

SURVEYORS NOTES

- 1) THE NORTH LINE OF SECTION 19, TOWNSHIP 42 SOUTH, RANGE 37 EAST, IS TAKEN TO BEAR SOUTH 89°17'41" WEST, AND ALL OTHER BEARING SHOWN HEREON ARE RELATIVE THERETO.
- 2) THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR OPTION OF TITLE. NO SEARCH OF THE PUBLIC RECORDS WAS PERFORMED BY THIS OFFICE.
- 3) THIS PARCEL IS SUBJECT TO ANY ADDITIONAL EASEMENTS, RIGHTS-OF-WAY, OR RESTRICTIONS OF RECORD, IF ANY.
- 4) NOT ALL SUBSURFACE IMPROVEMENTS AND OR ENCROACHMENTS, IF ANY, WERE NOT LOCATED AS PART OF THIS SURVEY.
- 7) THE PURPOSE OF THIS SURVEY IS TO SHOW EXISTING CONDITIONS FOR ENGINEERING PURPOSES.
- 8) HORIZONTAL LOCATIONS, AND ELEVATIONS, AS CALCULATED FROM FIELD OBSERVATIONS ARE BASED ON THE GLOBAL POSITIONING SYSTEM, UTILIZING THE FLORIDA DEPARTMENT OF TRANSPORTATION PERMANENT REFERENCE NETWORK, AS RELATED TO THE FLORIDA STATE PLAN SYSTEM, HAVING AN HORIZONTAL ACCURACY OF 0.10 FEET, AND VERTICAL ACCURACY OF 0.20 FEET, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- 9) THE LOCATION OF THE 12 FOOT DRAINAGE EASEMENT WITHIN LOT 23, PLAT 1, EAST LAKE VILLAGE IS NOT DIMENSIONED. THE EASEMENT AS SHOWN, IS BASED ON THE LOCATION OF THE EXISTING DRAINAGE PIPE.
- 10) AERIALS SHOWN HERE ON ARE REFERENCE PURPOSES ONLY.
- 11) THIS SURVEY WAS PERFORMED UNDER THE SUPERVISION OF TED E. PHILLIPS, PSM, FLORIDA REGISTRATION NUMBER LS5932.
- 12) LAST DATE OF FIELD SURVEY WAS CONDUCTED ON NOVEMBER 04, 2020.

LEGEND

- FMON- FOUND CONCRETE MONUMENT
- SRC- SET 3/4"x18" IRON ROD AND CAP, LS 5932
- SPKD - SET MAG NAIL AND DISK, T. PHILLIPS TRAV POINT
- ORB- OFFICIAL RECORDS BOOK
- PG- PAGE
- TYP- TYPICAL
- M- MEASURE
- C- CALCULATED
- P- PLAT
- D- DESCRIPTION
- OHUL- OVERHEAD UTILITIES LINE
- CMP- CORRUGATED METAL PIPE
- ⊕ - CONTROL POINT/BENCHMARK

REFERENCES

- 1) EAST LAKE VILLAGE PLAT ONE, PLAT BOOK 29, PAGE 17
- 2) EAST LAKE VILLAGE PLAT TWO, PLAT BOOK 29, PAGE 66
- 3) RIDGEWAY BEACH, PLAT BOOK 7, PAGE 11
- 4) CROSSBY'S SUBDIVISION OF TRACT 72, PLAT BOOK 25, PAGE 43
- 5) CERTIFIED CORNER RECORDS (CCR #)
 - CCR No. 005441
 - CCR No. 028554
 - CCR No. 049835
 - CCR No. 066898
- 6) VARIOUS PARCEL DESCRIPTIONS (REFER MAP)

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DATE	BY	REVISIONS

Date: 11/07/2020
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 F.B. DATA FILES
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 Field Date: 11/04/20

SURVEYOR AND MAPPER'S SIGNATURE
 1. UNLESS IT BEARS THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS MAP/REPORT IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.
 2. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN MADE BY THIS OFFICE.

TED E. PHILLIPS, PROFESSIONAL SURVEYOR & MAPPER
 STATE OF FLORIDA NO. 5932

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 102 SW Parish Terrace
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 State of Florida License No. LS5932, LB8079

**TOPOGRAPHIC SURVEY
 EAST LAKE VILLAGE
 DRAINAGE**

PREPARED FOR:
CITY OF PAHOKEE
 OVERALL VIEW

PROJECT No:
20-009
 TOPOGRAPHIC
 SHEET
 1 OF 6

REV	DATE	DESCRIPTION	APPR

VERIFY SCALES
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PROJECT NUMBER
20-12/5

DESIGNED BY
MMO

DRAWN BY
FG

DATE
2/11/2021

PROJECT ENGINEER
MARCOS, MONTES DE OCA

REG NUMBER
63897

DATE OF SIGNATURE
02/2023

FBPE AUTHORIZATION NUMBER
29880



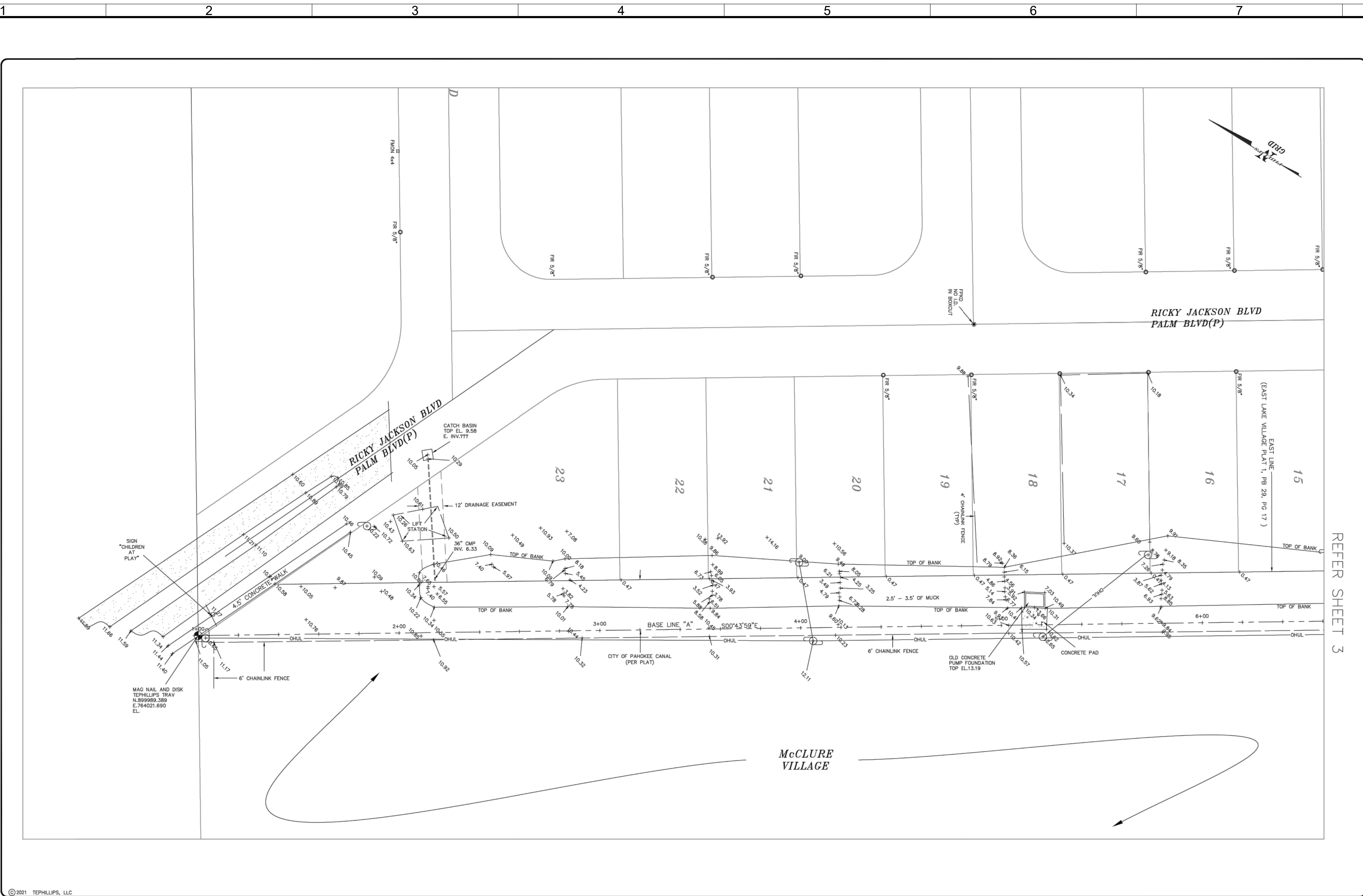
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 MARCOS@MDO-ENGINEERING.COM

**EAST LAKE
 DRAINAGE IMPROVEMENTS**

SURVEY

DRAWING
SURVEY PLANS

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© 2021 TEPHILLIPS, LLC		Date: 11/07/2020 Scale: 1"=50' Comp. By: TP Check By: TP Field By: TP/TP F.B.: DATA FILES Page: N/A Field Date: 11/04/20	TEPHILLIPS, LLC PROVIDING SURVEYING AND MAPPING SERVICES 102 SW Parish Terrace Port St. Lucie, Florida 34984 P(772)359-7023 ted_phillips@comcast.net State of Florida License No. LS5932, LB6079	TOPOGRAPHIC SURVEY EAST LAKE VILLAGE DRAINAGE	PREPARED FOR: CITY OF PAHOKEE	PROJECT No. 20-0009 TOPOGRAPHIC SHEET 2 OF 6
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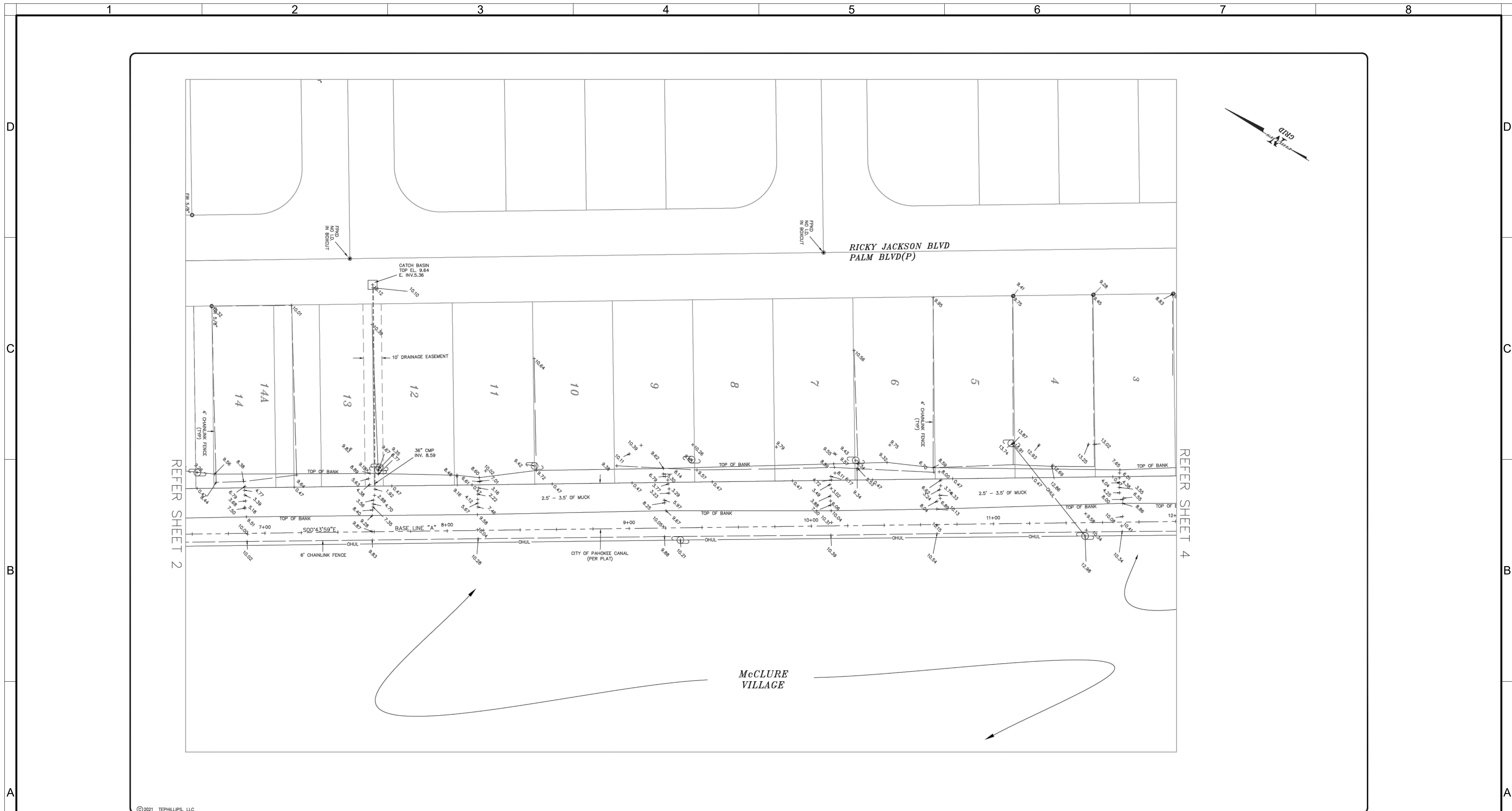
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DESIGNED BY MMO	REG NUMBER 63897
DRAWN BY FG	DATE OF SIGNATURE 02/2023
DATE 2/11/2021	FBPE AUTHORIZATION NUMBER 29880



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TOPOGRAPHIC SURVEY
EAST LAKE VILLAGE
DRAINAGE

PREPARED FOR:
CITY OF PAHOKEE

PROJECT No:
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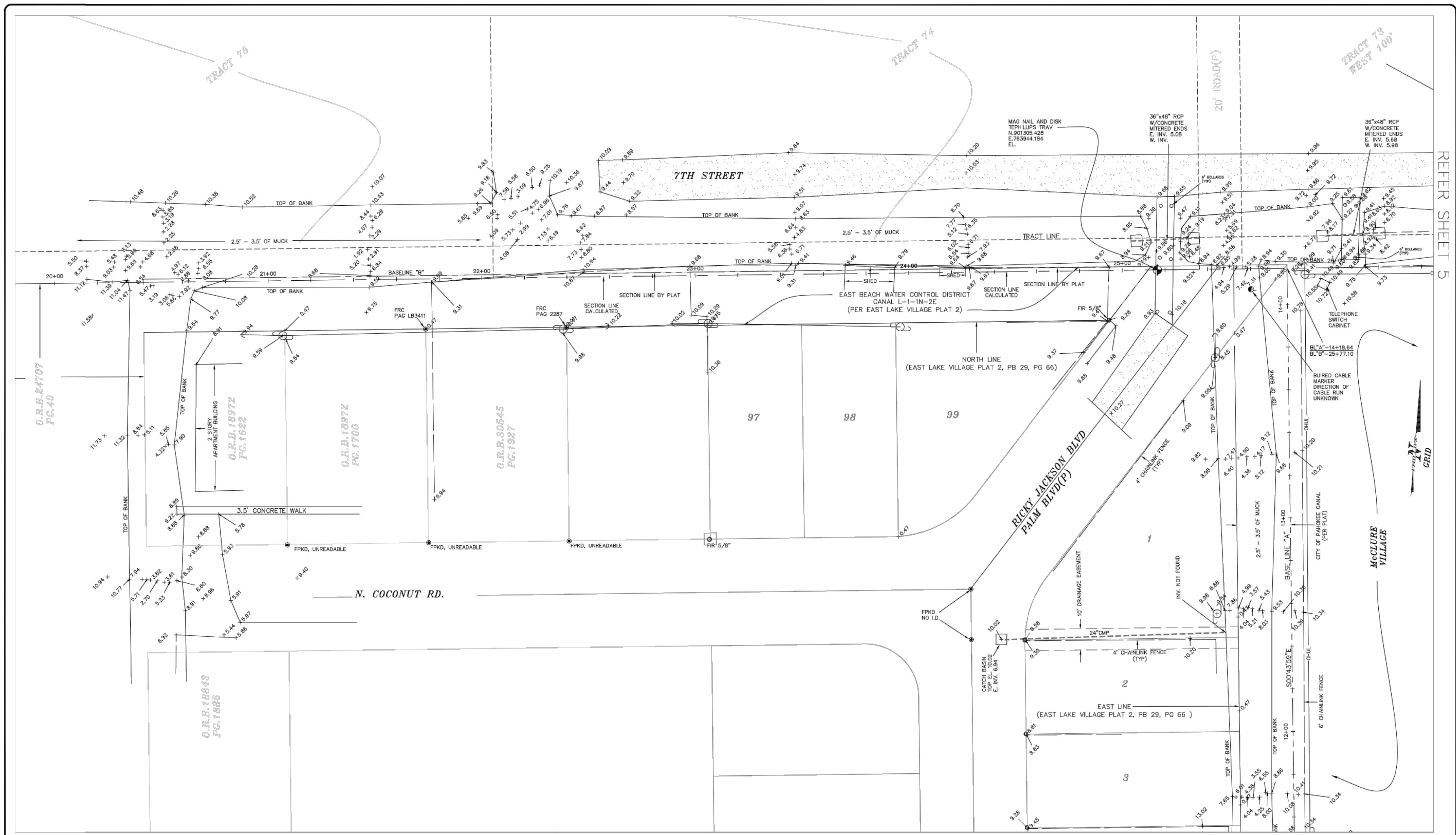
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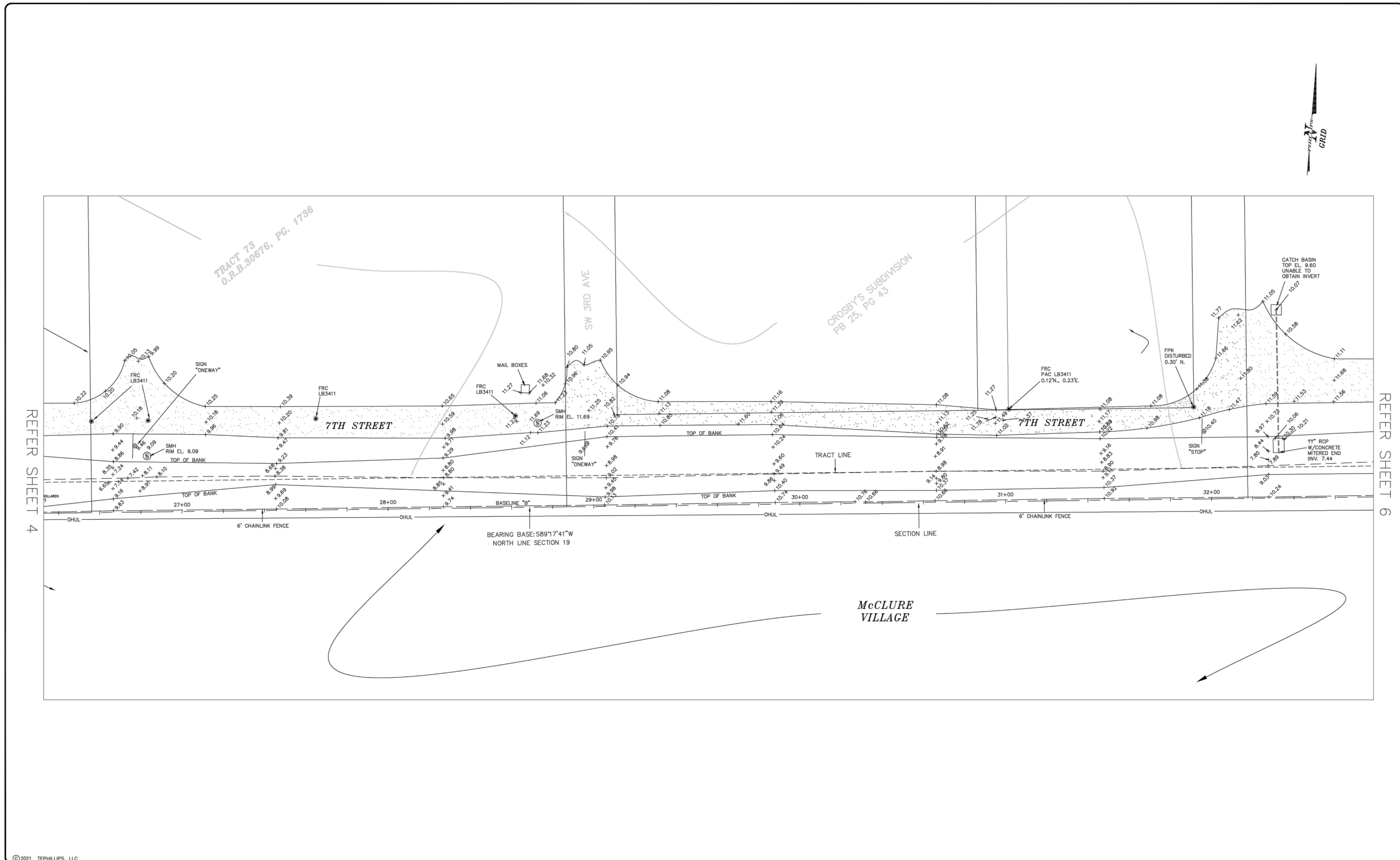
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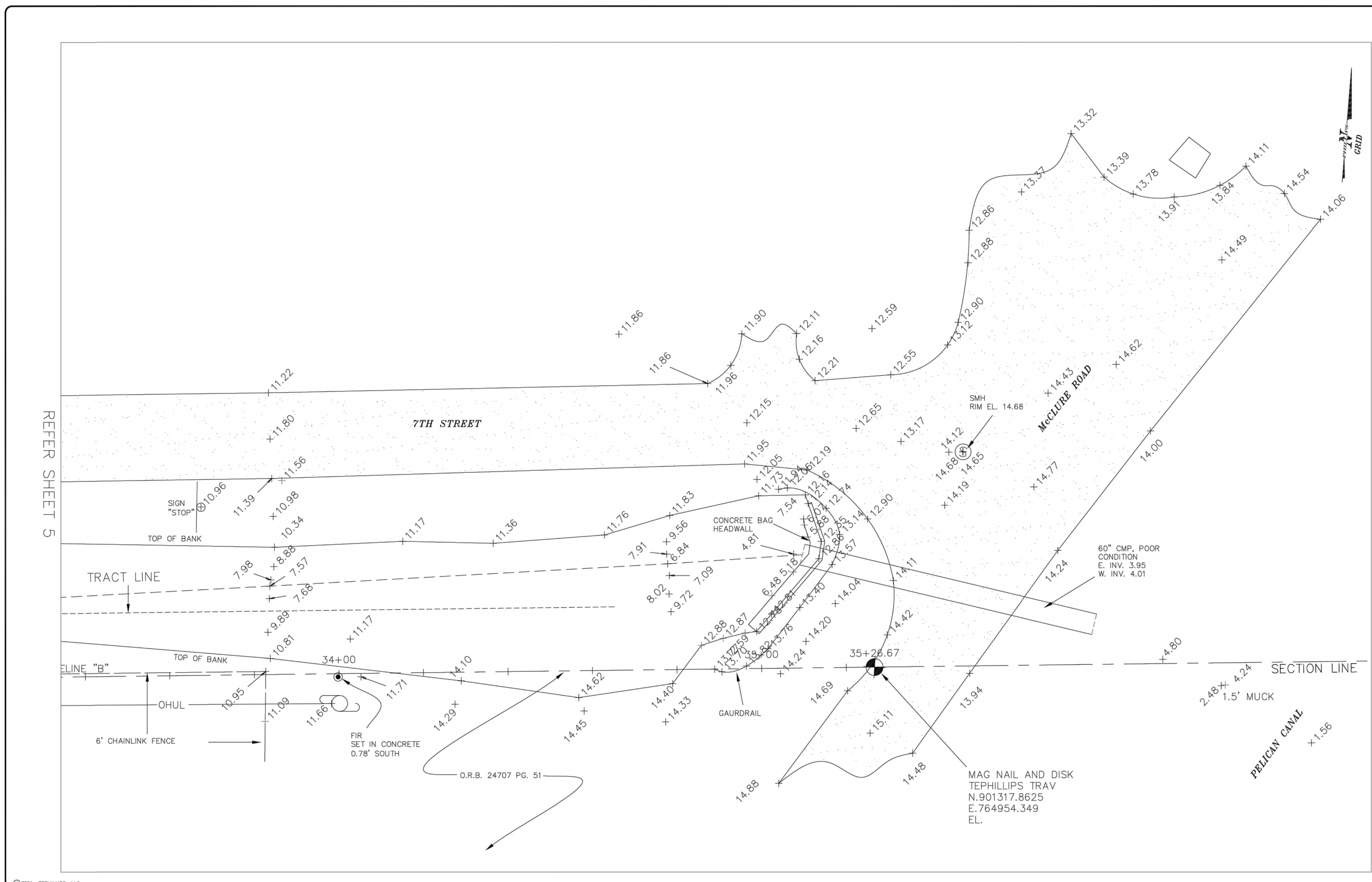


