Stakeholders' Meeting
10th Street Ovalabout Iniative

Monday, November 14, 2022, 6:00 PM - 8:00 PM
Commission Chambers, Town Hall

Meeting Agenda

Facilitator: Roberto Travieso, Director of Public Works

WELCOME/OPENING COMMENTS INTRODUCTIONS/BACKGROUND	**ROBERTO TRAVIESO**
PRESENTATION	**ROBERTO TRAVIESO** **ADAM SWANEY, P.E.** **JOHN WILLE**
TABLE DISCUSION	**TOWN AND ENGENUITY STAFFS**
CONSTRUCTION TIMELINE	**JOHN WILLE** **NADIA DITOMMASO**
Q&A	**ROBERTO TRAVIESO**
CLOSING COMMENTS	**JOHN D'AGOSTINO**

1st Stakeholders Meeting on the 10th Street Ovalabout Initiative

Monday, November 14, 2022

Department of Public Works

Project Team

- **John D'Agostino** – Town Manager
- **Roberto Travieso** – Public Works Director
- **Nadia DiTommaso**– Community Development Director
- **Adam Swaney, P.E.** – Civil Engineer
- **John Wille** – Capital Projects Manager

Meeting Agenda

1. Introductions
2. Project Background
3. What is an Ovalabout?
4. Why is this improvement needed?
5. Conceptual Design
6. Construction Cost Estimate
7. Table Discussions & Activity
8. Implementation Timeline and Next Steps
9. Q&A
10. Closing Comments

Project Background

ROBERTO TRAVIESO, DIRECTOR OF PUBLIC WORKS

PROJECT LOCATION

Project Background

- History of frequent and severe traffic accidents in project area
- Conducted Traffic Study in **2020** (O'Rourke Engineering & Planning)
  - Report available on Town's website
- Developed three (3) option:
  - Implement signalization improvements
  - Construct round-about (rotary) traffic element
  - Construct oval-about traffic element

Project Background

- Partnered with Palm Beach County (PBC) to design and construct the project

- Contracted with Engenuity Group to perform Feasibility Study and develop opinion of costs

What is an Ovalabout?

- A type of oval-shaped intersection or junction in which road traffic is permitted to flow in one direction (counterclockwise) around a oval-shaped island
- Widely consider a mobility and traffic safety-enhancement
- Traffic Calming benefits

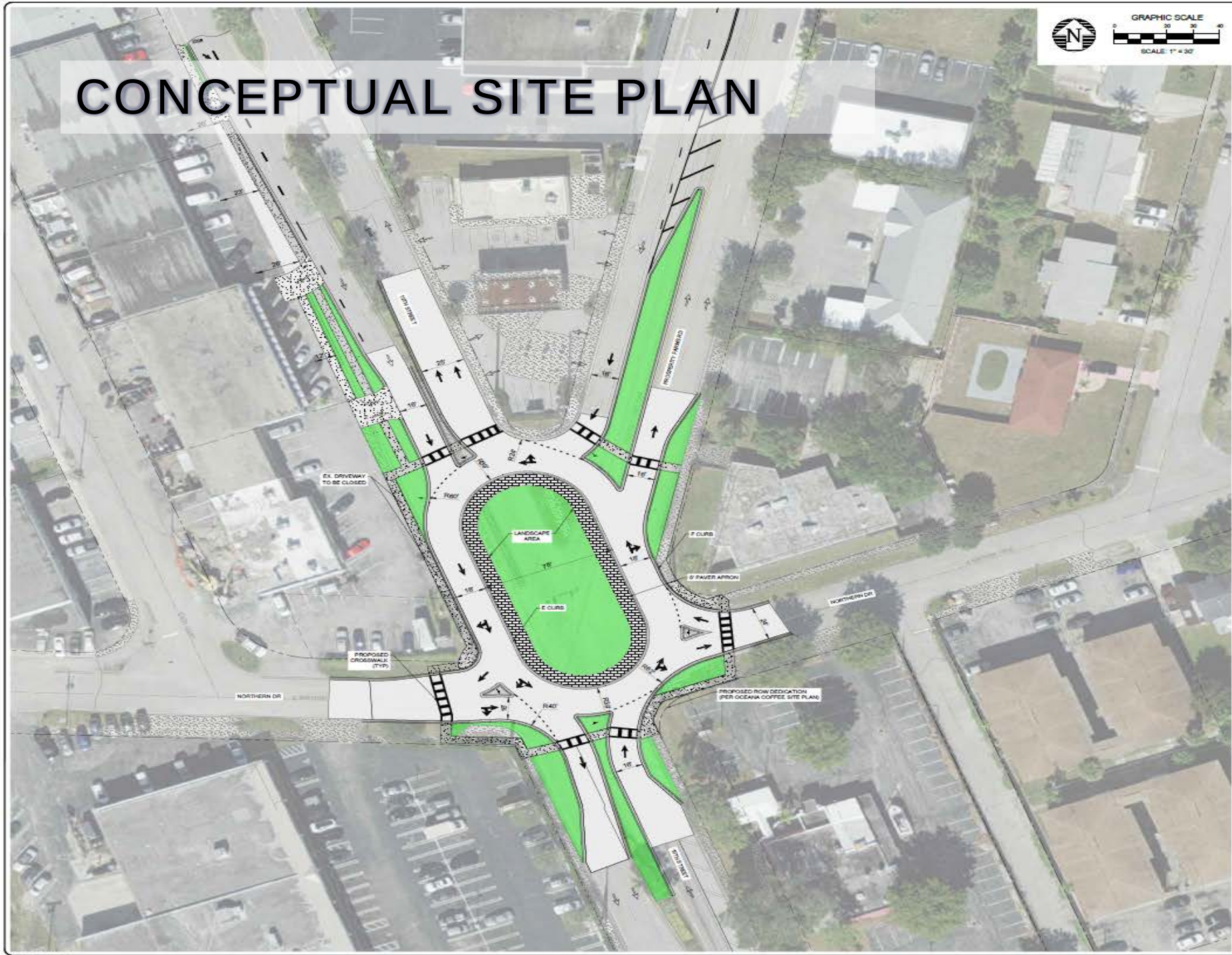
How Would an Ovalabout Help?

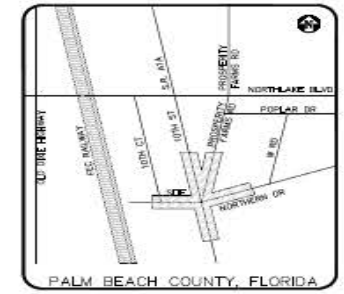
- Increased level of service
- Increased traffic safety, reduced travel speeds
- Increased mobility (I.e. protected crosswalks
- Landscape enhancements (plantings, art pedestal, etc.)

Conceptual Plans

ADAM SWANEY, PE

CONCEPTUAL SITE PLAN





LOCATION MAP
N.T.S.

ENGINEERING LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LANDSCAPE AREA
- PROPOSED PAVERS
- TRAFFIC FLOW DIRECTION
- CATCH BASIN / YARD DRAIN
- 25.00 FINISHED GRADE ELEVATION
- DRAINAGE FLOW DIRECTION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE REFERENCED TO BENCHMARK "V 402", ELEVATION= 16.706' (NAVD 88).
2. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP INC. IN NOVEMBER 2020.
3. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
4. ALL CROSSWALKS SHALL MEET ADA. NO CROSS SLOPE SHALL EXCEED 2%
5. IF PROPOSED WORK DAMAGE PALM BEACH COUNTY ROADWAY, SIDEWALK AND/OR DRAINAGE SYSTEMS, THEN THEY WILL BE CONSTRUCTED REPAIRED OR REPLACED TO ITS ORIGINAL OR BETTER CONDITION AT NO COST TO THE PALM BEACH COUNTY.
6. PAVEMENT MARKINGS AND SIGNING IN PALM BEACH COUNTY RIGHT OF WAY, SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-1-21.
7. CONTRACTOR SHALL CONTACT PBC TRAFFIC OPERATIONS AT 561-233-3900 FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT.
8. ANY DAMAGE TO SIGNAL EQUIPMENT CAUSED BY THE CONSTRUCTION OF THIS PROJECT MUST BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.

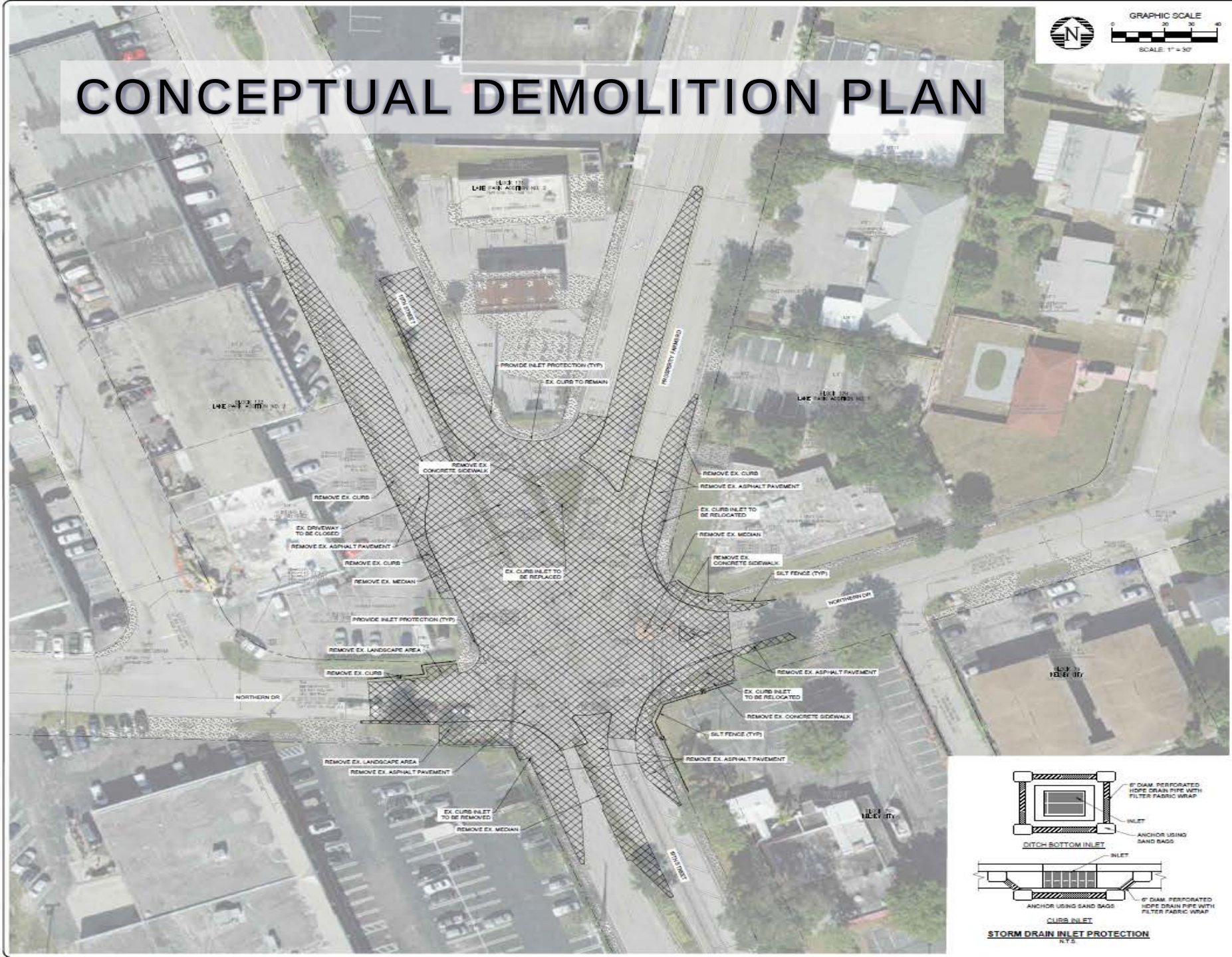
LEGEND: (ABBREVIATIONS)

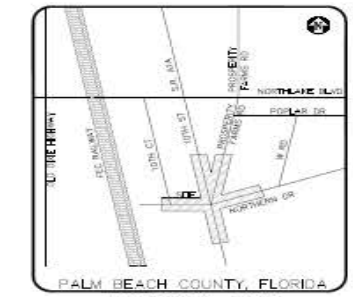
CB	CATCH BASIN
E	EAST
EL	ELEVATION
EXIST	EXISTING
FT	FEET OR FOOT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
L	LEFT
LF	LINEAR FEET
N	NORTH
NTS	NOT TO SCALE
ORB	OFFICAL RECORD BOOK
OS	OFFSET
R	RADIUS OR RIGHT
RIM	RIM ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
S	SOUTH
SVC	SERVICE
TYP	TYPICAL
W	WEST
M/E	MATCH EXISTING GRADE

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72226. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

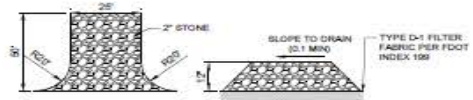
CONCEPTUAL DEMOLITION PLAN





LOCATION MAP
N.T.S.

