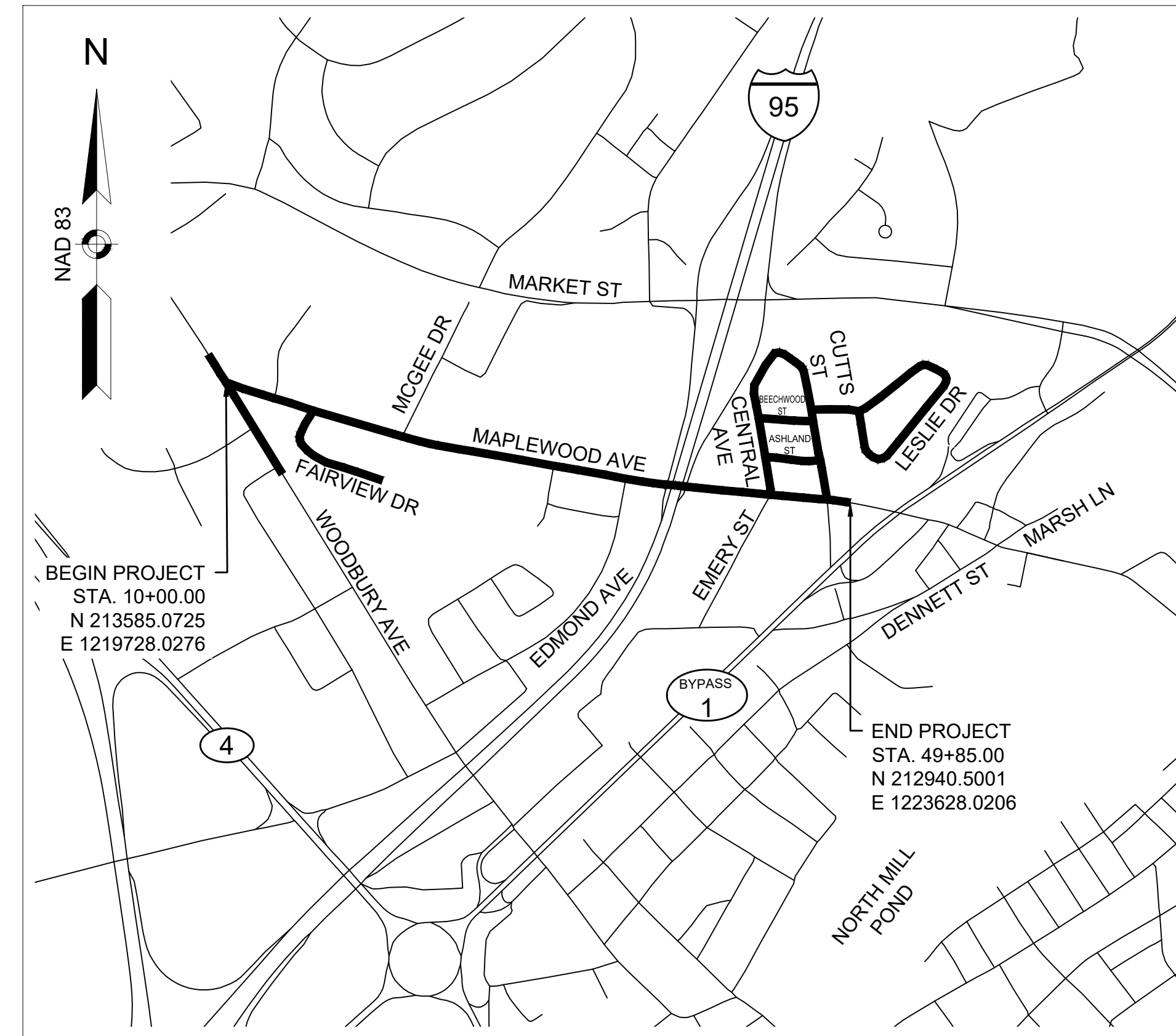


IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS

IN THE CITY OF PORTSMOUTH ROCKINGHAM COUNTY STATE OF NEW HAMPSHIRE



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DESIGN DESIGNATION

MAPLEWOOD AVENUE	
DESIGN SPEED	35 MPH
ADT (2016)	2,960
ADT (2036)	3,270
K	9.5%
D	55% (WB)
T (PEAK HOUR)	0.5%
T (AVERAGE DAY)	0.5%
DHV	310
DDHV	170

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PREPARED FOR
DEPARTMENT OF PUBLIC
WORKS
CITY OF PORTSMOUTH
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE
2/5/2018		
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	2015086.00
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PORTSMOUTH BID NO. 45-18

GENERAL NOTES

- EXISTING SANITARY SEWER UTILITY, TOPOGRAPHIC INFORMATION, EDGE OF PAVEMENT, UTILITY POLE LOCATIONS, AND LOCATIONS OF EXISTING ABOVE GROUND STRUCTURES WERE TAKEN FROM GROUND SURVEY CONDUCTED NOVEMBER 2015 BY GREENMAN-PEDERSEN, INC. (GPI), 21 DANIEL STREET, SECOND FLOOR, PORTSMOUTH, NH 03801 (603-891-2213). LESLIE DRIVE AND CENTRAL/CUTTS AREA WAS DEVELOPED BY EASTERLY SURVEYING, WHICH WAS PROVIDED BY THE CITY OF PORTSMOUTH, NH.
- THE HORIZONTAL DATUM SHOWN HEREON IS BASED UPON THE NH STATE PLANE COORDINATE SYSTEM, REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) (2011), EPOCH 2010.00 AS ESTABLISHED BY GPI IN NOVEMBER 2015 VIA GPS OBSERVATION. THE VERTICAL DATUM SHOWN HEREON REFERENCES THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AS ESTABLISHED BY GPI IN NOVEMBER 2015 VIA GPS OBSERVATION APPLYING THE GEOID 12B MODEL. THE UNITS SHOWN HEREON ARE US SURVEY FEET.
- WETLAND DELINEATION WAS PERFORMED IN DECEMBER 2016 AND MAY 2017 BY ROBERT PROKOP, NHCWS#063, 15 BISSON LANE, MERRIMAC, MA 01860. WETLAND FLAGS LOCATED BY GPI.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS DATED 2016, CURRENT STANDARD PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL. THESE PLANS HAVE BEEN CREATED TO BE USED TOGETHER WITH THE CONTRACT AND SPECIFICATIONS TO CREATE ONE COMPLETE BID AND CONSTRUCTION DOCUMENT.
- CONTRACTOR SHALL TAKE SPECIAL CARE IN NOT DISTURBING EXISTING MONUMENTS, BOUNDS, AND/OR BENCHMARKS WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES (INCLUDING SERVICES) ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT SIZE AND LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES. CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS PRIOR TO EXCAVATING AT ANY LOCATION. A COPY OF THE DIGSAFE PROJECT REFERENCE NUMBER(S) SHALL BE GIVEN TO THE OWNER PRIOR TO EXCAVATION. STRUCTURES SHOWN MAY HAVE MULTIPLE SERVICES AND MAY HAVE OLD CONNECTIONS THAT MAY NOT HAVE BEEN PROPERLY ABANDONED. NO EXTRA PAYMENTS WILL BE MADE FOR EXPLORATION OF DEFUNCT UTILITIES LEFT IN THE GROUND.
- WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS, OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE & RESET" (R & R).
- ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS NOTED OTHERWISE.
- ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, ADVANCE WARNING MARKINGS AND CROSSWALK LINES) AS NOTED ON THE PAVEMENT MARKING LEGEND ON SHEET 2 SHALL BE THERMOPLASTIC.
- THE CONTRACTOR SHALL CONTACT THE PORTSMOUTH DEPARTMENT OF PUBLIC WORKS AT 427-1530 ONE WEEK PRIOR TO PAVEMENT MARKING.
- ALL EXISTING STATE, COUNTY, CITY AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED. ALL PROPERTY LINES BETWEEN ABUTTERS ARE APPROXIMATE ONLY.
- ALL DISTURBED AREAS NOT DESIGNATED TO BE PAVED SHALL HAVE LOAM (ITEM 641.) AND SEED, PLACED WITH MULCH AND TACKIFIERS (ITEM 646.31). THE LOAM SHALL HAVE A MINIMUM DEPTH OF 6 INCHES AND SHALL BE PLACED FLUSH WITH THE TOP OF THE ADJACENT CURB, EDGING, BERM OR PAVEMENT SURFACE.
- THE LIMIT OF WORK AREA SHALL BE THE STREET RIGHT OF WAY UNLESS SHOWN OTHERWISE.
- PRIOR TO THE START OF ANY NEW UTILITY WORK, ALL ELEVATIONS OF EXISTING UTILITIES IN THOSE AREAS ARE TO BE VERIFIED. THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY SHOULD ANY DISCREPANCIES OCCUR.
- ALL CASTINGS (BESIDES DRAINAGE MANHOLE COVERS AND DRAINAGE GRATES) SHALL BE SET FLUSH WITH FINISHED GRADE AND IN ACCORDANCE WITH SEWER AND WATER CONSTRUCTION NOTE 13.
- ALL GATE BOXES, SERVICE BOXES AND PUBLICLY OWNED MANHOLE FRAMES AND COVERS SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL MATERIALS TO BE USED ON THIS PROJECT. THE CONTRACTOR SHALL NOT PURCHASE ANY MATERIALS UNTIL THEY HAVE BEEN APPROVED FOR USE BY THE OWNER.
- UTILITIES DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- TEMPORARY AND OR PERMANENT PAVING REPAIRS SHALL MAINTAIN EXISTING LINE AND GRADE UNLESS INDICATED OTHERWISE (SEE PROFILES AND CROSS SECTIONS) OR OTHERWISE DIRECTED BY THE ENGINEER.
- AS BUILT RED-LINE DRAWINGS NEED TO BE FURNISHED BY THE CONTRACTOR PRIOR TO FINAL PAYMENT. THE PREPARATION OF THESE AS BUILTS IS CONSIDERED SUBSIDIARY TO THE PROJECT.
- OVERHEAD WIRES ARE SHOWN ON THE DRAWINGS BUT THE CITY MAKES NO WARRANTY TO THEIR COMPLETENESS OR THAT HEIGHT IS SUFFICIENT TO COMPLETE THE WORK. POLES THAT NEED TO BE HELD UP BY THE UTILITY COMPANY WILL BE PAID FOR BY THE CONTRACTOR WITH NO ADDITIONAL COST PASSED ON TO THE OWNER.
- NO WORK SHALL BE PERFORMED ON PRIVATE PROPERTY UNTIL THE OWNER HAS SIGNED A

GENERAL NOTES (CONT.)

MEMORANDUM OF UNDERSTANDING WITH THE CITY.

- CONTRACTOR SHALL RECOGNIZE AND ACCOUNT FOR POTENTIAL LIMITATION ON EQUIPMENT TO BE UTILIZED LONG MAPLEWOOD AVENUE AND UNDER THE I-95 BRIDGE.
- ALL EXISTING STRUCTURES ABANDONED IN PLACE SHALL BE REMOVED TO 3' BELOW GRADE AND FILLED WITH COMPACTED GRAVEL. PIPES SHALL BE PLUGGED AT ALL OPEN AREAS AND ANY PIPE LARGER THAN 6" SHALL BE FILLED WITH PUMPED FLOWABLE FILL.
- THE CONTRACTOR SHALL IMPLEMENT VIBRATION MONITORING IN ORDER TO PROTECT EXISTING WALLS AND STRUCTURES LOCATED ADJACENT TO THE WORK ZONE. THIS MONITORING WILL BE PAID FOR UNDER ITEM 211.12.

STORM DRAINAGE SYSTEM NOTES

- ALL DRAIN LATERALS SHALL BE 6" UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PRIOR TO THE CONSTRUCTION OF THE NEW DRAIN MAIN, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FIND THE EXACT LOCATION, SIZE, TYPE AND ELEVATION OF EACH DRAIN LATERAL. DRAIN LATERALS SHALL BE INSTALLED TO THE PROPERTY LINE. ALL DRAIN LATERALS SHALL HAVE A MINIMUM PITCH OF 2%.
- THE CONTRACTOR SHALL PHASE THE CONSTRUCTION OF THE DRAIN TO MINIMIZE DISRUPTION TO THE EXISTING SYSTEM. THE SYSTEM SHALL NOT BE SURCHARGED AND ANY DAMAGE CAUSED BY A SURCHARGE WILL BE PAID FOR BY THE CONTRACTOR. MAINTENANCE OF THE DRAINAGE FLOWS IS SUBSIDIARY TO THE WORK.
- EXISTING SERVICES THAT ARE DETERMINED TO BE YARD, FOUNDATION OR ROOF DRAINS SHALL BE CONNECTED TO THE DRAINAGE SYSTEM AFTER BEING TESTED.
- DRAINAGE CONSTRUCTION WILL START AT THE LOW POINT OF THE SYSTEM UNLESS APPROVED BY THE ENGINEER.
- DRAIN MANHOLE COVERS AND CATCH BASINS GRATES SHALL BE SET 1/4 OF AN INCH BELOW GRADE.
- DRAIN MANHOLES AND CATCH BASINS FRAMES, COVERS AND GRATES SHALL BE IN CONFORMANCE WITH CITY OF PORTSMOUTH AND NHDOT STANDARDS.
- ALL CATCH BASINS, DRAIN MANHOLES & DRAIN LINES SHALL BE CLEANED PRIOR TO ACCEPTANCE.
- ALL REQUIRED STORM DRAIN SERVICES MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EVALUATE EACH HOME FOR THE PRESENCE OF AN EXISTING DRAIN SERVICE. SERVICES SHALL BE PROVIDED WHERE DIRECTED BY THE ENGINEER.

SEWER AND WATER CONSTRUCTION NOTES

- TEST PITS TO LOCATE EXISTING UTILITIES MAY BE ORDERED BY THE ENGINEER.
- STONE WALLS, FENCES, MAIL BOXES, LANDSCAPING, TREES, WALKWAYS, SIGNS, CURBS, LIGHT POLES AND ALL OTHER EXISTING FEATURES SHALL BE REMOVED AND RESTORED AS NECESSARY TO COMPLETE THE WORK FOR THE SEWER & WATER SERVICES. IF THE FEATURE(S) CANNOT BE RESTORED TO THE SATISFACTION OF THE OWNER, THEY SHALL BE REPLACED. UNLESS ASSOCIATED WITH ROADWAY WORK, OR OTHERWISE INDICATED, ALL SUCH WORK SHALL BE INCIDENTAL TO CONSTRUCTION OF THE PROJECT.
- ALL PAVEMENT DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN ACCORDANCE WITH THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS.
- ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND PAYMENT LIMITS SHALL BE RESTORED AT NO ADDITIONAL COST TO THE OWNER.
- CONCRETE CRADLES OR ARCHES SHALL BE CONSTRUCTED WHERE SHOWN ON THE DRAWINGS OR WHERE REQUIRED BY THE ENGINEER. UNLESS OTHERWISE INDICATED, CONCRETE USED FOR PIPE ANCHOR BLOCKS, BACKING, PIPE CRADLES, ARCHES, AND FILL SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
- THE CONTRACTOR SHALL NOT STORE ANY APPARATUS, MATERIALS, SUPPLIES, OR EQUIPMENT ON DRAINAGE STRUCTURES OR WITHIN 100 FEET OF WETLANDS.
- SEWER TRENCHES MAY BE EXCAVATED WIDER THAN THE 'LIMIT OF EXCAVATION AND PAYMENT FOR EARTH EXCAVATION' ABOVE THE 'LINE OF NARROW TRENCH LIMIT'. ANY SUCH ADDITIONAL EXCAVATION SHALL BE AT THE CONTRACTORS EXPENSE AND SHALL NOT BE MEASURED FOR PAYMENT.
- BELOW THE 'LINE OF NARROW TRENCH LIMIT' THE TRENCH SHOULD NOT BE EXCAVATED BEYOND THE TRENCH WIDTH 'W'. IF MATERIAL IS LOOSENEED OR REMOVED BEYOND THE ABOVE MENTIONED LIMITS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE CRUSHED STONE FOR THE FULL WIDTH OF THE TRENCH AT NO ADDITIONAL COST TO THE OWNER.
- SHEETING TO BE LEFT IN PLACE SHALL BE USED WHERE SHOWN ON THE DRAWINGS OR WHERE REQUIRED BY THE ENGINEER. IT SHALL BE LEFT IN PLACE BELOW A LINE 12 INCHES ABOVE THE TOP OF THE PIPE UNLESS OTHERWISE REQUIRED BY THE ENGINEER.
- FOUR FOOT INSIDE DIAMETER MANHOLES SHALL BE USED WITH SEWERS LESS THAN 24 INCHES IN DIAMETER, AND FIVE FOOT INSIDE DIAMETER MANHOLES SHALL BE USED WITH SEWERS EQUAL TO OR GREATER THAN 24 INCHES IN DIAMETER, UNLESS OTHERWISE SPECIFIED.
- OPENINGS FOR PIPE IN PRECAST MANHOLE BASES SHALL BE CAST IN THE REQUIRED LOCATIONS DURING MANHOLE MANUFACTURE. FIELD CUT OPENINGS WILL NOT BE PERMITTED UNLESS APPROVED BY THE ENGINEER.
- FORM BRICK INVERTS IN MANHOLES WITH BRICK ON EDGE TO A DEPTH OF HIGHEST PIPE CROWN AND FORM A 1 INCH SLOPED BENCH WITH BRICK FLAT. INVERT SHALL BE SLOPED UNIFORMLY BETWEEN INLET AND OUTLET PIPE AND SHALL BE FORMED AND FILLED AS REQUIRED TO DIRECT THE FLOW AS INDICATED AND TO PREVENT DEPOSITION OF SOLIDS.
- IN PAVED AREAS THE TOP OF THE MANHOLE COVER SHALL BE SET FLUSH WITH THE PAVED SURFACE. IN OTHER AREAS THE TOP OF THE COVER SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE, OR AS SHOWN ON THE DRAWINGS, OR AS REQUIRED BY THE ENGINEER.
- TRENCH PIPE INSULATION SHALL BE USED WHERE DEPTH OF COVER IS LESS THAN FIVE (5) FEET OR AS REQUIRED BY THE ENGINEER.

SEWER AND WATER CONSTRUCTION NOTES (CONT.)

- NEW WATER MAINS AND SERVICES SHALL BE INSTALLED AT THE MINIMUM DEPTH FROM FINISH GRADE TO TOP OF PIPE AS SHOWN ON THE DRAWINGS. WHERE NECESSARY, NEW WATER MAINS SHALL BE INSTALLED AT A GREATER DEPTH TO CLEAR OBSTACLES SHOWN ON THE DRAWINGS AT NO ADDITIONAL COST TO THE OWNER. MINIMUM CLEARANCES TO UTILITIES, AS SHOWN ON THE DRAWINGS SHALL BE MAINTAINED.
- EXISTING SERVICES SHALL NOT BE CONNECTED TO THE PROPOSED WATER MAIN UNTIL THAT MAIN HAS PASSED PRESSURE TEST AND DISINFECTION REQUIREMENTS.
- EXISTING WATER MAINS OR SERVICES SHALL NOT BE ABANDONED WITHOUT THE APPROVAL OF THE OWNER. WATER SERVICE SHALL NOT BE INTERRUPTED MORE THAN 4 HOURS WITHOUT PRIOR APPROVAL OF THE OWNER.
- ALL HYDRANTS REMOVED SHALL BE SALVAGED AND DELIVERED TO A LOCATION TO BE DETERMINED BY THE OWNER. SURFACE RESTORATION SHALL BE IN KIND UNLESS OTHERWISE NOTED.
- ANY HYDRANT WHICH IS NOT IN SERVICE SHALL BE COVERED WITH A SECURELY FASTENED AND APPROVED BAG.
- VALVE BOXES ON MAINS TO BE ABANDONED SHALL BE REMOVED BY THE CONTRACTOR. SURFACE RESTORATION SHALL BE IN KIND UNLESS OTHERWISE NOTED.
- EXISTING WATER MAINS PARALLEL TO PROPOSED WATER MAINS SHALL BE ABANDONED. ALL SERVICE CONNECTIONS SHALL BE TRANSFERRED TO NEW WATER MAIN AS REQUIRED.
- FOR WATER MAIN REMOVE AND REPLACE WORK, THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF EXISTING WATER MAIN WHEN IT IS IN THE NEW WATER MAIN TRENCH.
- THE LOCATION OF PIPES, CAPS, REDUCERS, BENDS, AND OTHER FITTINGS AT POINTS OF CONNECTIONS TO EXISTING MAINS IS APPROXIMATE. CONTRACTOR SHALL DIG A TEST PIT AT EACH LOCATION TO DETERMINE THE DIAMETER AND MATERIAL OF THE EXISTING PIPE AND THE LOCATION OF THE TIE-IN POINT.
- THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES WHICH HOLD WATER IN THE SYSTEM. THE OWNER WILL, ON 72 HOURS NOTICE FROM THE CONTRACTOR, OPEN AND/OR CLOSE ANY VALVES REQUIRED FOR DRAINING OR ADMITTING WATER TO THE VARIOUS SECTIONS OF THE WATER MAINS. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY IN WRITING 48 HOURS IN ADVANCE, ANY OCCUPANT THAT WILL BE WITHOUT WATER DUE TO A SHUTDOWN.
- SOME WATER SERVICE CONNECTIONS MAY NOT BE SHOWN ON THE DRAWINGS. THE OWNER WILL MARK THE LOCATION OF SUCH CONNECTIONS, PROVIDED THE CONTRACTOR GIVES THE OWNER AT LEAST 72 HOURS ADVANCE NOTICE.
- ALL NEW WATER SERVICES SHALL BE THE SAME SIZE AS THE EXISTING WATER SERVICE, EXCEPT THAT NO SERVICE SHALL BE LESS THAN 1" IN DIAMETER. COORDINATE THIS WORK WITH THE WATER DEPARTMENT.
- TEMPORARY WATER SERVICE PIPE WILL BE REQUIRED FOR ALL RESIDENTS WITHIN THE CONTRACT LIMITS WHERE THEY WILL BE WITHOUT WATER FOR A PERIOD OF 4 HOURS OR MORE AND ALSO WHERE REQUIRED BY THE ENGINEER. TEMPORARY GATE VALVES AND FIRE HYDRANTS ARE TO BE PROVIDED, AS REQUIRED.
- CONTRACTOR RESPONSIBLE FOR MAINTAINING TEMPORARY BYPASS 24/7 WHILE ACTIVELY BEING USED TO FEED DWELLINGS.
- SEWER CHIMNEY AND HOUSE CONNECTION LOCATIONS ARE SHOWN FOR ESTIMATING PURPOSES, AND ARE APPROXIMATE IN LOCATION. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD.
- PROTECTION OF WATER SUPPLIES - WHENEVER A SEWER MUST CROSS UNDER A WATER MAIN, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHEN THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THE ABOVE REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED BY THE CONTRACTOR AS REQUIRED BY THE ENGINEER TO PROVIDE THIS SEPARATION OR THE CONTRACTOR SHALL CONSTRUCT THE NEW SEWER OF CLASS 150 PRESSURE PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE WATER MAIN. ONE FULL LENGTH OF CLASS 150 PRESSURE PIPE SEWER SHOULD BE CENTERED ON THE WATER MAIN AS MUCH AS POSSIBLE. THE SEWER CONSTRUCTED OF THE PRESSURE PIPE MUST BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS.
- CALCULATION OF PIPE SLOPES IS BASED ON ELEVATION CHANGES DIVIDED BY THE DISTANCE BETWEEN THE OUTSIDE EDGES OF THE MANHOLE WALLS. FOR FOUR FOOT DIAMETER MANHOLES, THIS DISTANCE WAS CALCULATED AS THE CENTERLINE STATIONING MINUS FIVE FEET. FOR FIVE FOOT DIAMETER MANHOLES, THIS DISTANCE WAS CALCULATED AS THE CENTERLINE STATIONING MINUS SIX FEET. 'IN' INDICATES UPSTREAM END OF MANHOLE, 'OUT' INDICATES DOWNSTREAM END OF MANHOLE.
- ALL STREET EXCAVATIONS SHALL BE COMPLETELY CLOSED AT THE END OF EACH WORKING DAY BY BACKFILLING OR COVERING WITH STEEL PLATES (ONLY WITH APPROVAL FROM THE DIRECTOR OF PUBLIC WORKS AHEAD OF TIME).
- WORK WITHIN WETLANDS IS NOT ALLOWED DURING THIS PROJECT. CONTRACTOR SHALL PROTECT AND MAINTAIN WETLAND DELINEATION FLAGGING.

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GENERAL NOTES
SCALE: N.T.S.
2015086.00
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CONSTRUCTION SEQUENCE (GENERAL)

1. PROVIDE A SCHEDULE, SEQUENCE OF INSTALLATION, AND MATERIAL SUBMITTALS TO THE OWNER FOR REVIEW AND APPROVAL. MARK OUT AND CALL IN DIG SAFE. PREPARE FOR A PRECONSTRUCTION MEETING TO BE HELD WITH THE NEIGHBORHOODS. THE PERSON IN RESPONSIBLE CHARGE FOR THE PROJECT SHOULD PLAN ON ATTENDING THE MEETING.
2. INSTALL AND MAINTAIN TEMPORARY EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PERIOD (INCLUDING WINTER SHUT DOWN PERIODS AS REQUIRED) AS SHOWN IN THE APPROVED SWPPP, ON THE DRAWINGS, OR AS APPROVED BY THE ENGINEER.
3. INSTITUTE EXPLORATORY EXCAVATION PROGRAM WITH ENGINEER TO IDENTIFY POTENTIAL CONFLICTS AT UTILITY CROSSINGS. ANY EXPLORATORY EXCAVATION COMPLETED OUTSIDE THE LIMITS SHOWN ON THE DRAWINGS WITHOUT PRIOR APPROVAL FROM THE ENGINEER WILL BE AT NO ADDITIONAL COST TO THE OWNER.
4. THIS PROJECT HAS BEEN DESIGNED TO BE CONSTRUCTED USING A TEMPORARY WATER MAIN SYSTEM. THE CITY GENERALLY EXPECTS THAT THE CONNECTIONS TO INDIVIDUAL HOMES WILL BE MADE UNDERGROUND AND NOT TO SILLCOCKS. HOOK UP, FLUSH AND CHLORINATE THE SYSTEM. AFTER A CHEMICAL TEST IS TAKEN BY THE CITY AND THE WATER IS PROVED TO BE ACCEPTABLE, TIE INS TO THE TEMPORARY SYSTEM CAN TAKE PLACE.
5. PROPOSED POND AND CDS UNIT SHALL BE INSTALLED PRIOR TO DRAINAGE/ SEWER SEPARATION BETWEEN MCGEE AND WOODBURY AVE. STORMWATER BMPS SHOULD BE STABILIZED BEFORE CONVEYING STORMWATER TO THEM.
6. DISPOSE OF SURPLUS AND UNSUITABLE MATERIALS AS THE WORK PROGRESSES. STOCKPILES WILL NOT BE ALLOWED ON SITE UNLESS APPROVED BY THE ENGINEER AHEAD OF TIME. EXCAVATED MATERIALS WILL BE LOADED INTO TRUCKS AND TAKEN AWAY AS WORK PROGRESSES IN ORDER TO KEEP THE ROAD PASSABLE.
7. CONTRACTOR IS TO MAINTAIN DRY AND STABLE TRENCH CONDITIONS AT ALL TIMES. A DE-WATERING PLAN MUST BE PROVIDED AND APPROVED BY THE ENGINEER.
8. IMMEDIATELY STABILIZE DISTURBED AREAS AFTER PIPE INSTALLATION AND REESTABLISH TEMPORARY EROSION CONTROL DEVICES MOVED DURING CONSTRUCTION.
9. REPAIR TRENCHES EACH NIGHT WITH EITHER RECLAIMED BASED (IF CONSTRUCTION PHASING ALLOWS), SUITABLE EXCAVATED SUBBASE OR CRUSHED GRAVEL. THE TRENCH(ES) SHALL BE FLAT AND COMPACTED FIRM EACH NIGHT. CONSTRUCT TEMPORARY PAVEMENT REPAIRS AS SOON AS PRACTICAL FOLLOWING UTILITY INSTALLATION AND TESTING.
10. RESTORE ROAD DRAINAGE AT NIGHT PRIOR TO LEAVING THE SITE.
11. FINISH GRADING, LOAM AND SEED DISTURBED AREAS AND BACK UP PAVEMENT WITH GRAVEL IMMEDIATELY FOLLOWING PAVEMENT REPAIRS.
12. REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AS SOON AS VEGETATION IS ESTABLISHED AND AREAS ARE STABILIZED.

TRAFFIC MANAGEMENT NOTES

1. REFER TO SHEET 83 FOR STANDARD TRAFFIC CONTROL DETAILS.
2. ALL TRAFFIC MANAGEMENT AND WORK ZONE TRAFFIC CONTROL MEASURES SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.), THE CURRENT NHDOT - "WORK ZONE TRAFFIC CONTROL STANDARD PLANS", THE STANDARD SPECIFICATIONS, AND THE FOLLOWING NOTES.
3. THE TEMPORARY TRAFFIC CONTROL PLANS CONTAINED HEREIN ARE GIVEN AS A GUIDE FOR TYPICAL WORK ZONE TRAFFIC CONTROL APPLICATIONS FOR THE TYPES OF WORK ANTICIPATED FOR THIS PROJECT. THEY ARE NOT INTENDED TO COVER ALL POSSIBLE CONSTRUCTION OPERATIONS WHICH THE CONTRACTOR MAY CHOOSE TO EMPLOY. WORK ZONE TRAFFIC CONTROL FOR OTHER CONSTRUCTION OPERATIONS OR OTHER TRAFFIC SITUATIONS IF APPLICABLE SHALL BE IN ACCORDANCE WITH THE REFERENCES LISTED IN NOTE NO. 2 AND AS APPROVED OR DIRECTED BY THE ENGINEER.
4. LANE RESTRICTIONS MAY NOT REMAIN OVERNIGHT OR DURING NON-WORKING HOURS. AFTER EACH WORKING DAY, TRAFFIC CONTROL DEVICES THAT ARE NOT REQUIRED SHALL BE MOVED OFF THE ROADWAY OR FULL DEPTH CONSTRUCTION AREA AND PLACED SO AS NOT TO IMPEDE PEDESTRIAN AREAS, ABUTTER ACCESS OR CAUSE CONFUSION TO MOTORISTS. IN CERTAIN CIRCUMSTANCES, AND ONLY WITH THE APPROVAL OF THE CITY AND THE ENGINEER, LANE RESTRICTIONS MAY REMAIN OVERNIGHT. THE STREETS IN THE PROJECT AREA WILL BE PASSABLE AND SAFE IN THE OPINION OF THE ENGINEER PRIOR TO WORK TERMINATING AT THE END OF THE DAY.
5. THE CONTRACTOR SHALL MAINTAIN ONE PASSABLE LANE AND SAFE PASSAGE FOR RESIDENTS TO AND FROM THEIR DWELLINGS IN THE NEIGHBORHOODS. WORK THAT REQUIRES THE COMPLETE SHUT DOWN OF THE STREET HAS TO BE APPROVED BY THE ENGINEER PRIOR TO THE WORK COMMENCING.
6. WITH APPROVAL FROM THE ENGINEER, IT MAY BE POSSIBLE TO IMPLEMENT EITHER PARTIAL (ONE-WAY) OR FULL (TWO-WAY) DETOURS ALONG PORTIONS OF MAPLEWOOD AVENUE IN ORDER TO EXPEDITE/FACILITATE CONSTRUCTION. POTENTIAL SEGMENTS OF MAPLEWOOD AVENUE TO DETOUR COULD BE FROM:
 - WOODBURY AVENUE TO EDMOND AVENUE
 - EDMOND AVENUE TO CUTTS STREET/ROUTE 1 BYPASS
 IN ALL CASES, ACCESS FOR RESIDENTS MUST ALWAYS BE MAINTAINED.

ROAD WORK NOTES

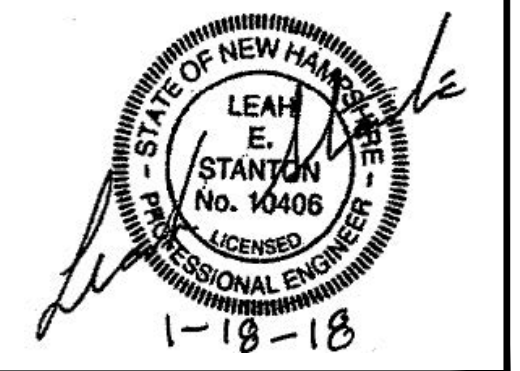
1. WORK ZONES SHALL BE LIMITED TO SEGMENTS OF THE PROJECT NO LONGER THAN 2,000' IN LENGTH. MULTIPLE WORK ZONES MAY BE APPROVED BY THE ENGINEER PROVIDED THEY ARE SEPARATE AND DISTINCT. REFER TO SECTION 0110 - SUMMARY CONTAINED WITHIN THE CONTRACT DOCUMENTS FOR A SUMMARY OF PROJECT REQUIREMENTS.
2. EXISTING SIDEWALKS SHALL BE MAINTAINED PROVIDED THEY DO NOT CONFLICT WITH THE WORK ZONE. IF A SIDEWALK IS NOT PASSABLE, OR A PORTION IS WITHIN A WORK ZONE, THE SIDEWALK SHALL BE SIGNED AS 'CLOSED' IN ADVANCE SO THAT A PEDESTRIAN CAN CHOOSE AN ALTERNATIVE ROUTE.
3. AFTER THE INSTALLATION OF UTILITIES, EXISTING GRANITE CURBING SHALL BE REMOVED AND ANY PIECES 3.5' OR LONGER SHALL BE RETAINED FOR REUSE ON THE PROJECT.
4. IT IS THE INTENT OF THIS PROJECT TO RECLAIM THE EXISTING ASPHALT AFTER THE INSTALLATION OF ALL UTILITY WORK AND ROADWAY WIDENING. UTILITY TRENCHES SHALL BE REPAIRED AS PER THE CONTRACT DOCUMENTS TO PREVENT THE CONTAMINATION OF THE PAVEMENT BASE MATERIAL AND ENSURE SATISFACTORY MATERIAL FOR RECLAIM.
5. WHEREVER THE VERTICAL PROFILE OF THE ROADWAY IS MAINTAINED OR INCREASED, THE RECLAIMED MATERIAL WILL REMAIN IN-PLACE. RECLAIMED MATERIAL SHALL BE REMOVED TO ACCOUNT FOR THE DEPTH OF THE PAVEMENT LAYERS WHILE ENSURING THAT A MINIMUM OF 8" OF RECLAIMED STABILIZED BASE IS LEFT IN PLACE.
6. IN AREAS WHERE THE VERTICAL PROFILE IS CUT, RECLAIMED MATERIAL WILL BE REMOVED AND REHANDLED, THE SUB BASE WILL BE GRADED TO ACHIEVE THE PROPER CROWN/GRADE AND THE RECLAIMED STABILIZED BASE WILL BE RETURNED AND PLACED ON THE PREPARED ROADBED TO THE DEPTHS SPECIFIED.
7. WHEN NECESSARY, STONE FOR BLENDING WILL BE APPLIED TO THE RECLAIMED SURFACE AND RE-BLENDED WITH THE PREVIOUSLY RECLAIMED MATERIAL TO MEET THE REQUIRED RECLAIMED STABILIZED BASED GRADATION.
8. WINDROWED OR GRADED RECLAIM PAVEMENT BORROW SHALL BE USED ON THE PROJECT UNDER WALKS, DRIVES, ISLANDS AND FOR LEVELING. REMOVAL OF EXCESS RECLAIMED BASE MATERIAL IS SUBSIDIARY TO RECLAIMED STABILIZED BASE.
9. ALL EXISTING SUITABLE GRANITE CURBING REMOVED WITHIN THE PROJECT LIMITS WILL BE REUSED FIRST. ADDITIONAL GRANITE WILL BE PURCHASED TO MAKE UP THE DIFFERENCE.
10. ALL PUBLIC SIDEWALKS AND ALL CURB RAMPS WILL BE CEMENT CONCRETE. WALKWAYS TO HOUSES WILL MATCH EXISTING UNLESS OTHERWISE DIRECTED. USE HAND METHOD ASPHALT, CONCRETE SIDEWALK OR 608 SERIES CONTRACT ITEMS AS APPROPRIATE.
11. ALL DRIVEWAYS SHALL RECEIVE TWO LAYERS OF ASPHALT AS CALLED FOR IN THE PAVEMENT NOTES. DO NOT REMOVE OR PAVE DRIVEWAYS BEYOND THE PROPERTY LINE UNLESS DEPICTED IN THE CONTRACT DOCUMENTS OR AS DIRECTED BY THE ENGINEER.
12. ALL FULL DEPTH ROAD PAVING ALONG MAPLEWOOD AVENUE WILL BE PLACED AT A TOTAL OF AT LEAST 5.5" THICK. DO NOT EXCEED 5.5" UNLESS DIRECTED BY THE ENGINEER TO DO SO. FULL DEPTH ROAD PAVING ALONG THE SIDE STREETS WILL BE PLACED AT A TOTAL OF AT LEAST 4" THICK. DO NOT EXCEED 4" ON SIDE STREETS UNLESS DIRECTED BY THE ENGINEER TO DO SO. MIX DESIGNS FOR ALL PAVEMENTS WILL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THE CONTRACT AND THE NHDOT STANDARD SPECIFICATIONS AND ALL MIX DESIGNS WILL BE APPROVED BY THE ENGINEER AT LEAST 48 HOURS PRIOR. ANY PAVEMENT PLACING OF 100 TONS OR MORE WILL BE COORDINATED FOR PAVEMENT TESTING AND INSPECTION.
13. ALL SIDEWALKS WILL BE CONSTRUCTED TO ADA STANDARDS AND CROSS SLOPES SHALL NOT EXCEED 2%.
14. PAVEMENT WILL NOT BE PLACED AT SURFACE TEMPERATURES COLDER THAN 40 DEGREES F FOR BINDER COURSE OR 50 DEGREES F FOR WEARING COURSE. IF PAVING IS ALLOWED, IT IS THE CONTRACTORS RESPONSIBILITY TO COMPACT THE ASPHALT PROPERLY BEFORE IT SETS.
15. CONCRETE SIDEWALKS WILL NOT BE POURED IF FREEZING TEMPERATURES ARE EXPECTED WITHIN 24 HOURS. ALL CONCRETE SIDEWALKS WILL BE COVERED WITH PLASTIC FILM FOR 3 DAYS AFTER PLACEMENT. PLASTIC WILL BE PROPERLY SECURED AS NOT TO BLOW OFF.
16. PUBLIC SAFETY IS A PRIORITY. THE CONTRACTOR WILL SUPPLY THE PROPER HAZARD WARNINGS AS ADVISED. IT IS THE DUTY OF THE CONTRACTOR'S SAFETY COORDINATOR TO PREVENT PERSONAL INJURY AND/OR DAMAGES TO THE RESIDENTS.
17. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, OR OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES, BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF OF THE SUSPECT MATERIAL TO AVOID FURTHER CONTAMINATION OF ADJACENT MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN USING CONTRACT ITEMS 1001.101 - 1001.106.
18. THE TERM TO "MEET EXISTING" SHALL MEAN TO MEET BOTH THE EXISTING ALIGNMENT AND ELEVATION.

EROSION & SEDIMENT CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROLS SHALL MEET THE REQUIREMENTS OF THE NH STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION, 2008.
2. THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:55 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
3. INSTALL COMPOST SOCK (OR OTHER APPROVED EQUAL) AS SHOWN ON THE CONSTRUCTION DETAILS. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
4. PRIOR TO CONSTRUCTION INSTALL SILT SACKS IN EXISTING CATCH BASINS TO PREVENT SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
5. THE SMALLEST PRACTICABLE AREA SHALL BE DISTURBED DURING CONSTRUCTION, AND ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINAL GRADE.
6. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF INCH OF RAINFALL.
7. THE ENTIRE PROJECT AREA SHALL BE SWEPT UPON COMPLETION OF CONSTRUCTION AND PRIOR TO REMOVAL OF THE EROSION CONTROL DEVICES.
8. THE CONTRACTOR SHALL COMPLY WITH THE GENERAL EROSION AND SEDIMENTATION CONTROL NOTES AND DETAILS AS SHOWN ON THESE PLANS.
9. ALL AREAS DISTURBED BY THE CONTRACTORS OPERATIONS SHALL BE RESTORED TO A MINIMUM OF 6" OF TOPSOIL, GRASS SEED, FERTILIZER AND MULCH UNLESS OTHERWISE NOTED.
10. THE CONTRACTOR SHALL CLEAN OUT ALL DRAINAGE STRUCTURES IDENTIFIED FOR INSTALLATION OF SILT SACKS DURING CONSTRUCTION, UPON COMPLETION OF WORK.
11. AN AREA SHALL BE CONSIDERED STABLE ONCE BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED, A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED, A MINIMUM OF 3" OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED OR EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
12. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
13. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
14. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
15. ALL INCOMPLETE ROADWAY SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER, SHALL BE PROTECTED WITH A MINIMUM OF 4" OF "WINTER" BINDER.
16. A NPDES PERMIT FOR CONSTRUCTION ACTIVITIES IS REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS REQUIRED TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND TO SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA TO FULFILL PROJECT REQUIREMENTS. THE SWPPP MUST BE PREPARED IN ACCORDANCE WITH THE EPA'S REQUIREMENTS. NO WORK IS TO PROCEED UNTIL THE SWPPP AND THE NOI IS SUBMITTED AND ACCEPTED BY THE OWNER. A COPY OF THE NOI, SWPPP REQUIREMENTS, AND EXAMPLE SWPPP ARE INCLUDED IN THE PROJECT MANUAL APPENDIX.
17. EROSION & SEDIMENT CONTROL CONSTRUCTION SEQUENCE:
 - a. INSTALL SILT FENCE AND INLET PROTECTION AS SHOWN.
 - b. PERFORM PROJECT IMPROVEMENTS.
 - c. STABILIZE ALL DISTURBED AREAS.
 - d. ONCE THE SITE HAS BEEN STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROLS.

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

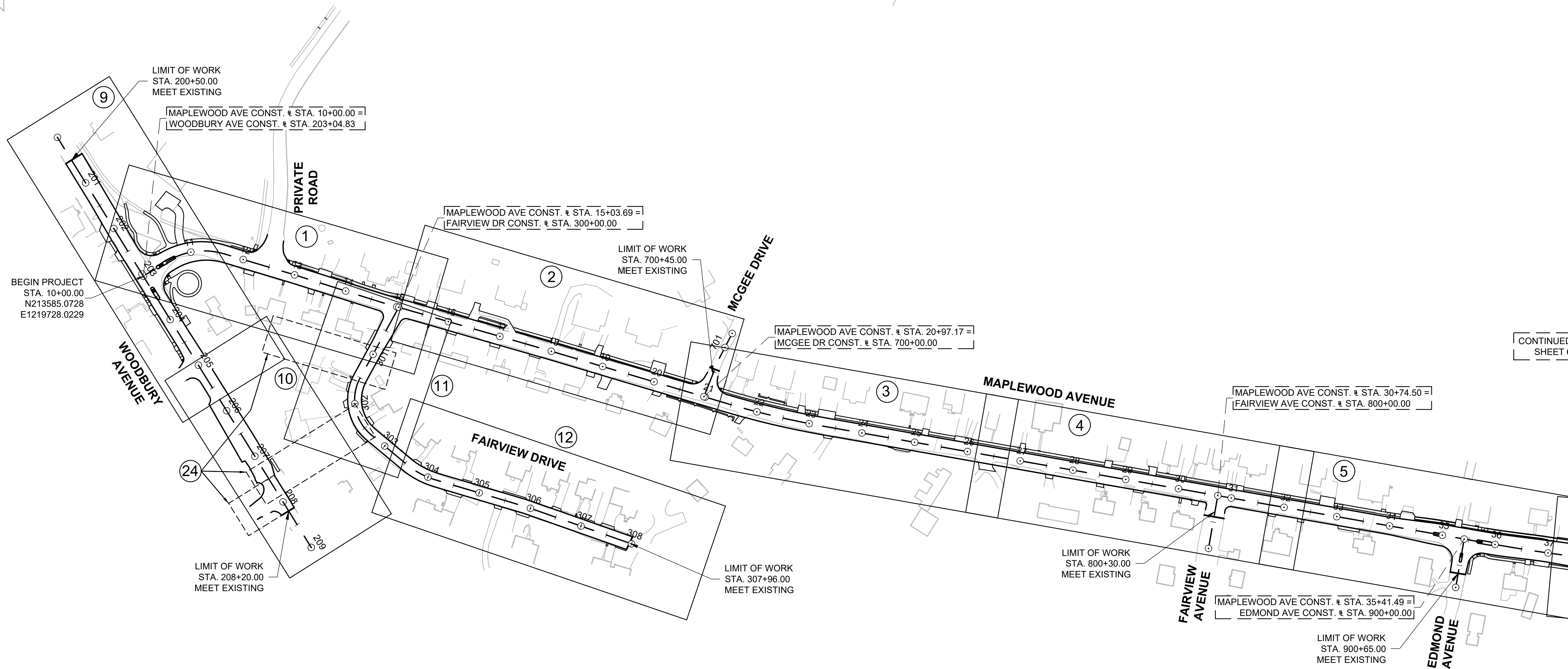
GENERAL NOTES

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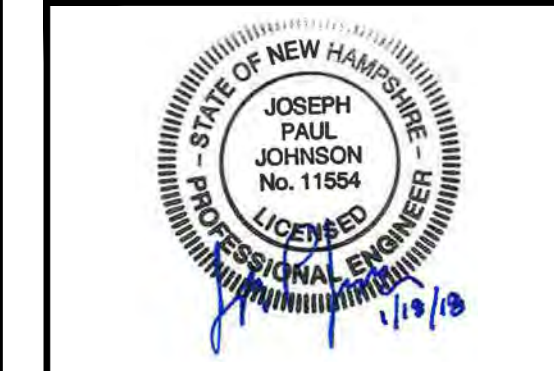
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ROADWAY PLAN & PROFILE	14	15	16	17	18	22	23	24	25	-
UTILITY PLAN & PROFILE	39	40	41	42	43	47	48	49	50	61
PAVEMENT MARKING & SIGNING PLANS	65	65	66	66	67	69	69	-	-	-



CONTINUED ON
SHEET 6

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PORTSMOUTH, NH**

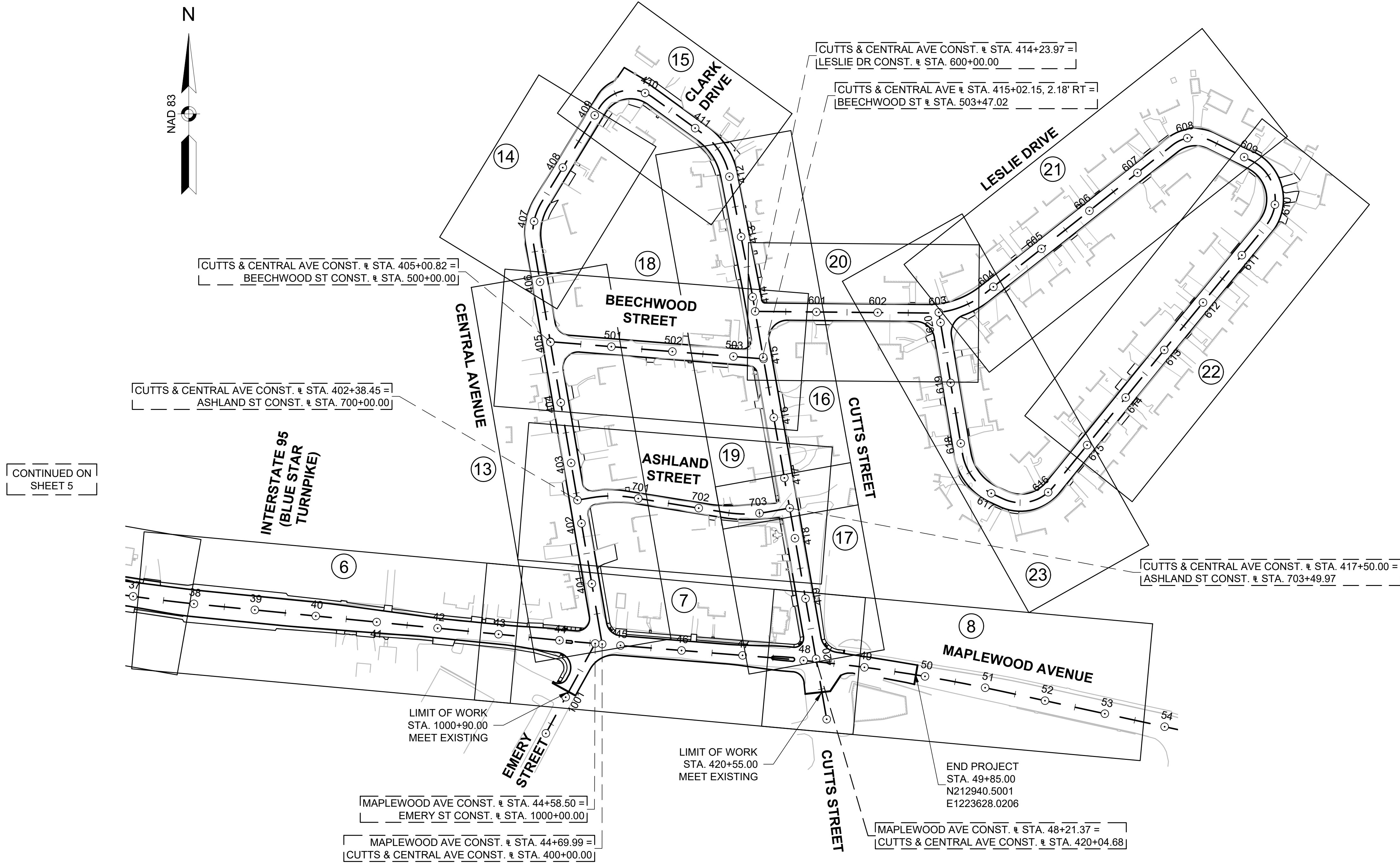
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NO.	REVISION	DATE
		2/5/2018
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DPE		JPJ

KEY PLAN

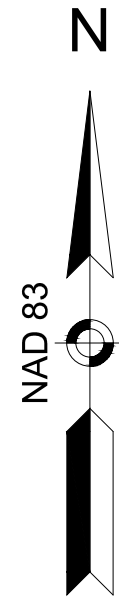
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SHEET REFERENCE	6	7	8	13	14	15	16	17	18	19	20	21	22	23
DRAWING TITLE	DRAWING NUMBER													
ROADWAY PLAN & PROFILE	19	20	21	26	27	27	28	29	30	31	32	33	34	35
UTILITY PLAN & PROFILE	44	45	46	51	52	52	53	54	55	56	57	58	59	60
PAVEMENT MARKING & SIGNING PLANS	67	68	68	70	70	70	71	71	-	-	71	-	-	-



CONTINUED ON SHEET 5



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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

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KEY PLAN
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PAVEMENT NOTES

FULL DEPTH HOT BITUMINOUS PAVEMENT WITH RECLAIMED BASE (MAPLEWOOD AVE)

SURFACE: ITEM 403.11 HOT BITUMINOUS PAVEMENT, MACHINE METHOD
 1 1/2" WEARING COURSE
 4" BINDER COURSE, TO BE PLACED IN 2 LAYERS
 8" RECLAIMED STABILIZED BASE

FULL DEPTH HOT BITUMINOUS PAVEMENT WITH RECLAIMED BASE (SIDE STREETS)

SURFACE: ITEM 403.11 HOT BITUMINOUS PAVEMENT, MACHINE METHOD
 1 1/2" WEARING COURSE
 2 1/2" BINDER COURSE
 8" RECLAIMED STABILIZED BASE

HOT BITUMINOUS PAVEMENT OVERLAY

SURFACE: ITEM 403.11 HOT BITUMINOUS PAVEMENT, MACHINE METHOD
 1 1/2" COLD PLANING
 1 1/2" WEARING COURSE
TACK COAT: EMULSIFIED ASPHALT FOR TACK COAT

FULL DEPTH WIDENING

SURFACE: ITEM 403.11 HOT BITUMINOUS PAVEMENT, MACHINE METHOD
 1 1/2" WEARING COURSE
 4" BINDER COURSE, TO BE PLACED IN 2 LAYERS
 8" REHANDLED RECLAIMED STABILIZED BASE
 12" GRAVEL BASE OR REHANDLED RECLAIMED STABILIZED BASE

HOT BITUMINOUS PAVEMENT DRIVEWAY:

SURFACE: ITEM 403.12 HOT BITUMINOUS PAVEMENT, HAND METHOD
 1" WEARING COURSE
 2" BINDER COURSE

SUBBASE: 8" CRUSHED GRAVEL, ITEM 304.301

BRICK ISLAND:

SURFACE: BRICK SURFACE, ITEM 608.6
BASE: 4" MANUFACTURED SAND SETTING BED
 6" CRUSHED GRAVEL, ITEM 304.301
SUBBASE: 12" GRAVEL (F), ITEM 304.2

CONCRETE SIDEWALK

SURFACE: 4" CEMENT CONCRETE
SUBBASE: 8" CRUSHED GRAVEL, ITEM 304.301

CONCRETE CURB RAMP

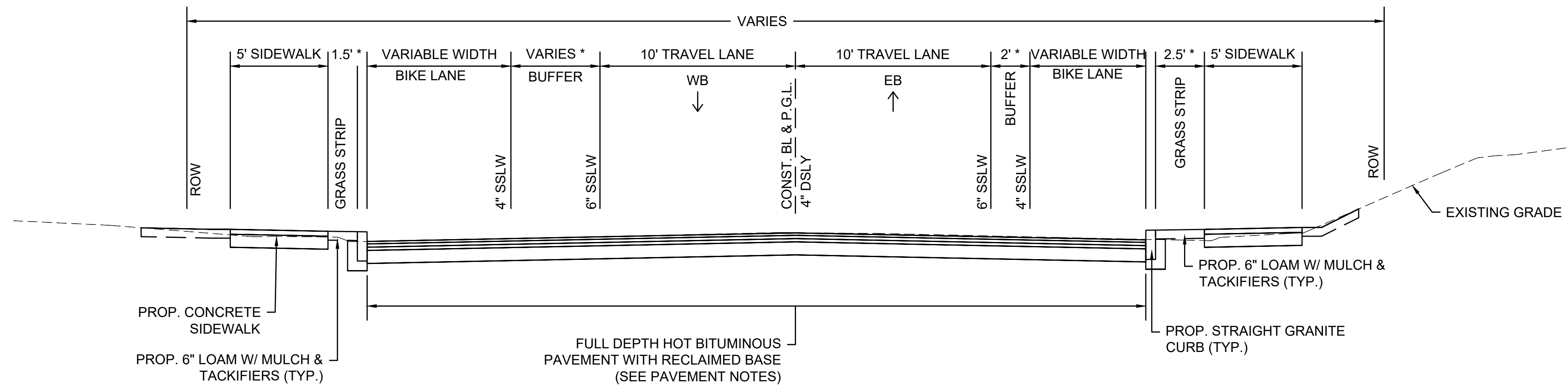
SURFACE: 6" REINFORCED CEMENT CONCRETE
SUBBASE: 8" CRUSHED GRAVEL, ITEM 304.301

BITUMINOUS WALK

SURFACE: 3" WEARING COURSE, TO BE PLACED IN 2 LAYERS
SUBBASE: 8" CRUSHED GRAVEL, ITEM 304.301

NOTES:

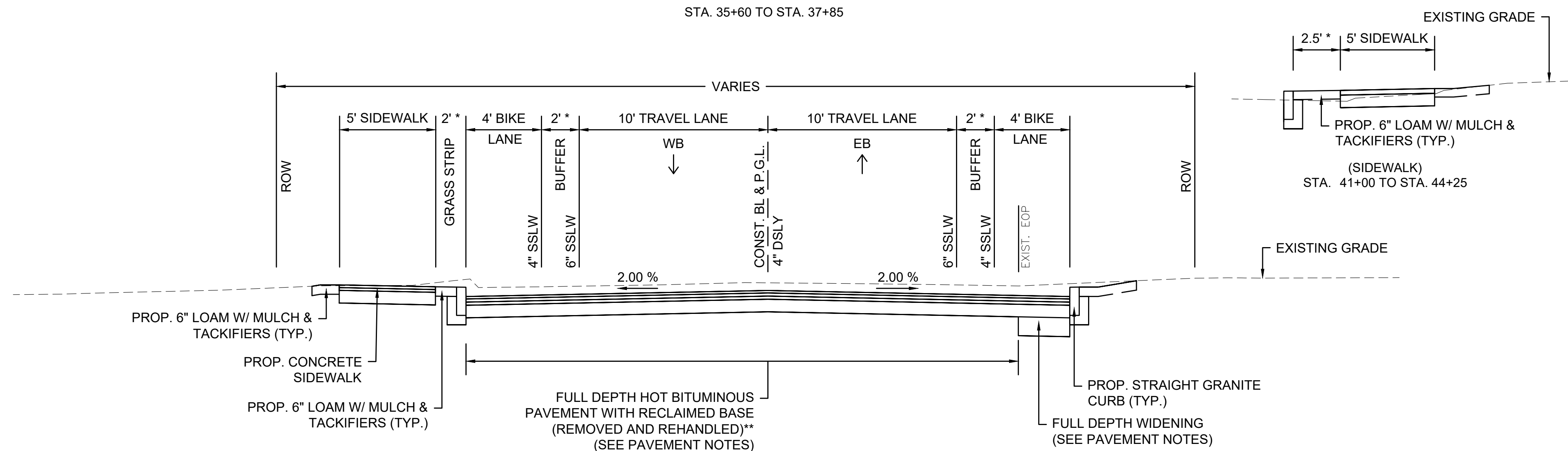
- THE SECTIONS OF PROPOSED ROADWAY NOT COVERED IN THE RANGE OF STATIONS ASSOCIATED WITH THE TYPICAL SECTIONS ARE IN AREAS OF TRANSITION AND THEREFORE NOT COVERED.
- ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED AT THE RATE OF 0.03 GALLONS PER SQUARE YARD OVER SMOOTH SURFACES AND 0.05 GALLONS PER SQUARE YARD OVER COLD PLANED SURFACES PER SUPPLEMENTAL SPECIFICATION FOR SECTION 410.
- PROPOSED SIDEWALK WIDTHS MAY VARY SLIGHTLY FROM DIMENSIONS SHOWN ON THE TYPICAL SECTIONS AND CONSTRUCTION PLANS. WHERE CURBING, WALLS, ETC. ARE LOCATED ALONG THE FRONTAGE OF A PROPERTY, THE SIDEWALK WIDTH SHALL BE ADJUSTED TO MEET.
- ALL SIDEWALKS SHALL PROVIDE MINIMUM 36 INCH CLEARANCE AROUND POINT OBSTRUCTIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE ENGINEER WHEN THIS MINIMUM REQUIREMENT CANNOT BE MET FOR RESOLUTION.
- ALL PROPOSED SIDEWALKS SHALL BE CONCRETE, UNLESS SPECIFICALLY NOTED ON THE ROADWAY AND PROFILE PLANS TO BE BITUMINOUS. ALL CURB RAMPS SHALL BE CONCRETE.
- ALL SIDE SLOPES TO BE ESTABLISHED WITH TURF SHALL BE 3:1 MAX. UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- RECLAIMED STABILIZED BASE SHALL COMPLY WITH NHDOT SECTION 306.
- RECLAIMED MATERIAL TO BE TESTED TO DETERMINE IF ADDITIONAL STONE WILL BE REQUIRED FOR BLENDING.
- AT WIDENED AREAS, CRUSHED GRAVEL (ITEM 304.301) SHALL BE USED IF REHANDLED RECLAIM QUANTITY IS NOT AVAILABLE.
- PROVIDE 2' WIDE CRUSHED GRAVEL (ITEM 304.301) SHOULDER WHERE GRANITE CURB OR EDGING IS NOT PROPOSED.
- EXCESS RECLAIMED BASE MATERIAL SHALL BE USED ON THE PROJECT UNDER WALKS, DRIVES, ISLANDS AND FOR LEVELING. REMOVAL OF EXCESS RECLAIMED BASE MATERIAL IS SUBSIDIARY TO RECLAIMED STABILIZED BASE.
- FULL DEPTH RECLAMATION SHALL BE 14 INCHES ALONG MAPLEWOOD AVENUE AND 12 INCHES ALONG THE SIDE STREETS. RECLAIMED BASE MATERIAL SHALL BE GRADED AND COMPACTED TO 8 INCHES MINIMUM PER LINES AND GRADES ON PLANS.