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EAST LAKE DRAINAGE IMPROVEMENTS

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TRAFFIC CONTROL:

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A MAINTENANCE OF TRAFFIC (MOT) PLAN PRIOR TO CONSTRUCTION TO SHOW ALTERNATE ROADWAY CONTROL, PAVEMENT MARKINGS, RAMPUP, BARRICADES, AND SHALL DETAIL ALL PROPOSED CONSTRUCTION SEQUENCING. THE MOT, PLAN AND INSTALLED TRAFFIC CONTROL MEASURES SHALL BE APPROVED BY THE ENGINEER, OWNER, AND ROADWAY JURISDICTIONAL AGENCIES PRIOR TO CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES ARE PROHIBITED DURING CONSTRUCTION UNLESS SPECIFICALLY DETAILED ON THESE PLANS. IN THE EVENT IT IS DETERMINED THAT ROADWAY AND DRIVEWAY LAINE CLOSURES WILL BE ALLOWED, THE CLOSURES SHALL BE RESTRICTED TO THE HOURS BETWEEN 9:00 A.M. AND 4:00 P.M. UNLESS OTHERWISE AUTHORIZED BY THE APPROVED MOT.

THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY ALL APPROPRIATE AGENCIES (PARTIAL LISTED BELOW) PRIOR TO ANY LAINE CLOSURES ON EITHER LOCAL OR COLLECTOR ROADWAY:

A. GOVERNING PUBLIC WORKS
 B. SHIFERS' OFFICE
 C. TREASURY AUTHORITY
 D. SCHOOL TRANSPORTATION
 E. EMS & FIRE ADMINISTRATION

ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH FDOT INDEX NO. 609 AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL TRAFFIC CONTROL MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION.

INSPECT TRAFFIC CONTROL DEVICES ON A DAILY BASIS TO ENSURE PLACEMENT OF BARRICADES AND FUNCTION OF LIGHTS IS MAINTAINED THROUGHOUT CONSTRUCTION.

CONTACT PROPERTY OWNERS AFFECTED BY CONSTRUCTION, COORDINATE TEMPORARY DRIVEWAY CLOSURES AND SEQUENCING, MAINTAIN ACCESS FOR ALL PROPERTY OWNERS DURING CONSTRUCTION.

ADJUST TRAFFIC CONTROL DEVICES AS REQUIRED UNDER EMERGENCY CONDITIONS.

THE CONTRACTOR IS EXPECTED TO COORDINATE ITS ACTIVITIES WITH OTHER CONTRACTORS WHO MAY BE WORKING IN THE IMMEDIATE VICINITY.

WHEN WORK OCCURS WITHIN 15-FT OF ACTIVE ROAD TRAVEL LANES, BUT NO CLOSER THAN 2-FT FROM THE EDGE OF PAVEMENT, SIGNAGE AND WARNING DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NO. 600 AND FDOT INDEX NO. 601.

TYPE I OR TYPE II BARRICADES AT 20-FT CENTERS SHALL BE PLACED AND MAINTAINED ALONG THE EDGE OF THE ROAD WHEREVER DROP-OFFS OR OTHER HAZARDS EXIST AND TO BLOCK ENTRANCE INTO COMPLETED OR PARTIALLY COMPLETED PAVEMENTS UNTIL SUCH PAVEMENTS ARE OPEN TO PUBLIC USE.

THE CONTRACTOR SHALL PROVIDE SIGNAGE AND OTHER TRAFFIC MEASURES NECESSARY TO PROTECT AND FACILITATE TRAFFIC MOVEMENT DURING CONSTRUCTION.

COMPLY WITH ALL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS ON PUBLIC ROADS BEYOND THE LIMITS OF THE WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF WATER AND EQUIPMENT. THE CONTRACTOR SHALL CONTROL HIS OPERATIONS, AND THOSE OF HIS SUBCONTRACTORS, AND ALL SUPPLIERS TO ASSURE THE LEAST CONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED MOVEMENT OF VEHICULAR TRAFFIC AND LIMIT HIS OPERATIONS FOR THE SAFETY AND CONVENIENCE OF THE TRAVELING PUBLIC. UNDER ALL CIRCUMSTANCES, SAFETY SHALL BE THE MOST IMPORTANT CONSIDERATION.

SANITARY SYSTEM NOTES:

GOVERNING JURISDICTIONAL PUBLIC WORKS AND/OR UTILITY STANDARDS ARE MINIMUM STANDARDS FOR PUBLIC POTABLE WATER, RECLAIMED WATER AND/OR SANITARY SEWER AND SANITATION CONTROL. THE NOTES BELOW APPLY ONLY WHEN THEY EXCEED THE GOVERNING JURISDICTIONAL PUBLIC WORKS STANDARDS.

1. SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS SHOULD ALWAYS CROSS UNDERNEATH WATER MAINS. INSTALLATIONS OF SANITARY SEWERS, FORCE MAINS AND STORM SEWERS, AT CROSSINGS OF WATER MAINS, SHALL BE PERFORMED SO AS TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHENEVER POSSIBLE, THE CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER MAINS ARE HIGHER THAN THE WATER MAINS. THE MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED AT EACH POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN ANY TWO JOINTS. WHERE SANITARY SEWERS, FORCE MAINS, AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED ON AN INVERT OF 120 INCHES. A MINIMUM VERTICAL SEPARATION OF 120 INCHES SHALL BE MAINTAINED AT EACH POINT OF CROSSING IF IT IS NOT AVAILABLE IN THE SIZE PROPOSED). SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. IN THE CASE OF DIP, THE SANITARY SEWER MAY BE PLACED IN A SLEEVE FOR 20 FEET CENTERED ON THE POINT OF CROSSING. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE LEAK FREE AND MECHANICALLY RESTRAINED. A MINIMUM VERTICAL SEPARATION OF 120 INCHES SHALL BE MAINTAINED AT EACH POINT OF CROSSING WITH NO LESS THAN 10 FEET BETWEEN JOINTS. CENTERED AT THE POINT OF CROSSING SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN. ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (I.E. PIPES CENTERED ON THE CROSSING). WHERE A PROPOSED PIPE COLLIDES WITH AN EXISTING PIPE, THE PROPOSED PIPE SHALL BE CONSTRUCTED OF DIP, AND THE CROSSING SHALL BE ARRANGED SO AS TO SATISFY THE REQUIREMENTS IDENTIFIED ABOVE.

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR PUBLIC ACCESS IRRIGATION MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMAL HORIZONTAL SEPARATION OF FIVE FEET (CENTER TO CENTER) OR THREE FEET (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND EITHER POTABLE WATER MAINS OR SEWAGE COLLECTION LINES. AN 18 INCH VERTICAL SEPARATION SHALL BE MAINTAINED AT CROSSINGS.

WHEN THE RECLAIMED WATER LINE IS TRANSPORTING WATER FOR NON-PUBLIC ACCESS IRRIGATION; THE RECLAIMED WATER NO MORE THAN 1.50 (1/4" PER FOOT OR 2.00% POSITIVE DRAINAGE). THIS LANDING AREA MUST BE 18" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE RECLAIMED WATER MAIN AND ALL EXISTING OR PROPOSED POTABLE WATER MAINS. NO MINIMUM SEPARATION IS REQUIRED BETWEEN THE RECLAIMED WATER MAIN AND SANITARY SEWERS, OTHER THAN NECESSARY TO ENSURE STRUCTURAL INTEGRITY AND PROTECTION OF THE LINES THEMSELVES.

2. A MINIMUM 10 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER (INCLUDING FORCE MAINS) AND EXISTING OR PROPOSED WATER MAINS. WHENEVER POSSIBLE THE DISTANCE FOR SEPARATION SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE INSTALLED IN A SEPARATE TRENCH, OR IN AN EXISTING TRENCH WITHIN THE SAME TRENCH AS THE SEWER. THE WATER MAIN SHALL BE INSTALLED AT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE, AND WATER AND SEWER JOINTS SHALL BE STAGGERED, WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES. IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP IF AVAILABLE IN THE SIZE PROPOSED, WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHALL BE LOCATED ABOVE THE SEWER MAIN WITHIN A MINIMUM VERTICAL DISTANCE OF 6 INCHES AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (I.E. STAGGERED JOINTS).

3. ALL DIP PIPE SHALL BE CLASS 50 OR HIGHER. REFER TO NOTE 6, 9 & 10 BELOW FOR ADDITIONAL DIP SPECIFICATIONS. ADEQUATE MEASURES AGAINST CORROSION SHALL BE UTILIZED.

4. ALL PVC PIPE SHALL BE CLASS 200 SDR 35 IN ACCORDANCE WITH ASTM D2241. FORCE MAINS SHALL BE SP48 WRAPPED WITH 2 INCH WHITE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 7' DIAMETER.

5. ALL SANITARY SEWER MAINS, LATERALS AND FORCE MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER. UNLESS OTHERWISE NOTED ON PLANS.

6. ALL SANITARY SEWERS SHALL BE SDR 21 PVC OR SCHEDULE 40 PIPE. ELASTOMERIC GASKET JOINTS SHALL BE UTILIZED FOR PVC PIPE, AND SHALL COMPLY WITH ASTM F477. ASTM D321 & ASTM F1336. JOINTS SHALL COMPLY WITH ASTM D321.

7. ALL PVC FORCE MAINS (IF REQUIRED) SHALL BE CLASS 200, DR 14 FOR 4" DIAMETER, AND CLASS 150, DR 18 FOR 6" TO 12" DIAMETER PIPE. IN ACCORDANCE WITH AWWA C900 STANDARDS, PVC FORCE MAIN SHALL BE 12" TO 12" DIAMETER SHALL BE CLASS 200 SDR 35. IN ACCORDANCE WITH ASTM D2241, FORCE MAINS SHALL BE SP48 WRAPPED WITH 2 INCH WHITE DARK GREEN STICK-ON VINYL TAPE. FORCE MAINS WITHIN THE RIGHT-OF-WAY SHALL BE CLASS 52 DIP, MINIMUM 7' DIAMETER.

8. ALL SANITARY MANHOLES SHALL BE LOCATED NO MORE THAN 400 FEET APART AND SHALL CONFORM TO THE DETAILS CONTAINED HEREIN, AS WELL AS WITH ASTM C478.

9. ALL DUCTILE IRON PIPE SHALL MEET REQUIREMENTS OF AWWA C151, ANSI SP.421.51.

10. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PROVIDED WITH A VIRGIN POLYETHYLENE INTERIOR LINING COMPLYING WITH ASTM D 158 (40 MILS THICK) HEAT BONDED TO THE INTERIOR OF ALL PIPES. ALL DIP PIPE SHALL HAVE A STANDARD OUTSIDE COATING COMPLYING WITH ASTM C114.

11. ALL SLOPES FOR SANITARY SEWER MAINS AND SERVICE CONNECTIONS SHALL COMPLY WITH STATE AND LOCAL UTILITY CRITERIA. CONTRACTOR TO NOTIFY ENGINEER IF THE SLOPES DEVIATES FROM THOSE SHOWN ON THE PLANS.

12. ALL UTILITIES SHALL BE INSTALLED WITH COMPLIANCE TO GOVERNING JURISDICTION STANDARDS CONSTRUCTION DETAILS AND LAND DEVELOPMENT CODE.

13. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING PROPOSED FACILITIES TO EXISTING LINES OR APURTANCES, THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATIONS OF EXISTING CONNECTION POINTS) AND NOTIFY THE OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.

14. SANITARY SEWER MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPES) BURIED AT LEAST 18 INCHES ABOVE THE MAIN LINES.

15. FORCE MAINS SHALL HAVE SUITABLE MAGNETIC LOCATOR TAPES) BURIED AT LEAST 18 INCHES ABOVE THE FORCE MAIN.

DEWATERING NOTES:

1. DURING THE EXCAVATION PROCESS IF GROUNDWATER IS ENCOUNTERED, THE CONTRACTOR SHALL CONSTRUCT A SEDIMENT BASIN TO PROVIDE A DISCHARGE POINT FOR DEWATERING. THE SEDIMENT BASIN CAN BE A CELL IN THE PROPOSED EXCAVATION AREA OF A POND OR IT CAN BE A BERMED AREA ABOVE GROUND OR AN ABOVE GROUND CHAMBER. ALL DEWATERING WATER SHALL BE COLLECTED AT THE DISCHARGE LOCATION. A LOG OF DAILY TURBIDITY MEASUREMENTS WILL BE KEPT ON-SITE FOR THE DURATION OF DEWATERING ACTIVITIES ALONG WITH DAILY MEASUREMENTS OF FLOW RATE.

2. IF THE GROUNDWATER CAN NOT BE CONTAINED ON-SITE AND MUST BE DISCHARGED OFF-SITE, THE CONTRACTOR IS RESPONSIBLE FOR FILING FOR AN FDEP DEWATERING NOI, ALL WATER TESTING REQUIREMENTS SET FORTH BY THE LOCAL JURISDICTION AND FDEP. IF THE PROJECT IS WITHIN PROXIMITY OF CONTAMINATION OR SUSPECTED CONTAMINATION, THE GROUNDWATER WILL HAVE TO BE TESTED PER FDEP REQUIREMENTS AT A MINIMUM, NO POLLUTED WATERS SHALL BE DISCHARGED INTO STORM SYSTEM OR BODIES OF WATER. BEFORE DISCHARGE OF THE GROUNDWATER TO ANY SURFACE WATER OF THE STATE FROM A NON-CONTAMINATED SITE ANALYTICAL TESTS ON SAMPLES OF DISCHARGE WATER SHALL BE PERFORMED TO DETERMINE CONTAMINATION. TEST RESULTS MUST MEET MINIMUM REQUIREMENTS SET BY FDEP (FORMED T-62-621-300) GENERIC PERMIT FOR THE DISCHARGE OF PROTECTED GROUNDWATER FROM NON-CONTAMINATED SITE ACTIVITY.) ANY DEWATERING DRAINAGE DISCHARGED INTO SANITARY SEWERS MUST BE APPROVED BY THE GOVERNING WASTEWATER DIVISION BEFORE DISCHARGING.

3. UNDER NO CIRCUMSTANCES WILL THE DISCHARGE FROM THE ON-SITE DEWATERING BE DIRECTLY DISCHARGED OFF-SITE.

4. ALL GROUND WATER DISCHARGED OFF-SITE SHALL BE 29 NEPHELOMETRIC TURBIDITY UNITS (NTUS) OR LESS. TURBIDITY READINGS SHOULD BE COLLECTED TWICE DAILY, AT LEAST FOUR HOURS APART, TO CONFIRM TURBIDITY IS KEPT BELOW 29 NTUS. THE SAMPLES WILL BE COLLECTED AT THE DISCHARGE LOCATION. LOG OF DAILY TURBIDITY MEASUREMENTS WILL BE KEPT ON-SITE FOR THE DURATION OF DEWATERING ACTIVITIES ALONG WITH DAILY MEASUREMENTS OF FLOW RATE.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP A DEWATERING SYSTEM THAT PROVIDES PRETREATMENT OF EFFLUENT PRIOR TO DISCHARGE INTO ADJACENT SURFACE WATERS OR LOCAL SANITARY UTILITY SYSTEM, IF ALLOWED/REQUIRED. THE CONTRACTOR'S DEWATERING METHOD MUST MEET ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING THIS PRACTICE INCLUDING THE USE OF PERMITTED OFF-SITE STRUCTURES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND APPLY FOR A DEWATERING PERMIT WITH THE APPROPRIATE WATER MANAGEMENT DISTRICT AND LOCAL GOVERNING JURISDICTION.

6. THE DEWATERING SYSTEM SHALL BE DESIGNED, AND BE PROVIDED USING ACCEPTED AND PROFESSIONAL METHODS CONSISTENT WITH CURRENT INDUSTRY PRACTICE. PROVIDE DEWATERING SYSTEM OF SUFFICIENT SIZE AND CAPACITY TO CONTROL GROUNDWATER IN A MANNER THAT PRESERVES STRENGTH OF FOUNDATION SOILS, DOES NOT CAUSE INSTABILITY OR RAVELING OF EXCAVATION SLOPES, AND DOES NOT RESULT IN DAMAGE TO EXISTING STRUCTURES, WHERE NECESSARY TO THESE PURPOSES, LOWER WATER LEVEL IN EXCAVATION AREAS TO A MINIMUM OF 2 FEET BELOW EXCAVATIONS, PROVIDE PIEZOMETERS DIRECTED BY THE ENGINEER TO DOCUMENT THE GROUNDWATER LEVEL IS BEING MAINTAINED.

7. CONTROL BY ACCEPTABLE MEANS. ALL WATER REGARDLESS OF SOURCE AND BE FULLY RESPONSIBLE FOR DISPOSAL OF THE WATER. NO ADDITIONAL PAYMENT WILL BE MADE FOR ANY SUPPLEMENTAL MEASURES TO CONTROL SEEPAGE GROUNDWATER OR ARTESIAN WATER.

8. OPEN PUMPING WITH Sumps and DITCHES SHALL BE ALLOWED PROVIDED IT DOES NOT RESULT IN BOILS, LOSS OF FINES, SOFTENING OF THE GROUND, OR INSTABILITY OF SLOPES. Sumps shall be located OUTSIDE OF LOAD BEARING AREAS SO THE BEARING SURFACES WILL NOT BE DISTURBED. WATER CONTAINING SILT IN SUSPENSION SHALL BE PUMPED INTO SEWER LINES OR ADJACENT STREAMS, DURING NORMAL PUMPING AND UPON DEVELOPMENT WELL, LEVEL OF FINE SAND OR SILT IN THE DISCHARGE WATER SHALL NOT EXCEED 99PPM.

9. THE CONTRACTOR SHALL BE REQUIRED TO PERMIT THE DEWATERING SYSTEM WITH THE LOCAL WATER MANAGEMENT DISTRICT IF:

A. 100,000 GPD TOTAL IN A 24 HOUR (1 DAY) PERIOD FROM DEWATERING
 B. 100,000 GPD PUMP CAPACITY IS REQUIRED
 C. GROUNDWATER WELL SIZE 8" IN DIAMETER OR GREATER
 D. CUMULATIVE OUTSIDE DIAMETER OR SURFACE WATER WITHDRAWAL PIPES IS 6" IN DIAMETER OR GREATER

THE CONTRACTOR SHALL BE REQUIRED TO PERMIT THE DEWATERING SYSTEM WITH WATER MANAGEMENT DISTRICT HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WITH THE LOCAL WATER MANAGEMENT AND GOVERNING JURISDICTION ON THE PERMIT REQUIREMENTS FOR DEWATERING. ALL PERMITS SHALL BE SUBMITTED A MINIMUM OF 21 DAYS PRIOR TO STARTING DEWATERING ACTIVITIES.

