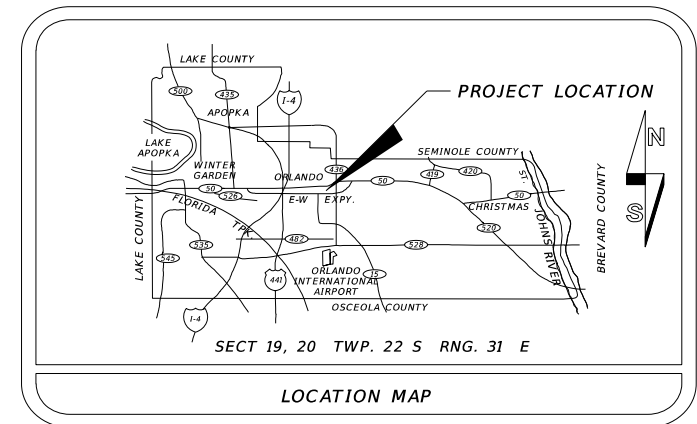


TERESA JACOBS, COUNTY MAYOR

BOARD OF COUNTY COMMISSIONERS

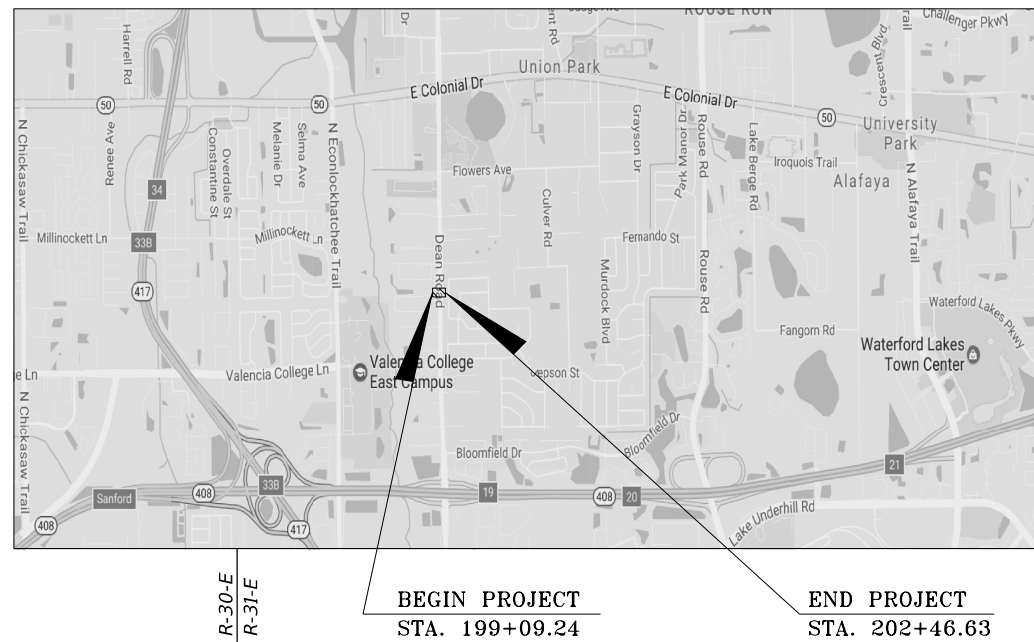
- BETSY VANDERLEY DISTRICT 1
- BRYAN NELSON DISTRICT 2
- PETE CLARKE DISTRICT 3
- JENNIFER THOMPSON DISTRICT 4
- EMILY BONILLA DISTRICT 5
- VICTORIA P. SIPLIN DISTRICT 6
- MARK V. MASSARO, P.E. PUBLIC WORKS DIRECTOR

CONSTRUCTION PLANS FOR DEAN ROAD AT CURAMENG DRIVE INTERSECTION IMPROVEMENTS ORANGE COUNTY CIP NO. 2722 DISTRICT NO. 4 ORANGE COUNTY, FLORIDA



| UTILITIES ENCOUNTERED | |
|-------------------------------|---------------|
| COMPANY NAME | TELEPHONE NO. |
| AT&T - DISTRIBUTION | 407-351-8180 |
| CHARTER COMMUNICATIONS | 407-532-8509 |
| COMCAST CABLE COMMUNICATIONS | 352-315-8528 |
| DUKE ENERGY | 352-694-8521 |
| ORANGE COUNTY UTILITIES (OCU) | 407-254-9706 |

| INDEX OF SHEETS | |
|-----------------|---------------------------------------|
| SHEET | DESCRIPTION |
| 1 | KEY SHEET |
| 2-3 | GENERAL NOTES |
| 4 | SUMMARY OF PAY ITEMS & PAY ITEM NOTES |
| 5 | DRAINAGE MAP |
| 6 | TYPICAL SECTION |
| 7 | TYPICAL SECTION DETAILS |
| 8-10 | SUMMARY OF QUANTITIES |
| 11 | PLAN & PROFILE |
| 12 | INTERSECTION DETAIL |
| 13 | DRAINAGE DETAIL SHEET |
| 14 | DRAINAGE STRUCTURE CROSS SECTION |
| 15-20 | ROADWAY CROSS SECTIONS |
| 21-23 | STORMWATER POLLUTION PREVENTION PLANS |
| 24-29 | TRAFFIC CONTROL PLAN |
| 30 | UTILITY ADJUSTMENT |
| G-1 - G-2 | SOIL SURVEY SHEETS |
| SV-1 - SV-4 | SURVEY CONTROL SHEETS |
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| T-1 - T-4 | SIGNALIZATION PLANS |



VICINITY MAP
N.T.S.

| LENGTH OF PROJECT | | |
|-------------------|-------------|-------|
| | LINEAR FEET | MILES |
| CURAMENG DR. | 337.39 | 0.064 |

NOTE :
PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY CHANGE SINCE PLANS PREPARATION.

CERTIFICATION TO PLANS

I HEREBY CERTIFY THAT THE DESIGN FOR THIS PROJECT AND THE ATTACHED CONSTRUCTION PLANS COMPLY WITH THE REQUIREMENTS OF SECTION 336.045 OF THE FLORIDA STATUTES AND ARE IN SUBSTANTIAL CONFORMANCE WITH THE STANDARDS CONTAINED IN THE EDITION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" IN EFFECT ON THIS DATE AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO SUBSECTION 336.045(1) OF THE FLORIDA STATUTES.

DATE: JAN. 2018 ENGINEER: ERIC L. WHIKEHART, P.E. PE NO.: 70776

ORANGE COUNTY BENCH MARKS USED

SITE BENCHMARK

THE SOURCE BENCHMARK USED IS BASED ON ORANGE COUNTY 88 DATUM - BENCHMARK A1504002 - FOUND "SQUARE CUT IN NORTHWEST SIDE OF 2.5' ROUND CONCRETE PAD FOR TRAFFIC LIGHT POST AT SOUTHEAST CORNER OF INTERSECTION OF DEAN ROAD AND CURAMENG DRIVE AND 55 FEET ± EAST OF THE CENTERLINE OF DEAN ROAD AND 40 FEET ± SOUTH OF THE CENTERLINE OF CURAMENG DRIVE. PUBLISHED ELEVATION = 75.087 FEET (NAVD88)

SITE BENCHMARK

BENCHMARK A1504003 - FOUND A 3 1/2" ORANGE COUNTY ALUMINUM DISK IN CONCRETE CURB INLET AT EAST RIGHT OF WAY OF DEAN ROAD 45 FEET ± EAST OF THE CENTERLINE OF DEAN ROAD AND 290 FEET ± SOUTH OF THE CENTERLINE OF CYPRESS GLEN DRIVE. PUBLISHED ELEVATION = 74.252 FEET (NAVD88)

GOVERNING STANDARDS AND STANDARD SPECIFICATIONS :
FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, DATED 2016 AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2016 AS AMENDED BY CONTRACT DOCUMENTS.

PREPARED BY:

TLP ENGINEERING CONSULTANTS, INC.
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL. 32817
PHONE: 407-901-5060
CERT. OF AUTH. #27205

REVISIONS

DATE BY

| REVISIONS | DATE | BY |
|-----------|------|----|
| | | |
| | | |
| | | |

| | |
|------------------|------------------|
| DESIGNED BY: TDR | DATE: JAN. 2017 |
| CHECKED BY: ELW | DATE: SEPT. 2017 |
| APPROVED BY: YMM | DATE: SEPT. 2017 |

SHEET 1
OF 30

LEGEND

| | | | |
|---------------------------|---------------|--------------------------|---------------|
| EXIST. EDGE OF PAVT. | --- | CONCRETE | --- |
| PROPOSED PAVEMENT | --- | RATE OF SUPERELEVATION | e |
| RIGHT OF WAY LINE | --- | COLUMN | □ |
| SEWER STORM INLET | ⌒ | OVERHEAD TELEPHONE | ---OT--- |
| SURVEY REFERENCE POINT | ○ | BURIED POWER CABLE | ---BE(B)--- |
| POINT OF INTERSECTION | ○ | TRANSFORMER | ⬇ |
| BASE LINE | ⌒ | POWER POLE W/TRANSFORMER | ⬇ |
| CENTER LINE | ⌒ | LIGHT POLE | ⬇ |
| PROPERTY LINE | ⌒ | CABLE TV BOX | ⬇ |
| DELTA ANGLE | Δ | SANITARY SEWER | ---S(B)--- |
| APPROXIMATE | +/- | FIRE HYDRANT | ⊕ |
| ROUND | ○ | CONCRETE MONUMENT | ⊕ |
| CURB | --- | IRON ROD | ⊕ |
| CURB & GUTTER | --- | IRON PIPE | ⊕ |
| BARBED WIRE FENCE | --- | BUSH | ⊕ |
| WATER METER | ⊕ | GATE POST | ⊕ |
| VALVE | ⊕ | TRAFFIC SIGN | ⊕ |
| WATER MAIN | ---W(B)--- | MAIL BOX | ⊕ |
| RE-USE WATER MAIN | ---NPW(B)--- | STORM SEWER, SIZE & TYPE | ---16" RCP--- |
| COMBINATION POLE | ⊕ | CATCH BASIN | ⊕ |
| POWER POLE | ⊕ | CLEAN OUT | ⊕ |
| GUY WIRE | --- | EXIST. MANHOLE | ⊕ |
| OVERHEAD POWER | OE--- | CHAIN LINK FENCE | ---X--- |
| BURIED FIBER OPTIC CABLE | ---BFOC(B)--- | FENCE GATE | --- |
| TELEPHONE PEDESTAL | ⊕ | CITRUS TREES | ⊕ |
| BURIED TV CABLE | ---BTV(B)--- | OAK TREES | ⊕ |
| BENCHMARK | ⊕ | SHRUB | ⊕ |
| SOIL BORING/PAVEMENT CORE | ⊕ | UNKNOWN TREE | ⊕ |
| PALM TREE & SIZE | ⊕ | | |
| SWALE FLOW LINE | --- | | |
| SIGNAL MAST ARM | --- | PULL BOX | ⊕ |
| PEDESTRIAN SIGNAL | --- | SINGLE SUPPORT SIGN | ⊕ |
| TRAFFIC SIGNAL LOOPS | --- | | |

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE PROJECT SPECIFICATION, THE 2016 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), AND SUPPLEMENTS THERETO, AND ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
2. SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
3. ALL PERSONAL PROPERTY, EXCEPT MAIL BOXES, WITHIN THE RIGHT-OF-WAY NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS. MAIL BOXES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH F.D.O.T. DESIGN STANDARD 532.
4. THE DISPOSAL OF EXCESS EARTHWORK MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVALS OF DISPOSAL SITES SHALL BE OBTAINED FROM ORANGE COUNTY PRIOR TO DISPOSAL. ALL EXCESS MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
5. SOD IN DISTURBED AREAS SHALL MATCH EXISTING TYPE SOD, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. INSTALL A 4" MUCK BLANKET OR TOPSOIL TREATMENT ON ALL PERMANENT GRASS AREAS. COST TO BE INCLUDED IN CONTRACT UNIT PRICE FOR PERFORMANCE TURF.
7. SOD ALL SLOPES. SLOPES STEEPER THAN 3:1 SHALL BE PEGGED.
8. ALL PAVEMENT OFFSETS SHOWN ARE TO PROPOSED BASELINE OF CONSTRUCTION; ALL RADII AND DIMENSIONS ARE TO PROPOSED EDGE OF PAVEMENT.
9. FOR STABILIZATION AT TURNOUTS AND DRIVEWAY CONNECTIONS SEE STANDARD INDEX No. 515 AND TYPICAL SECTIONS FOR DEPTH AND LBR.
10. DRIVEWAY LOCATIONS AND WIDTHS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY AS DIRECTED BY THE ENGINEER.
11. THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE VARIOUS PERMITS INCLUDED IN THE BID SPECIFICATIONS. PAYMENT IS INCLUDED IN THE QUANTITIES STATED ON THE SUMMARY OF PAY ITEMS; EXCLUDING ITEMS SPECIFIED ELSEWHERE. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS AND/OR DESIGNATED BY THE ENGINEER.
12. EXISTING UTILITIES ARE TO REMAIN UNLESS THEY ARE NOTED OTHERWISE IN THE UTILITY ADJUSTMENT SHEETS.
13. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION.
14. PRIOR TO COMMENCEMENT OF WORK CONTRACTOR SHALL CALL SUNSHINE ONE 48 HOURS IN ADVANCE OF PERFORMING ANY UTILITY ADJUSTMENTS OR RELOCATIONS. SUNSHINE ONE PHONE NUMBER IS 1-800-432-4770.
15. UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER. THE EXISTING TRAFFIC SIGNAL CABLE WILL BE RELOCATED BY CONTRACTOR PER CONTRACT SIGNALIZATION PLANS.
16. THE CONTRACTOR SHALL NOTIFY ALL GAS UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION AS REQUIRED BY CHAPTER 77-153 OF THE FLORIDA STATUTES. *
17. ALL DRAINAGE PIPES SHALL BE STEEL REINFORCED CONCRETE PIPE, CLASS III, UNLESS OTHERWISE NOTED.
18. MEASUREMENT OF DRAINAGE PIPE FOR PAYMENT SHALL BE DETERMINED FROM ACTUAL LENGTHS INSTALLED.
19. ALL STORMWATER MANHOLE COVERS SHALL INCLUDE THE ORANGE COUNTY LOGO AND BE IDENTIFIED AS "S.W.". (SEE STANDARD DETAILS)

20. ALL INLET/MANHOLE - PIPE JOINTS SHALL BE FILLED WITH NON-SHRINK GROUT, COVERED WITH AN ASPHALT MASTIC COATING, AND WRAPPED WITH A FILTER FABRIC MATERIAL PER SECTION 13.03.03 OF THE ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS. ALL PIPE JOINTS IN THIS PROJECT SHALL BE WRAPPED PER FDOT STANDARD INDEX No. 280 OR AS DIRECTED BY THE ENGINEER, COST TO BE INCLUDED IN THE COST OF THE PIPE CULVERT.
21. ALL CURB INLETS, DITCH BOTTOM INLETS, AND MANHOLES SHALL HAVE TRAFFIC BEARING FRAMES AND COVERS OR GRATES MEETING HS-20 LOADING REQUIREMENTS.
22. ALL EXISTING DRAINAGE STRUCTURES AND PIPES IF ABANDONED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE REMOVED, UNLESS OTHERWISE SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.
23. DESIGN CHANGES OF PIPE INVERTS NOT EXCEEDING PLUS OR MINUS ONE FOOT WILL NOT BE CONSIDERED AS A BASIS FOR ADDITIONAL COMPENSATION FOR THE PERTINENT PIPE BID ITEM OR FOR MODIFICATION OF PRECAST STRUCTURES.
24. ALL (P.R.M.'s) IRONS AND MONUMENTS SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
25. ANY U.S.C. AND G.S. MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, ORANGE COUNTY SURVEY SECTION (RON CLARK) 407-836-7947 AND BOTH SHALL NOTIFY:
STATE GEODETIC ADVISOR
3900 COMMONWEALTH BOULEVARD, SUITE 309,
TALLAHASSEE, FL
850-245-2606
- ORANGE COUNTY BENCHMARKS SHALL BE PRESERVED. IF AN ORANGE COUNTY BENCHMARK IS IN DANGER OF BEING DESTROYED, CONTACT ORANGE COUNTY SURVEY SECTION (RON CLARK) 407-836-7947 ONE WEEK PRIOR TO ANY CONSTRUCTION ACTIVITY THAT MAY DAMAGE SAID BENCHMARK.
26. PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE COUNTY SURVEYOR, WITHOUT DELAY, BY TELEPHONE 407-836-7900. THE CONTRACTOR SHALL PROVIDE WRITTEN FOLLOW UP CONFIRMATION WITHIN 48 HOURS OF TELEPHONE NOTIFICATION.
27. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO ORANGE COUNTY HIGHWAY CONSTRUCTION DEPARTMENT A SET OF FIELD NOTES VERIFYING THE BENCHMARK ELEVATIONS AND THE REFERENCE POINT TIES SHOWN ON THE TITLE SHEET AND PLAN AND PROFILE SHEETS, AND/OR A SET OF FIELD NOTES FOR ALL ADDITIONAL BENCHMARK AND REFERENCE POINT TIES PROPOSED TO BE USED IN CONSTRUCTING THE PROJECT WITH THEIR LOCATION, DESCRIPTION AND ELEVATION, BASED ON ORANGE COUNTY DATUM. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
28. TO MEET ADA REQUIREMENTS, ALL SIDEWALK CONSTRUCTION SHALL COMPLY WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
29. FOR PEDESTRIAN CURB CUT RAMP DETAILS, REFER TO FDOT STANDARD INDEX 304. NOMENCLATURE SHOWN IN THE PLANS REFERS TO THE RAMP TYPES IDENTIFIED IN INDEX 304.
30. THE CONTRACTOR SHALL RELOCATE EXISTING TRAFFIC SIGNS AS REQUIRED DURING CONSTRUCTION. SIGNS, WHICH ARE DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE COUNTY. THE CONTRACTOR SHALL REMOVE AND STORE EXISTING TRAFFIC SIGNS THAT ARE NOT USED DURING CONSTRUCTION. THE CONTRACTOR SHALL RE-INSTALL THE STORED SIGNS AS SHOWN ON THE SIGNING PLANS OR AS DIRECTED BY THE ENGINEER. SIGNS NOT TO BE RE-INSTALLED SHALL BE DELIVERED TO ORANGE COUNTY'S TRAFFIC SIGN SHOP. DAMAGED SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO ORANGE COUNTY. COST OF RELOCATION, MAINTENANCE, REMOVAL AND LEFTOVER SHALL BE INCLUDED IN THE UNIT PRICES STATED ON THE SUMMARY OF PAY ITEMS.

***CAUTION:**
MAPS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS OR SERVICE LINES. THE ONLY SAFE AND PROPER WAY TO LOCATE GAS FACILITIES IS BY AN ON-SITE INSPECTION BY T.E.C.O. GAS SYSTEMS THEREFORE, EXCAVATORS ARE INSTRUCTED TO TELEPHONE T.E.C.O. GAS FACILITIES US AT 407-425-4661 TWO WORKING DAYS BEFORE DIGGING IN A CONSTRUCTION AREA.

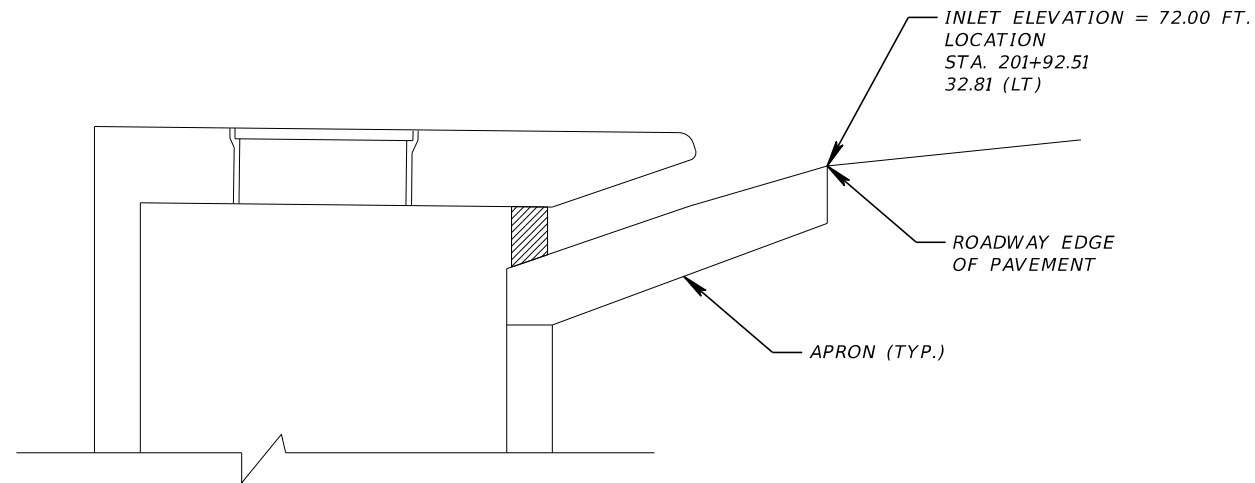
| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | GENERAL NOTES (SHEET 1 OF 2) | SHEET NO. 2 |
|-----------|-------------|------|-------------|----------------------------------|--|---|-------------------------|---------------------------------|--------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | INTERSECTION IMPROVEMENTS | | | |
| | | | | | | PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 | | |

**GENERAL NOTES
(CONTINUED)**

31. ALL EXCAVATIONS SHALL BE REQUIRED TO CONFORM TO THE PROVISION OF PART IV OF CHAPTER 553.60, F.S., ALSO KNOWN AS THE "TRENCH SAFETY ACT". TO PROTECT EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, AND CONSTRUCTION PERSONNEL DURING CONSTRUCTION OF THE PROJECT.
32. CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AND SIDE STREETS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTED CONSTRUCTION.
33. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING PAVEMENT ELEVATIONS OF ALL DRIVEWAYS AND SIDEWALKS TO MATCH THE PROPOSED PAVEMENT TO THE EXISTING.
34. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAT THE CONDITION EXISTING. COST TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
35. ALL CONCRETE SHALL BE MIN. OF 3,000 PSI.
36. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY CONSTRUCTION ACTIVITY FOR DIG PERMIT, ELECTRICAL PERMITS OR OTHER PERMITS AS APPLICABLE. THE LOCATION OF UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY, THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR IS TO COORDINATE FULLY WITH UTILITY COMPANIES ON EXACT LOCATION OF UNDERGROUND UTILITIES AND ANY UTILITY ADJUSTMENT REQUIRED. UTILITY COMPANIES SHALL BE NOTIFIED A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION.
37. CONTRACTOR TO COORDINATE WITH AT&T SOUTHEAST PRIOR TO ANY WORK ACTIVITY WITHIN THE VICINITY OF THEIR UNDERGROUND FACILITIES.

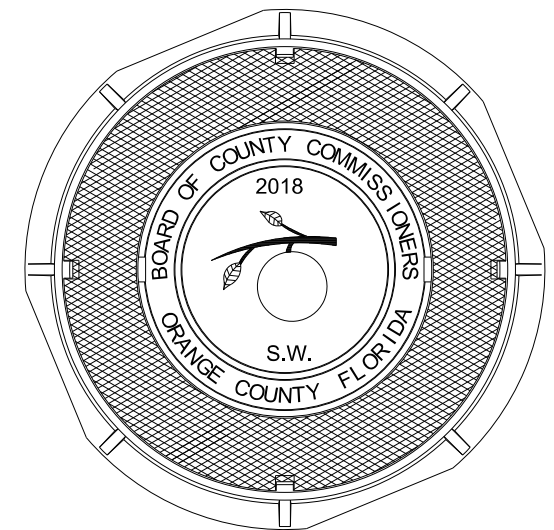
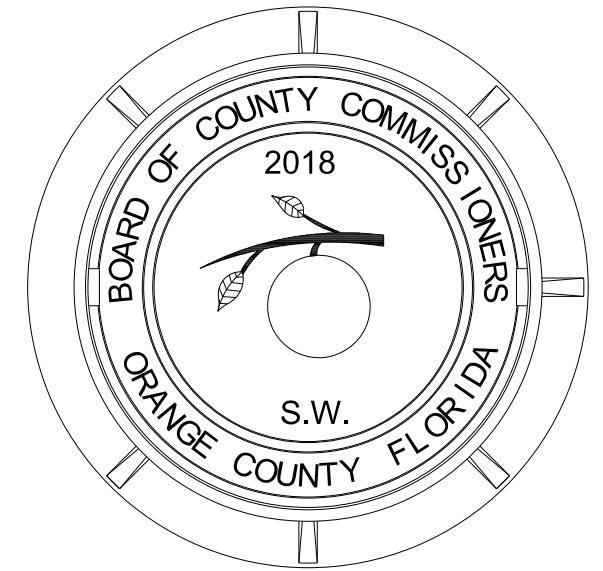
38. UTILITY CONTACTS ARE AS FOLLOWS:

- A. AT&T SOUTHEAST
ALAN REYNOLDS
5100 STEYR STREET
ORLANDO, FL 32819
407-351-8180
ar2916@att.com
- B. CHARTER COMMUNICATIONS
MARVIN USRY JR.
3767 ALL AMERICAN BLVD.
ORLANDO, FL 32810
407-532-8509
marvin.usryjr@charter.com
- C. COMCAST CABLE COMMUNICATIONS
CESAR RIVERA
8130 CR 44, LEG A
LEESBURG, FL 34788
352-315-8528
Cesar_Rivera@comcast.com
- D. DUKE ENERGY
STACIE MAREK
2166 PALMETTO ST. CW 75
CLEARWATER, FL 33765
352-694-8521
DEFDistributionGOV@duke-energy.com
- E. ORANGE COUNTY UTILITIES
CHRISTINA CROSBY
9150 CURRY FORD ROAD
ORLANDO, FL 32825
407-254-9706
Christina.Crosby@ocfl.net



INLET ELEVATION LOCATION DETAIL

N.T.S.



STANDARD MANHOLE COVER

N.T.S.