TYPICAL SECTION - MAPLEWOOD AVENUE

SCALE: 1" = 4'

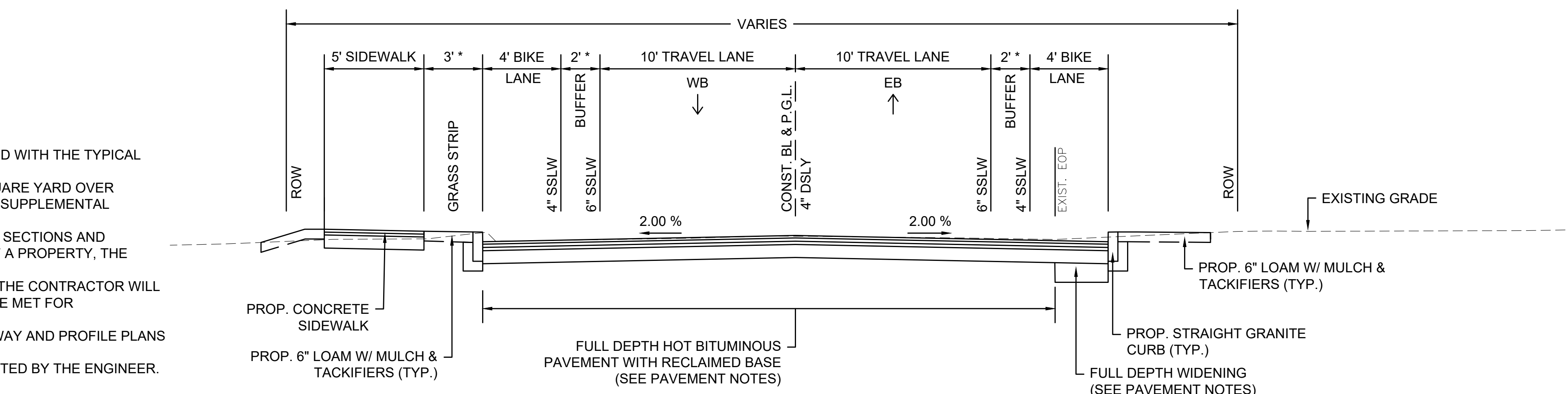
STA. 35+60 TO STA. 37+85



TYPICAL SECTION - MAPLEWOOD AVENUE

SCALE: 1" = 4'

STA. 12+50 TO STA. 17+50
 STA. 21+00 TO STA. 23+50
 STA. 41+00 TO STA. 46+00



TYPICAL SECTION - MAPLEWOOD AVENUE

SCALE: 1" = 4'

STA. 10+00 TO STA. 12+50
 STA. 17+50 TO STA. 21+00
 STA. 23+50 TO STA. 35+60
 STA. 46+00 TO STA. 48+50

* BUFFER WIDTHS VARY, SEE ROADWAY PLAN & PROFILE SHEETS AND REFER TO PAVEMENT MARKING AND SIGNING PLANS FOR BUFFER WIDTHS.

* BUFFER AND GRASS STRIP WIDTHS VARY, SEE ROADWAY PLAN & PROFILE SHEETS AND REFER TO PAVEMENT MARKING AND SIGNING PLANS FOR BUFFER WIDTHS.

** GIVEN THE CHANGE IN PROFILE WITHIN THESE LIMITS, RECLAIMED BASE WILL NEED TO BE REMOVED AND REHANDLED.

* BUFFER AND GRASS STRIP WIDTHS VARY, SEE ROADWAY PLAN & PROFILE SHEETS AND REFER TO PAVEMENT MARKING AND SIGNING PLANS FOR BUFFER WIDTHS.



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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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TYPICAL SECTIONS

SCALE: 1" = 4'

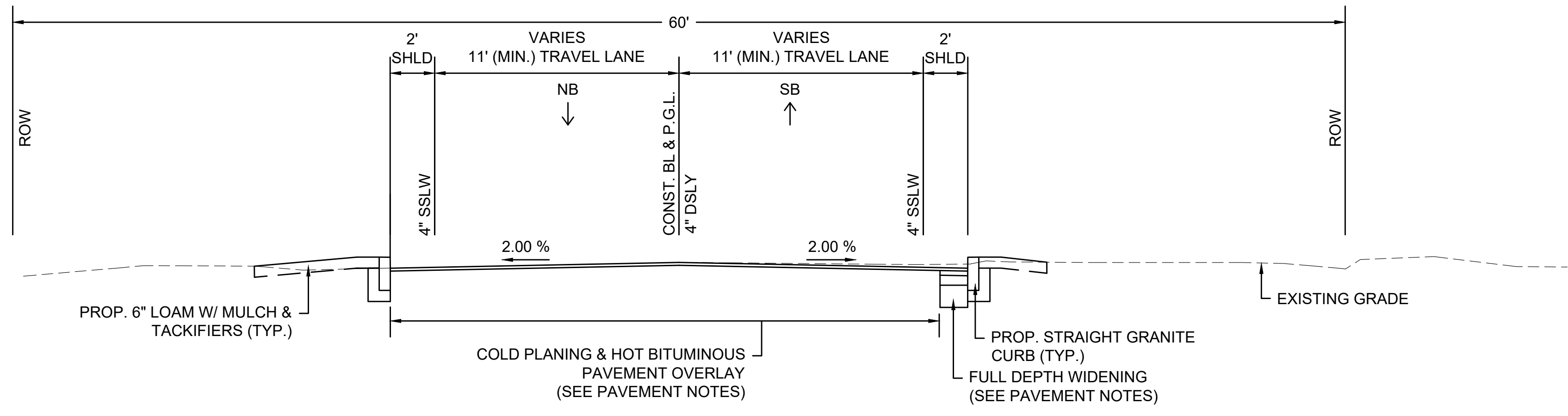
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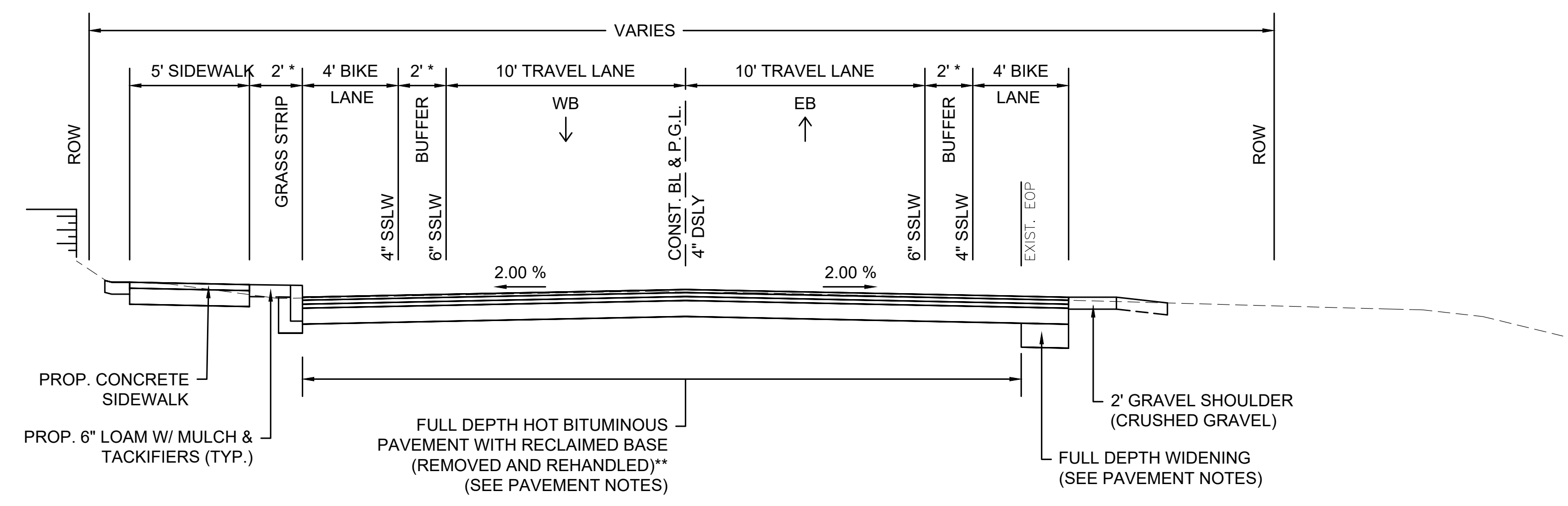


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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



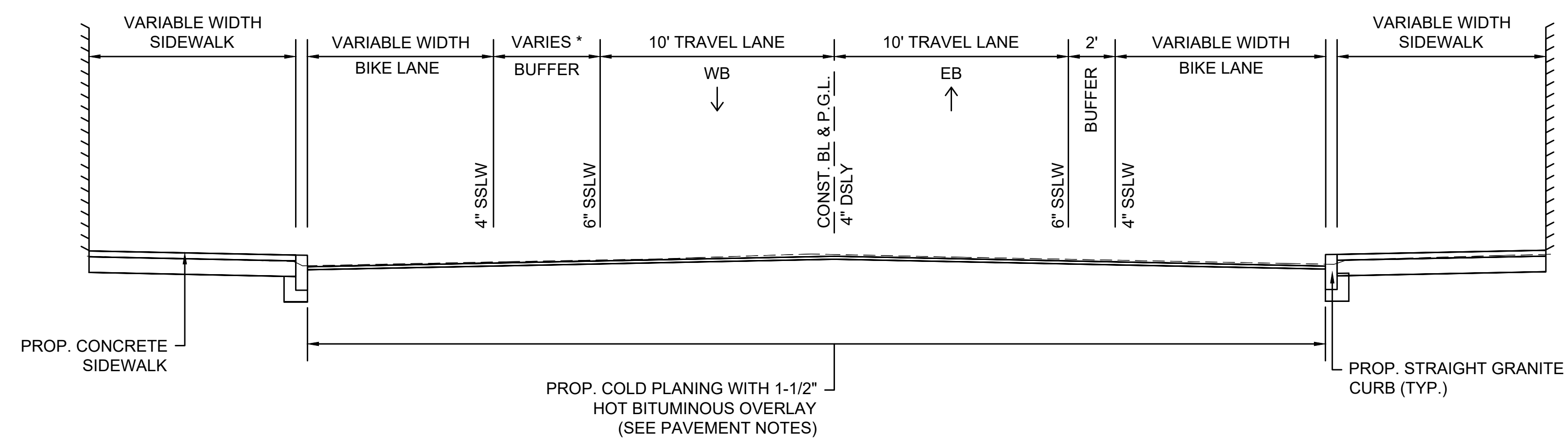
TYPICAL SECTION - WOODBURY AVENUE
 SCALE: 1" = 4'



TYPICAL SECTION - MAPLEWOOD AVENUE
 SCALE: 1" = 4'

STA. 45+00 TO STA. 47+00

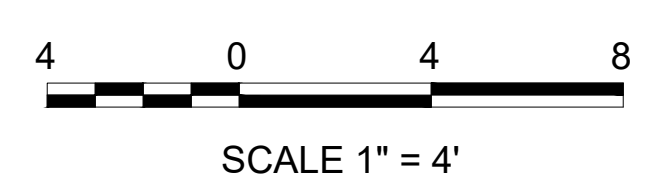
* BUFFER AND GRASS STRIP WIDTHS VARY, SEE ROADWAY PLAN & PROFILE SHEETS AND REFER TO PAVEMENT MARKING AND SIGNING PLANS FOR BUFFER WIDTHS.
 ** GIVEN THE CHANGE IN PROFILE APPROX. FROM STA. 45+00 TO STA. 46+50, RECLAIMED BASE WILL NEED TO BE REMOVED AND REHANDLED.



TYPICAL SECTION - MAPLEWOOD AVENUE
 SCALE: 1" = 4'

STA. 37+85 TO STA. 41+00

* BUFFER WIDTHS VARY, SEE ROADWAY PLAN & PROFILE SHEETS AND REFER TO PAVEMENT MARKING AND SIGNING PLANS FOR BUFFER WIDTHS.

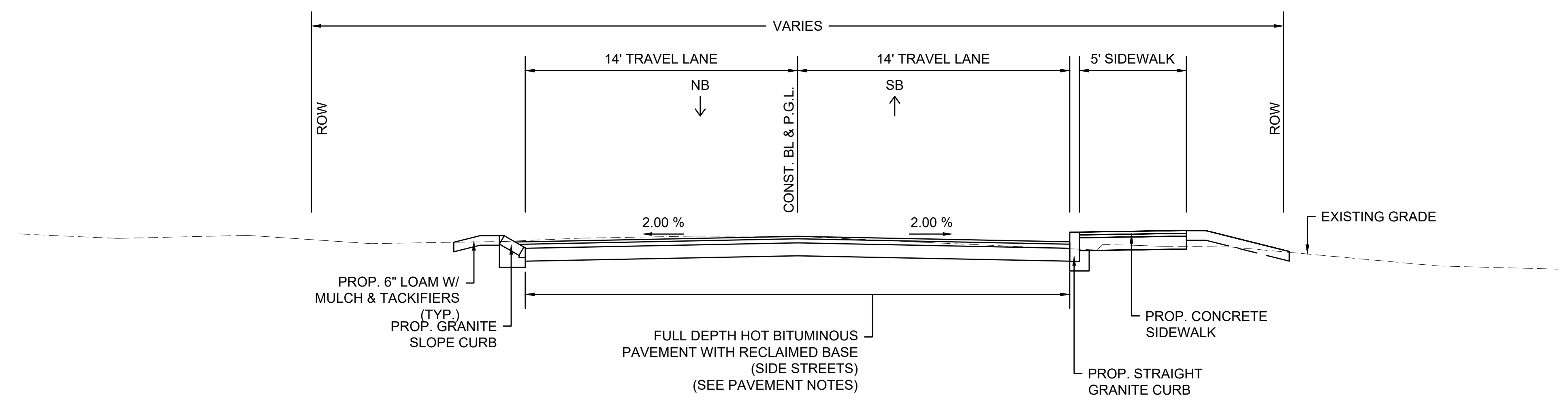


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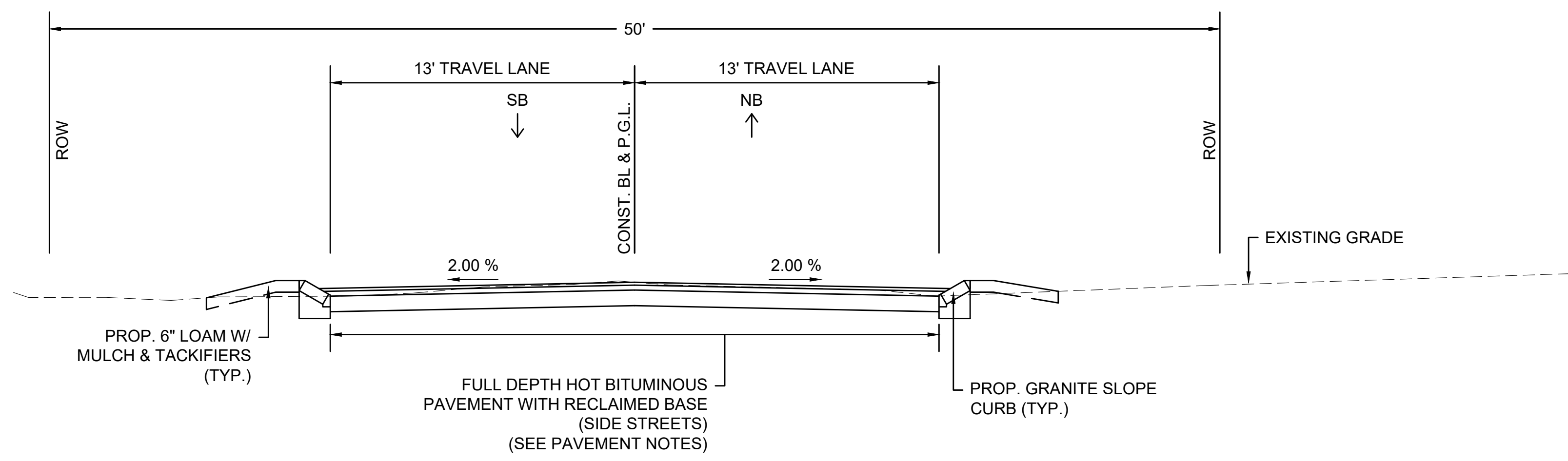


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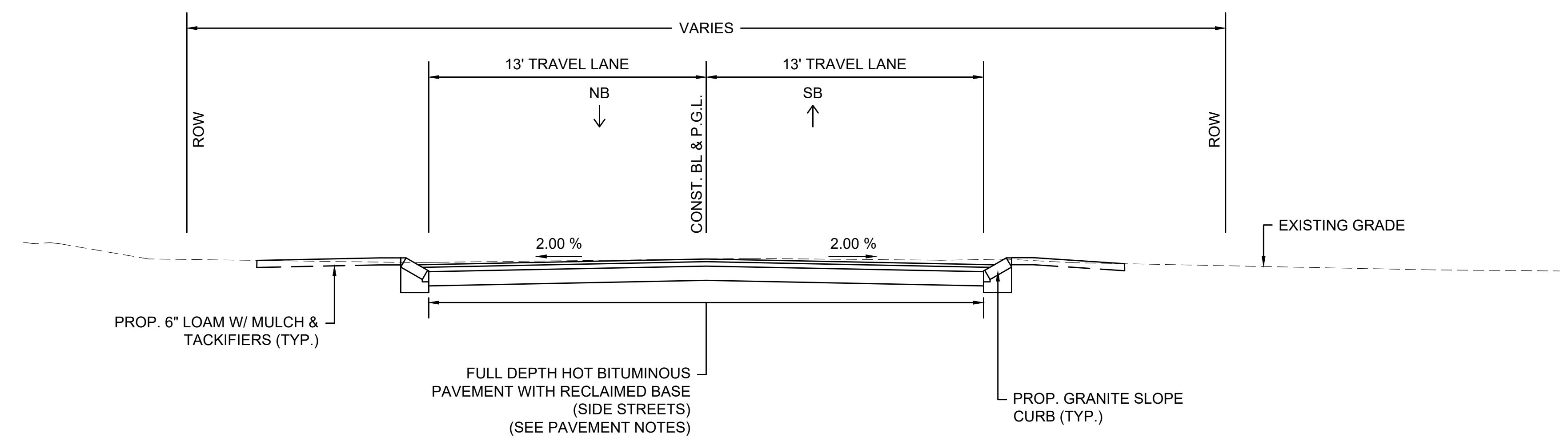
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



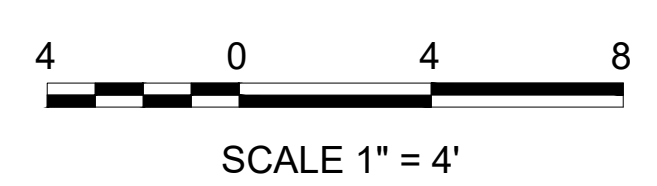
TYPICAL SECTION - CUTTS STREET
 SCALE: 1" = 4'



TYPICAL SECTION - CENTRAL AVENUE
 SCALE: 1" = 4'



TYPICAL SECTION - FAIRVIEW DRIVE
 SCALE: 1" = 4'



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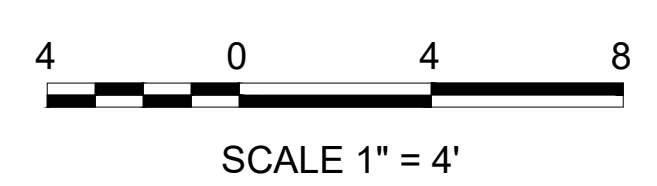
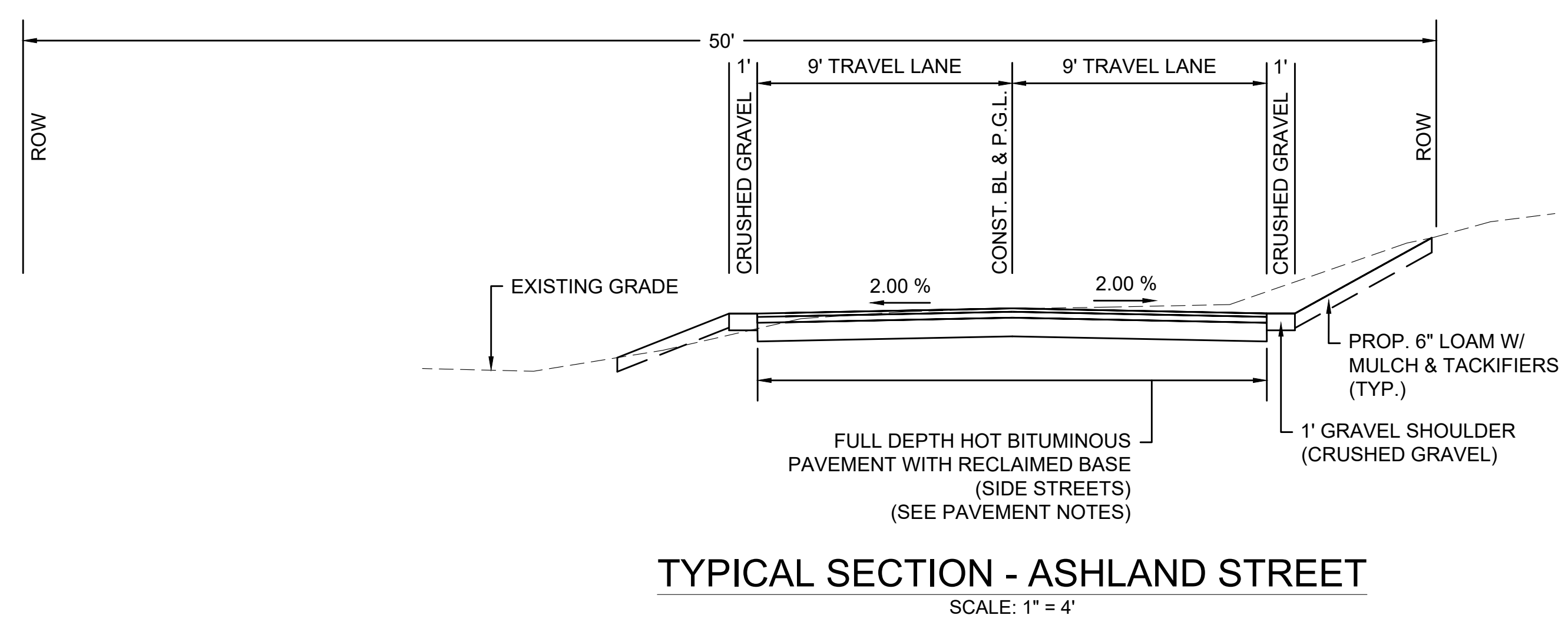
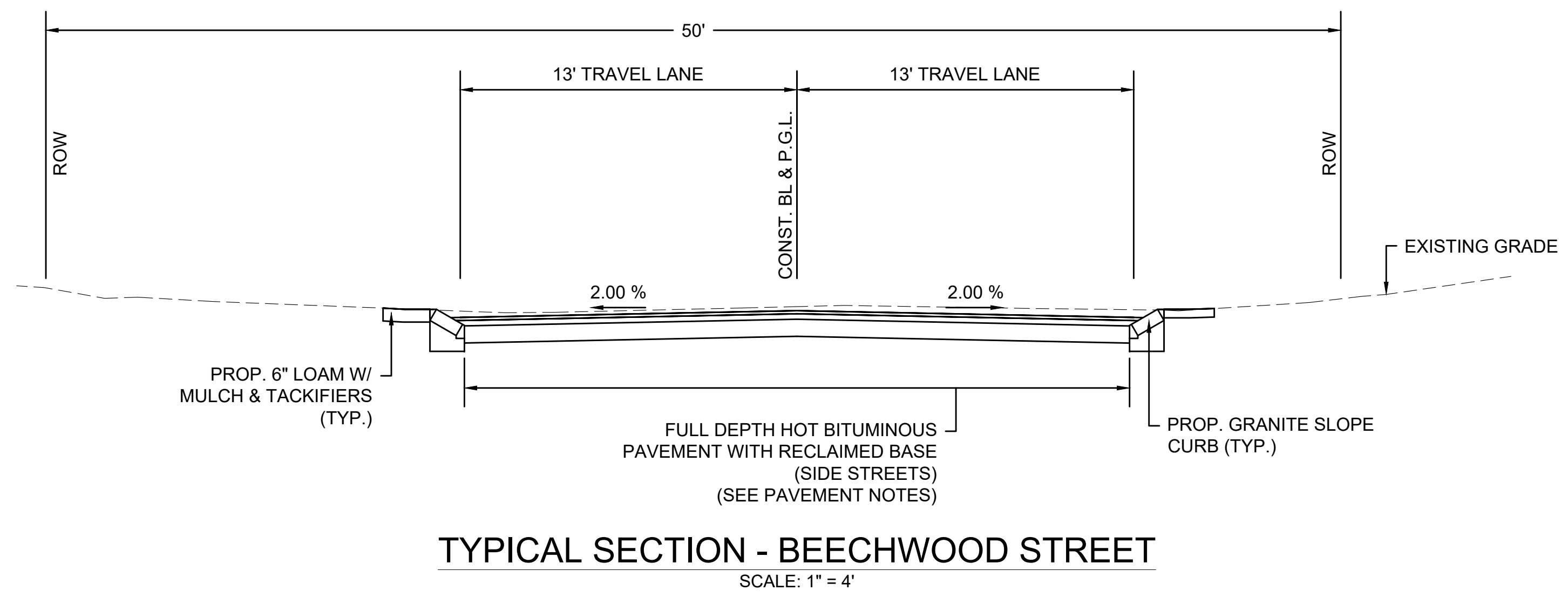
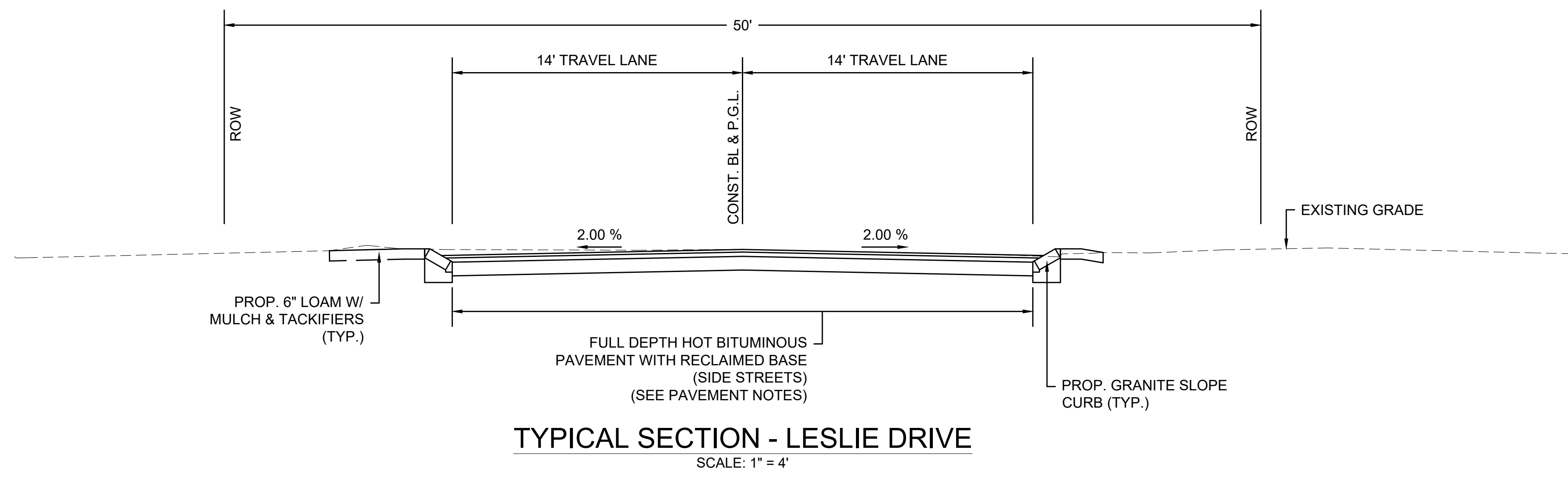
**TYPICAL
 SECTIONS**

SCALE:
 1"=4'
 2015086.00
 9 OF 184



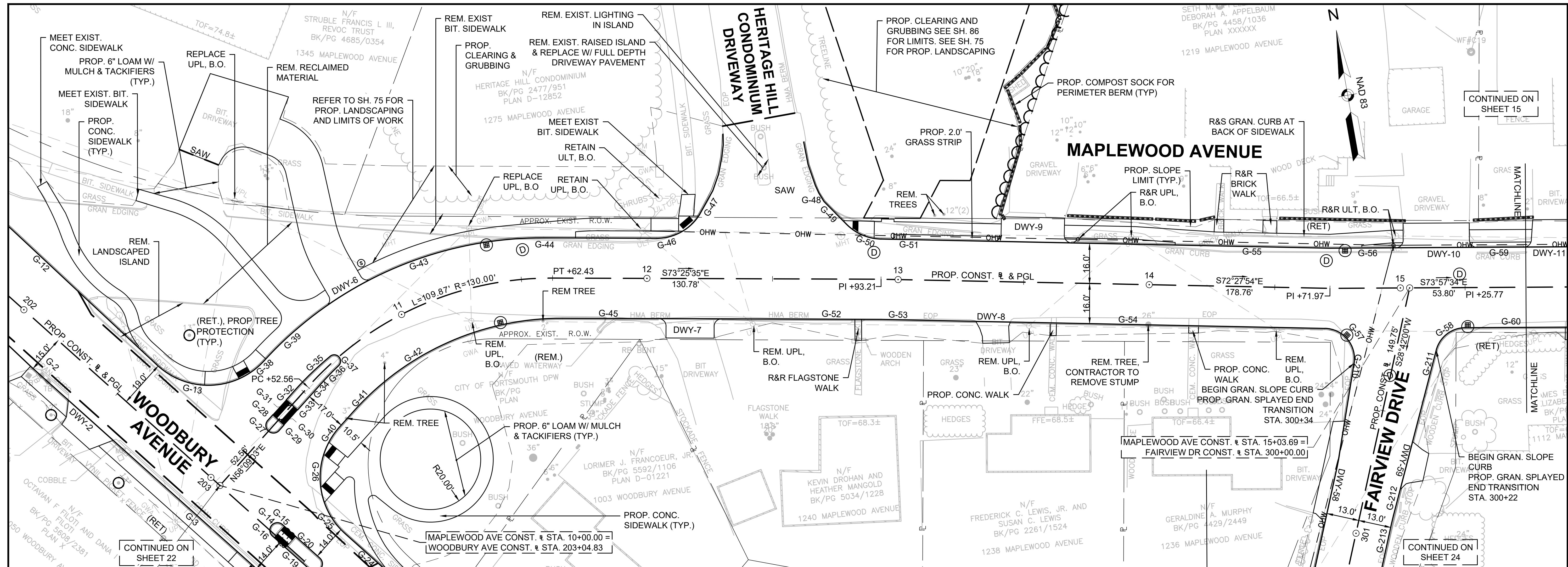
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



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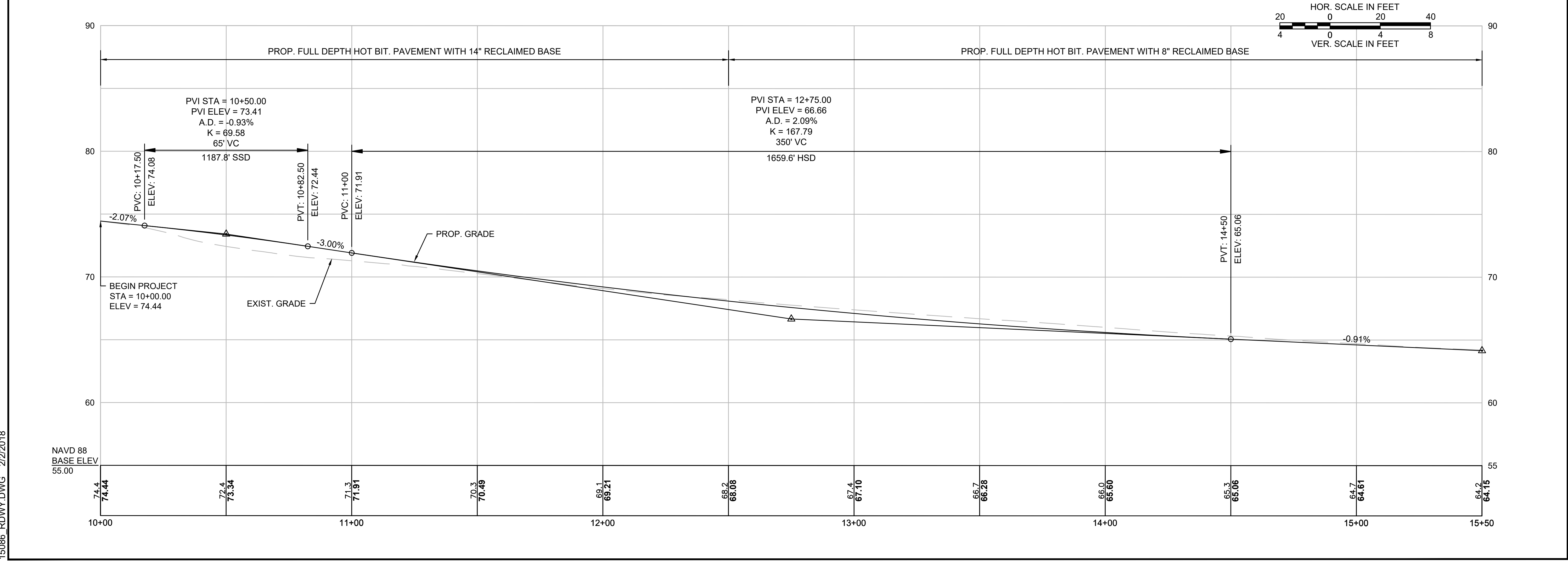
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 CITY OF PORTSMOUTH
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 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

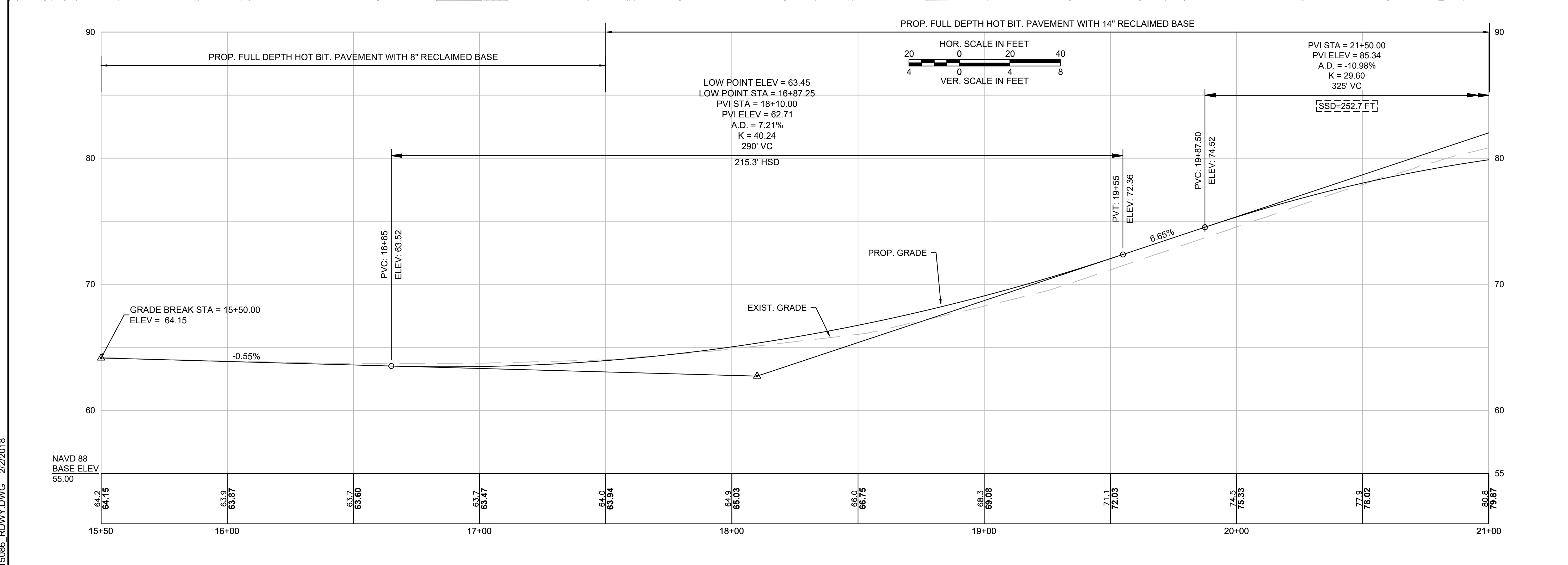
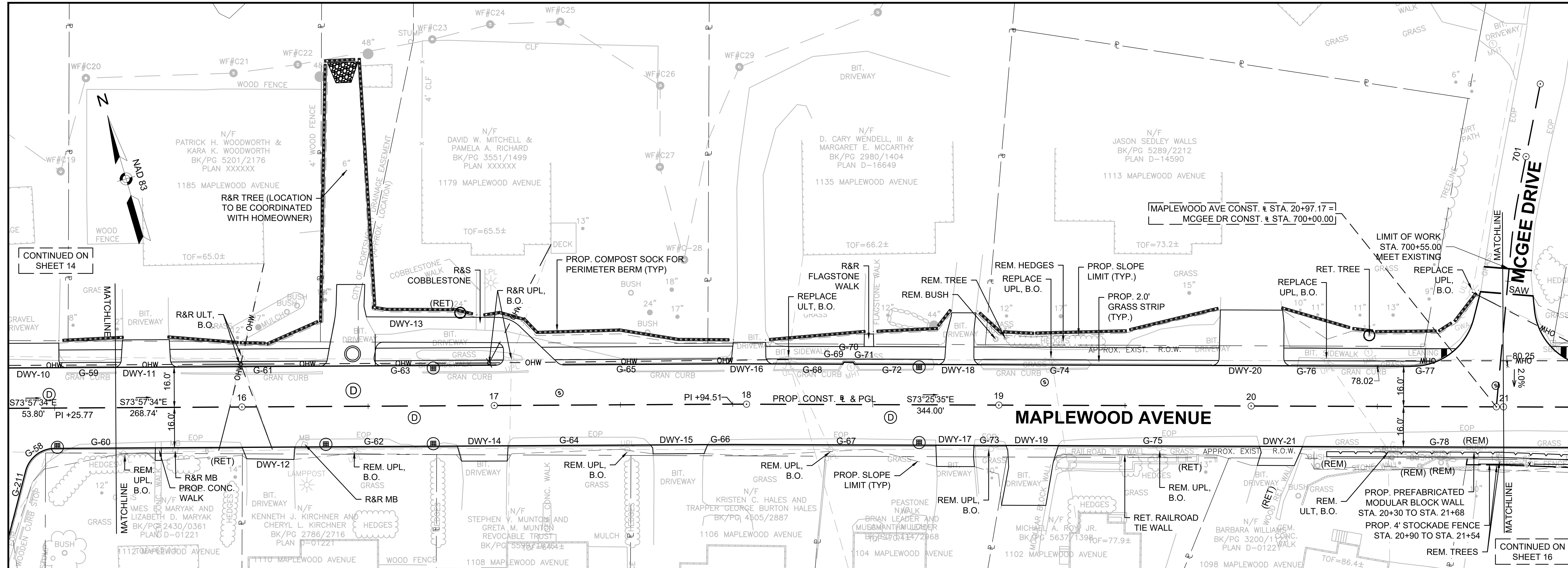
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ROADWAY PLAN & PROFILE - MAPLEWOOD AVENUE
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00



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JOSEPH PAUL JOHNSON
 No. 11564
 LICENSED PROFESSIONAL ENGINEER

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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

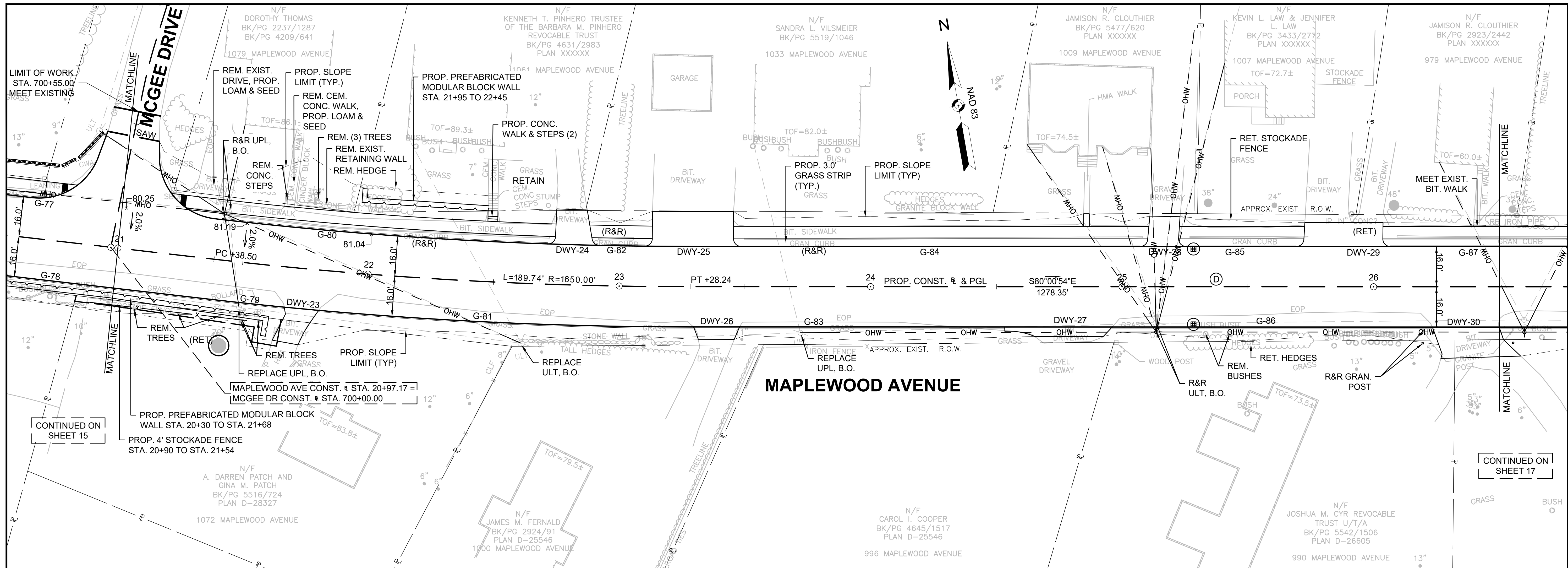
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ROADWAY PLAN & PROFILE - MAPLEWOOD AVENUE
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
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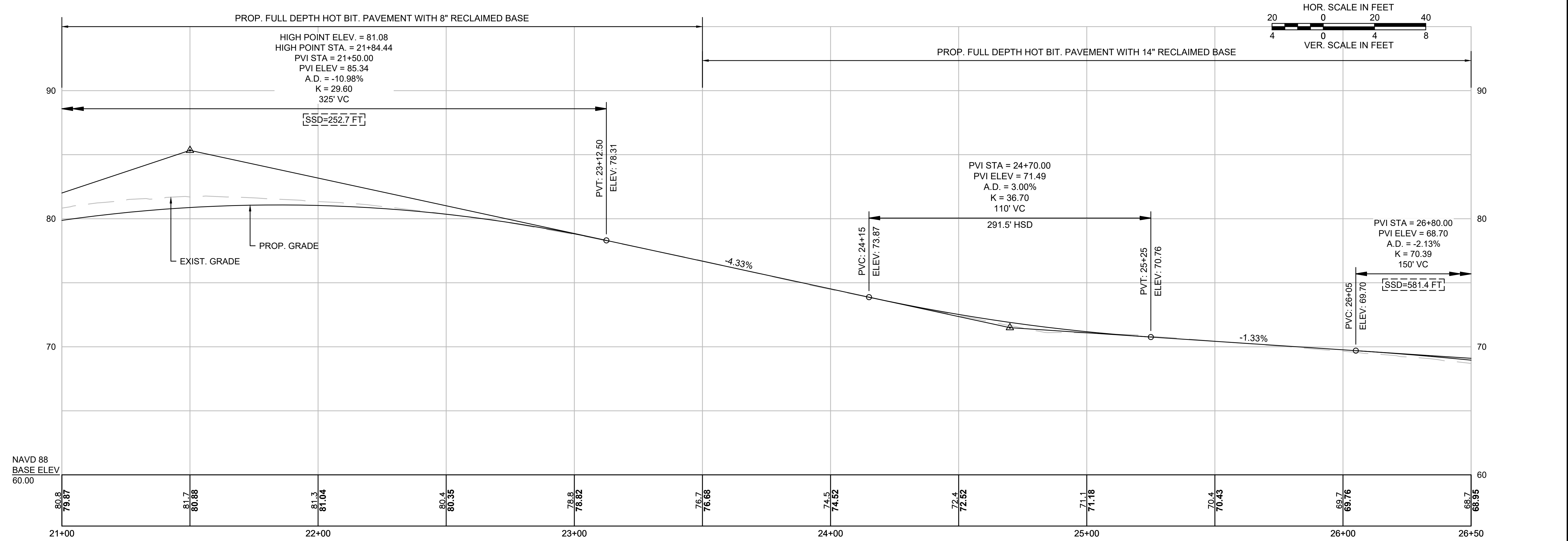
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



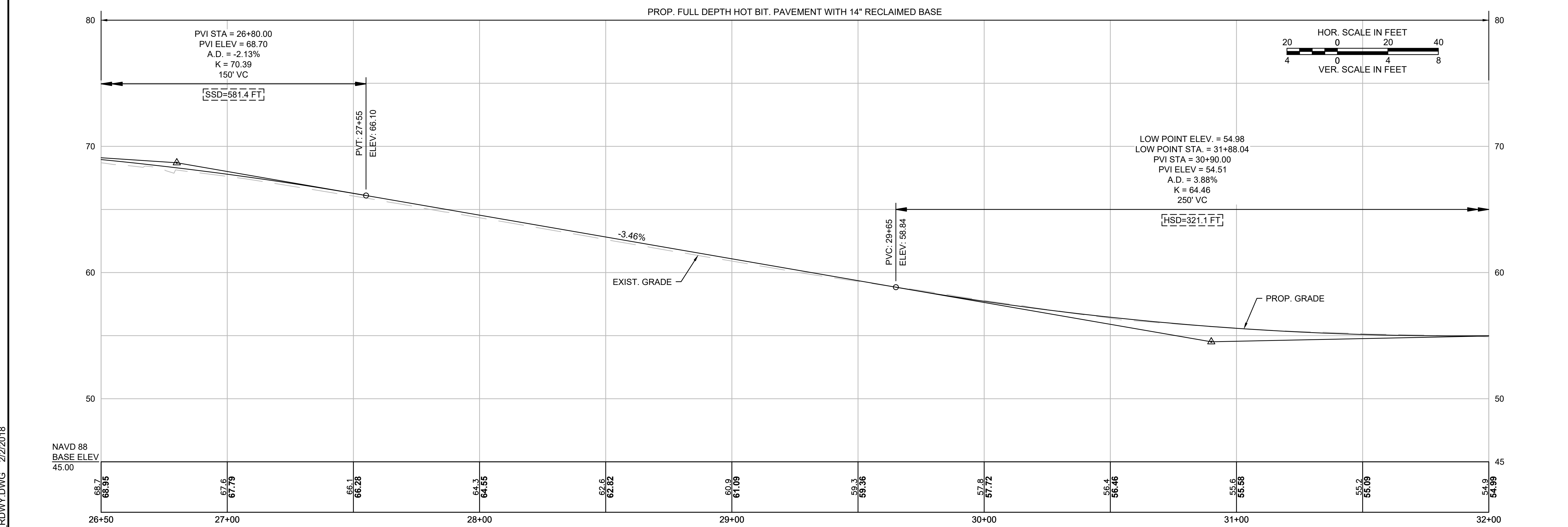
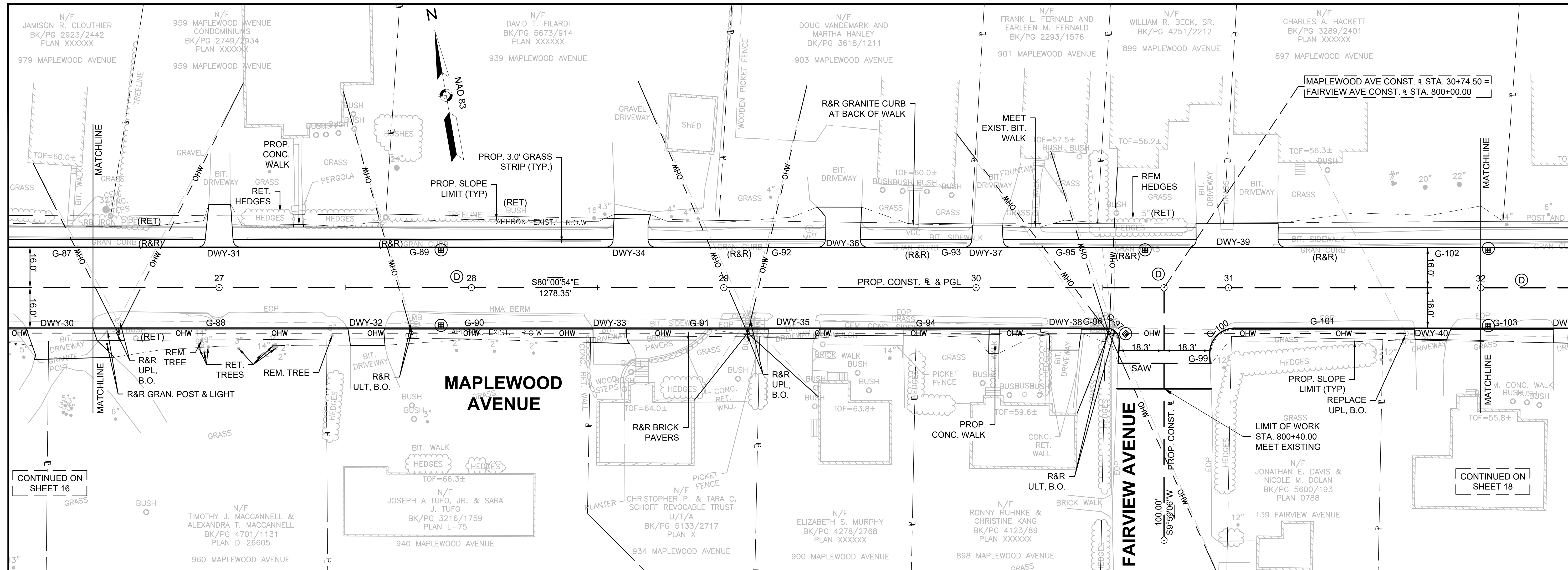
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ROADWAY PLAN & PROFILE - MAPLEWOOD AVENUE

