

# MOBILITY DEPARTMENT STORMWATER ENGINEERING DIVISION

# GRADY AVE DRAINAGE IMPROVEMENTS

24-C-00041; Ditch Rehabilitation – Grady Avenue & 43rd Street-REBID

[	No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: CTM	
[							DRN: CTM	]
							CKD: TLW	]
							DATE: 07/05/23	]

SW2024-08

PLANS FOR

# LEGEND

EX STORMWATER	UP to 18" & SMALLER	24" & LARGER	
ORCE MAIN			
PIPES & MANHOLES	(S)(S)-	-(S)====================================	
CATCH BASIN, GRATE			
DITCHES, SWALES			
PROP STORMWATER			
ORCE MAIN			
PIPES & MANHOLES			
OTHER UTILITIES			
AN SEWER & MANHOLES			
VATER LINE			
GAS LINE			
LECTRICAL CABLE or DUCT			
ELEPHONE CABLE or DUCT			
V CABLE			
ALVE	$\sim$		
YDRANT	~~ 		
LEAN OUT	( <u>_</u> )		
XISTING WYE	Ϋ́Υ.		
OWER POLE	$\swarrow$		
ELEPHONE POLE	$\sim$ $\checkmark$		
UY POLE	O		
UY WIRE	— — —)		
ALVE VAULT	V		
ATER METER	M		
LECTRICAL MANHOLE or VAULT	E		
ELEPHONE MANHOLE or VAULT	T		
RAFFIC BOX or VAULT	TR		
OTHER FEATURES			
IGHT of WAY LINE	R/W		1 mg
DGE of PAVEMENT			
UILDING LIMIT	1236 / 1		
ROPERTY OWNERSHIP		TBM FIR "LB	5/8" 6901" 22.60
		elev-	~~~ <b>\$</b> 5 ~
		20+00-\$	A Community
		STA. 0+00 OFF 0.00' R N 1317487.38	
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on the date indicated here. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

& MCKIM& CREED
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Tampa, Florida 33624
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# INDEX

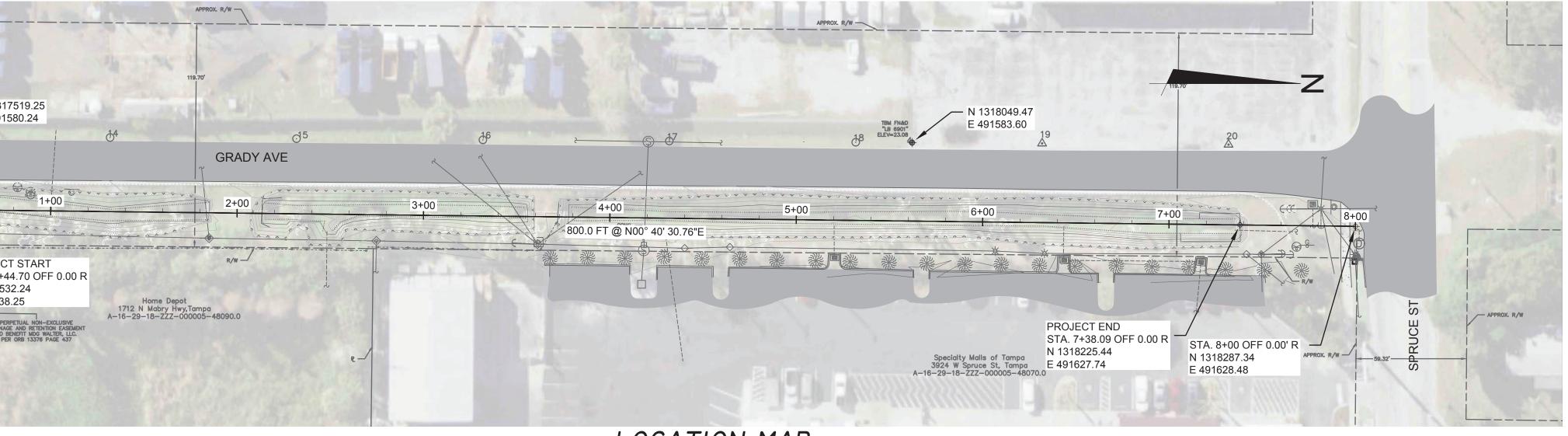
# LEGEND

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ONIFER	6"
ALM	8" (The second sec
AK	10"
THER	12"
HRUB	
EDGE	
AILROAD TRACKS	
RON PIPE	$\odot$
ONCRETE MONUMENT	0
OP-OF-BANK EXISTING	
OP-OF-BANK PROPOSED	
OE-OF-SLOPE EXISTING/PROPOSED	
UARDRAIL	<u> </u>

No.	DESCRIPTION
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# ABBREVIATIONS

DP of PIPE	TP
VERT ELEVATION	IE or INV EL
GHT of WAY	R/W
ANHOLE	МН
DLYVINYL CHLORIDE PIPE	PVCP
TRIFIED CLAY PIPE	VCP
DVANCED DRAINAGE SYSTEM	ADS
JCTILE IRON PIPE	DIP
EINFORCED CONCRETE PIPE	RCP
ONCRETE PIPE	СР
PPROXIMATE LOCATION	AL
ENCH MARK	BM
DINT of INTERSECTION	PI



	e_/				Specialty Malls of Tampa 3924 W Spruce St, Tampa E 491627.74 A-16-29-18-ZZZ-000005-48070.0	N 1318287.34 E 491628.48	
	1 2 mg and the second		LOCATION M	1AP	A Contraction of the second		
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No. DATE	REVISIONS	No. DATE	REVISIONS	DES: CTM DRN: CTM	CITY of TAMPA	GRADY AVE DRAINAGE IMPROVEMENTS	SHEET
No. DATE	REVISIONS	No. DATE   Image: Image of the second se	REVISIONS		CITY of TAMPA Mobility Department Stormwater Engineering Division	GRADY AVE DRAINAGE IMPROVEMENTS LEGEND, INDEX & LOCATION MAP	

# GENERAL NOTES

- 1. ELEVATIONS BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1988.
- 2. LOCATIONS, ELEVATIONS AND DIMENSIONS OF THE EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN 9. ALL GRADING OF SIDEWALKS AND PEDESTRIAN WALKWAYS SHALL MEET MINIMUM 'ADA' STANDARDS. SIDEWALK CROSS SLOPES ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS BUT DO NOT AND DRIVEWAY CROSSINGS FOR SIDEWALKS TO BE 2.0% MAX. SLOPE. ALL SIDEWALK RUNNING SLOPES SHALL NOT EXCEED PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS, OF 5% WITHOUT USE OF PROPER RAMPS FOR FDOT OR FLORIDA BUILDING CODE. CONTRACTOR SHALL FIELD-VERIFY SIDEWALK ALL EXISTING UTILITIES, STRUCTURE, AND OTHER FEATURES AFFECTING HIS WORK PRIOR TO CONSTRUCTION. GAS, VERIZON, FORM BOARDS PRIOR TO CONSTRUCTING WALKWAYS. WATER MAIN, WATER SERVICES, SEWER LATERALS AND OTHER SUBSURFACE PIPING HAS NOT BEEN LOCATED. ENGINEER OF RECORD SHOWS LOCATIONS AS APPROXIMATE AS PROVIDED BY OTHERS.
- 3. EXISTING UTILITIES AND TOPOGRAPHIC INFORMATION DENOTED BY UPPER AND LOWER CASE. PROPOSED WORK DENOTED BY ALL UPPER CASE.
- 4. THE CONTRACTOR SHALL CALL SUNSHINE (1-800-432-4770) AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
- 5. WHEN IN CONFLICT, UTILITY POLES, GAS LINES, UNDERGROUND ELECTRIC, TELEPHONE AND OTHER COMMUNICATION CABLES AND CONDUIT WILL BE RELOCATED BY THE RESPECTIVE UTILITY OWNERS AT THEIR OWN EXPENSE.
- 6. PRIOR TO ANY CONSTRUCTION, CONTACT TAMPA ELECTRIC COMPANY (PH: 813-228-4111 OR 813-275-3037) FOR EXACT LOCATION OF UNDERGROUND LINES. TECO TO RELOCATE ANY CONFLICTING LINES.
- 7. PRIOR TO ANY CONSTRUCTION, CONTACT TECO GAS (813-275-3743) FOR EXACT LOCATION OF UNDERGROUND LINES. TECO GAS TO RELOCATE ANY CONFLICTING LINES.
- 8. PRIOR TO ANY CONSTRUCTION, CONTACT VERIZON (813-978-2164) FOR EXACT LOCATION OF UNDERGROUND LINES. VERIZON TO RELOCATE ANY CONFLICTING LINES.
- 9. STATIONS AND OFFSETS GIVEN ARE TO THE CENTER LINE OF THE INLETS AND MANHOLES, AND REFER TO THE CONSTRUCTION CENTER LINE (CONST CL).
- 10. THE SOLID WASTE DEPARTMENT (813-348-1146) IS TO BE NOTIFIED PRIOR TO ANY STREET CLOSURES IN THE PROJECT AREA.
- 11. TREE REMOVAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING SITE CLEARING PERMIT PRIOR TO START OF ANY CONSTRUCTION.
- 12. NECESSARY ROOT PRUNING AND TRIMMING OF BRANCHES SHALL BE DONE BY A CERTIFIED ARBORIST.
- 13. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF THE LATEST "TREE ORDINANCE" OF THE CITY OF TAMPA. THE CONTRACTOR IS REQUIRED TO RELOCATE THE TREES REMOVED AS A PART OF THE NECESSARY CONSTRUCTION INDICATED on plans.
- 14. SOD ALL THE DISTURBED AREAS WITHIN APPROVED TRENCH LIMITS.
- 15. WHERE CONNECTIONS TO EXISTING DRIVES AND WALKS ARE NOT INDICATED ON THE PLANS, PROPER CONNECTIONS SHALL BE MADE AT THE DIRECTION OF THE ENGINEER.
- 16. STREET SIGNS, STREET MARKERS AND R-O-W MARKERS SHALL BE REMOVED AND RELOCATED AS DIRECTED BY THE ENGINEER.
- 17. MAILBOXES SHALL BE REMOVED AND REPLACED IN-KIND.
- 18. DRIVEWAYS SHALL BE RECONSTRUCTED IN ACCORDANCE WITH CHAPTER 25 OF THE CITY CODE AND THE TRANSPORTATION TECHNICAL MANUAL. DEVIATION FROM ESTABLISHED STANDARDS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
- 19. THE CONTRACTOR SHALL PROTECT ALL TREES, NOT DESIGNATED FOR REMOVAL, IN THE VICINITY OF THE PROPOSED CONSTRUCTION IN ACCORDANCE WITH CHAPTER 13 OF THE CITY OF TAMPA CODE. NO TREES SHALL BE PRUNED WITHOUT PRIOR APPROVAL FROM THE CITY OF TAMPA PARKS & RECREATION DEPARTMENT, NATURAL RESOURCES DIVISION, AND SHALL BE COMPLETED BY A CERTIFIED ARBORIST. ROOT PRUNING MAY BE REQUIRED AT CERTAIN LOCATIONS AND SHALL BE COMPLETED IN ACCORDANCE WITH CHAPTER 13 TECHNICAL MANUAL SPECIFICATIONS.
- 20. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE CITY OF TAMPA DEPARTMENT ORDINANCES AND REGULATIONS.
- 21. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL APPLICABLE PERMITS ON-SITE AND SHALL BE RESPONSIBLE TO ADHERE TO ALL PERMIT CONDITIONS DURING CONSTRUCTION.
- 22. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.
- 23. COMPACTION FOR PIPE BACKFILL SHALL COMPLY WITH AASHTO T-99 (100%).

