

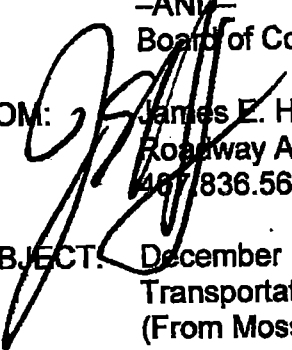


Interoffice Memorandum

AGENDA ITEM

November 26, 2018

TO: Mayor Jerry L. Demings
-AND-
Board of County Commissioners

FROM:  James E. Harrison, Esq., P.E., Chairman
Roadway Agreement Committee
407/836.5610

SUBJECT: December 18, 2018 – Consent Item
Transportation Agreement for Innovation Way
(From Moss Park Road to Sunbridge Parkway)

On March 20, 2018, the Board approved the Camino Reale Transportation Term Sheet (Term Sheet) for the proposed completion of Innovation Way South from Moss Park Road to Sunbridge Parkway, a critical east-west transportation corridor in the Innovation Way area connecting SR 417 and SR 528. The Term Sheet provided a framework for staff's review of a future transportation agreement by the Roadway Agreement Committee (RAC). Following the Board's approval, the RAC commenced review of the associated transportation agreement.

The Transportation Agreement for Innovation Way (From Moss Park Road to Sunbridge Parkway) (the "Agreement") by and among Camino Reale Properties, LLC (Camino) and Orange County provides for the construction of Innovation Way South between Moss Park Road and Sunbridge Parkway in multiple phases and segments. The Agreement primarily addresses the Preliminary Design Study (PDS), Design, Engineering and Permitting (DEP), Right of Way (ROW), and construction for Innovation Way South. Per the Agreement, the first two lanes of Innovation Way South will be constructed by the developer, with development phasing of Camino Reale tied to the completion of key road segments. While most segments of Innovation Way South are proposed to be initially constructed as a two-lane roadway, the developer will provide for design and ROW (including drainage) for the eventual four-lane improvement.

The Agreement pipelines the development's proportionate share mitigation funds to deliver certain segments of Innovation Way South. Consistent with Florida Statutes, the developer will receive transportation impact fee credits for completed roadway improvements outside of Camino Reale's project boundary. Transportation Impact fee credits are generally in accordance with the County's Impact Fee Ordinance and are expected to be approximately \$13.9 million, dependent upon actual, reasonable costs incurred and ROW appraisals. The Agreement further details the process by which the County will review and approve plans and permits for work, approve invoices and award

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impact fee credits, and other legal matters like conveyance and title work requirements, indemnification and insurance.

Under the Agreement, the County is committed to expend approximately \$1.3 million received under a separate agreement with the Moss Park Development of Regional Impact in completing the DEP for Segment 5, for potential ROW acquisition, or for widening of Segment 1. Some of this work is already included in the County's adopted Capital Improvements Program (CIP).

The Agreement also generally addresses transportation connections to adjoining developments, including the Sunbridge PD-RP and the connection to the west through the Live Oaks Property. It also limits future transportation connections to the Lake Mary Jane Rural Settlement and access to adjoining environmentally sensitive lands. Finally, the Agreement provides for transportation concurrency satisfaction for the Camino Reale PD-RP and outlines the phased improvements needed to connect Innovation Way South for the initial two lanes and ultimate four lanes needed to serve this development.

One issue that was not known when the Term Sheet was approved is that Segment 6 of Innovation Way South is located within the jurisdictional limits of the City of Orlando. This segment is part of the Storey Park development and is approximately 1500 feet long. While Segment 6 ROW is controlled by the City, staff was generally not supportive of awarding impact fee credits for this segment. The Agreement recognizes the need for further discussions with the City regarding the completion of Segment 6 and provides for the option of impact fee credits or for cash reimbursement of work towards Segment 6 subject to future funding appropriations by the Board.

The RAC has determined that the Transportation Agreement for Innovation Way is generally consistent with the Board-approved Camino Reale Transportation Term Sheet and recommended approval on September 19, 2018. The Specific Project Expenditure Report and Relationship Disclosure Forms are on file with the Transportation Planning Division.

ACTION REQUESTED: Approval and execution of Transportation Agreement for Innovation Way (From Moss Park Road to Sunbridge Parkway) by and among Camino Reale Properties, LLC and Orange County to provide for road improvements to Innovation Way from Moss Park Road to Sunbridge Parkway. District 4

Attachments
JEH|HEGB:am

BCC Mtg. Date: December 18, 2018

This instrument prepared by and after
recording return to:

A. Kurt Ardaman
Fishback Dominick
1947 Lee Road
Winter Park, FL 32789

Project: Camino Reale PD

Tax Parcel I.D. No: 01-24-31-0000-00-011

**TRANSPORTATION AGREEMENT
FOR INNOVATION WAY (From Moss Park Road to Sunbridge Parkway)**

THIS TRANSPORTATION AGREEMENT FOR INNOVATION WAY

(the "**Agreement**"), effective as of the latest date of execution (the "**Effective Date**"), is made and entered into by and among **CAMINO REALE PROPERTIES, LLC**, a Florida limited liability company f/k/a **Rio Real Properties Orlando, LLC** ("**Owner**"), 30 Floral Parkway, Concord, Ontario L4K-4R1, Canada, and **ORANGE COUNTY**, a charter county and political subdivision of the State of Florida whose mailing address is P.O. Box 1393, Orlando, Florida 32802-1393 ("**County**"). The Owner and County may sometimes be referred to collectively as the "**Parties**."

WITNESSETH:

WHEREAS, Owner is the fee simple owner of certain real property, as shown in the project location map identified as **Exhibit "A,"** and as more

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particularly described on **Exhibit “B,”** both of which are attached hereto and incorporated herein by this reference (the “**Property**”); and

WHEREAS, Owner is developing a portion of the Property as a large-scale master planned community including 3,000 residential units, commercial, office, industrial, and hotel uses to be known as the Camino Reale Planned Development (“**Camino Reale PD**”); and

WHEREAS, Owner submitted the Camino Reale PD Transportation Term Sheet dated February 28, 2018 (“**Road Term Sheet**”) to the County which outlined the major components of its obligations and responsibilities relating to the Innovation Way area and such Road Term Sheet was approved by the Orange County Board of County Commissioners (“**BCC**”) on the same date that the BCC approved the Camino Reale PD rezoning, which date was March 20, 2018; and

WHEREAS, Owner is willing to convey or cause the conveyance of certain portions of the Property to County in return for credits against transportation impact fees (“**Impact Fee Credits**”) to be paid in the future in connection with the Camino Reale PD; and

WHEREAS, Owner is willing to design, engineer, mitigate, and permit (“**DEP Work**”), and construct certain improvements in the Innovation Way area as more particularly identified and described in Section 4 below (sometimes

referred to and defined herein as the “**Improvements**”) and carry out certain other work as described in this Agreement, all in return for Impact Fee Credits; and

WHEREAS, a Transportation Network Evaluation dated October 2017 (“**Transportation Analysis**”) was prepared for the Camino Reale PD by Traffic & Mobility Consultants LLC and accepted by County, which accepted Transportation Analysis determined that the Owner’s total proportionate share transportation mitigation obligation is \$13,892,115.00 (“**Mitigation Funds**”); and

WHEREAS, the Orange County Engineer has declared that portions of the Improvements and certain other work described in this Agreement are transportation impact fee eligible; and

WHEREAS, the DEP Work and construction of the Improvements by Owner, and conveyance of road right-of-way, ponds and associated easements (collectively “**ROWE**”), and certain other work described in this Agreement will serve the health, safety, and general welfare of the public; and

WHEREAS, County and Owner desire to set forth certain terms, conditions, and agreements between the parties as to the DEP Work and construction of the Improvements, conveyance of the ROWE to County, the granting of Impact Fee Credits to the Owner and other obligations and rights of the parties.

NOW, THEREFORE, for and in consideration of the above premises, the mutual covenants and agreements set forth herein, and other good and valuable

consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

Section 1. Recitals. The above recitals are true and correct and are incorporated herein by this reference.

Section 2. Preliminary Design Study. Owner shall fund and conduct a preliminary design study of the Innovation Way corridor from SR 417 to Sunbridge Parkway (referred to as the “PDS”) pursuant to the scope of services attached hereto and incorporated herein as **Exhibit “C.”** The Owner shall receive Impact Fee Credits for the actual County-approved cost incurred for the PDS.

Section 3. Improvements Included Within this Agreement, Phasing of Development and PM Peak Hour Trip Generation Rates. For purposes of this Agreement, the Parties agree that the Improvements include only the Segments of Innovation Way roadway plan referenced in Section 4 below, the associated pedestrian and stormwater facilities relating to the Segments, and those other matters described in Section 4 below.

Owner may develop the Property in phases or all at once in any combination of phases provided the required construction of the Improvements for each such phase occurs as set forth in Section 4. The 4 phases of development are as follows:

<u>Development Phase</u>	<u>Development Threshold</u>	<u>Phase Trips</u>	<u>Cumulative Trips</u>
1	Up to 8%	260	260

2	Up to 60%	1,640	1,900
3	Up to 90%	950	2,850
4	Full Buildout	310	3,160

All development thresholds are based on the following pm peak hour trip generations:

<u>Land Use</u>	<u>Units</u>	<u>PM Peak Hour Trip Rates</u>
Single Family Residential	1 DU	1.00
Multifamily Residential	1 DU	0.62
Townhouse Residential	1 DU	0.52
Retail	1 KSF	3.71
Office	1 KSF	1.49

Section 4. Innovation Way Roadway Plan DEP Work and Construction.

County shall within thirty (30) days of the Effective Date of this Agreement provide Owner with a copy of the April 2015 design plans for Segment 5 previously prepared by third parties for the construction of an urban 4-lane divided roadway. The design for Segments 2, 3, 5, and 6 shall be for an urban 4-lane divided roadway, and the construction may be phased to deliver 2 lanes initially as provided in this Agreement. A typical cross section of Innovation Way is attached as **Exhibit “D”**. If funding for the DEP Work for Segment 5 is programmed by the County by October 1, 2019, the County shall proceed to finalize the DEP Work for Segment 5. If funding for the DEP Work for Segment 5 is not programmed by the County by October 1, 2019, Owner may, after coordination with County and upon County approval, finalize the DEP Work for Segment 5 and receive Impact Fee Credits for County-approved

expenditures. Upon completion of the PDS by Owner and acceptance of the PDS by the County, which acceptance shall not be unreasonably withheld, delayed or conditioned, Owner will deliver biddable road design plans and proceed to permit and construct those Improvements within the segments as shown in the chart and corridor map depicted on **Exhibit “E,”** attached hereto and incorporated herein (the **“Segments,”** and each a **“Segment”**), all as follows:

A. ***Phase 1 Improvements.*** Except for model homes allowed by Orange County Code, prior to issuance of vertical building permits during Phase 1 of the development as tracked by Owner pursuant to Section 12.C below, Owner shall complete the DEP Work for and construct the first 2 lanes of Segment 3 (**“Phase 1 Improvements”**) as follows:

- a. PDS – Owner shall complete, at Owner’s expense, a PDS for the Innovation Way corridor. The scope of the PDS will be consistent with County requirements for future right of way acquisition.
- b. DEP Work – Owner shall complete, at Owner’s expense, the DEP Work for Segment 3 as an urban 4-lane divided roadway in accordance with County standards. Design plans for Segment 3 shall be biddable in accordance with County requirements.
- c. Wetland Mitigation – County agrees to be the applicant or co-applicant for wetland mitigation permits, as appropriate to advance

the permitting and construction of the Phase 1 Improvements. Costs associated with wetland mitigation shall be included in the permitting costs and shall be at Owner's expense.

- d. ROWE - Commencing not later than County approval of 60% design plans, Owner shall make diligent efforts to secure and convey, or cause third parties to convey, to the County all Segment 3 ROWE, other than Segment 3 ROWE already held by the County, necessary to construct and operate Segment 3 in its final urban 4-lane divided roadway configuration with associated stormwater facilities ("**Uncontrolled Segment 3 ROWE**"), as set forth in Section 14 below.
- e. Construction – Owner shall construct the first 2 lanes of Segment 3 and the pedestrian facilities adjacent to the first 2 lanes. Owner shall construct associated stormwater facilities required for the ultimate urban 4-lane divided roadway.

B. Intersection of John Wycliffe Boulevard and Moss Park Road.

After completion of the Phase 1 Improvements, potential enhanced traffic control or alternative improvements at the intersection of John Wycliffe Boulevard and Moss Park Road ("**Intersection**") necessary to address such intersection traffic movement shall be evaluated by Owner in coordination

with County; provided, however, if Phase 1 Improvements and Phase 2 Improvements are completed at that time, the foregoing shall not be required. If it is determined that permanent or substantial Intersection improvements are necessary, Owner shall be responsible for its fair share of the cost of such improvements as mutually agreed between Owner and County, and the Phase 1 development threshold may be adjusted up to no more than 12% which shall be no more than 390 trips for the Phase 1 development. No amendment to this Agreement shall be required to effectuate the foregoing.

C. **Design, Engineering, Permitting and Construction of Segment 2 (Phase 1).** In connection with the Phase 1 Improvements, Owner shall, at Owner's expense (which shall not be subject to reimbursement), complete the DEP Work for all of Segment 2 as an urban 4-lane divided roadway, and at Owner's expense (which shall not be subject to reimbursement), construct those portions of the first 2 lanes of Segment 2 necessary for access to areas under development of the Property during Phase 1 of the development in accordance with the provisions of Innovation Way Segment 2 set forth in Section 4.J. below.

D. **Phase 2 Improvements.** Except for model homes allowed by Orange County Code, prior to issuance of vertical building permits during Phase 2 of the development as tracked by Owner pursuant to Section 12.C below, Owner

shall complete construction of 2 lanes of Segments 5 and 6 (“**Phase 2 Improvements**”) as follows:

- a. Design, Engineering and Permitting – Owner shall complete, at Owner’s expense, the DEP Work for Segments 5 and 6 of Innovation Way as an urban 4-lane divided roadway in accordance with County or City standards as applicable. Design plans for Segments 5 and 6 shall be biddable in accordance with County requirements.
- b. Wetland Mitigation – County agrees to be the applicant or co-applicant for wetland mitigation permits, as appropriate to advance the permitting and construction of the Phase 2 Improvements. Costs associated with wetland mitigation are included in the permitting costs and shall be at Owner’s expense.
- c. ROWE - Commencing not later than County approval of 60% design plans, Owner shall make diligent efforts to secure and convey, or cause third parties to convey, to the County or the City of Orlando, as applicable, all ROWE, other than ROWE already held by the County or the City of Orlando, necessary to construct and operate Segments 5 and 6 in its final urban 4-lane divided roadway configuration with associated stormwater facilities

(“**Uncontrolled Segments 5 & 6 ROWE**”), as set forth in Section 14 below.

- d. Construction – Owner shall construct the first 2 lanes of Segments 5 and 6 with the pedestrian facilities adjacent to the first 2 lanes. Owner shall construct the associated stormwater facilities required for the ultimate urban 4-lane divided roadway.

E. **Construction of Segment 2 (Phase 2).** In connection with the Phase 2 Improvements, Owner shall, at Owner’s expense (which shall not be subject to reimbursement), construct those portions of the first 2 lanes of Segment 2 necessary for access to areas under development during Phase 2 of the development in accordance with the provisions of Innovation Way Segment 2 set forth in Section 4.J. below.

F. **Phase 3 Improvements.** Except for model homes allowed by Orange County Code, prior to issuance of vertical building permits during Phase 3 of the development as tracked by Owner pursuant to Section 12.C below, funding for delivery of 4 lanes on Segments 2, 3, 5, and 6 shall be committed (“**Phase 3 Improvements**”) as follows:

- a. Funding – Owner shall commit the remaining balance of the Mitigation Funds that were not expended in the delivery of the Phase 1 Improvements and Phase 2 Improvements and for the

DEP Work for and construction of the Segment 2 Improvements, all of which are credited toward the Mitigation Funds obligation (“**Remaining Funds**”) to the construction of the remaining 2 lanes of Innovation Way for Segments 2, 3, 5, and 6 (“**Innovation Way Widening**”). If the Remaining Funds are not sufficient to fully fund the Innovation Way Widening, Owner shall cooperate in good faith with County and any other potential funding partners to identify funding sources for the completion of the Innovation Way Widening. Owner shall make available the Remaining Funds to fund the construction of the Innovation Way Widening in accordance with terms, conditions, and provisions of a future funding agreement acceptable to the County for construction of the Innovation Way Widening.

- b. Construction – Upon availability of sufficient funds for the Innovation Way Widening, Owner shall construct the remaining 2 lanes of the constructed portions of Segments 2, 3, 5, and 6 with the pedestrian facilities adjacent to the remaining 2 lanes. Construction of the Innovation Way Widening shall commence prior to the issuance of vertical construction permits for the Phase

3 Improvements and shall be completed within 24 months of commencement.

G. **Construction of Segment 2 (Phase 3).** In connection with the Phase 3 Improvements, Owner shall, at Owner's expense (which shall not be subject to reimbursement), construct those portions of the first 2 lanes of Segment 2 necessary for access to areas under development during Phase 3 of the development in accordance with the provisions of Innovation Way Segment 2 set forth in Section 4.J. below.

H. **Phase 4 Improvements.** Development under Phase 4 of the development of the Property as tracked by Owner pursuant to Section 12.C below, shall not proceed prior to the completion of construction, as determined by the County, of Segment 1 as a minimum 2-lane roadway with a similar cross section as Segments 2 through 6, and the Property has connectivity to SR 417 (Greeneway) and SR 528 (Beachline) via such Segment 1 and one or more constructed segments of Sunbridge Parkway.

I. **Innovation Way Segment 1 and Primary Access.**

- a. Segment 1, located within the Sunbridge PD, is anticipated to be designed, engineered, permitted, and constructed either by others, including the County at the County's election, or as may

be agreed in future multi-party roadway agreements addressing connectivity between Innovation Way and Sunbridge Parkway.

- b. Owner shall negotiate in good faith with County and other third parties to develop a regional transportation agreement addressing the timing, funding, obligations, and responsibilities for the completion of the 4-lane construction of all segments of Innovation Way, including Segment 1 (**“Regional Transportation Agreement”**).
- c. If a Regional Transportation Agreement is established with Owner, County and other third parties, Owner and County may mutually agree to amend the construction phasing of Innovation Way and the development phasing as set forth in this Agreement in an effort to advance certain development in connection with the construction of Segment 1.
- d. Upon construction of any portion of Section 2 of Sunbridge Parkway as set forth under Section 15 of the Transportation Agreement for Sunbridge Parkway, recorded under Document #20170253449 of the Public Records of Orange County, Florida, the County has the right, but not the obligation, under said Section 15 to require the conveyance of right of way from

Sunbridge needed for connection between Sunbridge Parkway and the northeast corner of Owner's property and connection between Sunbridge Parkway and Innovation Way, both depicted as primary access points on the Camino Reale PD Regulating Map. If and when the County acquires the right of way necessary for the connection(s), Owner may, subject to County approval and in accordance with County requirements, construct such connection(s), and shall be entitled to Impact Fee Credits as set forth in Section 11 of this Agreement.

J. **Innovation Way Segment 2.**

- a. Owner shall incrementally construct, from west to east, the first 2 lanes of Segment 2 with the pedestrian facilities adjacent to the first 2 lanes, and Owner shall construct the associated stormwater facilities required for the ultimate urban 4-lane divided roadway. The timing of this roadway construction shall be determined by the development activity within the Property.
- b. Within 120 days of completion of construction and acceptance of any portion of Segment 2, Owner shall convey to County marketable title to all lands, in fee simple or by easement, at County's election, necessary to construct and maintain the then

completed portion of Segment 2 in its final urban 4-lane divided roadway configuration with associated stormwater facilities (**“Controlled Segment 2 ROWE”**).

- c. If not sooner conveyed, Owner shall convey to County the Controlled Segment 2 ROWE to the eastern property boundary of the Property concurrent with the first plat approval located adjacent to Owner’s eastern boundary and adjacent to controlled ROWE, or upon approval of and consistent with the terms, conditions, and provisions of the Regional Transportation Agreement, whichever first occurs.
- d. If County determines that Controlled Segment 2 ROWE is needed to complete a network connection to the east prior to when Owner is otherwise obligated to convey such Controlled Segment 2 ROWE to County, County may require the conveyance upon reasonable notice to Owner provided that: (i) one or more agreements are in effect that secures all of the Innovation Way ROWE from Moss Park Road to Sunbridge Parkway and the funding to complete the Innovation Way Widening; and/or (ii) a Regional Transportation Agreement

acceptable to Owner has been entered into and approved by County.

- e. Prior to the earlier of any conveyance or construction and unless otherwise approved by the BCC, in the BCC's sole discretion, impacted materials within all areas related to the Innovation Way corridor, including but not limited to, soil, groundwater, and surface water, must be remediated in accordance with Chapters 62-730 and 62-780, Florida Administrative Code ("F.A.C."). Site rehabilitation shall be deemed complete when the Property meets "No Further Action" criteria of subsections 62-780.680(1), 62-780.680(2), or 62-780-680(3), F.A.C., and the Florida Department of Environmental Protection issues a Site Rehabilitation Completion Order ("SRCO") as referenced in subsection 62-780.680(7), F.A.C. Receipt of a SRCO consistent with this condition must be received prior to beginning construction or transfer of any interest of the ROWE, whichever occurs first.

K. Segment 6 is located within the jurisdictional limits of the City of Orlando; therefore, any DEP Work and construction of Segment 6 undertaken by Owner shall be coordinated with the City of Orlando. References to

Segment 6 in this Agreement do not mean or imply that the County owns or controls any portion of Segment 6 ROWE.

Section 5. Design, engineering, and permitting of the Improvements.

Owner shall complete the DEP Work for the Improvements, subject to review and approval by County.

A. The scope of the DEP Work shall be as generally set forth in the scope of services attached hereto as **Exhibit “F”** and incorporated herein by this reference.

i. It shall be the responsibility of the Owner to obtain all applicable permits for the Improvements, except that County, at its election, may be a co-applicant where reasonable and preferable to County.

ii. All required mitigation for the Improvements shall be the responsibility of Owner.

B. Each design contract for any one or more of the Segments shall be subject to County review and approval.

i. The Owner shall select FDOT qualified design and engineering consultant(s) for the DEP Work which consultant(s) shall be subject to County approval.

ii. Each design contract shall clearly identify an individual lead consultant acceptable to County who shall serve as project manager (“**PM**”) and be the primary point of contact for, and be required to coordinate with the County appointed contact person (“**County PM**”) throughout the design process. The PM shall be solely responsible for all communications to and coordination with any and all consultants and sub-consultants.

iii. Each design contract shall designate County as a 3rd party beneficiary to all plans and electronic media associated with the Improvements.

iv. Plans for each Segment shall all be subject to County review and approval. Submission of insufficient plans may result in delays and/or County may refuse to accept such submissions for review.

C. The design of the Improvements shall address drainage requirements.

The location of the ponds for both the initial and ultimate design of the roads shall be a component of the PDS.

i. Drainage facilities (“**Ponds**” or individually, a “**Pond**”) shall be conveyed to County as fee simple or easement interests, at County’s option.

ii. Any Pond intended to be used jointly by the parties may remain as property of Owner, who shall enter into a separate recorded joint-use pond agreement with County that establishes, unless otherwise agreed by County, Owner's obligation to maintain such joint-use pond(s) to County standards.

D. Owner shall submit design plans to County at 30%, 60%, 90%, 100%, and Final design completion for review and approval.

E. Prior to County approval of Final Design, Owner will submit a remediation plan acceptable to the County for any contamination in Segment 3 which remediation plan may require remediation prior to the earlier of conveyance or construction. The remediation plan shall conform to the applicable requirements set forth in Section 13.F below.

Section 6. Changes After County Approval of DEP Work. If changes to the DEP Work for the Segments or any of them are needed after the County has approved such work completed by Owner or its consultants, contractors and others, the changes or updates will be the responsibility of the County, at the County's expense, unless: (i) such changes or updates are required or initiated by Owner or required as a result of changes in Owner's design, engineering or permitting of the Segment or Segments; or (ii) updated plans or changes are required after expiration of the permitting for the Segment or any of them.

Section 7. Funding and Construction Commitments.

A. The Phase 1 Improvements and Phase 2 Improvements are intended to provide a continuous 2-lane roadway connection from the Property to Moss Park Road along the Innovation Way corridor. The planning level cost estimates are set forth on the attached **Exhibit “G”**, and do not constitute a funding limit for the design, permitting, and construction of the Phase 1 Improvements and Phase 2 Improvements.

B. If the cost of the Phase 1 Improvements and Phase 2 Improvements exceed the Mitigation Funds, Owner shall have no further obligations for funding of the Phase 3 Improvements. Owner may elect, in its sole discretion, to advance, participate in, or commit additional funding for the Phase 3 Improvements and/or Phase 4 Improvements. For clarification and without limitation, Owner has no obligation for, or related to, the Phase 4 Improvements.

C. Without limiting the County’s rights and obligations, County agrees to prioritize the funds collected after the Effective Date of this Agreement pursuant to the Moss Park Transportation and Proportionate Share Agreement, recorded under Document No.: 20120467348, of the Public Records of Orange County, Florida

(“**Moss Park PD Mitigation Funds**”) in accordance with the terms of the Moss Park PD Development Order such that the Innovation Way Widening and/or funding efforts by County are first used to design and permit Segment 5 and/or acquire uncontrolled Segment 5 ROWE. County may apply the Moss Park PD Mitigation Funds to other improvements or transportation needs for the Innovation Way Widening of Segment 1 if there are any funds remaining.

Section 8. Construction of the Improvements. For the construction of the Improvements, the following applies:

A. For each construction contract for any one or more of the Segments, Owner shall obtain a bid or bids from an FDOT qualified contractor or contractors acceptable to County. County must approve the awarding of each bid, which approval shall not be unreasonably withheld, conditioned, or delayed. County shall complete its review of any bid submitted for approval within thirty (30) days.

B. Each scope of the construction work shall be substantially consistent with the DEP Work, unless otherwise agreed between the Parties.

C. Owner shall be responsible for obtaining applicable permits, except that County may be an applicant or co-applicant.

D. Each construction contract shall be subject to County review and approval.

i. Each construction contract shall clearly identify Owner's PM, who shall serve as the primary point of contact for, and be required to coordinate with, County staff throughout the construction process. The PM shall be solely responsible for all communications to and coordination with any and all contractors and sub-contractors.

ii. County shall be designated as a 3rd party beneficiary to each contract.

iii. Prior to commencement of construction of any Segment(s), Owner shall provide payment and performance bonds satisfactory to County for the costs of the Improvements to be made in such Segment(s), together with a rider to such bonds identifying County as a dual-obligee.

E. Any required temporary construction easements, right-of-way utilization permits, and/or rights of entry shall be the responsibility of Owner; provided, however, the County shall issue such right of way utilization permits as applicable.

F. In the event that Owner does not perform the obligations for design, permitting, engineering, and construction as set forth in this Agreement, after one hundred twenty (120) days written notice from County to Owner giving the Owner the opportunity to commence and/or continue in good faith to perform Owner's

obligations, County shall have the right to undertake or advance the design, permitting, engineering and construction of the Improvements.

Section 9. Inspection, approval by County.

A. County shall have the right to inspect work on the Improvements throughout the duration of construction. County shall have the authority to request any construction or construction materials testing for any work on the Improvements. The cost of laboratory testing routinely performed on the job site or subsequent to samples typically retrieved from the job site shall be borne by the County, except for testing which is regularly called for in the County's Technical Provisions to be provided by the contractor. Concrete and Soil-Cement mix design and groundwater testing costs shall be borne by the contractor as part of the roadway construction costs. The Record Laboratory is the testing laboratory contracted by the County. Only results of testing by the Record Laboratory shall be considered in evaluating the contractor's compliance with contract requirements unless otherwise approved by the County.