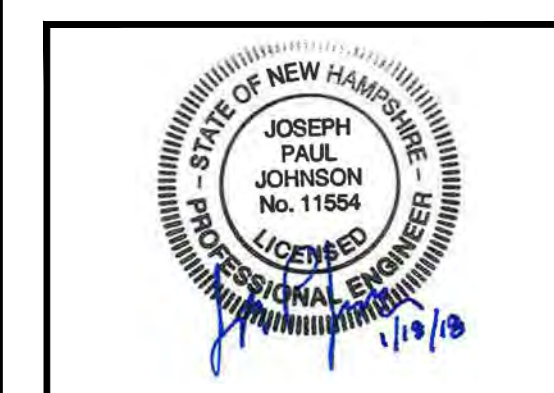
SCALE: HORIZ: 1" = 20'
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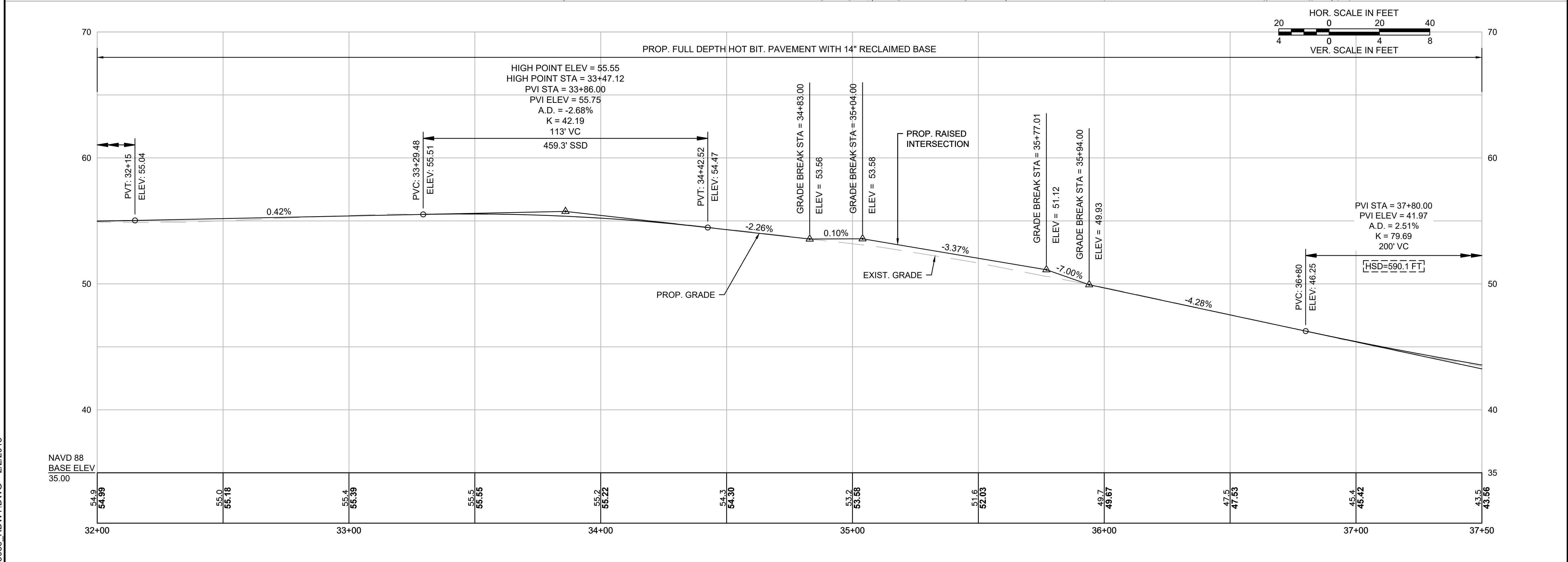
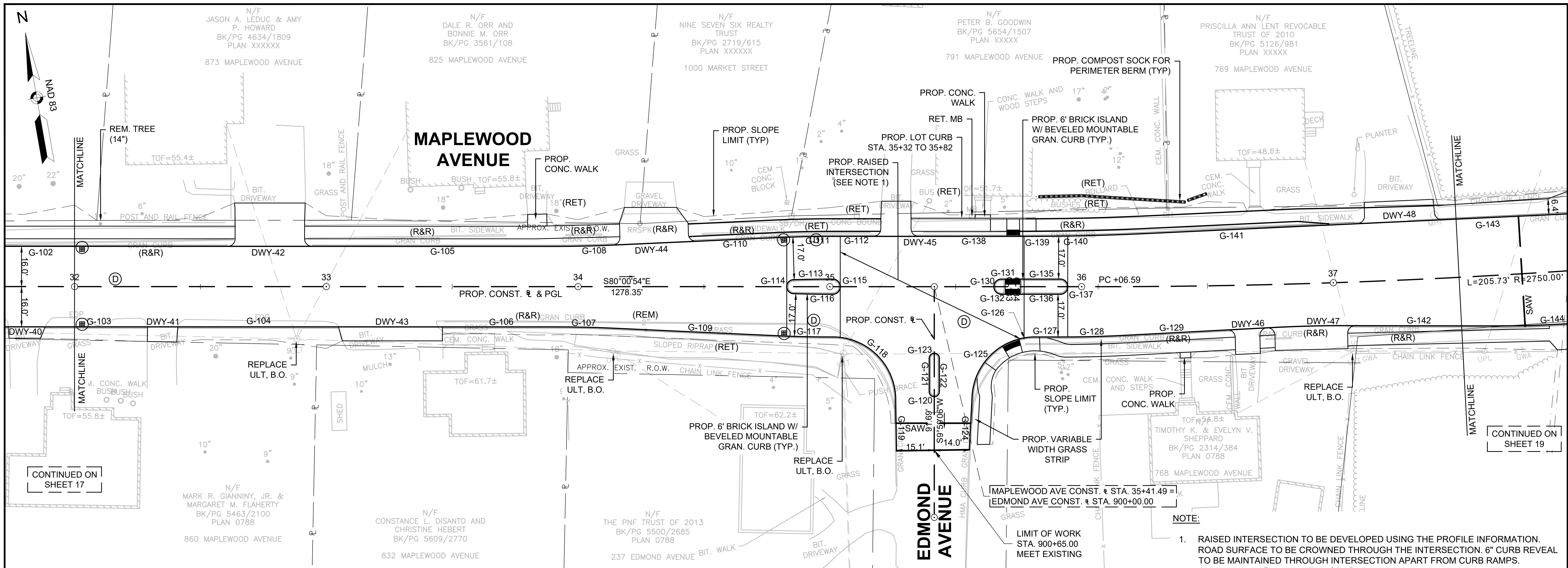
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

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NO.	REVISION	DATE

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ROADWAY PLAN & PROFILE - MAPLEWOOD AVENUE
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
17 OF 184

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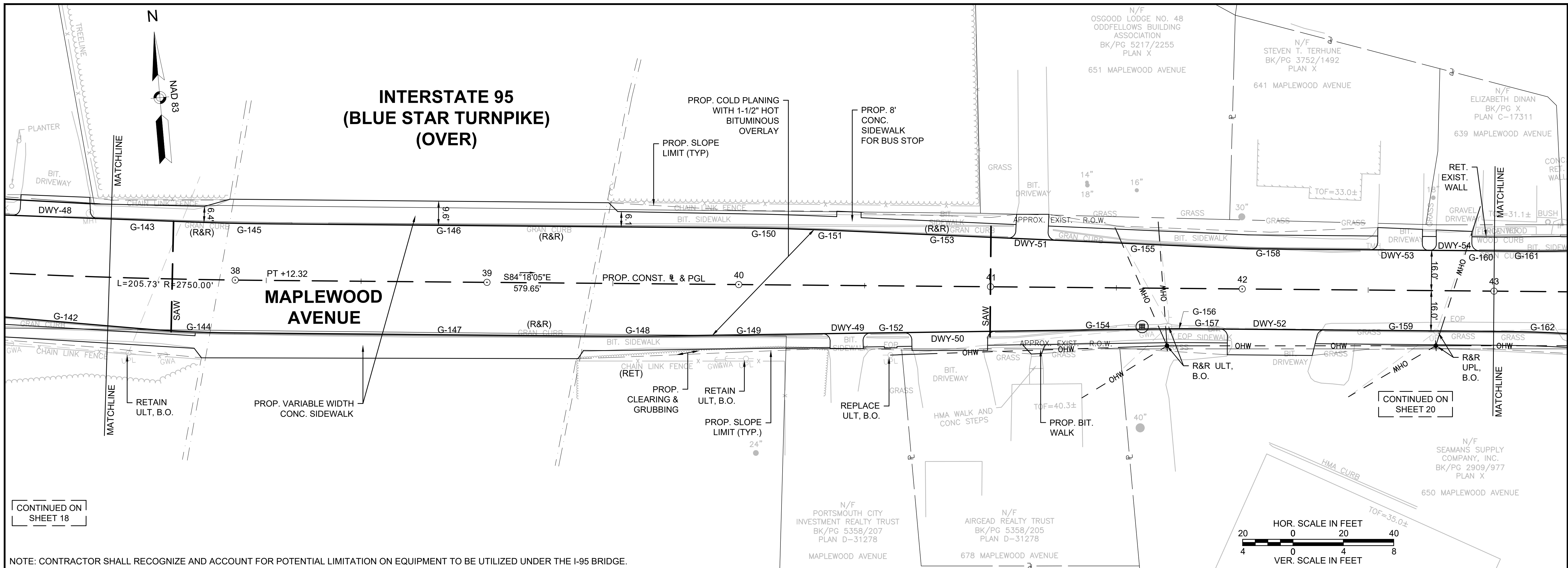
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

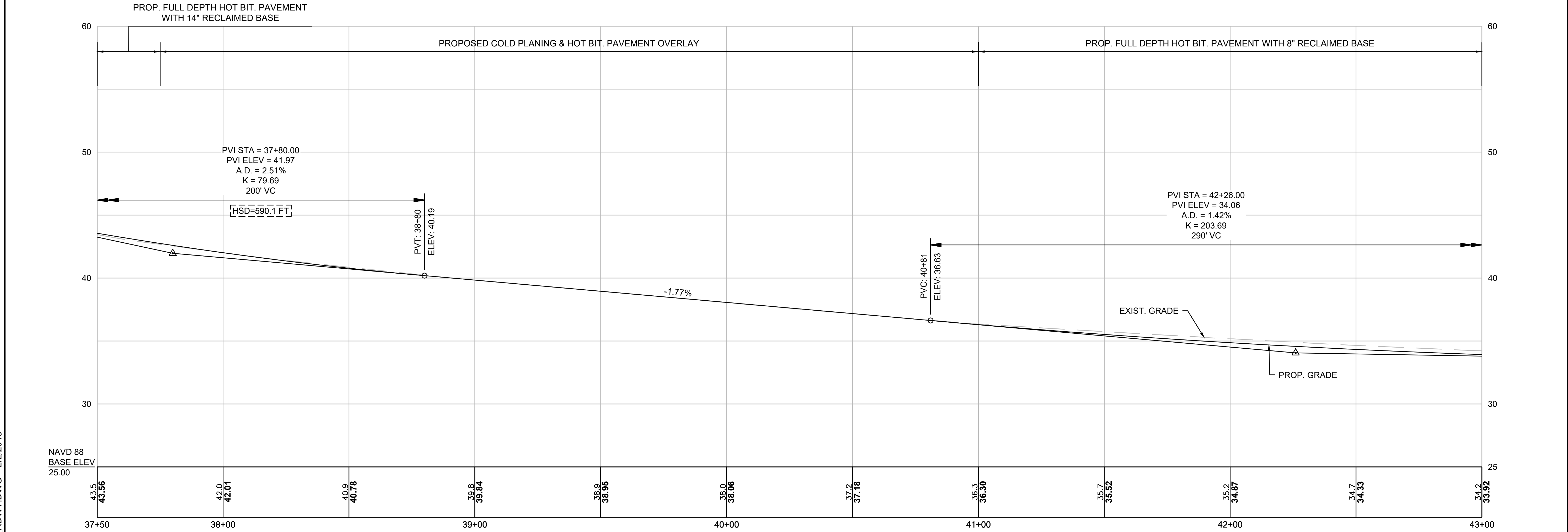
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**ROADWAY
 PLAN &
 PROFILE -
 MAPLEWOOD
 AVENUE**
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00
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NOTE: CONTRACTOR SHALL RECOGNIZE AND ACCOUNT FOR POTENTIAL LIMITATION ON EQUIPMENT TO BE UTILIZED UNDER THE I-95 BRIDGE.



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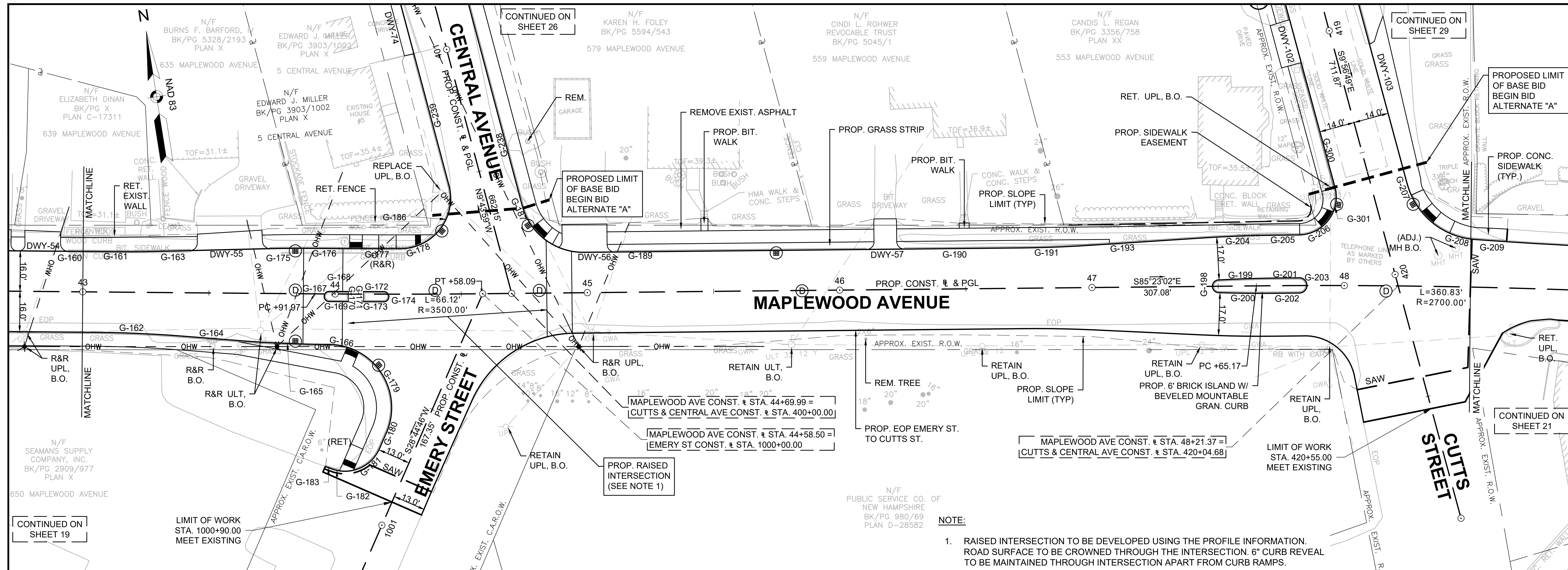
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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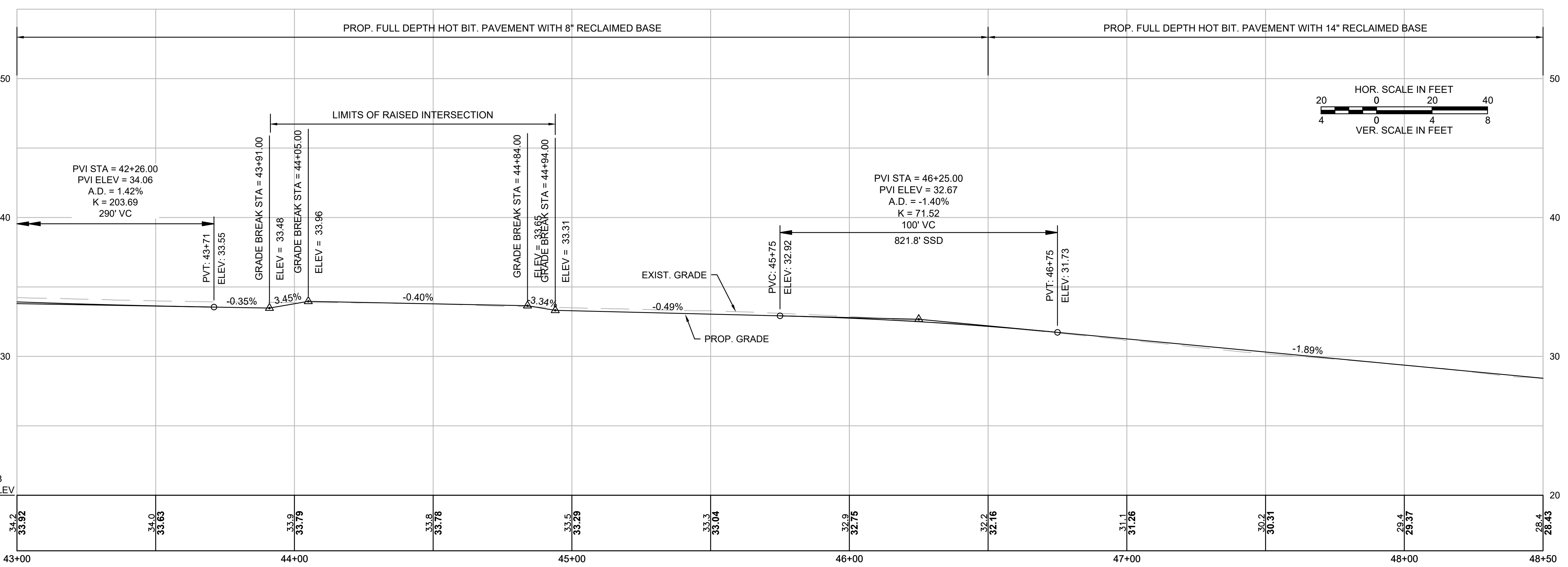
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ROADWAY PLAN & PROFILE - MAPLEWOOD AVENUE
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
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 19 OF 184

15086 RDWY.DWG 2/2/2018



NOTE:
 1. RAISED INTERSECTION TO BE DEVELOPED USING THE PROFILE INFORMATION. ROAD SURFACE TO BE CROWNED THROUGH THE INTERSECTION. 6" CURB REVEAL TO BE MAINTAINED THROUGH INTERSECTION APART FROM CURB RAMPS.



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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

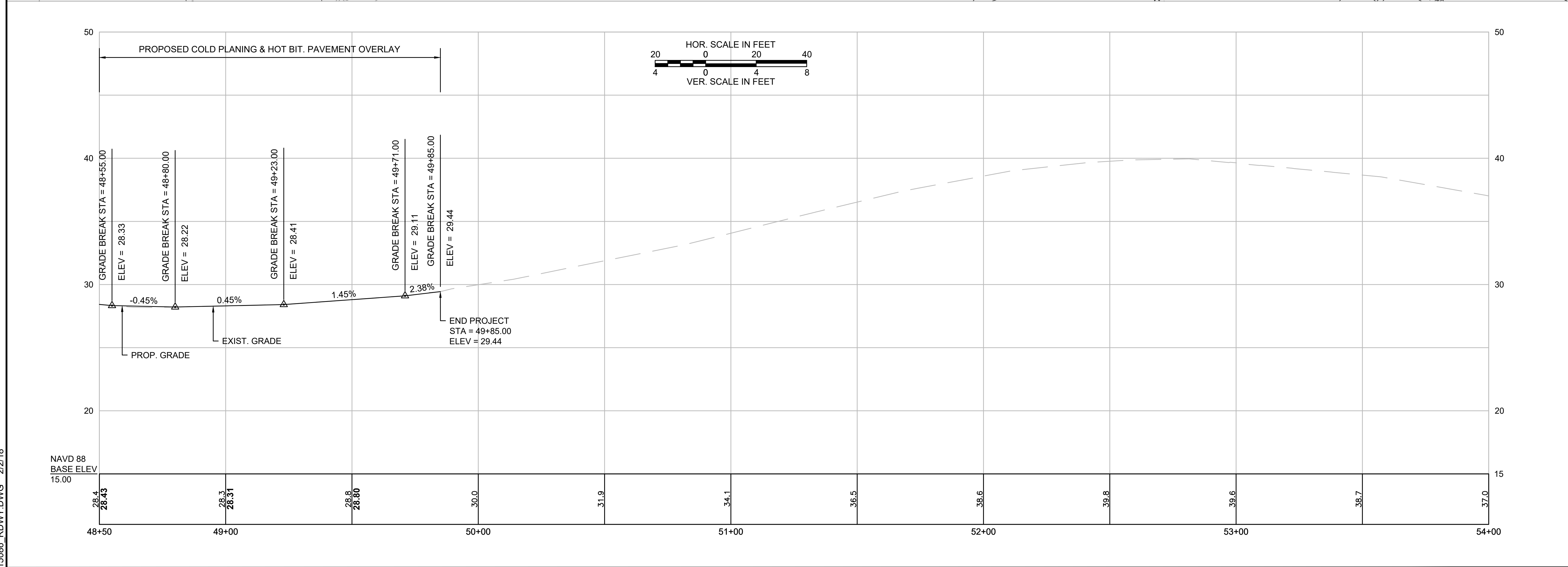
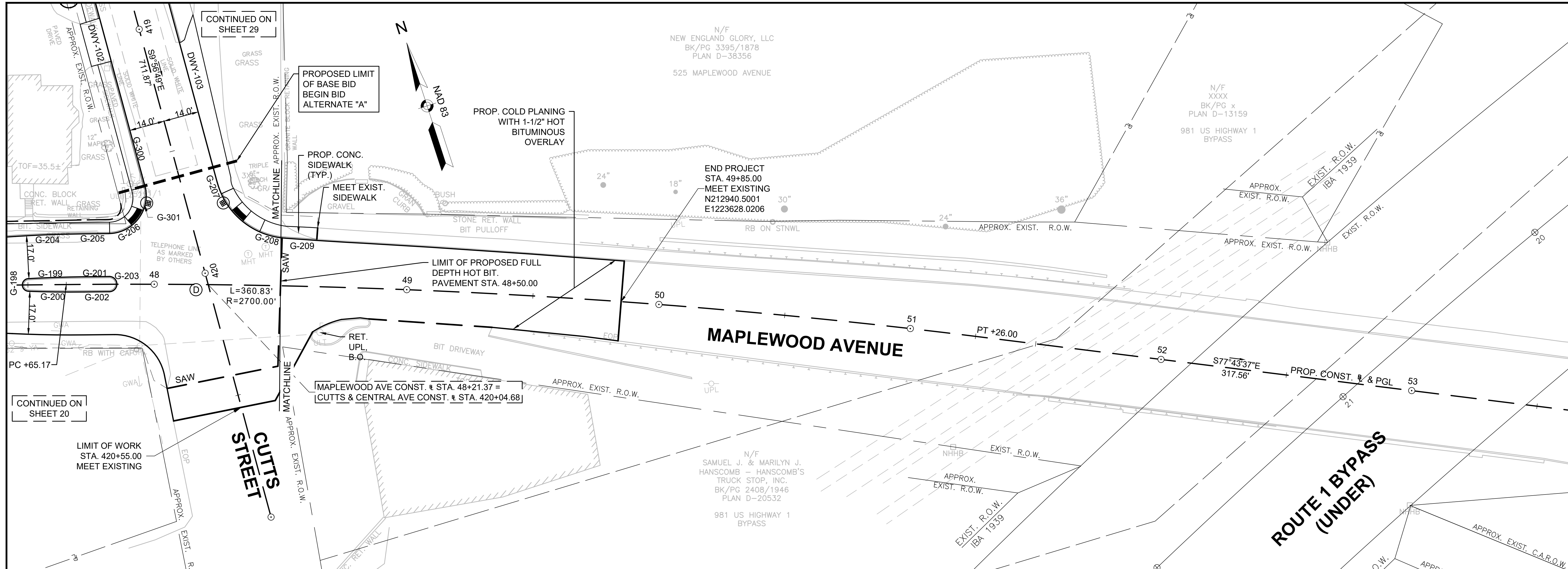
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2/5/2018
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ROADWAY PLAN & PROFILE - MAPLEWOOD AVENUE

SCALE: HORIZ: 1" = 20'
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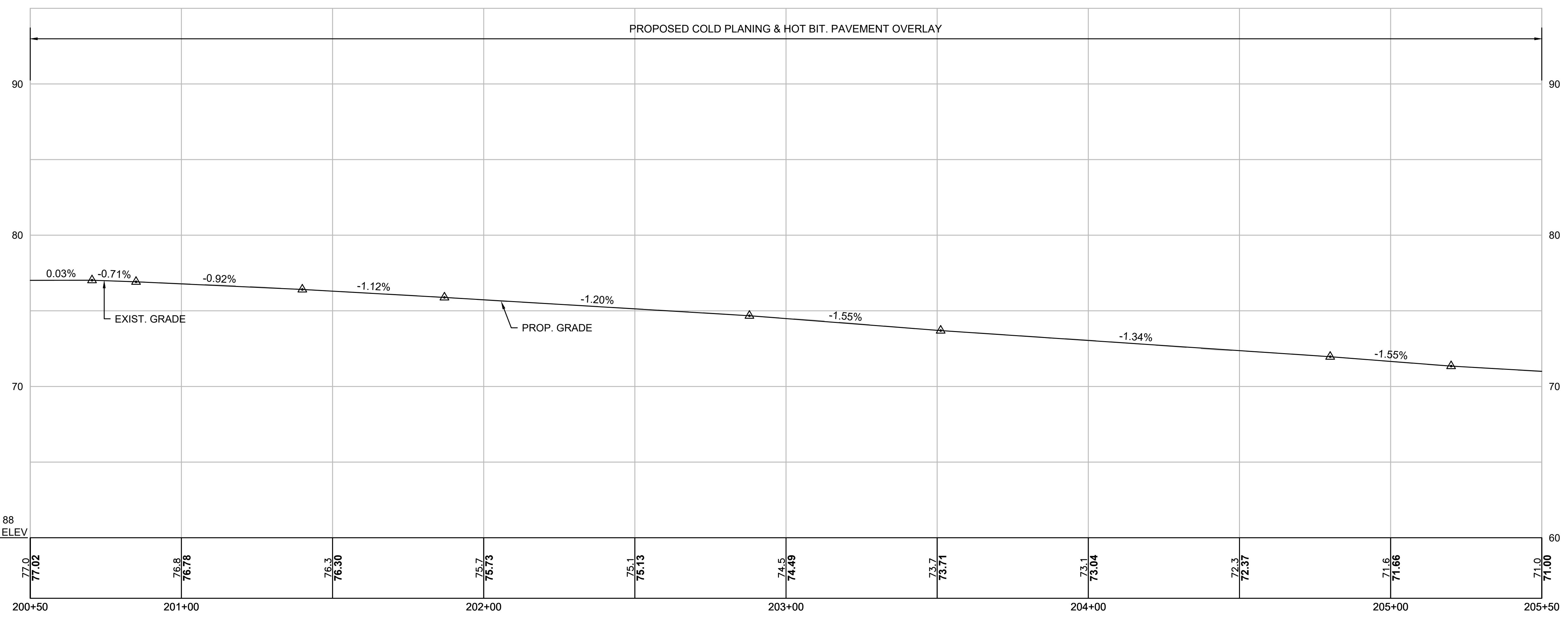
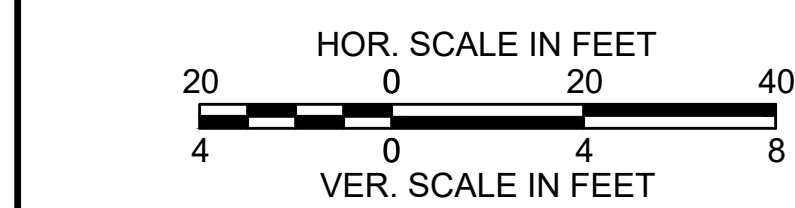
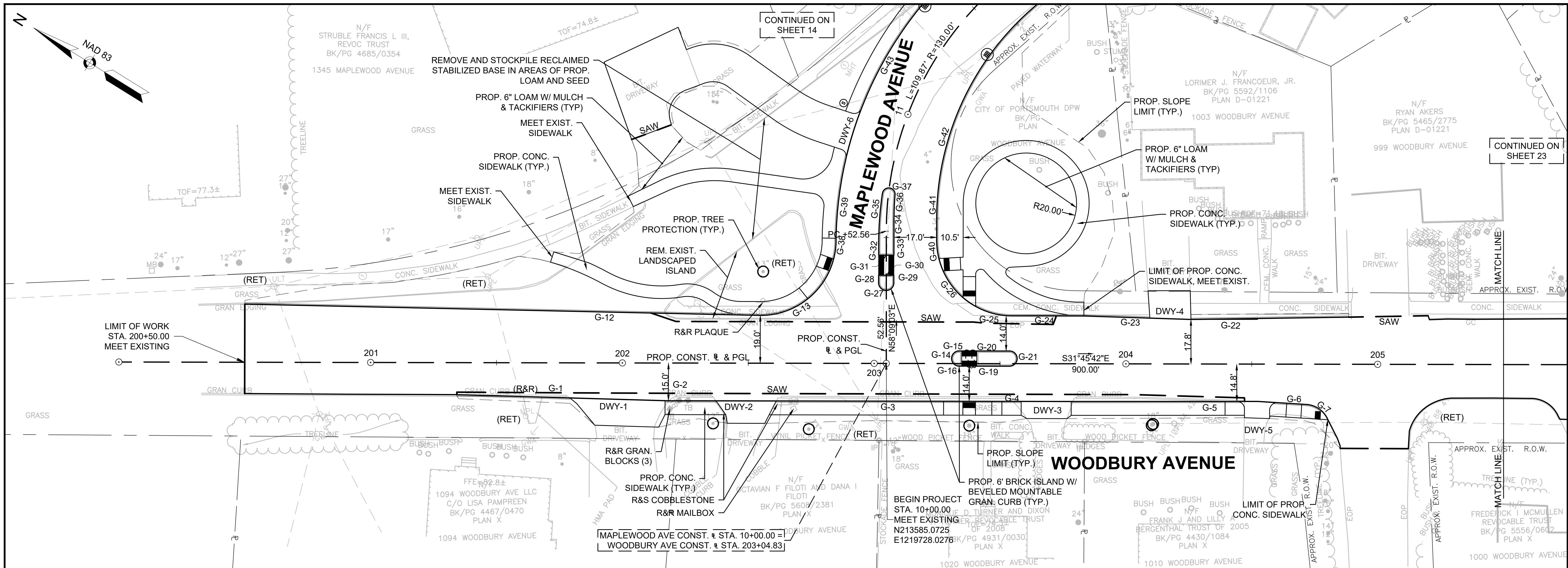
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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**ROADWAY
 PLAN &
 PROFILE -
 MAPLEWOOD
 AVENUE**
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00
 21 of 184



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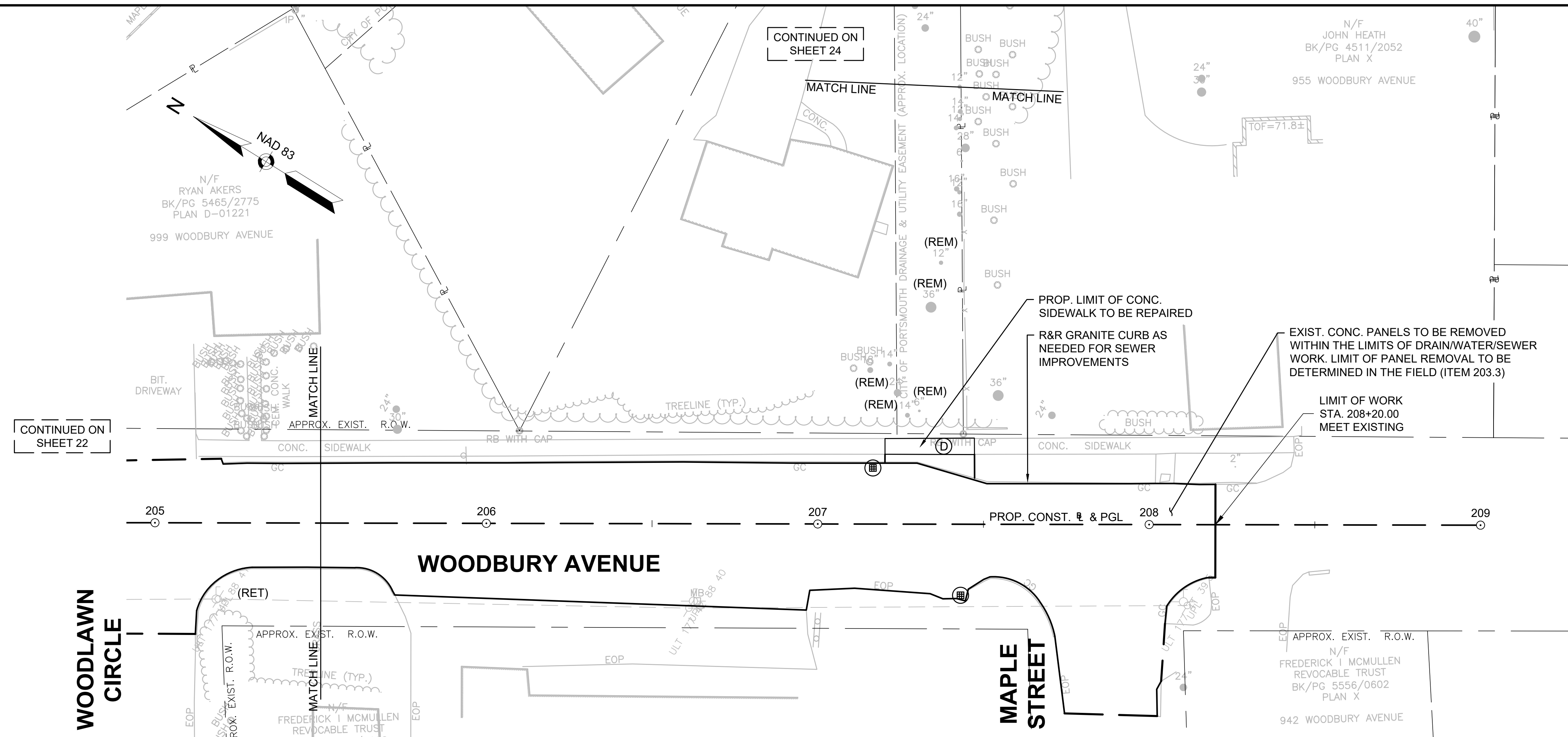
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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ROADWAY PLAN & PROFILE - WOODBURY AVENUE
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00



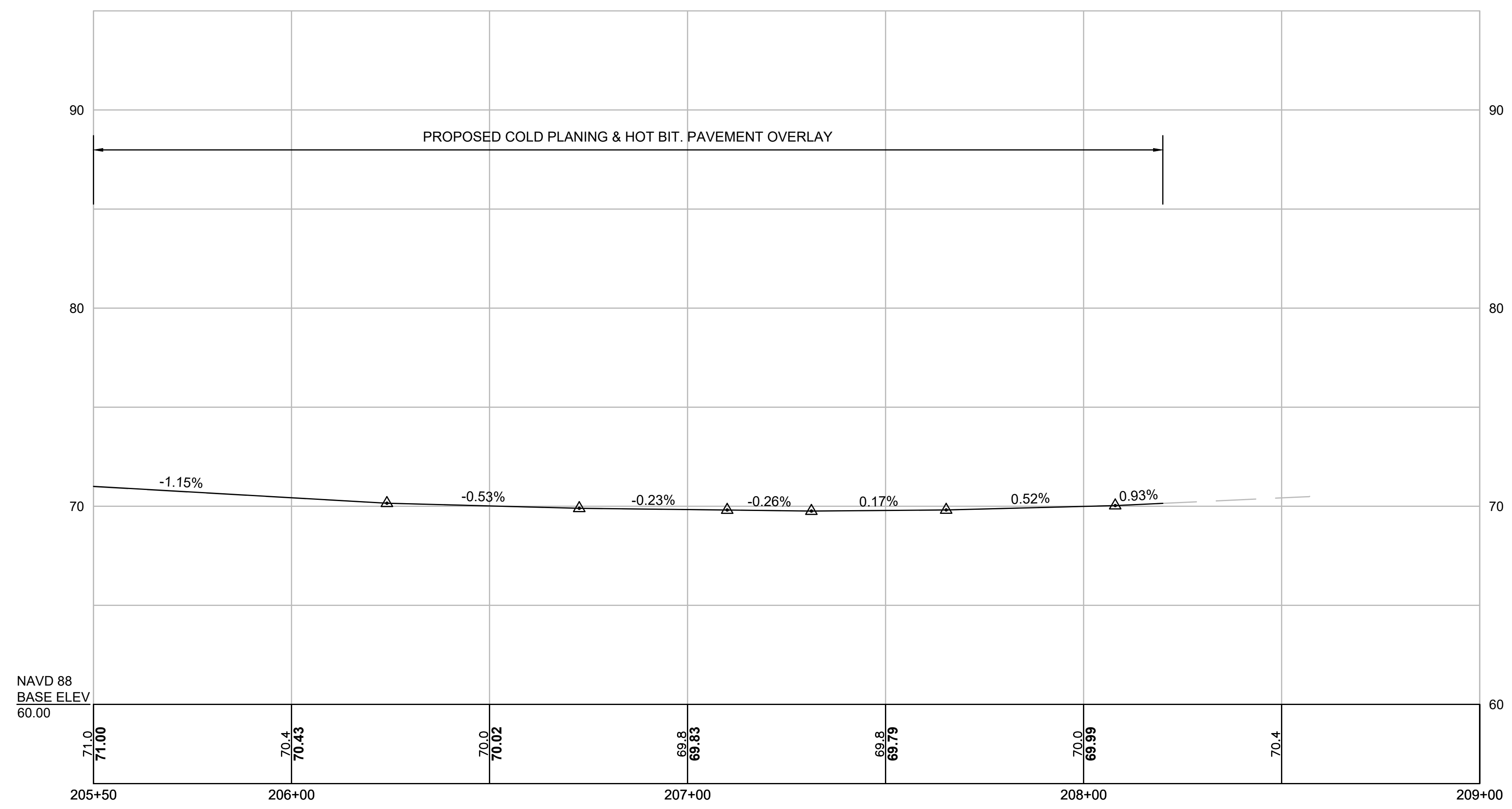
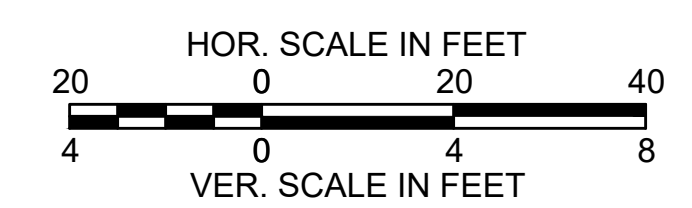
CONTINUED ON SHEET 22

CONTINUED ON SHEET 24

WOODLAWN CIRCLE

WOODBURY AVENUE

MAPLE STREET



NAVD 88
BASE ELEV
60.00

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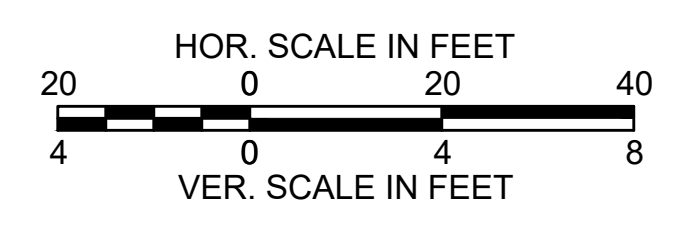
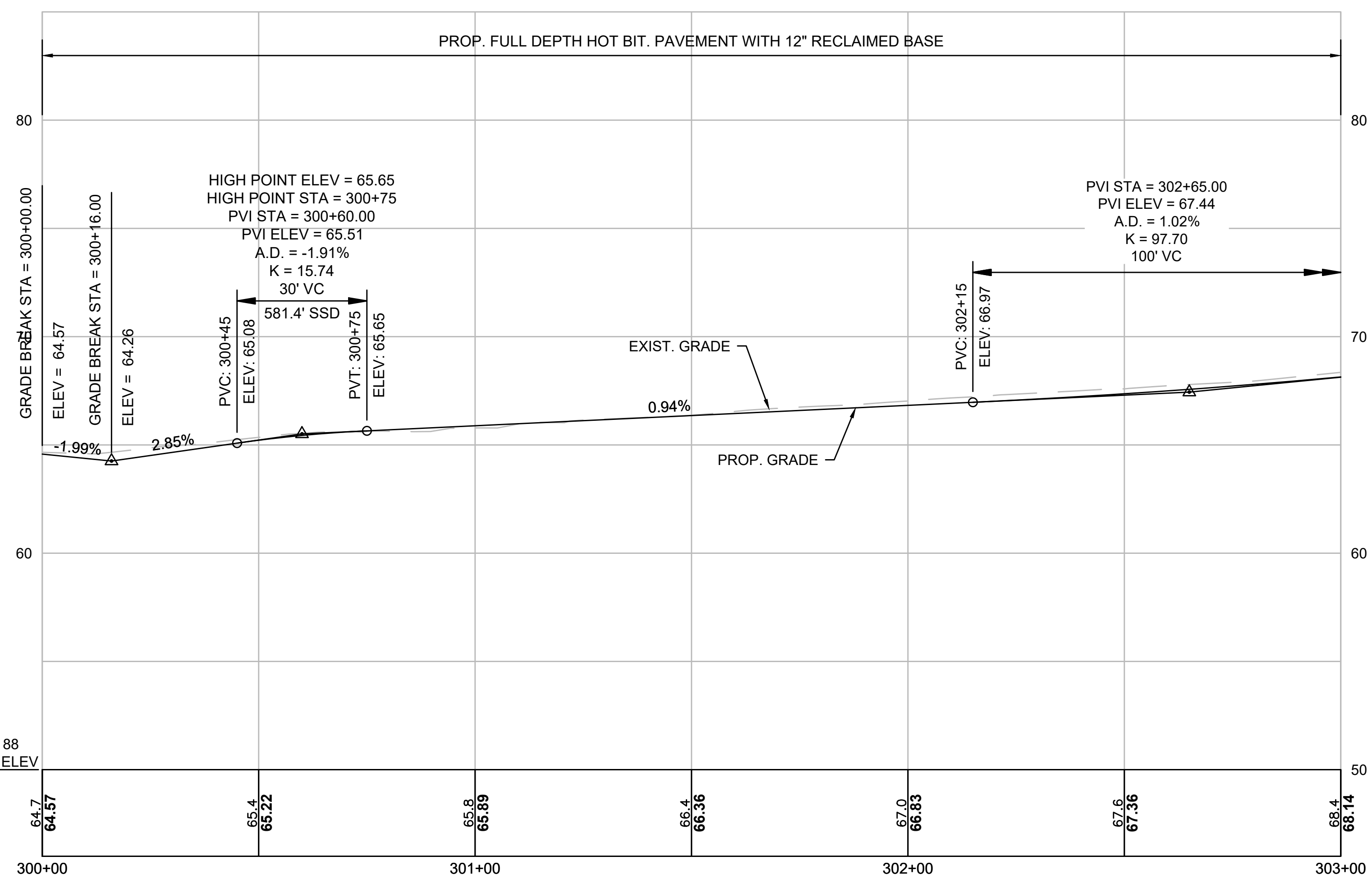
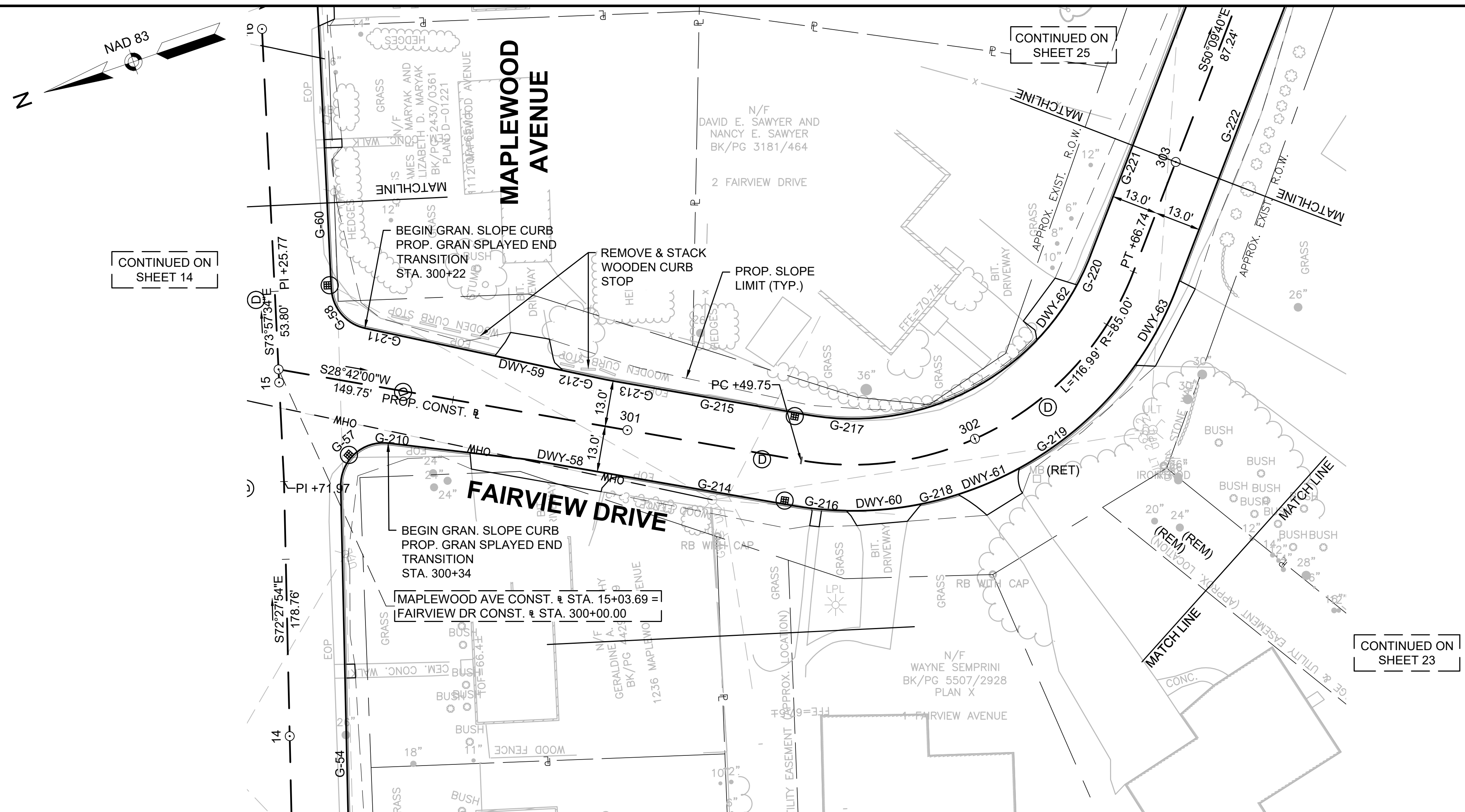
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

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ROADWAY PLAN & PROFILE - WOODBURY AVENUE
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PORTSMOUTH, NH**

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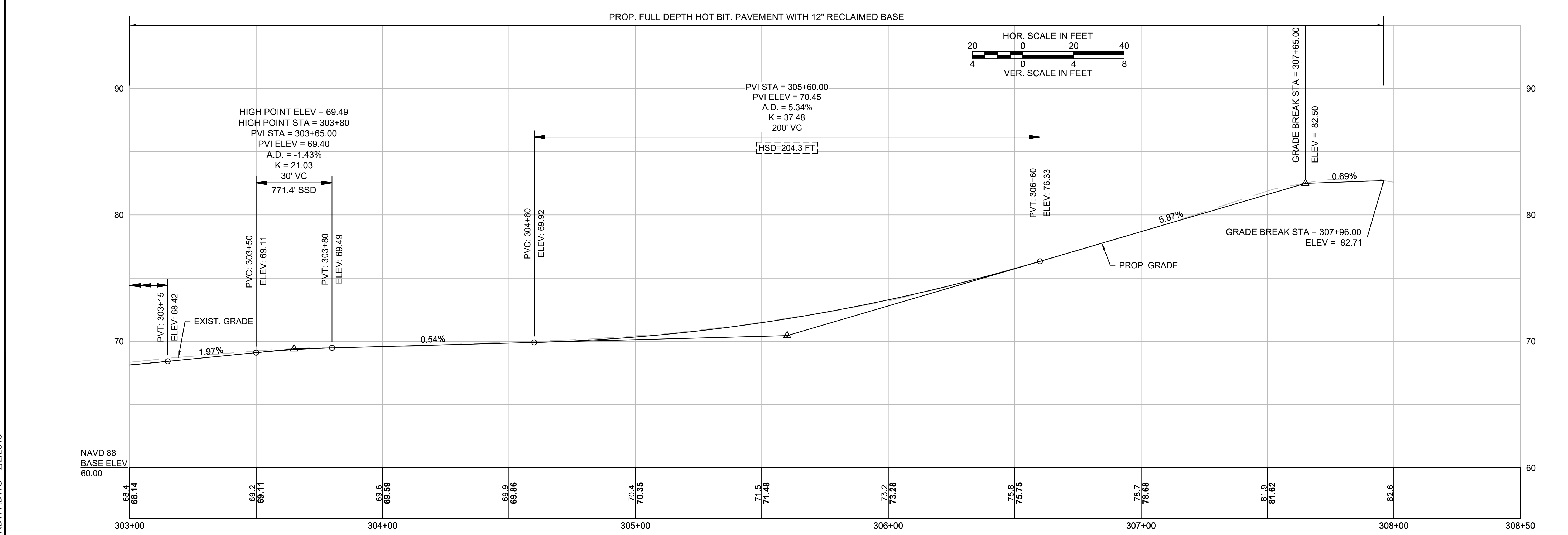
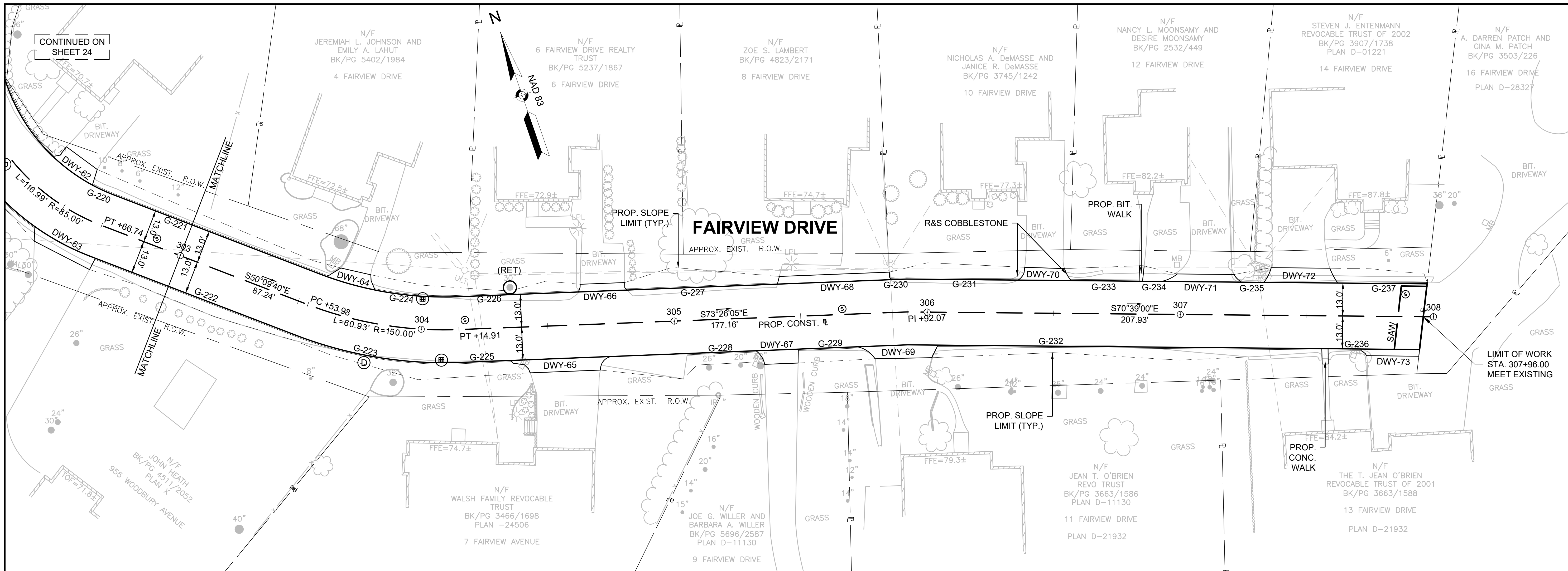
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**ROADWAY
PLAN &
PROFILE -
FAIRVIEW
DRIVE**

