

ST. PETERSBURG CITY COUNCIL

Consent Agenda

Meeting of March 2, 2017

TO: The Honorable Darden Rice, Chair and Members of City Council

SUBJECT: A Resolution authorizing the Mayor or his designee to execute Task Order No. 16-06-KHA/T to the agreement between the City of St. Petersburg and Kimley-Horn and Associates, Inc. in an amount not to exceed \$82,393.44 for professional engineering services for the Southwest Water Reclamation Facility (SWWRF) Access Improvements – Traffic Study; approving a supplemental appropriation in the amount of \$96,000 from the unappropriated balance of the Water Resources Capital Projects Fund (4003) to the SW Access Improve FY17 Project (Engineering Project No. 17064-111; Oracle No. 15967)

EXPLANATION: On May 5, 2016, the City Council approved an Architect/Engineering Agreement with the professional consulting engineering firm of Kimley-Horn and Associates, Inc. ("A/E") for engineering services related to the design and construction of Traffic Calming, Bicycle/Pedestrian and Development of Regional Impact Projects.

The Southwest Water Reclamation Facility (SWWRF) located on 54th Avenue South and 41st Street, at the end of the I-275 southwest bound off ramp, is currently undergoing improvements and once it is completed will result in additional traffic trip generation to the treatment plant. The Traffic Study will provide a comprehensive evaluation and analysis of the overall traffic impacts to the SWWRF and surrounding area associated with the future expansion. The final study report will include a Justification Summary Memorandum of the proposed improvements, prepared for approval and concurrence by the Florida Department of Transportation (FDOT) and the Federal Highway Administration (FHWA). The primary goal of the Traffic Study is to provide the City and other surrounding stakeholders with a better understanding of the traffic impacts. Stakeholders include, but are not limited to, FDOT, MPO, Eckerd College and neighboring community.

The scope of this project includes analysis and review of the crash history within the limits of this corridor, evaluating the existing operation of the traffic signals, projecting year 2040 traffic volumes and operations at the traffic signals. Also included is review of existing conditions along the corridor including relevant laneage, speed limits, signal traffic control and pedestrian and bicycle facilities. Two (2) field visits will be conducted to collect information and observe traffic operations. Additional data will be collected to supplement the traffic study and provide a better understanding of the overall traffic impacts to SWWRF associated with the future expansion plans of other stakeholders and facilities surrounding the SWWRF. A Justification Summary Memorandum will be prepared by the A/E describing the need and purpose of the proposed improvements with supporting data and documentation. The traffic analysis will be conducted to consider year 2020 and 2040 to support future traffic flow. A Draft Technical Memorandum (TM) will be prepared by the A/E of the data results analysis to be reviewed and commented on by the City Council and the City before preparing a final version to submit. After the TM is completed

CB-14

A/E costs for Design Phase will be provided to Council for approval as an amendment to this Task Order.


RECOMMENDATION: Administration recommends authorizing the Mayor or his designee to execute Task Order No. 16-06-KHA/T to the agreement between the City of St. Petersburg and Kimley-Horn and Associates, Inc. in an amount not to exceed \$82,393.44 for professional engineering services for the Southwest Water Reclamation Facility (SWWRF) Access Improvements – Traffic Study; approving a supplemental appropriation in the amount of \$96,000 from the unappropriated balance of the Water Resources Capital Projects Fund (4003) to the SW Access Improve FY17 Project (Engineering Project No. 17064-111; Oracle No. 15967)

COST/FUNDING/ASSESSMENT INFORMATION: Funds will be available upon the approval of a supplemental appropriation in the amount of \$96,000 from the unappropriated balance of the Water Resources Capital Projects Fund (4003) to the SW Access Improve Project (Engineering Project No. 17064-111; Oracle No. 15967).