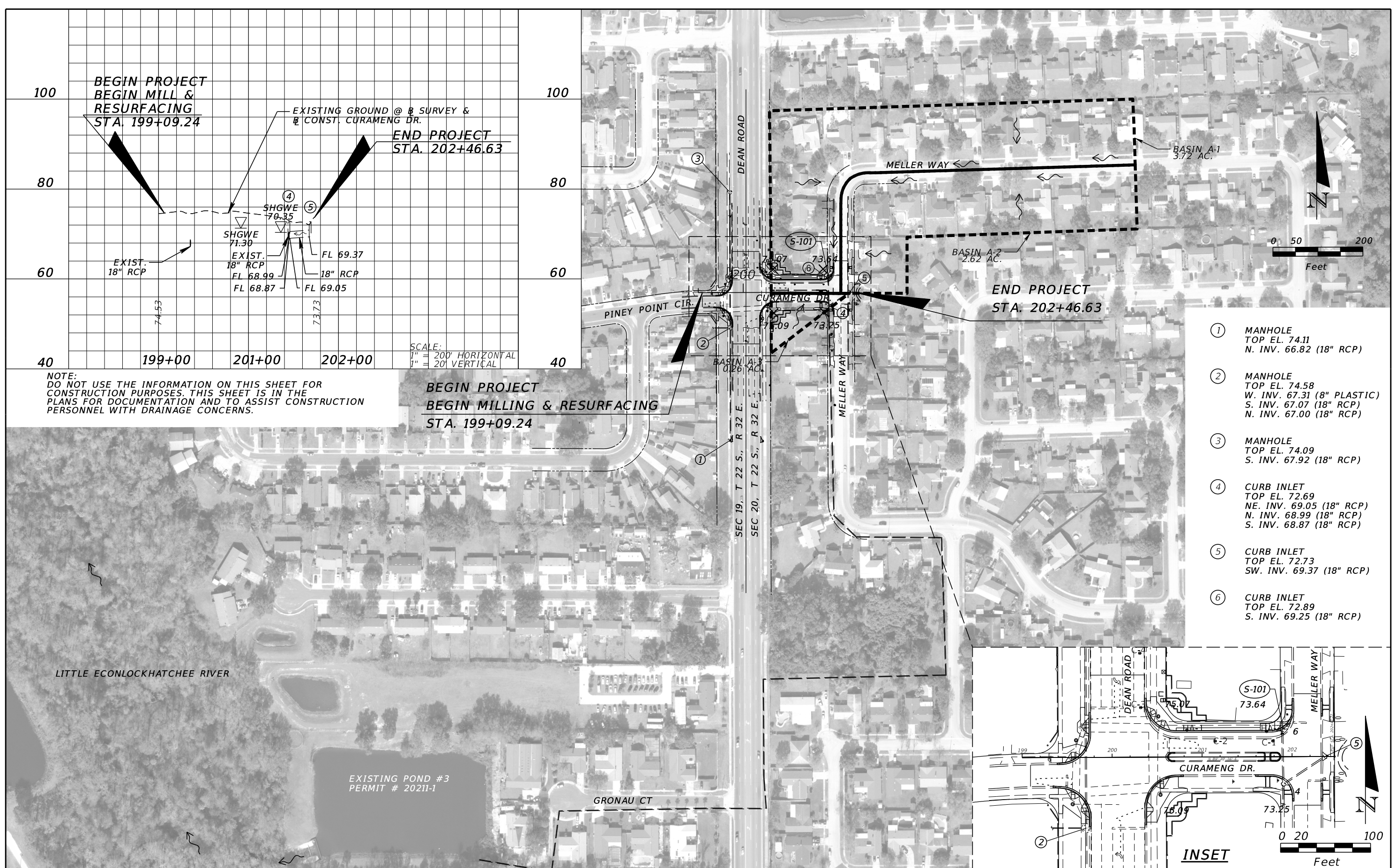
| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | GENERAL NOTES (SHEET 2 OF 2) | SHEET NO. |
|-----------|-------------|------|-------------|----------------------------------|---|---------------------------|-------------|---------------------------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | INTERSECTION IMPROVEMENTS | | | |
| | | | | | | PROJECT NAME | PROJECT NO. | | 3 |
| | | | | | | DEAN RD. AT | CIP-2722 | | |
| | | | | | | CURAMENG DR. | | | |

| SUMMARY OF PAY ITEMS | | | | |
|----------------------|---|------|----------|---|
| PAY ITEM NO. | PAY ITEM DESCRIPTION | UNIT | QUANTITY | |
| | | | P | F |
| 101-1 | MOBILIZATION | LS | 1 | |
| 102-1 | MAINTENANCE OF TRAFFIC | LS | 1 | |
| 104-14 | PREVENTION CONTROL & ABATEMENT CONTROL OF EROSION AND WATER POLLUTION | LS | 1 | |
| 110-1-1 | CLEARING & GRUBBING | LS | 1 | |
| 120-9 | EXCAVATION, EMBANKMENT, AND GRADING | LS | 1 | |
| 285-713 | ASPHALT BASE COURSE (TYPE B-12.5)(8") | SY | 186 | |
| 327-70-6 | MILLING EXIST ASPH PAVT, 1.5" DEPTH | SY | 2713 | |
| 334-1-23-150-OVB | SUPERPAVE ASPHALTIC CONCRETE (TRAFFIC C)(1.5" AVG.)(OVERBUILD) | TN | 19.9 | |
| 334-1-23 | SUPERPAVE ASPHALTIC CONCRETE (TRAFFIC C) (2.5") | SY | 186 | |
| 337-7-42 | ASPHALTIC CONCRETE FRICTION COURSE (TRAFFIC C, FC-9.5, PG 76-22 PMA) (1.5") | SY | 2845 | |
| 425-1-321 | INLET - CURB TYPE P-2, <10' | EA | 1 | |
| 430-11-125 | STEEL REINFORCED CONCRETE PIPE - SRCP (CLASS III) (18") | LF | 10 | |
| 520-1-10 | CONCRETE CURB & GUTTER, (TYPE F) | LF | 530 | |
| 520-2-1 | CONCRETE CURB & GUTTER, (TYPE A) | LF | 96 | |
| 522-1 | CONCRETE SIDEWALK, 4" THICK (INCLUDES COMPACTION) | SY | 548 | |
| 527-2 | DETECTABLE WARNINGS (ON WALKING SURFACES) | SF | 142 | |
| 570-1-1 | PERFORMANCE TURF (BAHIA OR MATCH EXISTING) | SY | 200 | |
| 603-1 | SIGNALIZATION(ORLANDO-DEAN RD AT CURAMENG DRIVE) | LS | 1 | |
| 700-1-11 | SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF | AS | 4 | |
| 700-1-50 | SINGLE SIGN POST, RELOCATE | AS | 1 | |
| 700-1-60 | SINGLE POST SIGN, REMOVED | AS | 2 | |
| 706-3 | RPM'S (WHITE/RED) & (YELLOW/YELLOW) TOTAL | EA | 25 | |
| 710-11-290 | PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE | SF | 20 | |
| 710-90 | PAINTED PAVEMENT MARKINGS (FINAL SURFACE) | LS | 1 | |
| 711-11-111 | THERMOPLASTIC, STANDARD, WHITE, SOLID (6") | LF | 502 | |
| 711-11-123 | THERMOPLASTIC, STANDARD, WHITE, SOLID (12") | LF | 633 | |
| 711-11-125 | THERMOPLASTIC, STANDARD, WHITE, SOLID (24") | LF | 658 | |
| 711-11-160 | THERMOPLASTIC, STANDARD, WHITE, MESSAGES | EA | 1 | |
| 711-11-170 | THERMOPLASTIC, STANDARD, WHITE, ARROWS | EA | 4 | |
| 711-11-211 | THERMOPLASTIC, STANDARD, YELLOW, SOLID (6") | LF | 227 | |
| 711-15-131 | THERMOPLASTIC, STANDARD, WHITE, SKIP/DOTTED (6") | LF | 10 | |
| 900-1 | AS-BUILT PLANS | LS | 1 | |
| 900-2 | INDEMNIFICATION | LS | 1 | |

PAY ITEM NOTES:

| | |
|---|--|
| <p>104-14 INCLUDES COST OF ALL ITEMS FOR EROSION CONTROL. THIS INCLUDES, BUT IS NOT LIMITED TO, SEDIMENT BARRIER, INLET PROTECTION DEVICES, TURBIDITY BARRIERS, TEMPORARY GRASSING & DESILTING OF EXISTING DRAINAGE PIPES AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.</p> | <p>110-1-1 INCLUDES, BUT IS NOT LIMITED TO, THE COST OF REMOVAL AND DISPOSAL OF CURB, CURB & GUTTER, SIDEWALK, DRIVEWAYS, DRAINAGE STRUCTURES, EXISTING PIPE, AND FULL DEPTH ASPHALT AND BASE COURSE. PAY ITEM ALSO ACCOUNTS FOR GROUND SURFACE STRIPPING TO A MINIMUM DEPTH OF ONE FOOT WITHIN ALL PAVEMENT WIDENING AND SOIL GRADING LIMITS.</p> |
| | <p>334-1-23-150-OVB INCLUDES COST OF ALL NECESSARY SUPERPAVE ASPHALTIC CONCRETE OVERBUILD.</p> |
| | <p>570-1-1 INCLUDES COST OF MOWING, WATERING AND FERTILIZING.</p> |

| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | SUMMARY OF PAY ITEMS & PAY ITEM NOTES | SHEET NO. |
|-----------|-------------|------|-------------|----------------------------------|---|-------------------|-------------|--|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | | |
| | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | | 4 |



**BEGIN PROJECT
BEGIN MILL &
RESURFACING
STA. 199+09.24**

**END PROJECT
STA. 202+46.63**

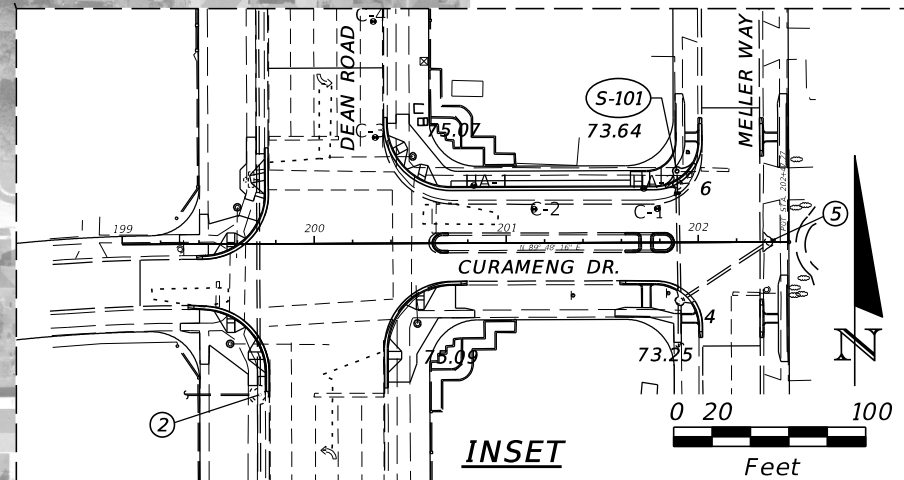
**END PROJECT
STA. 202+46.63**

**BEGIN PROJECT
BEGIN MILLING & RESURFACING
STA. 199+09.24**

NOTE:
DO NOT USE THE INFORMATION ON THIS SHEET FOR
CONSTRUCTION PURPOSES. THIS SHEET IS IN THE
PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION
PERSONNEL WITH DRAINAGE CONCERNS.

SCALE:
1" = 200' HORIZONTAL
1" = 20' VERTICAL

- ① MANHOLE
TOP EL. 74.11
N. INV. 66.82 (18" RCP)
- ② MANHOLE
TOP EL. 74.58
W. INV. 67.31 (8" PLASTIC)
S. INV. 67.07 (18" RCP)
N. INV. 67.00 (18" RCP)
- ③ MANHOLE
TOP EL. 74.09
S. INV. 67.92 (18" RCP)
- ④ CURB INLET
TOP EL. 72.69
NE. INV. 69.05 (18" RCP)
N. INV. 68.99 (18" RCP)
S. INV. 68.87 (18" RCP)
- ⑤ CURB INLET
TOP EL. 72.73
SW. INV. 69.37 (18" RCP)
- ⑥ CURB INLET
TOP EL. 72.89
S. INV. 69.25 (18" RCP)



| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |



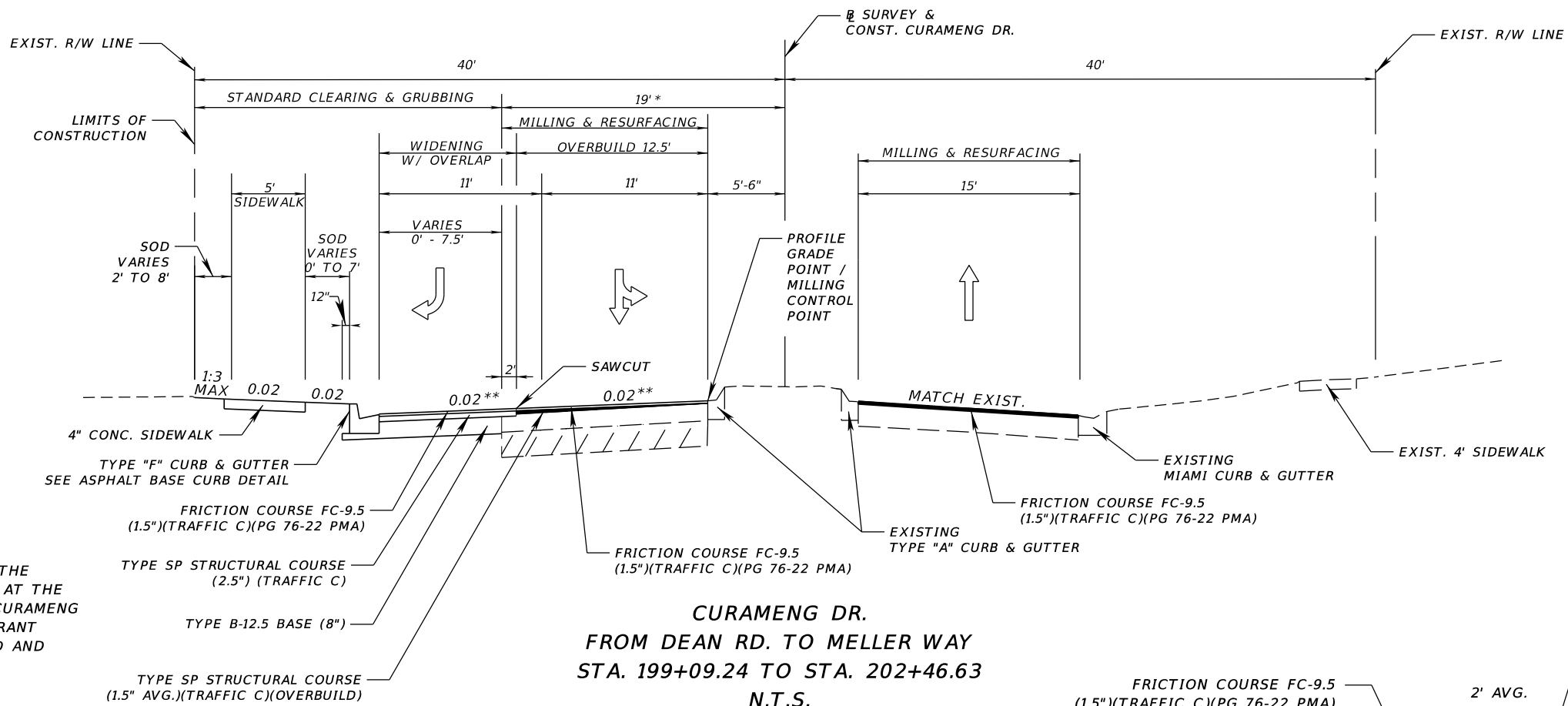
TLP ENGINEERING CONSULTANTS, INC
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL. 32817
PH. 407-901-5060
ERIC L. WHITEHART, P.E. 70776
CERT. OF AUTH. #27205

DESIGN PLANS FOR:
INTERSECTION IMPROVEMENTS

| | |
|-----------------------------|-------------|
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

DRAINAGE MAP

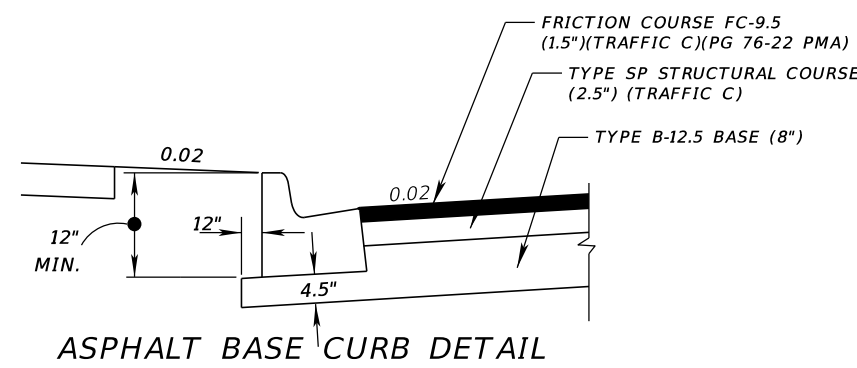
SHEET NO.
5



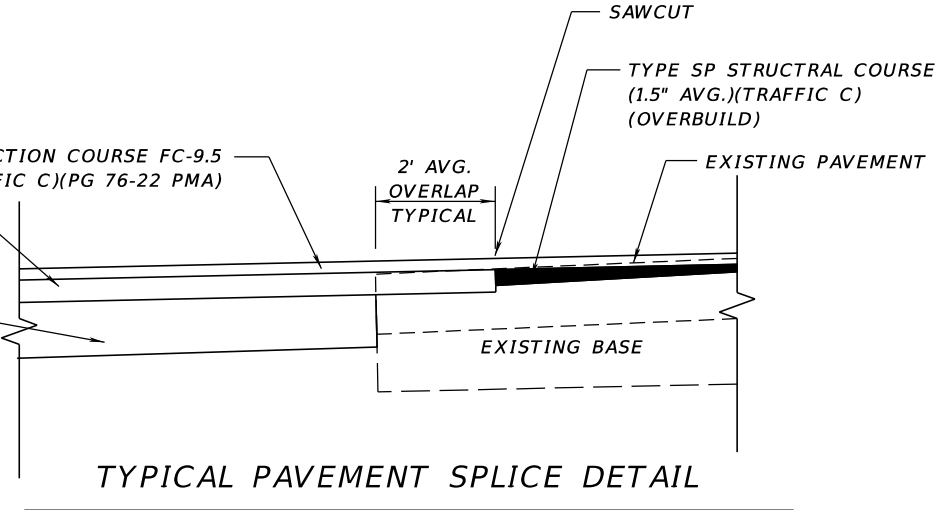
**CURAMENG DR.
FROM DEAN RD. TO MELLER WAY
STA. 199+09.24 TO STA. 202+46.63
N.T.S.**

* LIMITS INCREASE TO 57' MAX ALONG THE NORTHWEST QUADRANT CURB RADIUS AT THE INTERSECTION OF MELLER WAY AND CURAMENG DRIVE AND IN THE NORTHEAST QUADRANT AT THE INTERSECTION OF DEAN ROAD AND CURAMENG DRIVE.

** CROSS SLOPE TO TRANSITION TO EXISTING CROSS SLOPE BETWEEN STA. 200+35.93 TO STA. 200+67.00 AND BETWEEN 201+70.00 TO STA. 201+92.81. SEE TYPICAL SECTION DETAIL SHEET AND INTERSECTION DETAIL SHEET FOR MORE DETAIL.



ASPHALT BASE CURB DETAIL



TYPICAL PAVEMENT SPLICE DETAIL

**ALL WIDENING LOCATIONS
N.T.S.**

**DEAN RD.
TRAFFIC DATA**
CURRENT YEAR = 2015 AADT = 24,292
ESTIMATED OPENING YEAR = 2018 AADT = 24,900
ESTIMATED DESIGN YEAR = 2038 AADT = 31,100
K = 9.0 % D = 50.0% T = 4.4% (24 HOUR)
DESIGN HOUR T = 2.2%
DESIGN SPEED = 45 MPH

* NOTE: DEAN RD. MILL AND RESURFACE TO BE CONSTRUCTED OFF OF $\frac{R}{2}$ SURVEY & CONST. CURAMENG DR.

**CURAMENG DR./MELLER WAY
TRAFFIC DATA**
CURRENT YEAR = 2015 AADT = 4,256
ESTIMATED OPENING YEAR = 2018 AADT = 4,400
ESTIMATED DESIGN YEAR = 2038 AADT = 6,100
K = 9.0 % D = 37.3% T = 1.0% (24 HOUR)
DESIGN HOUR T = 0.5%
DESIGN SPEED = 25 MPH

* NOTE: MELLER WAY MILL AND RESURFACE TO BE CONSTRUCTED OFF OF $\frac{R}{2}$ CONST. CURAMENG DR.

MILLING (LT)
STA. 199+09.24 TO STA. 200+35.93
STA. 201+92.81 TO STA. 202+32.25
MILL EXIST. ASPHALT PAVEMENT (1.5" AVG. DEPTH)

RESURFACING (LT)
STA. 199+09.24 TO STA. 200+35.93
STA. 201+92.81 TO STA. 202+32.25
FRICTION COURSE FC-9.5 (1.5\"/>

MILLING (RT)
STA. 200+35.93 TO STA. 201+92.81
MILL EXIST. ASPHALT PAVEMENT (1.5" AVG. DEPTH)

OVERBUILD (LT)
STA. 200+35.93 TO STA. 201+92.81
TYPE SP STRUCTURAL COURSE (1.5" AVG.)(TRAFFIC C)(OVERBUILD)
WITH FRICTION COURSE FC-9.5 (1.5\"/>

WIDENING (LT)
STA. 200+33.98 TO STA. 202+04.11
TYPE B-12.5 BASE (8") WITH
TYPE SP STRUCTURAL COURSE (2.5") (TRAFFIC C)
AND FRICTION COURSE FC-9.5 (1.5\"/>

MILLING (RT)
STA. 199+09.24 TO STA. 202+32.25
MILL EXIST. ASPHALT PAVEMENT (1.5" AVG. DEPTH)

RESURFACING (RT)
STA. 199+09.24 TO STA. 202+32.25
FRICTION COURSE FC-9.5 (1.5\"/>

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

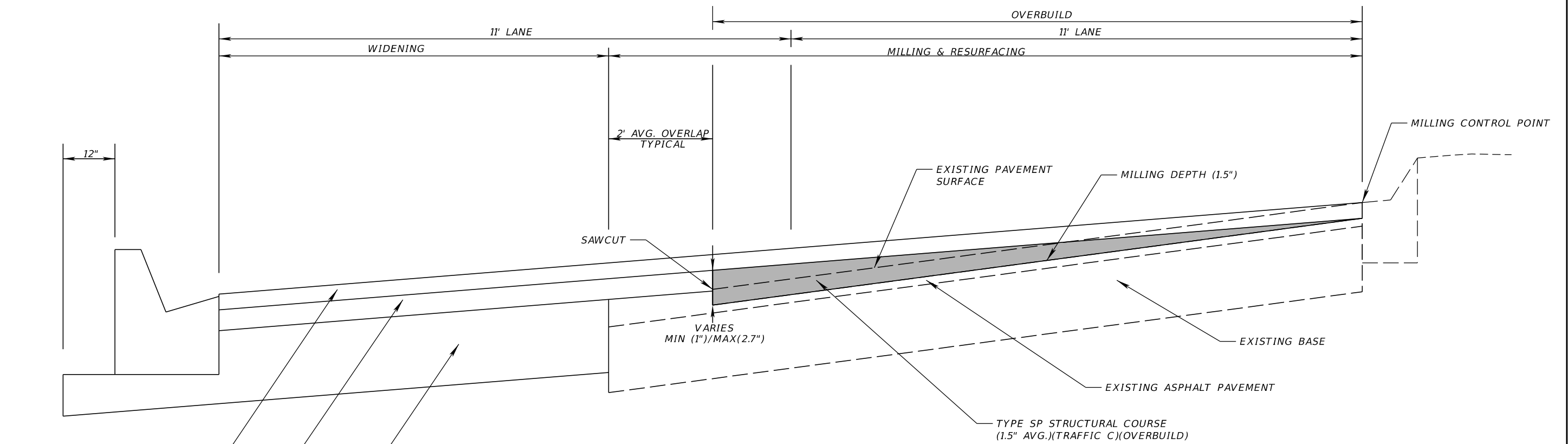
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Tyler Renfro 2/8/2018 9:46:32 AM

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11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL. 32817
PH. 407-901-5060
ERIC L. WHIKEHART, P.E. 70776
CERT. OF AUTH. #27205

| | |
|---|-------------------------|
| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

TYPICAL SECTION

SHEET NO.
6




VARIABLE DEPTH
OVERBUILD AND RESURFACING DETAIL
STA. 200+35.93 TO 201+92.81

| STATION | EXISTING PAVEMENT CROSS SLOPES | PROPOSED PAVEMENT CROSS SLOPES | NOTES |
|-----------|--------------------------------|--------------------------------|------------------------|
| 200+35.93 | 0.0262 | 0.0262 | BEGIN OVERBUILD |
| 200+40 | 0.0111 | 0.0045 | |
| 200+50 | 0.0219 | 0.0132 | |
| 200+60 | 0.0349 | 0.0179 | |
| 200+67 | 0.0375 | 0.0200 | BEGIN 2.0% CROSS SLOPE |
| 200+70 | 0.0357 | 0.0200 | |
| 200+80 | 0.0317 | 0.0200 | |
| 200+90 | 0.0321 | 0.0200 | |
| 201+00 | 0.0333 | 0.0200 | |
| 201+10 | 0.0336 | 0.0200 | |
| 201+20 | 0.0335 | 0.0200 | |
| 201+30 | 0.0327 | 0.0200 | |
| 201+40 | 0.0318 | 0.0200 | |
| 201+50 | 0.0324 | 0.0200 | |
| 201+60 | 0.0328 | 0.0200 | |
| 201+70 | 0.0327 | 0.0200 | END 2.0% CROSS SLOPE |
| 201+80 | 0.0342 | 0.0273 | |
| 201+92.81 | 0.0200 | 0.0200 | END OVERBUILD |

| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | TYPICAL SECTION DETAILS | SHEET NO. |
|-----------|-------------|------|-------------|----------------------------------|---|--------------------------|-------------|--------------------------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | | |
| | | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | |


| SUMMARY OF LUMP SUM ITEMS | | | | | |
|---------------------------|---|----------|---|--------------|----------------------|
| PAY ITEM NO. | PAY ITEM DESCRIPTION | QUANTITY | | DESIGN NOTES | CONSTRUCTION REMARKS |
| | | P | F | | |
| 101-1 | MOBILIZATION | 1 | | | |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | | | |
| 104-14 | PREVENTION CONTROL & ABATEMENT CONTROL OF EROSION AND WATER POLLUTION | 1 | | | |
| 110-1-1 | CLEARING & GRUBBING | 1 | | | |
| 120-9 | EXCAVATION, EMBANKMENT, AND GRADING | 1 | | | |
| 900-1 | AS-BUILT PLANS | 1 | | | |
| 900-2 | INDEMNIFICATION | 1 | | | |

| SUMMARY OF DRAINAGE STRUCTURES | | | | | | | | |
|--------------------------------|----------|-----------|------|-------------|---------|---|------------|--------------------------------|
| QUANTITY | STR. NO. | STATION | SIDE | DESCRIPTION | BARRELS | STORM DRAIN STEEL REINFORCED CONCRETE PIPE (SRCP) | CURB INLET | REMARKS |
| | | | | | | 430-11-125 | 425-1-321 | |
| | | | | | | ROUND | TYPE 2 | |
| | | | | | | 18" | <10' | |
| P | S-101 | 204+89.12 | LT. | Inlet, Pipe | 1 | 10 | 1 | 25' RADIUS AT EDGE OF PAVEMENT |
| F | | | | | | | | |
| Sheet Summary | | | | | P Total | 10 | 1 | |
| | | | | | F Total | | | |
| Final Summary | | | | | P Total | 10 | 1 | |
| | | | | | F Total | | | |

