TIMAWATHA AVENUE FORCE MAIN REPLACEMENT

JEA PROJECT NUMBER: 8005938

CITY OF JACKSONVILLE NOTES

GENERAL

All construction shall be performed in accordance with the approved plans and comply with all standard city policies and practices. City approval is contingent upon any required state or federal permit approvals such as those from the Department of Environmental Protection or the St. Johns River Water Management District (SJRWMD).

UTILITY WORK

Plan approval through Development Services does not include utilities. Proposed water, sewer or electric construction must be approved separately through the respective utility company. In most cases, this will be:

JEA
JEA Tower - 4th Floor
21 W. Church Street
Jacksonville, FL 32202
http://www.jea.com/business/services/devandbuild/developers.asp

WORK WITHIN THE RIGHT-OF-WAY

CITY: Except for new subdivision infrastructure construction, all work performed within a City of Jacksonville right-of-way or easement requires a Right-of-way Permit. The contractor performing the proposed work must have a current Right-of-way Bond on file with Development Services. Right-of-way Permit applications are processed at:

Development Services Customer Service Counter
Edward Ball Building, 2nd Floor
214 N. Hogan St.
Jacksonville, FL 32202
(904) 255-8572
http://row.jaxdev.info/

STATE: All work performed within a state right-of-way requires a permit from the Florida Department of Transportation (FDOT). It is the developer s responsibility to obtain required FDOT permits or maintenance-of-traffic approvals for work within FDOT right-of-ways. The FDOT regional office can be contacted at (904) 360-5200 Any changes to the approved plans needed for FDOT approval must be submitted to Development Services as revisions.

Adjacent State Roads: _____

RAILROAD: Railroad companies may require special approvals or permits to work within their right-of-ways. It is the developer s responsibility to obtain permission from any railroad right-of-way owner before performing any work within their right-of-way.

STORMWATER

Annual reports in compliance with the SJRWMD stormwater permits are required from the maintenance entity of all stormwater management facilities. Send copies of the reports to:

Engineering and Construction Management
Edward Ball Building, 10th Floor
214 N. Hogan St.
Jacksonville, FL 32202
http://www.coj.net/Departments/Public+Works/Engineering+and+Construction+Management/

The owner of any project one (1) acre or larger is required to provide a Notice of Intent (NOI) in accordance with criteria set forth in the city s NPDES permit within 48 hours of beginning construction. Send NOI and NOI fee to:

Florida Department of Environmental Protection
NPDES Stormwater Notices Center, Mail Station #2510
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(866) 336-6312
http://www.dep.state.fl.us/water/stormwater/npdes/

The contractor shall contact the Environmental Quality Division, Erosion and Sedimentation Control Section (ESC) to provide verification that applicable stormwater permits have been obtained and to schedule a pre-construction ESC site inspection:

Environmental Quality Division
407 North Laura Street, Third Floor
Jacksonville, FL, 32202
(904) 255-7222

FIRE MARSHALL

Plan review and approval does not relieve the contractor of complying with all applicable State Fire Codes.

Underground mains and hydrants shall be installed, completed, and in service prior to construction work.

Underground contractor shall submit to the Fire Marshall for approval complete specs for all underground pipe and fittings relating to fire protection PRIOR to installation and inspection. Contractor shall include manufacturer s name and pipe ID along with contractor s state license number.

LANDSCAPE

A Site Work Permit is required for this project.

☐ Tree Fund payment is due: _____ inches at $_____ = $_____

☐ Article 25 funds are due: _____ inches at $_____ = $_____

TRAFFIC ENGINEERING

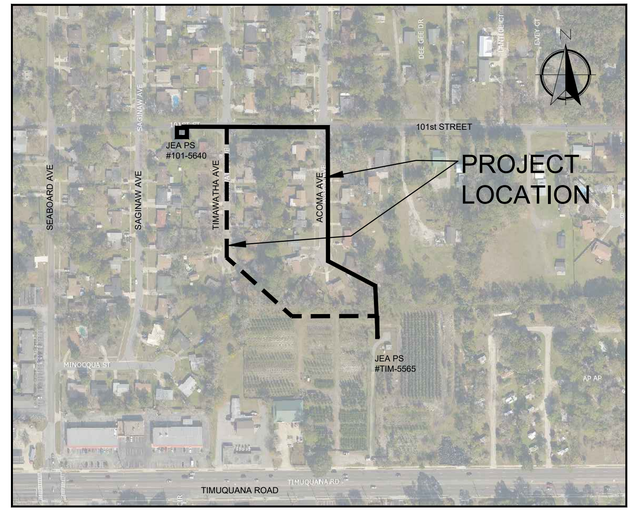
TRAFFIC SIGNS

Metro Name	_____	$55.00	ea.	_____
Standard	_____	$55.00	ea.	_____
Stop/Yield	_____	$55.00	ea.	_____
Design	_____	$55.00		_____
Installation	_____	$55.00	/hr.	_____
		TOTAL		_____

☐ Streetlights Required

NOTE: Traffic sign costs change from time to time. If the costs change after plan approval but prior to payment for installation, the developer must pay the for the signs at the current costs. The above total assumes the subdivision will be platted as one phase. If the development is platted as separate phases, design and installation will be calculated separately for each phase.

No lane closures allowed from 7 a.m. till 9 a.m. and from 4 p.m. till 6 p.m.



VICINITY MAP

NTS

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THIS DOCUMENT HAS BEEN DIGITALLY SIGNED AND SEALED BY Claro N. Magpantay, P.E. ON 11-30-20

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENTS.

C&ES
CONSTRUCTION & ENGINEERING SERVICES CONSULTANTS, INC.
9432 BAYMEADOWS ROAD, SUITE 100
JACKSONVILLE, FL 32256
CERTIFICATE OF AUTHORIZATION #27598
E.O.R.: Claro N. Magpantay, P.E., No. 60164

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.: C-1 THROUGH C-12

CLARO NACU MAGPANTAY
LICENSE
No. 60164
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

PLAN APPROVAL

_____ Date _____ Development Services Division (Chief)

_____ Date _____ Review Group (Reviewer)

Plan approval is valid for five years after the initial approval date. Revisions made after the initial approval date do not extend this five-year time frame.

PLAN APPROVAL IS SUBJECT TO THE FOLLOWING NOTES AND CONDITIONS:

GENERAL PROJECT INFORMATION

GENERAL

City Development Number	4161.327
Concurrency Application Number	-
Property Appraiser Number (RE #)	-
Zoning Designation	-
PUD Ordinance Number	N/A
FIRM Community Panel	12031C0363J; 12031C0526J
Flood Zones (Show in Plans)	X
Base Flood Elev. (Show in Plans)	N/A
Vertical Datum Used for Project	NAVD 88
JEA Availability Number	2020-3778

SUBDIVISION

PSD Number	N/A
City or Private Inspection	N/A
Public or Private Roads	N/A
Subdivision (911) Disk Provided?	N/A

NON-SUBDIVISION

North American Industry Classification System (NAICS)	N/A
Impervious Area (Sq. Ft.)	N/A

C&ES
Construction & Engineering Services Consultants, Inc.
9432 Baymeadows Road, Suite 100
Jacksonville, FL 32256
Tel: (904) 652-1186
Business Number CA 27598

100% SUBMITTAL

NOT APPLICABLE	APPLICABLE	
☐	■	1. ELEVATIONS ARE BASED ON N.A.V.D. 88.
☐	■	2. LOCATION OF EXISTING UTILITIES OBTAINED BY SOFT DIG LOCATES WHERE SHOWN ON PLANS, OR INCLUDED WITH BID SPECS.
☐	■	3. EXISTING WATER AND SEWER LINES ARE SHOWN AS PER FIELD LOCATES AND SUBDIVISION AS-BUILT PLANS.
■	☐	4. UNDERGROUND UTILITIES WERE LOCATED UTILIZING GROUND PENETRATING RADAR (GPR) AND A DIGITAL LOCATOR. CONTRACTOR SHALL BE AWARE THAT IN SOME CASES UTILITIES HAVE BEEN LOCATED, AND SURVEY HAS BEEN COMPLETED ONLY ON ONE SIDE OF THE ROAD.
☐	■	5. ALL PIPE LENGTHS SHOWN ON PLAN AND PROFILES ARE FROM CENTER TO CENTER OF MANHOLES, CATCH BASINS, INLETS ETC. OR ALONG THE CENTER LINE OF FORCE MAINS AND WATER MAINS.
☐	■	6. INVERT ELEVATIONS SHOWN ON DRAWINGS REFER TO THE CENTERLINE OF MANHOLES, UNLESS OTHERWISE INDICATED.
☐	■	7. THE LOCATION OF ALL EXISTING SEWER AND WATER SERVICE LINES MAY NOT BE INDICATED ON THESE PLANS. THE LOCATION OF NEW SERVICES SHALL BE VERIFIED IN THE FIELD.
☐	■	8. BENCHMARK DATA: SEE CIVIL NOTES.

SURVEY AND LOCATE DATA:

PERMIT REQUIREMENTS (NOT ALL INCLUSIVE):

☐	■	1. CONTRACTOR TO OBTAIN ALL REQUIRED RIGHT-OF-WAY PERMITS.
☐	■	2. CONTRACTOR SHALL NOT OPEN CUT STREETS IN THE PROJECT AREA UNLESS SPECIFICALLY SHOWN ON PLANS
☐	■	3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CONSUMPTIVE USE PERMIT (C.U.P.) THROUGH THE ST. JOHNS WATER MANAGEMENT DISTRICT SHOULD DEWATERING ACTIVITIES BE REQUIRED.
☐	■	4. THE DEPARTMENT OF TRANSPORTATION, RAILROAD COMPANIES AND C.O.J. ARE TO BE NOTIFIED IN ADVANCE OF CONSTRUCTION PER THEIR RESPECTIVE PERMIT CONDITIONS.
☐	■	5. ALL WORK SHALL BE IN ACCORDANCE WITH BID DOCUMENTS, JEA WATER AND SEWER STANDARDS, DETAILS AND MATERIALS MANUAL, REV. 01/15. AND CITY OF JACKSONVILLE STANDARD SPECIFICATIONS AND DETAILS AND ALL APPLICABLE STATE AND LOCAL REGULATIONS.
☐	■	6. IF SOLVENT CONTAMINATION IS FOUND IN THE PIPE TRENCH, WORK SHALL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH APPROVAL OF THE PERMITTING AGENCY, DUCTILE IRON PIPE, FITTINGS AND SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATED AREA. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST 100 FEET BEYOND ANY SOLVENT NOTED.
☐	■	7. THE CONTRACTOR SHALL NOTIFY APPLICABLE UTILITY CONTACT PERSONNEL NOT LESS THAN ONE WEEK PRIOR TO CONSTRUCTION OF FACILITIES IN THEIR RESPECTIVE AREAS.
☐	■	8. TREE PROTECTION SHALL BE IN ACCORDANCE WITH JACKSONVILLE ORDINANCE CODE 656 AND/OR AS DETAILED ON SPECIFIC PLAN SHEETS. NO TRIMMING OF OVERHANGING TREE LIMBS WILL BE ALLOWED. USE SMALLER EQUIPMENT IF NECESSARY.
☐	■	9. THE CONTRACTOR SHALL LOCATE THE DRAINAGE INLET STRUCTURES IN THE PROJECT AREA AND ERECT SEDIMENTATION CONTROL DEVICES AS NECESSARY PER THE CITY OF JACKSONVILLE STORMWATER POLLUTION PREVENTION PLAN.
☐	■	10. CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITIES DURING CONSTRUCTION.