# SITE NOTES

- 1. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN CITY OF TAMPA STORMWATER TECHNICAL MANUAL, LATEST VERSION.
- 2. ALL RIGHT-OF-WAY INSTALLATIONS MUST COMPLY WITH THE CITY OF TAMPA STANDARDS AND TECHNICAL MANUALS.
- 3. IN AREAS WHERE FILL MATERIAL IS REQUIRED, BUT THERE IS NO PROPOSED STRUCTURE, THE EXISTING VEGETATION AND ROOTS SHALL BE REMOVED PRIOR TO PLACING ANY FILL MATERIAL. THE FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 12 INCHES AS MEASURED LOOSE, AND COMPACTED TO A UNIFORM DENSITY ASTM D698 (80%). THE MATERIAL SHALL BE COMPACTED AT A MOISTURE CONTENT PERMITTING THE SPECIFIED COMPACTION. THE FILL SHALL BE TESTED BY THE CITY OF TAMPA THROUGH THE CITY INSPECTOR AND THE RESULTS SUPPLIED TO THE ENGINEER.
- 4. THE CONTRACTOR SHALL CONTACT THE ENGINEER'S OFFICE IMMEDIATELY ON ANY CONFLICTS ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONSULT WITH THE ENGINEER FOR MAKING ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS. HOWEVER, THIS IN NO WAY RELIEVES THE CONTRACTOR OF HIS RESPONSIBILITY FOR CONSTRUCTING THE PROJECT TO ACCOMPLISH THE INTENT OF THE PLANS.
- 5. REPAIR AND REPLACEMENT OF ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING BEFORE COMPLETING CONSTRUCTION UNLESS SPECIFICALLY EXEMPTED BY THE PLANS.
- 6. EROSION/SEDIMENTATION CONTROL: THE CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN). IF REQUIRED TO PREVENT SILTATION OF ADJACENT PROPERTY. STREETS. STORM SEWERS AND WATERWAYS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW, MULCH OR OTHER SUITABLE MATERIAL ON THE GROUND, AS REQUIRED, IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE, EITHER BY NATURAL DRAINAGE OR BY VEHICLE TRAFFIC, THE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR LOCAL AUTHORITIES AT NO ADDITIONAL COST.
- 7. CONTRACTOR SHALL SPRINKLE OR OTHERWISE APPLY WATER TO AFFECTED CONSTRUCTION AREA TO CONTROL BOTH SIGNIFICANT WIND EROSION OR FUGITIVE DUST.

### COLIN TYSON MILLER, State of Florida, Professional Engineer, License No. 61775

This item has been digitally signed and sealed by **COLIN TYSON MILLER** on the date indicated here.

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8. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. PORTLAND CEMENT SHALL CONFORM TO ASTM C150. AGGREGATE SHALL CONFORM TO ASTM C33. READY MIXED CONCRETE SHALL CONFORM TO ASTM C-04. SUBSURFACE SHALL BE FREE FROM TROWEL OR MACHINE MARKS. SURFACE VARIATIONS SHALL NOT EXCEED 1/4 INCH UNDER TEN-FOOT (10') STRAIGHT EDGE.

10. ALL INLET GRATE SEATS SHALL BE GALVANIZED GRATE SEATS.

# CONSTRUCTION NOTES

- 1. PRICE FOR ALL REMOVAL, AS SHOWN ON THE PLANS OUTSIDE OF CONSTRUCTION EXCAVATION AREA, SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE STORMWATER UNIT PRICES.
- 2. CONTRACTOR TO SOD DISTURBED AREA WITHIN THE PROJECT LIMITS WITH BAHIA SOD AND/OR LIKE KIND OF EXISTING SOD.
- 3. CONTRACTOR TO RESTORE DISTURBED RESIDENTIAL YARDS WITHIN CONSTRUCTION LIMITS WITH BAHIA, ST. AUGUSTINE, AND/OR LIKE KIND OF SOD.
- 4. CONTRACTOR SHALL RESTORE ALL NEIGHBORING RESIDENTIAL YARDS WITH LIKE KIND OF LANDSCAPING, MAILBOXES, WALK WAYS, DRIVEWAYS, ETC. EACH YARD SHALL BE RESTORED TO EXISTING CONDITIONS UP TO AND INCLUDING FROM BACK OF CURB TO RIGHT OF WAY LINE.
- 5. CONTRACTOR TO PROTECT EXISTING IRRIGATION SYSTEMS AND ANY OTHER UTILITIES IN RESIDENTIAL YARDS WITHIN CONSTRUCTION LIMITS AND/OR RESTORE ANY DAMAGED SYSTEMS DURING CONSTRUCTION BACK TO EXISTING CONDITIONS.
- 6. CONTRACTOR TO PROTECT EXISTING PRIVATE FENCES DURING CONSTRUCTION OR REPLACE IN LIKE KIND.
- 7. CONTRACTOR TO PROTECT THE EXISTING CONDUIT THAT IS TO REMAIN.
- 8. ALL REMOVAL WITHIN PROPOSED EXCAVATION AREAS IS PART OF PIPE & DITCH CONSTRUCTION.
- 9. CONTRACTOR TO PROTECT ALL POWER POLES & SUBSURFACE UTILITIES. IN THE EVENT OF A CONFLICT THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER RESPONSIBLE FOR THE RELOCATION.
- 10. ALL RCP PIPES SHALL BE CLASS III WITH MINIMUM COVER OF 18". ALL RCP PIPES WITH LESS THAN 18" OF COVER ON RESIDENTIAL ROADS SHALL BE CLASS IV.
- 11. CONCRETE STRUCTURES AND JUNCTION BOXES MAY BE PRECAST OR CAST IN PLACE.
- 12. CONTRACTOR TO PROVIDE DEWATERING PLANS TO CITY PRIOR TO IMPLEMENTATION. THE DEWATERING PLAN SHOULD INCLUDE: 1. METHOD OF DEWATERING; 2. DISCHARGE POINT FOR GROUNDWATER; 3. TURBIDITY CONTROL METHODS; 4. PUMPING RATES/DURATION.

# SURVEY NOTES

- 1. NOT A BOUNDARY SURVEY. [TOPOGRAPHIC SURVEY DATA ONLY]
- 2. THERE MAY BE ADDITIONAL EASEMENTS, RESERVATIONS, RESTRICTIONS AND/OR OTHER MATTERS OF RECORD AFFECTING THIS PROPERTY THAT ARE NOT SHOWN HEREON THAT MAY (OR MAY NOT) BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. THE UNDERSIGNED HAS NOT PERFORMED AN INDEPENDENT SEARCH FOR ADDITIONAL RECORDS.
- 3. THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1" = 20' OR SMALLER.
- 4. THE PRINTED DIMENSIONS SHOWN ON THIS SURVEY SUPERSEDE ANY SCALED DIMENSIONS; THERE MAY BE ITEMS DRAWN OUT OF SCALE TO GRAPHICALLY SHOW THEIR LOCATION.

5. "CERTIFICATION" IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE SURVEYOR AND MAPPER BASED ON THE SURVEYOR AND MAPPER'S KNOWLEDGE AND INFORMATION, AND THAT IT IS NOT A GUARANTEE OR WARRANTY, EXPRESSED OR IMPLIED.

- 6. THIS SURVEY HAS BEEN EXCLUSIVELY PREPARED FOR THE NAMED ENTITIES SHOWN HEREON AND IS NOT TRANSFERABLE. NO OTHER PERSON OR ENTITY IS ENTITLED TO RELY UPON AND/OR RE-USE THIS SURVEY FOR ANY PURPOSE WITHOUT THE EXPRESSED, WRITTEN CONSENT OF GEORGE F. YOUNG, INC. AND THE UNDERSIGNED PROFESSIONAL SURVEYOR AND MAPPER.
- 7. UNAUTHORIZED COPIES AND/OR REPRODUCTIONS VIA ANY MEDIUM OF THIS SURVEY OR ANY PORTIONS THEREOF ARE EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF GEORGE F. YOUNG, INC. AND THE UNDERSIGNED PROFESSIONAL 19. ALL REFERENCES TO THE OFFICIAL RECORDS REFER THE THE OFFICIAL RECORDS OF HILLSBOROUGH COUNTY, FLORIDA. SURVEYOR AND MAPPER.
- 8. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES ARE PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
- 9. THIS SURVEY IS VALID AS TO THE LAST DATE OF FIELD SURVEY AND NOT THE SIGNATURE DATE (IF ANY).
- 10. THIS SURVEY MAP AND REPORT (IF APPLICABLE) OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
- 11. BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, AS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, ADJUSTMENT OF 2011, NAD83(2011) AND ARE SHOWN IN U.S. SURVEY FEET. CONTROL FOR THIS SURVEY WAS ESTABLISHED USING REAL TIME KINEMATIC-GLOBAL POSITIONING SYSTEM (RTK GPS) OBSERVATIONS WITH CORRECTION SIGNALS PROVIDED BY TRIMBLE VRS NOW, WITH SUBSEQUENT CHECKS TO PUBLISHED HORIZONTAL CONTROL.
- 12. ELEVATIONS SHOWN ON THIS SURVEY ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). BENCHMARK USED: CITY OF TAMPA HV-02 0074 LOCATED AT THE SOUTHEAST CORNER OF GRADY AVENUE AND SPRUCE STREET, HAVING A PUBLISHED, ADJUSTED ELEVATION OF 24.071 FEET (NAVD 88). INFORMATION OBTAINED FROM THE CITY of tampa.
- 13. THIS SURVEY PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH. NO INSTRUMENTS OF RECORD REFLECTING OWNERSHIP, EASEMENTS OR RIGHTS OF WAY WERE FURNISHED TO THE UNDERSIGNED, UNLESS OTHERWISE SHOWN HEREON.
- 14. NO INFORMATION ON ADJOINING PROPERTY OWNERS OR ADJOINING PROPERTY RECORDING INFORMATION WAS PROVIDED TO THE SURVEYOR.
- 15. THIS SURVEY SHOWS VISIBLE, ABOVE GROUND FEATURES. NO UNDERGROUND FEATURES, INCLUDING BUT NOT LIMITED TO FOUNDATIONS, STRUCTURES, INSTALLATIONS, OR IMPROVEMENTS HAVE BEEN LOCATED, EXCEPT AS SHOWN HEREON.
- 16. UNDERGROUND UTILITIES SHOWN ARE BASED ON ABOVE-GROUND EVIDENCE AND SURFACE MARKING FOUND DURING THIS SURVEY. THERE MAY BE OTHER UNDERGROUND INSTALLATIONS WITHIN OR NEAR THE SUBJECT PROPERTY WHICH WERE NOT LOCATED AND ARE NOT SHOWN. UTILITIES SHOWN HEREON ARE NOT TO BE USED FOR CONSTRUCTION AND DO NOT NECESSARILY INDICATE AVAILABILITY.
- 17. FORTY-EIGHT (48) HOURS BEFORE DIGGING, BORING, PILE-DRIVING, PLANTING, ETC. NOTIFY SUNSHINE 811 BY CALLING 811 SO THAT UNDERGROUND UTILITIES MAY BE FIELD SPOTTED.

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- HAVING AN ELEVATION OF 25.57'.

- RECORDS.
- CONSENT.
- CODE.
- ELECTRONIC COPY.

- ACCOMPANYING ZIPPED DIRECTORY.

  - PERFORMED BY THE CITY.

# SW2024-08

18. ALL TREE SPECIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY AND ANY TREE SPECIES THAT MAY BE CRITICAL SHOULD BE VERIFIED BY A CERTIFIED ARBORIST.

19. GEORGE F. YOUNG, INC. AND THE UNDERSIGNED MAKE NO REPRESENTATIONS OR GUARANTEES PERTAINING TO EASEMENTS, RIGHTS-OF-WAY, SET BACK LINES, RESERVATIONS AND/OR AGREEMENTS.

# BOUNDARY SURVEY NOTES

1. THE PURPOSE OF THIS TOPOGRAPHIC SURVEY IS TO ESTABLISH EXISTING TOPOGRAPHIC FEATURES AND ELEVATIONS FOR A CITY OF TAMPA DITCH, IN SUPPORT OF A PROPOSED REHABILITATION.

2. THE BOUNDARY LINES SHOWN HEREON ARE APPROXIMATED FROM CURSORY RESEARCH AND FIELDWORK, AND BY NO MEANS REPRESENT AN OFFICIAL BOUNDARY DETERMINATION. THIS IS NOT A BOUNDARY SURVEY.

3. THE COORDINATES SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83/11), AS ESTABLISHED BY REAL TIME KINEMATIC (RTK) OBSERVATIONS USING THE FLORIDA PERMANENT REFERENCE NETWORK (FPRN).

4. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), AS ESTABLISHED BY A CLOSED LOOP DIFFERENTIAL LEVEL RUN BASED ON THE GPS DERIVED ELEVATION OF CONTROL POINT 18,

5. SUBSURFACE UTILITIES, FOUNDATIONS, AND OTHER IMPROVEMENTS WERE NOT LOCATED EXCEPT AS SHOWN.

6. JURISDICTIONAL WETLANDS, IF ANY, WERE NOT LOCATED OR IDENTIFIED AS PART OF THIS SURVEY.

7. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. EASEMENTS OR RIGHT OF WAY THAT APPEAR ON RECORDED PLAN OR THAT HAVE BEEN FURNISHED TO THE SURVEYOR BY THE CLIENT HAVE BEEN INCORPORATED INTO THIS SURVEY WITH NOTATION. OTHER EASEMENTS AND ENCUMBRANCES MAY BE DISCOVERED BY A SEARCH OF THE PUBLIC

8. ADDITIONS OR DELETIONS TO SURVEY OR REPORTS BY OTHER THAN MCKIM & CREED IS PROHIBITED WITHOUT WRITTEN

9. FEATURES SHOWN BY SYMBOL AS INDICATED IN THE LEGEND ARE NOT TO SCALE.

10. DIMENSIONS ARE SHOWN IN UNITED STATES STANDARD SURVEY FEET AND DECIMALS THEREOF. THIS DRAWING IS IN GRID.

11. THIS SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH IN CHAPTER 5J-17 OF THE FLORIDA ADMINISTRATIVE

### 12. THIS SURVEY HAS BEEN ELECTRONICALLY SIGNED AND SEALED PURSUANT TO RULE 5J-17.062, FLORIDA ADMINISTRATIVE CODE. PRINTED COPIES ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY

13. THE AERIAL PHOTOS INCLUDED HEREIN WERE PROVIDED BY FLORIDA DEPARTMENT OF TRANSPORTATION'S AERIAL PHOTO LOOK UP SYSTEM AND HAS A FLIGHT DATE OF FEBRUARY, 2020. THE SURVEYOR MAKES NO CLAIM TO ACCURACY AND THIS PHOTO SHOULD NOT BE UTILIZED FOR GEOSPATIAL MEASUREMENT.