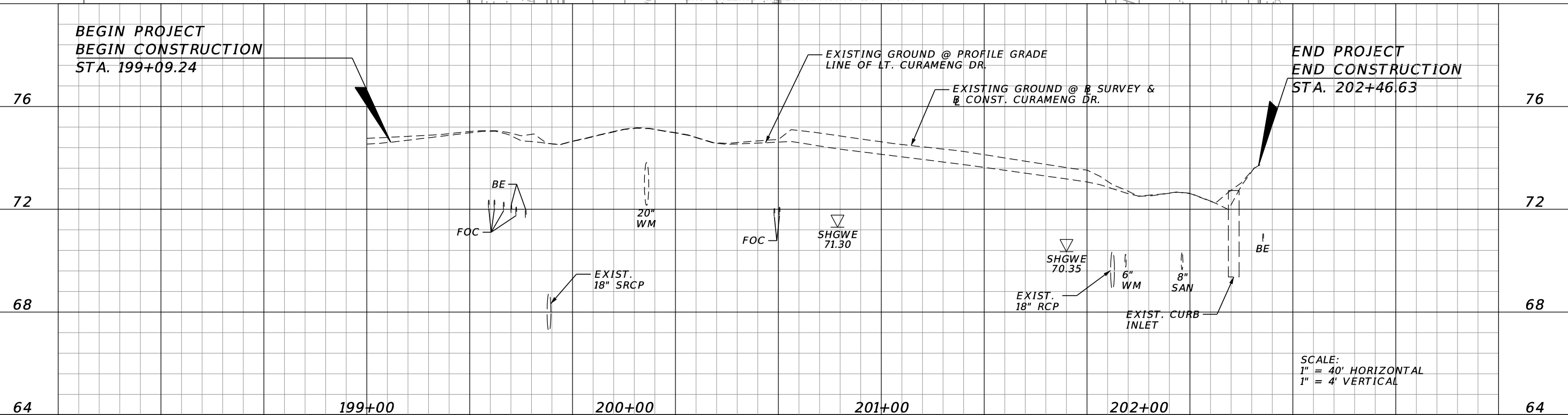
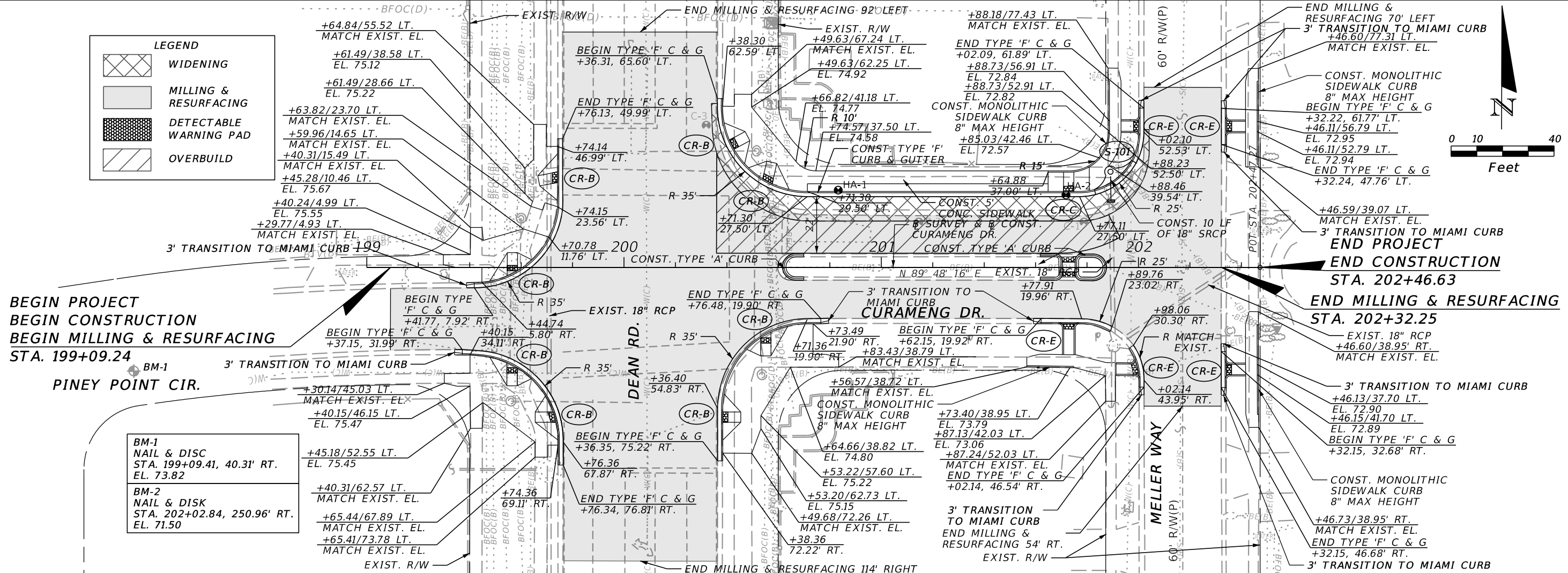
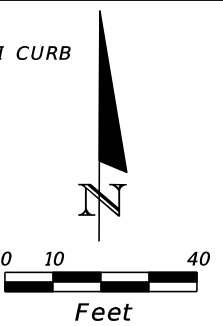
| REVISIONS | | | |  TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | SUMMARY OF QUANTITIES <i>(SHEET 1 OF 3)</i> | SHEET NO. |
|-----------|-------------|------|-------------|--|---------------------------|-------------|---|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | INTERSECTION IMPROVEMENTS | | | 8 |
| | | | | | PROJECT NAME | PROJECT NO. | | |
| | | | | DEAN RD. AT | CIP-2722 | | | |
| | | | | CURAMENG DR. | | | | |

| SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS | | | | | | | | | | | | |
|--|--------------------------------|------------------------|-------|------|--------------|------------|--|------------|-------|-----|--------------|----------------------|
| PAY ITEM NO. | PAY ITEM DESCRIPTION | LOCATION | SIDE | UNIT | QUANTITY | | | | TOTAL | | DESIGN NOTES | CONSTRUCTION REMARKS |
| | | STA. TO STA. | | | GROSS LENGTH | DEDUCTIONS | | NET LENGTH | | P | | |
| 520-2-1 | Concrete Curb & Gutter, Type A | 200+66.87 to 200+69.88 | LT/RT | LF | 20.6 | | | 20.6 | | 96 | | |
| | | 201+53.07 to 201+61.06 | LT/RT | | 23.3 | | | 23.3 | | | | |
| | | 201+67.22 to 201+82.47 | LT/RT | | 52.1 | | | 52.1 | | | | |
| 520-1-10 | Concrete Curb & Gutter, Type F | 199+34.14 to 199+74.86 | RT | LF | 69.4 | | | 69.4 | | 530 | | |
| | | 199+38.75 to 199+70.88 | LT/RT | | 38.7 | | | 38.7 | | | | |
| | | 199+74.63 to 199+74.64 | LT | | 32.0 | | | 32.0 | | | | |
| | | 200+37.80 to 202+01.10 | LT | | 210.8 | | | 210.8 | | | | |
| | | 200+37.85 to 200+79.48 | RT | | 81.1 | | | 81.1 | | | | |
| | | 201+51.14 to 201+89.06 | RT | | 38.6 | | | 38.6 | | | | |
| | | 201+96.72 to 202+01.20 | RT | | 19.1 | | | 19.1 | | | | |
| | | 202+33.08 to 202+33.65 | RT | | 20.1 | | | 20.1 | | | | |
| | | 202+33.17 to 202+33.75 | LT | | 20.1 | | | 20.1 | | | | |

| SUMMARY OF PAVEMENT | | | | | | | | | | |
|---------------------|---|------------------------|-------|------|----------|---|-------|---|--------------|----------------------|
| PAY ITEM NO. | PAY ITEM DESCRIPTION | LOCATION | SIDE | UNIT | QUANTITY | | TOTAL | | DESIGN NOTES | CONSTRUCTION REMARKS |
| | | STA. TO STA. | | | P | F | P | F | | |
| 285-713 | Asphalt Base Course (Type B-12.5)(8") | 200+33.98 to 202+04.11 | LT | SY | 185.8 | | 186 | | | |
| 327-70-6 | Milling Exist Asph Pavt, 1.5" Depth | 199+09.24 to 202+32.25 | LT/RT | SY | 2712.7 | | 2713 | | | |
| 334-1-23-150-OVB | Superpave Asphaltic Concrete (Traffic C) (1.5" AVG.)(Overbuild) | 200+35.93 to 201+92.81 | LT | TN | 19.90 | | 19.9 | | | |
| 334-1-23 | Superpave Asphaltic Concrete (Traffic C) (2.5") | 200+33.98 to 202+04.11 | LT | SY | 186.2 | | 186 | | | |
| 337-7-42 | Asphaltic Concrete Friction Course (Traffic C, FC-9.5, PG 76-22 PMA) (1.5") | 199+09.24 to 202+32.25 | LT/RT | SY | 2845.1 | | 2845 | | | |

| REVISIONS | | | |  | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | SUMMARY OF QUANTITIES <i>(SHEET 2 OF 3)</i> | SHEET NO. |
|-----------|-------------|------|-------------|---|---|---------------------------|-------------|---|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | INTERSECTION IMPROVEMENTS | | | |
| | | | | | | PROJECT NAME | PROJECT NO. | | |
| | | | | DEAN RD. AT | CIP-2722 | | | | |
| | | | | CURAMENG DR. | | | | | |

| LEGEND | |
|--------|------------------------|
| | WIDENING |
| | MILLING & RESURFACING |
| | DETECTABLE WARNING PAD |
| | OVERBUILD |



SCALE:
1" = 40' HORIZONTAL
1" = 4' VERTICAL

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

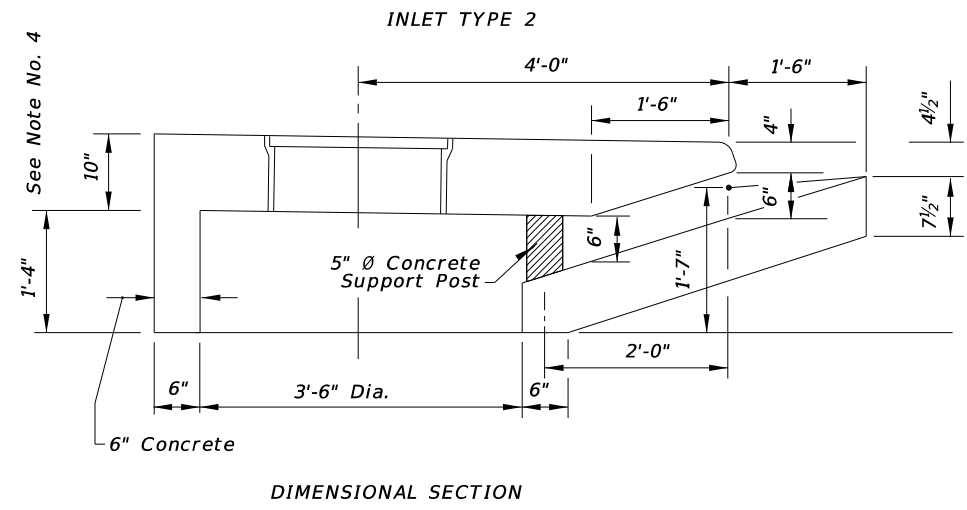
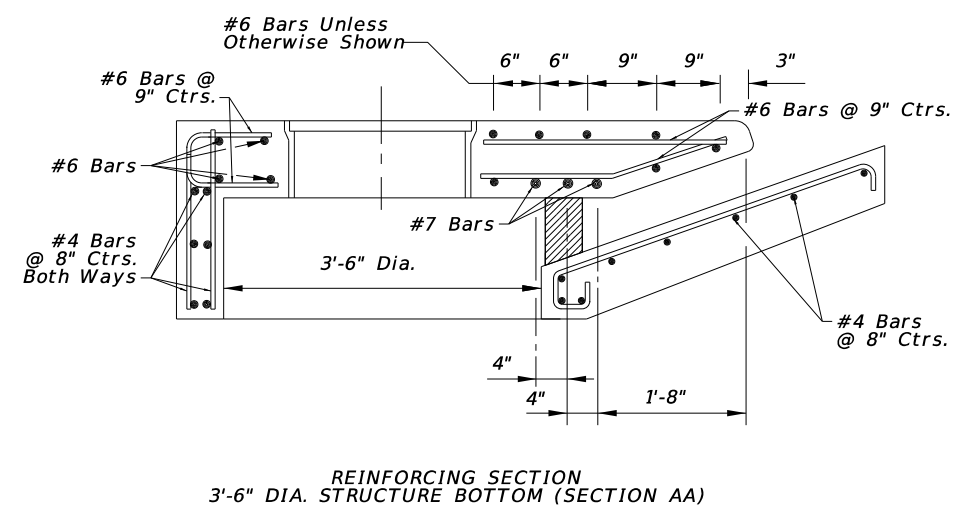
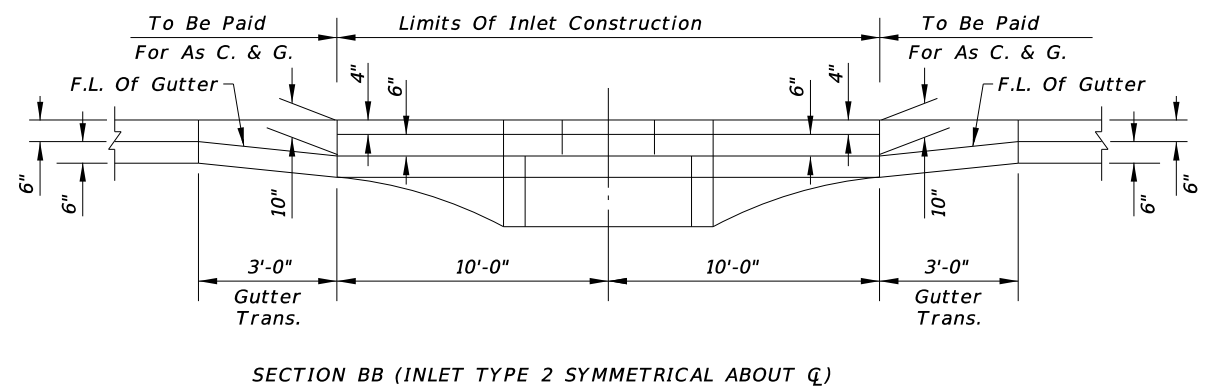
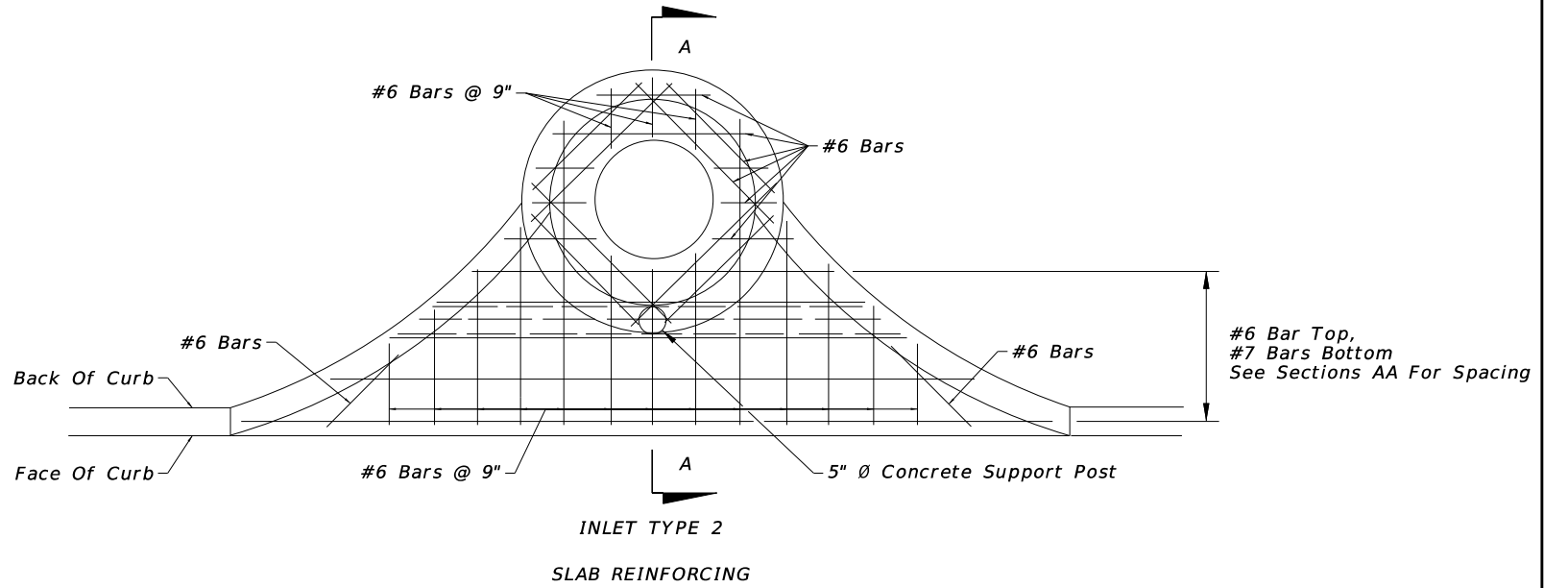
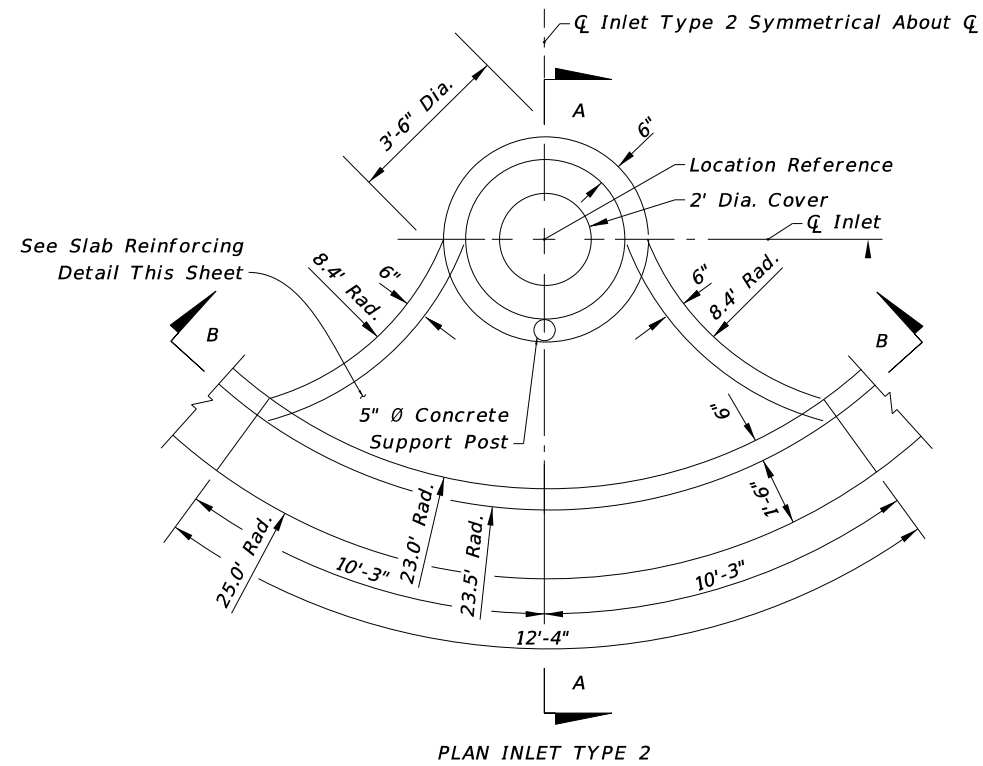


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11486 CORPORATE BLVD., SUITE 151
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PH. 407-901-5060
ERIC L. WHITEHART, P.E. 70776
CERT. OF AUTH. #27205

| | |
|---------------------------|-------------|
| DESIGN PLANS FOR: | |
| INTERSECTION IMPROVEMENTS | |
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT | CIP-2722 |
| CURAMENG DR. | |

PLAN & PROFILE

SHEET NO.
11



GENERAL NOTES

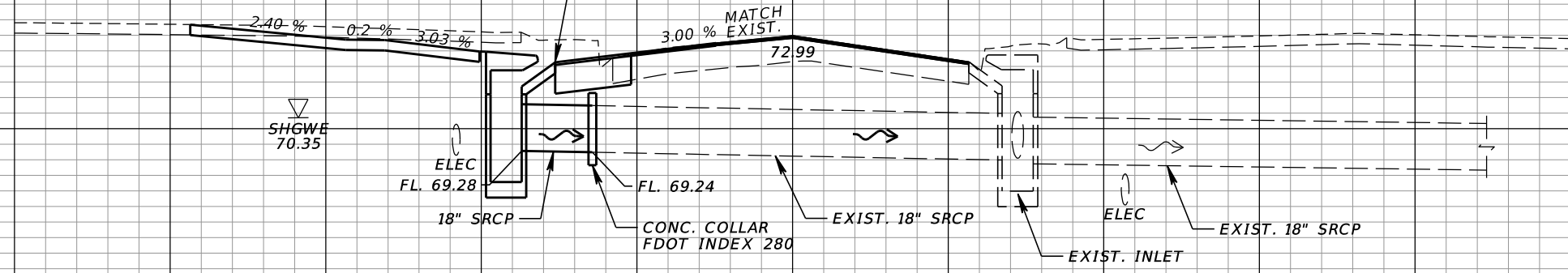
1. The finished grade and slope of the inlet tops are to conform with the finished cross slope and grade of the proposed sidewalk and/or border.
2. When inlets are to be constructed on a curve, refer to the plans to determine the radius and, where necessary, modify the inlet details accordingly. Bend steel when necessary.
3. All steel in inlet top shall have 1/4" minimum cover unless otherwise shown. Inlet tops shall be cast-in-place.
4. For supplemental details see Index No. 201.
5. Only round concrete support post will be acceptable.
6. These inlets are designed for use with standard curb and gutter Types E and Type F. Locate inlet outside of pedestrian crosswalks.
7. For structure bottoms see Index No. 200.
8. Inlet to be paid for under the contract unit price for inlets (Curb) (Type P-2), Each.

| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | DRAINAGE DETAIL SHEET | SHEET NO. 13 |
|-----------|-------------|------|-------------|----------------------------------|---|--------------------------|-------------|-----------------------|-----------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | | |
| | | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | |

☐ SURVEY & ☐ CONST. CURAMENG DR.

S-101
 STA. 201+89.12 (37.14' LT.)
 CONST. TYPE 2 CURB INLET 3.5' DIA
 CONST. CONC. COLLAR
 INDEX NO.'S 201, 210, 280
 INLET ELEV. 72.00
 FL 69.28

SEE GENERAL NOTES SHEET
 FOR INLET ELEV. LOCATION



STA. 201+89.12

☐ SURVEY & ☐ CONST. CURAMENG DR.

SCALE
 1" = 20' Horizontal
 1" = 5' Vertical

140 120 100 80 60 40 20 0 20 40 60 80 100 120

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT FLORIDA

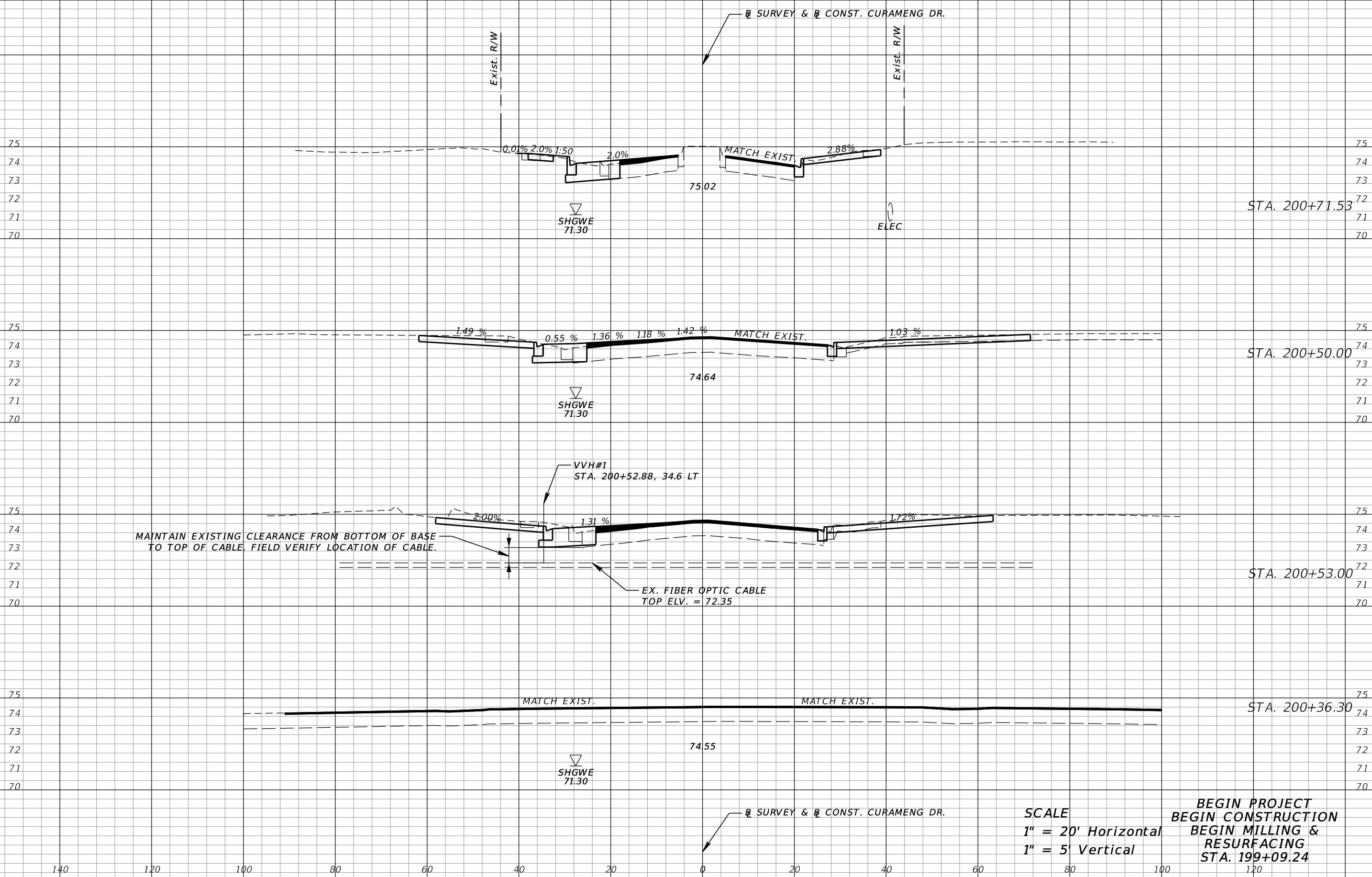
TLP ENGINEERING CONSULTANTS, INC
 11486 CORPORATE BLVD., SUITE 151
 ORLANDO, FL. 32817
 PH. 407-901-5060
 ERIC L. WHIKEHART, P.E. 70776
 CERT. OF AUTH. #27205

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| | |
|---|-------------------------|
| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

**DRAINAGE STRUCTURE
 CROSS SECTION**

SHEET NO.
14



SCALE
 1" = 20' Horizontal
 1" = 5' Vertical

**BEGIN PROJECT
 BEGIN CONSTRUCTION
 BEGIN MILLING &
 RESURFACING
 STA. 199+09.24**

| REVISIONS | |
|-----------|-------------|
| DATE | DESCRIPTION |
| | |
| | |

ORANGE COUNTY GOVERNMENT FLORIDA

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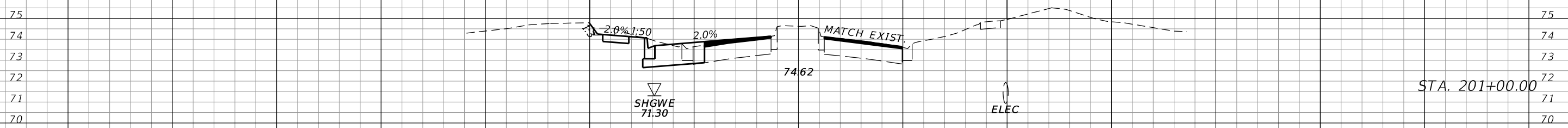
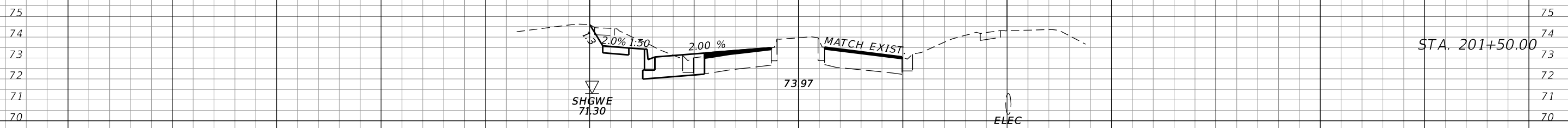
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| | |
|--|-------------------------|
| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

ROADWAY CROSS SECTIONS

SHEET NO.
15

☐ SURVEY & ☐ CONST. CURAMENG DR.



☐ SURVEY & ☐ CONST. CURAMENG DR.

SCALE
 1" = 20' Horizontal
 1" = 5' Vertical

140 120 100 80 60 40 20 0 20 40 60 80 100 120

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT FLORIDA

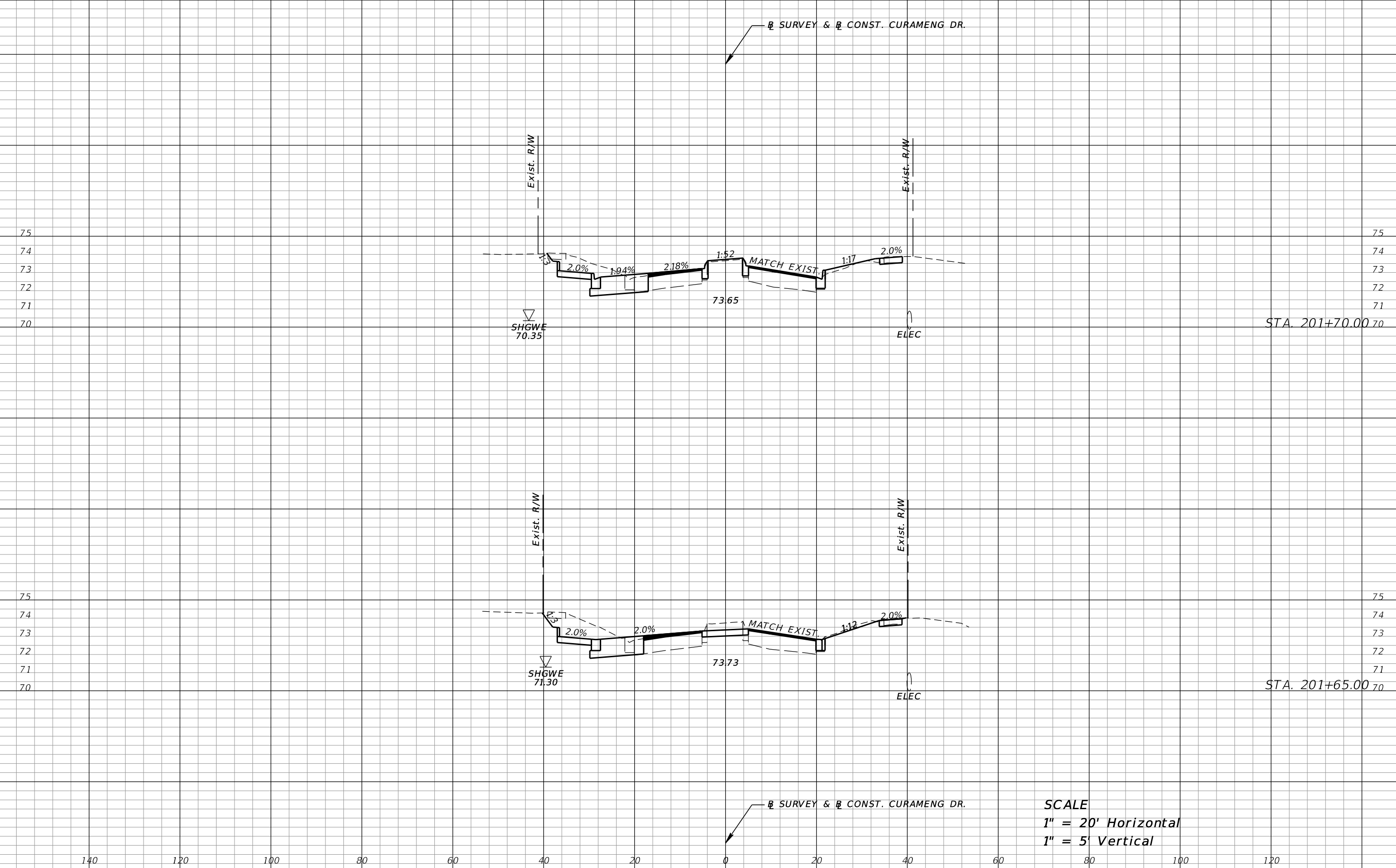
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 CERT. OF AUTH. #27205

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| | |
|--|-------------------------|
| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

ROADWAY CROSS SECTIONS

SHEET NO.
16



140 120 100 80 60 40 20 0 20 40 60 80 100 120

SCALE
 1" = 20' Horizontal
 1" = 5' Vertical

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
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ORANGE COUNTY GOVERNMENT FLORIDA

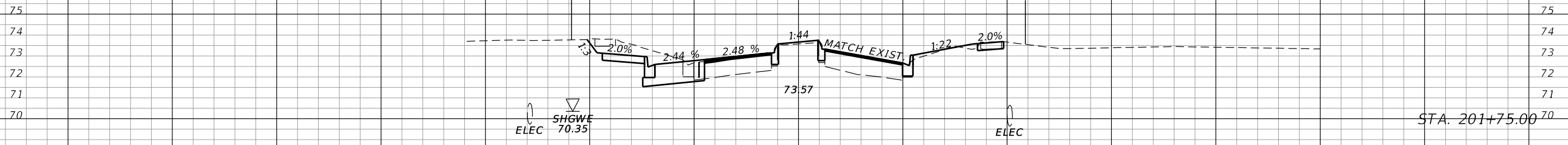
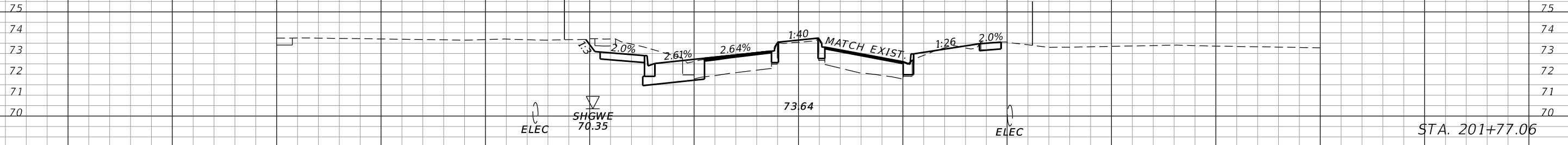
TLP ENGINEERING CONSULTANTS, INC
 11486 CORPORATE BLVD., SUITE 151
 ORLANDO, FL. 32817
 PH. 407-901-5060
 ERIC L. WHIKEHART, P.E. 70776
 CERT. OF AUTH. #27205

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| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

ROADWAY CROSS SECTIONS

Ⓡ SURVEY & Ⓡ CONST. CURAMENG DR.