EXISTING UTILITY PROTECTION:

1. IN ORDER TO REDUCE THE DISRUPTION AND COST OF UTILITY DAMAGES OCCURRING IN THE DUVAL COUNTY RIGHT-OF-WAY AND EASEMENTS, THE CONTRACTOR SHALL PREVENT DAMAGES TO EXISTING UTILITIES CAUSED BY HIS WORK THROUGH FIELD VERIFICATION OF THE LOCATION OF THE EXISTING UTILITIES. IN THE CASE OF OPEN EXCAVATION, VERIFICATION MAY BE PERFORMED DURING THE CONTRACTORS WORK. IN THE CASE OF DIRECTIONAL DRILLING, VERIFICATION SHALL TAKE PLACE PRIOR TO MOBILIZATION OF THE DRILLING EQUIPMENT.
2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES AS NEEDED TO AVOID CONTACT. EXISTING UTILITIES SHALL BE EXPOSED USING DETECTION EQUIPMENT OR OTHER ACCEPTABLE MEANS. SUCH METHODS MAY INCLUDE BUT SHALL NOT BE LIMITED TO "SOFT DIG" EQUIPMENT AND GROUND PENETRATING RADAR (GPR). THE EXCAVATOR SHALL BE HELD LIABLE FOR DAMAGES CAUSED TO THE CITY'S/JEA'S INFRASTRUCTURE AND THE EXISTING FACILITIES OF OTHER UTILITY COMPANIES.
3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND AVOID ALL UTILITIES, OTHER STRUCTURES AND OBSTRUCTIONS BOTH ABOVE AND BELOW GROUND SURFACE. ALL DAMAGE RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

RESTORATION NOTES:

1. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, TO REFERENCE AND RESTORE PROPERTY CORNERS AND LANDMARKS WHICH MAY BE DISTURBED BY CONSTRUCTION, KNOWN CORNER LOCATIONS ARE AVAILABLE FROM THE CITY OF JACKSONVILLE ENGINEERING DIVISION.
2. THE CONTRACTOR SHALL RESTORE/REPLACE ALL CULVERTS, HEADWALLS AND STORM DRAIN INLETS REMOVED OR DISTURBED BY THE CONSTRUCTION OPERATION.
3. TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION IN ACCORDANCE WITH CITY OF JACKSONVILLE/FDOT STANDARD SPECIFICATIONS.
4. SIDEWALKS, DRIVEWAYS AND CURBING DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH JACKSONVILLE STANDARD SPECIFICATIONS. SIDEWALKS REMOVED AND REPLACED IN CURB AND GUTTER AREAS AT INTERSECTIONS SHALL HAVE HANDICAP RAMPS INSTALLED. DRIVEWAYS AND SIDEWALKS SHALL BE SAWCUT ALONG THE RIGHT-OF-WAY LINE OR NEAREST JOINT AND REMOVED AND REPLACED TO THE EDGE OF STREET.
5. GRASS SOD SHALL BE FURNISHED AND PLACED IN THE AREAS DISTURBED OR DAMAGED BY THE CONSTRUCTION OPERATION.
6. ALL PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH THE CITY OF JACKSONVILLE/FDOT STANDARD DETAILS AND SPECIFICATIONS LATEST EDITION.
7. UNLESS OTHERWISE NOTED, REMOVE AND REPLACE EXISTING PAVEMENT AS PER C.O.J. CASE X (10) PAVEMENT REPLACEMENT DETAIL.
8. CONTRACTOR MUST MAINTAIN AND PRESERVE NEWLY GRADED AREAS AND REPAIR AREAS WHERE SETTLING AND EROSION HAVE OCCURRED.

UTILITY CONTACTS:

A. BLANK	N/A
B. AT&T ~ GREG LUMPIESZ~ NORTH DISTRICT	904-781-0741
C. AT&T ~ RYAN McFARLAND~ SOUTH DISTRICT	904-733-8011
D. CITY OF JACKSONVILLE ~ PUBLIC WORKS DEPT.	904-255-8786
E. CITY OF JACKSONVILLE ~ TRAFFIC OPERATIONS	904-255-7533
F. FLORIDA DEPT. OF TRANSPORTATION	904-360-5200
G. JEA ~ WATER DISTRIBUTION ~ JOSH PARKER	904-665-6052
H. JEA ~ SEWER COLLECTION ~ BILLY GREEN	904-665-8183
I. JEA ~ GENERAL INFORMATION	904-665-6000
J. JEA ~ PROJECT OUTREACH	904-665-7500
K. JEA ~ POWER OUTAGES	904-665-6000
L. JEA ~ SEWER PROBLEMS	904-665-4802
M. JEA ~ WATER PROBLEMS	904-665-4801
N. JEA ~ WATER & SEWER LOCATES ~ BRENDA FORBES	904-665-4465
O. NASSAU COUNTY ~ PUBLIC WORKS	904-503-6175
P. ST. JOHNS COUNTY ~ RIGHT-OF-WAY PERMITTING	904-209-0134
Q. ST. JOHNS COUNTY ~ TRAFFIC SIGNALS	904-209-0170
R. COMCAST ~ EMERGENCY HOTLINE	904-380-6341
S. TECO/PEOPLES GAS	904-443-7316
T. SUNSHINE ONE CALL	811

GENERAL LEGEND

EXISTING PROPOSED

CENTER LINE

FENCE (HEIGHT & MAT'L. INDICATED) — 6' CHAIN LINK

DRAIN PIPE — SD

CATCH BASIN

STORM SEWER (SIZE & MAT'L. INDICATED) — 24" RCP SD

WATER MAIN — W W — WM

GRAVITY SEWER SIZE, TYPE INDICATED — S S

SEWER FORCE MAIN — FM

LINE VALVE

CHECK VALVE

FIRE HYDRANT

REDUCER

SPOT ELEVATION — + (25.00)

MANHOLE - TYPE (IF INDICATED)
E - ELECTRIC S - SANITARY
D - STORM T - TELEPHONE

TEMPORARY SAMPLING TAP POINT (BACTERIOLOGICAL SAMPLING POINT) — SAMPLE TAP NO. TAP NO.

FULL DEPTH ASPHALT PAVEMENT REPLACEMENT (COJ CASE X)

CONCRETE REMOVAL

ASPHALT REMOVAL

CURB & GUTTER REMOVAL

SILT FENCE

INLET PROTECTION

UTILITY SYMBOLS

ELECTRIC POLE OR S.B.T. POLE (WOOD) — PP OR PP (WITH LIGHT)

WOOD POWER POLE — WPP

ELECTRIC POLE OR S.B.T. POLE (CONC.) — PP OR PP (WITH LIGHT)

CONCRETE POWER POLE — CPP

GUY WIRE

TRAFFIC SIGNAL POLE

IRON PIPE — I.P.

OVERHEAD UTILITY LINE — OHU

UNDERGROUND TELEPHONE — UGT

GAS MAIN — GAS

WATER METER — WM

SOIL BORING (NUMBER INDICATED) — SB-1

TREE, SIZE & TYPE INDICATED — 12" O

NOT APPLICABLE	APPLICABLE	
■	☐	1. CONTRACTOR TO REHABILITATE ALL MANHOLES ON PIPE BURST SEWERS VIA COATING/LINING PER JEA SPECIFICATION 446-2, UNLESS OTHERWISE NOTED ON THE PLANS.
■	☐	2. CONTRACTOR TO RENEW, REHABILITATE, REPLACE OR REINSTALL AS APPLICABLE ALL SERVICE LATERALS TO R.O.W. LINE.
■	☐	3. CONTRACTOR TO INSTALL SEWER SERVICE PIPING A MINIMUM OF 60 INCHES BELOW GRADE. WHERE NEW SANITARY SEWER MAIN IS LESS THAN 5 FEET DEEP, THE SEWER SERVICE PIPE SHALL BE INSTALLED AS DEEP AS POSSIBLE.
☐	■	4. WHEN THE DISTANCE BETWEEN A POWER POLE AND THE TRENCH IS LESS THAN THE TRENCH DEPTH, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH JEA ELECTRICAL PERSONNEL TO SECURE POWER POLES. THE CONTACTS FOR JEA ARE AS FOLLOWS: NORTHSIDE~EAST of US-1 MIKE CORBITT @ 665-7991 (mobile 662-0635) NORTHSIDE~WEST of US-1 ANDY YEAGER @ 665-7998 (mobile 662-0622) NORTHSIDE~BACKUP ALAN AINSLEY @ 665-7303 (mobile 662-6557) SOUTHSIDE~SOUTH of BEACH BLVD. TOM KERNS @ 665-6847 (mobile 860-1687) SOUTHSIDE~NORTH of BEACH BLVD. DERYL BASFORD @ 665-6855 (mobile 662-0616) SOUTHSIDE~BACKUP EDDIE GALES @ 665-6855 (mobile 662-0616) A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED FOR AN OUTSIDE MEETING WITH JEA ELECTRICAL TO DISCUSS THE REQUIRED WORK. ADDITIONAL TIME WILL BE REQUIRED BY JEA ELECTRICAL FOR ANY REQUIRED WORK TO BE ACCOMPLISHED.
■	☐	5. ALL NEW STORM DRAIN PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC.
☐	■	6. THE DESIGN FOR THE PROJECT IS BASED UPON THE "OPEN-CUT" METHOD OF CONSTRUCTION. IF USING ALTERNATIVE MEANS OR METHODS, THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS FOR THAT MEANS OR METHOD.
☐	■	7. THE CONTRACTOR SHALL MINIMIZE SERVICE INTERRUPTIONS AT SERVICE CONNECTIONS. THE MEANS AND METHODS SHALL BE LEFT TO THE DISCRETION OF THE CONTRACTOR, SUBJECT TO THE REQUIREMENTS OF THE CONTRACT SPECIFICATIONS. NO EXISTING ACTIVE SERVICE SHALL BE LEFT INTERRUPTED AT THE END OF THE WORK DAY.
■	☐	8. CONTRACTOR SHALL PROVIDE ADDITIONAL CORPORATION STOPS FOR FILLING AND DRAINING PURPOSES DURING CONSTRUCTION AS NEEDED. CORPORATION STOPS ARE TO BE PLUGGED AND LEFT IN PLACE. INDICATE CORPORATION STOP LOCATIONS ON RECORD DRAWINGS (AS-BUILTS).
■	☐	9. WATER SERVICES SHALL BE TRANSFERRED TO THE NEW MAIN UPON COMPLETION AND F.D.E.P./J.E.A. CERTIFICATION, AND PRIOR TO THE EXISTING MAINS BEING ABANDONED.
☐	■	10. IF EXISTING VALVES ARE IN UNPAVED AREAS AND ARE TO BE TAKEN OUT OF SERVICE, THEY SHALL BE CLOSED AND THE VALVE BOX AND COVER SHALL BE REMOVED. IF THE VALVES ARE UNDER PAVED AREAS, THEY SHALL BE CLOSED, THE VALVE BOX GROUT FILLED AND THE COVER REMOVED.
■	☐	11. CONTRACTOR SHALL REPLACE EXISTING WATER METER BOXES WHEN DEEMED NECESSARY BY THE JEA INSPECTOR.
☐	■	12. CONTRACTOR TO PROVIDE ADDITIONAL DEPTH OF BURY VIA PIPE JOINT DEFLECTION TO ACCOMMODATE VALVE SELECTION PER JEA STANDARDS.
■	☐	13. WATER METERS MAY REQUIRE RELOCATION FOR CONSTRUCTION, CONTRACTOR SHALL CONTACT JEA METER DEPARTMENT AND RELOCATE WATER METERS AS NECESSARY.
☐	■	14. PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL OBTAIN ALL GEOTECHNICAL AND TOPOGRAPHIC SURVEY DATA AND LOCATIONS OF ABOVE GROUND AND UNDERGROUND UTILITIES. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE DESIGN ENGINEER IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED.
☐	■	15. SHEET PILING WILL BE REQUIRED ON ALL EXCAVATIONS DEEPER THAN 16 FEET.