14. THE LAST FIELD DATE OF THIS SURVEY IS JANUARY 18, 2020.

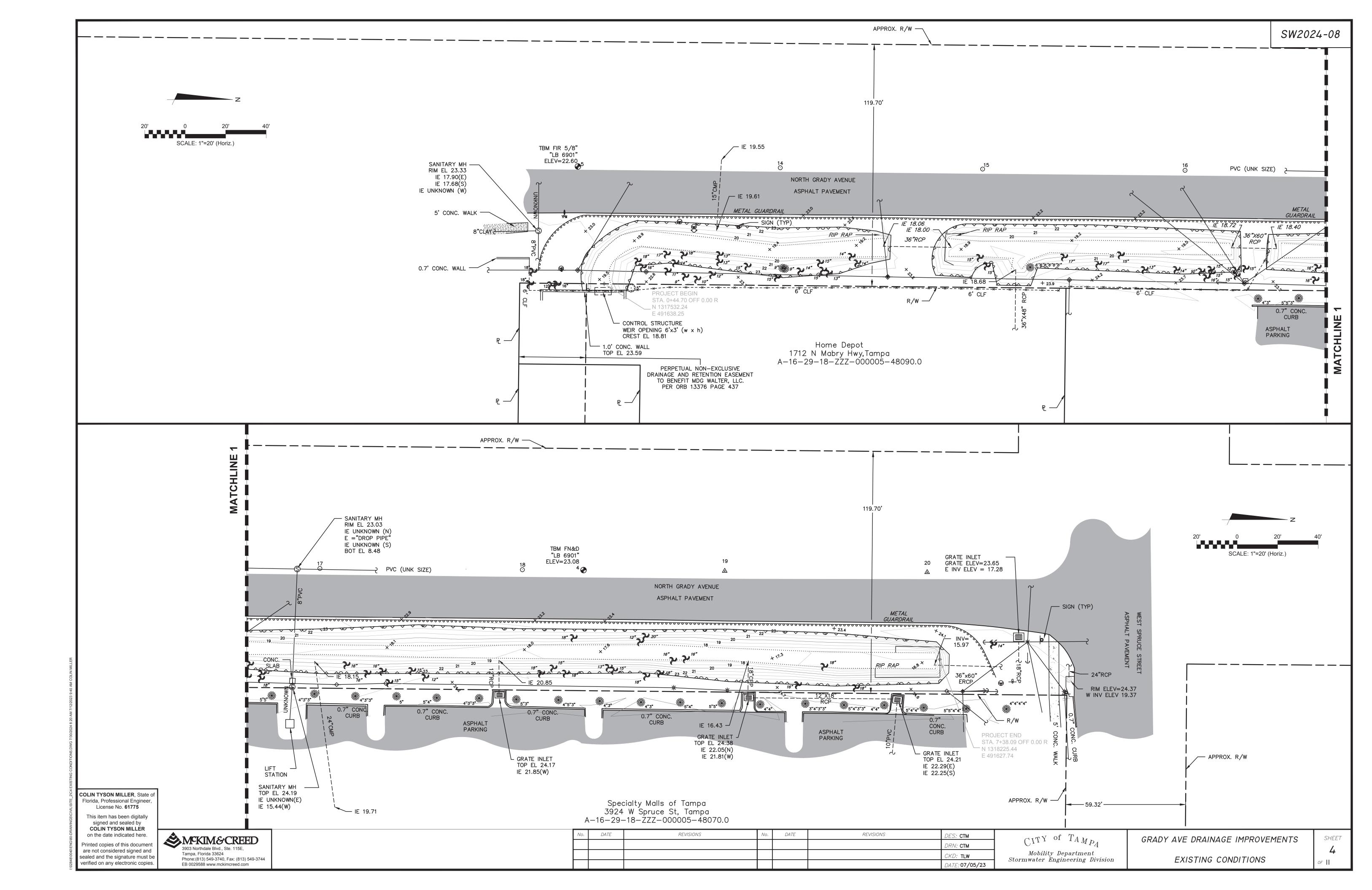
15. THIS SURVEY IN GRAPHIC FORM IS ACCOMPANIED BY AN ELECTRONIC ZIPPED DIRECTORY TITLED SITE5.ZIP DATED MARCH 6, 2021. THIS SURVEY IS NEITHER WHOLE NOR COMPLETE WITHOUT BOTH THE ELECTRONICALLY SIGNED SURVEY AND

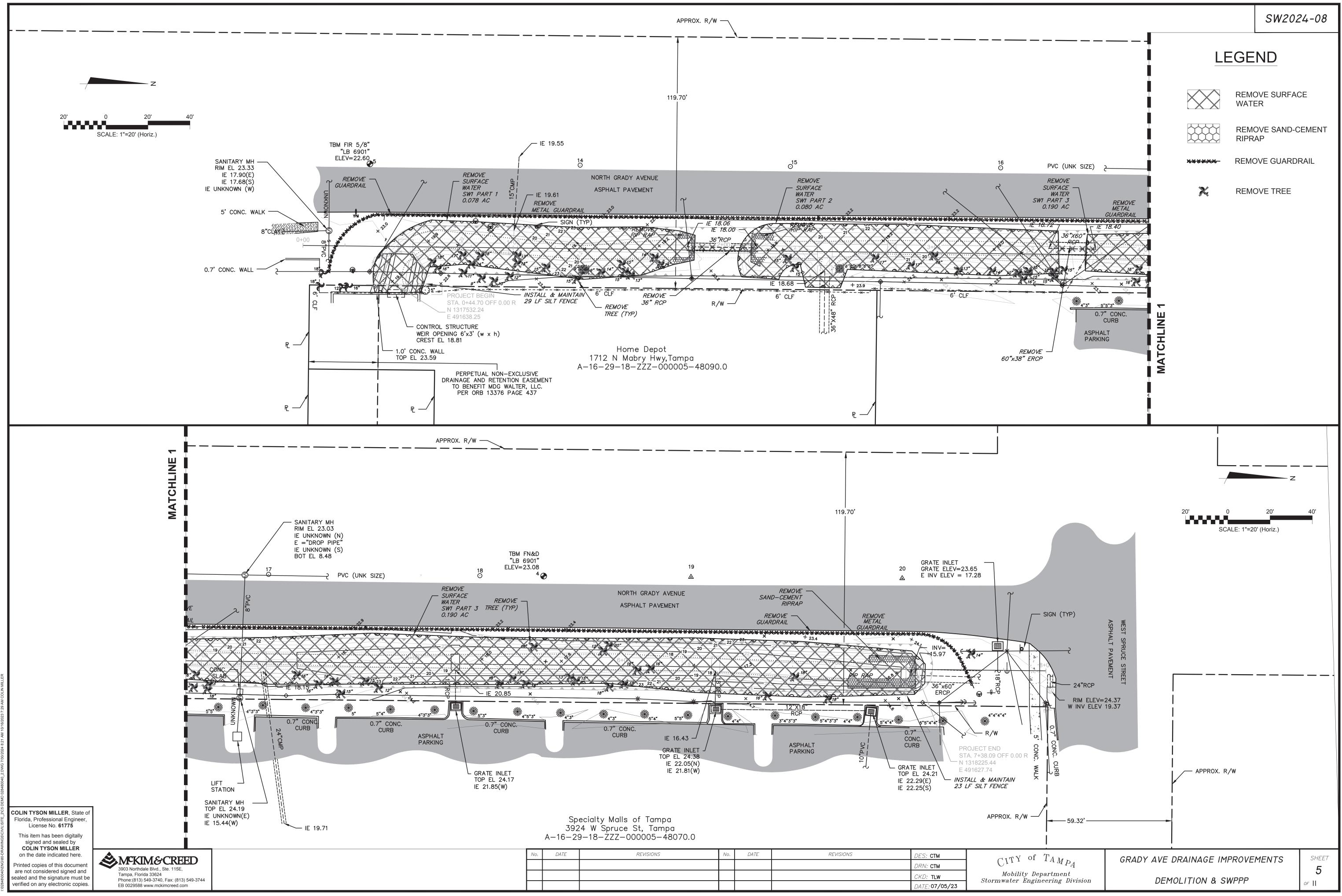
16. THIS SURVEY IN GRAPHIC FORM IS INTENDED TO BE PLOTTED AT A 1" = 30' SCALE OR SMALLER.

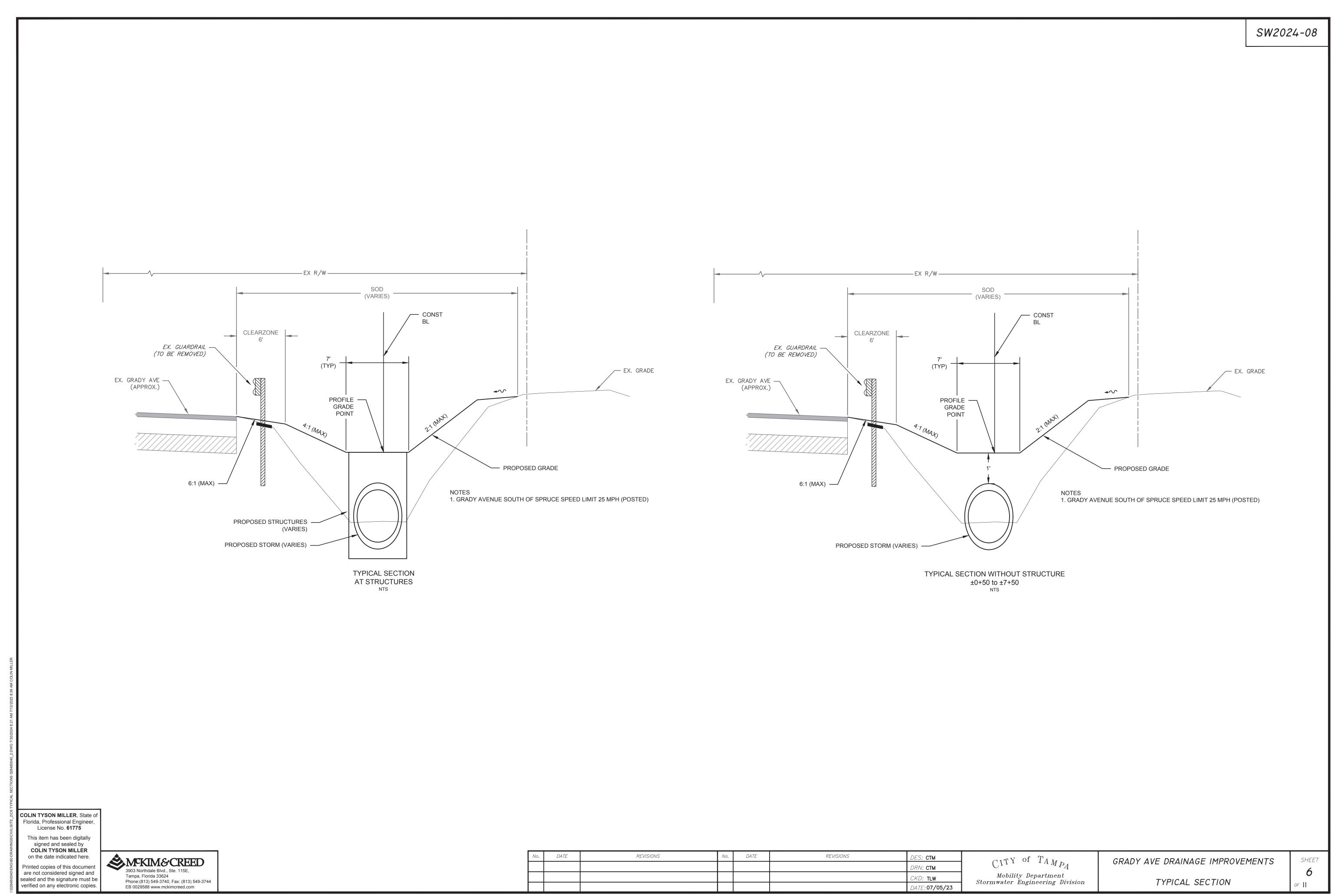
17. THE CITY OF TAMPA DRAINAGE EASEMENT DEED LEGAL DESCRIPTION AS DESCRIBED IN OFFICIAL RECORDS BOOK 5726, PAGE 1065 APPEARS TO ONLY ENCUMBER THE WESTERLY PORTION OF LOT 11 AND LOT 6, NORTH HILLSBORO SUBDIVISION AS RECORDED IN PLAT BOOK 6, PAGE 32. UPON REVIEWING CITY OF TAMPA RESOLUTION NO. 89–1228, IT APPEARS THAT THE INTENT OF THE CITY OF TAMPA INTENDED TO ACQUIRE AN EASEMENT UPON THE NORTH 35' OF BOTH SAID LOTS 6 AND 11 EXTENDING BETWEEN ARMENIA AVENUE AND ALBANY AVENUE. THE EASEMENT LIMITS DEPICTED HEREON REFLECT THE LEGAL DESCRIPTION AS PROVIDED IN BOTH DOCUMENTS.

