SHEET DESCRIPTION HIGHLANDS COUNTY BOARD OF COUNTY COMMISSIONERS 1 COVER SHEET 2 LEGEND CONSTRUCTION PLANS GENERAL NOTES, SPECIFICATIONS 3 & TYPICAL SECTION FOR 4-8 PLAN DETAILS g THUNDERBIRD ROAD WEST SIDEWALK EXTENSION 10-13 CROSS SECTIONS 14-18 MAINTENANCE OF TRAFFIC HIGHLANDS COUNTY PROJECT NO. 15010 FINANCIAL PROJECT ID# 433203-1-58-01 LAKE (FEDERAL FUNDS) THUNDI HIC TASK NO. MOBILIZATION 1 BONDS & INSURANCE CONSTRUCTION SURVEY ST TESTING 4 MAINTENANCE OF TRAFFIC SEDIMENT BARRIER TEMPO 6 CLEARING AND GRUBBING 7 REMOVAL OF EXISTING ASI 8 MAILBOX REMOVE AND RE 9 10REGULAR EXCAVATION STABILIZATION, TYPE B, LBI 11 STREET CONSTRUCTION 12 OPTIONAL BASE, BASE GRO PROJECT SITE 13 SUPERPAVE ASPHALTIC CO INLET. DITCH BOTTOM. TYP 14 **CLINTON HOWERTON, JR., P.E.** 15 18" x 12" REINFORCED CON COUNTY ENGINEER 15" REINFORCED CONCRET 16 17 15" HIGH DENSITY POLYETH 18 18" HIGH DENSITY POLYETH ENGINEER OF RECORD 19 MITERED END SECTION JAMES D. LANGFORD, JR., P.E. 20 CONCRETE COLLAR 21 SIDEWALK CONCRETE, 4" T 22 DRIVEWAY CONCRETE 6"1 RIGHT-OF-WAY WIDTH = VARIES FROM 68' TO 85' WIDTH 23 CONCRETE DRAINAGE STR APPROXIMATE PROJECT LENGTH = 2,587 LF (0.489 MILE) 24 DETECTABLE WARNING, YI POSTED SPEED LIMIT = 45 MPH 25 PERFORMANCE TURF (SOD COUGAR BLVD. 26 SINGLE POST SIGN, F & I, ST UTILITY COMPANIES 27 SINGLE POST SIGN, F & I, W 28 TEMPORARY PAINTED PAVE PROJECT LOCATION MAP HIGHLANDS COUNTY TRAFFIC COMCAST CABLE CITY OF SEBRING 29 TEMPORARY PAINTED PAVE SCALE: 1" = 2.000" 505 S. COMMERCE AVE. 368 S. COMMERCE AVE. 3010 HERRING AVE. 30 THERMOPLASTIC, STANDAR SEBRING, FLORIDA 33870 SEBRING, FLORIDA 33870 GOVERNING STANDARDS AND SPECIFICATIONS: 1. FLORIDA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND SEBRING, FL 33870 EDDIE CARDONA 31 THERMOPLASTIC, STANDAR TIM HINEFELT BOB BOGGUS (863) 402-6877 (863) 273-8556 (863) 471-5100 MAINTENANCE FOR STREETS AND HIGHWAYS DATED 2013, AS AMENDED BY CONTRACT DOCUMENTS. http://www.fdot.gov/roadway/EloridaGreenbook/EGB.shtm DUKE ENERGY-FLORIDA Point Number Easting CENTURY LINK 2. FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2019-2020 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND 1 2051 OLD SCENIC HWY. 924 MEMORIAL DR APPLICABLE INTERIM REVISIONS AS AMENDED BY CONTRACT DOCUMENTS. 493225.3650' 115 5000 LAKE WALES, EL 33898 AVON PARK, FL 33825 https://www.fdot.gov/design/standardplans/current/default.shtm

KEN LUTZ

STATUS

FOR BID

(863) 452-3185

DESIGNED BY: J.D. LANFORD, P.E.

DRAWN BY: DOUG NIETUBICZ

CHECKED BY: J.D. LANGFORD, P.E.