INSTALLATION NOTES:

ABBREVIATIONS:

AC	ASBESTOS CEMENT	INT.	INTERSECTION
A.G.	ALLEY GRATE	INV.	INVERT
℄	BASE LINE	I.P.	IRON PIPE
B.M.	BENCH MARK	J.W.W.	JACKSONVILLE WATER WORKS
BC	BOTTOM OF CURVE		
C.B.	CATCH BASIN	LT.	LEFT
C.I.	CAST IRON	MB	MAIL BOX
℄	CENTER LINE	M.H.	MANHOLE
C.E.P.	CITY ELECTRIC POLE	N.T.S.	NOT TO SCALE
CONC.	CONCRETE	O.E.	OVERHEAD ELECTRIC
CONST.	CONSTRUCTION	O.T.	OVERHEAD TELEPHONE
C.M.P.	CORRUGATED METAL PIPE	P.R.M.	PERMANENT REFERENCE MONUMENT
C.M.P.A.	CORRUGATED METAL PIPE ARCH		
CULV.	CULVERT	P.V.C.	POLYVINYL CHLORIDE
C&G	CURB & GUTTER	r	RADIUS
C	CUT	R	RATE
D.B.I.	DITCH BOTTOM INVERT	R.C.P.	
D.W. OR DR	DRIVEWAY	RT	RIGHT
D.I.	DUCTILE IRON	R/W	RIGHT OF WAY
E.O.P.	EDGE OF PAVEMENT	R.D.	ROOF DRAIN
ELEV.	ELEVATION	S/W	SIDE WALK
ERCP	ELLIPTICAL REINFORCED CONC. PIPE	S.B.T.	SOUTHERN BELL TELEPHONE
		STA	STATION
EXP. JT.	EXPANSION JOINT	TC	TOP OF CURVE
F	FILL	U.G.E.	UNDERGROUND ELECTRIC
F.H.	FIRE HYDRANT	U.G.T.	UNDERGROUND TELEPHONE
FL	FLOW LINE	U.S.C. & G.S.	UNITED STATES COASTAL & GEODETIC SURVEY
FM	FORCE MAIN		
GALV./GLV	GALVANIZED	V.C.	VITRIFIED CLAY
G	GAS LINE	WM	WATER METER
G.V.	GAS VALVE	W.V.	WATER VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE	WLP	WOOD LIGHT POLE
		WPP	WOOD POWER POLE
H.W.	HEAD WALL	WTP	WOOD TELEPHONE POLE
H.C.	HIGH CURB		

C&ES
Construction & Engineering Services Consultants, Inc.
9432 Baymeadows Road, Suite 100
Jacksonville, FL 32256
Tel: 904-571-1986 Fax: 904-571-1987
Business Number CA 27598

NO.	BY	DATE	REVISIONS
5.			
4.			
3.			
2.			
1.			

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
DATE:
FLORIDA REGISTRATION NO. 60164

DESIGNED: C.N. MAGPANTAY
DRAWN BY: B.D. FAGAN
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
GENERAL NOTES, ABBREVIATIONS AND LEGEND

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: NONE

NO. SHEETS 12
SHEET NO. 2
DRAWING NO. C-2

100% SUBMITTAL

Z:\Projects\20006.01 Timawatha Avenue Force Main Replacement\dwg\JEA Notes.dwg Current Layout Tab = C-2 Notes-Legend-Index Mon Nov 16, 2020 - 15:37

GENERAL SITE NOTES

1. ALL WORK AND MATERIALS SHALL BE IN COMPLETE ACCORDANCE WITH CITY OF JACKSONVILLE AND JEA STANDARD DETAILS AND SPECIFICATION INCLUDING ALL APPLICABLE LOCAL AND STATE REQUIREMENTS.
2. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLYING WITH OSHA REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTORS BID.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUBSURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS URGED TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND TO AID IN RESOLVING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSUITABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED.
5. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO JEA FOR A PERIOD OF TWO YEARS FROM DATE OF ACCEPTANCE BY JEA. SEE JEA STANDARD MANUAL SECTION 429.
6. ELEVATIONS SHOWN THUS: (12.3) AND REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
7. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON TAKEN FROM MAP PROVIDED BY CLARSON & ASSOCIATES: DATED, MAY 15, 2020.
8. REFERENCE BENCHMARK: NATIONAL GEOGETIC SURVEY DESIGNATION (A572 2002; EL. 10.78 (NAVD)
9. PROJECT BENCHMARK: SEE DRAWING NOS. C-(5, 6, 7, 8, & 9).
10. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE PROJECT INCLUDING RIGHT-OF-WAY PERMITS FOR WORK IN THE RIGHT-OF-WAY OR EASEMENTS.
11. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN COUNTY OR STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION & REPAIR.
12. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS. IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
13. ALL CLEARING AND GRUBBING REQUIRED FOR 4" SANITARY SEWER FORCE MAIN INSTALLATION IS INCLUDED IN THIS PROJECT AND THE CLEARING AND GRUBBING OF ALL RIGHT-OF-WAY OR EASEMENTS SHALL BE INCLUDED AS PART OF THIS PROJECT.
14. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.
15. ALL DEBRIS RESULTING FROM ALL ACTIVITIES SHALL BE DISPOSED OF OFF-SITE BY CONTRACTOR, IN ACCORDANCE WITH COUNTY REGULATIONS.
16. ALL EXCESS SUITABLE AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE BY ENGINEER OR OWNER.
17. ALL EXISTING TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED.
18. BURNING OF TREES, BRUSH AND OTHER MATERIAL IS NOT ALLOWED.
19. IF DEWATERING CAPACITY REQUIRES A CONSUMPTIVE USE PERMIT (C.U.P.) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE PERMIT THROUGH THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
20 THE CONTRACTOR SHALL USE NECESSARY MEANS AND METHODS TO CONTROL SURFACE AND GROUNDWATER DURING CONSTRUCTION, BUT NOT LIMITED TO SURFACE, GRADING, DEWATERING TRENCHES WITH SUMP PUMPS, WELL POINTS, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ACTUAL AND LIKELY DEPTHS TO GROUNDWATER AND THE WATER CONTROL NECESSARY TO MEET MOISTURE AND DENSITY REQUIREMENTS FOR THE NATIVE OR IMPORTED SOILS.
21. THE CONTRACTOR SHALL COORDINATE WITH THE JEA AND THE ENGINEER FOR APPROVAL OF ALL DEWATERING OPERATIONS PRIOR TO COMMENCEMENT.
22. THE LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND IMPROVEMENTS SHOWN ON THE DRAWINGS IS BASED ON LIMITED INFORMATION AND MAY NOT HAVE BEEN FIELD VERIFIED. THE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY RESPECTIVE UTILITY OWNERS AND FIELD VERIFY LOCATIONS OF EXISTING UTILITIES AND OTHER IMPROVEMENTS PRIOR TO COMMENCING ANY CONSTRUCTION. IF THE LOCATIONS SHOWN ARE CONTRARY TO THE ACTUAL LOCATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE DISCREPANCY. THIS DISCREPANCY SHOULD BE RESOLVED PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS NEAR EXISTING UTILITIES AND IMPROVEMENTS AND SHALL BE RESPONSIBLE FOR AND SHALL REPAIR OR PAY FOR ALL DAMAGE MADE TO EXISTING UTILITIES OR OTHER IMPROVEMENTS. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL GRADES, INVERTS AND TYPE OF MATERIAL OF EXISTING UTILITIES TO WHICH HE SHALL CONNECT.
23. FOR SEDIMENT AND EROSION CONTROL PLANS, DETAILS AND NOTES REFER TO SHEETS C-4, C-5 AND C-6.
24. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND MAINTAINED PROPERLY UNTIL PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED.
25. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
26. AFTER RESTORATION IS COMPLETE, TEMPORARY CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF PROPERLY.
27. THESE ENGINEERING DRAWINGS MAY NOT SHOW ALL THE STANDARD DETAILS REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CURRENT CITY OF JACKSONVILLE AND JEA UTILITIES STANDARD DETAILS AND SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN A COPY OF JEA UTILITIES AND CITY OF JACKSONVILLE STANDARD DETAILS AND SPECIFICATIONS PRIOR TO BEGINNING CONSTRUCTION.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS PER CITY OF JACKSONVILLE STANDARDS AND MEETING THE NPDES FINAL STABILIZATION REQUIREMENTS.
29. UNSUITABLE MATERIALS UNDER NEW FORCE MAIN PIPES OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED.
30. "AS-BUILT" DRAWINGS - FORCE MAIN AS-BUILTS PROVIDED TO JEA ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT JEA UTILITIES. CONTRACTOR SHALL ALSO SHOW ALL PIPE INVERTS. ITEMS INTENDED FOR DEDICATION TO JEA UTILITIES SHALL NOT BE CONSIDERED COMPLETE UNTIL "AS-BUILT" DRAWINGS ARE APPROVED, AND THE WORK ACCEPTED FOR DEDICATION BY JEA UTILITIES.
29. SHOP DRAWINGS FOR FORCE MAIN CONSTRUCTION: ALL PIPES, STRUCTURES AND MANUFACTURERS LITERATURE FORALL MATERIALS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION COMMENCING BY THE CONTRACTOR.
30. THE CONTRACTOR SHALL MAINTAIN A COPY OF ALL PERMITS ON THE JOB SITE AND SHALL ADHERE TO ALL CONDITIONS.
31. UPON COMPLETION OF ALL CONSTRUCTION, PROJECT SHALL LEFT CLEAN.
32. CONTACT SANTONIO WILLIAMS, PROJECT INSPECTOR AT (904) 497-2649 AT LEAST 48 HRS. PRIOR TO STARTING WORK AND TO SCHEDULE INSPECTIONS. 1

FORCE MAIN NOTES

1. FORCE MAIN LINES 4 INCHES THROUGH 12 INCHES SHALL BE AWWA STANDARD C-900, DR 18 PIPE WITH DUCTILE IRON MJ FITTINGS, UNLESS OTHERWISE INDICATED ON THE PLANS. FORCE MAIN MUST HAVE 36 INCHES MINIMUM COVER, EXCEPT AS INDICATED OTHERWISE. WHERE CALLED FOR, DUCTILE IRON PIPE, CLASS 51 MINUMUM THICKNESS IS REQUIRED.
2. A HORIZONTAL AND VERTICAL SEPARATION FROM OTHER UTILITIES SHALL BE MAINTAINED PER JEA STANDARD DETAILS (PLATE S-26).
3. FORCE MAIN LINES SHALL BE PRESSURE TESTED AND LEAKAGE TESTED TO 150 PSI FOR TWO HOURS IN ACCORDANCE WITH JEA STANDARD SPECIFICATION SECTION 429 IN THE PRESENCE OF THE ENGINEER AND JEA REPRESENTATIVE
4. PVC PIPE RESTRAINT SHALL CONFORM TO JEA PLATE NUMBERS S-38A TO S-38D, S-39 TO S-42 AND THRUST BLOCK ING SHALL CONFORM TO JEA PLATE S-45.
5. NO PART OF EXISTING 6" FORCE MAIN LINES SHALL BE DEMOLISHED, GROUT FILLED OR DISRUPTED UNTIL THE NEW 4" PVC FORCE MAIN HAS BEEN INSTALLED AND IS CLEARED TO BE PLACED INTO OPERATION.

