

PAVEMENT AND DRAINAGE IMPROVEMENTS

FOR

The Village at Riverbend Plat Three

MIDDLETON TOWNSHIP, WOOD COUNTY, OHIO

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BENCH MARK DATA

SITE BENCH MARK #200

CENTER OF STORM MANHOLE LID AT STA. 40+99.83, 31.22 RT.,
SUNSET MAPLE DRIVE.

ELEVATION 643.09

SITE BENCH MARK #201

"X" CUT ON WEST END OF HEADWALL, 7.2' SOUTH OF THE
CENTERLINE OF ROACHTON ROAD AND 662.2' WEST OF THE
CENTERLINE OF HIGH MEADOWS LANE.

ELEVATION 639.54

CONVENTIONAL SIGNS

	PROPOSED	EXISTING
SANITARY SEWER	—S—	—S—
STORM SEWER	—ST—	—ST—
WATERLINE	—W—	—W—
SANITARY MANHOLE	●	⊙
STORM MANHOLE	●	⊙
CATCH BASIN	■	⊞
YARD BASIN	●	⊙
WATER VALVE IN MANHOLE	●	⊙
HYDRANT	▼	○
CENTERLINE	—	—
TYPE B MONUMENT	⊕	⊕



LOCATION MAP
SCALE: 1" = 1,000'



INSPECTION SCHEDULING

FOR INSPECTION CALL 419-354-9090
BETWEEN 7:30 A.M. AND 4:00 P.M.
48 HOURS IN ADVANCE. IT IS THE
RESPONSIBILITY OF THE CONTRACTOR.

STANDARD DRAWINGS

ODOT

BP-5.1	COMBINATION CONCRETE CURB & GUTTER, TYPE 3	7/19/14
CB-2.2	CATCH BASIN NO. 3A	1/17/14
MH-1.2	MANHOLE NO. 3	1/18/13
MT-97.10	FLAGGER CLOSING 1 LANE OF A 2 LANE HIGHWAY STATIONARY OPERATIONS	7/18/14
RM-1.1	ROADWAY MONUMENTS	7/18/14
MT-101.90	DROP-OFFS IN WORK ZONES	7/21/17

SUPPLEMENTAL SPECIFICATIONS (ODOT)

SS 800	REVISIONS TO 2013 ODOT CMS	1/21/15
SS 811	CONDUIT AND DRAINAGE STRUCTURES	1/18/13

WOOD COUNTY: (<http://engineer.co.wood.oh.us/index.php/standard-drawings>)

TRENCH DETAILS	8/05/14
TYPE A AND B MONUMENT ASSEMBLIES	8/05/14
STANDARD BARRICADE	8/05/14

SCALES

PLAN	1" = 50'
PROFILE, HORIZONTAL	1" = 50'
PROFILE, VERTICAL	1" = 5'
CROSS-SECTION, HORIZONTAL	1" = 20'
CROSS-SECTION, VERTICAL	1" = 5'

APPROVED BY

John M. Musteric 09-18-2017
JOHN M. MUSTERIC, P.E., P.S. DATE
 WOOD COUNTY ENGINEER

THE ABOVE SIGNATURE CONSTITUTES ACKNOWLEDGEMENT THAT THOSE ITEMS
 OUTLINED IN THE CURRENT EDITION OF THE "WOOD COUNTY SUBDIVISION
 AND SITE IMPROVEMENT MANUAL" OR AS AMENDED BY THE WOOD COUNTY
 ENGINEER, HAVE BEEN UTILIZED. TECHNICAL CORRECTNESS AND
 INTERPRETATION OF THOSE ITEMS CONTAINED WITHIN THE MANUAL REMAIN
 THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS. THE
 ABOVE SIGNATURE IS VALID FOR 18 MONTHS FROM THE DATE OF SIGNING.

DEVELOPED BY:

McCarthy Builders, Inc.
 3618 KING ROAD, SUITE C
 TOLEDO, OHIO 43617
 419-476-1474

Blair
NAME **DATE**
 PRESIDENT 9-13-17

1683 Woodlands Drive, Maumee, Ohio 43537
 Phone: (419) 893-3680
 Fax: (419) 893-2982
 www.fellerfinch.com
FellerFinch
 & ASSOCIATES, INC.
 Engineers & Surveyors

DATE	REVISION

TITLE SHEET
 THE VILLAGE AT RIVERBEND
 PLAT THREE

STATE OF OHIO
 GREGORY N. FELLER
 E-69055
 REGISTERED PROFESSIONAL ENGINEER
 SIGNED: *G. N. Feller*
 DATE: 9/13/17

DESIGNED BY: CMG
DRAWN BY: RGS
CHECKED BY: GNF
REVIEWED BY: DRK
DATE: 6-13-17
PROJECT: 10E07849

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12

GENERAL NOTES

1. GENERAL SPECIFICATIONS

ALL MATERIAL AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WOOD COUNTY ENGINEERS OFFICE, THE WOOD COUNTY CONSTRUCTION STANDARDS AND THE OHIO DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS DATED JANUARY 1, 2013

2. REGULATIONS

ALL WORK MUST COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS IN ALL RESPECTS, INCLUDING COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT.

3. LICENSES AND PERMITS

ALL LICENSES AND PERMITS REQUIRED BY LOCAL, STATE OR FEDERAL AGENCIES SHALL BE OBTAINED BY THE CONTRACTOR.

4. BEGINNING CONSTRUCTION

THE WOOD COUNTY ENGINEER SHALL BE NOTIFIED SEVEN (7) DAYS PRIOR TO THE BEGINNING OF ACTUAL CONSTRUCTION.

5. STAKING RESPONSIBILITY

THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR PRESERVATION OF INITIAL STAKEOUT WORK ORDERED AND OWNER IS NOT RESPONSIBLE FOR DISTURBED STAKING AND RESTAKING OF INITIAL STAKEOUT WORK ORDERED. OWNER WILL BE GIVEN A SEVEN (7) DAY NOTICE FOR ALL STAKEOUT WORK ORDERED PER ODOT ITEM 623.

6. EXISTING BENCH MARKS, MONUMENTS AND CONTROL POINTS

EXISTING SURVEY MONUMENTS, BENCH MARKS, PROPERTY CORNER POINTS AND CONTROL POINTS DAMAGED OR DISTURBED BY CONSTRUCTION WILL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR. SHOULD THE CONTRACTOR FAIL TO PROPERLY REPLACE THESE POINTS, THE WOOD COUNTY ENGINEER SHALL REPLACE THESE POINTS AT THE CONTRACTOR'S EXPENSE, AFTER THREE (3) WEEKS NOTICE. THE CONTRACTOR IS TO NOTIFY THE WOOD COUNTY ENGINEER OF ANY ANTICIPATED CONFLICTS.

7. EXISTING STORM DRAINAGE

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS SO AS TO MAINTAIN EXISTING SEWER FLOWS AT ALL TIMES AND SHALL PROMPTLY REPLACE IN KIND ANY STORM SEWER DISTURBED BY CONSTRUCTION TO THE SATISFACTION OF THE WOOD COUNTY ENGINEER. THE COST OF MAKING INSPECTIONS AND ANY REPAIRING OR CORRECTION OF SEWERS AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PERTINENT BID ITEM. WHERE CONSTRUCTION CROSSES AN EXISTING DITCH OR FOLLOWS THE COURSE OF SUCH DITCH, THE CONTRACTOR MAY DIVERT THE FLOW OF DRAINAGE WATER TEMPORARILY AT HIS OWN COST AND EXPENSE WITH THE APPROVAL OF THE WOOD COUNTY ENGINEER. DITCH FLOW SHALL BE MAINTAINED AT ALL TIMES.

8. INSPECTION

ALL WORK PERFORMED ON THIS PROJECT IS SUBJECT TO THE INSPECTION AND APPROVAL OF THE WOOD COUNTY ENGINEER. COST OF INSPECTION BY THE WOOD COUNTY ENGINEER SHALL BE PAID FOR BY THE DEVELOPER.

9. AS-BUILT DRAWINGS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A COMPLETE SET OF CONSTRUCTION DRAWINGS CLEARLY MARKED TO SHOW ALL DEVIATIONS FROM THE APPROVED PLANS. AT COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL PROVIDE THE COUNTY ENGINEER WITH A SET OF MYLAR AS-BUILT DRAWINGS.

10. SUBDIVISION IMPROVEMENT MAINTENANCE BOND

PRIOR TO THE DATE OF FINAL ACCEPTANCE OF THE STORM DRAINAGE, ROADWAY AND PAVEMENT IMPROVEMENTS BY WOOD COUNTY AND THE PLACEMENT OF SAID IMPROVEMENTS ON THE PUBLIC ROAD SYSTEM, THE CONTRACTOR SHALL FURNISH A SUBDIVISION IMPROVEMENT MAINTENANCE BOND TO WOOD COUNTY. THE BOND SHALL BE FOR A TWO (2) YEAR PERIOD IN THE AMOUNT OF TWENTY-FIVE (25) PERCENT OF THE COST OF IMPROVEMENT. THE COST OF THE MAINTENANCE BOND SHALL BE INCLUDED IN THE CONTRACTOR'S BID UNDER ITEM SPECIAL, SUBDIVISION IMPROVEMENT MAINTENANCE BOND.

11. MAINTAINING PUBLIC SAFETY

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND MAINTAINING ALL LIGHTS, SIGNS AND BARRICADES NECESSARY TO MAINTAIN PUBLIC SAFETY PER ODOT ITEM 614.

12. MAINTENANCE OF TRAFFIC

TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES ON DEDICATED ROADS. IF CONSTRUCTION ALONG DEDICATED ROADS INTERFERES WITH TRAFFIC, IN THE OPINION OF THE WOOD COUNTY ENGINEER, THEN TWO (2) FLAGMEN SHALL BE PROVIDED BY THE CONTRACTOR DURING ONE LANE OPERATIONS AT THE INTERSECTION, A THIRD FLAGGER WILL BE NEEDED TO DIRECT INGRESS/EGRESS TRAFFIC FOR HIGH MEADOW LANE AND VILLAGE DRIVE. ALL BARRICADES, SIGNS, FLAGMEN AND OTHER TRAFFIC CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE OHIO DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, ITEM 614, MAINTAINING TRAFFIC AND THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".

13. ROAD NAME SIGNS AND STOP SIGNS

ROAD NAME SIGNS AND STOP SIGNS WILL BE PLACED BY THE WOOD COUNTY ENGINEER. THE COST SHALL BE PAID BY THE DEVELOPER.

14. UNDERGROUND UTILITIES AND UTILITY ADJUSTMENTS

THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS IS APPROXIMATE.

THE EXACT LOCATION SHALL BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY EACH RESPECTIVE UTILITY COMPANY AND THE OHIO UTILITY PROTECTION SERVICE (800-362-2764), AT LEAST SEVEN (7) DAYS PRIOR TO THE TIME OF CONSTRUCTION. ANY AND ALL ADJUSTMENTS OR EXTENSIONS REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THEIR RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THE PLANS.

15. UTILITY OWNERSHIP

THE FOLLOWING IS A LIST OF THE OWNERS OF UTILITIES KNOWN TO BE WITHIN THE LIMITS OF CONSTRUCTION:

SBC
130 NORTH ERIE
ROOM 714
TOLEDO, OH 43604
419-245-5420

CABLEVISION OF OHIO
116 NORTH MAIN STREET
PO BOX 105
GIBSONBURG, OH 43401-0105
419-637-2199

COLUMBIA GAS OF OHIO
333 SOUTH ERIE STREET
TOLEDO, OH 43602
419-252-8110

NORTHWESTERN WATER & SEWER DISTRICT
12560 MIDDLETON PIKE
BOWLING GREEN, OH 43402
419-354-9090

WATERVILLE GAS COMPANY
PO BOX 259
WATERVILLE, OHIO 43566

DOMO PETROLEUM
PO BOX 138
GOSHEN, IN 46527

SPRINT
375 EAST RIVERVIEW AVE.
NAPOLEON, OH 43545
419-599-4022

TIME WARNER CABLE
118 NORTH MAIN STREET
BOWLING GREEN, OH 43402
419-352-8424

TOLEDO EDISON
900 LEMOYNE ROAD
NORTHWOOD, OH 43619
419-249-5967

WOOD COUNTY ENGINEER
ONE COURTHOUSE SQUARE
BOWLING GREEN, OH 43402
419-354-9060

MILTONVILLE COMMUNITY WATERLINE
CARL HUDACEK, PRESIDENT
23757 WEST RIVER ROAD
PERRYSBURG, OH 43551

OHIO UTILITIES PROTECTION SERVICE (OUPS)
1-800-362-2764

16. EXISTING DRAINAGE TILE

ALL EXISTING DRAINAGE TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE CONNECTED TO AN APPROPRIATE DRAINAGE OUTLET APPROVED BY THE COUNTY ENGINEER. COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT CONDUIT ITEM.

17. SHALLOW PIPE UNDERDRAINS

ALL PIPE UNDERDRAINS SHALL BE CONNECTED TO AN APPROPRIATE DRAINAGE OUTLET OR AS DIRECTED BY THE COUNTY ENGINEER.

18. EMBANKMENT CONSTRUCTION

WHERE NECESSARY TO CONSTRUCT PAVEMENT SUBGRADE IN FILL, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL BENEATH THE PROPOSED PAVEMENT AND INCLUDE THE COST OF REMOVAL IN THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING.

19. PAVEMENT CONSTRUCTION

NO PAVEMENT SHALL BE PLACED UNTIL ALL WATER SERVICES, VALVE BOXES AND ELECTRICAL CONDUIT HAVE BEEN INSTALLED.

20. TRENCH MAINTENANCE

AT ALL TIMES DURING THE PROGRESS OF THE WORK, AND UNTIL THE RELEASE FROM HIS GUARANTEE BY THE COUNTY, THE CONTRACTOR SHALL MAINTAIN ALL BACKFILLED TRENCHES. ANY SETTLEMENT THAT OCCURS DURING SUCH TIME SHALL BE FILLED IMMEDIATELY.

21. RIGHT-OF-WAY RESTORATION

ALL EXISTING FEATURES IN EXISTING COUNTY OR TOWNSHIP RIGHTS-OF-WAY THAT ARE DISTURBED DUE TO CONSTRUCTION, SUCH AS: MAILBOXES, TREES, SHRUBS, BUSHES, GUARDRAILS, DRIVEWAYS, ROADWAY PAVEMENT, SWALES, SEWERS, CATCH BASINS, BERMS, SEEDED AREAS, ETC. SHALL BE REPLACED TO

THEIR ORIGINAL CONDITIONS IN ACCORDANCE WITH CURRENT ODOT SPECIFICATION ITEM 107.10 AND TO THE SATISFACTION OF THE WOOD COUNTY ENGINEER. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT ITEM.

22. SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE AS PER ODOT ITEM 659, USING THE FOLLOWING SEED MIXTURE: 50% CREEPING RED FESCUE, 25% DOMESTIC RYEGRASS, AND 25% KENTUCKY BLUEGRASS. ALL REAR LOT SWALES AND/OR DRAINAGE SWALES SHALL BE RESTORED AFTER ALL UTILITIES HAVE BEEN CONSTRUCTED. THESE AREAS SHALL BE SEEDED AND MULCHED AS PER ABOVE SEEDING MIXTURE. SEEDING AND MULCHING SHALL NOT BE PLACED WITHOUT APPROVAL OF THE WOOD COUNTY ENGINEER.

23. ESTIMATED QUANTITIES

THE ESTIMATED PLAN QUANTITIES ARE FOR THE PURPOSE OF COMPETITIVE BIDDING AND NOT NECESSARILY THE FINAL PAY QUANTITIES. FINAL FIELD MEASUREMENTS AND CALCULATIONS SHALL DETERMINE THE FINAL PAY QUANTITIES. DURING THE BIDDING PERIOD THE CONTRACTOR SHALL COMMUNICATE TO THE PROJECT ENGINEER ANY DIFFERENCES IN HIS BID QUANTITIES AND THOSE LISTED ON THE PLANS.

24. HAUL ROUTES

THE CONTRACTOR SHALL MAINTAIN ALL HAUL ROUTES IN A CONDITION ACCEPTABLE TO THE COUNTY ENGINEER, FOR THE DURATION OF THE PROJECT. THIS MAINTENANCE INCLUDES THE REMOVAL OF MUD, STONE AND OTHER FOREIGN MATERIALS.

25. ROOF DRAINS

ROOF DRAINS, FOUNDATION DRAINS AND ALL OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

GRADING & PAVING NOTES

1. GENERAL SPECIFICATIONS

THE CONTRACTOR SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE ALL GRUBBING, CLEARING, EXCAVATING, STOCKPILING, EMBANKMENT, GRADING, COMPACTING AND PAVING IN ACCORDANCE WITH THE PLANS AND THE INTENT OF THE CONTRACT DOCUMENTS. IN GENERAL, ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SHALL BE ADHERED TO.

2. RESTORATION

THE CONTRACTOR SHALL RESTORE ALL DISTURBED OFF-SITE AREAS TO A CONDITION EQUAL OR BETTER THAN THAT EXISTING PRIOR TO BEGINNING CONSTRUCTION.

3. EROSION PROTECTION

THE CONTRACTOR SHALL PROVIDE ALL ACCEPTABLE AND COMMON PRACTICES TO MINIMIZE WIND AND WATER EROSION OF THE SOILS AT THE PROJECT. THE CONTRACTOR SHALL MONITOR AND EMPLOY BOTH TEMPORARY AND PERMANENT METHODS TO THE SATISFACTION OF THE OWNER, THE WOOD COUNTY ENGINEER, ODOT DISTRICT 2 AND OEPA.

4. CLEARING AND GRUBBING

IF DEEMED NECESSARY, THE CONTRACTOR SHALL CLEAR AND STRIP THE PROJECT ROADWAYS OF ALL VEGETATION, ROOTS, TOPSOIL, REFUSE AND OTHER DELETERIOUS NON-SOIL MATERIALS TO BE DISPOSED OF AT AN APPROVED DUMP SITE. MATERIAL CONSIDERED ACCEPTABLE TOPSOIL SHALL BE STOCKPILED IN AN AREA ON SITE DESIGNATED BY THE OWNER, WHICH COST SHALL BE INCLUDED IN THE COST OF CLEARING AND GRUBBING.

5. EXCAVATION AND EMBANKMENT

AFTER CLEARING AND STRIPPING THE CONTRACTOR SHALL EXCAVATE THOSE AREAS REQUIRING FURTHER EXCAVATION AND EMBANK THOSE AREAS OF THE RIGHT OF WAY AND LOTS. PRIOR TO PLACING OF THE FILL, AREAS TO SUPPORT NEW FILL PAVEMENTS OR FUTURE BUILDINGS SHALL BE CAREFULLY EVALUATED BY A GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL REQUIRE PROOF ROLLING OF THE SOIL WITH A 20 TO 30 TON LOADED TRUCK TO LOCATE SOFT, WEAK, WET SOILS PRESENT AT THE TIME OF CONSTRUCTION. ANY UNSUITABLE MATERIALS SHALL BE REPLACED WITH ACCEPTABLE MATERIAL PROPERLY COMPACTED.

STRUCTURAL FILL SHOULD BE PLACED IN LIFTS OF 6 TO 8 - INCHES LOOSE MEASURE. ALL FILL MATERIAL SHOULD BE PLACED IN HORIZONTAL LIFTS ADEQUATELY KEYED INTO SUBGRADE SOILS. ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR (ASTM D698) UNLESS OTHER DIRECTIVES FROM A RETAINED GEOTECHNICAL ENGINEER ARE GIVEN. ALL FILL SHALL BE TESTED WITH AT LEAST ONE (1) FIELD DENSITY TEST PER EVERY 2500 SQUARE FEET OF FILL AREA PER EACH LIFT OF COMPACTED FILL WITHIN THE RIGHT OF WAY.

ALL AREAS SHALL BE GRADED TO WITHIN ONE-INCH (1") OF DESIGN PAVEMENT SUBGRADES.

ALL FILL MATERIAL SHALL BE ACCEPTABLE TO A RETAINED GEOTECHNICAL ENGINEER. NO SLAG MATERIAL SHALL BE PERMITTED. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ODOT ITEM 203.

6. TESTING

A. SUBGRADE COMPACTION TEST

COMPACTION OF EMBANKMENT AND PAVEMENT SUBGRADE AREAS SHALL BE AT 98% AS DETERMINED BY THE STANDARD PROCTOR TEST. COMPACTION TESTS SHALL BE TAKEN EVERY FOUR HUNDRED (400) LINEAL FEET MAXIMUM PER THE WOOD COUNTY ENGINEER.