ATTACHMENTS: Resolution

Task Order No. 16-06-KHA/T

APPROVALS:


Administrative


Budget

RESOLUTION NO. 2017-_____

A RESOLUTION AUTHORIZING THE MAYOR OR HIS DESIGNEE TO EXECUTE TASK ORDER NO. 16-06-KHA/T TO THE AGREEMENT BETWEEN THE CITY OF ST. PETERSBURG AND KIMLEY-HORN AND ASSOCIATES, INC. IN AN AMOUNT NOT TO EXCEED \$82,393.44 FOR PROFESSIONAL ENGINEERING SERVICES FOR THE SOUTHWEST WATER RECLAMATION FACILITY (SWWRF) ACCESS IMPROVEMENTS – TRAFFIC STUDY; APPROVING A SUPPLEMENTAL APPROPRIATION IN THE AMOUNT OF \$96,000 FROM THE UNAPPROPRIATED BALANCE OF THE WATER RESOURCES CAPITAL PROJECTS FUND (4003) TO THE SW ACCESS IMPROVE FY17 PROJECT (ENGINEERING PROJECT NO. 17064-111; ORACLE NO. 15967)

WHEREAS, on May 5, 2016, the City Council approved an Architect/Engineering Agreement with the professional consulting engineering firm of Kimley-Horn and Associates, Inc. ("A/E") for engineering services related to the design and construction of Traffic Calming, Bicycle/Pedestrian and Development of Regional Impact Projects; and

WHEREAS, the Southwest Water Reclamation Facility (SWWRF) located on 54th Avenue South and 41st Street, at the end of the I-275 southwest bound off ramp, is currently undergoing improvements which, once it is completed, will result in additional traffic trip generation to the treatment plant; and

WHEREAS, the proposed Traffic Study will provide a comprehensive evaluation and analysis of the overall traffic impacts to the SWWRF and surrounding area associated with the future expansion; and

WHEREAS, the Traffic Study includes analysis and review of the crash history within the limits of this corridor, evaluating the existing operation of the traffic signals, projecting year 2040 traffic volumes and operations at the traffic signals; and

WHEREAS, the final Traffic Study report will include a Justification Summary Memorandum of the proposed improvements for approval and concurrence by the Florida Department of Transportation (FDOT) and the Federal Highway Administration (FHWA); and

WHEREAS, the primary goal of the Traffic Study is to provide the City and other surrounding stakeholders with a better understanding of the traffic impacts.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of St. Petersburg, Florida that the Mayor or his designee is hereby authorized to execute Task Order No. 16-06-KHA/T to the agreement between the City of St. Petersburg and Kimley-Horn and Associates, Inc. in an amount not to exceed \$82,393.44 for professional engineering services for the Southwest Water


to the agreement between the City of St. Petersburg and Kimley-Horn and Associates, Inc. in an amount not to exceed \$82,393.44 for professional engineering services for the Southwest Water Reclamation Facility (SWWRF) Access Improvements – Traffic Study; and

BE IT FURTHER RESOLVED by the City Council of the City of St. Petersburg, Florida that there is hereby approved the following supplemental appropriation from the unappropriated balance of the Water Resources Capital Projects Fund (4003):


<u>Water Resources Capital Projects Fund (4003)</u>	
SW Access Improve FY17 Project (15967)	\$96,000

This resolution shall become effective immediately upon its adoption.

Approved by:




Legal Department
By: (City Attorney or Designee)



Tom Greene
Budget Director

Approved by:



Brejesh Prayman, P.E., ENV SP
Engineering & Capital Improvements Director

TASK ORDER NO. 16-06-KHA/T
SWWRF ACCESS IMPROVEMENTS - TRAFFIC STUDY
TRAFFIC CALMING, BICYCLE/PEDESTRIAN AND DEVELOPMENT OF
REGIONAL IMPACT PROJECTS
CITY PROJECT NO. 17064-111

This Task Order No. 16-06-KHA/T is made and entered into this _____ day of _____, 20____, pursuant to the ARCHITECT/ENGINEERING AGREEMENT FOR MISCELLANEOUS PROFESSIONAL SERVICES FOR TRAFFIC CALMING, BICYCLE/PEDESTRIAN AND DEVELOPMENT OF REGIONAL IMPACT PROJECTS dated June 1, 2016 ("Agreement") between Kimley-Horn and Associates, Inc. ("A/E"), and the City of St. Petersburg, Florida ("City"), and upon execution shall become a part of the Agreement.