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

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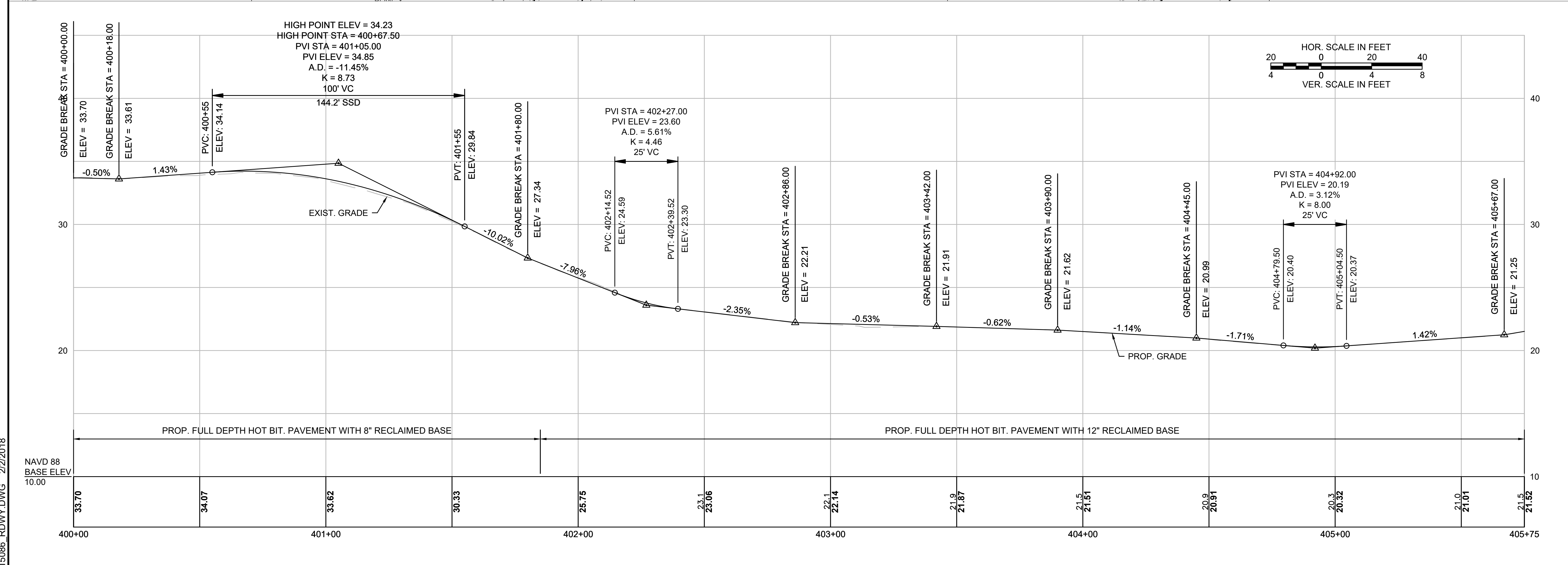
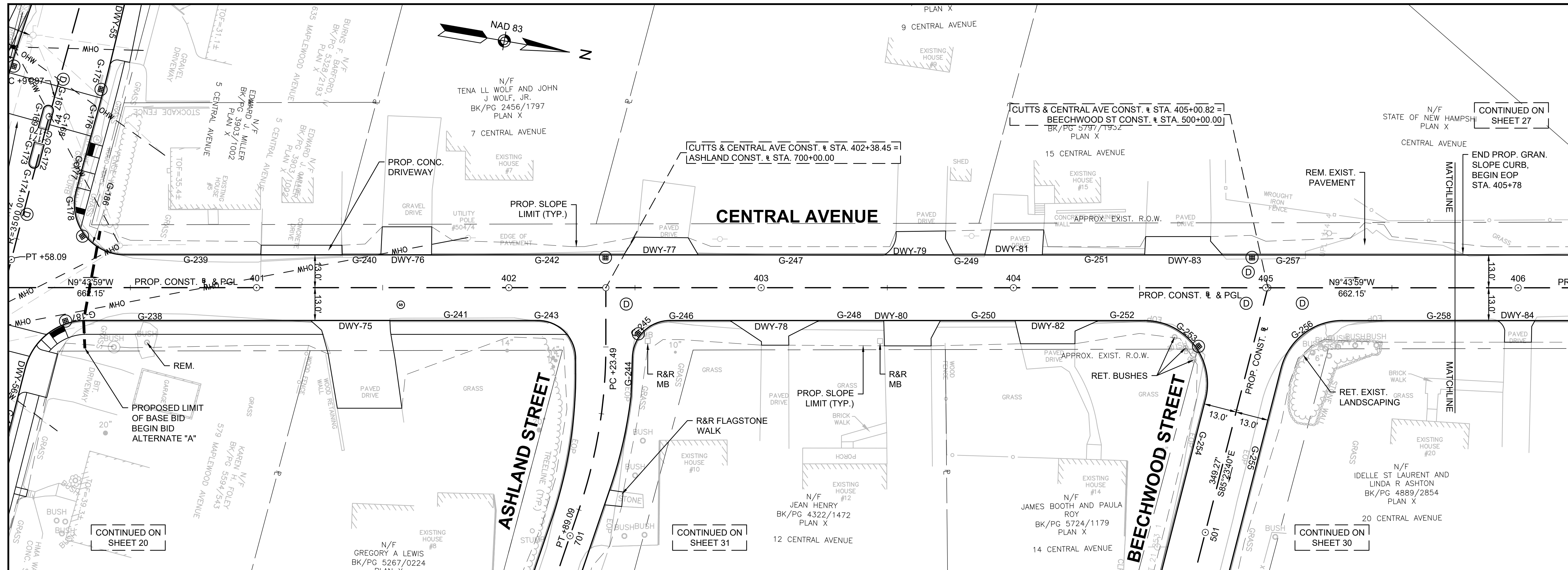
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
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ROADWAY PLAN & PROFILE - FAIRVIEW DRIVE
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
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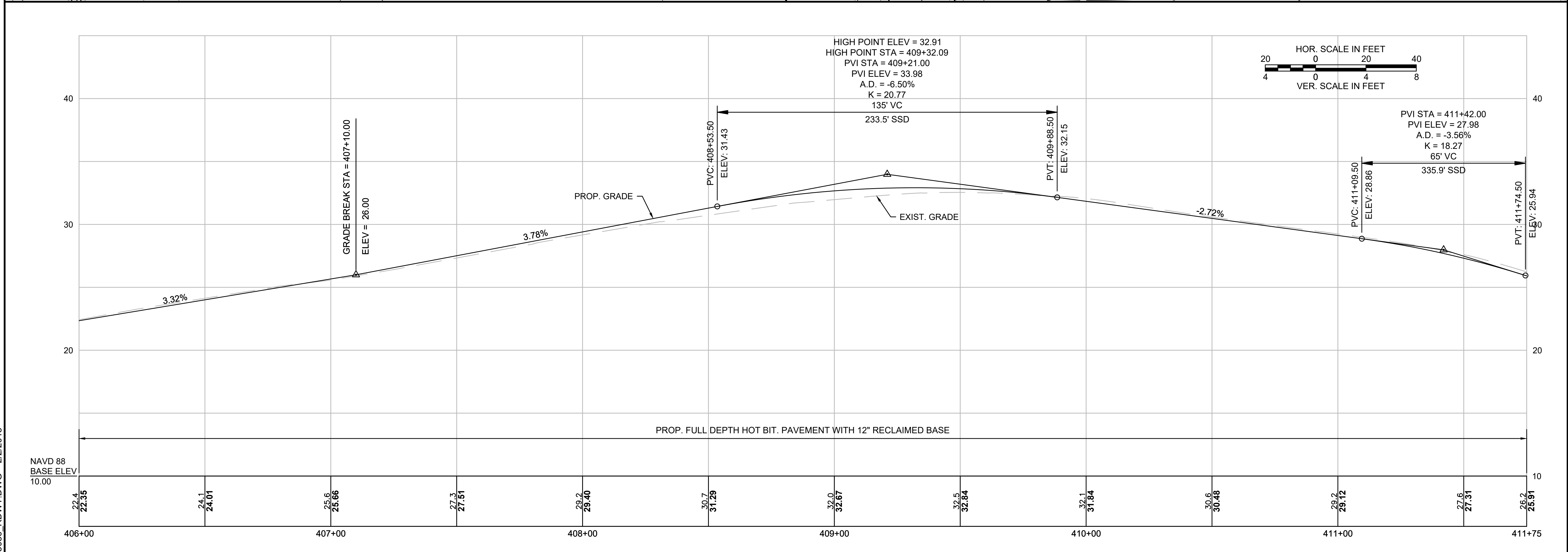
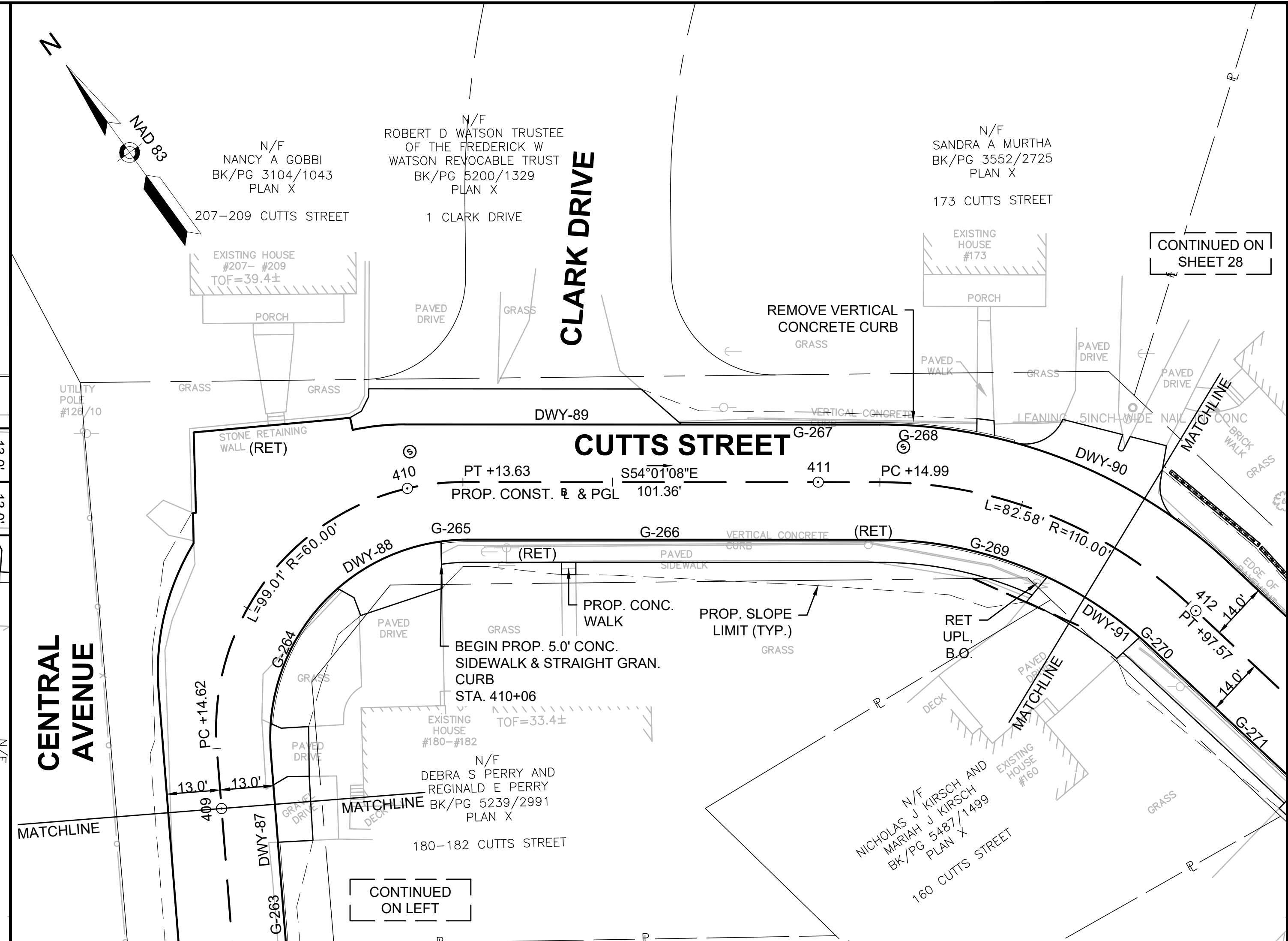
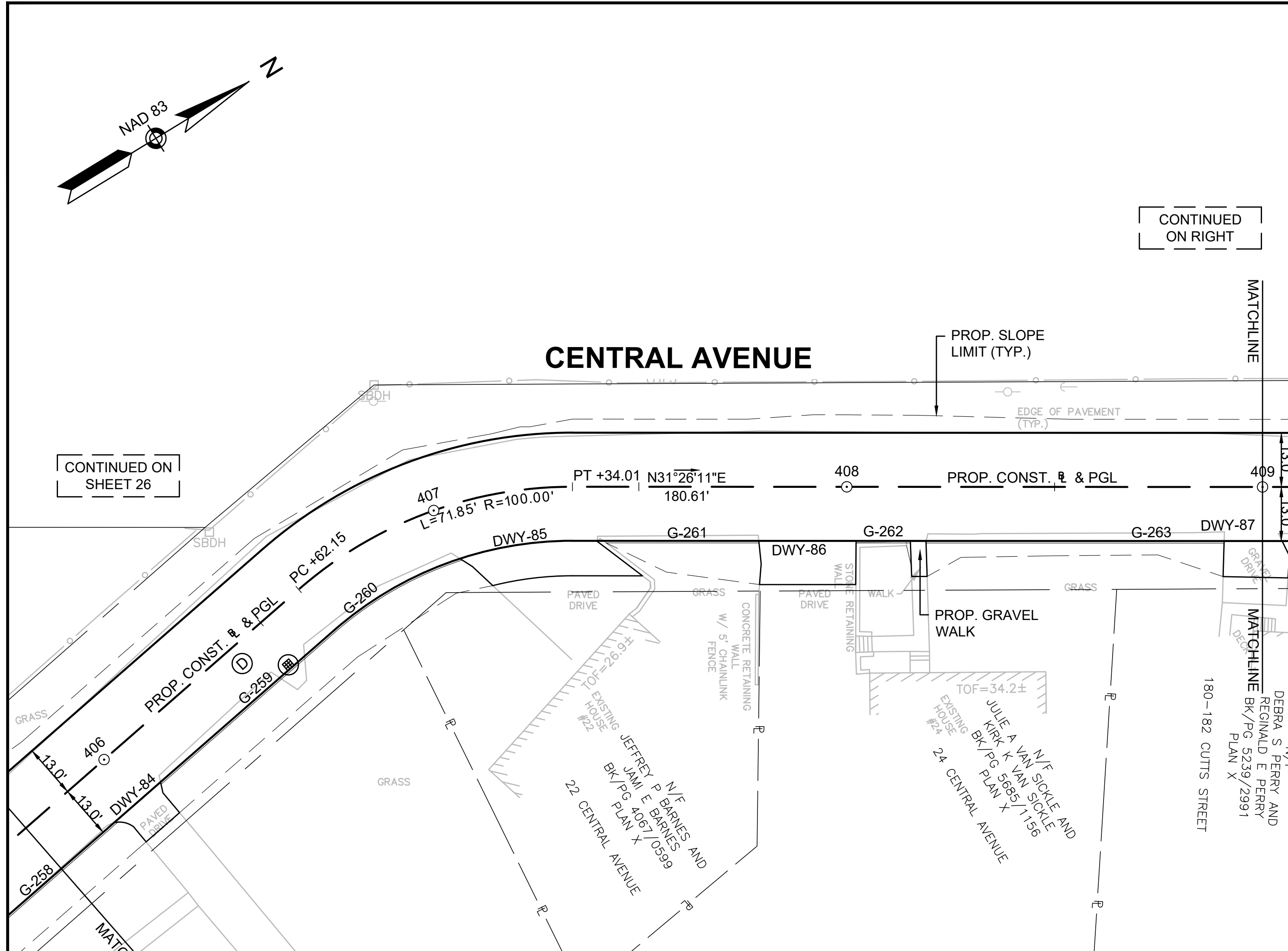
ROADWAY PLAN & PROFILE - CENTRAL AVENUE

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

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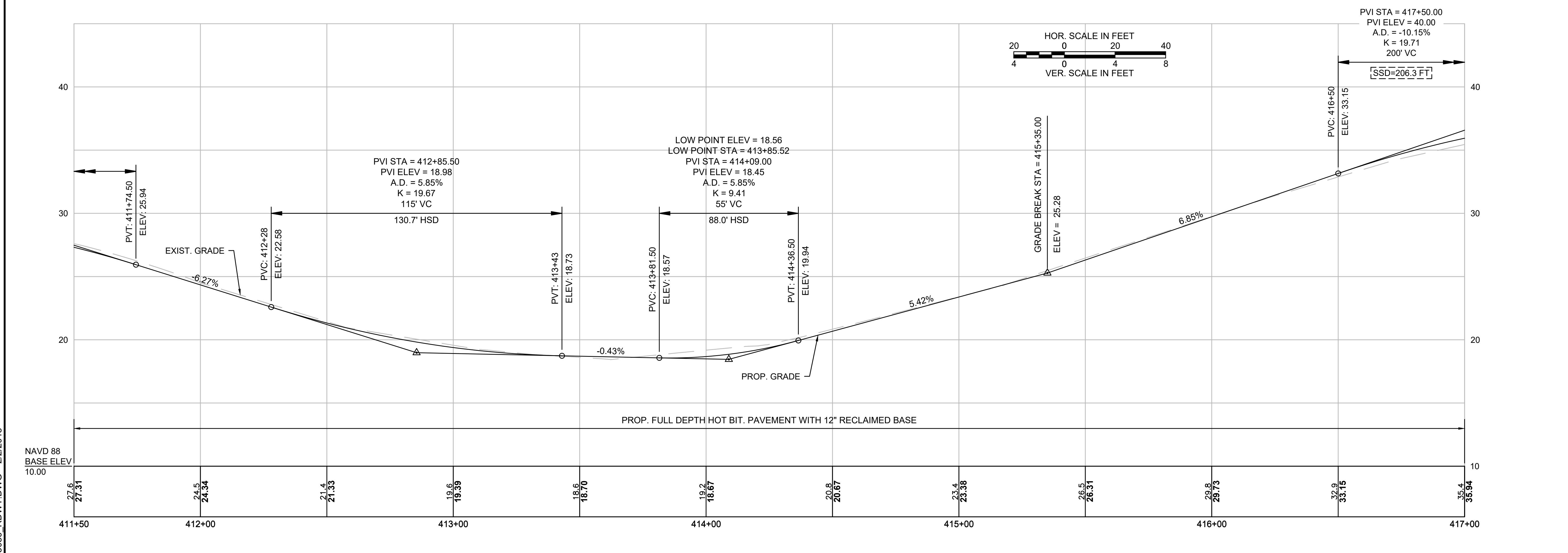
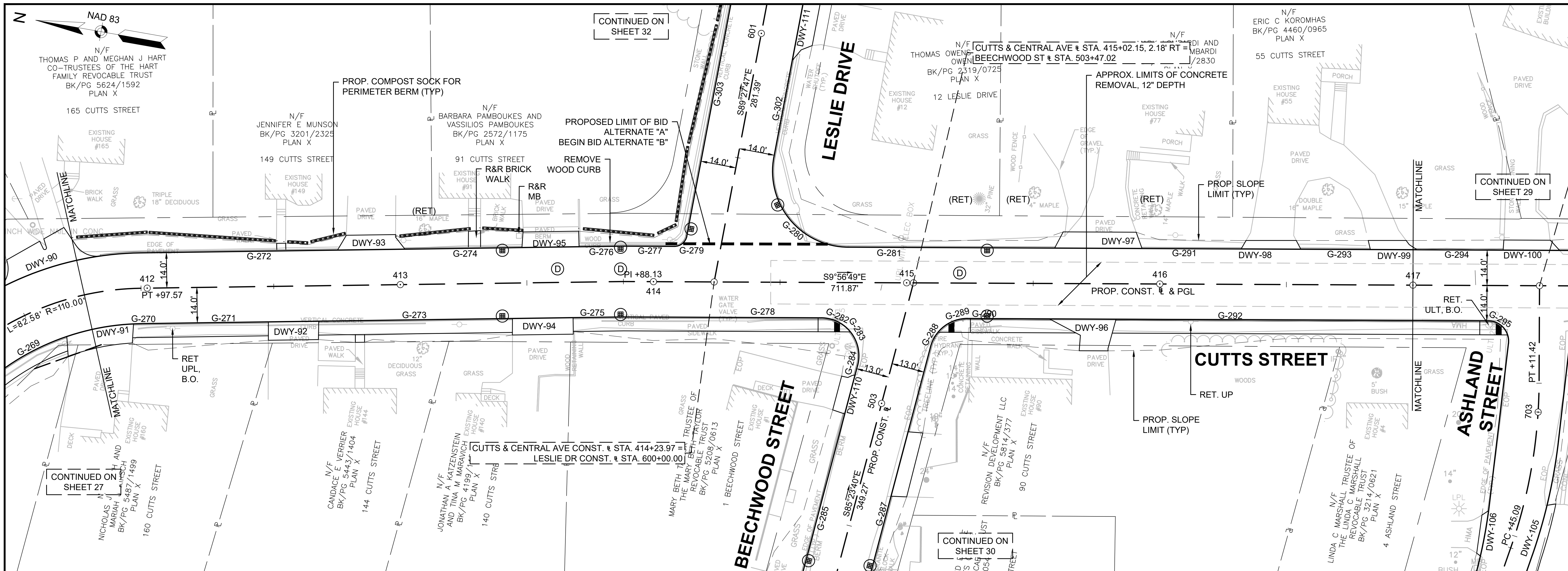
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

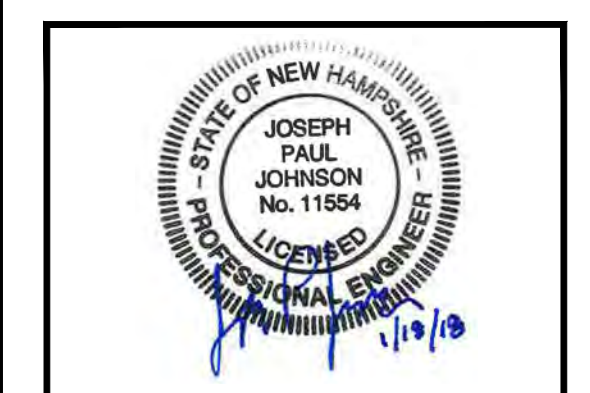
ROADWAY PLAN & PROFILE - CENTRAL & CUTTS
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
27 OF 184

15086_RDWY.DWG 2/2/2018



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DEPARTMENT OF PUBLIC WORKS
CITY OF PORTSMOUTH
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PORTSMOUTH, NH 03801

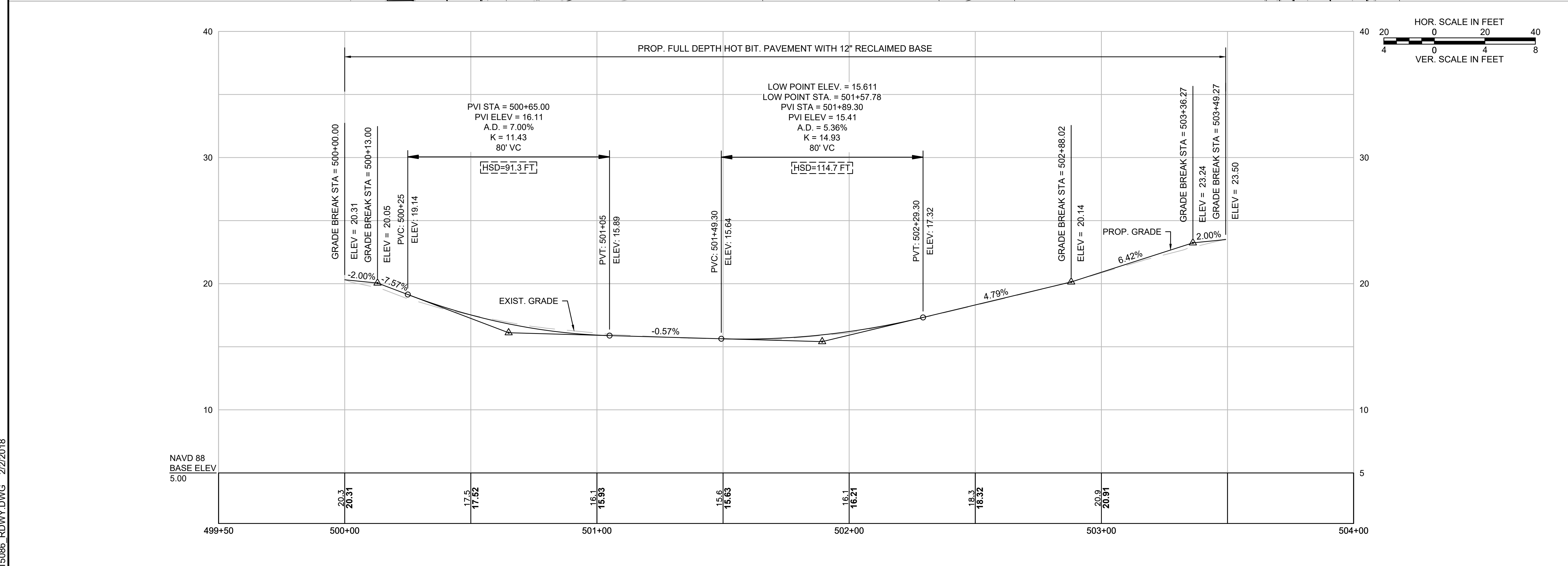
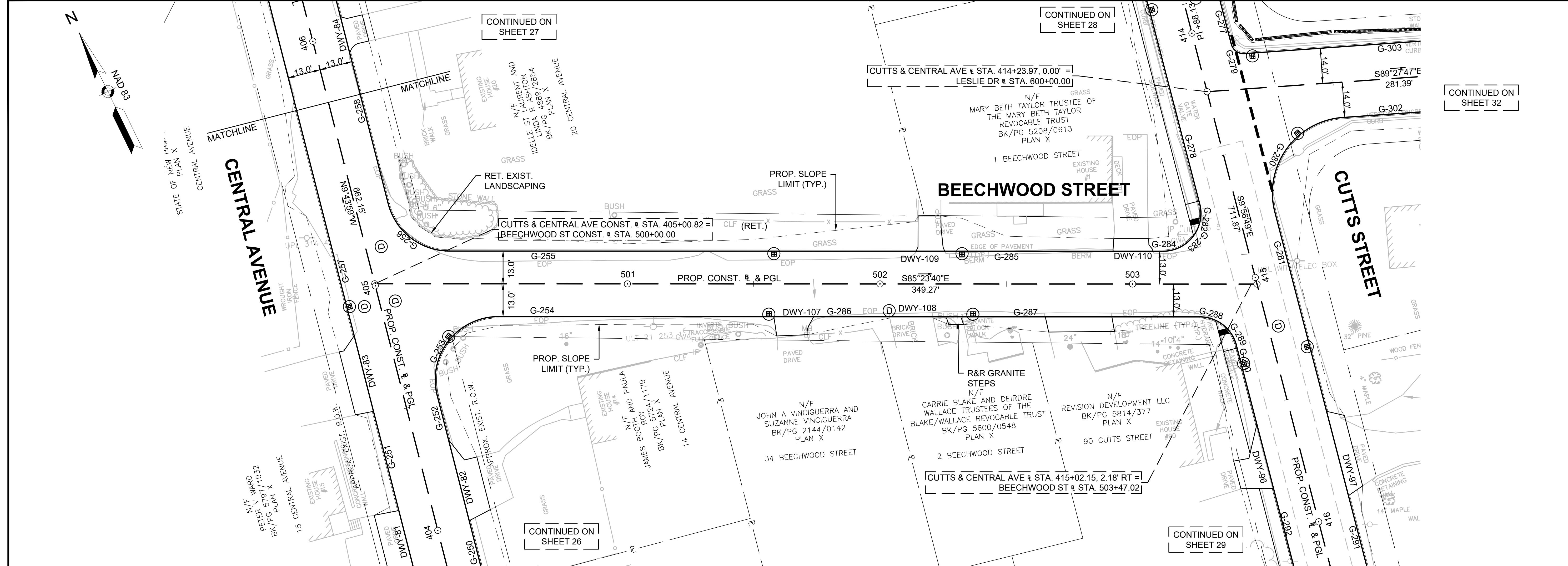
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS MAPLEWOOD AVENUE PORTSMOUTH, NH

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS
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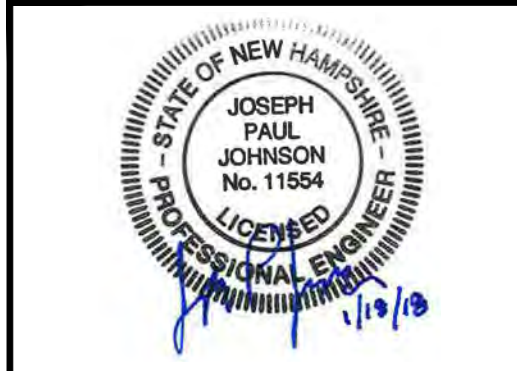
ROADWAY PLAN & PROFILE - CUTTS STREET
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
28 OF 184

15086 RDWY.DWG 2/2/2018



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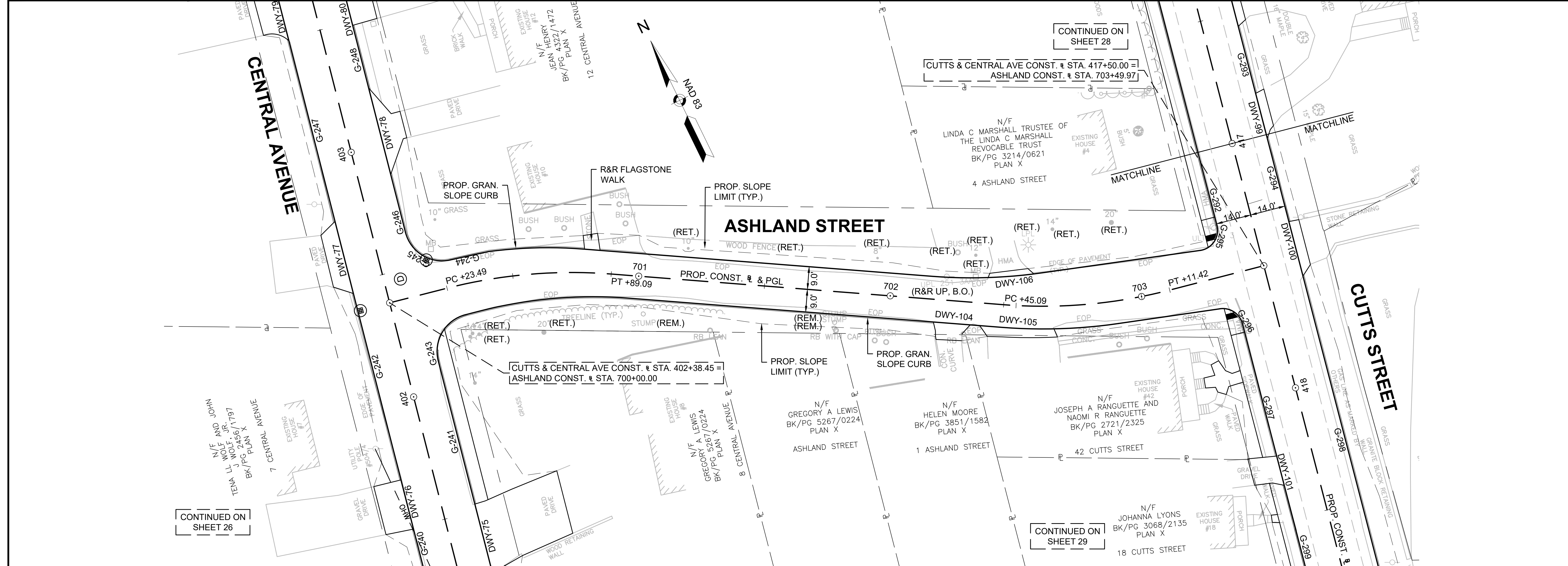
DEPARTMENT OF PUBLIC WORKS
CITY OF PORTSMOUTH
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
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2/5/2018
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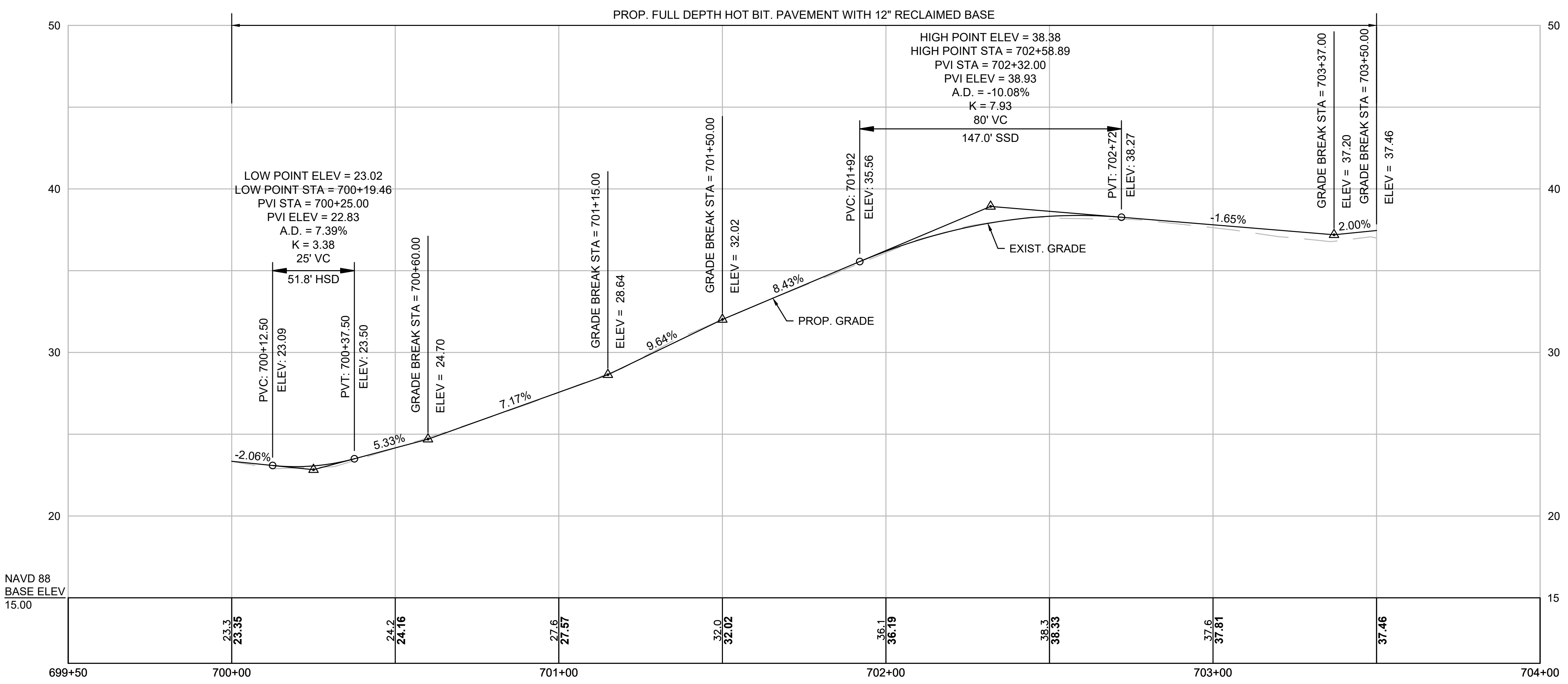
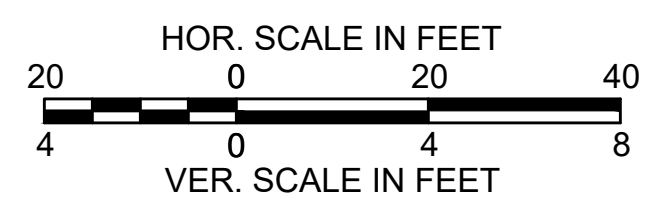
**ROADWAY
PLAN &
PROFILE -
BEECHWOOD
STREET**
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
30 OF 184



CONTINUED ON SHEET 26

CONTINUED ON SHEET 29

CONTINUED ON SHEET 28



PROP. FULL DEPTH HOT BIT. PAVEMENT WITH 12" RECLAIMED BASE

LOW POINT ELEV = 23.02
 LOW POINT STA = 700+19.46
 PVI STA = 700+25.00
 PVI ELEV = 22.83
 A.D. = 7.39%
 K = 3.38
 25' VC

HIGH POINT ELEV = 38.38
 HIGH POINT STA = 702+58.89
 PVI STA = 702+32.00
 PVI ELEV = 38.93
 A.D. = -10.08%
 K = 7.93
 80' VC

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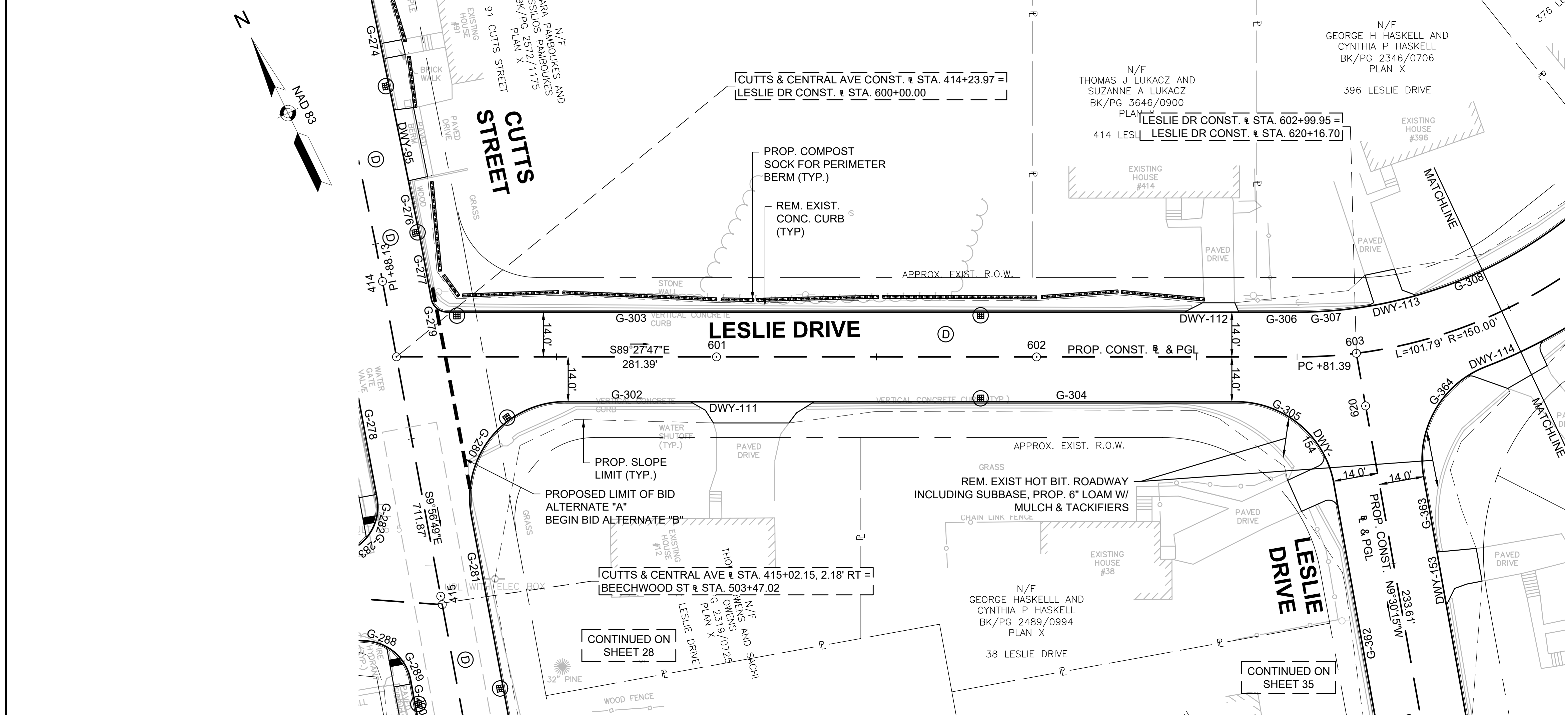
DEPARTMENT OF PUBLIC WORKS
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IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

ROADWAY PLAN & PROFILE - ASHLAND STREET
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00

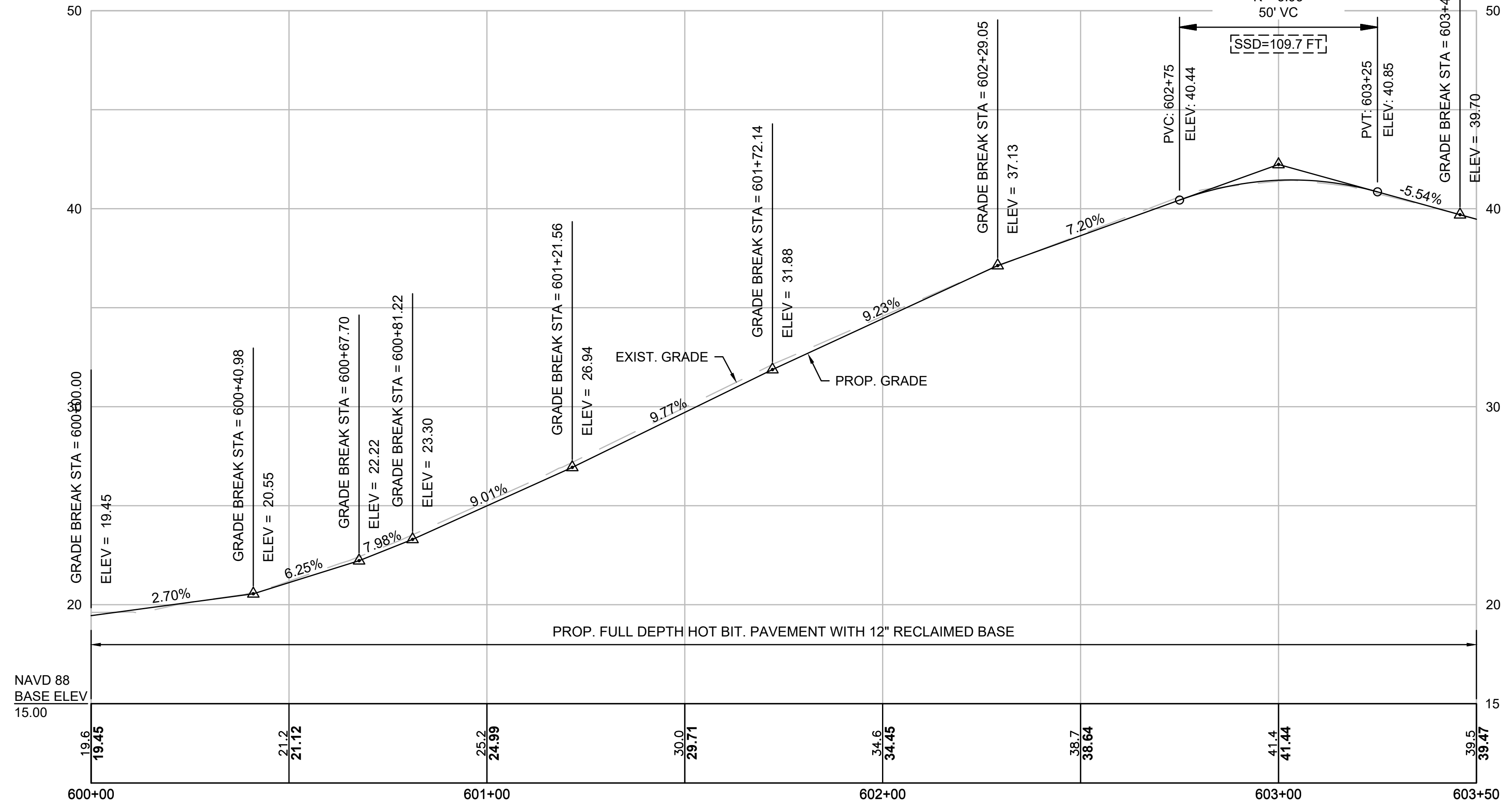
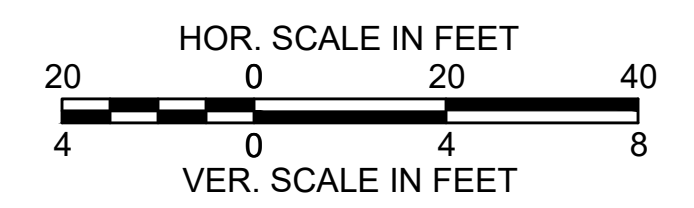


CONTINUED ON SHEET 33

CONTINUED ON SHEET 28

CONTINUED ON SHEET 35

PVI STA = 603+00.00
 PVI ELEV = 42.24
 A.D. = -12.73%
 K = 3.93
 50' VC



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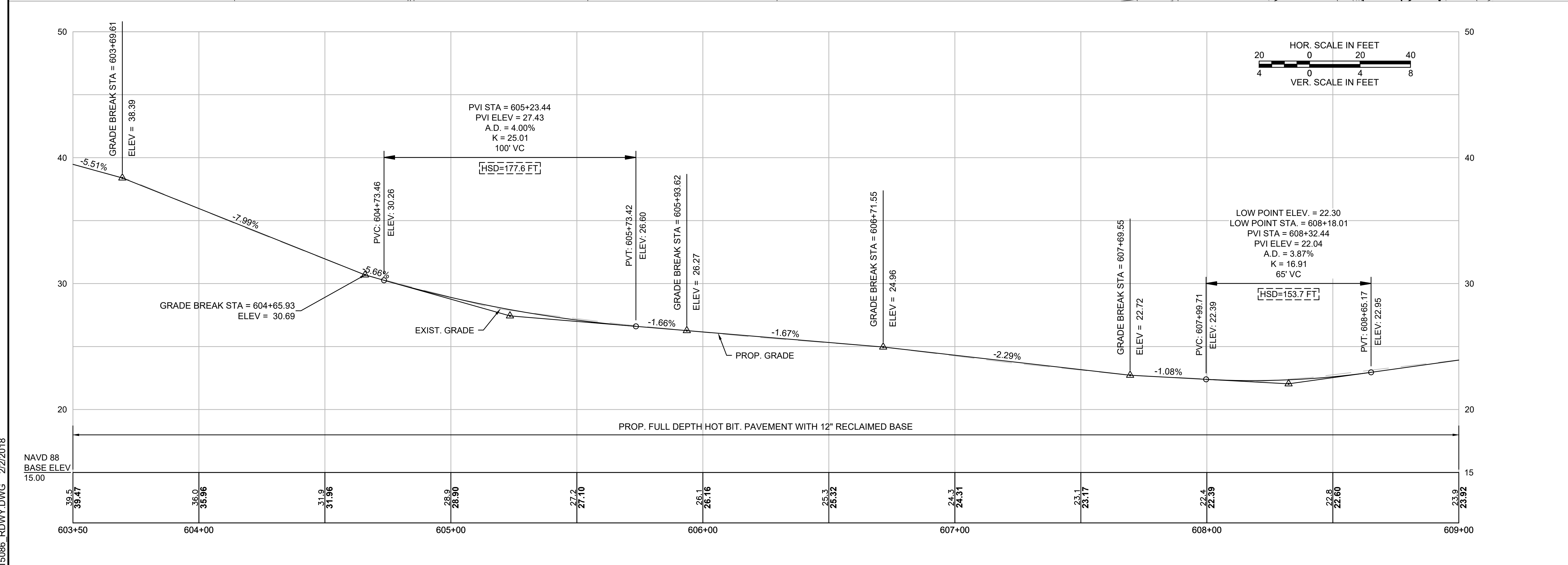
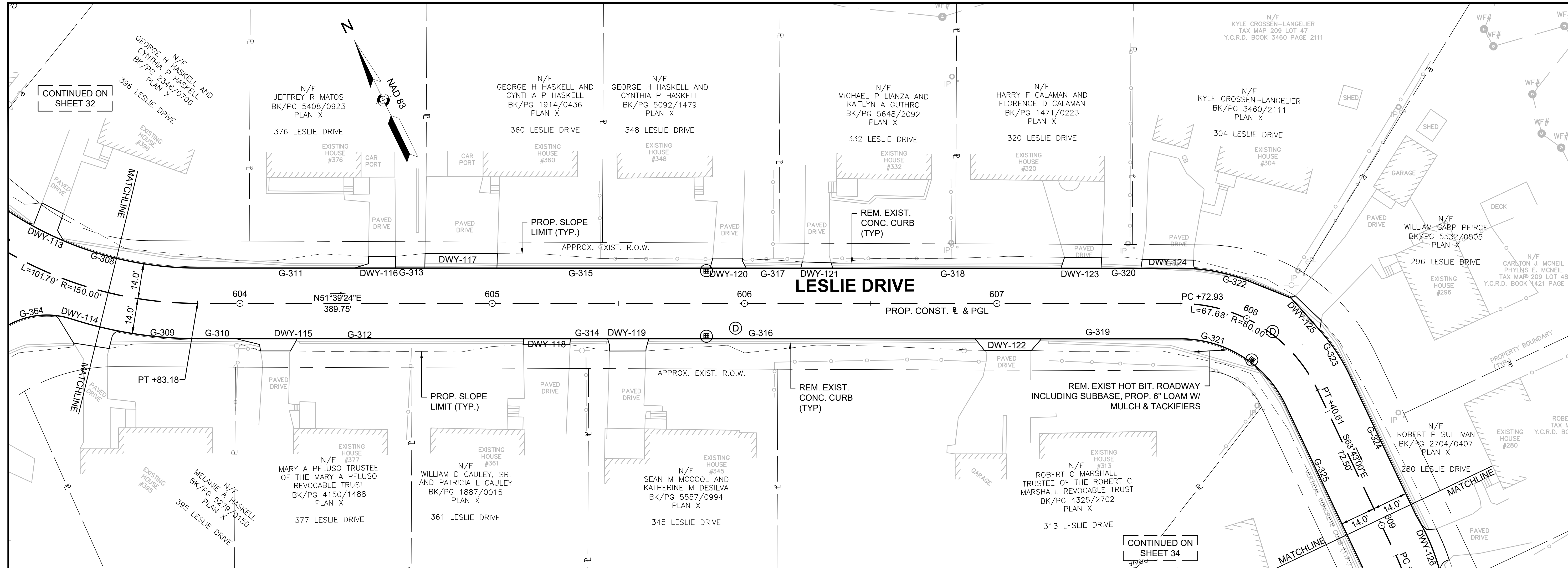
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 CITY OF PORTSMOUTH
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

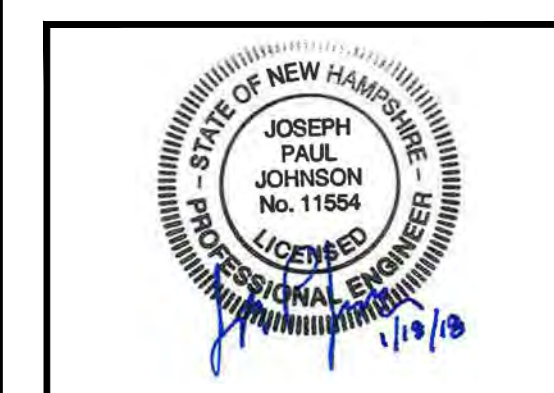
2/5/2018
 DRAWN/DESIGN BY: CLS
 CHECKED BY: JPJ

ROADWAY PLAN & PROFILE - LESLIE DRIVE
 SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00
 32 OF 184



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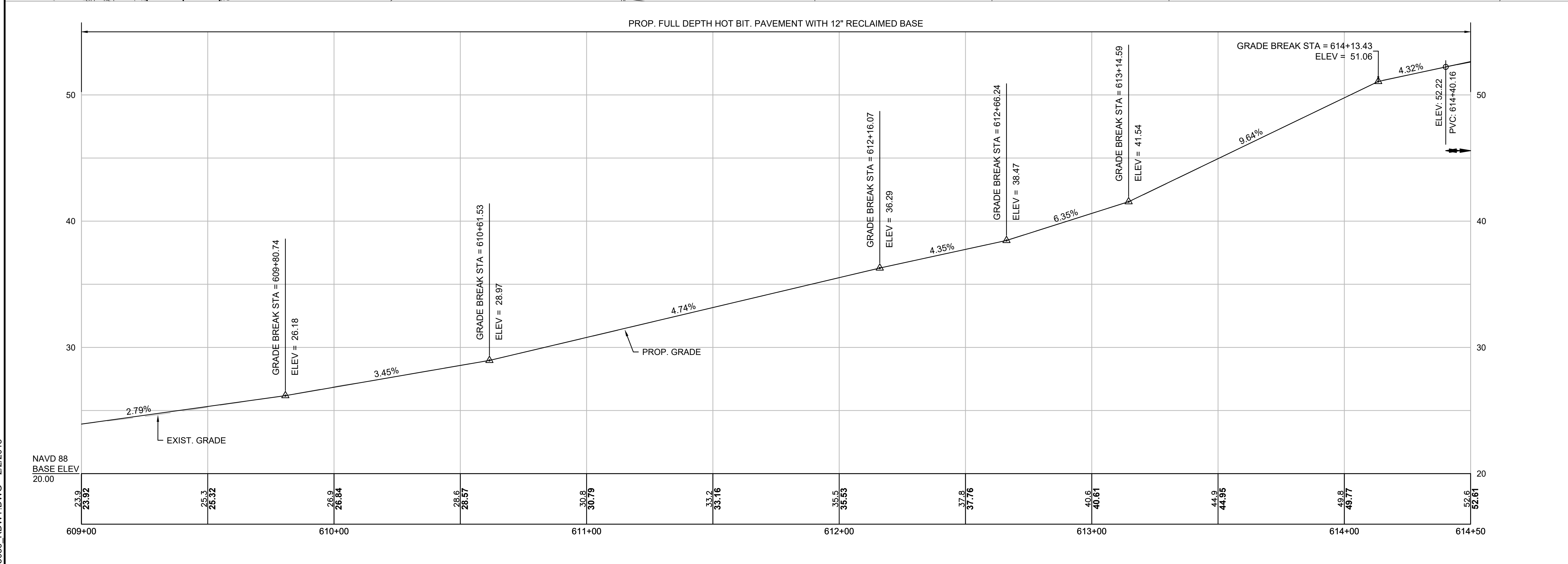
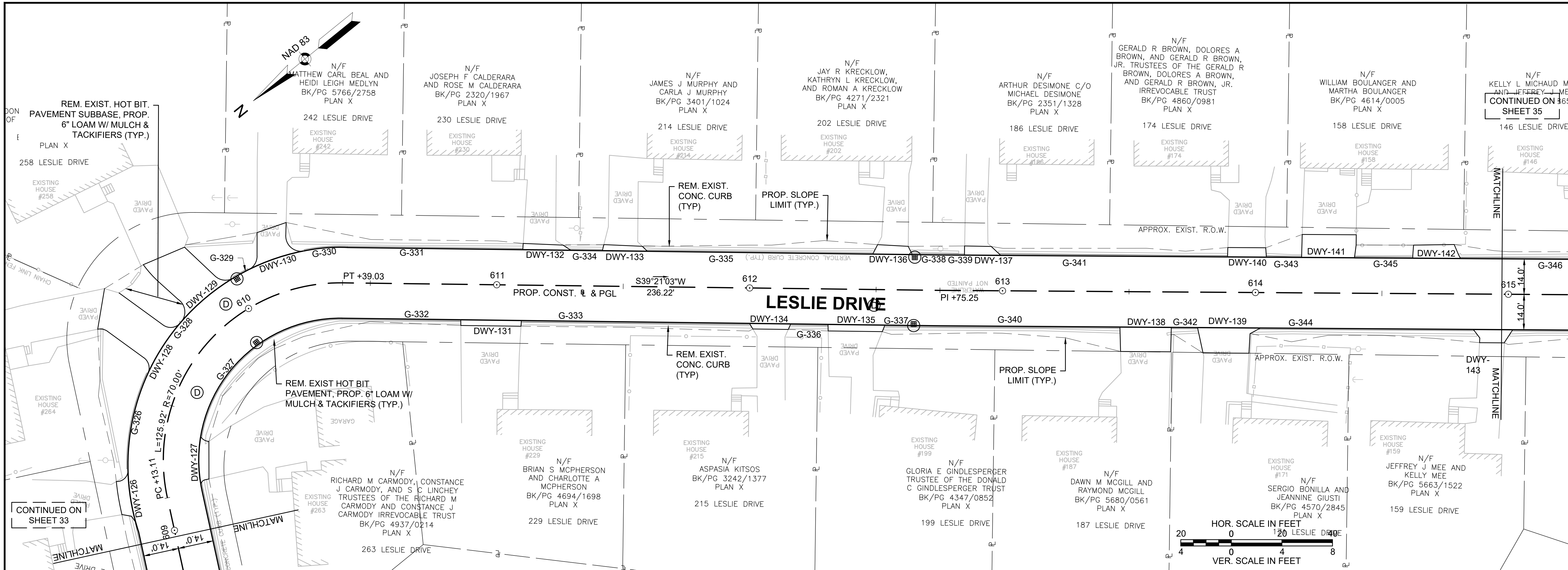
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
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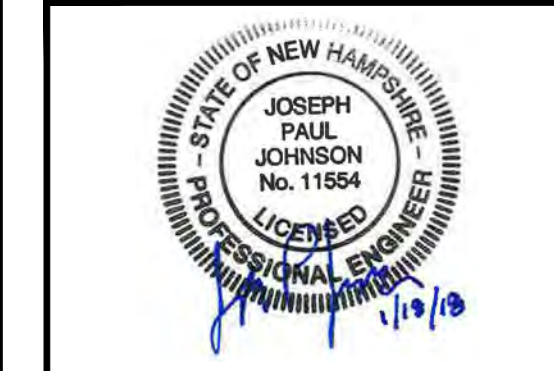
ROADWAY PLAN & PROFILE - LESLIE DRIVE
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
33 OF 184