B. BASE COMPACTION

COMPACTION OF SUBBASE AND BASE MATERIALS SHALL BE AS PER ODOT SPECIFICATIONS. COMPACTION OF SUBBASE AND BASE MATERIALS SHALL BE AT 98% AS DETERMINED BY THE STANDARD PROCTOR TEST (ASTM D698). COMPACTION TESTS SHALL BE TAKEN EVERY FOUR HUNDRED (400) LINEAL FEET MAXIMUM PER THE WOOD COUNTY ENGINEER.

C. CONCRETE TEST

THREE (3) CONCRETE CYLINDERS SHALL BE TESTED FROM EACH DAYS POUR PER THE WOOD COUNTY ENGINEER. CONCRETE SHALL MEET A MINIMUM OF 4000 PSI AT 28 DAYS.

D. ASPHALT CONCRETE CERTIFICATION

PROVIDE JOB-MIX FORMULA CERTIFICATION TO THE WOOD COUNTY ENGINEER FOR EACH PAVEMENT TYPE, CONFORMING TO THE REQUIREMENTS OF ODOT ITEM 441.

E. COST

MATERIAL SAMPLING AND TESTING SHALL BE BY A TESTING FIRM APPROVED BY THE WOOD COUNTY ENGINEER. WOOD COUNTY ENGINEER SHALL RECEIVE AN ORIGINAL COPY OF ALL TEST REPORTS DIRECTLY FROM THE TESTING FIRM. THE COST OF MATERIAL SAMPLING AND TESTING SHALL BE PAID BY THE DEVELOPER.

8. SEEDING / TOPSOIL

ALL AREAS OF THE RIGHT OF WAY NOT OTHERWISE OCCUPIED SHALL BE COVERED WITH A MINIMUM OF FOUR INCHES (4") OF TOPSOIL, SEEDED, AND MULCHED IN ACCORDANCE WITH PREVIOUS SECTIONS OF THIS SPECIFICATION.

9. OVERLOT GRADING

THE CONTRACTOR SHALL PROVIDE THE MINIMUM OVERLOT GRADING AND DRAINAGE WORK NECESSARY TO PREVENT STANDING WATER IN THE LOTS DURING THE INTERIM PERIOD BETWEEN DEVELOPMENT OF THE PROPOSED RIGHT OF WAYS AND FINAL LOT DEVELOPMENT. THIS WORK INCLUDES SURFACE GRADING OF THE LOTS, CUTTING SWALES ACROSS THE LOTS AND THE POSSIBLE USE OF STORM SEWER LATERALS AS TEMPORARY DRAINAGE OUTLETS FOR THE LOTS IF NECESSARY. ALL SURFACE WATER RUNOFF SHALL BE DIRECTED TO A STORM SEWER OR EXISTING DRAINAGE DITCH.

10. BACK LOT DRAINAGE

ALL BACK LOT DRAINAGE SWALES SHALL BE CONSTRUCTED IN CONJUNCTION WITH PAVEMENT SUBGRADE PREPARATION. NO PUBLIC UTILITIES SHALL BE PLACED WITHIN THE DRAINAGE AND UTILITY EASEMENT UNTIL THE REAR LOT GRADING HAS BEEN APPROVED BY THE WOOD COUNTY ENGINEER.

11. ITEM SPECIAL - SUBGRADE IMPROVEMENT

AREAS DESIGNATED BY THE GEOTECHNICAL ENGINEER IN CONJUNCTION WITH THE WOOD COUNTY ENGINEER FOR SUBGRADE IMPROVEMENT SHALL BE UNDERCUT AND BACKFILLED WITH STONE MATERIALS PRIOR TO PLACEMENT OF THE AGGREGATE BASE COURSE. A MINIMUM UNDERCUT OF 6" SHALL BE PROVIDED. ACCEPTABLE STONE MATERIALS ARE NO. 1 AND NO. 2 SIZE AGGREGATE AND ITEM 304, AGGREGATE BASE. COMPACTION SHALL BE EQUAL TO OR EXCEEDING 98% OF MAXIMUM STANDARD PROCTOR DRY UNIT WEIGHT (ASTM D698).

PAYMENT WILL BE BASED UPON THE QUANTITY OF EXCAVATION ONLY AND SHALL INCLUDE BACKFILLING WITH APPROVED MATERIALS. A CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

STORM SEWER GENERAL NOTES

1. PIPE

ALL SEWER PIPE SHALL BE A MINIMUM OF 12" DIAMETER PIPE EXCEPT FOR METER LINES AND UNDERDRAINS. ALL PIPE 12" DIAMETER AND SMALLER SHALL BE EITHER PVC MEETING THE LATEST REQUIREMENTS OF ASTM F-794, WITH A MINIMUM PIPE STIFFNESS OF 60 PSI; PVC MEETING THE LATEST REQUIREMENTS OF ASTM F-949, WITH A MINIMUM PIPE STIFFNESS OF 50 PSI; PVC MEETING THE LATEST REQUIREMENTS OF ASTM D-3034, SDR 35 (TYPE PSM); OR REINFORCED CONCRETE "O"RING PIPE MEETING THE LATEST REQUIREMENTS OF ASTM C-76, CLASS III. ALL PVC PIPE SHALL HAVE A MINIMUM CELL CLASSIFICATION OF 12454-B, 12454-C OR 12364-A PER ASTM D-1784.

ALL SEWER PIPE 15" DIAMETER AND LARGER SHALL BE EITHER PVC MEETING THE LATEST REQUIREMENTS OF ASTM F-794, WITH A MINIMUM PIPE STIFFNESS OF 46 PSI; PVC MEETING THE LATEST REQUIREMENTS OF ASTM F-949, WITH A MINIMUM PIPE STIFFNESS OF 50 PSI; OR REINFORCED CONCRETE "O"RING PIPE MEETING THE LATEST REQUIREMENTS OF ASTM C-76, CLASS III. (ALL ELLIPTICAL PIPE SHALL BE REINFORCED CONCRETE). ALL PVC PIPE SHALL HAVE A MINIMUM CELL CLASSIFICATION OF 12454-B, 12454-C OR 12364-A PER ASTM D-1784. 60" CULVERT SHALL BE REINFORCED CONCRETE "O" RING PIPE.

2. JOINTS

THE JOINTS FOR ALL SEWER PIPE SHALL BE O-RING TYPE MEETING THE REQUIREMENTS OF ODOT ITEM 706.11 (ASTM C-443) FOR CONCRETE AND ASTM D-3212 FOR PVC

3. DEFLECTION TESTING

ALL FLEXIBLE PIPE SHALL BE TESTED FOR DEFLECTION. TESTS SHALL BE CONDUCTED, IN THE PRESENCE OF A REPRESENTATIVE OF THE COUNTY; NO LESS THAN 30 DAYS AFTER FINAL FULL BACKFILL HAS BEEN PLACED. NO PIPE SHALL EXCEED A DEFLECTION OF 5% WHERE POSSIBLE. ELECTRONIC EQUIPMENT IS NOT AVAILABLE, DEFLECTION TESTS CAN BE RUN USING RIGID MANDRELS WITH DIAMETERS EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. ALL TESTS SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.

Table with 4 columns: REVISION, DATE, DESIGN BY, DRAWN BY. Includes names like CMG, RCS, GNF and drawing number 10-07849P03A1.

STORM SEWER GENERAL NOTES CONTINUED

4. BEDDING

ALL BEDDING SHALL BE CLASS "B" BEDDING AND MEET THE REQUIREMENTS OF ODOT ITEM 611.06 BEDDING. WHERE PVC PIPE IS USED, THE BEDDING SHALL BE EXTENDED TO 12" ABOVE THE TOP OF THE PIPE.

5. BACKFILL

TYPE A AND TYPE B PIPE WITHIN FIVE (5) FEET OF THE EDGE OR BACK OF CURB OF EXISTING OR PROPOSED PAVEMENT AND UNDER THE EXISTING OR PROPOSED PAVEMENT SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL TO THE SUBGRADE. GRANULAR MATERIAL SHALL MEET THE GRADING REQUIREMENTS OF ITEM 411 OR 304 STONE, ODOT SPECIFICATIONS, OR 1997 ODOT SPECIFICATIONS AS MODIFIED BY THE WOOD COUNTY ENGINEER (MAXIMUM DRY DENSITY EXCEEDING 105 POUNDS/CUBIC FEET AND 98% COMPACTION AS DETERMINED BY THE STANDARD PROCTOR TEST ASTM D698). THE WOOD COUNTY ENGINEER RESERVES THE RIGHT TO ORDER COMPACTION TESTS IF THE WOOD COUNTY ENGINEER DEEMS NECESSARY. TYPE C PIPE OUTSIDE THE LIMITS OF FIVE (5) FEET FROM THE EDGE OR BACK OF CURB OF THE EXISTING OR PROPOSED PAVEMENT MAY BE BACKFILLED WITH SUITABLE EXCAVATED MATERIAL. ITEM 411 OR 304 STONE APPROVED GRANULAR MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAL FOOT OF PIPE.

6. CONNECTING TO/OR CROSSING EXISTING UTILITIES

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS OVER OR UNDER AN EXISTING UTILITY; IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING UTILITY AS TO LINE AND GRADE BEFORE LAYING THE PROPOSED CONDUIT. WHEN CONNECTING TO AN EXISTING MANHOLE THE CONTRACTOR SHALL CUT A CIRCULAR HOLE AND INSTALL A KOR-N-SEAL BOOT OR APPROVED EQUAL.

7. SERVICE CONNECTIONS

ALL SEWER SERVICE CONNECTIONS SHALL BE PROPERLY PLUGGED, WITH THE COST OF ALL LABOR AND MATERIALS FOR INSTALLATION INCLUDED IN THE UNIT PRICE BID FOR THE CONDUIT. THE ENDS OF ALL SEWER SERVICE CONNECTIONS SHALL BE MARKED WITH A TWO INCH (2") BY FOUR INCH (4") STAKE EXTENDING FROM THE FLOW LINE TO WITHIN 18 INCHES OF PROPOSED FINISHED GRADE.

8. PLUGS AND FITTINGS

ANY PIPE NOT CONNECTED SHALL BE FITTED WITH PREMIUM JOINT PLUGS FASTENED IN AN APPROVED MANNER. ALL PIPE SPECIALS, SUCH AS PLUGS, BENDS, TEES, WYES, ETC., SHALL BE ONE-PIECE FACTORY FORMED AND CONSIDERED PAID FOR IN THE UNIT PRICE BID FOR THE PERTINENT CONDUIT ITEM.

9. MANHOLES, CATCH BASINS AND HEADWALLS

MANHOLES, CATCH BASINS AND HEADWALLS SHALL BE CONSTRUCTED ACCORDING TO THE ODOT STANDARD CONSTRUCTION DRAWINGS. ALL CATCH BASINS AND MANHOLES SHALL BE BUILT WITHOUT SUMPS UNLESS OTHERWISE NOTED.

10. MANHOLES

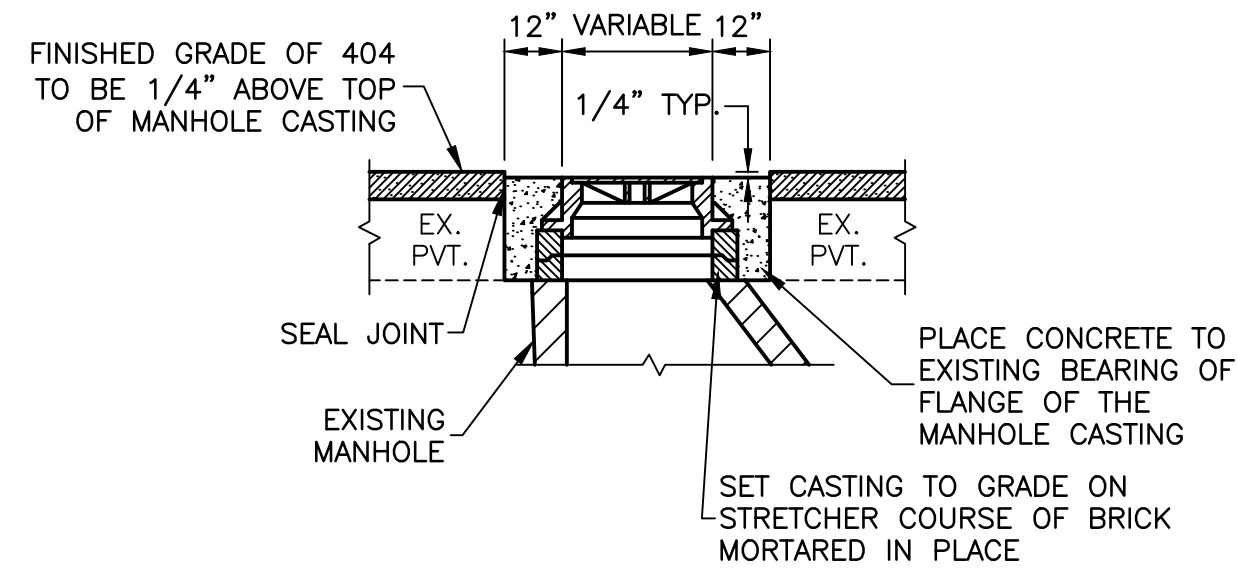
ALL MANHOLES SHALL BE PRECAST CONCRETE CONSTRUCTED ACCORDING TO THE ODOT STANDARDS CONSTRUCTION DRAWING. THE RISER SECTIONS WILL BE "O-RING" TYPE CONFORMING TO ASTM C-443.

11. MANHOLE RIM ELEVATIONS

WHEN MANHOLES ARE LOCATED WITHIN THE PAVEMENT, THE UPPERMOST SURFACE OF THE FRAME OR COVER SHALL BE 1/4 INCH BELOW THE PAVEMENT SURFACE. WHEN MANHOLES ARE LOCATED OUTSIDE THE PAVEMENT, THE TOP SHALL BE SET ONE INCH (1") ABOVE THE FINISHED GROUND GRADE TOP ELEVATIONS SHOWN ON THE DRAWINGS ARE GIVEN AT GROUND OR PAVEMENT.

12. STORM SEWER ACCEPTANCE

PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE WOOD COUNTY ENGINEER, ALL STORM SEWERS INSTALLED OR REPAIRED SHALL BE THOROUGHLY CLEANED AND FLUSHED WITH CLEAN WATER AND ALL NEW INLETS AND MANHOLES CONSTRUCTED AS PART OF THE PROJECT SHALL BE FREE OF FOREIGN MATTER AND IN A CLEAN CONDITION.



RESET CASTING BY THE FOLLOWING METHOD:

STEP 1 THE ASPHALT CONCRETE, INCLUDING LEVELING, BINDER AND WEARING COURSES, SHALL BE LAID CONTINUOUSLY OVER THE CASTING. SPECIAL PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR, THE ENGINEER, AND THE INSPECTORS, FOR THE MARKING AND RE-ESTABLISHMENT OF THE LOCATIONS OF THE CASTINGS.

STEP 2 AFTER COMPLETELY PLACING AND COMPACTING THE ASPHALT CONCRETE, ONE-HALF THE WIDTH OF THE STREET SHALL BE BARRICADED. THE NEW ASPHALT CONCRETE SURFACE AND THE OLD PAVEMENT SHALL BE NEATLY CUT AWAY WITH AIR SPADES AND REMOVED IN A CIRCULAR AREA OF SPECIFIED DIAMETER AROUND EACH CASTING, DOWN TO THE EXISTING BEARING OF THE FLANGE OF THE CASTINGS AS DETAILED.

STEP 3 THE CASTING SHALL THEN BE RAISED TO 1/4" BELOW THE NEW ASPHALT CONCRETE SURFACE AND SET TO GRADE. THE EXCAVATED AREA AROUND THE CASTING SHALL THEN BE FILLED AND COMPACTED TO 1/4" BELOW THE NEW SURFACE WITH "HIGH-EARLY STRENGTH" CONCRETE AS SPECIFIED BY THE ENGINEER. THE CONCRETE SHALL BE ALLOWED TO CURE AT LEAST TWENTY-FOUR (24) HOURS BEFORE THIS SIDE OF THE STREET IS OPENED TO TRAFFIC.

STEP 4 AFTER STEP 3 HAS BEEN COMPLETED THE REMAINING ONE-HALF THE WIDTH OF THE STREET SHALL BE COMPLETED IN THE SAME MANNER AS OUTLINED IN STEP 2 AND 3 ABOVE.

STEP 5 ALL SANITARY MANHOLES ADJUSTMENT RINGS AND CASTINGS SHALL BE SEALED WITH AN INTERNAL OR EXTERNAL SEAL. INTERNAL SEALS SHALL BE FLEX SEAL. EXTERNAL SEALS SHALL BE WRAPID SEAL OR APPROVED EQUAL. SEALS SHALL BE INSTALLED PER THE REQUIREMENTS OF THE NORTHWESTERN WATER AND SEWER DISTRICT.

FOR SPECIFICATIONS ON RESETTING CATCH BASINS REFER TO C.M.S. SPECIFICATION SS811.

PAYMENT FOR ADJUSTMENT OF EXISTING MANHOLE / CATCH BASIN / CURB BOX CASTINGS SHALL BE PAID FOR UNDER ITEM SS811, ADJUST CASTING TO GRADE. PAYMENT FOR PLACEMENT AND ADJUSTMENT OF NEW CASTINGS TO FINAL GRADE SHALL BE PAID FOR UNDER THE PERTINENT NEW MANHOLE OR CATCH BASIN PAY ITEM.

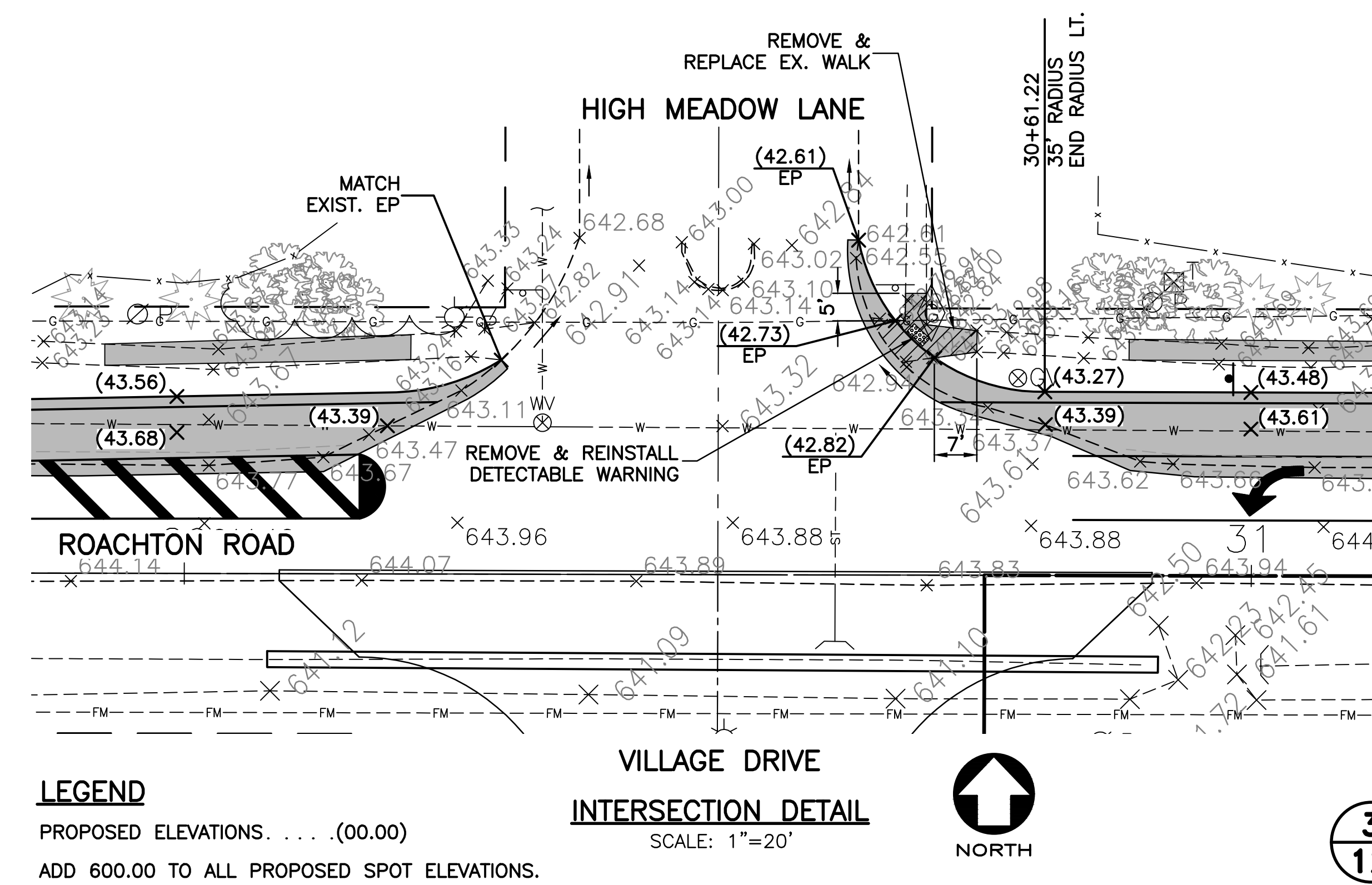
DETAIL OF ADJUSTMENT AND PLACEMENT OF MANHOLE / CATCH BASIN / CURB BOX CASTINGS INCLUDING NEW CONSTRUCTION