LANGFORD, P.E

IN CHARGE:

DATE: 2/28/2019

3. HIGHLANDS COUNTY TECHNICAL STANDARDS MANUAL, THROUGH RESOLUTION 14-15-60. http://cms2.revize.com/revize/highlandscounty/document_center/LDRS%20thru%20Ord%2017-18-15%20(7-25-18).pdf

DATE

2-19-19

BY

BWD

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA REVISIONS

DESCRIPTION

REVISED PER FDOT COMMENTS

C: \PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings\Cover General Notes Details 15009 Thunderbird Rd.dwa, WEST COVER, Acad 1-7 Black.ctb

MARK MANNER (863) 678-4476 5001 492398.4320' 115 5002 491351.9530' 115

5003

490401.6090' 115

HIGHLANDS COUN ENGINEERING DEPARTM 505 S. COMMERCE AVENUE SEBRING, FLORIDA 33870	ITY IENT		
APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402	DATE:	E E	





STATE LAW REQUIRES EXCAVATORS TO CALL 811 BEFORE DIGGING PER THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT" CHAPTER 556, FLORIDA STATUTES. FAILURE TO CALL CAN RESULT IN FINES FROM \$250 TO \$5,000.

ERBIRD ROAD WEST SIDEWALK EXTENSION							
GHLANDS COUNTY PROJECT NO. 15010							
BASE BID							
ITEM DESCRIPTION	QUANTITY	UNIT					
	1	LS					
	1	LS					
AKING INCLUDING AS-BUILT	1	LS					
	1	LS					
	1	LS					
RARY	1,800	LF					
INCLUDING TREE REMOVAL	1	LS					
HALT PAVEMENT ROADWAY	110	SY					
LOCATE	7	EA					
	1	LS					
R 40, 12" COMPACTED THICKNESS SHOULDER & SIDE	2,150	SY					
UP 4, 6" COMPACTED THICKNESS	385	SY					
NCRETE, 1 1/2" THICK, RAP 30% MAXIMUM	12	TN					
EC	7	EA					
CRETE PIPE (RCP)	50	LF					
E PIPE (RCP)	10	LF					
IYLENE PIPE (HDPE)	640	LF					
IYLENE PIPE (HDPE)	10	LF					
	8	EA					
	1	EA					
HICK, 3,000 PSI MIN	1,350	SY					
HICK, INCLUDE 6"x6"W1.4xW1.4 WWM, 3,000 PSI MIN	270	SY					
JCTURE, SEE DETAILS	1	EA					
LLOW, EMBEDDED	80	SF					
	6,000	SY					
OP (R1-1), 30" x 30" & TWO (2), D3-1	3	AS					
1-R 30"x30" & W13-1P (15 MPH) 18" x 18"	1	AS					
EMENT MARKINGS, STD, WHITE, SOLID, 12"	170	LF					
EMENT MARKINGS, STD, WHITE, SOLID, 24"	27	LF					
D, WHITE, SOLID, 12"	170	LF					
D, WHITE, SOLID, 24"	27	LF					

PROJECT CONTROL POINTS						
Northing	Elevation	Description				
1256.3750'	161.51'	Set Iron Rod w/ cap stamped "Highlands County"				
1256.2110'	164.68'	Set Iron Rod w/ cap stamped "Highlands County"				
1278.2980'	167.34'	Set Iron Rod w/ cap stamped "Highlands County"				
1276.8390'	169.60'	Set Iron Rod w/ cap stamped "Highlands County"				