C&ES
Construction & Engineering Services Consultants, Inc.
9432 Baymeadows Road, Suite 100
Jacksonville, FL 32256
Tel (904) 821-1982
Business Number CA 27598

NO.	BY	DATE	REVISIONS
5.			
4.			
3.			
2.			
1.	CNM	10-30-20	COJ COMMENT

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.D. FAGEL
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
CIVIL NOTES

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: NONE

NO. SHEETS 12
SHEET NO. 3
DRAWING NO. C-3

100% SUBMITTAL

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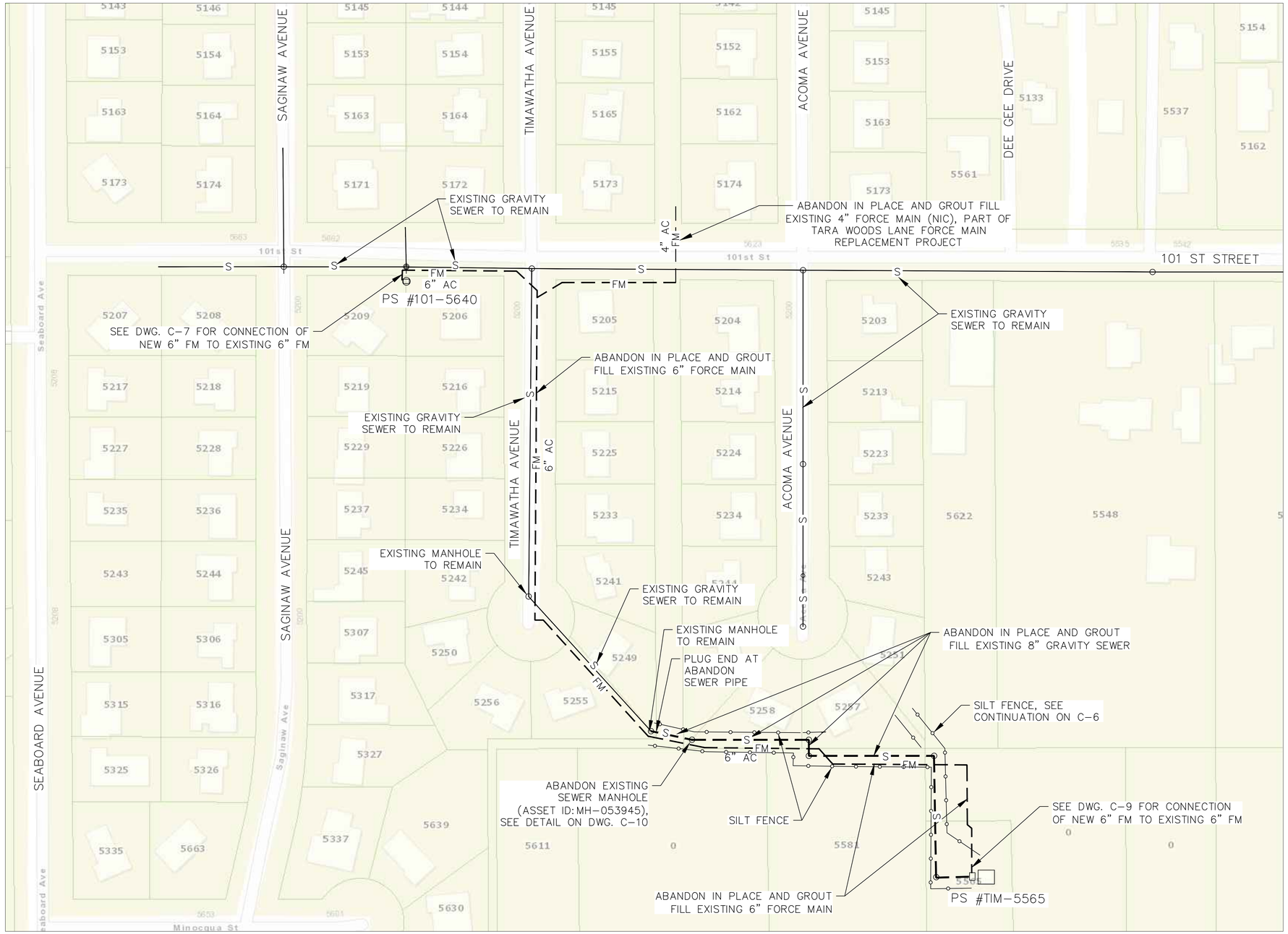

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Business Number CA 27598

NO.	BY	DATE	REVISIONS
6.			
5.			
4.			
3.			
2.			
1.			

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. FAIRE
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

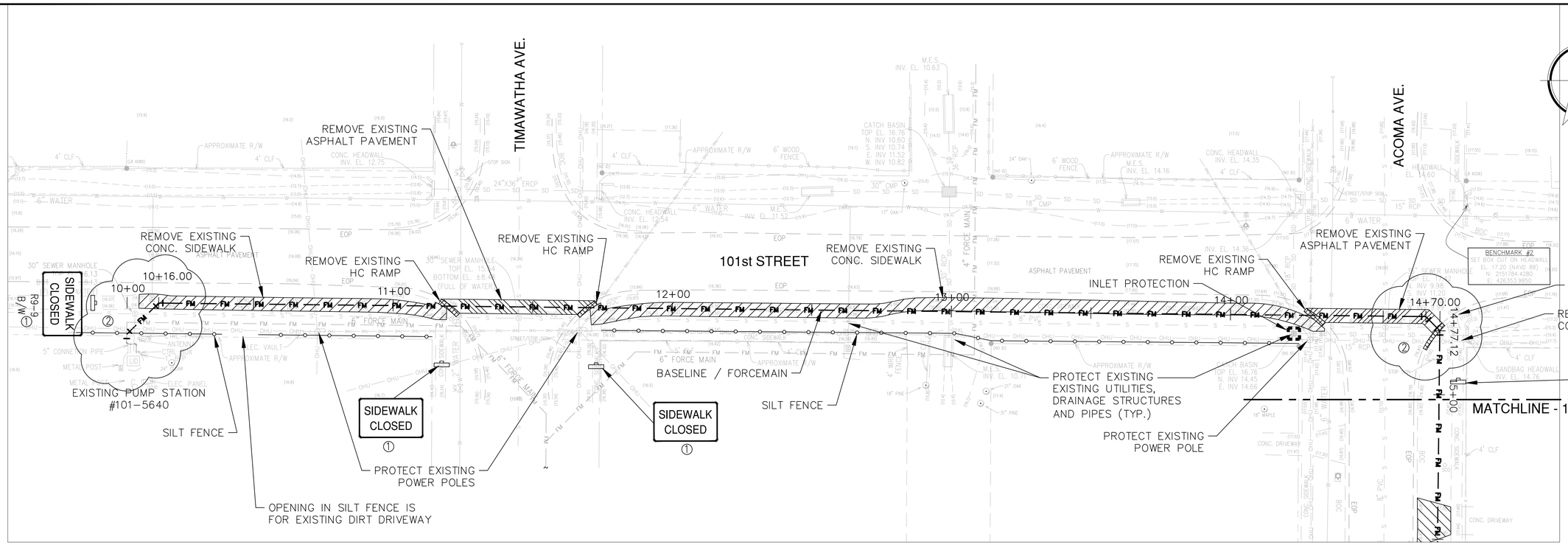
JEA Building Community

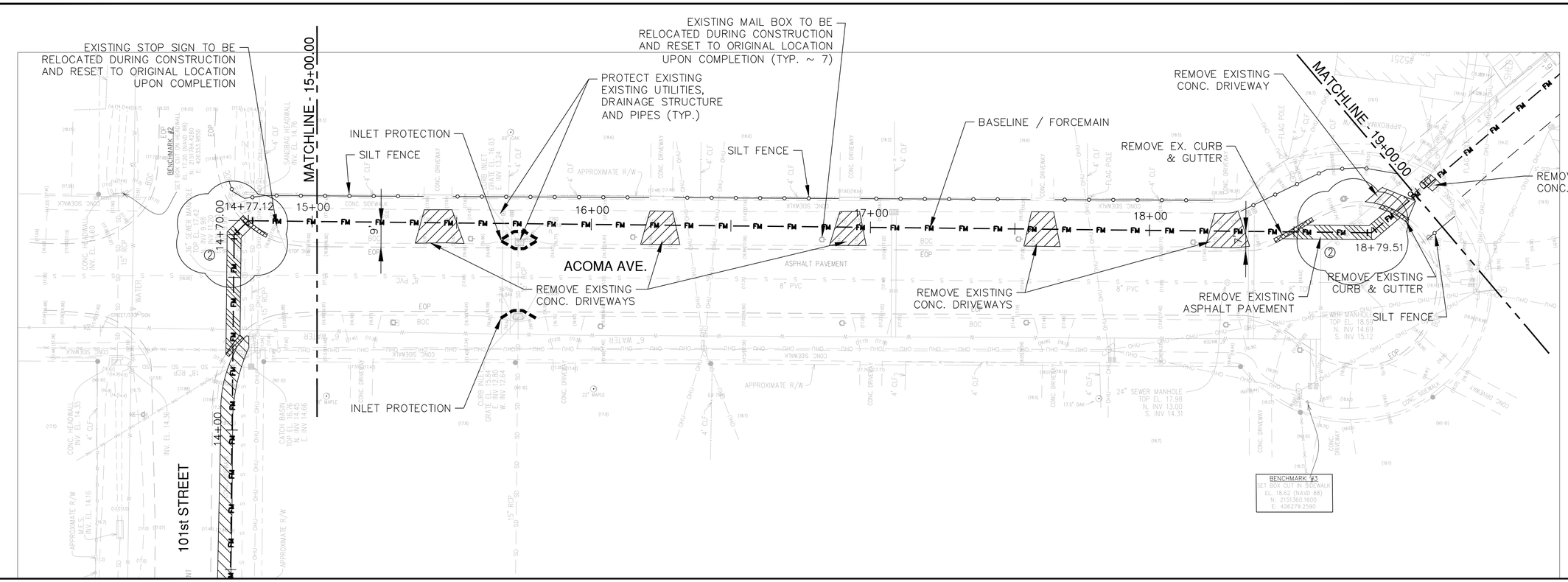
TIMAWATHA AVENUE FORCE MAIN REPLACEMENT
OVERALL EXISTING UTILITY MAP

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: NONE

NO. SHEETS 27
SHEET NO. 4
DRAWING NO. C-4

100% SUBMITTAL





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Business Number CA 27598

NO.	BY	DATE	REVISIONS
5			
4			
3			
2	CNM	11-16-20	JEA COMMENT
1	CNM	10-30-20	COJ COMMENT

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. FAGER
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