B. Upon completion of construction of each Segment, County shall conduct a final inspection and upon approval of the applicable Improvements and shall issue a certificate of completion ("C of C") for the Improvements which C of C shall not be unreasonably withheld, delayed, or conditioned.

C. Prior to issuance of the C of C, Owner shall also deliver to the County a one year maintenance surety covering all Improvements constructed, such surety to be in form of a letter of credit or cash or otherwise as acceptable to County. From the date of completion until such time as the Improvements are accepted for maintenance or otherwise by the County, Owner shall be responsible for maintaining such, at its expense, to County standards as set forth in Chapter 34, Orange County Code, including landscaping, irrigation, and other improvements within the road right-of-way pursuant to a use agreement with the County.

Section 10. Indemnification and Insurance.

A. Indemnification. Owner agrees, on behalf of itself, its agents, contractors, successors and assigns, that it shall, to the fullest extent permitted by law, defend, indemnify, and hold harmless the County, its officials, agents, and employees from and against any and all liabilities, claims, damages, losses, costs, and expenses (including attorneys' fees) or obligations of any kind including without limitation environmental assessments, evaluations, remediation, fines, penalties, and clean-up costs asserted against the County and arising out of or resulting from Owner's performance of the construction activities, excepting those acts or omissions arising out of the negligence of the County provided that any such liability, claim, damage, loss, cost, or expense:

i. Is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property (other than the construction activities themselves) including the loss of use resulting therefrom; and

ii. Is caused, in whole or in part, by an act or omission relating to the construction of the Improvements by the Owner, its agents or employees, or any contractor employed by the Owner, or anyone directly or indirectly employed by the Owner or its contractor(s), their subcontractors, or anyone for whose acts any of them may be liable.

iii. Is caused, in whole or in part, by any discharge or disposal of any hazardous or toxic materials, trash, debris, refuse, waste, or other materials related in any way to the construction activities related to the construction of the Improvements.

Provided, however, if this Agreement or any underlying contract for construction of any Improvements is deemed by a court of competent jurisdiction to be a construction contract under Section 725.06, Florida Statutes, any obligation of the contractors to defend, indemnify or hold harmless the County, its officers, and employees shall be limited to an obligation to indemnify and hold harmless to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the contractors and persons employed or utilized by the contractors in the performance of the construction activities.

The indemnification provision contained herein shall survive the termination of this Agreement.

B. Insurance. Prior to commencing construction of any portion of the Improvements and throughout the course of construction of the Improvements, the Owner or its agents and contractors, shall procure and maintain insurance with such limits and terms as specified in the following Schedule of Limits (see below):

(i) Workers' compensation insurance with statutory workers' compensation limits and no less than the limits specified in the Schedule of Limits for Employer's Liability with a waiver of subrogation in favor of the County.

(ii) Commercial general liability insurance for all operations including, but not limited to, contractual products, completed operations, and personal injury with limits of not less than the limits specified in the Schedule of Limits per occurrence and an aggregate limit of at least twice the per occurrence limit.

Additional insured endorsements CG 20 10 & CG 20 37 or their equivalents shall be included and shall specifically name the County as an additional insured (scheduled). All liability policies shall also include a CG 24 04 or its equivalent waiver of right of recovery endorsement in favor of the County.

(iii) Business automobile liability insurance for all owned, hired, or non-owned vehicles with limits of not less than the limits specified in the Schedule of Limits per occurrence.

(iv) Professional Liability (errors and omissions) for engineering design in amounts not less than One Million and 00/100 Dollars (\$1,000,000.00) per occurrence.

(v) Contractors pollution liability insurance including remediation and monitoring expense for all construction operations with limits of not less than One Million Dollars and 00/100 (\$1,000,000.00) per occurrence.

Schedule of Limits:

<u>Contract Amount</u>	<u>Workers' Comp/ Employers' Liability</u>	<u>General Liability</u>	<u>Automobile Liability</u>
Up to \$10 million	Statutory/\$500,000	\$1,000,000	\$1,000,000
\$10 - \$20 million	Statutory/\$1,000,000	\$5,000,000	\$5,000,000
Over \$20 million	To be determined by the County		

The Owner shall be responsible for ensuring that each of its contractors and subcontractors of every tier procure and maintain the insurance specified above and shall furnish to the County evidence of such insurance including endorsements prior to commencement of construction. The County shall be specifically named (scheduled) as an additional insured on all policies except for workers' compensation coverage. All coverage shall be primary and not contributory with any insurance or self-insurance maintained by the County. The Owner shall

provide the County notice of any material change, cancellation, non-renewal of any policy required herein at least thirty (30) days prior to the occurrence thereof.

Section 11. Reimbursement for Costs of Improvements; Transportation

Impact Fee Credits. County shall credit to the account of Owner, for purposes of Article IV of Chapter 23 of the Orange County Code and any successor code provisions (the “**Impact Fee Ordinance**”), Impact Fee Credits or any other type of fee credits that may replace transportation impact fees to which Owner is entitled under the Impact Fee Ordinance as and when described as follows:

A. The full actual County-approved costs of the PDS incurred by Owner, upon County’s acceptance of the PDS;

B. The full actual County-approved costs incurred by Owner for the DEP Work for Segments 3 and 5, subject to County’s acceptance of the DEP Work;

C. The incremental actual County-approved costs incurred by Owner for the DEP Work for the additional 2 lanes of Segment 2, subject to the County’s acceptance of the DEP Work;

D. The mutually agreed-upon value of additional Controlled Segment 2 ROWE needed to construct a 4-lane section instead of a 2-lane section on Segment 2, to be determined by County appraisal process, upon conveyance to County or County’s acquisition of the ROWE and approved by County;

E. All actual County-approved costs incurred by Owner acquiring Uncontrolled Segment 3 ROWE and Segment 5 of Uncontrolled Segments 5 & 6 ROWE, upon conveyance to County or County's acquisition of the ROWE;

F. The County-approved construction costs of Innovation Way Segments 3 and 5, upon C of C for each Segment;

G. If Owner elects to construct 4 lanes on Segment 2, the County-approved construction costs for the additional 2 lanes of Segment 2;

H. To the extent the County does not provide Impact Fee Credits for the DEP Work and construction of Segment 6 of the Phase 2 Improvements and all actual County-approved costs associated with acquiring Segment 6 of Uncontrolled Segments 5 & 6 ROWE (collectively the "**Segment 6 ROWE Costs**"), the County shall reimburse Owner for County-approved actual, reasonable fees, costs, and expenses for Segment 6 ROWE Costs incurred by Owner for such Segment 6. Such reimbursement shall be paid by County to Owner within 120 days of County's receipt and approval of sufficient documentation of Segment 6 ROWE Costs, and shall be subject to annual appropriation by the BCC. Notwithstanding the foregoing, the County has no obligation to expend funds for the acquisition of any ROWE for Segment 6; and

I. All County-approved fees, costs, expenses, and other expenditures incurred by Owner, and conveyances made by Owner pursuant to Innovation Way

Widening and Regional Transportation Agreement as well as such expenditures and conveyances made pursuant to this Agreement, when incurred or conveyed, as applicable, by Owner and approved by County.

Except as noted for Segment 6, all of the foregoing DEP Work, ROWE acquisition, and construction are impact fee eligible transportation improvements for which Impact Fee Credits are to be issued by the County to the Owner.

Such Impact Fee Credits may only be used within the Property or transportation impact fee zone 3. As transportation impact fees become payable from time to time in connection with the Property, and if so instructed by Owner, County shall deduct such amounts payable from Owner's account. For purposes of the foregoing, County shall make deductions from Owner's account from time to time only upon receipt of written direction from Owner (or from such person or entity to whom Owner expressly may assign this authority, in writing, in the future) to effect the particular deduction. Nothing herein shall prevent Owner from assigning Impact Fee Credits as provided for in Section 23-95(e) of the Orange County Code, as may be amended from time to time.

Section 12. Concurrency Satisfaction. For each phase of development and in accordance with the terms herein, upon performing the obligations and/or associated improvements for each phase, the Property shall be deemed to have met and satisfied the requirements of Transportation Concurrency for the corresponding

level of development as referenced in Section 3 of this Agreement. For each phase of development of the Property, the Owner shall not be required to undertake any additional evaluations of capacity on the transportation network, and the County shall not withhold development approvals subject to additional evaluations of capacity.

A. From time to time as Owner satisfies the requirements of Transportation Concurrency as tracked by Owner pursuant to Section 12.C below, and upon Owner's written request for same (accompanied by such other documentation as may be reasonably required by County to verify concurrency satisfaction), the County's Transportation Planning Division shall issue to Owner a letter in substantially the form set forth in **Exhibit "H"** attached hereto ("**Confirmation Letter**"), confirming that the applicable Transportation Concurrency requirements have been satisfied, and that the number of trips corresponding with such satisfaction have been released by the County for use by Owner, and its successors and assigns, within the Property.

B. Trips released to Owner by a Confirmation Letter may, at any time and from time to time, be assigned by Owner (solely for use within the Property) to a successor Owner of all or any portion of the Property pursuant to a written assignment ("**Assignment of Trips**") and such assignment shall be in substantially the form set forth in **Exhibit "I"** attached hereto. Until such assigned trips are

allocated for development, such assigned Trips may, at any time and from time to time, be further assigned by such successor Owner to any other successor Owner of all or any portion of the Property (or back to the original Owner), so long as such further assignment is also evidenced by an Assignment of Trips.

C. As the Property develops, Owner shall provide documentation to County in the form of one or more Confirmation Letters, as applicable, and one or more Assignment of Trips, as applicable, evidencing that the trips have been released in an amount necessary for the proposed development. Owner shall maintain a cumulative record of the trips that have been used and applied by Owner, and its successors and assigns. Owner shall be required to maintain an accurate record, and on a quarterly basis, Owner shall provide the County with records showing the cumulative number of trips of total PM peak hour trips that have been allocated during the prior quarter for development within the Property and cumulatively. The records shall also indicate the number of trips remaining to be allocated before the next performance and trip threshold is reached as set forth in Section of this Agreement.

Section 13. Conveyance of Controlled Segment 2 ROWE to County by Owner.

A. For purposes of this Section 13, the Controlled Segment 2 ROWE shall be defined as **“Conveyed Lands.”**

B. *Timing for conveyance; Conveyance requirements.* Owner shall convey marketable title to the Conveyed Lands in compliance with Section 4.J of this Agreement and shall be in fee simple or by easement, at County's election.

C. *Procedure.* Conveyances shall be by special warranty deed or easement, as applicable. All conveyances shall be free and clear of all liens and encumbrances, except for matters of record acceptable to County, if any. Owner shall pay all costs associated with the conveyances, including all recording fees and documentary stamps related to such conveyances. Ad valorem taxes in connection with the conveyances shall be prorated as of the date of transfer of title and said prorated amount shall be paid by Owner to the Orange County Tax Collector, in escrow, pursuant to Section 196.295, Florida Statutes, unless the conveyance occurs between November 1 and December 31 of the year of conveyance, in which case ad valorem taxes shall be paid in full by Owner for the year of conveyance.

D. *Title Policy.* No less than thirty (30) days prior to any conveyance, Owner shall deliver to County, at Owner's sole cost and expense, a commitment to issue an Owners' Policy of Title Insurance naming County as the insured (the "**Title Commitment**"). The original Owners' Policy of Title Insurance (the "**Title Policy**") shall be delivered to County within thirty (30) days of any conveyance.

E. *Value of Conveyed Lands; Entitlement to Impact Fee Credits.* The value of the Conveyed Lands to be conveyed by Owner to County has been determined in accordance with Section 23-95, Orange County Code, as follows:

The Parties hereby agree that the value of the Conveyed Lands conveyed in fee to be conveyed by Owner to County in return for Impact Fee Credits is an agreed-upon fair market value of \$27,840.31 per acre, or fraction thereof.

The size and location of all Conveyed Lands will be determined initially through the PDS provided that the acreage to be used for determining Impact Fee Credits will be determined based on the final areas conveyed in fee simple title to the County. County and Owner agree that the legal descriptions used to convey the Conveyed Lands to County may be revised based upon final engineering.

F. *Environmental Audit.* No less than thirty (30) days prior to conveyance, Owner shall submit to County a current (within 6 months of conveyance to County) Phase I environmental audit of the areas encompassed by the Conveyed Lands. The Phase I environmental audit shall be conducted in accordance with the requirements of the All Appropriate Inquiries Final Rule (“AAIFR”), and with the standards set forth in the American Society for Testing and Materials (“ASTM”) E-1527-13. In the event the Phase I environmental audit presents a matter of concern, as determined by County, then prior to the conveyance, Owner shall submit to County a Phase II environmental audit. The

Phase II environmental audit shall be conducted in accordance with requirements of the AAIFR and ASTM E-1903-11. If the Phase II environmental audit is performed and reveals the need for remediation to the Conveyed Lands, one of the following events shall occur: (i) Owner shall remediate the Conveyed Lands to County's satisfaction prior to the conveyance; or (ii) Owner and County shall negotiate and enter into a separate agreement whereby Owner shall pay the full cost of remediation; or (iii) County may terminate this Agreement at its option.

G. *Compliance with Section 286.23, Florida Statutes.* Owner shall execute and deliver to County the "Disclosure of Beneficial Interests" required pursuant to section 286.23, Florida Statutes.

Section 14. Acquisition of Uncontrolled Segments. As set forth in Sections 4.A and 4.D above, Owner shall make diligent efforts to acquire the Uncontrolled Segment 3 ROWE and Uncontrolled Segments 5 & 6 ROWE (collectively "**Uncontrolled Segments**") necessary to construct and operate Segments 3, 5 and 6 in their final 4-lane urban arterial road configuration with associated stormwater facilities.

A. In the event Owner is able to acquire the Uncontrolled Segments, Owner shall convey the Uncontrolled Segments to County or the City of Orlando, as applicable, no later than one hundred twenty (120) days after the later of: (i) when

design and engineering for the Uncontrolled Segments has been completed and approved by the County; or (ii) Owner's acquisition of the Uncontrolled Segments.

B. If Owner is unable to secure any Uncontrolled Segments within nine (9) months after completion of the PDS for Segment 3, and upon completion and County approval of 60% design plans for Segments 3 and 5, County shall make reasonable efforts to acquire Segments 3 and 5 of the Uncontrolled Segments; provided, however, County may commence acquisition of Segments 3 and 5 of the Uncontrolled Segments at any earlier time if County determines Owner has not acquired all of Segments 3 and 5 of the Uncontrolled Segments.

C. Right of way costs for the acquisition of the Uncontrolled Segments shall be included in the Phase 1 Improvements and Phase 2 Improvements and shall be at Owner's expense, and County agrees to keep Owner informed of the acquisition process.

D. The conveyance process for the conveyance of the Uncontrolled Segments to County from Owner shall be as set forth in Subsections B, C, D, F and G of Section 13 above for the conveyance of the Conveyed Lands.

Section 15. Orange County Gun Range. The County is the owner of property located at 14500 Wewahootee Road, Orlando, Florida 32832, on which the Orange County Gun Range is located. The Owner has entered into a School Mitigation Agreement for Capacity Enhancement ("CEA") with the School Board

of Orange County, Florida (“**School Board**”), which was approved at the November 1, 2016 meeting of the School Board. Due to the proximity of the property to the Orange County Gun Range, the School Board has established an Excluded Area on the property, which prohibits the location of any school within one mile of the Orange County Gun Range or any location west of the railroad tracks.

Due strictly to this restriction, the Owner reserves the reasonable right to delay the PDS, design, permitting, engineering, or construction of any Segment only until such time that the gun range provisions of the Excluded Area in the CEA are waived, modified or satisfied.

Section 16. Lake Mary Jane Alliance Commitments. The connection of any road within the Property, including but not limited to Innovation Way, to Lake Mary Jane Road, or to any road within the Lake Mary Jane Rural Settlement that connects to Lake Mary Jane Road, shall be prohibited.

Section 17. OUC Railroad Crossing. County and Owner anticipate that the railroad crossing located within Segment 5 (“**RR Crossing**”) shall be designed and constructed as an at-grade railroad crossing. County and Owner agree that County will continue to negotiate with Orlando Utilities Commission to permit the RR Crossing, and Owner shall coordinate with County on such negotiation efforts. The RR Crossing permit requirements shall be reflected in the final design of Segment

5. Any flyover or other railroad crossing requirements, other than an at grade railroad crossing shall in no way delay, condition, or reduce Owner's rights under this Agreement to proceed with matters under this Agreement that are not precluded by such non at grade railroad crossing.

Section 18. Utilities. This Agreement does not address utility requirements. Owner shall coordinate with the Orange County Utilities Director, or a designee, with respect to any utility easements necessary to accommodate appropriately-sized wastewater sewer mains or lines, potable water mains or lines, and/or reclaimed water mains or lines.

Section 19. Joint Ponds. Owner has the right to propose joint stormwater ponds and facilities to be included as part of the Improvements. If the County approves such, subject to an agreement acceptable to the County, the Owner may design, permit, engineer, and construct joint use stormwater ponds and facilities to be included as part of the Improvements; provided, however, joint use ponds shall not be permitted within gated communities and property owned by the School Board of Orange County, Florida.

Section 20. MSTU/MSBU/Assessments. In the event the Owner seeks to utilize an MSTU/MSBU or other assessment mechanism acceptable to County, to address lighting and landscaping requirements, Owner and County shall cooperate in establishing such; provided, however, for landscaping within any public right of

way and in excess of County standards, the landscaping shall be maintained by a homeowner or property owner association through the imposition of assessments.

Section 21. Notice. Any notice delivered with respect to this Agreement shall be in writing and shall be deemed to be delivered (whether or not actually received) (i) when hand delivered to the person(s) hereinafter designated, or (ii) upon deposit of such notice in the United States mail, postage prepaid, certified mail, return receipt requested, addressed to the person at the address set forth opposite the party's name below, or to such other address or to such other person as the party shall have specified by written notice to the other party delivered in accordance herewith.

As to Owner: Camino Reale Properties, LLC
30 Floral Parkway
Concord, Ontario L4K-4R1, Canada

With a copy to: A. Kurt Ardaman
Fishback Dominick
1947 Lee Road
Winter Park, FL 32789

As to County: Orange County Administrator
P.O. Box 1393
201 S. Rosalind Ave
Orlando, FL 32802-1393

With a copy to: Orange County Community, Environmental,
and Development Services Department
Manager, Transportation Planning Division
Orange County Public Works Complex
4200 S. John Young Parkway

Orlando, FL 32839-9205

Section 22. Covenants Running with the Land. This Agreement shall run with the Property and shall be binding upon, and shall inure to the benefit and burden of, the heirs, legal representatives, successors, and assigns of the Owner and the Owners and to any person, firm, corporation, or other entity that may become a successor in interest to the Property. Notwithstanding the foregoing, however: (i) Owner's authority under this Agreement to instruct County to make deductions from Owner's transportation impact fee account shall remain with Camino Reale Properties, LLC and not follow or be attended to any conveyance of all or any portion of the Property unless expressly assigned in writing to another by Owner; and (ii) Owner's rights and obligations relating to the design, permitting, engineering, and construction of the Improvements, in whole or in part, at Camino Reale Properties, LLC's written election, may remain with Camino Reale Properties, LLC.

Section 23. Recordation of Agreement. An executed original of this Agreement shall be recorded, at Owner's expense, in the Public Records of Orange County, Florida within thirty (30) days of the Effective Date.

Section 24. *Applicable Law.* This Agreement and the provisions contained herein shall be construed, controlled, and interpreted according to the laws of the State of Florida.

Section 25. *Time is of the Essence.* Time is hereby declared of the essence to the lawful performance of the duties and obligations contained in this Agreement.

Section 26. *Further Documentation.* The Parties agree that at any time following a request therefor by the other party, each shall execute and deliver to the other party such further documents and instruments reasonably necessary to confirm and/or effectuate the obligations of either party hereunder and the consummation of the transactions contemplated hereby.

Section 27. *Limitation of Remedies.* County and Owner expressly agree that the consideration, in part, for each of them entering into this Agreement is the willingness of the other to limit the remedies for all actions arising out of or in connection with this Agreement.

A. ***Limitations on County's remedies.*** Upon any failure by Owner or any successor to Owner to perform its obligations under this Agreement, County shall be limited strictly to only the following remedies:

- i. action for specific performance or injunction; or
- ii. the right to set off, against the amounts of impact fees to be credited in favor of Owner under this Agreement, (A) any amounts due to County

from Owner or any Owner under this Agreement but remaining unpaid and (B) the cost to County of performing any action or actions required to be done under this Agreement by Owner or any Owner, but which Owner, or such Owner has failed or refused to do when required; or

- iii. the withholding of development permits and other approvals or permits in connection with the Camino Reale PD and/or the Property; or
- iv. any combination of the foregoing.

B. *Limitations on Owner's remedies.* Upon any failure by County to perform its obligations under this Agreement, Owner shall be limited strictly to only the following remedies:

- i. action for specific performance; or
- ii. action for injunction; or
- iii. action for declaratory judgment regarding the rights and obligations of Owner; or
- iv. any combination of the foregoing.

Both parties expressly waive their respective rights to sue for damages of any type for breach of, or default under, this Agreement by the other. Both parties expressly agree that each party shall bear the cost of its own attorney fees for any action arising out of or in connection with this Agreement. Venue for any actions

initiated under or in connection with this Agreement shall be in the Circuit Court of the Ninth Judicial Circuit in and for Orange County, Florida.

Section 28. Amendment. This Agreement may be amended only in writing, formally executed in the same manner as this Agreement.

Section 29. Counterparts. This Agreement and any amendment(s) may be executed in up to two (2) counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument.

Section 30. Authority to Contract. The execution of this Agreement has been duly authorized by the appropriate body or official of each party hereto.

Section 31. Entire Agreement. This Agreement embodies and constitutes the entire understanding of the parties with respect to the subject matter addressed herein, and all prior or contemporaneous agreement, understandings, representations, and statements, oral or written, are merged into this Agreement.

Section 32. Interpretation. This Agreement shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared by counsel for one of the parties, it being recognized that all parties have contributed substantially and materially to the preparation hereof. Captions and section headings in this Agreement are provided for convenience only and shall not be deemed to explain, modify, amplify, or aid in the interpretation, construction, or meaning of this Agreement.

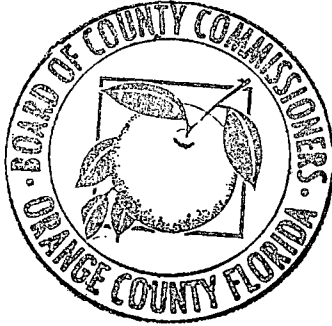
Section 33. Disclaimer of Third Party Beneficiaries. Except as stated below, this Agreement is solely for the benefit of the formal parties hereto and no right or cause of action shall accrue by reason hereof to or for the benefit of any third party not a formal party hereto. Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon or give any person or entity any right, remedy, or claim under or by reason of this Agreement or any provisions or conditions hereof, other than the parties hereto and their respective representatives, heirs, successors, and assigns.

Section 34. Severability. If any provision of this Agreement, the deletion of which would not adversely affect the receipt of any material benefits by any party hereunder nor substantially increase the burden of any party hereunder, shall be held to be invalid or unenforceable to any extent by a court of competent jurisdiction, the same shall not affect in any respect whatsoever the validity or enforceability of the remainder of this Agreement.

[Signatures appear on following pages]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their respective duly authorized representatives on the dates set forth below, but effective as of the Effective Date.

ORANGE COUNTY, FLORIDA
By: Board of County Commissioners



By: *Jerry L. Demings*
Jerry L. Demings
JL Orange County Mayor

Date: 12.18.18

ATTEST: Phil Diamond, CPA, County Comptroller
As Clerk of the Board of County Commissioners

By: *Katie Smith*
Deputy Clerk

Printed name: Katie Smith

CAMINO REALE PROPERTIES, LLC, a Florida
limited liability company f/k/a Rio Real Properties
Orlando, LLC

By: Paul Shakespeare
Printed Name: Paul Shakespeare
Title: Vice-President
Date: NOV 12/18

WITNESSES: [Signature]

Printed Name: Matthew Wilson

[Signature]

Printed Name: MOHAMMED ABDALLAH

STATE OF FLORIDA
COUNTY OF ORANGE

The foregoing instrument was acknowledged before me by Paul Shakespeare, as Vice-President of CAMINO REALE PROPERTIES, LLC, a Florida limited liability company, f/k/a Rio Real Properties Orlando, LLC, who is known by me to be the person described herein and who executed the foregoing, this 12TH day of NOVEMBER, 2018. He is personally known to me or has produced _____ as identification and did not take an oath.

WITNESS my hand and official seal in the County and State last aforesaid this 12TH day of NOVEMBER, 2018.

