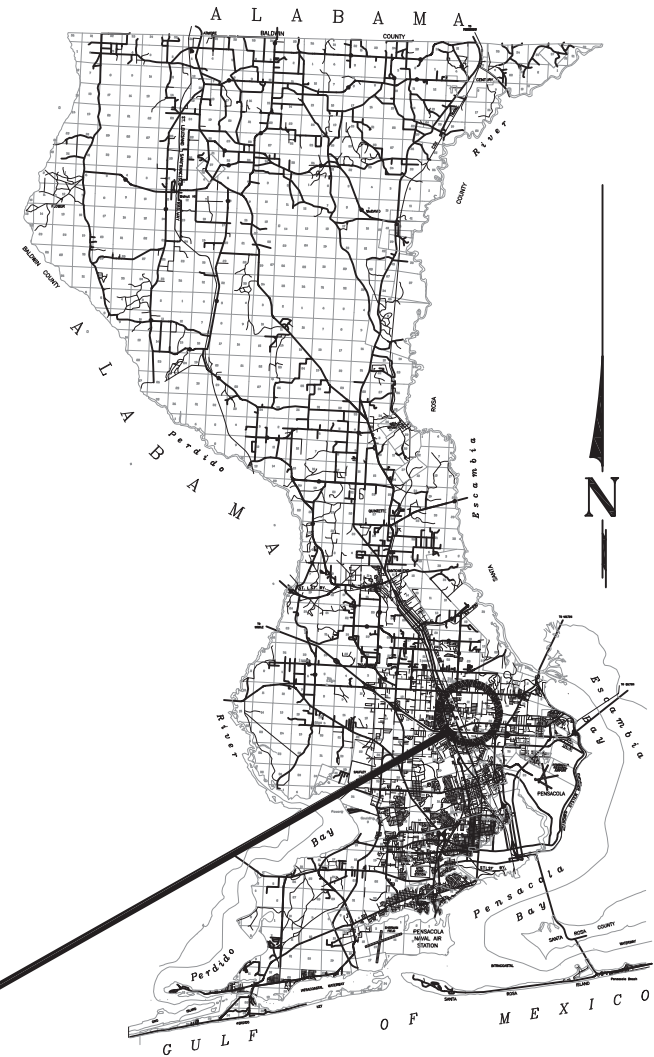




**BOARD OF COUNTY COMMISSIONERS
 ESCAMBIA COUNTY, FLORIDA
 PUBLIC WORKS DEPARTMENT
 ENGINEERING / INFRASTRUCTURE DIVISION**



**LAP FINANCIAL PROJECT ID 436252-2-58-01
 (FEDERAL FUNDS)**

PLANS PROPOSED FOR

**JOHNSON AVENUE
 STORM SEWER REPAIRS**

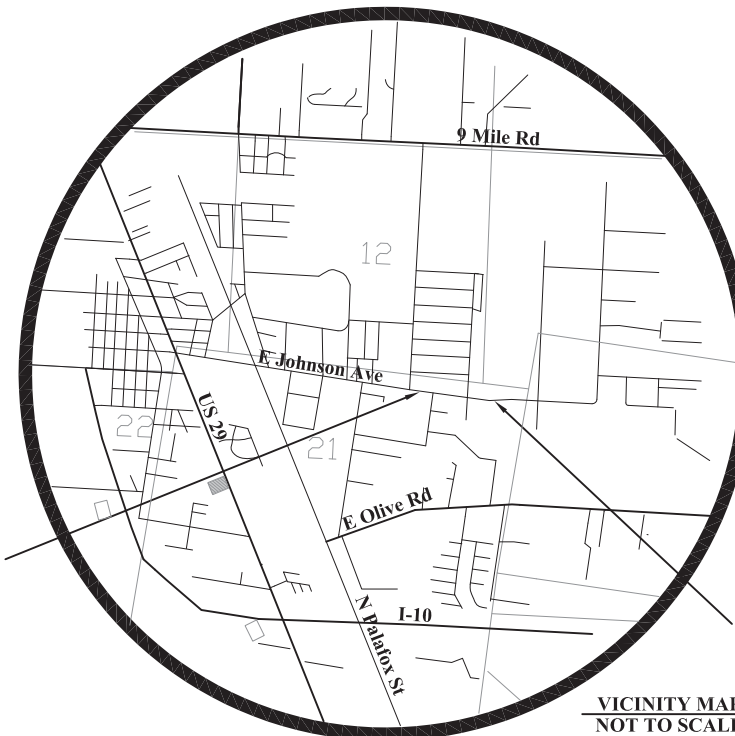
ENG FLOOD 0414-87

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	GENERAL NOTES
3	SUMMARY OF PAY ITEMS
4 THRU 6	PROPOSED PLAN/PROFILE
7 THRU 11	DRAINAGE STRUCTURE SECTIONS
12 THRU 14	MISCELLANEOUS DETAILS
15	DRIVEWAY DETAILS

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (DATED JANUARY 2015), THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS (DATED JANUARY 2015), AND THE LATEST ESCAMBIA COUNTY STANDARD SPECIFICATIONS.

ANY REFERENCE TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, DIVISION 1, GENERAL REQUIREMENTS AND COVENANTS, SHALL BE EXCLUDED AND NOT APPLICABLE TO ANY SPECIFICATION REFERRED HEREIN OR OTHERWISE LISTED IN THESE PLANS OR RELATED DOCUMENTS OR THE ESCAMBIA COUNTY TECHNICAL SPECIFICATIONS.



- COMMISSIONERS**
- DISTRICT ONE **WILSON ROBERTSON**
 - DISTRICT TWO **DOUG UNDERHILL**
 - DISTRICT THREE **LUMON MAY**
 - DISTRICT FOUR **GROVER C. ROBINSON, IV, VICE CHAIRMAN**
 - DISTRICT FIVE **STEVEN BARRY, CHAIRMAN**

**OCTOBER 2016
 RELEASED FOR CONSTRUCTION**

KEY SHEET REVISIONS	
DATE	DESCRIPTION

BEGIN PROJECT
 STA 52+75.00

END PROJECT
 STA 67+10.00

VICINITY MAP
 NOT TO SCALE

	LENGTH OF PROJECT	
	LINEAR FEET	MILES
ROADWAY	1435	0.272
BRIDGES	0.00	0.000
NET LENGTH OF PROJECT	1435	0.272
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	1435	0.272

ESCAMBIA COUNTY PROJECT MANAGER: NICK CHAUVIN

Digitally signed by Kari E Tharpe
 DN: c=US, o=IdentTrust ACES
 Business Representative,
 ou=AMERICAN CONSULTING
 ENGINEERS, cn=Kari E Tharpe,
 0.9.2342.19200300.100.1.1=A0109
 800000015001020C7000004645
 Date: 2016.03.28 13:30:41 -05'00'

CONSTRUCTION PLANS
 ENGINEER OF RECORD
 KARI EDWARDS THARPE, P.E.