Ⓡ SURVEY & Ⓡ CONST. CURAMENG DR.

SCALE
 1" = 20' Horizontal
 1" = 5' Vertical

140 120 100 80 60 40 20 0 20 40 60 80 100 120

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ORANGE COUNTY GOVERNMENT FLORIDA

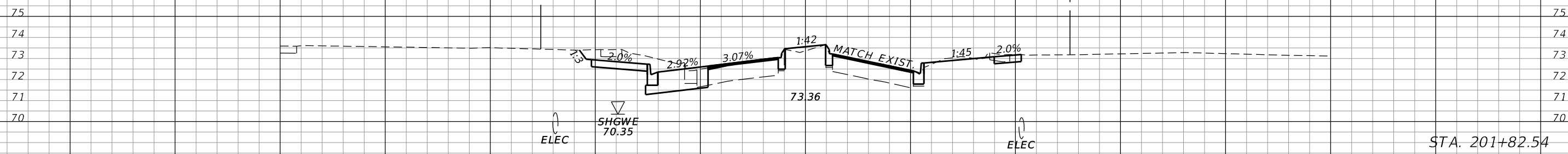
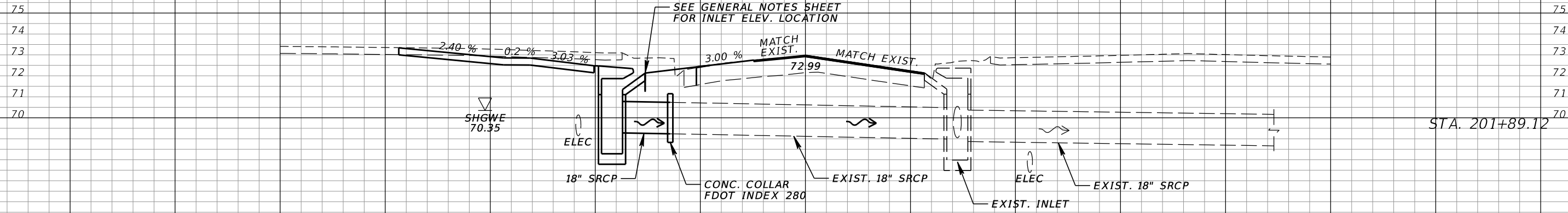
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ROADWAY CROSS SECTIONS

SHEET NO.
18



SCALE
 1" = 20' Horizontal
 1" = 5' Vertical

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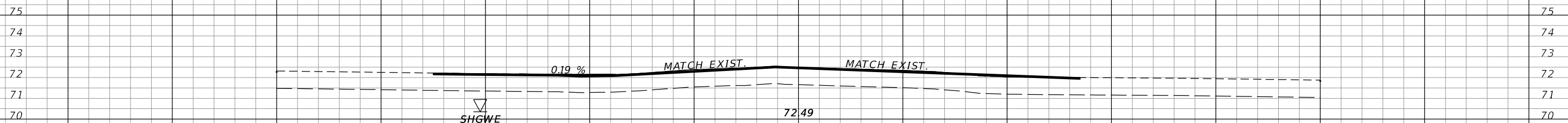
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| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

ROADWAY CROSS SECTIONS

Ⓡ SURVEY & Ⓡ CONST. CURAMENG DR.

END PROJECT
END CONSTRUCTION
STA. 202+46.63

END MILLING &
RESURFACING
STA. 202+32.25



STA. 202+02.11

Ⓡ SURVEY & Ⓡ CONST. CURAMENG DR.

SCALE
1" = 20' Horizontal
1" = 5' Vertical

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ROADWAY CROSS SECTIONS

SHEET NO.
20

1 SITE DESCRIPTION

A Construction Activity:

This SWPPP is applicable to all phases of construction for this project and will apply to phased construction plans including, but not limited to, maintenance of traffic plans, roadway widening, and drainage improvements.

Project limits:

The project is located in east Orange County at the intersection of Dean Road and Curameng Drive, and the intersection of Curameng Drive and Meller Way. The project limits along Dean Road extend 100 feet north of the intersection to 115 feet south of the intersection. The project limits along Meller Way extend 70 feet north and 55 feet south of the intersection along Curameng Drive in Section 19 & 20, Township 22 south, Range 31 east in Orange County, Florida.

Project Description:

The construction activities will take place over a 0.04 mile length of Dean Road and Curameng Drive in Orange County, Florida. This project involves construction of a new right turn lane along Curameng Drive in the westbound direction. Drainage improvements will be provided as needed for the proposed improvements. The roadway limits will be milled and resurfaced, disturbed permanent pervious area will be sodded with performance turf.

B Major Soil Disturbing Activities:

Soil disturbing activities are associated with the construction of the new turn lane, and storm sewer.

Clear and grub the area necessary to install perimeter erosion controls before beginning any work off pavement for the construction phase. Remove perimeter controls only after all upstream areas are stabilized.

C Area Estimates:

Total Project Area: 1.04 acres.
Total Area To Be Disturbed: 0.17 acres.

E Runoff Data:

(1) runoff coefficients before, during, and after construction:

Runoff Coefficients:
Grassed Area Adjacent To Pavement, C = 0.20
Impervious Surface, C = 0.95
Disturbed Areas During Construction, C = 0.40

Before Construction C = 0.74
During Construction C = 0.71
After Construction C = 0.75

(2) Description of Soil or Quality of Discharge:
The soils within the project limits are comprised primarily of fine sand and are classified as hydrologic group A. The most common soil type is Pomello Fine Sand. Detailed data on the soils and others found within the project limits is supplied in the soil survey of Orange County, prepared by the Natural Resources Conservation Service.

(3) Estimates of Size of Drainage Area for Each Outfall:

Curameng Road Storm Sewer: S-101 3.20 acres.

(4) For locations of outfalls see construction plans. outfalls are located at the following approximate locations (latitude, longitude):

Econ River (28° 34' 57" N, 81° 10' 14" W)

E Site Map:

The construction plans are being used as the required site map. The location of the required information is described below. The sheet numbers for the plan sheets referenced are identified on the Key Sheet of these construction plans.

* Drainage Patterns:
The drainage basin divides and flow directions are shown on the drainage map. The shapes shown in these sheets indicate runoff collected and conveyed by either on site or off site systems.

* Approximate slopes:
The slopes of the site can be seen in the roadway cross section sheets and the profile sheets.

* Areas of soil disturbance:
The areas to be disturbed are shown in the roadway plans. Any areas where permanent features are shown to be constructed above or below ground will be disturbed.

* Locations of Temporary Controls:
These are shown on the stormwater pollution prevention plan sheets.

* Areas to be Stabilized:
The roadway widening will be permanently stabilized with asphalt or concrete. additionally, the fill slopes will be permanently stabilized with sod. These details are shown in the typical sections, roadway plans and profiles and cross sections.

* Surface Waters and Wetlands Within the Site:
The project limits do not contain wetlands or surface waters.

* Discharge Points to Surface waters:
No surface waters are located within the project limits.

F (1) Name of Receiving Waters:

The project drains to stormwater management facilities that ultimately outfall to the Econ River.

(2) Wetland Area:

There are no wetland impacts.

2.0 CONTROLS:

A. Erosion, Sediment, and Turbidity Controls
During construction operations, the following control measures will be used to prevent erosion and sedimentation.

Clearing and grubbing operations are controlled so as to minimize unprotected areas exposed to weather from eroding. Areas outside the limits of construction will not be disturbed. Excavated material will not be deposited in locations where it could be washed away by high water or storm water runoff, and stockpiles shall be covered or encircled with sediment containment devices. New and existing structures will be protected from siltation during construction.

Development of detailed erosion, sediment, and turbidity control plans. The plan will include:

- * The construction project schedule with erosion, sediment, and turbidity control installation and maintenance tied to specific dates of construction activities.
- * Modifications to the department's SWPPP and erosion control plans due to contractor's proposed construction means, methods and phasing. The contractor's erosion control plan will be utilized as the first formal update to the SWPPP.
- * Name and phone number of contractor's representative responsible for erosion and sediment control installation and maintenance on a 24 hour basis.

The Contractor is advised that the contract drawings only indicate erosion, sediment, and turbidity controls at locations determined in the design process. However, the contractor is required to update the SWPPP to reflect any additional controls necessary to prevent the possibility of silting any adjacent lowland parcel, receiving water, or otherwise violating State and Federal permit requirements.

(1) Stabilization Practices

The Contractor shall be responsible for:

- a) Erosion and sediment control measures are to be placed prior to, or as the first step in construction. Sediment control devices will be employed as a perimeter defense against any transportation of silt off the site.
- b) Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity if the portions of the site has temporarily or permanently ceased.
- c) Permanent soil erosion control measures for all slopes, channels, ditches or any disturbed land areas shall be completed immediately after final grading. When it is not possible to permanently protect a disturbed area immediately after grading operations, temporary erosion control measures shall be installed. All temporary protection shall be maintained until permanent measures are in place and established.
- d) The Contractor shall furnish, install, maintain and subsequently remove, all necessary erosion control, including but not limited to sediment barriers, inlet protection devices, synthetic hay bales, turbidity barriers and any other miscellaneous items as indicated within the contract document. Or as required per applicable standards or the Engineer.

(2) Structural Practices

The following structural practices may be included in the lump sum pay item for "PREVENTION CONTROL AND ABATEMENT CONTROL OF EROSION AND WATER POLLUTION" within the construction plans:
- artificial coverings
- turbidity barrier
- sediment barrier
- geotextile filter fabric
- rock bags
- inlet protection devices

B. Storm Water Management and Monitoring

Runoff from Lake Pickett Road sheet flows into a swale/storm sewer system whose outfall ultimately discharges to the Econ River. Runoff from N. Tanner Road sheet flows into curb and gutter inlets and discharge into existing Pond 10. Existing Pond 10 outfalls into the Lake Pickett ditch/storm sewer system at inlet S-104.

C. Other Controls

- (1) Waste Disposal - To be developed as part of the contractor's ECP.
- (2) Sanitary Waste - To be developed as part of the contractor's ECP.
- (3) Fertilizers and Pesticides - To be developed as part of the contractor's ECP.
- (4) This project is exempt from having to submit an NOI application as the total disturbed area is less than 1 acre and is Not part of a planned phased construction that will exceed 1 acre of disturbed area.

Non-Storm Water Discharges and Hazardous Waste
When the Contractor encounters a spill, the contractor must contact Orange County. Construction will stop and work will not resume until directed by the engineer. Disposition of hazardous waste will be made in accordance with any requirements and regulations of any local, state, or federal agency jurisdiction.

| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHITEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | STORMWATER POLLUTION PREVENTION PLAN (1 OF 2) | SHEET NO. |
|-----------|-------------|------|-------------|----------------------------------|---|-----------------------------|-------------|--|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | | |
| | | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | |

3. MAINTENANCE

The Contractor shall be responsible for maintaining all pollution prevention controls. Daily inspections shall be made by the Contractor to determine the effectiveness of erosion, sedimentation, turbidity, and pollution control measures. Remedial action shall be performed immediately.


4. INSPECTION

The Contractor is required to inspect all erosion control features at least once every seven calendar days and within 24 hours of the end of a storm of 0.5 inches or greater. In addition, maintain all erosion control features as required herein and as specified in State and or Federal environmental regulatory permits. This includes, but is not limited to, the daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that silt fences are properly located for effectiveness. The Contractor will use a form acceptable to the Engineer to report all inspection findings and corrective actions taken as a result of the inspection. The Contractor will sign each inspection report and submit it weekly to the Engineer. The Contractor shall be responsible for the installation and maintenance of rain gauges. Daily Rainfall data will be recorded and submitted to the Engineer along with the weekly inspection reports.

5. REFERENCES

The construction plans and specifications for Dean Road at Curameng Drive Intersection Improvements are hereby referenced and made a part of this plan.

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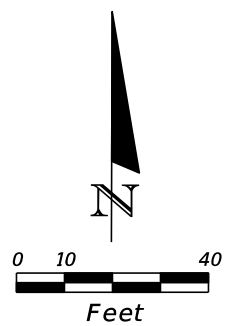
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| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

**STORMWATER POLLUTION
 PREVENTION PLAN (2 OF 2)**

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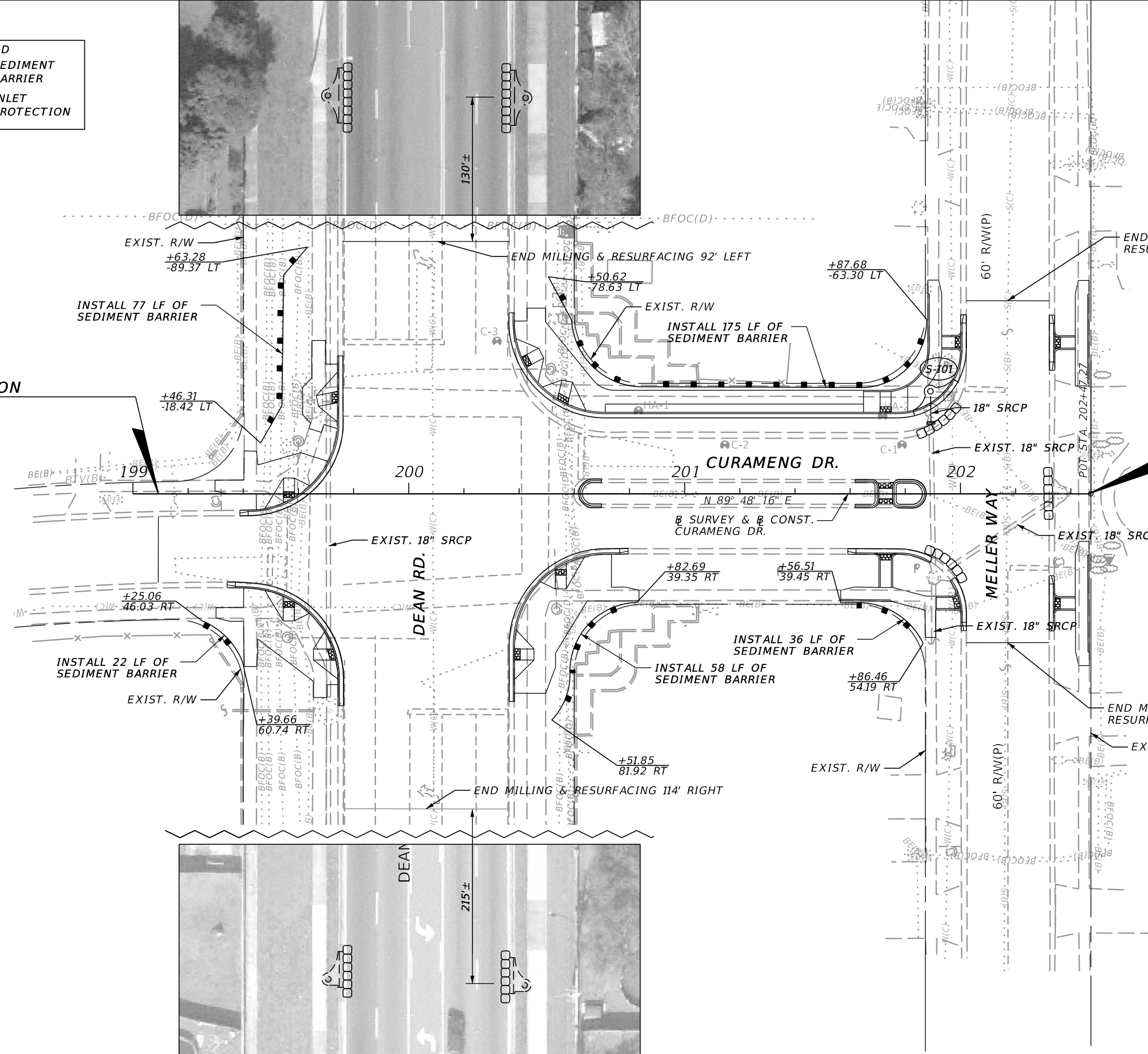
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| LEGEND | |
|--------|------------------|
| | SEDIMENT BARRIER |
| | INLET PROTECTION |



**BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 199+09.24**

**END PROJECT
END CONSTRUCTION
STA. 202+46.63**



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ORANGE COUNTY GOVERNMENT
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| DESIGN PLANS FOR: | |
| INTERSECTION IMPROVEMENTS | |
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

STORMWATER POLLUTION PREVENTION PLAN SHEET

SHEET NO.
23

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS (2016 EDITION)
2. THE CONTRACTOR SHALL CONTACT ORANGE COUNTY ONE (1) WEEK PRIOR TO THE START OF ANY PHASE OF WORK TO REQUEST STREET, LANE, OR SIDEWALK CLOSURE AUTHORIZATION. LANE CLOSURES ARE NOT ALLOWED DURING THE FOLLOWING TIMES:

 CURAMENG DRIVE & MELLER WAY: MON - FRI: 6:00 AM TO 8:00 PM
 DEAN ROAD: MON - FRI: 6:00 AM TO 10:00 PM

 LANE CLOSURES WILL NOT BE PERMISSABLE DURING SPECIAL EVENTS INCLUDING BUT NOT LIMITED TO:
 -HOLIDAYS, SEVERE WEATHER CONDITIONS, SCHOOL EVENTS (UNION PARK ELEMENTARY AND LAWTON CHILES ELEMENTARY). NIGHT TIME WORK REQUIRING A FLAGGER WILL REQUIRE TEMPORARY LIGHTING TO BE INSTALLED.

 THE CONTRACTOR SHALL PROVIDE A UNIFORMED OFF-DUTY LAW ENFORCEMENT OFFICER(S) FOR ALL NIGHT WORK. COST TO BE INCLUDED IN PAY ITEM 102-1.
3. LOCAL RESIDENTIAL/BUSINESS ACCESS SHALL BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO THE RESIDENTS/BUSINESSES AFFECTED BY CONSTRUCTION ACTIVITIES, ONE (1) WEEK IN ADVANCE OF THE START OF ANY PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE COPIES OF THE NOTIFICATION TO THE TRAFFIC CONTROL MANAGER PRIOR TO DISTRIBUTION.
4. THE CONTRACTOR SHALL NOTIFY THE ORANGE COUNTY SCHOOL BOARD SAFETY MANAGER, WINNIE GERKIN (407) 521-2339, ONE (1) WEEK IN ADVANCE OF THE START OF ANY PHASE OF CONSTRUCTION TO COORDINATE SCHOOL BUS RE-ROUTING.
5. ORANGE COUNTY RESERVES THE RIGHT TO REQUIRE ADDITIONAL DEVICES AND/OR CHANGES TO THE TRAFFIC CONTROL PLAN BASED UPON CHANGING TRAFFIC CONDITIONS.
6. ANY CHANGES MADE TO THE TRAFFIC CONTROL PLAN BY THE CONTRACTOR, SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED AND REGISTERED IN THE STATE OF FLORIDA AND APPROVED BY THE COUNTY PRIOR TO IMPLEMENTATION.
7. CONTRACTOR SHALL NOTIFY LYNX AT (407) 841-2279 A MINIMUM OF ONE (1) WEEK PRIOR TO IMPLEMENTING ANY STREET CLOSURE OR DETOUR PLAN TO COORDINATE BUS RE-ROUTING.
8. THE NUMBER OF DEVICES SHOWN ON THESE PLANS ARE FOR ILLUSTRATION PURPOSES. ADDITIONAL DEVICES MAY BE REQUIRED TO PROPERLY PROTECT THE WORKERS AND WORK ZONE FROM VEHICULAR TRAFFIC.
9. IF TEMPORARY MARKINGS ARE REQUIRED ON FRICTION COURSE SURFACES, ALL MARKINGS SHALL BE INSTALLED USING 3M BRAND STAMARK REMOVABLE TAPE, SERIES 750, WET REFLECTIVE TEMPORARY TAPE. THE USE OF "FOIL BACK" TYPES OF TEMPORARY TAPE IS NOT PERMITTED.
10. 3M BRAND REMOVABLE BLACK MASK TAPE SERIES 145, IS THE ONLY APPROVED MATERIAL FOR "BLACKING OUT" OF EXISTING PAVEMENT MARKINGS ON FINAL ROADWAY SURFACES. UNDER NO CIRCUMSTANCES WILL BLACK PAINT OR GRINDING BE PERMITTED.
11. PAINT PRODUCTS AND RETRO-REFLECTIVE PAVEMENT MARKERS WILL BE CONSIDERED TEMPORARY PAVEMENT MARKING MATERIALS ON SURFACES THAT ARE TO BE MILLED AND RESURFACED.
12. EXISTING PAVEMENT MARKINGS, WHICH ARE TO BE OBLITERATED, SHALL BE RESTORED TO ORIGINAL CONDITION UPON COMPLETION OF CONSTRUCTION AND PRIOR TO REINSTATING VEHICULAR TRAFFIC. PAYMENT IS TO BE INCLUDED IN THE MAINTENANCE OF TRAFFIC LUMP SUM PAY ITEM.
13. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE NEW OR LIKE NEW CONDITION. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE INDICATED.
14. CHANNELIZING DRUMS SHALL BE USED ON NEWLY PAVED ROADWAYS.
15. DURING NON-WORKING HOURS, NO EQUIPMENT, VEHICLES OR MATERIAL SHALL BE PARKED OR STORED WITHIN THE CLEAR ZONE OR A ROADWAY OPEN TO VEHICULAR TRAFFIC.
16. EXISTING REGULATORY AND WARNING SIGNS ARE TO BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE NOTED. ALL EXISTING SIGNS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLAN DURING A CONSTRUCTION PHASE SHALL BE REMOVED OR COVERED AS NECESSARY. THE CONTRACTOR SHALL MAINTAIN AND RELOCATE EXISTING ROADWAY SIGNS, AS CONDITIONS WARRANT IN EACH PHASE, THROUGHOUT THE DURATION OF CONSTRUCTION. THE COST OF THESE SIGNING OPERATIONS IS TO BE INCLUDED IN THE MAINTENANCE OF TRAFFIC LS PAY ITEM.
17. PEDESTRIAN CONTROL SHALL BE MAINTAINED ON ONE SIDE OF THE ROAD AT ALL TIMES WHERE EXISTING SIDEWALK EXISTS. IF UNABLE TO DO SO, THE CONTRACTOR SHALL PROVIDE TEMPORARY WALKWAYS, BOARDWALKS AND/OR TEMPORARY CONCRETE SIDEWALKS. PAYMENT IS TO BE INCLUDED IN THE MAINTENANCE OF TRAFFIC LUMP SUM PAY ITEM.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING EACH EMPLOYEE SUPERVISING THE SELECTION AND PLACEMENT OF MAINTENANCE OF TRAFFIC (MOT) CONTROL DEVICES SHALL BE PROPERLY TRAINED BY ATTENDING AND SUCCESSFULLY COMPLETING AN FDOT APPROVED MOT COURSE. THE TRAINING SHALL BE AT A LEVEL APPLICABLE TO THE EMPLOYEE'S LEVEL OF INVOLVEMENT. COPIES OF CERTIFICATIONS SHALL BE PROVIDED TO ORANGE COUNTY PRIOR TO IMPLEMENTING ANY PHASE OF MOT.
19. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL SUPERVISOR (TCS) WHO IS RESPONSIBLE FOR INITIATING, INSTALLING AND MAINTAINING ALL TRAFFIC CONTROL DEVICES.
20. THE TCS SHALL BE AVAILABLE ON A 24-HOUR PER DAY BASIS, PARTICIPATE IN ALL CHANGES TO TRAFFIC CONTROL AND REVIEW THE PROJECT ON A DAY-TO-DAY BASIS.
21. THE TCS SHALL BE PRESENT DURING THE INITIAL SETUP OF THE TRAFFIC CONTROL PLAN AND ALL SUBSEQUENT PHASES OR CHANGES TO THE TRAFFIC CONTROL.
22. THE TCS SHALL IMMEDIATELY CORRECT ALL DEFICIENCIES.
23. THE CONTRACTOR SHALL ENSURE THE TCS BE AVAILABLE ON SITE WITHIN 45 MINUTES OF NOTIFICATION OF AN EMERGENCY SITUATION AND IS PREPARED TO RESPOND TO AND CORRECT THE TRAFFIC CONTROL OR PROVIDE ALTERNATE ARRANGEMENTS FOR CORRECTIVE ACTIONS.
24. THE TCS SHALL BE RESPONSIBLE FOR PERFORMING WEEKLY, DAYTIME AND NIGHT TIME INSPECTIONS OF ALL TRAFFIC CONTROL DEVICES, TRAFFIC FLOW, PEDESTRIAN, AND BICYCLIST MOVEMENT THROUGH OUT THE WORK AREA AND BUSINESS ACCOMMODATIONS.
25. ORANGE COUNTY MAY DISQUALIFY AND REMOVE FROM THE PROJECT A TCS THAT FAILS TO COMPLY WITH THESE PROVISIONS. ORANGE COUNTY MAY ALSO SUSPEND ALL WORK ACTIVITIES UNTIL CORRECTIVE ACTIONS HAVE BEEN COMPLETED.
26. THE CONTRACTOR SHALL EITHER BACK FILL OR COVER BY AN APPROVED METHOD ANY OPEN TRENCHES AT THE END OF EACH WORK PERIOD.
27. THE CONTRACTOR SHALL REPLACE ANY VEHICLE DETECTION LOOPS DAMAGED DURING CONSTRUCTION, AS PER THE ORIGINAL CONTRACT PLANS.
28. MODIFICATIONS TO OR RELOCATION OF SIGNALS SHALL BE THE CONTRACTORS RESPONSIBILITY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE MODIFICATIONS OR RELOCATIONS DURING EACH PHASE OF CONSTRUCTION. PAYMENT FOR ALL SIGNAL HEAD RELOCATIONS, MODIFICATIONS, AND TEMPORARY SIGNALIZATION SHALL BE INCLUDED AS PART OF THE MAINTENANCE OF TRAFFIC LUMP SUM PAY ITEM. CONTRACTOR SHALL COORDINATE WITH THE COUNTY TRAFFIC ENGINEER PRIOR TO RELOCATION/ADJUSTMENT FOR APPROVAL.
29. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS. PAVEMENT MARKINGS HAVE BEEN LABELED AS NECESSARY.
30. TRAFFIC SHALL BE MAINTAINED ON PAVED SURFACES AT ALL TIMES.
31. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES FOR THE ENTIRE PROJECT.
32. CHANNELIZING DEVICES ERECTED ALONG SIDE STREETS, BUSINESS DRIVEWAYS, AND RESIDENTIAL DRIVEWAYS SHALL BE SPACED AT 10' CENTER-TO-CENTER ALONG THE RETURN RADIUS UNLESS OTHERWISE NOTED.
33. ALL TEMPORARY PAVEMENT SHALL UTILIZE A FIRM AND UNYIELDING BASE WITH 2" ASPHALT PAVEMENT. PAVEMENT SHALL ADHERE TO A PAVEMENT DESIGN FOR NEW CONSTRUCTION. TEMPORARY PAVEMENT SHALL BE REPAIRED AS NEEDED OR AS DIRECTED BY THE ENGINEER AND PAYMENT SHALL BE INCLUDED IN THE MAINTENANCE OF TRAFFIC LUMP SUM PAY ITEM.
34. STOP SIGNS ALONG SIDE STREETS AND/OR DRIVEWAYS SHALL BE MAINTAINED AND RELOCATED AS REQUIRED BY THE CONSTRUCTION PHASING.
35. AT NIGHT ONLY DRUMS WITH LIGHTS SHALL BE USED FOR CHANNELIZING DEVICES.
36. NIGHT TIME LANE OR ROAD CLOSURES REQUIRE ORANGE COUNTY DEPUTY SHERIFF PRESENT IN MARKED CAR.

| REVISIONS | | | |  TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | TRAFFIC CONTROL PLANS GENERAL NOTES | SHEET NO. 24 |
|-----------|-------------|------|-------------|---|--------------------------|-------------|--|---------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | PROJECT NAME | PROJECT NO. | | |
| | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | |

MAINTENANCE OF TRAFFIC

PHASING NOTES

PHASE 1, OPTION 1

1. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN THE TRAFFIC CONTROL PLANS. CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
2. CONSTRUCT THE FOLLOWING ITEMS DURING OFF-PEAK TRAFFIC HOURS (SATURDAY & SUNDAY): WIDENING AND MILL & OVERBUILD/RESURFACING, CURB, SIDEWALK RAMPS ALONG CURAMENG DRIVE AND MELLER WAY, PEDESTRIAN SIGNALS ALONG CURAMENG DRIVE, MEDIAN ISLAND IMPROVEMENTS, AND SIGNAGE AND DRAINAGE FEATURES AS SHOWN IN THE TRAFFIC CONTROL PLANS. TRAFFIC ON MELLER WAY SHALL USE DETOUR TO ACCESS DEAN RD. WESTBOUND CURAMENG DRIVE AS WELL AS SIDEWALK CONNECTIVITY MUST BE TO A STATE MEETING FDOT INDEX 600 PRIOR TO FINISHING WORK OPERATIONS SUNDAY EVENING (11:59 PM).
3. CONTRACTOR MUST MAINTAIN EXISTING PEDESTRIAN PUSH BUTTON SIGNALS AND MAINTAIN ACCESS TO THE EXISTING PUSH BUTTONS UNTIL PROPOSED RAMPS AND PROPOSED PEDESTRIAN SIGNALS ARE FULLY FUNCTIONAL.
4. THE REGULATORY SPEED IS 45 MPH ALONG DEAN ROAD AND 25 MPH ON CURAMENG DR.