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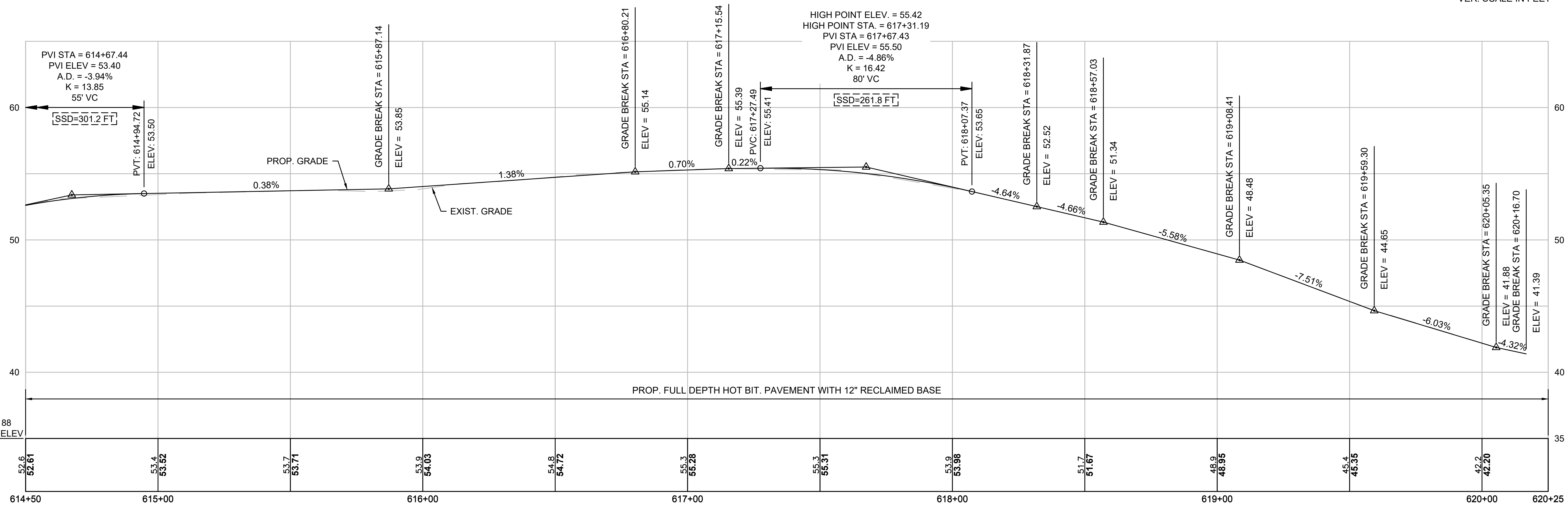
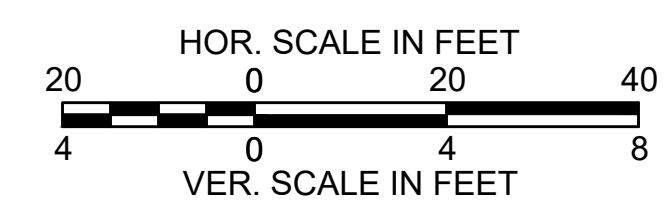
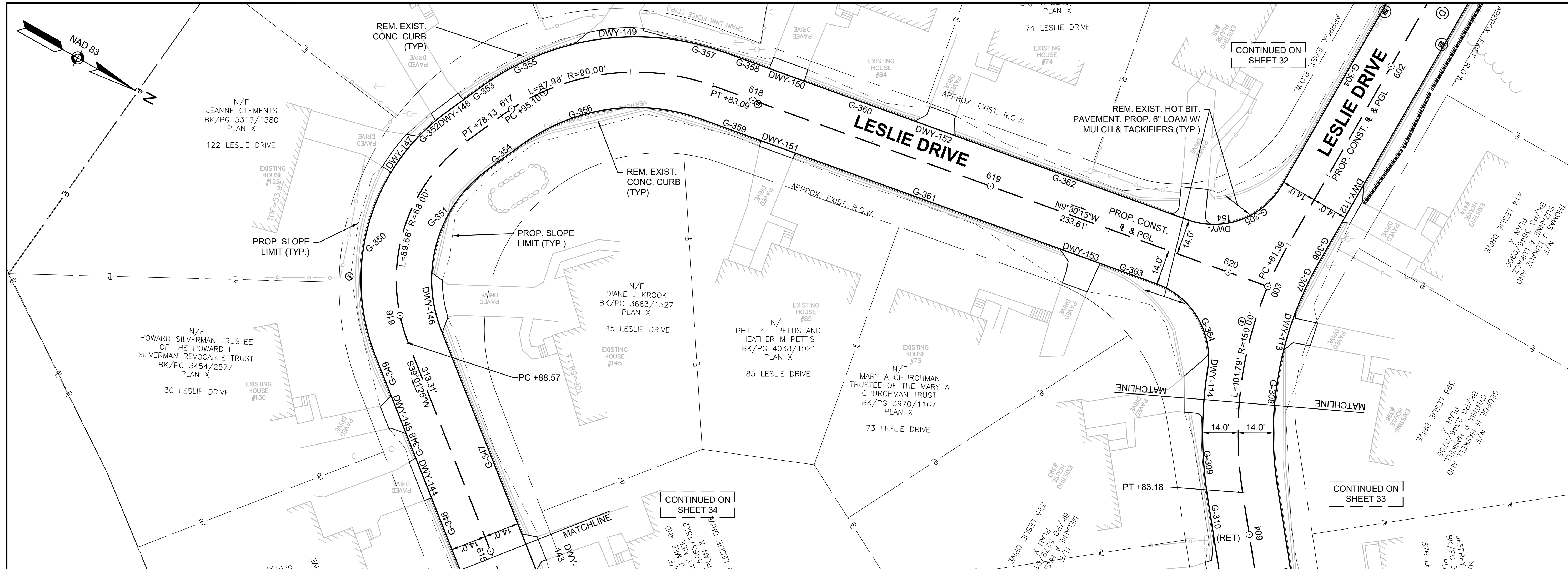
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

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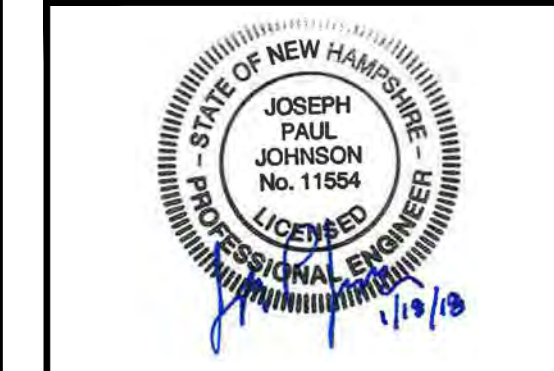
ROADWAY PLAN & PROFILE - LESLIE DRIVE
SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
34 OF 184

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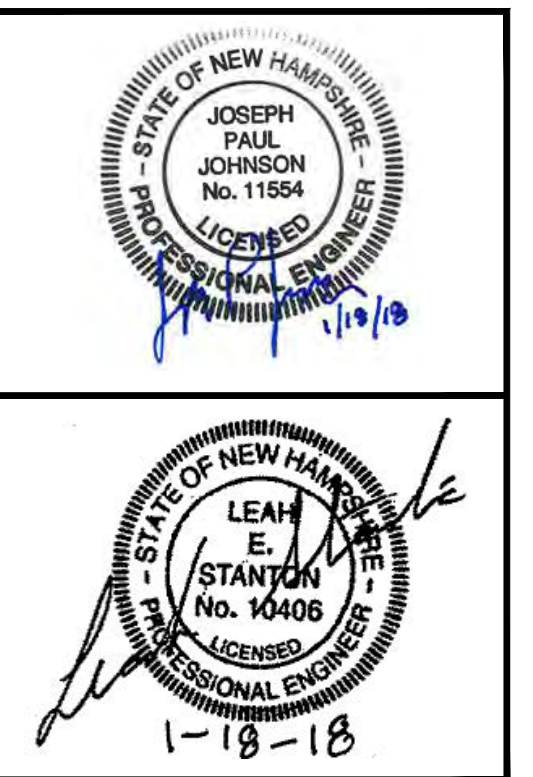
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

ROADWAY PLAN & PROFILE - LESLIE DRIVE
SCALE: HORIZ: 1" = 20'
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**IMPROVEMENTS TO MAPLEWOOD
AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
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**EXISTING
DRAIN &
SEWER DATA**

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

2015086.00

36 OF 184

SMH-5119 RIM=67.84 INV.A=59.54 INV.B=59.44	SMH-100 RIM=45.40 INV.A=38.70 INV.B=38.80	SMH-79 RIM=25.20 INV.A=14.80 INV.B=14.90		DMH-1 RIM=64.55 INV.A=61.05 INV.B=62.75	DMH-14 RIM=20.32 INV.A=13.72 INV.B=13.82 INV.C=13.82 INV.D=15.72 INV.E=13.72	CB-1 RIM=64.50 INV.=62.00	CB-15 RIM=33.71 INV.=32.51	CB-29 RIM=19.42 INV.A=15.72	CB-54 RIM=28.32 INV.A=20.19 INV.B=19.85
SMH-764 RIM=64.74 INV.A=58.04 INV.B=56.64 INV.C=60.04 INV.D=61.04	SMH-99 RIM=38.27 INV.A=32.37 INV.B=32.57	SMH-80 RIM=26.36 INV.A=19.36 INV.B=19.46	SMH-54 RIM=32.64 INV.A=24.84 INV.B=24.94	DMH-2 RIM=67.83 INV.A=61.03 INV.B=62.43 INV.C=63.43 INV.D=60.83 INV.E=63.43 INV.F=62.43	DMH-15 RIM=21.91 INV.A=13.51 INV.B=14.41 INV.C=16.81 INV.D=16.31	CB-2 RIM=64.42 INV.=62.62	CB-16 RIM=33.72 INV.=32.12	CB-31 RIM=15.54 INV.A=14.24	
SMH-767 RIM=81.80 INV.A=76.30 INV.B=78.50 INV.C=76.90 INV.D=77.10	SMH-98 RIM=37.78 INV.A=32.28 INV.B=32.48	SMH-1025 RIM=53.01 INV.A=46.41 INV.B=46.51	SMH-53 RIM=27.46 INV.A=15.36 INV.B=17.66	DMH-3 RIM=55.46 INV.A=51.96 INV.B=47.76 INV.C=47.46	DMH-16 RIM=26.23 INV.A=21.83 INV.B=23.03 INV.C=19.83	CB-3 RIM=63.22 INV.A=61.12 INV.B=60.92	CB-17 RIM=32.89 INV.A=28.89 INV.B=30.09 INV.C=29.09	CB-32 RIM=14.04	
SMH-106 RIM=71.07 INV.A=64.47 INV.B=64.77	SMH-97 (OUTSIDE DROP) RIM=34.98 INV.A=24.98 INV.B=30.08	SMH-2364 RIM=53.86 INV.A=47.16 INV.B=47.26	SMH-52 RIM=17.06 INV.A=9.06 INV.B=9.26 INV.C=9.16	DMH-4 RIM=51.38 INV.A=44.98 INV.B=44.78 INV.C=45.68	DMH-17 RIM=20.03 INV.A=13.23 INV.B=13.03 INV.C=13.33	CB-4 RIM=63.01 INV.=61.11	CB-18 RIM=32.68 INV.=30.98	CB-33 RIM=18.20	
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SMH-105 RIM=68.03 INV.A=59.48 INV.B=53.63	SMH-95 RIM=27.94 INV.A=16.54 INV.B=16.74 INV.C=16.74	SMH-2135 RIM=18.77 INV.A=10.27 INV.B=10.37	SMH-2371 RIM=28.40 INV.A=19.80 INV.B=23.40	DMH-6 RIM=38.63 INV.A=30.33 INV.B=30.13	DMH-21 RIM=22.90 INV.A=15.80 INV.B=16.10 INV.C=15.90 INV.D=15.40	CB-6 RIM=54.16 INV.=52.06	CB-20 RIM=20.61 INV.A=16.91	CB-35 RIM=21.16 INV.A=17.96	
SMH-104 RIM=59.43 INV.A=51.23 INV.B=51.63	SMH-2794 RIM=28.47 INV.A=17.47 INV.B=17.17	SMH-2136 RIM=26.93 INV.A=19.56 INV.B=19.66	SMH-123 RIM=27.46 INV.A=15.36 INV.B=17.66	DMH-7 RIM=35.19 INV.A=25.99 INV.B=27.39 INV.C=27.49 INV.D=27.19 INV.E=29.69 INV.F=26.59 INV.G=30.29	DMH-21 RIM=22.90 INV.A=15.80 INV.B=16.10 INV.C=15.90 INV.D=15.40	CB-7 RIM=52.95 INV.A=47.45 INV.B=47.15 INV.C=48.45	CB-21 RIM=19.12 INV.A=15.72	CB-36 RIM=21.65 INV.A=19.75	
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SMH-2132 RIM=54.96 INV.A=45.16 INV.B=45.46	SMH-26 RIM=20.86 INV.A=12.86 INV.B=12.96	SMH-84 RIM=25.19 INV.A=17.49 INV.B=17.59	SMH-1481 RIM=10.58 INV.A=3.88 INV.B=3.58	DMH-10 RIM=33.76 INV.A=32.36 INV.B=28.76		CB-10 RIM=42.27 INV.=35.57	CB-24 RIM=22.04 INV.A=18.54	CB-42 RIM= N/A INV.A=-7.30 INV.B=-6.50 INV.C=-7.10	
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SMH-2360 (FORCE MAIN) RIM=56.35 INV.A=51.35 INV.B=51.45	SMH-73 RIM=25.88 INV.A=13.38 INV.B=13.58	SMH-85 RIM=22.74 INV.A=13.74 INV.B=13.84		DMH-12 RIM=33.84 (COULD NOT OPEN)		CB-12 RIM=35.32 INV.A=28.92 INV.B=28.92	CB-26 RIM=26.23	CB-51 RIM=127.29 INV.= N/A	
SMH-102 RIM=51.98 INV.A=41.68 INV.B=41.88 INV.C=41.98	SMH-29 RIM=22.72 INV.A=15.92 INV.B=16.12 INV.C=16.42	SMH-86 RIM=23.87 INV.A=18.67 INV.B=18.77		DMH-13 RIM=31.08 INV.A=22.88 INV.B=22.58 INV.C=UNKOWN		CB-13 RIM=35.33 INV.=30.93	CB-27 RIM=27.58 INV.A=24.88	CB-52 RIM=28.31 INV.A=25.61 INV.B=25.61	
SMH-101 RIM=46.27 INV.A=39.77 INV.B=39.97	SMH-2140 RIM=22.41 INV.A=14.21 INV.B=14.41	SMH-82 RIM=15.33 INV.A=10.03 INV.B=10.13		DMH-50 RIM=28.29 INV.A=20.64 INV.B=20.61 INV.C=24.85 INV.D=24.47		CB-14 RIM=34.45 INV.A=32.85	CB-28 RIM=18.25 INV.A=15.95 INV.B=16.05	CB-53 RIM=28.48 INV.=25.80	

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STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-103	MAPLEWOOD AVE	16+76 15.00 (LT)	RIM = 63.22	103 OUT = 59.07	
CB-104	MAPLEWOOD AVE	16+33 15.00 (RT)	RIM = 63.39	104 OUT = 59.27	
CB-106	MAPLEWOOD AVE	16+76 14.99 (RT)	RIM = 63.22	106 OUT = 59.54	
CB-108	MAPLEWOOD AVE	18+68 14.97 (RT)	RIM = 67.26	108 OUT = 63.20	
CB-109	MAPLEWOOD AVE	18+68 14.99 (LT)	RIM = 67.25	109 OUT = 63.20	
CB-120	FAIRVIEW DR	300+10 25.89 (LT)	RIM = 64.05	120 OUT = 59.55	
CB-122	FAIRVIEW DR	301+46 12.00 (LT)	RIM = 66.08	122 OUT = 61.08	
CB-123	FAIRVIEW DR	301+47 12.01 (RT)	RIM = 66.09	123 OUT = 62.07	
CB-127	FAIRVIEW DR	304+00 12.05 (LT)	RIM = 69.35	127 OUT = 65.73	
CB-128	FAIRVIEW DR	304+08 11.98 (RT)	RIM = 69.39	129 IN = 66.32 128 OUT = 66.07	
CB-1181	WOODBURY AVE	207+17 16.93 (LT)	RIM = 69.19	181 OUT = 64.73	
CB-1191	WOODBURY AVE	207+43 21.44 (RT)	RIM = 68.78	191 OUT = 64.73	
DI-129	FAIRVIEW DR	305+01 22.38 (RT)	RIM = 68.41	129 OUT = 67.91	
DMH-102	MAPLEWOOD AVE	16+44 6.29 (LT)	RIM = 63.50	110 IN = 57.74 105 IN = 58.87 103 IN = 58.70 104 IN = 59.07 102 OUT = 57.64	
DMH-105	MAPLEWOOD AVE	16+68 4.60 (RT)	RIM = 63.45	107 IN = 59.28 106 IN = 59.41 105 OUT = 59.18	
DMH-107	MAPLEWOOD AVE	18+57 5.00 (RT)	RIM = 66.96	108 IN = 63.04 109 IN = 62.99 107 OUT = 61.17	
DMH-111	FAIRVIEW DR	300+36 0.23 (RT)	RIM = 64.69	121 IN = 60.22 121 (1) OUT = 60.12	
DMH-118	MAPLEWOOD AVE	15+24 5.41 (LT)	RIM = 64.28	120 IN = 59.34 121 (1) IN = 59.88 110 OUT = 59.09	
DMH-121	FAIRVIEW DR	301+39 1.59 (RT)	RIM = 66.22	124 IN = 61.71 122 IN = 60.96 123 IN = 62.04 121 OUT = 60.64	
DMH-124	FAIRVIEW DR	302+22 3.14 (RT)	RIM = 66.91	125 IN = 62.59 171 IN = 62.59 124 OUT = 62.49	
DMH-126	FAIRVIEW DR	303+80 16.01 (RT)	RIM = 69.79	128 IN = 65.76 127 IN = 65.56 125 OUT = 65.31	
DMH-1171	WOODBURY AVE	207+38 23.52 (LT)	RIM = 69.99	191 IN = 64.50 181 IN = 64.62 171 OUT = 64.25	
OUTFALL-101	MAPLEWOOD AVE	16+41 128.13 (LT)	RIM = 59.58	102 IN = 57.00	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-111	MAPLEWOOD AVE	14+78 15.00 (LT)	RIM = 64.51	111 OUT = 60.44	
CB-116	MAPLEWOOD AVE	11+39 15.51 (LT)	RIM = 70.49	116 OUT = 66.37	
CB-117	MAPLEWOOD AVE	11+39 15.91 (RT)	RIM = 70.48	130 IN = 65.92 117 OUT = 65.92	
CB-119	FAIRVIEW DR	300+24 20.41 (RT)	RIM = 64.79	119 OUT = 60.80	
DI-130	MAPLEWOOD AVE	11+82 20.20 (RT)	RIM = 69.84	130 OUT = 67.34	
DMH-110	MAPLEWOOD AVE	14+70 11.00 (LT)	RIM = 64.66	111 IN = 60.27 119 IN = 60.49 112 OUT = 60.27	
DMH-112	MAPLEWOOD AVE	12+90 10.68 (LT)	RIM = 67.07	115 IN = 62.51 112 IN = 59.62 113 OUT = 59.37	
DMH-115	MAPLEWOOD AVE	11+51 11.77 (LT)	RIM = 70.21	116 IN = 65.71 117 IN = 65.62 115 OUT = 64.51	

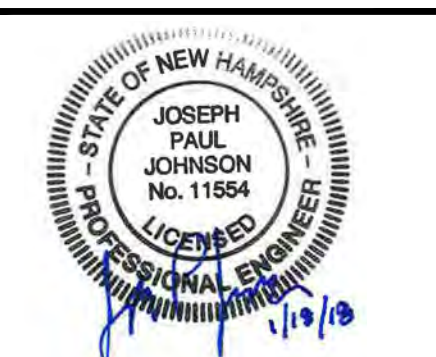
STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-9	MAPLEWOOD AVE	37+59 20.02 (RT)	RIM = 43.38	7 (1) IN = 35.77 12 IN = 35.47 9 OUT = 35.42	
CB-11	MAPLEWOOD AVE	40+10 19.27 (RT)	RIM = 37.50	9 IN = 25.35 (9) IN = 25.35 (7) OUT = 25.35	
CB-202	MAPLEWOOD AVE	41+60 15.34 (RT)	RIM = 35.08	202 OUT = 31.08	
CB-203	MAPLEWOOD AVE	34+82 18.59 (RT)	RIM = 53.47	203 OUT = 49.42	
CB-204	MAPLEWOOD AVE	34+82 18.60 (LT)	RIM = 53.47	204 OUT = 48.69	
CB-206	MAPLEWOOD AVE	32+03 15.56 (LT)	RIM = 54.69	206 OUT = 50.73	
CB-207	MAPLEWOOD AVE	32+03 15.00 (RT)	RIM = 54.70	207 OUT = 50.75	
CB-209	MAPLEWOOD AVE	30+67 15.00 (LT)	RIM = 55.86	209 OUT = 51.86	
CB-210	MAPLEWOOD AVE	30+59 18.22 (RT)	RIM = 56.36	210 OUT = 52.36	
CB-212	MAPLEWOOD AVE	27+88 14.97 (LT)	RIM = 64.67	212 OUT = 60.00	
CB-213	MAPLEWOOD AVE	27+88 14.93 (RT)	RIM = 64.67	213 OUT = 60.49	
CB-216	MAPLEWOOD AVE	25+28 15.00 (LT)	RIM = 70.42	215 OUT = 66.34	
CB-217	MAPLEWOOD AVE	25+28 14.97 (RT)	RIM = 70.42	216 OUT = 66.35	
DMH-12	MAPLEWOOD AVE	37+61 21.95 (LT)	RIM = 42.77	12 OUT = 35.57	
DMH-131	MAPLEWOOD AVE	42+00 487.96 (LT)	RIM = 2.92	(7) IN = -2.00 118 OUT = 8.00	
DMH-132	MAPLEWOOD AVE	43+49 487.50 (LT)	RIM = 19.67	118 IN = 4.70 119 OUT = 4.60	
DMH-133	MAPLEWOOD AVE	46+41 593.89 (LT)	RIM = 18.13	119 IN = 3.10 120 OUT = 3.10	
DMH-205	MAPLEWOOD AVE	32+16 3.03 (LT)	RIM = 54.99	208 IN = 49.87 206 IN = 50.55 207 IN = 50.55 205 OUT = 49.62	
DMH-208	MAPLEWOOD AVE	30+72 5.41 (LT)	RIM = 55.96	211 IN = 51.56 209 IN = 51.77 210 IN = 52.11 208 OUT = 51.31	
DMH-211	MAPLEWOOD AVE	27+94 4.37 (LT)	RIM = 64.66	213 IN = 60.29 212 IN = 59.88 214 (1) IN = 59.98 211 OUT = 59.73	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
DMH-214	MAPLEWOOD AVE	26+95 3.99 (LT)	RIM = 67.83	214 IN = 60.97 214 (1) OUT = 60.97	
DMH-215	MAPLEWOOD AVE	25+37 3.03 (LT)	RIM = 70.54	215 IN = 66.28 216 IN = 66.27 214 OUT = 62.55	
DMH-218	MAPLEWOOD AVE	35+53 13.89 (RT)	RIM = 51.64	7 IN = 44.60 7 (1) OUT = 44.60	
E-CB-12	MAPLEWOOD AVE	41+50 14.11 (RT)	RIM = 35.24	(8) IN = 28.92 202 IN = 31.00 (9) OUT = 28.92	
E-CB-13	MAPLEWOOD AVE	41+50 16.86 (LT)	RIM = 35.18	(8) OUT = 30.93	
E-DMH-7	MAPLEWOOD AVE	34+94 13.35 (RT)	RIM = 53.40	205 IN = 47.40 8 IN = 47.45 203 IN = 49.32 7 OUT = 47.15	
E-DMH-8	MAPLEWOOD AVE	34+95 18.63 (LT)	RIM = 53.28	204 IN = 48.60 8 OUT = 48.35	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-301	CUTTS & CENTRAL AVE	419+75 14.19 (LT)	RIM = 30.00	123 OUT = 26.00	
CB-302	CUTTS & CENTRAL AVE	419+67 15.09 (RT)	RIM = 30.23	302 OUT = 25.82	
CB-304	MAPLEWOOD AVE	45+75 14.99 (LT)	RIM = 32.60	304 OUT = 28.59	
CB-306	MAPLEWOOD AVE	44+77 26.83 (LT)	RIM = 33.59	136 OUT = 29.61	
CB-308	MAPLEWOOD AVE	44+42 25.00 (LT)	RIM = 33.58	135 OUT = 29.61	
CB-309	MAPLEWOOD AVE	44+17 28.12 (RT)	RIM = 33.55	134 OUT = 29.51	
CB-311	MAPLEWOOD AVE	43+84 16.94 (LT)	RIM = 33.38	306 OUT = 29.36	
CB-312	MAPLEWOOD AVE	43+84 18.81 (RT)	RIM = 33.34	307 OUT = 29.36	
DMH-300	MAPLEWOOD AVE	48+17 2.07 (RT)	RIM = 29.02	303 IN = 22.71 302 IN = 24.95 123 IN = 24.95 301 OUT = 22.46	
DMH-303	MAPLEWOOD AVE	45+85 0.12 (RT)	RIM = 32.84	305 (1) IN = 25.02 304 IN = 28.43 303 OUT = 24.77	
DMH-305	MAPLEWOOD AVE	44+81 1.08 (LT)	RIM = 33.45	305 IN = 26.04 136 IN = 28.10 305 (1) OUT = 26.04	
DMH-307	MAPLEWOOD AVE	44+40 1.51 (LT)	RIM = 33.76	310 IN = 26.44 134 IN = 29.34 135 IN = 29.50 305 OUT = 26.44	
DMH-310	MAPLEWOOD AVE	43+84 1.43 (LT)	RIM = 33.69	306 IN = 29.17 307 IN = 29.17 310 OUT = 26.98	
E-CB-1	MAPLEWOOD AVE	48+91 17.98 (RT)	RIM = 27.29	1 OUT = 24.60	
E-CB-2	MAPLEWOOD AVE	49+07 16.32 (LT)	RIM = 28.44	3 IN = 25.61 2 OUT = 25.61	
E-CB-3	MAPLEWOOD AVE	49+37 15.77 (LT)	RIM = 28.59	3 OUT = 25.80	
E-CB-6	MAPLEWOOD AVE	51+54 13.76 (RT)	RIM = 36.42	15 IN = 18.71 6 OUT = 17.43	
E-CB-15	MAPLEWOOD AVE	49+50 12.57 (RT)	RIM = 28.32	1A IN = 20.19 15 OUT = 19.85	
E-CB-70	MAPLEWOOD AVE	51+58 53.41 (RT)	RIM = 15.90	6 IN = 13.96 70 OUT = 13.77	
E-CB-80	MAPLEWOOD AVE	51+77 54.99 (RT)	RIM = 15.15	70 IN = 13.21	
E-DMH-1A	MAPLEWOOD AVE	49+06 0.13 (LT)	RIM = 28.33	301 IN = 20.80 2 IN = 24.85 1 IN = 24.47 1A OUT = 20.61	

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**IMPROVEMENTS TO MAPLEWOOD
AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS/TLT
CHECKED BY: JPB/LES

**PROPOSED
DRAIN DATA**

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

2015086.00

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STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-20	LESLIE DR	600+35 18.98 (RT)	RIM = 20.67	131 OUT = 16.62	
CB-21	CUTTS & CENTRAL AVE	414+15 20.92 (LT)	RIM = 19.07	132 OUT = 15.10	
CB-23	LESLIE DR	601+83 13.00 (LT)	RIM = 32.74	126 OUT = 29.02	
CB-24	LESLIE DR	601+83 12.95 (RT)	RIM = 32.91	124 OUT = 28.94	
CB-401	CUTTS & CENTRAL AVE	413+40 12.99 (RT)	RIM = 18.74	122 OUT = 14.74	
CB-402	CUTTS & CENTRAL AVE	413+40 13.00 (LT)	RIM = 18.68	402 OUT = 14.68	
CB-404	CUTTS & CENTRAL AVE	413+87 13.57 (LT)	RIM = 18.84	404 OUT = 14.31	
CB-405	CUTTS & CENTRAL AVE	413+87 13.01 (RT)	RIM = 18.31	405 OUT = 14.31	
CB-407	CUTTS & CENTRAL AVE	415+32 13.00 (LT)	RIM = 25.04	407 OUT = 21.04	
CB-408	CUTTS & CENTRAL AVE	415+32 13.00 (RT)	RIM = 24.91	408 OUT = 21.04	
CB-409	BEECHWOOD ST	502+32 12.00 (LT)	RIM = 17.24	409 OUT = 11.61	
CB-410	BEECHWOOD ST	502+37 12.00 (RT)	RIM = 17.44	410 OUT = 11.91	
CB-412	BEECHWOOD ST	501+58 12.00 (LT)	RIM = 15.39	411 OUT = 11.38	
CB-413	BEECHWOOD ST	501+56 11.99 (RT)	RIM = 15.39	412 OUT = 11.75	
CB-415	CUTTS & CENTRAL AVE	406+48 12.00 (RT)	RIM = 23.62	415 OUT = 19.29	
CB-417	CUTTS & CENTRAL AVE	404+73 23.20 (RT)	RIM = 18.74	417 OUT = 14.84	
CB-418	CUTTS & CENTRAL AVE	404+93 6.22 (LT)	RIM = 20.01	422 IN = 15.80 418 OUT = 15.92	
CB-420	CUTTS & CENTRAL AVE	402+51 18.27 (RT)	RIM = 22.09	420 OUT = 17.62	
CB-421	CUTTS & CENTRAL AVE	402+38 11.99 (LT)	RIM = 23.14	E-37 IN = 19.38 421 OUT = 19.05	
CB-422	CUTTS & CENTRAL AVE	402+34 21.50 (LT)	RIM = 23.63	E-37 OUT = 19.43	
DI-422	CUTTS & CENTRAL AVE	404+95 12.00 (LT)	RIM = 19.85	422 OUT = 15.81	
DMH-22	LESLIE DR	601+72 7.11 (LT)	RIM = 31.85	124 IN = 28.03 126 IN = 28.52 125 OUT = 26.00	
DMH-72	CUTTS & CENTRAL AVE	413+70 13.76 (RT)	RIM = 17.60		
DMH-104	CUTTS & CENTRAL AVE	413+78 112.06 (RT)	RIM = 15.46	108 IN = 9.30 85 IN = 9.29 121 OUT = 9.29	
DMH-147	CUTTS & CENTRAL AVE	414+25 36.64 (LT)	RIM = 20.25	125 IN = 13.70 131 IN = 16.10 132 IN = 15.02	
DMH-400	CUTTS & CENTRAL AVE	413+62 5.37 (LT)	RIM = 18.47	E-33.2 IN = 8.20 402 IN = 14.22 403 IN = 13.39 122 IN = 14.17 114 OUT = 8.10	DOGHOUSE STRUCTURE
DMH-403	CUTTS & CENTRAL AVE	413+87 5.00 (LT)	RIM = 18.94	404 IN = 14.14 405 IN = 13.95 406 IN = 14.25 403 OUT = 13.89	
DMH-406	CUTTS & CENTRAL AVE	415+21 4.00 (LT)	RIM = 24.48	407 IN = 20.90 408 IN = 20.84 406 OUT = 20.59	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
DMH-411	BEECHWOOD ST	502+04 10.56 (RT)	RIM = 16.11	(107) IN = 11.01 412 IN = 11.25 410 IN = 11.25 107 OUT = 11.09	
DMH-413	CUTTS & CENTRAL AVE	405+14 6.12 (RT)	RIM = 20.01	416 IN = 13.33 414 IN = 14.74 E28 IN = 13.23 85 OUT = 13.03	
DMH-414	CUTTS & CENTRAL AVE	406+40 4.47 (RT)	RIM = 23.69	415 IN = 19.24 414 OUT = 19.14	
DMH-416	CUTTS & CENTRAL AVE	404+92 6.15 (RT)	RIM = 19.95	419 IN = 13.45 418 IN = 15.68 417 IN = 14.59 416 OUT = 13.45	
DMH-419	CUTTS & CENTRAL AVE	402+47 6.48 (RT)	RIM = 22.90	421 IN = 18.96 420 IN = 17.52 419 OUT = 15.40	
E-CB-28	CUTTS & CENTRAL AVE	405+42 22.99 (LT)	RIM = 18.36	E28 OUT = 15.95	
E-CB-32	BEECHWOOD ST	502+02 16.71 (RT)	RIM = 15.37	(107) OUT = 11.10	
E-DMH-19	BEECHWOOD ST	502+11 14.32 (LT)	RIM = 18.19	107 IN = 10.83 409 IN = 10.84 411 IN = 10.84 108 OUT = 10.59	
E-DMH-400	CUTTS & CENTRAL AVE	413+72 25.56 (RT)	RIM = 18.52	121 IN = 8.50 E-33.2 OUT = 8.40	

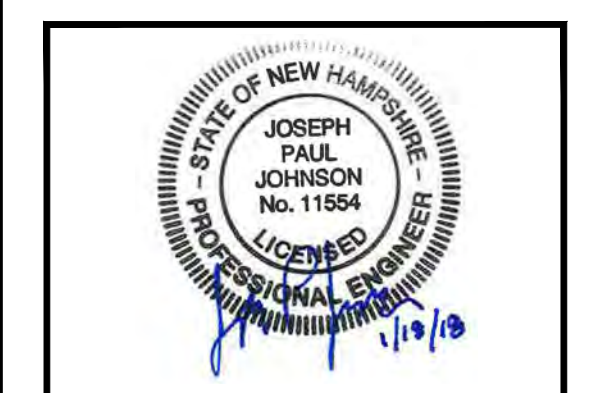
STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET	RIM	INV DATA	COMMENTS
CB-503	LESLIE DR	608+11 13.00 (RT)	RIM = 22.08	140 OUT = 18.19	
CB-506	LESLIE DR	609+95 13.00 (RT)	RIM = 26.40	504 OUT = 22.53	
CB-507	LESLIE DR	610+02 12.42 (LT)	RIM = 26.66	503 OUT = 22.83	
CB-509	LESLIE DR	612+65 14.05 (RT)	RIM = 38.24	507 OUT = 34.27	
CB-510	LESLIE DR	612+65 12.98 (LT)	RIM = 38.27	508 OUT = 34.27	
CB-512	LESLIE DR	605+85 13.00 (RT)	RIM = 26.22	141 OUT = 22.12	
CB-513	LESLIE DR	605+85 13.00 (LT)	RIM = 26.22	137 OUT = 22.16	
DMH-502	LESLIE DR	608+11 1.00 (LT)	RIM = 22.31	138 IN = 16.50 140 IN = 18.07 502 IN = 16.75 139 OUT = 16.40	
DMH-504	LESLIE DR	609+59 7.38 (RT)	RIM = 25.51	129 IN = 21.29 502 OUT = 19.50	
DMH-505	LESLIE DR	609+94 6.44 (LT)	RIM = 26.51	506 IN = 22.82 503 IN = 22.61 504 IN = 22.34 129 OUT = 22.39	
DMH-508	LESLIE DR	612+49 6.20 (RT)	RIM = 37.56	508 IN = 33.74 507 IN = 33.74 506 OUT = 33.15	
DMH-511	LESLIE DR	605+96 9.80 (RT)	RIM = 26.02	137 IN = 21.82 141 IN = 25.47 138 OUT = 21.72	
E-DMH-23	LESLIE DR	608+09 13.77 (LT)	RIM = 25.44	139 IN = 21.55	

SEWER MANHOLE SCHEDULE

MANHOLE #	STREET	4' DIA. (VF)	6" DROP (VF)	8" DROP (VF)
SMH 1	MAPLEWOOD	7.8		
SMH 764	MAPLEWOOD	9.1		2.9
SMH 2	MAPLEWOOD	6.8		
SMH 3	MAPLEWOOD	11.7		
SMH 4	MAPLEWOOD	7.7	7.3	
SMH 5	MAPLEWOOD	6.1		
SMH 6	MAPLEWOOD	8.0		
SMH 761	WOODBURY	15.3		
SMH 7	WOODBURY	15.8		10 (TBD)
SMH 763	FAIRVIEW	10.9		
SMH 762	FAIRVIEW	12.1		2
SMH 8	FAIRVIEW	10.2		
SMH 9	FAIRVIEW	9.9		
SMH 10	FAIRVIEW	9.9		
SMH 11	FAIRVIEW	10.0		
SMH 12	CENTRAL	7.5		
SMH 1032	CENTRAL	6.7		
SMH 13	CUTTS	6.9		
SMH 14	CUTTS	6.8		
SMH 15	LESLIE	9.3		
SMH 16	LESLIE	13.5 (TBD)		
SMH 73	LESLIE			2.4
SMH 1025	LESLIE	6.7		
SMH 2364	LESLIE	7.0		
SMH 17	LESLIE	6.7		
SMH 1024	LESLIE	5.6		
SMH 1028	LESLIE	4.9		
SMH 18	FAIRVIEW	8.9	4 (TBD)	
SMH 709	WOODBURY	13.9		
SUB-TOTAL:		255.7	11.3	17.3
ROUNDING:		260.0	25.0	20.0
TOTAL ESTIMATED QUANTITY:		260.0	25.0	20.0

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**IMPROVEMENTS TO MAPLEWOOD
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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

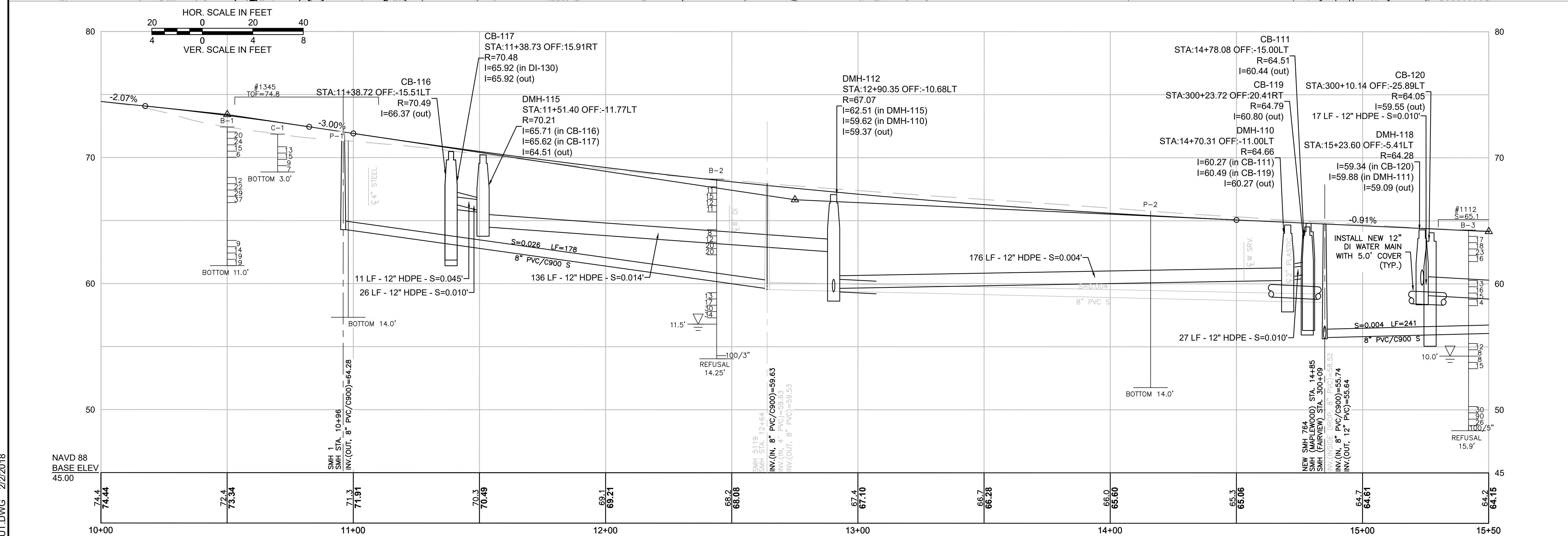
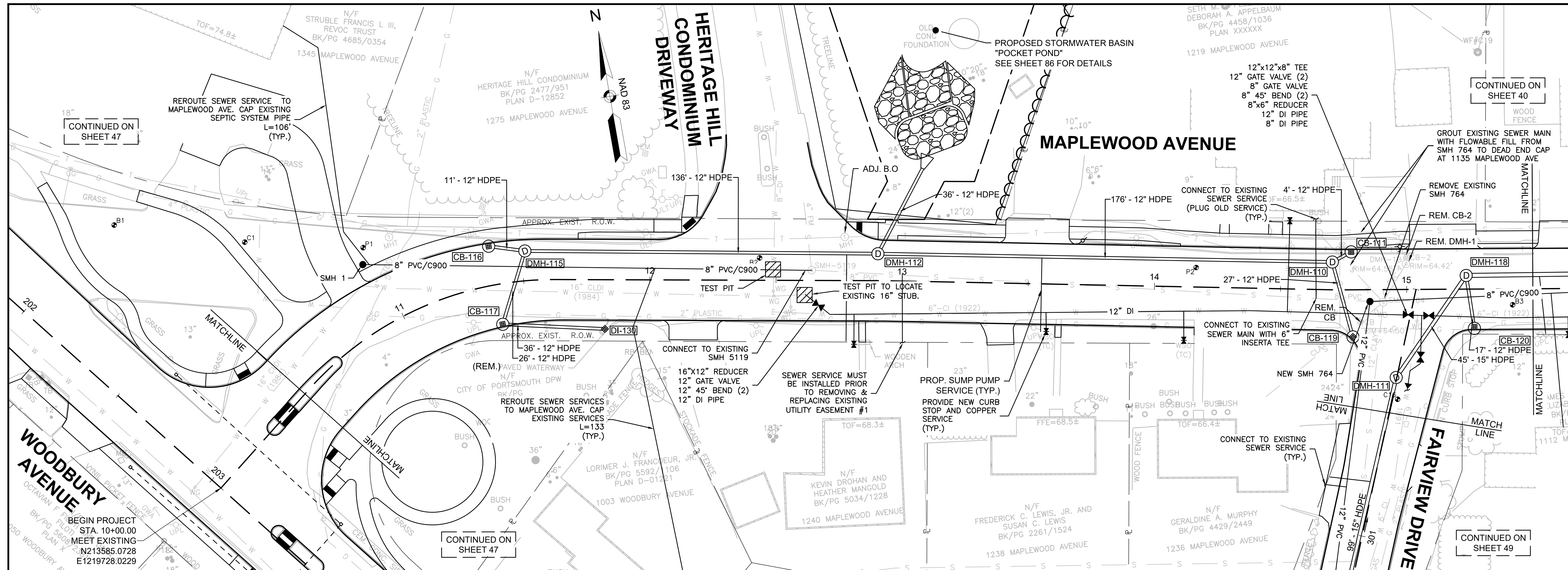
2/5/2018
DRAWN/DESIGN BY: CLS/TLD CHECKED BY: JPP/JES

**PROPOSED
DRAIN &
SEWER DATA**

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

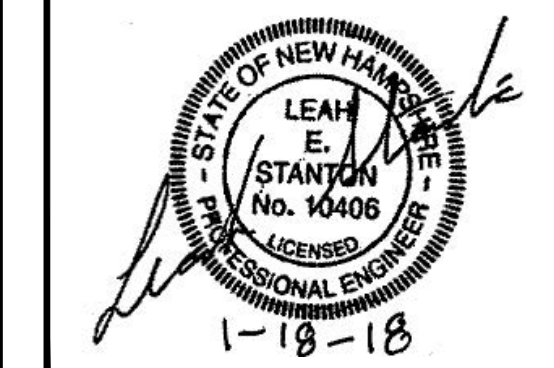
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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
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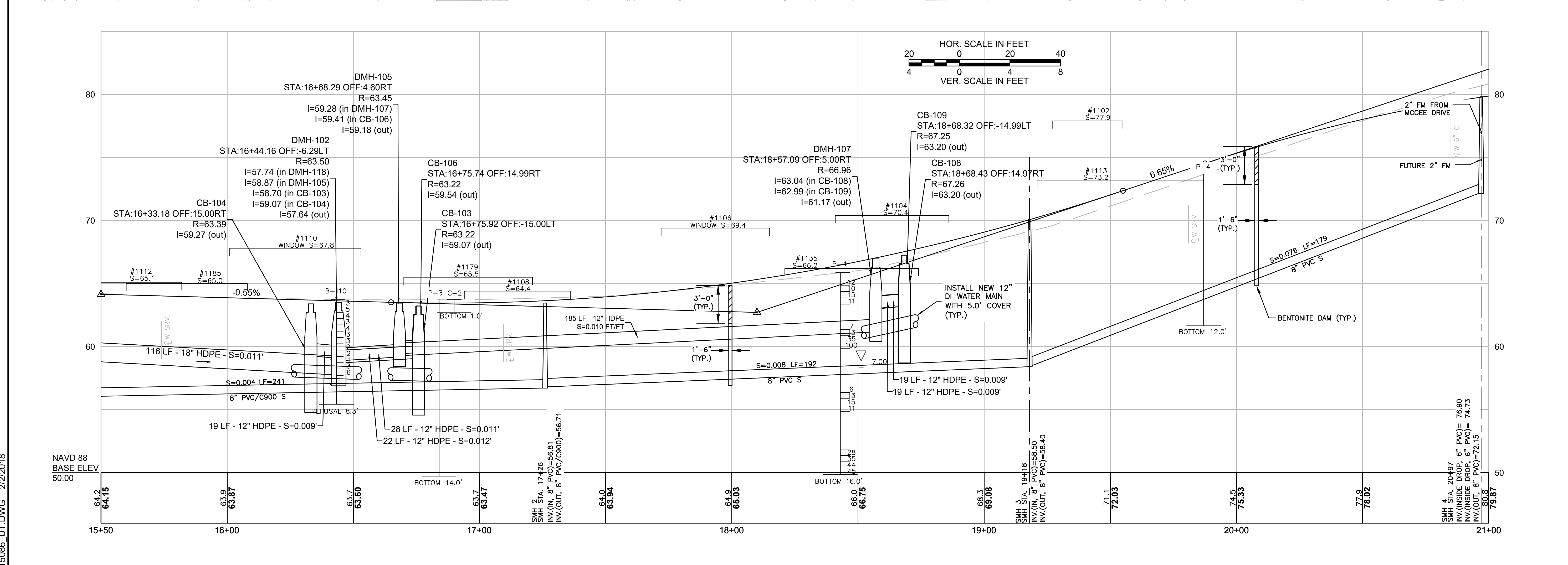
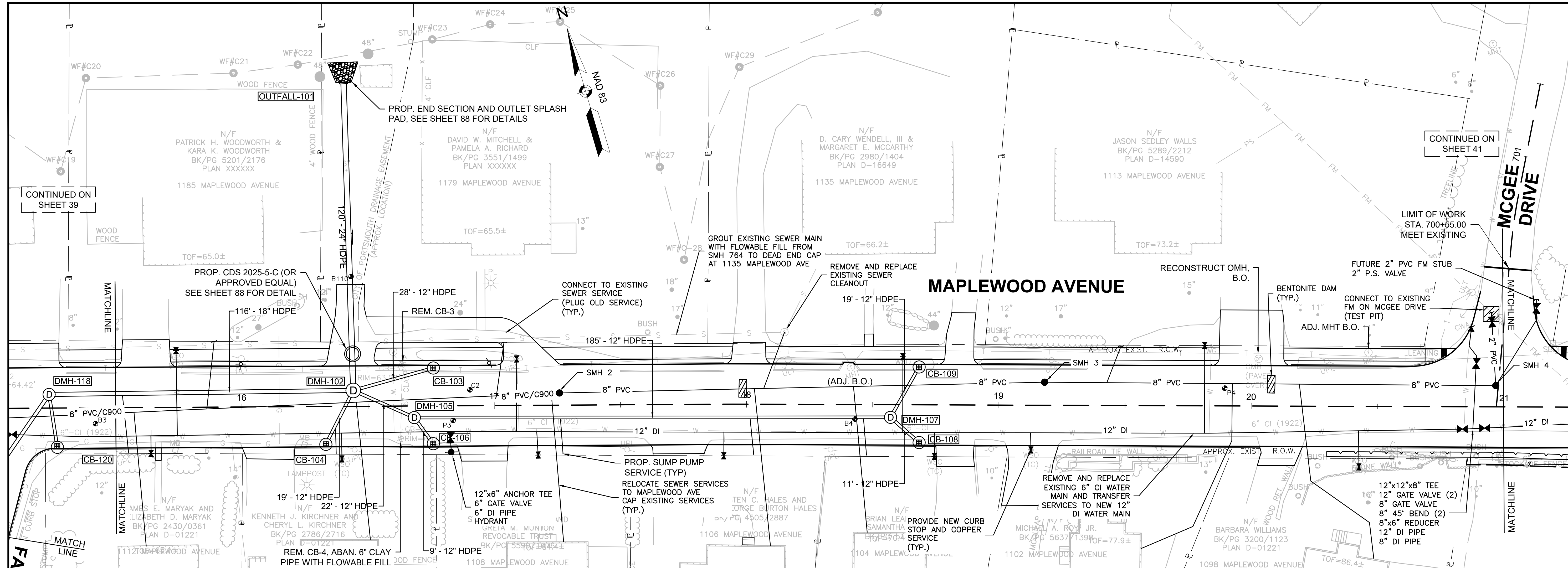
2/5/2018
DRAWN/DESIGN BY: CLS/TLT CHECKED BY: JPJ/LES

**UTILITY PLAN & PROFILE -
MAPLEWOOD AVENUE**

SCALE: HORIZ: 1" = 20'
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2015086.00

15086 UT.DWG 2/2/2018



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JOSEPH PAUL JOHNSON
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LICENSED PROFESSIONAL ENGINEER
1-18-18

LEAH E. STANTON
No. 10406
LICENSED PROFESSIONAL ENGINEER
1-18-18

PREPARED FOR:
DEPARTMENT OF PUBLIC WORKS
CITY OF PORTSMOUTH
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS/TLD CHECKED BY: JPP/JES

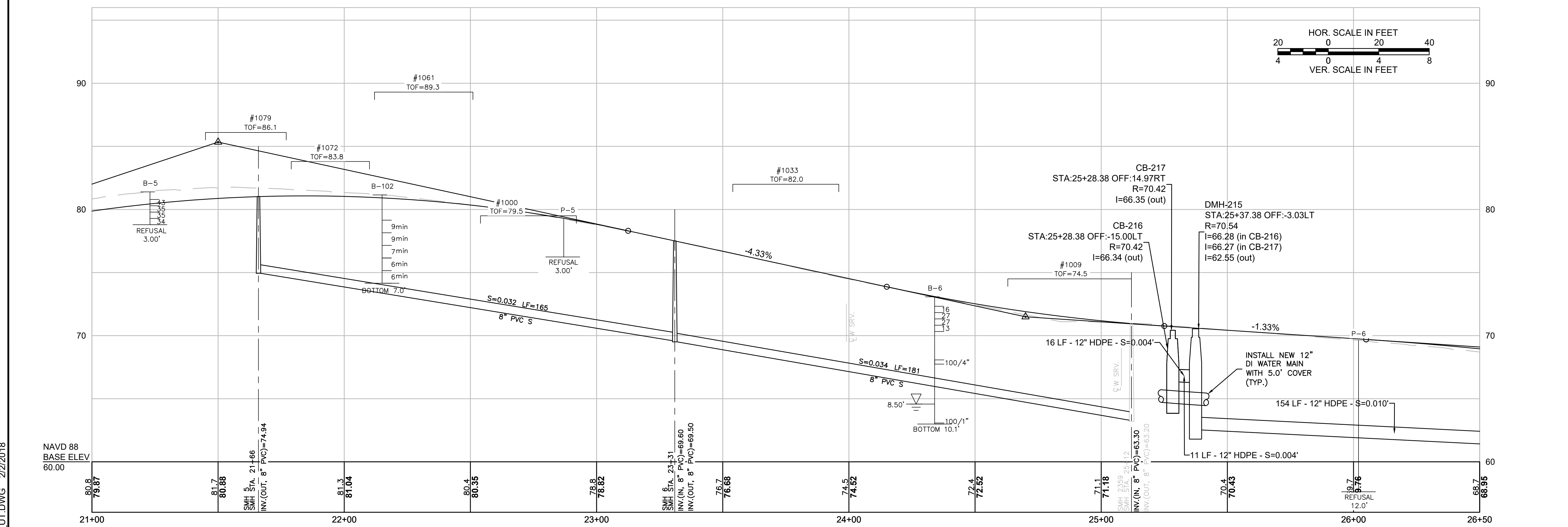
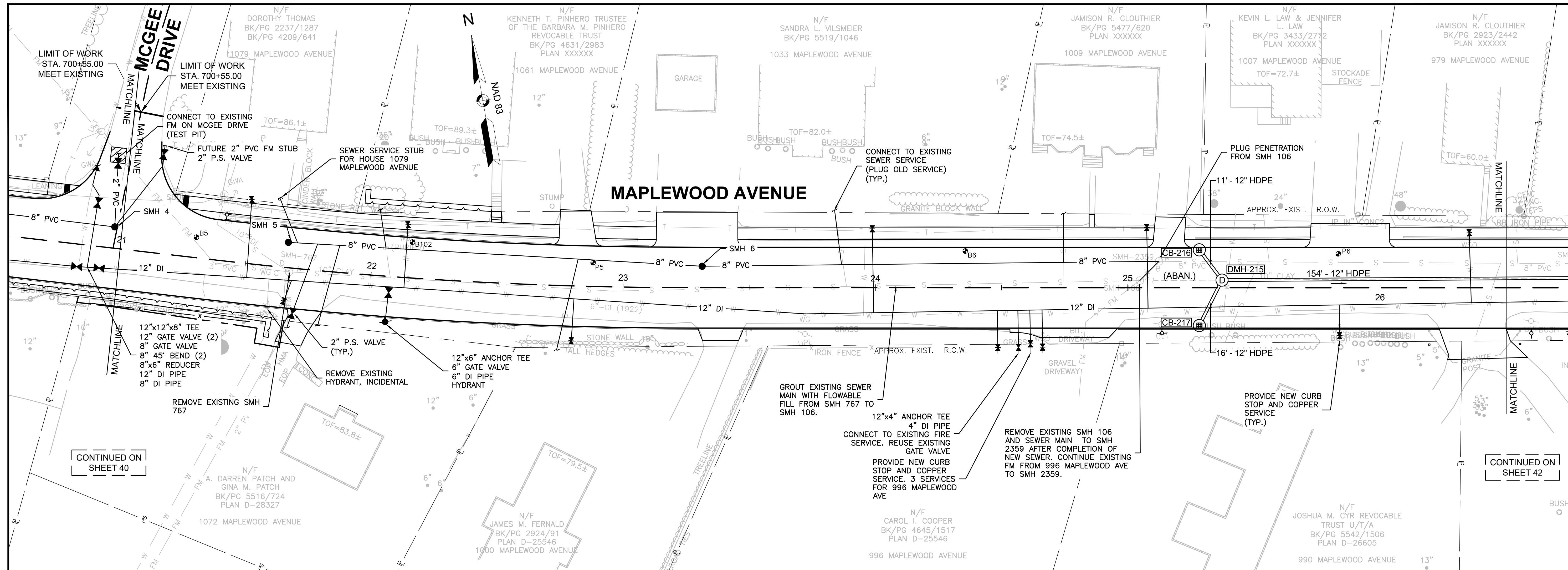
UTILITY PLAN & PROFILE - MAPLEWOOD AVENUE