4489 Woodbine Road • Pace, Florida 32571
 Tel 850.289.1000 • Fax 850.289.1001



P.E. NO. 73720

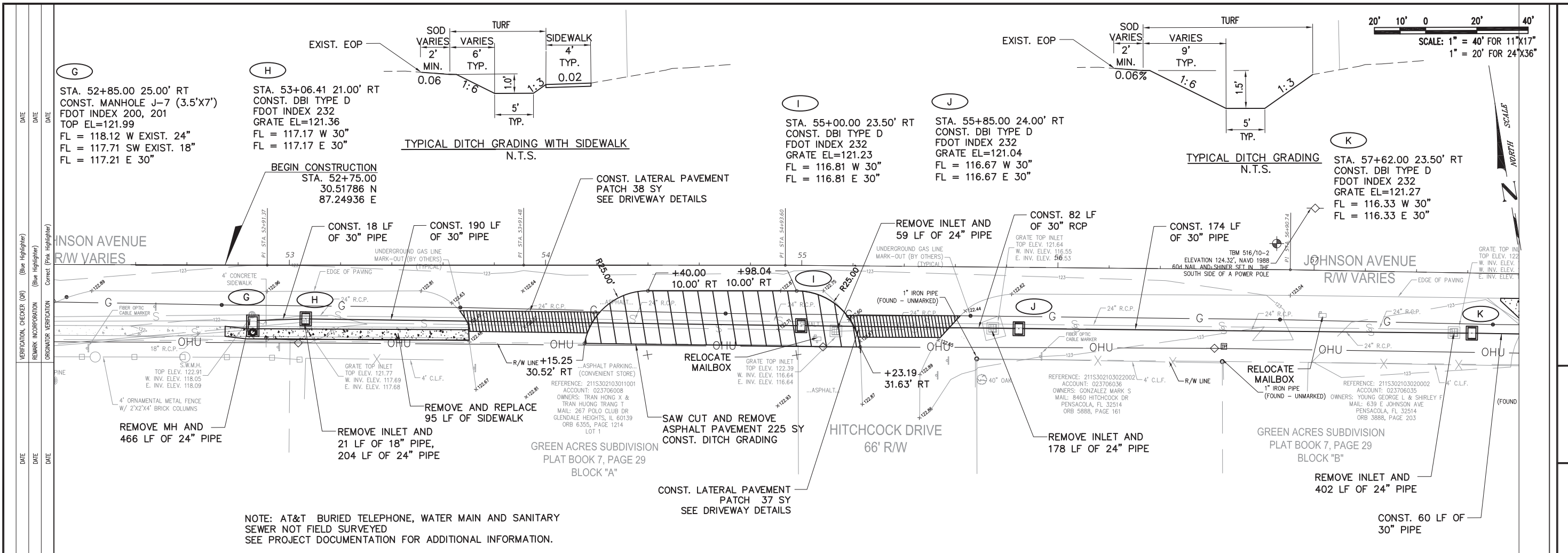
Certificate of Authorization No. 9302

SUMMARY OF PAY ITEMS:

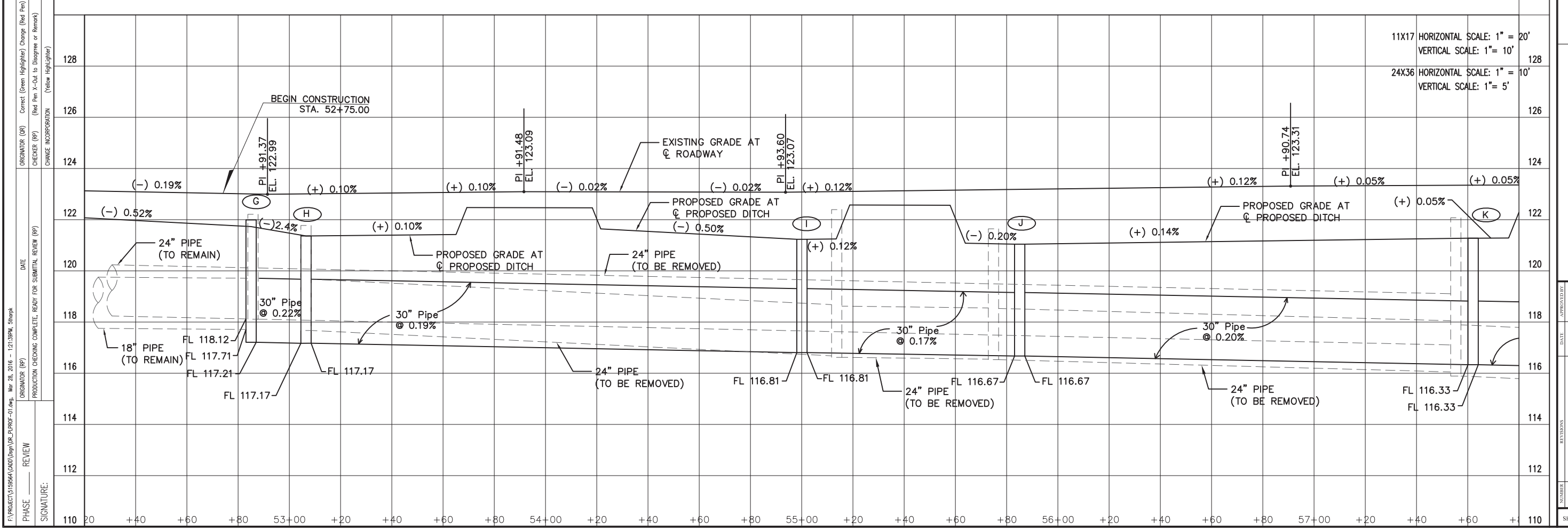
Bid Item No.	Description	Unit	Quantity
1	Mobilization	LS	1
2	Relocate existing standard mailbox	EA	4
3	Earthwork Fill, County Specs 2300	CY	50
4	3" Top Soil	SY	3000
5	Earthwork Establishing Grade, County Specs 2300	SY	3000
6	Remove and Replace Unsuitable Materials	CY	500
7	Construct 2" Thick Asphalt Flume	SY	10
8	Lateral Pavement Patch (6" GAB)	SY	120
9	Remove Existing Asphalt	SY	350
10	Saw cut Existing Asphalt	LF	550
11	Maintenance of Traffic (Includes Plan and Implementation)	LS	1
12	6" Fiber Reinforced Concrete Driveway	SY	188
13	5' Fiber Reinforced Concrete Sidewalk	LF	95
14	Saw cut Existing Concrete	LF	50
15	Remove Existing 4" Concrete	SY	42
16	Misc. Concrete	CY	2.5
17	Ditch Bottom Inlet, Type D (H, I, J, K, K1, M, P, Q)	EA	8
18	Manhole with J-7, (4'x4') FDOT Structure Bottom (L)	EA	1
19	Manhole w/ J-7, (3.5'x7') FDOT Structure Bottom (G)	EA	1
20	Remove Ditch Bottom Inlet (including top and bottom)	EA	7
21	30" HP DW HDPE Pipe	LF	1199
22	30" RCP Pipe	LF	138
23	30" RCP Side Drain MES	EA	3
24	Pipe Removal	LF	1845
25	Remove Existing Concrete Headwall	EA	1
26	Remove Existing Sand Bag Headwall	EA	2
27	Centipede Sod	SY	3000
28	Adjust Existing Rip Rap (Includes 4" Bedding Stone and Geotextile Fabric)	LS	1
29	Silt Fence Type III	LF	1000
30	Baled Hay or Straw	EA	50
31	Erosion Control (Includes SWPPP Plan, Implementation, replacements, etc.)	LS	1
32	Jobsite Board (for posting project information, permits, etc.)	EA	1

PROJECT: 151566A (C&S) (V&P) - SUBMITTALS, Mar 28, 2016 - 11:25:04, 3/28/16
 PHASE: REVIEW
 SIGNATURE: _____
 ORIGINATOR (RP) _____ DATE _____
 PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP) _____ DATE _____
 CHECKER (RP) _____ DATE _____
 ORIGINATOR (RP) _____ DATE _____
 CHANGE INCORPORATION (Yellow Highlighter) _____ DATE _____
 CORRECT (Green Highlighter) Change (Red Pen) _____ DATE _____
 CHECKER (RP) (Red Pen X-Out to Disagree or Remark) _____ DATE _____
 VERIFICATION, CHECKER (RP) (Blue Highlighter) _____ DATE _____
 REMARK INCORPORATION (Blue Highlighter) _____ DATE _____
 ORIGINATOR VERIFICATION Correct (Pink Highlighter) _____ DATE _____

	
JOHNSON AVENUE STORM SEWER REPAIRS SUMMARY OF PAY ITEMS	
KARI EDWARDS THARPE, P.E. No. 17370 DATE: _____ PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS PROJECT NUMBER: 436252-58-01	PROJECT MANAGER: KARLE THARPE, PE
	
4480 Woodbine Road • Pace, Florida 32571 Tel 850.288.1000 • Fax 850.288.1001 Certificate of Authorization No. 9302	
REVISIONS NUMBER _____ DATE _____ APPROVED BY _____	SHEET 3



NOTE: AT&T BURIED TELEPHONE, WATER MAIN AND SANITARY SEWER NOT FIELD SURVEYED SEE PROJECT DOCUMENTATION FOR ADDITIONAL INFORMATION.