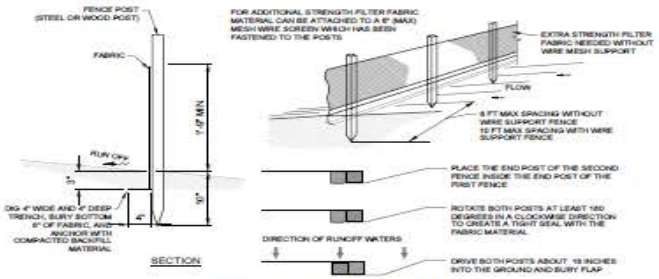
LEGEND:	
	DEMOLITION



TEMPORARY GRAVEL ENTRANCE
N.T.S.

SILT FENCE NOTES:

1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (90 CM).
2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET (3 M) APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES (30 CM). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET (1.8 M).
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES (10 CM) WIDE AND 4 INCHES (10 CM) DEEP ALONG THE LINE OF POSTS AND UP SLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UP SLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH (25 MM) LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES (5 CM) AND SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES (20 CM) OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
7. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH TIES SPACED EVERY 24 INCHES AT TOP AND MID. SECTION. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
8. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR DEPTH OF ACCUMULATED SEDIMENT REACHES 6 INCHES.
9. SILT FENCE SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL CONSTRUCTION IS COMPLETE.
10. THE CONTRACTOR SHALL INSPECT AND REPAIR THE SILT FENCE AFTER EACH RAIN EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
11. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFFSITE AND CAN BE PERMANENTLY STABILIZED.
12. THE SILT FENCE SHALL BE PLACED ON SLOPE CONTOUR TO MAXIMIZE ITS PONDING EFFICIENCY.
13. IF DITCH LEVEL IS DEEPER THAN 30", THEN A FLOATING SILT SCREEN SHALL BE USED.
14. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
15. ALL PROJECTS REQUIRE SUBMITTAL OF POLLUTION PREVENTION PLAN.
16. ALL PROJECTS ≥ 1 AC. OR MORE MUST SUBMIT NOTICE OF INTENT (NOI) TO FDEP.



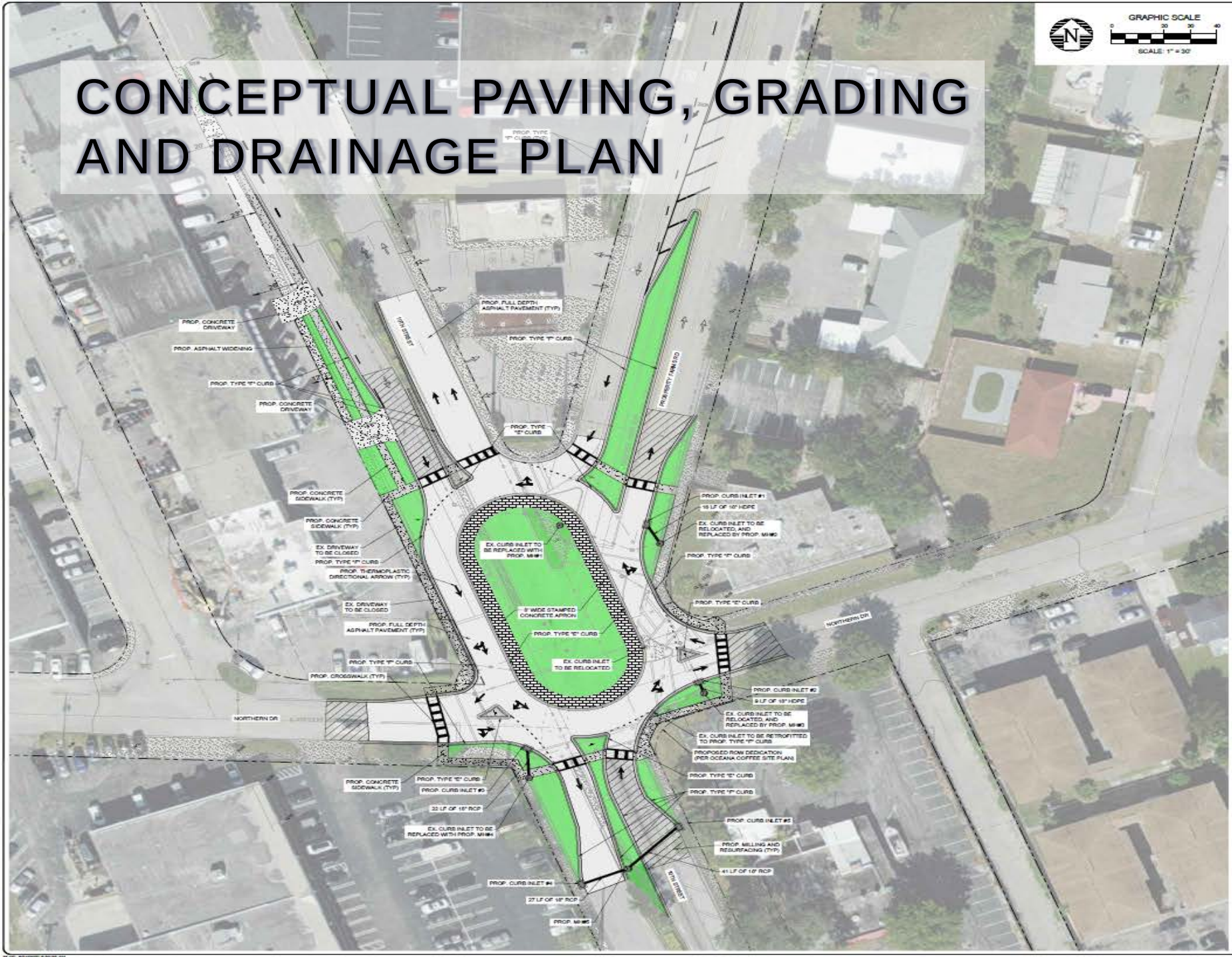
SILT FENCE INSTALLATION DETAIL
N.T.S.

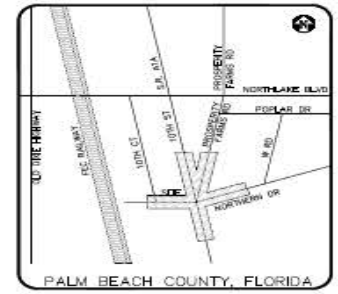
STORM DRAIN INLET PROTECTION
N.T.S.

CONCEPTUAL DESIGN PHASE

811 Know what's below. Call before you dig.

CONCEPTUAL PAVING, GRADING AND DRAINAGE PLAN





LOCATION MAP
N.T.S.

ENGINEERING LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LANDSCAPE AREA
- PROPOSED PAVERS
- TRAFFIC FLOW DIRECTION
- CATCH BASIN / YARD DRAIN
- 25.00 FINISHED GRADE ELEVATION
- DRAINAGE FLOW DIRECTION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE REFERENCED TO BENCHMARK "Y 402", ELEVATION=18.735' (NAVD 88).
2. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP INC. IN NOVEMBER 2020.
3. ALL REMOVED DEBRIS & REHEUSED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
4. ALL CROSSWALKS SHALL MEET ADA. NO CROSS SLOPE SHALL EXCEED 2%.
5. IF PROPOSED WORK DAMAGES PALM BEACH COUNTY ROADWAY, SIDEWALK AND/OR DRAINAGE SYSTEMS, THEN THEY WILL BE CONSTRUCTED/REPAIRED OR REPLACED TO ITS ORIGINAL OR BETTER CONDITION AT NO COST TO THE PALM BEACH COUNTY.
6. PAVEMENT MARKINGS AND SIGNING IN PALM BEACH COUNTY RIGHT OF WAY, SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL F-7-21.
7. CONTRACTOR SHALL CONTACT PBC TRAFFIC OPERATIONS AT 561-233-3600 FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT.
8. ANY DAMAGE TO SIGNAL EQUIPMENT CAUSED BY THE CONSTRUCTION OF THIS PROJECT MUST BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.

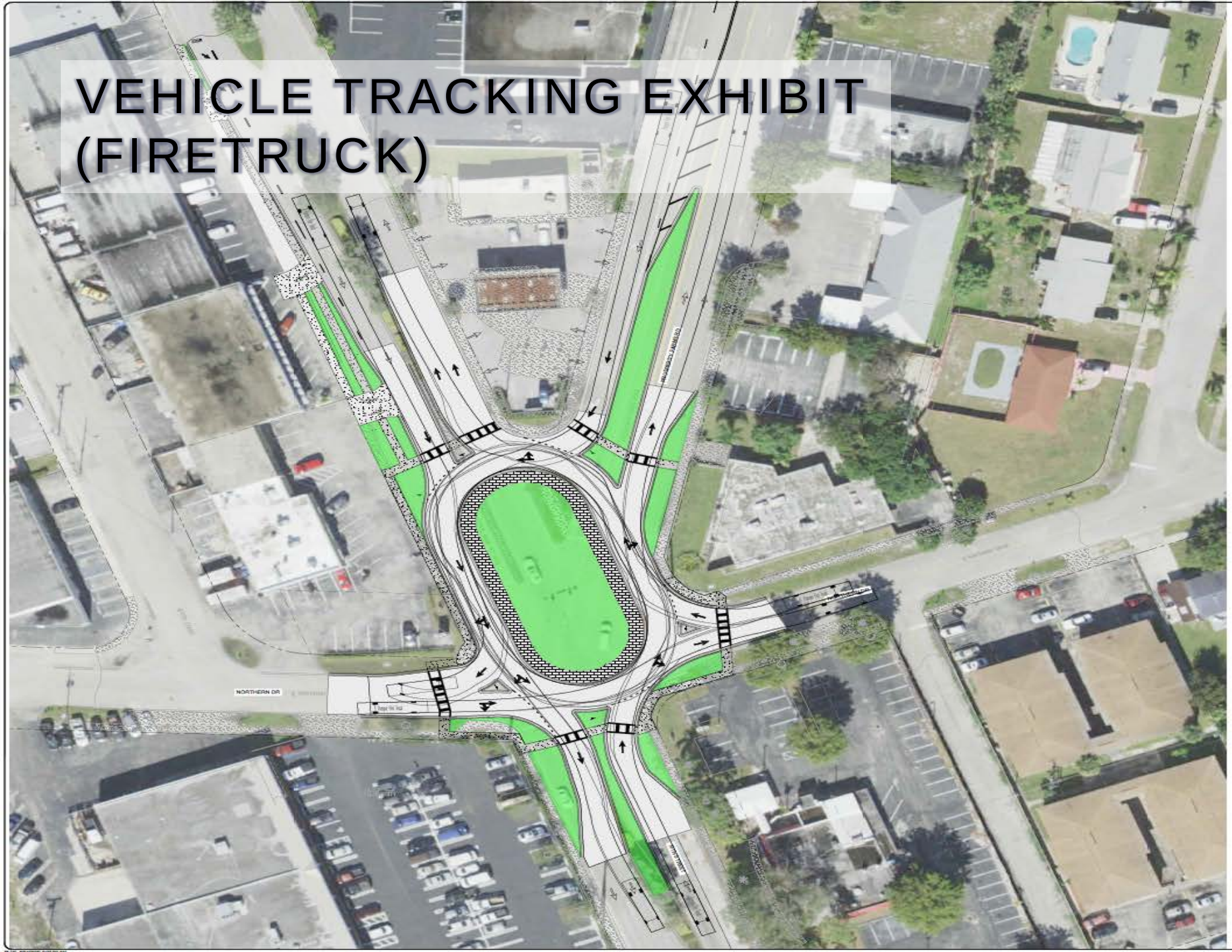
LEGEND: (ABBREVIATIONS)

CB	CATCH BASIN
E	EAST
EL	ELEVATION
EXIST	EXISTING
FT	FEET OR FOOT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
L	LEFT
LF	LINEAR FEET
N	NORTH
NTS	NOT TO SCALE
ORB	OFFICAL RECORD BOOK
OS	OFFSET
R	RADIUS OR RIGHT
RIM	RIM ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
S	SOUTH
SVC	SERVICE
TYP	TYPICAL
W	WEST
M/E	MATCH EXISTING GRADE

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

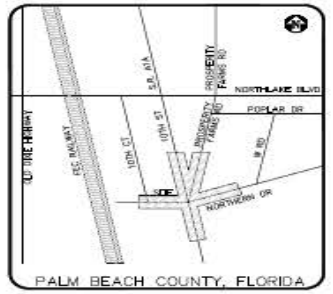
VEHICLE TRACKING EXHIBIT (FIRETRUCK)



GRAPHIC SCALE

0 20 30 40

SCALE: 1" = 30'

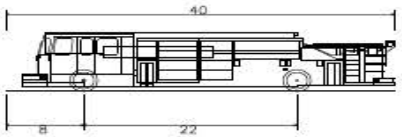


PALM BEACH COUNTY, FLORIDA

LOCATION MAP

N.T.S.