10. CONTINUOUSLY MAINTAIN EXCAVATIONS IN A DRY CONDITION WITH POSITIVE DEWATERING METHODS DURING PREPARATION OF SUBGRADE, INSTALLATION OF PIPE, AND CONSTRUCTION OF STRUCTURES UNTIL THE CRITICAL PERIOD OF CONSTRUCTION AND/OR BACKFILL IS COMPLETED TO PREVENT DAMAGE TO SUBGRADE, SUPPORT, PILING, STRUCTURE, SIDE SLOPES, OR ADJACENT FACILITIES FROM FLOATION OR OTHER HYDROSTATIC PRESSURE IMBALANCE.

11. IF SILTY/VCLAY SANDS, WHICH CAUSE THE WATER TO BECOME TURBID, ARE ENCOUNTERED THEN THE WATER SHALL BE TREATED WITH CHEMICAL ADDITIVES, SUCH AS ALUM, IN THE SEDIMENT BASIN IN ORDER TO PROMOTE THE COAGULATION OF THE PARTICLES WHICH ALLOW THE SEDIMENT TO SETTLE AND THE WATER TO BECOME LESS TURBID. IF TURBID WATER IS ENCOUNTERED DURING THE EXCAVATION OF THE PONDS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY TO DETERMINE THE COURSE OF ACTION THAT IS APPROPRIATE TO ELIMINATE THE TURBIDITY AND ALLOW DISCHARGE THAT MEETS WATER QUALITY STANDARDS.

12. THE EXCAVATION PROCESS SHALL BE SEQUENCED IN SUCH A MANNER SUCH THAT THE SEDIMENT BASIN WILL BE AVAILABLE AT ALL TIMES. THE SEDIMENT BASIN CAN BE RELOCATED AS NECESSARY SUBJECT TO THE WATER WITHIN THE SEDIMENT BASIN BEING NON-TURBID AND ACCEPTABLE FOR DISCHARGE.

13. WHEN CONSTRUCTION IS COMPLETE, REMOVE ALL DEWATERING EQUIPMENT FROM SITE INCLUDING WELLS AND RELATED TEMPORARY ELECTRICAL SERVICE.

TESTING AND INSPECTION REQUIREMENTS (SANITARY):

1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER AND APPLICABLE MUNICIPALITY/AGENCY. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS). THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH A TELEVISION INSPECTION (TVI) OF THE PROPOSED GRAVITY SEWER LINE. THE CONTRACTOR SHALL PROVIDE COPIES OF THE TVI INSPECTION TAPE TO THE ENGINEER, THE OWNER AND THE APPLICABLE MUNICIPALITY/AGENCY.

2. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWERS IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

LEAKAGE TEST ARE SPECIFIED REQUIRING THAT:

1. A. LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 150 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.
 B. MANHOLE LEAKAGE TEST SHALL NOT EXCEED FOUR (4) GALLONS PER DAY PER UNIT, NO VISUAL LEAKAGE ALLOWED.
 C. EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 3 FEET.
 D. AIR TESTS, AS MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C924 FOR CONCRETE PIPE, ASTM F1417 FOR PLASTIC PIPE AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES, AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MAINS, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C1244.

3. DEFLECTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES, CHAPTER 33.65. FOR ALL GRAVITY SANITARY SEWER LINES. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 90 DAYS TO PERMIT STABILIZATION OF THE SOIL PIPE SYSTEM, TESTING REQUIREMENTS SPECIFY:

A. INO PIPE SHALL EXCEED A DEFLECTION OF 5%.
 B. USING A RIGID BALL OR MANHOLE FOR THE PIPE DEFLECTION TESTS WITH A DIAMETER NOT LESS THAN 8% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED.

4. ALL FORCE MAINS (IF APPLICABLE) SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. THE SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

5. COORDINATE WITH THE ENGINEER, GOVERNING UTILITY AUTHORITY AND INSTALLER FOR THE LIFT STATION WASTEWATER PUMP STARTUP AND TESTING PROCEDURES SHALL FOLLOW THE GOVERNING UTILITY AUTHORITY. ENGINEER REQUIRES 48 HOUR NOTICE PRIOR TO REQUESTED START-UP DATE.

6. IF THE ABOVE TESTING REQUIREMENTS ARE IN CONFLICT WITH ANY LOCAL, STATE, OR FEDERAL AGENCY, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.

GENERAL ADA GUIDELINES FOR SITE CONSTRUCTION:

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAP) ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE ADA STANDARDS AND REGULATIONS, THE DEPARTMENT OF JUSTICE, ADA STANDARDS AND REGULATIONS, THE ADA STAIRWAY, WALKWAY AND TRAFFIC DESIGN STANDARDS. ALL FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO COMPLETE FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO BUILDINGS OR BUILDING ENTRANCE MUST COMPLY WITH THESE ADA CODE REQUIREMENTS, INCLUDING ANY REQUIRED ELECTRONIC DATA SUBMITTALS.

1. PARKING SPACES AND PARKING AISLES - CROSS SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR 2.0%) IN ANY DIRECTION. THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE.

2. RAMP SLOPES FOR WALKWAYS SHALL NOT EXCEED 1:20 (5%) BUT NO MORE THAN 1:12 (8.3%) CONSTITUTE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, AND LANDINGS). NO RAMP SHALL EXCEED A 1:12 (8.3%) RUNNING SLOPE OR 1:50 (2%) CROSS SLOPE. RAMPS EXCURSING SIX FEET IN LENGTH REQUIRE A HANDRAIL THAT CONFORMS TO ADA STANDARDS. A RAMP MAY NOT RISE MORE THAN 2.5 FEET WITHOUT A LANDING.

3. LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PT FOOT OR 2.0%) IN ANY DIRECTION. THE LANDING SHOULD BE AS WIDE AS THE PROPOSED RAMP, MIN 36" WIDE, AND BE 60" LONG. IN MOST SITE CASES LANDINGS SHOULD BE 5 FEET.

4. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36-INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). IF THE PATH OF TRAVEL GOES TO A PUBLIC RIGHT-OF-WAY, IT IS PREFERRED THAT THE ROUTE BE A MINIMUM OF 60 INCHES. THE SLOPE SHOULD BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (2%) PER FOOT OR 2.0% IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5%), THE ADA RAMP CRITERIA MUST BE ADHERED TO, A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND LEVEL LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 (1/4" PER FOOT) FOR POSITIVE DRAINAGE.

5. CROSS WALKS - THE PATH OF TRAVEL STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 1:20 (5%) CROSS SLOPE IS MET IN THE CROSS WALK.

6. DOORWAYS - MUST HAVE A LEVEL LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICCANSI A117.1-2003 AND OTHER REFERENCED INCORPORATED CODES).

7. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 402.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN AND MOBILITY MUST BE VERIFIED. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS. IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.

8. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS. THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMING IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING CONCRETE.

9. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY REQUIREMENTS LISTED ABOVE OR OTHER NON-STATED ADA REQUIREMENT THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BY THE CONTRACTOR IMMEDIATELY UPON DISCOVERY THAT SUCH WORK WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON-COMPLIANT AREAS AT THE GENERAL CONTRACTOR'S COST.

PAVING AND GRADING NOTES:

1. ALL DELETERIOUS SURFACE MATERIAL (I.E. MUCK, PUD, BURIED DEBRIS OR AS DEFINED BY FDOT INDEX 5500) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOILS TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE. ALL DEBRIS TO BE REMOVED AT THE EXPENSE OF THE CONTRACTOR. EXCAVATED AREAS ARE TO BE REPAIRED WITH MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHIELDING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.

3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOILS TESTING COMPANY (OWNER) OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.

4. PROPOSED SLOPE ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADES UNLESS OTHERWISE NOTED.

5. FINISHED SURFACES ADJACENT TO PAVED AREAS AND WITHIN 10 FEET OF STRUCTURES SHALL BE WITHIN 1 INCH OF THE PROPOSED GRADE. ALL OTHER AREAS SHALL BE WITHIN 3 INCHES OF THE PROPOSED GRADE.

6. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. CONTRACTOR TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.

7. CONTRACTOR SHALL SAW CUT, TACK, AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.

8. UNIFORMLY SMOOTH GRADE THE SITE. DEPRESSIONS FROM SETTLEMENT SHALL BE FILLED AND COMPACTED TOPS WITHIN 1/8" OF FINISHED GRADE. FINISHED GRADE SHALL BE ROUNDED. FINISHED GRADE SHALL BE ROUNDED TO A SMOOTH, COMPACTED, FREE FROM IRREGULAR SURFACE CHANGES AND COMPARABLE TO THE SMOOTHNESS OBTAINED BY BLADE-GRADER OPERATIONS.

9. CURBING SHALL BE PLACED AT THE EDGES OF ALL THESE PAVEMENTS UNLESS OTHERWISE NOTED. REFER TO THE LATEST EMBANKMENT, CURBING AND CONCRETE PAVING AND TRAFFIC DESIGN STANDARDS FOR DETAILS AND SPECIFICATIONS OF ALL F.D.O.T. TYPE CURB AND GUILTERS CALLED FOR IN THESE PLANS.

10. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD.

11. CONTRACTOR TO PROVIDE A 12" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER CONCRETE STRUCTURES (STRUCTURES, OTHER PLACED CONCRETE, ETC.).

12. SEAL CONCRETE PER ASTM C930 OR ASTM C1315 (TYPE II) OR PLAS CUTTING CONTROL JOINTS.

13. CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING ALL EXISTING MANHOLE AND INLET COVERS, VALVE BOXES, HATCHES, OR RISERS, ETC. TO PROPOSED ELEVATIONS, AS REQUIRED, WHETHER SPECIFICALLY SHOWN ON PLANS OR NOT.

14. ALL SIGNING AND PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS, AND/OR LOCAL GOVERNING JURISDICTION.

15. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOIL, OR OTHER APPROVED MATERIALS (REFER TO PLANS), ANY AND ALL DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER AND OWNER'S ENGINEER. CONTRACTOR TO COORDINATE WITH OWNER REGARDING TYPE OF MATERIAL, LANDSCAPING AND IRRIGATION REQUIREMENTS.

16. ELEVATIONS REFER TO NAVD 1988 VERTICAL DATUM.

17. GRADING SHOWN ON THESE PLANS IS PROVIDED TO CONTRACTOR TO EXPRESS THE GENERAL GRADING INTENT OF THE PROJECT. THE CONTRACTOR SHALL BE EXPECTED TO GRADE THE ENTIRE SITE TO PROVIDE POSITIVE DRAINAGE IN ALL AREAS THROUGHOUT THE SITE. SMOOTH TRANSITIONS SHALL BE PROVIDED BETWEEN CONTOURS OR SPOT ELEVATIONS AS SHOWN ON THE PLANS TO ACCOMPLISH THE GRADING INTENT. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING HAS BEEN COMPLETED. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER PRIOR TO DEMOBILIZATION OF GRADING EQUIPMENT TO DETERMINE THAT THE GRADING INTENT HAS BEEN ACHIEVED.

18. NEWLY GRADED AREAS SHALL BE PROTECTED FROM TRAFFIC AND EROSION. ALL SETTLEMENT OR WASHING AWAY THAT MAY OCCUR FROM ANY CAUSE PRIOR TO SEEDING OR ACCEPTANCE SHALL BE REPAIRED AND GRADES RE-ESTABLISHED TO THE REQUIRED ELEVATIONS AND SLOPES AT NO ADDITIONAL COST TO THE OWNER.

TESTING AND INSPECTION REQUIREMENTS (PAVING/GRADING):

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH SITE SPECIFIC GEOTECHNICAL REPORT FOR THE SITE, AS WELL AS THE TESTING SCHEDULE REQUIRED BY FDOT AND THE AFFECTED MUNICIPALITY. THE MORE STRINGENT REQUIREMENTS SHALL APPLY. UPON COMPLETION OF WORK, THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

2. QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

3. THE OWNER'S ENGINEER WILL NOT BE RESPONSIBLE FOR SCHEDULING, COORDINATION OR EVALUATION OF THE SOILS TESTING AND CERTIFICATIONS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER/DEVELOPER TO MAKE THE NECESSARY ARRANGEMENTS DIRECTLY WITH THE SOILS TESTING LABORATORY/GEOTECHNICAL FIRM AND THE CONTRACTOR.

4. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/2" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.

5. FIELD COMPACTION DENSITY, STABILITY, AND THICKNESS TESTING FREQUENCIES OF SUB-BASE, BASE, AND ASPHALT SHALL BE TESTED ONCE EVERY 300 LINEAR FEET OF PAVING PER 24" WIDE STRIP, STAGGERED LEFT, CENTER AND RIGHT OF CENTERLINE. WHERE LESS THAN 300 LINEAR FEET OF SUB-BASE, BASE, AND ASPHALT IS PLACED IN ONE DAY, PROVIDE MIN. OF ONE TEST FOR EACH PER DAY'S CONSTRUCTION AT A LOCATION DESIGNATED BY THE ENGINEER. BORE SAMPLE EXTRACTION AND GRADATION SHALL BE TESTED THROUGHOUT THE CONSTRUCTION ONCE EVERY 1800 SQUARE YARDS OF ASPHALT DELIVERED TO THE SITE (OR A MINIMUM OF ONCE PER DAY).

AS-BUILTS, RECORD DRAWINGS & CERTIFICATIONS:

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR WILL OBTAIN A COPY OF THE MINIMUM REQUIREMENTS FOR AS-BUILT RECORD DRAWING ACCEPTANCE FOR THE AGENCY HAVING JURISDICTION (SUCH AS THE CITY OR COUNTY) AND/OR UTILITY SERVICE PROVIDER. FAMILIARIZE THEMSELVES WITH THESE REQUIREMENTS, AND PRODUCE AS-BUILT RECORD DRAWINGS THAT SUBSTANTIALLY COMPLY WITH OR EXCEED THESE REQUIREMENTS, INCLUDING ANY REQUIRED ELECTRONIC DATA SUBMITTALS.

2. AT LEAST 30 DAYS PRIOR TO ANTICIPATED COMPLETION OF SITE CONSTRUCTION, THE FINAL CERTIFICATION PROCESS SHALL BEGIN. THE CONTRACTOR SHALL PROVIDE DOCUMENTS AND INFORMATION IN A TIMELY MANNER TO THE ENGINEER, INCLUDING AND WITHOUT LIMITATIONS:

A. SURVEYED "AS-BUILTS", MINIMUM AS-BUILT SURVEY SCOPE IS LISTED BELOW.
 B. COMPACTION AND DENSITY TEST RESULTS CERTIFIED BY OWNERS TESTING COMPANY.
 C. PRESSURE TESTING AND BACTERIOLOGICAL TESTING RESULTS AS REQUIRED FOR WATER DISTRIBUTION AND/OR WASTEWATER COLLECTION TRANSMISSION SYSTEMS.

3. AS-BUILT DRAWINGS SHALL BE ACCURATELY RECORDED AND CERTIFIED BY A LICENSED LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA AND SHALL MEET THE MINIMAL TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF SURVEYORS AND MAPPERS IN CHARTER 61017-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.07 FLORIDA STATUTES.

4. ALL RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR IN AUTOCAD FORMAT USING CONSTRUCTION PLANS SHEETS PROVIDED BY THE ENGINEER. AS-BUILT INFORMATION SHALL BE FIELD VERIFIED, MEASURED, ADDED TO THE AUTOCAD FILES OF THE CONSTRUCTION PLAN SHEETS PROVIDED BY THE ENGINEER, AND CERTIFIED, SIGNED AND SEALED BY THE CONTRACTOR'S LICENSED SURVEYOR WHO WILL BE RESPONSIBLE FOR THE ACCURACY OF ALL DIMENSIONS AND ELEVATIONS.

5. THE X, Y AND Z LOCATION BASED ON THE COORDINATE SYSTEM FLORIDA EAST ZONE STATE PLANE COORDINATE FEET NAD 83, OF ALL VALVES (CENTER OF PIPE), MANHOLES, INLETS, VALVE BOXES (GRADE), HYDRANTS (GRADE), BLOW OFFS (GRADE), SAMPLE POINTS (GRADE) AND METER BOXES (GRADE) ETC. SHALL BE CLEARLY SHOWN. ACCEPTABLE POSITION ACCURACY SHALL BE SUB-METER OR BETTER FOR COMPATIBILITY WITH GLOBAL POSITIONING SYSTEM (GPS) EQUIPMENT. THE VERTICAL DATUM USED SHALL BE NAVD 88 UNLESS OTHERWISE SPECIFIED ON CONSTRUCTION PLANS.

6. THE AS-BUILT INFORMATION IS TO INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

• SITE IMPROVEMENTS:
 • ALL BUILDINGS AND OTHER IMPROVEMENTS WITH DESCRIPTIONS, DIMENSIONS, AND LOCATION.
 • PAVEMENT WIDTH AND ELEVATIONS AT THE CENTERLINE AND EDGE OF PAVEMENT EVERY 200 FEET PLUS AT ALL CHANGES IN LONGITUDINAL SLOPE, CROSS SLOPE, INLET LOCATIONS, AND AT ALL DRIVEWAY AND STREET INTERSECTIONS.
 • ALL PARKING LOTS, RECORD CENTERLINE AND EDGE OF PAVEMENT ELEVATIONS ALONG ALL DRIVE AISLES AND ISLANDS.
 • ALL CURB AND SIDEWALK RAMP AREAS DESIGNATED FOR HANDICAP ACCESS SHALL CONTAIN HORIZONTAL AND VERTICAL MEASUREMENTS IN ORDER TO VERIFY REQUIRED WIDTHS AND SLOPES HAVE BEEN MET.
 • HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION THAT DEVIATES FROM THE APPROVED ENGINEERING DRAWINGS.
 • WHERE THE PLANS CONTAIN SPECIFIC HORIZONTAL LOCATION DATA, SUCH AS STATION AND OFFSET, THE CONTRACTOR SHALL PROVIDE THE CORRECTED HORIZONTAL LOCATION.
 • WHERE THE PLANS CONTAIN SPECIFIC VERTICAL ELEVATION DATA, THE AS-BUILT DRAWINGS ARE TO REFLECT THE ACTUAL MEASURED VERTICAL ELEVATION.

• SANITARY SEWER:
 • TOP ELEVATION OF EACH MANHOLE FRAME AND COVER AND INVERTS OF EACH LINE ENTERING AND LEAVING EACH MANHOLE/STRUCTURE.
 • LENGTH OF EACH RUN OF MAIN BETWEEN MANHOLES (CENTER TO CENTER).
 • ACTUAL GRADE/PIPE OF PIPE BETWEEN MANHOLES.
 • LOCATE ALL SERVICE WYVES FROM DOWNSTREAM MANHOLE WITH DEPTH AT LOT LINE AND DISTANCE FROM THE MAIN LINE.
 • LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).

• STORM DRAINAGE:
 • TOP ELEVATION OF EACH MANHOLE FRAME AND COVER/GRATE AS WELL AS ALL OTHER STRUCTURES (HEADWALLS, CONTROL STRUCTURES, ETC.) AND INVERT OF EACH LINE ENTERING AND LEAVING EACH STRUCTURE, INCLUDING UNDERDRAIN PIPES AND ROCK ENVELOPES.
 • INVERTS OF ALL MITERED END SECTIONS.
 • LOCATE ALL SERVICE WYVES FROM BETWEEN THE STRUCTURES.
 • INVERT ELEVATIONS AND TWO HORIZONTAL TIES FROM PERMANENT VISIBLE OBJECTS TO ALL STORM SUB-OUTLETS.
 • STORM WATER POND TOP OF BERM AND POND BOTTOM ELEVATIONS AND HORIZONTAL DIMENSIONS MEASURED AT A MINIMUM OF TEN LOCATIONS PER POND, AT LOCATIONS DESIGNATED BY THE ENGINEER. TOP OF POND HORIZONTAL DIMENSIONS ARE ALSO TO BE TIED TO PROPERTY CORNERS, EASEMENTS, AND RIGHTS-OF-WAY.
 • STORMWATER CONTROL STRUCTURE DIMENSIONS AND ELEVATIONS, INCLUDING ALL WEIRS, SLOTS, ORIFICES, GRATINGS, AND SKIMMERS.

• WATER AND REUSE SYSTEMS AND FORCE MAINS:
 • ACTUAL LENGTHS OF PIPE BETWEEN BRANCHES AND VALVES IN THE RUN.
 • LOCATE WITH MEASUREMENTS FROM PERMANENT VISIBLE OBJECTS ALL FITTINGS/ACCESSORIES NOT VISIBLE FROM THE SURFACE (MINIMUM TWO POINT TIES).
 • LIST THE DEPTHS OF THE LINES AT ALL VALVES, FITTINGS AND FIVE HYDRANTS.
 • POTABLE WATER SHALL CLEARLY INDICATE CONNECTION TO MINIMUM SEPARATION DISTANCES OR REQUIRED PIPE UPGRADES.

PRIOR TO THE CIVIL ENGINEERING PUNCH LIST INSPECTION THE CONTRACTOR SHALL SEND THE ENGINEER AN AS-BUILT SURVEY. THE ENGINEER WILL REVIEW THE DRAWINGS FOR COMPLETENESS IN ACCORDANCE WITH THE REQUIREMENTS OF THESE NOTES WITHIN FIVE (5) WORKING DAYS. FOR PRELIMINARY REVIEW, SUBMITTAL IN AUTOCAD AND PDF FORMAT IS SUFFICIENT. IF ANY DEFICIENCIES ARE NOTED, ONE COPY OF REDLINED AS-BUILTS WILL BE GIVEN TO THE GENERAL CONTRACTOR FOR REVISIONS TO BE MADE. REVISED AS-BUILTS WILL BE USED FOR THE REVIEW AND APPROVAL OF THE DRAWINGS. MATERIALS TO BE PROVIDED AT THE EXPENSE OF THE CONTRACTOR.

7. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR KEEP A DAILY "AS-BUILT" SET OF DRAWINGS WHILE THE WORK BEING DONE IS VISIBLY EXPOSING ACCORDING TO THE CRITERIA OUTLINED HEREIN.

8. THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RETEST AND/OR REPAIR ANY ACTION NECESSARY TO ENSURE THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

9. THE CONTRACTOR'S GEOTECHNICAL ENGINEER SHALL CERTIFY TO OWNER'S ENGINEER THAT ALL SITE, UTILITY, AND ROADWAY COMPACTION, BERM STABILITY, AND PAVEMENT CONSTRUCTION SPECIFICATIONS HAVE BEEN CONSTRUCTED TO MEET THE RECOMMENDATIONS OF THE DESIGN GEOTECHNICAL ENGINEER.

10. THE DESIGN ENGINEER RESERVES THE RIGHT TO REQUIRE PERMEABILITY TESTING RESULTS AND BORING LOGS WITHIN DRY RETENTION/DETENTION BASINS TO BE PROVIDED TO OR COMPLETED BY THE GEOTECHNICAL ENGINEER CERTIFYING THE RECOVERY TO THE DESIGN ENGINEER. QUANTITIES, LOCATIONS, AND DEPTHS BELOW FINISHED GRADE SHALL BE SPECIFIED BY THE GEOTECHNICAL ENGINEER.

11. THE CONTRACTOR SHALL SUBMIT COPIES OF THE TVI INSPECTION TAPE TO THE ENGINEER, THE OWNER, ENGINEER OF RECORD, CONTRACTOR AND LOCAL MUNICIPALITY/AGENCY FOR PURPOSES, SUCH AS BUT NOT LIMITED TO, CERTIFICATION, AND ACCEPTANCE OF FACILITIES BY THE DEVELOPER AND/OR MUNICIPALITY/AGENCY.

12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN CONSTRUCTION IS COMPLETE FOR WATER, WASTEWATER, AND STORMWATER SYSTEMS SO THAT THE CERTIFICATIONS MAY BE INITIATED. SATISFACTORY BACTERIOLOGICAL TEST RESULTS, PRESSURE TEST RESULTS, AND AN AS-BUILT SURVEY SHALL BE SUBMITTED TO ENGINEER FOR ALL WORK REQUIRING CERTIFICATIONS.

13. IN CASES WHERE THE OWNER DETERMINES PARTIAL CLEARANCES FROM PERMITTING AGENCIES ARE BENEFICIAL TO THE OWNER FOR COMPLETED PORTIONS OF THE PROJECT, PRELIMINARY RECORD DRAWINGS (AUTOCAD FORMAT) TO THE ENGINEER FOR ITS USE IN PREPARING THE PARTIAL CLEARANCE APPLICATIONS FOR THE OWNER.

14. COMPLETE RECORD DRAWINGS THAT ARE FOUND TO BE SATISFACTORY AS A RESULT OF THE ENGINEER'S REVIEW WILL BE USED AS THE BASIS FOR THE FINAL PROJECT RECORD DRAWINGS PREPARED BY THE ENGINEER USING THE CONTRACTOR PROVIDED RECORD DRAWINGS PLUS ENGINEER ADDED INFORMATION.

15. COMPLETE SIGNED AND SEALED RECORD DRAWINGS ARE REQUIRED TO BE DELIVERED TO THE OWNER PRIOR TO FINAL INSPECTION OF THE PROJECT. FINAL INSPECTIONS WILL ONLY BE SCHEDULED UPON RECEIPT OF SIGNED AND SEALED RECORD DRAWINGS THAT HAVE BEEN REVIEWED BY THE ENGINEER AND DELIVERED BY THE ENGINEER TO THE OWNER.

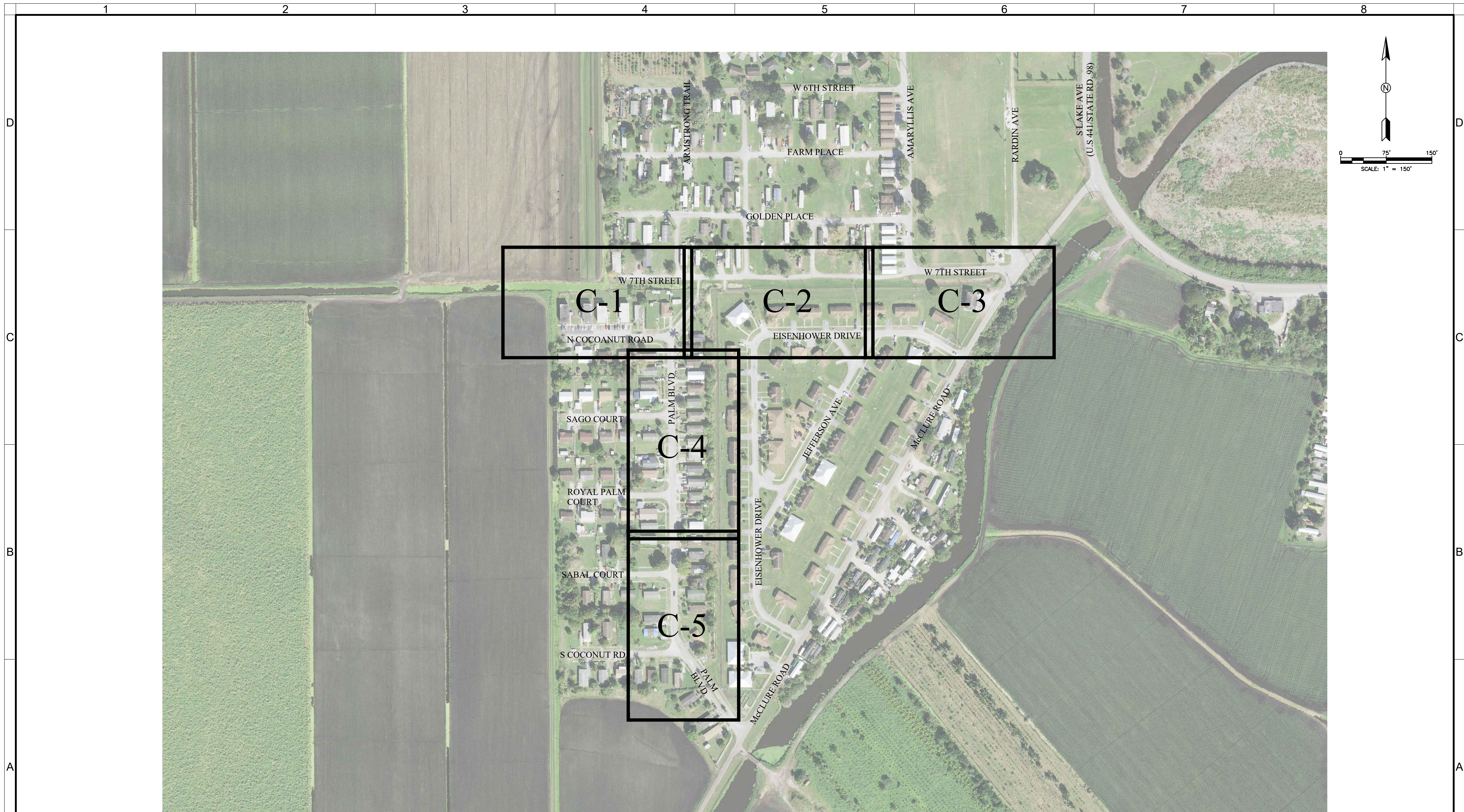
16. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING DESIGN PARAMETERS ARE MET TO THE SATISFACTION OF THE GEOTECHNICAL AND DESIGN ENGINEER PRIOR TO CERTIFICATION OF COMPLETION.

BETWEEN THE ENGINEER'S DESIGN STANDARDS AND LOCAL DESIGN STANDARDS, THE MORE STRINGENT UTILITY NOTE SHALL APPLY.

TECHNICAL SPECIFICATIONS:

1. MATERIALS, CONSTRUCTION METHODS, TESTING AND TOLERANCES FOR ALL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, AND WITH THE SPECIFICATIONS REFERENCED UNDER THE "SUPPLEMENTARY CONDITIONS" IN THE EVENT OF CONFLICT, THE MORE STRINGENT PROVISION SHALL APPLY.

1. **MOBILIZATION/DEMOBILIZATION:** THE WORK SPECIFIED IN THIS SECTION CONSISTS OF THE PREPARATORY WORK AND OPERATIONS IN MOBILIZING FOR BEGINNING WORK ON THE PROJECT, INCLUDING, BUT NOT LIMITED TO, THOSE OPERATIONS NECESSARY FOR THE MOVEMENT OF PERSONNEL, EQUIPMENT, SUPPLIES AND INCIDENTALS TO THE PROJECT SITE, AND FOR THE ESTABLISHMENT OF TEMPORARY OFFICES, BUILDINGS, SAFETY EQUIPMENT AND FIRST AID SUPPLIES, SANITARY AND OTHER FACILITIES, AS REQUIRED BY THESE SPECIFICATIONS. THE SPECIFICATIONS, INCLUDING ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS, PERMITS AND ANY REQUIRED INSURANCE, AND ANY OTHER PRECONSTRUCTION



REV	DATE	DESCRIPTION	APPR

VERIFY SCALES
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 IF NOT ONE INCH ON
 THIS SHEET, ADJUST
 SCALES ACCORDINGLY

PROJECT NUMBER 20-12/5	DESIGNED BY MMO	PROJECT ENGINEER MARCOS, MONTES DE OCA
DRAWN BY FG	REG NUMBER 63897	DATE OF SIGNATURE
DATE 1/20/2021	EXP DATE 02/2023	FBPE AUTHORIZATION NUMBER 29880



PO BOX 1001
 OKEECHOBEE, FL 34973
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 FAX: (863) 763-6169
 FL ENGINEERING BUSINESS NO. 29880
 MARCOS@MDO-ENGINEERING.COM

**EAST LAKE
 DRAINAGE IMPROVEMENTS**

KEY SHEET

DRAWING KEY SHEET
SHEET G-3
OF - SHEETS



BURIED UTILITIES NOTE
 BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD SURVEY. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCESSES AND CONTACT FLORIDA STATE ONE, 1-800-432-4770 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

CALL BEFORE YOU DIG...
 1-800-432-4770
 UTILITIES PROTECTION CENTER
 IT'S THE LAW



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PROJECT NUMBER: 20-12/5
 DESIGNED BY: MMO
 DRAWN BY: FG
 DATE: 1/20/2021

PROJECT ENGINEER: MARCOS, MONTES DE OCA
 REG NUMBER: 63897
 DATE OF SIGNATURE: 02/2023
 FBPE AUTHORIZATION NUMBER: 29880



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EAST LAKE DRAINAGE IMPROVEMENTS
OVERALL DRAINAGE CLEARING

DRAWING: KEY SHEET
 SHEET: G-4
 OF: - SHEETS



DITCH ALONG 7TH FROM SECTION E-E TO McCURE ROAD
CUT - ±6,029.1 cu yds

DITCH ALONG RICKY JACKSON BLVD
CUT - ±1,826 cu yds



NOTE:
CONTRACTOR TO REPAIR AND RE-SOD ALL DISTURBED AREAS

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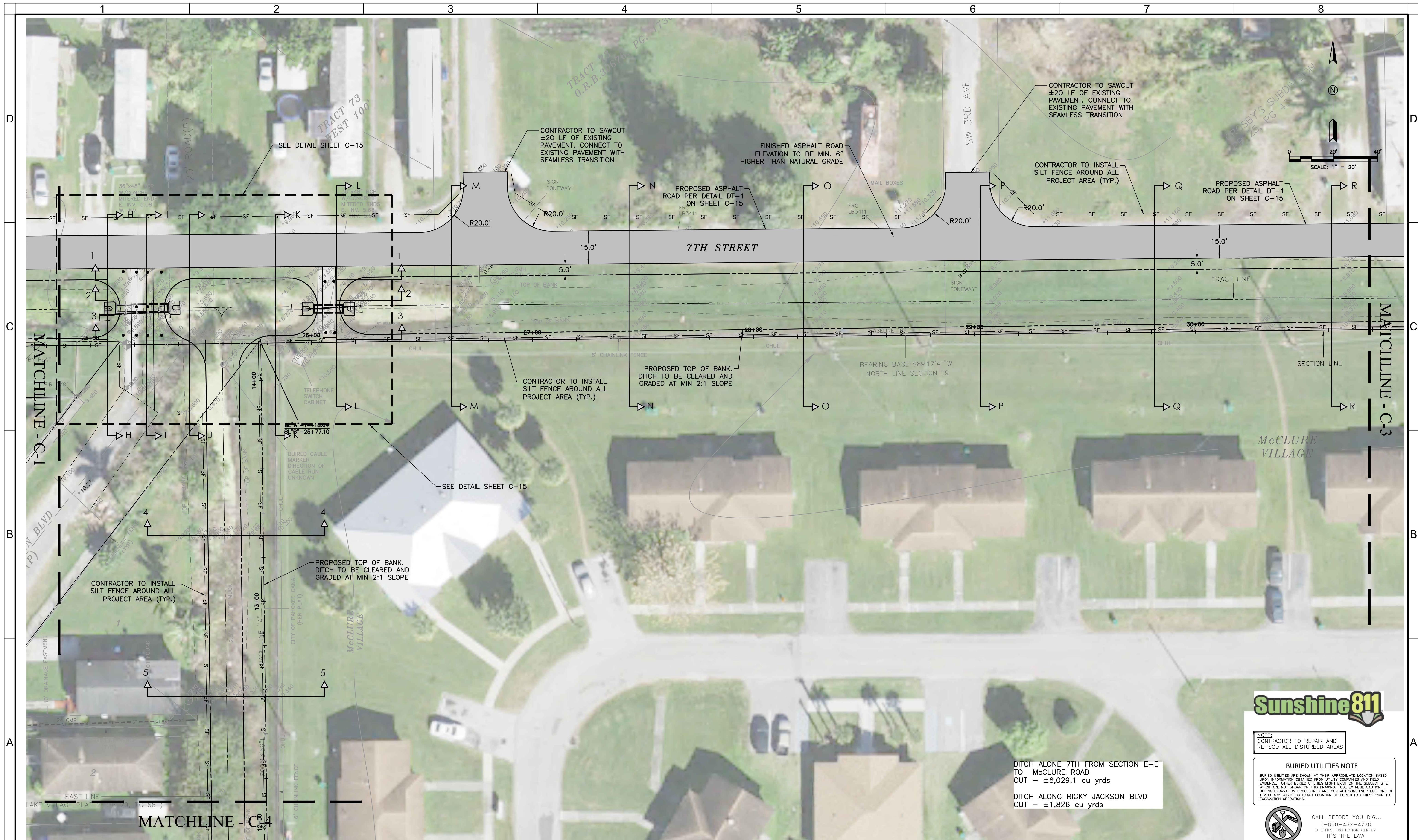
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PROJECT NUMBER 20-12/5	DESIGNED BY MMO	PROJECT ENGINEER MARCOS, MONTES DE OCA
DRAWN BY FG	REG NUMBER 63897	DATE OF SIGNATURE
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EAST LAKE DRAINAGE IMPROVEMENTS		DRAWING PLAN SHEETS
PLAN SHEET		SHEET C-1 OF 21 SHEETS



DITCH ALONG 7TH FROM SECTION E-E TO McCLURE ROAD
CUT - ±6,029.1 cu yds

DITCH ALONG RICKY JACKSON BLVD
CUT - ±1,826 cu yds

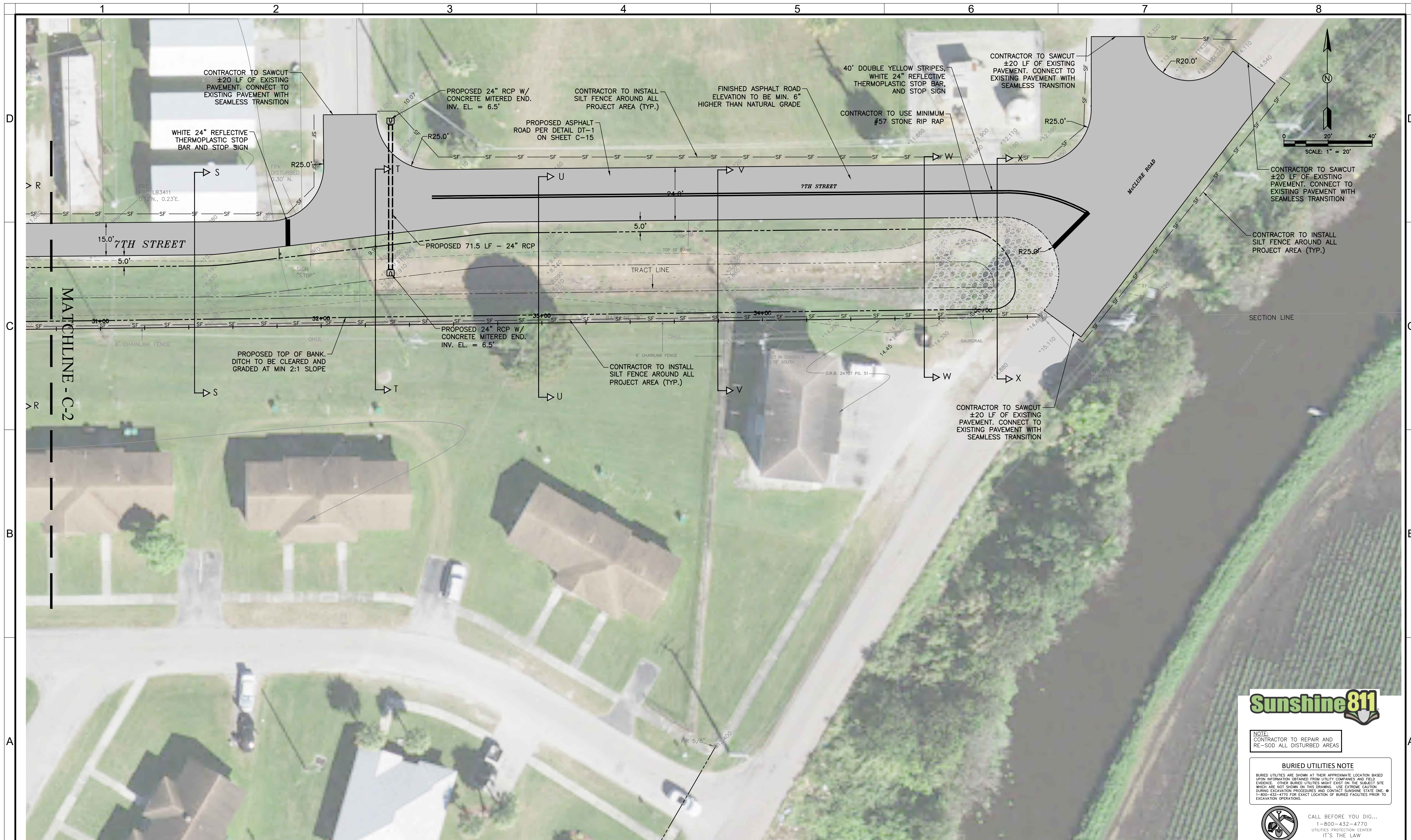


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<table border="1"> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>APPR</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	REV	DATE	DESCRIPTION	APPR					VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	PROJECT NUMBER 20-12/5 DESIGNED BY MMO DRAWN BY FG DATE 12/15/2020	PROJECT ENGINEER MARCOS, MONTES DE OCA REG NUMBER 63897 DATE OF SIGNATURE 02/2023 FBPE AUTHORIZATION NUMBER 29880	 PO BOX 1001 OKEECHOBEE, FL 34973 TEL: (863) 634-2131 FAX: (863) 763-6169 FL ENGINEERING BUSINESS NO. 29880 MARCOS@MDO-ENGINEERING.COM WWW.MDO-ENGINEERING.COM	EAST LAKE DRAINAGE IMPROVEMENTS PLAN SHEET	DRAWING PLAN SHEETS SHEET C-2 OF 21 SHEETS
	REV	DATE	DESCRIPTION	APPR										
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VERIFY SCALES
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PROJECT NUMBER 20-12/5	PROJECT ENGINEER MARCO S, MONTES DE OCA
DESIGNED BY MMO	REG NUMBER 63897
DRAWN BY FG	DATE OF SIGNATURE
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EAST LAKE DRAINAGE IMPROVEMENTS

PLAN SHEET

DRAWING
PLAN SHEETS
SHEET
C-3
OF 21 SHEETS



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EAST LAKE DRAINAGE IMPROVEMENTS