VERIFICATION, CHECKER (GR) (Blue Highlighter) DATE
 REMARK INCORPORATION (Blue Highlighter)
 ORIGINATOR VERIFICATION (Blue Highlighter) DATE
 CORRECT (Pink Highlighter)
 CHECKER (RF) (Red Pen X-Out to Diagrams or Remarks) DATE
 CHANGE INCORPORATION (Yellow Highlighter) DATE
 ORIGINATOR (RF) (Green Highlighter) Change (Red Pen) DATE
 PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RF) DATE
 ORIGINATOR (RF) DATE
 REVIEW DATE
 SIGNATURE: _____

JOHNSON AVENUE
STORM SEWER REPAIRS

PROPOSED PLAN/PROFILE

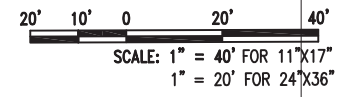
KARL EDWARDS THARPE, P.E. No. 93720

DATE: _____
 PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS
 PROJECT NUMBER: 436252-58-01
 PROJECT MANAGER: _____
 PROJECT ENGINEER: KARLE THARPE, PE

American CONSULTING

4480 Woodbine Road • Pace, Florida 32571
 Tel: 850.288.1000 • Fax: 850.288.1001
 Certificate of Authorization No. 9302

SHEET **4**

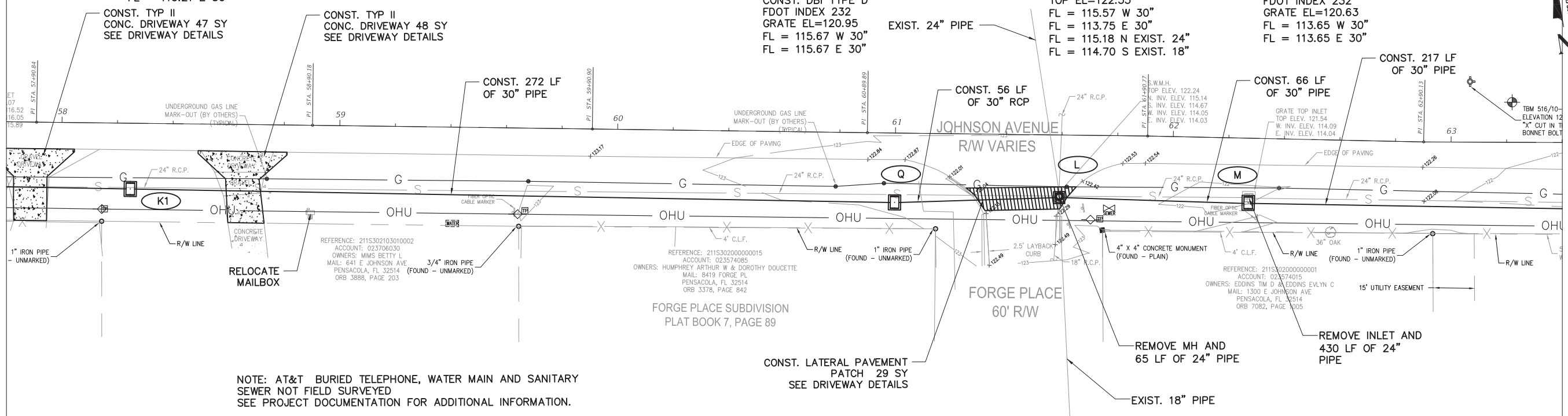


(K1)
 STA. 58+25.00 23.50' RT
 CONST. DBI TYPE D
 FDOT INDEX 232
 GRATE EL=121.99
 FL = 116.21 W 30"
 FL = 116.21 E 30"

(Q)
 STA. 61+00.00 25.00' RT
 CONST. DBI TYPE D
 FDOT INDEX 232
 GRATE EL=120.95
 FL = 115.67 W 30"
 FL = 115.67 E 30"

(L)
 STA. 61+60.00 22.13' RT
 CONST. MANHOLE J-7 (4'X4')
 FDOT INDEX 200, 201
 TOP EL=122.33
 FL = 115.57 W 30"
 FL = 113.75 E 30"
 FL = 115.18 N EXIST. 24"
 FL = 114.70 S EXIST. 18"

(M)
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 FDOT INDEX 232
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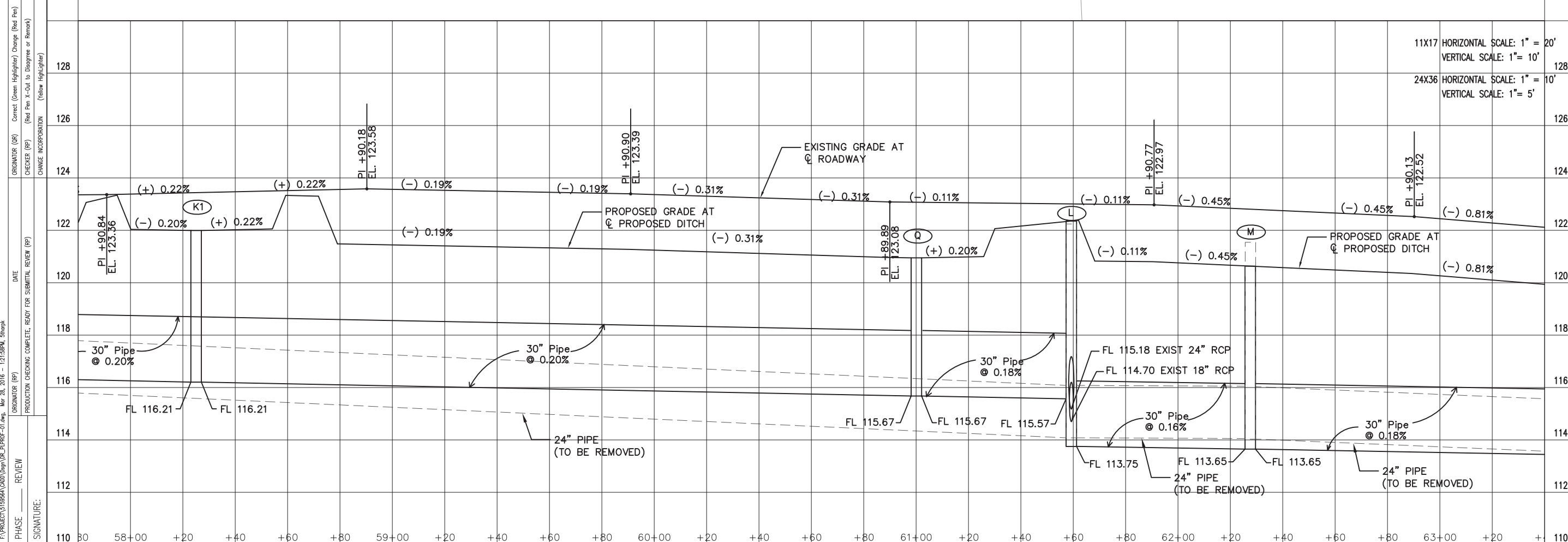


NOTE: AT&T BURIED TELEPHONE, WATER MAIN AND SANITARY SEWER NOT FIELD SURVEYED SEE PROJECT DOCUMENTATION FOR ADDITIONAL INFORMATION.

REFERENCE: 211S302103010002
 ACCOUNT: 023706030
 OWNERS: MIMS BETTY L
 MAIL: 641 E JOHNSON AVE
 PENSACOLA, FL 32514
 ORB 3888, PAGE 203

REFERENCE: 211S302000000015
 ACCOUNT: 023574085
 OWNERS: HUMPHREY ARTHUR W & DOROTHY DOUCETTE
 MAIL: 8419 FORGE PL
 PENSACOLA, FL 32514
 ORB 3378, PAGE 842

REFERENCE: 211S302000000001
 ACCOUNT: 023574015
 OWNERS: EDDINS TIM D & EDDINS EVELYN C
 MAIL: 1300 E JOHNSON AVE
 PENSACOLA, FL 32514
 ORB 7062, PAGE 1005



11X17 HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

24X36 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'

PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)	DATE	ORIGINATOR (RP)	CHECKER (RP)	CHANGE INCORPORATION	DATE	ORIGINATOR (RP)	CHECKER (RP)	CHANGE INCORPORATION	DATE	ORIGINATOR (RP)	CHECKER (RP)	CHANGE INCORPORATION	DATE	ORIGINATOR (RP)	CHECKER (RP)	CHANGE INCORPORATION	DATE	