GENERAL SUMMARY

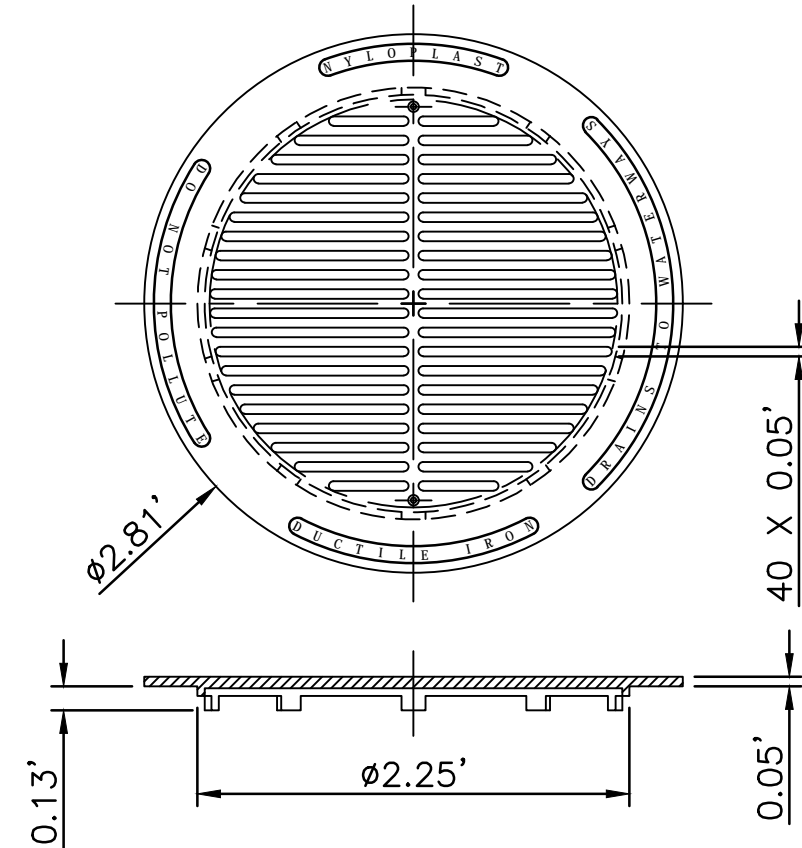
ITEM	QTY.	UNIT	DESCRIPTION
ROADWAY AND PAVEMENT			
201	1	LUMP SUM	CLEARING AND GRUBBING
203	10845	CU. YD.	EMBANKMENT, AS PER PLAN
203	46435	CU. YD.	EXCAVATION, AS PER PLAN
204	3813	SQ. YD.	SUBGRADE COMPACTION
623	5	EACH	TYPE A MONUMENTS (BY OTHERS)
623	2	EACH	TYPE B MONUMENTS
608	9002	SQ. FT.	4" AND 6" CONCRETE WALKS (BY OTHERS)
304	1221	CU. YD.	AGGREGATE BASE, AS PER PLAN
407	151	GALLON	TACK COAT FOR INTERMEDIATE COURSE
448	209	CU. YD.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22,
448	126	CU. YD.	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG64-22,
609	2251	FT.	MOUNTABLE CURB AND GUTTER, WOOD COUNTY TYPE F
614	1	LUMP SUM	MAINTAINING TRAFFIC
SPEC.	29	FT.	STANDARD BARRICADE
SPEC.	300	CU. YD.	SUBGRADE IMPROVEMENT (CONTINGENCY)
SPEC.	1	LUMP SUM	SUBDIVISION IMPROVEMENT MAINTENANCE BOND
DRAINAGE			
SS 811	171	FT.	12" CONDUIT, TYPE B, AS PER PLAN
SS 811	49	FT.	15" CONDUIT, TYPE B, AS PER PLAN
SS 811	456	FT.	6" CONDUIT, TYPE C, AS PER PLAN
SS 811	43	FT.	8" CONDUIT, TYPE C, AS PER PLAN
SS 811	1101	FT.	12" CONDUIT, TYPE C, AS PER PLAN
SS 811	270	FT.	15" CONDUIT, TYPE C, AS PER PLAN
SS 811	77	FT.	18" CONDUIT, TYPE C, AS PER PLAN
SS 811	344	FT.	21" CONDUIT, TYPE C, AS PER PLAN
SS 811	210	FT.	24" CONDUIT, TYPE C, AS PER PLAN
SS 811	213	FT.	30" CONDUIT, TYPE C, AS PER PLAN
SS 811	7	EACH	ODOT No. 3 MANHOLE
SS 811	4	EACH	ODOT CATCH BASIN NO. 3A
SS 811	8	EACH	YARD BASIN, AS PER PLAN
605	2251	FT.	UNDERDRAINS, 707.31

SEE SWP3 PLANS FOR EROSION CONTROL QUANTITIES.

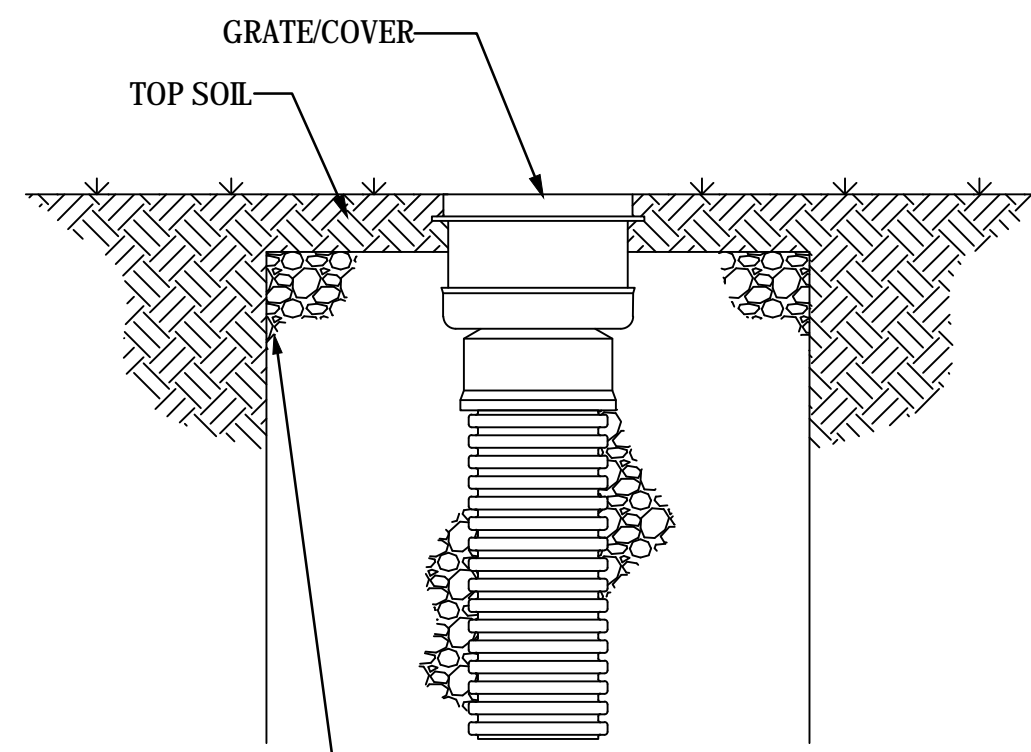
SEE SHEET 7 FOR ROACHTON ROAD LEFT TURN LANE QUANTITIES.



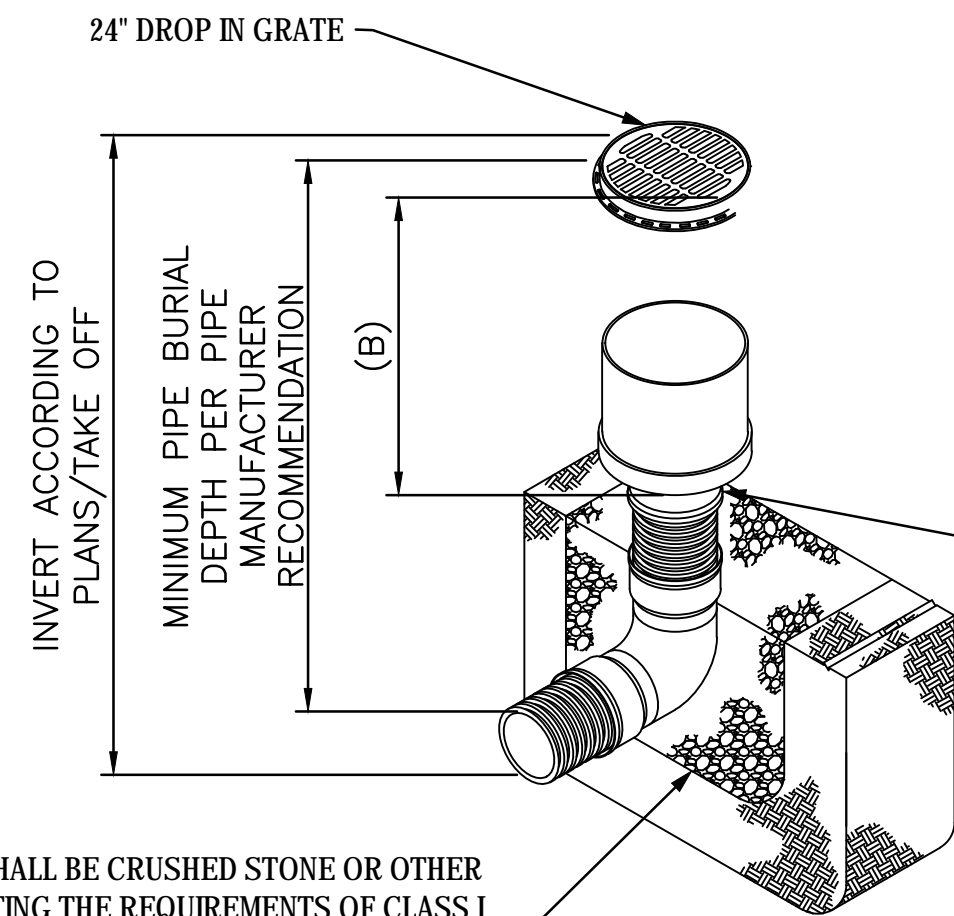
FELLER, FINCH & ASSOCIATES, INC.			
REVISION	DATE	DESIGN BY:	CMG
		DRAWN BY:	RCS
		DATE:	6-13-17
		CHK'D BY:	GNF
		DRAWING:	10-07848P03A1



YARD BASIN GRATE DETAIL
SCALE: NTS



THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I OR CLASS II MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE WELL PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.



ADAPTER SIZE	B
4"	15.00
6"	15.00
8"	15.00
10"	15.00
12"	15.00
15"	15.00
18"	10.00
24"	10.25

(3) VARIOUS TYPES OF INLET & OUTLET ADAPTERS AVAILABLE:
4" - 24" FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL ADS/HANCOR SINGLE WALL), N-12 HP. PVC SEWER (EX: SDR 35), PVC DWV (EX: SCH 40), PVC C900/C905, CORRUGATED & RIBBED PVC (CORRUGATED HDPE SHOWN)

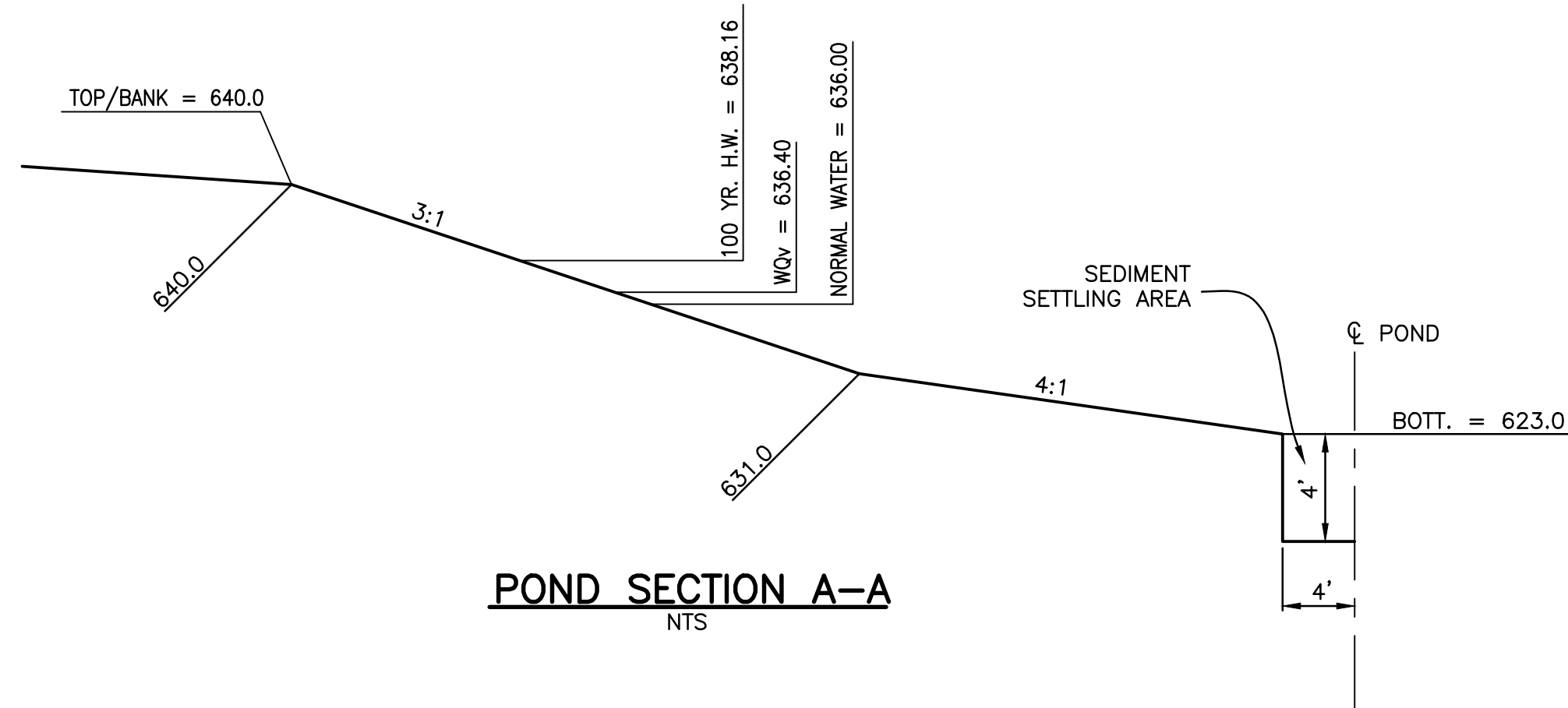
THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I OR CLASS II MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE WELL PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	2499CGP	7001-110-216
STANDARD	MEETS H-20	2499CGS	7001-110-217
SOLID COVER	MEETS H-20	2499CGC	7001-110-218
DOME	N/A	2499CGD	7001-110-219
DROP IN GRATE	LIGHT DUTY	2401DI	7001-110-075

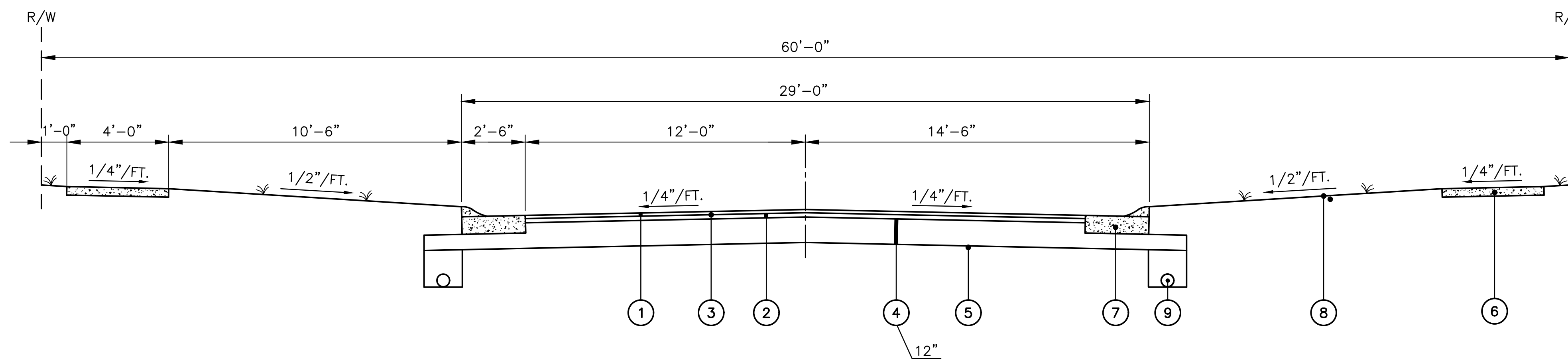
- 1 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP. & PVC SEWER.
- 2 - DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY.
- 3 - DIMENSIONS ARE IN INCHES
- 4 - SEE DRAWING NO. 7001-110-275 FOR ADS N-12 & HANCOR DUAL WALL BELL INFORMATION & DRAWING NO. 7001-110-364 FOR N-12 HP BELL INFORMATION.

YARD BASIN DETAIL (INLINE DRAIN)

SCALE: NTS
YARD BASIN SHALL BE NYLOPLAST 24" INLINE DRAIN BASIN OR APPROVED EQUAL.



POND SECTION A-A
NTS

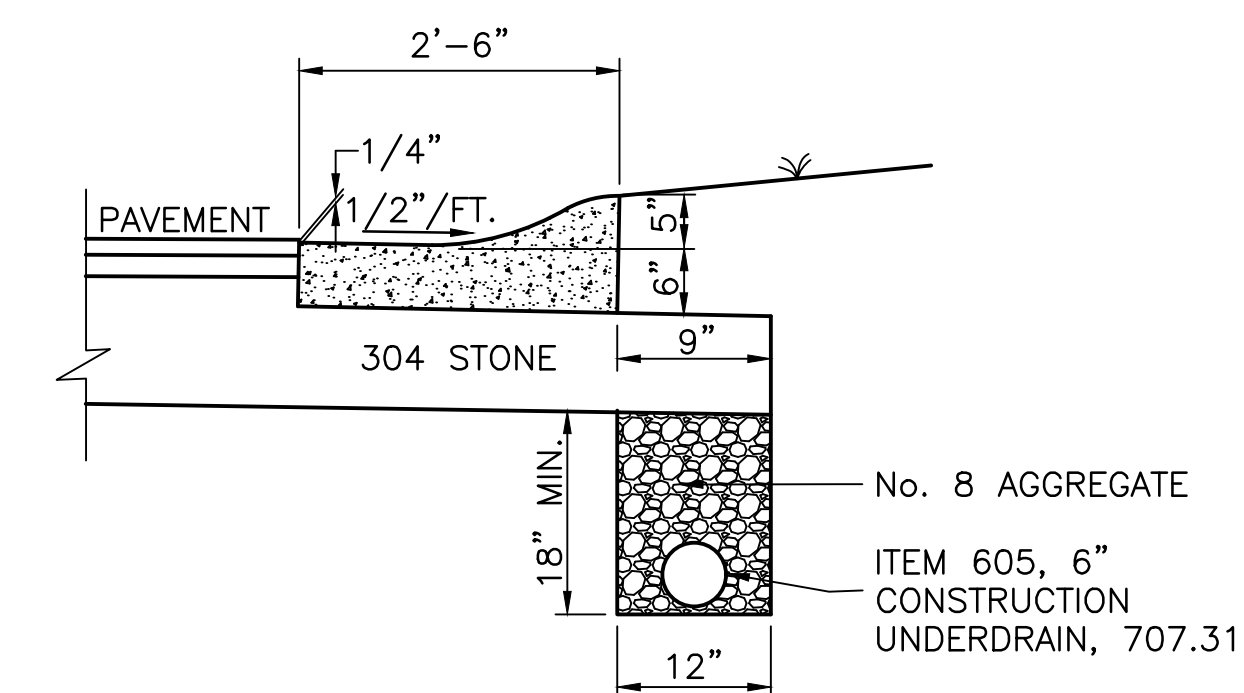


SUNSET MAPLE DRIVE, STA. 40+88.31 TO STA. 52+13.44 = 1125.13 LIN. FT.