18. THE DRAINAGE EASEMENT DEPICTED UPON THE NORTHERLY 15' OF PARCEL ID: A-23-28-18-3DT-000000-00008.0 APPEARS TO HAVE BEEN RETAINED BY THE GRANTOR, FIRST VIRGINIA MORTGAGE AND REAL ESTATE INVESTMENT TRUST. AS SUCH, THIS EASEMENT APPEARS TO HAVE BEEN CREATED FOR THE BENEFIT OF ADJOINING PARCEL OWNERS RATHER THAN THE CITY OF TAMPA. AT THIS TIME IT DOES NOT APPEAR THAT THIS EASEMENT BENEFITS PROPOSED REHABILITATION TO BE

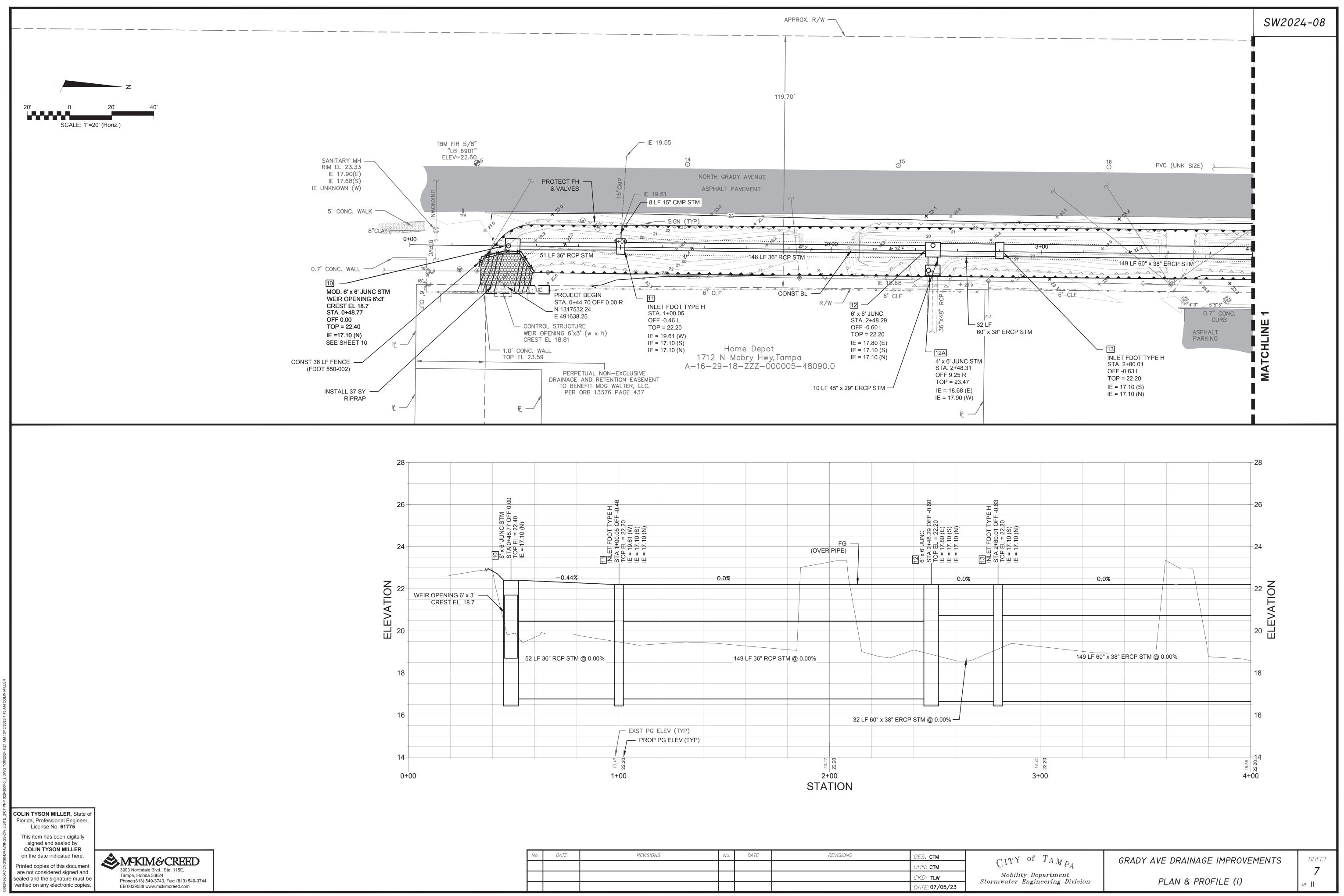
CITY of TAMPA	GRADY AVE DRAINAGE IMPROVEMENTS
Mobility Department Stormwater Engineering Division	GENERAL NOTES



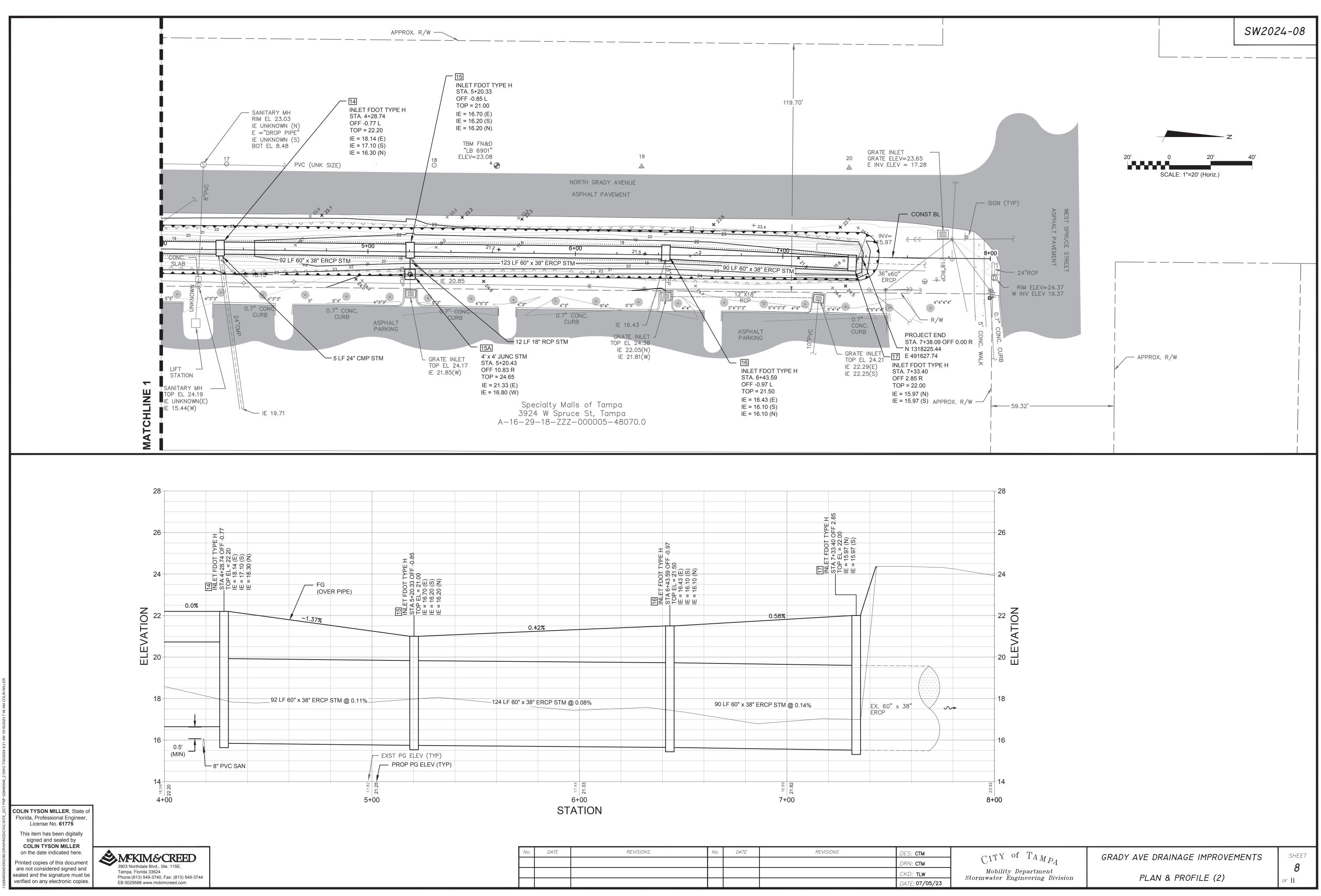




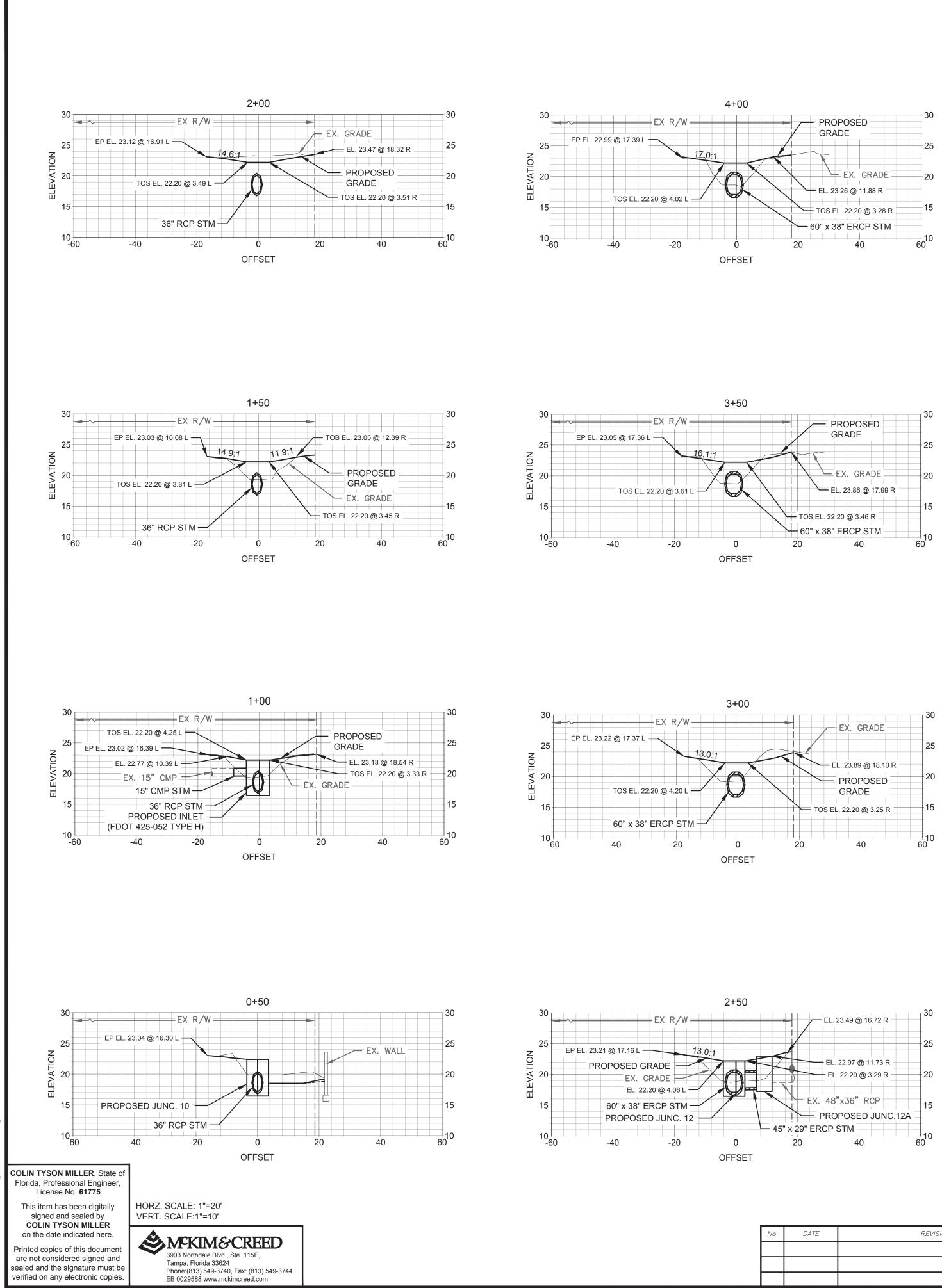
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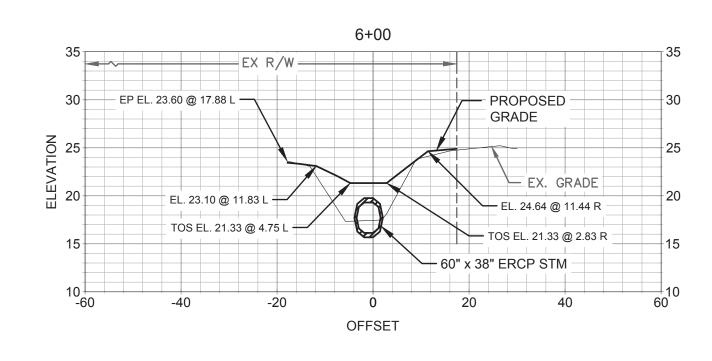