[Signature]
Notary Public
Print Name: _____

My Commission Expires: _____
Sarah J Davenport
NOTARY PUBLIC
STATE OF FLORIDA
Comm# GG195212
Expires 3/26/2022



OCPA Web Map		
Major Roads	State Road	One Way
Interstate 4	Road Under Construction	County Road
Florida Turnpike	Proposed Road	Toll Ramp
Toll Road	US Road	Interstate Ramp
		Proposed SunRail
		Block Line
		Lot Line
		OIA
		OEA
		County Boundary
		Park
		Golf Course
		Lakes and Rivers
		Point of Interest
		Public School
		Fire Station
		Urgent Care Center

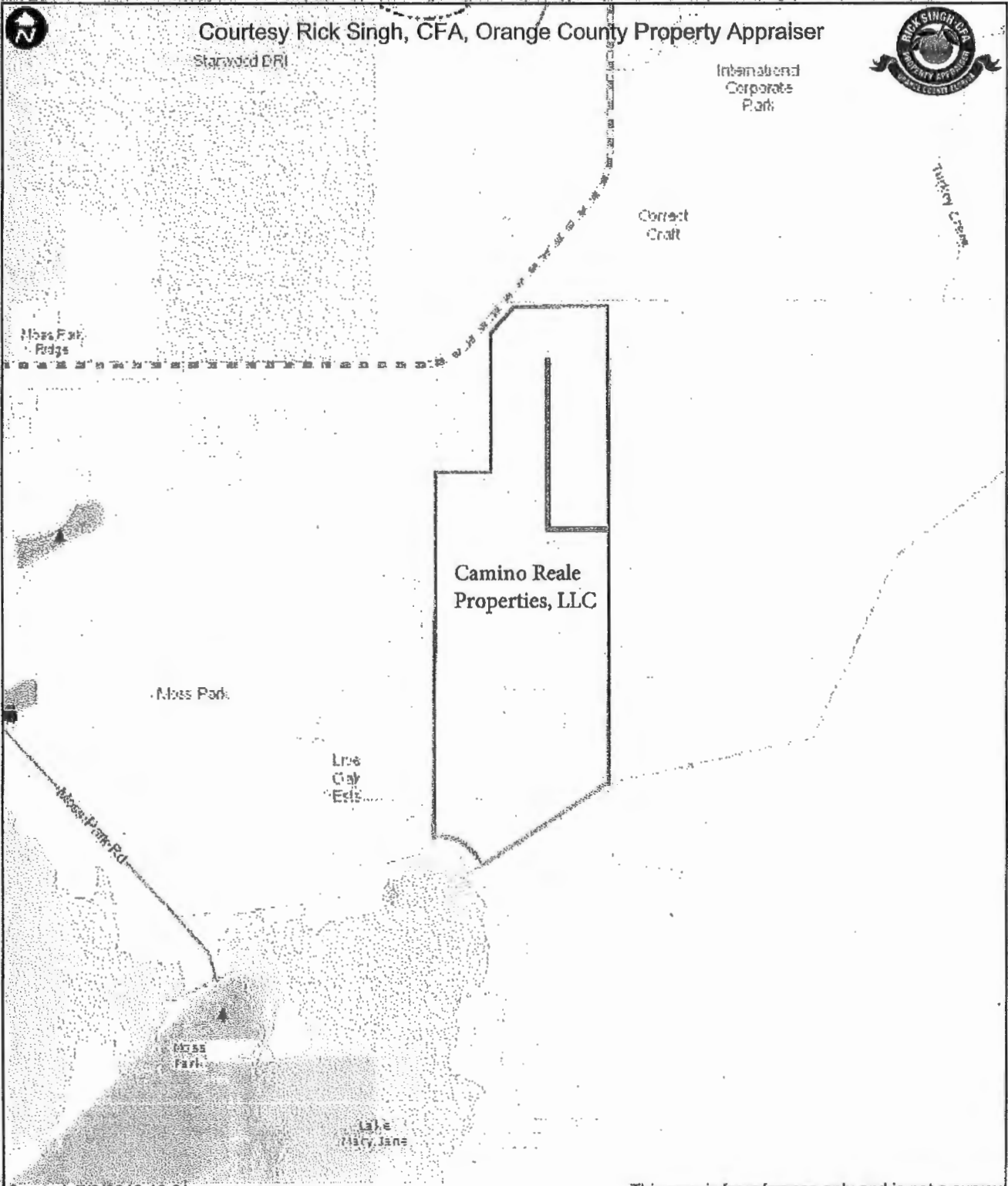


EXHIBIT "A"

EXHIBIT "B"

Beginning at the Southeast corner of Section 19, Township 24 South, Range 32 East, Orange County, Florida; thence S 89°57'12" W along the South line of said Section 19, a distance of 3146.18 feet; thence run North 05°38'25" East, 1169.63 feet to a 1/2" iron rod with cap marked "LB 6915"; thence run North 14°52'28" West, 929.69 feet to a 1/2" iron rod with cap marked "LB 6915"; thence run North 13°48'56" West, 1202.80 feet to a 1/2" iron rod with cap marked "LB 6915"; thence run North 13°44'26" West, 756.42 feet to a 1/2" iron rod with cap marked "LB 6915"; thence run North 16°50'12" West, 1520.28 feet to a 1/2" iron rod with cap marked "LB 6915"; thence continue North 16°50'12" West, 808.08 feet more or less to the centerline of aforesaid Disston Canal; thence S 77°53'03" W along the centerline of said canal a distance of 914.16 feet; thence S 58°10'49" W a distance of 16.44 feet to the East line of the East 3/4 of Section 13, Township 24 South, Range 31 East, Orange County, Florida; thence N 00°03'15" W a distance of 1938.31 feet to the East 1/4 corner of said Section 13; thence N 00°11'10" W a distance of 2658.73 feet to the Northeast corner of Section 13; thence N 00°06'46" W along the East 1/2 of Section 12 Township 24 South, Range 31 East, Orange County, Florida a distance of 2652.04 feet to the East 1/4 corner of said Section 12; thence N 00°09'12" W a distance of 2655.83 feet to the Southeast corner of Section 1, Township 24 South, Range 31 East, Orange County, Florida; thence N 00°15'12" W along the East line of the Southeast 1/4 of said Section 1 a distance of 1321.85 feet to the centerline of Wewahootee Road; thence S 89°43'48" W along said centerline a distance of 2570.08 feet to a point of curve concave to the south having a radius of 400.00 feet and a chord bearing of S 74°16'46" W; thence run through a central angle of 30°54'05" an arc distance of 215.73 feet to the West line of said Southeast 1/4 of Section 1; thence S 00°20'50" E a distance of 1260.56 feet to the Southwest corner of said Southeast 1/4 of Section 1; thence S 00°04'36" E a distance of 2649.12 feet to the Northeast corner of the East 1/2 of the Southwest 1/4 of Section 12, Township 24 South, Range 31 East, Orange County, Florida; thence S 89°57'42" W a distance of 1317.83 feet to the Northwest corner of said East 1/2 of the Southwest 1/4 of Section 12; thence S 00°02'10" E a distance of 2648.67 feet to the Southwest corner of said East 1/2 of the Southwest 1/4 of Section 12; thence S 00°30'48" W along the West line of the East 3/4 of Section 13, Township 24 South, Range 31 East, Orange County, Florida a distance of 2643.93 feet; thence S 00°03'52" E a distance of 1328.80 feet to the Northeast corner of LIVE OAK ESTATES PHASE I, as recorded in Plat Book 19, Page 63, Public Records of Orange County, Florida; thence S 00°27'11" W along the East line of said LIVE OAK ESTATES PHASE I, a distance of 1327.86 feet to the Southwest corner of the aforesaid East 3/4 of Section 13; thence continue along the East line of said LIVE OAK ESTATES PHASE I, S 00°21'43" W a distance of 525.64 feet to a point 250.00 feet as measured at right angles from the North and East right-of-way line of Lake Mary Jane County Road said point also being a point of curve concave Southerly having a radius of 1016.78 feet and a chord bearing S 68°51'47" E; thence run along the arc of said curve a line drawn parallel to and 250 feet North and East of the right-of-way line of Lake Mary Jane County Road through a central angle of 60°06'38" an arc distance of 1066.73 feet; thence S 38°46'26" E a distance of 339.00 feet to the centerline of Disston Canal; thence S 57°54'36" W along said centerline of Disston Canal a distance of 251.71 feet to the Easterly right-of-way of Lake Mary Jane Road; thence S 38°49'00" E along said Easterly right-of-way line a distance of 1241.35 feet; thence leaving said Easterly right-of-way line, N 59°35'32" E a distance of 733.87 feet; thence S 38°48'28" E a distance of 600.00 feet; thence S 59°35'32" W a distance of 733.87 feet to aforesaid Easterly right-of-way line of Lake Mary Jane Road and a point of curve concave westerly having a radius of 623.69 feet and a chord bearing of S 06°44'28" E; thence run along said right-of-way line and the arc of said curve through a central angle of 64°08'00" an arc distance of 698.12 feet; thence S 25°19'32" W a distance of 830.98 feet to a point of curve concave easterly having a radius of 1382.70 feet and a chord bearing of S 13°22'02" W; thence run along the arc of said curve through a central angle of 23°55'00" an arc distance of 577.17 feet; thence S 01°24'32" W a distance of 241.08 feet; thence leaving

said right-of-way, N 89°59'04" E a distance of 780.24 feet; thence S 01°24'32" W a distance of 360.11 feet to the South line of the East 1/2 of Section 24, Township 24 South, Range 31 East, Orange County, Florida; thence N 89°59'04" E a distance of 1697.74 feet to the Southeast corner of said E 1/2 of Section 24; thence S 00°12'49" E along the West line of Section 30, Township 24 South, Range 32 East, Orange County, Florida a distance of 2658.18 feet to the West 1/4 corner of said Section 30; thence S 00°12'49" E a distance of 2658.18 feet to the northwest corner of Section 31, Township 24 South, Range 32 East, Orange County, Florida; thence S 00°09'36" E a distance of 2671.73 feet to the West 1/4 corner of said Section 31; thence S 00°15'37" E a distance of 2841.08 feet to the Southwest corner of said Section 31; thence S 89°38'46" E a distance of 2655.16 feet to the South 1/4 corner of said Section 31; thence S 89°38'08" E a distance of 2654.78 feet to the Southeast corner of said Section 31; thence S 89°38'47" E a distance of 2654.90 feet to the South 1/4 corner of Section 32, Township 24 South, Range 32 East, Orange County, Florida; thence S 89°37'50" E a distance of 2654.88 feet to the Southeast corner of said Section 32; thence N 00°21'48" W a distance of 2924.84 feet to the East 1/4 corner of said Section 32; thence N 00°21'48" W a distance of 2658.95 feet to the Northeast corner of said Section 32; thence N 00°11'51" W a distance of 2658.94 feet to the East 1/4 corner of Section 29, Township 24 South, Range 32 East, Orange County, Florida; thence N 00°11'51" W a distance of 2658.94 feet to the Northeast corner of said Section 29; thence S 89°59'09" W a distance of 2649.16 feet to the North 1/4 corner of said Section 29; thence S 89°59'09" W a distance of 2649.16 feet to the point of beginning;

LESS:

That portion conveyed to the City of Orlando and the Orlando Utilities Commission by that certain Warranty Deed recorded in Official Records Book 3471, page 617, of the Public Records of Orange County, Florida; more particularly described as follows:

From the Southwest corner of the Southeast 1/4 of Section 1, Township 24 South, Range 31 East, Orange County, Florida, said corner being marked by a 2" iron pipe, run North 00°16'36" West 602.65 feet along the West boundary of Southeast 1/4 for the Point of Beginning; thence continue North 00°16'36" West 453.43 feet along said West boundary; thence run North 41°08'51" East 348.82 feet to a point in the existing centerline of that certain road known as Wewahootee Road; thence run North 89°38'52" East 400.56 feet along said existing centerline; thence run South 41°08'51" West 954.24 feet to the Point of Beginning. The bearings referenced herein are grid bearing based on the Florida State plane coordinate system zone east.

AND LESS:

That part of Sections 18 and 19, Township 24 South, Range 32 East, Orange County, Florida described as City of Cocoa Well Field Sites #31, #32 and #33, recorded in Official Records Book 4874, pages 1504, 1505 and 1506, Public Records of Orange County, Florida; more particularly described as follows:

City of Cocoa Well Field Site #31 is described as follows: Begin at a concrete monument marking the Northwest corner of said Section 19 and run South 00°29'34" West, along the West line of the Northwest 1/4 of said Section 19, a distance of 433.00 feet to an iron rod; thence South 89°30'26" East perpendicular to said West line, a distance of 450.04 feet to an iron rod; thence North 00°29'34" East parallel to said West line of the Northwest 1/4, a distance of 450.00 feet to an iron rod; thence North 89°30'26" West perpendicular to said West line of the Northwest 1/4, a distance of 450.00 feet to an iron rod on the West line of the Southwest 1/4 of aforesaid Section 18; thence South 00°37'50" West, along the West line of said Southwest 1/4, a distance of 17.00 feet to the Point of Beginning.

AND LESS:

City of Cocoa Well Field Site #32 is described as follows: Commence at a concrete monument marking the Northwest corner of said Section 19, and run South 00°29'34" West, along the West line of the Northwest 1/4 of said Section 19, a distance of 1199.38 feet; thence South 31°55'11" East, a distance of 496.61 feet to an iron rod; the Point of Beginning; thence North 89°22'50" West, a distance of 100.00 feet to an iron rod; thence South 00°37'10" West, perpendicular to the first course of this description, a distance of 450.00 feet to an iron rod; thence South 89°22'50" East, parallel to the first course of this description, a distance of 450.00 feet to an iron rod; thence North 00°37'10" East perpendicular to the first course of this description, a distance of 450.00 feet to an iron rod; thence North 89°22'50" West parallel to the first course of this description, a distance of 350.00 feet to the Point of Beginning.

AND LESS:

City of Cocoa Well Field Site #33 is described as follows: Commence at a concrete monument marking the Northwest corner of said Section 19, and run South 00°29'34" West along the West line of the Northwest 1/4 of said Section 19, a distance of 1199.38 feet; thence South 31°55'11" East, a distance of 496.61 feet to a point on the North line of City of Cocoa Well Field Site #32; thence North 89°22'50" West, along said North line a distance of 100.00 feet to the Northwest corner of said Site #32; thence South 00°37'10" West, along the West line of said Site #32 a distance of 450.00 feet to the Southwest corner of said Site #32; thence South 89°22'50" East, along the South line of said Site #32, a distance of 450.00 feet to the Southeast corner of said Site #32; thence South 00°37'10" West, a distance of 170.52 feet; thence South 44°22'50" East, a distance of 424.26 feet; thence South 00°37'10" West, a distance of 323.73 feet; thence South 44°22'50" East a distance of 432.40 feet to an iron rod, the Point of Beginning; thence South 89°22'50" East a distance of 450.00 feet to an iron rod; thence South 00°37'10" West, Perpendicular to the first course of this description, a distance of 450.00 feet to an iron rod; thence North 89°22'50" West parallel to the first course of this description, a distance of 450.00 feet to an iron rod; thence North 00°37'10" East perpendicular to the first course of this description, a distance of 450.00 feet to the Point of Beginning.

ALSO LESS AND EXCEPT:

That part of Section 13 and 24, Township 24 South, Range 31 East, and part of Sections 18, 19 and all of Sections 29, 30, 31 and 32, Township 24 South, Range 32 East, Orange County, Florida, described in Special Warranty Deed recorded in Official Records Book 9979, Page 8982, of the Public Records of Orange County, Florida.

FURTHER LESS AND EXCEPT:

That part of Section 1, Township 24 South, Range 31 East, Orange County, Florida, described in Special Warranty Deed recorded in Official Records Book 9979, Page 9045, of the Public Records of Orange County, Florida.

TOGETHER WITH easement estate created pursuant to that certain Perpetual Non-Exclusive Easement Agreement recorded in Official Records Book 5761, Page 3567, Public Records of Orange County, Florida.

Exhibit "C"

INNOVATION WAY – MOSS PARK ROAD TO SUNBRIDGE PARKWAY PRELIMINARY DESIGN STUDY PROFESSIONAL TRANSPORTATION PLANNING and ENGINEERING SERVICES CONTRACT

Innovation Way

From Moss Park Road to Sunbridge Parkway - Approximate Length: 4.50 miles

Preliminary Design Study Scope of Services

The Consultant shall provide project planning, preliminary engineering, and environmental analysis services for the above referenced project. The consultant shall perform those services required for location/design studies, social and environmental effects, multimodal use, safety, engineering reports and public hearings.

Orange County's Preliminary Design Study (PDS) applies a comprehensive interdisciplinary approach, combining the strengths of the engineering and transportation planning disciplines in the initial development phases of roadway improvement projects. The interdisciplinary approach also seeks to assure early and systematic coordination with all affected County Departments and Divisions, the appropriate state and local entities and the citizenry. The resulting coordination effort is intended to accurately gather and convey information pertinent to the development of the project, thereby identifying viable opportunities to expedite or advance pertinent project phases.

The early establishment of sound criteria documenting the need for the improvement is key to the PDS process. The determination of project need is to be based on comprehensive and integrated technical data analyses, which effectively demonstrates the necessity for the project. In addition to the technical basis for the project, a commensurate public involvement effort providing citizens with clear and concise information is to be developed, thereby affording the citizenry an understanding of the project need.

The Consultant shall study the Innovation Way corridor from Moss Park Road to Sunbridge Parkway. Portions of this corridor have already been studied under separate preliminary design studies (PDS) and for the purposes of this study the Consultant shall reference those studies and document relevant elements to establish geometric and cross section continuity. The portions of the corridor that have been studied include: Innovation Way Segments 4 through 7 as illustrated on Exhibit E of the 2018 RAC Agreement (attached) and along the proposed Innovation Way alignment from the east boundary of Camino Reale to Sunbridge Parkway. The remainder of the Innovation Way alignment including Segments 1, 2 and 3 as illustrated on Exhibit E of the 2018 RAC Agreement shall be studied based on this scope of services.

The Consultant shall utilize transportation elements documented in the Camino Reale Regulating Plan (Revised February 9, 2018) and the Camino Reale PD Transportation Term Sheet (BCC Approved February 28, 2018) in order to complete this study.

The Consultant and all Subconsultants shall provide the lump sum fee, man-hour estimates and the Activity and Fee Summary utilizing forms in Exhibit B. A general Project Schedule shall be attached as Exhibit C.

The tasks included in this Scope of Services can be generally grouped into the following seven primary categories:

1. Administration
2. Public Involvement
3. Data Collection
4. Surveying and Mapping
5. Corridor Analysis and Project Need Documentation
6. Improvement Alternatives Development and Analysis
7. Recommended Improvement Evaluation

The format and digital source application used for all submittals are subject to County acceptance and approval. All maps and illustrations depicting aerial extent shall include a directional symbol indicating north and scale appropriate to the map at the size presented. Reproduced maps of greater or lesser dimension than the original must include a modified scale specific to the reproduced map. All illustrations and photographs depicting vertical extent shall be similarly marked when illustrating design features or shall contain captions providing location and direction of the view.

The scope of service addresses each task within these elements and serves to further define specific requirements.

1.0 Administration

1.1 Notice to Proceed Meeting

The Consultant shall prepare for and the Consultant's Project Manager attend a Notice to Proceed Meeting with County representatives, where relevant project information will be presented and discussed between Consultant and County. At this meeting County and Consultant shall establish procedures for administering the PDS contract.

1.2 Project Status Meetings

The Consultant shall attend periodic meetings (up to 12 meetings) with the Orange County Project Manager and staff to discuss project progress and status, upcoming events and action items. The purpose of these meetings is to maintain clear communication between the County and the Consultant team. For the purposes of this study and scope, the Project Team shall be defined as the County Project Manager/Team and the Consulting Team. The Consultant shall prepare and distribute meeting minutes following each of these meetings. The project schedule shall reflect these meetings.

1.3 Project Management/Supervision

The Consultant shall coordinate and manage the efforts of the Consulting Team throughout the duration of the Preliminary Design Study. Management shall include solicitation of proposals, review of invoices, schedule management and coordination of deliverables.

1.4 PDS Project Schedule

The Consultant shall prepare and submit a detailed project schedule for the PDS process identifying major tasks, their duration and tasks relationships. This schedule shall utilize the Orange County Standard Roadway Project Schedule format on MS Project. An updated project schedule shall be submitted at each project status meeting.

1.5 Quarterly Progress Reports

Quarterly Progress Reports shall be prepared in the format prescribed by the Public Works Department. When a progress report includes man-hours from a Subconsultant, the Subconsultant's progress report backup shall accompany the Consultant's status report. A separate Pay Item Breakdown sheet for the Consultant and each Subconsultant shall accompany each progress report. The Consultant's Pay Item Breakdown sheet shall include in aggregate the Consultant's AND Subconsultant's scope assignments. A narrative description of the work performed by the Consultant and Subconsultants during the reporting period for each item in the scope, corresponding to Exhibit B, shall also accompany the progress report. The narrative shall also describe the work to be performed during the next reporting period. The Consultant shall provide quarterly progress reports to County summarizing the effort expended to date by the Consulting Team.

1.6 Quality Assurance/Quality Control

The Consultant shall designate appropriate staff to conduct Quality Assurance/Quality Control (QA/QC) reviews of all work products. These reviews shall be performed for newsletters, webpages, press releases, exhibits, PowerPoint presentations, reports, maps and other work products prior to them being submitted to the County for review or use. Work effort for QA/QC reviews shall be included as part of the work effort and shall be limited to 5 percent (5%) of the work effort of each item.

1.7 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Notice to Proceed Meeting Materials and Minutes
- Project Status Meeting Minutes
- Project Schedule-(Initial and updates as needed)

1.8 Pay Items (Not Applicable)

2.0 Public Involvement

The public involvement element of this project is a primary component distinguishing this project from a roadway design project. The purpose of the public involvement element is to get the community involved in the project development and decision-making process so that the County can develop a

project that not only meets the transportation needs of the area, but is also supported by the community it is intended to serve. Therefore, the Consultant shall conduct the following public involvement activities throughout the project.

2.1 Public Involvement Plan

The Consultant shall prepare a Public Involvement Plan (PIP) and submit it to the County Project Manager for review and approval to delineate the Consultant's efforts to inform and involve the citizens of the county, appropriate state and local agencies and responsible appointed and elected public officials in the project planning, review and approval process. At a minimum, The PIP should identify a) stakeholders, b) public outreach methods with particular attention to low income, elderly, minority and disabled persons, c) estimated schedule of public/community meetings, d) limited English proficiency strategies and e) other opportunities for the public to provide input.

2.2 Coordination Meetings

The Consultant shall coordinate and conduct an initial meeting/telephone call and up to one (1) follow-up meeting/telephone call with each of the following local and state organizations to inform them of the project and solicit their input:

- United States Fish & Wildlife Service (USFWS)
- Army Corps of Engineers, (ACOE)
- Florida Department of Environmental Protection (FDEP)
- Florida Fish & Wildlife Conservation Commission (FFWCC)
- St Johns River Water Management District
- Orange County Environmental Protection Department (EPD)
- Orange County Utilities Department (OCU)
- City of Orlando Public Works Water Reclamation
- Orange County Public Schools (OCPS)
- Orange County Fire Rescue (OCFR)
- Orange County Sheriff's Department
- Central Florida Expressway Authority (CFX)
- Florida Department of Transportation (FDOT)
- LYNX
- City of Orlando Transportation Bureau
- Orlando Utilities Commission

The Consultant shall coordinate with LYNX and OCPS to determine if the project will result in adverse impacts to their regional and local bussing schedules, routes, and bus stops. The Consultant shall coordinate with OCPS to determine if the proposed improvements impact the movement of students from Innovation Middle School.

The Consultant shall include County staff in the meetings/telephone calls and shall provide the name of the individual contacted, date, time, contact details and minutes of the topics discussed for each interaction. Production of minutes shall be included in the associated pay item and shall be submitted to County Project Manager within two days of each coordination meeting.

Where agency involvement is required or agency participation is requested at a public meeting, the Consultant shall coordinate with pertinent agencies a minimum of 30 days prior to such public meeting.

2.3 Small Group Meetings (Up to six)

The Consultant shall be available to conduct up to six (6) small group meetings with organizations interested in the Study. These meetings/presentations may be made to homeowners, formal homeowner associations, business owners or other formal organizations such as a Citizens Advisory Committee. The Consultant shall be responsible for preparing all presentation and handout materials. Preparation for public meetings and other outreach activities, as well as preparation of meeting summaries and follow up, shall comply with direction provided in Sub-Task 2.8.

2.4 Updated Mailing List

The County shall prepare an initial list of property owners and their addresses to the Consultant. The list shall contain, as a minimum, all homeowners/property owners located within the study corridor as determined by the County. The Consultant shall expand the initial mailing list to include any person or institution expressing an interest in the project, potential permitting or review agencies, elected and appointed officials in the area, community leaders, and media representatives.

The Consultant shall maintain and regularly update the mailing list during the course of the study and provide an updated listing for Public Information Meetings and Land Planning Agency (LPA) and Board of County Commissioner (BCC) Public Hearings.

2.5 Newsletters

Orange County shall provide a newsletter template and The Consultant shall prepare update and distribute up to five (5) editions of the project newsletters subject to Orange County approval prior to distribution at the following events of the Study:

- Edition 1: Prior to Kickoff-Alternatives Information Public Meeting
- Edition 2: Prior to the Recommended Improvement Concept Meeting
- Edition 3: Prior to the LPA Public Hearing
- Edition 4: Prior to the Board of County Commissioners Public Hearing
- Edition 5: After final action by the Board of County Commissioners

The newsletters shall be prepared in English and in Spanish and shall be printed in color on 8 1/2" x 11" sheets in a format acceptable to the County. Each English newsletter shall include a Spanish point of contact. Sufficient copies of each English edition shall be printed by the Consultant to provide 110% of the addressees on the mailing list at each mailing, plus an additional 20 copies to be delivered to the County for internal distribution. Sufficient copies of each Spanish edition shall be printed by the Consultant to provide 10% of the addresses on the mailing list at each mailing, plus an additional 15 copies to be delivered to the County for internal distribution. The newsletters shall be submitted to the county Project Manager one month before mailing and shall be modified as necessary and sent to each entry included in the

data base mailing list at least two (2) weeks prior to scheduled meetings or hearings. First class mail shall be used. Spanish newsletters and those English newsletters not mailed shall be distributed as needed through the small group meetings, work sessions and public meetings. The Chief Planner of the Transportation Planning Division and the County Communication Office must approve all final newsletter proofs prior to final printing. Newsletters shall adhere to the County's Title VI Nondiscrimination Policy and Plan.

2.6 Website Creation / Maintenance (Orange County)

Orange County may create and maintain the project website. Consultant will provide reasonable website content as requested by Orange County.

2.7 Advertisements / News Releases

Orange County shall provide templates for all required advertisements and/or news releases and The Consultant shall ensure the publication of display advertisements in the Sunday Orange County Extra Section of the Orlando Sentinel and El Sentinel at least two weeks prior to each of the two public meetings and two public hearing. The advertisements shall be display ads approximately 4" x 5".

The Consultant shall also be responsible for placing the public meeting dates/announcements on the Calendar of Events in the Orange County Extra Section of the Orlando Sentinel.

The Consultant shall prepare and deliver news releases to the county project manager at least three (3) weeks prior to each public meetings and each public hearing.

All public display advertisements and news releases must be approved by the Chief Planner of the Transportation Planning Division and the County Communication Office prior to their distribution to media outlets and the general public.

2.8 Public Information Meetings

The Consultant shall prepare for and participate in two (2) public information meetings as described below:

- Preparation and Documentation of Public Meetings
 - Logistics: The Consultant shall conduct all preparations for the public meetings for the County and shall ensure that appropriate Consultant personnel are present to assist with the meetings. The Consultant shall make arrangements for the meeting room rental and set up (including A/V and screen equipment for presentation) and shall ensure that adequate directional signs are placed on the meeting grounds to direct participants to the meeting room. Informational displays (i.e. maps, alternative improvements concepts, and other graphics) shall be displayed for the public to review and comment at least one (1) hour prior to the Recommended Improvement Concept Public Meeting. The meeting shall include a formal PowerPoint presentation followed by an informal question and answer period during which meeting participants may meet one-on-one with the Study Team to individually discuss their areas of concern.

- Presentation/Materials: The Consultant shall obtain direction from the County Project Manager prior to beginning work on meeting presentation and materials and shall have the PowerPoint presentation and all meeting materials (including script and displays) in final format ready for review and approval by County staff no later than three (3) weeks prior to the public meeting. Displays shall be exhibits mounted on foam board unless otherwise directed by the County. Exhibits shall be plotted in color or black and white as appropriate and as directed by the County. Exhibits shall include maps on an aerial photography base, traffic data and projections, typical sections, alternative evaluation matrices, detail sketches and other text or graphical information as described elsewhere herein or as directed by the County. The Consultant shall prepare and distribute comment forms (comment forms in Spanish may be required) to meeting participants and other interested parties. An interactive comment form shall be posted on the project website to obtain public feedback from persons who are not able to attend the public meeting. The comment form shall be designed to elicit information from the public relevant to the road improvement being considered. Any and all meeting and public outreach materials that will be presented to the general public must be approved by the Chief Planner of the Transportation Planning Division and County Communications Office.
- Meeting Documentation: The Consultant shall document, interpret and summarize all comments received and questions addressed at the meetings and shall prepare written responses to all questions not adequately addressed at the meetings. Additionally, the Consultant shall document and summarize all comments and questions received from the hardcopy and online comment forms. The Consultant shall provide follow-up information necessary to respond to the public's comments and questions. All comments shall be incorporated in the alternative analysis process, leading to the identification and selection of a Recommended Improvement Concept and shall be incorporated into the Preliminary Design Study Report. Public meeting minutes and summaries shall be submitted to the County Project Manager within two (2) days of the meeting. Sign-In sheets, public comment card summaries, final meeting minutes/summaries and other meeting documentation shall be submitted to the County Project Manager and staff within five (5) days of the public meeting. Once approved by the County Project Manager, meeting summaries will be posted on the project web site.
- Kick-Off Alternative Information Public Meeting - The Consultant shall prepare for and conduct a Kick-Off Alternatives Information Public Meeting within twenty (20) weeks of the Notice to Proceed Meeting. The purpose of this meeting is to present the data collection findings, alternative improvement concepts and the preferred alignment improvement of the Preferred Alternative (including the draft recommended stormwater pond sites, typical section(s), stormwater conveyance for offsite and bypass systems and access management, alternative typical sections, wildlife crossings, transit needs as addressed in typical sections, predetermined or proposed and pedestrian pathways and crossings).
- Recommended Improvement Concept Public Meeting – Following completion of the alternative analysis activities and identification of a Recommended Improvement Concept,

the Consultant shall prepare for and conduct a Recommended Improvement Concept Public Meeting. The purpose of this meeting is to present the draft Recommended Improvement Concept to the public for review and comment prior to presentation to the LPA and BCC.

The County Project Manager shall present the recommended improvement concept to the public in a formal PowerPoint presentation and script. Consultant shall distribute a comment form to the meeting participants. The comment form shall be designed to elicit information from the public relevant to the road improvement being considered.

The Consultant shall provide exhibits for display at meetings. Exhibits shall be plotted in color or black and white as appropriate. Exhibits shall include maps on an aerial photography base and typical sections and detail sketches.