TYPICAL ROAD SECTION
NTS

TYPICAL SECTION LEGEND

- 1 ITEM 448 1-1/2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG 64 - 22
- 2 ITEM 448 2 1/2" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64 - 22
- 3 ITEM 407 TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ YD.
- 4 ITEM 304 AGGREGATE BASE (THICKNESS PER PLAN)
- 5 ITEM 204 SUBGRADE COMPACTION
- 6 ITEM 608 4" CONCRETE WALK, 6" AT DRIVES (BY OTHERS)
- 7 ITEM 609 MOUNTABLE CURB AND GUTTER, WOOD COUNTY TYPE F
- 8 ITEM 659 SEEDING AND MULCHING; COMMERCIAL FERTILIZER
- 9 ITEM 605 6" UNDERDRAIN (707.31)



MOUNTABLE CURB AND GUTTER, WOOD COUNTY TYPE F

SCALE: NTS

LEGEND

EXISTING CONTOURS 000
 PROPOSED ELEVATIONS (00.0)
 PROPOSED ELEVATIONS AT HOUSE (00.0)
 PROPOSED = EXISTING (00.0E)
 ADD 600.00 TO ALL PROPOSED SPOT ELEVATIONS.
 ALL PAVEMENT GRADES ARE TOP OF CURB.

MONUMENT LEGEND

EXISTING WOOD COUNTY TYPE A MONUMENT
 PROPOSED WOOD COUNTY TYPE A MONUMENT
 PROPOSED WOOD COUNTY TYPE B MONUMENT
 PROPOSED IRON PIN AT LOT CORNERS
 PROPOSED WOOD COUNTY AND CENTERLINE MONUMENT (DISC TO BE PROVIDED BY WOOD COUNTY)

BENCH MARK DATA

SITE BENCH MARK #200
 CENTER OF STORM MANHOLE LID AT STA. 40+99.83, 31.22 RT., SUNSET MAPLE DRIVE.
 ELEVATION 643.09

SITE BENCH MARK #201
 "X" CUT ON WEST END OF HEADWALL, 7.2' SOUTH OF THE CENTERLINE OF ROACHTON ROAD AND 662.2' WEST OF THE CENTERLINE OF HIGH MEADOWS LANE.
 ELEVATION 639.54

AS PER FEMA COMMUNITY PANEL NUMBER 39173C0015 D EFFECTIVE DATE SEPT. 2, 2011, THIS PROJECT IS NOT WITHIN THE 100 YEAR FLOOD HAZARD AREA.

EASEMENT ABBREVIATIONS	
D.E.	DRAINAGE EASEMENT
P.M.D.E.	LAKE/POND MAINTENANCE & DRAINAGE EASEMENT
S.E.	SANITARY SEWER EASEMENT
U.T.E.	UTILITY & TOLEDO EDISON EASEMENT
W.E.	WATERLINE EASEMENT

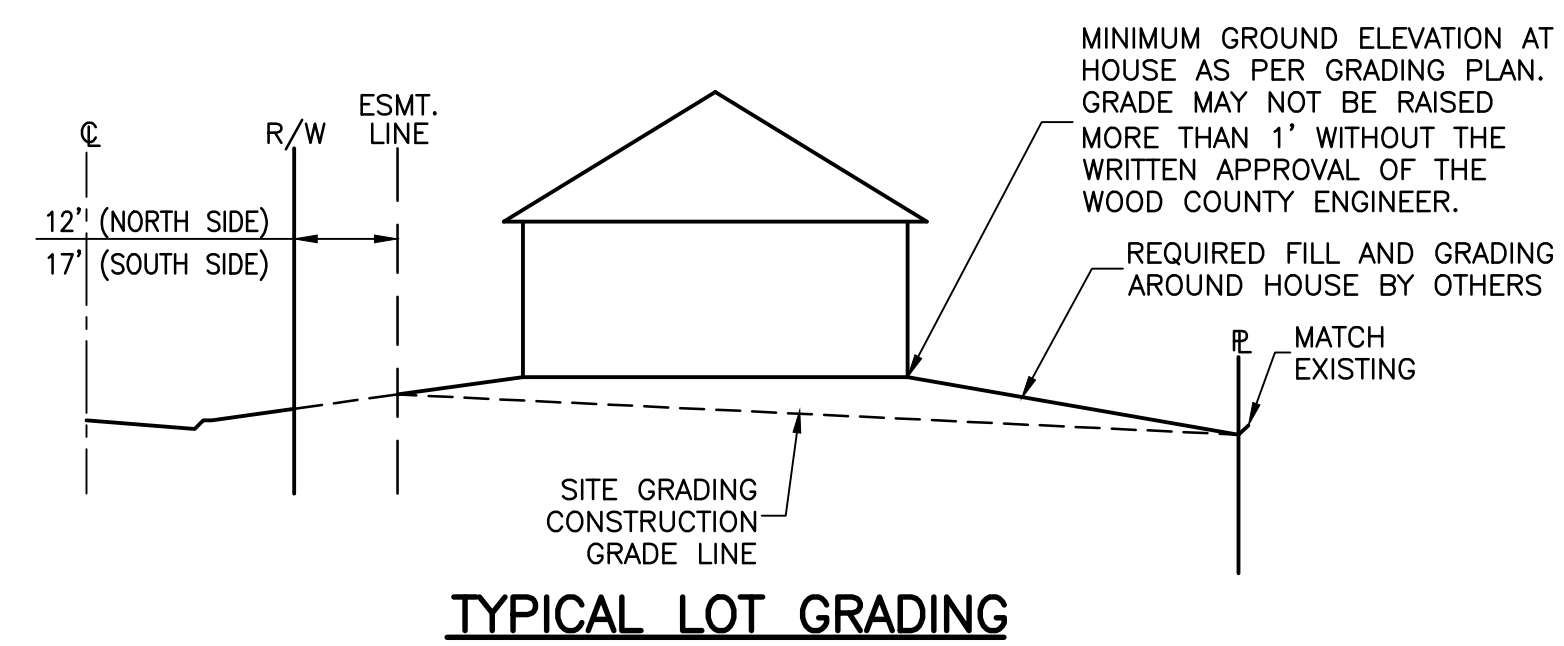
SITE ZONING DATA	
LOCATION:	MIDDLETON TWP, WOOD CO.
ZONING DISTRICT:	R-3
MINIMUM SETBACKS:	
FRONT:	30'
SIDE:	10'
REAR:	30'
SUM OF SIDES:	25'

SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE AS PER ODOT SPECIFICATION ITEM 659, USING SEEDING MIXTURE: 50% CREEPING RED FESCUE, 25% DOMESTIC RYEGRASS AND 25% KENTUCKY BLUEGRASS. SEEDING AND MULCHING SHALL INCLUDE ALL PROPOSED RIGHTS-OF-WAY, REAR YARD SWALES, EASEMENTS PARALLEL TO AND ADJACENT TO THE PROPOSED RIGHT OF WAY, POND SLOPE FROM THE NORMAL WATER ELEVATION TO TOP OF BANK, AND ALL DISTURBED AREAS WITHIN EXISTING COUNTY AND TOWNSHIP RIGHTS-OF-WAY.

LIMITS OF PERMANENT SEEDING & MULCHING SHOWN SHALL BE COMPLETED BY SITE CONTRACTOR.

PLAT THREE CENTERLINE CURVE DATA						
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA	TANGENT
C4	125.00'	198.21'	178.09'	S 44°26'29" E	90°51'07"	126.87'



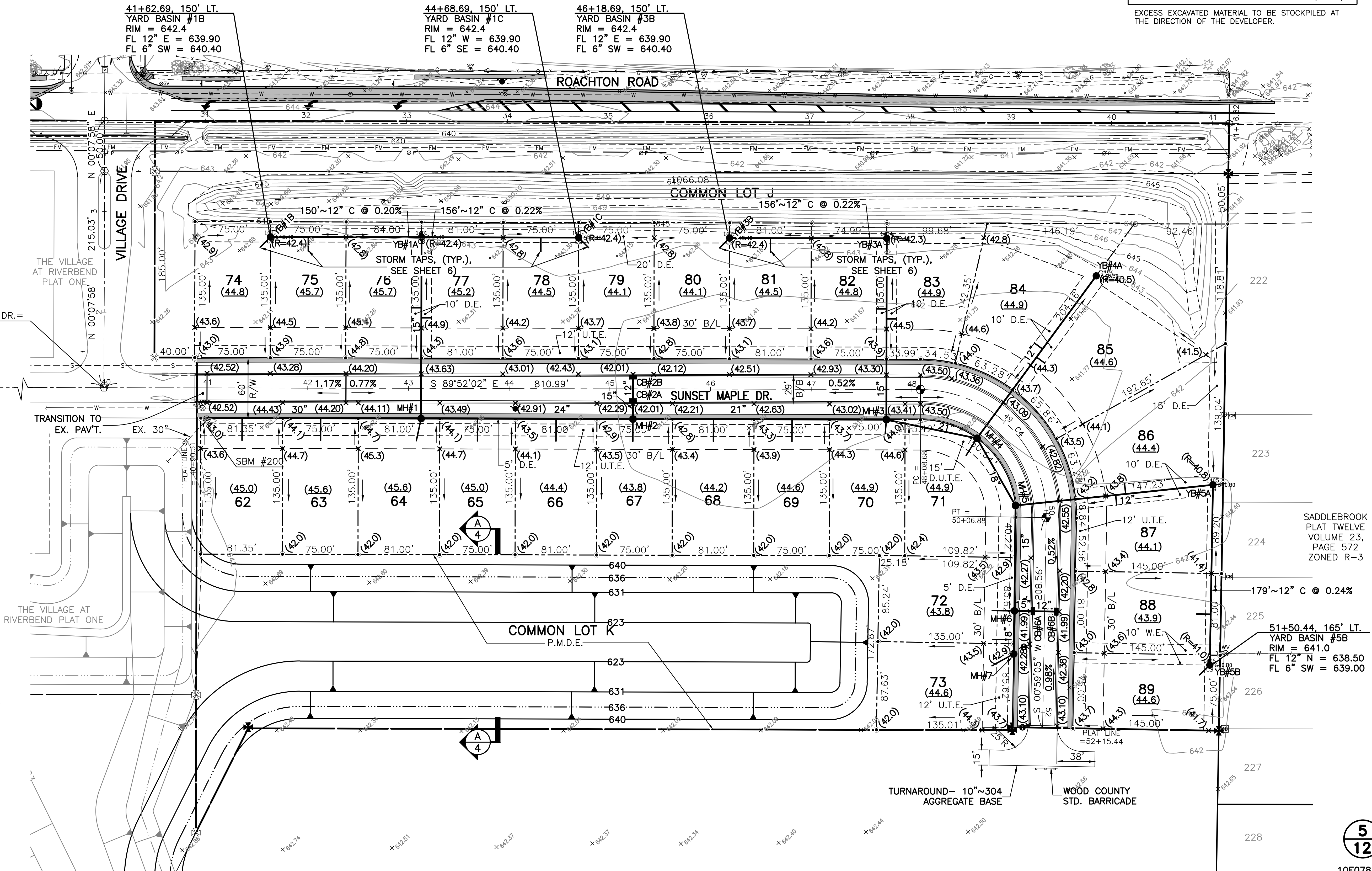
MINIMUM GROUND ELEVATION AT HOUSE AS PER GRADING PLAN. GRADE MAY NOT BE RAISED MORE THAN 1' WITHOUT THE WRITTEN APPROVAL OF THE WOOD COUNTY ENGINEER.

REQUIRED FILL AND GRADING AROUND HOUSE BY OTHERS

FELLER, FINCH & ASSOCIATES, INC.			
REVISION	DATE	DESIGN BY:	CMG
		DRAWN BY:	RCS
		DATE:	6-13-17
		CHK'D BY:	GNF
		DRAWING:	10-07849P03A1

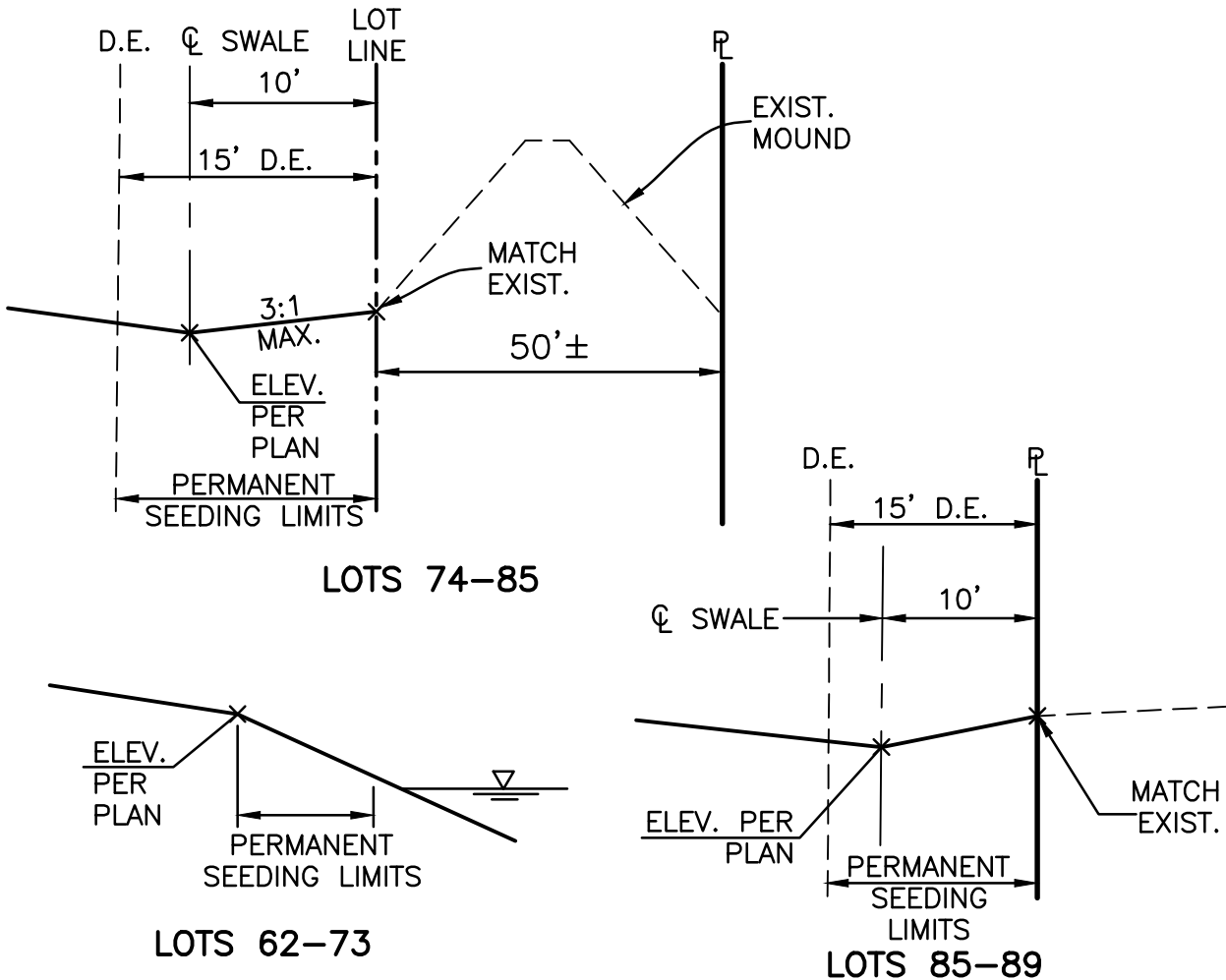
SITE VOLUME TABLE (UNADJUSTED)			
DESCRIPTION	CUT (C) (CU. YDS.)	FILL (F) (CU. YDS.)	NET (CU. YDS.)
BASIN	43770	0	(43770)
ROADWAY & LOTS	2015	10195	8180
TOPSOIL	650	650	0
TOTAL =	46435	10845	(35590)

EXCESS EXCAVATED MATERIAL TO BE STOCKPILED AT THE DIRECTION OF THE DEVELOPER.

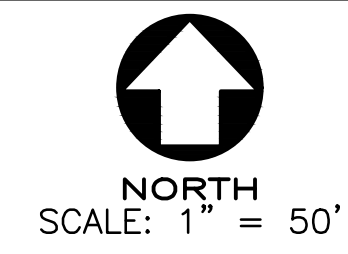


REAR YARD DRAINAGE SWALES

REAR YARD DRAINAGE SWALES SHALL BE GRADED AT THE TIME OF ROADWAY GRADING. SWALES SHALL BE SEEDED, MULCHED AND FERTILIZED AS SOON AS WEATHER PERMITS. TEMPORARY INLET PROTECTION FILTER FABRIC FENCE SHALL BE PLACED AROUND ALL REAR YARD CATCH BASINS AT THE TIME OF CONSTRUCTION.



RETENTION BASIN DATA	
NORMAL WATER ELEVATION	= 636.0
100 YR. HIGH WATER ELEVATION	= 638.16
100 YR. STORAGE VOLUME REQUIRED (PLATS ONE, TWO & THREE)	= 162,646 CU. FT.
100 YR. STORAGE VOLUME PROVIDED	= 529,947 CU. FT.



EASEMENT ABBREVIATIONS
 D.E. DRAINAGE EASEMENT
 D.U.T.E. DRAINAGE & UTILITY EASEMENT
 U.T.E. UTILITY & TOLEDO EDISON EASEMENT
 W.E. WATERLINE EASEMENT

STORM TAP DATA

LOT 80
 0+00 (46+08.79, 140' LT.)
 14'~6" C @ 1.0%
 FL 6" = 639.54

LOT 81
 1+15.50 (46+59.19, 136' LT.)
 6" ON 12" TEE
 14'~6" C @ 1.0%
 FL 6" = 640.20

LOT 88
 1+28.50 (51+00, 151' LT.)
 6" ON 12" TEE
 14'~6" C @ 1.0%
 FL 6" = 638.77

LOT 89
 0+00 (51+60.34, 155' LT.)
 14'~6" C @ 1.0%
 FL 6" = 639.14

STORM TAP DATA

LOT 72
 0+00 (51+00, 52' RT.)
 22'~6" C @ 1.0%
 FL 6" = 639.02

LOT 73
 0+00 (51+54.85, 51.35' RT.)
 25'~6" C @ 1.0%
 FL 6" = 639.22

LOT 74
 0+00 (41+52.79, 140' LT.)
 14'~6" C @ 1.0%
 FL 6" = 640.54

LOT 75
 1+12.50 (42+00.19, 136' LT.)
 6" ON 12" TEE
 14'~6" C @ 1.0%
 FL 6" = 640.21

LOT 78
 1+18.50 (44+31.19, 136' LT.)
 6" ON 12" TEE
 14'~6" C @ 1.0%
 FL 6" = 640.20

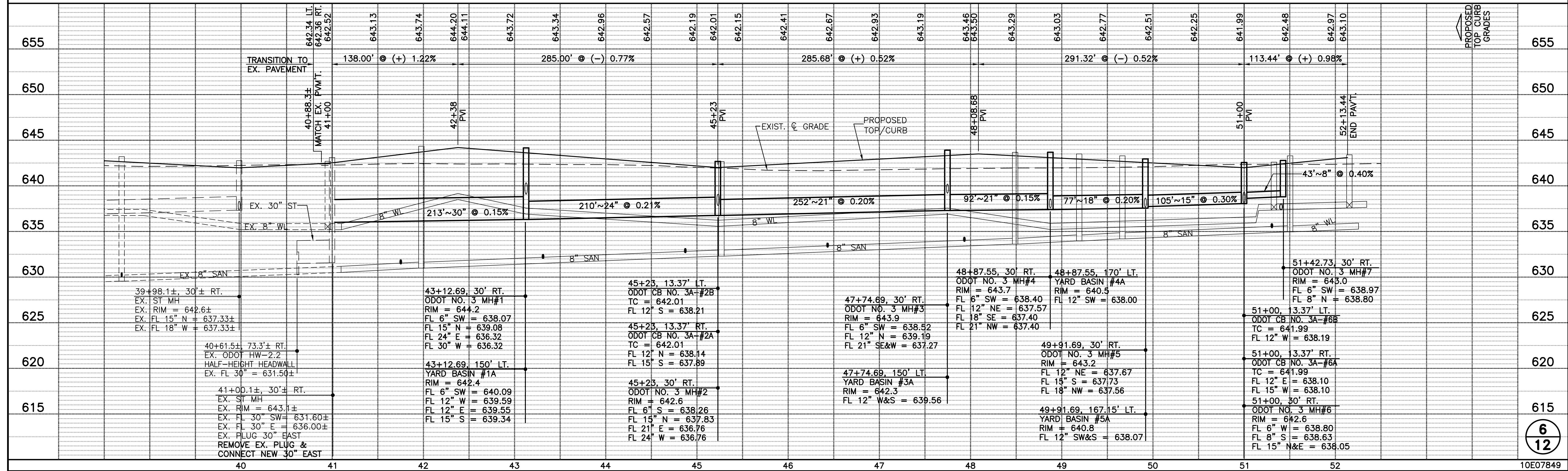
LOT 79
 0+00 (44+78.59, 140' LT.)
 14'~6" C @ 1.0%
 FL 6" = 640.54