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

2015086.00

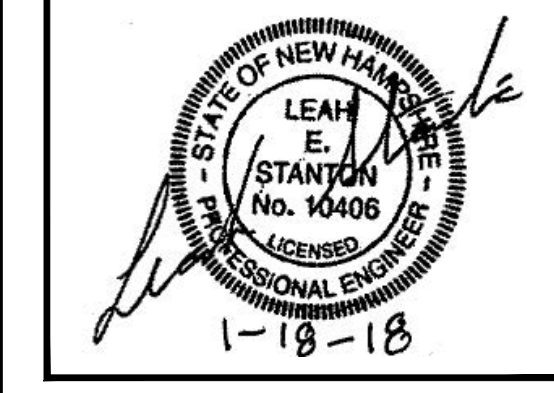
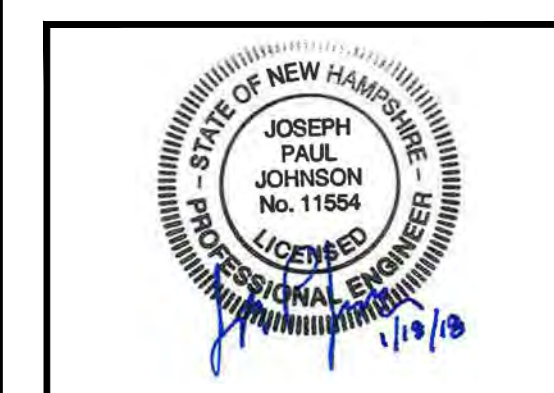
40 OF 184

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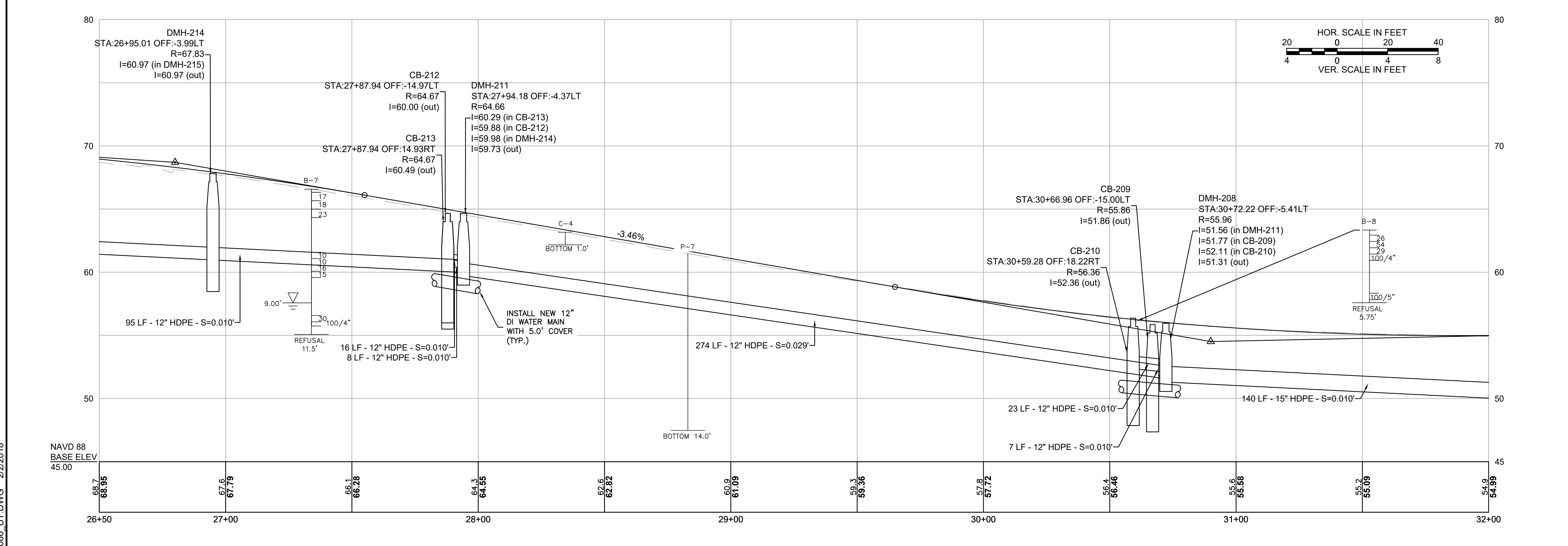
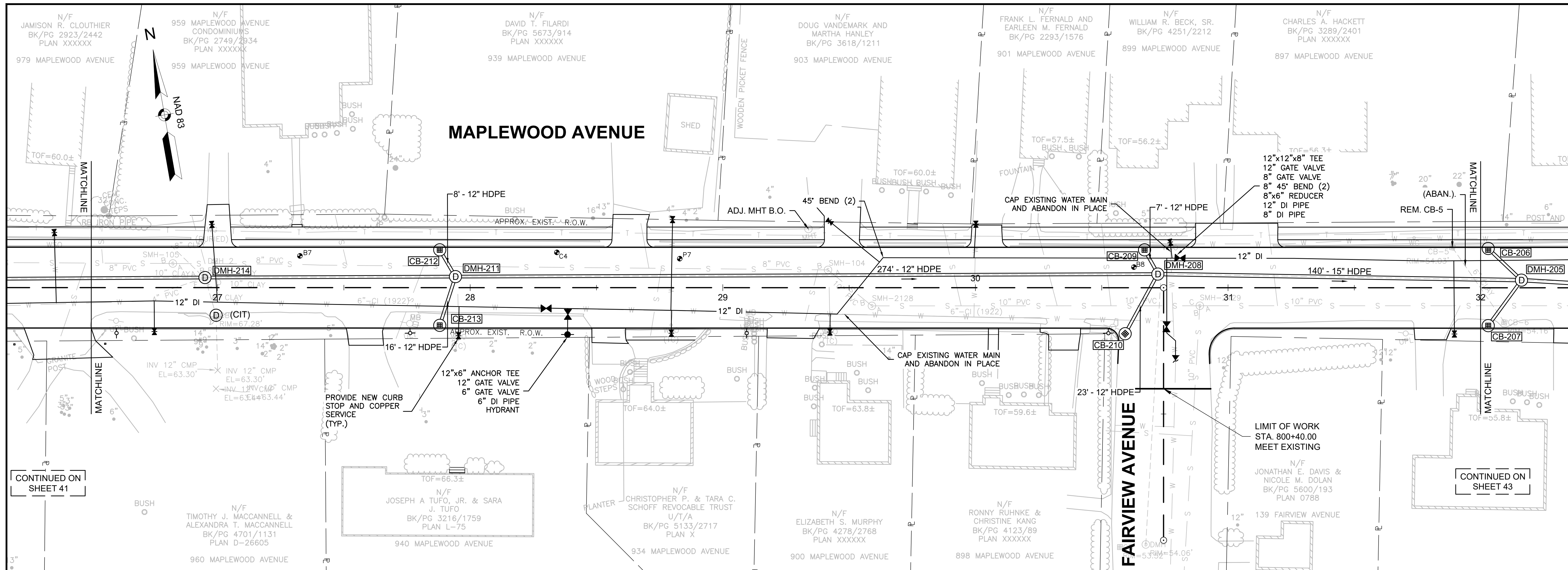
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
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PORTSMOUTH, NH

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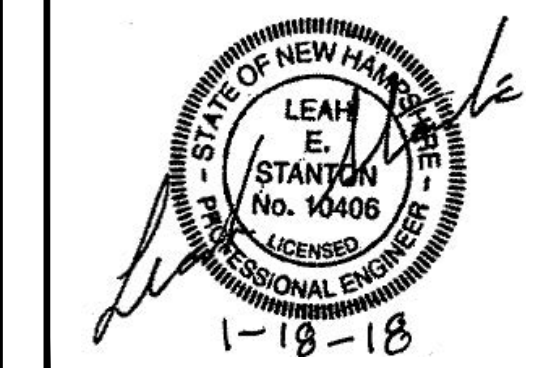
UTILITY PLAN & PROFILE - MAPLEWOOD AVENUE
SCALE: HORIZ: 1" = 20'
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2015086.00

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PORTSMOUTH, NH**

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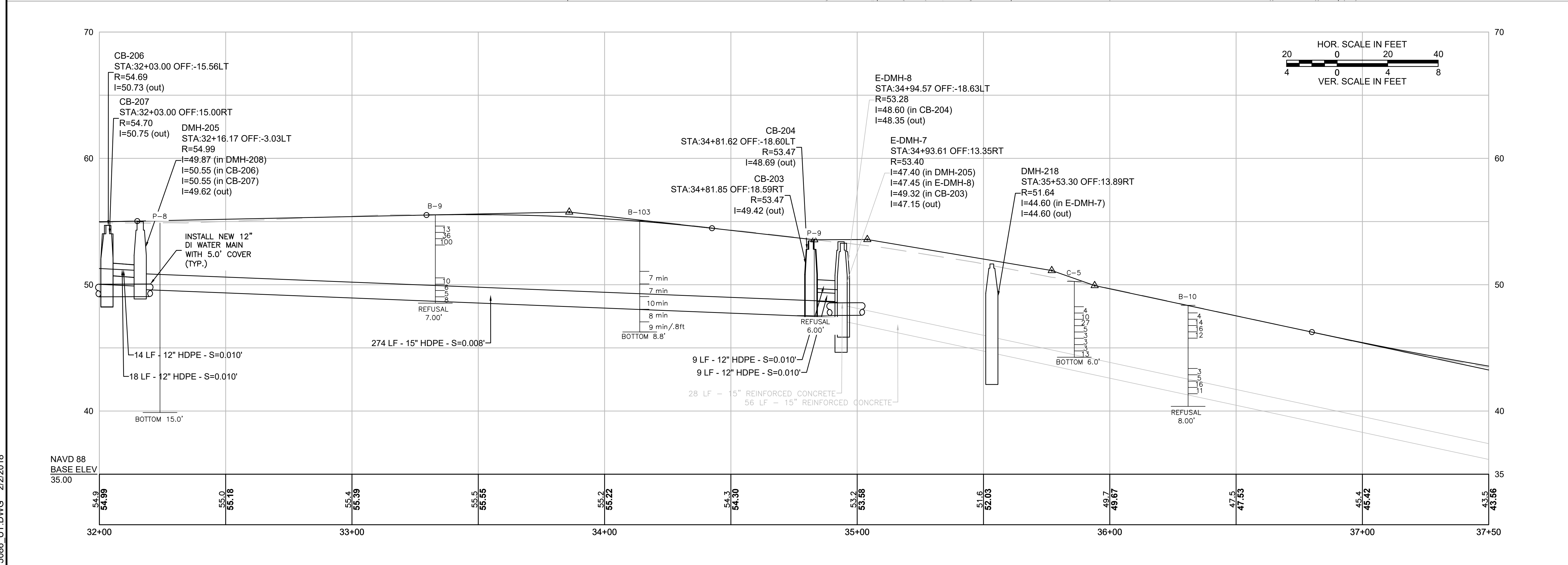
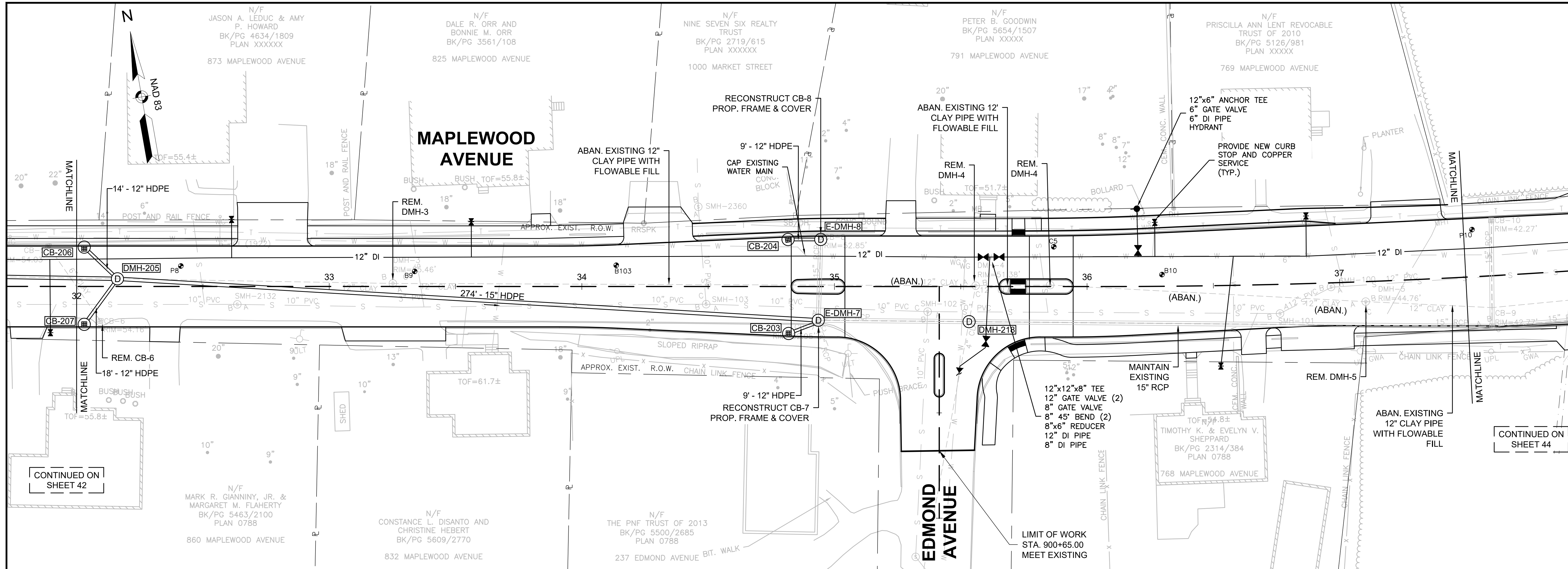
**UTILITY PLAN
& PROFILE -
MAPLEWOOD
AVENUE**

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

2015086.00

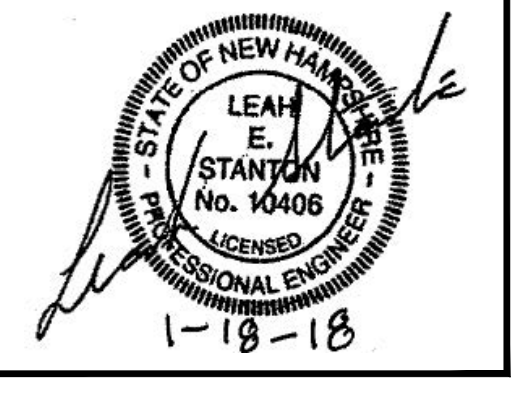
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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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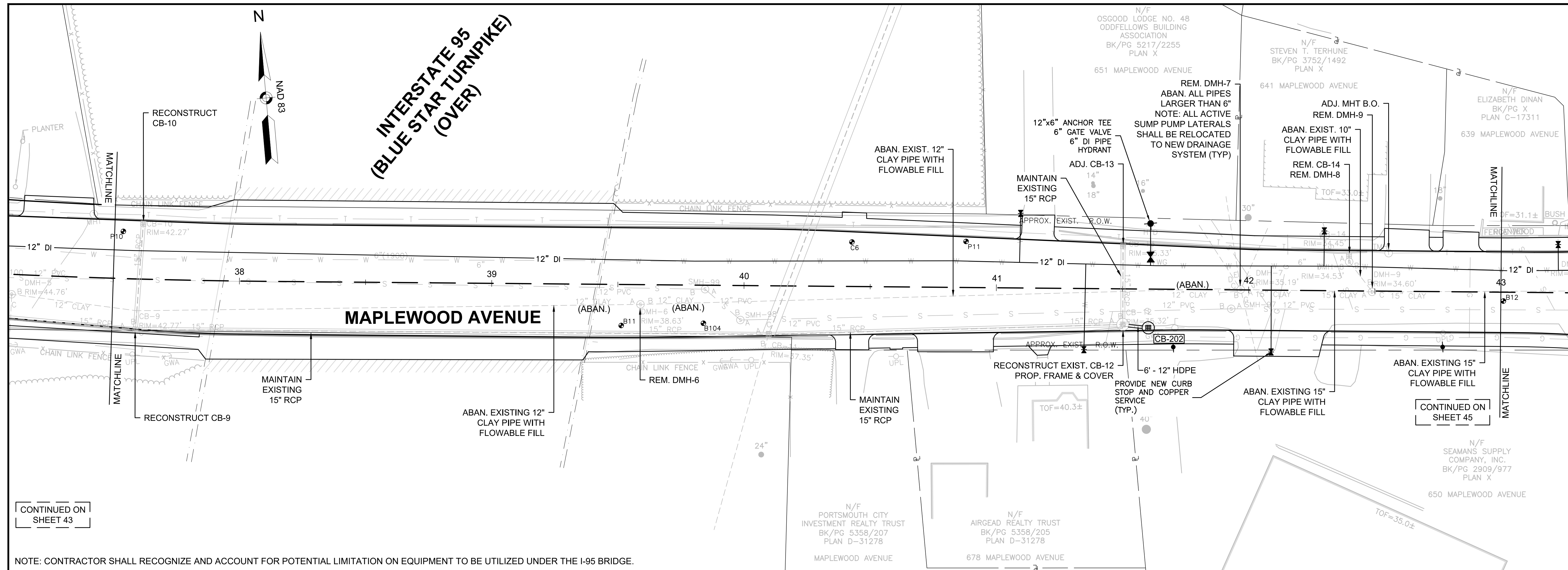
2/5/2018
 DRAWN/DESIGN BY: CLS/TLD CHECKED BY: JPJ/LES

**UTILITY PLAN
 & PROFILE -
 MAPLEWOOD
 AVENUE**

SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'

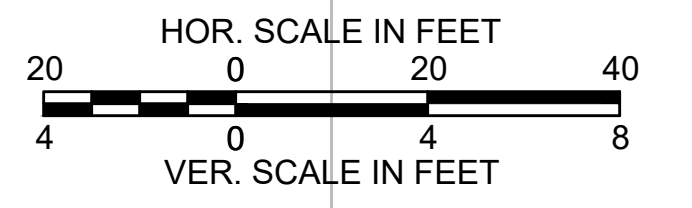
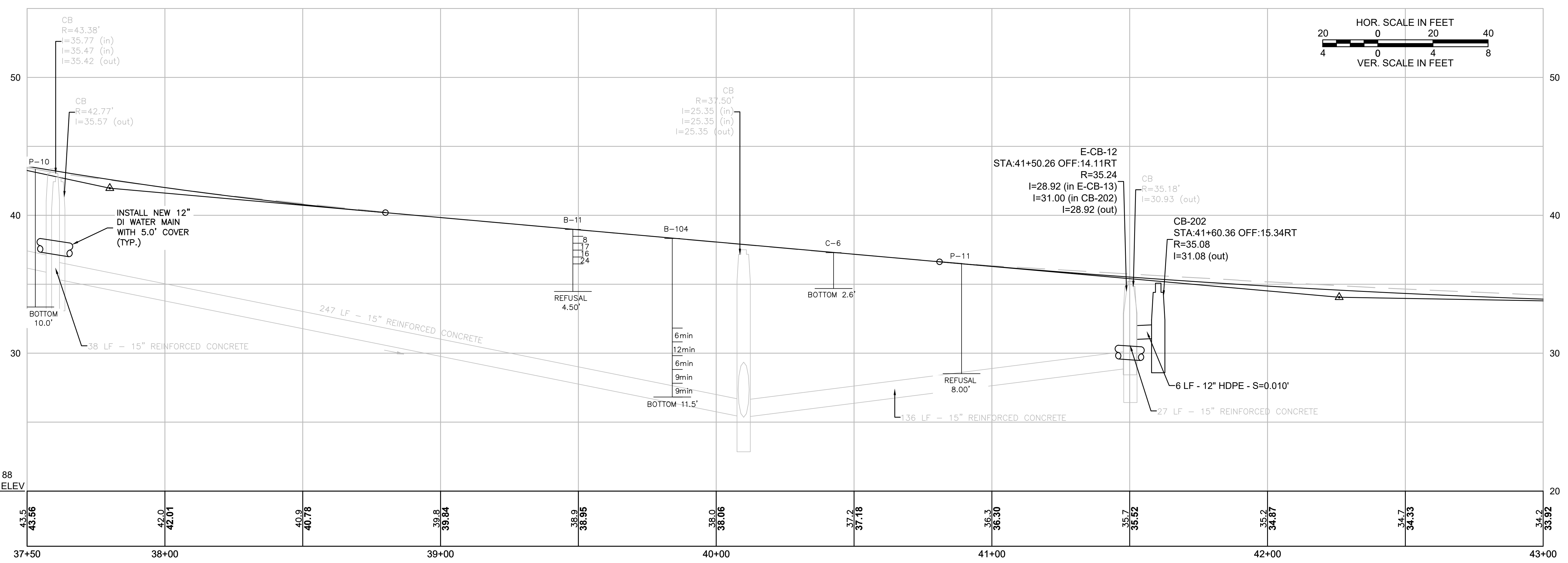
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CONTINUED ON SHEET 43

NOTE: CONTRACTOR SHALL RECOGNIZE AND ACCOUNT FOR POTENTIAL LIMITATION ON EQUIPMENT TO BE UTILIZED UNDER THE I-95 BRIDGE.



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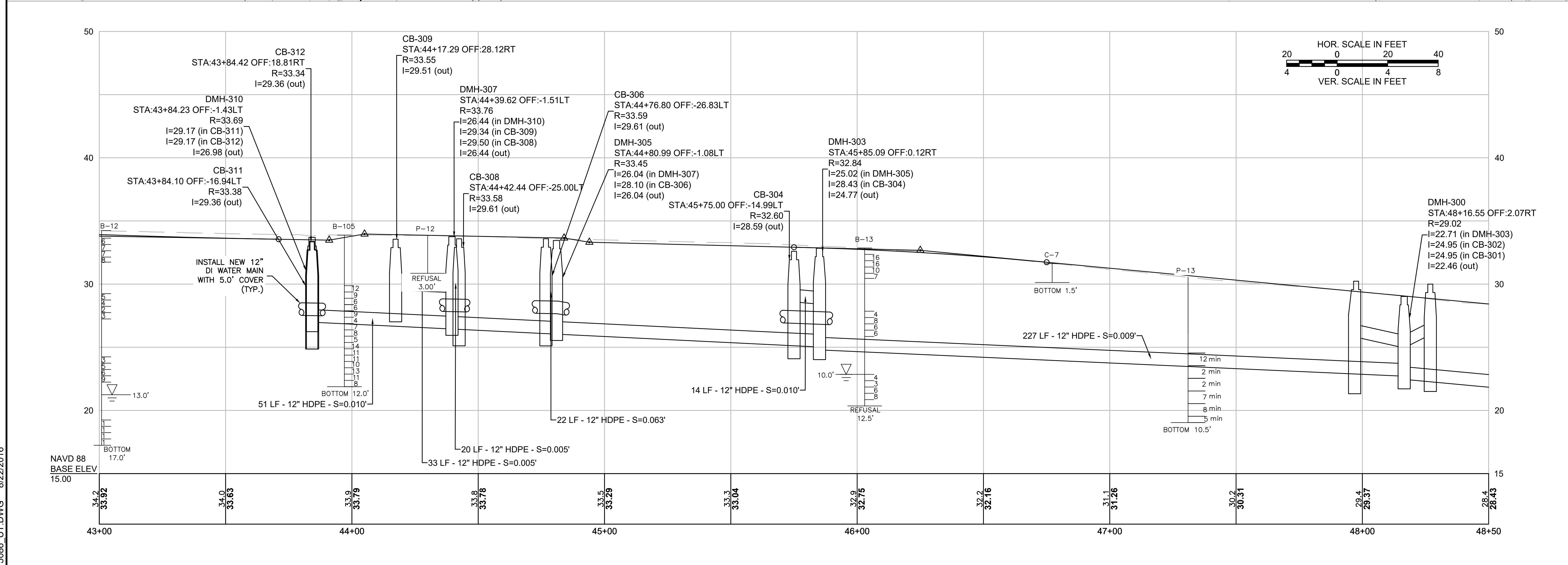
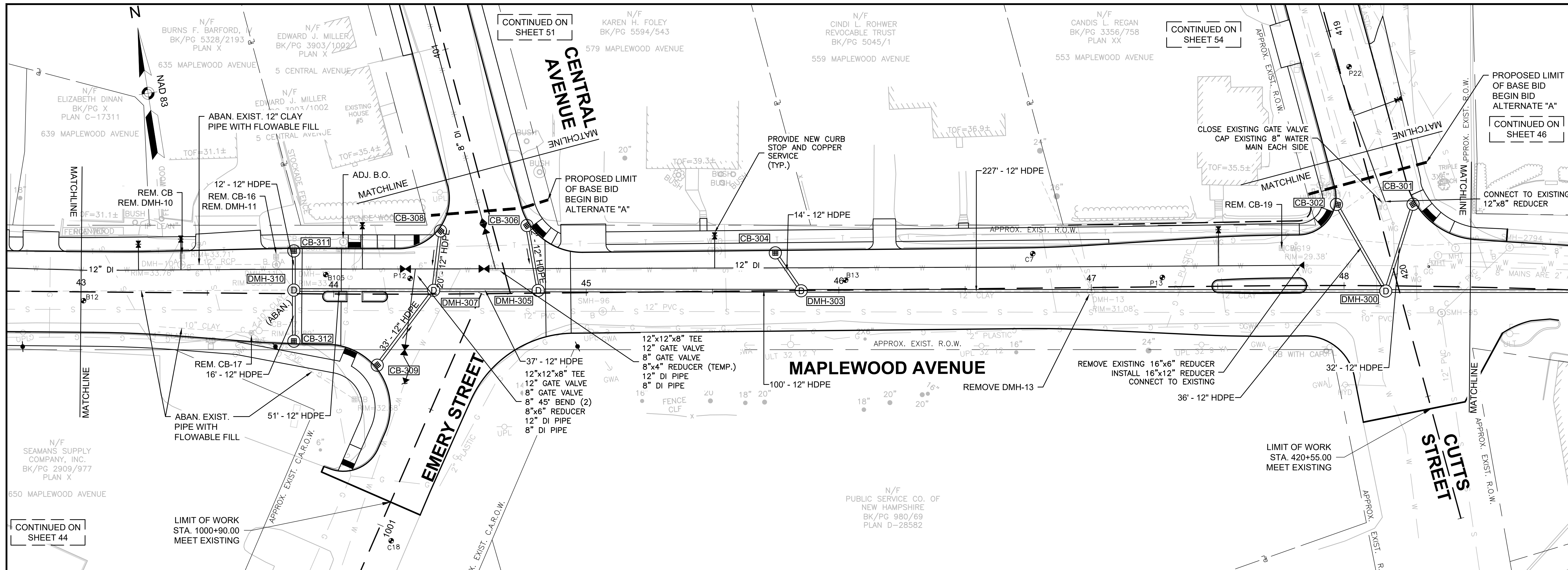


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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

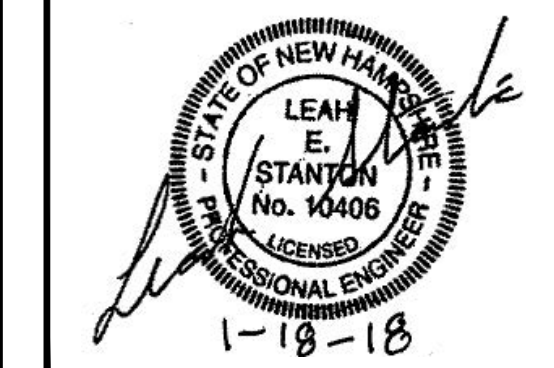
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NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS/TLT
CHECKED BY: JPP/JES
UTILITY PLAN & PROFILE - MAPLEWOOD AVENUE
SCALE: HORIZ: 1" = 20'
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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

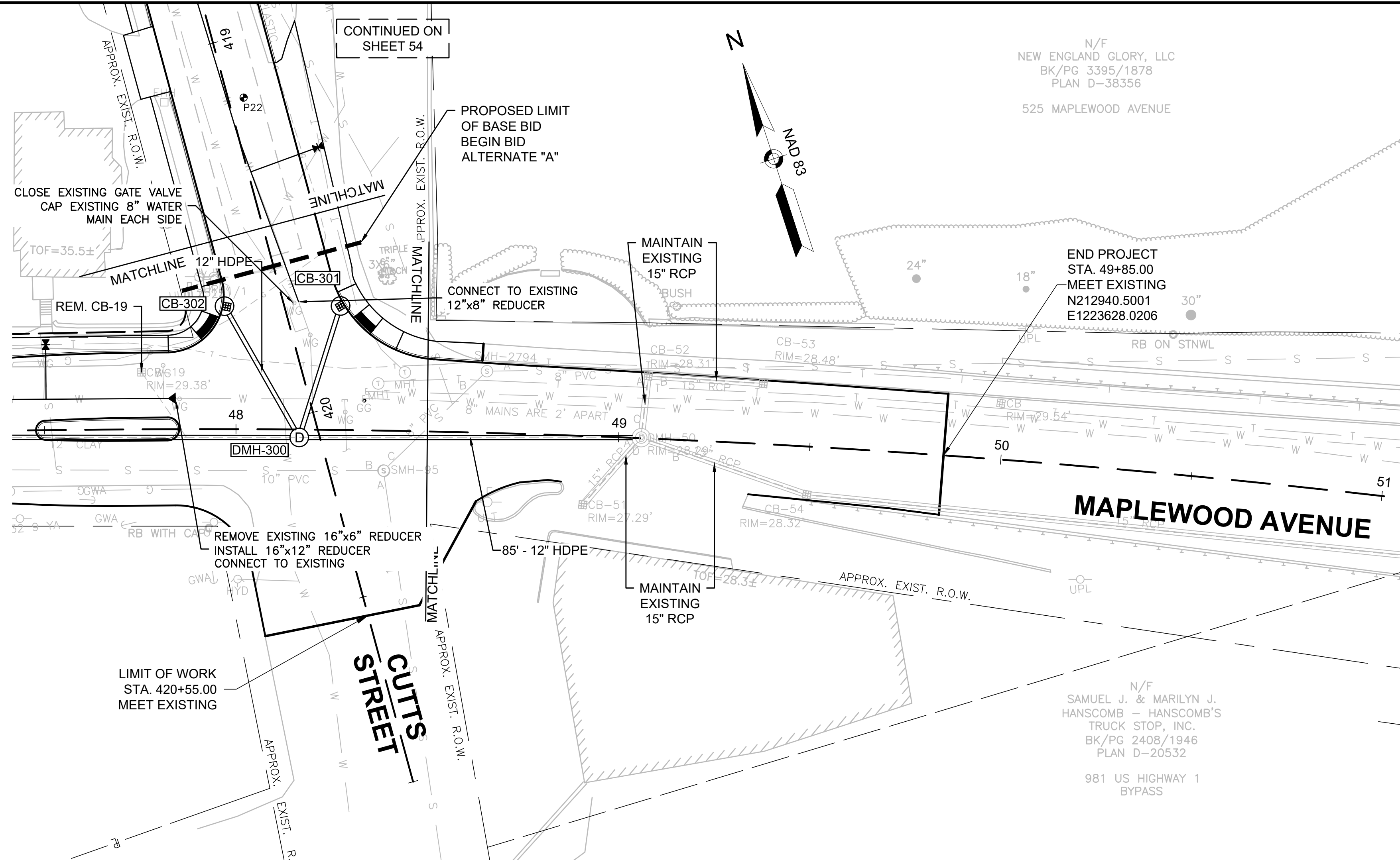
2/5/2018
 DRAWN/DESIGN BY: CLS/TLD CHECKED BY: JPP/JES

**UTILITY PLAN
 & PROFILE -
 MAPLEWOOD
 AVENUE**

SCALE: HORIZ: 1" = 20'
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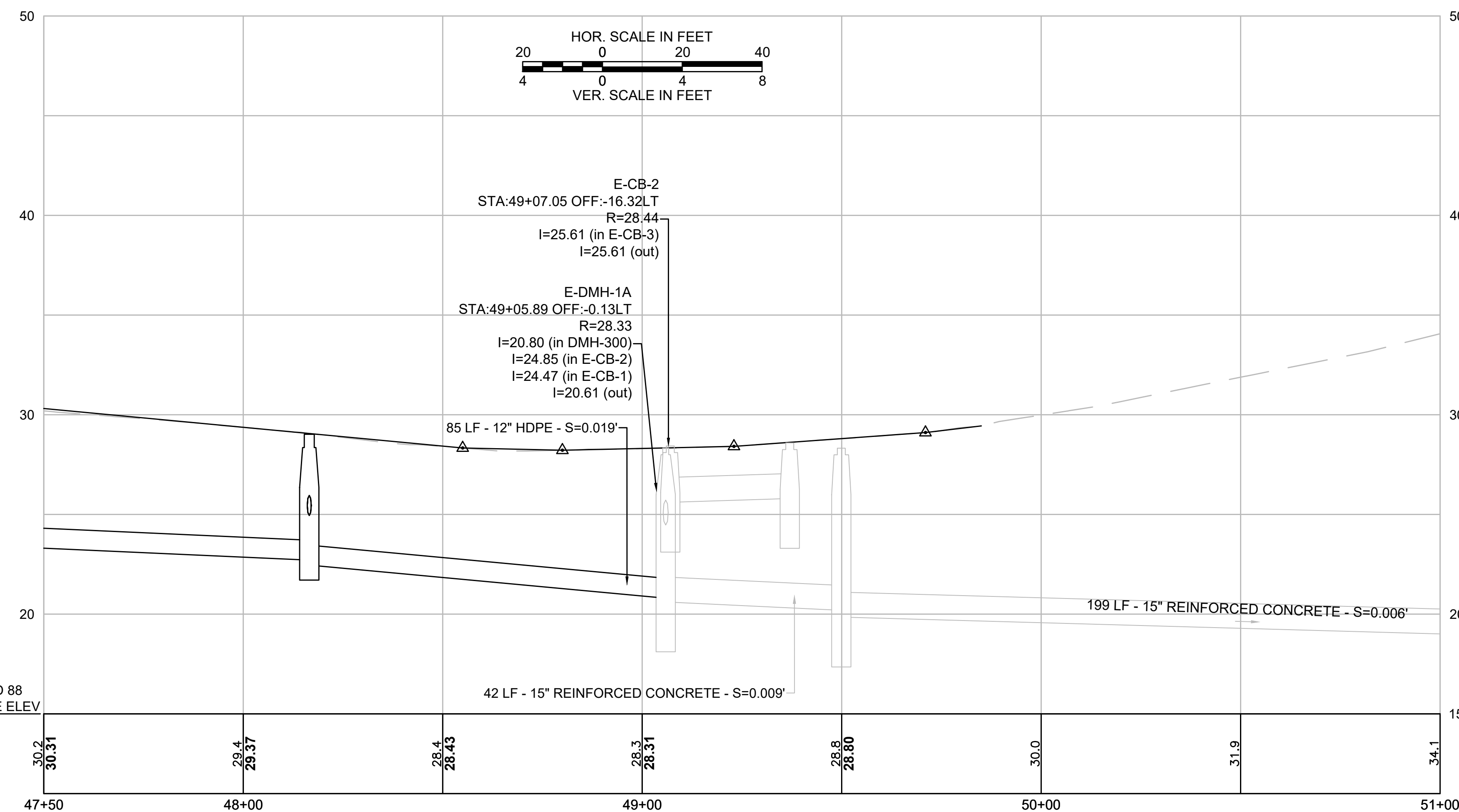
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45 OF 184



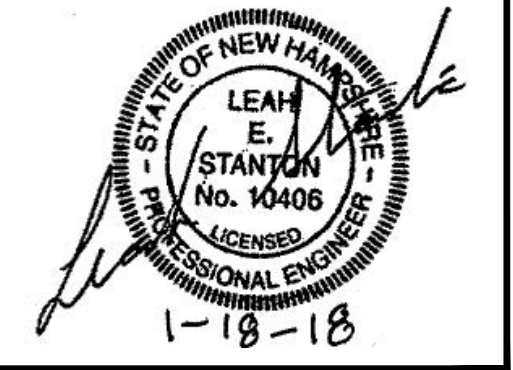
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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

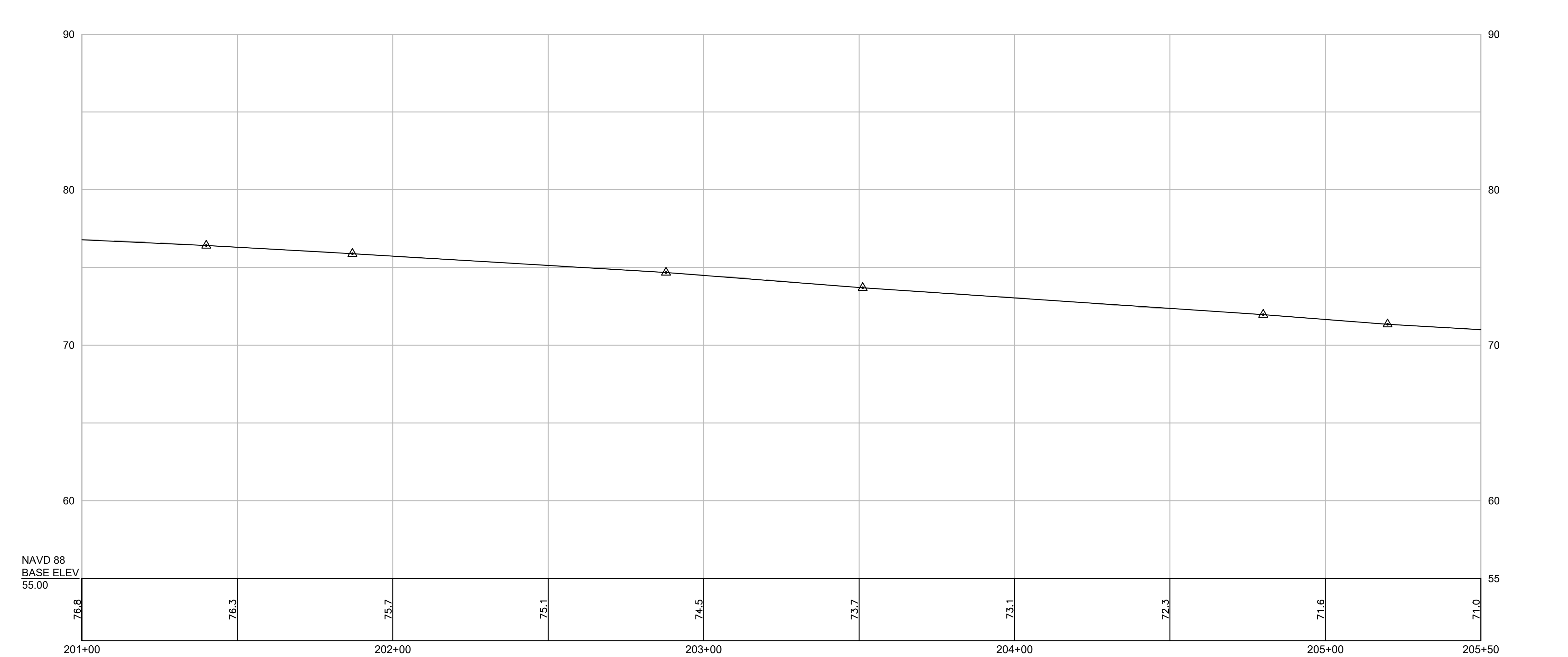
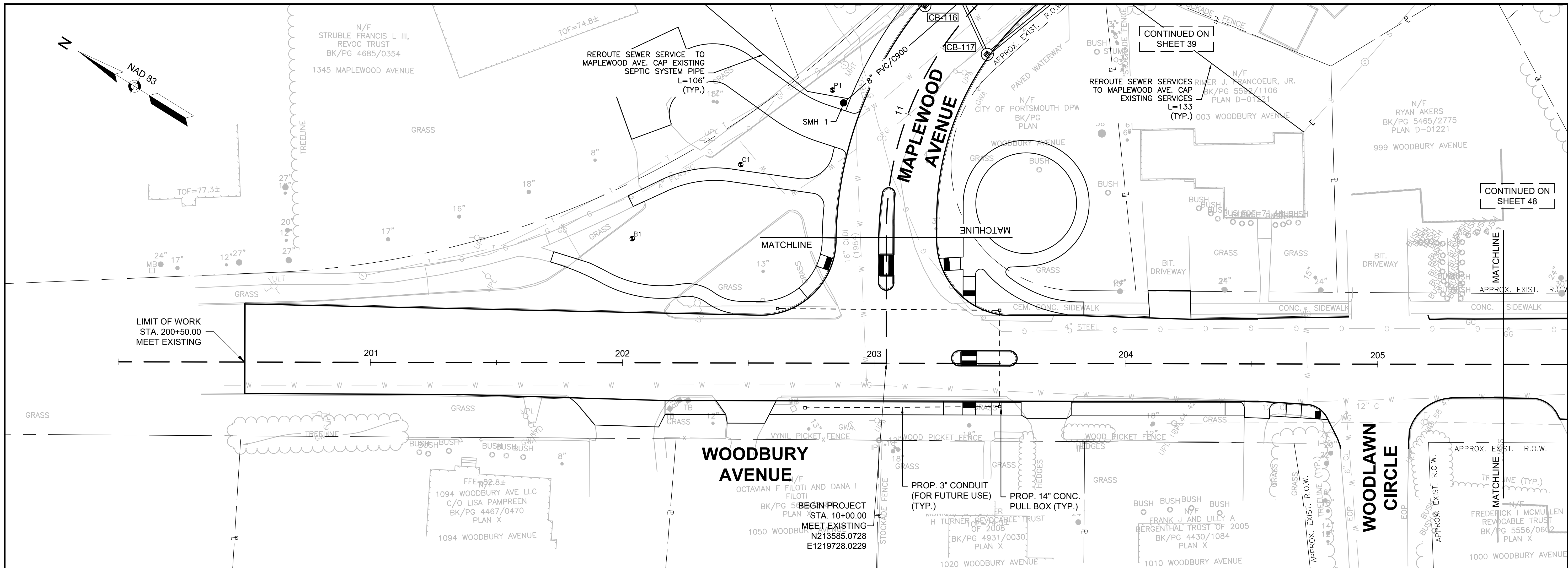
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UTILITY PLAN & PROFILE - MAPLEWOOD AVENUE

SCALE: HORIZ: 1" = 20'
VERT: 1" = 4'

2015086.00

46 OF 184



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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

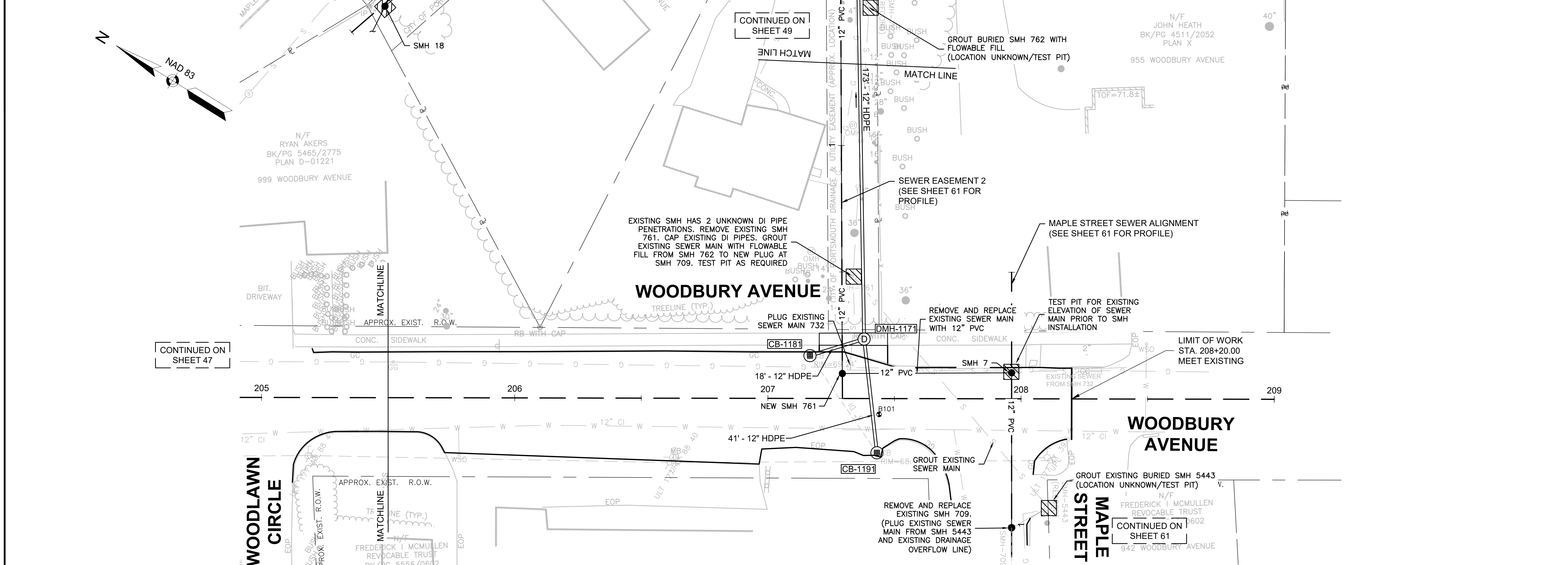
REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS/TLTD CHECKED BY: JPPJ/LES

**UTILITY PLAN & PROFILE -
 WOODBURY AVENUE**

SCALE: HORIZ: 1" = 20'
 VERT: 1" = 4'
 2015086.00

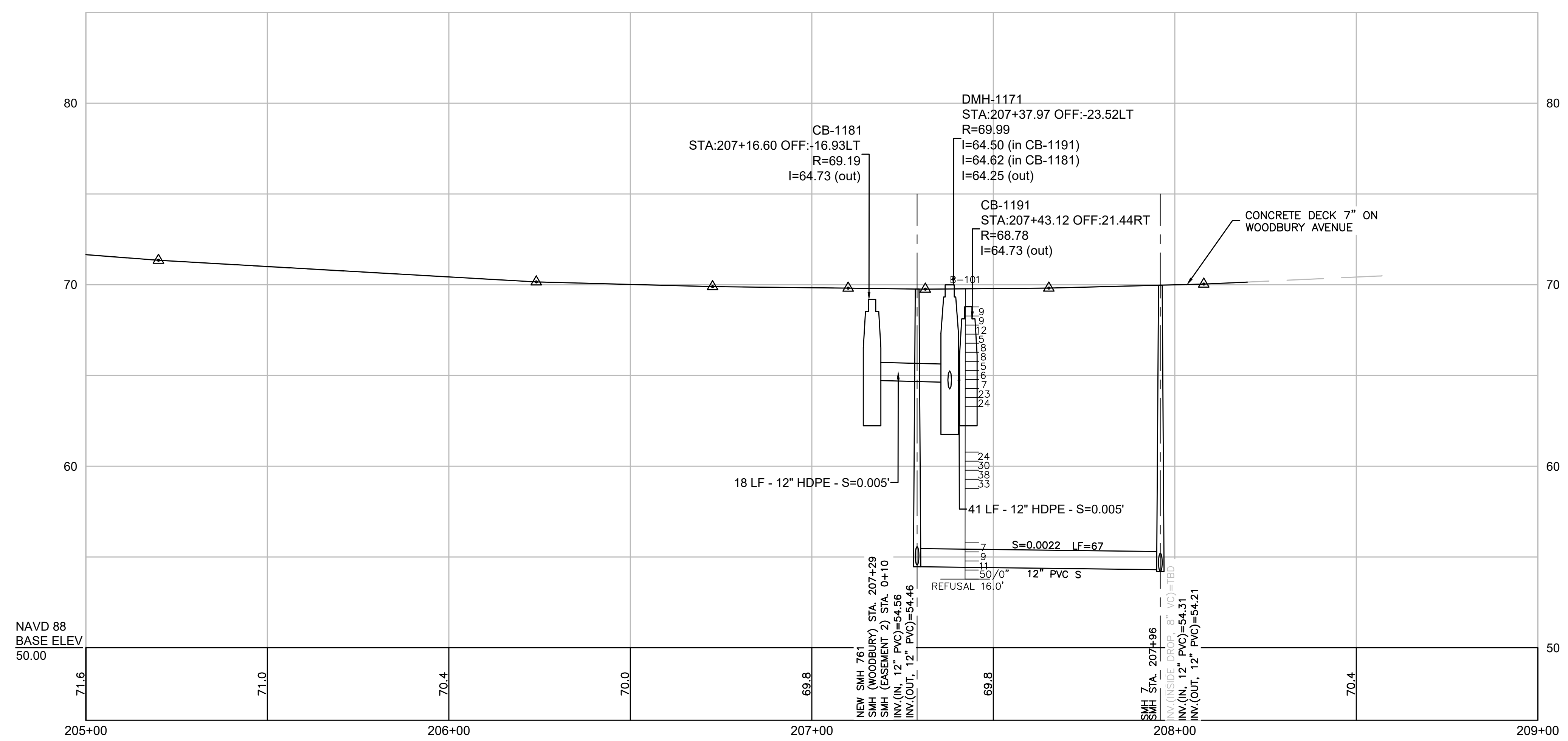
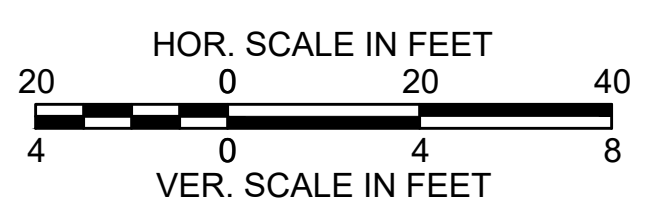
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CONTINUED ON SHEET 47

CONTINUED ON SHEET 49

CONTINUED ON SHEET 61



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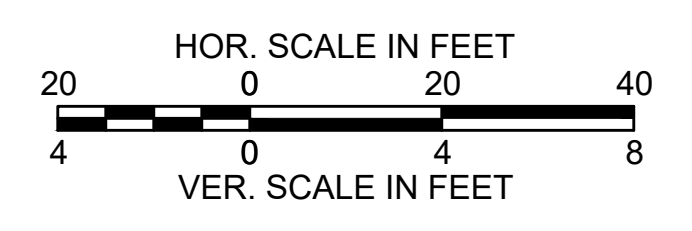
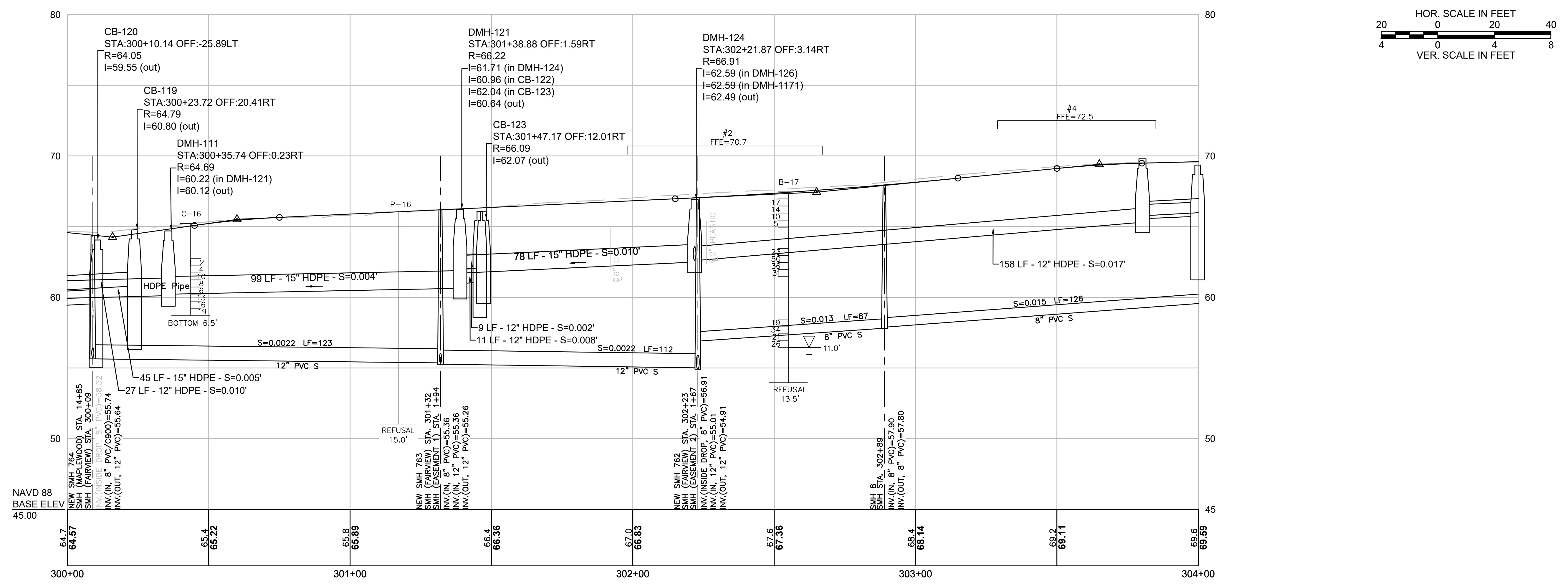
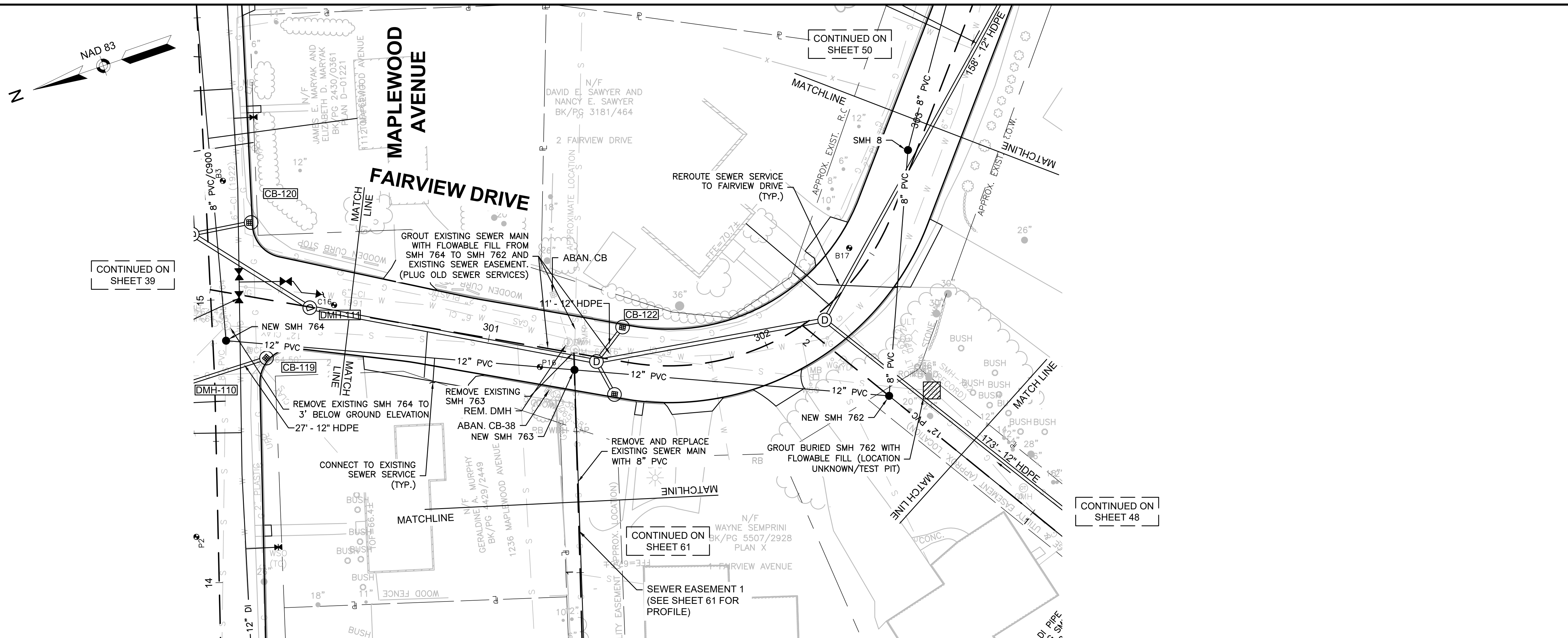
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS	
REVISION	DATE