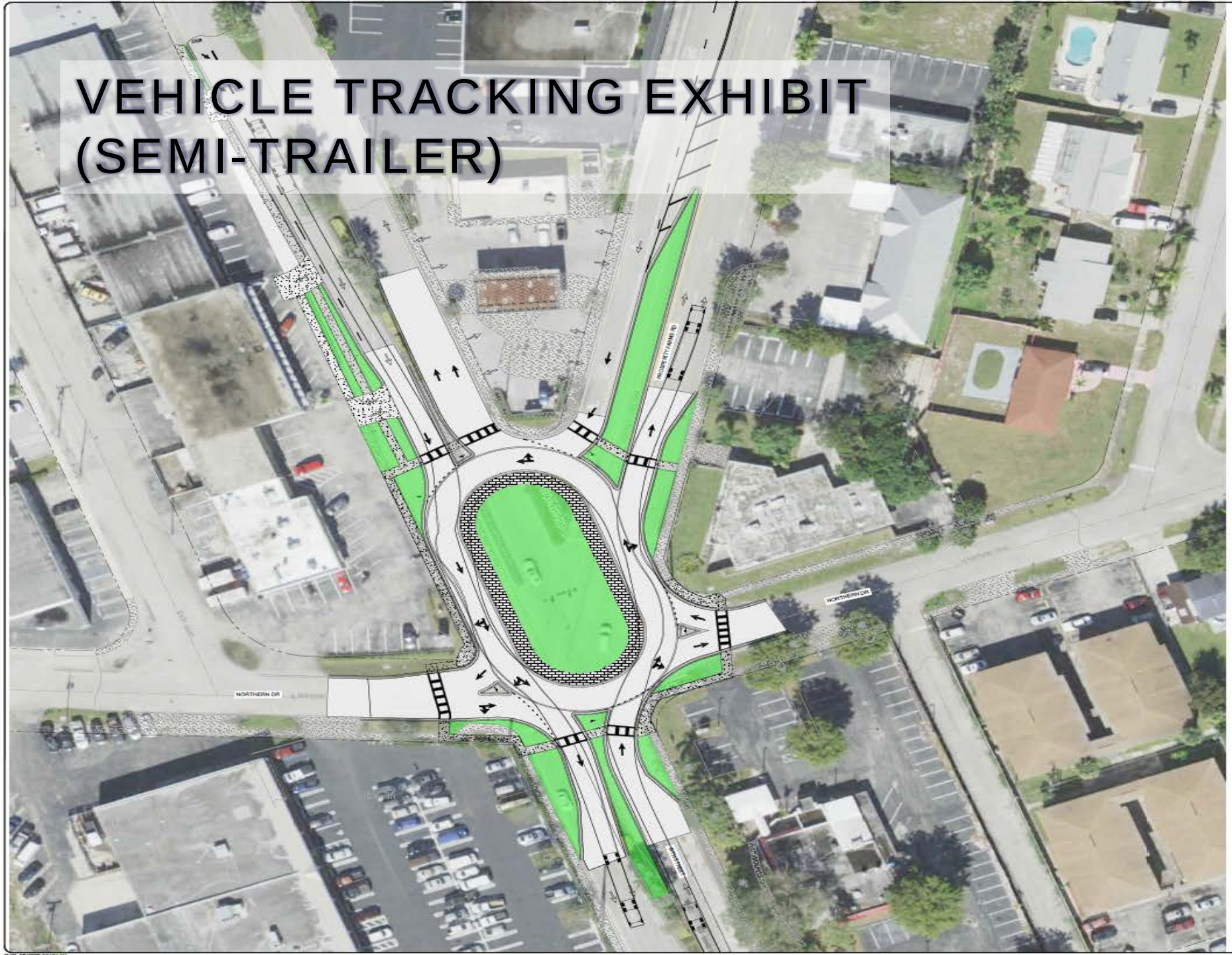
LEGEND:	
	PROPOSED LANDSCAPE AREA
	TRAFFIC FLOW DIRECTION
	PROPOSED CONCRETE SIDEWALK
	PAVERS



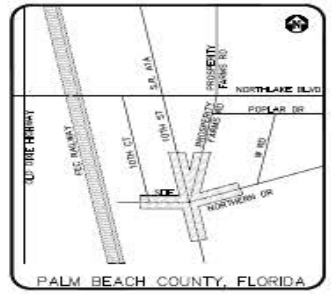
Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°

CONCEPTUAL ENGINEERING PLAN

VEHICLE TRACKING EXHIBIT (SEMI-TRAILER)

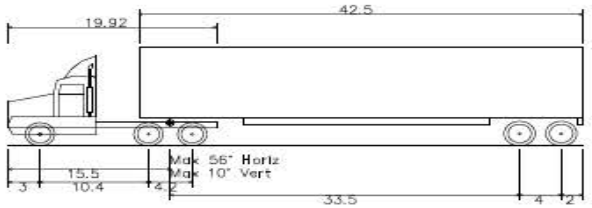


GRAPHIC SCALE
0 20 30 40
SCALE: 1" = 30'



LOCATION MAP
N.T.S.

LEGEND:	
	PROPOSED LANDSCAPE AREA
	TRAFFIC FLOW DIRECTION
	PROPOSED CONCRETE SIDEWALK
	PAVERS



WB—50 — Intermediate Semi—Trailer	
Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock—to—lock time	6.00s
Max Steering Angle (Virtual)	17.90°

CONCEPTUAL ENGINEERING PLAN

Conceptual Cost Estimate

ADAM SWANEY, PE

Conceptual Cost Estimates

Description	Estimated Cost
SITE PREPARATION	$122,000
ROADWAY CONSTRUCTION	$308,941
SIDEWALK & ROAD CONSTRUCTION	$43,310
DRAINAGE CONSTRUCTION	$81,625
ADDITIONAL ITEMS	$275,000
MOBILIZATION & OTHER COSTS	$556,687
TOTAL:	**$1,387,563**

Table Discussion

DURATION: UP TO 30 MINUTES

Implementation Timeline & Next Steps

JOHN WILLE, CAPITAL PROJECTS MANAGER

Implementation Timeline & Next Steps

- Perform traffic study to confirm Ovalabout service level supports projected increases to densities in the project area
- Prepare Conceptual Plans for submittal to PBC's Five-Year Work Plan (beginning with FY-24)
- Continue to collaborate with PBC to prioritize, fund, design and implement project within the next five years (FY's 2024-2029)
- Continue to engage with Stakeholders regarding project design and implementation

Questions & Closing Comments

Please scan for additional information on this project:

CONCEPTUAL CIVIL ENGINEERING PLANS
FOR
OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY
LAKE PARK, FL
AUGUST 2022

PREPARED FOR:
TOWN OF LAKE PARK

COMMISSIONERS
MICHAEL O'ROURKE, MAYOR
KIMBERLY GLAS-CASTRO, VICE MAYOR
JOHN LINDON, COMMISSIONER
MARY BETH TAYLOR, COMMISSIONER
ROGER MICHAUD, COMMISSIONER

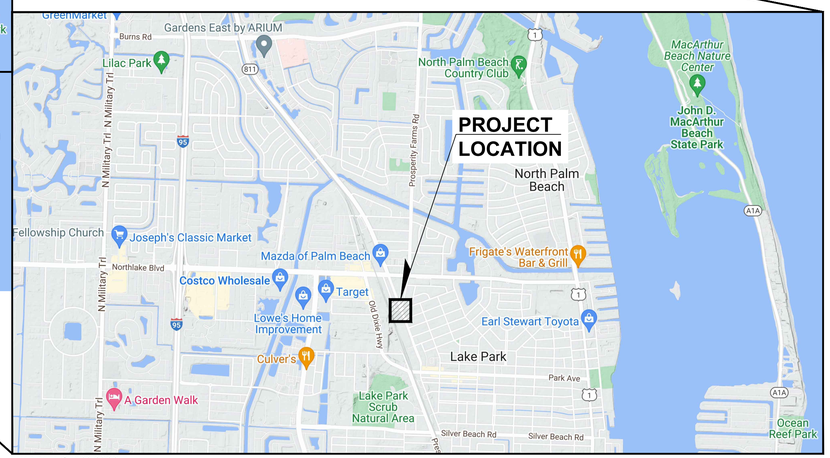
SHEET INDEX

SHEET NO.	SHEET TITLE
C-0	COVER
C-1	CONCEPTUAL ENGINEERING PLAN
C-2	DEMOLITION PLAN
C-3	PAVING, GRADING AND DRAINAGE PLAN
C-4	PAVING, GRADING AND DRAINAGE DETAILS
C-5	PAVEMENT MARKINGS AND SINGAGE DETAILS

TOTAL NO. OF SHEETS = 5

MAP DATA © 2022 GOOGLE

VICINITY MAP
NTS



MAP DATA © 2022 GOOGLE

VICINITY MAP
NTS

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

DESIGN PHASE, CONCEPTUAL

PLOT: 8/24/2022 8:50:18 AM

REVISIONS

NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY
LAKE PARK, FL
COVER

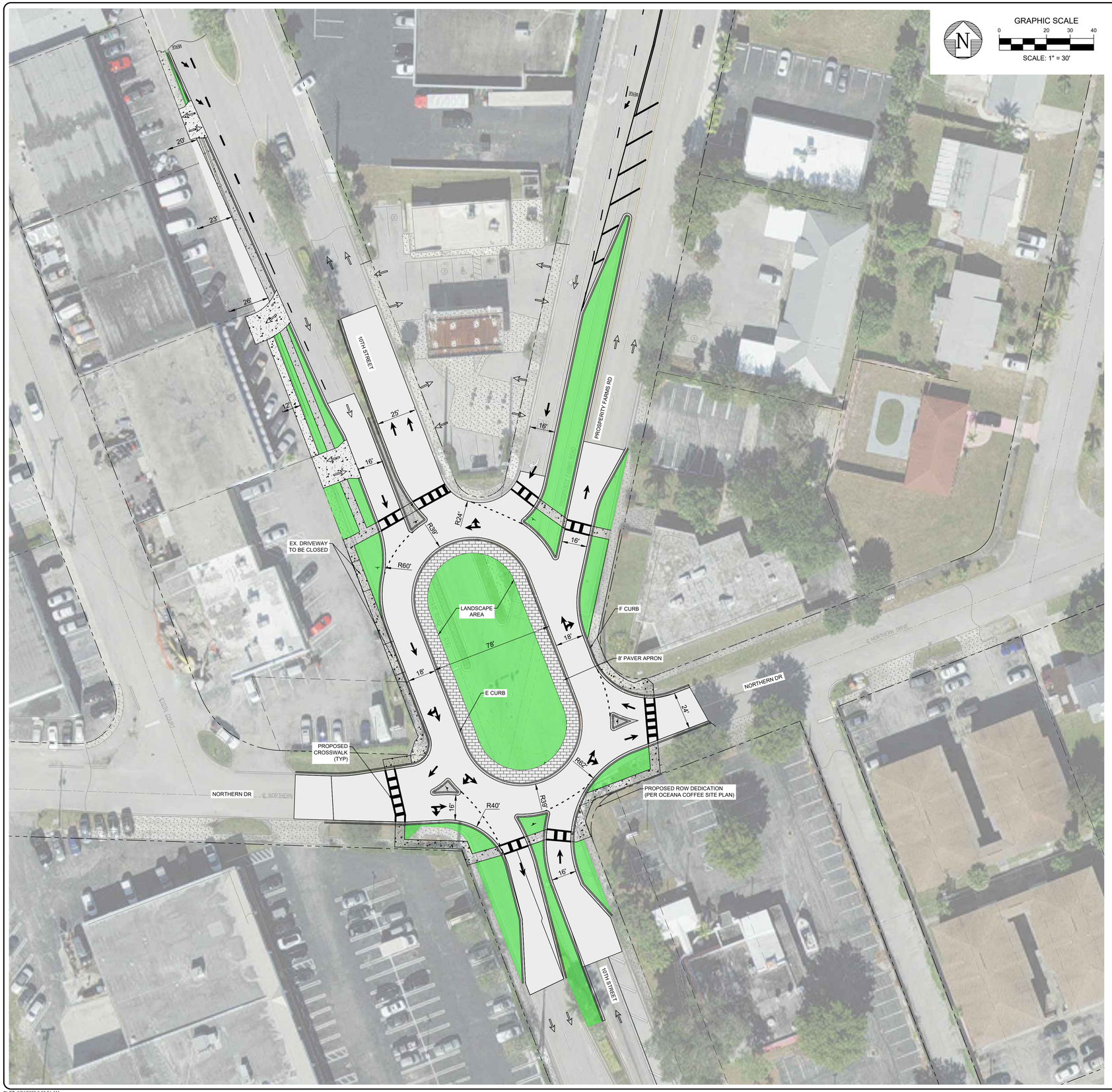
A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-3390
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

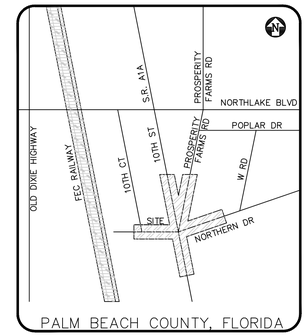
J:\Land Projects R2\18187.46 Oval About\DWG\18187.46 COVER.dwg DATE: 8/24/2022 8:49 AM

DATE	AUGUST 2022		
DRAWN	KG		
PROJECT ENGINEER	ACS		
PROJECT MANAGER	KG		
CHECKED	ACS		

SHEET NO. C-0
TOTAL SHEETS 5

JOB NO. 18187.46





LOCATION MAP

N.T.S.