THUNDERBIRD	ROAD	WEST
SIDEWALK	EXTENS	ION

SCALE: HORIZ. VERT.	N/A N/A	
PROJECT 1501	NO. 0	REV. 0
SHEET	T 1 OF	18

COVER SHEET

LINE LEGEND			SY	MBOL LEGEND			ABBREVIATIONS		Т	REE LEGEND
ониониониониониониониониониониони	OVERHEAD WIRES		•	BENCHMARK		A.D.	ALGEBRAIC DIFFERENCE		*	CEDAR TREE
			•	CONCRETE MONUMENT		BFS	BEGIN FULL SUPER		Õ	CITRUS TREE
BEBEBEBE	BURIED ELECTRIC		0	IRON ROD OR IRON PIPE		BL	BASELINE			CYPRESS TREE
CASCASCASCASCASCAS	CONDUIT & CASEMENTS		۲	NAIL AND DISK		BNC	BEGIN NORMAL CROWN			MAGNOLIA TREE
			\otimes	CLEANOUT		СМР	CORRUGATED METAL PIPE			MAPLE TREE
			EM	ELECTRIC METER		CONC.	CONCRETE		E Star	OAK TREE
BTBTBT	BURIED TELEPHONE		₽E	FLAG ELECTRIC		CONST.	CONSTRUCTION		*	PALM TREE
FMFMFM	FORCE MAIN		₽ F0	FLAG FIBER OPTIC		EFS	END FULL SUPER		*	PINE TREE
	GASLINE		₽°	FLAG GAS		ELEV	ELEVATION		Θ	TREE
			Pss	FLAG SEWER		ENC	END NORMAL CROWN			TREE A
w	WATER LINE			FLAG TELEPHONE		EXIST.	EXISTING		*	TREE B
CTVCTVCTV	CABLE TELEVISION		▶	FLAG WATER		HDPE	HIGH DENSITY POLYETHYLENE PIPE		*	TREE C
YYYYYYY			*	FIRE HYDRANT		LC	LONG CHORD		*	TREE D
			X	GAS VALVE		LT	LEFT			
	CHAIN LINK FENCE		EB	ELECTRIC BOX		MES	MITERED END SECTION			
	WOOD FENCE		□	TELEPHONE BOX		PAVT	PAVEMENT			
	EXISTING TOP OF BANK			TELEVISION BOX		PC	POINT OF CURVATURE			
			TS	TRAFFIC SIGNAL BOX		PGL	PROFILE GRADE LINE			
	EXISTING TOE OF SLOPE		<u>xw</u>	PEDESTRIAN CROSSWALK		PROP.	PROPOSED			
· · · · · · · · · · · · · · · · · · ·	EXISTING EDGE OF SHELL ROCK		\$	LIGHT POLE		PT	POINT OF TANGENCY			
	EXISTING RIGHT OF WAY LINE		D	MANHOLE DRAINAGE		PVC	POINT OF VERTICAL CURVE			
			₩	MANHOLE OTHER		PVI PVI	POINT OF VERTICAL INTERSECTION			
	PROPOSED RIGHT OF WAY LINE		S	MANHOLE SEWER			POINT OF VERTICAL TANGENCY			
	EXISTING GRADE AT R/W RT (PROFILE VIEW)			MANHOLE TELEPHONE			RIGHT OF WAY			
	EXISTING GRADE AT R/W LT (PROFILE VIEW)									
	EXISTING GRADE AT CONST BL (PROFILE VIE	N)				STA	STATION			
150 150	EXISTING CONTOURS WITH ELEVATIONS									
149	PROPOSED CONTOURS WITH ELEVATIONS		+0.0	EXISTING GRADE SHOT						
149			-+-0.00	PROPOSED ELEVATIONS						
	EXISTING GUARDRAIL		0	BOLLARD						
	EXISTING EASEMENT			MAIL BOX						
· _ ·	GOVERNMENT FRACTIONAL LINES			SIGN			DRAINAGE LEGEND			
			Þ	MITERED END SECTION		H =====	EXISTING PIPES & STRUCTURES			
	LOT LINES		\leftarrow	GUY ANCHOR		D =====	PROPOSED PIPES & STRUCTURES			
	PROPOSED SOD SHOULDER LINE									
	PROPOSED BACK OF DITCH									
	PROFILE GRADE LINE (PROFILE VIEW)									
	PROPOSED CURVE RETURN									
	PROPOSED CENTERLINE OR BASELINE									
REVISIONS	STATUS	DESIGNED BY: J.D. LANGFORD, P.E.	HIGH	ILANDS CC	DUNT	Y 📈	NF. HIGON			SCALE: HORIZ.
			NGINI	EERING DEPA	RTMEN	√ T		BIRD ROA	D WE	ST
	FOR BID	CHECKED BY: J.D. LANGFORD, P.E.		DUD S. COMMERCE AVE SEBRING. FLORIDA 33	ENUE 870		SIDEWA	LK EXIEN	NOICE	PROJECT NO. R 15010
		J.D. LANGFORD, P.E.	ROVED BY:	JAMES D. LANGFORD, JR., P.E.	DATE:			LEGEND		SHEET 2 OF 18
G: \PROJECTS \2015 \15009 Thunderbird Rd Sidewalk - Cornet to Grand Prix \All Drawings _Details Legend 15009 Thunderbird Rd Sidewalk.dwg, West Legen	d, Dorey, Bruce Acad 1—7 Black.ctb	11/15/2019 FLO	RIDA REGISTR	ATION NO.: 78402						

SCALE: HORIZ. VERT.	N/A	
PROJEC 1501	Г NO. 0	REV 0
0		

GENERAL NOTES AND SPECIFICATIONS

GENERAL CONSTRUCTION NOTES

- 1. The Contractor shall be responsible for furnishing all material and labor to construct the facility as shown and described in the construction documents.
- The Contractor shall be responsible for obtaining all required construction bonds prior to construction.
- The Contractor shall have available at the job site at all times one copy of the construction documents including plans, specifications, and special conditions and copies of any required construction permits.
- 4. Any discrepancies on the drawings shall be immediately brought to the attention of the Highlands County Project Manager before commencing work. No field changes or deviations from design are to be made without prior approval of the Highlands County Project Manaaer.
- Contractor shall submit a construction schedule to the Highlands County Project Manager prior to commencement of construction.
- Contractor shall coordinate proposed driveway construction with affected property owners.