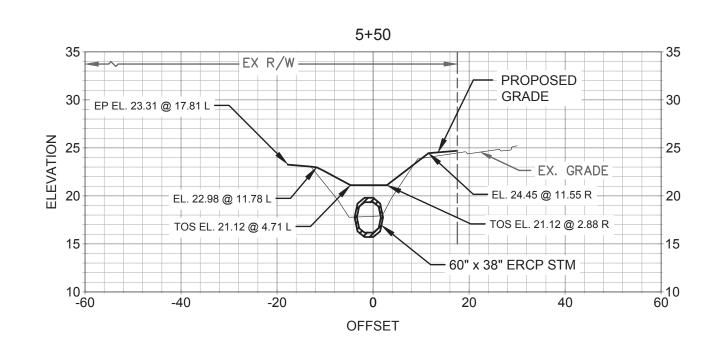
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						DATE: 07/05/23	]

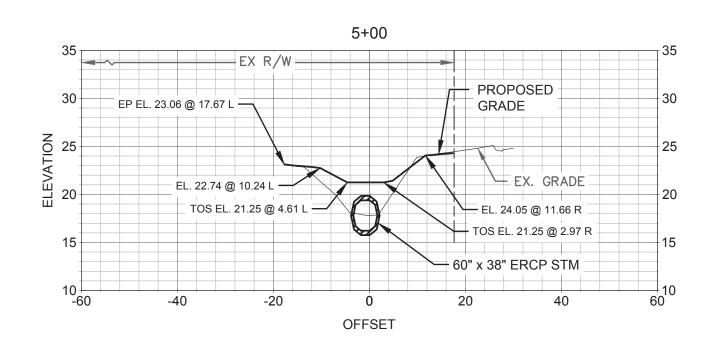


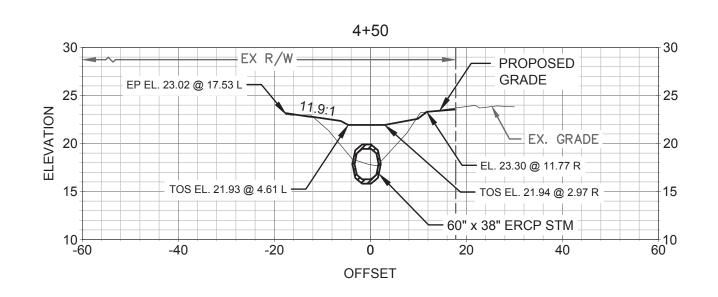
No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: CTM	
						DRN: CTM	
						CKD: TLW	
						DATE: 07/05/23	





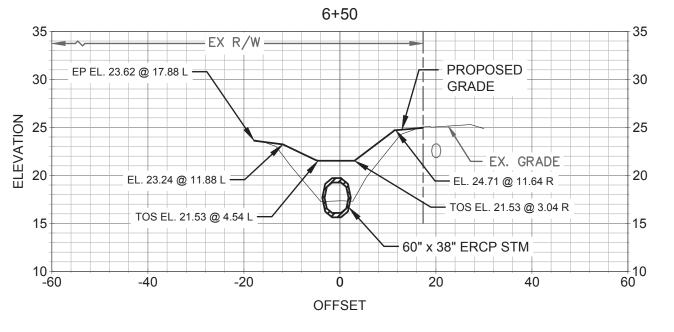


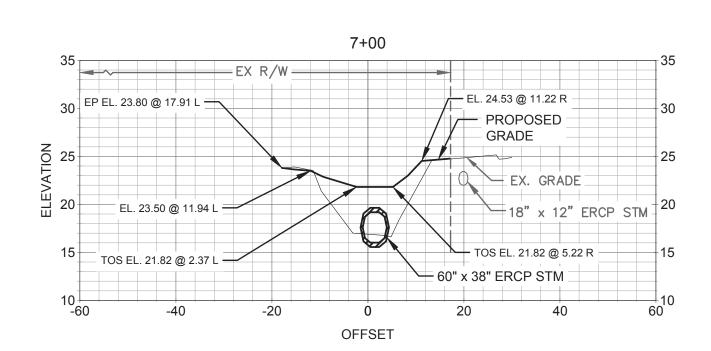


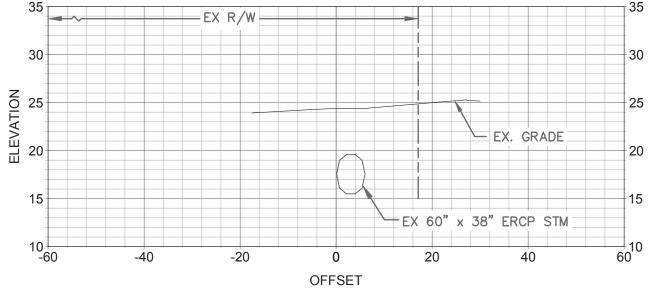


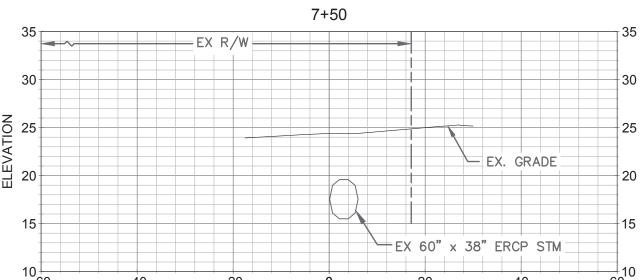
			-				
No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: CTM	
						DRN: CTM	
						CKD: TLW	S
						DATE: 07/05/23	د د

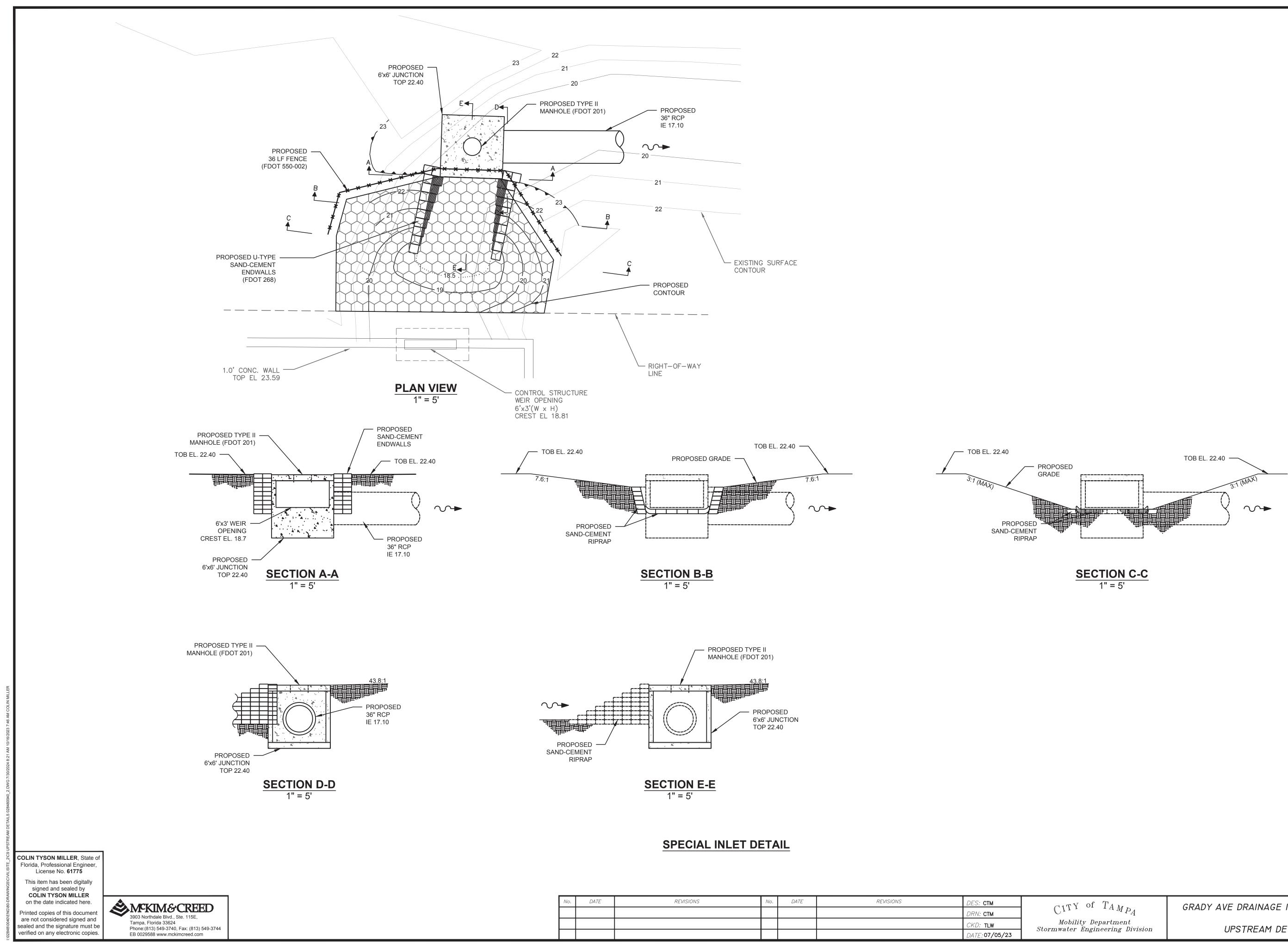
CITY of TAMPA	GRADY AVE DRAINAGE IMPROVEMENTS	SHEET
Mobility Department Stormwater Engineering Division	CROSS SECTIONS (I)	9 0f