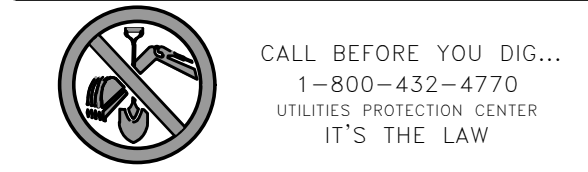
PLAN SHEET

DRAWING	PLAN SHEETS
SHEET	C-4
OF	21 SHEETS



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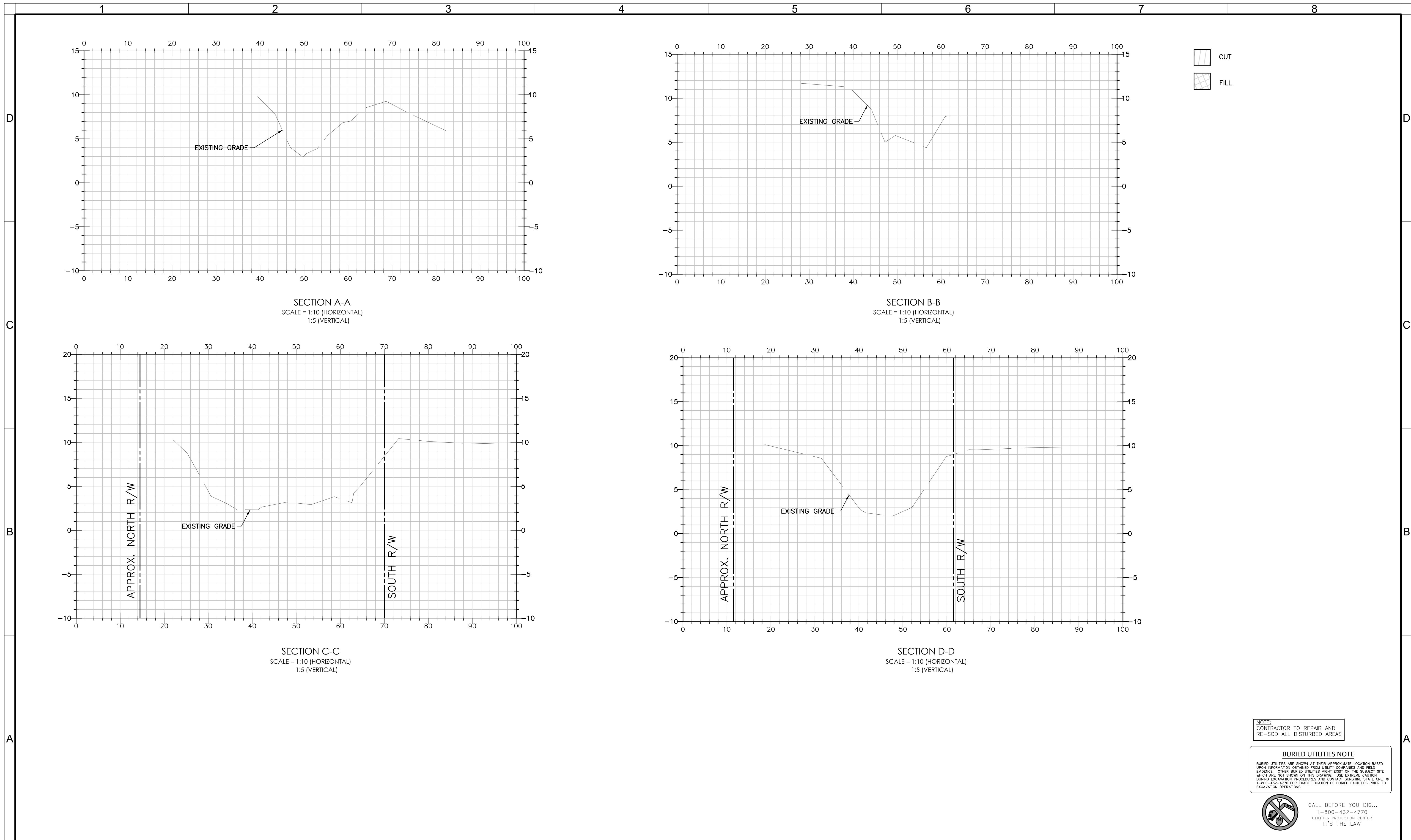
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EAST LAKE DRAINAGE IMPROVEMENTS
PLAN SHEET

DRAWING PLAN SHEETS
SHEET C-5
OF 21 SHEETS



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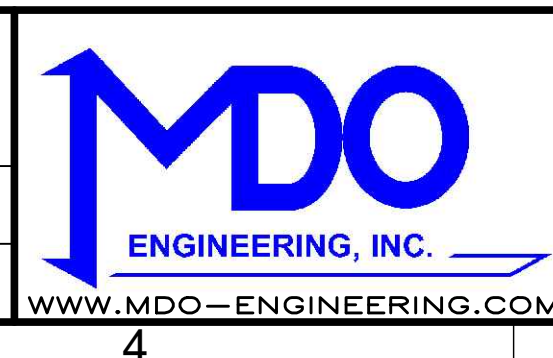
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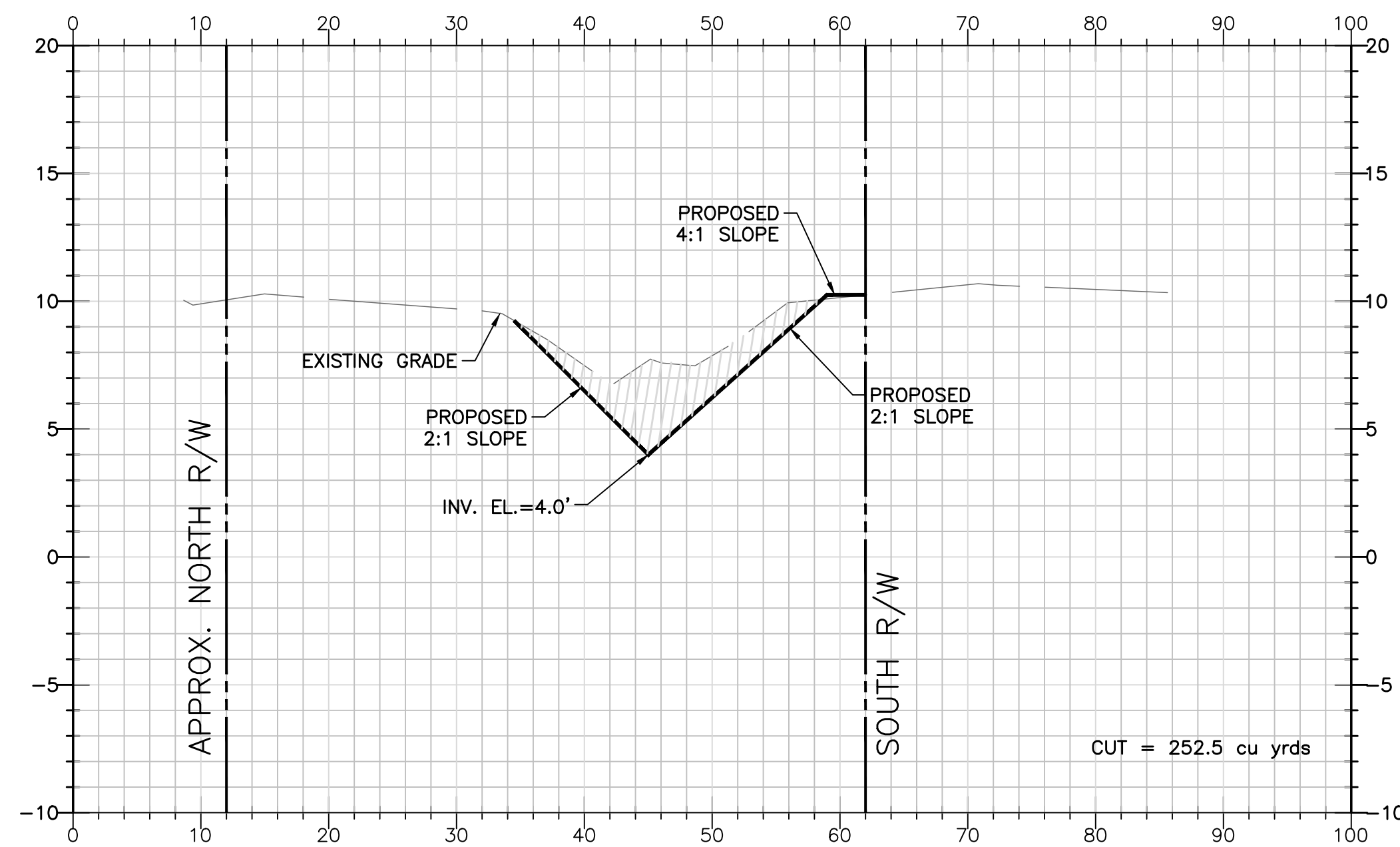
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PROJECT NUMBER 20-12/5	PROJECT ENGINEER _____
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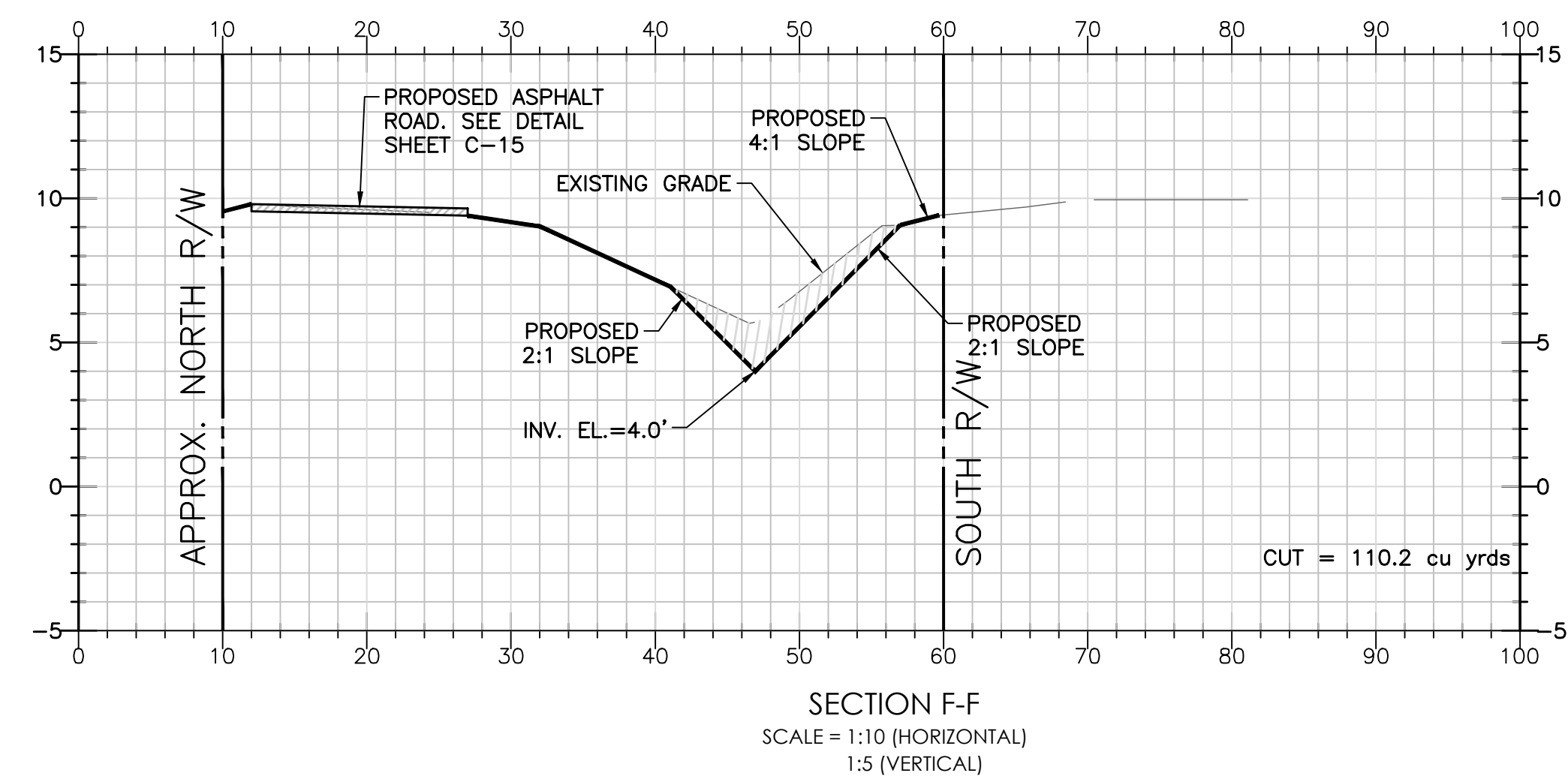


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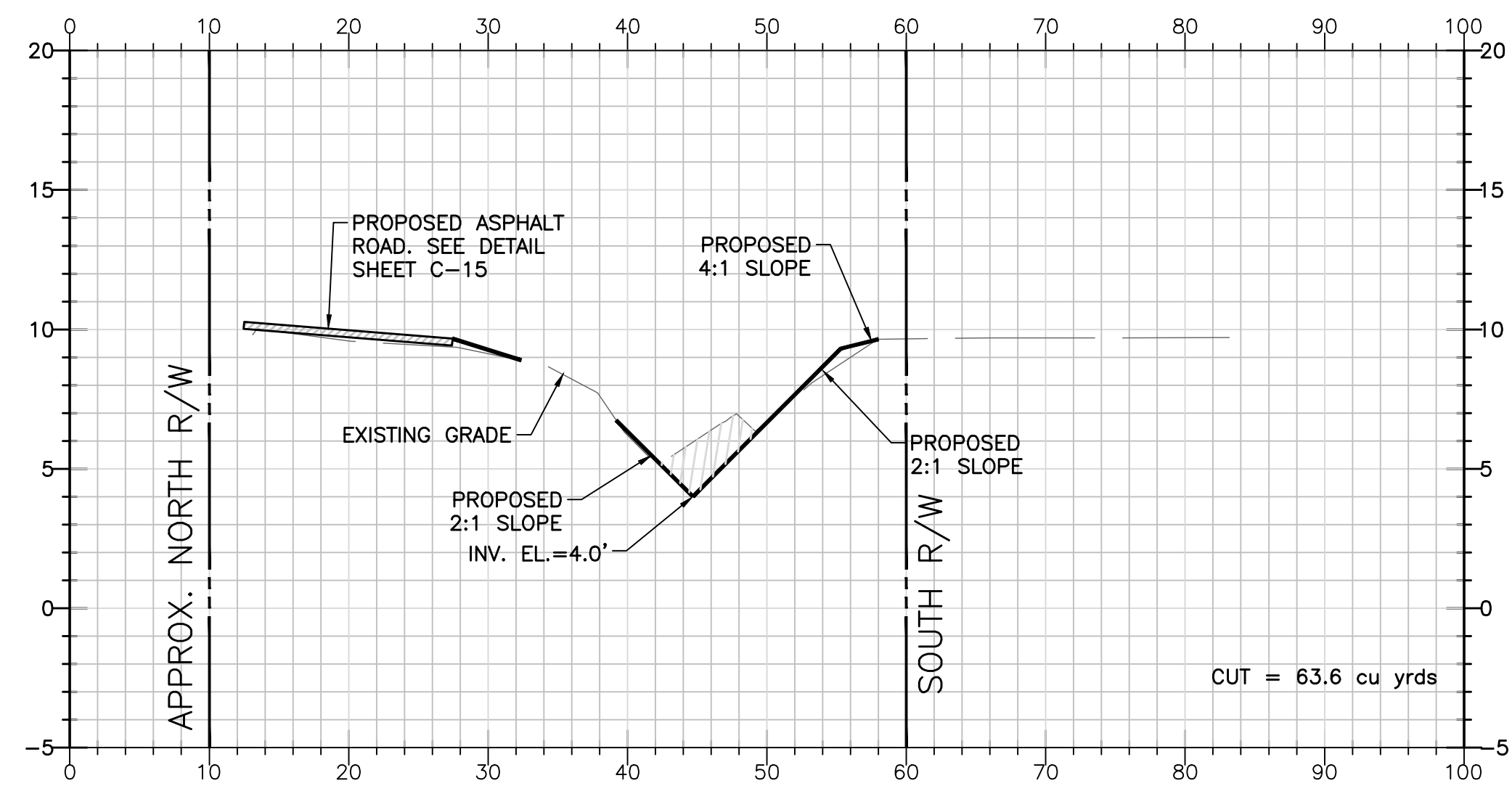
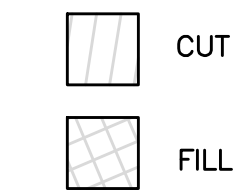
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SECTION DETAILS		PLAN SHEETS
SHEET		C-6
OF 21 SHEETS		



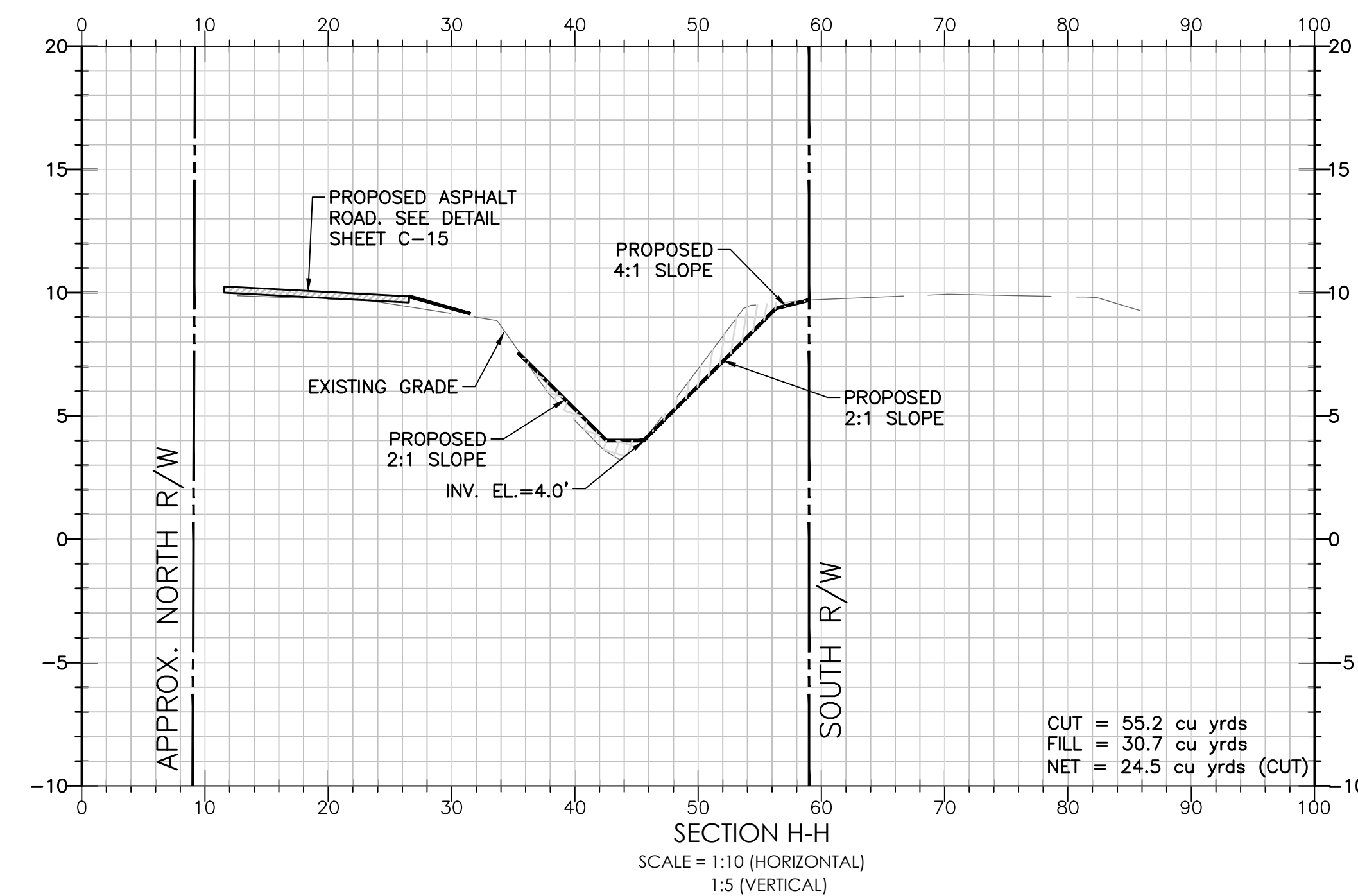
SECTION E-E
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)



SECTION F-F
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)



SECTION G-G
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)



SECTION H-H
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)

CUT = 55.2 cu yds
FILL = 30.7 cu yds
NET = 24.5 cu yds (CUT)

REV	DATE	DESCRIPTION	APPR

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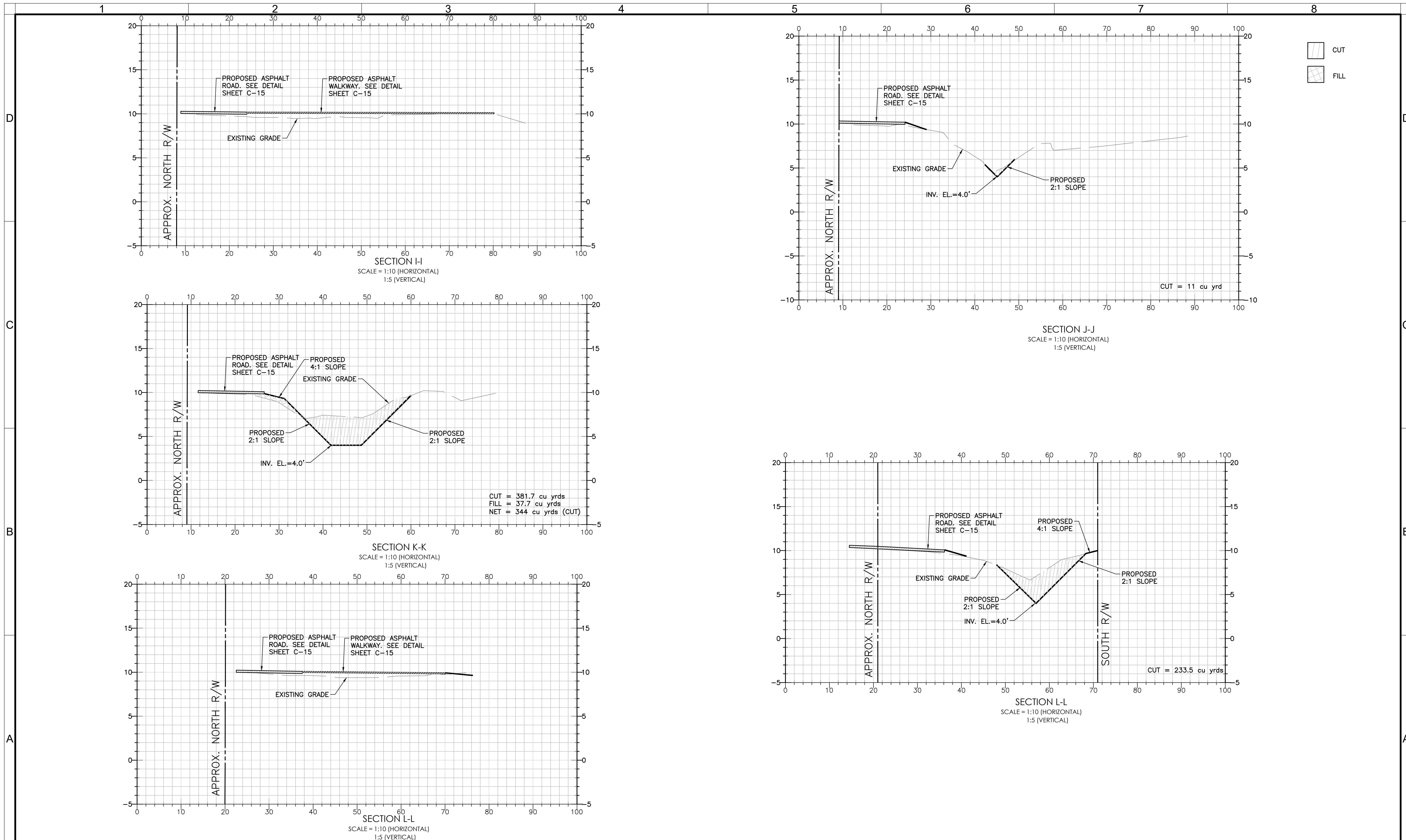
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EAST LAKE
DRAINAGE IMPROVEMENTS
SECTION DETAILS