The Consultant shall conduct all preparations for the meetings and shall ensure an adequate number of Consultant personnel are present. The Consultant shall make arrangements for the meeting room rental and setup and ensure that adequate directional signs are placed on the meeting grounds to direct participants to the meeting room. Consultant shall have the PowerPoint presentation and all meeting materials in final format ready for review and approval by County staff no later than one week prior to the scheduled public meeting. Consultant shall document all comments received and questions addressed at the meetings and shall prepare written responses to all questions not adequately addressed at the meetings.

2.9 Staff Presentation

The Consultant shall prepare for and participate in a presentation to the Public Works Director and other senior staff at least two (2) weeks prior to the LPA Work Session. The presentation shall be the final draft of the PowerPoint presentation and script to be presented at the LPA Work Session. The Consultant shall modify the presentation to address comments received from county management and staff at that time.

2.10 Local Planning Agency Work Session and Public Hearing

The Consultant shall prepare for, participate in and provide all support necessary (including a PowerPoint presentation, script and handout materials) for the County Project Manager to conduct a Work Session and Public Hearing with the LPA. The Work Session and the Public Hearing presentations shall reflect the Recommended Improvement Concept. Back up materials and supporting reports shall be provided in an editable digital format acceptable to the County twenty-one (21) days prior to the scheduled LPA Work Session and the LPA Public Hearing. All presentation materials shall be compliant with the Board and County Commission Meeting Presentation Guidelines. The Consultant shall setup displays and other exhibits at least one (1) hour prior to the scheduled LPA Public Hearing for public inspection. The Consultant shall provide the final digital presentation at least two (2) business days prior to the scheduled LPA meeting time. The County shall prepare a PowerPoint presentation and script for the LPA Public Hearing.

2.11 Board of County Commissioners Work Session and Public Hearing

The Consultant shall prepare for, participate in and provide all support necessary (including a PowerPoint presentation, script and handout materials) for the County Project Manager to conduct a Work Session and Public Hearing with the BCC. The Final Public Hearing presentation shall reflect the Recommended Improvement Concept and any comments received from the LPA and BCC Work Sessions and LPA Public Hearing. Back up materials and supporting reports shall be provided in a digital editable format acceptable to the County twenty-one (21) days prior to the scheduled BCC Work Session and the BCC Public Hearing. All presentation materials shall be compliant with the Board and County Commission Meeting Presentation Guidelines. The Consultant shall set up displays and other exhibits at least one (1) hour prior to the scheduled Public Hearing for public inspection. The Consultant shall provide the final digital presentation at least two (2) business days prior to the scheduled BCC meeting time.

2.12 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Public Involvement Plan
- Updated Mailing List
- Newsletters (English and Spanish versions)
- Small Group Meeting Material and Minutes (if applicable)
- Advertisements & News Releases
- Public Information Meeting Materials
 - Exhibits
 - PowerPoint Presentations
 - Comment Forms
 - Handouts
 - Response/Comment Tabulations
- Public Works Senior Staff Presentation Materials, Minutes and Summary
- Local Planning Agency Work Session Presentation and Summary
- Local Planning Agency Public Hearing Presentation and Summary
- Board of County Commissioners Work Session Presentation and Summary
- Board of County Commissioners Public Hearing Presentation and Summary

2.13 Pay Items (Not Applicable)

3.0 Data Collection

Immediately upon receipt of the notice to proceed, the Consulting Team shall begin collecting the engineering, land use, traffic and crash, transit, drainage, hydraulic, and environmental data necessary to develop and evaluate a reasonable range of alternative improvement concepts as defined in Section 6.0 to meet the existing and future travel demand within the Study Area. The Consultant shall utilize information gathered in previous science, engineering, cultural and ecological reports and/or other existing right-of-way documentation.

3.1 Aerial Photography / Base Maps

The Consultant shall utilize the latest publically available Orange County aerial photography to prepare color and black and white 1"=100' and 1"=50' scale controlled aerial-based raster image maps. These maps may be limited to unconstructed segments of the corridor and shall be used to present the master drainage basins (1"=100'), the alternative improvement concepts (1"=100'), the recommended improvement concept (1"=50'), right-of-way requirements (1"=50') and any other required information.

The Consultant shall prepare color aerial photography on standard 22 x 34 inch sheets with appropriate title blocks, which shall be suitable for public display. Color aerial imaging shall be used to present the overall project concept and the final recommended improvement alternative to the public at the various public meetings. Both shall be provided to the County in digital format on CD or USB flash or portable drive acceptable to the County.

3.2 Existing Roadway Characteristics

The Consultant shall conduct field investigations to collect all pertinent information on existing roadway characteristics (including structures where applicable) necessary to develop, evaluate and compare the alternative improvement concepts.

All pedestrian infrastructure (i.e., sidewalks, curb ramps, street crossings, etc.) located within the project limits and public rights-of-way shall be evaluated to determine compliance with current Americans with Disabilities Act (ADA) standards. If the subject areas appear to be non-compliant with the current ADA standards, the Consultant shall notify the County Project Manager in writing advising the Public Work's ADA Coordinator or designee of the existing non-compliant features for further review and assessment.

The roadway data shall be compiled, documented and mapped on the aerial photography base maps for public presentations.

3.3 Traffic Data

Orange County shall provide to the Consultant existing and projected traffic data from either previously prepared Innovation Way traffic studies or the Orange County Comprehensive Plan. Utilizing the traffic data supplied by the County, the Consultant shall establish the basic design requirements for the roadway typical section, a typical detail for major and minor intersection improvements. The Consultant shall summarize the traffic data and analysis activities in a report to be included in the *Innovation Way Preliminary Design Study Report*.

3.3.1 Traffic Counts

In addition, the Consultant shall collect and analyze a combination of 72-hour classification counts and eight (8) hour turning movement counts (by 15-minute increments). All traffic count locations shall be identified by map in the Design Traffic Engineering Report.

72 Hour Count Locations

- Moss Park Road from SR 417 to Innovation Way
- Moss Park Rd from Innovation Way Rd to John Wycliffe Blvd
- Moss Park Rd from John Wycliffe Blvd To Lake Hart Drive
- Innovation Way from Moss Park Road to Story Time Drive
- Innovation Way from John Wycliffe Boulevard to Moss Park PD Entrance

Intersection Turning Movement Count Locations (minimum eight [8] hour)

- Moss Park Road & Innovation Way
- Innovation Way & Story Time Drive
- Innovation Way & John Wycliffe Boulevard
- Moss Park Road and John Wycliffe Boulevard
- Innovation Way and Moss Park PD Entrance

The Consultant shall also be prepared to collect turning movement counts at one (1) additional intersections based on the results of this initial data collection effort.

3.3.2 Traffic Factors

Using the data collected through the traffic count program described above, the Consultant shall develop current and future year values for the following traffic factors:

- Peak to Daily Ratio (K) Factor
- Directional Split (D) Factor
- Truck Factor (T)

3.3.3 Design Traffic Projections

Using the latest adopted Orlando Urban Area Transportation Study (OUATS) travel forecasting model and historical data, the Consultant shall prepare opening year, interim year, and design year travel forecasts for the Innovation Way corridor for No-Build and Build conditions. The Consultant shall be responsible for the review of the sub area model and shall make adjustments as necessary or as directed by the County.

The traffic projections shall be presented as average annual daily traffic (AADT) and directional design hour volumes (DDHV) based on the comparison of model and trends based growth rates. For the purpose of this Study, the following horizon years shall be assumed:

- Opening Year – 2025
- Interim Year – 2035
- Design Year – 2045

The Consultant shall also prepare peak hour turning movement forecasts for the following intersections using the latest FDOT TURNS spreadsheet.

- Innovation Way and John Wycliffe Boulevard
- Innovation Way and Camino N-S Connector Road
- Innovation Way and Sunbridge Parkway

Un-signalized intersections shall be evaluated for signal warrant possibility. The Consultant shall perform an intersection LOS analysis, as well as other performance indicators, and provide a recommendation for the preferred method of traffic control (roundabout, two way stop control, all way stop control or signalization) for each of the above listed intersections. Furthermore, the intersection operational analysis (for both the Build and No-Build concepts) shall establish the minimum required lane geometry (including queue lengths) needed to adequately serve the projected turning movements.

The design traffic shall be used to establish the basic design requirements for the roadway typical section and each intersection.

3.3.4 Modeling of Interchange Alternatives using Micro-Simulation (Not Applicable)

3.3.5 Crash Data

The Consultant shall collect and analyze Signal 4 analytic data provided by the County for the most recent five (5) years. Crash diagram summaries shall be provided for each identified high crash area. The crash data collected shall include, at a minimum, the total number of crashes within the Study area and a summary of the crashes by type including crashes involving pedestrians and bicycles which shall be acquired both separately and concurrently with vehicular crash data, location, fatalities, injuries, cause and conditions, and shall be included in the *Design Traffic Technical Memorandum*.

3.3.6 Connected/Automated Vehicles (CAV)

With the advances in connected, semi-autonomous and autonomous vehicles in recent years, and the smart cities initiatives, transportation is considered the most impacted sector by digital innovation. The primary objective is to develop new integrated data platforms to improve safety, enhance mobility and increase the efficiency of the transportation system. A major component of a Smart City/County is communication and sharing of information. Several Intelligent Transportation System (ITS) technologies and development practices are available and recommended to be used within the study area that will allow its users and infrastructure to be smart, connected and provided with mobility alternatives and mode choice information to support automated, connected and smart city applications. The Consultant shall consider the following advances in technologies that improve operations and align with Central Florida's automated vehicle designation including but not limited to:

- a) Loop detectors or video detection at the intersection approaches
- b) Bluetooth devices or any MAC address system
- c) Dynamic Message Signs (DMS)
- d) Adaptive Signal Control (ASC) systems such as Insync or Synchro Green
- e) Flashing yellow Arrow (FYA) signals for pedestrian safety

3.3.7 Design Traffic Technical Memorandum

The Consultant shall summarize the traffic data, travel forecasting and crash analysis activities in a *Design Traffic Technical Memorandum* that shall be submitted to the County for review and comment two weeks prior to scheduling the Kick-Off Alternatives Information Public Meeting and updated two (2) months following the Kick-off Alternatives Information Public Meeting. Comments on the updated *Design Traffic Technical Memorandum* shall be addressed in the *Design Traffic Engineering Report*.

3.3.8 Design Traffic Engineering Report

The Consultant shall prepare a detailed *Design Traffic Engineering Report* describing the traffic data collection effort, modeling and analysis. The report shall contain tabulations of all data collected, warrant analyses where appropriate, and recommendations as to traffic control methods and turn lane geometry for specific intersections. The draft *Design Traffic Engineering Report* shall be submitted for review two weeks prior to scheduling the Recommended Concept Public Meeting. The final *Design Traffic Engineering Report* shall be summarized in and appended to the *Innovation Way Preliminary Design Study Report*.

3.4 Utilities

The Consultant shall identify any existing and proposed utilities, which may influence location and design consideration, including but not limited to the following:

- Overhead: transmission lines, microwave towers, etc.
- Land Surface: utility boxes, valves and shut-offs, potable or irrigation water supply wells, etc.
- Underground: water, gas, sanitary sewer, force mains, power and telephone cables, etc.

The Consultant shall coordinate with Orange County Utilities to:

1. Make them aware of the project at the conceptual level. (All information provided to each utility shall be documented as noted below.)
2. Obtain information on proposed utility construction and required clearances and easements.
3. Obtain input on utility issues that may not be readily apparent.

The Consultant shall map and document this information in the Utility Section of the *Innovation Way Preliminary Design Study Report* which shall summarize how the existing utilities shall influence location and design considerations.

3.5 Bridges and Structures (Not Applicable)

3.6 Transportation Plans

The Consultant shall review and document plans, including the Orange County Trails Master Plan, for all modes of transportation including automobile, truck/freight, transit,

bicycle/pedestrian and other non-motorized vehicles and modes. The information received from these plans shall be used to identify the conformance of this project to applicable transportation plans and to develop and evaluate the alternative improvement concepts. The Consultant shall document this investigation and its conclusions in the *Innovation Way Preliminary Design Study Report*.

3.7 Existing Multimodal Accommodations and Services

The Consultant shall research, evaluate and document the locations and conditions of existing and planned pedestrian, bicycle, trail, and public transportation accommodations and services within the vicinity of the Study area including, but not limited to, sidewalks, pedestrian crossings, paved shoulder widths, signed bike routes, park-and-ride lots and transit bus routes and stops. The Consultant shall also observe, document and map pedestrian and bicycle activity and travel patterns within the vicinity of the Study area. This information, along with a review of the County's adopted Trails Master Plan, will be used to identify potential multimodal improvements and connections to existing and planned multimodal infrastructure, if applicable.

3.8 Soil Survey and Geotechnical Data

The Consultant shall review existing soil maps and available geotechnical information for the study area. Preliminary borings should be conducted along the unconstructed portions of recommended alignment (20-foot deep approximately every 600 l.f.) to determine seasonal groundwater levels and in areas of each alignment that have a probability of having significant depths of unsuitable materials.

The Consultant shall also perform one (1) soil boring to a depth of 15 feet for each proposed stormwater retention pond site. For this study, it is assumed that up to ten (10) locations shall be evaluated as preferred (five [5] primary and five [5] alternative) pond sites.

The results of the geotechnical data collection activities shall be mapped and documented in a Geotechnical Report, which shall be summarized in and appended to the *Innovation Way Preliminary Design Study Report*. This section shall document existing soil, geotechnical and boring results, included in the Geotechnical Report will be a survey map of the boring locations showing each field boring location, boring identification, state plane coordinates, NAVD 88 elevation, also included a site location map, surveyor's name, license number and date of field location, and shall contain preliminary stormwater/drainage recommendations, including pond siting recommendations, relevant to the project.

3.9 Environmental Site Assessment

The Consultant shall conduct a Contamination Screening Evaluation Report (CSER) including Sanborn Maps, if available, and any data contained on the FDEP websites for the properties that are not existing public ROW that are affected by each alignment being considered in Segments 2, the southern portion of 3, the western portion of 5 and 6 as illustrated on Exhibit E of the 2018 RAC Agreement.

Impacted materials within all areas related to the roadway corridor, including but not limited to soil, groundwater, and surface water, must be remediated in accordance with Chapters 62-730

and 62-780, Florida Administrative Code (F.A.C.). Site remediation will be deemed complete when the site meets "No Further Action" criteria of subsection 62-780.680(1), or 62-780.680(2), or 62-780.680(3), F.A.C., and the Florida Department of Environmental Protection (FDEP) issues a Site Rehabilitation Completion Order ("SRCO") as referenced in subsection 62-780.680(7), F.A.C. Closure with waste in place in accordance with section 62-730.260, F.A.C., is not acceptable to Orange County. Receipt of a SRCO consistent with this condition must be received prior to beginning construction or transfer of any interest on the ROWE, whichever occurs first.

The Environmental Site Assessment shall be mapped and documented in a CSER report, which shall be summarized in and appended to the *Innovation Way Preliminary Design Study Report*.

3.10 Land Use / Development Plans

The Consultant shall consider in the preparation of the Preliminary Design Study, any Regulating Plan, Land Use Plan, Preliminary Subdivision Plan or Development Plan that could potentially influence the determination of a recommended improvement concept for Innovation Way.

3.11 Cultural Facilities

The Consultant shall conduct a desk-top review of cultural facilities that are located within the vicinity of the Study Area. Cultural facilities shall include, but not be limited to, trails, parks, schools and recreational areas as well as the neighborhoods they serve. Information relevant to this Study shall be mapped and documented in the *Innovation Way Preliminary Design Study Report*.

3.12 Archaeological and Historic Features

The Consultant shall review federal, state and local sources to identify recorded historical and archaeological sites within the proposed right-of-way, all proposed stormwater facilities and a 100-foot buffer on all sides of stormwater facilities located within Segments 2 and 3 as illustrated on Exhibit E of the 2018 RAC Agreement. Utilizing this information, the Consultant shall map all sites that may influence the location and evaluation of alternative improvement concepts. This information shall be documented in the Cultural Resource Section of the *Innovation Way Preliminary Design Study Report*.

3.13 Hydrologic and Natural Features

The Consultant shall review existing information, including, but not limited to, the data and maps of the US Army Corps of Engineers, Florida Natural Areas Inventory, St. Johns River and South Florida Water Management District Databases, Florida Department of Environmental Protection, Florida Land Use and Cover Classification Systems, Natural Resources Conservation Service, Orange County Stormwater including Federal Emergency Management Agency basin studies, Florida Fish and Wildlife Conservation Commission Habitat Model Data, US Fish and Wildlife IPaC tool and specific site indicators such as topography, vegetation, soils data, floodplain information, and other field observations to identify significant hydrologic and natural features found within the study area.

The Consultant shall supplement existing literature/resource documents with field reviews of the study area. If the field review identifies the potential presence of a listed feature within the study area, the Consultant shall document and map the location(s) and extent relative to the occurrence within the study area. Information to be documented shall, at a minimum, include the following:

- Wetlands, Uplands or both according to quality and conservation value
- Wildlife Corridors
- Wildlife Crossing Recommendation(s)
- Critical and Strategic Habitat
- Conservation, Refuge and Management Areas
- Mitigation Sites / Conservation Easements
- Water Quality
- Floodplains and Floodways
- Drainage Outfalls
- Recommendations for the Maintenance of Watershed Water Flows and Volumes

Wildlife Corridor shall be defined as a route that permits the direct travel or spread of animals or plants from one area or region to another, either by the gradual spread of a population of a species along the route or by actual movement of animals, seeds, pollen, spores or microbes, as defined in Florida's State Wildlife Action Plan (formerly Comprehensive Wildlife Conservation Strategy). Critical and Strategic Habitat shall be defined as areas designated or proposed in accordance with the US Fish and Wildlife Endangered Species Act or FWC modeled areas of habitat that have been identified as essential to sustain a minimum viable population for focal terrestrial vertebrate species that were not adequately protected on existing conservation lands, respectively.

The Consultant shall make recommendations as appropriate, to accommodate, wildlife crossing(s) and to preserve wildlife corridors.

The Consultant shall document offsite and bypass drainage features occurring within the study corridor and shall make recommendations to preserve and maintain water flows and volumes within watersheds.

The Consultant shall also evaluate corridor-wide permit-related information on environmental resource permits, dredge and fill permits, water quality permits, or stormwater discharge permits. This activity shall include coordinating with all applicable permitting agencies and identifying all existing permits and their conditions and influence on this Study.

The Consultant shall document in report and map format, in the *Innovation Way Preliminary Design Study Report*, all information that may influence the location and evaluation of alternative improvement concepts.

3.14 Threatened and Endangered Species

The Consultant shall review existing information to determine the potential presence of threatened or endangered plant and animal species within the unconstructed segments of the study area. If the review identifies the potential presence of threatened or endangered plant or animal species, the Consultant shall document and map their locations relative to the findings/recommendations in Section 3.13. The Consultant shall supplement documented information with field reviews of the study area. The Consultant shall document in report and map format, in the *Innovation Way Preliminary Design Study Report* all information that may influence the location and evaluation of alternative improvement concepts.

3.15 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be submitted to and accepted by the County:

- Color and gray-cast Aerial Base Map
- Initial Design Traffic Technical Memorandum
- Updated Design Traffic Technical Memorandum
- Design Traffic Engineering Report
- Geotechnical Reports and Maps
- Recommendations for the Maintenance of Watershed Water Flows and Volumes
- Environmental Site Assessment Report
- Cultural Resource Assessment Survey
- Wildlife Crossing Recommendation(s)
- Wildlife Corridors and Critical and Strategic Habitat, Management Areas and Mitigation Sites
- Mapping and Documentation of:
 - Existing road characteristics
 - Existing and proposed utilities
 - Hazardous materials areas
 - Land use and development plans
 - Cultural features including trails
 - Archaeological and Historical Sites
 - Hydrologic and Natural Features
 - Wildlife Corridors and Critical and Strategic Habitat
 - Threatened & Endangered Species
 - Utilities

3.16 Pay Items (Not Applicable)

4.0 Right-of-Way Engineering Projects (Right-of-Way Identification Maps)

4.1 Right-of-Way Mapping

The Consultant shall prepare a Right-of-Way Identification (I.D.) Map at a scale of 1" = 40' for the Segments 3, the western portion of 5 and 6 as illustrated on Exhibit E of the 2018 RAC Agreement. All survey work shall meet the requirements of Chapter 472, Florida Statutes and Chapter 5J-17 (050, 051, 052), Florida Administrative Code. The Consultant shall analyze each proposed acquisition to identify the appropriate property interest to be acquired (fee simple right-of-way, drainage easement, fill slope easement, temporary construction easement, temporary demolition easement, etc.). The Consultant shall include identification of the right-of-way required for the multiuse trail within this project. The Consultant shall submit 60%, 90% and 100% progress review submittals of the Right-of-Way I.D. Maps in 11 inch x 17 inch format. Electronic copies in PDF format and a disc containing electronic copies in CAD Autodesk – Civil 3D 2015 (or as updated) shall be provided at 100% submittal. Sufficient control data shall be shown on the final Right-of-Way I.D. Map to allow the Consultant/County to prepare legal descriptions and parcel sketches for individual parcels with no additional field information needed.

The Consultant shall update and modify legal descriptions, parcel sketches and Right-of-Way I.D. Maps as needed until final 100% submittal.

4.2 Parcels

4.2.1 Review of Title Work

The Consultant shall review the title work as provided by the County, supplemental surveys and investigations and/or other record information. The size, location, and dimensions of each parent tract, parcel and property interest (easements, leases, etc.) shall be determined by the Consultant from this review. This information shall be shown on the Right-of-Way I.D. Maps/miscellaneous surveys and parcel sketches, as appropriate. Recorded and Unrecorded easements shall be shown to the extent they can be identified and located on the Right-of-Way I.D. Map and parcel sketches.

4.2.2 Legal Descriptions and Parcel Sketches

The Consultant shall prepare for each right-of-way parcel and stormwater management parcel to be conveyed to Orange County (for Segment 2 as illustrated on Exhibit E of the 2018 RAC Agreement) via warranty deed a Legal Description and Sketch in accordance with applicable State of Florida Standards of Practice as set forth by the Board of Professional Surveyors and Mappers, Chapter 5J-17.05, Florida Administrative Code, per Section 472.027, Florida Statutes. Such legal descriptions and sketches shall be appropriately tied to existing physical monuments and section corners. Closure reports shall be provided for all legal descriptions.

4.2.3 Parcel Staking for Appraisal (Not Applicable)

4.3 Right-of-Way Surveys, Alignment and Monumentation

The Consultant shall have a licensed Professional Surveyor and Mapper conduct field surveys, including a field survey of geotechnical boring locations as described in Section 3.8 Soil Survey and Geotechnical Data, to supplement existing survey data. All survey information shall be recorded in cross section field book that has 10 columns by 10 rows per inch on both pages supplied by the Consultant. The field book remains the property of the County and must be submitted with the Final Right-of-Way I.D. Map/miscellaneous surveys and be signed and sealed. When a data collector is used, the Consultant shall submit a paper copy of the raw data files and coordinate data files bound in a book, together with the electronic copy on a disc. All Right-of-Way computations shall be documented in a Right-of-Way Computation Book, which shall be submitted to the County Project Manager with the Survey Field Notes, State Plane Coordinate file, adjusted bench run (if required) and Final Right-of-Way I.D. Maps/miscellaneous surveys.

The Consultant shall have a licensed Professional Surveyor and Mapper monument the center line of construction/survey at stations that are not more than 600 feet apart and at all P.C.'s, P.T.'s, side street intersections and changes in direction including the limits of the property required for the proposed multiuse trail. Stationing shall be shown on the Right-of-Way I. D. Maps at all changes of direction, property lines, points of curvature and proposed parcel takes. Similar monumentation and markings shall be provided at all side streets to 150 feet beyond the limits of the topographic survey or at other locations as approved by the County Project Manager. The centerline of construction/survey shall be referenced to permanent monumentation (Section Corners, subdivision corners, roadway monumentation) located outside the limits of construction at the beginning and end of project, all P.C.'s and P.T.'s, all changes in direction, and intermediate points such that referenced points are spaced not more than 600 feet apart. Horizontal control, as stated above shall be tied to the Florida State Plane Coordinate System, North American Datum of 1983/1990 Adjustment East Zone and shall be shown on the final Right-of-Way I.D. Maps/miscellaneous surveys. Map Dimensions shall be shown in U.S. feet.

4.4 Minimization of Compensable Impacts

The Consultant shall, in coordination with the Orange County Project Manager, coordinate with Orange County Public Works Engineering, the County Attorney's Office and Orange County Real Estate early in the final design phase of the project to review the design corridor and make the necessary revisions to the design to minimize compensable impacts to private properties. The Consultant shall also identify and evaluate alternatives to acquisition (e.g., retaining walls instead of fill slope easements, closed drainage instead of ditch systems, etc.) to determine the most cost effective option(s) to meet the project needs.

The Consultant shall perform the following services during this phase:

- Meet as necessary with the County and property owners.
- Perform site inspections with the County and property owners as may be necessary.
- Coordinate with the County to identify cost effective ways to reduce compensable impacts.
- Consult with the County as may be necessary during the design process with respect to right-of-way issues.

During this phase, the Consultant shall inspect affected properties in the field to determine the extent of compensable impacts on each parcel and whether such impacts can be reduced in a cost-effective manner. Consideration shall, at a minimum, be given to site access, onsite drainage, onsite parking, onsite utilities, including septic systems, and any other existing facilities impacted by the proposed improvements. This effort shall include meetings with property owners to obtain their input on the configuration of the proposed improvements in those cases where various options exist. The Consultant shall modify the design, where possible, to minimize the number and extent of such compensable impacts and to accommodate property owner preferences where appropriate.

The Consultant shall document the above-described investigations and their findings and recommendations. This work should occur early in the design process and prior to completion of 60% plans.

The Consultant shall meet with all property owners where the proposed right-of-way exceeds the limits shown on the Right-of-Way Identification Maps prepared during Phase I.

4.5 Changes to Documents during Right-of-Way Acquisition (Not Applicable)

4.6 Deliverables

Work to be completed under this section shall require the following items to be delivered and accepted by the County:

- Right-of-Way I.D. Maps (60%, 90%, 100%)/miscellaneous surveys in PDF format and three (3) hardcopy paper sets with each submittal – signed and sealed at 100%.
- Right-of-Way Survey Field Books. In original format signed and sealed.
- Right-of-Way Computation Book (Raw Data Files, Coordinate data files, benchmarks, etc.) In original format signed and sealed.
- Title Work for Parcels where parcel takes are involved. In PDF format. Depict all encumbrances (if any) found in Title Work on Right-of-Way I.D. Maps, Sketches and Surveys.
- Electronic PDF and CAD format on disc at project completion of all final set(s).
- Legal Descriptions and Sketches

4.7 Pay Items (Not Applicable)

5.0 Corridor Analysis and Project Need Documentation

Following completion of the data collection and evaluation activities, the Consultant shall perform a corridor analysis for the study area. This analysis shall determine the characteristics within the study

area and potential corridors therein that could influence the development of alternative alignments and improvement concepts.

The Corridor Analysis activities shall identify the improvement need, the existing and projected travel demand, the current and projected land use development patterns and the presence of any environmental, cultural, archaeological/historical, hydrologic and natural sensitive area(s) within the corridor.

The Consultant shall prepare a draft *Corridor Analysis Technical Memorandum* that shall document the Corridor Analysis activities. The draft memorandum shall be submitted within thirty (30) days prior to the Kick-Off Alternatives Information Public Meeting to allow the County's review comments to be incorporated into the development of the alternatives and analysis. The technical memorandum shall be submitted to the County for approval and shall be included in the Corridor Analysis Section of the *Innovation Way Preliminary Design Study Report*.