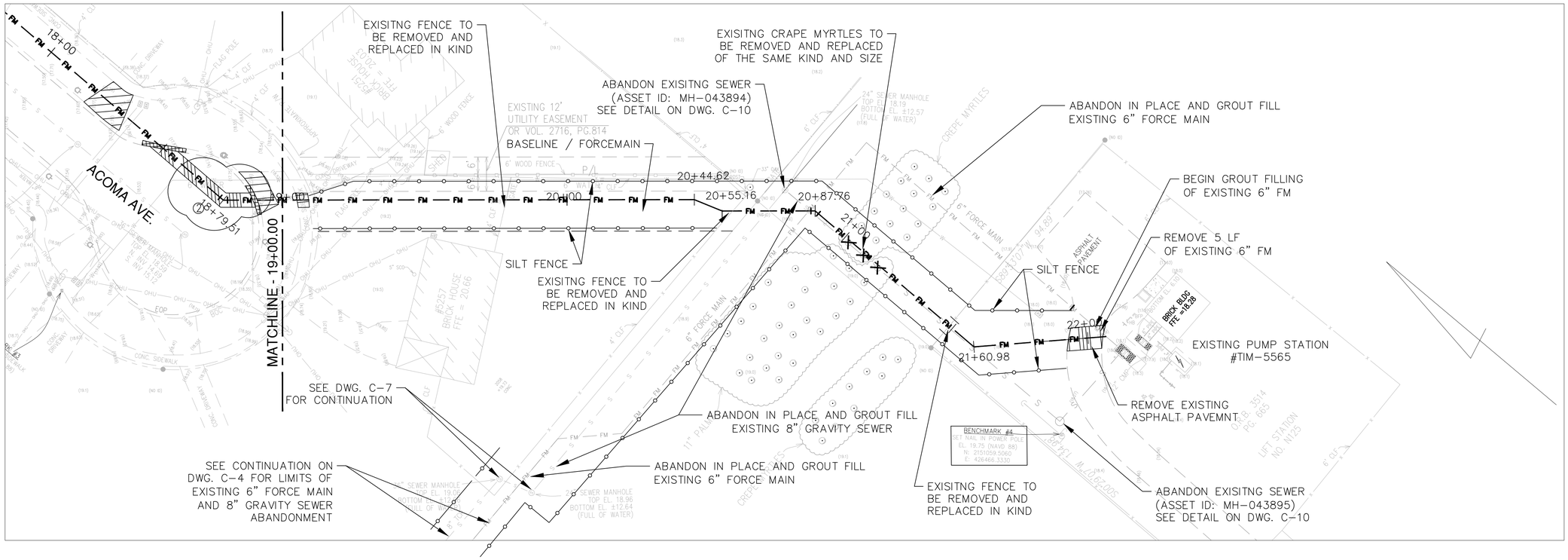
JEA Building Community

TIMAWATHA AVENUE FORCE MAIN REPLACEMENT DEMOLITION AND EROSION CONTROL PLAN - STA. 10+00 TO STA. 19+00.00

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: 1" = 20'

NO. SHEETS 7
SHEET NO. 5
DRAWING NO. C-5

100% SUBMITTAL



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Business Number CA 27598

NO.	BY	DATE	REVISIONS
5			
4			
3			
2	CNM	11-16-20	JEA COMMENT
1			

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO.
60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. FAGAN
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
DEMOLITION AND EROSION CONTROL PLAN - STA. 19+00.00 TO STA. 22+00

NO. SHEETS 12
SHEET NO. 6
DRAWING NO. C-6

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: 1" = 20'

100% SUBMITTAL

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ROAD CL BASELINE
STA. 30+00.00
N 2151767.97
E 425874.10

NEW 4"–45° BEND
STA. 10+00.00
(PIPE LINE BASELINE)
N 2151742.68
E 425886.00
STA. 30+00.00;
29.59' RT.
(ROAD CL BASELINE)

NEW 4" TEE
10+21.00
(PIPE LINE BASELINE)
N 2151749.52
E 425890.29
STA. 30+16.36; 18.30' RT.
(ROAD CL BASELINE)

NEW 4" TEE,
2–4" GATE VALVE,
5 LF ~ 4" DR 18 PVC FM
AND 4" PLUG

INSTALL 62 SY ~ CONC. SIDEWALK

ABANDON IN PLACE AND GROUT FILL
EXISTING 6" FORCE MAIN

NEW 12 LF ~
4" DR 18 PVC FM

EXISTING
PUMP
STATION
#101–5640

BEGIN GROUT FILLING
OF EXISTING 6" FM

REMOVE APPROX. 10 LF
~ EXISTING 6" FM

CONNECT TO EXISTING
6" FORCE MAIN WITH
6"X4" REDUCER

INSTALL CURB CUT RAMP
PER FDOT CR–E

NEW 4"–45° BEND
STA. 10+16.00
(PIPE LINE BASELINE)
N 2151749.57
E 425885.29
STA. 30+11.39;
18.29' RT.
(ROAD CL BASELINE)

INSTALL 27 SY ~ ASPHALT PAVEMENT
PER COJ PLATE P–409

TIMAWATHA AVE.

101st STREET

NEW 2" ARV,
SEE DETAIL ON DWG. C–11
STA. 12+77.69
(PIPE LINE BASELINE)
N 2151746.78
E 426146.96
STA. 32+73.05; 18.68' RT.
(ROAD CL BASELINE)

PIPE LINE
BASELINE/FORCEMAIN

INSTALL CURB CUT RAMP
PER FDOT CR–E

SEE CONTINUATION ON
DWG. C–4 FOR LIMITS OF
EXISTING 6" FORCE MAIN
ABANDONMENT

ABANDON IN PLACE AND GROUT FILL
EXISTING 4" FORCE MAIN (NIC), PART OF
TARA WOODS LANE FORCE MAIN
REPLACEMENT PROJECT

NEW 470 LF ~
4" DR 18 PVC FM

INSTALL 139 SY ~
CONC. SIDEWALK

ROAD CL BASELINE
STA. 34+49.85
N 2151763.85
E 426323.93

INSTALL 27 SY ~ ASPHALT PAVEMENT
PER COJ PLATE P–409

INSTALL CURB CUT RAMP
PER FDOT CR–E

MATCHLINE - 15+00.00
(PIPE LINE BASELINE)

MATCHLINE - 34+98.56)
(ROAD CL BASELINE)

ACOMA AVE.

NEW 4"–45° BEND
STA. 14+70.00
(PIPE LINE BASELINE)
N 2151744.73
E 426339.27
STA. 34+68.80; 15.43'LT.
(ROAD CL BASELINE)

BENCHMARK #2
SET BOX OUT ON HEADWALL
EL. 17.20 (NAVD 88)
N: 2151764.4280
E: 426353.9850

NEW 4"–45° BEND
STA. 14+77.12
(PIPE LINE BASELINE)
N 2151739.64
E 426344.25
STA. 34+73.95; 20.42' LT.
(ROAD CL BASELINE)

INSTALL 5 SY ~
CONC. SIDEWALK

INSTALL CURB CUT RAMP
PER FDOT CR–E

NOTE:
FOR ADA SIDEWALK CURB CUT RAMP DETAIL WITH DETECTABLE
WARNINGS USE FDOT INDEX 522–002, SHEET 4 OF 7.

SCALE IN FEET

EXISITNG GROUND
GRADE

EXISTING ASPHALT PAVEMENT
AND BASE COURSE TO BE
REMOVED AND REPLACED

EXISTING CONC.SIDEWALK
TO BE REMOVED AND
REPLACED

EXISTING ASPHALT PAVEMENT
AND BASE COURSE TO BE
REMOVED AND REPLACED

12" MIN
CLEARANCE

3' MIN.

NEW 4" DR 18 PVC FM

NEW 4"– 45° BEND

CONNECT TO
EXISTING 6" FM

NEW 2– 4"
45° BENDS

12" MIN
CLEARANCE

NEW 4" DR 18 PVC FM

NEW 2" ARV

NEW 2– 4"
45° BENDS

TOP OF 4" FM
= EL. 12.50

12" MIN
CLEARANCE

NEW 2– 4"
45° BENDS

12" MIN
CLEARANCE

NEW 4" DR 18 PVC FM

18"CLEARANCE

NEW 4"– 90° BEND

MATCHLINE - 15+00.00

101st STREET

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(904) 641-1925
Business Number CA 27598

NO.	BY	DATE	REVISIONS
5			
4			
3			
2	CNM	11-16-20	JEA COMMENT
1			

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO.
60164

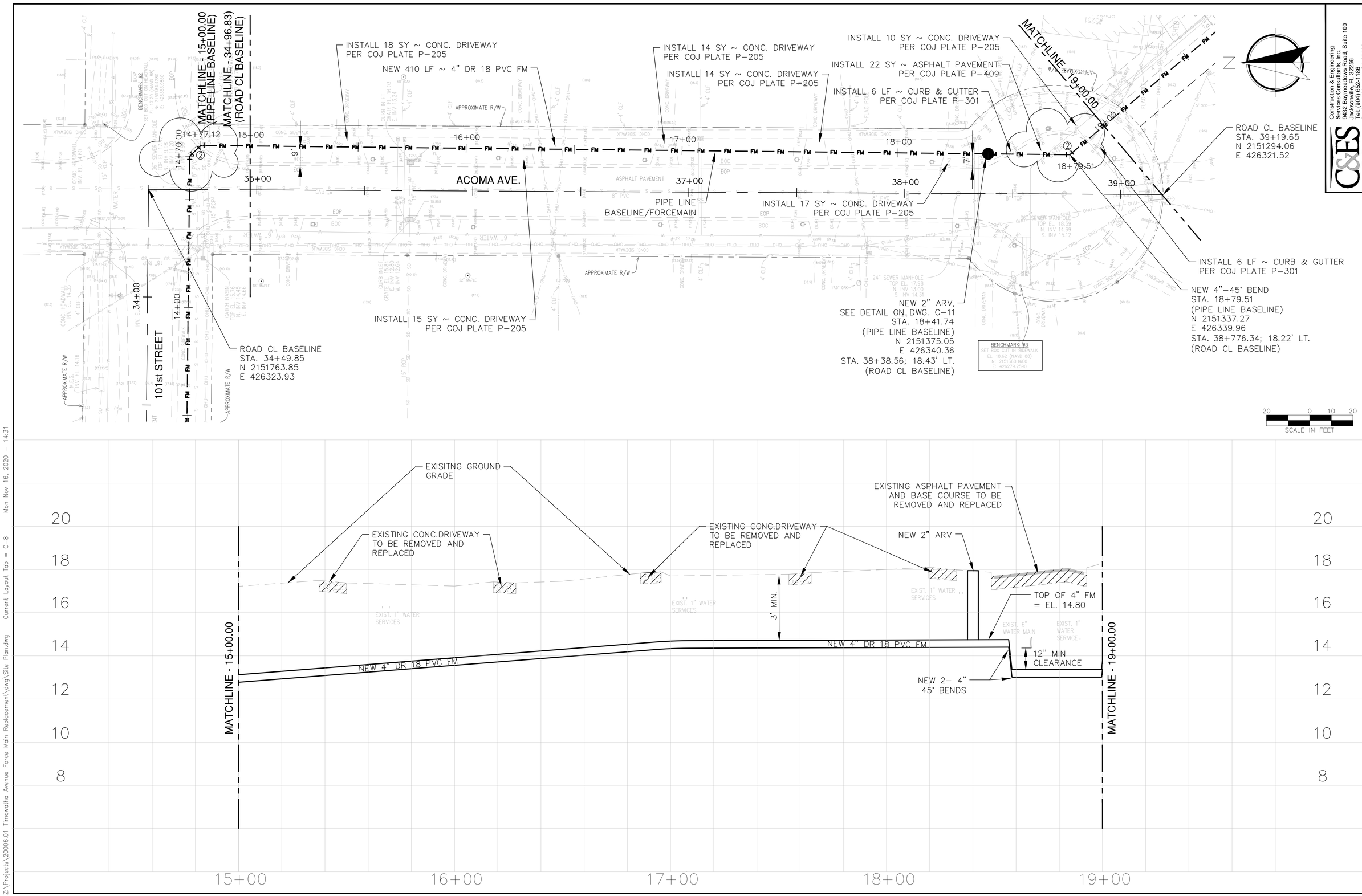
DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. FAGER
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
PLAN AND PROFILE - STA. 10+00 TO STA. 15+00.00