UTILITY PLAN & PROFILE - WOODBURY AVENUE

HORIZ: 1" = 20'
 VERT: 1" = 4'

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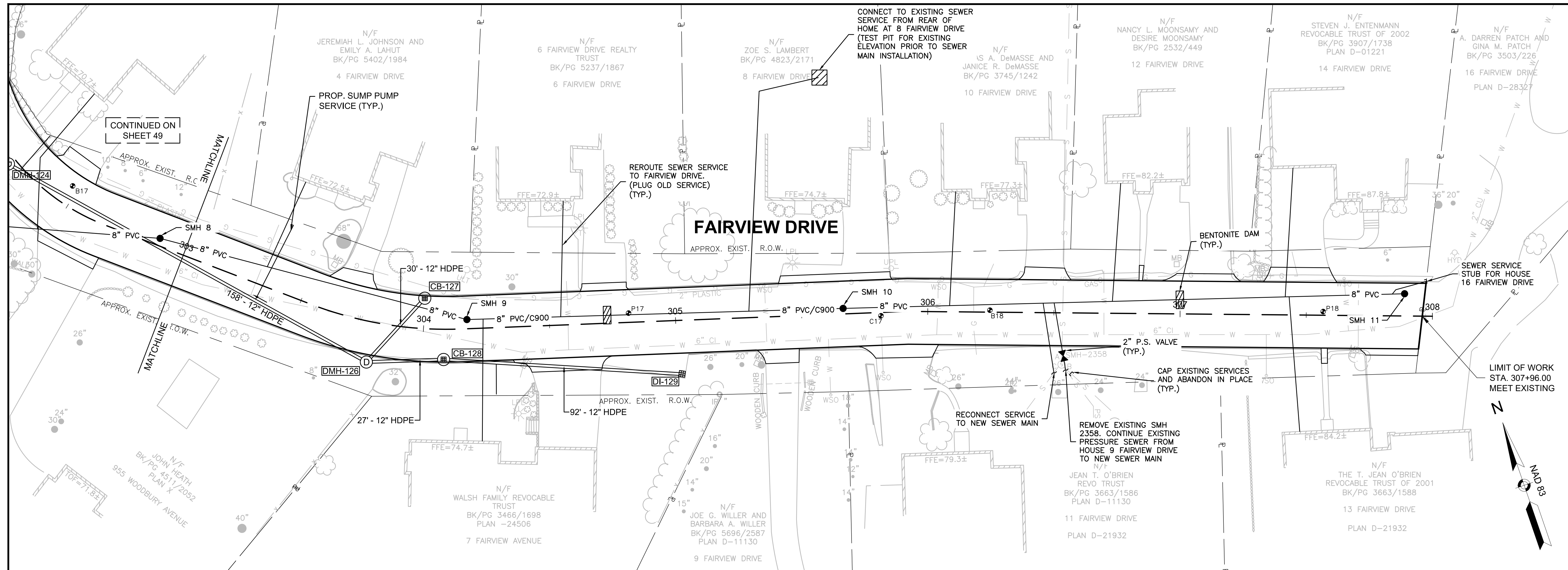


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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

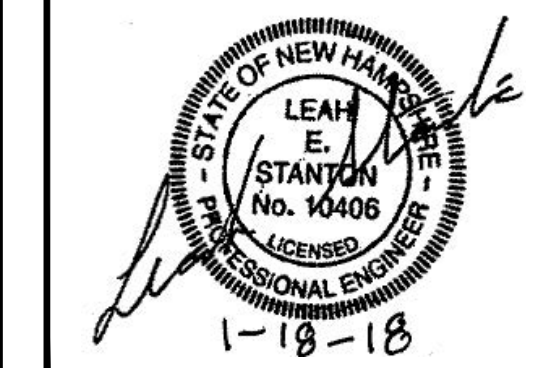
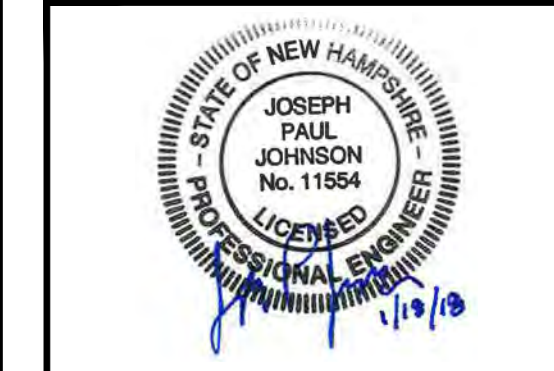
REVISIONS	
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2/5/2018
DRAWN/DESIGN BY: CLS/TLT
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UTILITY PLAN
& PROFILE -
FAIRVIEW
DRIVE
HORIZ: 1" = 20'
VERT: 1" = 4'
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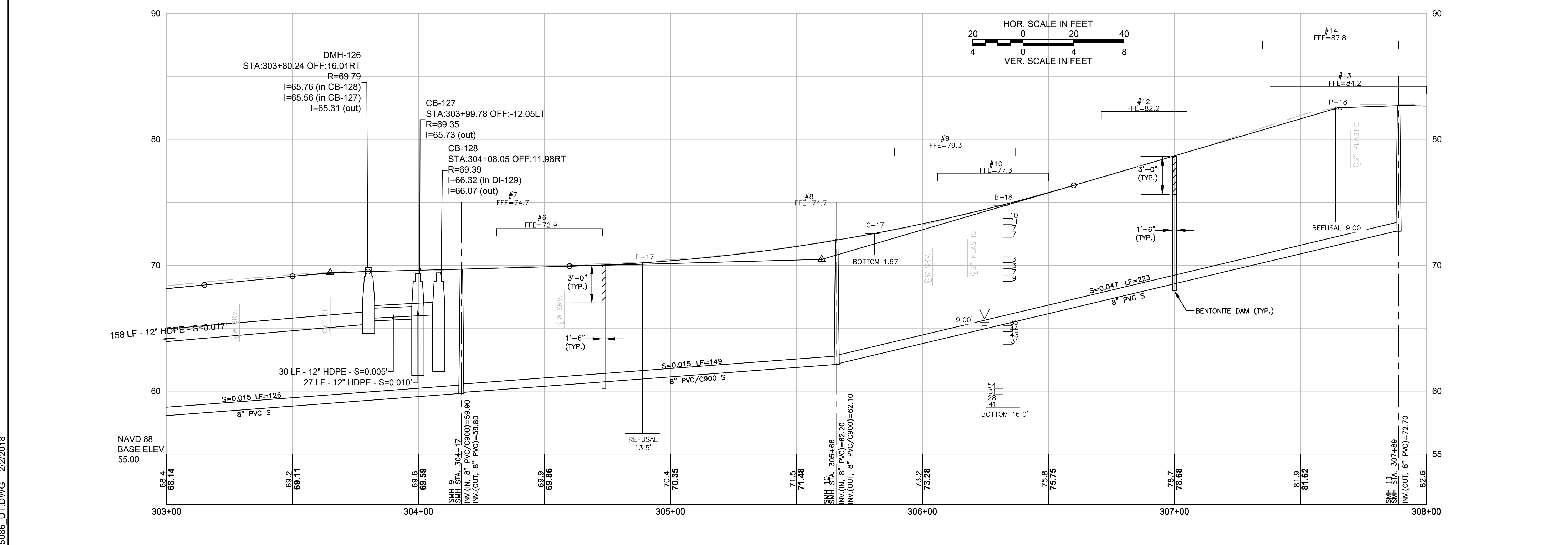


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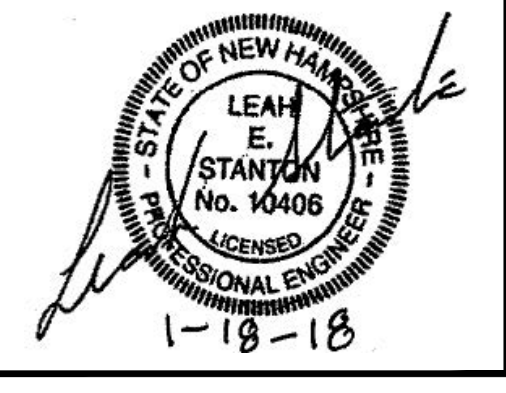
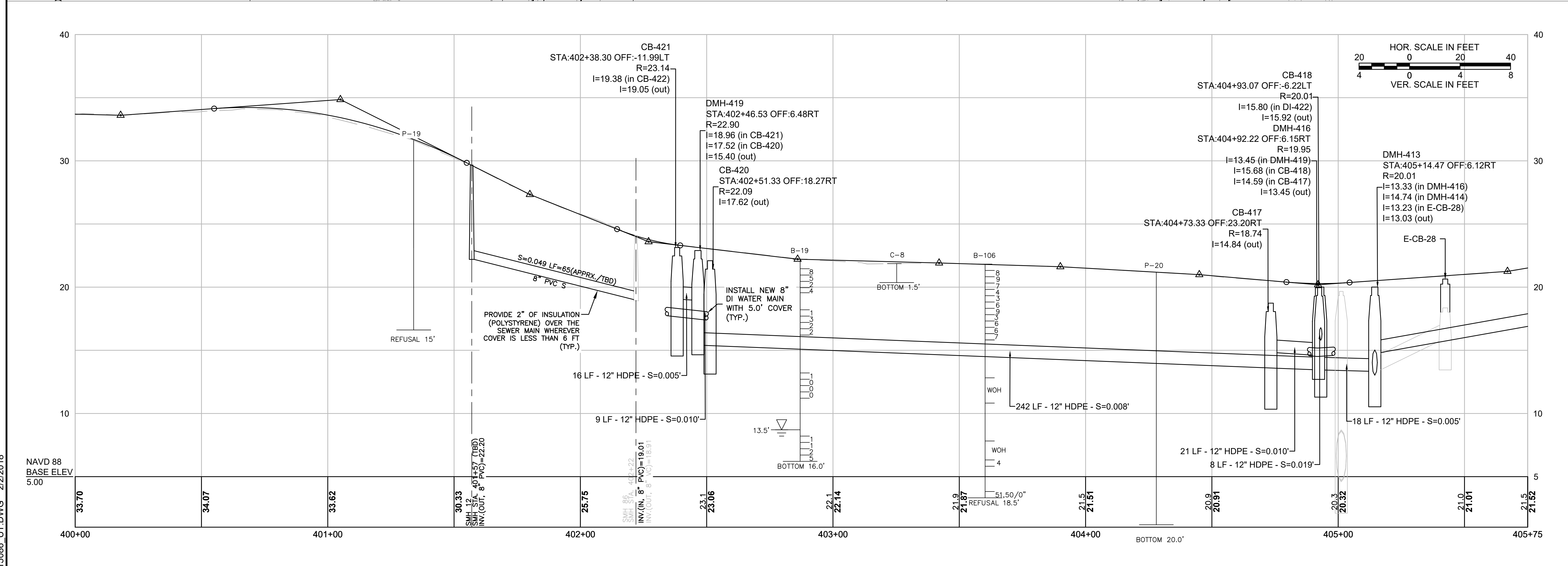
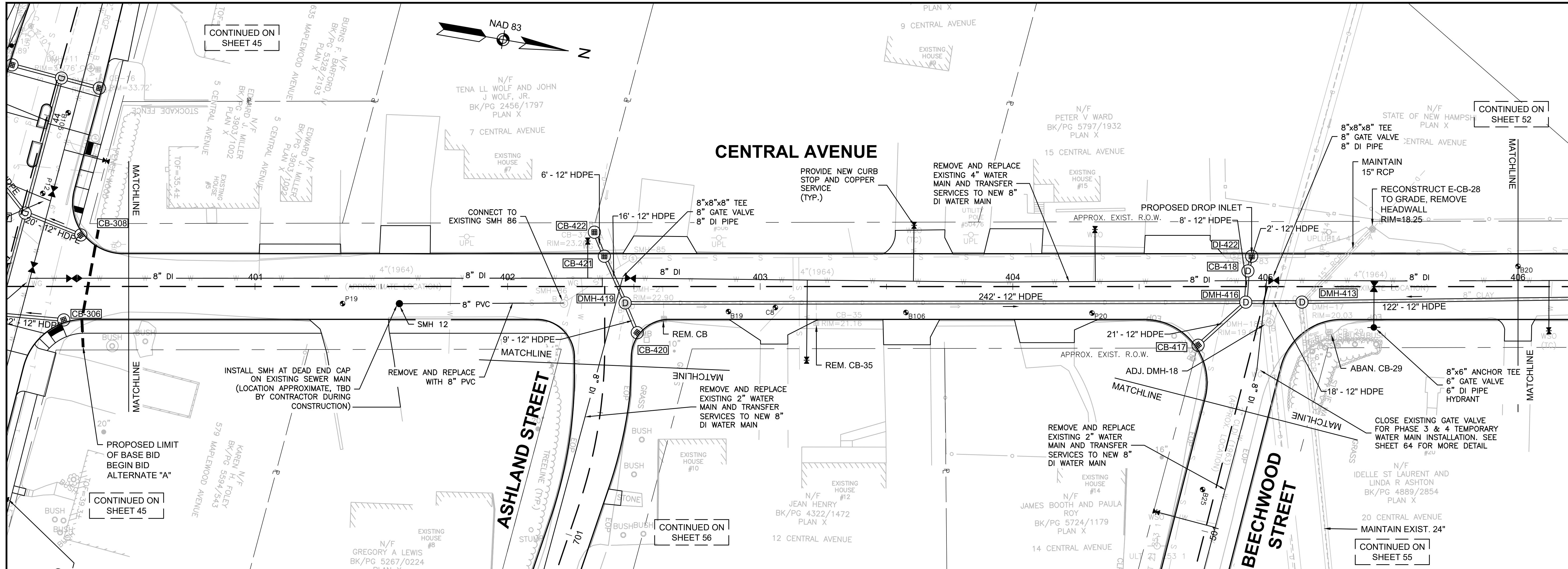
**IMPROVEMENTS TO MAPLEWOOD
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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

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REVISION	DATE

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**UTILITY PLAN
& PROFILE -
FAIRVIEW
DRIVE**
HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00
50 OF 184



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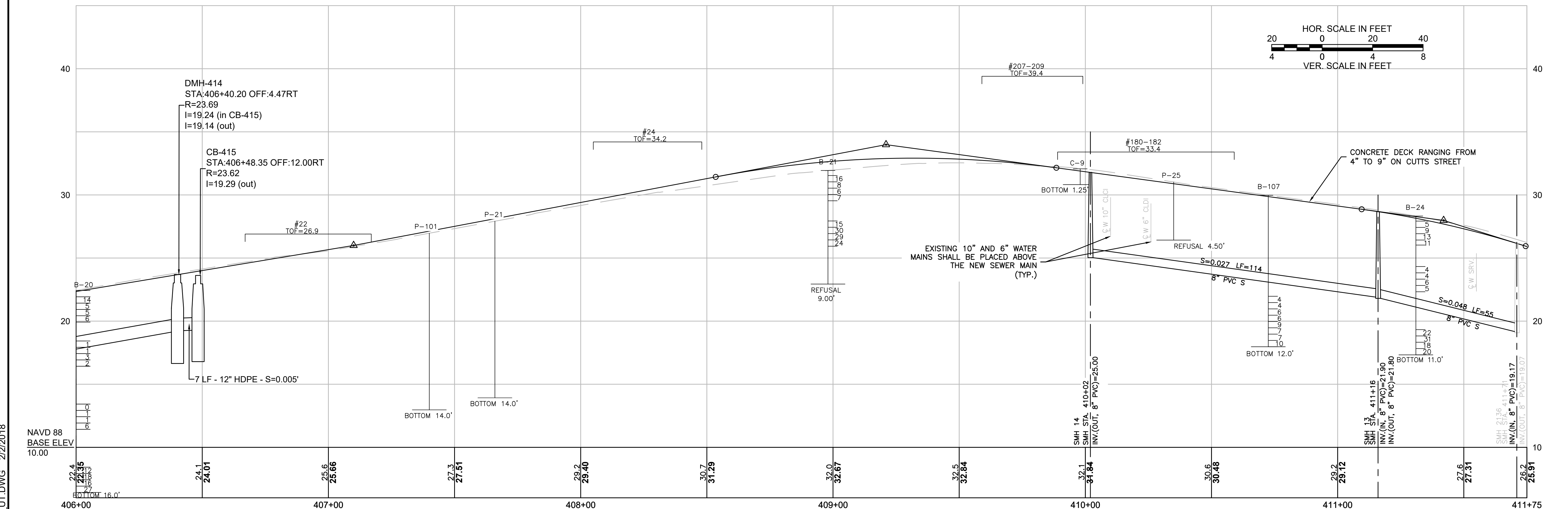
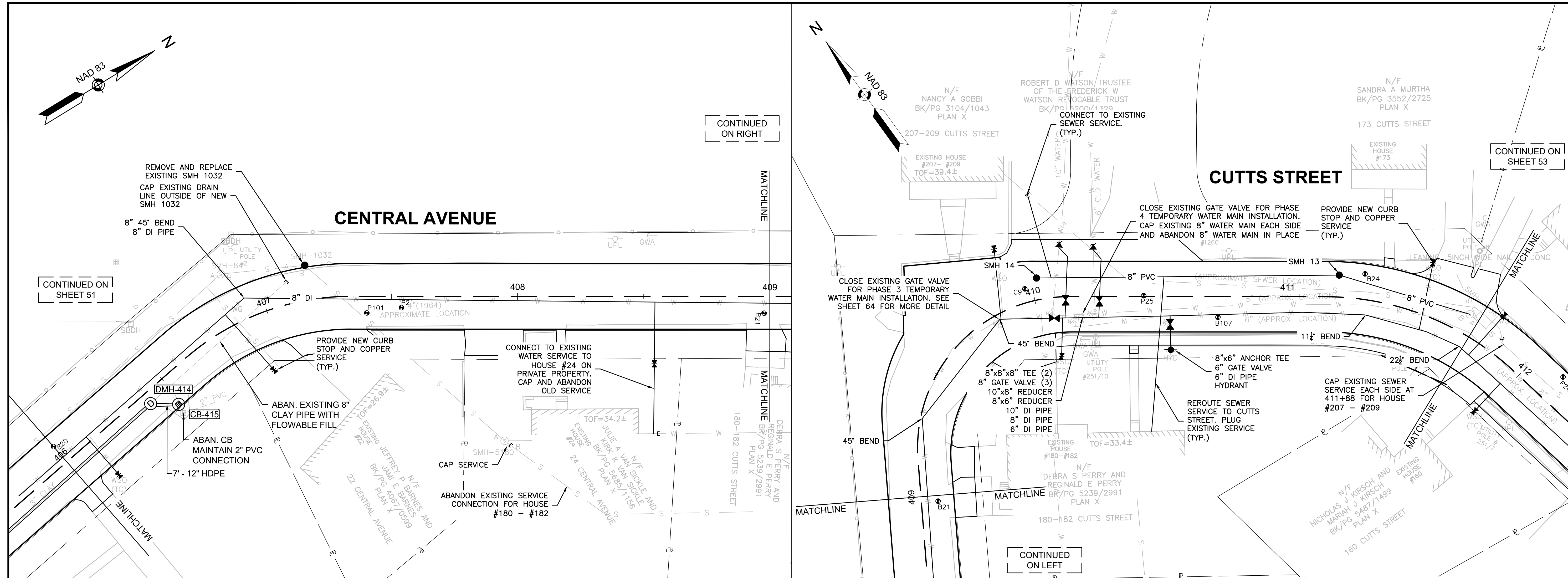
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
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 PORTSMOUTH, NH**

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REVISION	DATE

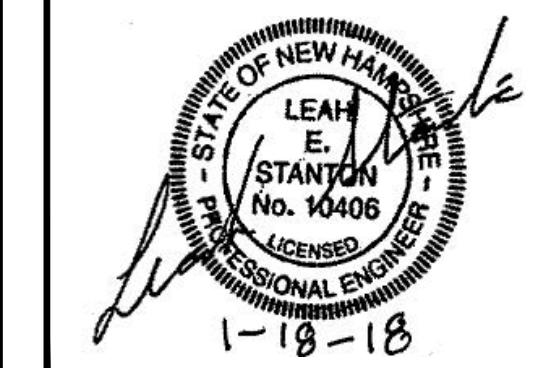
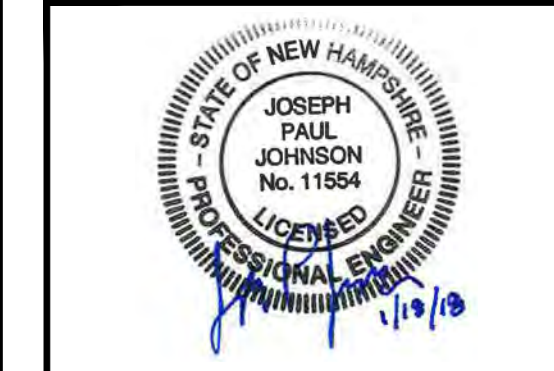
**UTILITY PLAN & PROFILE -
 CENTRAL AVENUE**

HORIZ: 1" = 20'
 VERT: 1" = 4'



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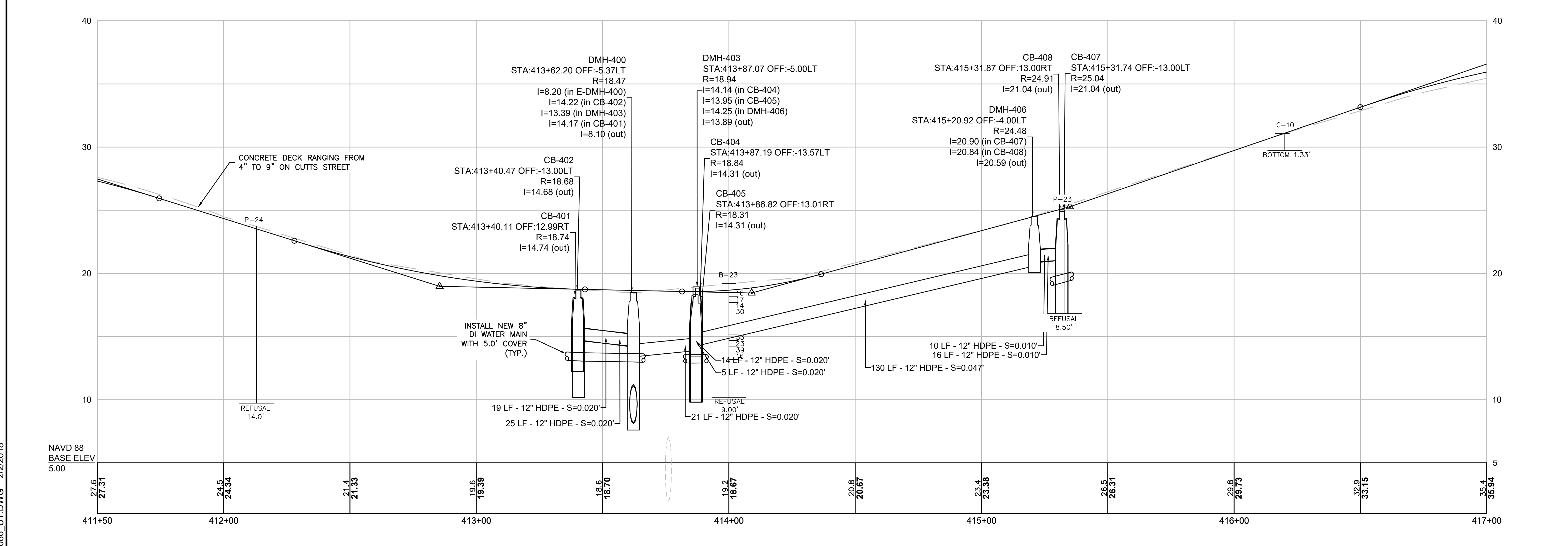
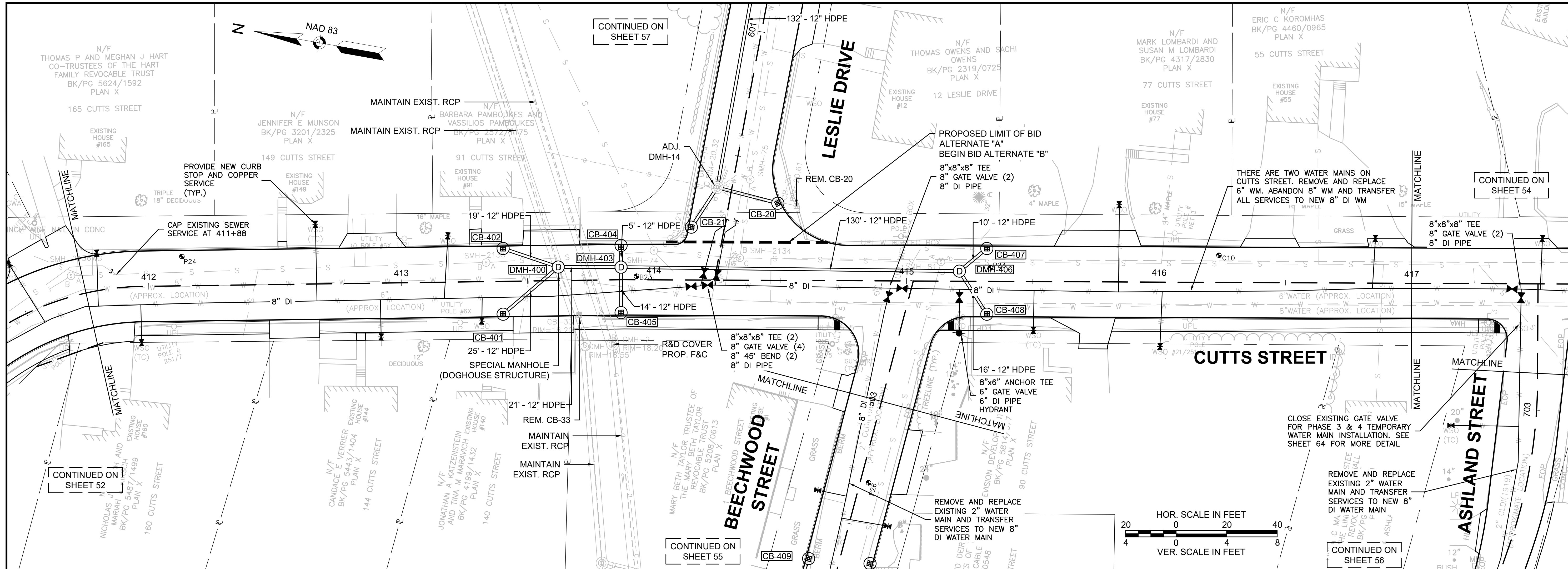
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REVISION	DATE

**UTILITY PLAN & PROFILE -
 CENTRAL &
 CUTTS**

HORIZ: 1" = 20'
 VERT: 1" = 4'

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JOSEPH PAUL JOHNSON
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LICENSED PROFESSIONAL ENGINEER

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1-18-18

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IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS	
REVISION	DATE

UTILITY PLAN & PROFILE - CUTTS STREET

HORIZ: 1" = 20'
VERT: 1" = 4'

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53 OF 184

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 PORTSMOUTH, NH**

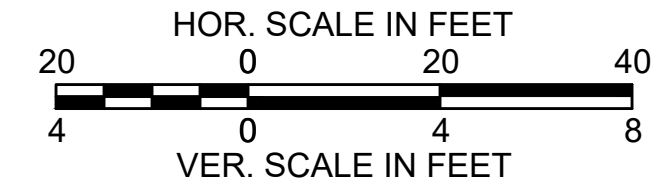
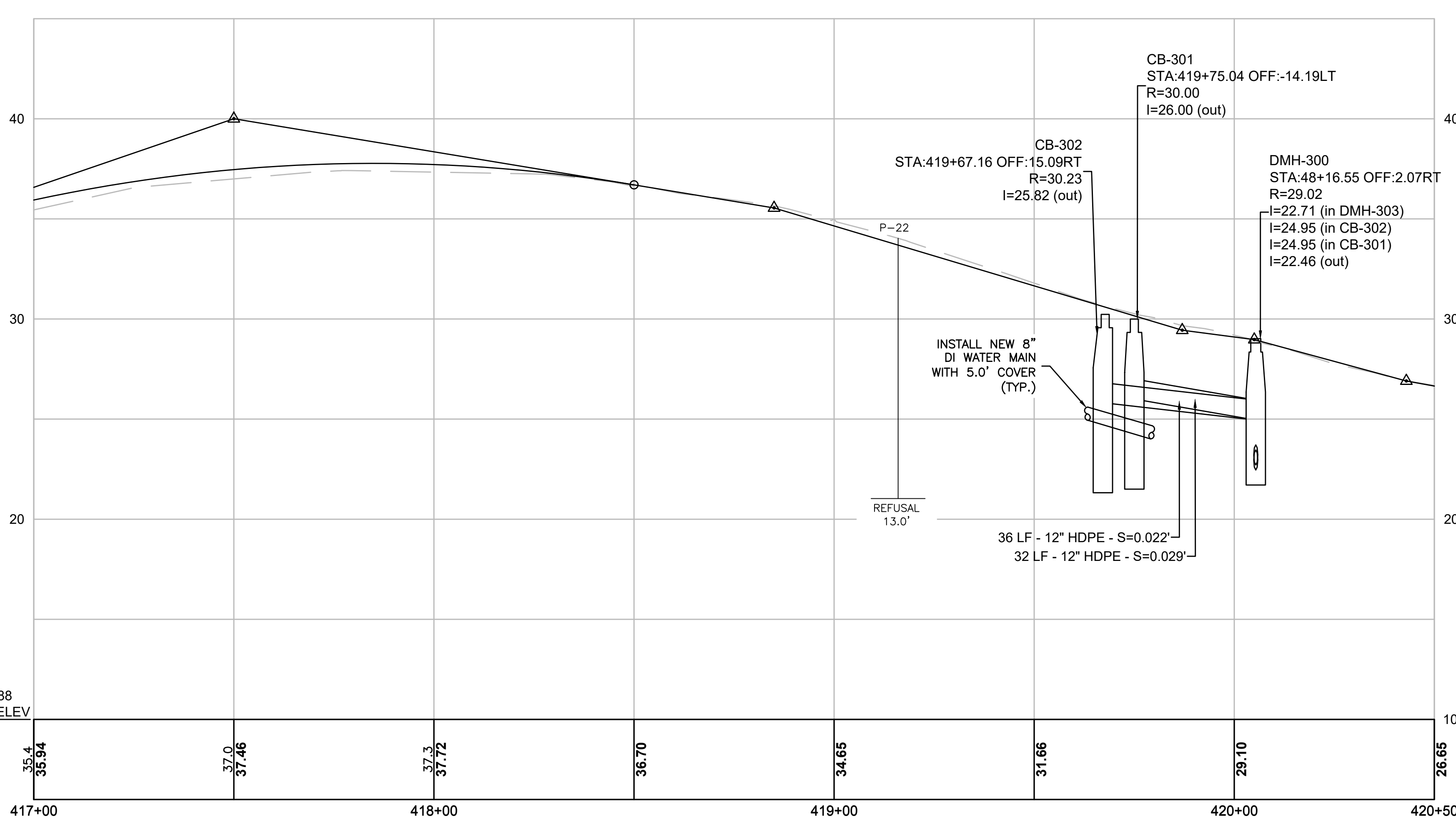
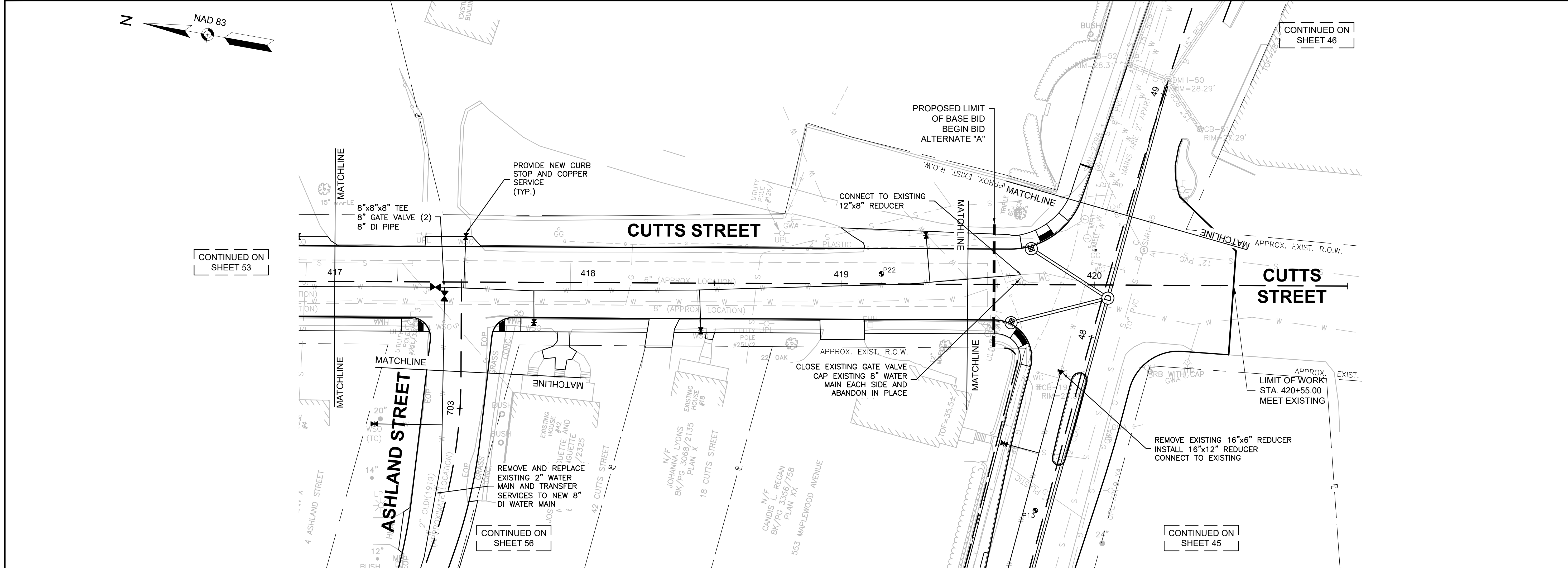
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2015086.00

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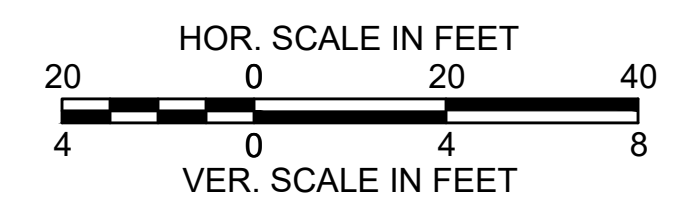
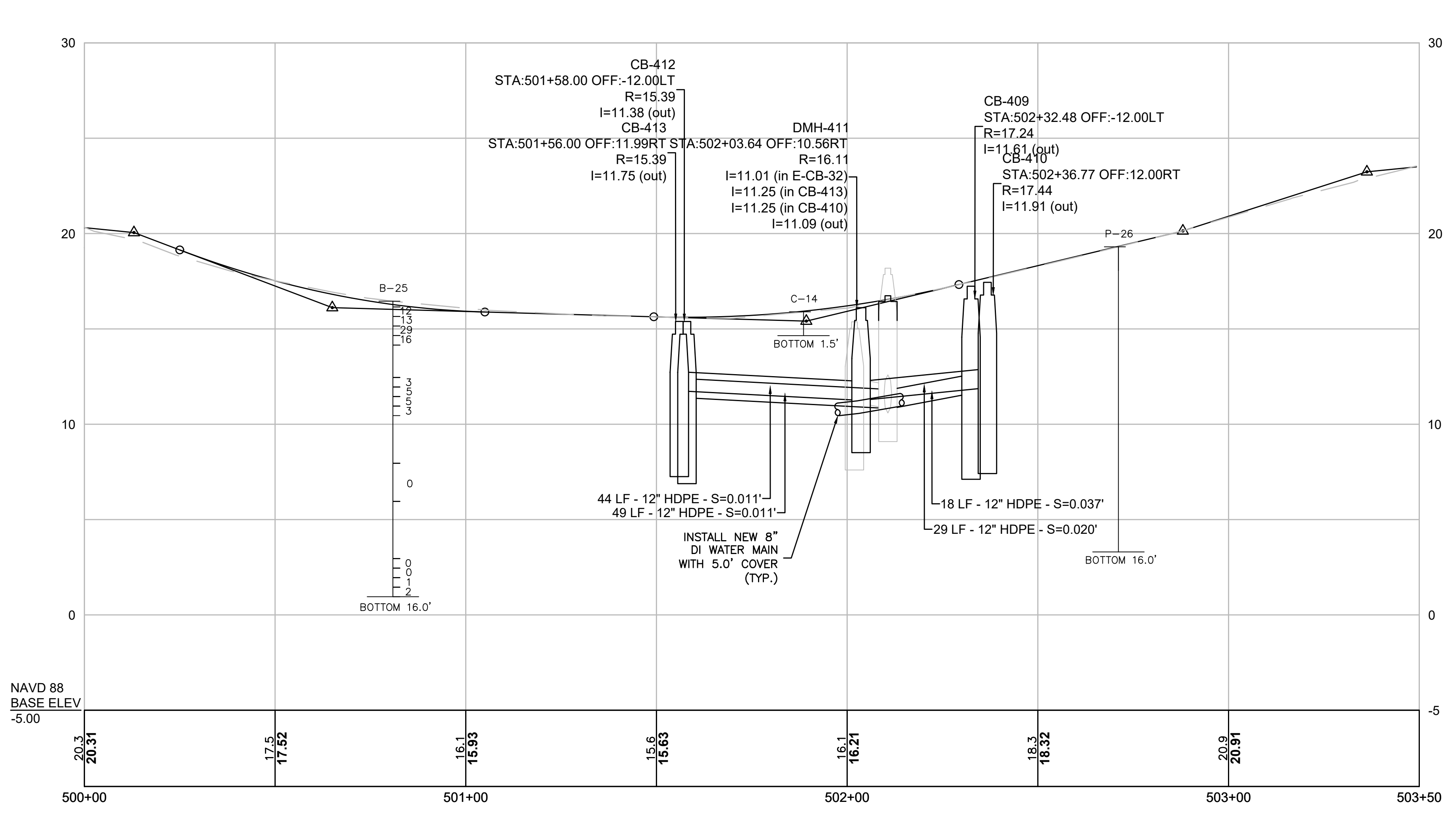
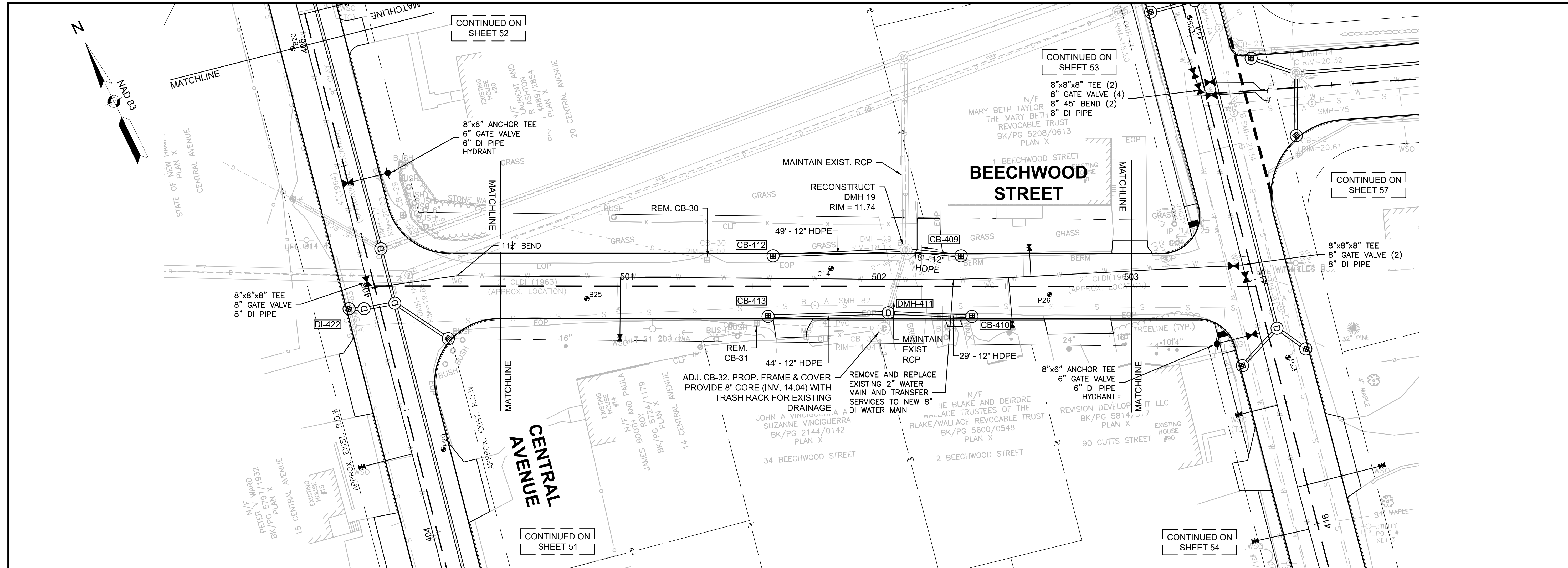


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 SHEET 53

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 SHEET 56

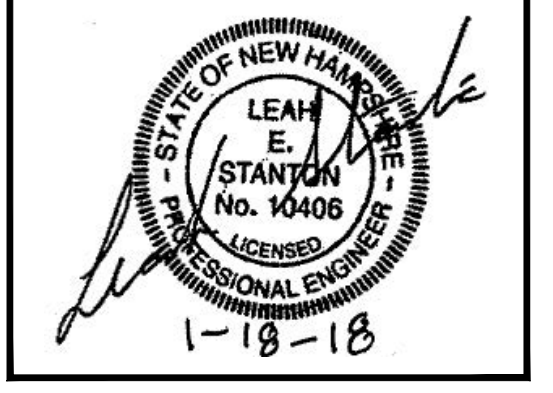
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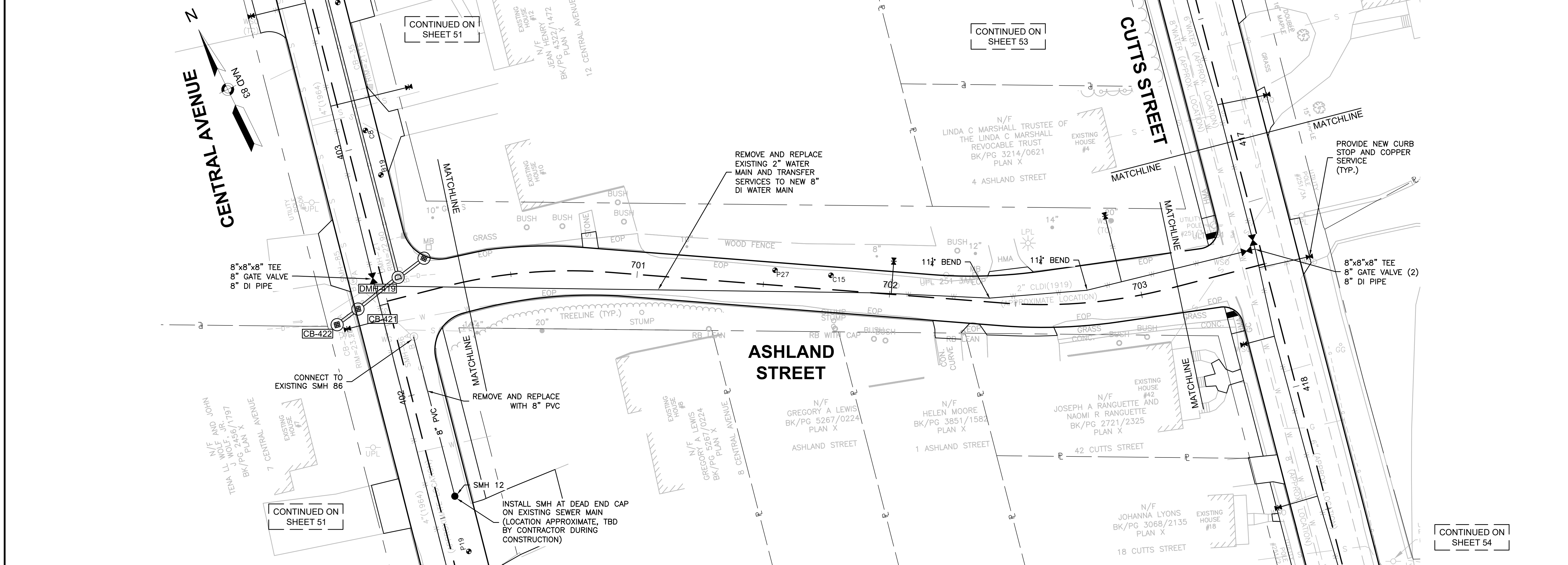
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS	
REVISION	DATE

UTILITY PLAN & PROFILE - BEECHWOOD STREET

HORIZ: 1" = 20'
 VERT: 1" = 4'

2015086.00



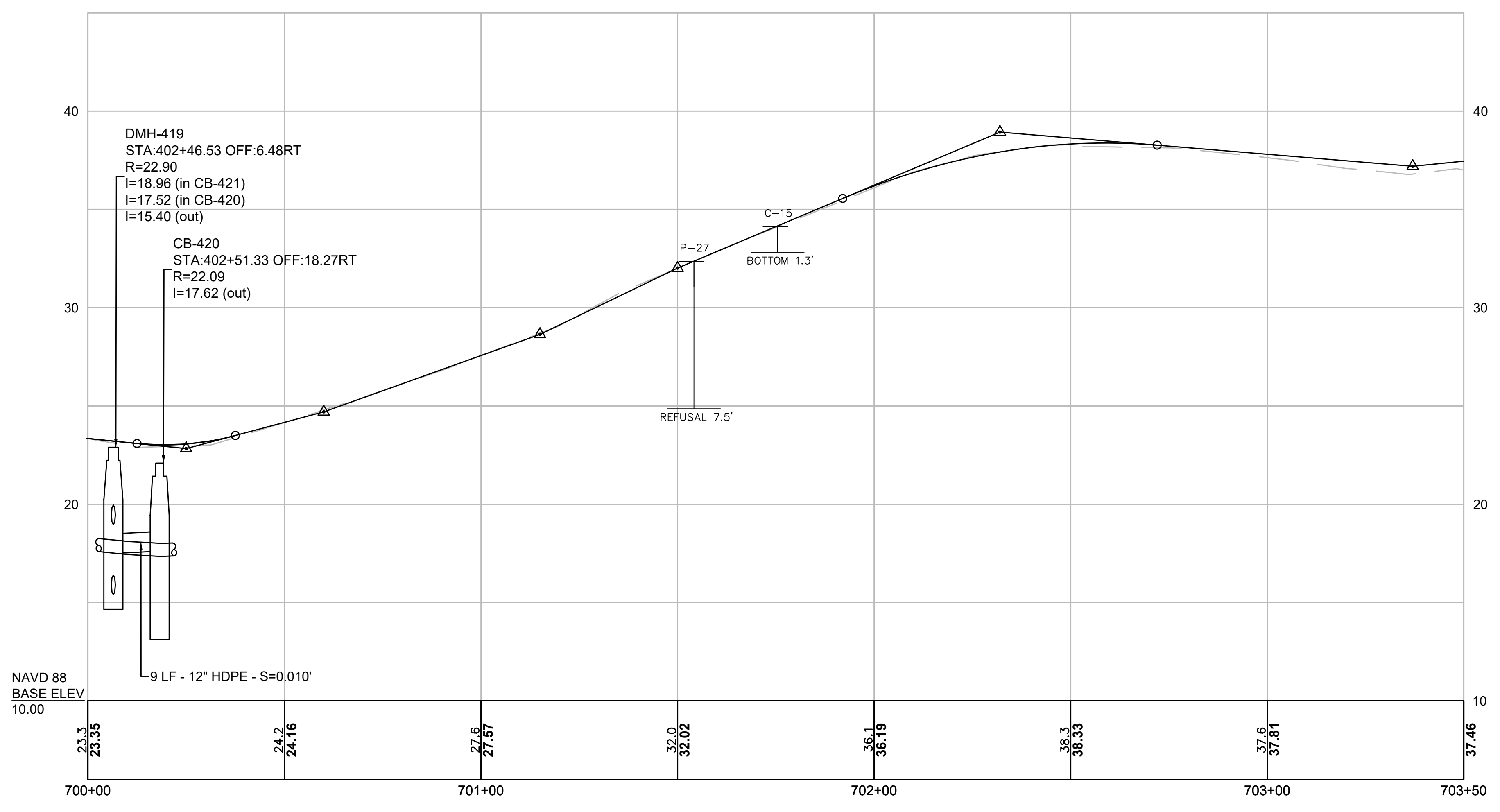
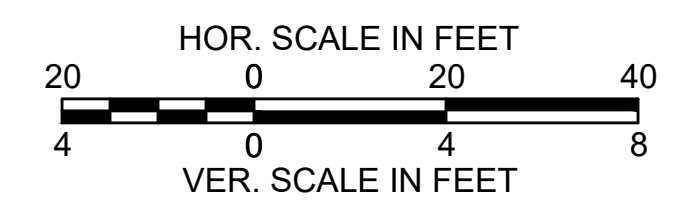
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



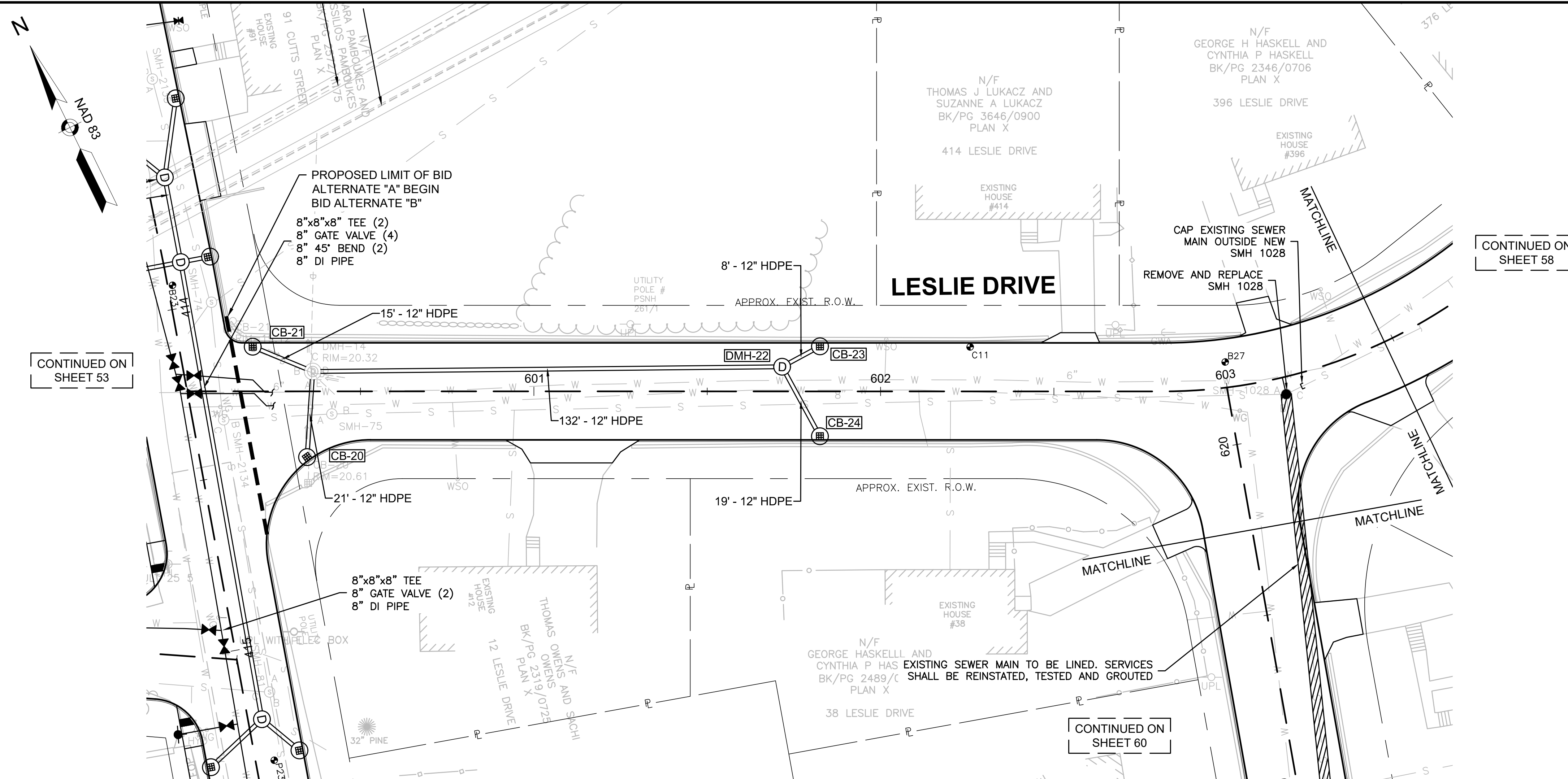
REVISIONS	
REVISION	DATE

**UTILITY PLAN & PROFILE -
 ASHLAND STREET**

HORIZ: 1" = 20'
 VERT: 1" = 4'