The *Corridor Analysis Technical Memorandum* shall contain, at a minimum, the following information in the body of the memorandum (including maps as appropriate):

Characteristics of the Study Area

- Existing Road Characteristics
- Crash Data
- School and Public Transportation
- Existing and Proposed Utilities
- Existing Transportation and Long-Range Plans
- Geotechnical Data
- Areas of Potential Contamination
- Existing and Proposed Land Uses, Zoning and Development Project Boundaries
- Cultural Features including Trails
- Archeological and Historic Features
- Demographic Data
- Wildlife Corridors
- Critical and Strategic Habitat
- Threatened and Endangered Species

Corridor Analysis

- Project Need
- Existing and proposed travel demand
- Current and projected development patterns
- Improvement Opportunities, Alternatives and Constraints
- Summary of Public Involvement to date

5.1 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Corridor Analysis Technical Memorandum

5.2 Pay Items (Not Applicable)

6.0 Improvement Alternatives Development and Analysis

The Consultant shall perform the following tasks to develop, analyze and compare alternative improvement concepts within the unconstructed portions of the corridor and in consideration of the ROW widths. All alternatives shall consider and demonstrate the capacity to comply with ADA standards. The Consultant shall document in the *Innovation Way Preliminary Design Study Report* any design criteria utilized in the analysis process for roadway and drainage improvement concepts.

6.1 Alternative Typical Sections

Based on the draft *Design Traffic Technical Memorandum* and *Corridor Analysis Technical Memorandum*, drainage considerations, transit and multimodal needs and other available information, the Consultant shall consider alternative typical sections that transition into portions of Innovation Way that have already been constructed. The Consultant shall utilize the typical section in the First Amendment to Moss Park Transportation and Proportionate Share Agreement (Doc# 20140534419 Book 10822, Page 4520). The Consultant shall then evaluate the typical sections using criteria that shall include but not be limited to access management, right-of-way requirements, offsite and bypass drainage systems and traffic volumes. The analysis shall be documented in the *Innovation Way Preliminary Design Study Report*.

6.2 Access Management Determination

The Consultant shall determine the proper access classification and standard to be applied to the project and coordinated with the County's access management regulations.

The Consultant shall evaluate the effects of at least two (2) alternative access management concepts that appear to be most applicable considering traffic circulation, access to individual properties, U-turn vehicle tracking needs and other applicable criteria and recommend the most appropriate application for each section of the corridor.

The Consultant shall update the concept throughout the Study and document the evaluation and recommendation of the alternative access management concepts in the *Innovation Way Preliminary Design Study Report*.

6.3 Develop Alternative Alignment Improvement Concepts

The Consultant shall develop a recommended improvement concept based on review and analysis of collected data related to the project. Up to three alignment improvement concepts which utilize the existing Innovation Way right-of-way to the greatest extent possible. The improvement concepts shall be prepared on the aerial base maps.

The proposed right-of-way requirements shall be shown on each Improvement Alternative Concept display.

6.4 Analyze Alternative Improvement Concepts

The Consultant shall analyze the benefits and impacts associated with the Alternative Alignment Improvement Concepts. The results of the analysis of the Alternative Improvement Concepts shall be documented in the in the *Innovation Way Preliminary Design Study Report*. The analysis to be performed for each alternative shall specifically include safety, cost, conformance to long range plans, good engineering practices and environmental considerations, some of which are more particularly described below:

- Compensable Impacts Analysis - The consultant shall, in coordination with the Orange County Project Manager, coordinate with the County Attorney's Office, Orange County Engineering Division Right-of-Way Section and the Orange County Real Estate Management Division Appraisal Section during the development of the Alternative Improvement Concepts to minimize compensable impacts to private properties associated with each viable alternative. This evaluation effort shall include:
 - Inspection of potential affected properties in the field to determine the extent of compensable impacts on each parcel associated with each viable alternative, and whether such impacts can be reduced in a cost-effective manner.
 - Consideration of site access, onsite drainage, onsite parking, onsite utilities, including septic systems, and any other existing facilities that may be impacted by each viable alternative improvement concept, including financial impacts to existing businesses.
 - Meetings with potentially affected property owners to obtain their input on viable alternative alignments and configurations of the proposed improvements in those cases where various options exist, for example, where the shape and location of retention ponds can be configured to meet property owner's preferences.
 - Incorporation of comments in the recommended alternative such as to minimize the number and extent of such compensable impacts.

The above described investigations, findings and recommendations shall be documented in the *Innovation Way Preliminary Design Study Report*.

- Cost Analysis – The Consultant shall develop engineering design and construction cost estimates for each alternative. The Consultant shall provide the County with a Right-of-Way Impacts Estimation Package. This package shall include a tabulation of potential acquisition parcels and areas (in square feet) for each Alternative Alignment Improvement Concept. The location of each parcel shall be shown on an aerial map. Right-of-way cost estimates shall be provided for each alternative by the County and shall include property values and damages. The cost estimates shall

be based on the information in the Right-of-Way Impacts Estimation Package and shall reflect the costs for the year of expenditure. The County will provide the Consultant with escalation/de-escalation factors and production phase schedules for converting present day values to year of expenditure values.

- Conceptual Drainage Analysis – The Consultant shall perform a preliminary drainage analysis of each alternative to determine the potential outfall locations and preliminary sizes (volume and area) of required detention and/or retention facilities for stormwater treatment or attenuation. The drainage analysis shall include identification of the facilities required to serve the proposed multiuse trail. This analysis shall also address off-site and bypass systems within each viable alternative corridor including the sizing of closed systems. Pond locations shall be evaluated for up to eight (8) pond sites (four [4] primary and four [4] alternative sites). Pond site evaluations shall require coordination with the property owner to determine the owner's preferred location within the property. The evaluation shall also consider permitability, avoidance of wetland and floodplain impacts, outfall availability, hydraulics and County standards with regards to the pond slopes and configuration. A matrix shall be developed to compare the cost of each alternative pond site, including property cost and construction cost for the pond, conveyance system and outfall. The findings shall be documented in a Pond Siting Report that shall be appended to the *Innovation Way Preliminary Design Study Report*. The Consultant shall provide a digital copy of associated Interconnected Channel and Pond Routing (ICPR) model output files to the County.
- Community (social-economic) Impact Analysis – The Consultant shall estimate the number of residences, businesses, neighborhoods, and community facilities impacted by each alternative, including socio-economic data sufficient to determine potential impacts to disadvantaged populations. The right-of-way cost estimate prepared by the County shall reflect the cost of these impacts and the number of each type of impact. The Consultant shall prepare aerial photography with proposed right-of-way lines for each alternative. The approximate square footage of each potential acquisition shall be provided to the County.
- Computer Enhanced Photographs – The Consultant shall prepare up to three (3) sets of low oblique computer enhanced photographs. These photographs shall be used to convey the existing and future appearance (i.e. visual and aesthetics) of the improvement concept to the public at the various meetings.
- Wetland and/or Upland Impacts – The Consultant shall estimate the acres of wetlands and/or equivalent uplands impacted by each alternative and identify potential mitigation strategies, including costs.
- Flood Plain Impacts – The Consultant shall estimate the extent of flood plain encroachment of each alternative improvement concept and identify potential floodplain compensation alternatives and costs.

- Critical and Strategic Habitat Impact - The Consultant shall quantify/qualify the potential impacts to US Endangered Species Act critical habitats and FWC identified strategic habitat associated with each alternative, and shall identify potential alignment alternatives and/or mitigation strategies and costs.
- Wildlife Corridor Impact - The Consultant shall quantify/qualify the potential impacts to wildlife corridors associated with each alternative and shall identify potential mitigation strategies and costs. The Consultant shall coordinate with regulatory agencies to identify engineered controls and other means of preserving wildlife corridors.
- Threatened & Endangered Species Impacts – The Consultant shall quantify/qualify the potential impacts to threatened and endangered plant and animal species and their habitats associated with each alternative and shall identify potential mitigation strategies and costs. The Consultant shall coordinate with regulatory agencies to identify permissibility of impacts of the recommended alignment to Threatened and Endangered Species.
- Archaeological and Historic Feature Impacts – The Consultant shall estimate the location and extent of impacts caused to significant archaeological or historical structures or sites. The Consultant shall identify alternatives to avoid, minimize and/or mitigate impacts and shall identify costs associated with each alternative.
- Contaminated Sites Impacted – The Consultant shall identify the location of any contaminated or potentially contaminated sites, facility numbers, known extent of contaminated soil, groundwater and/or surface water and the location of pollutant storage tanks or other regulated materials storage areas or vessels in each alternative and shall recommend whether a Phase II Environmental Site Assessment is necessary.
- Geotechnical Analysis – The Consultant shall evaluate the suitability of the soil underlying each alternative for roadway and pond construction.

6.5 Alternatives Comparison Matrix

The Consultant shall prepare and submit to the County Project manager and staff an Alternatives Evaluation and Comparison Matrix. The Consultant shall prepare an evaluation matrix to document and compare the results of the evaluation tasks. This matrix shall be used to clearly identify the most viable improvement concept. It shall be prepared in a manner suitable for presentation to the public. The draft matrix shall be provided at least thirty (30) days in advance of the Kick-Off Alternatives Information Public Meeting to allow the County's review comments to be incorporated into the matrix prior to the Kick-Off Alternatives Improvement Public Meeting. The matrix shall be updated prior to the Recommended Improvement Concept Public Meeting to reflect the Recommended Improvement.

6.6 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- No Build Alternative
- Alternative Typical Sections
- Access Management, Evaluation and Concept
- Alternative Alignment Improvement Concepts and Maps, to include:
 - Right-of-Way Impacts Estimation Package
 - Cost Analysis
 - Conformance to Transportation Plans Analysis
 - Land Use and Development Plan Analysis
 - Community Needs and Preferences Analysis
 - Conceptual Drainage Analysis and Pond Siting Report
 - Community Impact Analysis
 - Computer Enhanced Photographs
 - Wetlands and/or Upland Impact Analysis
 - Floodplain Impact of Alternatives
 - Critical and Strategic Habitats Impact Analysis
 - Wildlife Corridor Impact Analysis
 - Threatened and Endangered Species Impact of Analysis
 - Archaeological and Historic Feature Analysis
 - Contaminated Sites Analysis
 - Geotech Analysis
 - Draft and Final Alternatives Comparison Matrix
- Digital Copy of ICPR Output Files

6.7 Pay Items (Not Applicable)

7.0 Recommended Alternative Improvement Evaluation

Following completion of the alternative analysis and Alternatives Information Public Meeting, the Consultant, in association with the County, shall prepare the final recommended improvement concept to be evaluated at a more detailed level.

The Consultant shall refine the final Recommended Alternative Improvement concept to finalize the major elements of the project. These refinements shall include estimating the final recommended right-of-way limits, pond locations, cost and other major features needed to advance the project to the subsequent design phase. The evaluation matrix shall be updated to reflect the impacts of the final recommended improvement concept. Impacts that are not quantifiable shall be documented in the *Innovation Way Preliminary Design Study Report*.

7.1 Preliminary Design Study Report

One primary document entitled the *Innovation Way Preliminary Design Study Report* shall be prepared. This document shall record all public involvement activities, alternatives developed,

analysis efforts, and the final recommendation. A report outline shall be submitted to the County Project Manager for review and approval prior to initiating documentation. It shall contain summaries and recommendations pertaining to the recommended alternative and potential impacts associated with it. The Consultant shall prepare the draft *Innovation Way Preliminary Design Study Report* documenting all activities leading to and including all comments received from the public to that point and the selection of the recommended improvement concept. The draft report shall be prepared two (2) months prior the Recommended Improvement Concept Public Meeting to allow the County's review comments to be incorporated into the draft document which shall be available for review at that meeting.

The *Innovation Way Preliminary Design Study Report* shall be amended, if necessary, in accordance with the results of the Recommended Improvement Concept Public Meeting and subsequent LPA Work Session and Public Hearing. Five (5) paper and twenty (20) digital copies of the draft report shall be submitted to the County Project Manager sixteen (16) days prior to the LPA Work Session, LPA Public Hearing, BCC Work Session and BCC Public Hearing respectively. To the maximum extent possible, all draft documents shall be updated by modifying and inserting adjusted pages into the previously submitted documents. Digital copies shall be delivered on CD or USB flash or portable drive acceptable to the County and may be similarly updated for each submittal.

Following the LPA and BCC Public Hearings and final action by the BCC, the Consultant shall finalize the *Innovation Way Preliminary Design Study Report* by formally documenting BCC action and the public involvement process, including all comments received up to and during the LPA and BCC Public Hearings.

Technical memoranda shall be prepared throughout the course of the study to document interim decision on the traffic forecasts and the initial corridor analysis processes. These technical memoranda shall be formally summarized in the body of the report and incorporated in their entirety into the *Innovation Way Preliminary Design Study Report* as appendices two weeks prior to the Recommended Concept Public Meetings.

The *Innovation Way Preliminary Design Study Report* shall, at a minimum, contain the following information in the body of the report (including maps as appropriate):

- Public Involvement
- Existing Conditions
- Project Need
- Utilities
- Conformance with Transportation and Long Range Plans
- Land Use and Development Patterns
- Existing and Proposed Land Uses
- Community Needs and Preferences
- Geotechnical Considerations
- Utilities Analysis

- Environmental Site Assessment Issues
- Cultural Features including Trails
- Archeological and Historic Features
- Hydrologic and Natural Features
- Critical and Strategic Habitat
- Wildlife Corridors
- Threatened and Endangered Species
- Corridor Analysis
- Alternative Typical Sections
- Alternative Alignment Improvement Concepts
- No Build Concepts
- Access Management Alternatives
- Alternative Drainage and Pond Concepts
- Analysis and Comparison of Alternatives (Including Costs and Impacts)
- Recommended Alternative Improvement Concept and Map
- Right-of-Way Identification Map
- Cost Estimates
- Design and Construction Schedules

In addition, the *Innovation Way Preliminary Design Study Report* shall include the following as appendices or as separate volumes of the report:

- Public Involvement Report
- Geotechnical Report
- Design Traffic Engineering Report
- Environmental Site Assessment Report
- Hydrologic and Natural Features Report
- Threatened and Endangered Species Report
- Pond Siting Report

The Consultant shall prepare an Executive Summary that contains a synopsis of the *Preliminary Design Study Report*. The draft Executive Summary and subsequent revisions including the final summary shall be no more than 75 pages. The Executive Summary shall contain sufficient text, illustrations, tables and maps to adequately convey the results of the study to appointed and elected officials and the public and shall function as a standalone document.

7.2 Cost Estimates and Final Design Schedule

The Consultant shall submit an estimated schedule and estimated costs for the final design and construction of the recommended alignment. This schedule shall utilize the Orange County Standard Roadway Project Schedule format on MS Project provided by the County. The schedule and estimated cost shall be included in the draft, updated and final copies of the *Innovation Way Preliminary Design Study Report*.

7.3 Final Recommended Improvement Concept Map

The Consultant shall prepare a Recommended Improvement Concept Map that shall graphically depict the location of the roadway and appurtenances, their alignment and the proposed improvements three (3) weeks prior to the Recommended Concept Public Meeting. The map shall be prepared in a strip-map format at a scale of 1" = 50'. The Recommended Improvement Concept Map shall show the location of median openings (identified as to full or directional), signalization, lane configurations, pedestrian/bicycle facilities, transit facilities, potential pond/mitigation/flood plain compensation sites, wildlife corridors, critical and strategic habitat, utility strips, privacy walls and any other project elements identified for inclusion in the final design of the roadway. If deviations from the proposed typical sections are proposed in specific areas (such as reductions in lane widths, modification to border areas, etc.); they shall be clearly identified on the Recommended Improvement Concept Map. A draft version of the Recommended Improvement Concept Map shall be prepared by the Consultant two (2) months prior to the Recommended Improvement Concept Public Meeting to allow for review by the County and incorporation of any review comments prior to the Public Meeting. The Recommended Improvement Concept Map shall be updated and submitted to the County Project Manager eighteen (18) days prior to the LPA Public Hearing, if necessary, to reflect adjustments arising from the Recommended Concept Public Meeting and the LPA Work Session respectively. The Recommended Improvement Concept Map shall be updated and submitted to the County Project Manager eighteen (18) days prior to the BCC Public Hearings to reflect any adjustments arising from LPA Public Hearing, if necessary.

The Consultant shall submit a Final Recommended Improvement Concept Map with the Final *Innovation Way Preliminary Design Study Report*. The final map shall include modifications to the draft map as necessary to reflect the Board's action at the Public Hearing.

The draft and final submittals of the *Innovation Way Preliminary Design Study Report* with Executive Summary shall include final Recommended Improvement Concept Maps formatted onto 11 inch X 17 inch sheets at a scale of 1" = 100'.

7.4 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be submitted to and accepted by the County:

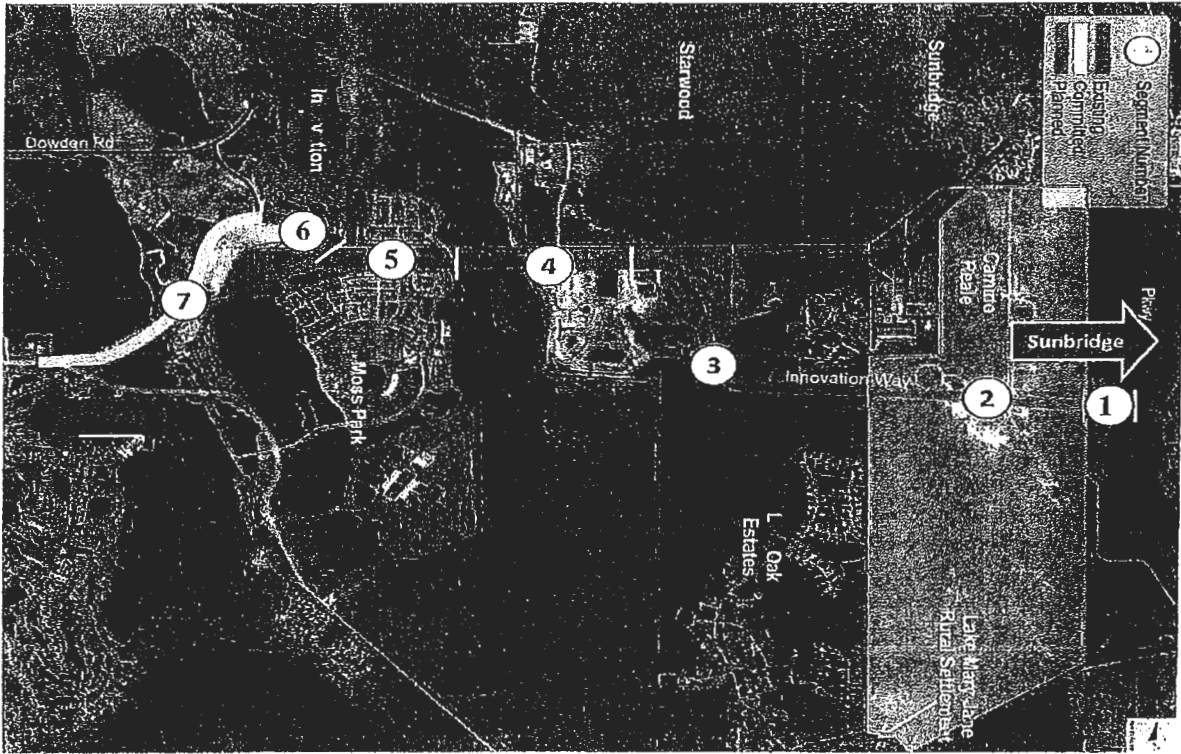
- Draft, updated drafts and final Executive Summary
- Draft, updated drafts, and final Preliminary Design Study Report (including 11" X 17" maps)
- Draft, updated drafts, and final Executive Summary (including 11" X 17" maps)
- Recommended Improvement Concept Map, drafts and final
- Final Design Cost Estimate and Schedule
- Construction Cost Estimate and Schedule

7.5 Pay Items (Not Applicable)

8.0 Project Schedule

The Consultant shall submit all required deliverables and provide specified services within 360 calendar days from the date of the written Notice to Proceed from the County.

ATTACHMENT



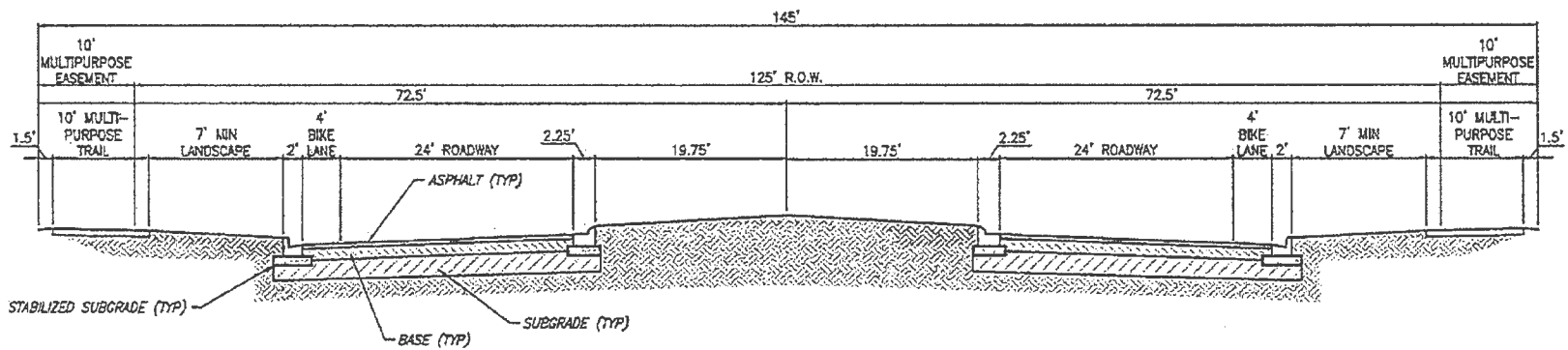


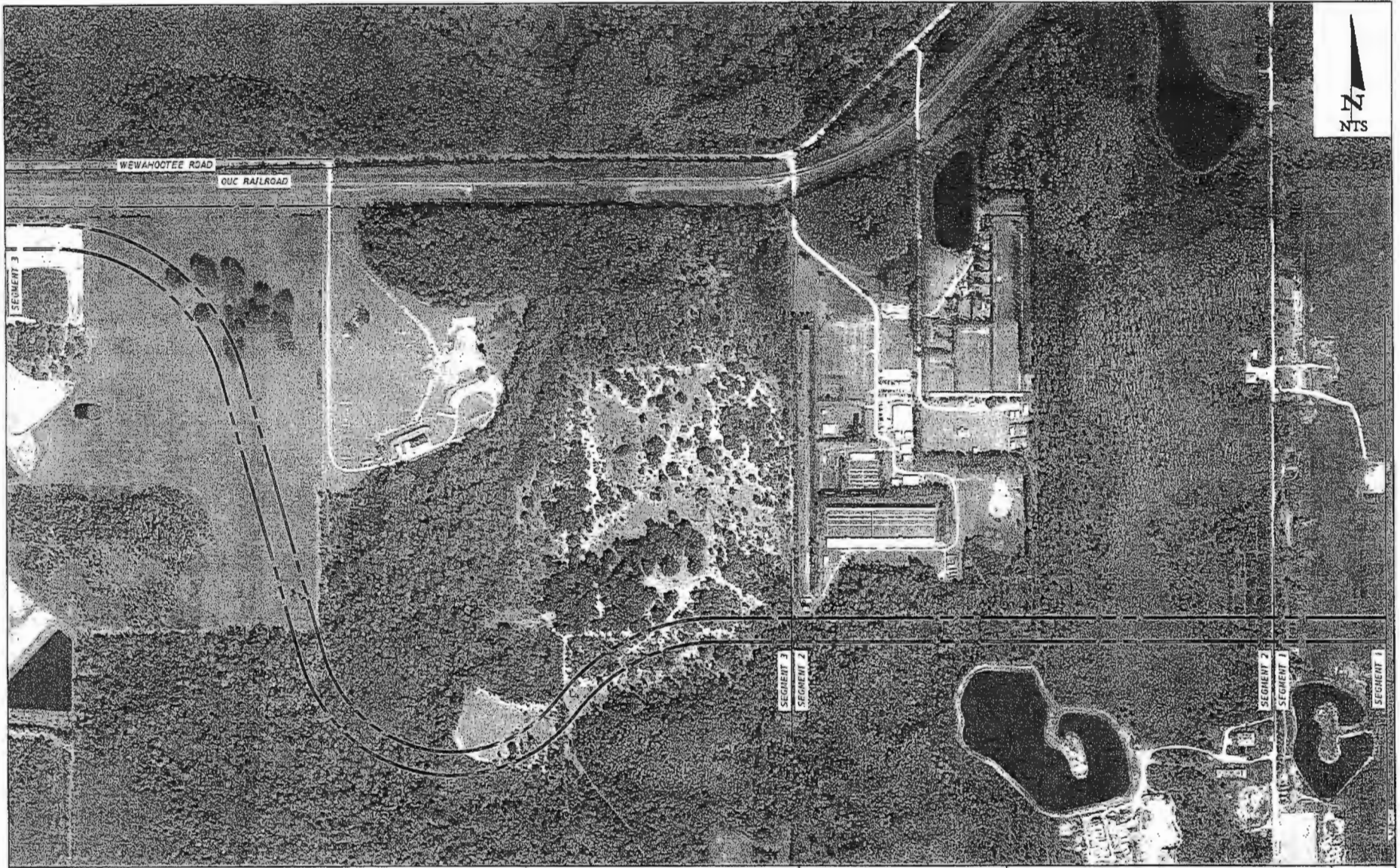
EXHIBIT "D"

Innovation Way
 Typical Section
 4-Lane Divided

EXHIBIT "E"

**INNOVATION WAY CORRIDOR
SEGMENT LIMITS CHART**

<u>Segment:</u>	<u>Limits:</u>	<u>Length:</u>
1	Sunbridge Pkwy to Camino Reale East Boundary	0.4 miles
2	Camino Reale East Boundary to Camino Reale West Boundary	0.8 miles
3	Camino Reale West Boundary to Yellow Jasmine Drive	1.2 miles
4	Yellow Jasmine Drive to John Wycliffe Boulevard	0.7 miles
5	John Wycliffe Boulevard to City of Orlando City Limit (North Side of Wewahoottee ROW)	0.4 miles
6	City of Orlando City Limit (North Side of Wewahoottee ROW) to Story Time Drive	0.3 miles
7	Story Time Drive to Moss Park Road	1.1 miles



REVISIONS	
DATE	DESCRIPTION

TMC TRAFFIC & MOBILITY CONSULTANTS, LLC
 3016 MADRINE BLVD, SUITE 300
 DUNEDIN, FL 33523
 OFFICE: (813) 530-6332
 FAX: (407) 530-6332
 CERTIFICATE OF AUTHORIZATION: 30034

Exhibit E

Innovation Way Segments

SHEET NO.
1

FOUSLKE SDATE'S STIMES SFILES



REVISIONS	
DATE	DESCRIPTION

TMC
 Traffic & Mobility Consultants
 TRAFFIC & MOBILITY CONSULTANTS, LLC
 200 MAGNOLIA BLVD, SUITE 200
 ORLANDO, FL 32803
 OFFICE (407) 820-2322
 FAX: (407) 833-8331
 CERTIFICATE OF AUTHORIZATION: 39024

Exhibit B

Innovation Way Segments

SHEET NO.
 2

SCALE: 1" = 100' (VERTICAL SCALE)

Exhibit F Innovation Way

Yellow Jasmine Drive to Camino Reale PD East Boundary
(Approximate Length = 2 miles)

Final Engineering Design Scope of Services

The Consultant shall provide final engineering design and construction plan preparation for the above referenced project. The Consultant shall perform those engineering services required to prepare a complete set of contract documents (plans and specifications) as described elsewhere herein.

The Consultant shall use the design concepts provided in the *Innovation Way Preliminary Design Study* as approved by the Board of County Commissioners. The Consultant shall perform the required engineering services utilizing all the applicable materials and data collected and provided in the *Innovation Way Preliminary Design Study* process.