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

NO. SHEETS 22
SHEET NO. 7
DRAWING NO. C-7



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9432 Baymeadows Road, Suite 100
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Tel: (904) 821-1862
Business Number CA 27598

NO.	BY	DATE	REVISIONS
5			
4			
3			
2	CNM	11-16-20	JEA COMMENT

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO.
60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. FAGG
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

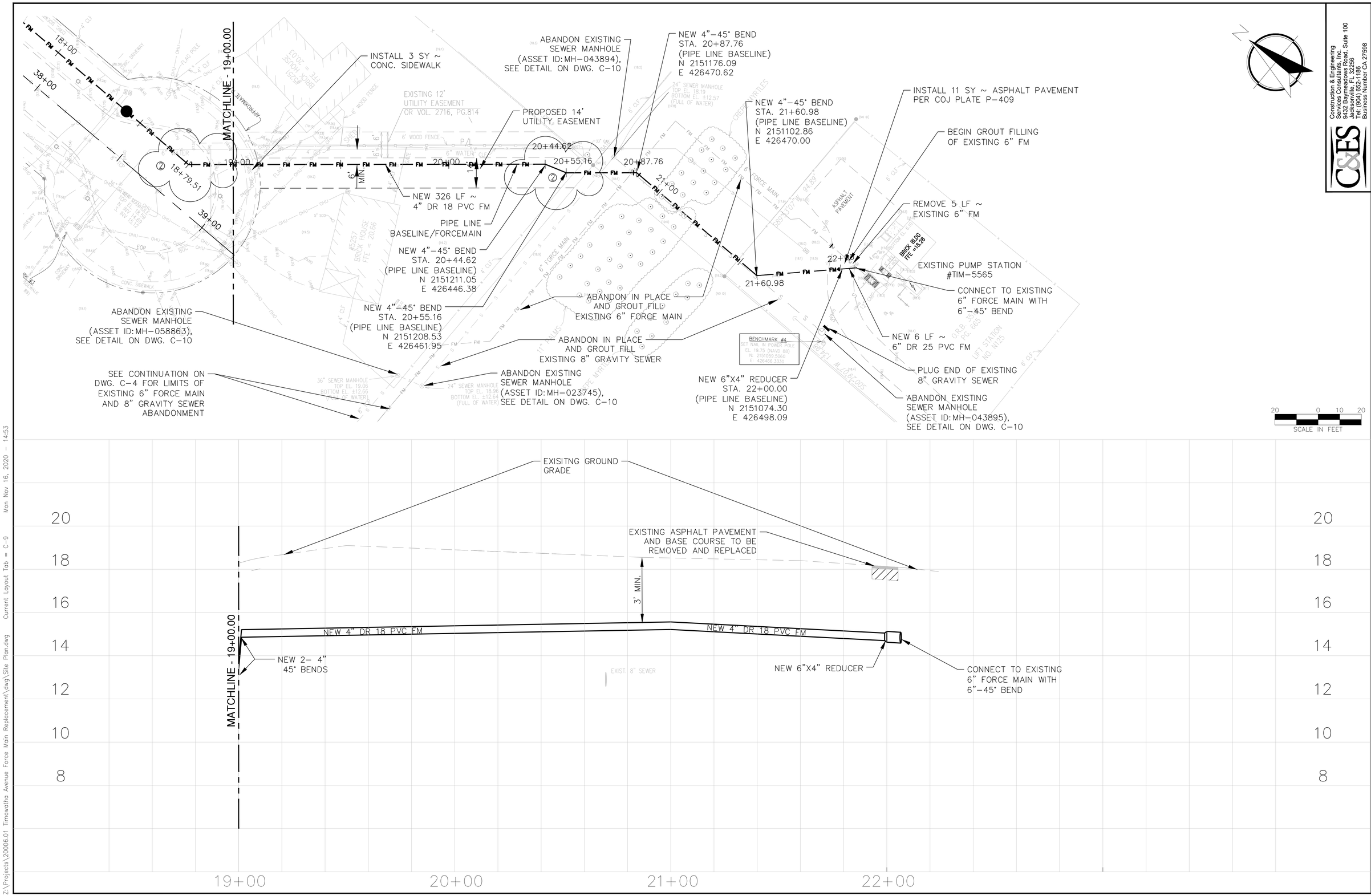
TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
PLAN AND PROFILE - STA. 15+00.00 TO STA. 19+00.00

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: 1" = 20' HORIZ.
1" = 2' VERT.

NO. SHEETS
12
SHEET NO.
8
DRAWING NO.
C-8

Z:\Projects\20006.01 Timawatha Avenue Force Main Replacement\dwg\Site Plan.dwg Current Layout Tab = C-8 Mon Nov 16, 2020 - 14:31

100% SUBMITTAL



Construction & Engineering Services Consultants, Inc.
9432 Baymeadows Road, Suite 100
Jacksonville, FL 32256
Tel: (904) 821-1826
Business Number CA 27598

NO.	BY	DATE	REVISIONS
5.			
4.			
3.			
2.	CNM	11-16-20	JEA COMMENT
1.			

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. FAMES
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE FORCE MAIN REPLACEMENT

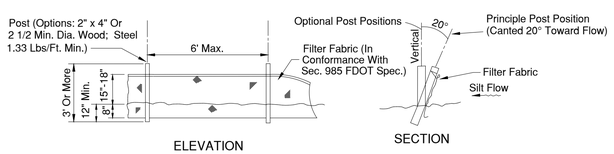
PLAN AND PROFILE - STA. 19+00.00 TO STA. 22+00

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: 1" = 20' HORIZ. 1" = 2' VERT.

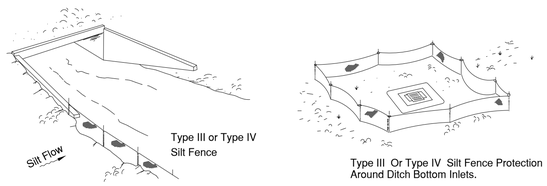
NO. SHEETS 22
SHEET NO. 9
DRAWING NO. C-9

100% SUBMITTAL

Z:\Projects\20006.01 Timawatha Avenue Force Main Replacement\dwg\Site Plan.dwg Current Layout Tab = C-9 Mon Nov 16, 2020 - 14:53



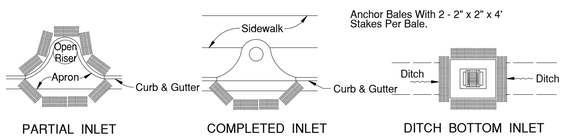
TYPE III SILT FENCE



Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

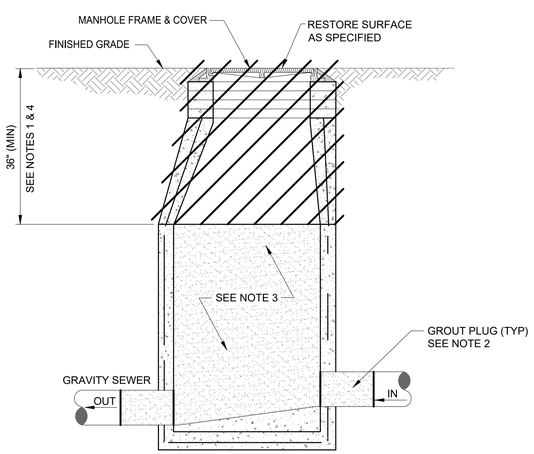
SILT FENCE TYPE III

CITY OF JACKSONVILLE — PLATE D-908



HAY BALE LOCATION

CITY OF JACKSONVILLE — PLATE D-901

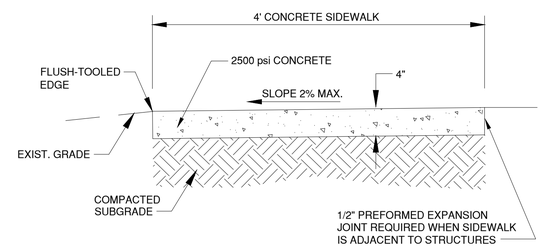


NOTES:

1. REMOVE TOP SECTION(S), FRAME AND COVER, AND GRADE RINGS TO A POINT NO LESS THAN 36" BELOW FINISH GRADE, OR TO THE FIRST JOINT BELOW THE CONE, WHICHEVER IS GREATER.
2. PROVIDE 24" - LONG, GROUT OR PERFORMED PLUG FOR ALL PIPE PENETRATIONS.
3. FOLLOWING GROUT PLUG INSTALLATION AND CURING, BACKFILL ENTIRE REMAINING DEPTH OF MANHOLE WITH COMPACTED A-3 BACKFILL OR BETTER AS SET FORTH BY THE LATEST AASHTO CLASSIFICATION STANDARD.
4. BACKFILL WITH A-3 BACKFILL TO FINISH GRADE FOLLOWING FILL PROCEDURES, AS APPLICABLE.

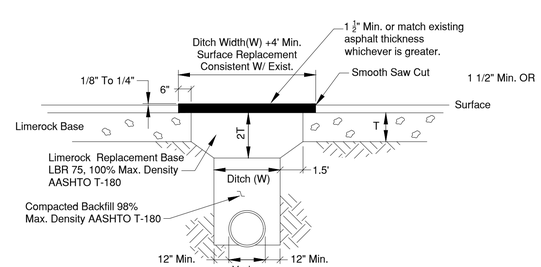
ABANDONING MANHOLES AND SEWERS

N.T.S.



SIDEWALK DETAIL

N.T.S.