DRAWING
PLAN SHEETS
SHEET
C-7
OF 21 SHEETS



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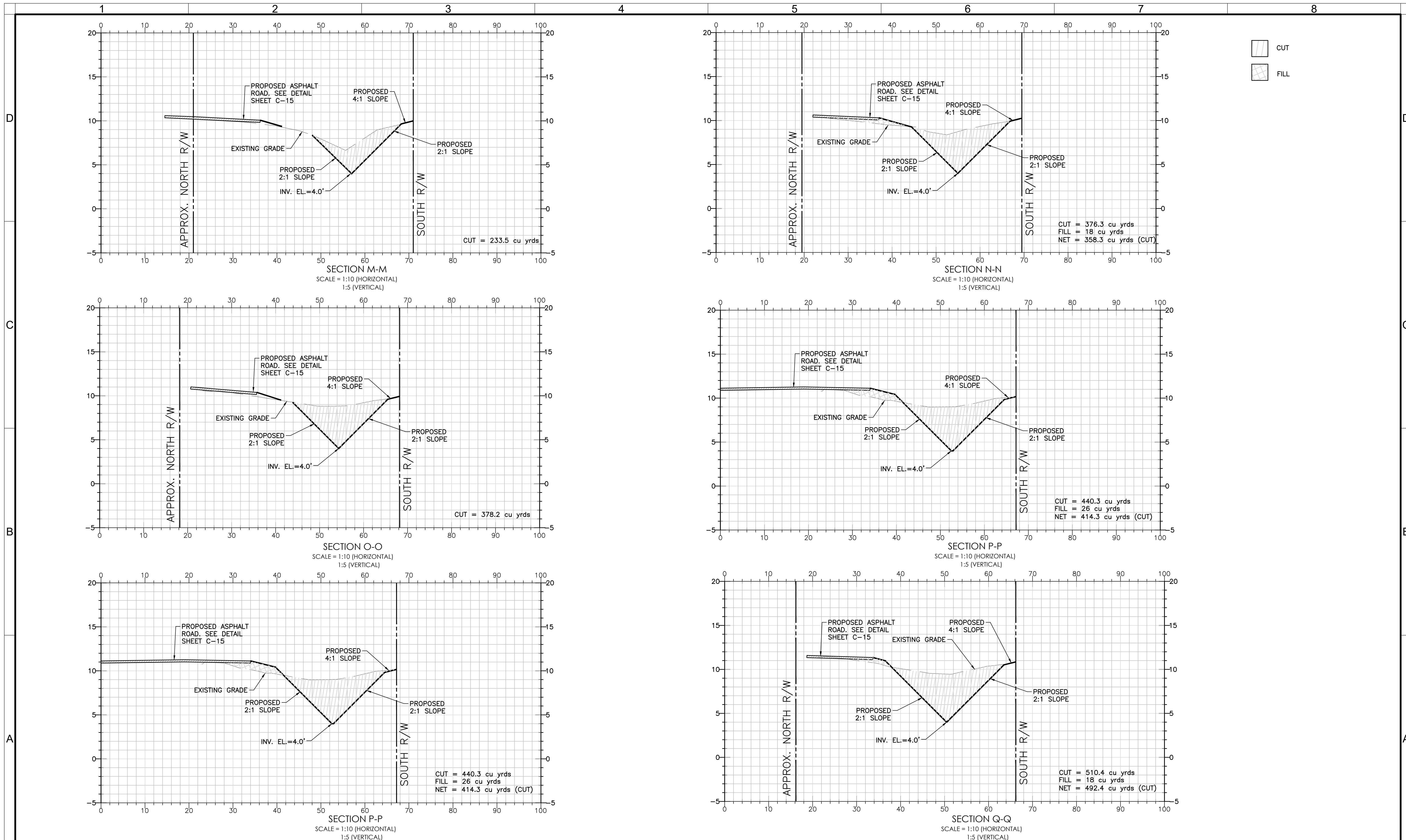


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**EAST LAKE
 DRAINAGE IMPROVEMENTS**

SECTION DETAILS

DRAWING PLAN SHEETS
SHEET C-8
OF 21 SHEETS



CUT
FILL

REV	DATE	DESCRIPTION	APPR

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PROJECT NUMBER
20-12/5

DESIGNED BY
MMO

DRAWN BY
FG

DATE
12/15/2020

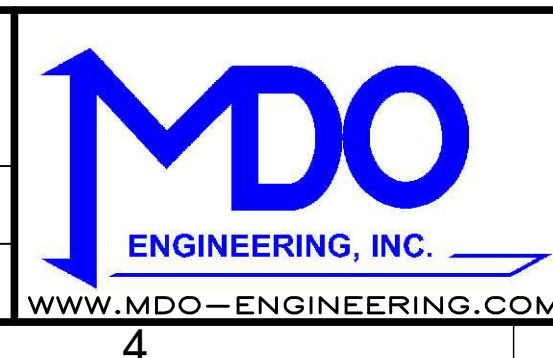
PROJECT ENGINEER
MARCOS, MONTES DE OCA

REG NUMBER
63897

DATE OF SIGNATURE

EXP DATE
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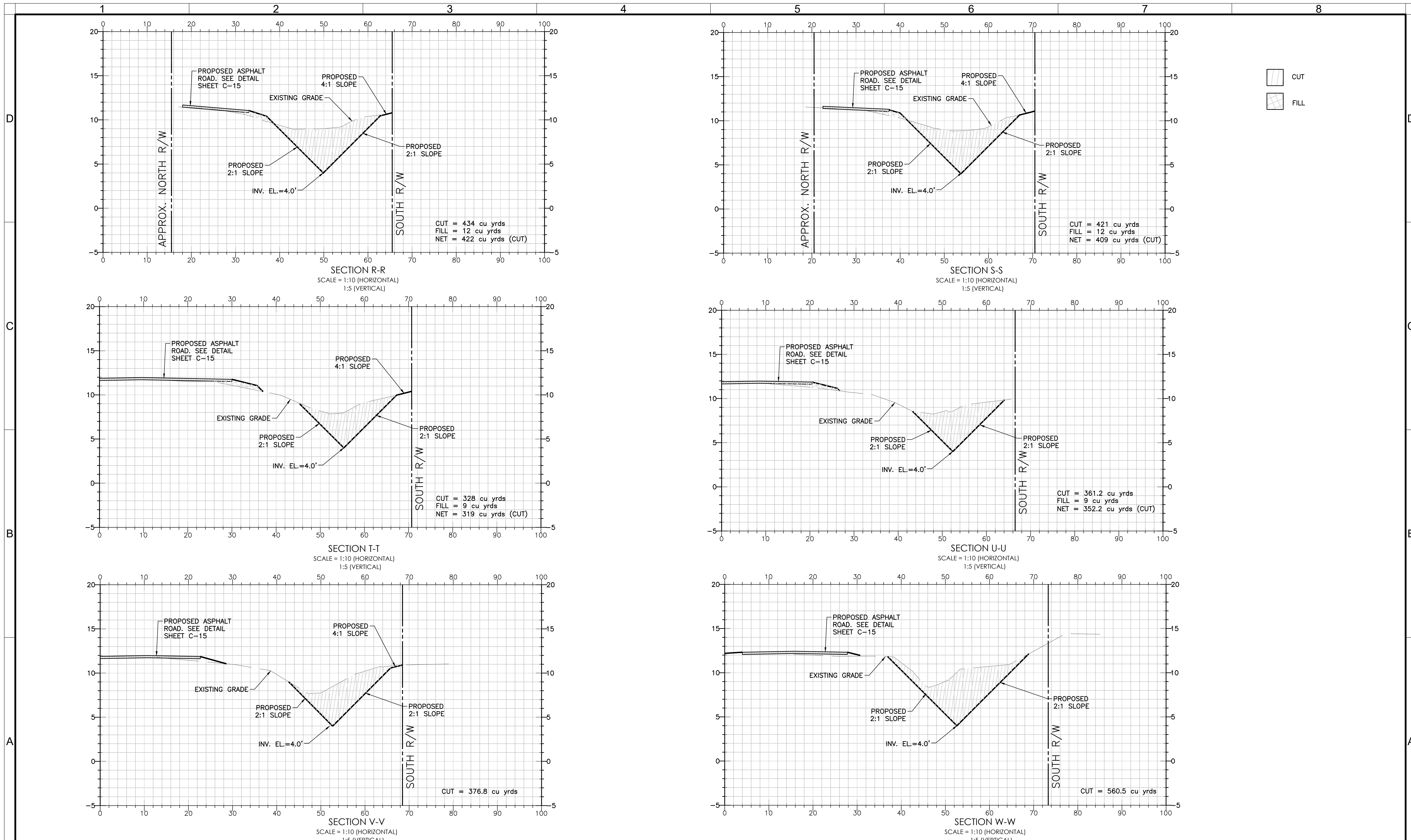
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EAST LAKE DRAINAGE IMPROVEMENTS

SECTION DETAILS

DRAWING
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SHEET
C-9
OF 21 SHEETS



CUT
FILL

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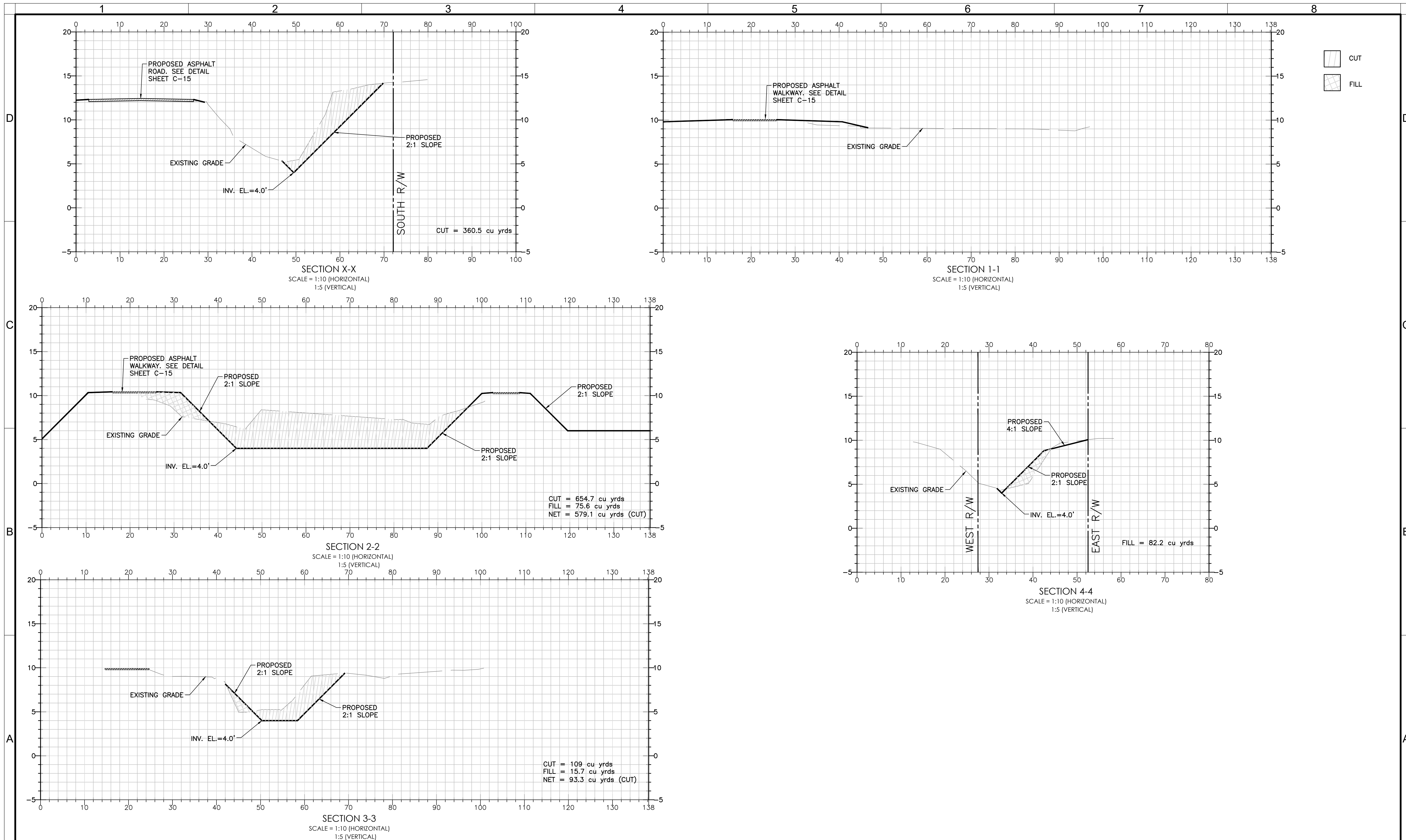
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MARCOS@MDO-ENGINEERING.COM

EAST LAKE DRAINAGE IMPROVEMENTS

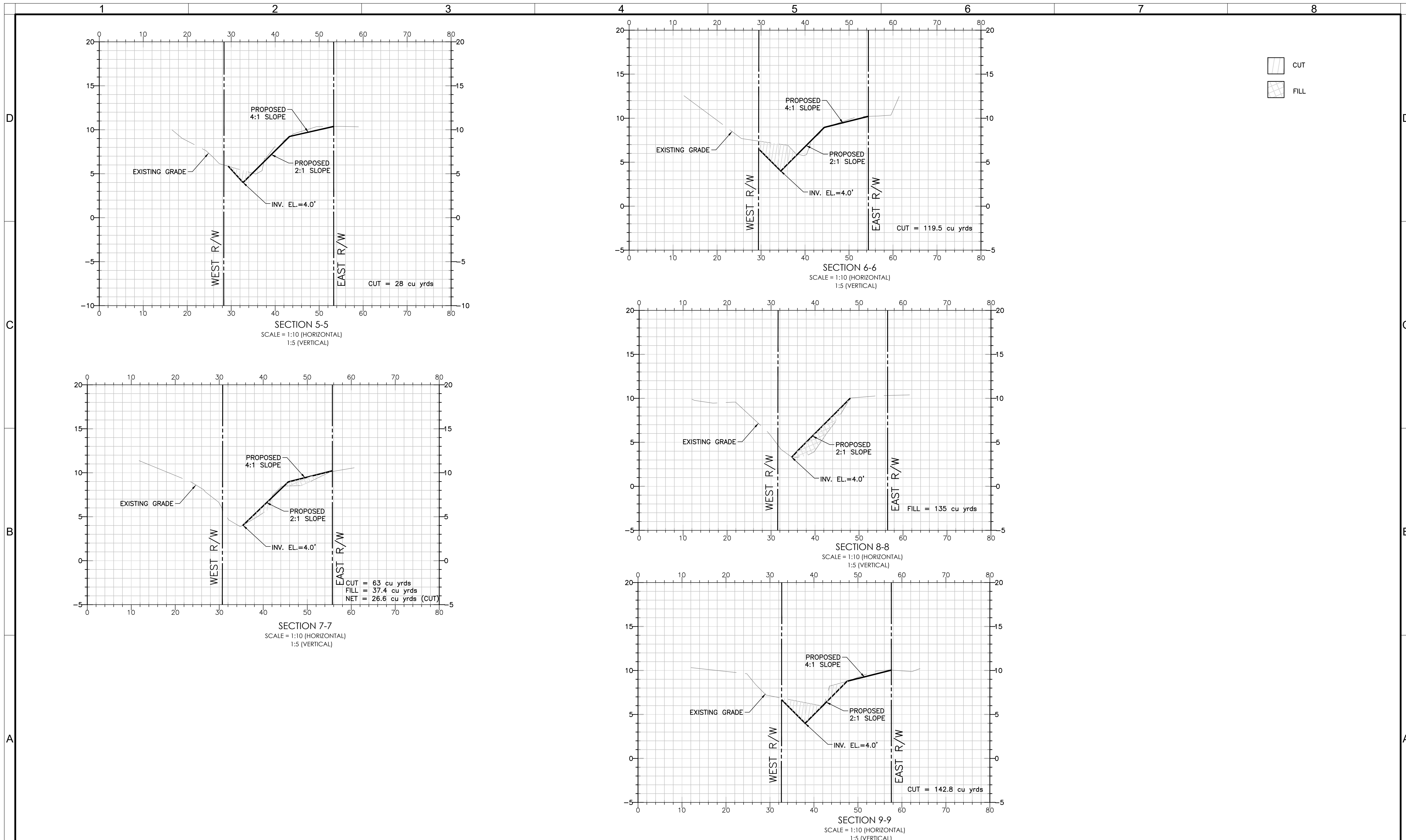
SECTION DETAILS

DRAWING
PLAN SHEETS

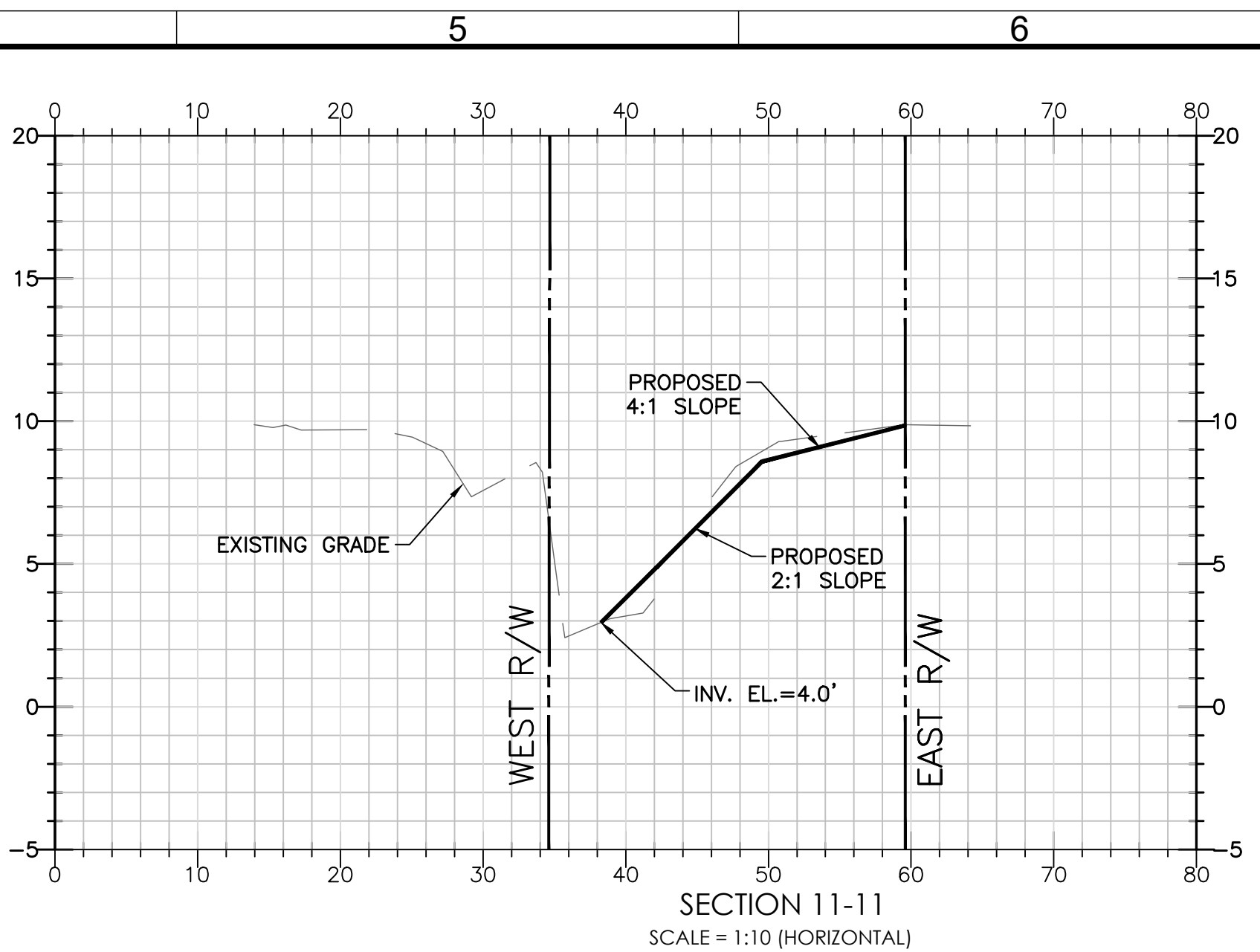
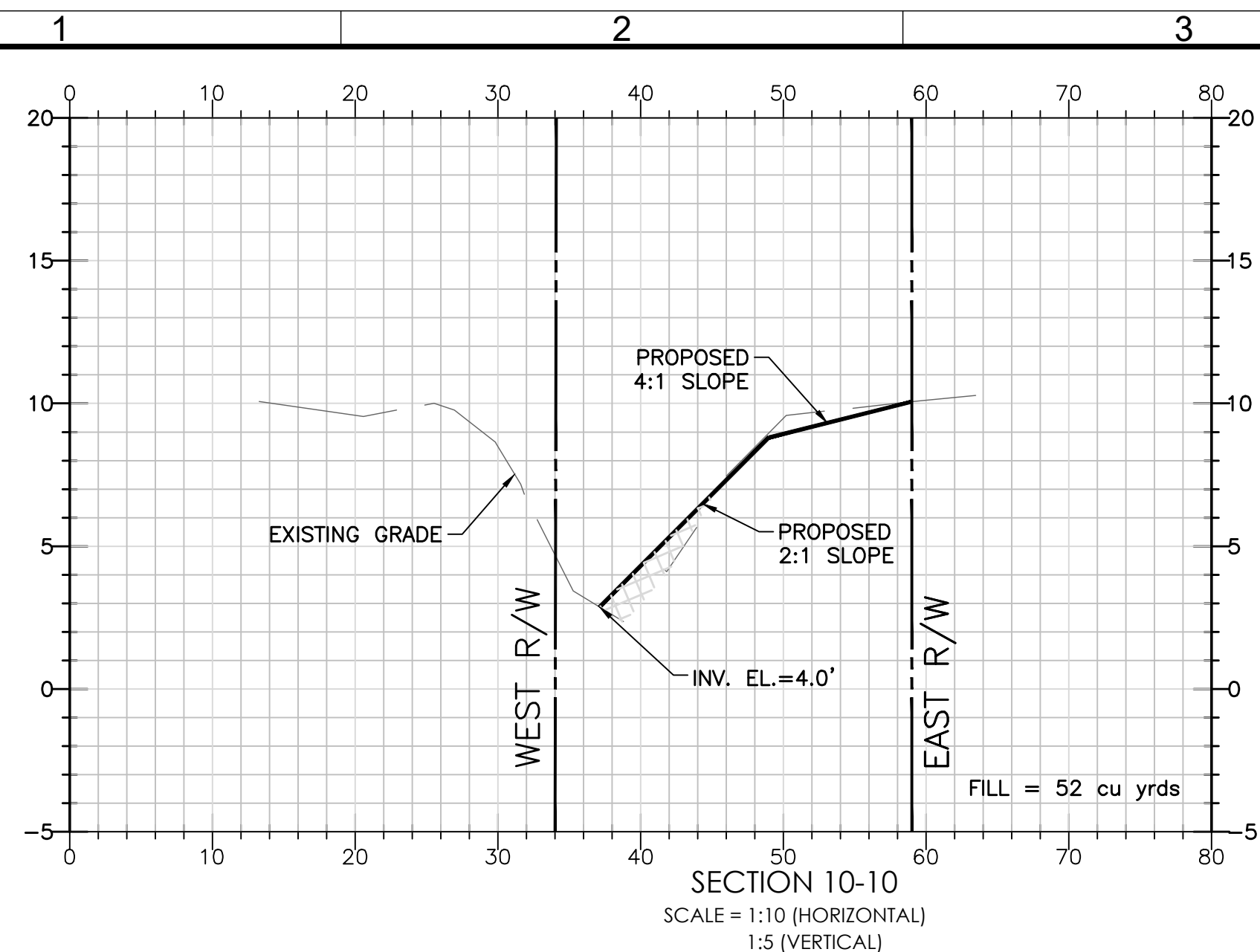
SHEET
C-10
OF 21 SHEETS