The Consultant's Engineer-of-Record shall sign and seal a certification on the plans stating that the design has been prepared in accordance with the State of Florida Manual of Uniform Standards for Design, Construction, and Maintenance for Streets and Highways. Plans shall be accurate, legible and completed in accordance with the Florida Department of Transportation Design Manual (FDM) and the FDOT Standard Plans latest English Units edition, in effect at the time of the Notice to Proceed, as modified herein. The Consultant shall utilize his/her best engineering judgment, practices and principles in performing the work.

The Consultant is to prepare plans for the construction of four (4) lanes for Innovation Way from Yellow Jasmine Drive to Camino Real PD East Boundary. Special treatment and/or additional lanes at major intersections, and widening of crossroads up to 600 feet in each direction shall be provided as identified in the *Innovation Way Preliminary Design Study*. The Consultant shall also be responsible for proper tie in of all crossroads to the existing condition with respect to grading and drainage.

The lump sum fee and man-hour requirements shall be presented utilizing forms in Attachment A. A general Project Schedule shall be attached to the fee proposal as Attachment B.

The tasks included in this Scope of Services can be generally grouped into the following nine primary categories:

1. Administration
2. Public Information
3. Design and Plans Preparation
4. Permitting
5. Right-of-Way Engineering

6. Design Surveys
7. Geotechnical Services
8. Railroad Coordination
9. Post Design Services

This Scope of Services addresses each task within these elements and serves to further define specific requirements. The Consultant shall submit all required deliverables and provide specific services (with the exception of Post Design Services) within ____ days (inclusive of four-week review periods by County for review of progress submittals) upon written authorization from the COUNTY.

1.0 Administration

1.1 Notice to Proceed Meeting

The Consultant will prepare for and attend a Notice to Proceed Meeting with the Orange County Project Manager and staff. At this meeting, Orange County staff and key members of the Consulting team shall set the final parameters for the project and formally initiate final design.

1.2 Project Meetings

The appropriate members of the Consulting team shall attend periodic meetings (up to ten (10)) with the Orange County Project Manager and staff to discuss project progress and status, technical issues such as constructability, utility coordination, right-of-way requirements, and upcoming events and activities. The purpose of these meetings is to maintain clear communication between the County and the Project Team. The Consultant shall prepare and distribute meeting minutes following each of these meetings.

1.3 Project Management and Supervisions

Project Management and Supervision shall be included as a percentage of manhours for each primary categories listed above except for Administration and Post Design Services

1.4 Final Design Project Schedule

The Consultant shall prepare and submit a detailed project schedule prior to the Notice to Proceed Meeting for completion of final design and plans preparation identifying major tasks, their duration and tasks relationships. All deliverables shall be identified as milestones on the schedule. This schedule will utilize the Orange County Standard Roadway Project Schedule format on MS Project. The Consultant shall submit an updated design project schedule as directed by the Orange County Project Manager.

1.5 Cost Estimates and Construction Schedule

The Consultant shall prepare and submit a detailed engineer's cost estimate for construction of the project at each 60%, 90%, and final submittal. The Consultant shall also provide an estimate of construction time at the 90% and final submittals.

Note: If no bid is within +/- 10 % of the Engineer's estimate, the Consultant will prepare a revised estimate, re-evaluate the construction plans, evaluate the bids and submit a report that summarizes this information. This report will include recommendations for revisions to the construction documents, if needed. This report shall be prepared at no cost to the County.

1.6 Utility Coordination

The Consultant shall coordinate with all utility providers within the project limits by furnishing plans at the 30%, 60%, 90%, 100% and final review stages to the utilities for review, confirmation of utility location and relocation purposes. The development of the roadway plans shall incorporate and consider the input provided by each utility. The Consultant shall coordinate with all utilities to ensure that the final design considers all existing and proposed utilities. As part of each progress submittal Consultant shall provide a list of all utilities that have been provided copies of the construction plans, and the dates the plans were delivered to each Utility. Consultant shall also provide a summary of the response received from each Utility.

The Consultant shall conduct timely on-going utility coordination efforts to ensure timely receipt of design information from the various utilities. The Consultant shall hold utility coordination meetings at Orange County Public Works at 60%, 90% and at 100% plans as necessary, and shall furnish the most recent project schedule to the utility companies. The Consultant shall prepare and distribute the meeting minutes following each of these meetings.

The Consultant shall obtain Utility Work Schedules (UWSs) from all utilities.

The Consultant shall prepare a utilities conflict matrix and resolve all utility conflicts prior to submitting final plans. No utilities shall be in conflict with any proposed roadway improvements.

The consultant shall be responsible to coordinate with utility companies to identify any unrecorded or prescriptive easements. Said information shall be communicated to Orange County appraisal/right-of-way acquisition staff.

1.7 Coordination with project stakeholders (Limiting Amount)

Any required coordination related to the design with any other city, county, or any Orange County department outside of Public Works should be handled by the Consultant.

1.8 Quality Assurance/Quality Control

The Consultant shall designate appropriate staff to conduct Quality Assurance/Quality Control (QA/QC) reviews of all work products. These reviews shall be performed for all work products prior to their being submitted to the County for review or use. Work effort for QA/QC reviews shall be addressed as part of the work effort for each Pay Item as identified elsewhere herein.

1.9 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Final design project Schedule
- Construction Time Estimate
- Cost Estimate
- Utility Conflict Matrix

1.10 Pay Item

Work to be completed under this section by the Consultant shall be paid for under the following pay items as listed on the Activity and Fee Summary:

- Administration

2.0 Public Information (Limiting Amount)

The purpose of the public information element is to keep the community advised of the project status. Therefore, the Consultant will conduct the following public information activities throughout the project.

2.1 Small Group Meetings

The Consultant shall be available to conduct up to two (2) meetings with organizations interested in the final design. These meetings/presentations may be made to informal homeowners groups, formal homeowner associations or other formal organizations. The Consultant will be responsible for all presentation and handout materials, as identified in the Table of Deliverables.

2.2 Newsletters

The Consultant shall prepare and distribute project newsletters at the following three (3) milestones during the design:

1. Within two weeks of the Notice to Proceed
2. At the start of the right-of-way acquisition process
3. When the project is advertised for bids

The newsletters shall be printed in color on 8 ½ inch X 11 inch sheets in a format acceptable to the County. Sufficient copies of each edition shall be printed by the Consultant to provide 110% of the addressees on the mailing list at each mailing. The newsletters will be sent to each entry included in the data base mailing list. Newsletters shall be mailed as First Class mail. Those newsletters not mailed will be distributed as needed through small group meetings and workshops. The Project Manager, the Chief Engineer of the Engineering Design Section and the Manager of the Transportation Planning Division must approve all final newsletter proofs prior to final printing.

2.3 Web Page Update / Maintenance

The Consultant shall provide updated information for the Orange County website during the design phase of the project. The information shall be provided to Orange County within three (3) weeks of the Notice to Proceed being issued to the Consultant, and shall be installed on the Orange County web page by Orange County staff. The information shall be in Microsoft Word or PDF format. The information shall be consistent with the county template.

The Consultant shall provide updated information as necessary throughout the design process, but at a minimum concurrently with the issuance of project newsletters. The web site file shall also be updated to reflect the results of the bid process and at the issuance of the Notice to Proceed to the Contractor.

2.4 Mailing List

The County shall provide the Consultant with the final mailing list that was used for the *Innovation Way Preliminary Design Study*, and with a current list of property owners and their addresses. The list shall contain all homeowners/property owners located within the study corridor as determined by the County. The Consultant shall review the two lists and shall combine them to create the initial mailing list for the final design process. The County shall provide the Consultant with an updated list of homeowners/property owners prior to the mailing of each newsletter. The Consultant shall update the mailing list with the information provided by the County prior to mailing the newsletters. The Consultant shall also expand the initial mailing list throughout the duration of the project to include any person or institution expressing an interest in the project, potential permitting or review agencies, elected and appointed officials in the area, community leaders, and media representatives.

2.5 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Small group meeting presentations materials and handouts
- Newsletters
- Initial web site information and periodic updates

2.6 Pay Item

Work to be completed under this section by the Consultant shall be paid for under the following pay items as listed on the Activity and Fee Summary:

- Public Involvement

3.0 Design and Plans Preparation

The Consultant shall prepare the Final Roadway Plans Package. This work effort includes the roadway design needed to provide complete construction plans and specifications for the project with sufficient information to allow for constructing, permitting and right-of-way acquisitions. These plans are for the use of the Contractor to bid and build the project and for Orange County

to ensure the project is built as designed and to specifications. The Consultant shall provide 30%, 60%, 90% and 100% progress review submittals, in 11 inches x 17 inches format. All text shall be clear and legible on 11"x17" plans. 11"x17" plans shall identify the scale of the drawing in both numerical and graphic formats. Each submittal shall contain the information items listed in the appropriate Orange County Progress Review Submittal checklist. A copy of the appropriate checklist shall accompany each submittal with a certification signed by the Consultant's Project Manager certifying that the submittal completely addresses the required items as listed on the check list. Each review submittal shall include documentation of the internal Quality Assurance and Quality Control review conducted by the Consultant. The Consultant shall complete designs required for all aspects of the project as specifically described herein.

Final bid documents shall be submitted in both hard copy, as specified elsewhere herein, and electronic format in accordance with the standards established by the Orange County Purchasing and Contracts Division.

3.1 Roadway Design

The Consultant shall complete all design analysis, studies, and geotechnical investigations as required to complete the roadway design of the project. This effort shall include, but not be limited to the following areas.

3.1.1 Design Analysis

The Consultant shall design the geometrics for the project using the design standards that are most appropriate, with the proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, access management, to be consistent with the alignment and typical sections, the type of construction and other design parameters identified and described in the *Innovation Way Preliminary Design Study (PDS)*. The design elements shall include, but not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, cross slopes, borders, side slopes and ditches, lane transitions, superelevation, features of intersections and interchanges, and limited access points. The geometric design developed by the Consultant shall be the engineering solution to a given problem and not merely an adherence to minimum County, AASHTO and/or FDOT standards.

Changes to the alignment as shown on the *Innovation Way PDS* shall be limited to that necessary to address project requirements not previously identified and must be approved by the County.

The Consultant shall prepare a Typical Section Package that shall include information sufficient for the County to approve overall elements of the roadway improvements related to the typical section. Significant variations along a corridor, or multiple affected roadways, may require multiple typical sections.

Information to be included in the typical section package shall include the following elements with dimensions as appropriate: lanes, medians, profile grade point(s), cross-slopes (all elements as appropriate), curb type, shoulders, sidewalk placement relative to curb (or edge of pavement), centerline of construction, right of way, easements, clearing and grubbing limits, and side slopes or retaining walls as appropriate. Other elements to be provided in the package include: type of (but not necessarily thickness of) subgrade stabilization, base course, structural course and friction course (for concrete pavement the concrete is shown in lieu of the latter two items); design speed, recommended posted speed, and traffic volumes (opening and design year).

The Consultant shall review the typical sections presented in the *Innovation Way PDS* and inform the County of any concerns they may have regarding these sections. The Consultant shall then prepare a Typical Section Package addressing the proposed section(s) for the mainline (including bridges if applicable) as well as all side streets. The Consultant shall also prepare a Roadway Design Criteria Package utilizing the basic design parameters recommended in the Roadway Conceptual Analysis Report. This criteria package shall address such items as Roadway Classification, Design Vehicle, Design Year, Design Speed, Horizontal Alignment, Vertical Alignment, Cross Section elements, MOT concept etc. The Typical Section and Roadway Design Criteria Packages shall be submitted to the County for review and approval prior to commencing any work for the 30% design and plans packages.

The Consultant shall prepare a Pavement Design Package in accordance with FDOT's Flexible Pavement Design Manual. The Consultant shall determine the twenty-year Equivalent Single-Axle Loads based on traffic counts and projections, including truck traffic. The Consultant shall review the traffic data provided by the Roadway Conceptual Analysis and shall obtain additional data as necessary to support the pavement design. The Consultant shall also determine the pavement structural number necessary to withstand the projected traffic loads. The pavement design shall include calculation of the thickness of each layer of the pavement structure based on the appropriate layer structural coefficients. The Consultant shall utilize Superpave (SP) Asphalt Concrete[SJL1] as directed by the County. For designs using Superpave Asphalt Concrete, Consultant shall determine the type of asphalt binder, traffic level, and nominal maximum aggregate size for each pavement layer, and shall show this information on the typical sections. All Superpave Asphalt designs shall specify that fine graded mixes shall be used. Soils and traffic loading data used as input for the design shall be included in the package. The Pavement Design Package shall be submitted to the County for review and approval with the 30% Plans Package.

3.1.2 Roadway Design Documentation and Quantities Computation

The Consultant shall submit all design notes; design calculations and computations to document the decisions and conclusions reached during the development of the construction plans. The Consultant shall also submit accurate

quantities that provide a breakdown of the pay items necessary to construct the project.

3.2 Drainage Design

The Consultant shall finalize the design of the drainage and stormwater management systems. The *Innovation Way PDS* will identify recommended potential stormwater management ponds for the roadway. The Consultant shall verify the number and location of pond sites needed to appropriately meet the needs of the project.

3.2.1 Drainage Analysis

The Consultant shall finalize the drainage design for the project including underdrain as necessary using the design standards that are applicable for the appropriate water management district and County standards. The final stormwater management system shall be consistent with the concepts identified and described in the *Innovation Way PDS*, unless otherwise approved by the County. The final drainage design shall consider and address property impacts in accordance with section 5.4 of this scope of work.

3.2.2 Design Documentation and Drainage Calculations

The Consultant shall submit a Drainage Design Documentation Report containing all design notes and computations to document the decisions and conclusions reached during the development of the stormwater management systems including geotechnical investigations and reports. The Consultant shall also submit signed and sealed drainage calculations for the project.

3.2.3 Bridge Hydraulics Report (BHR) (Not Applicable)

3.3 Structural Design

3.3.1 Bridge Concept Report (BCR) (Not Applicable)

3.3.1 Bridge Design (Not Applicable)

3.3.3 Retaining Wall Design

If required, The Consultant shall provide all necessary design effort required to produce a complete set of construction documents for a conventional retaining wall system. The Consultant shall also determine appropriate Proprietary Wall types from the FDOT proprietary wall standards to the extent necessary to finalize the wall plans as described herein for proprietary wall systems. Retaining walls are anticipated at the following locations:

At the County's option, the Consultant shall obtain project specific retaining wall drawings from proprietary wall companies and incorporate these drawings into the contract document.

3.3.4 Critical Temporary Retaining Wall Design

A critical temporary retaining wall is defined as a wall required during the construction stage only to protect existing facilities during excavation operations, when other construction methods such as benching or sloping are not practical. These walls may be removed and reused after completion of the work. Such systems as steel sheet pilings, soldier beams and lagging, or other similar systems are commonly used. In such cases, the Consultant is responsible for designing and detailing the wall in the set of contract plans.

Critical temporary retaining walls may be required at locations to be identified prior to contract approval.

3.3.5 Miscellaneous Highway Related Structures

The Consultant shall design miscellaneous Highway Related Structures. This work effort includes the design analysis and associated plan preparation needed to prepare a complete set of contract plans and other necessary documents pursuant to the County criteria and the FDOT Plans Preparation Manuals.

- 3.3.5.1 Box Culverts – The Consultant shall provide the structural design for all box culverts (new and/or existing) for both stormwater and wildlife crossings. Existing box culverts that are hydraulically adequate shall be structurally evaluated to determine whether it is appropriate to extend or replace the structure. Applicable FDOT Box Culvert standards shall be evaluated and incorporated to the extent possible.

All box culverts are to be determined by the Consultant and approved by the County.

- 3.3.5.2 Overhead Sign Structures – The Consultant shall provide the design of sign structures for overhead cantilever and overhead truss sign assemblies and the associated foundation design. Applicable FDOT Overhead Sign Structure standards shall be evaluated and incorporated to the extent possible.

Overhead Sign Structures may be required at locations to be identified prior to contract approval.

- 3.3.5.3 Traffic Mast Arms/Mono Tubes/Trusses – The Consultant shall provide the design of traffic mast arms/mono tube/trusses and the associated foundation design for signalized intersections. Applicable FDOT Standard pole and arm configurations shall be evaluated and incorporated to the extent possible.

Mast Arms/Mono Tube/ Trusses may be required at locations to be identified prior to contract approval.

3.4 Roadway Construction Plans

The Consultant shall prepare final construction plan sheets, notes and details to include, all sheets necessary to convey the intent and scope of the project for the purposes of construction. The plan sheets shall be assembled in the following order:

1. Cover Sheet
2. General Notes
3. Standard Drawings and Details
4. Summary of Pay Items
5. Drainage Map
6. Typical Sections
7. Summary of Quantities
8. Summary of Drainage Structures
9. Survey Control Sheets
10. Plan and Profile Sheets
11. Intersection Details
12. Drainage Structure Cross Section
13. Box Culvert Plans
14. Pond Details and Cross Sections
15. Flood Plain Compensation Area Details
16. Environmental Considerations Plans/Mitigation Plans
17. Geotechnical Soil Survey
18. Cross Sections
19. Erosion Control Plans
20. Miscellaneous Details
21. Screen Wall Plans
22. Maintenance of Traffic Plans
23. Utility Adjustment Plans
24. Signing and Pavement Marking Plans
25. Signalization Plans
26. Landscape Plans
27. Retaining Wall Plans (If Required)
28. Critical Temporary Wall Plans (If Required)

3.4.1 Cover Sheet

The County will provide a standard County cover sheet in AutoCAD format to the Consultant. The Consultant shall complete the cover sheet with the information applicable to the project.

3.4.2 General Notes

The County shall provide a standard general notes sheet in AutoCAD format to the Consultant. The Consultant shall review and modify the general notes as required for this project.

3.4.3 Standard Drawings and Details

The Consultant shall include standard drawings and details as required for this project, including:

1. Supplementary details shall be provided for superelevation transitions. Profiles shall be shown for the profile grade line and the outside edge of each driving lane. Elevations shall be shown at 25-foot intervals, at grade breaks for the profile grade line, each lane profile on the graphical profile and on a superelevation table.
2. Details for all non-standard structures not covered elsewhere.
3. Standard details provided by Orange County, e.g., driveways, manhole rim and cover, etc.

3.4.4 Summary of Pay Items

The Consultant shall include all pay items and quantities that are required for this project. Pay items shall be based on FDOT pay items, but may be amended by the County. The necessary pay items and quantities shall be shown on the summary of pay items sheet. The summary of pay items with quantities shall be submitted no later than the 60% plans

3.4.5 Drainage Map

Drainage maps shall be developed at 1" = 200' scale on current black and white aerial photography provided by the Consultant for the entire length of the project. Ponds should be shown in their entirety.

3.4.6 Typical Sections

Upon approval of the Typical Section Package, the Consultant shall prepare the typical section sheets including the mainline, bridges (if applicable) and side streets with all applicable details added to the sections. These sheets shall also include other miscellaneous details necessary to construct the project. The details shall include but are not limited to milling and resurfacing, non-standard superelevation transitions, etc.

3.4.7 Summary of Quantities

The Consultant shall prepare a summary of quantities sheet in accordance with FDOT Basis of Estimates Manual showing individual summaries including but not limited to guardrail, fence, turnouts, sodding, ditch pavement, side drains, underdrains, and earthwork.

3.4.8 Summary of Drainage Structures

The Consultant shall prepare a table listing all proposed or modified drainage structures on the project. The structures shall be listed by structure number in numerical order. Cross drains and storm sewer structures shall be tabulated by

structure number, providing the station, side (left/right), size, type, length and incidental quantities appropriate for the pipe material contained in the plans.

3.4.9 Survey Control Sheets

See Section 6.3.

3.4.10 Plan and Profile Sheets

The plan and profile sheets shall be developed for (street names) _____, _____, _____, and _____, and conform to the following requirements:

1. Plan and profile sheets shall be prepared at a scale of 1"=40' horizontal and 1"=4' vertical, and oriented such that north is shown to the top or right side of each sheet.
2. All stationing shall be positive and shall proceed from south to north or from west to east.
3. Existing features including existing utilities shall be shown with dashed lines and proposed or design features shall be shown with solid lines. Vertical utility locations verified in the field shall be shown on the profile.
4. Locations, dimensions and types of existing and proposed driveways shall be shown.
5. The plans shall show the names of all intersecting streets and shall identify the station and angle of the intersection of the centerlines.
6. Each plan and profile sheet shall show two readily accessible benchmarks to establish vertical control.
7. Horizontal control points shall be shown at all Points of Curvature, Points of Tangency, and Points of Intersection. Horizontal control points shall also be shown for Points on Curve or Points on Line such that the maximum spacing between control points is 600 feet or less.
8. All property lines and improvements located within 25 feet of the right-of-way or limits of construction, whichever extent is greater, shall be shown on the plan view.
9. Existing and proposed elevations shall be shown on the profile at even hundred foot stations and at all Points of Vertical Intersection on the Profile Grade Line. Proposed elevations shall be shown at 25-foot intervals along vertical curves and at Points of Vertical Curvature and Points of Vertical Tangency.
10. The following information shall be given for each horizontal curve on the centerline of construction and the center line of right-of-way:
 1. Curve Number
 2. P.I. Station
 3. Delta in degrees, minutes and seconds

4. Degree of Curve
 5. Tangent length
 6. Arc length
 7. Radius
 8. P.C. Station
 9. P.T. Station
 10. Superelevation rate
11. Percent of slope for profile grade lines, ditch flow lines, and all drainage pipes where not shown on the drainage details.
 12. Plan and profile sheets shall be provided for all side street improvements extending more than 50 feet from the right-of-way of the main project alignment.
 13. Plan and profile sheets shall be provided for all drainage outfalls extending more than 50 feet from the right-of-way of the main project alignment.
 14. No separate profile sheets will be allowed unless approved by the County.
 15. Driveway horizontal geometry shall conform to County standards. Profiles shall be shown for all driveways.
 16. Submittal of 60% construction plans and 90% right-of-way maps shall only show the centerline of construction. Baseline of survey shall not be shown. All locations and offsets shall be based on centerline of construction.

3.4.11 Driveway Profiles

[S]L2]The Consultant shall prepare driveway profiles for each driveway within the limits of construction, including side streets. Driveway profiles shall be drawn on the cross section sheets at the stations where they occur. These profiles shall show existing and proposed grade lines. Grades of proposed driveways shall conform to Orange County policies and procedures and Florida Department of Transportation Standard Plans.

3.4.12 Intersection Details

The Consultant shall prepare intersection detail sheets for the intersections of Innovation Way and Yellow Jasmine Drive, Camino Connector,. Intersection sheets shall show all necessary details and geometric controls/access management features, including, turn lanes, special drainage and grading. Intersection details shall be drawn at a scale of 1" = 10'. Spot elevations shall be shown along pavement lane lines and curb returns at 10-foot intervals and at all grade breaks. Profiles for all radius returns shall be included with the detail of each intersection.

3.4.13 Drainage Structure Cross Sections

The Consultant shall prepare drainage structure cross sections for all pipes crossing under the roadway. Drainage structure sheets shall show the drainage

structures, location, offsets not covered by template/standard index sheets, cross section, flow line elevations of all weirs or slots, top of grates, culverts and top of manhole elevations, pipe slopes, and similar data.

3.4.14 Box Culverts (If Required)

Details shall be provided for box culverts showing all dimensions, critical elevations and all reinforcing steel. Major box culverts may be included in the bridge plans portion of the construction plans.

3.4.15 Pond Details and Cross Sections

Pond detail sheets shall be provided showing a plan view of each pond at a scale acceptable to the County. Typical sections of each pond shall be shown for at least two axes of the pond. Each pond shall have cross sections to accurately depict the pond configuration. Details shall be provided for all control structures. Boring locations shall be shown on the plan view and soil boring logs shall be plotted on the pond cross sections.

3.4.16 Flood Plain Compensation Area Details and Cross Sections

Detail sheets shall be provided showing a plan view of each flood plain compensation area at a scale acceptable to the County. Typical sections of each area shall be shown for at least two axes of the area. Each flood plain compensation area shall have cross sections to accurately depict the compensation area configuration. Boring locations shall be shown on the plan view and soil boring logs shall be plotted on the cross sections.

3.4.17.1 Environmental Consideration Plans (Dredge and Fill Sketches)

The consultant shall develop Environmental Consideration Plans, at a scale acceptable to the County, including necessary notes and details, as part of the contract plans necessary to secure applicable permits. The objectives of the plans are to depict wetland and upland buffer locations and impacts. The plans shall provide, at a minimum, wetland and upland buffer locations, impact areas, limits of construction, and limits of the project. The objective of the plans are to provide unencumbered details of wetland and buffer impacts including remaining wetland and upland buffers that would be preserved throughout construction.

3.4.17.2 Mitigation Plans (Limiting Amount)

Once a mitigation plan has been reviewed and approved by the County, the Consultant shall be responsible for coordinating the proposed mitigation plan with the environmental agencies and for preparing the wetland mitigation plan to be included as a part of the Environmental Resource Permit application and to be included in the final construction documents.

Wetland mitigation area detail sheets shall be provided showing a plan view of each mitigation area at a scale acceptable to the County. Typical sections of each mitigation area shall be shown for at least two axes of each mitigation area.

Planting zones shall be shown and dimensioned on the plan view with elevations shown on both the plan view and the cross sections. Each wetland mitigation area shall have cross sections to accurately depict the configuration of the mitigation area suitable for construction purposes. Plantings shall be listed in a table giving the common and scientific name of each species, the size of the plantings, and the number of each size of each species to be planted in each zone. Planting details, as necessary, shall also be provided. Soil boring locations shall be plotted on the plan views. Soil boring logs shall be plotted on mitigation area cross-sections or other acceptable location.

3.4.18 Geotechnical Soil Survey

The Consultant shall prepare soil survey sheets, which depicts the various types of soils encountered within the project limits, classification, mechanical properties, and recommended usage of those soils. The soil survey sheets shall include the following information at a minimum:

- Narrative description of each soil type with its engineering characteristics
- Supplemental soils investigations, such as muck probes

3.4.19 Cross Sections

Cross sections sheets shall include the following information at a minimum for roadways, lateral ditches, ponds, flood compensation areas and mitigation areas.

1. Unless otherwise approved by the County, the horizontal scale shall be 1" = 10' and the vertical scale shall be 1" = 5'.
2. The elevation grid shall be labeled on both left and right sides of each section.
3. The station shall be shown to the right each section.
4. Existing ground, structures, drainage conduits and utilities shall be shown as dashed lines and designed or proposed features shall be shown as solid lines.
5. End areas in square feet for earthwork cut and fill shall be shown. End areas for unsuitable materials shall be identified.
6. Existing ground shall be shown at least 25 feet outside the proposed rights-of-way lines, easements or limits of construction, whichever is further.
7. Existing buildings, structures, or drainage facilities shall be shown within the limits of the cross section as described in Item 6 above.
8. Section stationing shall increase from the bottom of the sheet to the top. When more than one row of sections are placed on a sheet, the stationing shall increase from bottom to top and from left to right.
9. The existing ground elevation at the centerline, design profiles and ditches shall be shown on each section.
10. Cross sections shall be shown at intervals not exceeding 50 feet. Additional intermediate cross sections shall be shown as necessary to

provide supplementary information at bridges, box culverts, intersections, side streets, railroads, etc. Additional cross sections as negotiated on a project-by-project basis may be necessary to support right-of-way acquisition basis.

11. Cross section sheets shall be provided for all side street improvements extending more than 50 feet from the right-of-way line of the main project alignment.
12. Soil boring information, including encountered and estimated seasonal high groundwater levels shall be shown on all applicable cross sections.
13. Horizontal and vertical location of unsuitable soils.

3.4.20 Erosion Control Plans

The Consultant shall develop Erosion Control details, at a scale acceptable to the County, including necessary notes and details, as part of the contract plans necessary to secure applicable permits. The objectives of the erosion control plans are to prevent erosion where construction activities are occurring, prevent pollutants from mixing with storm water and prevent pollutants from being discharged by trapping them on-site. The construction documents shall provide stormwater pollution prevention plans (SWPPP) to be paid for as a lump sum item.

3.4.21 Miscellaneous Details

Any details not included elsewhere in the plan set shall be shown here.