ENGINEERING LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LANDSCAPE AREA
- PROPOSED PAVERS
- TRAFFIC FLOW DIRECTION
- CATCH BASIN / YARD DRAIN
- 25.00 FINISHED GRADE ELEVATION
- DRAINAGE FLOW DIRECTION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE REFERENCED TO BENCHMARK "V 402", ELEVATION=16.706' (NAVD 88).
2. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP INC. IN NOVEMBER 2020.
3. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
4. ALL CROSSWALKS SHALL MEET ADA. NO CROSS SLOPE SHALL EXCEED 2%.
5. IF PROPOSED WORK DAMAGE PALM BEACH COUNTY ROADWAY, SIDEWALK AND/OR DRAINAGE SYSTEMS, THEN THEY WILL BE CONSTRUCTED REPAIRED OR REPLACED TO ITS ORIGINAL OR BETTER CONDITION AT NO COST TO THE PALM BEACH COUNTY.
6. PAVEMENT MARKINGS AND SIGNING IN PALM BEACH COUNTY RIGHT OF WAY, SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-21.
7. CONTRACTOR SHALL CONTACT PBC TRAFFIC OPERATIONS AT 561-233-3900 FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT.
8. ANY DAMAGE TO SIGNAL EQUIPMENT CAUSED BY THE CONSTRUCTION OF THIS PROJECT MUST BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.

LEGEND: (ABBREVIATIONS)

CB	CATCH BASIN
E	EAST
EL	ELEVATION
EXIST	EXISTING
FT	FEET OR FOOT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
L	LEFT
LF	LINEAR FEET
N	NORTH
NTS	NOT TO SCALE
ORB	OFFICAL RECORD BOOK
OS	OFFSET
R	RADIUS OR RIGHT
RIM	RIM ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
S	SOUTH
SVC	SERVICE
TYP	TYPICAL
W	WEST
M/E	MATCH EXISTING GRADE

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

811 Know what's below. Call before you dig.

REVISIONS

NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY
LAKE PARK, FL
CONCEPTUAL SITE PLAN

engenuity group inc.
A Higher Standard of Excellence
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)855-1151 • FAX (561)832-5390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

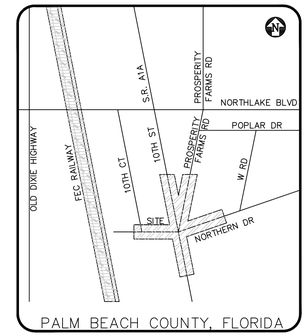
DATE	AUGUST 2022
DRAWN	KG
PROJECT ENGINEER	ACS
PROJECT MANAGER	KG
CHECKED	ACS

SHEET NO. C-1 / 5

JOB NO. 18187.46

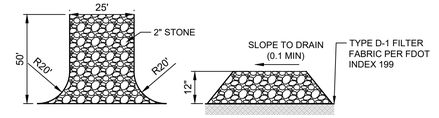
J:\Land Projects\52\18187.46 Oval About\DWG\18187.46 Prelim Eng.dwg DATE: 8/24/2022 8:42 AM

PLOT: 8/24/2022 8:50:21 AM



LOCATION MAP
N.T.S.

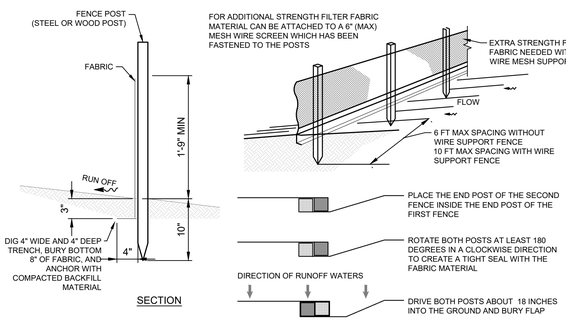
LEGEND:	
	DEMOLITION



TEMPORARY GRAVEL ENTRANCE
N.T.S.

SILT FENCE NOTES:

1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (90 CM).
2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET (3 M) APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES (30 CM). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET (1.8 M).
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES (10 CM) WIDE AND 4 INCHES (10 CM) DEEP ALONG THE LINE OF POSTS AND UP SLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UP SLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH (25 MM) LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES (5 CM) AND SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES (20 CM) OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
7. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH TIES SPACED EVERY 24 INCHES AT TOP AND MID. SECTION. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
8. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE OR DEPTH OF ACCUMULATED SEDIMENT REACHES 6 INCHES.
9. SILT FENCE SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION AND SHALL NOT BE REMOVED UNTIL CONSTRUCTION IS COMPLETE.
10. THE CONTRACTOR SHALL INSPECT AND REPAIR THE SILT FENCE AFTER EACH RAIN EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
11. REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFFSITE AND CAN BE PERMANENTLY STABILIZED.
12. THE SILT FENCE SHALL BE PLACED ON SLOPE CONTOUR TO MAXIMIZE ITS PONDING EFFICIENCY.
13. IF DITCH LEVEL IS DEEPER THAN 30", THEN A FLOATING SILT SCREEN SHALL BE USED.
14. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
15. ALL PROJECTS REQUIRE SUBMITTAL OF POLLUTION PREVENTION PLAN.
16. ALL PROJECTS 1 AC. OR MORE MUST SUBMIT NOTICE OF INTENT (NOI) TO FDEP.



SILT FENCE INSTALLATION DETAIL
N.T.S.

STORM DRAIN INLET PROTECTION
N.T.S.

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

REVISIONS			
NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY FARMS RD
LAKE PARK, FL
CONCEPTUAL DEMOLITION PLAN

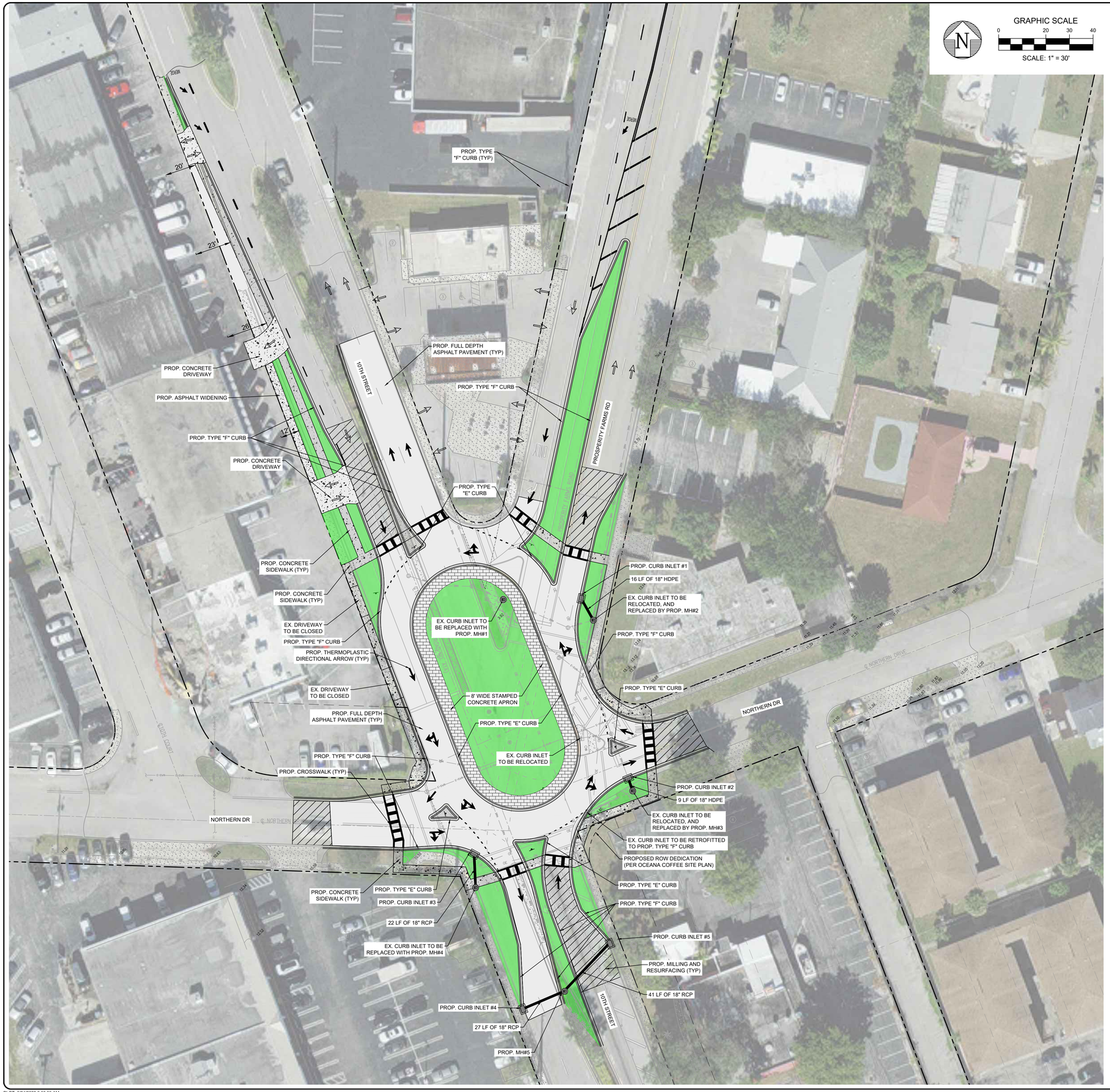
A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE., SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)855-1191 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

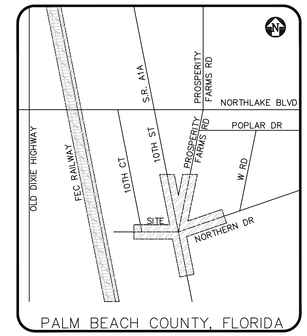
DATE	AUGUST 2022
DRAWN	KG
PROJECT ENGINEER	ACS
PROJECT MANAGER	KG
CHECKED	ACS
SHEET NO.	C-2
	5
JOB NO.	18187.46

J:\Land Projects R2\18187.46 Oval At\out\DWG\18187.46 DEMO.dwg DATE: 8/24/2022 8:34 AM

PLOT: 8/24/2022 8:50:32 AM

DESIGN PHASE, CONCEPTUAL





LOCATION MAP

N.T.S.

ENGINEERING LEGEND:

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED LANDSCAPE AREA
- PROPOSED PAVERS
- TRAFFIC FLOW DIRECTION
- CATCH BASIN / YARD DRAIN
- 25.00 FINISHED GRADE ELEVATION
- DRAINAGE FLOW DIRECTION

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE REFERENCED TO BENCHMARK "V 402", ELEVATION=16.706' (NAVD 88).
2. TOPOGRAPHIC SURVEY PERFORMED BY ENGENUITY GROUP INC. IN NOVEMBER 2020.
3. ALL REMOVED DEBRIS & DEMOLISHED MATERIAL TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.
4. ALL CROSSWALKS SHALL MEET ADA. NO CROSS SLOPE SHALL EXCEED 2%.
5. IF PROPOSED WORK DAMAGE PALM BEACH COUNTY ROADWAY, SIDEWALK AND/OR DRAINAGE SYSTEMS, THEN THEY WILL BE CONSTRUCTED REPAIRED OR REPLACED TO ITS ORIGINAL OR BETTER CONDITION AT NO COST TO THE PALM BEACH COUNTY.
6. PAVEMENT MARKINGS AND SIGNING IN PALM BEACH COUNTY RIGHT OF WAY, SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL T-P-21.
7. CONTRACTOR SHALL CONTACT PBC TRAFFIC OPERATIONS AT 561-233-3900 FORTY-EIGHT (48) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT.
8. ANY DAMAGE TO SIGNAL EQUIPMENT CAUSED BY THE CONSTRUCTION OF THIS PROJECT MUST BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.