JOHNSON AVENUE

STORM SEWER REPAIRS

PROPOSED PLAN/PROFILE

KARI EDWARDS THARPE, P.E. No. 93720

DATE: _____

PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS

PROJECT NUMBER: 436252-58-01

PROJECT MANAGER: KARLE THARPE, PE

4480 Woodbine Road • Pace, Florida 32571

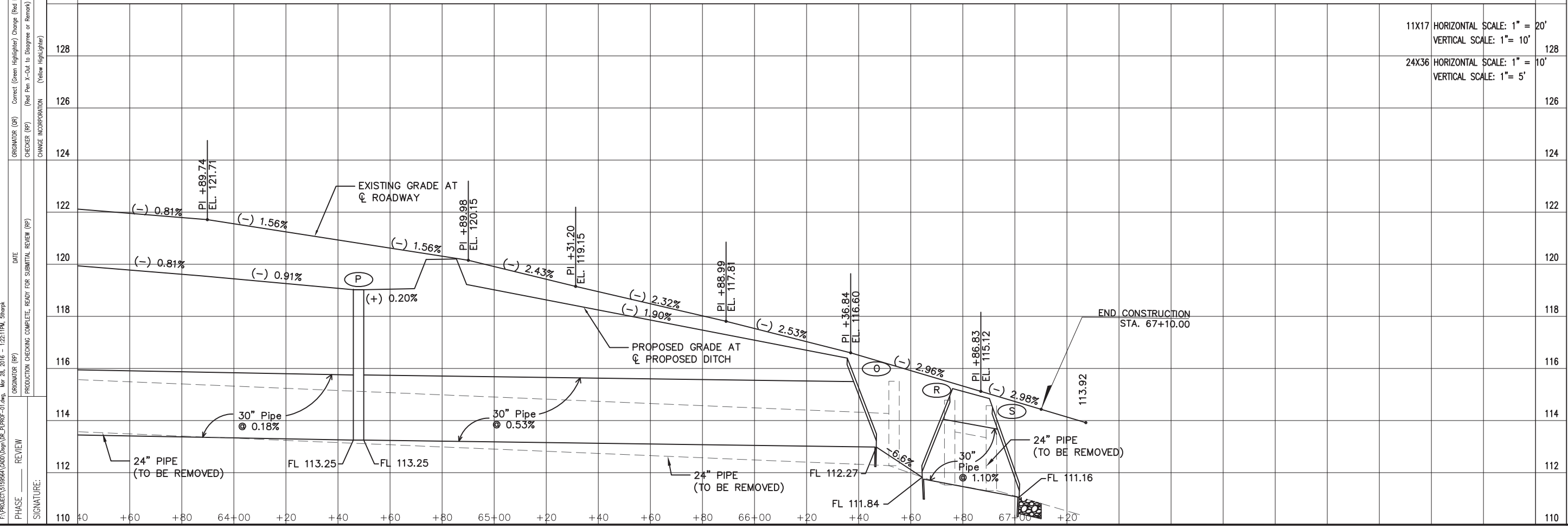
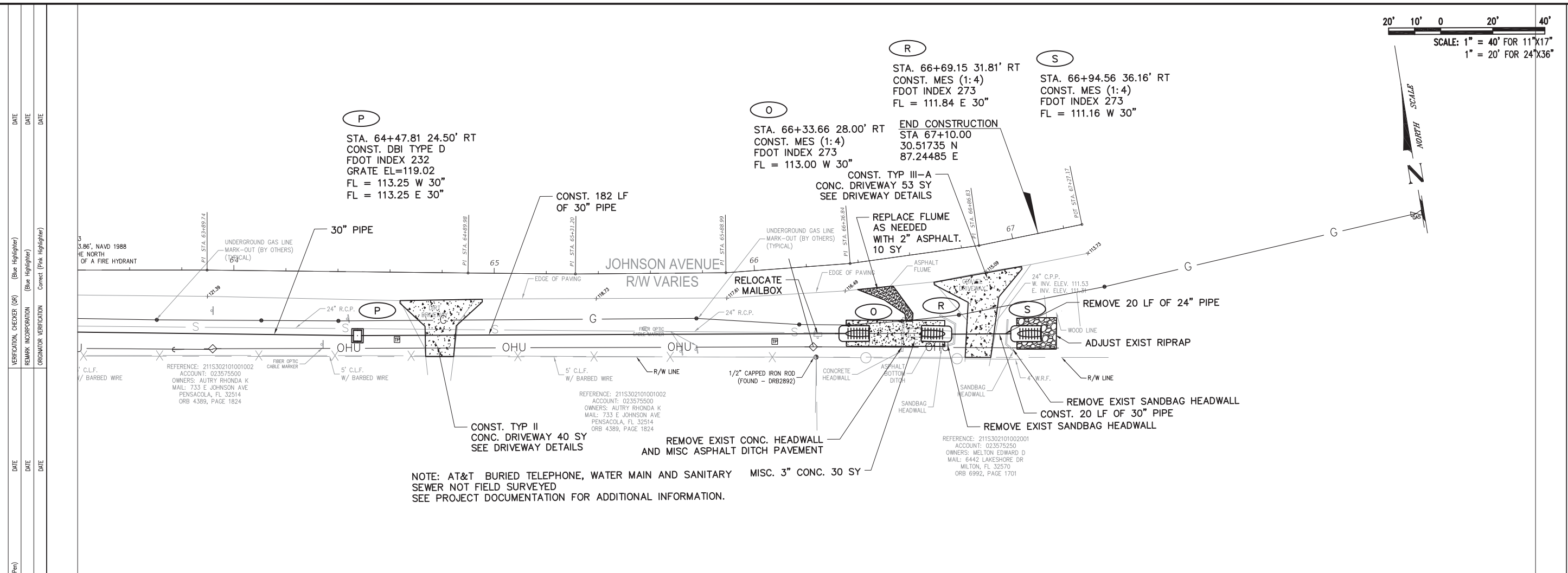
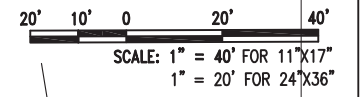
Tel: 850.288.1000 • Fax: 850.288.1001

Certificate of Authorization No. 9302

REVISIONS

NUMBER	DATE	APPROVED BY

SHEET **5**



PHASE	REVIEW	DATE	ORIGINATOR (RP)	PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)	DATE	ORIGINATOR (RP)	CORRECT (Green Highlighter) Change (Red Pen)	CHECKER (RP)	(Red Pen X-Out to Disagree or Remark)	DATE	ORIGINATOR (RP)	CORRECT (Blue Highlighter)	CHECKER (RP)	(Blue Highlighter)	DATE	ORIGINATOR (RP)	CORRECT (Blue Highlighter)	CHECKER (RP)	(Blue Highlighter)	DATE	

SIGNATURE:

JOHNSON AVENUE

STORM SEWER REPAIRS

PROPOSED PLAN/PROFILE

KARI EDWARDS THARPE, P.E. No. 37370	DATE: _____
PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS	PROJECT NUMBER: 436252-58-01
PROJECT MANAGER: KARLE THARPE, PE	