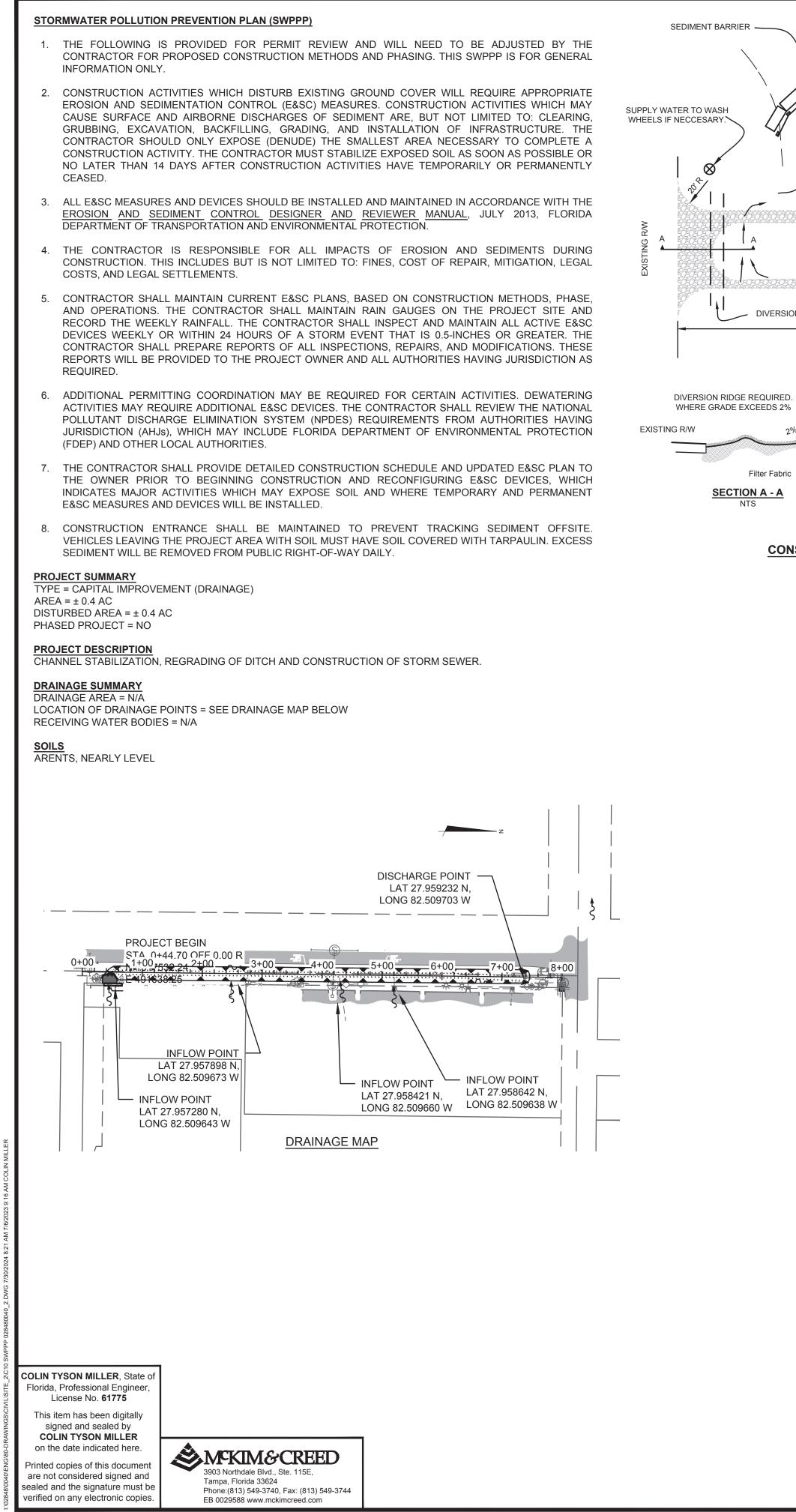


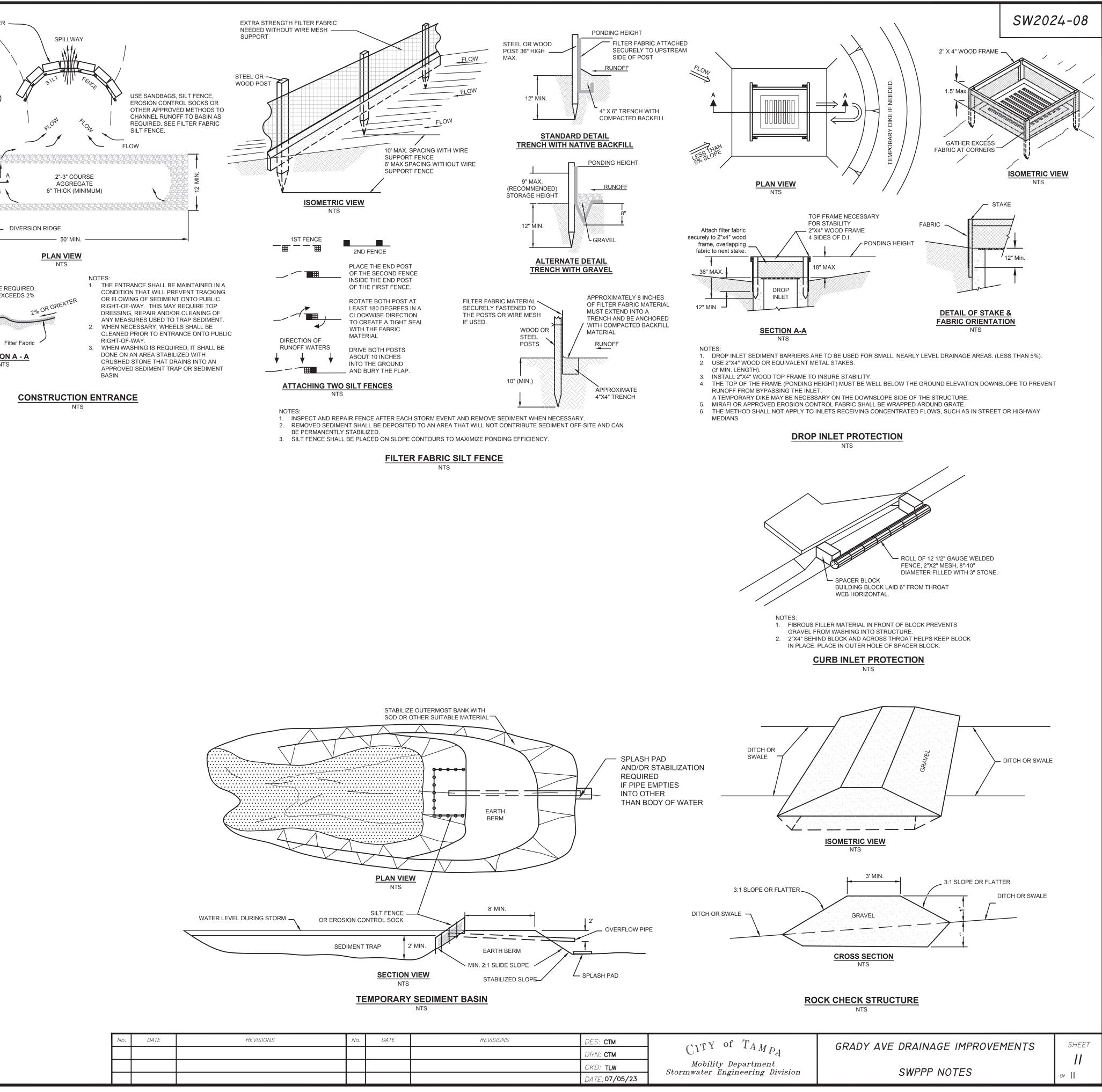


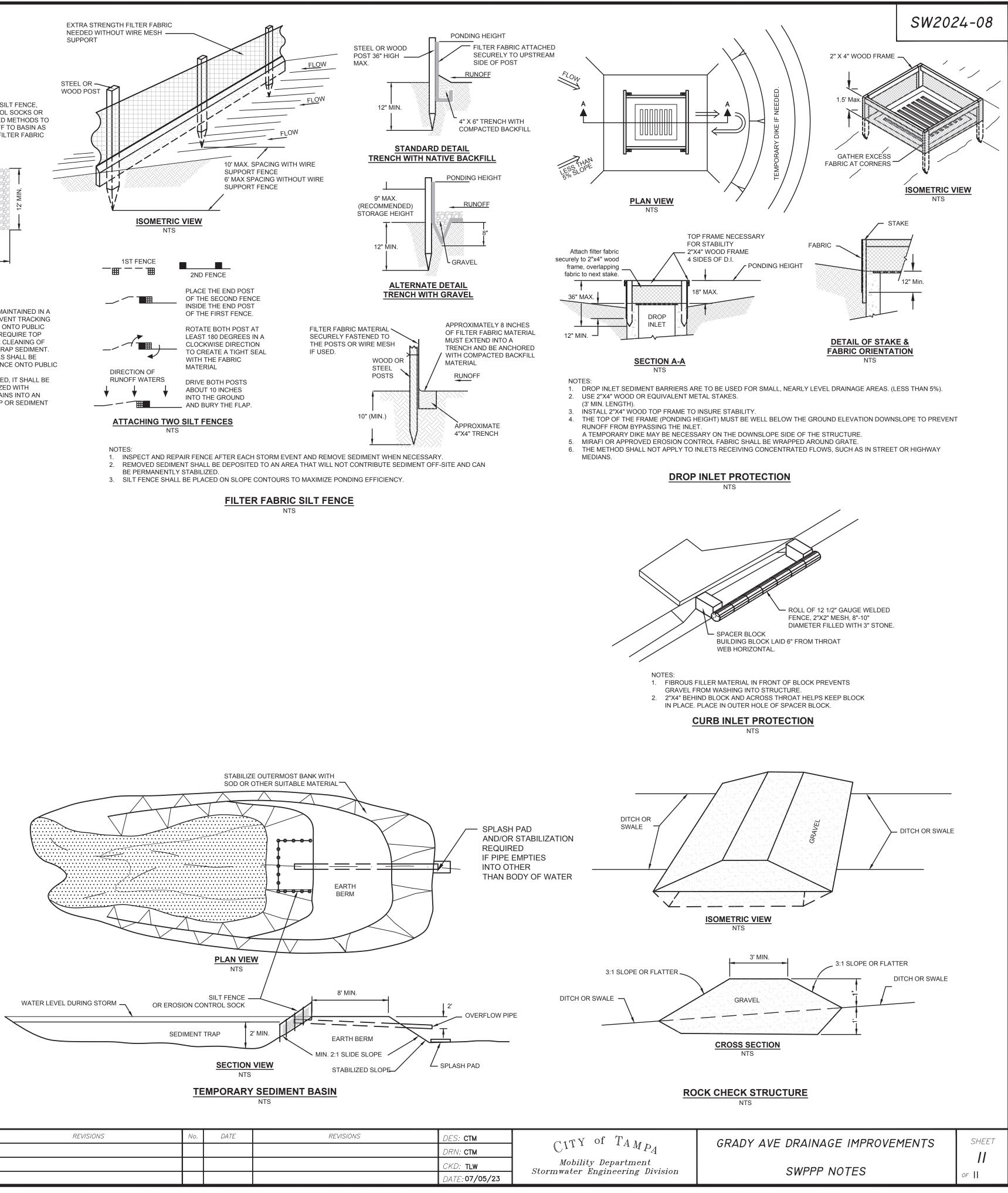
No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: CTM	
						DRN: CTM	
						CKD: TLW	
						DATE: <b>07/05/23</b>	

SECTION	C-C
1" = 5'	

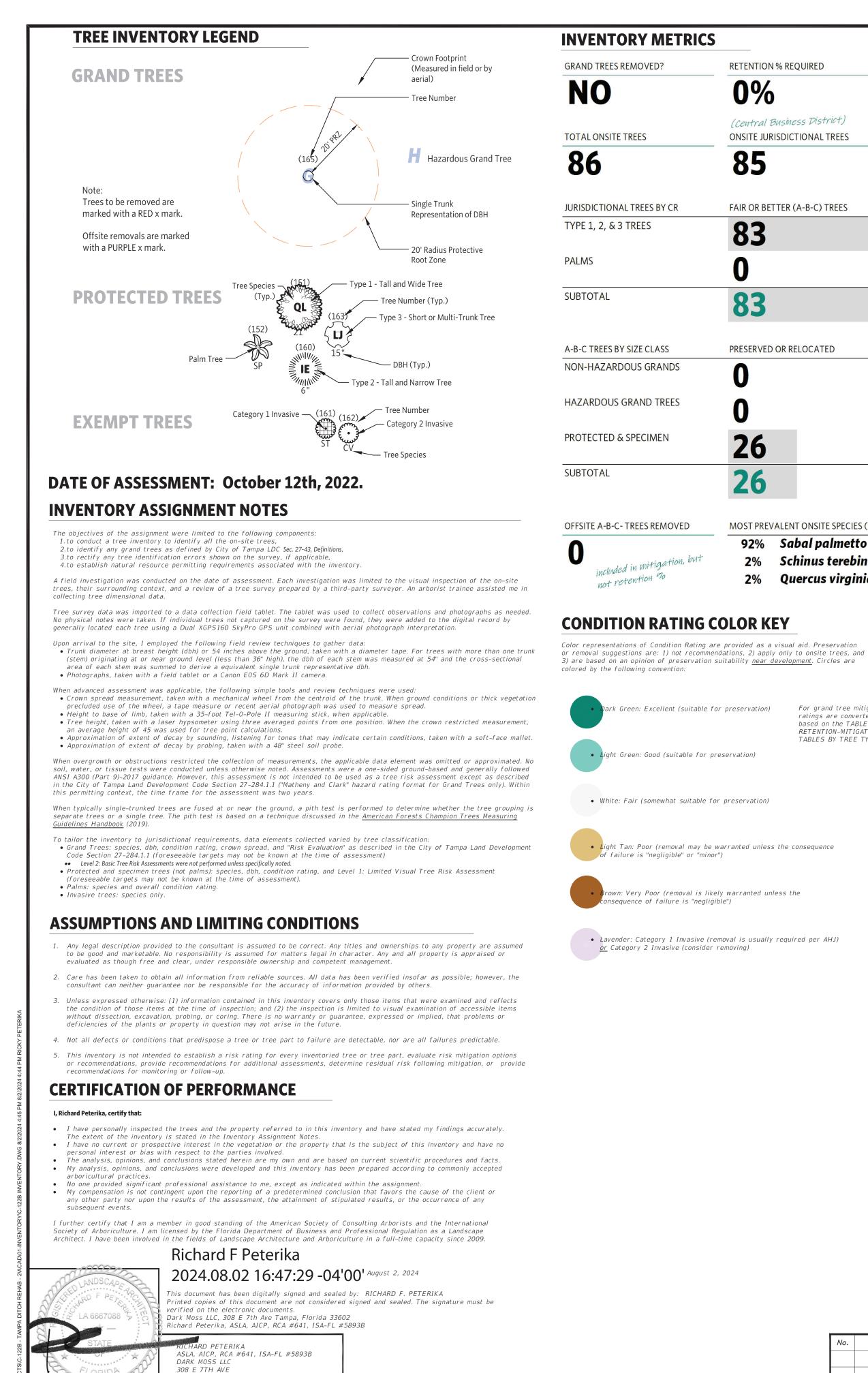
CITY of TAMPA	GRADY AVE DRAINAGE IMPROVEMENTS	SHEET
Mobility Department Stormwater Engineering Division	UPSTREAM DETAILS	10 of