I. DESCRIPTION OF PROJECT

The CITY's Southwest Water Reclamation Facility (SWWRF) located on 54th Ave. South and 41st St. South, off the I-275 southbound off-ramp, is currently undergoing expansion and once complete it will result in additional traffic trip generation to the treatment plant. In addition, as part of this traffic study, it is the CITY's intent to better understand the overall traffic impacts to SWWRF associated with the future expansion plans of other stakeholders and facilities surrounding the SWWRF. Stakeholders of interest include FDOT, MPO, Eckerd College and the neighboring community.

The CITY has authorized the A/E to undertake a comprehensive traffic study/analysis of this corridor, within the limits of the southbound I-275 off-ramp and the signalized intersection at Avenue of States Drive (Eckerd Drive), which provides access to Eckerd College. The expanded traffic study area will provide recommendations for a dedicated left turn lane, access improvements and associated modifications required for accommodating all traffic entering and leaving the SWWRF. The A/E will also coordinate with the CITY, FDOT, MPO and Eckerd College to obtain available data and information for use in the traffic model. It is also expected that the A/E will obtain required approvals from the FDOT and the FHWA. From a safety perspective, it is conceivable that the proposed modification and improvements may include widening the southbound I-275 off-ramp to westbound 54th Ave. South, to facilitate a dedicated left turn lane into the SWWRF access drive at 41st St. South. From an efficiency standpoint, the A/E shall incorporate appropriate available data from other sources and/or previous studies to supplement this traffic study and to provide applicable information to FDOT and FHWA for the justification and safety considerations for a new dedicated left turn lane.

The study will include analysis and review of the crash history within the limits of this corridor, evaluating the existing operation of the signals, projecting year 2040 traffic volumes at the signalized intersections, as well as the current and projected traffic entering and exiting the SWWRF driveway as provided by the CITY, and evaluating the year 2040 traffic operations.

The A/E will provide the CITY with a Technical Memorandum identifying the results of this study addressing both intersection on 54th Ave. South at Avenue of States Drive (Eckerd Drive) and at the SWWRF access drive at 41st Street South.

II. SCOPE OF SERVICES

Task 1 – Data Collection

The A/E will identify the existing conditions within the limits of this corridor including relevant laneage, speed limits, signal traffic control, signage traffic control, and pedestrian and bicycle facilities. The A/E will conduct two (2) field visits to collect information and observe traffic operations. The A/E will request available traffic counts and three years of crash data from FDOT.

The A/E will collect intersection turning movements for both intersections on 54th Ave. South at Avenue of States Drive (Eckerd Drive) and at the SWWRF access drive at 41st Street South within the limits of this corridor for a duration of 12 hours from 7 AM to 7 PM on a weekday. The data will be reviewed to identify turning movement counts (vehicles, trucks and pedestrians) at peak times from 3:00 PM to 6:00 PM and from 7:30 AM to 9:30 AM. The A/E will also collect traffic signal timing data from the CITY for the periods analyzed.

To enhance the CITY's overall objective of this traffic study, the A/E will also collect additional data to supplement the traffic study and provide a better understanding of the overall traffic impacts to SWWRF associated with the future expansion plans of other stakeholders and facilities surrounding the SWWRF. Stakeholders of interest include FDOT, MPO, Eckerd College and neighboring community. The A/E will review and document planned and programmed facility improvements that may potentially impact traffic flows at or near the Eckerd College and the SWWRF access drive, based on the information collected.

The A/E will also review relevant information and data from the stakeholders relative to their planned (future) facility improvements (i.e., growth, expansion, master plan studies, alternative access, etc.) that could have the potential to affect the future operation of the intersections at Avenue of States Drive (Eckerd Drive) and the SWWRF access drive at 41st St. South.

Task 2 – Justification Summary Memorandum

Due to the potential impacts of this project to the I-275 off-ramp, A/E will coordinate with FDOT relative to the required notification and approval process from the Federal Highway Administration (FHWA). Based on previous meetings and guidance from FDOT, it is understood that an Interchange Operational Analysis Report (IOAR) for this project will not be required. Instead a Justification Summary Memorandum for the proposed change (s) will be prepared for approval and concurrence by FDOT and FHWA. A/E will prepare this document / memorandum describing the access request including the need and purpose of the proposed improvements with supporting data / documentation. A/E will prepare graphics illustrating the SWWRF site, its current access and traffic movements allowed at its driveway connection to 54th Ave. South. Available data from FDOT and other relevant data obtained in Task 1 will be included in the summary.