Contractor shall repair and/or replace all disturbed irrigation. Contractor shall coordinate this activity with affected property owners. EROSION CONTROL

- The Contractor shall grade the site to the elevations indicated and shall regrade washouts where they occur after every rainfall event until sod is well established or adequate stabilization occurs.
- 2. Contractor shall denote on plan the temporary parking and storage area which shall also be used as the equipment maintenance and cleaning area, employee parking area, and area for locating toilet facilities
- All wash water (concrete trucks, vehicle cleaning, equipment cleaning, etc.) shall be detained and properly treated and disposed.
- The Contractor shall be responsible for the control of dust and dirt rising and scattering in the air during construction and shall provide water sprinkling or other suitable methods of control. The Contractor shall comply with all governing regulations pertaining to environmental protection.
- The use of motor oils and other petroleum based or toxic liquids for dust suppression operations is prohibited.
- Sod must be installed and maintained on exposed slopes within 48 hours of completing final grading, and at any other time as necessary, to prevent erosion, sedimentation or turbid discharges.
- 7. Stabilization practices should be initiated as soon as practical, but in no case more than 7 days where construction has temporarily ceased.
- All materials spilled, dropped, washed or tracked from vehicles onto roadways or into storm drains must be removed as soon as possible. On-site & off-site soil stockpile and borrow areas shall be protected from erosion and sedimentation through implementation of best 9. management practices.
- 10. Slopes shall be left in a roughened condition during the grading phase to reduce runoff velocities and erosion.
- 11. Due to grade changes during the development of the project, the Contractor shall be responsible for adjusting the erosion control measures (silt fence, etc.) to prevent erosion.
- 12. All construction shall be stabilized at the end of each working day, this includes back filling of trenches for utility construction and placement of gravel or bituminous paving for road construction.
- 13. The contractor shall install sediment barrier as shown on plans within the perimeter of the project site.

SURVEY AND STAKEOUT

- 1. Existing section corners and ¼ Section corners, and other land markers or monuments located within proposed construction are to be referenced prior to construction and reset after construction. The Contractor shall have this work done by a registered Professional Land Surveyor at the Contractor's expense (Florida Registration). Any public land corner within the limits of construction is to be protected. If a corner monument is in danger of being destroyed and has not been properly referenced, the Contractor should notify the County Surveyor, without delay, by telephone (863-402-6877).
- Benchmark data is North American Vertical Datum of 1988 (NAVD 88).
- Any NGVD-29 monument within the limits of construction is to be protected. If in danger of damage, the Contractor should notify: Geodetic Information Center, Attn: Mark Maintenance Section N/CG-162, 6001 Executive Boulevard, Rockville, Maryland 20852. Telephone (301) 443-8319.
- Grades shown are the finished arades, unless otherwise indicated.
- The Contractor shall remove survey stakes and erosion control items prior to the completion of the contract. The Contractor shall be responsible for submitting to the Highlands County Project Manager a certified record survey signed and sealed by 6. a Professional Land Surveyor registered in the state of Florida depicting the actual field location of all constructed improvements that are required by the jurisdictional agencies for the certification process. All survey costs will be the Contractor's responsibility.