3.4.22 Screen Wall Plans

The Consultant shall evaluate the project relative to screen wall placement and/or replacement and make recommendations in accordance with the County's "Screen Wall Policy."

Areas that may require new walls include the following locations:

Any locations identified in the Innovation Way PDS

The County will make the final determination if new walls will be included in the project. All new walls shall be placed within the public right-of-way, unless otherwise directed by the County.

The County shall provide an electronic copy of its standard wall detail sheet to the Consultant. The Consultant shall review, modify and supplement the County's standard wall detail sheet as necessary to provide all necessary plans and details for all screen walls (new or adjusted) along the corridor. Consultant shall determine that the detail sheet and any necessary modifications meet all current standards and the requirements of the project. The consultant shall sign and seal the detail sheet. Plans shall include depiction of walls on plan and profile sheets

and cross section sheets; notes on plan and profile sheets, general construction and foundation notes, structural details and wall finishing notes and details.

3.4.23 Maintenance of Traffic Plans

The Consultant shall prepare plan sheets, notes and details to move vehicular and pedestrian traffic during all phases of construction. The maintenance of traffic plans shall include construction phasing of Innovation Way (including side streets), ingress and egress to existing properties, temporary signing and pavement markings, temporary signals, and detour routes. Additional sheets such as cross sections, profiles, drainage structures, retaining wall details and sheet piling may be necessary to ensure implementation of the maintenance of traffic plan and will be provided by the Consultant. The plan sheets will be developed at 1" = 100' scale. The construction documents shall provide for Maintenance of Traffic to be paid for as a lump sum item.

3.4.24 Utility Adjustment Plans/Roadway Lighting Coordination

The Consultant shall prepare separate plan and profile sheets showing proposed new or relocated facilities by others. These plans shall be prepared based on information provided by the utility companies.

Consultant shall coordinate with the applicable power companies to arrange for a lighting design to be prepared in accordance with agreements between the County and the power companies. Consultant shall coordinate the design of the lighting (performed by the power company) with the design of the roadway improvements and landscaping. Consultant shall show the location of the street lights provided by the power company on the Utility Adjustment Plans.

3.4.25 Signing and Pavement Marking Plans

The Consultant shall prepare plan sheets at a scale of 1"=40' for the entire length of the project, including side streets, showing pavement markings and signage to be installed on the project. Pavement markings and signs shall conform to the *Manual on Uniform Traffic Control Devices*. Signing and Marking Plans shall include, but not be limited to, the following: General Note sheet(s), summary of Pay Items sheets, Plan sheet(s), and Special Marking Detail sheet(s), as needed.

3.4.26 Signalization Plans

The Consultant shall prepare plan sheets, notes and details to include, but not be limited to, the following: Intersection Signalization Plan sheets at 1" = 20' scale, General Note sheet(s), Summary of Pay Items sheet(s), Pole Mast Arm Detail sheet(s), Foundation Details sheet(s) and special detail sheet(s) and soil boring data, as needed. The signalization plans will include overhead and pole mounted lighted street signs and signal support structures and required foundations. Florida Department of Transportation standard foundation designs shall be used where applicable. The sign support structures will be aesthetically compatible with the County's current lighted sign standards. This project may involve

signals. The County will provide all available traffic data. The Consultant shall provide additional traffic data as necessary for these intersections. Span wire signal designs are not acceptable. All signals shall be mast arm/mono tube/truss design as appropriate and approved by the County.

3.4.27 Landscape Plans

Consultant shall provide landscape plans prepared by a registered Landscape Architect. The plans shall identify the location and type of plant materials to be installed. Unless otherwise directed by the County, plantings shall be limited to trees of a species that will not require irrigation after maturity. Species and location shall be coordinated with clear zone requirements, sight distance requirements, proposed signage, ground conditions, streetlight locations, billboard locations, and utility conflicts and clearance. The location of the streetlights shall also be shown on the landscaping plans to ensure there are no conflicts between the streetlights and existing trees to remain or proposed trees. The landscape plans shall also include General Notes and Details and a summary of Pay Items sheet (s).

Design shall be based on a landscaping construction budget not to exceed \$75,000 per mile of total project length.

3.4.28 Structural Plans

The Consultant shall prepare plan sheets, notes and details to include all drawings referenced in the submittal checklist.

3.4.28.1 Bridge Structure Plans Package (Not Applicable)

3.4.28.2 Wall Control Drawings

3.4.28.2.1 The Consultant shall prepare control drawings for all permanent walls required. These drawings shall provide vertical and horizontal alignments, wall lengths, and details for any special features that need to be provided. Barriers, architectural treatments, etc., are considered to be special features.

3.4.28.2.2 For conventional wall designs, the Consultant shall prepare drawings and specifications needed to supplement the control drawings. Appropriate FDOT standard drawings may be used if applicable.

3.4.28.3 Bridge Hydraulic Recommendation Sheet (Not Applicable)

3.4.28.4 Retaining Wall Plans

This task includes the effort necessary for the preparation of a complete set of Retaining Wall Drawings to include Plan and Elevation, Reinforcement

Details (if required) and Special Details. The Plans shall be prepared pursuant to the County standards and the FDOT Plans Preparation Manuals.

3.4.28.5 Critical Temporary Retaining Wall Plans

This task includes the effort necessary for the preparation of a complete set of Critical Temporary Retaining Wall Drawings to include Plan and Elevation, Reinforcement Details (if required) and Special Details. The Plans shall be prepared pursuant to the County standards and the FDOT Plans Preparation Manuals.

3.4.28.6 Miscellaneous Highway Related Structures

This task includes the effort necessary for the preparation of a complete set of Drawings to include Plan and Elevation, Reinforcement Details (if required) and Special Details for any miscellaneous highway related structures not covered elsewhere herein, including box culverts, overhead sign structures traffic signal mast arms, mono tubes and trusses. The Plans shall be prepared pursuant to the County standards and the FDOT Plans Preparation Manuals.

3.5 Progress Review Submittals

All submittals shall be accompanied by documentation of the Quality Assurance/Quality Control reviews in accordance with Section 1.8 herein. Submittals shall conform to the requirements outlined in the Orange County Progress Review Submittal checklist incorporated herein by reference. A copy of the checklist certified by the Consultant's Project Manager in accordance with Section 1.8 herein. Submittals shall conform to the requirements outlined in the Orange County Progress Submittal checklist. A copy of the checklist certified by the Consultant's Project Manager in accordance with Section 3.0 herein shall accompany each submittal.

The Consultant shall submit construction plans to the County for review at the 30%, 60%, 90%, 100% and final completion stages. The 30% roadway plans and the 30% bridge plans shall be separate submittals. A 60% bridge plan submittal is not required.

All County comments or questions on previous submittals, and any additional direction received from County must be addressed. Responses to the comments submitted by the reviewers should be addressed in writing and distributed to all reviewers. Cost estimates are required per section 1.5.

3.6 Electronic Design and Topography

The Consultant shall provide electronic Design and Topography files to the County in Microstation DGN format and Autodesk DWG file format at each review submittal and as requested by the County. Orange County recommends using the Microstation EXPORT AS command available in Microstation V8 software when converting DGN files to DWG file format.

3.7 Bid Package

The Consultant shall prepare a complete draft and a final bid packages for the project. Orange County will provide the Consultant with a master documents (Special and Technical Provisions). The bid package shall include, but are not limited to the following documents:

- Project Information Sheet
- Location Map
- Scope of Work
- Engineer's Estimate
- Part D Schedule of prices (In Word Format)
- Index of Plan Sheets (In Word Format)
- Part G Special provisions (In Word Format)
- Index of Technical Provisions (In Word Format)
- Part H Technical Provisions (In Word Format)
- Permits
- Construction Plans
- Bid Check List

3.8 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Drainage Design Documentation Report
- Roadway Design Criteria Package
- Typical Section Package
- Pavement Design Package
- 30%, 60%, 90%, and 100% Construction Plans and Engineer's Cost Estimate
- Final Construction Plans and Engineer's Cost Estimate
- Roadway Design Documents and Computation Book
- Quantity Computation Book
- Draft Schedule of Prices Technical and Special Provisions
- Final Schedule of Prices Technical and Special Provisions
- Final Electronic Design and Topography Files
- Electronic Bid Document Package
- Load Rating (Form or Report)
- Environmental Consideration Plans
- Mitigation Plans
- Draft Bid Package
- Final Bid Package
- Subcontracting Opportunities per Contract Section IV G-2.
- Direct Purchases per Contract Section IV G-3.

3.9 Pay Items

Work to be completed under this section by the Consultant shall be paid for under the following pay items as listed on the Activity and Fee Summary.

- Pond Siting Report (Draft and Final)
- Drainage Design Documentation Report
- Roadway Design Criteria, Typical Section and Pavement Design Packages
- 30%, 60%, 90%, 100% Construction Plans
- Final Construction Plans
- Design Notes and Computations Book
- Quantity Computation Book
- Technical and Special Provisions (Draft and Final
- 30%, 60%, 90%, 100% and Final Engineer's Cost Estimate
- Electronic Bid Document Package
- Final Electronic Design and Topography Files
- Load Rating (Form or Report)
- Environmental Consideration Plans
- Mitigation Plans
- Bid Package (Draft and Final)

4.0 Permitting

The Consultant will prepare all applications and other submittals and provide all environmental services necessary to obtain all permits including Environmental Resource Permits, Army Corps of Engineers Permits, FDOT connection permits, N.P.D.E.S. permit package, Florida Fish and Wildlife Conservation Commission, dewatering permits, and any other permits that may be necessary for the construction of the proposed improvements. The Consultant will pay for all permit application fees from out of pocket expenses. The construction plans package shall not be considered complete until all required permits have been received.

4.1 Environmental Permitting

4.1.1 Agency Coordination

The Consultant shall coordinate the environmental permitting effort with the Orange County Project Manager and Public Works Environmental Project Manager. The Consultant shall notify the County Project Manager and Orange County Public Works Environmental Project Manager of all meetings with regulatory agencies to coordinate attendance by County staff. The Consultant shall submit meeting minutes and provide copies of all permit-related correspondence. In addition, the Consultant shall coordinate with County staff for any information, which may be relevant to the project design. This coordination shall take place prior to any regulatory meetings.

4.1.2 Wetland Delineation and Agency Field Review

The Consultant shall conduct and identify wetlands in accordance with all applicable State and Federal Regulations. A minimum of three (3) Seasonal High Water Table Elevations (SHWT) shall be established for each wetland. The Consultant shall conduct and coordinate field investigations as necessary with County staff and with the appropriate regulatory agencies. The consultant shall provide meeting minutes and field notes to County Environmental Project Manager.

4.1.3 Wetland Mitigation (Limiting Amount)

If wetland impacts cannot be avoided, the Consultant shall coordinate with the County and investigate mitigation alternatives including the following, as appropriate:

- Payment to DEP/WMD per acre of wetlands impacted as defined in CH 373.4137 FS
- Monetary participation in regional offsite mitigation area (ROMA) and/or a permitted mitigation bank
- Creation/restoration/preservation on private or County owned lands

The Consultant shall coordinate with County personnel prior to approaching any environmental permitting or review agency. In the event that physical creation, restoration or preservation is the only feasible alternative to offset wetland impacts, the Consultant shall collect all of the data and information necessary to prepare alternative mitigation concepts. The alternative mitigation concepts may be presented to the permitting agencies and commenting agencies that are processing or reviewing a permit application for this project.

Prior to selection of a final mitigation site, the Consultant will provide as necessary and evaluate the following, in the development of alternative mitigation concepts:

- Wetland jurisdictional determination for each proposed site
- Preliminary geotechnical and survey data to substantiate each design alternative
- Construction and ROW cost estimations for each proposed site
- Contamination Screening Evaluation for each site
- Coordination of alternative sites with the County and affected environmental agencies

The Consultant shall prepare and submit a written Alternative Wetland Mitigation Concepts Report, listing potential sites with justifications for those recommended and non-recommended. The County shall review this report and make the final determination as to the recommended mitigation alternative.

4.1.4 Threatened and Endangered Species (Limiting Amount)

The Consultant shall review the Roadway Conceptual Analysis Report to familiarize himself with the location and extent of any protected species (plant and animal species listed by state and federal agencies as threatened, endangered or species of special concern) identified by the Roadway Conceptual Analysis Report.

The Consultant shall also:

- Review occurrence records, GIS Data Bases, and other records from the U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC) and any other generally accepted source for the potential presence of protected species.
- Conduct qualitative site reviews of the project area to verify the presence of protected species and/or critical habitats.
- Conduct quantitative population surveys for those protected species confirmed within the project area following methodologies approved by the USFWS, FFWCC, or other regulatory agencies having jurisdiction.
- Prepare a Protected Species Management Alternatives Report which shall discuss the results of preliminary species evaluations and population surveys, regulations affecting each species, potential effect of the project upon each species, potential impacts to the project and a discussion of available and acceptable management alternatives.
- Prepare a final Protected Species Management Plan, which shall be suitable for submittal to the appropriate State and Federal review agencies. This shall address specific Management approaches to be used to address unavoidable impacts. It shall include all additional investigations, maps or other documentation needed to support permitting of the unavoidable impacts.
- Update the Threatened and Endangered Species Survey and Management Plan which shall be performed 90 days prior to the start of construction.
- Gopher Tortoise Live Capture and Off-Site Relocation
 - The Consultant shall provide a Registered Gopher Tortoise agent certified to survey, permit, and relocate by both mechanical and bucket trapping.
 - The Consultant shall perform the following:
 - Coordination with the FFWCC, backhoe operator, recipient site representative, and the County to schedule excavation, relocation of gopher tortoises.
 - Provide personnel and equipment (including a hydraulic backhoe and operator) necessary to excavate gopher tortoise burrows and live capture gopher tortoises from the area proposed for development.

- Transport the gopher tortoises to an approved long-term protected, off-site location (recipient site) for release. Payment of the recipient site fees will be responsibility of the County.
- Prepare and submit to the FFWCC an Off-Site Gopher Tortoise Relocation After Action Report.
- The CONSULTANT shall conduct wildlife surveys as defined by rules or regulations of any permitting agency, or commenting agency that is processing a DEPARTMENT permit. This information shall be utilized for determination of appropriate wildlife crossings.

4.2 Other Permitting Agencies

The Consultant shall be responsible for obtaining all other permits required to construct the proposed improvements. These permits may include FDOT, CFX, SHPPO, FAA, GOAA, FDEP, FFWCC, FWS, dewatering permits, local agencies (i.e. City of Orlando) etc. The Consultant is responsible for coordination with these agencies early on to confirm the permitting process and the agency's criteria. This shall also include preparation of all necessary documents to secure the permit.

4.3 Preparation and Submittal

The Consultant shall prepare and submit all necessary permits. All permit packages shall be provided to the County for review and comment prior to submittal. It is anticipated that permit preparation shall include one or more Requests for Additional Information (RAI) from the permitting agencies. In addition, the Consultant shall prepare a N.P.D.E.S. Stormwater Pollution Prevention Plan, which will satisfy the requirements, at the time the permit application is submitted, of the FDEP. The Stormwater Pollution Prevention Plan shall be included in the Technical Provisions.

4.4 Renewals and Extensions

Permit fee renewals and extensions, as necessary, shall be paid for under Post Design Services.

4.5 Additional Permit Requirements (Limiting Amount)

Consultant shall conduct surveys and prepare legal descriptions and sketches and survey drawings as necessary to address permit conditions. These shall include the following as necessary:

- Conservation/mitigation easements
- Releasing of an existing conservation easement
- Sovereign/submerged lands leases/easements

4.5.1 Site Evaluation Report

The report shall include a search of all applicable databases to determine if a contaminated site is adjacent to the project, results from water and soil testing, and potential impacts to the project and a recommendation of how to handle any possible contamination that may affect the project.

The Consultant shall also perform the following:

- Install monitoring wells in accordance with all rules and regulations to test groundwater as required under the FDEP NPDES groundwater permitting requirements.
- Abandon all monitoring wells in accordance with all rules and regulations.
- Perform soil testing in accordance with all rules and regulations.

4.6 Deliverables

Work to be completed under this section by the Consultant shall require the following items to be delivered and accepted by the County:

- Water Management District/ACOE Permit Package
- Alternative Wetland Mitigation Concepts Report
- FDOT Permit Application Package(s)
- N.P.D.E.S. Stormwater Pollution Prevention Plan Package
- Special Permit Documents (Surveys)
- Threatened and Endangered Species Reports and After Action Report (if applicable)
- Site Evaluation Report and FDEP Contaminated Groundwater Permit (if applicable)

4.7 Pay Items

Work to be completed under this section by the Consultant shall be paid for under the following pay items as listed on the Activity and Fee Summary:

- Water Management District/ACOE Permit Package
- Alternative Wetland Mitigation Concepts Report (if applicable)
- FDOT Permit Application Package(s)
- N.P.D.E.S. Stormwater Pollution Prevention Plan Package
- Permit(s) Issuance
- Special Permit Documents (Survey) Limiting Amount
- Threatened and Endangered Species Reports and After Action Report (if applicable)
- Site Evaluation Report and FDEP Contaminated Groundwater Permit (if applicable)

5.0 Right-of-Way Engineering for Survey Projects

Right-of-Way Engineering services shall begin immediately upon issuance of the Notice to Proceed by the County, and shall be conducted on an expedited schedule. The County will provide the Consultant with title searches on each parcel identified on the Parcel Identification Map as furnished by the County. The title work will be provided to the Consultant at the Notice to Proceed meeting or as specified by the Project Manager. All survey work shall meet the requirements of Chapter 472, Florida Statutes and Chapter 5J-17, Florida Administrative Code. All surveys shall result in a map and/or survey report signed and sealed by a Professional

Surveyor and Mapper registered in the State of Florida and delivered to the Project Manager. Within 5.0 and 6.0 any mention of "Map of Survey" refers to the Surveys defined in 5J-17.050 (2), (7) and (11), (12) – July 31, 2018.

The Consultant shall not deviate from the alignment and right-of-way limits from the Scope of Services as provided by the County. Any deviations must be justified by the Consultant and approved by the Project Manager.

5.1 Right-of-Way Mapping

Consultant shall survey the entire project area and prepare a Map of Survey at a scale of 1" = 40' on 11 inches x 17 inches or at a scale approved by the Project Manager. Right-of-way mapping services shall conform to the most current version (at the time of the Notice to Proceed) of the Orange County Procedures for Right-of-Way Engineering, a copy of which will be provided to the Consultant. The Consultant shall analyze each proposed acquisition to identify the appropriate property interest to be acquired (fee simple right-of-way, drainage easement, fill slope easement, temporary construction easement, temporary demolition easement, etc.). The Consultant shall submit 30%, 60%, 90% and 100% progress review submittals of the Map of Survey in 11 inches x 17 inches formats, as well as electronic copies in AutoCAD and PDF format as requested by the County.

Each Map of Survey submittal of right-of-way maps, boundary surveys, specific/miscellaneous surveys, legal descriptions and parcel sketches shall implement the information items listed in the appropriate Orange County Procedures for Right-of-Way Engineering checklist. A copy of the appropriate checklist shall accompany each submittal with a certification signed by the Consultant's Project Manager and the Surveyor of Record certifying that the submittal completely addresses the required items as listed on the checklist.

Prior to submittal of the 60% Map of Survey, the baseline of survey and/or the centerline of construction shall be the same line and approved by the Project Manager. From that time on, only the centerline of construction shall be shown on the Map of Survey and construction plans, if required.

Consultant shall update and modify legal descriptions, parcel sketches, right-of-way surveys, boundary surveys, specific/miscellaneous surveys and construction plans in a timely manner to reflect changes in proposed acquisitions resulting from right-of-way acquisitions, negotiations and litigation. After approval of the 100% Map of Survey; right-of-way surveys, boundary surveys, specific/miscellaneous survey modifications shall be addressed in accordance with Section 5.5.

5.2 Parcels

5.2.1 Review of Title Work

The Consultant shall review the title work provided by the County, supplemental surveys and investigations performed by the Consultant and/or other record

information. The size, location, and dimensions of each parent tract, parcel and property interest and encumbrances (easements, leases, etc.) shall be determined by the Consultant from this review. This information shall be shown on the Map of Survey for right-of-way surveys, boundary surveys, specific/miscellaneous surveys and parcel sketches, as appropriate. Recorded and Unrecorded easements shall be shown to the extent they can be identified and located on the Map of Survey and parcel sketches.

5.2.2 Legal Descriptions and Parcel Sketches

Consultant shall have a licensed Professional Surveyor and Mapper prepare legal descriptions and parcel sketches for each parcel as necessary in accordance with the previously described Orange County Procedures for Right-of-Way Engineering. A draft of each legal description and parcel sketch for every parcel shall be submitted prior to the 90% right-of-way maps, if required. If any parcels are added or modified prior to the 100% right-of-way map submittal, the Consultant shall submit the legal descriptions and sketches of the modified parcels with revisions to the right-of-way maps showing the modifications. The signed and sealed final Parcel Sketches and Legal Descriptions shall be submitted upon request by the County for use in parcel acquisitions, but not later than with the submittal of the 100% Right-of-Way Map.

5.2.3 Parcel Staking for Appraisal (If Required)

The Consultant shall have a licensed Professional Surveyor and Mapper stake the limits of acquisition on each parcel in preparation for appraisals. The timing and method of marking the acquisition limits shall be as directed by the Project Manager.

5.3 Map of Survey; Right-of-Way Surveys, Boundary Surveys, Specific/Miscellaneous Surveys and Control Surveys

The Consultant shall have a licensed Professional Surveyor and Mapper conduct field surveys to supplement the field survey data obtained during the Roadway conceptual Analysis (RCA) that is provided to the Consultant. All survey information shall conform to the most current version of the Orange County Procedures for Right-of-Way Engineering, and shall be recorded in a cross section field book that has 10 columns by 10 rows per inch on both pages supplied by the Consultant. The field book remains the property of the County, and must be submitted with the Map of Survey for right-of-way surveys, boundary surveys, specific/miscellaneous surveys and be Signed and Sealed. When a data collector is used, the Consultant shall submit a paper copy of the raw data files and coordinate data files bound in a book, together with the electronic copy on a disk. All Right-of-Way computations shall be documented in a Right-of-Way Computation Book, which shall be submitted to the Project Manager with the Survey Field Notes, State Plane Coordinate file, adjusted bench run and Final Map of Surveys such as right-of-way maps, boundary surveys and/or specific/miscellaneous surveys.

Consultant shall have a licensed Professional Surveyor and Mapper monument the center line of construction at stations that are not more than 600 feet apart and at all P.C.'s, P.T.'s, side street intersections, and changes in direction. Stationing shall be marked in the field. Similar monumentation and markings shall be provided at all side streets up to 150 feet beyond the limits of the topographic survey or at other locations as directed by the Project Manager. The centerlines of construction shall be referenced to permanent monumentation located outside the limits of construction at the beginning and end of project, all P.C.'s and P.T.'s, all changes in direction, and intermediate points such that referenced points are spaced not more than 600 feet apart. Horizontal control, as stated above shall be tied to the Florida State Plane Coordinate System, North American Datum of 1983/1990 Adjustment East Zone and shall be shown on the Map of Survey for right-of-way surveys, boundary surveys, and specific/miscellaneous surveys.

5.4 Minimization of Compensable Impacts (If Required)

The Consultant shall coordinate with Orange County Right of Way Acquisition Section as early as possible in the design phase of the project to review the design corridor and make the necessary revisions to the design to minimize compensable impacts to private properties. The Consultant shall also identify and evaluate alternatives to right-of-way acquisition (e.g., retaining walls instead of fill slope easements, closed drainage system instead of ditch systems, etc.) to determine the most cost effective way to meet the project needs.

The Consultant shall perform the following services during this phase:

- Meet as necessary with the Orange County Right of Way Acquisition Section and property owners.
- Perform site inspections of properties together with the Orange County Right of Way Acquisition Section as may be necessary to evaluate the potential for minimization of compensable impacts. Coordinate with the Orange County Right of Way Acquisition Section to identify compensable impacts and evaluate cost effective ways to reduce compensable impacts to the greatest extent possible.
- Consult with the Orange County Right of Way Acquisition Section during the design process and fully address any right-of-way review comments provided.

During this phase the Consultant and the County shall inspect affected properties in the field to determine the extent of compensable impacts on each parcel, and whether such impacts can be reduced in a cost-effective manner. The Consultant shall at a minimum consider site access, onsite drainage, onsite parking, onsite utilities, including septic systems, and any other existing facilities impacted by the proposed improvements. This effort shall include meetings with property owners to obtain their input on the configuration of the proposed improvements in those cases where various options exist. The Consultant shall modify the design, where possible, to minimize the number and extent of such compensable impacts, and to accommodate the property owner preferences where appropriate.

The Consultant shall document the above-described investigations and their findings and recommendations. This work should occur early in the design process and prior to completion of 60% plans.

Consultant shall meet with all property owners where the proposed right-of-way exceeds the limits shown on the Right-of-Way Identification Maps prepared during Phase I.

5.5 Changes to Documents during Right-of-Way Acquisition

There shall be a limiting amount in this contract to cover work required due to right-of-way acquisition or other developments. This work shall include, but not limited to changes to construction plans (beyond the normal design process as agreed to by the County), right-of-way maps, legal descriptions and parcel sketches. It will also include staking parcels at the County's request (in addition to the parcel staking for appraisals), attendance at Order of Taking Hearings, Mediations and Settlement Conferences, and responding to questions posed by the County from property owners and property owners' representatives and experts. This work may be required at any time during the contract at the request of the County. It will be billed on an hourly basis, as approved by the Project Manager. The limiting amount shall include hourly rates for the consultant and all applicable sub-consultants including, but not limited to, surveyor, drainage engineer and environmental staff.

5.6 Deliverables

Work to be completed under this section shall require the following items to be certified, signed/sealed, delivered and accepted by the County:

- Maps of Survey for Right-of Way Acquisition (30%,60%, 90%, 100%, and Final)
- Parcel Legal Descriptions and Sketches (Draft and Final) (If Required)
- Right-of-Way Survey Field Books and electronic AutoCAD and PDF files.
- Right-of-Way Computation Book (Raw Data Files, Coordinate data files, Benchmarks- Three-wire level notes or Digital files)
- Parcels staked for appraisal , (If Applicable)
- Updated/Modified documents during right-of-way acquisition
- Document number of Final Right-of-Way Map(s) recorded in the Orange County Comptroller Office for Public Records (Required, to be Recorded and paid by Consultant at final submittal, (mylar submittal – 11"x 17").
- All of the above items must be in an acceptable Orange County format approved by the Project Manager. Hardcopies and electronic submittals will be certified where required and approved by the Project Manager.

5.7 Pay Items

Work to be completed under this section by the Consultant shall be paid for under the following pay items as listed on the Activity and Fee Summary:

- Maps of Survey (30%, 60%, 90%, 100%, and Final).
- Parcel Legal Descriptions and Sketches (Draft and Final) (If Required).
- Right-of-Way Survey Field Books and electronic AutoCAD files.
- Right-of-Way Computation Book (Raw Data Files, Coordinate Data Files, Benchmark data)
- Parcels staked for appraisal
- Changes to documents during right-of-way acquisition (Limiting Amount)
- Subsurface Utility Locations
- Boring Locations
- Recordation of Right-of-Way Maps with the Orange County Comptroller Office (Required, to be Recorded and paid by Consultant), (mylar submittal – 11"x 17").

6.0 Design Survey Services for Major Survey Projects

The Consultant shall have a licensed Professional Surveyor and Mapper conduct field surveys as necessary to support the design of the project. These Map of Surveys shall include, but not be limited to, horizontal and vertical control surveys and topographic surveys of the roadway alignment and adjacent areas and retention ponds, mitigation areas, wetland, jurisdictional limits, environmentally sensitive areas, flood plain compensation areas, or other areas where information is needed to support the design and permitting of the project.

Controlled aerial photography or other data collection methods may be used to collect topographic information as approved by the Project Manager. When aerial photography is used the Consultant shall provide all necessary control and shall document the setting of targets and collection of other control information as required above.