LEGEND: (ABBREVIATIONS)

CB	CATCH BASIN
E	EAST
EL	ELEVATION
EXIST	EXISTING
FT	FEET OR FOOT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
L	LEFT
LF	LINEAR FEET
N	NORTH
NTS	NOT TO SCALE
ORB	OFFICAL RECORD BOOK
OS	OFFSET
R	RADIUS OR RIGHT
RIM	RIM ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
S	SOUTH
SVC	SERVICE
TYP	TYPICAL
W	WEST
M/E	MATCH EXISTING GRADE

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

REVISIONS			
NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY FARMS RD
LAKE PARK, FL
CONCEPTUAL PAVING, GRADING AND DRAINAGE PLAN

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

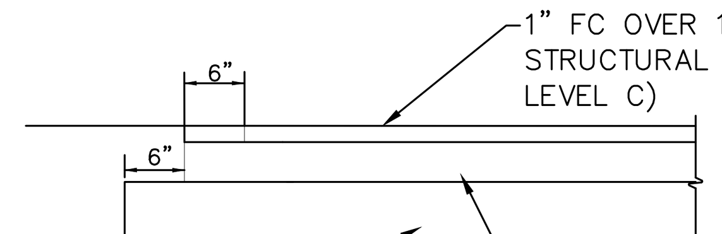
DATE	AUGUST 2022
DRAWN	KG
PROJECT ENGINEER	ACS
PROJECT MANAGER	KG
CHECKED	ACS

J:\Land Projects R2\18187.46 Oval About\DWG\18187.46 PGD.dwg DATE: 8/24/2022 8:43 AM

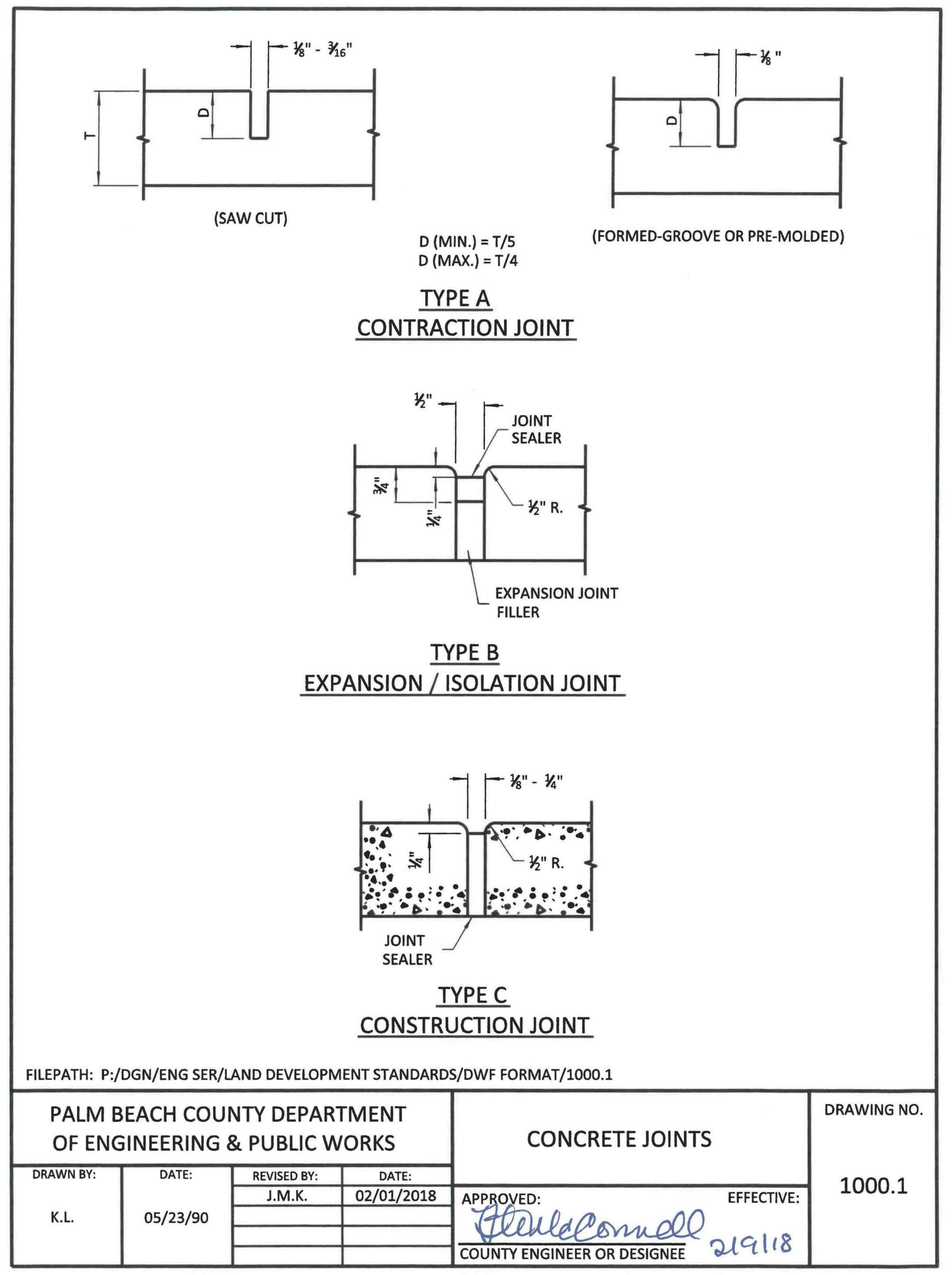
SHEET NO. C-3
TOTAL SHEETS 5
JOB NO. 18187.46

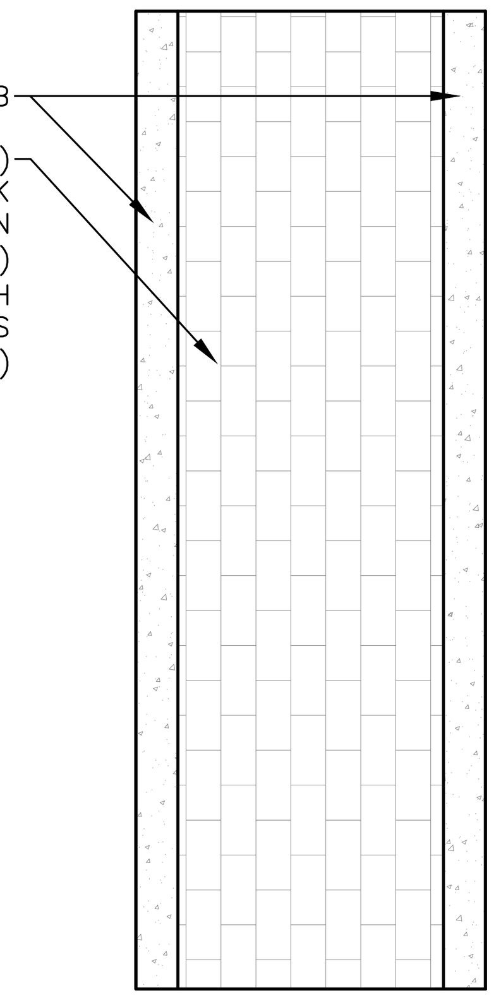
PLOT: 8/24/2022 8:50:35 AM

DESIGN PHASE, CONCEPTUAL



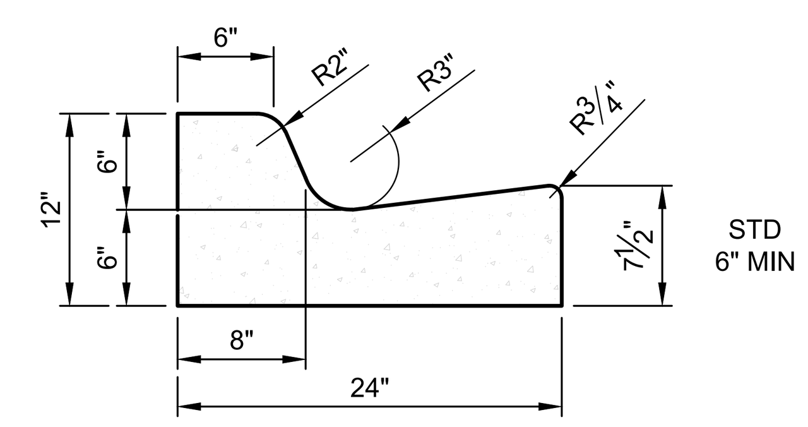
PAVEMENT SECTION
(WITHIN PALM BEACH COUNTY R/W)
NTS





NOTES:
1. CONTROL JOINTS PER ACI 330, JOINTS TO BE CUT WITHIN 4 TO 12 HOURS OF PLACEMENT, ACI CERTIFIED CONCRETE FINISHER REQUIRED. CONTRACTOR TO PROVIDE JOINTING SHOP DRAWING PRIOR TO PLACEMENT OF CONCRETE.
2. FIBERMESH REINFORCEMENT TO BE EQUAL TO FIBERMESH 300 AS MANUFACTURED BY PROPEX COMPLY WITH MANUFACTURERS REQUIREMENTS.

STAMPED CONCRETE
NTS

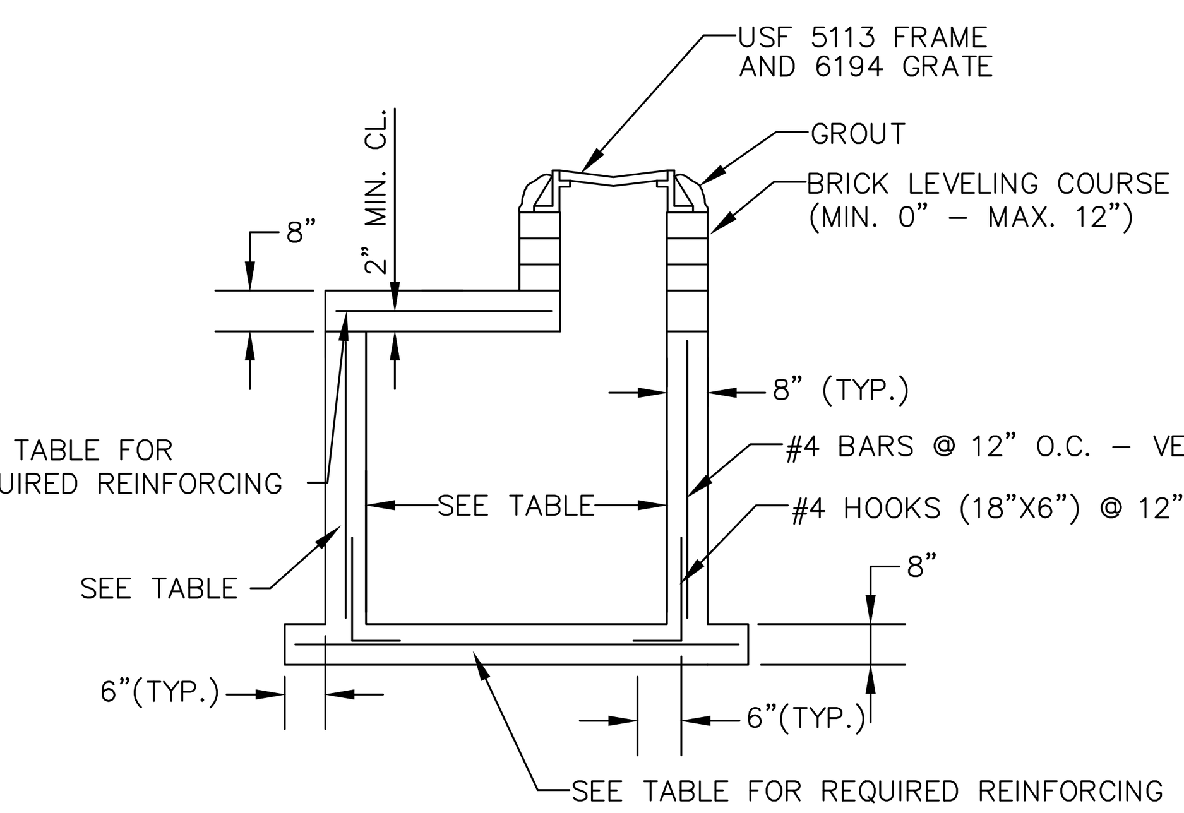


NOTE:
WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

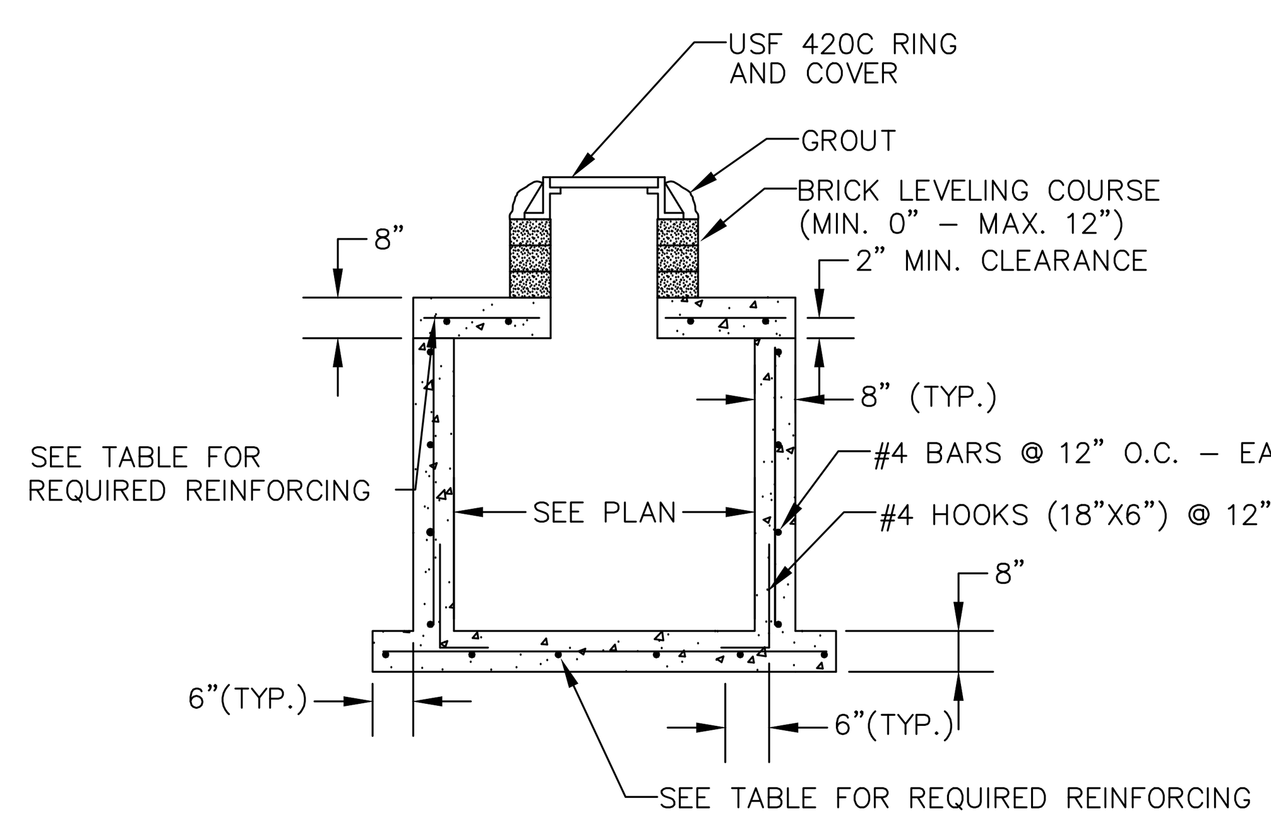
TYPE 'F' CURB

INLET TYPE	STRUCTURE SIZE (REC)	STRUCTURE SIZE(ROUND)	SLAB REINFORCING REQUIRED	HORIZ. REINFORCING REQ.
3	36" X 36"	36" ø	#4 BARS @ 10" O.C. – EW	#4 BARS @ 10" O.C.
4	48" X 48"	48" ø	#5 BARS @ 10" O.C. – EW	#5 BARS @ 10" O.C.
5	54" X 54"	54" ø	#5 BARS @ 10" O.C. – EW	#5 BARS @ 10" O.C.
6	60" X 60"	60" ø	#6 BARS @ 10" O.C. – EW	#5 BARS @ 10" O.C.
7	66" X 66"	66" ø	#6 BARS @ 10" O.C. – EW	#6 BARS @ 10" O.C.
8	72" X 72"	72" ø	#6 BARS @ 10" O.C. – EW	#6 BARS @ 10" O.C.