PHASE 1, OPTION 2

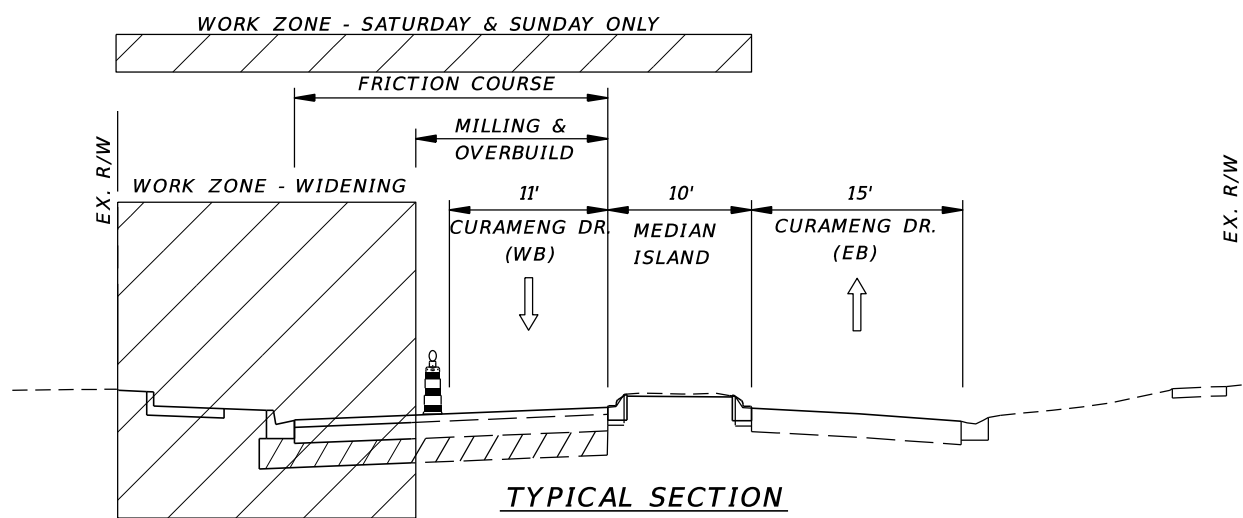
1. FOLLOW INSTRUCTIONS PUT FORTH IN OPTION 1. AS AN ALTERNATIVE TO UTILIZING THE PHASE 1, OPTION 1 DETOUR, CONTRACTOR MAY UTILIZE TRAFFIC CONTROL OFFICERS TO DIRECT TRAFFIC THROUGH THE DEAN ROAD/CURAMENG DRIVE INTERSECTION AND ALONG EASTBOUND CURAMENG DRIVE WITH FLAGGERS POSITIONED ON MELLER WAY AND CURAMENG DR., SEE PHASE 1 OPTION 2 PLAN SHEET FOR DETAILS.

PHASE II

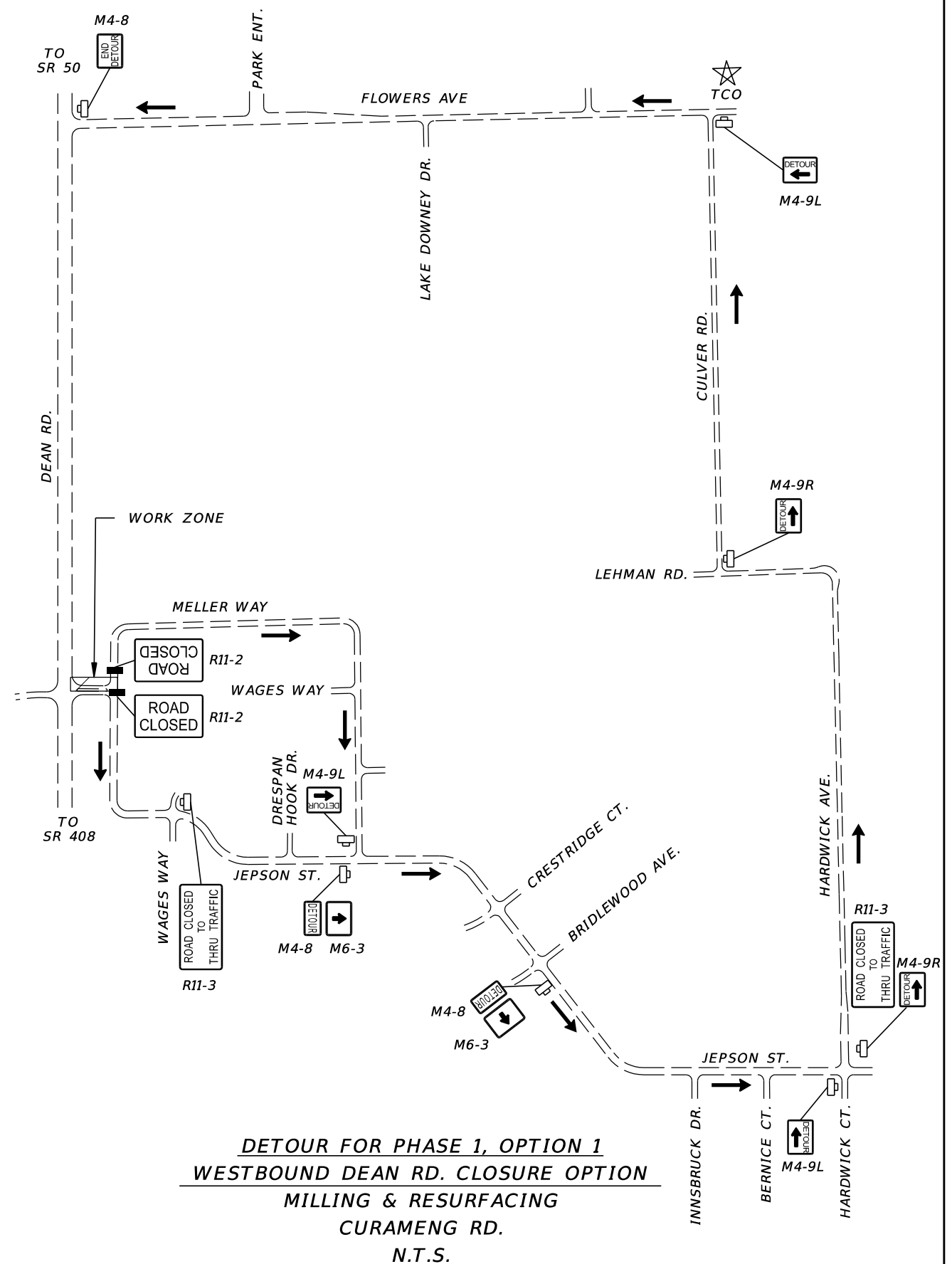
1. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN INDEX 603. CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
2. CONSTRUCT REMAINING CURB AND GUTTER AND SIDEWALK ON DEAN RD. AND ON PINEY POINT CIRCLE.
3. CONTRACTOR MUST MAINTAIN EXISTING PEDESTRIAN PUSH BUTTON SIGNALS AND MAINTAIN ACCESS TO THE EXISTING PUSH BUTTONS UNTIL PROPOSED RAMPS AND PROPOSED PEDESTRIAN SIGNALS ARE FULLY FUNCTIONAL.
4. THE REGULATORY SPEED IS 45 MPH ALONG DEAN RD. AND 25 MPH ON CURAMENG DR.

PHASE III

1. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN FDOT INDEX 603 & 604 (FOR PINEY POINT CIR.) 613, 615, & 616 (FOR DEAN ROAD). CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
2. MILL AND RESURFACE REMAINING PROJECT LIMITS PER CONSTRUCTION PLANS. INSTALL NEW SIGNAL LOOPS.
3. APPLY FINAL STRIPING.
4. THE REGULATORY SPEED IS 45 MPH ALONG DEAN RD. AND 25 MPH ON CURAMENG DR.







TYPICAL SECTION
PHASE 1
STA. 200+33.98 TO STA. 202+04.11
N.T.S.



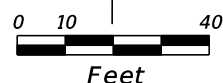
| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | TRAFFIC CONTROL PLANS DETAILS | SHEET NO. |
|-----------|-------------|------|-------------|----------------------------------|---|-------------------|-------------|--|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | | |
| | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | 25 | |

LEGEND

-  WORK AREA
-  WORK ZONE SIGN
-  CHANNELIZATION DEVICE
-  ADVANCE WARNING ARROW BOARD

**BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 199+09.24**

ROAD CLOSED



* CONTRACTOR TO SEQUENCE CONSTRUCTION IN THIS PHASE TO PROVIDE AT LEAST ONE OPEN SIDEWALK PATH AT ALL TIMES ONLY ONE SET OF R9-11 AND R9-9 SIGNS TO BE USED AT ANY TIME

CONTRACTOR MUST MAINTAIN ACCESS TO THIS AND ALL DRIVEWAYS AT ALL TIMES.

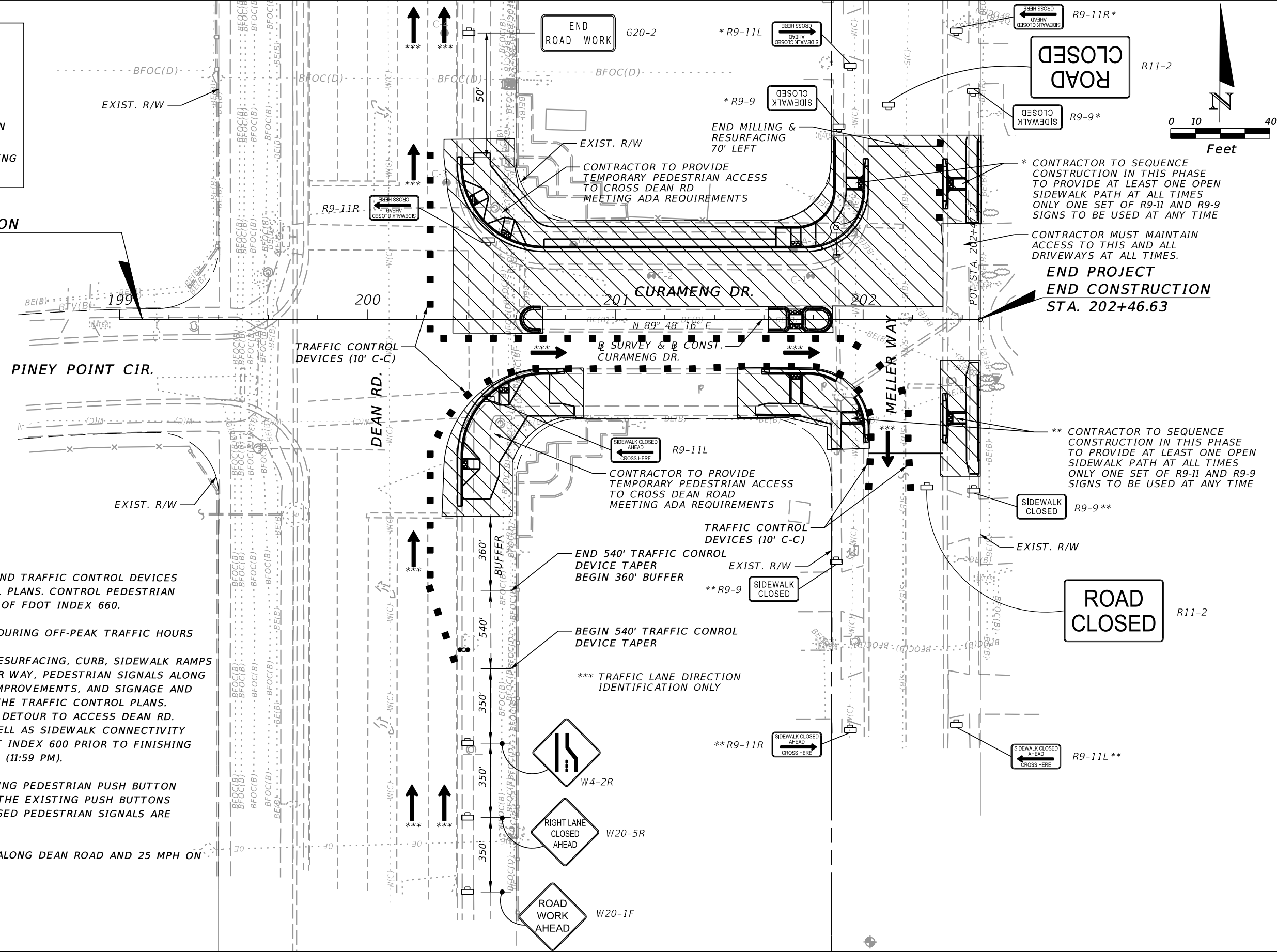
**END PROJECT
END CONSTRUCTION
STA. 202+46.63**

** CONTRACTOR TO SEQUENCE CONSTRUCTION IN THIS PHASE TO PROVIDE AT LEAST ONE OPEN SIDEWALK PATH AT ALL TIMES ONLY ONE SET OF R9-11 AND R9-9 SIGNS TO BE USED AT ANY TIME

ROAD CLOSED

PHASE 1, OPTION 1

1. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN THE TRAFFIC CONTROL PLANS. CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
2. CONSTRUCT THE FOLLOWING ITEMS DURING OFF-PEAK TRAFFIC HOURS (SATURDAY & SUNDAY): WIDENING AND MILL & OVERBUILD/RESURFACING, CURB, SIDEWALK RAMPS ALONG CURAMENG DRIVE AND MELLER WAY, PEDESTRIAN SIGNALS ALONG CURAMENG DRIVE, MEDIAN ISLAND IMPROVEMENTS, AND SIGNAGE AND DRAINAGE FEATURES AS SHOWN IN THE TRAFFIC CONTROL PLANS. TRAFFIC ON MELLER WAY SHALL USE DETOUR TO ACCESS DEAN RD. WESTBOUND CURAMENG DRIVE AS WELL AS SIDEWALK CONNECTIVITY MUST BE TO A STATE MEETING FDOT INDEX 600 PRIOR TO FINISHING WORK OPERATIONS SUNDAY EVENING (11:59 PM).
3. CONTRACTOR MUST MAINTAIN EXISTING PEDESTRIAN PUSH BUTTON SIGNALS AND MAINTAIN ACCESS TO THE EXISTING PUSH BUTTONS UNTIL PROPOSED RAMPS AND PROPOSED PEDESTRIAN SIGNALS ARE FULLY FUNCTIONAL.
4. THE REGULATORY SPEED IS 45 MPH ALONG DEAN ROAD AND 25 MPH ON CURAMENG DR.



| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT FLORIDA

TLP ENGINEERING CONSULTANTS, INC.
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL 32817
PH. 407-901-5060
ERIC L. WHITEHART, P.E. 70776
CERT. OF AUTH. #27205

DESIGN PLANS FOR:

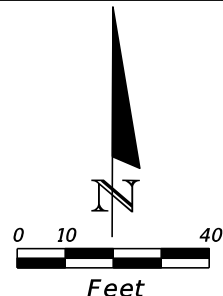
| | |
|----------------------------------|-------------|
| INTERSECTION IMPROVEMENTS | |
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

**TRAFFIC CONTROL PLAN
PHASE I, OPTION 1**

SHEET NO.
26

LEGEND

- WORK AREA
- WORK ZONE SIGN
- CHANNELIZATION DEVICE
- ADVANCE WARNING ARROW BOARD
- TRAFFIC CONTROL OFFICER (TCO)
- FLAGGER

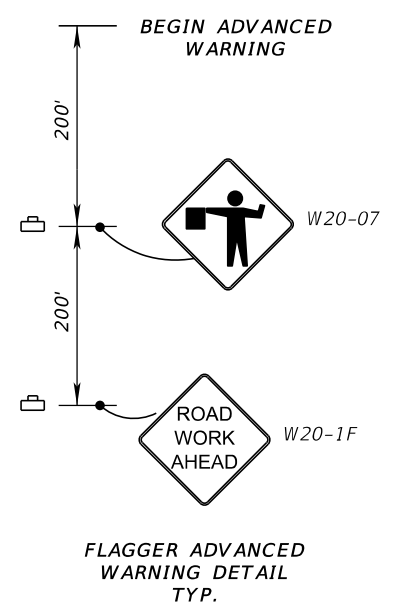
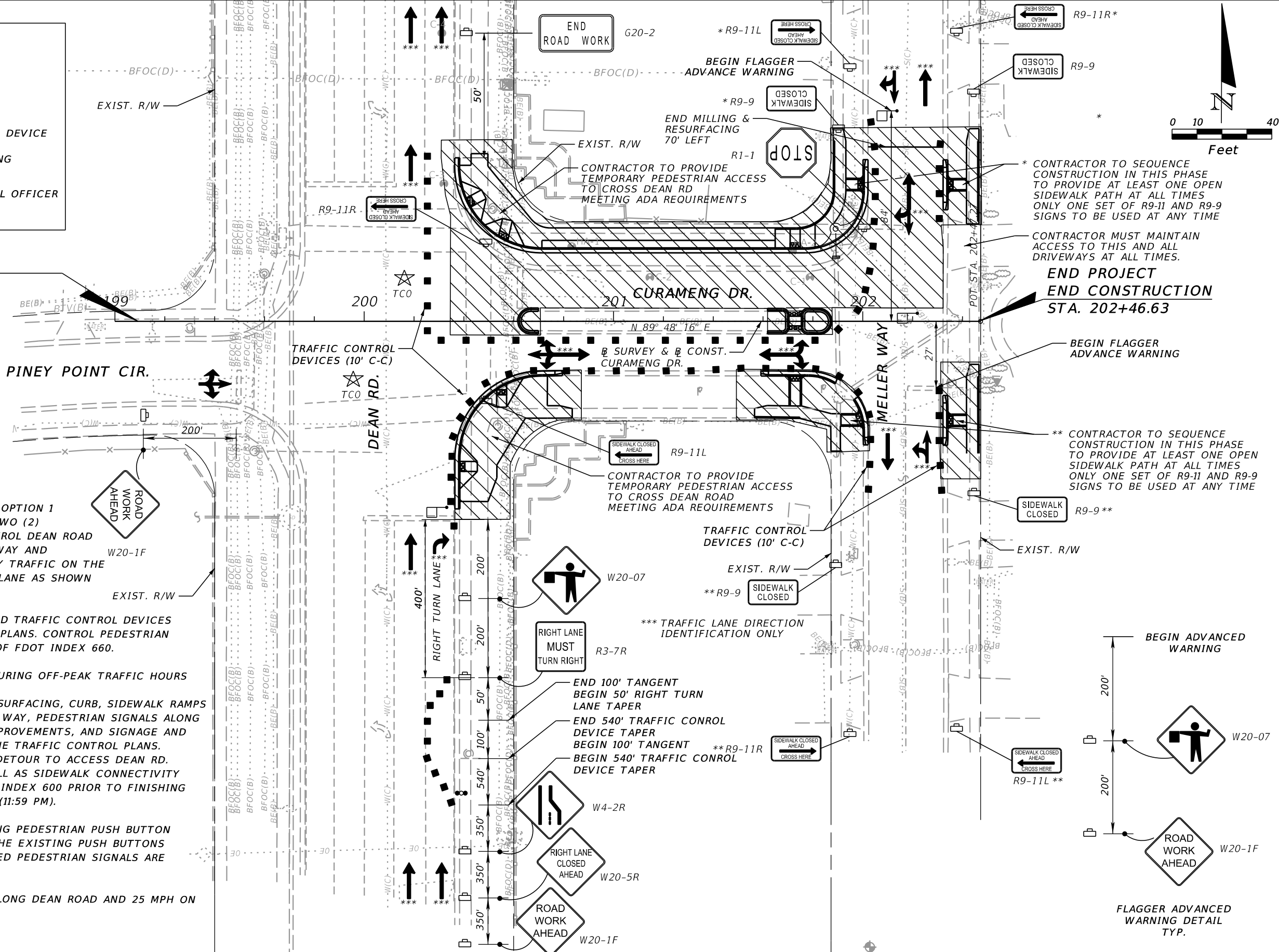


**BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 199+09.24**

**END PROJECT
END CONSTRUCTION
STA. 202+46.63**

PHASE 1, OPTION 2

1. AS AN ALTERNATIVE TO THE PHASE 1 OPTION 1 DETOUR, CONTRACTOR CAN UTILIZE TWO (2) TRAFFIC CONTROL OFFICERS TO CONTROL DEAN ROAD AND FLAGGERS TO CONTROL MELLER WAY AND CURAMENG DRIVE TO ALLOW TWO WAY TRAFFIC ON THE EXIST EASTBOUND CURAMENG DRIVE LANE AS SHOWN IN THIS PLAN SHEET.
2. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN THE TRAFFIC CONTROL PLANS. CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
3. CONSTRUCT THE FOLLOWING ITEMS DURING OFF-PEAK TRAFFIC HOURS (SATURDAY & SUNDAY): WIDENING AND MILL & OVERBUILD/RESURFACING, CURB, SIDEWALK RAMPS ALONG CURAMENG DRIVE AND MELLER WAY, PEDESTRIAN SIGNALS ALONG CURAMENG DRIVE, MEDIAN ISLAND IMPROVEMENTS, AND SIGNAGE AND DRAINAGE FEATURES AS SHOWN IN THE TRAFFIC CONTROL PLANS. TRAFFIC ON MELLER WAY SHALL USE DETOUR TO ACCESS DEAN RD. WESTBOUND CURAMENG DRIVE AS WELL AS SIDEWALK CONNECTIVITY MUST BE TO A STATE MEETING FDOT INDEX 600 PRIOR TO FINISHING WORK OPERATIONS SUNDAY EVENING (11:59 PM).
4. CONTRACTOR MUST MAINTAIN EXISTING PEDESTRIAN PUSH BUTTON SIGNALS AND MAINTAIN ACCESS TO THE EXISTING PUSH BUTTONS UNTIL PROPOSED RAMPS AND PROPOSED PEDESTRIAN SIGNALS ARE FULLY FUNCTIONAL.
5. THE REGULATORY SPEED IS 45 MPH ALONG DEAN ROAD AND 25 MPH ON CURAMENG DR.



| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT FLORIDA

TLP ENGINEERING CONSULTANTS, INC.
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL. 32817
PH. 407-901-5060
ERIC L. WHITEHART, P.E. 70776
CERT. OF AUTH. #27205

DESIGN PLANS FOR:





| | |
|---------------------------|-------------|
| INTERSECTION IMPROVEMENTS | |
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

**TRAFFIC CONTROL PLAN
PHASE I, OPTION II**

SHEET NO.
27

CONTRACTOR TO PROVIDE PEDESTRIAN GUIDANCE TO ALTERNATIVE SIDEWALK

LEGEND

-  WORK AREA
-  WORK ZONE SIGN
-  CHANNELIZATION DEVICE
-  ADVANCE WARNING ARROW BOARD

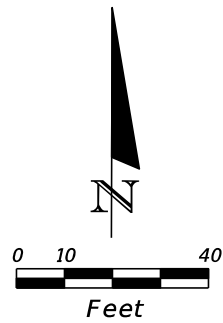
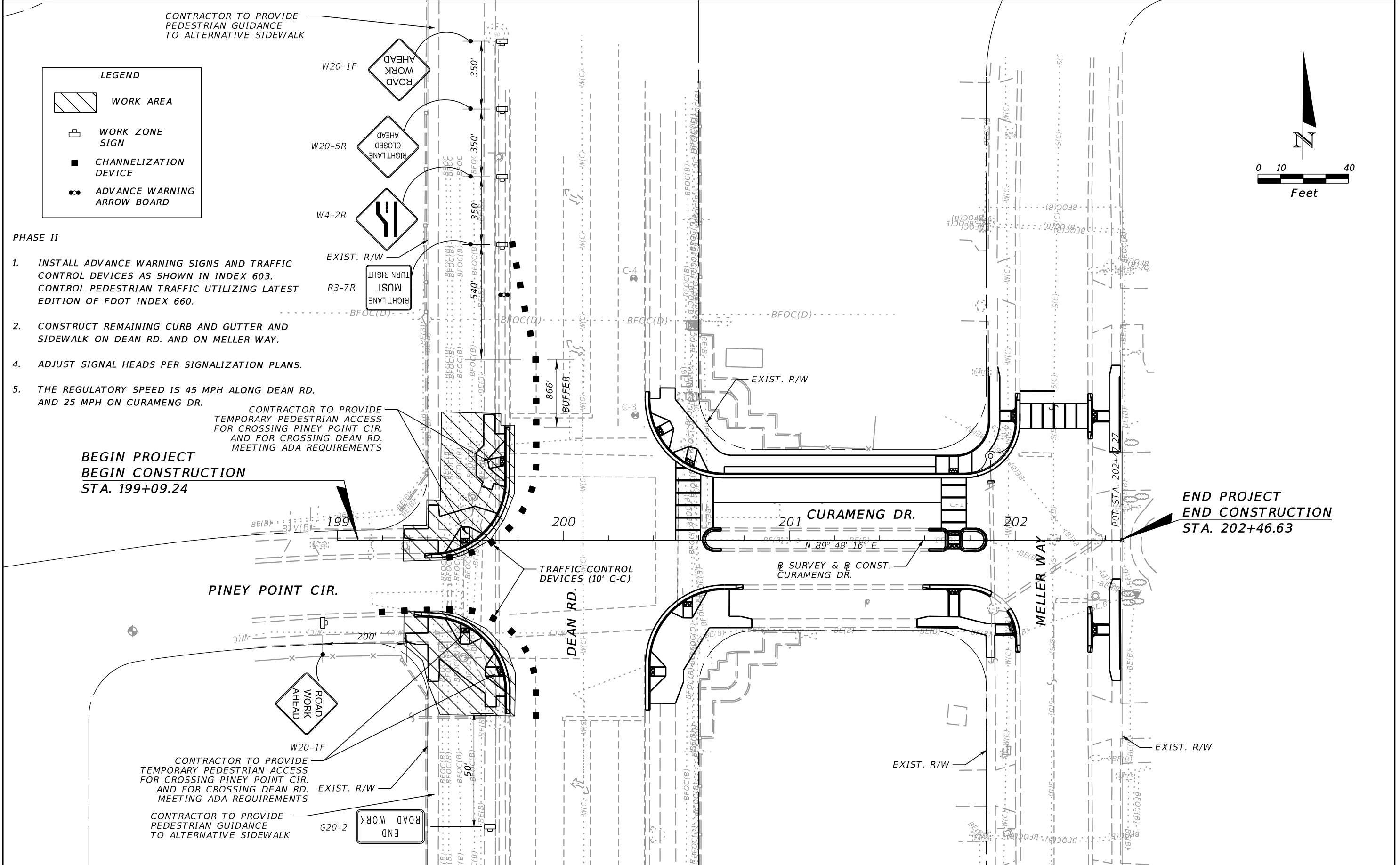
PHASE II

1. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN INDEX 603. CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
2. CONSTRUCT REMAINING CURB AND GUTTER AND SIDEWALK ON DEAN RD. AND ON MELLER WAY.
4. ADJUST SIGNAL HEADS PER SIGNALIZATION PLANS.
5. THE REGULATORY SPEED IS 45 MPH ALONG DEAN RD. AND 25 MPH ON CURAMENG DR.

**BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 199+09.24**

CONTRACTOR TO PROVIDE TEMPORARY PEDESTRIAN ACCESS FOR CROSSING PINEY POINT CIR. AND FOR CROSSING DEAN RD. MEETING ADA REQUIREMENTS

**END PROJECT
END CONSTRUCTION
STA. 202+46.63**



| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT





TLP ENGINEERING CONSULTANTS, INC.
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL 32817
PH. 407-901-5060
ERIC L. WHITEHART, P.E. 70776
CERT. OF AUTH. #27205

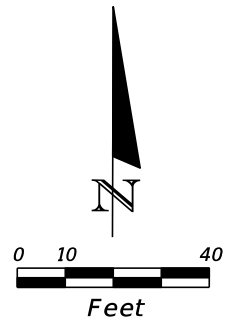
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|---------------------------|-------------|
| DESIGN PLANS FOR: | |
| INTERSECTION IMPROVEMENTS | |
| PROJECT NAME | PROJECT NO. |
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

**TRAFFIC CONTROL PLAN
PHASE II**

| |
|-----------|
| SHEET NO. |
| 28 |

LEGEND

-  WORK AREA
-  WORK ZONE SIGN
-  CHANNELIZATION DEVICE
-  ADVANCE WARNING ARROW BOARD



**BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 199+09.24**

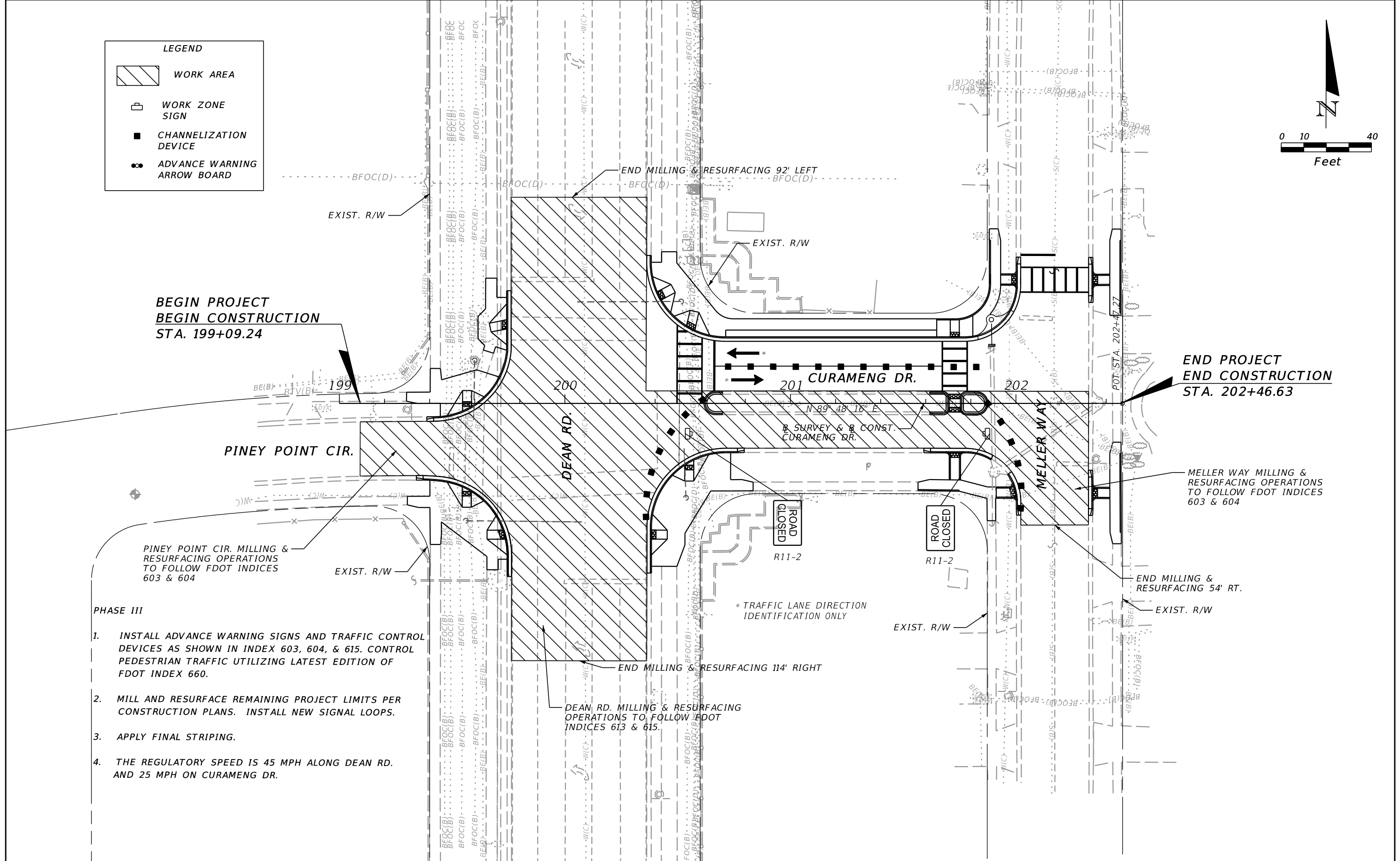
**END PROJECT
END CONSTRUCTION
STA. 202+46.63**

PINEY POINT CIR. MILLING & RESURFACING OPERATIONS TO FOLLOW FDOT INDICES 603 & 604

MELLER WAY MILLING & RESURFACING OPERATIONS TO FOLLOW FDOT INDICES 603 & 604

PHASE III

1. INSTALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN INDEX 603, 604, & 615. CONTROL PEDESTRIAN TRAFFIC UTILIZING LATEST EDITION OF FDOT INDEX 660.
2. MILL AND RESURFACE REMAINING PROJECT LIMITS PER CONSTRUCTION PLANS. INSTALL NEW SIGNAL LOOPS.
3. APPLY FINAL STRIPING.
4. THE REGULATORY SPEED IS 45 MPH ALONG DEAN RD. AND 25 MPH ON CURAMENG DR.



| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT FLORIDA

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ORLANDO, FL. 32817
PH. 407-901-5060
ERIC L. WHIKEHART, P.E. 70776
CERT. OF AUTH. #27205

| | |
|---|-------------------------|
| DESIGN PLANS FOR: INTERSECTION IMPROVEMENTS | |
| PROJECT NAME DEAN RD. AT CURAMENG DR. | PROJECT NO. CIP-2722 |

**TRAFFIC CONTROL PLAN
PHASE III**

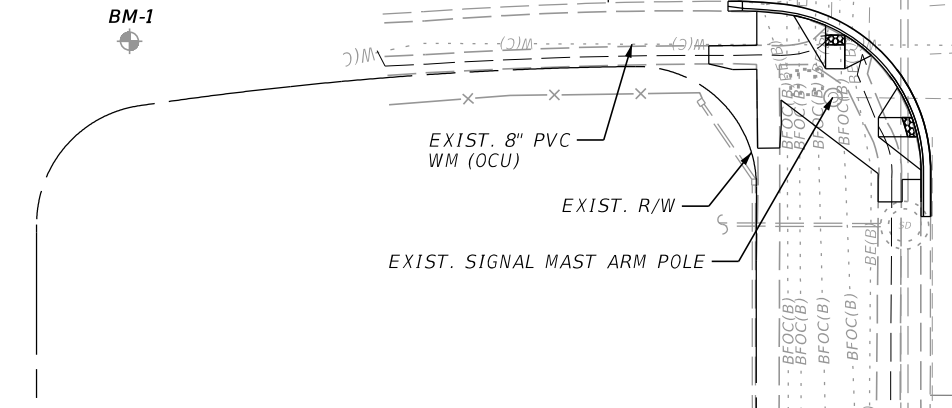
| |
|-----------------|
| SHEET NO. 29 |
|-----------------|

**BEGIN PROJECT
BEGIN CONSTRUCTION
STA. 199+09.24**

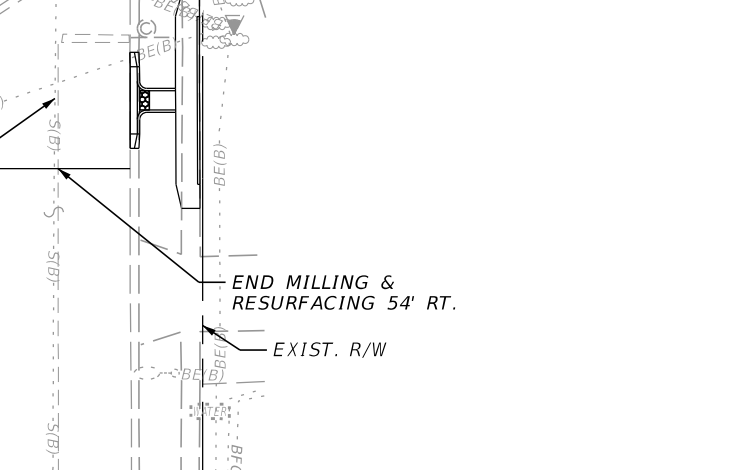
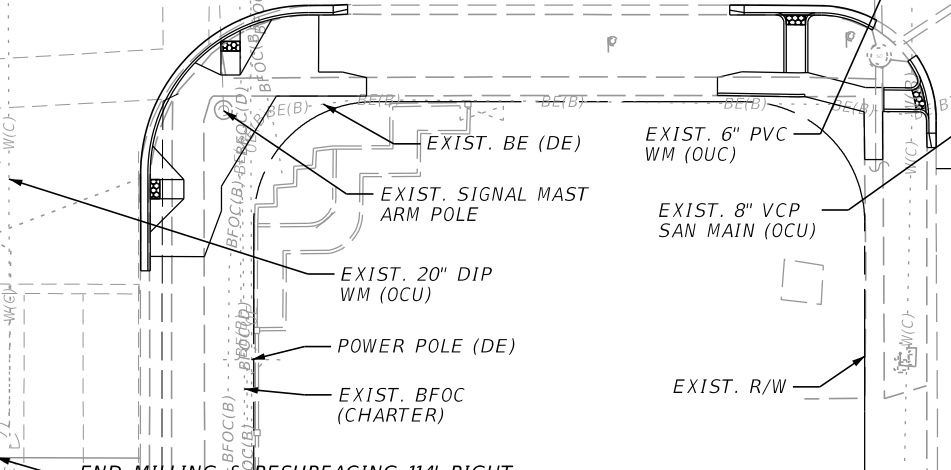
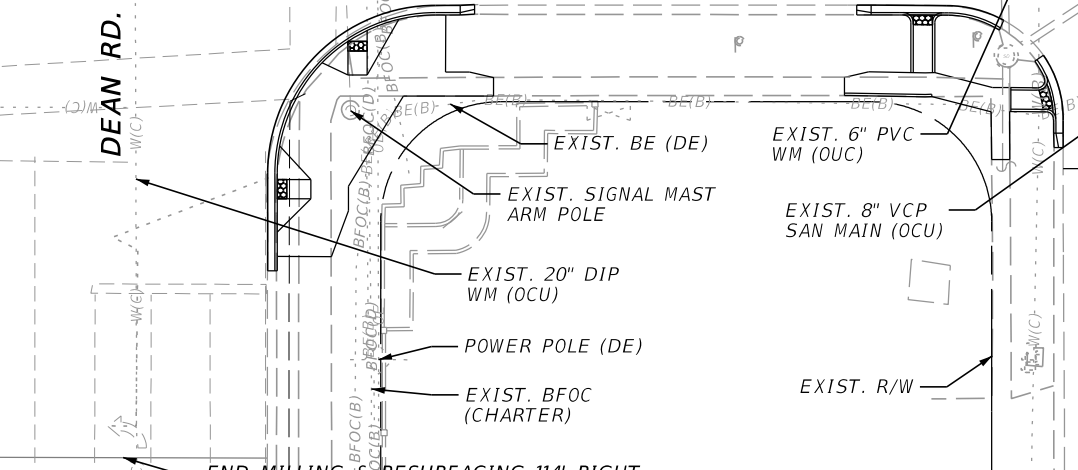
BM-1
NAIL & DISC
STA. 199+09.41, 40.31' RT.
EL. 73.82

BM-2
NAIL & DISC
STA. 202+02.84, 250.96' RT.
EL. 71.50

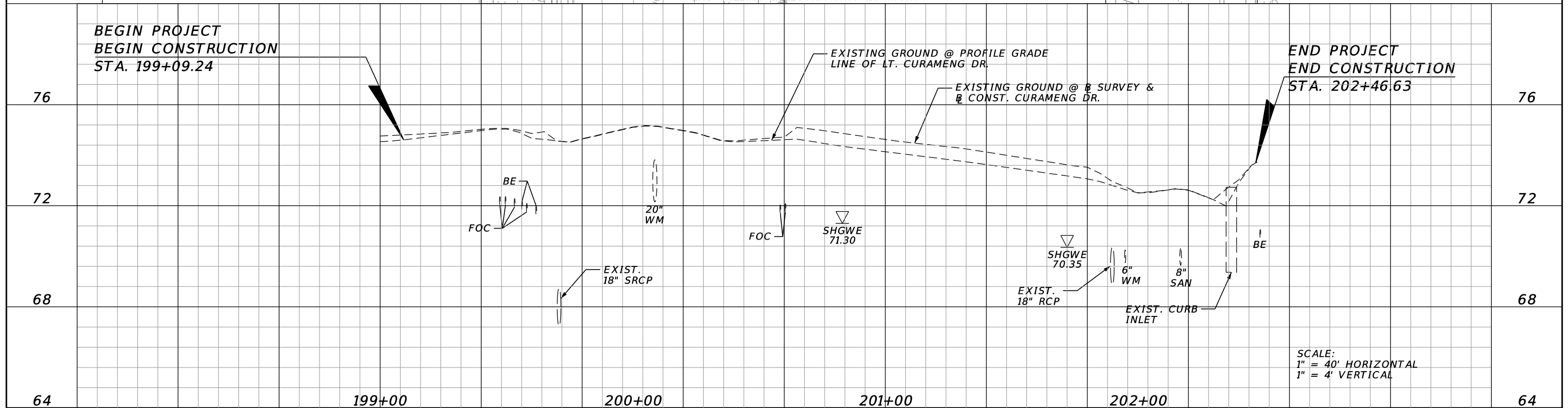
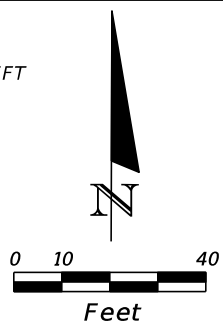
PINEY POINT CIR.



DEAN RD.



**END PROJECT
END CONSTRUCTION
STA. 202+46.63**



SCALE:
1" = 40' HORIZONTAL
1" = 4' VERTICAL

| REVISIONS | | | |
|-----------|-------------|------|-------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION |
| | | | |

ORANGE COUNTY GOVERNMENT FLORIDA

TLP ENGINEERING CONSULTANTS, INC.
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL 32817
PH. 407-901-5060
ERIC L. WHITEHART, P.E. 70776
CERT. OF AUTH. #27205

Tyler Renfro 2/8/2018 9:46:59 AM

DESIGN PLANS FOR:

INTERSECTION IMPROVEMENTS

| PROJECT NAME | PROJECT NO. |
|--------------------------|-------------|
| DEAN RD. AT CURAMENG DR. | CIP-2722 |

UTILITY ADJUSTMENT

SHEET NO. 30

ROADWAY SOILS SURVEY REPORT OF TESTS

TOWNSHIP: 24 SOUTH
RANGE: 31 EAST
SECTION: 9

PROJECT NO.: AEA PROJ. NO. 201304-9
ROAD NO.: DEAN ROAD AT CURAMENG DRIVE INTERSECTION IMPROVEMENTS
SUBMITTED BY: ANTILLIAN ENGINEERING ASSOCIATES, INC.

DATE OF SURVEY: 06/15/16
SURVEYED BY: ANTILLIAN ENGINEERING ASSOCIATES, INC.
SURVEY BEGINS STA. NO.:
SURVEY ENDS STA. NO.:
DATE REPORTED: 06/24/16

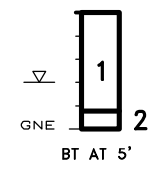
| STRATUM NO. | ORGANIC CONTENT | | | | SIEVE ANALYSIS RESULTS (% PASSING) | | | | | ATTERBERG LIMITS (%) | | | AASHTO GROUP | DESCRIPTION | CORROSION TEST RESULTS | | | | ENVIRONMENTAL CLASSIFICATION (SUBSTRUCTURE) | | |
|-------------|-----------------|--------------|-----------|--------------------|------------------------------------|----------|----------|----------|-----------|----------------------|--------------|--------------|--------------|-------------|---|--------------------|---------------|--------------|---|----------|-------|
| | LBR VALUE | NO. OF TESTS | % ORGANIC | MOISTURE CONTENT % | NO. OF TESTS | #10 MESH | #40 MESH | #60 MESH | #100 MESH | #200 MESH | NO. OF TESTS | LIQUID LIMIT | | | PLASTICITY INDEX | RESISTIVITY ohm-cm | CHLORIDES ppm | SULFATES ppm | pH | CONCRETE | STEEL |
| 1 | -- | -- | -- | -- | 3 | -- | -- | -- | -- | 3-6 | -- | -- | -- | A-3 | DARK GRAY, GRAYISH BROWN, BROWN AND PALE BROWN SAND | -- | -- | -- | -- | -- | -- |
| 2 | -- | -- | -- | -- | 3 | -- | -- | -- | -- | 12-22 | -- | -- | -- | A-2-4 | BROWN, GRAYISH BROWN AND VERY DARK BROWN SILTY SAND | -- | -- | -- | -- | -- | -- |

NOTES

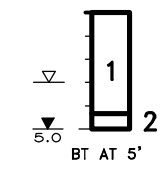
1. THE SYMBOL "--", IF PRESENT, REPRESENTS UNMEASURED SOIL PARAMETERS.
2. SOIL BOUNDARIES ARE APPROXIMATE AND REPRESENT SOIL STRATA AT EACH BORING LOCATION ONLY. ANY SUBSOIL CONNECTING LINES SHOWN ARE FOR ESTIMATING EARTHWORK ONLY AND DO NOT INDICATE ACTUAL STRATUM LIMITS. SUBSURFACE VARIATIONS BETWEEN BORINGS SHOULD BE ANTICIPATED AS INDICATED IN SECTION 2-4 OF THE FDOT STANDARD SPECIFICATIONS.
3. - ENCOUNTERED GROUNDWATER LEVEL AT THE TIME OF SURVAEY
4. - ESTIMATED HIGH GROUNDWATER LEVEL FOR PAVEMENT DESIGN PURPOSES ONLY.
5. GNE - GROUNDWATER NOT ENCOUNTERED
6. PLASTIC AND ORGANIC MATERIAL SHALL BE REMOVED IF ENCOUNTERED, IN ACCORDANCE WITH FDOT STANDARD INDEX 500.
7. ALL MATERIAL USED IN EMBANKMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH FDOT STANDARD INDEX 505.
8. SUBSURFACE VARIATIONS BETWEEN BORINGS SHOULD BE ANTICIPATED AS INDICATED IN SECTION 2-4 OF THE FDOT STANDARD SPECIFICATIONS.

| REVISIONS | | | | | | ENGINEER OF RECORD: | | LOGO: | SEAL: | ORANGE COUNTY PUBLIC WORKS DEPT. ENGINEERING DIVISION | | SHEET TITLE: | Drawing No. | | | |
|-----------|----|-------------|------|----|-------------|--|----------|----------------|---|--|--------------|--------------|------------------------------------|-----------------|---|-------------------------|
| Date | By | Description | Date | By | Description | Names | Dates | | | 4200 S. JOHN YOUNG PKWY. ORLANDO, FLORIDA 32839-9205 (407) 838-7950 | | PROJECT NAME | PROJECT NUMBER | REPORT OF TESTS | | |
| | | | | | | Drawn by | K.A.S. | 06/20/16 | ANTILLIAN ENGINEERING ASSOCIATES, INC. GEOTECHNICAL ENGINEERS CERTIFICATE OF AUTHORIZATION EB6685 | | PROJECT NAME | | DEAN RD. AT CURAMENG DR. INT. IMP. | XX | PROJECT NAME: DEAN ROAD AT CURAMENG DRIVE INTERSECTION IMPROVEMENTS | Index No. G-1 |
| | | | | | Checked by | P.G.S. | 06/20/16 | PROJECT NUMBER | | | | | | | | |
| | | | | | Designed by | | | | | | | | | | | |
| | | | | | Checked by | | | | | | | | | | | |
| | | | | | Approved by | | | | | ENGINEER OF RECORD: PETER G. SUAH, P.E. FLORIDA REG. NO. 46910 | | | | | | |
| | | | | | | ANTILLIAN ENGINEERING ASSOCIATES 3331 BARTLETT BOULEVARD ORLANDO, FLORIDA 32811 PHONE: (407) 422-1441 | | | | | | | | | | |

BORING:
APPROX. STATION: 200+83
APPROX. OFFSET: 30' LEFT
DATE DRILLED: 06/15/16
GSE: 74.30



BORING:
APPROX. STATION: 201+72
APPROX. OFFSET: 28' LEFT
DATE DRILLED: 06/15/16
GSE: 73.35



BORING:
APPROX. STATION:
APPROX. OFFSET:
DATE DRILLED:
GSE:



| STRATUM NO. | AASHTO SOIL CLASSIFICATION SYMBOL | DESCRIPTION |
|-------------|-----------------------------------|---|
| 1 | A-3 | DARK GRAY, GRAYISH BROWN, BROWN AND PALE BROWN SAND |
| 2 | A-2-4 | BROWN, GRAYISH BROWN AND VERY DARK BROWN SILTY SAND |

| REVISIONS | | | | | | ENGINEER OF RECORD: | | LOGO: | SEAL: | ORANGE COUNTY PUBLIC WORKS DEPT. ENGINEERING DIVISION | | SHEET TITLE: | Drawing No. | |
|-----------|----|-------------|------|----|-------------|---------------------|----------|----------|---|---|------------------------------------|--------------|---|---------------------------------|
| Date | By | Description | Date | By | Description | Names | Dates | | | 4200 S. JOHN YOUNG PKWY. ORLANDO, FLORIDA 32839-9205 (407) 838-7950 | | PROJECT NAME | PROJECT NUMBER | REPORT OF ROADWAY AUGER BORINGS |
| | | | | | | Drawn by | K.A.S. | 06/20/16 |  ANTILLIAN ENGINEERING ASSOCIATES, INC. GEOTECHNICAL ENGINEERS CERTIFICATE OF AUTHORIZATION EB6885 | | DEAN RD. AT CURAMENG DR. INT. IMP. | | PROJECT NAME: DEAN ROAD AT CURAMENG DRIVE INTERSECTION IMPROVEMENTS | G-2 |
| | | | | | Checked by | P.G.S. | 06/20/16 | XX | | | | | | |
| | | | | | Designed by | | | | | | | | | |
| | | | | | Checked by | | | | | | | | | |
| | | | | | Approved by | | | | | | | | | |



SURVEY CONTROL SHEETS

DEAN ROAD AT CURAMENG DRIVE

LYING IN SECTIONS 19 & 20, TOWNSHIP 22 SOUTH, RANGE 31 EAST

GENERAL NOTES

1. THIS CONTROL SURVEY WAS MADE FOR THE PURPOSE OF ESTABLISHING HORIZONTAL AND VERTICAL CONTROL FOR THE FOLLOWING LIMITS:
 - A. CUARMENG DRIVE FROM DEAN ROAD TO MELLER WAY.
 - B. DEAN ROAD FROM 200 FEET NORTH TO 200 FEET SOUTH OF CURAMENG DRIVE.
 - C. MELLER WAY FROM 210 FEET NORTH AND 170 FEET SOUTH OF CURAMENG DRIVE.
 - D. PINEY POINT CIRCLE FROM DEAN ROAD, WEST FOR 150 FEET

2. BEARINGS AND COORDINATES SHOWN HEREON ARE RELATIVE TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983/2011 ADJUSTMENT (NAD83/11), ZONE 901, FLORIDA EAST, WITH THE WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 20, TOWNSHIP 22 SOUTH, RANGE 31 EAST HAVING A BEARING OF NORTH 00°11'45" WEST.

3. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED FROM THE FOLLOWING ORANGE COUNTY BENCHMARKS:

A1504002
FOUND SQUARE CUT IN NORTHWEST SIDE OF 2.5' ROUND CONCRETE PAD FOR TRAFFIC LIGHT POST AT SOUTHEAST CORNER OF INTERSECTION OF DEAN ROAD AND CURAMENG DRIVE AND 55 FEET ± EAST OF THE CENTERLINE OF DEAN ROAD AND 40 FEET ± SOUTH OF THE CENTERLINE OF CURAMENG DRIVE.
PUBLISHED ELEVATION = 75.087 FEET (NAVD88)

A1504003
FOUND A 3 1/2" ORANGE COUNTY ALUMINUM DISK IN CONCRETE CURB INLET AT EAST RIGHT OF WAY OF DEAN ROAD 45 FEET ± EAST OF THE CENTERLINE OF DEAN ROAD AND 290 FEET ± SOUTH OF THE CENTERLINE OF CYPRESS GLEN DRIVE.
PUBLISHED ELEVATION = 74.252 FEET (NAVD88)

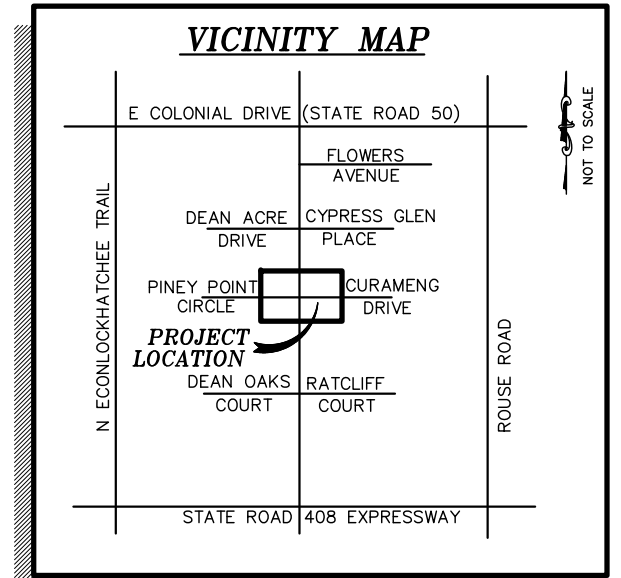
4. ALL RECORDING REFERENCES ON THIS SURVEY SHALL REFER TO THE PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA, UNLESS OTHERWISE NOTED.

5. UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER, THIS DRAWING, SKETCH, PLAT, OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

6. THE SURVEYOR HAS NOT ABSTRACTED THE LANDS SHOWN HEREON FOR EASEMENTS AND/OR RIGHT OF WAY RECORDS. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT.

| LEGEND & ABBREVIATIONS | |
|-----------------------------------|--|
| (C) = CALCULATED | L = LENGTH |
| ☉ = CENTERLINE | LT = LEFT |
| CCR = CERTIFIED CORNER RECORD | NAVD88 = NORTH AMERICAN VERTICAL DATUM OF 1988 |
| CB = CHORD BEARING | N: = NORTHING |
| CH = CHORD DISTANCE | NO. = NUMBER |
| CM = CONCRETE MONUMENT | ORB = OFFICIAL RECORDS BOOK |
| DB = DEED BOOK | (P) = PLAT |
| Δ = DELTA (CENTRAL ANGLE) | PB = PLAT BOOK |
| E: = EASTING | PG = PAGE |
| EL = ELEVATION | R = RADIUS |
| (F) = FIELD | RT = RIGHT |
| FND = FOUND | R/W = RIGHT OF WAY |
| ID = IDENTIFICATION | STA = STATION |
| IPC = IRON PIPE AND CAP | UE = UTILITY EASEMENT |
| IRC = IRON ROD AND CAP | |

| SHEET INDEX | |
|--------------------|-----------------------------|
| SHEET | CONTENTS |
| SV1 | COVER |
| SV2-SV4 | SURVEY CONTROL DETAIL SHEET |



PREPARED FOR:

ORANGE COUNTY PUBLIC WORKS
ENGINEERING DEPARTMENT
TLP ENGINEERING CONSULTANTS, INC.