All such survey information will be recorded in a cross section field book that has 10 columns by 10 rows per inch on both pages supplied by the Consultant. The field book remains the property of the County, and must be submitted with the Final Construction Plans, if required. When a data collector is used, the Consultant shall submit a paper copy of the raw data files and coordinate data files bound in a book, together with an electronic copy on a disk.

All survey work shall meet the requirements of Chapter 472, Florida Statutes, and Chapter 5J-17, Florida Administrative Code, and shall provide sufficiently detailed information to meet the design requirements of the project. Survey data shall be sufficient to establish drainage basins, address localized drainage issues within and adjacent to the project limits, and include all areas as necessary to address project design considerations. All surveys shall result in a Map of Survey stating the type and/or purpose of the survey it depicts and be signed and sealed by a Professional Surveyor and Mapper registered in the State of Florida and delivered to the Project Manager.

6.1 Horizontal Control and Monumentation

Consultant shall monument the center line of construction at each 600-foot station and at all P.C.'s, P.T.'s, side street intersections, and changes in direction. Stationing shall be marked in the field. Similar monumentation and markings shall be provided at all side streets to one hundred fifty (150) feet beyond the limits of the topographic survey or at other locations as directed by the Project Manager. The center line of construction shall be referenced to permanent monumentation located outside the limits of construction at the beginning and end of project, all P.C.'s and P.T.'s, all changes in direction, and intermediate points such that referenced points are spaced not more than six hundred (600) feet apart. Horizontal control shall be tied to the Florida State Plane Coordinate System, North American Datum of 1983/1990 Adjustment East Zone and either shown graphically or in tabulation format on the Right of Way Maps, specific/miscellaneous surveys and Survey Control Sheet(s).

6.2 Vertical Control and Monumentation

All vertical control shall be based on NAVD 1988 datum, and shall be established from at least two (2) Orange County benchmarks or NGS marks. Permanent benchmarks shall be set outside the limits of construction. The location of benchmarks shall be approximately 600 feet apart and coordinated with the design such that a minimum of two benchmarks are identified on each sheet of the construction plans. Features that may be moved/adjusted in the future (e.g., utility poles, fire hydrants, etc.) shall not be used for benchmarks. Preferred locations include, but not limited to concrete drop inlets, concrete curb inlets, concrete headwalls, etc. or other permanent structures as approved by the County Surveyor or his/her agent.

6.3 Survey Control Sheet(s)

Consultant shall prepare Survey Control Sheet(s) for inclusion in the Construction plans. The survey control sheet(s) shall identify and show the location and type of all horizontal control points, reference points (three (3) outside of proposed right-of-way limits) and benchmarks. Details shall be included as necessary to clarify the relationship of monumentation and project control lines. The survey control sheet(s) shall be signed and sealed by a Professional Surveyor and Mapper registered in the State of Florida, and shall conform to the requirements of Chapter 5J-17 of the Florida Administrative Code. The Survey Control Sheet(s) shall also include, but not limited to the following:

- The complete centerline alignment data, including beginning of survey station, all curve data, P.C.'s, P.T.'s, side street intersections, changes of directions, all intermediate control point stations, and end of survey station must be shown. All control points must be identified as to type of material set and/or found at each respective point and referenced.
- All section lines, all quarter section lines, (and all quarter-quarter section lines when pertinent) must be shown with the station where their intersection with the centerline or baseline of survey occurs, a distance from the nearest corner to the centerline, and bearings and distances to all corners. The type of corner, found or set, shall be spelled out or identified by a legend.

- Centerline data will be referenced to State Plane Coordinate System, and labeled on the Survey Control Sheet(s) using North American Datum of 1983/1990 adjustment (NAD83/90) East Zone and state the type of Network RTK used for the project, (If Applicable). Information placed on the Survey Control Sheet(s) can be either in tabular format or placed on the survey alignment.
- All Centerline Control points shall have a minimum of 3 reference points outside the limits of construction and shall be shown on the Survey Control Sheet(s).
- All Benchmarks shall be shown both in graphic and note form on the Survey Control Sheet(s).

6.4 Vertical Data

Vertical data shall be of sufficient accuracy to support the development of profiles and/or cross sections at intervals not exceeding 50 feet, including, but not limited to the main line roadway, side streets, drainage ways, retention ponds, etc. Check cross sections shall be measured at appropriate intervals, but no less than every 1,000 feet.

6.5 Pay Items

- Control Survey
- Design Survey
- Design Survey Field Books and/or raw data files hard copies and electronic copies
- Design survey Computation Book, if applicable.
- Subsurface utility locations
- Boring locations
- Wetland Designation and Locations

6.6 Deliverables

- Control Survey
- Design Survey
- Design Survey Field Books and/or raw data files hard copies and electronic copies
- Design Survey Computation Book
- Subsurface utility locations
- Boring locations

7.0 Geotechnical Services

The Consultant shall be responsible for a complete geotechnical investigation. All work performed by the Consultant shall be in general accordance with the Florida Department of Transportation Soils and Foundation Handbook and other applicable standards, or as otherwise described in this scope of services. Any changes regarding geotechnical standards, policies and

procedures shall be discussed on a project-by-project basis. The Consultant shall be responsible for obtaining any permits needed to perform the work. The County will assist in obtaining property owner permission to perform the necessary geotechnical fieldwork.

7.1 Data Collection

The Consultant shall review printed literature including topographic maps, county agricultural maps, aerial photographs (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field investigations, the Consultant shall review U.S.G.S., S.C.S and potentiometric maps to identify areas with problematic soil and groundwater conditions.

7.2 Roadway

The Consultant shall be responsible for coordination of all geotechnical related fieldwork activities. The Consultant shall retain all samples until Final Plans are submitted.

- 7.2.1 A preliminary roadway exploration shall be performed before the 30% plans submittal. The preliminary roadway exploration will be performed and results provided to assist in setting roadway grades and locating potential problem areas. Boring frequency shall be one every 600 feet. Borings shall be of sufficient depth to determine seasonal high water elevation and other critical geotechnical features. The preliminary auger borings shall be surveyed for use in the final design.

Pavement cores shall be obtained in areas to be milled and resurfaced, and specifically at the following locations:

-

- 7.2.2 The final roadway exploration shall include one auger boring every 200 feet to a depth of 5 feet. The borings shall be extended to 20 feet every 600 feet along the roadway. Boring depths shall be adjusted to accommodate roadway cuts and utility excavations. Additional borings or muck probes shall be performed in suspected muck areas to evaluate the extent of organic soils.

Standard Penetration Test (SPT) borings shall be performed every 400 feet in high fill embankment areas (i.e., fill greater than about 10 feet). SPT boring depths shall be to 1.5 times the fill height. Undisturbed samples of compressible materials such as muck, peat, clay or silt shall be obtained for use in consolidation testing for settlement analysis.

Routine soil classification shall be performed on representative samples obtained from the borings. These tests typically include grain size analysis, percent fines, Atterberg limits, organic content and moisture content. Additional bulk samples of representative soils encountered

along the alignment shall be collected for Limerock Bearing Ratio (LBR) and corrosion testing. All laboratory testing and classification shall be performed in accordance with applicable AASHTO or ASTM standards.

7.3 Stormwater Systems

The Consultant shall evaluate subsurface conditions in proposed stormwater systems. For stormwater ponds, two auger borings to a depth of 20 feet below the bottom of the proposed pond elevation shall be performed per acre of pond. One field permeability test per acre of pond shall also be provided. One auger boring to a depth of 20 feet shall be performed every 500 feet for exfiltration trenches and treatment swales. One field permeability test or Double Ring Infiltrometer (DRI) test shall be performed every 500 feet.

Two auger borings per acre shall be performed in proposed floodplain compensation areas and mitigation areas to a depth below the proposed lowest elevation in those areas.

The Consultant shall provide an analysis of stormwater volume recovery through infiltration or background see page analysis as required.

7.4 Structures

SPT borings shall be performed at bridge structures to evaluate foundation alternatives. Borings shall be performed at end bent and intermediate bent locations. Borings for intermediate bents shall be no further apart than one every 20 feet. Borings shall be of sufficient depth to determine a bearing layer for pile foundations and are expected to be 40 feet deep. SPT borings shall be sampled on two-foot centers to 10 feet and at five-foot centers thereafter to the termination depth.

7.5 Special Geotechnical Investigations

This shall include box culverts, signals, overhead signs and retaining walls. A minimum of two SPT borings shall be performed to a depth of 30 feet at each box culvert location. Box culverts are anticipated at the locations listed in Section 3.3.5.1.

Borings shall also be drilled to a depth of 30 feet at the mast arm pole locations listed in Section 3.3.5.3.

SPT borings shall be performed 40 feet deep at each overhead cantilever or truss sign location. Overhead signs are anticipated at the locations listed in Section 3.3.5.2.

SPT borings shall be performed every 200 feet along retaining wall alignments to a depth equal to 2 times the wall height. The borings shall be sampled on two-foot centers to ten feet and at five-foot centers thereafter to the termination depth. Retaining walls are anticipated at the locations listed in Section 3.3.3 and 3.3.4.

7.6 Contamination Evaluation

The Consultant shall determine the location and extent of soil and groundwater contamination within the project limits, and shall avoid or minimize impacts to contaminated areas to the extent possible.

7.6.1 Contamination Screening Evaluation Report (CSER)

The Contamination Screening Evaluation Report prepared during the Roadway Conceptual Analysis shall be updated as requested by the County. The update is intended to obtain and review the most current information about potential contamination impact sites identified in the Roadway Conceptual Analysis Contamination Screening Evaluation Report and to identify any new sites not identified in the original report. The methodology to be used to update the report shall be compatible to that used in the Roadway Conceptual Analysis.

7.6.2 Preliminary Contamination Assessment (PCA)

The Consultant shall perform Preliminary Contamination Assessment on sites identified in the Contamination Screening Report as MEDIUM or HIGH risk for contamination impacts. Prior to construction, soil and groundwater samples shall be obtained from those sites and tested for the presence of contaminant of concern as identified in the report. Based on the Roadway Conceptual Analysis Contamination Screening Evaluation Report, the following sites shall be investigated:

-

The Preliminary Contamination Assessment investigations shall be performed in such a manner as to detect the contaminants of concern identified in the Contamination Screening Evaluation Report. For petroleum-impacted sites, auger borings with Organic Vapor Analyzer soil screening shall be performed at locations where contamination is most likely. A laboratory shall test soil samples with high Organic Vapor Analyzer readings. Groundwater samples shall be obtained and analyzed for the contaminants of concern using testing protocols approved by the Florida Department of Environmental Protection. If appropriate, geophysical methods such as Ground Penetrating Radar or Magnetometer surveys shall be performed to look for unknown buried fuel storage tanks or other buried objects of concern such as sumps, pits, etc. All field and sampling activities shall conform to Florida Department of Environmental Protection requirements. A Florida Department of Health approved laboratory shall perform all laboratory analyses. Prior to drilling any borings or installing/obtaining groundwater samples, the location of underground utilities shall be determined and sampling locations cleared in accordance with local regulations.

The County shall assist the Consultant in obtaining access onto private property as necessary to conduct the Preliminary Contamination Assessments.

The approximate area of potential construction contamination impacts shall be crosshatched on the plan view of the roadway and labeled as "Approximate Limits of Potential Contamination Area." The following issues shall be addressed in the plans, details and/or specifications:

- Type of contamination.
- Specific Contractor responsibilities (dewatering, disposal of contaminated soils, etc).
- Special permitting requirements and constraints.

7.7 Geotechnical Reports

7.7.1 Roadway Soil Survey Report

The Consultant shall submit a preliminary Roadway Soil Survey Report with the 60% plans and a final report with the 90% plans. The preliminary and final Roadway Soil Survey Reports shall include the following:

- Copies of U.S.C.G.S and S.C.S. maps with project limits shown.
- A report of tests sheet (i.e. Roadway Soil Survey sheet) that summarizes the laboratory test results, the soil stratification (i.e., soils grouped into layers of similar materials) and construction recommendations relative to FDOT Standard Plans 120-001 and 120-002.
- Data interpretation and analysis including a Design LBR, seasonal high groundwater levels for roadway base clearance, aquifer parameters for stormwater systems and volume recovery analysis, limits of unsuitable material and removal recommendations, magnitude and time rate of embankment settlement, calculation of factor of safety for embankment slope stability, and embankment construction recommendations.
- Determination of seasonal high water shall consider proposed improvements impacting existing hydrological features, and identifying impacts to adjacent properties, including existing septic systems.
- An Appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.

7.7.2 Bridge Foundation Report – (N/A)

7.7.3 Miscellaneous Structure Foundation Report

The Consultant shall prepare a Miscellaneous Structure Foundation Report to cover traffic signal and sign supports, box culverts and walls. The report shall include the following:

- Copies of U.S.C.G.S. and S.C.S maps with project limits shown.
- A summary of structure background data, U.S.G.S., S.C.S, geologic and potentiometric data.
- Data interpretation and analysis including design soil profiles(s) that include the soil model/type of each layer and all soil properties required for foundation design, lateral earth pressure coefficients, estimated differential and total (long term and short term) settlements, wing wall stability evaluation, external stability of conventional and retained earth wall systems, soil parameters used in analysis for retained earth wall systems and minimum soil reinforcement lengths versus wall heights, sheet pile wall analysis, and a review of the design for geotechnical compatibility and constructability.
- Recommendations for foundation installation, or other site preparation soils related construction considerations.
- An Appendix which includes SPT boring profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, and any other pertinent information.

7.7.4 Contamination Screening Report

The updated Contamination Screening Report shall identify all potential contamination impact sites and shall rank them with their risk potential. A discussion of the available information about the contamination issues at each site shall be provided. Recommendations for further Preliminary Contamination Assessment evaluation shall be made. The report shall follow the format outlined in Chapter 22 of the FDOT Preliminary Design and Environment Manual.

7.7.5 Preliminary Contamination Assessment Report

The Preliminary Contamination Assessment Report shall fully describe the contamination concerns at each site, and shall discuss the sampling and testing methodologies used and the findings. The following information shall be presented in the report:

- Site location map on an aerial photo background
- Background information relative to known or suspect contamination issues (e.g., plume maps, groundwater flow direction maps, etc.)
- Sampling and testing locations map
- Sampling and testing results

- Conclusions relative to contamination impacts affecting the project, including potential costs during construction

7.8 Deliverables

- Roadway Soil Survey Report (Preliminary and Final)
- Miscellaneous Structures Foundation Report
- Updated Contamination Screening Evaluation Report
- Preliminary Contamination Assessment Report

7.9 Pay Items

- Fieldwork, lab analysis and engineering
- Roadway Soil Survey Report (Preliminary and Final)
- Miscellaneous Structures Foundations Report
- Updated Contamination Screening Evaluation Report
- Preliminary Contamination Assessment Report

8.0 Railroad Coordination (Not Applicable)

9.0 Post Design Services

The Consultant shall provide engineering support as necessary which includes, but is not limited to, the following:

- **Shop Drawing Review**

The Consultant shall provide engineering services to complete a shop drawing review for bridge and structural component submittals.

- **Construction Administration**

The Consultant shall provide engineering services during the construction of the project as requested by the County. The Consultant may be required to attend a Pre-Bid Construction Meeting, the Pre-Construction Conference or any other meeting requested by the County.

- **Modification of Final Construction Plans**

Consultant shall update and modify the final Construction Plans as may be necessary to reflect changes in proposed improvements identified after submittal of the 100% plans. The consultant shall provide signed and sealed copies of the updated final construction plans. Additional signed and sealed copies of the final construction plans, or portions thereof, shall be provided during the completion of the right-of-way acquisition process, as requested by the County. Plans may require revisions until the completion of the right-of-way acquisition process.

- **Permit Renewals and Extensions**

Consultant will be responsible for renewals and extensions of the permits as requested by the County.

- **Pay Items**

- Post Design Services

TABLE OF DELIVERABLES

1.0 Administration

<i>Final Design Project Schedule – Paper, Digital File & pdf File</i>	<i>3/1/1 Copies</i>
<i>Construction Time Estimate – Paper, Digital File & pdf File</i>	<i>3/1/1 Copies</i>
<i>Workshop Review Meeting Minutes Paper & pdf file</i>	<i>1/1 Copies</i>

2.0 Public Involvement

<i>Public Involvement Plan – Paper, Digital File & pdf File</i>	<i>3/1/1 Copies</i>
<i>Small Group Meeting Materials</i>	<i>As required</i>

3.0 Design and Plans Preparation

<i>Preliminary Drainage Calculations – Paper & Digital pdf File</i>	<i>3/1 Copies</i>
<i>Final Drainage Calculations (Signed & Sealed & pdf File)</i>	<i>3/1 Copies</i>
<i>Roadway Design Criteria Package (Paper & pdf File)</i>	<i>3/1 Copies</i>
<i>Typical Section Package (Paper & pdf File)</i>	<i>3/1 Copies</i>
<i>Pavement Design Package (Paper & pdf File)</i>	<i>3/1 Copies</i>
<i>30%, 60%, 90% & 100% Cost/Engineers Estimate – Paper</i>	<i>Copies</i>
<i>Final Cost/Engineers Estimate – Paper, Digital File & pdf File)</i>	<i>3/1/1 Copies</i>
<i>Design Notes and Computation Book</i>	<i>3 Copies</i>
<i>Quantity Computation Book</i>	<i>3 Copies</i>
<i>Draft Schedule of Prices and Technical and Special Provisions – Paper & MS Word File</i>	<i>3/1 Copies</i>
<i>Final Schedule of Prices Technical and Special Provisions – Paper & MS Word File</i>	<i>3/1 Copies</i>
<i>Electronic Bid Document Package</i>	<i>1 Copy</i>
<i>Final Electronic Design and Topography files (ACAD 2010 & Microstation)</i>	<i>1 Copy</i>
<i>Environmental Consideration Plans-Paper, Digital File & pdf File</i>	<i>3/1/1 Copies</i>
<i>Draft Bid Package – Paper, Digital file</i>	<i>3/1 Copies</i>
<i>Final Bid Package – Paper, Digital File, pdf File</i>	<i>3/1/1 Copies</i>

3.0 A - Construction Plans

<i>30% Submittal – Paper, (11"x17")</i>	<i>1/10 Copies</i>
<i>60% Submittal – Paper, (11"x17")</i>	<i>4/19 Copies</i>
<i>90% Submittal – Paper, (11"x17")</i>	<i>4/18 Copies</i>
<i>100% Submittal – Paper, (11"x17")</i>	<i>4/18 Copies</i>

3.0 B - Final Construction Plans

<i>Hard Copy – Paper, (11"x17")</i>	<i>25 Copies</i>
<i>Hard Copy – Paper, (11"x17") (Signed and Sealed)</i>	<i>3 Copies</i>
<i>Digital Files – AutoCAD 2010, Microstation & pdf Files</i>	<i>1 Copy each</i>

4.0 Permitting

<i>Water Management District/ACOE Permit Package (Paper & pdf File)</i>	<i>1 Copy</i>
<i>Alternatives Wetland Mitigation Concepts Report (Paper & pdf File)</i>	<i>1/1 Copy</i>
<i>FDOT Permit Application Package(s)</i>	<i>1 Copy</i>
<i>RCID Permit Application Package(s) (Paper & pdf File)</i>	<i>1 Copy</i>
<i>N.P.D.E.S. Pollution Prevention Plan (Paper & pdf Files)</i>	<i>3/1 Copies</i>
<i>Special Permit Documents (signed and scaled surveys). If required</i>	<i>3 Copies</i>
<i>Site Evaluation Report (Paper & pdf File)</i>	<i>1/1 Copy</i>

5.0 Right-of-Way Engineering

<i>Sample Format (with list of parcels for each)</i>	<i>1 Copy/Format</i>
<i>Draft Sketches and Legal Descriptions</i>	<i>3 Copies</i>
<i>Final Sketches and Legal Descriptions (Signed and Sealed)</i> <i>(Hard copy, Digital, PDF copy)</i>	<i>7 Copies/Parcel</i>
<i>Right-of-Way Survey Field Books</i>	<i>Original Books</i>
<i>Raw Data Files – Paper</i>	<i>1 Copies</i>
<i>Right-of-Way Computation Book</i>	<i>1 Copies</i>
<i>Parcels Staked in Field for Appraisal</i>	<i>2 Time/Parcel</i>
<i>Minimization of Compensable Impacts Report (Paper & pdf File)</i>	<i>3/1 Copies</i>
<i>Updated/Modified Sketches and Legal Descriptions</i>	<i>7 Copies/Parcel</i>

5.0 A - Preliminary Surveys: Right-of-Way, Boundary, Specific, Miscellaneous

<i>30% Submittal – Paper, 11" X 17" Sized, PDF copy</i>	<i>3/1 Copies</i>
<i>60% Submittal – Paper, 11" X 17" Sized, PDF copy</i>	<i>3/1 Copies</i>
<i>90% Submittal – Paper, 11" X 17" Sized, PDF copy</i>	<i>3/1 Copies</i>
<i>100% Submittal – Paper, 11" X 17" Sized, PDF copy</i>	<i>3/1 Copies</i>

5.0 B - Final Surveys: Right-of-Way, Boundary, Specific, Miscellaneous

<i>Hard Copy – Paper, 11" X 17" Sized (Signed and Sealed)</i>	<i>3 Copies</i>
<i>Digital Files – AutoCAD 2016 & pdf Files</i>	<i>1 Copy each</i>

5.0 - Updated/Modified Surveys: Right-of-Way, Boundary, Specific, Miscellaneous (Each Modification Cycle)

<i>Hard Copy – Paper, 11" X 17" Sized, PDF copy</i>	<i>3 Copies</i>
<i>Hard Copy – Paper, 11" X 17" Sized (Signed & Sealed), PDF copy</i>	<i>3 Copies</i>

6.0 Design Survey Services

<i>Control Survey – paper copies signed and sealed, PDF copy</i>	<i>3 Copies</i>
<i>Design Survey – paper copies signed and sealed, PDF copy</i>	<i>3 Copies</i>
<i>Design Survey Field Books (Signed and Sealed)</i>	<i>All Books</i>

Raw Data Files – Paper
Design Survey Computation Book, if applicable

1 Copy
1 Copy

7.0 Geotechnical Services

Final Preliminary Roadway Soil Survey Report (including ponds and swales)

3 Copies

Roadway Soil Survey Report (including ponds and swales)(S & S)

3 Copies

Miscellaneous Structure Foundation Report

3 Copies

Updates Contamination Screening Report

3 Copies

Preliminary Contamination Assessment Report

3 Copies

Box Culvert Report (If Required) (Signed & Sealed)

3 Copies

Mast Arm Signal Pole Report (Signed & Sealed)

3 Copies

Retaining Walls Report (Signed & Sealed)

3 Copies

Innovation Way Planning Level Cost Estimates

Segment Number	Length	PDS	First 2 Lanes of 4 Lane Road			4-Lane	
			Design	Mitigation	ROW	Construction	Construction
2	0.8 mi	\$55,000	\$480,000	\$192,000	*	\$2,340,000	\$1,620,000
3	1.2 mi	\$180,000	\$720,000	\$288,000	\$1,800,000	\$3,510,000	\$2,430,000
5	0.5 mi		\$195,000	\$30,000	\$557,900	\$1,462,500	\$1,012,500
6	0.3 mi		\$117,000	\$36,000	\$334,740	\$877,500	\$607,500
Total	2.8 mi	\$235,000	\$1,512,000	\$546,000	\$2,692,640	\$8,190,000	\$5,670,000
Total Costs		First 2 Lanes = \$13,175,640		4-Laning = \$5,670,000		Combined = \$18,845,640	

Estimate Assumptions:

PDS Segment 3 = \$150,000/mile, Segment 2 = \$55,000 for Modified Scope PDS. of Innovation Way.

Design (\$600k/mile) - Required for Segments 2 & 3. 65% of full cost assumed for Segments 5 & 6.

Mitigation (\$240k/mile) - Required for Segments 2 & 3. Minimal needed for Segments 5 & 6.

ROW (Custom) - Estimated based on cost of \$100k/acre for Segment 3. Minimal needed for Segments 5 & 6.

Construction First 2 Lanes - 65% of estimated 4-lane cost of \$4.5 mil/mile or \$2.9 mil/mile.

Construction 4-Laning - 45% of estimated 4-lane cost of \$4.5 mil/mile or \$2 mil/mile.

** PD required to dedicate ROW for Segment 2. Full PDS not necessary for this segment.*

EXHIBIT "G"

EXHIBIT "H"

Form of Confirmation Letter

CONFIRMATION LETTER
ADDRESS TO:

THIS CONFIRMATION LETTER is issued this ___ day of _____, 20___, by the Orange County Transportation Planning Division pursuant to that certain Transportation Agreement for Innovation Way (from Moss Park Road to Sunbridge Parkway) for the Camino Reale PD by and between Camino Reale Properties, LLC, a Florida limited liability company ("Owner"), and Orange County, a charter county and political subdivision of the State of Florida ("County") executed on _____, 2018 and recorded on _____, 2018 under Document No.: _____ of the Public Records of Orange County, Florida (the "Road Agreement"). Capitalized terms used in this Confirmation Letter but not defined herein shall have the same meaning as in the Road Agreement.

This Confirmation Letter is issued to confirm, on behalf of the County pursuant to Section 11 of the Road Agreement that _____ trips have satisfied Transportation Concurrency review.

These trips are now available use by Owner (and/or its assigns) to evidence that concurrency requirements have been satisfied for any development within the Property pursuant to the terms of the Road Agreement, including but not limited to, Section 11 of thereof.

ORANGE COUNTY, FLORIDA

By: _____
Print Name: _____
Title: _____
Date: _____

EXHIBIT "I"

Form of Assignment of Trips

ASSIGNMENT OF TRIPS

THIS ASSIGNMENT OF TRIPS ("Assignment") is made and entered into this ___ day of _____, 20___, by and between _____ ("Assignor"), and _____ ("Assignee").

WHEREAS, Assignor is an Owner pursuant to that certain Transportation Agreement for Innovation Way (from Moss Park Road to Sunbridge Parkway) for the Camino Reale PD by and between Camino Reale Properties, LLC, a Florida limited liability company ("Owner"), and Orange County, a charter county and political subdivision of the State of Florida ("County") executed on _____, 2018 and recorded on _____, 2018 under Document No.: _____ of the Public Records of Orange County, Florida (the "Road Agreement"); and

WHEREAS, as a result of the Owner's satisfaction of the Transportation Concurrency requirements, the Orange County Transportation Planning Division acknowledged that ___ trips have been vested against transportation concurrency by that certain Confirmation Letter dated _____ (the "Confirmation Letter"); and

WHEREAS, Assignor, or assignee from another Owner participated in the satisfaction requirement described in the Confirmation Letter and is the holder of ___ trips arising under such Confirmation Letter which are exempt from concurrency review pursuant to Section 11 of the Road Agreement; and

WHEREAS, Assignor desires to assign ___ trips (the "Assigned Trips") to Assignee pursuant to the Confirmation Letter and the Road Agreement.

NOW THEREFORE, in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee agree as follows:

1. The above recitals are true and correct and are incorporated herein as material provisions of this Assignment.
2. Assignor hereby transfers, conveys, and assigns to Assignee all of Assignor's right, title and interest in and to the ___ Assigned Trips.

3. Assignee acknowledges and agrees that this Assignment is subject to the terms and provisions of the Road Agreement and that the Assigned Trips assigned hereunder shall be utilized in connection with the provisions of the Road Agreement.

ASSIGNOR:

By: _____

Print Name: _____

Its: _____

Date: _____

STATE OF _____
COUNTY OF _____

This instrument was acknowledged before me this ____ day of _____, 20____,
by _____, of _____, who is personally known
to me or who has produced _____ as identification.

Notary Public, State of Florida

Print Name

My Commission Expires: _____

ASSIGNEE:

By: _____

Print Name: _____

Its: _____

Date: _____

STATE OF _____
COUNTY OF _____

This instrument was acknowledged before me this ____ day of _____, 20 ____,
by _____, of _____, who is personally known
to me or who has produced _____ as identification.

Notary Public, State of Florida

Print Name

My Commission Expires: _____