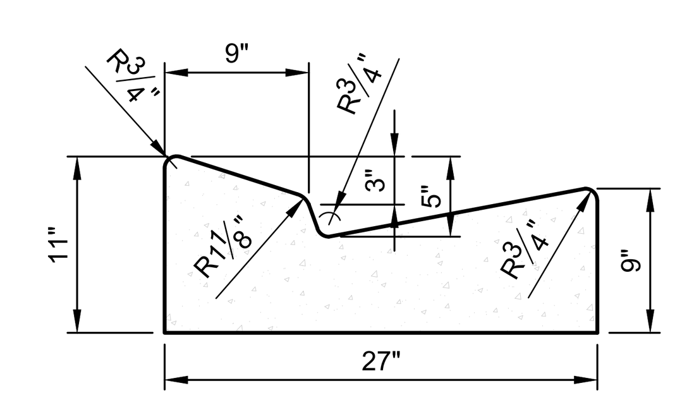
STRUCTURE SIZE	STEEL REINFORCING REQUIRED
4' DIAM.	#4 BARS @ 12" O.C. – EW
5' DIAM.	#4 BARS @ 10" O.C. – EW
6' DIAM.	#5 BARS @ 10" O.C. – EW
7' DIAM.	#6 BARS @ 10" O.C. – EW
8' DIAM.	#6 BARS @ 7" O.C. – EW



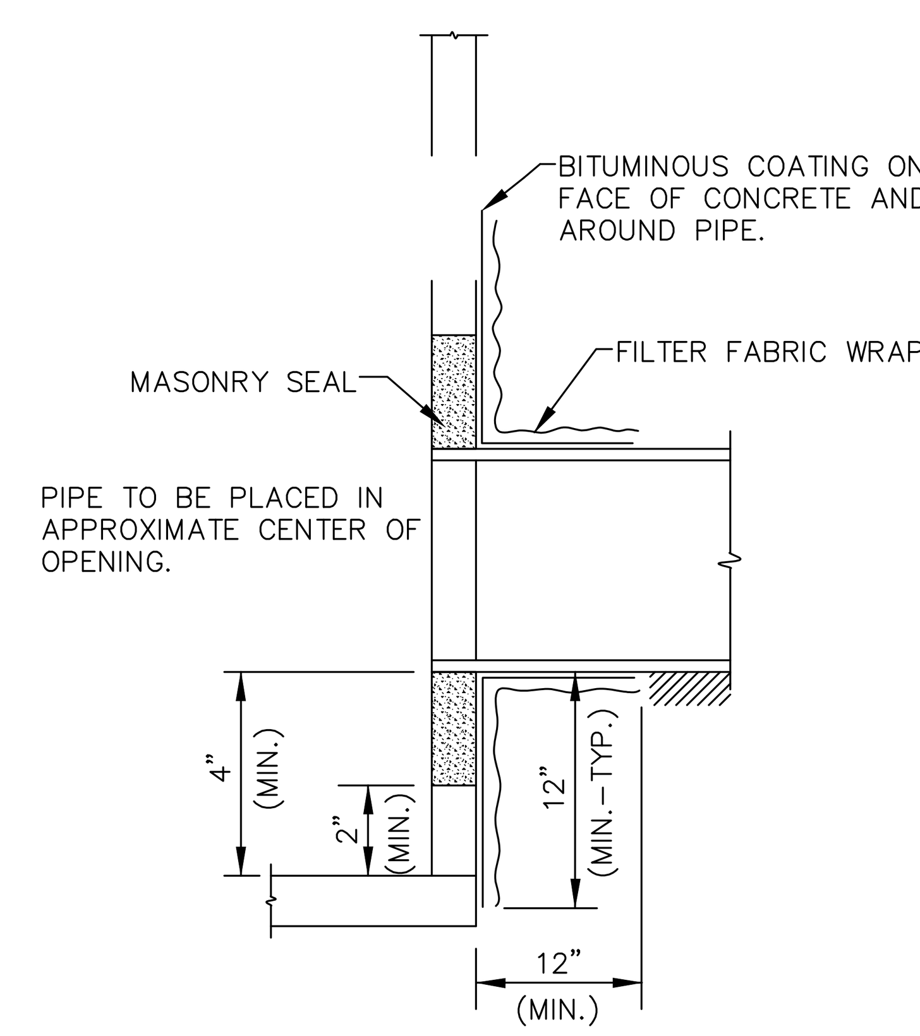
DRAINAGE INLET



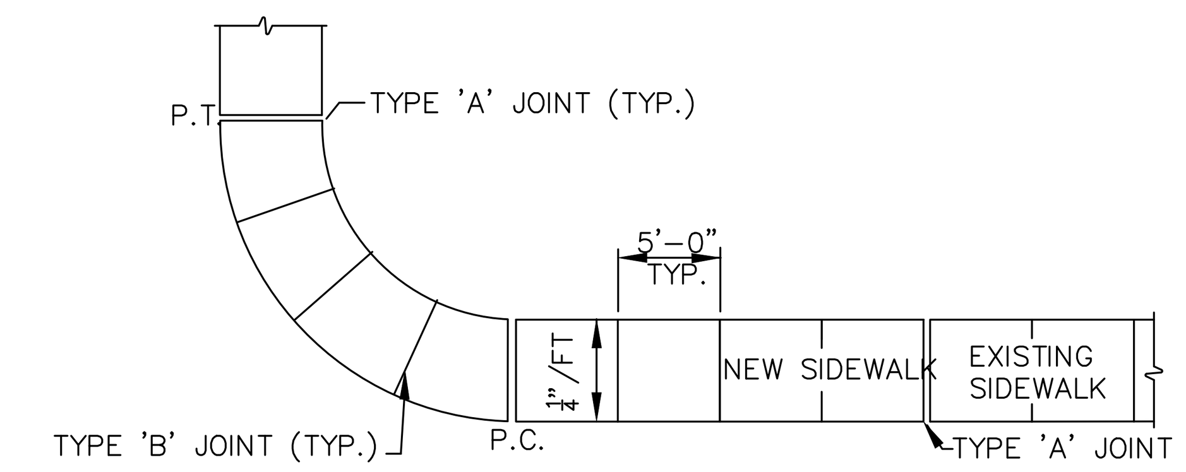
DRAINAGE MANHOLE



TYPE 'E' CURB – FDOT



FILTER FABRIC WRAP ON GROUTED
PIPE TO STRUCTURE JOINT



PLAN

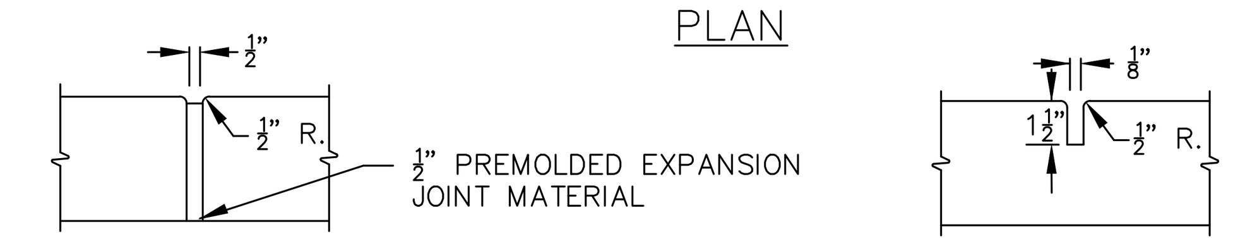
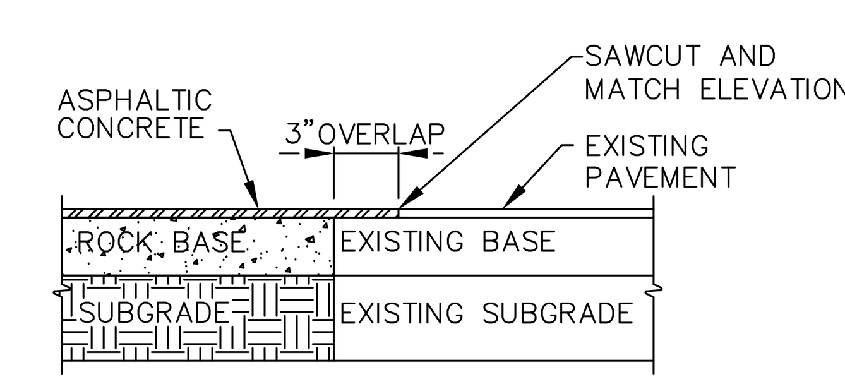


TABLE OF SIDEWALK THICKNESS	
LOCATION	
RESIDENTIAL AREAS	4"
AT DRIVEWAYS AND OTHER AREAS	6"

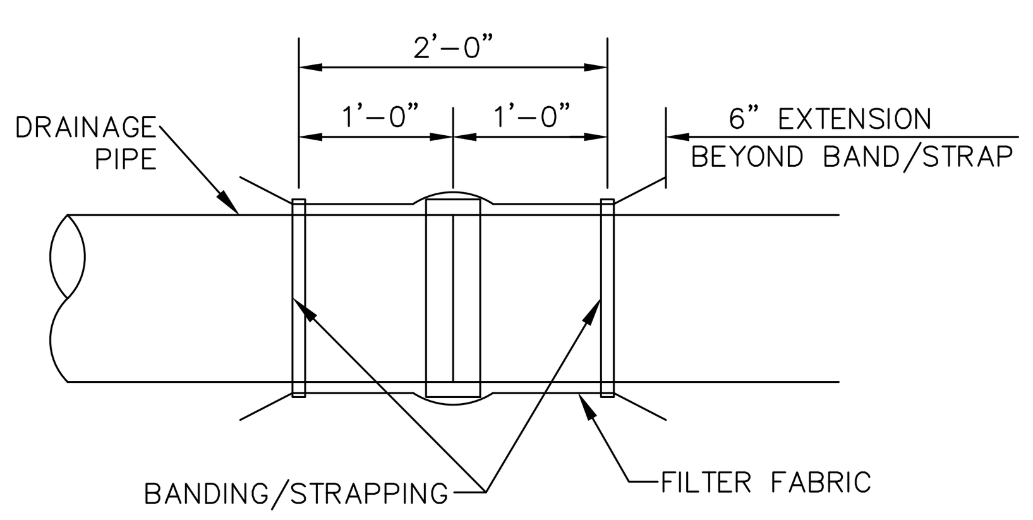
1. ALL SIDEWALKS SHALL MEET ADA STANDARDS. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%. SIDEWALK LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.

2. CONSTRUCT SIDEWALK ON 6" THICK COMPACTED SUBGRADE (98% AASHTO T-180).

CONCRETE SIDEWALK



ASPHALT PAVEMENT JOINT



FILTER FABRIC JOINT WRAP

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

811 Know what's below. Call before you dig.

REVISIONS			
NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY
LAKE PARK, FL
PAVING, GRADING AND DRAINAGE DETAILS

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects R2\18187.46 Oval About\DWG\18187.46 Details.dwg DATE: 5/18/2022 4:23 PM

DATE	AUGUST 2022
DRAWN	KG
PROJECT ENGINEER	ACS
PROJECT MANAGER	KG
CHECKED	ACS

SHEET NO. C-4 / 5
JOB NO. 18187.46

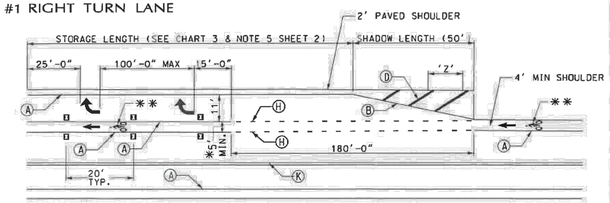
PLOT: 8/24/2022 8:50:42 AM

DESIGN PHASE, CONCEPTUAL

MUTCD "RIGHT TURN ONLY" SIGN (R3-5R)
N.T.S.