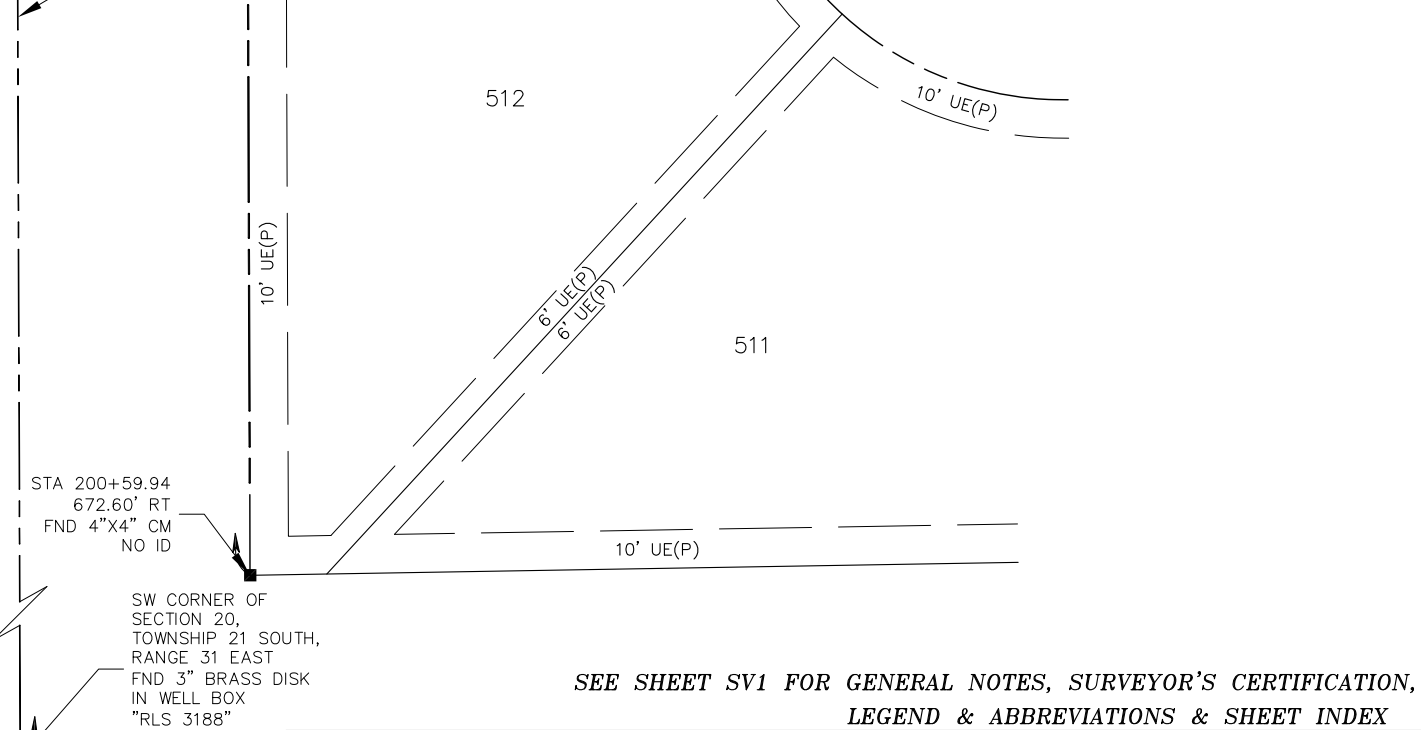
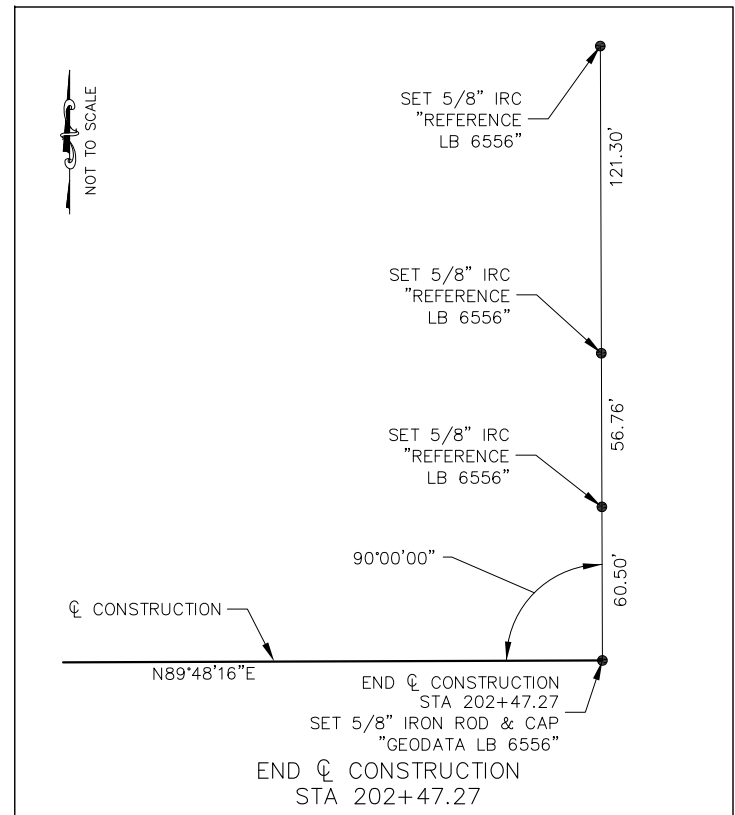
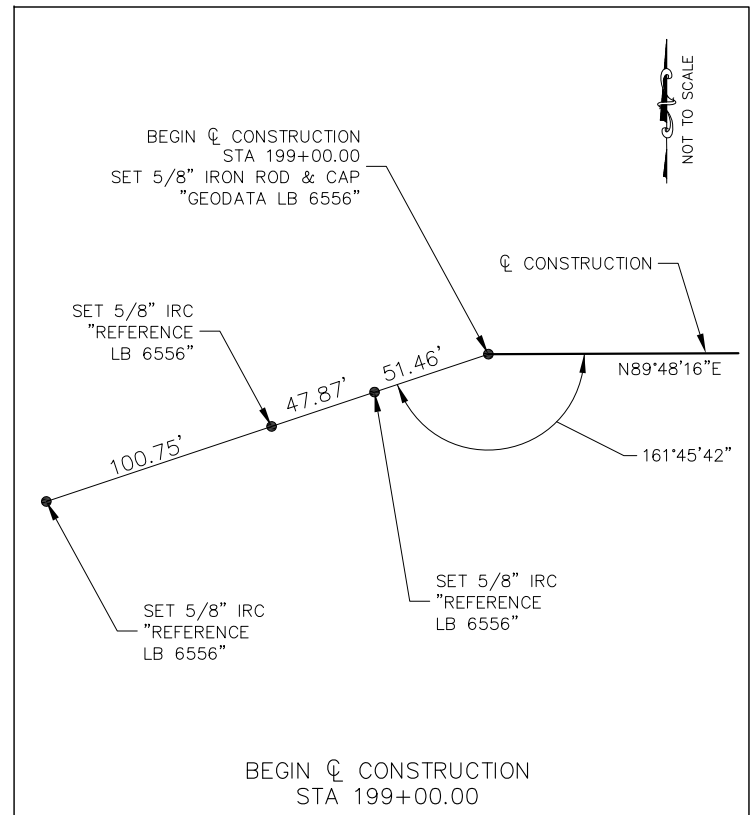
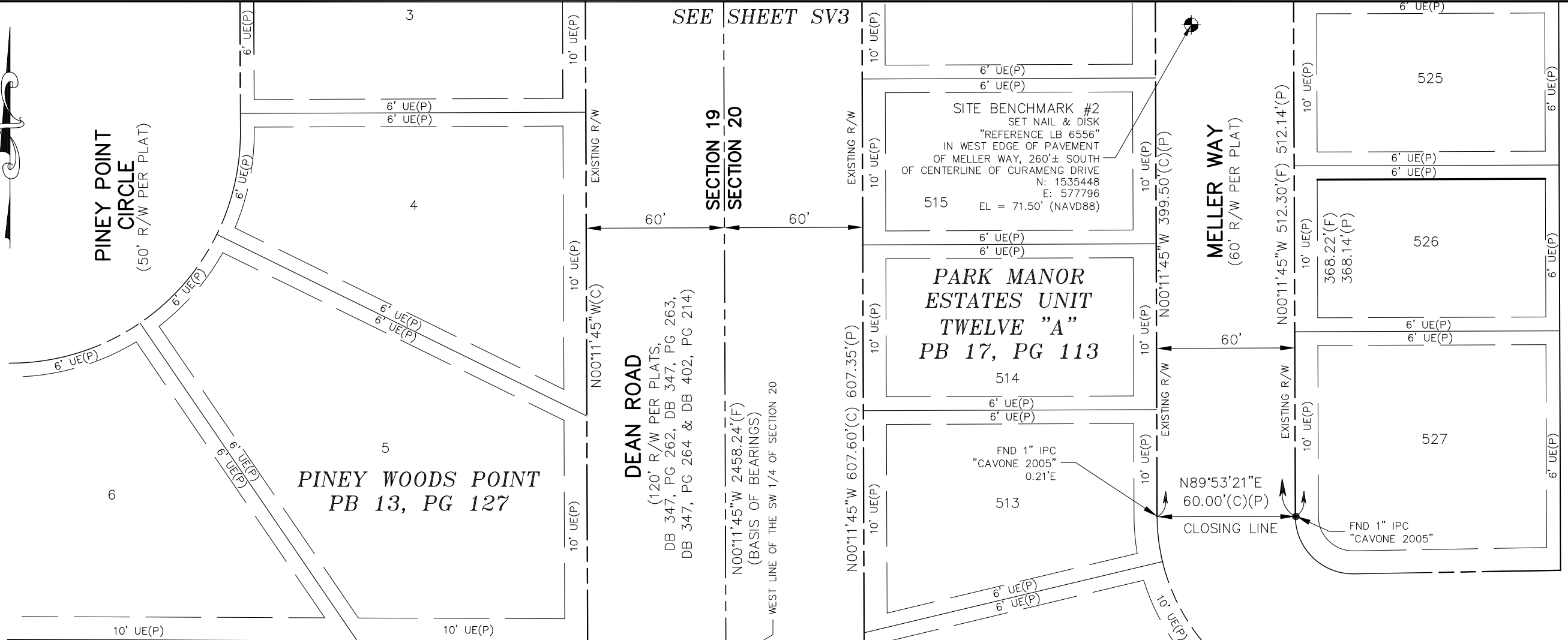
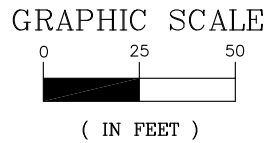
SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT A SURVEY OF THE PROPERTY SHOWN HEREON WAS MADE UNDER MY SUPERVISION AND THAT THE SURVEY MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 OF THE FLORIDA STATUTES AND THAT THE SKETCH HEREON IS A TRUE AND ACCURATE REPRESENTATION THEREOF TO THE BEST OF MY KNOWLEDGE AND BELIEF. SUBJECT TO NOTES AND NOTATIONS SHOWN

THIS _____ DAY OF _____, 20____

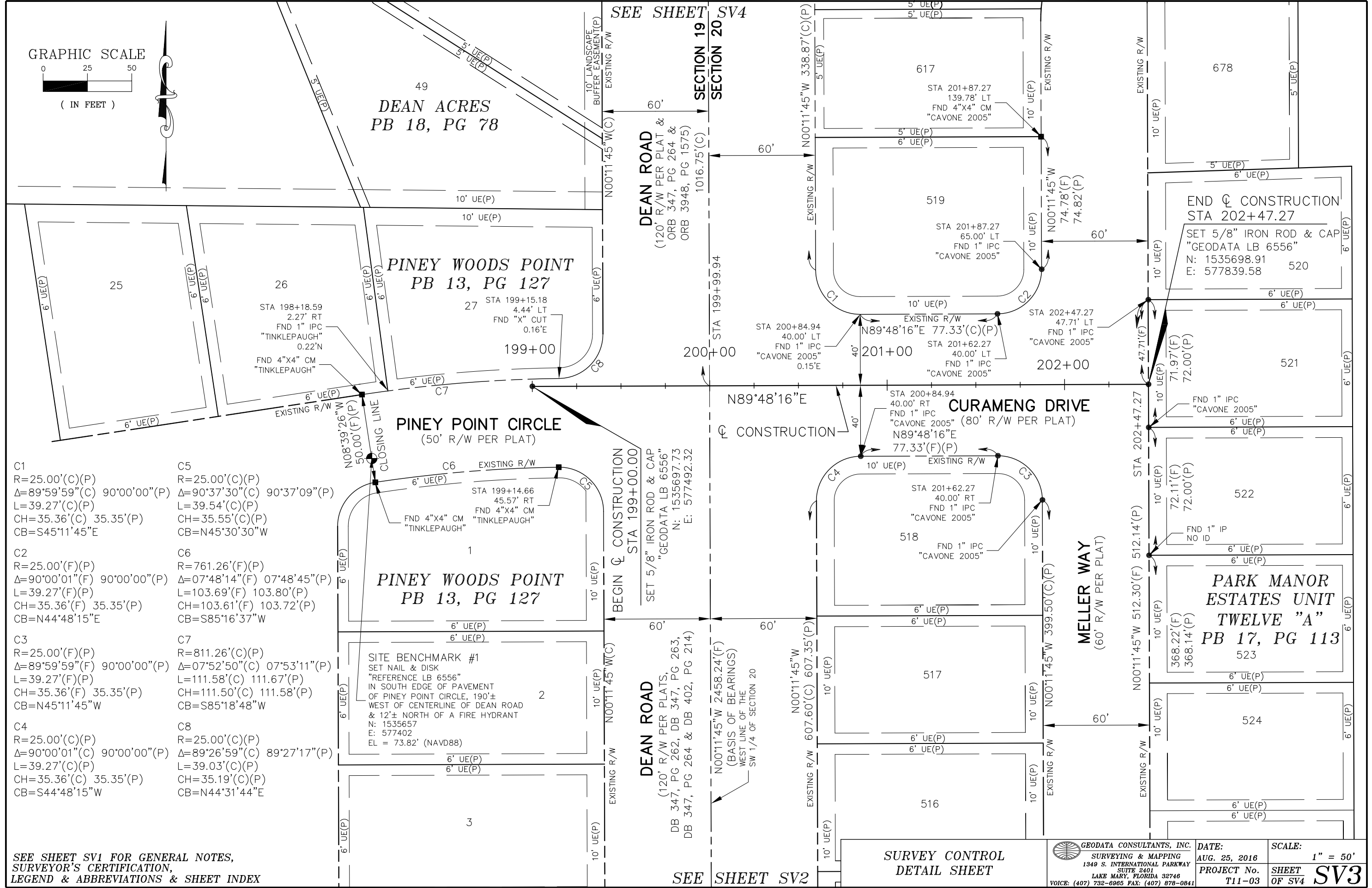
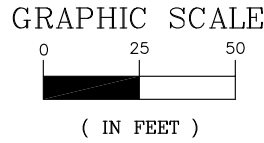
H. Paul deVivero, Professional Land Surveyor No. 4990
Land Surveyor Business License No. 6556
VALID ONLY WITH SIGNATURE AND EMBOSSED SEAL

| SURVEY CONTROL SHEET | | | |
|------------------------------------|-----|---|------------------------|
| MAPS PREPARED BY: | | GEODATA CONSULTANTS, INC. SURVEYING & MAPPING 1349 S. INTERNATIONAL PARKWAY SUITE 2401 LAKE MARY, FLORIDA 32746 VOICE: (407) 732-6985 FAX: (407) 878-0841 Land Surveyor Business License No. 6556 | |
| DESIGNED | BY | DATE | FIELD BOOK NO.'S |
| | RJH | AUG 2016 | 18/06 |
| DRAWN | PMM | AUG 2016 | ORANGE COUNTY |
| CHECKED | JMS | AUG 2016 | |
| DEAN ROAD AT CURAMENG DRIVE | | | |
| REVISION | BY | DATE | COVER SHEET SV1 OF SV4 |



SEE SHEET SV1 FOR GENERAL NOTES, SURVEYOR'S CERTIFICATION,
LEGEND & ABBREVIATIONS & SHEET INDEX

| | | | |
|--|---|-------------------------------|---------------------------|
| SURVEY CONTROL DETAIL SHEET | GEODATA CONSULTANTS, INC. SURVEYING & MAPPING 1349 S. INTERNATIONAL PARKWAY SUITE 2401 LAKE MARY, FLORIDA 32746 VOICE: (407) 732-6965 FAX: (407) 878-0841 | DATE: AUG. 25, 2016 | SCALE: 1" = 50' |
| | PROJECT No. T11-03 | SHEET OF SV4 | SV2 |



- C1
R=25.00'(C)(P)
Δ=89°59'59"(C) 90°00'00"(P)
L=39.27'(C)(P)
CH=35.36'(C) 35.35'(P)
CB=S45°11'45"E
- C2
R=25.00'(F)(P)
Δ=90°00'01"(F) 90°00'00"(P)
L=39.27'(F)(P)
CH=35.36'(F) 35.35'(P)
CB=N44°48'15"E
- C3
R=25.00'(F)(P)
Δ=89°59'59"(F) 90°00'00"(P)
L=39.27'(F)(P)
CH=35.36'(F) 35.35'(P)
CB=N45°11'45"W
- C4
R=25.00'(C)(P)
Δ=90°00'01"(C) 90°00'00"(P)
L=39.27'(C)(P)
CH=35.36'(C) 35.35'(P)
CB=S44°48'15"W
- C5
R=25.00'(C)(P)
Δ=90°37'30"(C) 90°37'09"(P)
L=39.54'(C)(P)
CH=35.55'(C)(P)
CB=N45°30'30"W
- C6
R=761.26'(F)(P)
Δ=07°48'14"(F) 07°48'45"(P)
L=103.69'(F) 103.80'(P)
CH=103.61'(F) 103.72'(P)
CB=S85°16'37"W
- C7
R=811.26'(C)(P)
Δ=07°52'50"(C) 07°53'11"(P)
L=111.58'(C) 111.67'(P)
CH=111.50'(C) 111.58'(P)
CB=S85°18'48"W
- C8
R=25.00'(C)(P)
Δ=89°26'59"(C) 89°27'17"(P)
L=39.03'(C)(P)
CH=35.19'(C)(P)
CB=N44°31'44"E

SEE SHEET SV1 FOR GENERAL NOTES,
SURVEYOR'S CERTIFICATION,
LEGEND & ABBREVIATIONS & SHEET INDEX

SEE SHEET SV2

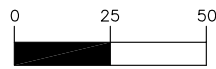
SURVEY CONTROL
DETAIL SHEET

GEODATA CONSULTANTS, INC.
SURVEYING & MAPPING
1349 S. INTERNATIONAL PARKWAY
SUITE 2401
LAKE MARY, FLORIDA 32746
VOICE: (407) 732-6965 FAX: (407) 878-0841

DATE:
AUG. 25, 2016
PROJECT No.
T11-03

SCALE:
1" = 50'
SHEET
OF SV4 SV3

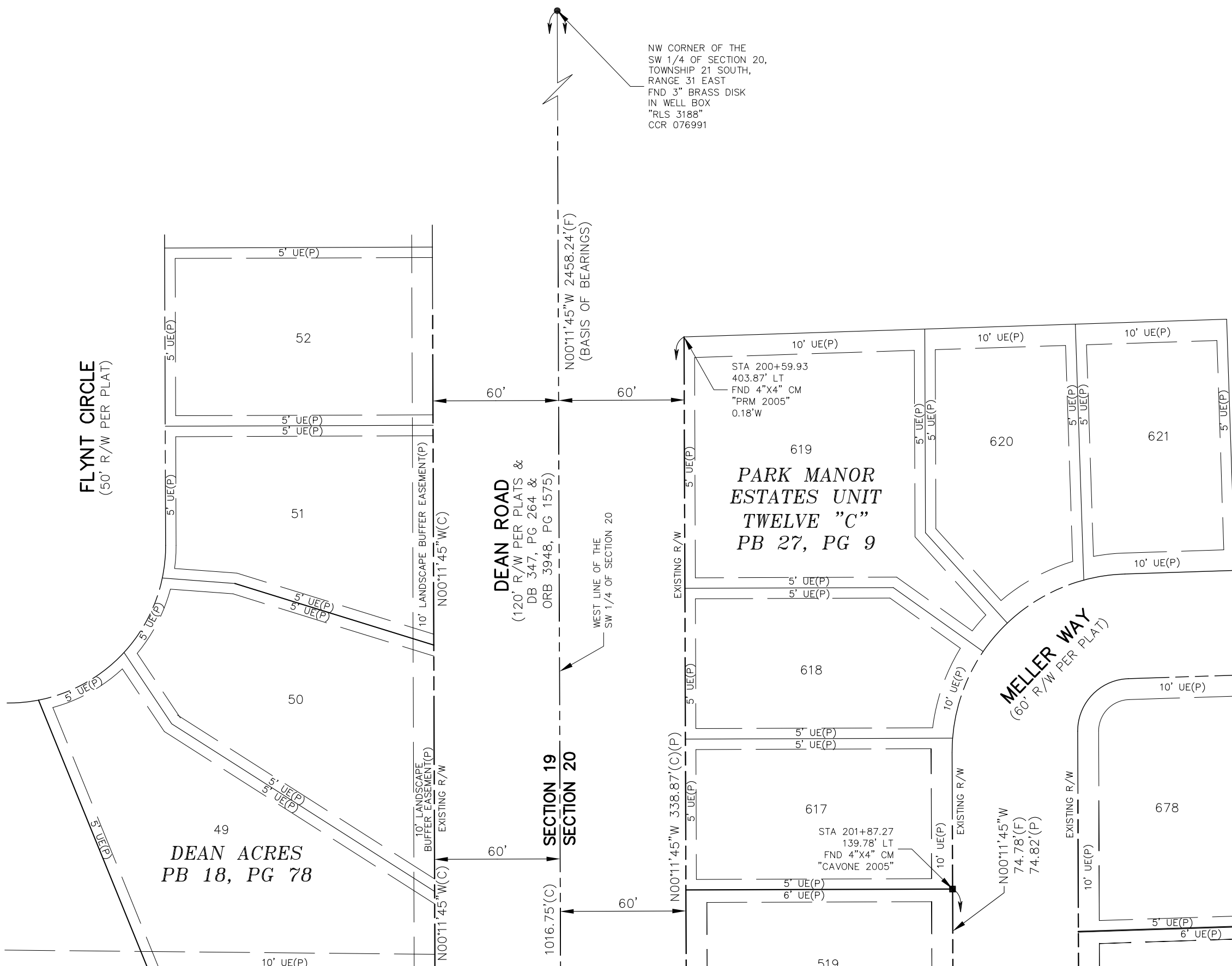
GRAPHIC SCALE



(IN FEET)



NW CORNER OF THE SW 1/4 OF SECTION 20, TOWNSHIP 21 SOUTH, RANGE 31 EAST
FND 3" BRASS DISK IN WELL BOX
"RLS 3188"
CCR 076991



SEE SHEET SV1 FOR GENERAL NOTES, SURVEYOR'S CERTIFICATION, LEGEND & ABBREVIATIONS & SHEET INDEX

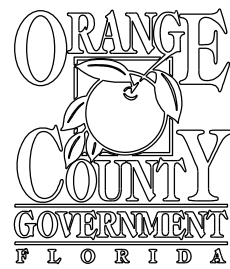
SEE SHEET SV3

SURVEY CONTROL
DETAIL SHEET

GEODATA CONSULTANTS, INC.
SURVEYING & MAPPING
1349 S. INTERNATIONAL PARKWAY
SUITE 2401
LAKE MARY, FLORIDA 32746
VOICE: (407) 732-6965 FAX: (407) 878-0841

DATE:
AUG. 25, 2016
PROJECT No.
T11-03

SCALE:
1" = 50'
SHEET
OF SV4 SV4

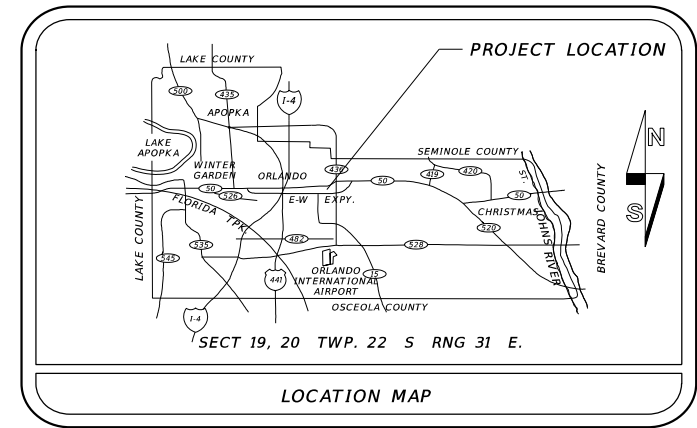


TERESA JACOBS, COUNTY MAYOR

BOARD OF COUNTY COMMISSIONERS

- | | |
|-----------------------|-----------------------|
| BETSY VANDERLEY | DISTRICT 1 |
| BRYAN NELSON | DISTRICT 2 |
| PETE CLARKE | DISTRICT 3 |
| JENNIFER THOMPSON | DISTRICT 4 |
| EMILY BONILLA | DISTRICT 5 |
| VICTORIA P. SIPLIN | DISTRICT 6 |
| MARK V. MASSARO, P.E. | PUBLIC WORKS DIRECTOR |

CONSTRUCTION PLANS FOR DEAN ROAD AT CURAMENG DRIVE INTERSECTION IMPROVEMENTS ORANGE COUNTY CIP NO. 2722 DISTRICT NO. 4 ORANGE COUNTY, FLORIDA



| UTILITIES ENCOUNTERED | |
|--|---------------|
| COMPANY NAME | TELEPHONE NO. |
| AT&T DISTRIBUTION | 407-351-8180 |
| BRIGHT HOUSE NETWORKS | 407-532-8509 |
| COMCAST CABLE COMMUNICATIONS (ORLANDO) | 352-315-8528 |
| DUKE ENERGY | 352-694-8521 |
| ORANGE COUNTY UTILITIES (OCU) | 407-254-9706 |

| INDEX OF SHEETS | |
|-----------------|-----------------------------------|
| SHEET | DESCRIPTION |
| S-1 | KEY SHEET |
| S-2 | GENERAL NOTES |
| S-3 | TABULATION OF QUANTITIES |
| S-4 | SIGNING AND PAVEMENT MARKING PLAN |
| | |
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**FINAL SUBMITTAL
JANUARY 26, 2018**

SIGNING & PAVEMENT MARKING

NOTE :

PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY CHANGE SINCE PLANS PREPARATION.

CERTIFICATION TO PLANS

I HEREBY CERTIFY THAT THE DESIGN FOR THIS PROJECT AND THE ATTACHED CONSTRUCTION PLANS COMPLY WITH THE REQUIREMENTS OF SECTION 336.045 OF THE FLORIDA STATUTES AND ARE IN SUBSTANTIAL CONFORMANCE WITH THE STANDARDS CONTAINED IN THE EDITION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" IN EFFECT ON THIS DATE AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO SUBSECTION 336.045(1) OF THE FLORIDA STATUTES.

DATE: JAN. 2018 ENGINEER: ERIC L. WHIKEHART, P.E. PE NO.: 70776

GOVERNING STANDARDS AND STANDARD SPECIFICATIONS :
FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM, DATED 2016 AND SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2016 AS AMENDED BY CONTRACT DOCUMENTS.