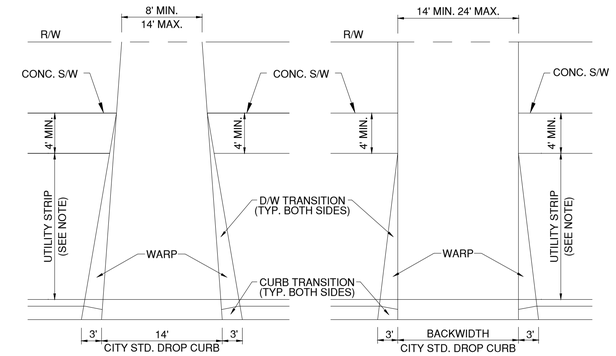


Permanent Repair

Note: In Some Cases Portland Cement Concrete May Be Considered Or Required By City Engineer For Surface Replacement.

MODIFIED CASE X - STANDARD PAVING REPAIR DETAIL

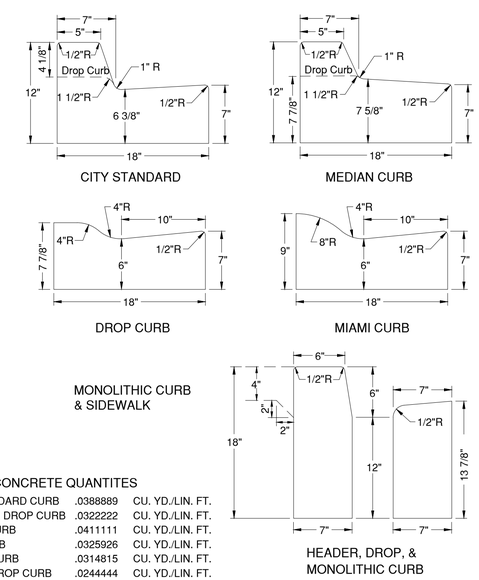
CITY OF JACKSONVILLE — PLATE P-409



NOTE: WHERE UTILITY STRIP IS LESS THAN 5', D/W TRANS. TO MEET BACK OF S/W. WHERE UTILITY STRIP IS 5' OR GREATER, D/W TRANS. TO MEET FRONT OF S/W.

CONCRETE DRIVEWAY DETAILS

CITY OF JACKSONVILLE — PLATE P-205



CONCRETE QUANTITES

CITY STANDARD CURB	.0388889	CU. YD./LIN. FT.
STANDARD DROP CURB	.0322222	CU. YD./LIN. FT.
MEDIAN CURB	.0411111	CU. YD./LIN. FT.
MIAMI CURB	.0325926	CU. YD./LIN. FT.
HEADER CURB	.0314815	CU. YD./LIN. FT.
HEADER DROP CURB	.0244444	CU. YD./LIN. FT.

CITY STANDARD CURB TEMPLATES

CITY OF JACKSONVILLE — PLATE P-301

C&ES
Construction & Engineering Services Consultants, Inc.
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Business Number CA 27598

NO.	BY	DATE	REVISIONS
5.			
4.			
3.			
2.			
1.	CNM	10-30-20	REMOVE COJ ADA RAMP DETAILS

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.T. KAYE
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
PAVING AND EROSION CONTROL DETAILS

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: NONE

NO. SHEETS 127
SHEET NO. 10
DRAWING NO. C-10

100% SUBMITTAL

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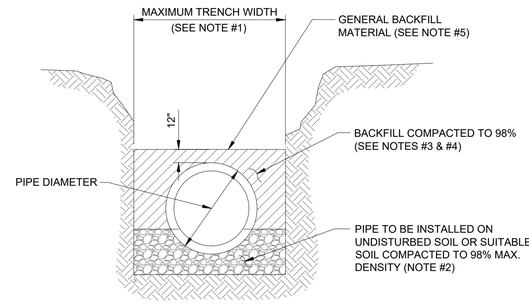


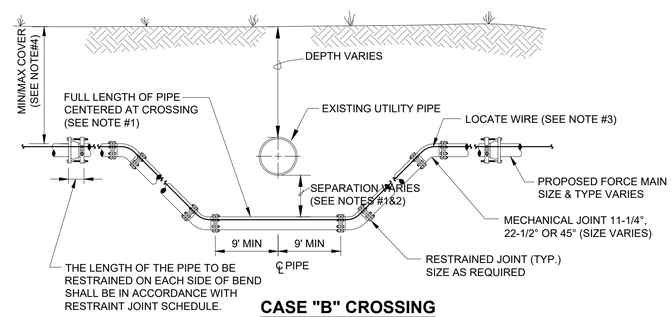
TYPICAL TRENCH

NOTES:

1. TRENCH SIDES SHALL BE APPROXIMATELY VERTICAL BETWEEN AN ELEVATION OF 1 FOOT ABOVE THE TOP OF THE PIPE AND THE CENTER LINE OF THE PIPE; OTHERWISE, TRENCH SIDES SHALL BE AS VERTICAL AS POSSIBLE OR AS REQUIRED BY OSHA STANDARDS. REFER TO THE MEASUREMENT AND PAYMENT SECTION (SECTION #801, PARAGRAPH #4)) TO DETERMINE MAXIMUM PAYLINE WIDTHS.
2. BELL HOLE SHALL BE DUG TO PERMIT THE ENTIRE STRAIGHT BARREL OF THE PIPE TO REST ON THE UNDISTURBED TRENCH BOTTOM. BOULDERS OR LOOSE ROCKS LARGER THAN 3/4 INCH IN SIZE WILL NOT BE PERMITTED IN BACKFILL UP TO 1 FOOT ABOVE THE TOP OF THE PIPE.
3. BACK FILL MATERIAL UP TO A LEVEL OF 1 FOOT OVER THE PIPE SHALL CONSIST OF AASHTO CLASS A-3 SOIL (SUITABLE SOIL) AND SHALL EXCLUDE CLAY MATERIALS AND LOOSE ROCKS LARGER THAN 3/4 INCH SIZE.
4. BACKFILL MATERIAL UP TO A LEVEL 1 FOOT OVER THE TOP OF PIPE OR BOTTOM OF STRUCTURES SHALL BE PLACED IN 6 INCH COMPACTED THICKNESS LAYERS AND SHALL BE COMPACTED TO 98% OF IT'S MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST, ASTM D1557.
5. SEE " EXCAVATION AND EARTHWORK", SECTION 408 FOR ADDITIONAL REQUIREMENTS INCLUDING REMOVAL AND REPLACEMENT OF UNSUITABLE SOILS, DEWATERING, COMPACTION REQUIREMENTS AND DENSITY TESTING OF COMPACTED SOILS.

OPEN CUT TRENCH FOR PRESSURE PIPE

JANUARY 2019 | IN CITY RIGHT -OF-WAY | PLATE W-42



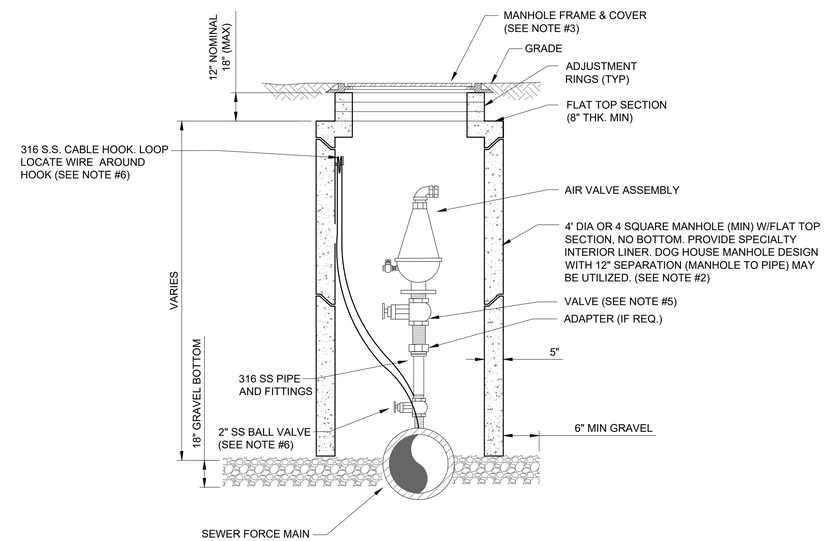
CASE "B" CROSSING

NOTES:

1. IF EXISTING CONFLICT PIPE IS A WATER OR RECLAIMED WATER MAIN, 12-INCHES OF SEPARATION IS REQUIRED.A FULL LENGTH OF PIPE SHALL BE CENTERED OVER EXISTING UTILITY MAIN TO PROVIDE MAXIMUM JOINT SPACING FOR ALL CROSSINGS.
2. FOR OTHER LOCATION LIMITATIONS SEE DETAIL (S-26 & S-27).
3. LOCATING WIRE REQUIRED: SEE DETAIL S-49.
4. THE COVER FOR PIPING LESS THAN 24" SIZE SHALL BE 30" (MIN) IN UNPAVED AREAS, 36" (MIN) IN PAVED AREAS AND A MAXIMUM COVER OF 60", UNLESS PRE-APPROVED BY JEA. THE COVER FOR PIPING 24" SIZE AND LARGER SHALL BE 36" (MIN) IN PAVED AND UNPAVED AREAS AND A MAXIMUM COVER OF 84", UNLESS APPROVED BY JEA.
5. THE SOILS BETWEEN THE MAIN AND THE CONFLICT PIPE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY THE LABORATORY MODIFIED PROCTOR TEST ASTM D 1557.

ADJUSTMENT UNDER EXISTING UTILITIES MECHANICAL RESTRAINTS

JANUARY 2019 | PLATE S-41



NOTES:

1. THE AIR ASSEMBLY MANHOLE SHALL BE LOCATED OUTSIDE OF THE ROADWAY PAVEMENT AREA (I.E. LOCATED IN NON-TRAFFIC AREAS).
2. THE CONCRETE MANHOLE SHALL INCLUDE A POLYURETHANE SPECIALTY LINER (PER SPEC SECTION 446) TO BE INSTALLED ON THE INTERIOR SURFACES INCLUDING THE RISER SECTION TOP AND THE ADJUSTMENT RINGS. A BITUMINOUS WATERPROOFING MATERIAL SHALL BE PROVIDED ON THE OUTSIDE SURFACES OF THE MANHOLE.
3. FRAME AND COVER SHALL BE JEA STANDARD. THE COVER SHALL HAVE NO GASKET TO ALLOW AIR TO EXIT VAULT (REMOVE GASKET IF NECESSARY FROM THE UNDER SIDE OF STANDARD JEA COVER). THE COVER (WHEN FLIPPED OPEN) MUST CLEAR THE AIR VALVE ASSEMBLY AT ALL TIMES OR A SQUARE TOP WITH ALUMINUM DOOR SHALL BE PROVIDED (NON-TRAFFIC LOCATIONS ONLY).
4. FOR PIPE SIZES 3 INCH AND SMALLER, PROVIDE A STAINLESS STEEL BALL VALVE (2" MIN). FOR PIPE SIZES 4 INCH AND LARGER, PROVIDE A FLANGE GATE VALVE (WHEEL OPERATOR) OR PLUG VALVE. (LEVER ARM OPERATOR) SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
5. FOR A 2" AIR VALVE, PROVIDE 2" STAINLESS STEEL BALL VALVE AT THE MAIN. FOR AIR VALVES LARGER THAN 2" SIZE, PROVIDE A TAPPING SLEEVE OR DUCTILE IRON TEE FITTING. ALSO, FOR OFF-SET PIPING LARGER THAN 2 INCH SIZE, PROVIDE A GATE VALVE (INSTALLED VERTICALLY NEAR MAIN). SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
6. LOCATE WIRE SHALL HAVE ENOUGH SLACK TO REACH 4' ABOVE FINAL GRADE.