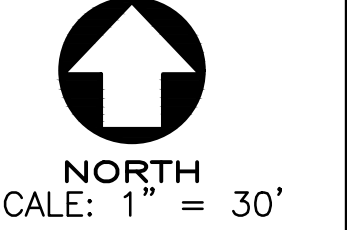
PLAT THREE CENTERLINE CURVE DATA						
CURVE	RADIUS	LENGTH	CHORD	BEARING	DELTA	TANGENT
C4	125.00'	198.21'	178.09'	S 44°26'29" E	90°51'07"	126.87'

SEE GRADING PLAN ON SHEET 5 FOR REAR YARD BASIN DATA

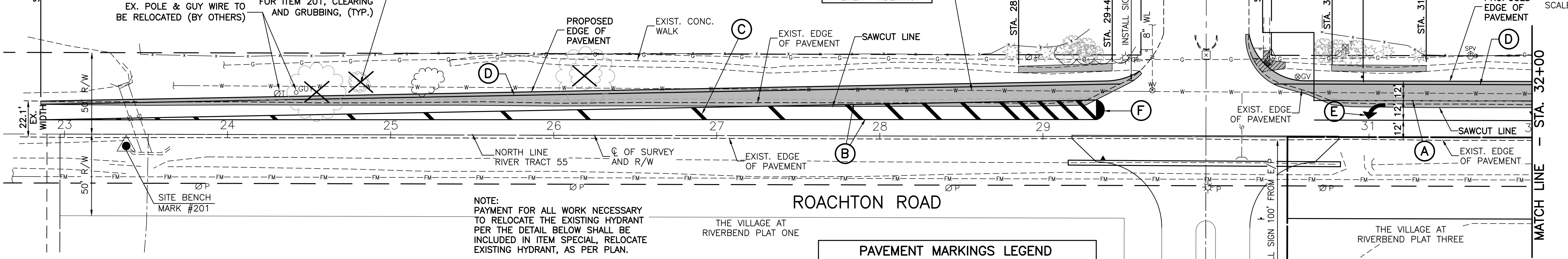
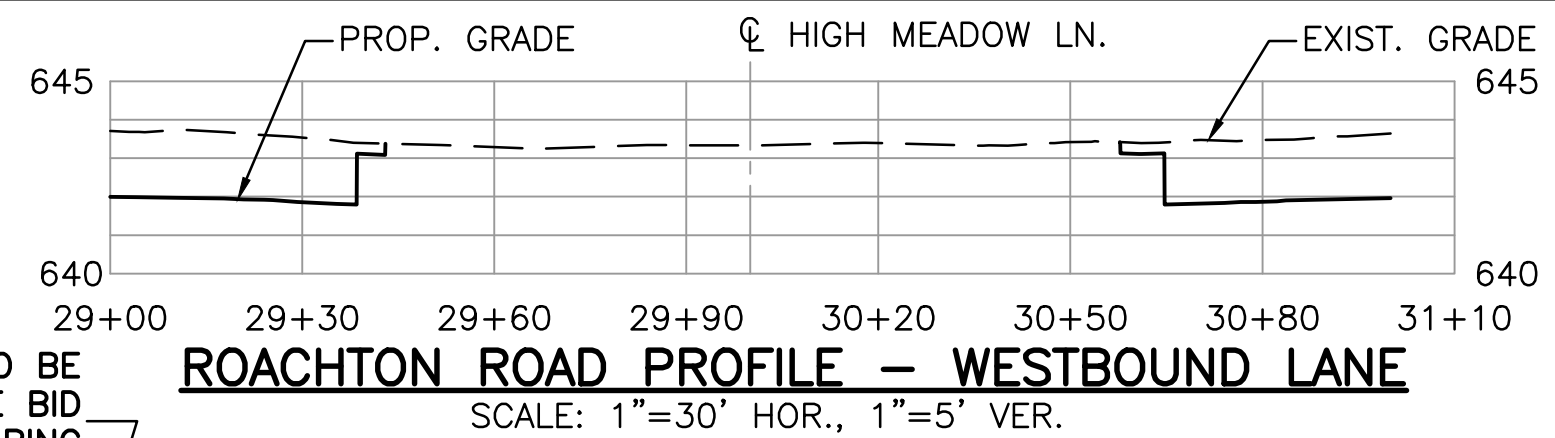
SUNSET MAPLE DRIVE

NOTE: ORIENT THE STRAIGHT SIDE OF THE DOME SECTION AWAY FROM THE STREET CENTERLINE FOR ALL MANHOLES. IF FLAT SLAB TOP IS USED, ORIENT MANHOLE LID AWAY FROM SIDEWALK.





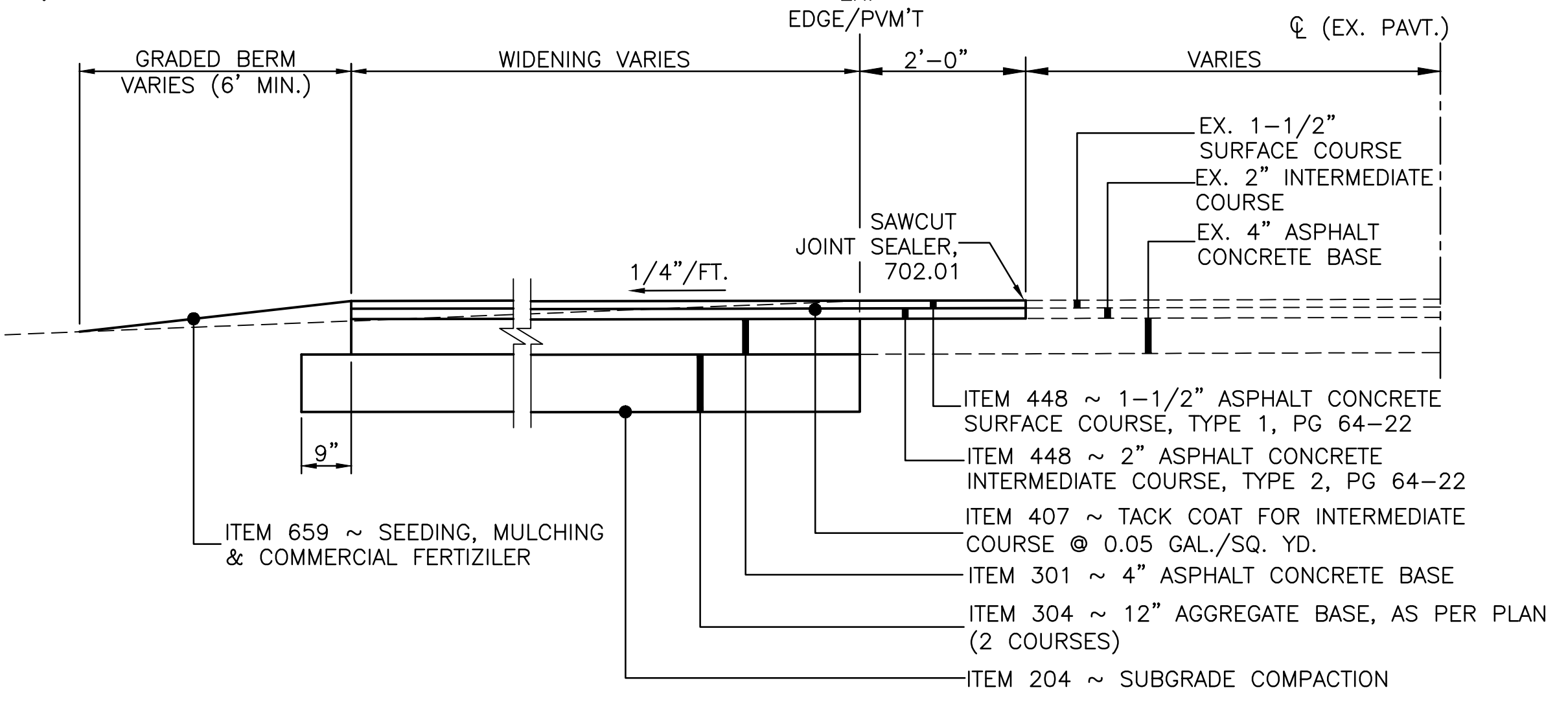
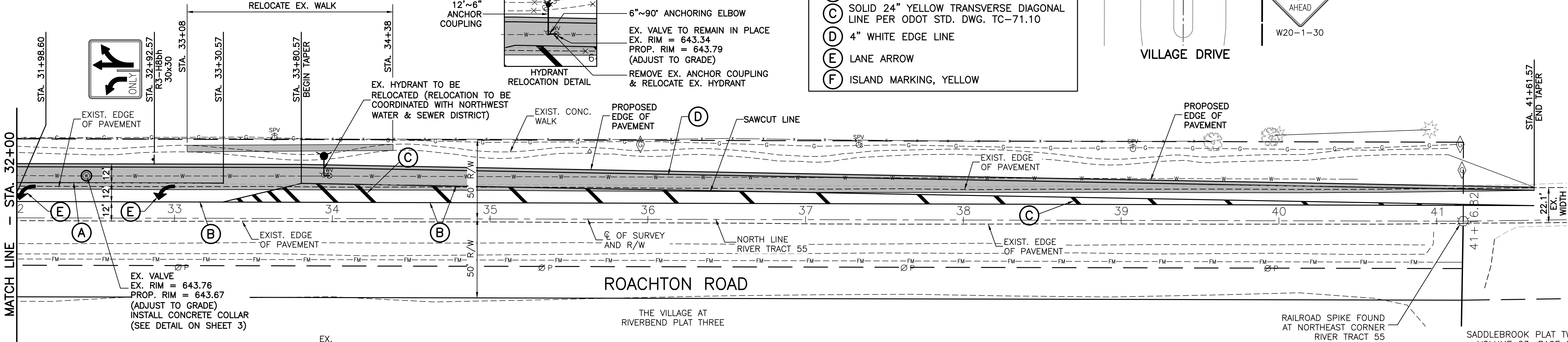
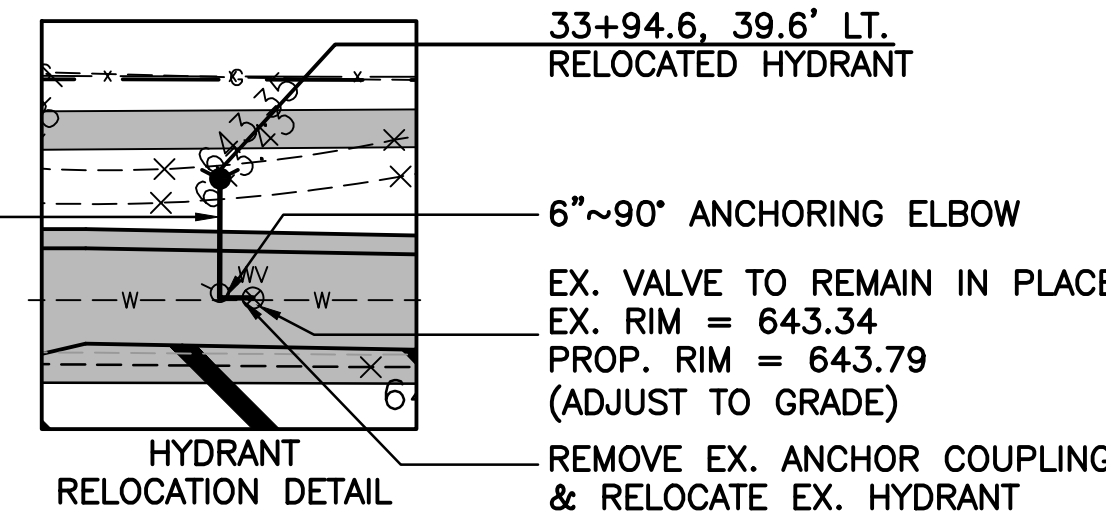
SITE BENCH MARK #201
 "X" CUT ON WEST END OF HEADWALL, 7.2' SOUTH OF THE CENTERLINE OF ROACHTON ROAD AND 662.2' WEST OF THE CENTERLINE OF HIGH MEADOWS LANE.
 ELEVATION 639.54



PAVEMENT MARKINGS LEGEND

- (A) 8" WHITE CHANNELIZING LINE
- (B) 4" SOLID DOUBLE YELLOW CENTERLINE
- (C) SOLID 24" YELLOW TRANSVERSE DIAGONAL LINE PER ODOT STD. DWG. TC-71.10
- (D) 4" WHITE EDGE LINE
- (E) LANE ARROW
- (F) ISLAND MARKING, YELLOW

NOTE: PAYMENT FOR ALL WORK NECESSARY TO RELOCATE THE EXISTING HYDRANT PER THE DETAIL BELOW SHALL BE INCLUDED IN ITEM SPECIAL, RELOCATE EXISTING HYDRANT, AS PER PLAN.