Task 3 – Traffic Operations Analysis and Recommendations

The A/E will analyze existing conditions using SYNCHRO to model 54th Avenue South at intersection with Avenue of States Drive (Eckerd Drive) and the SWWRF access drive at 41st St. South, including the review of the crash history at both, these intersections.

Future intersection turning movements at the study intersections will be developed for two periods as indicated below:

1. Year 2020, the projected year of the completion of the SWWRF expansion
2. Year 2040.

For the 2020 analysis, future annual average daily traffic (AADT) volumes will be developed based on historic traffic trends for a minimum of the last ten years. Year 2020 trips accessing Eckerd College and the SWWRF facility at the study intersections will also be considered in developing the 2020 AADT volumes.

For the 2040 analysis, future AADT volumes will be developed after considering the results of the Tampa Bay Regional Planning Model (TBRPM), as well as historic trends. The TBRPM base year model will be reviewed to determine the accuracy of the model within the study area. In the event the base year model either underestimates or over estimates the base year traffic counts, adjustments to the model will be considered. These adjustments may include changes to facility types, area types or centroid connector locations. If these adjustments do not correct the over, or under estimating of traffic volumes, manual adjustments to future model results will be considered. After considering the model results and historic trends, a growth rate will be developed for projecting future AADT volumes.

The future AADT volumes will be used to develop turning movements at the study intersections. The A/E will coordinate with FDOT, and thru the CITY to determine if the Standard K Factor (9.0%) is appropriate, or if a lower K Factor should be used due to the influence of beach traffic. Once the K factor has been established, future turning movements will be developed at the study intersection. These volumes will be provided to FDOT thru the CITY for their approval, prior to conducting the 2020 and 2040 traffic operation analysis.

The A/E will analyze 2020 and 2040 conditions using SYNCHRO to model 54th Ave. South, at its intersection with Avenue of States Drive (Eckerd Drive) and the SWWRF access drive at 41st St. South. Anticipated operating conditions with and without the proposed dedicated left turn lane will be identified for 2020 and 2040 conditions. In addition, the A/E will perform a queuing analysis to determine the anticipated stacking or queueing length required for the proposed left turn lane.

Task 4 – Technical Memorandum and Study Results

A/E will prepare and document the results of the analysis in a Draft Technical Memorandum (TM), and submit the same to the CITY for review. A/E will meet with the CITY to discuss their review comments, provide responses to the CITY's concerns and answer any other questions. The A/E will incorporate the relevant comments and revise the TM accordingly. The Revised TM will be submitted to the CITY in electronic format (pdf) for submittal to FDOT for their review and comment. FHWA feedback and concurrence will be obtained thru the FDOT. A/E will organize and attend a joint review meeting with the CITY and FDOT to discuss FDOT's review comments, including any issues relevant to FHWA to document need and justification relative to the widening of the I-275 off-ramp. A/E will prepare the Final TM, incorporate all relevant review comments from FDOT and FHWA, and submit three (3) signed and sealed copies of the Final TM to the CITY.

Task 5 – Concept Left Turn Lane Plans and Probable Construction Cost

After the completion of Final TM, the A/E shall prepare concept level plans and opinion of probable construction cost for the left turn lane including the necessary coordination with the FDOT's current Milling and Resurfacing (3R) design project within this corridor of 54th Ave. South. A/E shall use available topographic data and as-built plans of I-275 and 54th Ave. South for preparing the concept level geometric layout of the left turn lane. It is also known that the FDOT's 3R project is at 60% Design and the letting is currently scheduled for October 2017, with the actual start of construction expected to be in February/March of 2018. The FDOT's project schedule will allow sufficient time to develop the construction plans for the proposed left turn lane for the SWWRF access drive, as well as, provide the opportunity to construct the project under a Joint Project Agreement (JPA) with FDOT. This collaborative approach with FDOT using the JPA project delivery method, will save the CITY both, construction time and cost.