UTILITIES

- It is the Contractor's responsibility to contact the various utility companies which may have buried or aerial utilities within or near the construction area before commencing work. The Contractor shall call 811 to provide 48 hours minimum notice to all utility companies in advance of any excavation involving their utilities so that a company representative can be present. A list of the utility companies which the Contractor MUST call before commencing work is provided in these construction plans. This list serves as a guide only and is not
- intended to limit the utility companies which the contractor may wish to notify. 2. Existing utilities shown are located according to the information available to the Engineer at the time of the topographic survey and have not been independently verified by the Owner or the Engineer. Guarantee is not made that all existing underground utilities are shown or that the location of those shown are entirely accurate. Finding the actual location of any existing utilities is the Contractor's responsibility and shall be done before he/she commences any work in the vicinity. Furthermore, the Contractor shall be fully responsible for any and all damages due to the Contractor's failure to exactly locate and preserve any and all underground utilities. The Owner or Engineer will assume no liability for any damages sustained or cost incurred because of the operations in the vicinity of existing utilities or structures, nor for temporary bracing and shoring of same. If it is necessary to shore, brace, swing or relocate a utility, the utility company or department affected shall be contacted and their permission obtained regarding the method to use for such work. In addition, the Contractor shall be responsible to verify if "other" utilities (Not shown in the plans) exist within the area of construction. Should there be utility conflicts, The Contractor shall inform the Engineer and notify the respective utility owners to resolve utility conflicts and utility adjustments as required.
- The Contractor is to use caution when working in or around areas of overhead transmission lines or underground utilities. Prior to commencement of any excavation, the contractor shall comply with Florida Statute 553.851 for the protection of underground gas
- pipelines. 5. All valves within area of construction or disturbed by construction to be adjusted to finished arade. Replace valve collars and boxes as
- necessary.
- CLEARING AND GRUBBING
- 1. Contractor shall clear and grub all areas unless otherwise indicated, removing trees, stumps, roots, muck, existing pavement, existing concrete and all other deleterious material.
- PAVING, GRADING AND DRAINAGE
- 1. Where new pavements meets the existing pavement, the Contractor shall saw cut the existing pavement a minimum 2" deep for a smooth and straight joint and match the existing pavement elevation with the proposed pavement unless otherwise indicated.
- All cut or fill slopes shall be 4 (horizontal): 1 (vertical) or flatter unless otherwise shown.
- Existing drainage structures within construction limits shall remain unless noted otherwise.
- Contractor is responsible for repairing any existing concrete or asphalt areas that are disturbed during construction.

PAVEMENT MARKING AND SIGNAGE

- 1. Stop bars shall be 24" white stripes.
- Temporary pavement markings shall be provided by the end of each day's operation. 2.
- 3. Edition.
- 4. Sign substrate shall be aluminum.

5. Traffic signs shall be mounted on 3" diameter post with "Z" bar brackets. 6. Sign post underground support shall be 6" aluminum "Z" bar brackets (no concrete). SOD

- 2.
- and grasses including tropical soda apple, shall be rejected for use on the spot.

1.

- TESTING
- of the test results shall be provided to the Highlands County Project Manager. 2.
- of work or materials to conform with the plans and specifications.
 - 3. All copies of compaction, concrete and other required test results are to be sent to the Highlands County Project Manager directly from the testing agency.

THUNDERBIRD ROAD WEST SIDEWALK EXTENSION PROJECT NO. 15010						
	CONTRACTOR REQUIRED QUALITY CONTR	OL MATERIALS TESTING				
S	idewalk Construction: IN-SITU SOIL TESTING REQUIRE	MENTS (6" COMPACTED THICKNESS)				
TEST NAME	QUALITY CONTROL	ACCEPTANCE				
DENSITY	ONE (1) PER LIFT, TEN (10) TOTAL	Minimum density of 95% of AASHTO T99 density.				
Construction	Method: Compact area directly under the sidewalk and one	(1) foot beyond each side of the sidewalk to a depth				
Resident	tial Driveways: OPTIONAL BASE GROUP 4 TESTING R	EQUIREMENTS (6" COMPACTED THICKNESS)				
TEST NAME	QUALITY CONTROL	ACCEPTANCE				
DENSITY	ONE (1) PER LIFT PER DRIVEWAY, SIX (6) TOTAL	Minimum density of 95% of AASHTO T99 Density.				
THICKNESS	ONE (1) PER LIFT PER DRIVEWAY, SIX (6) TOTAL	Compacted lift thickness = 6", tolerance = 0.5"				
Optional Base	e Group 4 Construction Method: Construct the base in one (1) equal lift with a compacted lift thickness of six (6)				
Shoulder C	onstruction: TYPE B STABILIZATION (LBR 40) TESTING	REQUIREMENTS (12" COMPACTED THICKNESS)				
TEST NAME	QUALITY CONTROL	ACCEPTANCE				
		Minimum density of 95% of the Modified Proctor				
DENSITY	ONE (1) PER LIFT, TEN (10) TOTAL	maximum density as determined by FM 1-T 180,				
	Method D					
THICKESS	ONE (1) PER LIFT, TEN (10) TOTAL	Compacted lift thickness = 12", tolerance = 0.5"				
Stabilization Construction Method: Construct the stabilization in one (1) 12" lift with a compacted lift thickness of twelve (12)						
NOTE: Contractor shall perform at minimum one LBR per material type. County shall perform vertication testing as necessary.						