4489 Woodbine Road • Pace, Florida 32571
Tel: 850.288.1000 • Fax: 850.288.1001
Certificate of Authorization No. 9302

NO.	DATE	APPROVED BY	REVISIONS

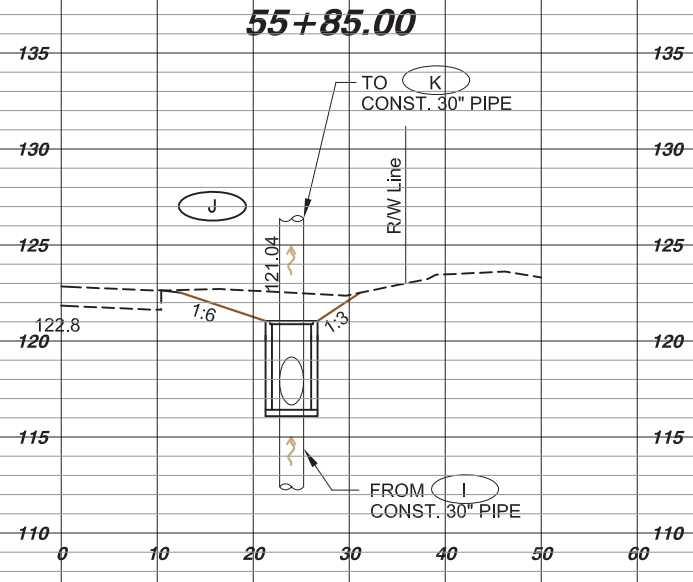
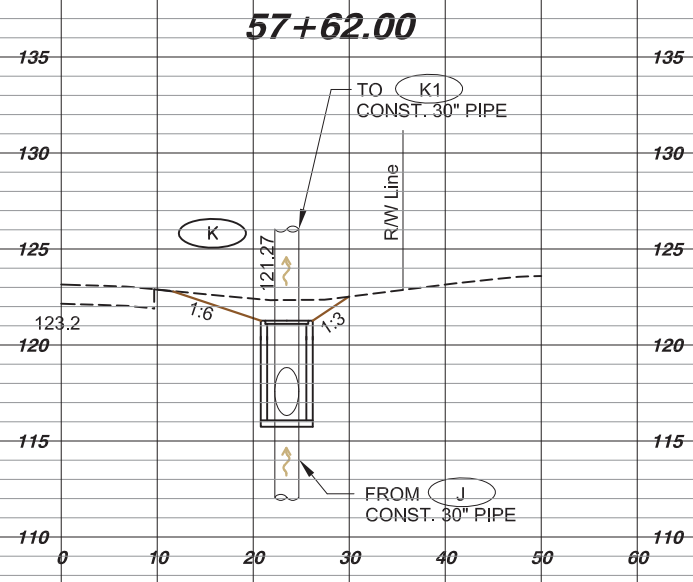
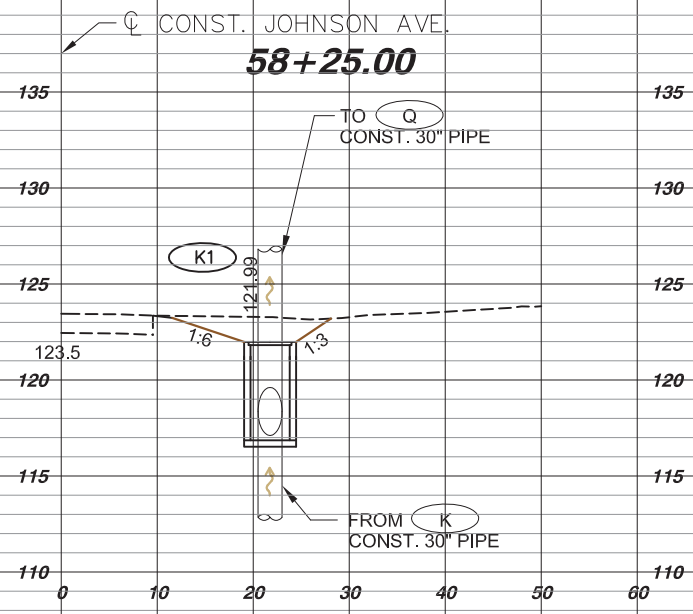
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SIGNATURE:										REMARK INCORPORATION	(Blue Highlighter)
										ORIGINATOR VERIFICATION	Correct (Pink Highlighter)

11x17 HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

24x36 HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



REGULAR EXC. EMBANKMENT
A V A V

JOHNSON AVENUE STORM SEWER REPAIRS DRAINAGE STRUCTURES



KARI EDWARDS THARPE, P.E. No. 73720
DATE
PROJECT LOCATION:
JOHNSON AVENUE STORM SEWER REPAIRS
PROJECT NUMBER:
486252-5801 PROJECT MANAGER:
KARIE THARPE, PE

American CONSULTING
4489 Woodbine Road • Tallahassee, Florida 32311
Tel 904.288.1000 • Fax 904.288.1001
Certificate of Authorization No. 9302

NUMBER	REVISIONS	DATE	APPROVAL

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PHASE REVIEW

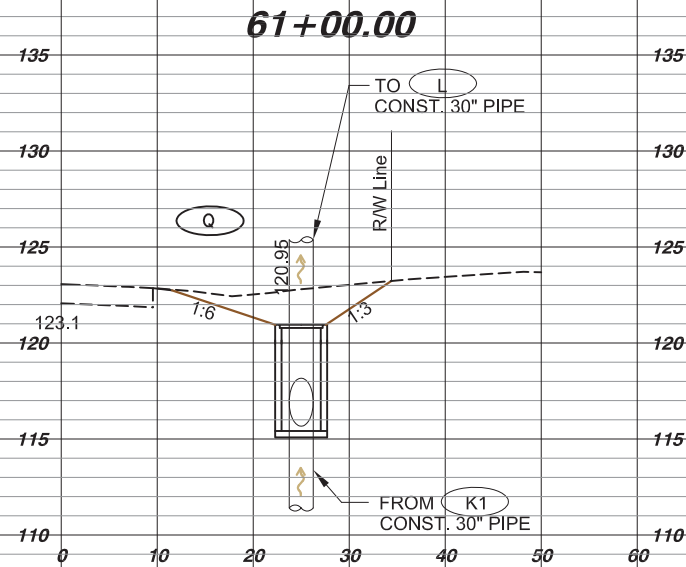
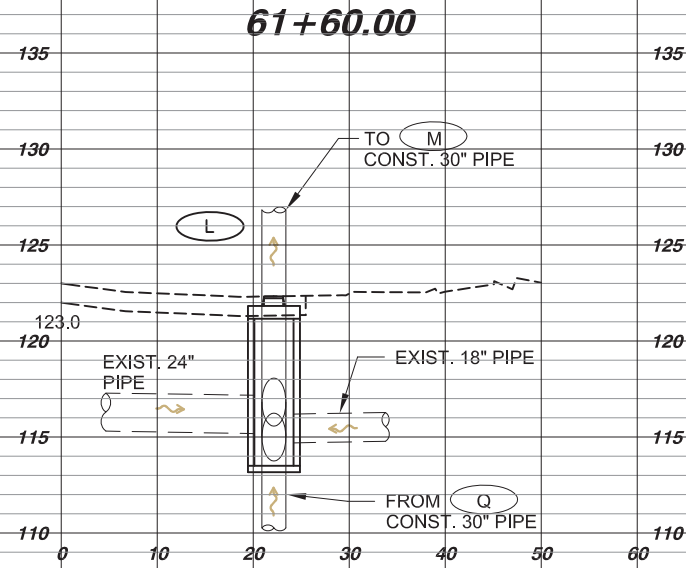
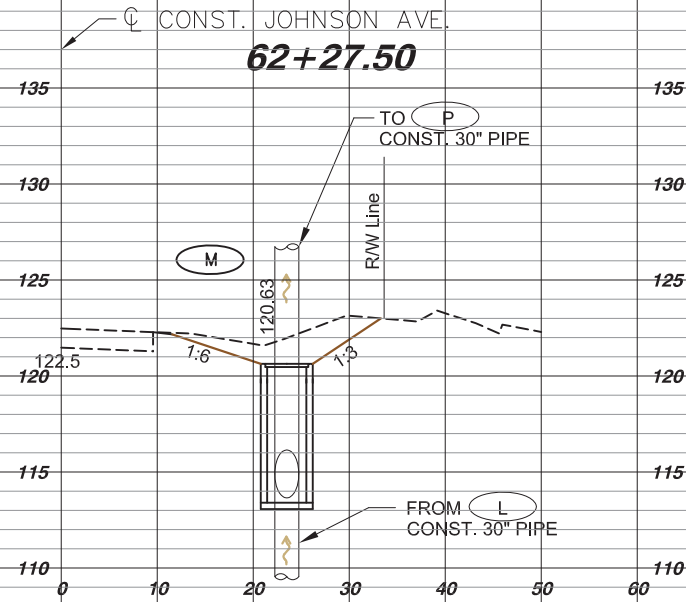
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ORIGINATOR (OR) CORRECT (Green Highlighter) Change (Red Pen) CHECKER (RP) (Red Pen X-Out to Disapprove or Remark) CHANGE INCORPORATION (Yellow Highlighter) DATE

VERIFICATION, CHECKER (OR) (Blue Highlighter) REMARK INCORPORATION (Blue Highlighter) ORIGINATOR VERIFICATION Correct (Pink Highlighter) DATE

11x17 HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

24x36 HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



REGULAR A V
EXC. V
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JOHNSON AVENUE STORM SEWER REPAIRS DRAINAGE STRUCTURES



KARI EDWARDS THARPE, P.E. No. 73720

DATE

PROJECT LOCATION:
JOHNSON AVENUE STORM SEWER REPAIRS

PROJECT NUMBER:
486232-0601

PROJECT MANAGER:
KARIE THARPE, PE

American
CONSULTING
4489 Woodbine Road • Tallahassee, Florida 32309
Tel 850.288.1000 • Fax 850.288.1001
Certificate of Authorization No. 9302