Task 6 – Project Management & Admin

During the execution of this project, the A/E shall provide all project management and administration functions, including QA/QC, supervision, coordination, attendance at all required project meetings, prepare meeting minutes, and managing schedule/budget. The A/E will include a maximum of ten (10) meetings and prepare the associated meeting minutes for the various aspects of work during the performance of this study. The following project meetings are included in the scope of services with an average:

- One (1) Project kick-off meeting with the CITY and FDOT
- Three (3) stakeholder meetings (Eckerd College and MPO)
- One (1) meeting with FDOT relative to adjacent RRR project
- Two (2) Technical Memorandum review meetings; one each with CITY and FDOT
- Two (2) progress review meetings with CITY
- One (1) Concept plans review meeting with CITY and FDOT

Task 7 – Additional Services

Any services not specifically provided for in the above scope, as well as any changes the CITY requests, will be considered additional services and will be negotiated separately under a different Task Work Order. Additional services that can be provided may include, but will not be limited to, the following:

- Expanded data collection and traffic modeling.
- Preparation of materials other than Technical Memorandum
- Review of construction plans for the FDOT's 3R project
- Assistance and support for a Joint Project Agreement with FDOT
- Final design and construction plans for the dedicated left turn lane for the SWWRF access drive

III. SCHEDULE

The A/E shall provide the services described in the above Scope of Services based on the following schedule from the issuance of the Notice to Proceed (NTP) and assuming an expeditious reviews and turnaround time from FDOT, FHWA and the CITY:

Data Collection & Stakeholder Meetings	4 weeks
Justification Summary Memorandum	2 weeks
Traffic Operations Analysis	4 weeks
Technical Memorandum	4 weeks
Concept Access Drive Improvements	2 weeks
TOTAL TIME FROM NTP	16 weeks (includes reviews & meetings)

IV. A/E'S RESPONSIBILITIES

The A/E shall provide the services described in the above Scope of Services.

V. CITY'S RESPONSIBILITIES

The CITY's participation under this Task Order is anticipated to include, but not limited to, to the following:

- Provide available traffic data, reports, master plans, etc.
- Provide projected traffic data for the SWWRF based on the current and future expansion plans.
- Facilitate dialogue and communication with the key stakeholders and participate in meetings.
- Review and comment on the A/E's deliverables.

VI. DELIVERABLES

Deliverables for this Task Order will consist of the following:

- A Justification Summary Memorandum
- A Technical Memorandum documenting the study findings and appropriate recommendations.
- Conceptual plans for the proposed dedicated left turn lane in accordance with the results of the traffic study and the proposed milling & resurfacing plans on 54th Avenue by FDOT within this corridor.

VII. A/E'S COMPENSATION

For work under Tasks 1 through 6, the CITY shall compensate the A/E in a lump sum amount of **\$72,393.44** for services provided and expenses incurred, based on the Task Breakdown shown in the attached Appendix B.

This Task Order establishes an allowance in the amount of **\$10,000.00** for additional services not identified in the Scope of Services. Additional services may be performed only upon receipt of prior written authorization from the City and such authorization shall set forth the additional services to be provided by the A/E. The cost for any additional services shall not exceed the amount of the allowance set forth in this Task Order.

The grand total for Tasks 1 through 6 and the Allowance is **\$82, 393.44**

VIII. PROJECT TEAM

A/E will subcontract traffic data collection services to National Data & Surveying Services. A copy of the subconsultant's proposal is attached and the cost is included in the A/E's compensation amount above.

IX. MISCELLANEOUS

In the event of a conflict between this Task Order and the Agreement, the Agreement shall prevail.

IN WITNESS WHEREOF the Parties have caused this Task Order to be executed by their duly authorized representatives on the day and date first above written.

ATTEST

CITY OF ST. PETERSBURG, FLORIDA

By: _____
Chandrasasa Srinivasa
City Clerk

By: _____
Brejesh Prayman, P.E., ENV SP, Director
Engineering & Capital Improvements

(SEAL)

DATE: _____

APPROVED AS TO FORM FOR CONSISTENCY
WITH THE STANDARD TASK ORDER.
NO OPINION OR APPROVAL OF THE SCOPE
OF SERVICES IS BEING RENDERED BY
THE CITY ATTORNEY'S OFFICE

By: _____
City Attorney (Designee)


KIMLEY-HORN AND ASSOCIATES, INC.