TEST NAME	QUALITY CONTROL						
DENSITY	ONE (1) PER LIFT, TEN (10) TOTAL	Minimum densit maximum densi Method D					
THICKESS	ONE (1) PER LIFT, TEN (10) TOTAL	Compacted lift t					
Stabilization Construction Method: Construct the stabilization in one (1) 12" lift with a cor							
NOTE: Contractor shall perform at minimum one LBR per material type. County shall perform							



		REVISIONS	STATUS	DESIGNED BY:	HIGHLANDS COUNTY
DATE	BY	DESCRIPTION		DRAWN BY:	
2–19–19	BWD	REMOVED NOTE PER FDOT COMMENTS		DOUG NIETUBICZ	ENGINEERING DEPARIMENT
			FOR BID	CHECKED BY:	505 S. COMMERCE AVENUE
				IN CHARGE:	SEBRING, FLORIDA 33870
				J.D. LANGFORD, P.E.	APPROVED BY: JAMES D. LANGFORD. JR., P.E. DATE:
G: \PROJECTS\2015	5\15009 Thunde	rbird Rd Sidewalk - Comet to Grand Prix All Drawings Cover General Notes Details 15009 Thunderbird Rd.dwg, GENERAL NOTES WEST, Dorey, Bruce Acad 1-7 Black.	ctb	11/15/2019	FLORIDA REGISTRATION NO.: 78402
				11,10,2010	

All pavement markings and signage shall be installed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), 2009

All disturbed areas within the project limits shall be sodded with "like kind" sod. The areas on which sod is to be placed shall be thoroughly wetted prior to and after placement is complete. No addition of top soil material is required prior to placement. All sod materials shall be subject to inspection by the Highlands County Project Manager prior to placement. Any sod with noxious weeds All areas within the project site shall be sodded unless indicated in these construction plans.

Contractor shall perform, at his own expense, any and all tests required by the specifications and/or any agency having jurisdiction. A copy The Highlands County Project Manager shall inspect all construction and is authorized to call to the attention of the Contractor any failure

IES			
6.0'	11.0'		
UNPAVED SHLDR SOD	EB TRAVEL LANE		
6.0%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	XX	
STABILIZATION, TYPE B,	LBR 40,		
2" COMPACTED THICKNI PTH AND WIDTH CROSS SECTIONS	ESS EXC.	RDWT	
BECTION LK CONSTRUC TO STA 46+2	CTION 20.04		
THUNDERBI	RD ROAD WEST	SCALE: HORIZ. N/A VERT. N/A	
SIDEWAL	PROJECT NO. 15010	REV. O	
GENERAL NO	TES & QUANTITIES	SHEET 3 OF	18







7.5' PLATTED PUBLIC UTILITY & DRAINAGE E 7.5' PLATTED PUBLIC UTILITY & DRAINAGE E	168.64	C-22-34-28-030-0520- GIORDANO JOHN A + CA 4324 THUNDERBIRD R SEBRING, FL 33872	-0180 ROL D +168.6
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March 1		1	
UCTION, STABILIZATION, T 6, 8" COMPACTED THIC CONCRETE, 1 ¹ " COMPAC	TYPE B, LBR 40, 12 (NESS TED THICKNESS	COMPACTED THICKNES	S
-0150 D + ¹ 6 ^{8, 36}	7.5' PLATTED PUBLIC UTILITY & DRAINAGE		C-22-34-28-030- ORJALES YVE 4252 THUNDERE SEBRING, FL 3
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THUNDERBIRD ROAD WEST						
SIDEWALK EXTENSION						
PI AN SHEFTS						

SCALE: HORIZ. VERT.	1"=20' N/A	
PROJEC 150	CT NO. 10	REV. 0



IN CHARGE: J.D. LANGFORD, P.E.