SUMMARY

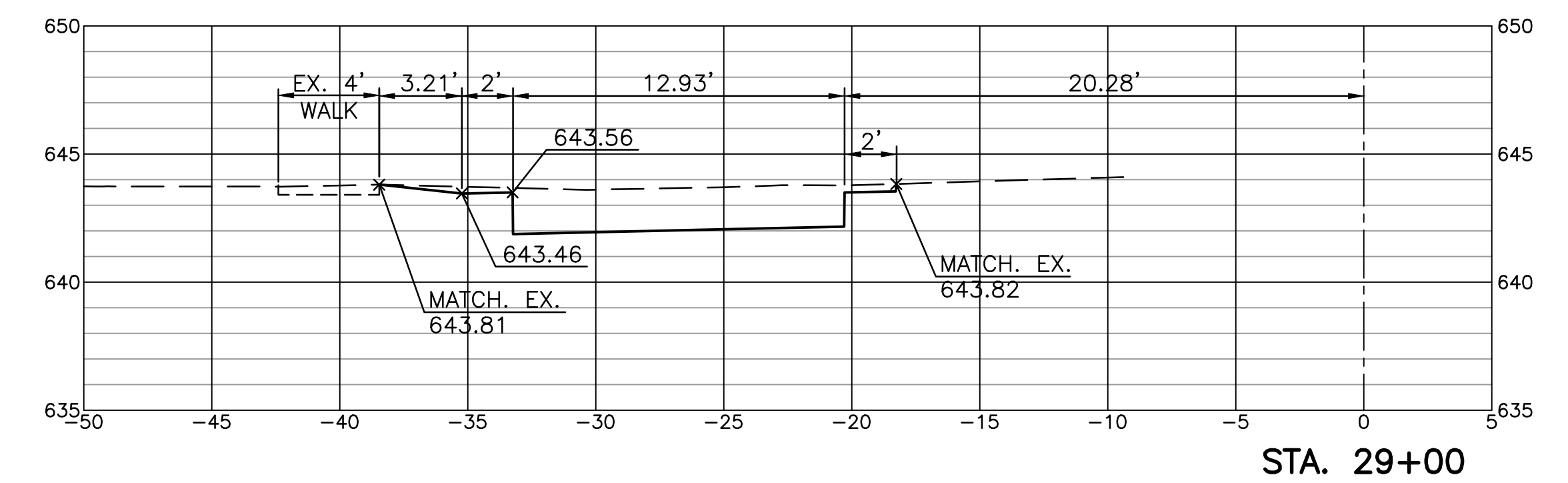
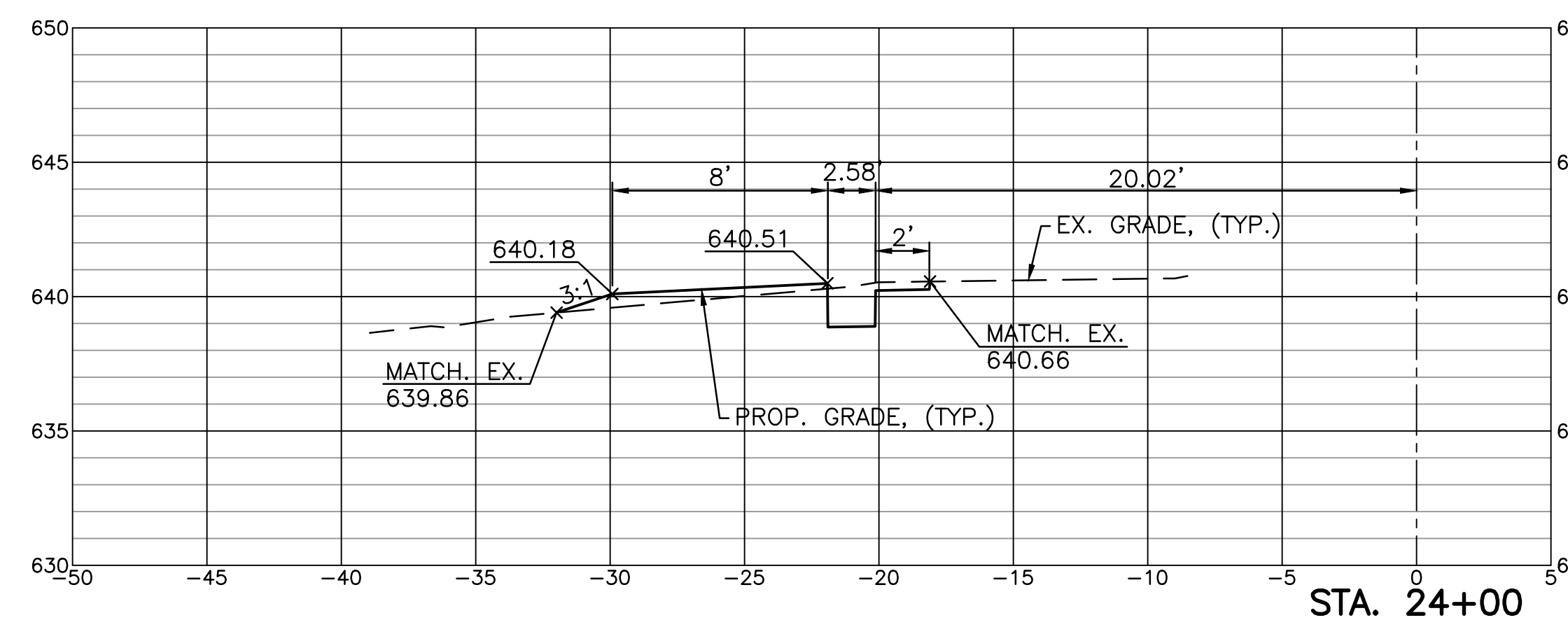
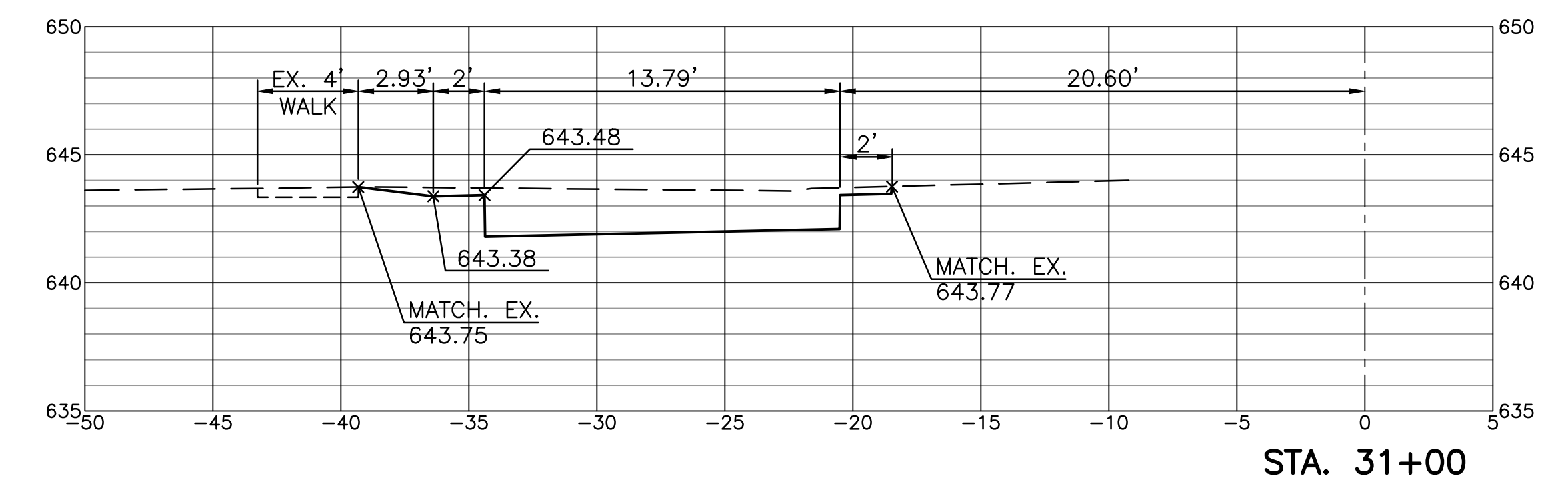
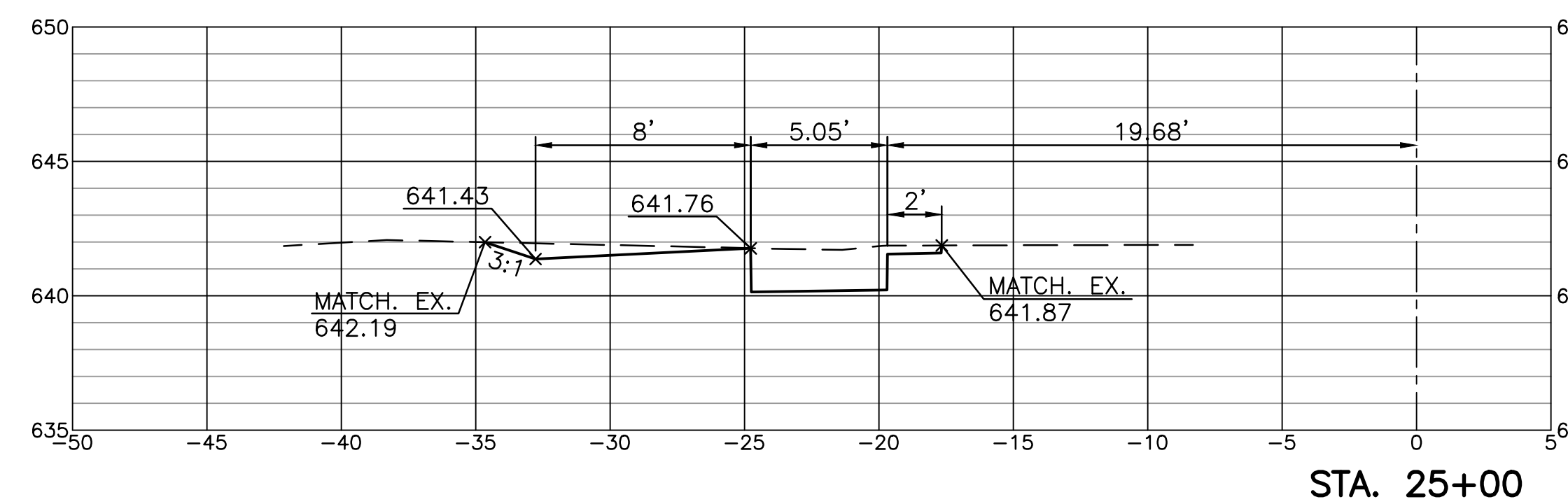
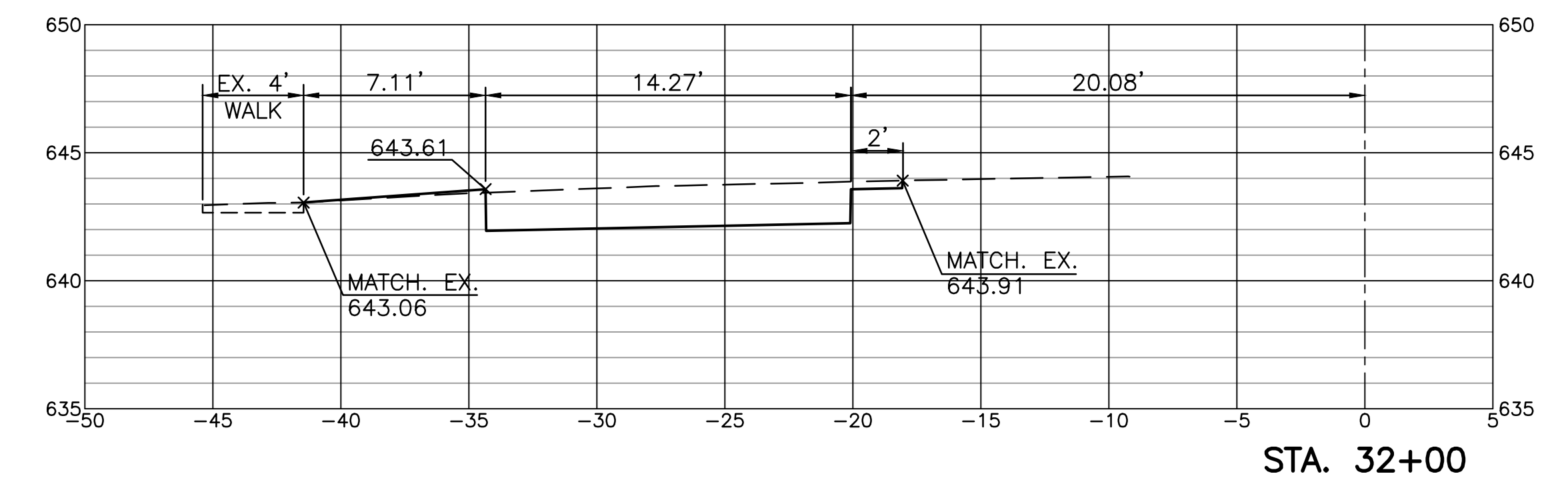
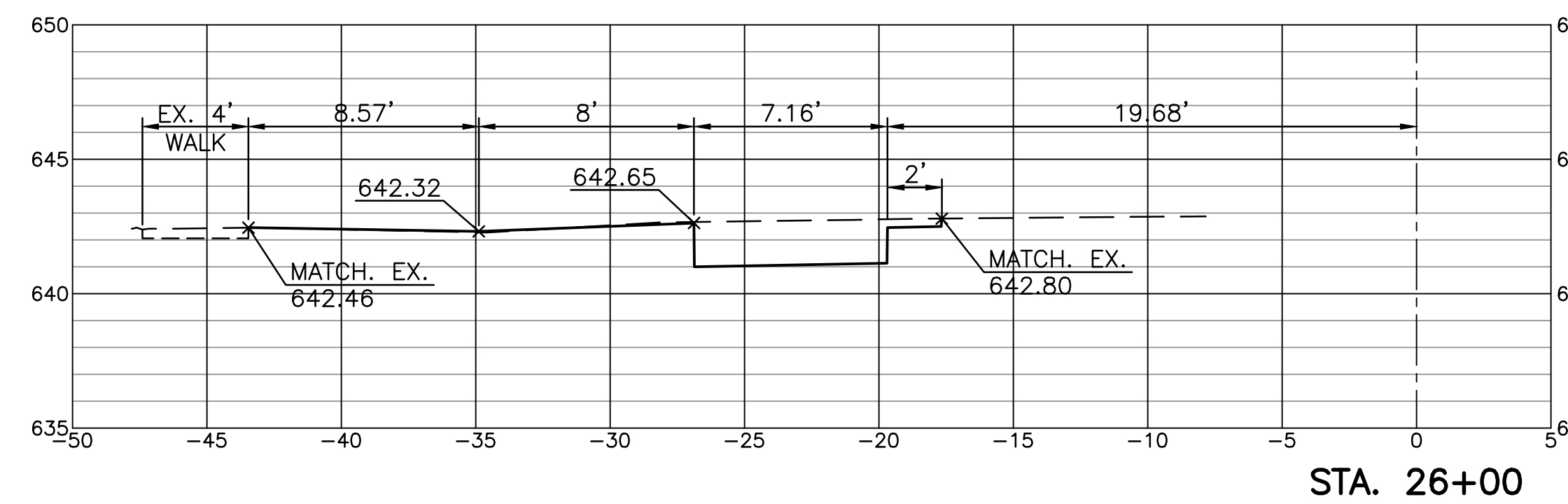
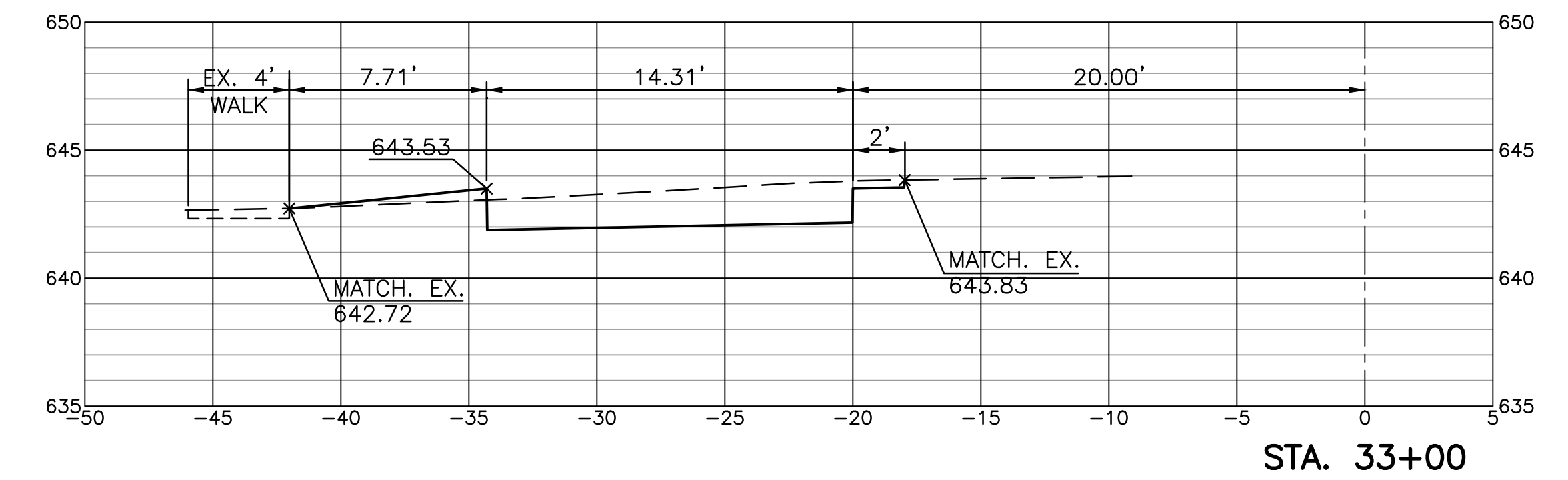
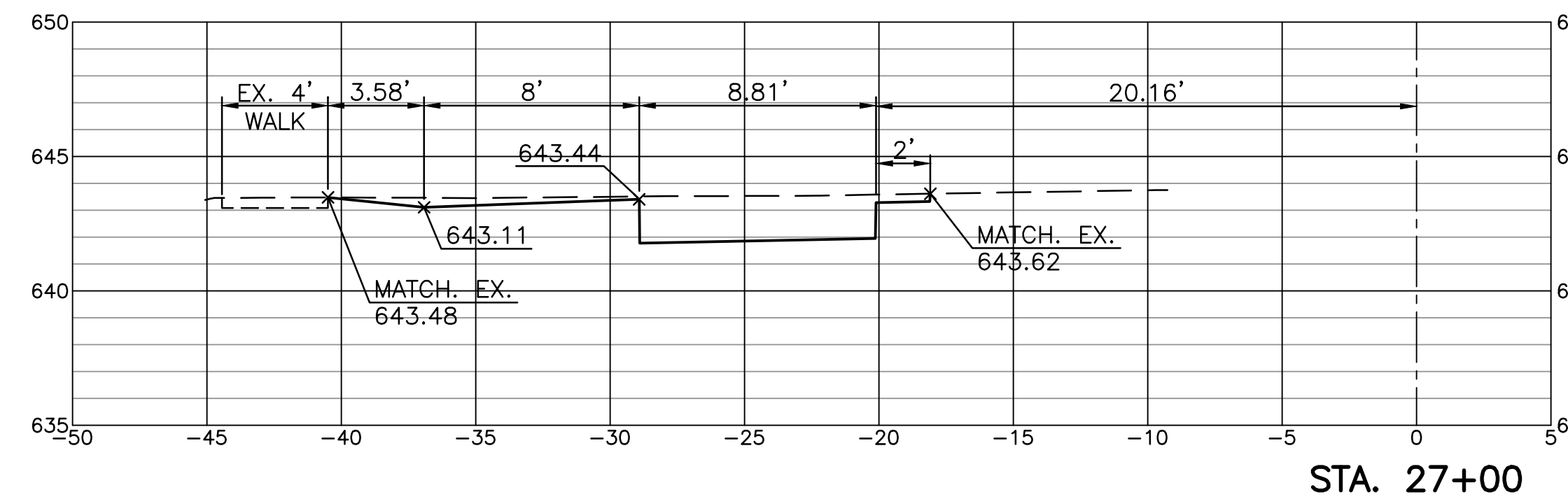
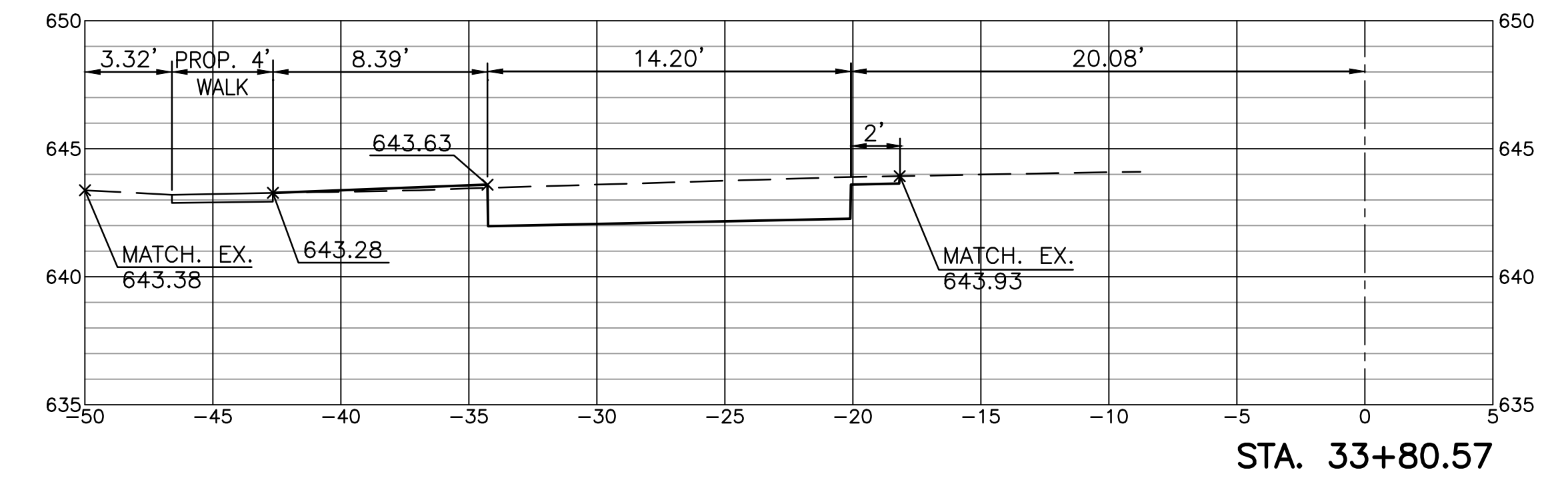
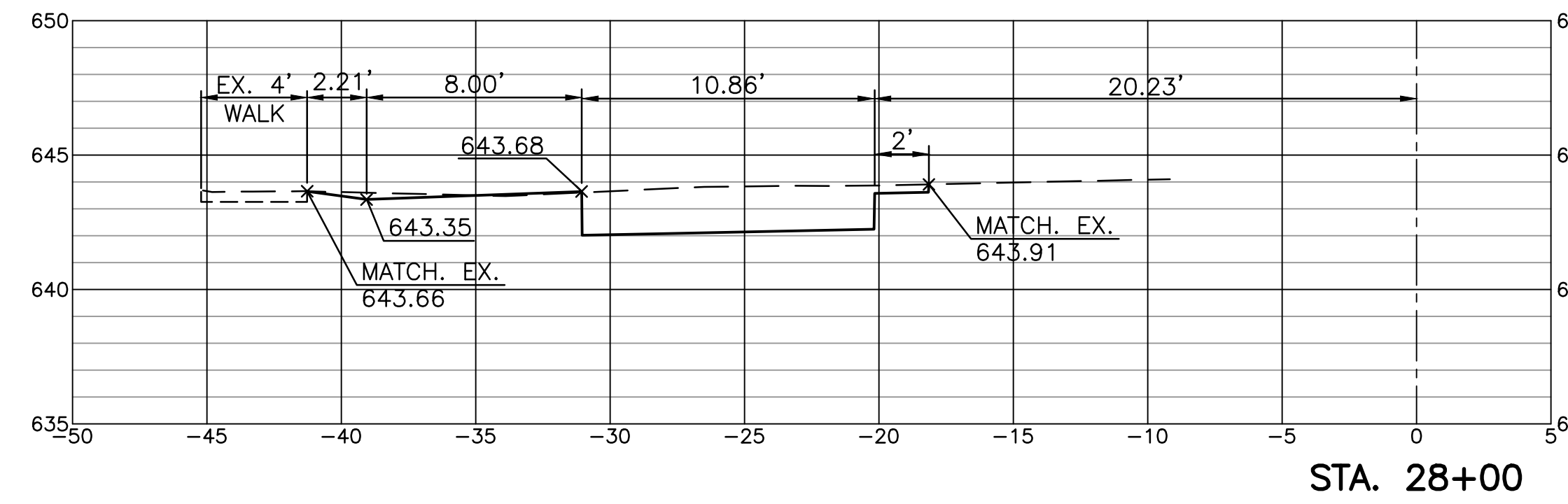
ITEM	QTY.	UNIT	DESCRIPTION
PAVEMENT			
201	LUMP	LUMP	CLEARING AND GRUBBING
202	950	SQ. FT.	WALK REMOVED, AS PER PLAN
203	967	CU. YDS.	EXCAVATION, AS PER PLAN
204	1851	SQ. YDS.	SUBGRADE COMPACTION
301	187	CU. YDS.	ASPHALT CONCRETE BASE
304	617	CU. YDS.	AGGREGATE BASE
407	106	GALLONS	TACK COAT
448	118	CU. YDS.	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG 64-22
448	89	CU. YDS.	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1 PG 64-22
608	994	SQ. FT.	4" CONCRETE WALKS (BY CONTRACTOR)
614	LUMP	LUMP	MAINTAINING TRAFFIC
659	1827	SQ. YDS.	SEEDING AND MULCHING
659	0.16	TONS	COMMERCIAL FERTILIZER (20 LBS. PER 1,000 SQ. FT.)
SPEC.	1	EACH	RELOCATE EX. HYDRANT, AS PER PLAN