(Company Name)

WITNESSES:

By:  _____
(Signature)

Gary J. Nadeau, P.E. Vice President
(Printed Name and Title)

By:  _____
(Signature)

Nizar Jetha, P.E. Project Manager
(Printed Name)

Date: 2/9/2017

Date: 2/9/2017

APPENDIX B
Work Task Breakdown
CITY of St. Petersburg SWWRF Access Drive Improvements
Traffic Study

I. Manpower Estimate: All Tasks

		Direct labor Rates Classifications		Project Manager		Principal		Senior Engineer		Project Engineer		Project Engineer		Engineering Intern		Designer		Admin Professional		Total Hours	Labor Cost
		Project Role	Employee Name	Project Manager	Project Manager	Quality Assurance	Traffic Studies	Leap	Woodward	Travel Demand Modeling	Analysis	Cadd Production	Project Admin	Hughes							
	TASK	2016/2017 Billing Rates ¹	Direct Salary	\$ 79.82	\$ 80.78	\$ 76.44	\$ 43.28	\$ 48.56	\$ 43.28	\$ 32.94	\$ 43.28	\$ 31.26									
			Overhead 192.16%	\$ 153.39	\$ 155.23	\$ 146.89	\$ 83.17	\$ 93.32	\$ 63.30	\$ 83.17	\$ 60.07										
			Profit 12%	\$ 27.99	\$ 28.33	\$ 26.80	\$ 15.18	\$ 17.03	\$ 11.55	\$ 15.18	\$ 10.96										
				\$ 261.20	\$ 264.34	\$ 250.13	\$ 141.63	\$ 158.91	\$ 107.79	\$ 141.63	\$ 102.29										
1						8	8	24		8		2	50	\$ 8,014.82							
2						8		16		8		2	34	\$ 5,610.50							
3						12	8	40		16		4	80	\$ 12,624.80							
4						24		16		8		8	56	\$ 10,226.32							
5							8			16	40	2	66	\$ 8,727.46							
6						4						8	24	\$ 4,953.24							
					12								12	\$ 3,172.08							
					2		2					4	8	\$ 1,431.82							
					24		40					10	74	\$ 17,296.90							
Totals						98	24	96		56	40	40	404	\$ 72,057.94							

II. Fee Calculation

Task	Labor Cost	Expenses ²	Subconsultant Services	Mark-up on Subconsultant Services ⁴	Allowance ³	Total Cost Without Allowance	Total Cost With Allowance
1	\$ 8,014.82	\$ -	\$ 305.00	\$ 30.50		\$ 8,350.32	
2	\$ 5,610.50	\$ -	\$ -	\$ -		\$ 5,610.50	
3	\$ 12,624.80	\$ -	\$ -	\$ -		\$ 12,624.80	
4	\$ 10,226.32	\$ -	\$ -	\$ -		\$ 10,226.32	
5	\$ 8,727.46	\$ -	\$ -	\$ -		\$ 8,727.46	
6	\$ 26,854.04	\$ -	\$ -	\$ -		\$ 26,854.04	
Total (b)	\$ 72,057.94	\$ -	\$ 305.00	\$ 30.50	\$ -	\$ 72,393.44	\$ 72,393.44

III. Fee Limit

Lump Sum Cost	\$72,393.44
Allowance	\$10,000.00
Total:	\$82,393.44

IV. Notes:

1. Rate x overhead + profit (per contract).
2. As negotiated with the City
3. Allowance to be used only upon City's written authorization.
4. Includes 10 percent markup of SUBCONSULTANT (per contract).



The Leading Traffic Data Collection Company

Date	Job Ref
10/17/2016	St. Petersburg

To: S. Clifton Tate, Jr.
Kimley-Horn
3660 Maguire Blvd., Suite 200
Orlando, FL 32803
407-427-1628

[illegible]