MUTCD "NO U TURN" SIGN (R3-4)
N.T.S.

#1 RIGHT TURN LANE

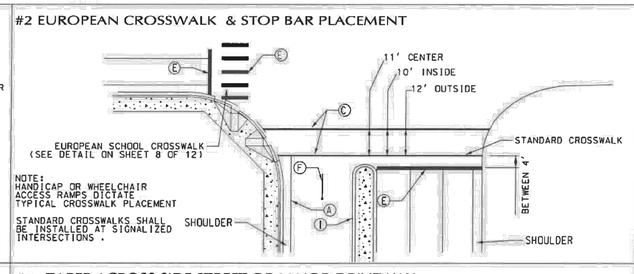


*IF 5' MIN NOT PROVIDED MOVE SHOULDER TO RIGHT TURN LANE.

**BIKELANE MARKINGS ONLY AT APPROACH TO SIGNALIZED INTERSECTION

FOR DISTANCE 'Z' SEE CHART 2 ON SHEET 2.

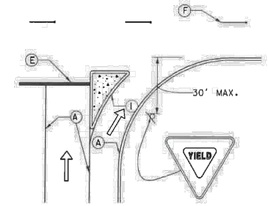
#2 EUROPEAN CROSSWALK & STOP BAR PLACEMENT



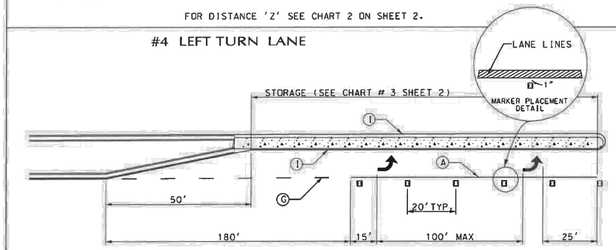
NOTE:
HANDICAP OR WHEELCHAIR ACCESS RAMPS DICTATE TYPICAL CROSSWALK PLACEMENT

STANDARD CROSSWALKS SHALL BE INSTALLED AT SIGNALIZED INTERSECTIONS.

#3 YIELD SIGN PLACEMENT

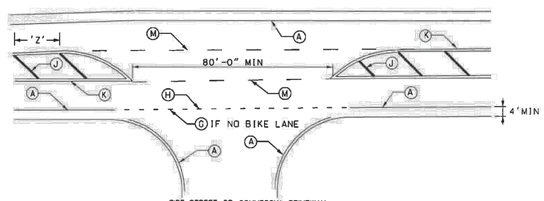


#4 LEFT TURN LANE



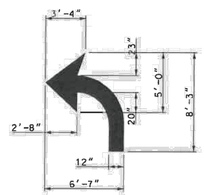
Shadow length's shall be 100 feet at all dual left applications, with 250' of 6'-10' skips.

#5 TAPER ACROSS SIDE STREET OR MAJOR DRIVEWAY



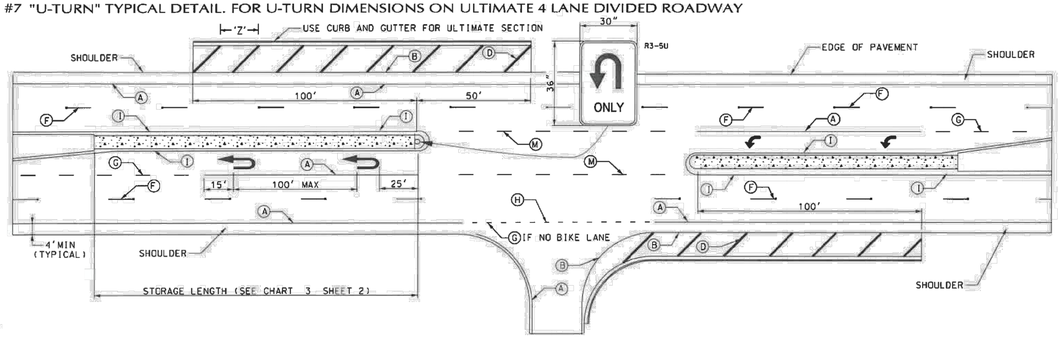
SIDE STREET OR COMMERCIAL DRIVEWAY

#6 TYPICAL TURN LANE ARROW



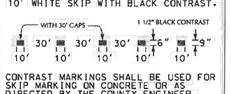
100 FT MAXIMUM DISTANCE BETWEEN ARROWS
LEFT AND RIGHT TURN LANES

#7 "U-TURN" TYPICAL DETAIL. FOR U-TURN DIMENSIONS ON ULTIMATE 4 LANE DIVIDED ROADWAY



#8 CONTRAST MARKINGS

10' WHITE SKIP WITH BLACK CONTRAST.

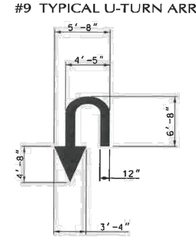


CONTRAST MARKINGS SHALL BE USED FOR SKIP MARKING ON CONCRETE OR AS DIRECTED BY THE COUNTY ENGINEER.

STRIPING KEY

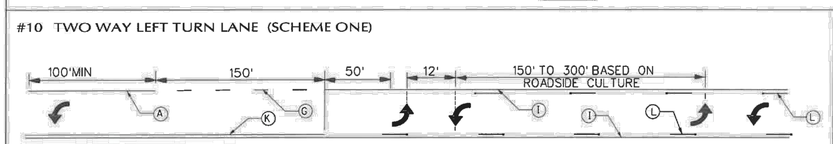
A = 6" SOLID WHITE
B = 8" SOLID WHITE
C = 12" SOLID WHITE
D = 18" SOLID WHITE
E = 24" SOLID WHITE
F = 6" SKIP WHITE TYP (10'-30')
G = 6" SKIP WHITE TYP (6'-10')
H = 6" SKIP WHITE TYP (2'-4')
I = 6" SOLID YELLOW
J = 18" SOLID YELLOW
K = 6" DOUBLE YELLOW
L = 6" SKIP YELLOW TYP (10'-30')
M = 6" SKIP YELLOW TYP (6'-10')
N = 6" SKIP YELLOW TYP (2'-4')
P = RPM BI-DIRECTIONAL AMBER/AMBER
R = FDP WHITE
S = FDP YELLOW
T = RPM BI-DIRECTIONAL WHITE/RED
U = RPM BI-DIRECTIONAL RED/YELLOW

#9 TYPICAL U-TURN ARROW



100 FT MAXIMUM DISTANCE BETWEEN ARROWS
U- TURN LANES

#10 TWO WAY LEFT TURN LANE (SCHEME ONE)



PALM BEACH COUNTY FLORIDA

PALM BEACH COUNTY, FLORIDA
TRAFFIC DIVISION
TYPICAL
OTHER LANE DETAILS
WITH PAVED SHOULDER

	NAME	DATE
BOGDAN T. PIWKOWSKI	SENIOR PROFESSIONAL ENGINEER	3/5/10
MOTASEM AL-TURK	DIRECTOR - TRAFFIC DIVISION	
DRAWN BY	CGT	4-16-2010
TRACED BY		
CHECKED BY		

SCALE: N.T.S.
CONTRACT NO.
DRAWING: T-P-21
SHEET 4 OF 12 SHEETS

NO.	DATE	REVISIONS	BY	APP.

PMT_04.DGN 2/4/2021 7:39:36 AM

CONCEPTUAL DESIGN PHASE

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Know what's below. Call before you dig.

PLOT: 8/24/2022 8:50:43 AM

DESIGN PHASE, CONCEPTUAL

REVISIONS

NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT INTERSECTION IMPROVEMENTS
10TH STREET & PROSPERITY
LAKE PARK, FL

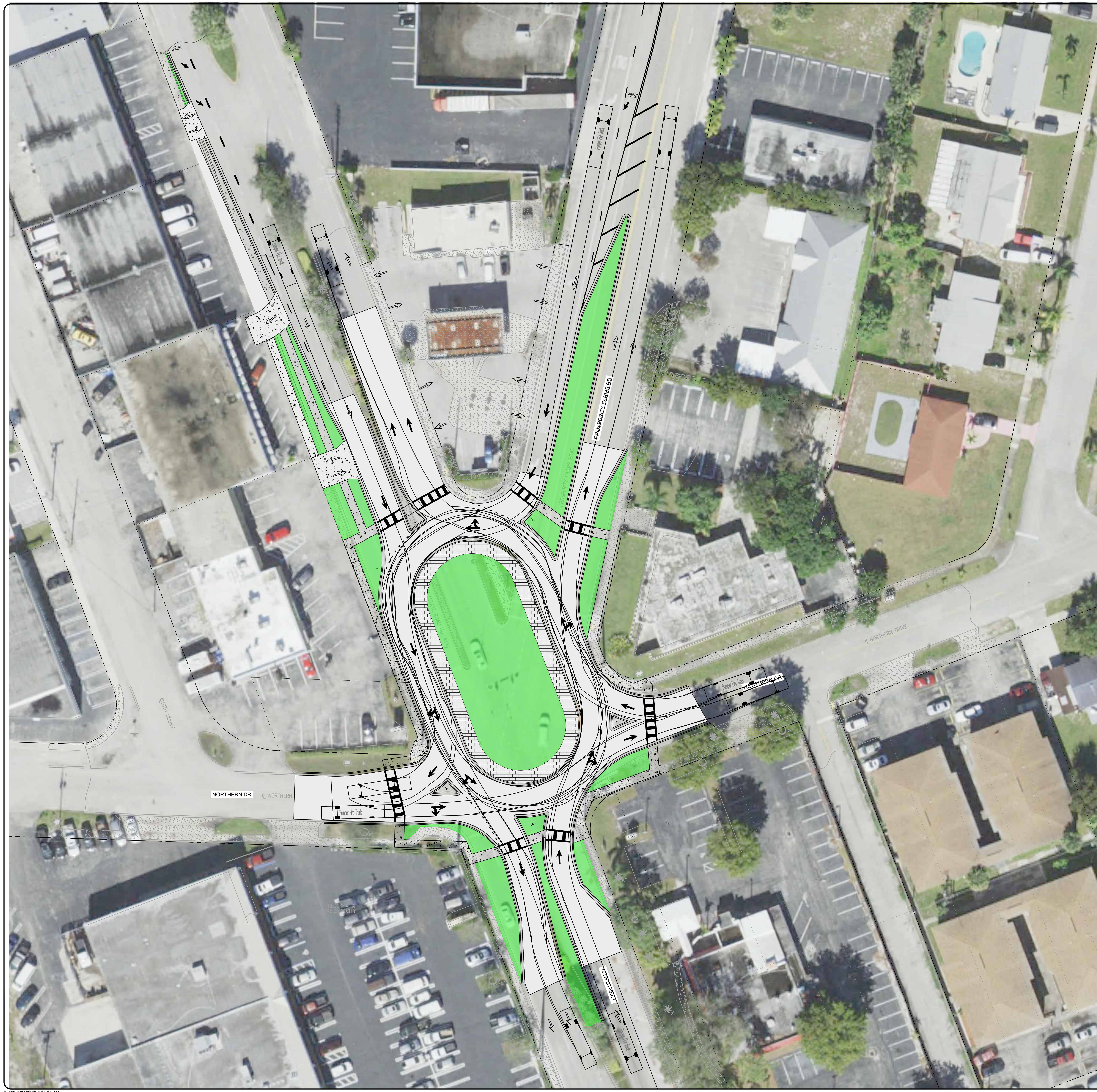
PAVEMENT MARKINGS AND SIGNAGE DETAILS

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE. SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

J:\Land Projects\R2\18187.46 Oval About\DWG\18187.46 Details.dwg DATE: 5/18/2022 4:23 PM