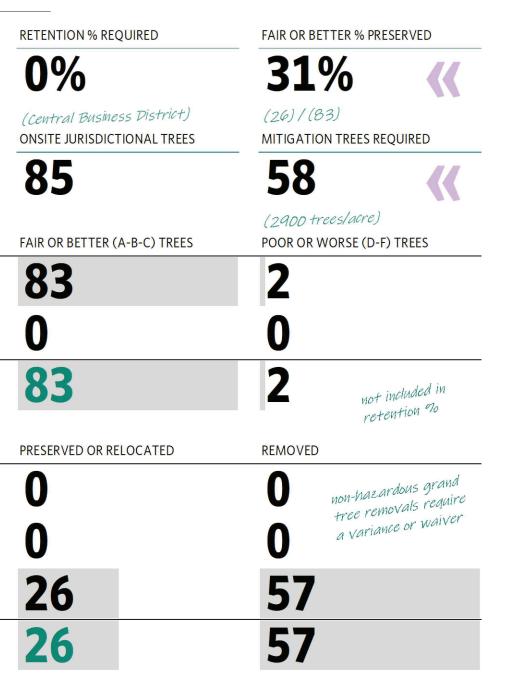


No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: CTM	
						DRN: CTM	
						CKD: TLW	
						DATE: 07/05/23	



TAMPA, FL 33602

813-532-3440



### MOST PREVALENT ONSITE SPECIES (% OF POPULATION)

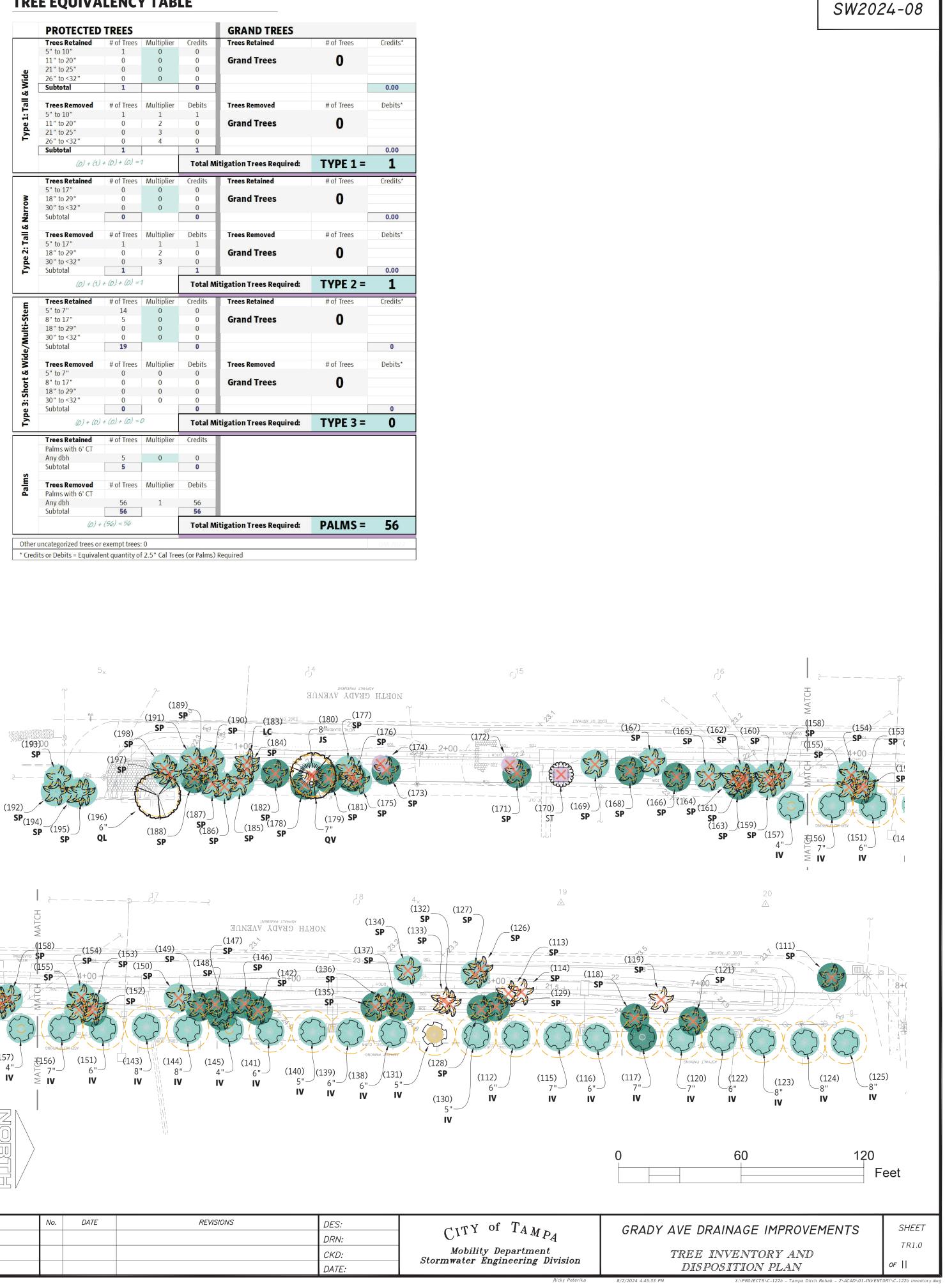
- 92% Sabal palmetto (60)
- 2% Schinus terebinthifolius (1)
- 2% Quercus virginiana (1)

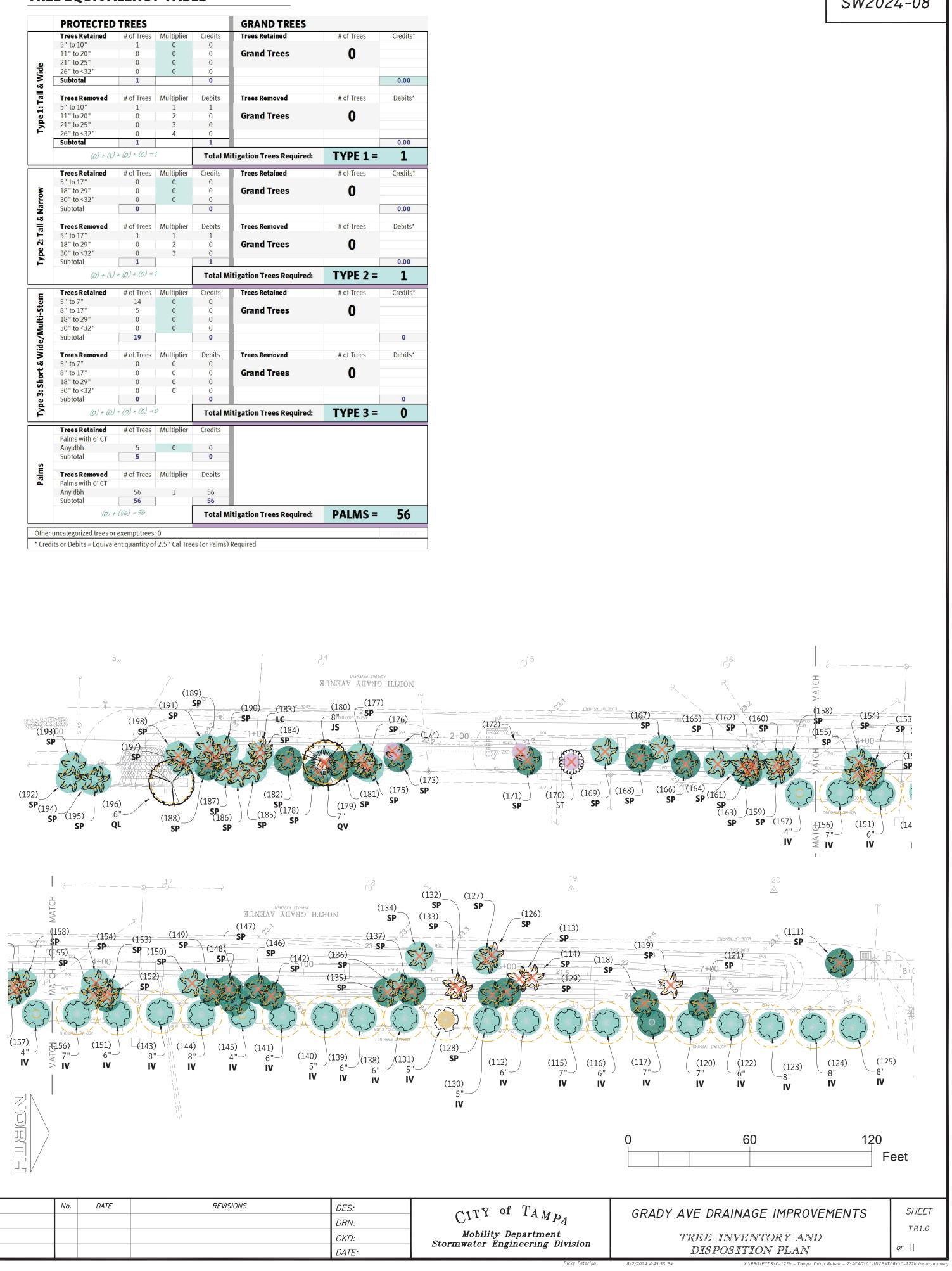
For grand tree mitigation, the condition ratings are converted to percentages

based on the TABLE 284.4.1-A: TREE RETENTION-MITIGATION EQUIVALENCY TABLES BY TREE TYPE, Footnote 3.