Quotation prepared by: **Diana Leon**

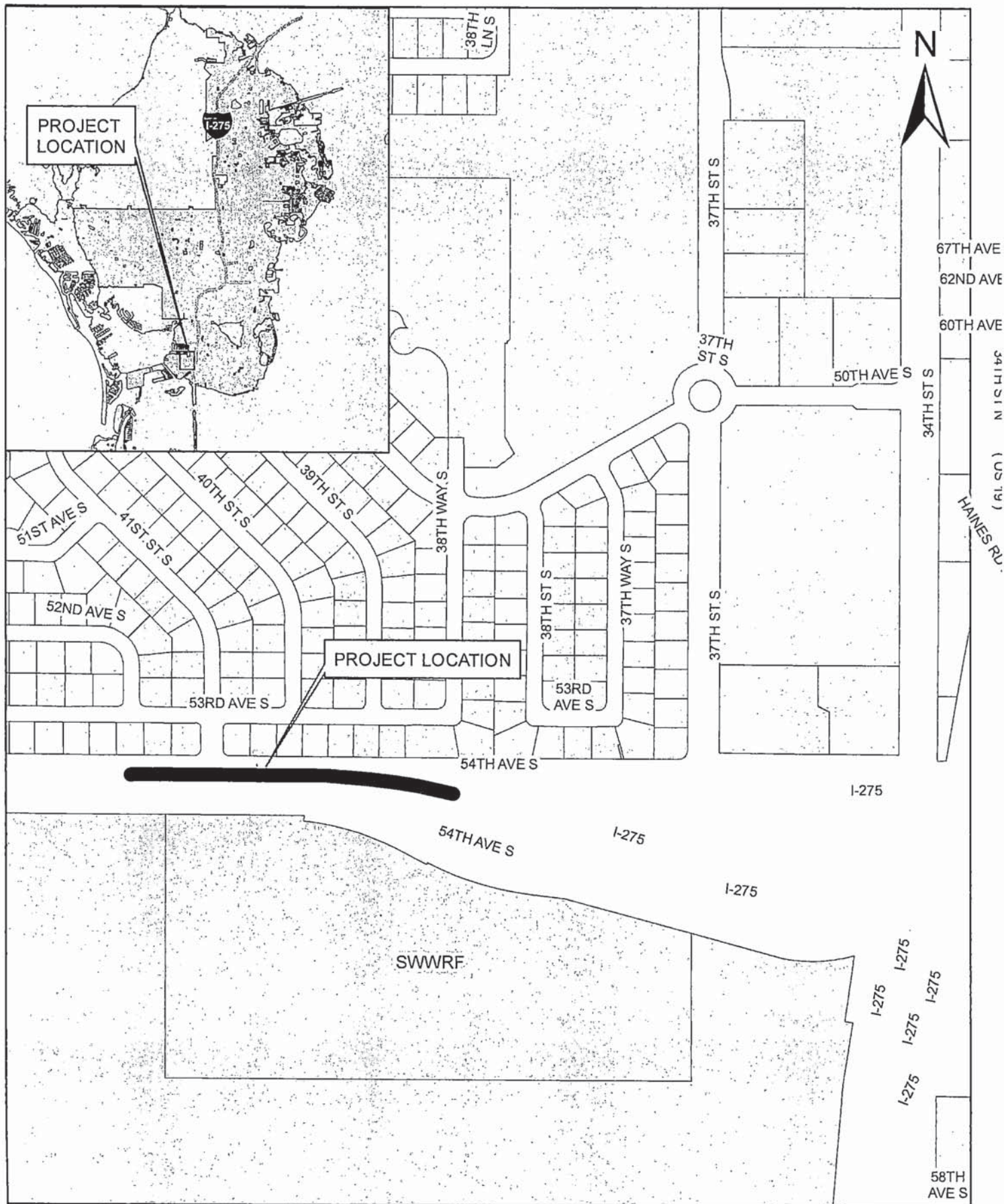
To accept this quotation, sign here and return

Via email: diana@ndsdata.com Via Fax: 323-375-1666:

Thank you for your business!

NDS 7414 Surrey Pines Dr, Apollo Beach, FL 33572 P: 813-658-8121 E: diana@ndsdata.com

Corporate Office 8370 Wilshire Blvd, Ste 205, BH, CA 90211 323-782-0090



ENGINEERING AND CAPITAL
IMPROVEMENTS DEPARTMENT
CITY of ST PETERSBURG

APPROVED BY: _____ DATE: 1/04/2017

Project Location Map
SWWRF Access Improvements
Project No. 17064-111