DATE	AUGUST 2022		
DRAWN	KG		
PROJECT ENGINEER	ACS		
PROJECT MANAGER	KG		
CHECKED	ACS		

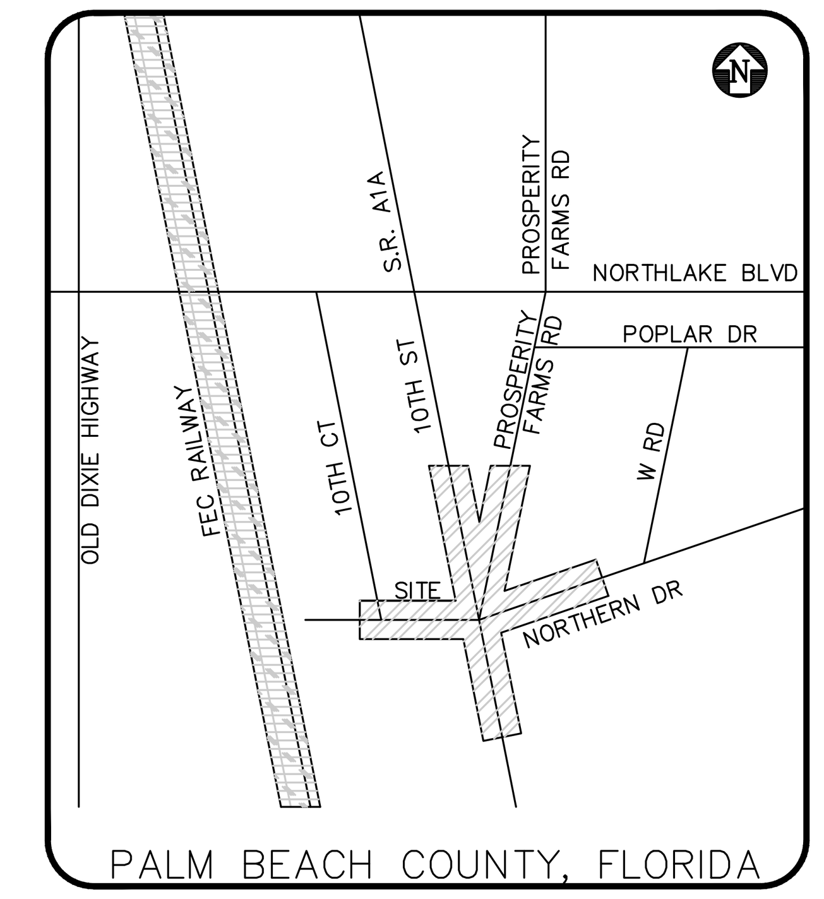
TITLE OF SHEET: C-5
5
JOB NO. 18187.46



GRAPHIC SCALE

0 20 30 40

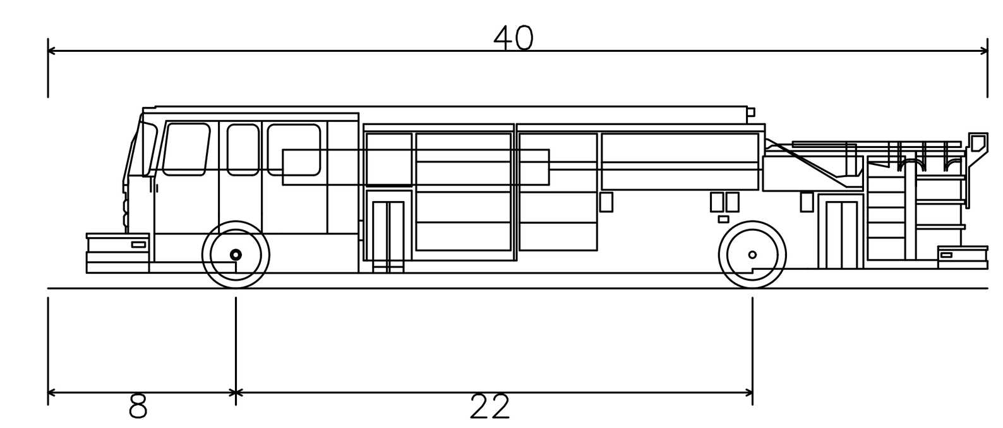
SCALE: 1" = 30'



LOCATION MAP

N.T.S.

LEGEND:	
	PROPOSED LANDSCAPE AREA
	TRAFFIC FLOW DIRECTION
	PROPOSED CONCRETE SIDEWALK
	PAVERS



Pumper Fire Truck	
Overall Length	40.000ft
Overall Width	8.167ft
Overall Body Height	7.745ft
Min Body Ground Clearance	0.656ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Max Wheel Angle	45.00°

CONCEPTUAL ENGINEERING PLAN

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

811 Know what's below. Call before you dig.

REVISIONS			
NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT CONCEPT
10TH STREET & PROSPERITY
LAKE PARK, FL
VEHICLE TRACKING EXHIBIT

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N CONGRESS AVE, SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

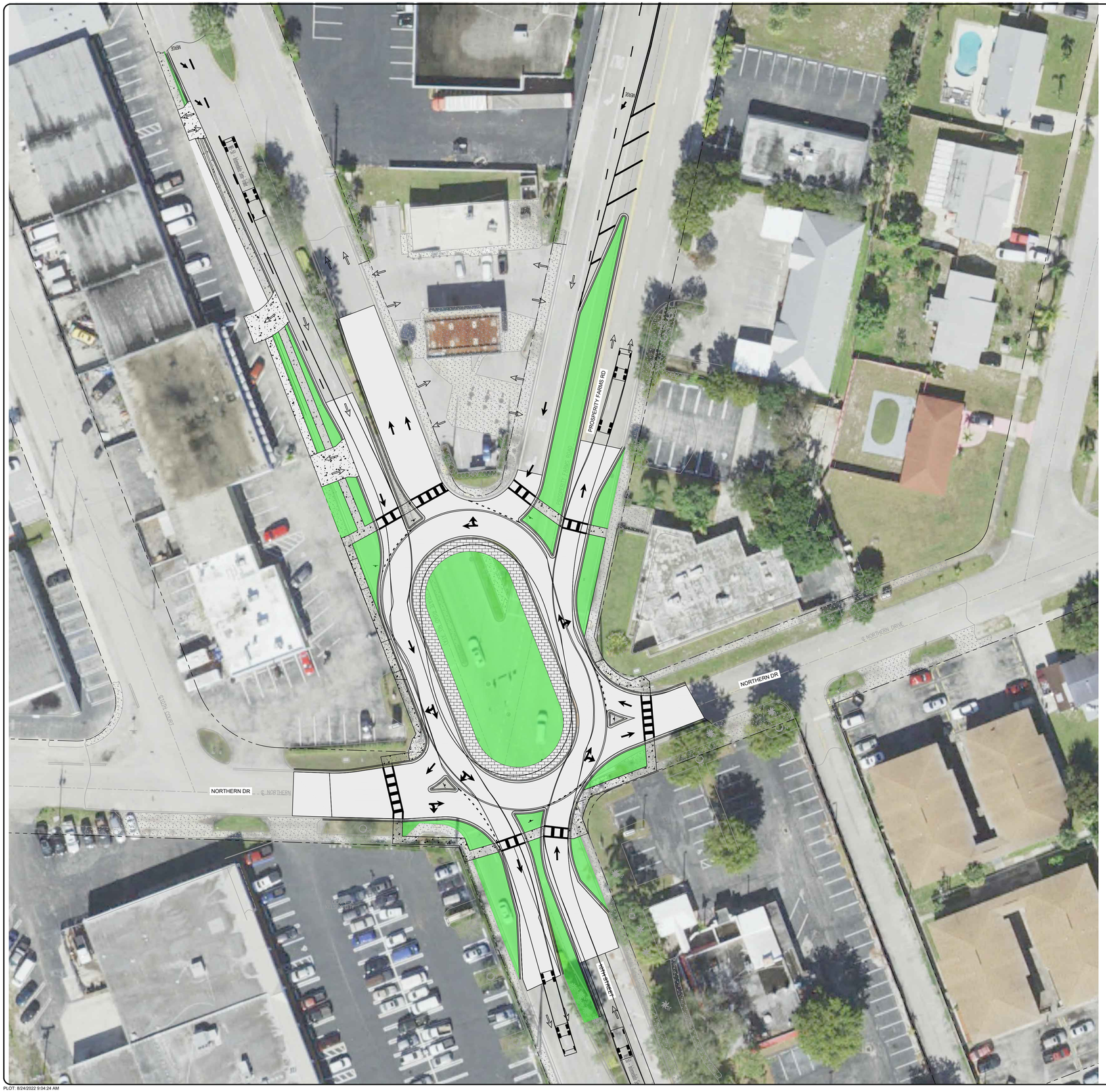
J:\Land Projects R2\18187.46 Oval About\DWG\18187.46 AUTOTURN_FIRETRUCK.dwg DATE: 8/24/2022 9:03 AM

DATE	01/26/2022
DRAWN	KG
PROJECT ENGINEER	ACS
PROJECT MANAGER	KG
CHECKED	ACS

SHEET NO. 2 / 2

JOB NO. 18187.46

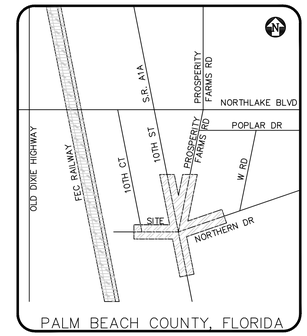
PLOT: 8/24/2022 9:03:59 AM



GRAPHIC SCALE

0 20 30 40

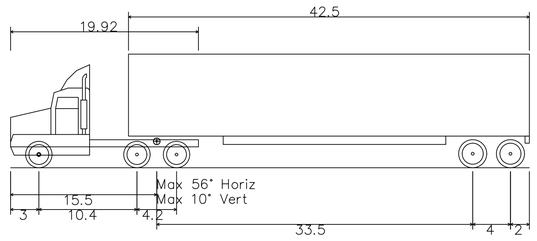
SCALE: 1" = 30'



LOCATION MAP

N.T.S.

LEGEND:	
	PROPOSED LANDSCAPE AREA
	TRAFFIC FLOW DIRECTION
	PROPOSED CONCRETE SIDEWALK
	PAVERS



WB-50 - Intermediate Semi-Trailer

Overall Length	55.000ft
Overall Width	8.500ft
Overall Body Height	12.052ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	17.90°

CONCEPTUAL ENGINEERING PLAN

ADAM SWANEY, P.E., PROFESSIONAL ENGINEER LICENSE NO. 72235. THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ADAM SWANEY, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

811 Know what's below. Call before you dig.

REVISIONS			
NO.	DATE	REMARKS	BY

ADAM SWANEY, P.E.
NO. 72235

OVAL-A-BOUT CONCEPT
10TH STREET & PROSPERITY FARMS RD
LAKE PARK, FL
WEHICLE TRACKING EXHIBIT

A Higher Standard of Excellence
engenuity group inc.
ENGINEERS • SURVEYORS • GIS MAPPERS
1280 N. CONGRESS AVE., SUITE 101
WEST PALM BEACH, FLORIDA 33409
PH (561)655-1151 • FAX (561)832-9390 •
WWW.ENGENUITYGROUP.COM CERTIFICATE OF AUTHORIZATION #7095

DATE	01/26/2022	
DRAWN	KG	
PROJECT ENGINEER	ACS	
PROJECT MANAGER	KG	
CHECKED	ACS	

SHEET NO. 1 OF 2

JOB NO. 18187.46

J:\Land Projects R2\18187.46 Oval-About\DWG\18187.46 AUTOTURN SEMITRUCK.dwg DATE: 8/24/2022 8:58 AM

PLOT: 8/24/2022 9:04:24 AM

ENGINEER'S CONCEPTUAL COST ESTIMATE
OVAL-A-BOUT INTERSECTION IMPROVEMENTS

Engenuity Project No. 18187.46

	Description	Unit	Quantity	Unit Cost*	Total
	SITE PREPERATION				
1	NPDES Erosion Control	LS	1	$6,000.00	$6,000.00
2	Clearing & Grubbing	LS	1	$6,000.00	$6,000.00
3	Earthwork (Excavation, Fill, Embankment)	LS	1	$20,000.00	$20,000.00
4	Demolition	LS	1	$90,000.00	$90,000.00
	ROADWAY CONSTRUCTION				
5	12" Stabilized Subgrade	SY	2,245	$7.50	$16,837.50
6	Optional Base Group 13	SY	2,245	$26.00	$58,370.00
7	1" FC over 1-1/2" SP Asphalt (w/ tack and prime coat)	SY	2,245	$25.00	$56,125.00
8	Mill/resurface aspahlt (1" FC Average Depth)	SY	520	$20.00	$10,400.00
9	Pavers (including base and subgrade)	SY	336	$110.00	$36,947.78
10	Type E Curb	LF	663	$30.00	$19,890.00
10	Type F Curb	LF	1,765	$30.00	$52,950.00
11	Header Curb	LF	352	$30.00	$10,560.00
12	Sodding	SY	1,791	$15.00	$26,861.67
13	Striping and Signage	LS	1	$10,000.00	$10,000.00
14	Adjust manholes and valves to grade	LS	1	$10,000.00	$10,000.00
	SIDEWALK & ROW CONSTRUCTION				
15	Concrete Sidewalk (4in)	SY	223	$65.00	$14,466.11
16	Concrete Driveway/Sidewalk (6in)	SY	111	$80.00	$8,844.44
17	ADA Ramp	EA	10	$2,000.00	$20,000.00
	DRAINAGE CONSTRUCTION				
18	Drainage Inlet	EA	5	$7,000.00	$35,000.00
19	Drainage Manhole	EA	5	$7,000.00	$35,000.00
20	18" RCP Drainage	LF	115	$75.00	$8,625.00
21	Connect to Existing	EA	4	$750.00	$3,000.00
	ADDITIONAL ITEMS				
	Lighting (BY OTHERS)	LS	1	$100,000.00	$100,000.00
	Lanscape and Irrigation (BY OTHERS)	LS	1	$100,000.00	$100,000.00
	Overhead Signal Removal (BY OTHERS)	LS	1	$75,000.00	$75,000.00
				SUBTOTAL	**$830,877.50**
22	Mobilization/Demobilization and General Conditions (10%)	LS	1	$83,087.75	$83,087.75
23	Engineering, Legal, Admin (20%)	LS	1	$166,175.50	$166,175.50
24	Maintenance of Traffic (12%)	LS	1	$99,705.30	$99,705.30
25	Contingency (25%)	LS	1	$207,719.38	$207,719.38
				TOTAL	**$1,387,565.43**

NOTE: THIS ENGINEERS' OPINION OF COST IS FOR PRELIMINARY FEASIBILITY AND BUDGET PURPOSES ONLY. IT IS NOT BASED ON A COMPLETED SET OF APPROVED PLANS.

Adam Swaney, P.E.
FL License #72235