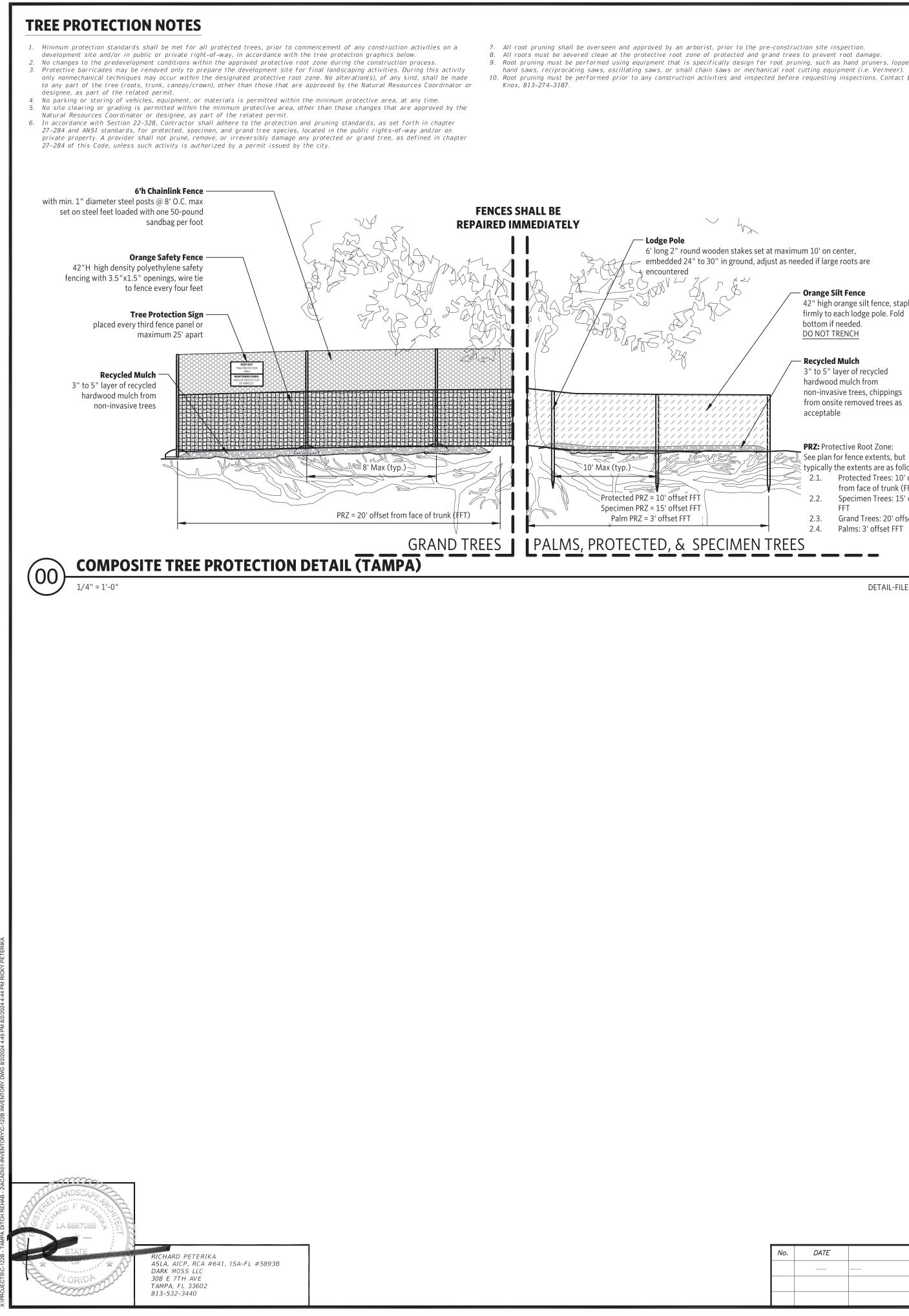
# **TREE EQUIVALENCY TABLE**

	PROTECTED	TREES			GRAND TREES		
	<b>Trees Retained</b>	# of Trees	Multiplier	Credits	Trees Retained	# of Trees	Credits*
	5" to 10"	1	0	0			
	11" to 20"	0	0	0	Grand Trees	0	
e	21" to 25"	0	0	0		-	
id	26" to <32"	0	0	0			
3	Subtotal	1		0			0.00
Type 1: Tall & Wide							
Ta	Trees Removed	# of Trees	Multiplier	Debits	Trees Removed	# of Trees	Debits*
÷	5" to 10"	1	1	1		•	
e	11" to 20"	0	2	0	Grand Trees	0	
2	21" to 25"	0	3	0			
	26" to <32"	0	4	0			
	Subtotal	1		1			0.00
	(0) + (1)	+ (0) + (0) =	1	Total M	litigation Trees Required:	<b>TYPE 1 =</b>	1
	<b>Trees Retained</b>	# of Trees	Multiplier	Credits	Trees Retained	# of Trees	Credits*
	5" to 17"	0	0	0			
Ň	18" to 29"	0	0	0	Grand Trees	0	
rro	30" to <32"	0	0	0		-	
Na	Subtotal	0		0			0.00
Type 2: Tall & Narrow							
all	Trees Removed	# of Trees	Multiplier	Debits	Trees Removed	# of Trees	Debits*
5	5" to 17"	1	1	1		•	
6 2	18" to 29"	0	2	0	Grand Trees	0	
λb	30" to <32"	0	3	0			
E.	Subtotal	1		1			0.00
	(0) + (1)	+ (0) + (0) =	1	Total M	litigation Trees Required:	TYPE 2 =	1
٤	<b>Trees Retained</b>	# of Trees	Multiplier	Credits	Trees Retained	# of Trees	Credits*
E	5" to 7"	14	0	0			
-S	8" to 17"	5	0	0	Grand Trees	0	
Ξ	18" to 29"	0	0	0		-	
Ā	30" to <32"	0	0	0			
1	Subtotal	19		0			0
id							
3	Trees Removed	# of Trees	Multiplier	Debits	Trees Removed	# of Trees	Debits*
hort & Wide/Multi-Stem	5" to 7"	0	0	0		•	
P	8" to 17"	0	0	0	Grand Trees	0	
Sh	18" to 29"	0	0	0			
	30" to <32"	0	0	0			
	Subtotal	0		0			0
e	(0) + (0)	+ (0) + (0) =	0	Total M	itigation Trees Required:	<b>TYPE 3 =</b>	0
Type 3: S		# of Trees	Multiplier	Credits			
Type	<b>Trees Retained</b>						
Type	Palms with 6' CT						
Type		5	0	0			
Type	Palms with 6' CT		0	0			
-	Palms with 6' CT Any dbh Subtotal <b>Trees Removed</b>	5	0 Multiplier				
Palms Type	Palms with 6' CT Any dbh Subtotal <b>Trees Removed</b> Palms with 6' CT	5 <b>5</b> # of Trees	Multiplier	<b>0</b> Debits			
-	Palms with 6' CT Any dbh Subtotal <b>Trees Removed</b> Palms with 6' CT Any dbh	5 <b>5</b> # of Trees 56		0 Debits 56			
	Palms with 6' CT Any dbh Subtotal Trees Removed Palms with 6' CT Any dbh Subtotal	5 <b>5</b> # of Trees	Multiplier	0 Debits 56 <b>56</b>	itigation Trees Required:	PALMS =	56





No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES:	
						DRN:	
						CKD:	
						DATE:	· ·



7. All root pruning shall be overseen and approved by an arborist, prior to the pre-construction site inspection. 8. All roots must be severed clean at the protective root zone of protected and grand trees to prevent root damage. 9. Root pruning must be performed using equipment that is specifically design for root pruning, such as hand pruners, loppers,

10. Root pruning must be performed prior to any construction activities and inspected before requesting inspections. Contact Brian

## $\sim$ Th - Lodge Pole 6' long 2" round wooden stakes set at maximum 10' on center, embedded 24" to 30" in ground, adjust as needed if large roots are Orange Silt Fence 42" high orange silt fence, staple firmly to each lodge pole. Fold bottom if needed. DO NOT TRENCH Recycled Mulch 3" to 5" layer of recycled hardwood mulch from non-invasive trees, chippings from onsite removed trees as acceptable PRZ: Protective Root Zone: See plan for fence extents, but typically the extents are as follows: 2.1. Protected Trees: 10' offset from face of trunk (FFT) 2.2. Specimen Trees: 15' offset 2.3. Grand Trees: 20' offset FFT 2.4. Palms: 3' offset FFT

# **RATING NOTES:**

### DBH and Permit DBH:

1.

The species or structure of a tree can be incompatible with a municipal or jurisdictional ordinance. DBH is the arborist's field adjusted dbh determination, based on DBH measurement guidelines provided in the Guide for Plant Appraisal, 10th Edition (2018). Permit DBH is a translation of the field adjusted dbh to a value relevant to applicable permitting requirements. Typically, multi-stem trees are resolved into single-stem equivalents using trunk formula method. The Permit DBH for small multi-stem species may be visually estimated.

## 2. H-S-F = CR

"Health, Structure, and Form" to Condition Rating: A composite, weighted assessment of health, structure, and form. Adapted from the Guide for Plant Appraisal, 10th Edition, second printing (2019)("10th Edition"). Values range from: A-Excellent, B-Good, C-Fair, D-Poor, F-Very Poor or Dead.

2.1. "Y" is used when no value is applicable.

### 3. Excluded or Reserved

- Tree survey data quality and utility can vary widely between different surveyors. The initial inventory data involves data transformation to isolate tree data and prepare it for field data collector import. Occasionally extra data points are imported. During the assessment, these points are field verified and either assessed or excluded. The excluded values are preserved in the table to provide consecutive numbering. Reasons to exclude a data point include:
- 3.1. another type of survey point, such as a ground shot or irrigation valve;
- 3.2. a surveyed tree that did not exist at the time of assessment;
- 3.3. a tree part, such as a canopy extent measurement; 3.4. a tree that is not recognized or protected in the jurisdiction due to
- size;
- 3.5. or by the arborist's professional opinion.

### 4. Disposition

Tree disposition is the decision to retain or remove the tree based on a the arborist's evaluation of the cumulative impact of the proposed construction activity. This decision is based on the tree protection provided, general knowledge of the species, information on the tree's age and condition, and other relevant factors that may be applicable.

DETAIL-FILE

# THE DICHOCITION CUMMADV TADIE

ee_number	species_symbol	Botanical Name	common_name	is grand?	dbh_permit	cot_cr_haz	species_rating	Dispositio
172	XX	(n/a)				-		[REMOVED
174	XX	(n/a)				-		[REMOVED-
179	QV	Quercus virginiana	Southern Live Oak		7	B-4	90	[REMOVED-
196	QL	Quercus laurifolia	Laurel Oak		6	C-3	70	Preserved
180	JS	Juniperus silicicola	Southern Red Cedar		8	C-3	90	[REMOVED-
112	IV	Ilex vomitoria	Yaupon Holly		6	B-3	90	Preserved
115	IV	Ilex vomitoria	Yaupon Holly		7	B-3	90	Preserved
116	IV	Ilex vomitoria	Yaupon Holly		6	B-3	90	Preserved
117	IV	Ilex vomitoria	Yaupon Holly		7	A-3	90	Preserved
120	IV	Ilex vomitoria	Yaupon Holly		7	B-3	90	Preserved
122	IV	Ilex vomitoria	Yaupon Holly		6	B-3	90	Preserved
123	IV	Ilex vomitoria	Yaupon Holly		8	B-3	90	Preserved
124	IV	Ilex vomitoria	Yaupon Holly		8	B-3	90	Preserved
125	IV	Ilex vomitoria	Yaupon Holly		8	B-3	90	Preserved
130	IV	Ilex vomitoria	Yaupon Holly		5	B-3	90	Preserved
131	IV	llex vomitoria	Yaupon Holly		5	D-3	90	Preserved
138	IV	Ilex vomitoria	Yaupon Holly		6	B-3	90	Preserved
139	IV	Ilex vomitoria	Yaupon Holly		6	B-3	90	Preserved
140	IV	Ilex vomitoria	Yaupon Holly		5	B-3	90	Preserved
141	IV	Ilex vomitoria	Yaupon Holly		6	B-3	90	Preserved
143	IV	Ilex vomitoria	Yaupon Holly		8	B-3	90	Preserved
144	IV	Ilex vomitoria	Yaupon Holly		8	B-3	90	Preserved
145	IV	Ilex vomitoria	Yaupon Holly		4	B-3	90	Preserved
151	IV	llex vomitoria	Yaupon Holly		6	B-3	90	Preserved
151	IV	Ilex vomitoria	Yaupon Holly		7	B-3	90	Preserved
150	IV	llex vomitoria	Yaupon Holly		4	B-3	90	Preserved
111	SP	Sabal palmetto	Cabbage Palm			A-4	90	[REMOVED
111	SP	Sabal palmetto	Cabbage Palm			C-4	90	[REMOVED
113	SP	Sabal palmetto	Cabbage Palm			C-4	90	[REMOVED
114	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
110	SP	Sabal palmetto	Cabbage Palm			C-4	90	[REMOVED
121	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
121	SP	Sabal palmetto	Cabbage Palm			X-4	90	[REMOVED
120	SP	Sabal palmetto	Cabbage Palm			B-4	90	[REMOVED
127	SP		Cabbage Palm			A-3	90	
128	SP	Sabal palmetto Sabal palmetto	Cabbage Palm Cabbage Palm				90	[REMOVED [REMOVED
129	SP	Sabal palmetto	C			A-3 C-3	90	
	SP	Sabal palmetto	Cabbage Palm				90	[REMOVED [REMOVED
133	SP		Cabbage Palm			C-3 B-3		
134	SP	Sabal palmetto	Cabbage Palm				90 90	[REMOVED
135		Sabal palmetto	Cabbage Palm			A-3		[REMOVED
136	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
137	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
142	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
146	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
147	SP	Sabal palmetto	Cabbage Palm			A-3	90	Preserved
148	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
149	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
150	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
152	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
153	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
154	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
155	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
158	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
159	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
160	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
161	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
162	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
163	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
164	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
165	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
166	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
167	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
168	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
169	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
171	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
173	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
175	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
176	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
177	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
178	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
181	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
182	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
183	LC	Livistona chinensis	Chinese Fan Palm			C-5	90	[REMOVED
184	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
185	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
186	SP	Sabal palmetto	Cabbage Palm			B-3	90	- [REMOVED
187	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
188	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
189	SP	Sabal palmetto	Cabbage Palm			A-3	90	[REMOVED
190	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
191	SP	Sabal palmetto	Cabbage Palm			B-3	90	[REMOVED
191	SP	Sabal palmetto	Cabbage Palm			B-3	90	Preserved
192	SP	Sabal palmetto	Cabbage Palm			B-3	90	Preserved
193	SP	Sabal palmetto	Cabbage Palm Cabbage Palm			в-з В-3	90	Preserved
194	SP SP	Sabal palmetto Sabal palmetto						Preserved
			Cabbage Palm			B-3	90	
197	SP	Sabal palmetto Sabal palmetto	Cabbage Palm Cabbage Palm			B-3 B-3	90 90	[REMOVED [REMOVED
198	SP					00	00	

No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES:	
						DRN:	
						CKD:	
						DATE:	

# SW2024-08

CITY of TAMPA Mobility Department Stormwater Engineering Division

GRADY AVE DRAINAGE IMPROVEMENTS TREE TABLES AND

PROTECTION NOTES