AIR VALVE ASSEMBLY INSIDE MANHOLE IN ROW

JANUARY 2019 | PLATE S-29B

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NO.	BY	DATE	REVISIONS
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1.			

DESIGN ENGINEER
CLARO N. MAGPANTAY, P.E.
FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.D. FAGER
DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
JEA DETAILS

PROJ. NO. 8005938
DATE: NOVEMBER 2020
SCALE: NONE

NO. SHEET'S 12
SHEET NO. 11
DRAWING NO. C-11

100% SUBMITTAL

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① COJ TEMPORARY TRAFFIC CONTROL NOTES

1. NOTIFY THE TRAFFIC ENGINEERING DIVISION (255-7533) A MINIMUM OF 5 WORKING DAYS PRIOR TO IMPLEMENTATION OF TTC.
2. THE PROJECT WORK HOURS SHALL BE BETWEEN 7:00 AM AND 7:00 PM ON RESIDENTIAL STREETS AND 9:00 AM TO 4:00 PM ON COLLECTOR STREETS. THERE SHALL BE NO LANE CLOSURES BETWEEN 7:00 AM AND 9:00 AM AND BETWEEN 4:00 PM AND 7:00 PM ON WEEKDAYS.
3. THE CONTRACTOR SHALL CONFIRM THAT EXISTING SIGNAGE WILL NOT POSE A CONFLICT FOR WORK ZONE TRAFFIC CONTROL. THE CONTRACTOR SHALL COVER OR REMOVE ALL SIGNING IN CONFLICT WITH THE TRAFFIC CONTROL DURING CONSTRUCTION OPERATIONS.
4. ACCESS TO SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
5. THIS REVIEW APPROVAL IS FOR CITY OF JACKSONVILLE MAINTAINED RIGHT OF WAY ONLY.

Notes for Figure 6H-27—Typical Application 27
Closure at the Side of an Intersection

Guidance:

1. *The situation depicted can be simplified by closing one or more of the intersection approaches. If this cannot be done, and/or when capacity is a problem, through vehicular traffic should be directed to other roads or streets.*
2. *Depending on road user conditions, flagger(s) or uniformed law enforcement officer(s) should be used to direct road users within the intersection.*

Standard:

3. At night, flagger stations shall be illuminated, except in emergencies.

Option:

4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights is positioned in the work space.
6. A BE PREPARED TO STOP sign may be added to the sign series.

Guidance:

7. *When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.*
8. *ONE LANE ROAD AHEAD signs should also be used to provide adequate advance warning.*

Support:

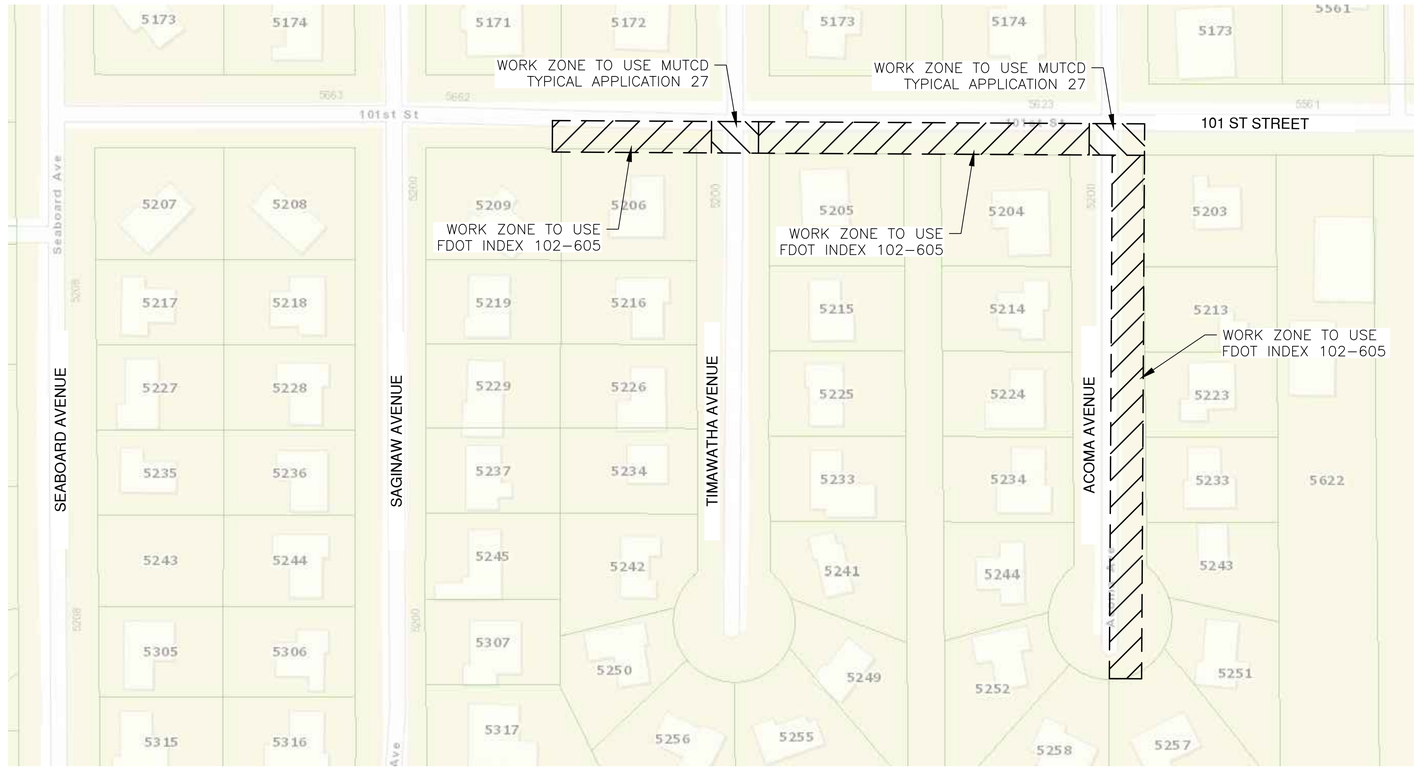
9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

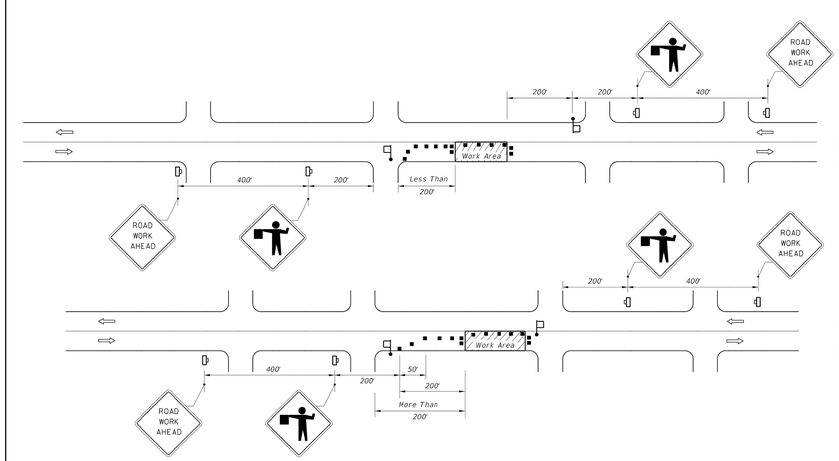
Option:

10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.





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.

SYMBOLS

- *Work Area*
- *Channelizing Device (See Index 102-600)*
- *Work Zone Sign*
- *Flagger*
- *Lane Identification + Direction of Traffic*

GENERAL NOTES

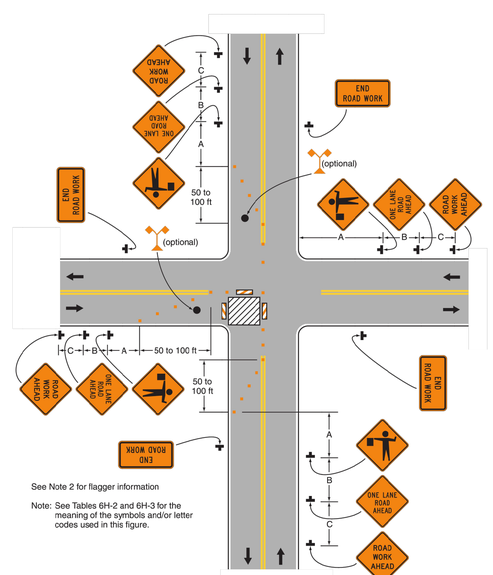
1. *Work operations shall be confined to one travel lane, leaving the opposing travel lane open to traffic.*
2. *When vehicles in a parking zone block the line of sight to TCZ signs or when TCZ signs encroach on a normal pedestrian walkway, the signs shall be post mounted and located in accordance with Index 700-101.*
3. *If work area is confined to an outside auxiliary lane, the work area shall be barricaded and the FLAGGER signs replaced by ROAD WORK AHEAD signs. Flaggers are not required.*
4. *Flaggers shall be in sight of each other or in direct communication at all times.*
5. *The FLAGGER legend sign may be substituted for the symbol sign.*
6. *The maximum spacing between devices shall be no greater than 25'.*
7. *For general TCZ requirements and additional information, refer to Index 102-600.*
8. *The two channelizing devices directly in front and directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.*
9. *Use Temporary Raised Rumble Strips in accordance with Index 102-603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.*

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.*
   - *c. No sight obstructions to vehicles approaching the work area for a distance of 600 feet.*
   - *d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.*
   - *e. Volume and complexity of the roadway has been considered.*

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2019-20 STANDARD PLANS	TWO-LANE, TWO-WAY, WORK NEAR INTERSECTION	INDEX 102-605	SHEET 1 of 1
11/01/17						

Figure 6H-27. Closure at the Side of an Intersection (TA-27)



See Note 2 for flagger information

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 27

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

Arrow board	Shadow vehicle
Arrow board support or trailer (shown facing down)	Sign (shown facing left)
Changeable message sign or support trailer	Surveyor
Channelizing device	Temporary barrier
Crash cushion	Temporary barrier with warning light
Direction of temporary traffic detour	Traffic or pedestrian signal
Direction of traffic	Truck-mounted attenuator
Flagger	Type 3 barricade
High-level warning device (Flag tree)	Warning light
Longitudinal channelizing device	Work space
Luminaire	Work vehicle
Pavement markings that should be removed for a long-term project	

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

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DESIGN ENGINEER
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FLORIDA REGISTRATION NO. 60164

DESIGNER: C.N. MAGPANTAY
DRAWN BY: B.D. FOWLER DATE: NOVEMBER 2020
CHECKED BY: E.E. GRAY
DATE: NOVEMBER 2020

JEA Building Community

TIMAWATHA AVENUE
FORCE MAIN REPLACEMENT
TEMPORARY TRAFFIC CONTROL PLAN AND DETAILS

PROJ. NO. 8005938
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DRAWING NO. C-12

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