DATE: 11/15/2019

G:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings_Details Legend 15009 Thunderbird Rd Sidewalk.dwg, West SW Struct Detail, Dorey, Bruce Acad 1-7 Black.ab

APPROVED BY: JAMES D. LANGFORD, JR., P.E. FLORIDA REGISTRATION NO.: 78402

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THUNDERBIRD ROAD WEST SIDEWALK EXTENSION					
DETAILS					

SCALE: HORIZ. 1"= VERT. N/A	:5 ' 4
PROJECT N 15010	0. REV. 0
SHEET 9	OF 18













		REVISIONS	STATUS	DESIGNED BY:	HIGHLANDS COUNTY	NE UIA
DATE	BY	DESCRIPTION		DRAWN BY		
				DOUG NIETUBICZ	ENGINEERING DEPARIMENT	
			FOR BID	CHECKED BY:	505 S. COMMERCE AVENUE	
				IN CHARGE!	SEBRING, FLORIDA 33870	
				J.D. LANGFORD, P.E.		
C:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Cornet to Grand Prix\All Drawings_X-Sections 15009 Thunderbird Rd Sidewalk.dwg, WEST - (1), Darey, Bruce Colors As Black Except Gray Calors.ctb		DATE: 11/15/2019	FLORIDA REGISTRATION NO.: 78402	OF FLO		



SCALE: HORIZ. 1"=10' VERT. 1"=10'	
PROJECT NO. 15010	REV. 0
SHEET 10 OF	18

THUNDERBIRD ROAD WEST SIDEWALK EXTENSION CROSS SECTIONS













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		REVISIONS	STATUS	DESIGNED BY:	HIGHLANDS COUNTY	NE HIA	
DATE	BY	DESCRIPTION		DRAWN BY:			
				DOUG NIETUBICZ	ENGINEERING DEPARIMENT		
			FOR BID	CHECKED BY: J.D. LANGFORD, P.E.	505 S. COMMERCE AVENUE		
				IN CHARGE:	SEBRING, FLORIDA 33870		
				J.D. LANGFORD, P.E.			
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SCALE: HORIZ. 1"=10' VERT. 1"=10'	
PROJECT NO. 15010	REV. 0
SHEET 11 OF	18

THUNDERBIRD ROAD WEST SIDEWALK EXTENSION CROSS SECTIONS













REVISIONS		REVISIONS STATUS DESIGNED BY:		HIGHLANDS COUNTY /	. WA	
DATE	BY	DESCRIPTION		DRAWN BY:		
				DOUG NIETUBICZ	ENGINEERING DEPARIMENI	
			FOR BID	CHECKED BY: J.D. LANGFORD, P.E.	505 S. COMMERCE AVENUE	
				IN CHARGE:	SEBRING, FLORIDA 33870	
				J.D. LANGFORD, P.E.	APPROVED BY: JAMES D. LANGFORD, JR., P.E. DATE:	
x \PROLECTS\2015\15009 Thunderbird Rd Sidewalk - Cornet to Grand Prix\All Drawings_X-Sections 15009 Thunderbird Rd Sidewalk.dwg, WEST - (3), Dorey, Bruce Colors As Black Except Gray Colors.ctb		DATE: 11/15/2019	FLORIDA REGISTRATION NO.: 78402			





SCALE: HORIZ. 1"=10' VERT. 1"=10'	
PROJECT NO. 15010	REV. 0
SHEET 12 OF	18

THUNDERBIRD ROAD WEST SIDEWALK EXTENSION CROSS SECTIONS











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REVISIONS		REVISIONS STATUS DESIGNED BY an A STATUS DESIGNED BY a STATUS		DESIGNED BY:	HIGHLANDS COUNTY	NE UIA	
DATE	BY	DESCRIPTION	DRAWN BY:				
				DOUG NIETUBICZ	ENGINEERING DEPARIMENI		
			FOR BID	CHECKED BY: J.D. LANGFORD, P.E.	505 S. COMMERCE AVENUE		
				IN CHARGE:	SEBRING, FLORIDA 33870		
				J.D. LANGFORD, P.E.	APPROVED BY: JAMES D. LANGFORD. JR., P.E. DATE:		
G: \PROJECTS\201	5\15009 Thunde	rbird Rd Sidewalk - Cornet to Grand Prix\All Drawings_X-Sections 15009 Thunderbird Rd Sidewalk.dwg, WEST - (4), Dorey, Bruce Colors As Black Except Gray Co	lors.ctb	TDATE: 11/15/2019	FLORIDA REGISTRATION NO.: 78402	UP IL	

THUNDERBIRD ROAD WEST	SCALE: HORIZ. 1"=10' VERT. 1"=10'			
SIDEWALK EXTENSION	PROJECT NO. 15010	REV. 0		
CROSS SECTIONS	SHEET 13 OF 18			