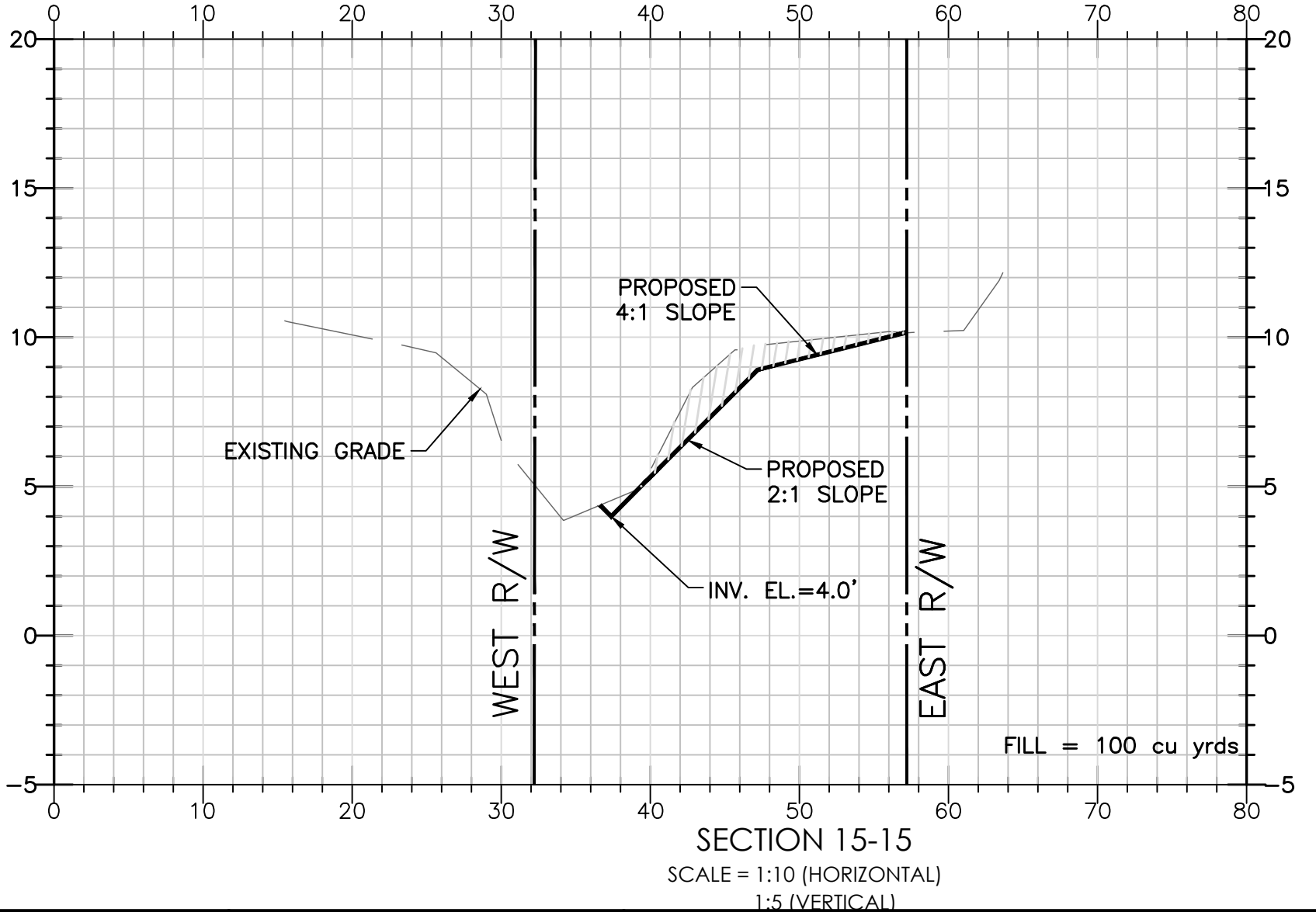
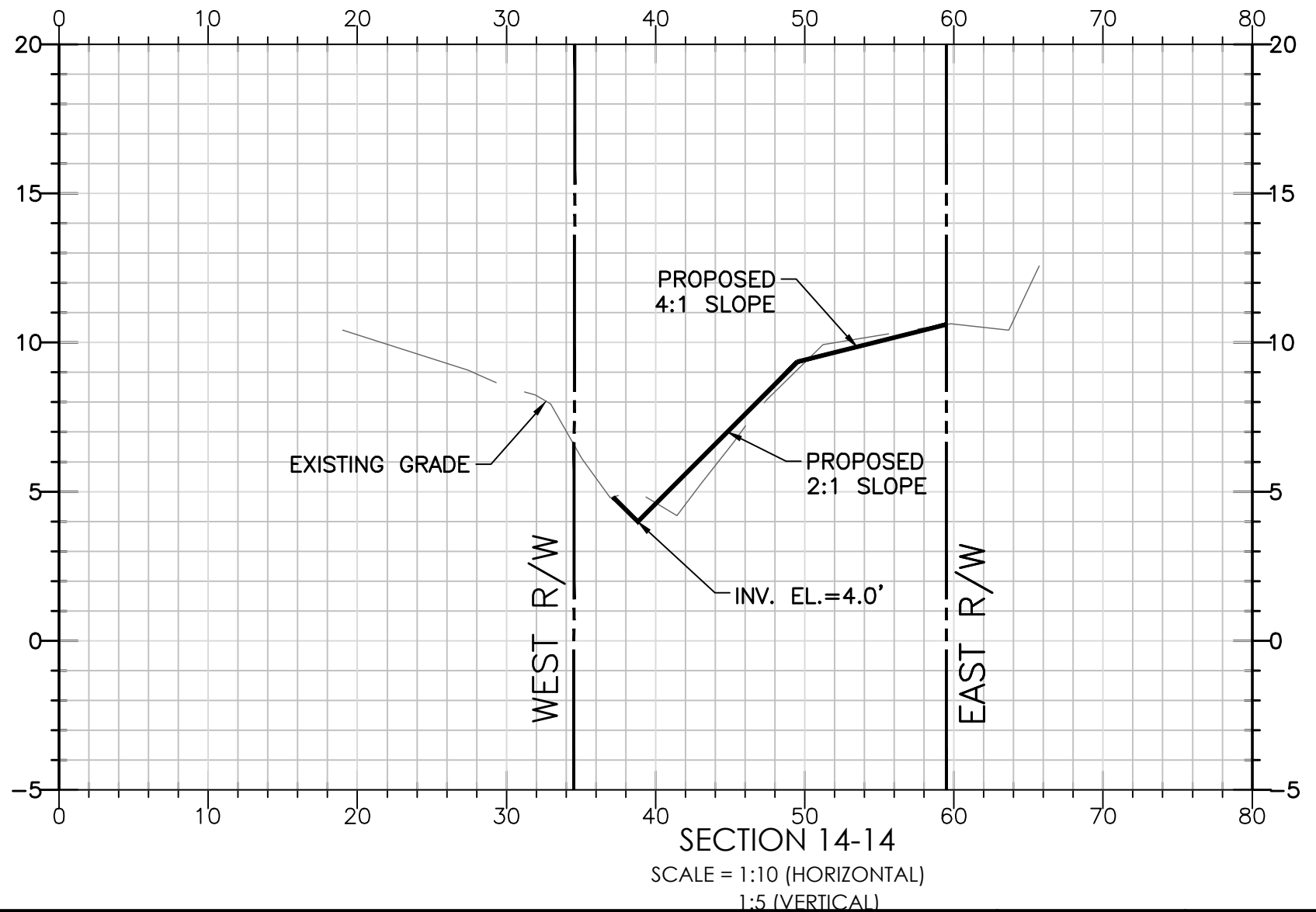
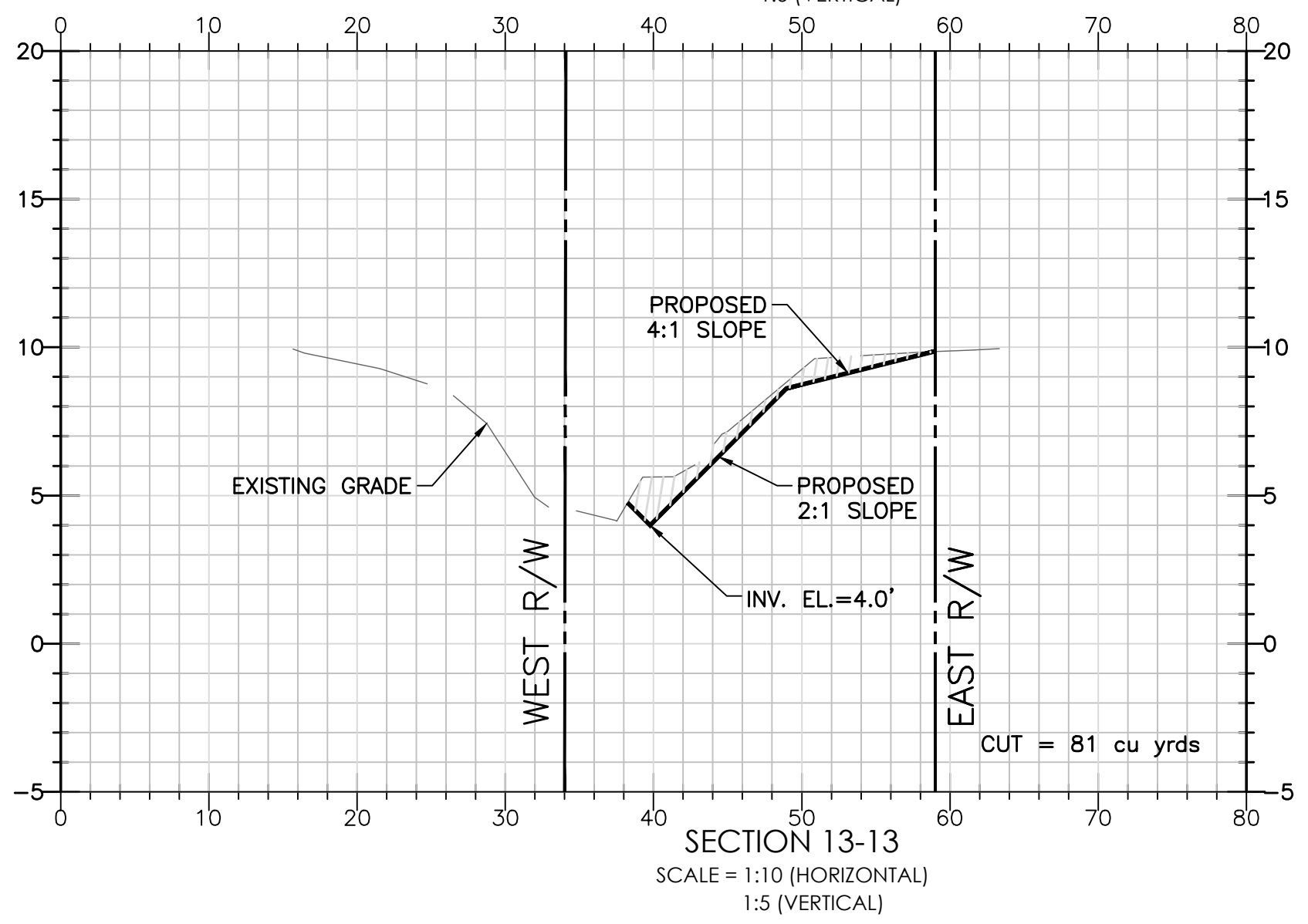
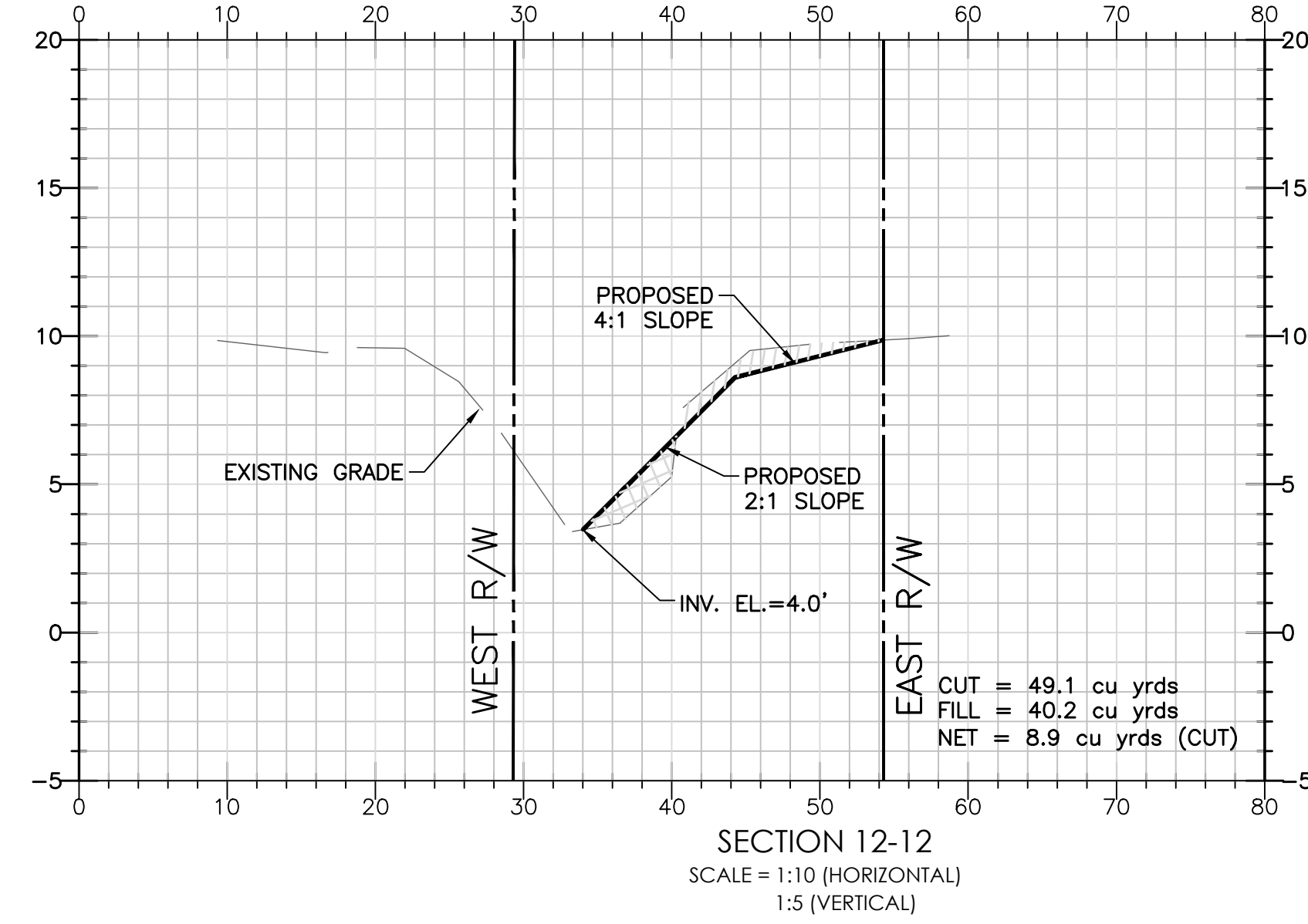
VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	PROJECT NUMBER 20-12/5	PROJECT ENGINEER _____	 PO BOX 1001 OKEECHOBEE, FL 34973 TEL: (863) 634-2131 FAX: (863) 763-6169 FL ENGINEERING BUSINESS NO. 29880 MARCOS@MDO-ENGINEERING.COM	EAST LAKE DRAINAGE IMPROVEMENTS SECTION DETAILS	DRAWING PLAN SHEETS
	DESIGNED BY MMO	REG NUMBER 63897			DATE OF SIGNATURE _____
DRAWN BY FG	DATE 12/15/2020	EXP DATE 02/2023	FBPE AUTHORIZATION NUMBER 29880		



VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	PROJECT NUMBER 20-12/5	PROJECT ENGINEER _____	 WWW.MDO-ENGINEERING.COM	PO BOX 1001 OKEECHOBEE, FL 34973 TEL: (863) 634-2131 FAX: (863) 763-6169 FL ENGINEERING BUSINESS NO. 29880 MARCOS@MDO-ENGINEERING.COM	EAST LAKE DRAINAGE IMPROVEMENTS SECTION DETAILS	DRAWING PLAN SHEETS
	DESIGNED BY MMO	MARCOS, MONTES DE OCA				SHEET C-12
DATE 12/15/2020	DRAWN BY FG	REG NUMBER 63897	DATE OF SIGNATURE _____	FBPE AUTHORIZATION NUMBER 29880		



CUT
FILL



REV	DATE	DESCRIPTION	APPR
1			
2			
3			

VERIFY SCALES
BAR IS ONE INCH
ON ORIGINAL DRAWING
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

PROJECT NUMBER
20-12/5
DESIGNED BY
MMO
DRAWN BY
FG
DATE
12/15/2020

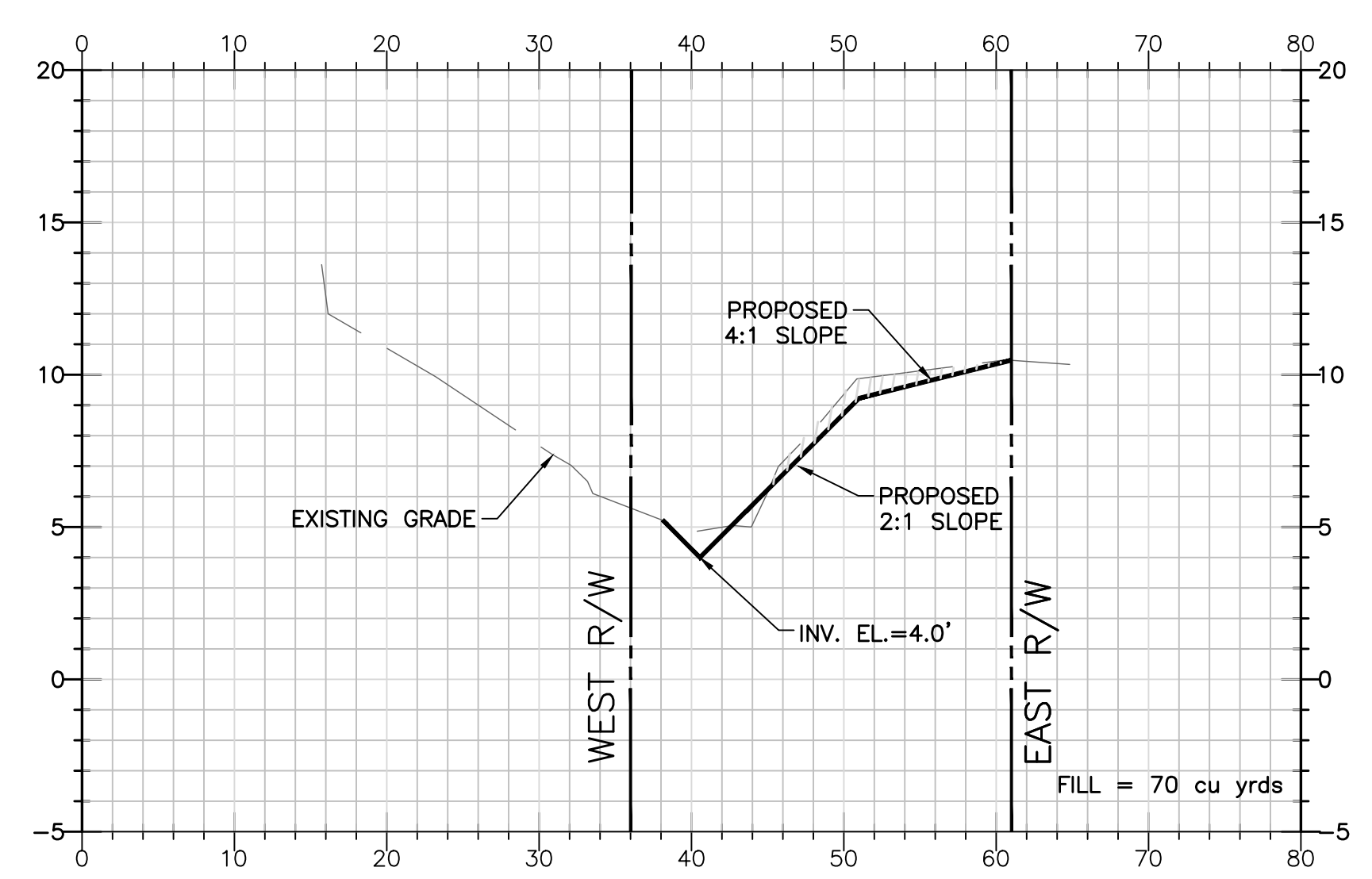
PROJECT ENGINEER
MARCOS, MONTES DE OCA
REG NUMBER
63897
DATE OF SIGNATURE
02/2023
FBPE AUTHORIZATION NUMBER
29880