NUMBER	REVISIONS	DATE	APPROVAL

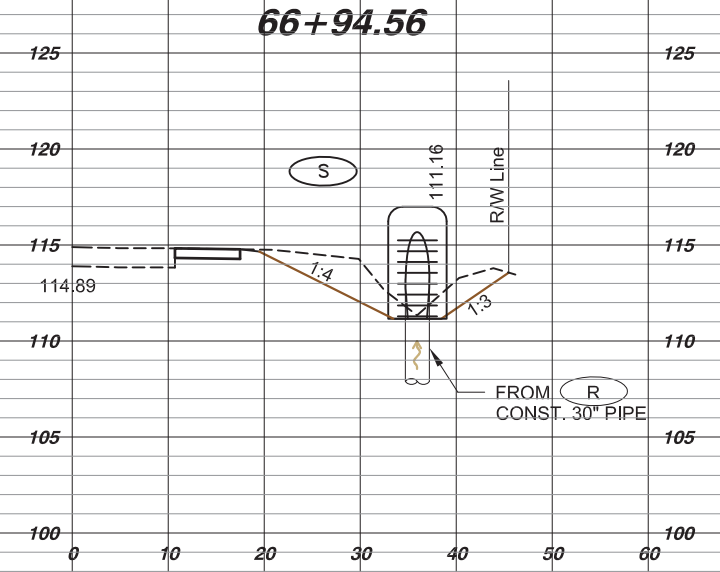
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SIGNATURE:																				

11x17 HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

24x36 HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'

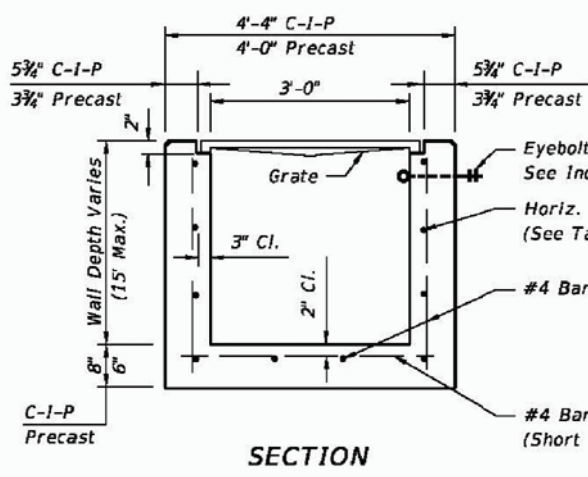
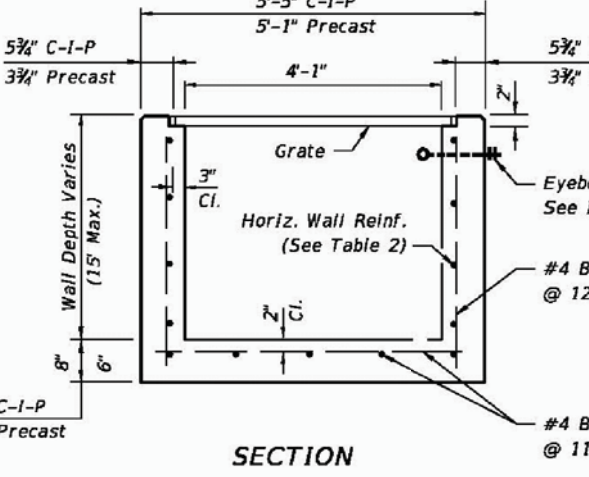
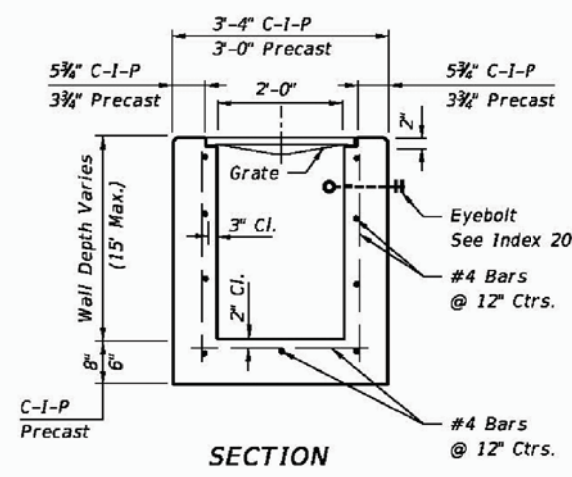
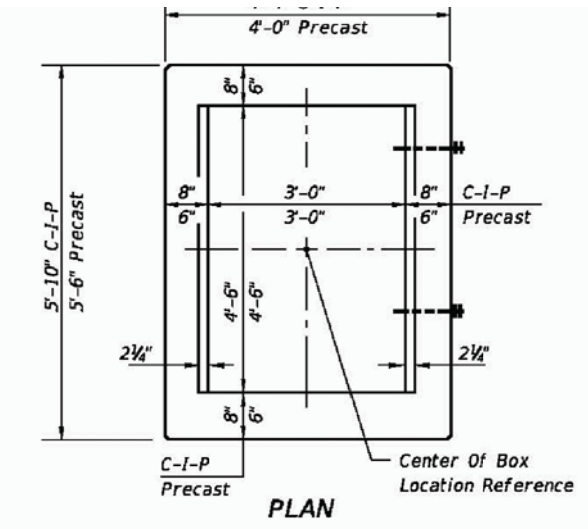
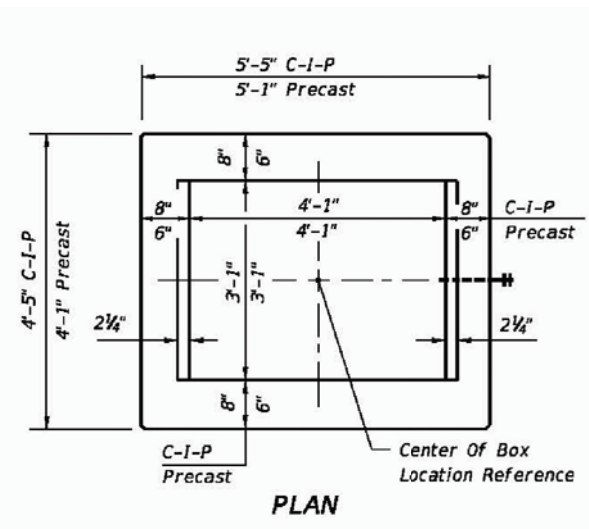
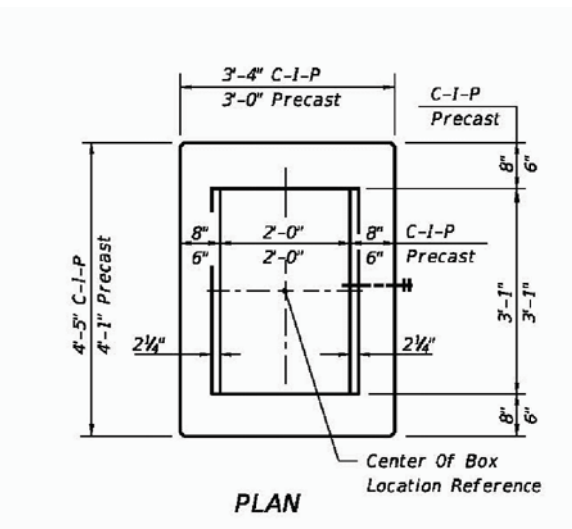
CONST. JOHNSON AVE.