SUMMARY

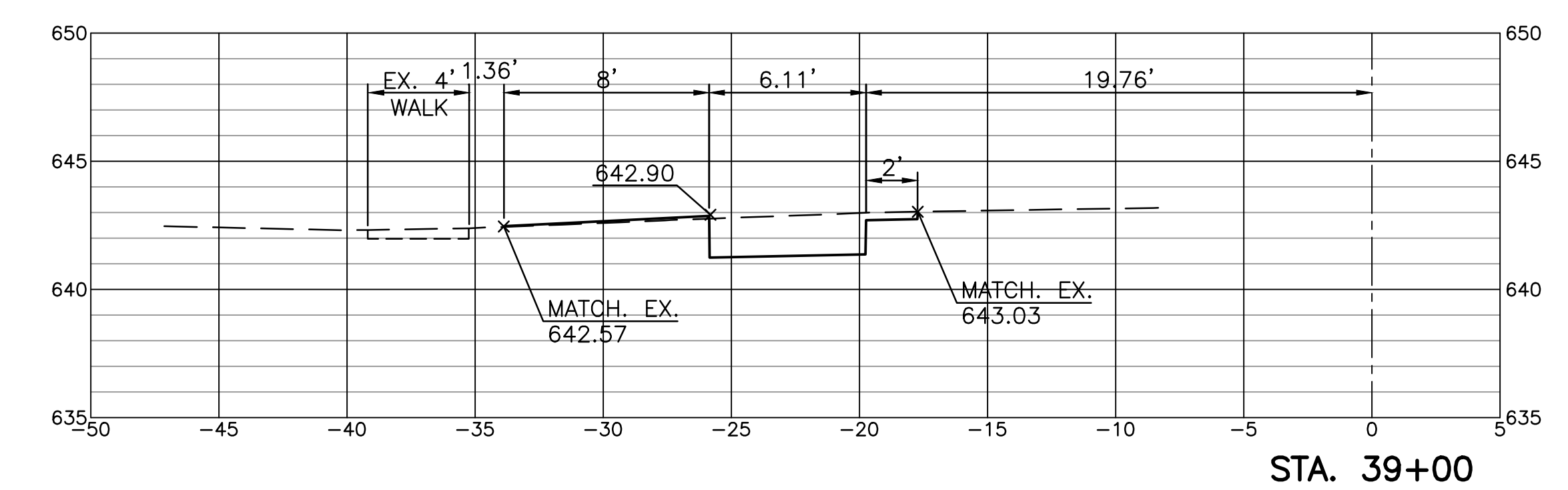
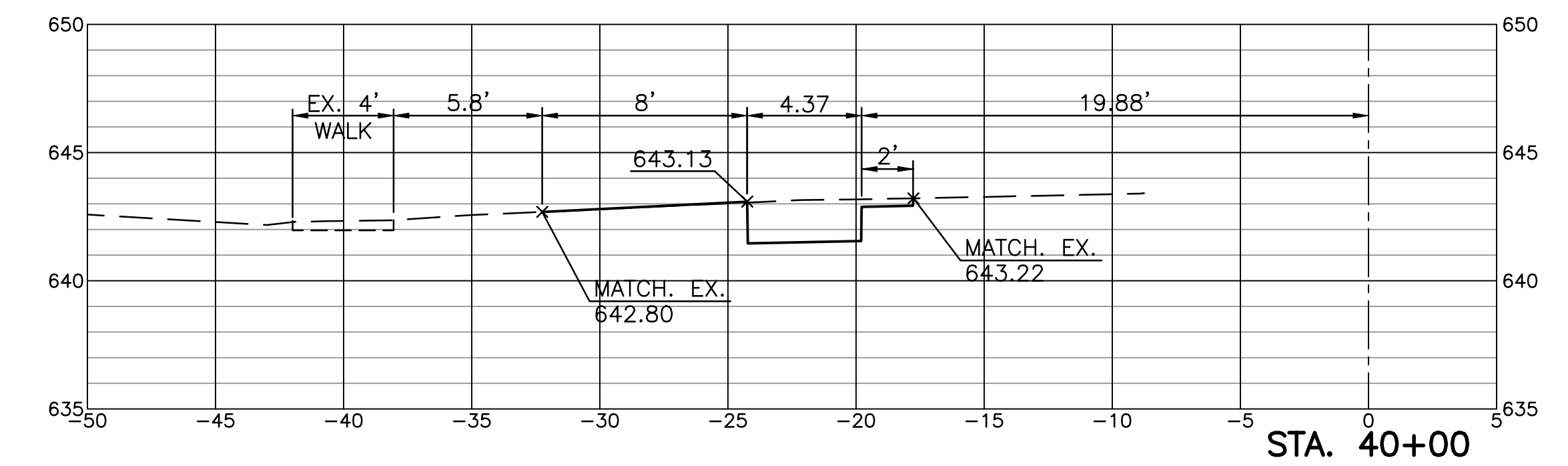
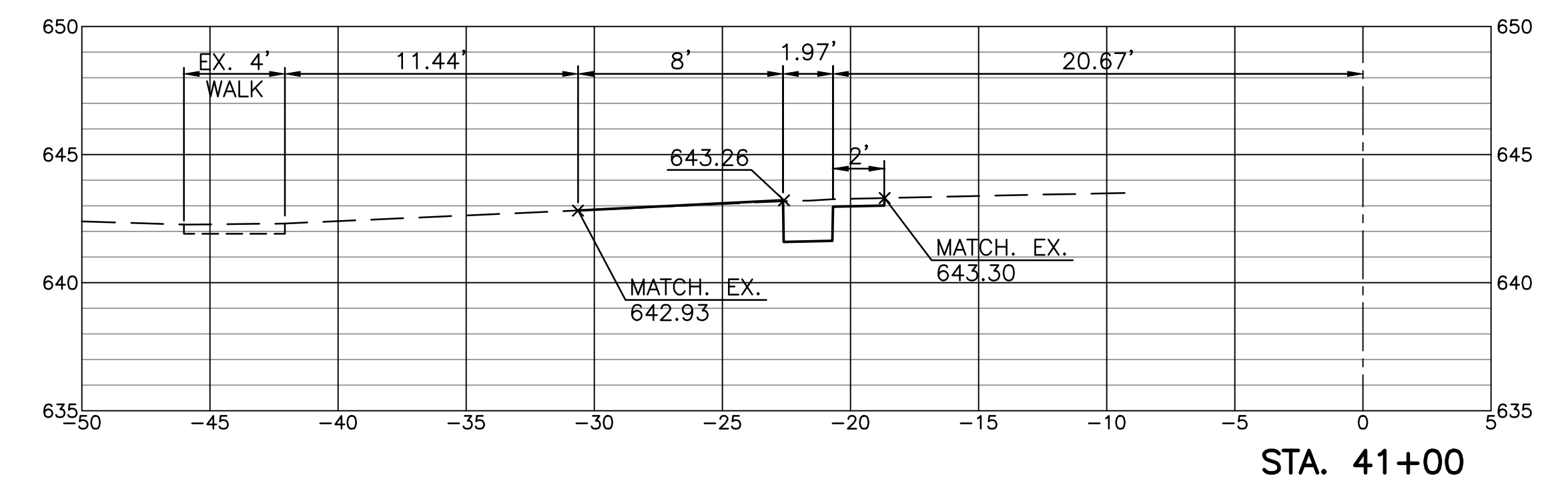
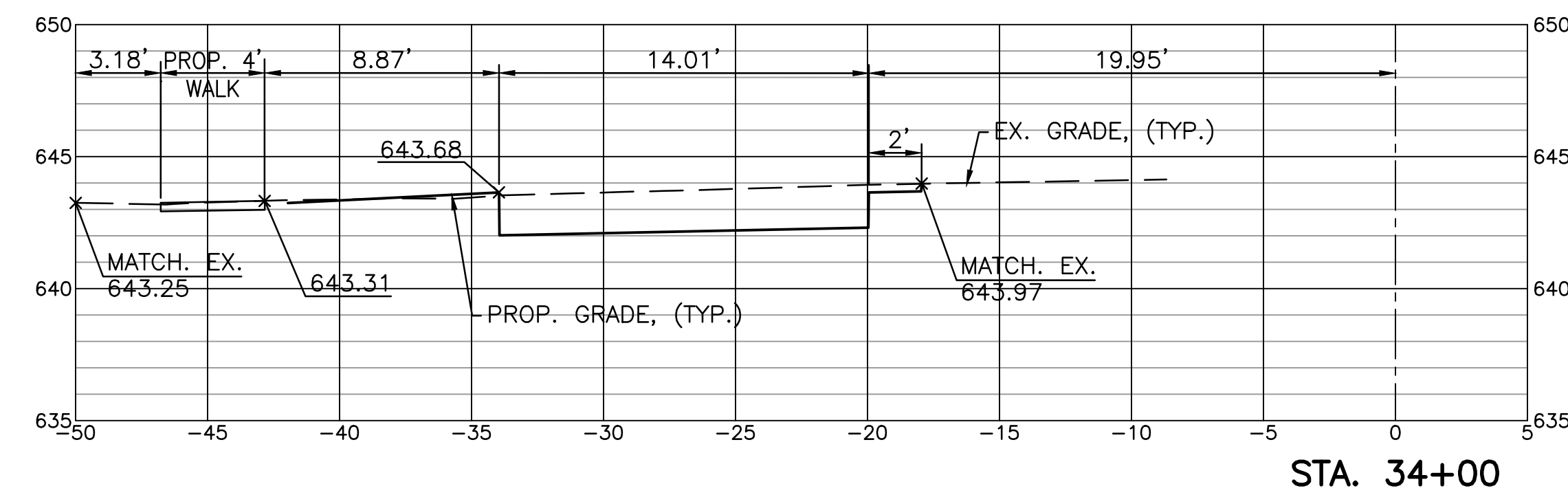
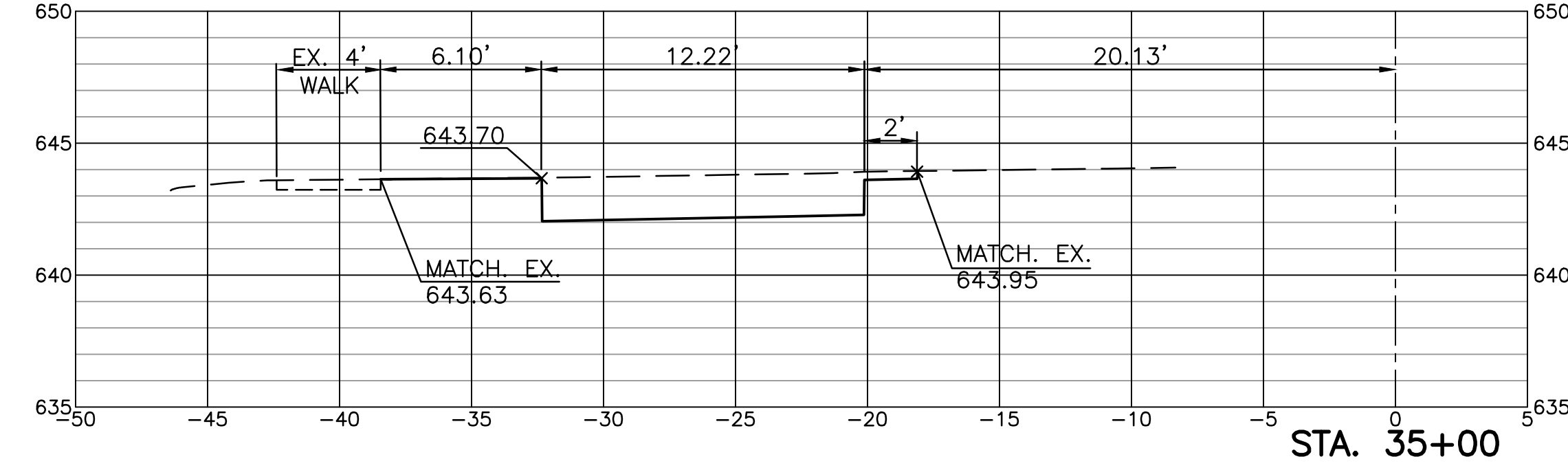
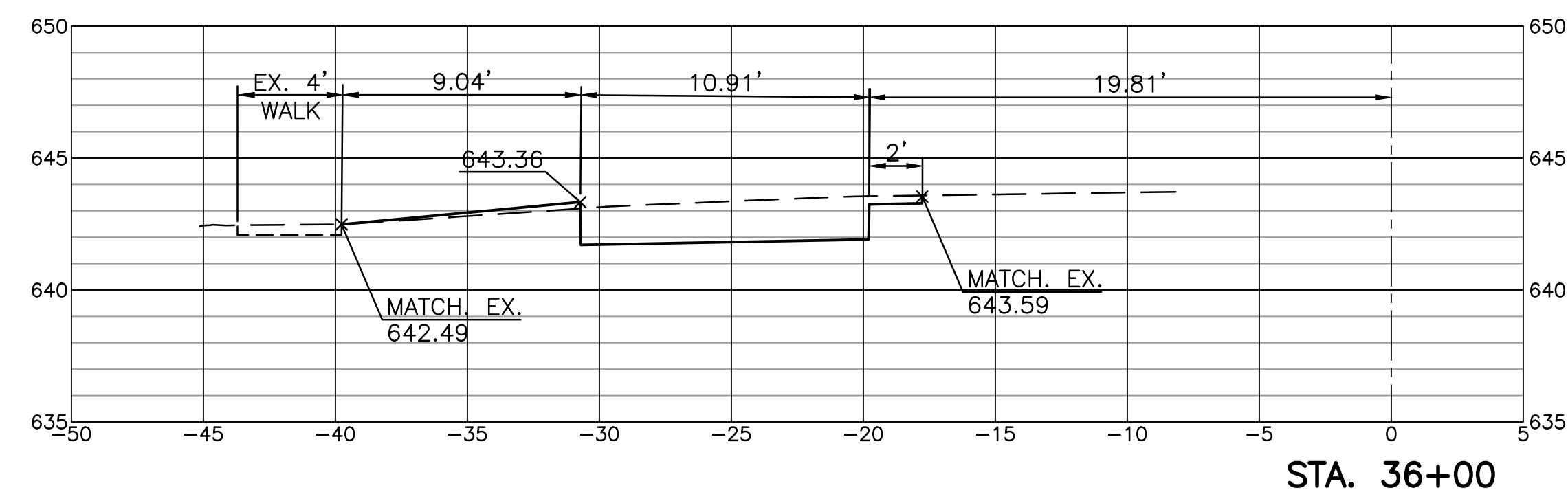
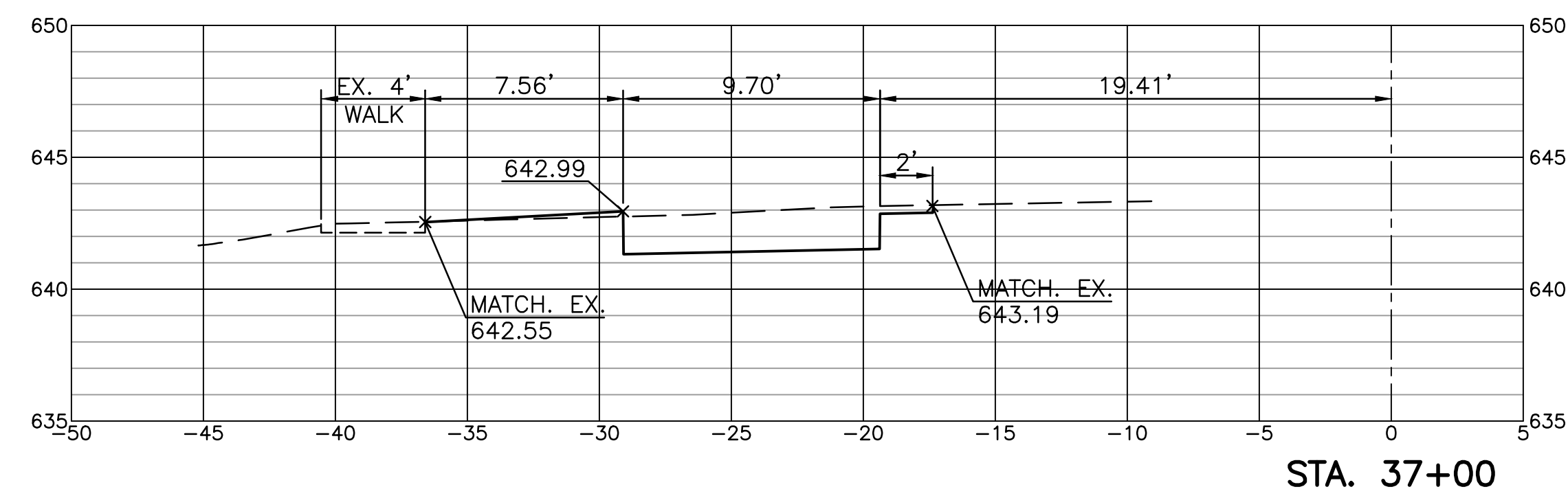
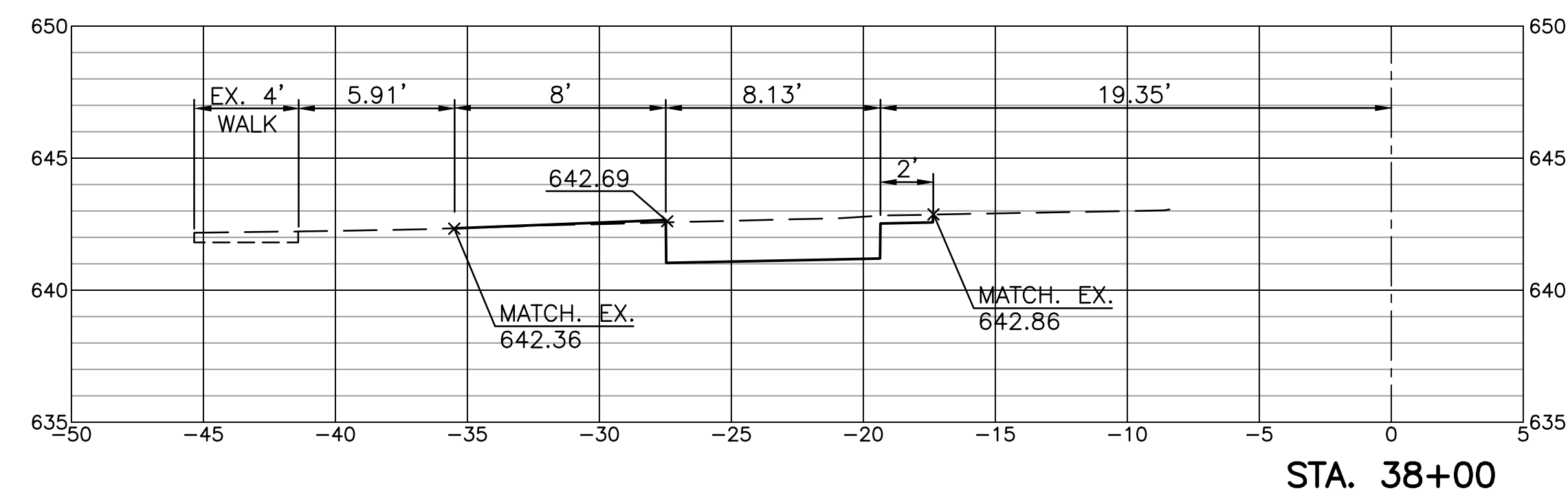
ITEM	QTY.	UNIT	DESCRIPTION
SIGNING AND STRIPING			
642	3	EACH	LANE ARROW
642	264	FT.	8" WHITE CHANNELIZING LINE
642	0.34	MI.	4" WHITE EDGE LINE, TYPE 1
642	366	FT.	YELLOW TRANSVERSE/DIAGONAL LINE, TYPE 1
642	3222	MI.	4" DOUBLE YELLOW CENTER LINE, TYPE 1
642	1876	FT.	REMOVAL OF CENTER LINE
642	42	SQ. FT.	ISLAND MARKING, TYPE A
630	51	FT.	GROUND MOUNTED SUPPORT No. 3 POST
630	25	SQ. FT.	SIGN, FLAT SHEET, TYPE G

TYPICAL ROACHTON ROAD WIDENING SECTION
 SCALE: NTS

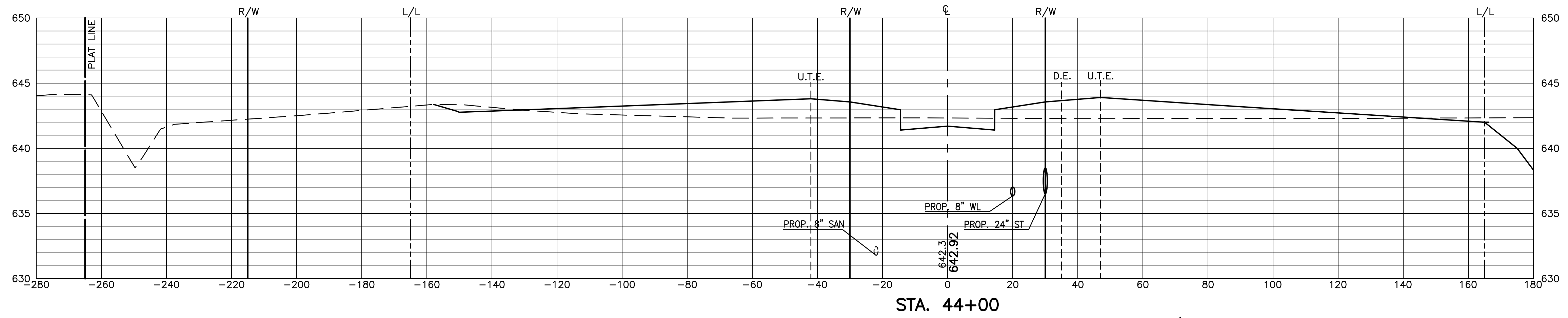
FELLER, FINCH & ASSOCIATES, INC.			
REVISION	DATE	DESIGN BY:	CMG
		DRAWN BY:	RCS
		DATE:	6-13-17
		CHK'D BY:	GNF
		DRAWING:	10-07849P03A1