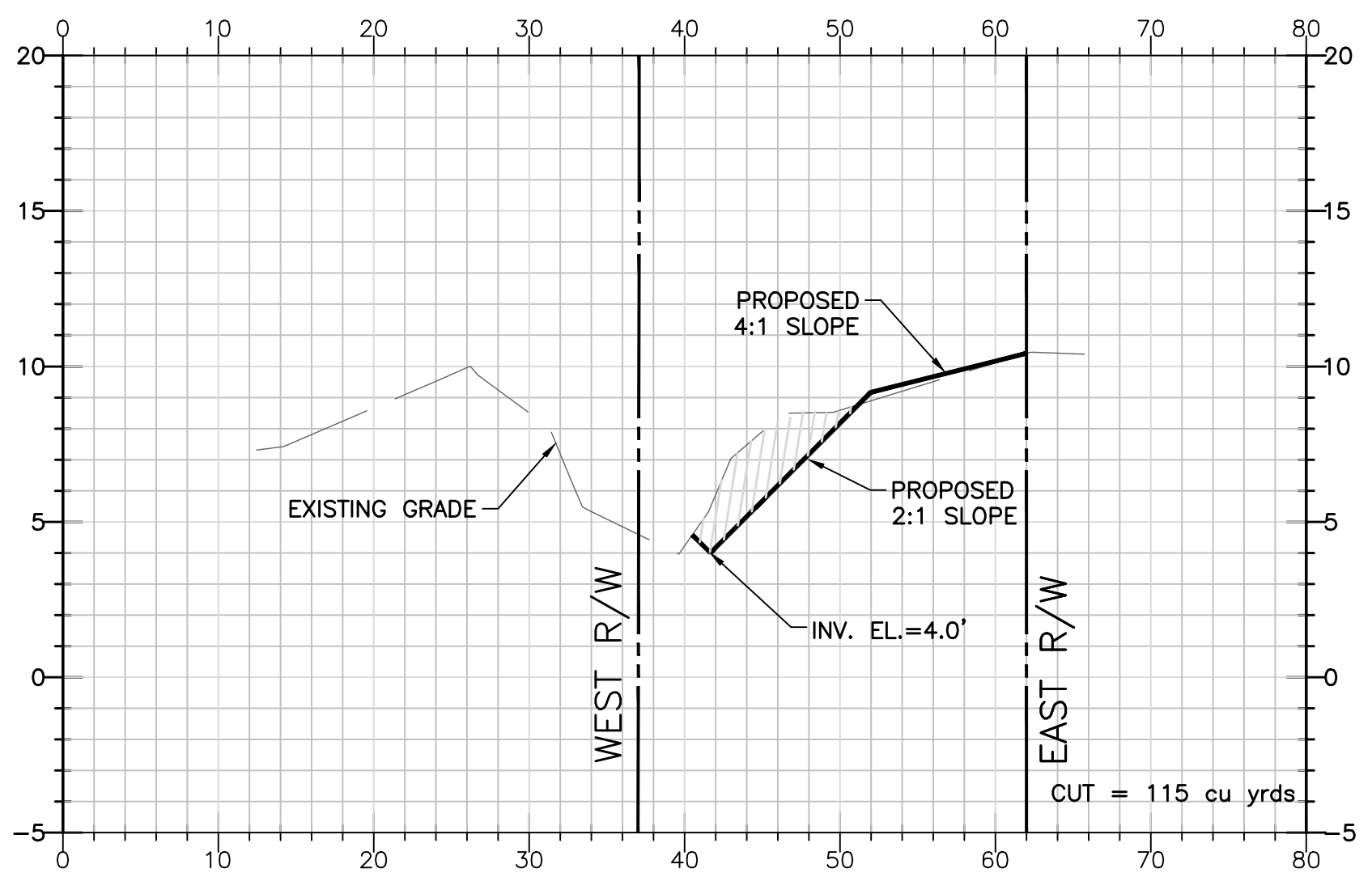
PO BOX 1001
OKEECHOBEE, FL 34973
TEL: (863) 634-2131
FAX: (863) 763-6169
FL ENGINEERING BUSINESS NO. 29880
MARCOS@MDO-ENGINEERING.COM

EAST LAKE
DRAINAGE IMPROVEMENTS
SECTION DETAILS

DRAWING
PLAN SHEETS
SHEET
C-13
OF 21 SHEETS

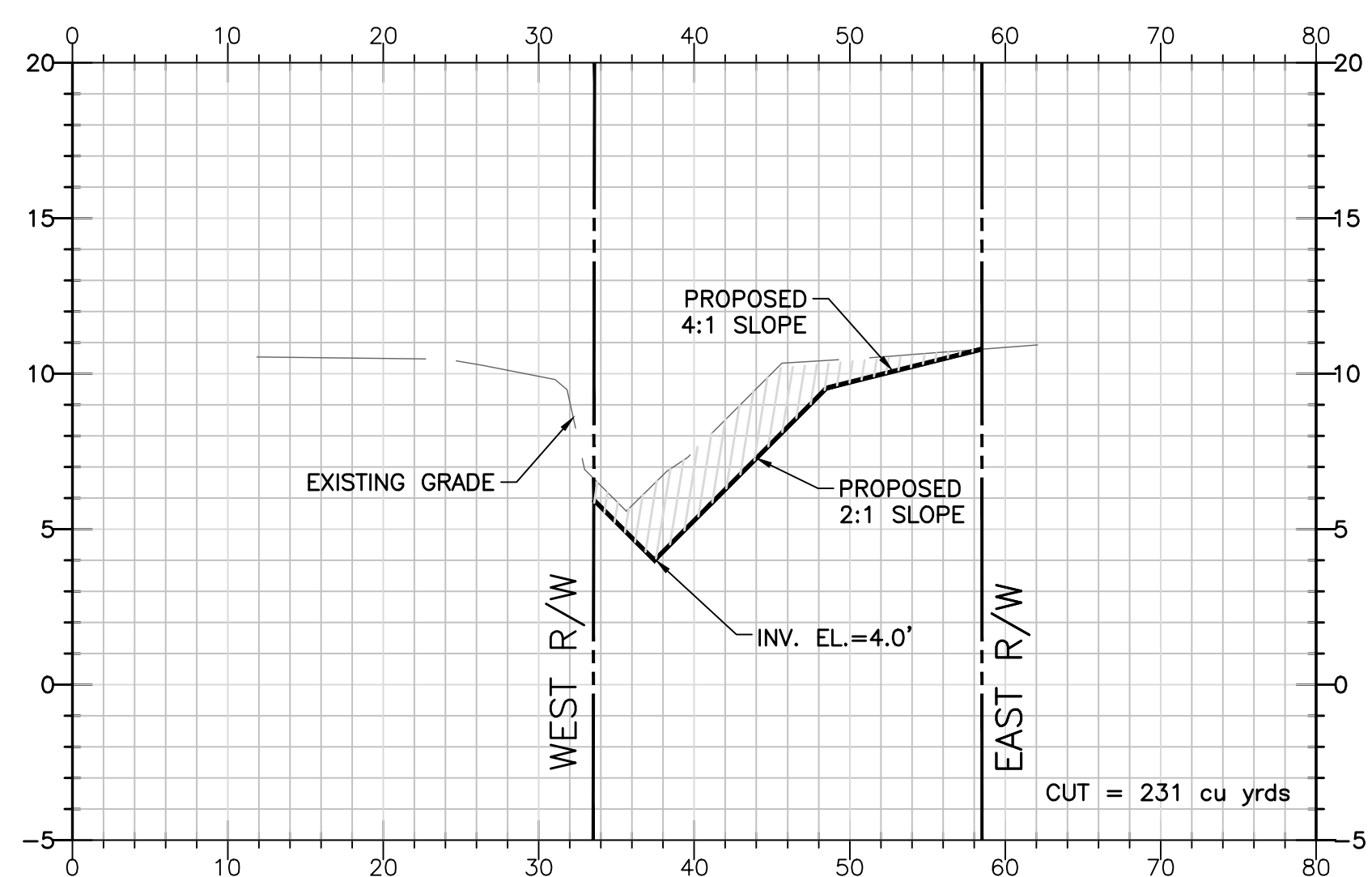


SECTION 16-16
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)



SECTION 17-17
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)

CUT
FILL



SECTION 18-18
SCALE = 1:10 (HORIZONTAL)
1:5 (VERTICAL)

REV	DATE	DESCRIPTION	APPR

VERIFY SCALES
BAR IS ONE INCH
ON ORIGINAL DRAWING
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

PROJECT NUMBER 20-12/5	PROJECT ENGINEER MARCOS, MONTES DE OCA
DESIGNED BY MMO	DATE OF SIGNATURE
DRAWN BY FG	REG NUMBER 63897
DATE 12/15/2020	EXP DATE 02/2023
	FBPE AUTHORIZATION NUMBER 29880



PO BOX 1001
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EAST LAKE
DRAINAGE IMPROVEMENTS
SECTION DETAILS

DRAWING
PLAN SHEETS
SHEET
C-14
OF 21 SHEETS

<p style="text-align: center;">DIMENSION & TYPE</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Paving Area</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> <tr> <td>Drive Aisle</td> <td>1.5"</td> <td>N/A</td> <td>8"</td> <td>12"</td> </tr> <tr> <td>Parking</td> <td>1 1/2"</td> <td>N/A</td> <td>6"</td> <td>12"</td> </tr> </table> <p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">1 ASPHALT PAVING SECTION</p>	Paving Area	A	B	C	D	Drive Aisle	1.5"	N/A	8"	12"	Parking	1 1/2"	N/A	6"	12"	<p style="text-align: center;">Note: All traffic markings to be solid white reflective traffic paint as per dimensions below.</p> <p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">2 TYPICAL PAVEMENT MARKINGS</p>	<p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">3 STOP SIGN DETAIL</p>	<p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">4 PAVEMENT CONNECTION</p>	<p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">5 TYPICAL PIPE GUARD SECTION</p>
Paving Area	A	B	C	D															
Drive Aisle	1.5"	N/A	8"	12"															
Parking	1 1/2"	N/A	6"	12"															

<p>STORM SEWER PIPE LENGTHS NOTED IN THE DRAWINGS REFLECT ONLY THE PIPE ITSELF. WHERE A MITERED END SECTION IS INSTALLED ON SAID PIPE, ITS ADDITIONAL PIPE LENGTH SHALL BE INCLUDED IN THE COST OF THE MITERED END SECTION.</p> <p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">6 MITERED END SECTION</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="13">DIMENSIONS AND QUANTITIES</th> </tr> <tr> <th rowspan="2">D</th> <th rowspan="2">X</th> <th rowspan="2">A</th> <th rowspan="2">B</th> <th rowspan="2">C</th> <th rowspan="2">E</th> <th rowspan="2">F</th> <th rowspan="2">G</th> <th rowspan="2">H</th> <th rowspan="2">M</th> <th colspan="3">M</th> <th rowspan="2">Quad.</th> </tr> <tr> <th>Single Pipe</th> <th>Double Pipe</th> <th>Triple Pipe</th> </tr> </thead> <tbody> <tr><td>18"</td><td>2'-7"</td><td>1.98'</td><td>2.58'</td><td>4.07'</td><td>6.06'</td><td>5'</td><td>1.25'</td><td>2.5'</td><td>4.63'</td><td>7.51'</td><td>9.79'</td><td>12.37'</td><td></td></tr> <tr><td>18"</td><td>2'-0"</td><td>1.99'</td><td>2.54'</td><td>4.11'</td><td>6.06'</td><td>6'</td><td>1.4'</td><td>3.4'</td><td>6.32'</td><td>7.75'</td><td>10.56'</td><td>13.42'</td><td></td></tr> <tr><td>24"</td><td>3'-0"</td><td>2.06'</td><td>3.55'</td><td>5.35'</td><td>7.55'</td><td>7'</td><td>1.73'</td><td>3.4'</td><td>5.50'</td><td>8.50'</td><td>12.33'</td><td>15.75'</td><td></td></tr> <tr><td>30"</td><td>4'-0"</td><td>2.15'</td><td>4.55'</td><td>7.01'</td><td>9.55'</td><td>8'</td><td>2.00'</td><td>3.4'</td><td>6.05'</td><td>10.33'</td><td>14.58'</td><td>18.61'</td><td></td></tr> <tr><td>36"</td><td>5'-0"</td><td>2.25'</td><td>5.55'</td><td>8.33'</td><td>11.55'</td><td>9'</td><td>2.25'</td><td>3.4'</td><td>6.67'</td><td>11.75'</td><td>16.83'</td><td>21.92'</td><td></td></tr> <tr><td>42"</td><td>6'-0"</td><td>2.34'</td><td>6.55'</td><td>9.55'</td><td>13.55'</td><td>10'</td><td>2.5'</td><td>3.4'</td><td>7.25'</td><td>13.25'</td><td>19.25'</td><td>24.92'</td><td></td></tr> 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Single Pipe	Double Pipe	Triple Pipe	18"	2'-7"	1.98'	2.58'	4.07'	6.06'	5'	1.25'	2.5'	4.63'	7.51'	9.79'	12.37'		18"	2'-0"	1.99'	2.54'	4.11'	6.06'	6'	1.4'	3.4'	6.32'	7.75'	10.56'	13.42'		24"	3'-0"	2.06'	3.55'	5.35'	7.55'	7'	1.73'	3.4'	5.50'	8.50'	12.33'	15.75'		30"	4'-0"	2.15'	4.55'	7.01'	9.55'	8'	2.00'	3.4'	6.05'	10.33'	14.58'	18.61'		36"	5'-0"	2.25'	5.55'	8.33'	11.55'	9'	2.25'	3.4'	6.67'	11.75'	16.83'	21.92'		42"	6'-0"	2.34'	6.55'	9.55'	13.55'	10'	2.5'	3.4'	7.25'	13.25'	19.25'	24.92'		48"	7'-0"	2.43'	7.55'	10.55'	15.55'	11'	2.75'	3.4'	7.83'	14.58'	21.43'	28.08'		54"	8'-0"	2.52'	8.55'	11.55'	17.55'	12'	3.0'	3.4'	8.42'	16.00'	23.75'	31.42'		60"	9'-0"	2.61'	9.55'	12.55'	19.55'	13'	3.25'	4.4'	9.00'	17.50'	26.00'	34.50'		66"	10'-0"	2.71'	10.55'	14.39'	21.55'	14'	3.5'	4.4'	9.58'	18.75'	27.92'	37.08'		72"	11'-0"	2.80'	11.55'	15.55'	23.55'	15'	3.75'	4.4'	10.16'	20.00'	30.83'	40.42'		18"	2'-7"	2.27'	4.07'	6.35'	4.01'	5'	1.25'	4.0'	4.63'	7.51'	9.79'	12.37'		18"	2'-0"	2.28'	4.10'	6.36'	4.01'	5'	1.4'	4.0'	4.92'	7.75'	10.56'	13.42'		24"	3'-0"	2.35'	5.35'	7.01'	7.01'	7'	1.73'	4.0'	5.50'	8.50'	12.33'	15.75'		30"	4'-0"	2.42'	6.55'	8.33'	9.01'	8'	2.00'	4.0'	6.05'	10.33'	14.58'	18.61'		36"	5'-0"	2.49'	7.75'	9.55'	10.51'	9'	2.25'	4.0'	6.67'	11.75'	16.83'	21.92'		42"	6'-0"	2.56'	8.95'	11.01'	11.51'	10'	2.5'	4.0'	7.25'	13.25'	19.25'	24.92'		48"	7'-0"	2.63'	10.15'	12.51'	12.51'	11'	2.75'	4.0'	7.83'	14.58'	21.43'	28.08'		54"	8'-0"	2.70'	11.35'	14.01'	13.51'	12'	3.0'	4.0'	8.42'	16.00'	23.75'	31.42'		60"	9'-0"	2.77'	12.55'	15.51'	14.51'	13'	3.25'	4.0'	9.00'	17.50'	26.00'	34.50'		66"	10'-0"	2.84'	13.75'	17.01'	15.51'	14'	3.5'	4.0'	9.58'	18.75'	27.92'	37.08'		72"	11'-0"	2.91'	14.95'	18.51'	16.51'	15'	3.75'	4.0'	10.16'	20.00'	30.83'	40.42'		<p style="text-align: center;">SCALE - 1:6</p> <p style="text-align: center;">9 ASPHALT WALKWAY DETAIL</p>
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60"	9'-0"	2.61'	9.55'	12.55'	19.55'	13'	3.25'	4.4'	9.00'	17.50'	26.00'	34.50'																																																																																																																																																																																																																																																																																																																																								
66"	10'-0"	2.71'	10.55'	14.39'	21.55'	14'	3.5'	4.4'	9.58'	18.75'	27.92'	37.08'																																																																																																																																																																																																																																																																																																																																								
72"	11'-0"	2.80'	11.55'	15.55'	23.55'	15'	3.75'	4.4'	10.16'	20.00'	30.83'	40.42'																																																																																																																																																																																																																																																																																																																																								
18"	2'-7"	2.27'	4.07'	6.35'	4.01'	5'	1.25'	4.0'	4.63'	7.51'	9.79'	12.37'																																																																																																																																																																																																																																																																																																																																								
18"	2'-0"	2.28'	4.10'	6.36'	4.01'	5'	1.4'	4.0'	4.92'	7.75'	10.56'	13.42'																																																																																																																																																																																																																																																																																																																																								
24"	3'-0"	2.35'	5.35'	7.01'	7.01'	7'	1.73'	4.0'	5.50'	8.50'	12.33'	15.75'																																																																																																																																																																																																																																																																																																																																								
30"	4'-0"	2.42'	6.55'	8.33'	9.01'	8'	2.00'	4.0'	6.05'	10.33'	14.58'	18.61'																																																																																																																																																																																																																																																																																																																																								
36"	5'-0"	2.49'	7.75'	9.55'	10.51'	9'	2.25'	4.0'	6.67'	11.75'	16.83'	21.92'																																																																																																																																																																																																																																																																																																																																								
42"	6'-0"	2.56'	8.95'	11.01'	11.51'	10'	2.5'	4.0'	7.25'	13.25'	19.25'	24.92'																																																																																																																																																																																																																																																																																																																																								
48"	7'-0"	2.63'	10.15'	12.51'	12.51'	11'	2.75'	4.0'	7.83'	14.58'	21.43'	28.08'																																																																																																																																																																																																																																																																																																																																								
54"	8'-0"	2.70'	11.35'	14.01'	13.51'	12'	3.0'	4.0'	8.42'	16.00'	23.75'	31.42'																																																																																																																																																																																																																																																																																																																																								
60"	9'-0"	2.77'	12.55'	15.51'	14.51'	13'	3.25'	4.0'	9.00'	17.50'	26.00'	34.50'																																																																																																																																																																																																																																																																																																																																								
66"	10'-0"	2.84'	13.75'	17.01'	15.51'	14'	3.5'	4.0'	9.58'	18.75'	27.92'	37.08'																																																																																																																																																																																																																																																																																																																																								
72"	11'-0"	2.91'	14.95'	18.51'	16.51'	15'	3.75'	4.0'	10.16'	20.00'	30.83'	40.42'																																																																																																																																																																																																																																																																																																																																								

<p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">7 PROPOSED DITCH SECTION</p>	<p style="text-align: center;">NO SCALE</p> <p style="text-align: center;">8 PROPOSED DITCH SECTION DT-1</p>	<p style="text-align: center;">SCALE - 1:6</p> <p style="text-align: center;">9 ASPHALT WALKWAY DETAIL</p>
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<p>VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY</p>	<p>PROJECT NUMBER 20-12/5</p> <p>DESIGNED BY MMO</p> <p>DRAWN BY FG</p> <p>DATE 12/15/2020</p>	<p>PROJECT ENGINEER MARCOS, MONTES DE OCA</p> <p>REG NUMBER 63897</p> <p>DATE OF SIGNATURE 02/2023</p> <p>FBPE AUTHORIZATION NUMBER 29880</p>	<p>MDO ENGINEERING, INC.</p> <p>PO BOX 1001 OKEECHOBEE, FL 34973 TEL: (863) 634-2131 FAX: (863) 763-6169 FL ENGINEERING BUSINESS NO. 29880 MARCOS@MDO-ENGINEERING.COM</p>
<p>EAST LAKE DRAINAGE IMPROVEMENTS</p> <p>DETAILS</p>			
<p>PLAN SHEETS</p> <p>C-15</p> <p>OF 21 SHEETS</p>			