REGULAR EXC. EMBANKMENT
A V A V

<p>JOHNSON AVENUE STORM SEWER REPAIRS DRAINAGE STRUCTURES</p>	
<p>KARI EDWARDS THARPE, P.E. No. 73720</p>	<p>DATE</p>
<p>PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS</p>	
<p>PROJECT NUMBER: 486252-5601</p>	<p>PROJECT MANAGER: KARIE THARPE, PE</p>
<p>4489 Woodbine Road • Page, Florida 32571 Tel 850.288.1000 • Fax 850.288.1001 Certificate of Authorization No. 9302</p>	
<p>REVISIONS</p>	<p>DATE APPROVAL</p>
<p>NUMBER</p>	<p>DATE</p>
<p>SHEET 11</p>	

F:\PROJECTS\151896A\CAD\DWG\UR_MISCELLANEOUS.DWG, Apr 28, 2016 - 12:45:54, sbrpk
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 CHECKER (RP) (Red Pen X-Out to Diagram or Remark)
 ORIGINATOR (RP) (Green Highlighter) Change (Red Pen)
 VERIFICATION, CHECKER (RP) (Blue Highlighter)
 REMARK INCORPORATION (Blue Highlighter)
 ORIGINATOR VERIFICATION Correct (Pink Highlighter)
 DATE DATE DATE DATE DATE DATE
 PHASE REVIEW
 SIGNATURE:



HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWF
0'-15'	A12	0.20	12"	8"

TYPE C

Recommended Maximum Pipe Size:
 2'-0" Wall - 18" Pipe
 3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWF
0'-6'	A12	0.20	12"	8"
6'-10'	A6	0.20	6"	5"
10'-13'	A4	0.20	4"	3"
10'-15'	B5.5	0.24	5 1/2"	5"

TYPE D

Recommended Maximum Pipe Size:
 3'-1" Wall - 24" Pipe
 4'-1" Wall - 36" Pipe

HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)

WALL DEPTH	SCHEDULE	AREA (in. ² /ft.)	MAX. SPACING	
			BARS	WWF
0'-5'	A12	0.20	12"	8"
0'-7.5'	A6	0.20	6"	5"
7.5'-10'	B5.5	0.24	5 1/2"	5"
10'-15'	C6.5	0.37	6 1/2"	6"

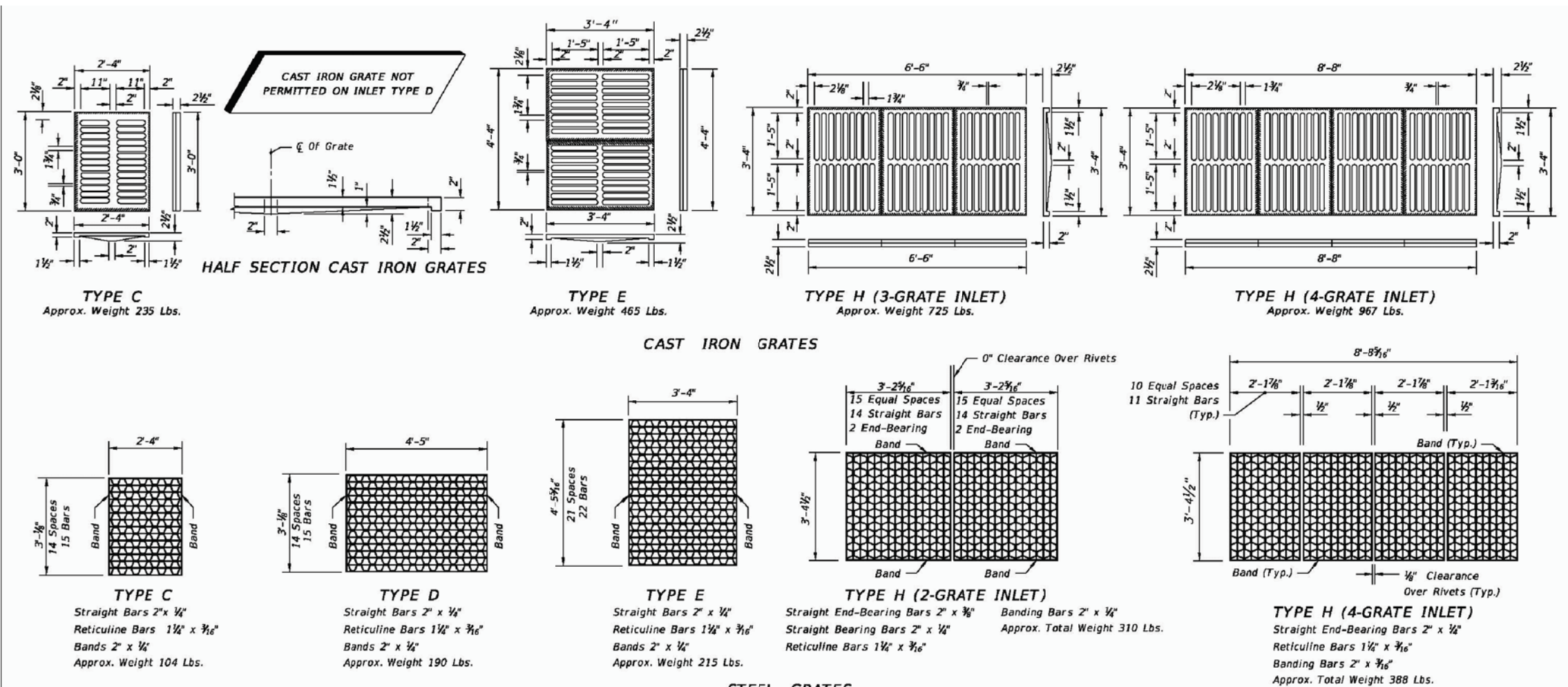
TYPE E

Recommended Maximum Pipe Size:
 3'-0" Wall - 24" Pipe
 4'-6" Wall - 36" Pipe

JOHNSON AVENUE
STORM SEWER REPAIRS
 MISCELLANEOUS DETAILS

 KARI EDWARDS THARPE, P.E. No. 37370
 DATE _____ PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS
 PROJECT NUMBER: 436252-2-58-01 PROJECT MANAGER: KARLE THARPE, PE

 4480 Woodbine Road • Pace, Florida 32571
 Tel 850.288.1000 • Fax 850.288.1001
 Certificate of Authorization No. 9302
 REVISIONS
 SHEET 12



NOTE: Steel Grates Are Required On Inlets With Traversable Slots And On Inlets Where Bicycle Traffic Is Anticipated.

GENERAL NOTES

- These inlets are suitable for bicycle traffic and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheel loads. These inlets may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet.
- Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and areas subject to pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans. Traversable slots shall not be used in areas subject to occasional bicycle traffic.
- Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dip galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
- Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
- All exposed edges and corners shall be 3/16" chamfer or tooled to 1/4" radius.
- Concrete inlet pavement to be used on inlets without slots and inlets with non-traversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
- Traversable slots constructed in existing inlets shall be paid for as inlets partial. For conversion work and method of payment see TRAVERSABLE SLOT INLETS (PARTIAL) FOR EXISTING INLETS.
- Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Performance Turf, 5Y.
- For supplementary details see Index No. 201.
- All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. Bars to be cut or bent for 1 1/2" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.



REVISIONS	DATE	APPROVED BY

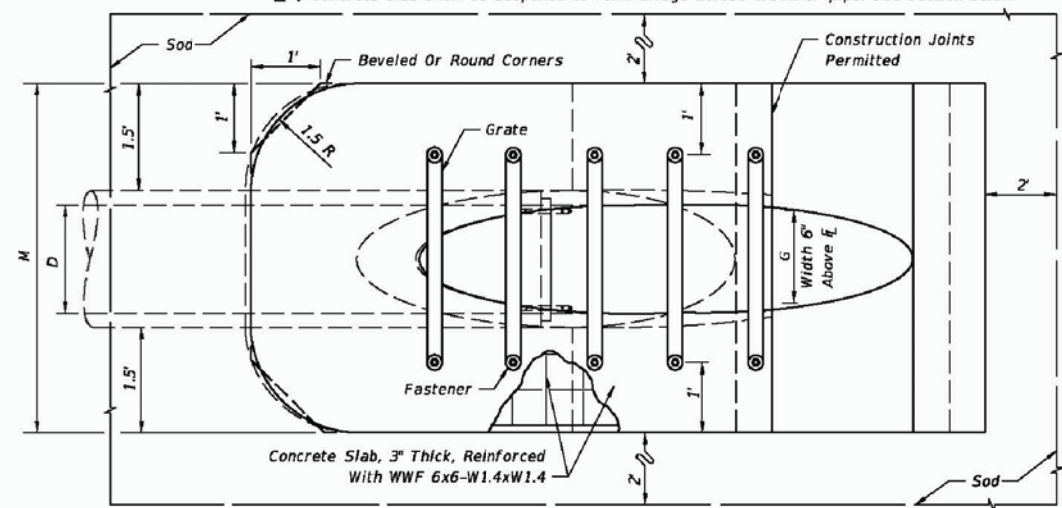
PROJECT: S:\159564\CAD\Drawings\UR\MISCDETAILS.DWG, Apr 28, 2016 - 1:25:37PM, shrank
 PHASE: REVIEW
 SIGNATURE:

ORIGINATOR (RP)	CHECKER (RP)	VERIFICATION, CHECKER (RP)	DATE	ORIGINATOR (RP)	CHECKER (RP)	VERIFICATION, CHECKER (RP)	DATE
PRODUCTION CHECKING COMPLETE, READY FOR SUBMITTAL REVIEW (RP)	CHANGE INCORPORATION (Yellow Highlighter)	REMARK INCORPORATION (Blue Highlighter)	DATE	ORIGINATOR VERIFICATION (Blue Highlighter)	Correct (Pink Highlighter)	REMARK INCORPORATION (Blue Highlighter)	DATE

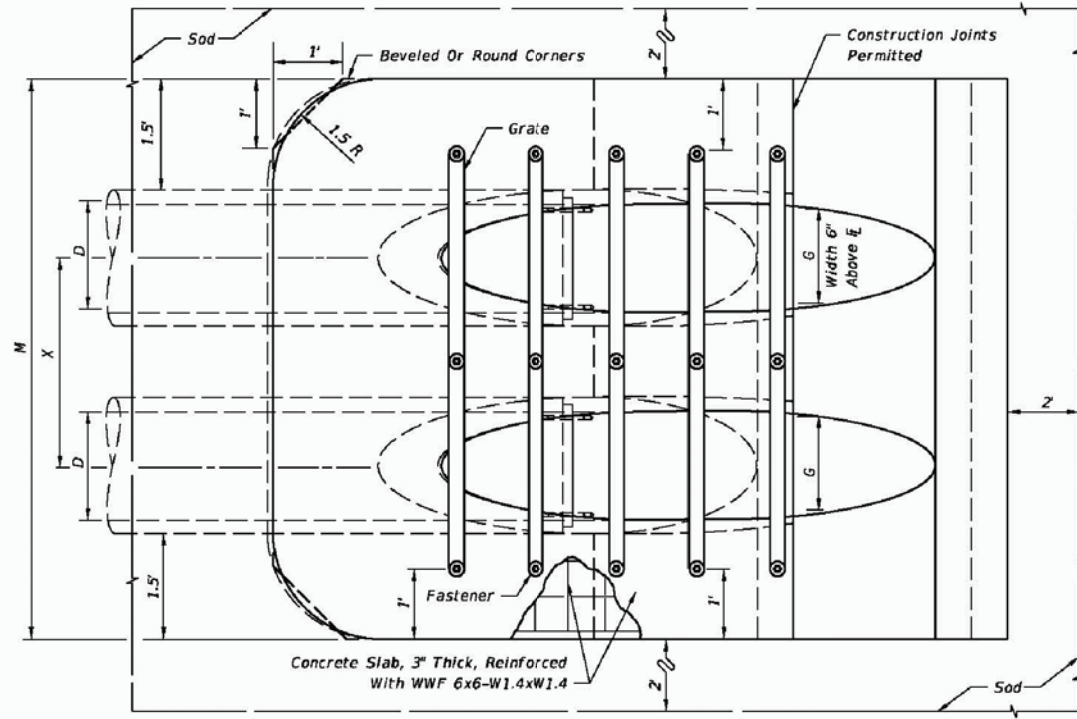
D	X	A	B	C	E	F	G	H	M				N	GRATE SIZES		CONCRETE (CY)				SODDING (SY)			
									Single Pipe	Double Pipe	Triple Pipe	Quad Pipe		Standard Weight Pipe	Extra Strong Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad Pipe	Single Pipe	Double Pipe	Triple Pipe	Quad Pipe
15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'	4.0'	4.63'	7.21'	9.79'	12.37'	1.19'			0.76	1.16	1.54	1.94	8	10	11	12
18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	1.21'			0.85	1.28	1.71	2.17	9	10	12	13
24"	3'-5"	2.53'	7.18' Δ	9.71'	7.03' Δ	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	1.25'			1.02	1.58	2.15	2.75	10	12	13	15
30"	4'-3"	2.70'	9.25'	11.95'	9.03'	13'	2.00'	4.0'	6.08'	10.33'	14.58'	18.83'	1.29'	2 1/2"	3"	1.23	1.98	2.74	3.50	12	14	15	17
36"	5'-1"	2.87'	11.31' ◇	14.18'	11.03' ◇	15'	2.24'	4.0'	6.67'	11.75'	16.83'	21.92'	1.33'	2 1/2"	3"	1.40	2.38	3.33	4.24	13	15	17	20
42"	6'-0"	3.05'	13.37'	16.42'	13.03'	17'	2.45'	4.0'	7.25'	13.25'	19.25'	25.25'	1.38'	2 1/2"	3 1/2"	1.60	2.83	4.04	5.26	14	17	19	22
48"	6'-9"	3.22'	15.43'	18.65'	15.03'	19'	2.65'	4.0'	7.83'	14.58'	21.33'	28.08'	1.42'	2 1/2"	3 1/2"	1.81	3.26	4.70	6.14	15	18	21	24
54"	7'-8"	3.39'	17.49'	20.88'	17.03'	21'	2.83'	4.0'	8.42'	16.08'	23.75'	31.42'	1.46'	3"	4"	2.03	3.78	5.54	7.28	17	20	23	27
60"	8'-6"	3.56'	19.55'	23.11'	19.03'	23'	3.00'	4.0'	9.00'	17.50'	26.00'	34.50'	1.50'	3"	4"	2.28	4.36	6.43	8.50	18	22	25	29

Δ 6.42' Δ 6.25' Dimensions permitted to allow use of 8' standard pipe lengths.
 ◇ 10.40' ◇ 10.10' Dimensions permitted to allow use of 12' standard pipe lengths.
 Δ ◇ Concrete slab shall be deepened to form bridge across crown of pipe. See section below.

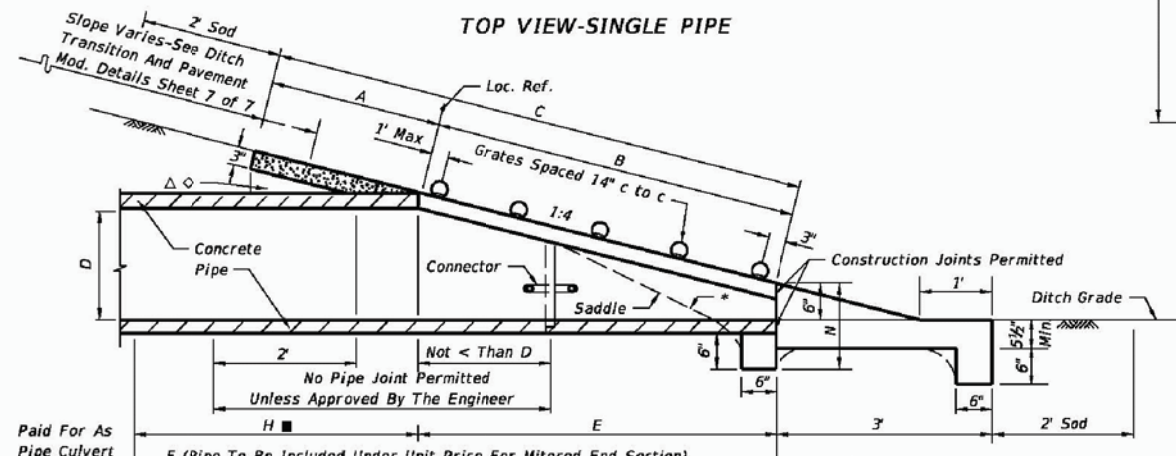
■ Values shown for estimating pipe quantities and are for information only.



TOP VIEW-SINGLE PIPE



TOP VIEW-MULTIPLE PIPE



SECTION

*Slope: To ϕ Pipe For Pipes 18" And Smaller
1:2 For Pipes 24" And Larger.

Note: See Sheets 6 and 7 for details and general notes.

SINGLE AND MULTIPLE ROUND CONCRETE PIPE

	2015 DESIGN STANDARDS	SIDE DRAIN MITERED END SECTION	INDEX NO. 273	SHEET NO. 1 of 7
			SHEET NO. 14	

JOHNSON AVENUE
STORM SEWER REPAIRS
 MISCELLANEOUS DETAILS

KARI EDWARDS THARPE, P.E. No. 73720
 DATE: _____
 PROJECT LOCATION: JOHNSON AVENUE STORM SEWER REPAIRS
 PROJECT NUMBER: 436252-58-01
 PROJECT MANAGER: KARLE THARPE, P.E.

4480 Woodbine Road • Pace, Florida 32571
 Tel 850.288.1000 • Fax 850.288.1001
 Certificate of Authorization No. 9302

NO.	REVISIONS	DATE	APPROVED BY