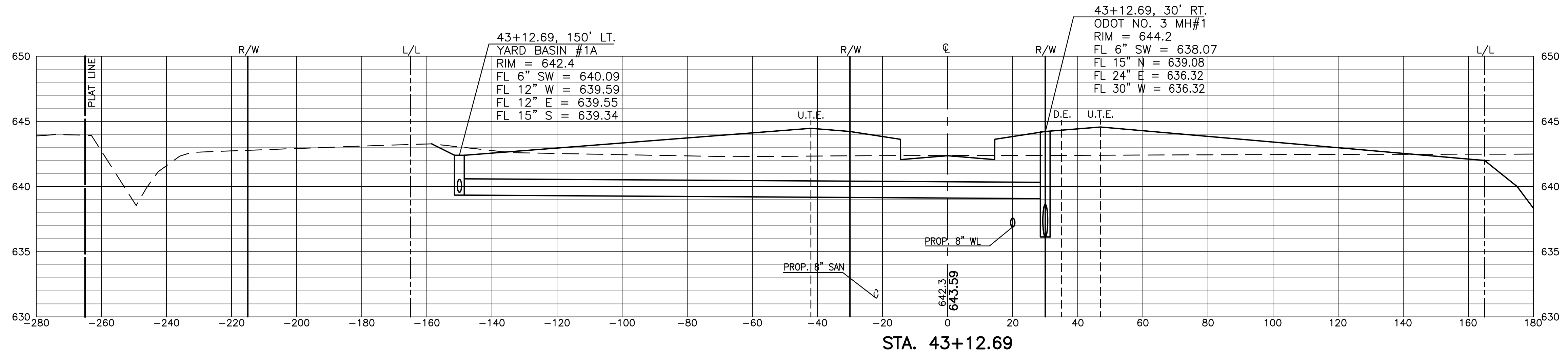
FELLER, FINCH & ASSOCIATES, INC.			
REVISION	DATE	DESIGN BY:	CMG
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		DATE:	6-13-17
		CHK'D BY:	GNF
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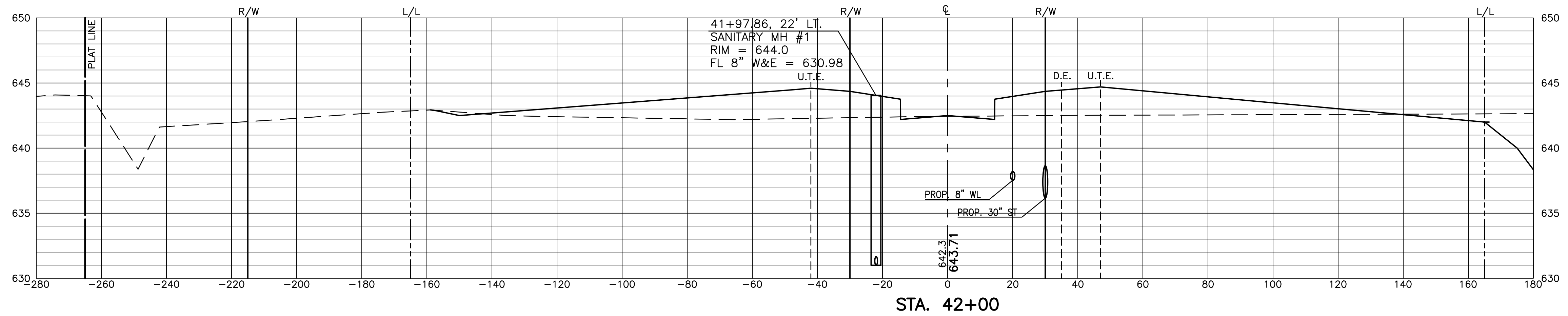
FELLER, FINCH & ASSOCIATES, INC.			
REVISION	DATE	DESIGN BY:	CMG
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		DATE:	6-13-17
		CHK'D BY:	GNF
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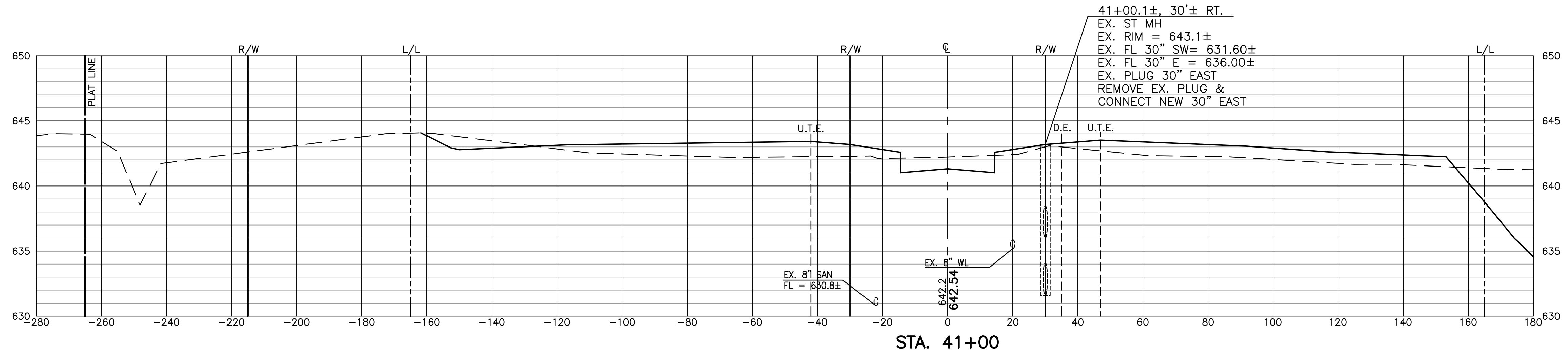
STA. 44+00



STA. 43+12.69

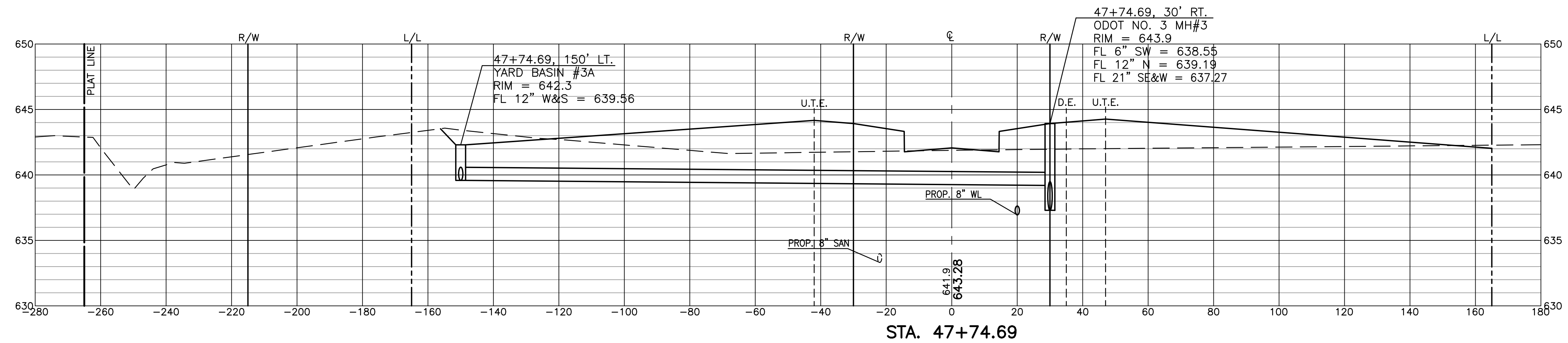


STA. 42+00

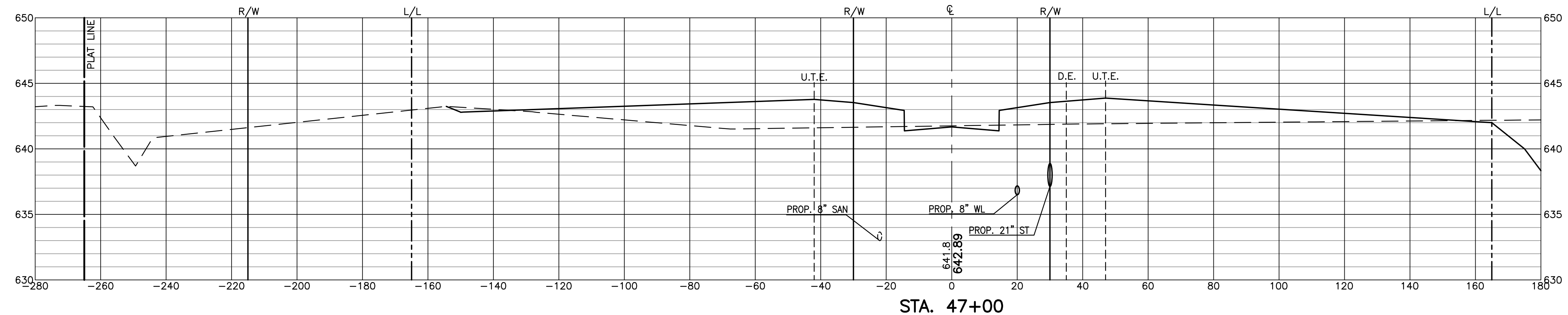


STA. 41+00

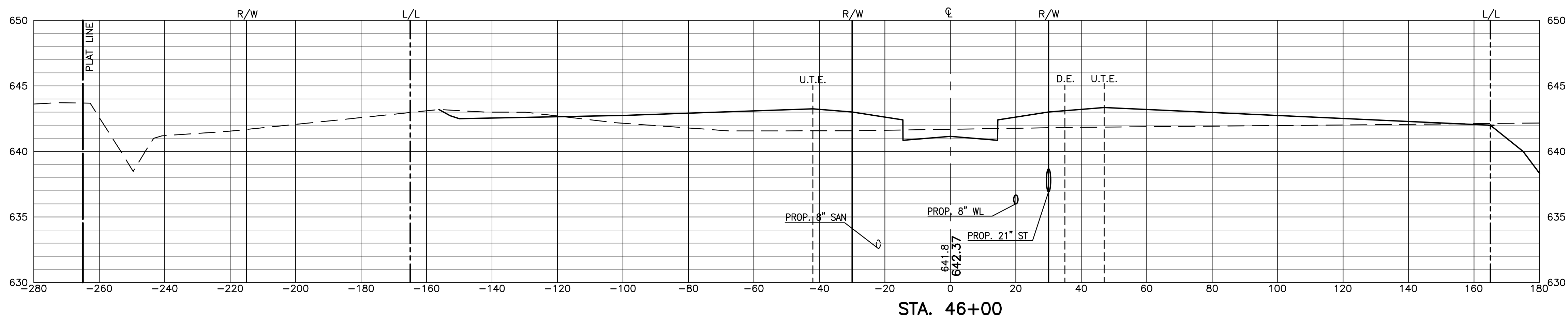
REVISION	DATE	DESIGN BY:	CMG
		DRAWN BY:	RCS
		DATE:	6-13-17
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		DRAWING:	10-07849P03A1



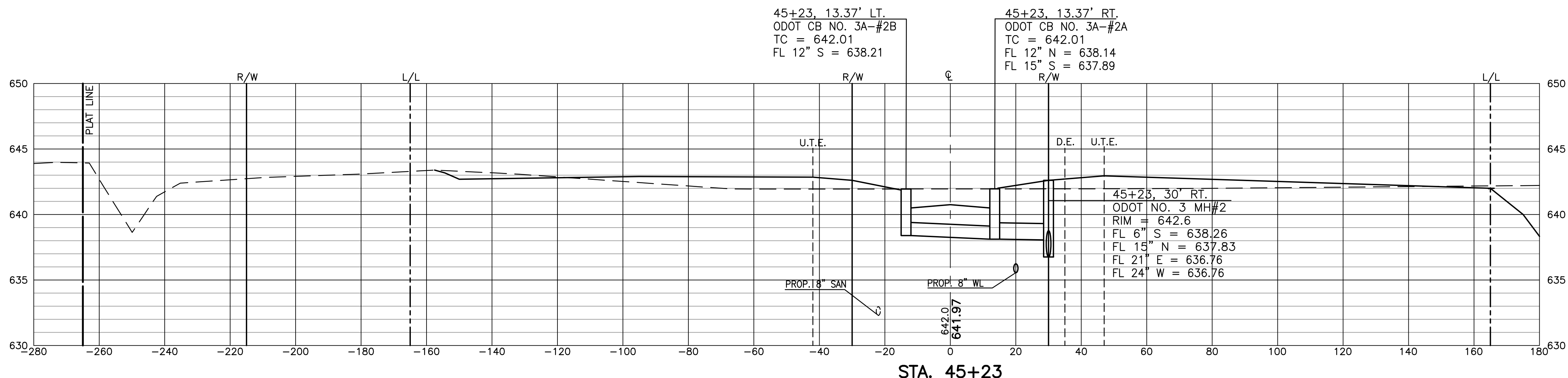
STA. 47+74.69



STA. 47+00

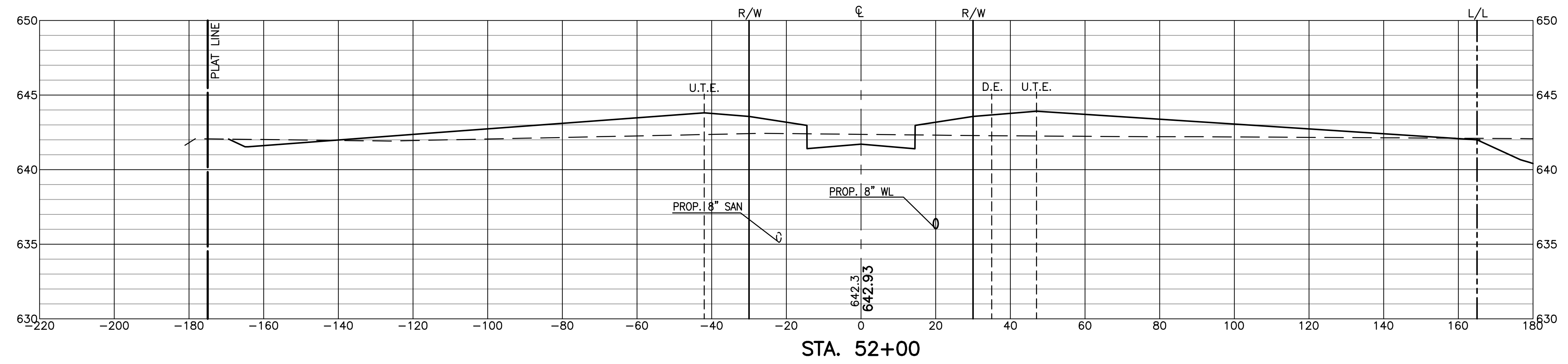


STA. 46+00



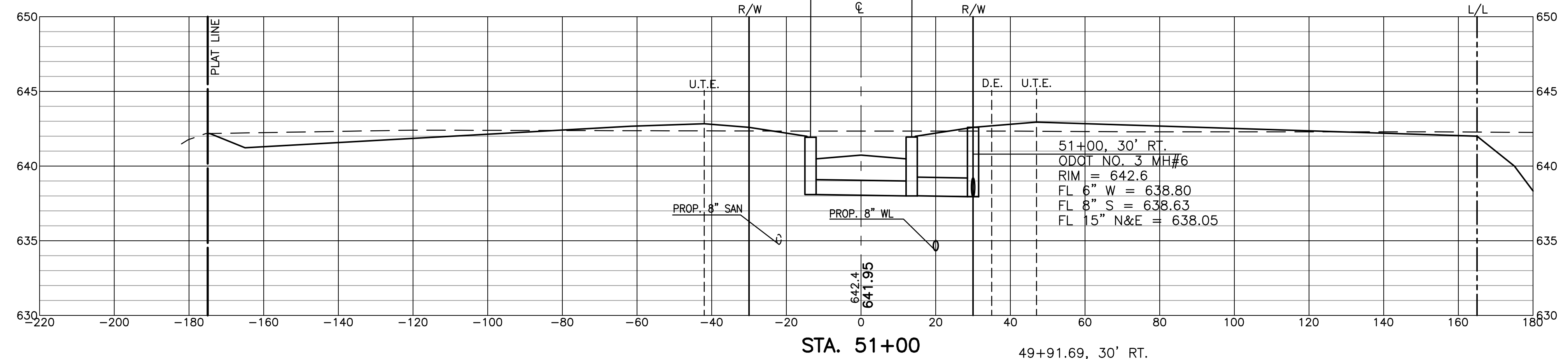
STA. 45+23

FELLER, FINCH & ASSOCIATES, INC.			
REVISION	DATE	DESIGN BY:	CMG
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		DATE:	6-13-17
		CHK'D BY:	GNF
		DRAWING:	10-07849P03A1

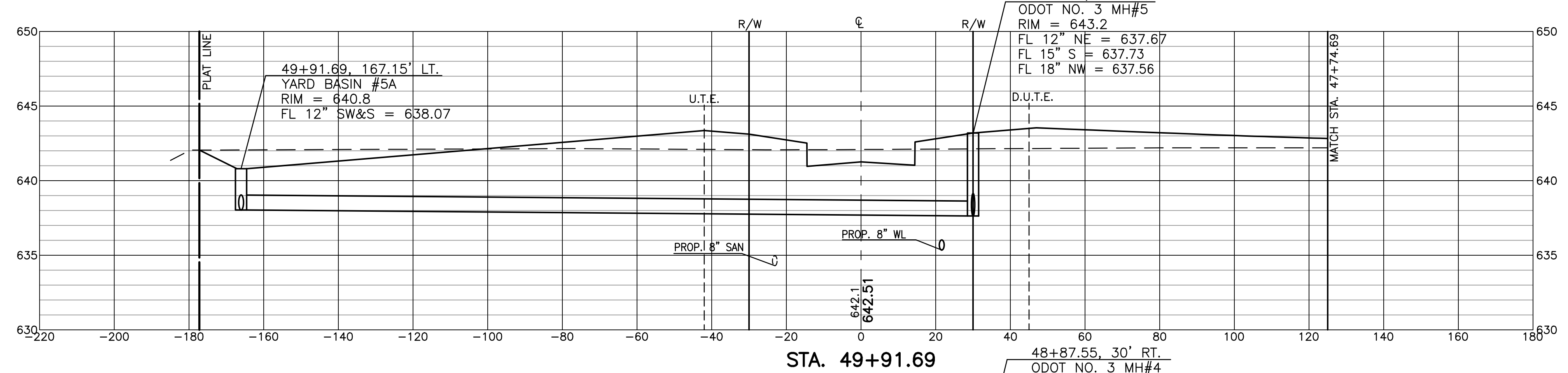


51+00, 13.37' LT.
 ODOT CB NO. 3A-#6B
 TC = 641.99
 FL 12" W = 638.19

51+00, 13.37' RT.
 ODOT CB NO. 3A-#6A
 TC = 641.99
 FL 12" E = 638.10
 FL 15" W = 638.10

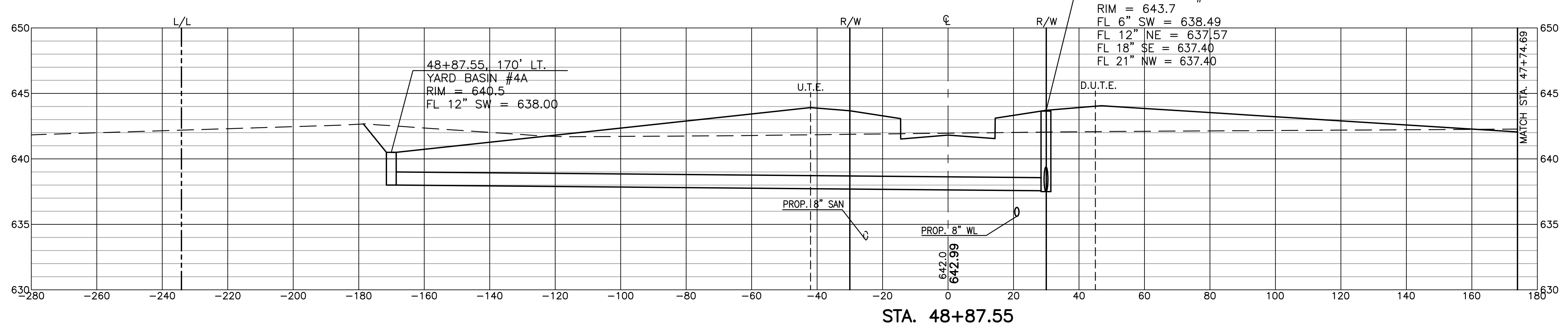


51+00, 30' RT.
 ODOT NO. 3 MH#6
 RIM = 642.6
 FL 6" W = 638.80
 FL 8" S = 638.63
 FL 15" N&E = 638.05



49+91.69, 167.15' LT.
 YARD BASIN #5A
 RIM = 640.8
 FL 12" SW&S = 638.07

49+91.69, 30' RT.
 ODOT NO. 3 MH#5
 RIM = 643.2
 FL 12" NE = 637.67
 FL 15" S = 637.73
 FL 18" NW = 637.56



48+87.55, 170' LT.
 YARD BASIN #4A
 RIM = 640.5
 FL 12" SW = 638.00

48+87.55, 30' RT.
 ODOT NO. 3 MH#4
 RIM = 643.7
 FL 6" SW = 638.49
 FL 12" NE = 637.57
 FL 18" SE = 637.40
 FL 21" NW = 637.40