PREPARED BY:

TLP ENGINEERING CONSULTANTS, INC.
11486 CORPORATE BLVD., SUITE 151
ORLANDO, FL. 32817
PHONE: 407-901-5060
CERT. OF AUTH. #27205

| REVISIONS | DATE | BY |
|-----------|------|----|
| | | |
| | | |
| | | |
| | | |

DESIGNED BY: TDR DATE: JAN. 2017
CHECKED BY: ELW DATE: SEPT. 2017
APPROVED BY: YMM DATE: SEPT. 2017

SHEET S-1
OF S-4

SIGNING & PAVEMENT MARKING GENERAL NOTES

1. SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DESIGN STANDARDS. DATED 2016. AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION.
2. SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE PROJECT ENGINEER. SIGNS SHALL BE REPLACED AT THEIR ORIGINAL LOCATIONS UNLESS OTHERWISE NOTED IN THE PLANS.
3. ALL EXISTING SIGNS TO BE REMOVED MUST BE FREE OF DAMAGE AND DELIVERED TO AN AREA DESIGNATED BY THE OWNER'S AUTHORIZED REPRESENTATIVE FOR PROPER STORAGE.
4. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGNS ARE DAMAGED BEYOND USE, AS DETERMINED BY THE PROJECT MANAGER. SIGNS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
5. ALL SURFACES SHALL BE CLEANED PRIOR TO THE START OF INSTALLATION OF ALL PAVEMENT MARKINGS.
6. ALL PAVEMENT MARKINGS SHALL BE APPLIED BEFORE REELECTIVE PAVEMENT MARKERS ARE APPLIED.
7. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH HORIZONTAL CLEARANCES (CLEAR ZONES) AS SPECIFIED BY FDOT.
8. FOR REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS, REFER TO FDOT DESIGN STANDARDS. INDEX NO 17352.
9. BITUMINOUS ADHESIVE SHALL BE USED TO SET REFLECTIVE PAVEMENT MARKERS ON ALL ASPHALT PAVEMENTS.
10. CAUTION SHOULD BE EXERCISED IN THE INSTALLATION OF POST MOUNTED ROADSIDE SIGNS IN ORDER TO PREVENT DAMAGE TO BURIED UTILITIES. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITIES 48 HOURS PRIOR TO ANY EXCAVATION FOR UTILITY LOCATES AND PROTECTION.
11. IT SHALL BE THE THE CONTRACTOR'S RESPONSIBILITY TO RECORD AND REPLACE THE EXISTING PAVEMENT MARKINGS AND DELINEATORS UNLESS OTHERWISE NOTED IN THE PLANS. ALL MARKINGS AND DELINEATORS SHALL BE REPLACED AT THEIR ORIGINAL LOCATIONS UNLESS NOTED AS OTHERWISE IN THE PLANS.
12. ALL EXISTING SIGNS ARE TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS.
13. SIGNS SHALL BE CONSTRUCTED WITH TYPE Xi (DG3) REFLECTIVE SHEETING.
14. SIGN POSTS SHALL BE A MINIMUM 14 GAUGE 2' X 2' SQUARE WELDED STEEL WITH 3/8" KNOCKOUTS ON 1" CENTERS ON ALL FOUR SIDES. THE POSTS SHALL BE GALVANIZED AND SEALED WITH A POLYMER TOPCOAT.
15. IF THE CONTRACTOR USES SEGMENTAL TEMPLATES TO PLACE DIRECTIONAL ARROWS, OR PAVEMENT MESSAGES ALL SEGMENTS SHALL BE CLOSED TO FORM ONE-PIECE COMPONENTS PER STANDARD INDEX 17346.
16. MATCH EXISTING PAVEMENT MARKINGS AT THE BEGINNING AND AT THE END OF THE PROJECT LIMITS.
17. CROSSWALKS SHALL BE 10 WIDE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

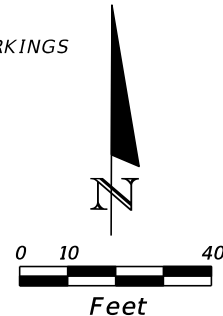
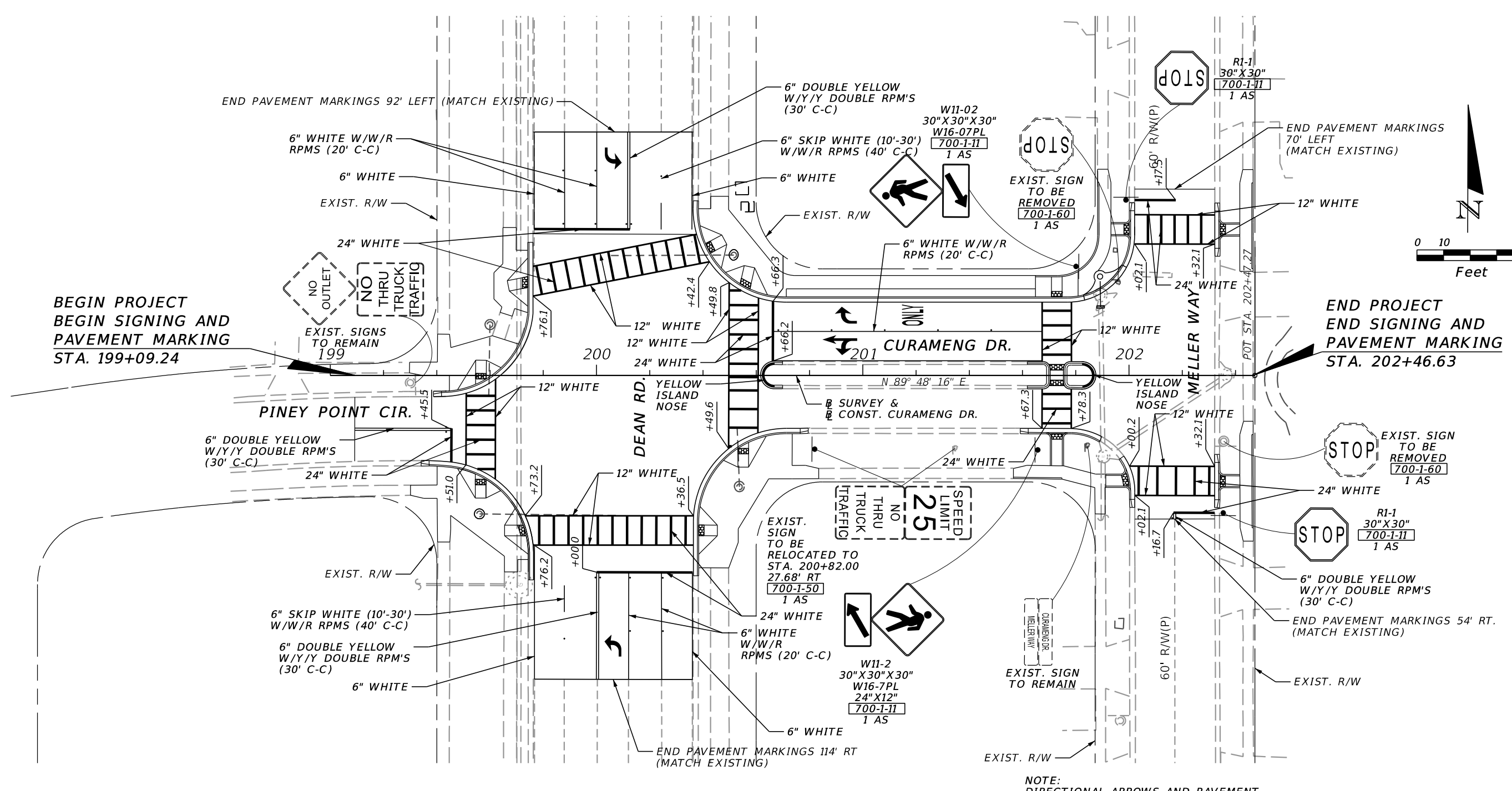
| REVISIONS | | | |  | DESIGN PLANS FOR: | | SIGNING & PAVEMENT MARKING GENERAL NOTES | SHEET NO. |
|-----------|-------------|------|-------------|---|-----------------------------|-------------|---|--------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | PROJECT NAME | PROJECT NO. | | S-2 |
| | | | | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DEAN RD. AT CURAMENG DR. | CIP-2722 | | |

TABULATION OF QUANTITIES

| PAY ITEM NO. | DESCRIPTION | UNIT | SHEET NUMBERS | | | | | | | | | | | | | | | | TOTAL THIS SHEET | | GRAND TOTAL | | REF. SHEET |
|--------------|--|------|---------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------------------|-------|-------------|--|------------|
| | | | 5-4 | | | | | | | | | | | | | | PLAN | FINAL | PLAN | FINAL | | | |
| | | | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | | | | | | | |
| 700-1-11 | SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF | AS | 4 | | | | | | | | | | | | | | | 4 | | 4 | | | |
| 700-1-50 | SINGLE POST SIGN, RELOCATE | AS | 1 | | | | | | | | | | | | | | | 1 | | 1 | | | |
| 700-1-60 | SINGLE POST SIGN, REMOVED | AS | 2 | | | | | | | | | | | | | | | 2 | | 2 | | | |
| 706-3* | RPM'S (WHITE/RED) & (YELLOW/YELLOW) TOTAL | EA | 25 | | | | | | | | | | | | | | | 25 | | 25 | | | |
| * | (WHITE/RED) | EA | 15 | | | | | | | | | | | | | | | 15 | | 15 | | | |
| * | (YELLOW/YELLOW) | EA | 10 | | | | | | | | | | | | | | | 10 | | 10 | | | |
| 710-11-290 | PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE | SF | 20 | | | | | | | | | | | | | | | 20 | | 20 | | | |
| 710-90** | PAINTED PAVEMENT MARKINGS (FINAL SURFACE) | LS | 1 | | | | | | | | | | | | | | | 1 | | 1 | | | |
| 711-11-111 | THERMOPLASTIC, STANDARD, WHITE (6") | LF | 502 | | | | | | | | | | | | | | | 502 | | 502 | | | |
| 711-11-123 | THERMOPLASTIC, STANDARD, WHITE (12") | LF | 633 | | | | | | | | | | | | | | | 633 | | 633 | | | |
| 711-11-125 | THERMOPLASTIC, STANDARD, WHITE (24") | LF | 658 | | | | | | | | | | | | | | | 658 | | 658 | | | |
| 711-11-160 | THERMOPLASTIC, STANDARD, WHITE, MESSAGES | EA | 1 | | | | | | | | | | | | | | | 1 | | 1 | | | |
| 711-11-170 | THERMOPLASTIC, STANDARD, WHITE, ARROWS | EA | 4 | | | | | | | | | | | | | | | 4 | | 4 | | | |
| 711-11-211 | THERMOPLASTIC, STANDARD, YELLOW, SOLID (6") | LF | 227 | | | | | | | | | | | | | | | 227 | | 227 | | | |
| 711-15-131 | THERMOPLASTIC, STANDARD, WHITE, SKIP/DOTTED (6") | LF | 10 | | | | | | | | | | | | | | | 10 | | 10 | | | |
| ** | RPM'S (WHITE/RED) & (YELLOW/YELLOW) TOTAL | EA | 25 | | | | | | | | | | | | | | | 25 | | 25 | | | |
| ** | (WHITE/RED) | EA | 15 | | | | | | | | | | | | | | | 15 | | 15 | | | |
| ** | (YELLOW/YELLOW) | EA | 10 | | | | | | | | | | | | | | | 10 | | 10 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, WHITE (6") | LF | 502 | | | | | | | | | | | | | | | 502 | | 502 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, WHITE (12") | LF | 633 | | | | | | | | | | | | | | | 633 | | 633 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, WHITE (24") | LF | 658 | | | | | | | | | | | | | | | 658 | | 658 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, MESSAGES | EA | 1 | | | | | | | | | | | | | | | 1 | | 1 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ARROWS | EA | 4 | | | | | | | | | | | | | | | 4 | | 4 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, SOLID (6") | LF | 227 | | | | | | | | | | | | | | | 227 | | 227 | | | |
| ** | PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, SKIP/DOTTED (6") | LF | 10 | | | | | | | | | | | | | | | 10 | | 10 | | | |

** THESE QUANTITIES ARE PAID FOR UNDER PAINTED PAVEMENT MARKINGS (FINAL SURFACE) LUMP SUM ITEM NO. 710-90. THE QUANTITIES ARE FOR ONE APPLICATION; SEE SPECIFICATION 710 FOR THE NUMBER OF APPLICATIONS REQUIRED.

| REVISIONS | | | | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | TABULATION OF QUANTITIES | SHEET NO. S-3 |
|-----------|-------------|------|-------------|---|---------------------------|--|--------------------------|----------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | INTERSECTION IMPROVEMENTS | | | |
| | | | | PROJECT NAME | PROJECT NO. | | | |
| | | | | DEAN RD. AT | CIP-2722 | | | |
| | | | | CURAMENG DR. | | | | |




NOTE:
DIRECTIONAL ARROWS AND PAVEMENT
MESSAGES PER INDEX 17346 (TYP.)

| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | TLP ENGINEERING CONSULTANTS, INC. 11486 CORPORATE BLVD., SUITE 151 ORLANDO, FL. 32817 PH. 407-901-5060 ERIC L. WHIKEHART, P.E. 70776 CERT. OF AUTH. #27205 | DESIGN PLANS FOR: | | SIGNING & PAVEMENT MARKING PLAN SHEET | SHEET NO. S-4 |
|-----------|-------------|------|-------------|----------------------------------|---|-----------------------------|-------------|--|------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | | |
| | | | | | | DEAN RD. AT CURAMENG DR. | CIP-2722 | | |

TABULATION OF QUANTITIES

| ITEM NO. | DESCRIPTION | UNIT | SHEET NUMBERS | | | | | | | | | | | | | | | | |
|------------|---|------|---------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|
| | | | T-4 | | | | | | | | | | | | | | | | |
| | | | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | |
| 603-1 | | LS | | | | | | | | | | | | | | | | | |
| 630-2-11* | CONDUIT, FURNISH & INSTALL, OPEN TRENCH | LF | 213 | | | | | | | | | | | | | | 213 | | 213 |
| 632-7-1* | SIGNAL CABLE - NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL | PI | 1 | | | | | | | | | | | | | | 1 | | 1 |
| 635-2-11* | PULL& SPLICE BOX, F&I, 13"X24" COVER SIZE | EA | 3 | | | | | | | | | | | | | | 3 | | 3 |
| 646-1-11* | ALUMINUM SIGNALS POLE, PEDESTAL | EA | 6 | | | | | | | | | | | | | | 6 | | 6 |
| 646-1-60* | ALUMINUM SIGNALS POLE, REMOVE | EA | 1 | | | | | | | | | | | | | | 1 | | 1 |
| 653-1-11* | PEDESTRIAN SIGNAL, FURNISH & INSTALL, LED COUNTDOWN, 1 WAY | AS | 8 | | | | | | | | | | | | | | 8 | | 8 |
| 653-1-60* | PEDESTRIAN SIGNAL, REMOVE PED SIGNAL, - POLE/PEDESTAL TO REMAIN | AS | 7 | | | | | | | | | | | | | | 7 | | 7 |
| 660-1-103* | LOOP DETECTOR, INDUCTIVE, F&I, TYPE 3 | EA | 1 | | | | | | | | | | | | | | 1 | | 1 |
| 660-2-106* | LOOP ASSEMBLY, F&I, TYPE F | AS | 5 | | | | | | | | | | | | | | 5 | | 5 |
| 665-1-11* | PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD | EA | 8 | | | | | | | | | | | | | | 8 | | 8 |
| 665-1-60* | PEDESTRIAN DETECTOR, REMOVE - POLE/PEDESTAL TO REMAIN | EA | 7 | | | | | | | | | | | | | | 7 | | 7 |
| 671-2-40* | TRAFFIC CONTROLLER, MODIFY | EA | 1 | | | | | | | | | | | | | | 1 | | 1 |
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*NOTE: COST OF SIGNALIZATION PAY ITEMS SHALL BE INCLUDED IN LUMP SUM PAY ITEM 603-1.

| <p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> | | | | DATE | DESCRIPTION | DATE | DESCRIPTION | | | | |  <p>VHB 225 E. ROBINSON ST., SUITE 300 LANDMARK CENTER TWO ORLANDO, FL 32801 PH. 407-839-4006 KATHRYN L. LEE, P.E. 62420 CERT. OF AUTH. #3932</p> | | <p>DESIGN PLANS FOR:</p> <p>INTERSECTION IMPROVEMENTS</p> <table border="1"> <thead> <tr> <th>PROJECT NAME</th> <th>PROJECT NO.</th> </tr> </thead> <tbody> <tr> <td>DEAN RD. AT CURAMENG DR.</td> <td>CIP 2722</td> </tr> </tbody> </table> | | PROJECT NAME | PROJECT NO. | DEAN RD. AT CURAMENG DR. | CIP 2722 | <p>TABULATION OF QUANTITIES</p> | | <p>SHEET NO.</p> <p>T-2</p> |
|--|-------------|------|-------------|------|-------------|------|-------------|--|--|--|--|--|--|---|--|--------------|-------------|-----------------------------|----------|--|--|-----------------------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | | | | | | | | | | | | | | | | | |
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| PROJECT NAME | PROJECT NO. | | | | | | | | | | | | | | | | | | | | | |
| DEAN RD. AT CURAMENG DR. | CIP 2722 | | | | | | | | | | | | | | | | | | | | | |

1. THE SIGNALIZATION PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION'S DESIGN STANDARDS, DATED 2016. GOVERNING SPECIFICATIONS ARE THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2016, AND SUPPLEMENTS THERETO IF NOTED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.

2. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OR THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND PRIOR TO ANY FURTHER WORK ACTIVITY.

3. WHENEVER SIGNAL WORK IS BEING PERFORMED AT AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING NEW SIGNAL EQUIPMENT, INSTALLING LOOPS AND RUNS) WHERE A LANE IS CLOSED AN OFF-DUTY LAW ENFORCEMENT OFFICER SHALL DIRECT TRAFFIC. THE COST OF THE OFF-DUTY LAW ENFORCEMENT OFFICER SHALL BE INCIDENTAL TO THE WORK AND WILL NOT BE PAID SEPARATELY.

4. DURING NON-WORKING HOURS, NO EQUIPMENT, VEHICLES OR MATERIAL SHALL BE PARKED OR STORED WITHIN 30 FEET (9 METERS) OF THE ROADWAY CARRYING TRAFFIC. IF THE ABOVE IS NOT POSSIBLE, A STORAGE AREA WITH PROPER DELINEATION AND ADVANCED WARNING SHALL BE USED WITH THE APPROVAL OF THE ENGINEER.

5. AT THE TIME OF FINAL PROJECT INSPECTION THE CONTRACTOR SHALL FURNISH TO THE INSPECTOR THREE COMPLETE SETS OF AS-BUILT PLANS. ONE SET SHALL BE LEFT IN THE CABINET FOR THE LOCAL MAINTAINING AGENCY, ORANGE COUNTY.

6. THE CONTRACTOR SHALL HAVE AN IMSA LEVEL II CERTIFIED SIGNAL TECHNICIAN ON CALL WITHIN A MAXIMUM OF TWO HOURS RESPONSE TIME.

7. THE CONTRACTOR SHALL NOTIFY ORANGE COUNTY TRAFFIC OPERATIONS (407-836-7890) AT LEAST 24 HOURS IN ADVANCE OF INSTALLING GROUND RODS, UNDERGROUND CONDUIT, MAST ARM FOUNDATIONS OR SETTING POLES SO THAT THESE OPERATIONS MAY BE OBSERVED.

8. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS IN ACCORDANCE WITH SECTION 2-4 OF THE FDOT SPECIFICATIONS.

9. AS DIRECTED BY THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST CONDUIT VERTICALLY TO AVOID ANY POSSIBLE CONFLICTS WITH UNDERGROUND UTILITIES.

10. ALL CONDUITS TO BE INSTALLED UNDER PAVEMENT OR SIDEWALK SHALL BE INSTALLED PRIOR TO THE INSTALLATION OF THE BASE COURSE OR SIDEWALK.

11. ALL CONDUIT SHALL BE SCHEDULE 40, 2 INCH (5 CM) DIA. MINIMUM UNLESS OTHERWISE SPECIFIED IN PLANS, EXCEPT ELECTRICAL POWER SERVICE DUCT.

12. ALL ENDS OF CONDUITS IN PULL BOXES AND CABINETS SHALL BE SEALED WITH ELECTRICAL PUTTY AFTER WIRING IS COMPLETE.

13. PULL BOXES SHALL BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THEN PULL BOXES SHALL BE PLACED AT LEAST 7 FEET FROM THE EDGE OF PAVEMENT.

14. UNLESS SPECIFIED OTHERWISE, ALL PULL BOX COVERS TO BE FURNISHED AND INSTALLED SHALL BE NON-METALLIC.

15. UNDER NO CIRCUMSTANCES SHALL ENERGIZED CABLE BE PLACED IN THE SAME CONDUIT OR PULL BOX AS LOOP LEAD-IN CABLE.

16. ALL CABLE SHALL BE PULLED IN THE CONDUIT WITH A CABLE GRIP DESIGNED TO PROVIDE A FIRM HOLD ON THE EXTERIOR COVERING OF THE CABLE. A WINCH WITH A SLIP CLUTCH SHALL BE USED TO ENSURE THAT THE ALLOWABLE TENSION UNIT IS NOT EXCEEDED. AN APPROVED LUBRICANT SHALL BE USED TO FACILITATE THE PULLING OF THE CABLE.

17. THE CONTRACTOR SHALL VERIFY COLOR CODES FOR SIGNAL CABLE WITH ORANGE COUNTY BEFORE ORDERING. WIRING DIAGRAMS SHALL BE IN ACCORDANCE WITH ORANGE COUNTY SPECIFICATIONS.

18. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.

19. THREE SPARE WIRES ARE REQUIRED PER SIGNAL CABLE. SPARES SHALL BE BOUND AND GROUNDED IN CABINET.

20. DURING TRAFFIC SIGNAL FLASHING OPERATION THE RED ARROW INDICATION OF ALL 3-SECTION LEFT TURN HEADS SHALL FLASH. UNLESS SPECIFIED OTHERWISE, FLASHING OPERATION SHALL BE AMBER FOR MOVEMENTS 2 & 6 AND RED FOR MOVEMENTS 4 & 8.


21. NO POLYCARBONATE HOUSING OR MOUNTING HARDWARE WILL BE PERMITTED FOR VEHICULAR OR PEDESTRIAN SIGNAL HEAD ASSEMBLIES. ALL LENSES FOR THESE HEADS SHALL BE GLASS. ALL SIGNAL HEADS SHALL BE BLACK ALUMINUM. TUNNEL VISORS SHALL BE USED ON ALL SIGNAL SECTIONS. PAYMENT FOR TUNNEL VISORS SHALL BE INCLUDED IN THE PRICE OF THE SIGNAL HEADS.

22. ALL SIGNAL INDICATIONS SHALL BE LED. LED SIGNAL PRODUCT INFORMATION SHALL BE SUBMITTED TO ORANGE COUNTY FOR APPROVAL.

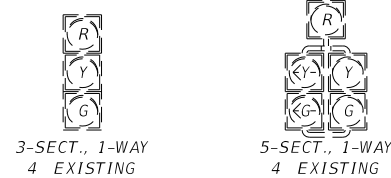
23. THE COST OF FURNISHING AND INSTALLING THE FTP-68A-06 & FTP-68B-06 SIGNS SHALL BE INCLUDED IN PAY ITEM NO. 603-1.

24. PUSH BUTTONS SHALL BE CONSTRUCTED WITH MECHANICAL CONTACTS. MICROSWITCHES SHALL NOT BE USED.

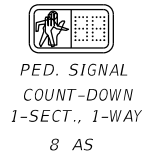
25. UNLESS OTHERWISE NOTED, ALL REMOVED EQUIPMENT EXCEPT CONCRETE POLES SHALL BE DELIVERED TO THE MAINTAINING AGENCY. THE MAINTAINING AGENCY IS: ORANGE COUNTY TRAFFIC OPERATIONS 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839-9205 (407) 836-7804.

| REVISIONS | | | |  | VHB 225 E. ROBINSON ST., SUITE 300 LANDMARK CENTER TWO ORLANDO, FL 32801 PH. 407-839-4006 KATHRYN L. LEE, P.E. 62420 CERT. OF AUTH. #3932 | DESIGN PLANS FOR: | | <i>GENERAL NOTES</i> | SHEET NO. |
|-----------|-------------|------|-------------|---|---|-----------------------------|-------------|----------------------|------------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | INTERSECTION IMPROVEMENTS | | | |
| | | | | | | PROJECT NAME | PROJECT NO. | | <i>T-3</i> |
| | | | | | | DEAN RD. AT CURAMENG DR. | CIP 2722 | | |

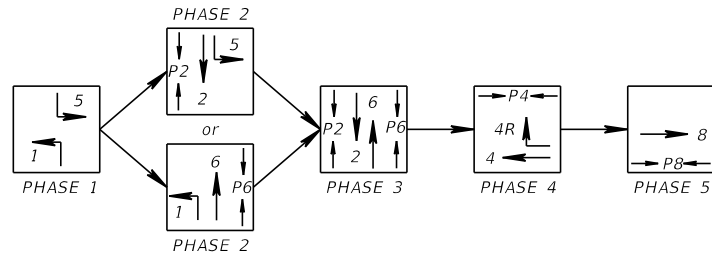
SIGNAL HEAD DETAILS



PEDESTRIAN HEAD DETAILS



MOVEMENT DIAGRAM
S.O.P. 9



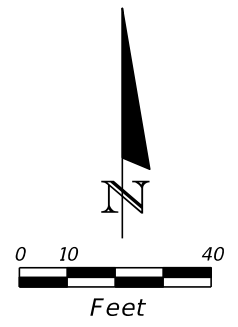
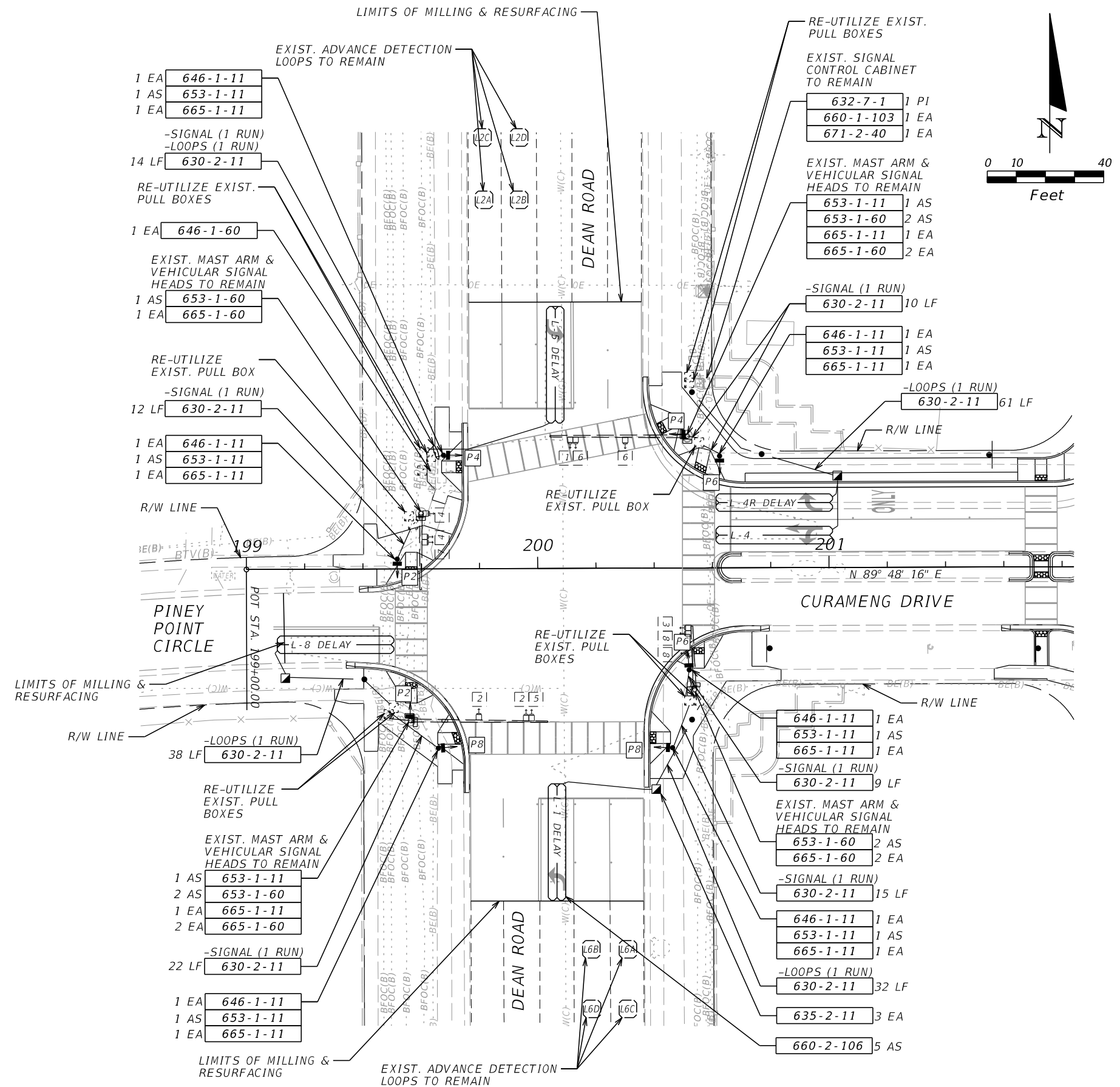
| DETECTORS FOR LOOPS | | | | |
|---------------------|--------------|------------------|---------------------|------------------|
| LOOP | NO. OF LOOPS | NO. OF NEW DETS. | NO. OF EXIST. DETS. | DELAY TIME (SEC) |
| L-1 | 1 | | 1 | 5 |
| L-2A | 1 | | 1 | - |
| L-2B | 1 | | 1 | - |
| L-2C | 1 | | 1 | - |
| L-2D | 1 | | 1 | - |
| L-4 | 1 | 1 | | - |
| L-4R | 1 | | 1 | 5 |
| L-5 | 1 | | 1 | 5 |
| L-6A | 1 | | 1 | - |
| L-6B | 1 | | 1 | - |
| L-6C | 1 | | 1 | - |
| L-6D | 1 | | 1 | - |
| L-8 | 1 | | 1 | 5 |

DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

| CONTROLLER TIMINGS | | | | | | | |
|--------------------|--|-----|-----|-----|-----|-----|-----|
| TIMING FUNCTION | | 1 | 2 | 4 | 5 | 6 | 8 |
| MOVEMENT NUMBER | | 1 | 2 | 4 | 5 | 6 | 8 |
| YELLOW CLEARANCE | | 4.8 | 4.8 | 3.4 | 4.8 | 4.8 | 3.4 |
| ALL RED | | 2.0 | 2.1 | 3.6 | 3.1 | 2.1 | 3.4 |
| PEDESTRIAN WALK | | | 7 | 7 | | 7 | 7 |
| PED. CLEARANCE | | | 12 | 20 | | 18 | 19 |

EXISTING TIMING SHALL REMAIN EXCEPT AS NOTED ABOVE.

- NOTES:**
- MAJOR STREET IS DEAN ROAD, MOVEMENTS 2 & 6, AND MINOR ROADS ARE CURAMENG DRIVE AND PINEY POINT CIRCLE, MOVEMENTS 4 & 8.
 - UNLESS OTHERWISE NOTED, ALL EXISTING SIGNAL EQUIPMENT SHALL REMAIN.
 - THE TRAFFIC CONTROLLER MODIFICATION SHALL INCLUDE ALL MODIFICATIONS NECESSARY TO ACCOMMODATE THE PROPOSED DESIGN.
 - THE EXISTING CONDUIT AND PULL BOXES SHALL BE RE-UTILIZED FOR HOME RUNS TO THE CONTROLLER.



| REVISIONS | | | | ORANGE COUNTY GOVERNMENT FLORIDA | VHB 225 E. ROBINSON ST., SUITE 300 LANDMARK CENTER TWO ORLANDO, FL 32801 PH. 407-839-4006 KATHRYN L. LEE, P.E. 62420 CERT. OF AUTH. #3932 | DESIGN PLANS FOR: | | SHEET NO. |
|-----------|-------------|------|-------------|----------------------------------|---|--------------------------|-------------|-----------|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | | PROJECT NAME | PROJECT NO. | |
| | | | | | | DEAN RD. AT CURAMENG DR. | CIP 2722 | T-4 |

SIGNALIZATION PLAN