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	ONS		
WORKERS AND THEI ARE BEHIND AN EXI	R ACTIVITIES STING BARRIER		
MORE THAN 2' BEHI OR 15' OR MORE FRO	ND THE CURB, DM THE EDGE	,	
OF TRAVEL WAY.			
HOULDER	INDEX	SHEET	
	102-601	1 of 1]
			SCALE: HORIZ.
	D ROAD V	VEST NC	VERT. N/A
FDOT MAINTEN	JACE OF TH	RAFFIC	15010 0
			SHEET 14 OF 18



	T	able	11			
Тар	er Lei	ngth -	Shoi	ulder	-	
Speed (mph)	0'	⅓L (ft)	12'	Notes		
(mpn)	o Shldr.	Shldr.	Shldr.			
25	28	35	42		1	
30	40	50	60	$L = \frac{WS^2}{60}$		
35	55	68	82			
40	120	150	180		-	
50	133	167	200			
55	147	183	220			
60	160	200	240	L=WS		
65	173	217	260			
W = Wi (cc 5 = Po W W W EI T1 2'	dth of t ombined sted spo (C HERE A ORKERS NCROAC HAN 15° TO TH	otal shot paved ar eed limit CONDI NY VEHI 5 OR THI H THE A BUT NO E EDGE	TION (mph) (CLE, E EIR AC AREA C AREA C OF TR.	S QUIPMENT IVITIES LOSER SER THAN AVEL WAY) r,	
ULDI	ER		וו 102	NDEX 2-602	sheet 1 of 1	
TH FDO	UNDE SIDE ^V T MA	ERBIR WALK INTEN	D RO EXT JACE	DAD W ENSIO	EST N AFFIC	SCALE: HORIZ. VERT. N/A PROJECT NO. 15010 SHEET 15 OF 18



DATE: 11/15/2019

FLORIDA REGISTRATION NO.: 78402

DATE

S:\PROJECTS\2015\15009 Thunderbird Rd Sidewalk - Comet to Grand Prix\All Drawings_Details Legend 15009 Thunderbird Rd Sidewalk.dwg, West Legend 603, Dorey, Bruce Acad 1-7 Black.ctb

			A							
ONE LANE ROAD AHEAD						ROAD WORK AHEAD				
upstream	within	the pr	roject	limits.						
							_			
							-			
1										
1						_				
ing of be II 5/Drums		Dist Betv Sig	ance veen gns		Buf1 Spa	er ce				
On a angent	A	В	С	D						
50' 50'	200' 200'	200' 200'	200' 200'	100' 100'	15 20	5' 0'				
50'	200'	200'	200'	100'	25	0'				
50'	200'	200'	200'	100'	30	5' 0'				
50 [°] 100'	500'	500'	500'	250'	42	5'				
100'	2640'	1500'	1000'	500'	49	5'				
100'	2640' 2640'	1500' 1500'	1000' 1000'	500' 500'	57 64	0' 5'				
100'	2640'	1500	1000'	500'	73	0'				
CO WHE WOR ENCH THE OUT	NDIT RE AN KERS ROACH CENTI SIDE T	Y VEH OR TH THE ERLINE	5 ICLE, I EIR AG AREA I AND DGE OI	EQUIPM CTIVITI BETWEI A LINE - TRAV	1ENT, TES EN 2' EL WA	AY.				
				INDEX		SHEET	-			
ľ			10	2-60)3	1 of	3			
TH	UND SIDE Г МА	ERB WAL	IRD .K E	ROA XTEN	D W NSIC F TR	/EST N AFFIC		SCALE: HORIZ. VERT. PROJE 150	N/A CT NO. 010	REV. 0
								SHE	ET 16 OF	⁻ 18



CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS 200' OR MORE DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

DURATION NOTES

1. ROAD WORK AHEAD sign may be omitted if all of the following conditions are met:

a. Work operations are 60 minutes or less.

b. Speed is 45 mph or less

sight obstructions to vehicles approaching the work area for stance of 600 feet. icles in the work area have high-intensity, rotating, hing, oscillating, or strobe lights operating. ime and complexity of the roadway has been considered.							
	INDEX	SHEET					
NIERSECTION	102-605	1 of 1					
THUNDERBIRD RO SIDEWALK EXT FDOT MAINTENACE	IC	SC HO VE	ALE: RIZ. RT. N/A ROJECT NO. 15010 SHEET 17 OF	REV. 0 18			



DATE