2015086.00

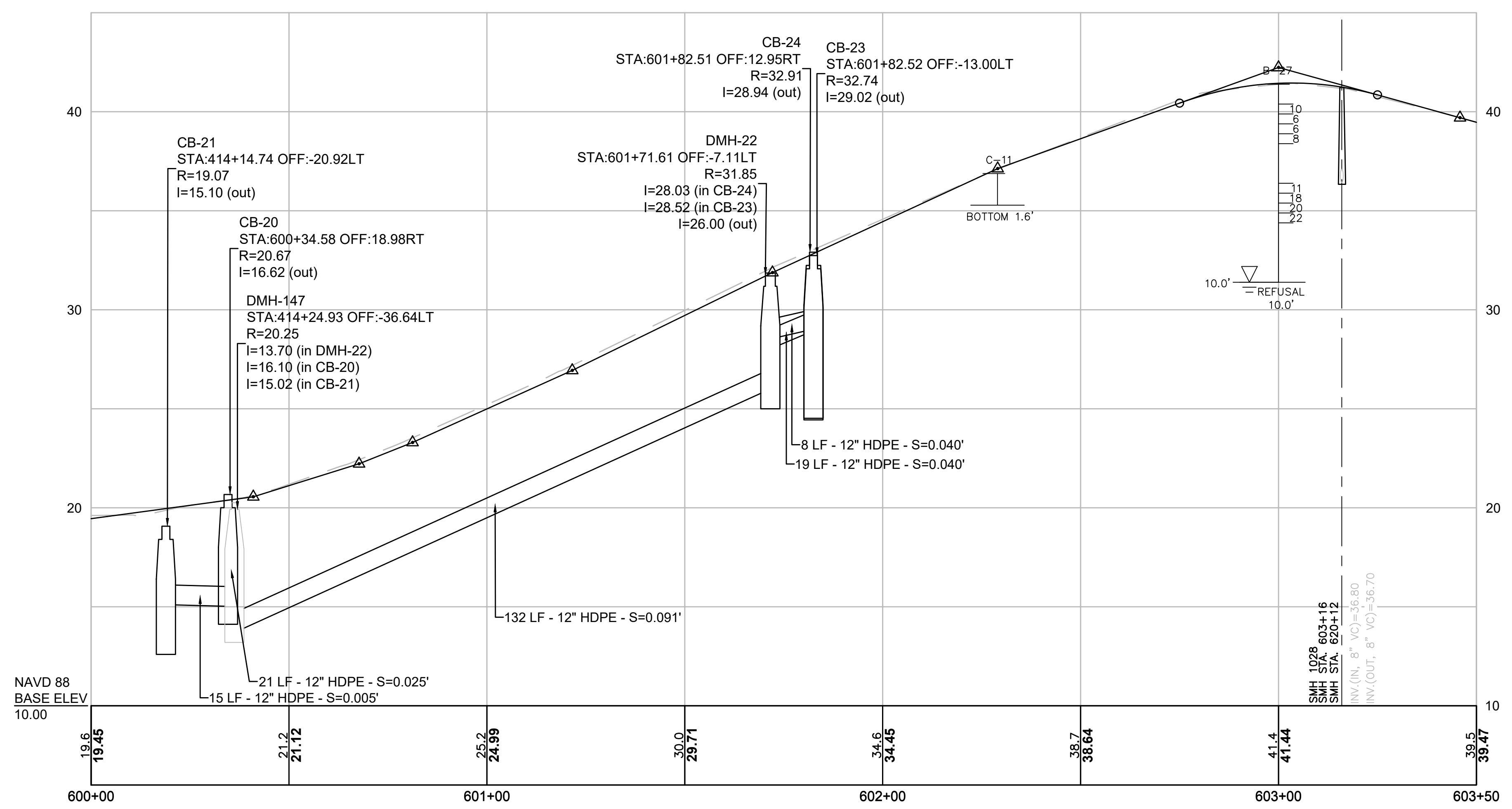
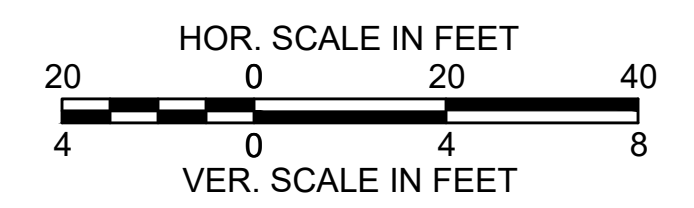
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CONTINUED ON SHEET 58

CONTINUED ON SHEET 53

CONTINUED ON SHEET 60



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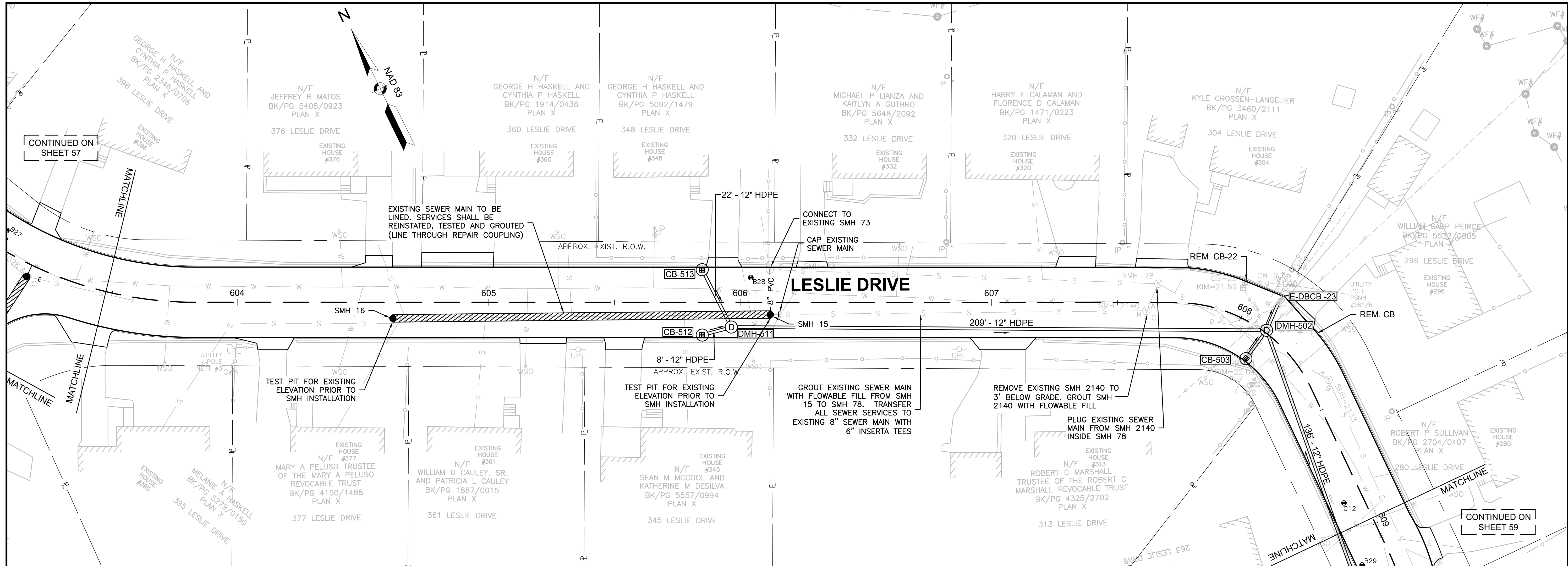


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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS	
REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS/TLT
CHECKED BY: JPJ/LES
UTILITY PLAN & PROFILE - LESLIE DRIVE
HORIZ: 1" = 20'
VERT: 1" = 4'
2015086.00



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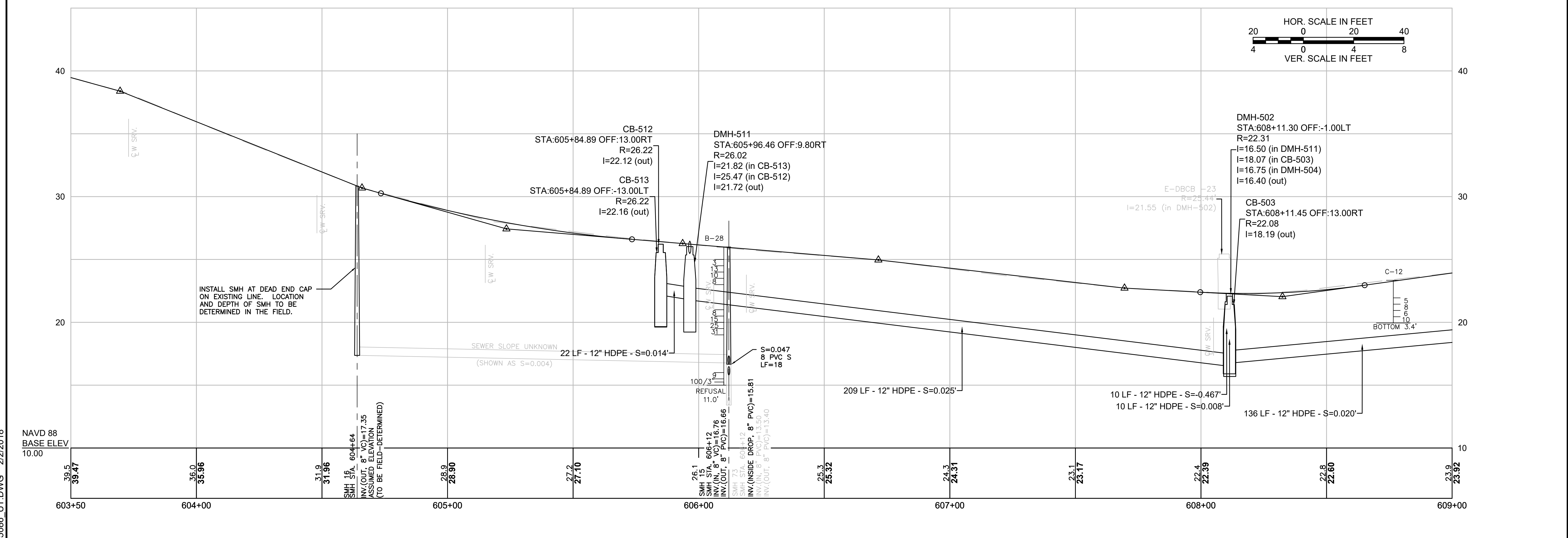


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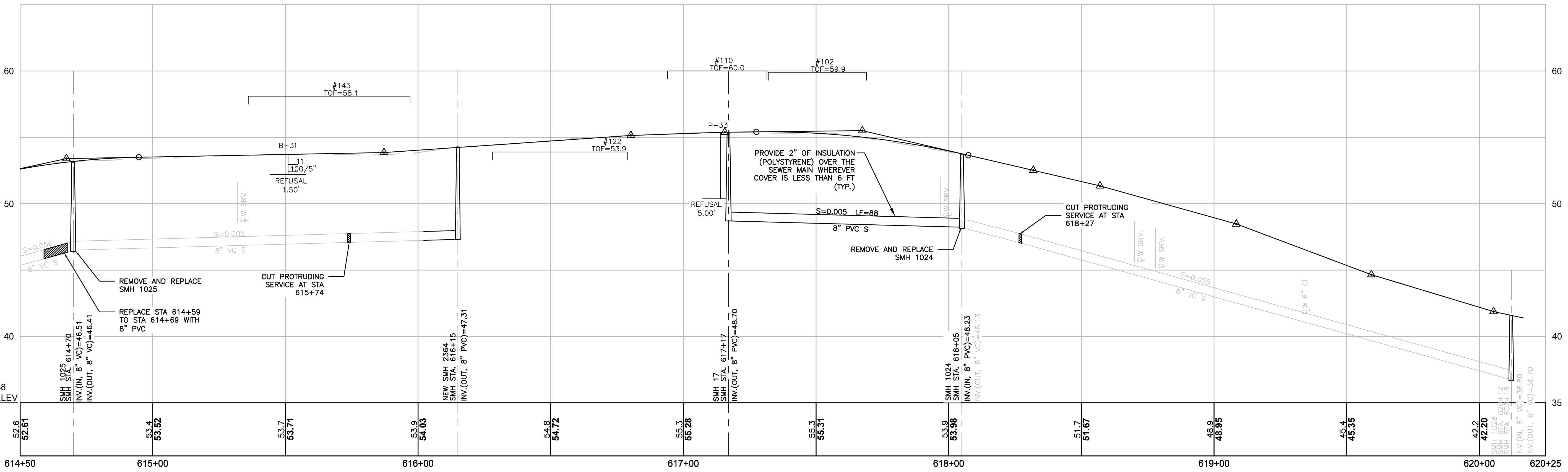
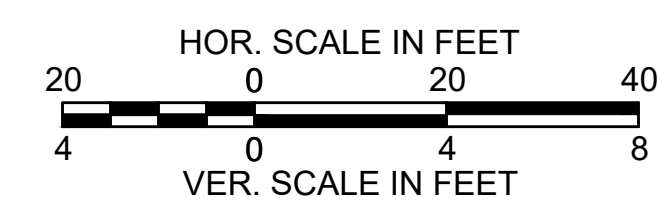
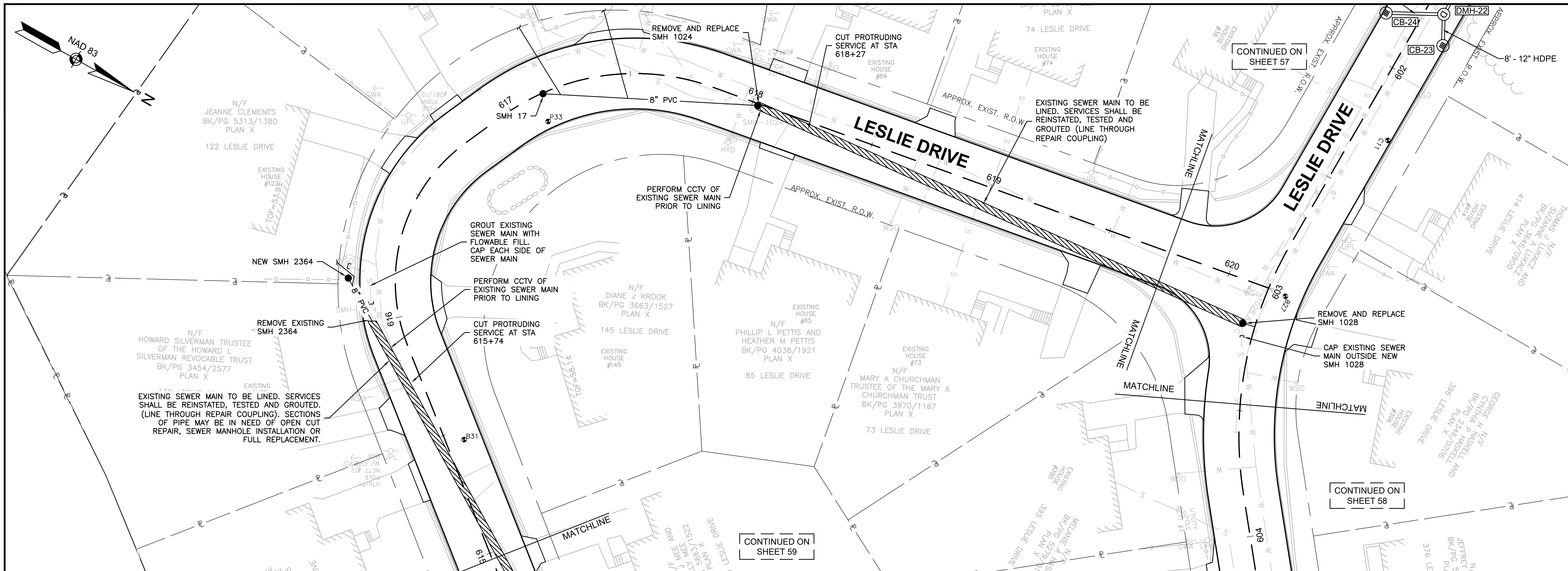
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS	
REVISION	DATE

2/5/2018
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MAPLEWOOD AVENUE
PORTSMOUTH, NH**

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REVISION	DATE

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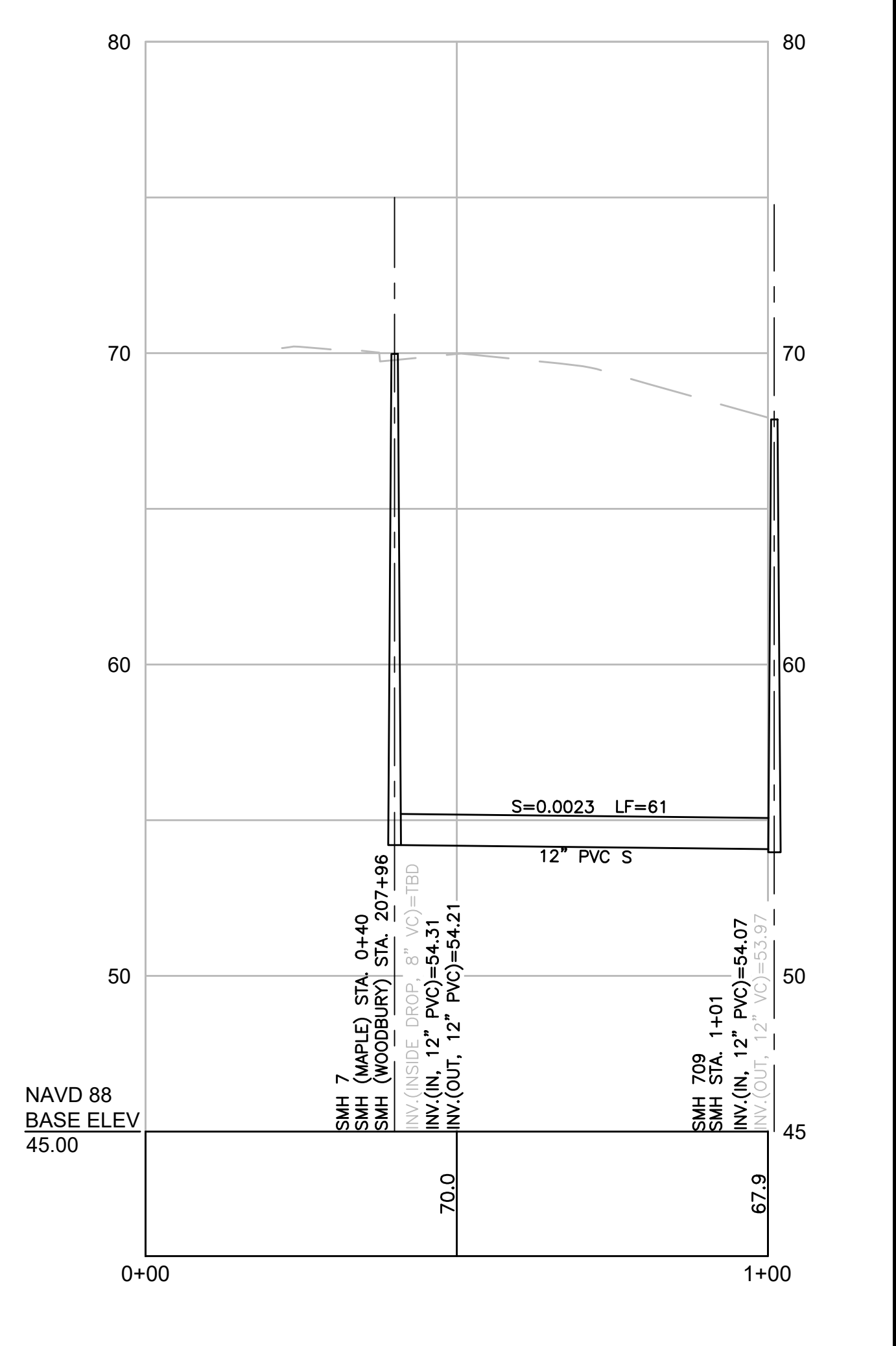
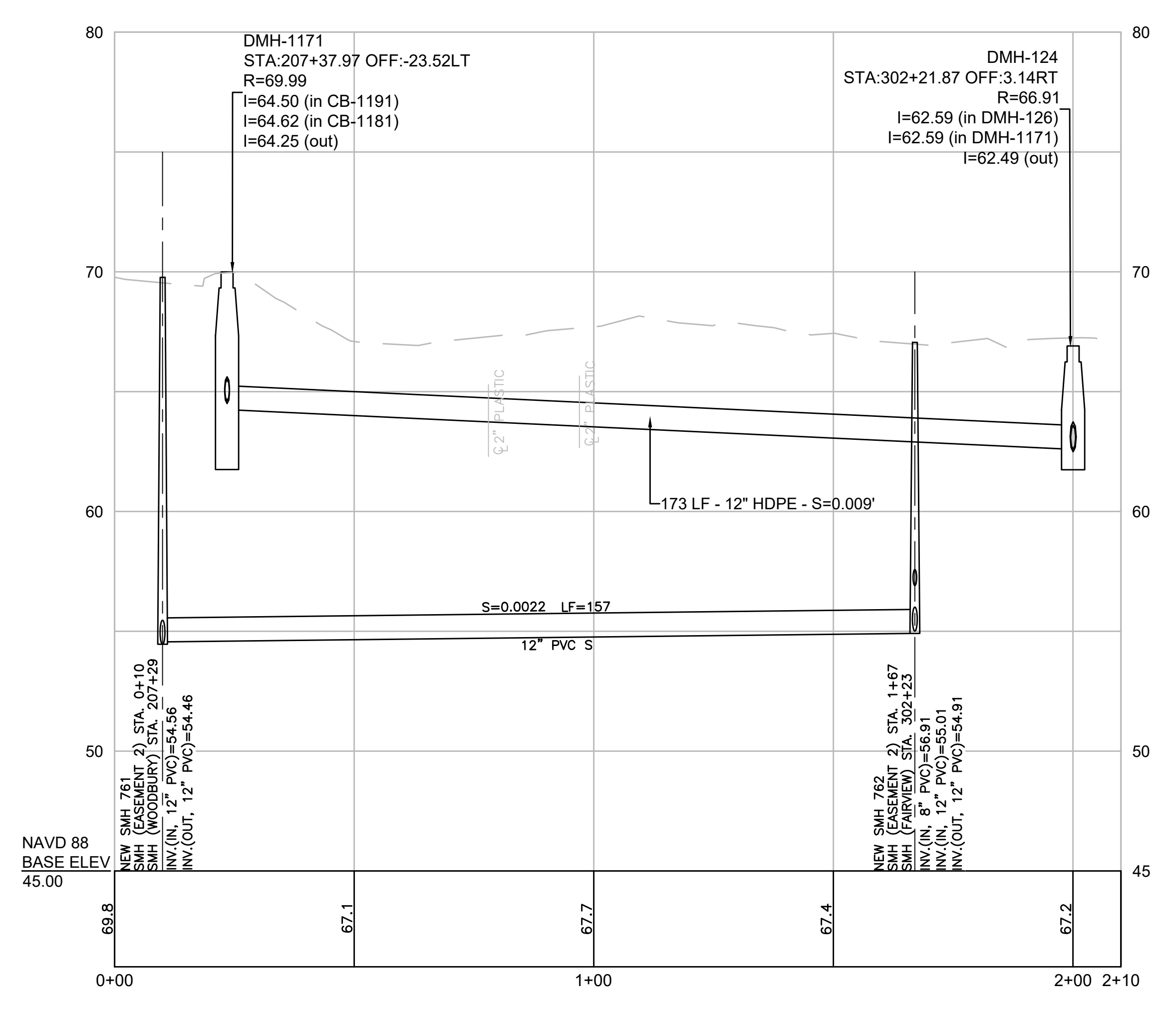
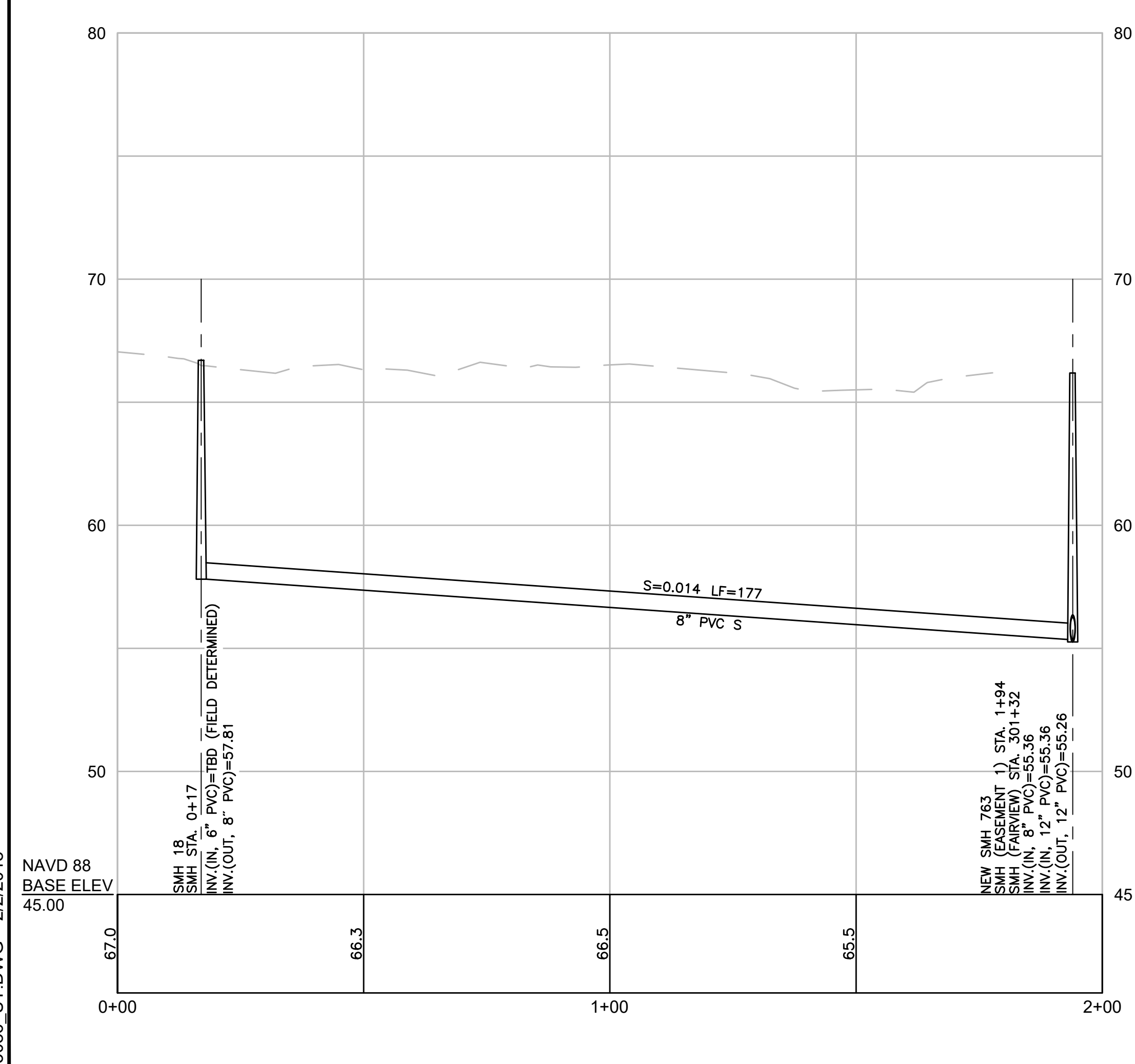
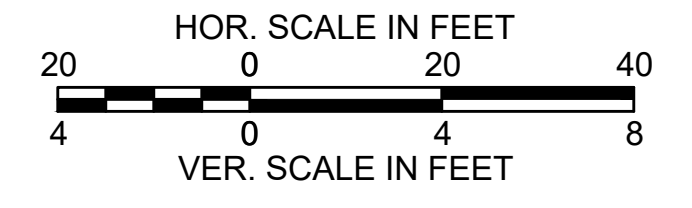
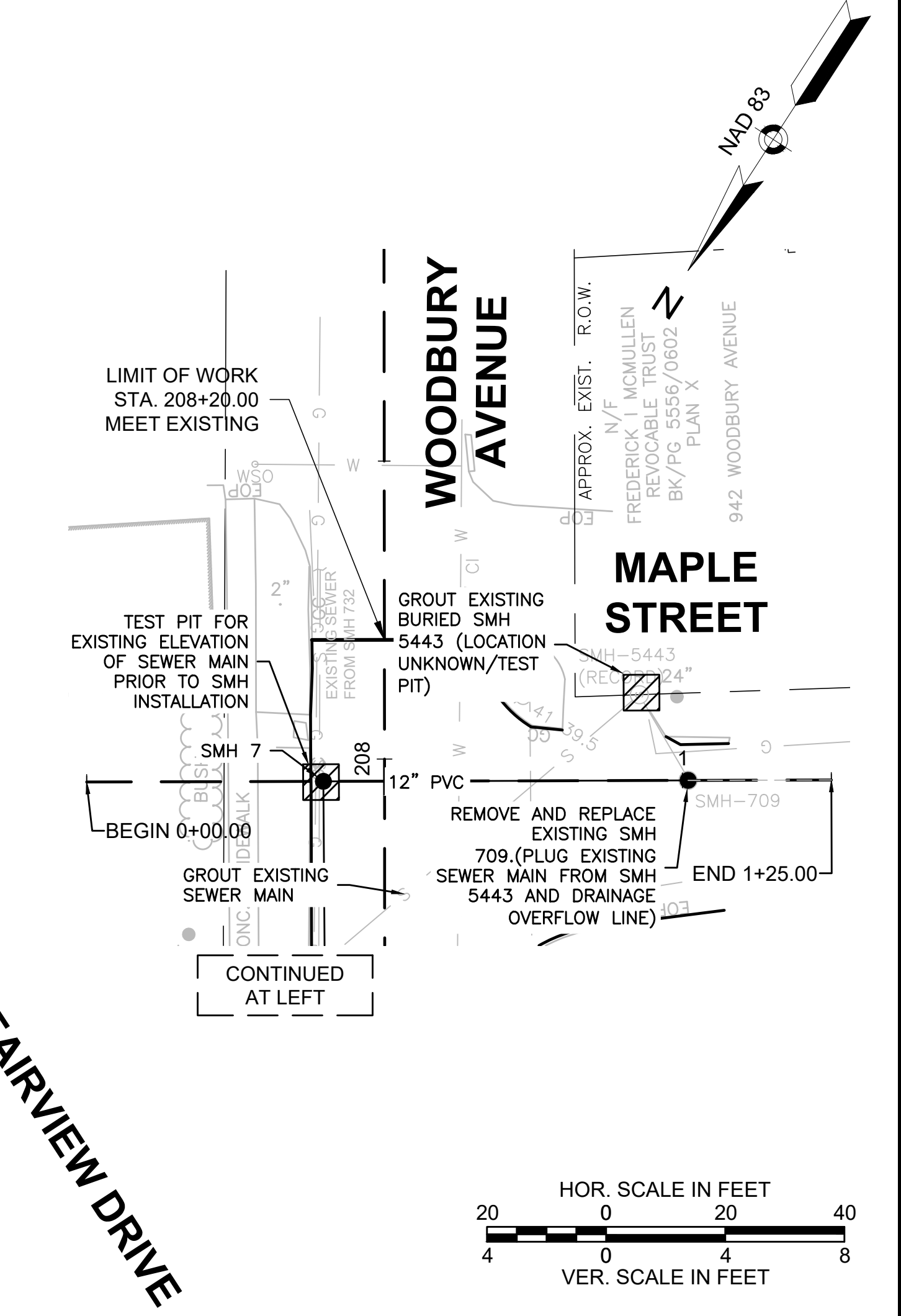
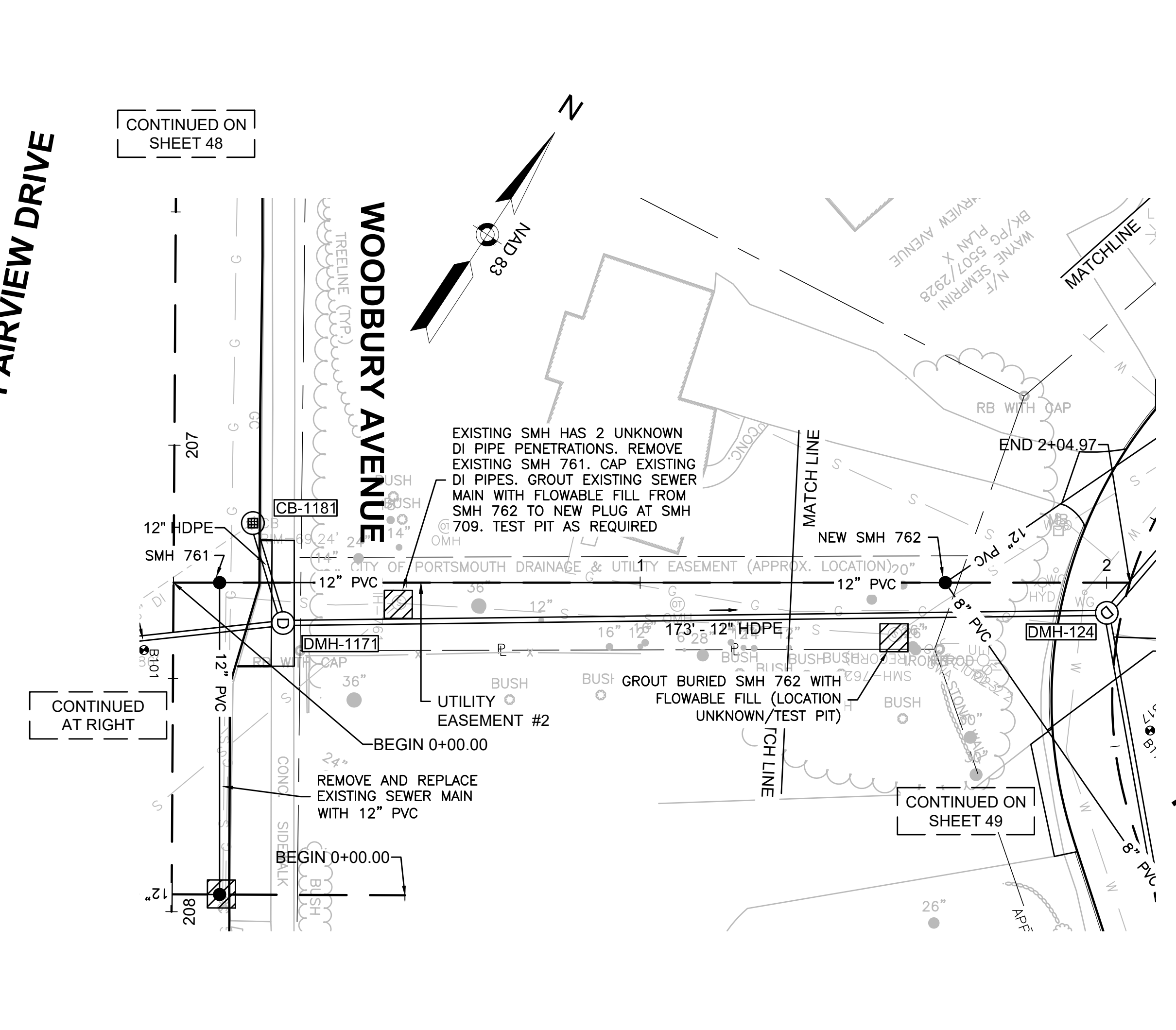
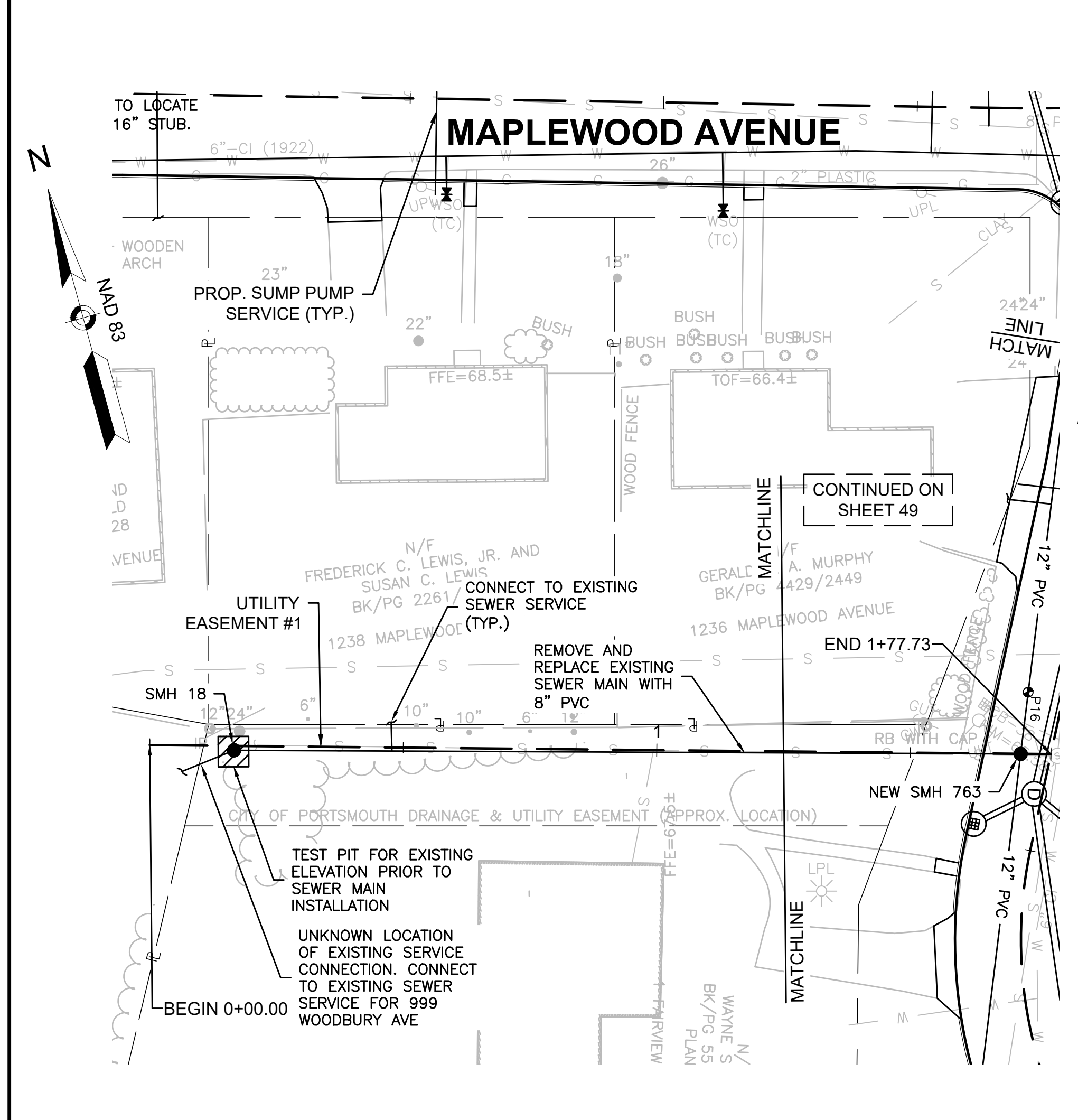
UTILITY PLAN & PROFILE - LESLIE DRIVE

HORIZ: 1" = 20'
VERT: 1" = 4'

2015086.00

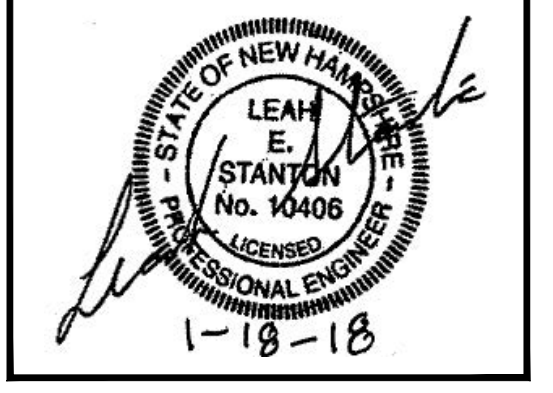
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS	
REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS/TLTD CHECKED BY: JPP/JLES

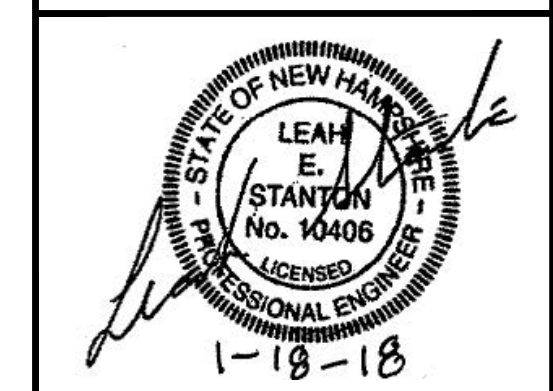
UTILITY PLAN & PROFILE - UTILITY EASEMENTS

HORIZ: 1" = 20'
VERT: 1" = 4'

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15086_UT.DWG 2/2/2018



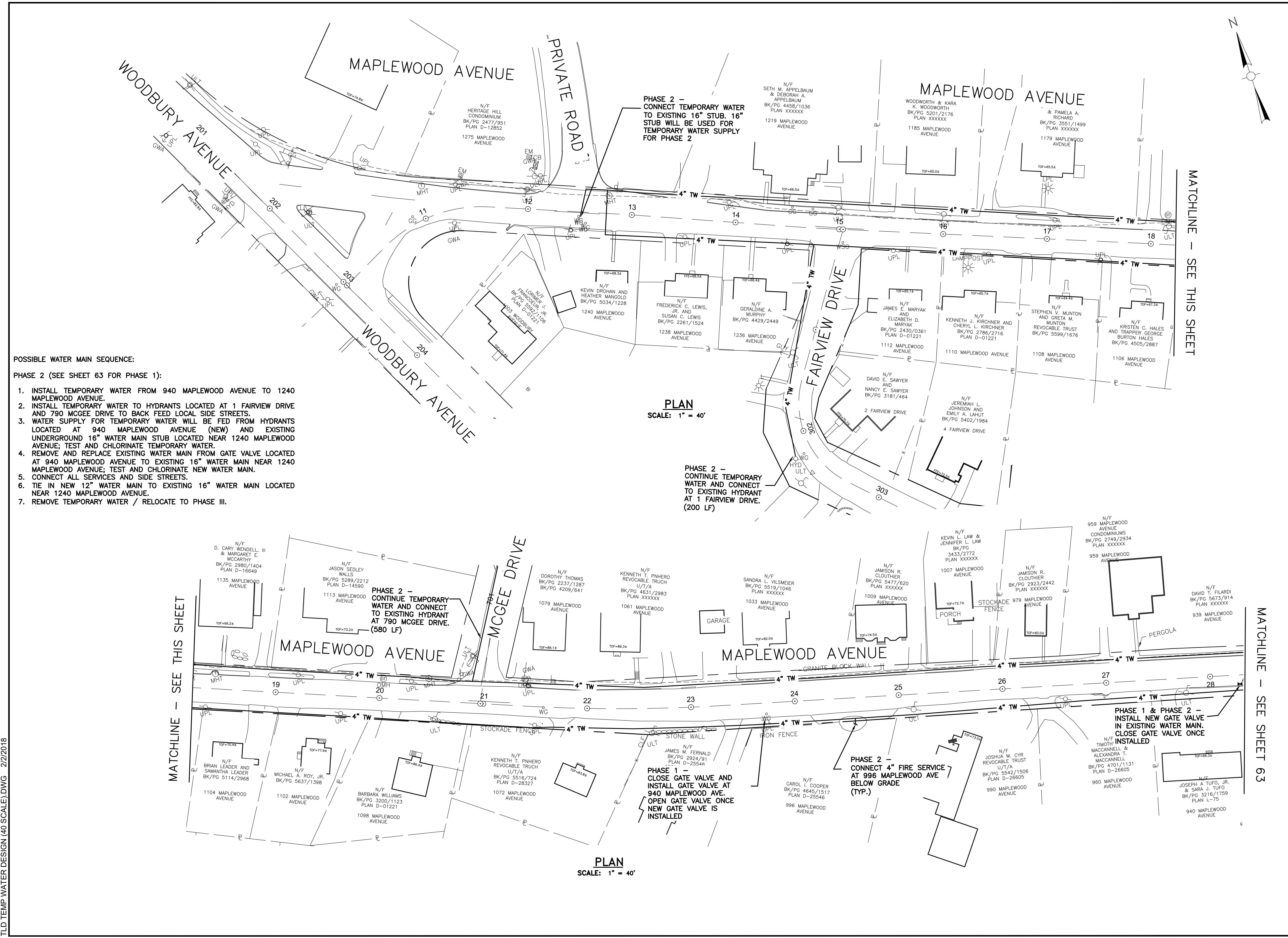
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: TLD
 CHECKED BY: LES

TEMPORARY WATER - MAPLEWOOD AVENUE
 SCALE: HORIZ: 1" = 40'
 VERT: 1" = 4'
 2015086.00
 62 OF 184



- POSSIBLE WATER MAIN SEQUENCE:
- PHASE 2 (SEE SHEET 63 FOR PHASE 1):
1. INSTALL TEMPORARY WATER FROM 940 MAPLEWOOD AVENUE TO 1240 MAPLEWOOD AVENUE.
 2. INSTALL TEMPORARY WATER TO HYDRANTS LOCATED AT 1 FAIRVIEW DRIVE AND 790 MCGEE DRIVE TO BACK FEED LOCAL SIDE STREETS.
 3. WATER SUPPLY FOR TEMPORARY WATER WILL BE FED FROM HYDRANTS LOCATED AT 940 MAPLEWOOD AVENUE (NEW) AND EXISTING UNDERGROUND 16" WATER MAIN STUB LOCATED NEAR 1240 MAPLEWOOD AVENUE; TEST AND CHLORINATE TEMPORARY WATER.
 4. REMOVE AND REPLACE EXISTING WATER MAIN FROM GATE VALVE LOCATED AT 940 MAPLEWOOD AVENUE TO EXISTING 16" WATER MAIN NEAR 1240 MAPLEWOOD AVENUE; TEST AND CHLORINATE NEW WATER MAIN.
 5. CONNECT ALL SERVICES AND SIDE STREETS.
 6. TIE IN NEW 12" WATER MAIN TO EXISTING 16" WATER MAIN LOCATED NEAR 1240 MAPLEWOOD AVENUE.
 7. REMOVE TEMPORARY WATER / RELOCATE TO PHASE III.

PHASE 2 -
 CONNECT TEMPORARY WATER TO EXISTING 16" STUB. 16" STUB WILL BE USED FOR TEMPORARY WATER SUPPLY FOR PHASE 2

PLAN
 SCALE: 1" = 40'

PHASE 2 -
 CONTINUE TEMPORARY WATER AND CONNECT TO EXISTING HYDRANT AT 1 FAIRVIEW DRIVE. (200 LF)

PHASE 2 -
 CONTINUE TEMPORARY WATER AND CONNECT TO EXISTING HYDRANT AT 790 MCGEE DRIVE. (580 LF)

PHASE 1 -
 CLOSE GATE VALVE AND INSTALL GATE VALVE AT 940 MAPLEWOOD AVE. OPEN GATE VALVE ONCE NEW GATE VALVE IS INSTALLED

PHASE 2 -
 CONNECT 4" FIRE SERVICE AT 996 MAPLEWOOD AVE BELOW GRADE (TYP.)

PHASE 1 & PHASE 2 -
 INSTALL NEW GATE VALVE IN EXISTING WATER MAIN. CLOSE GATE VALVE ONCE INSTALLED

PLAN
 SCALE: 1" = 40'

TLD TEMP WATER DESIGN (40 SCALE).DWG 2/2/2018

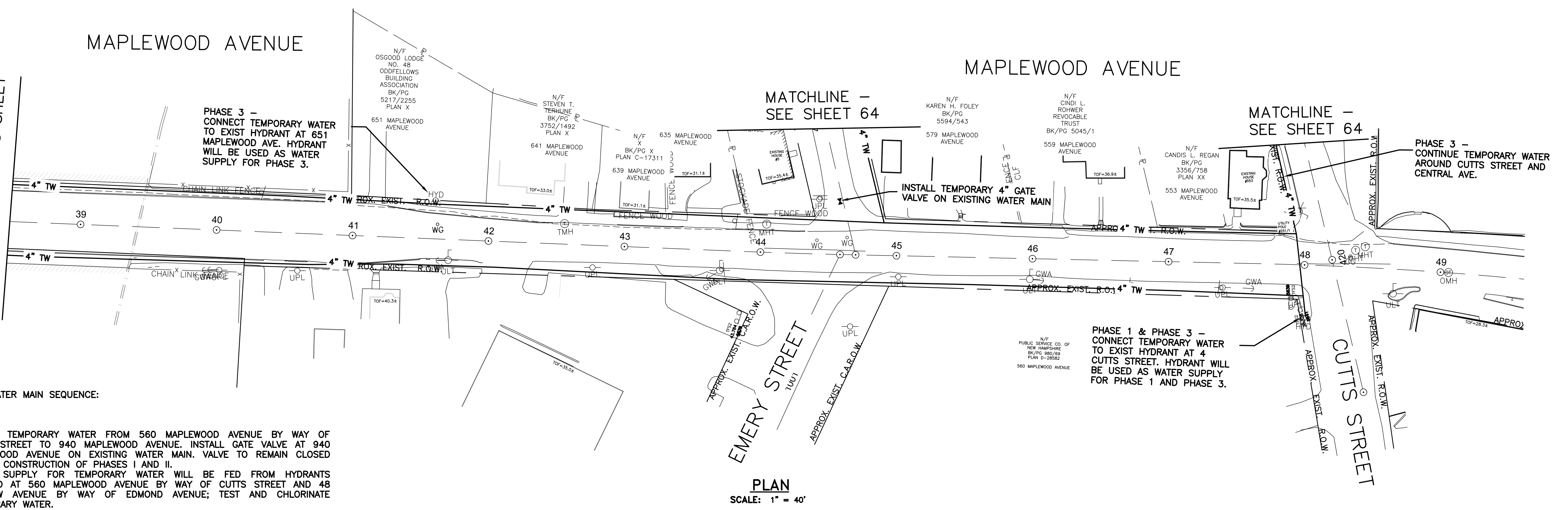
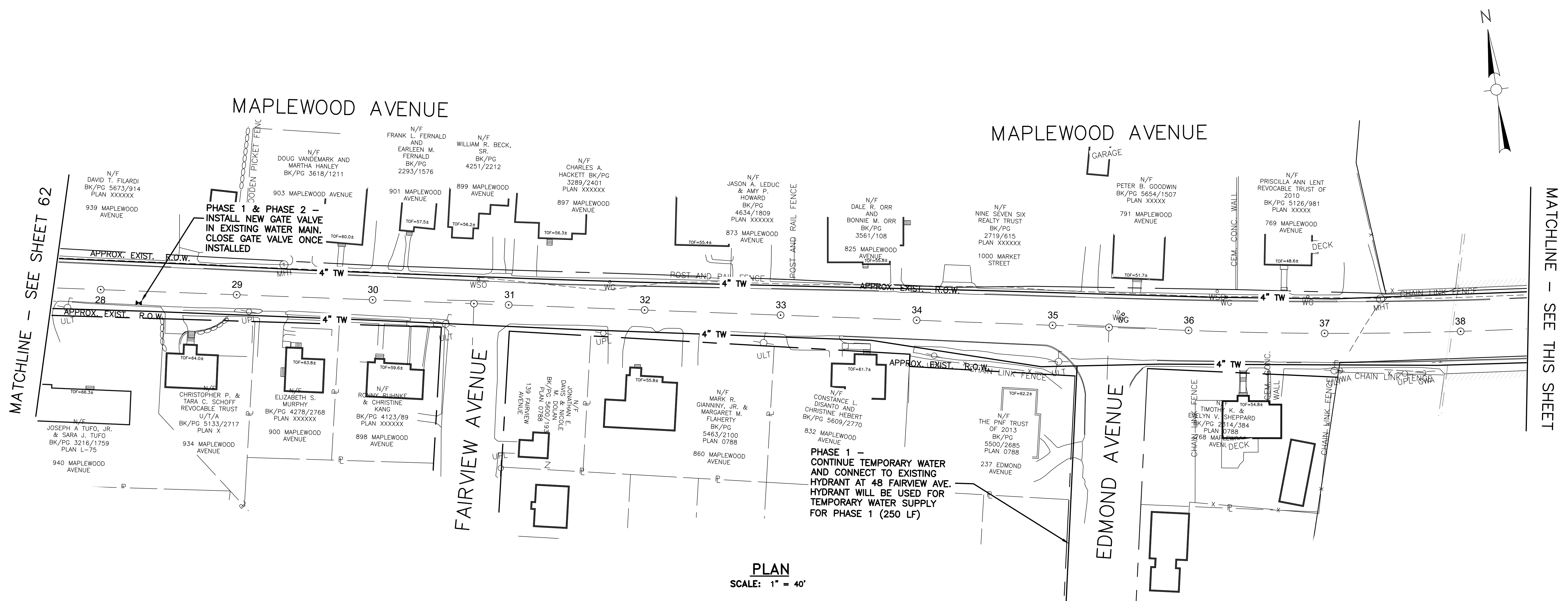


PREPARED FOR:
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

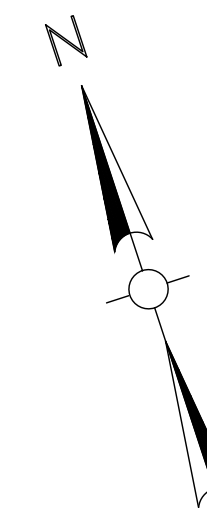
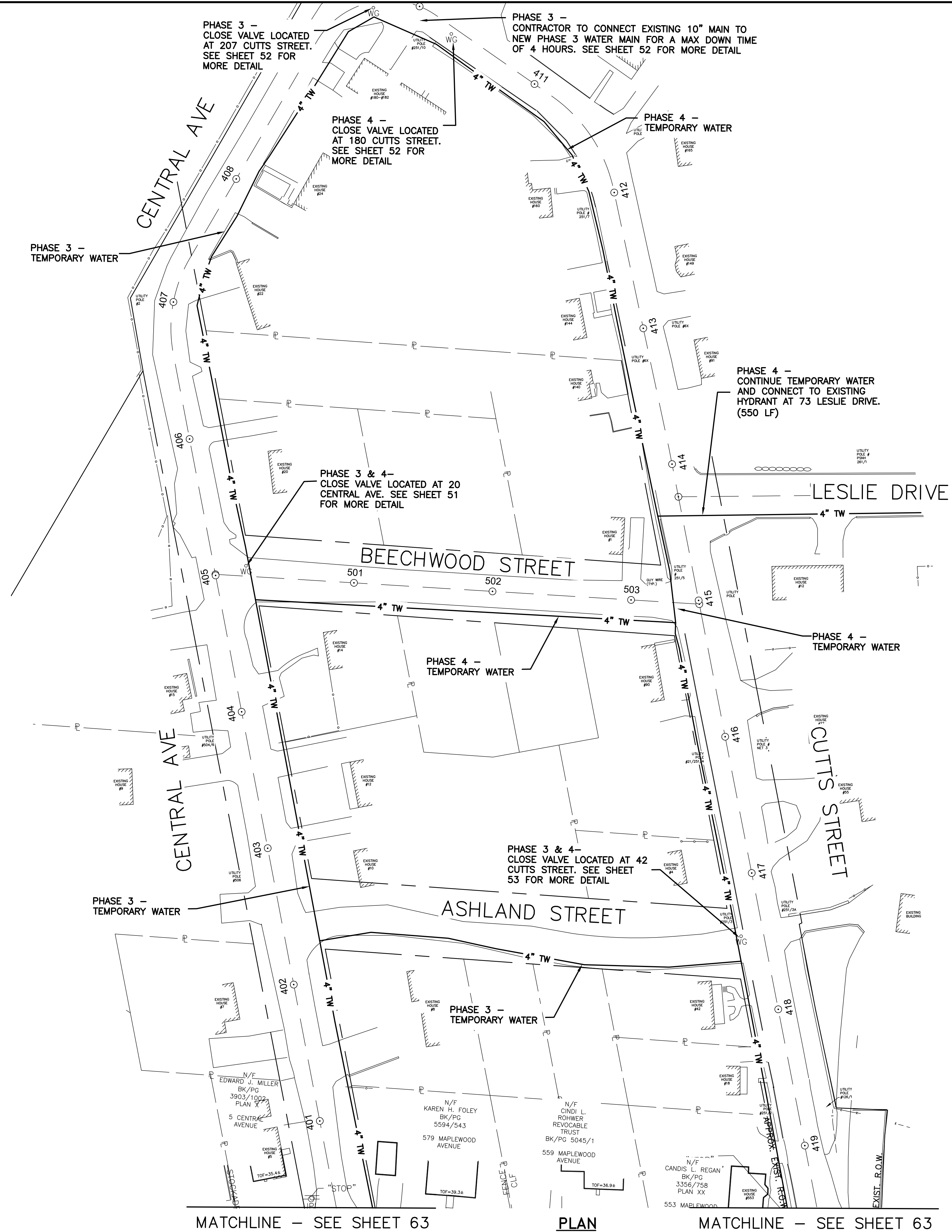
TEMPORARY WATER - MAPLEWOOD AVENUE
 SCALE: HORIZ: 1" = 40'
 VERT: 1" = 4'
 2015086.00
 63 OF 184



- POSSIBLE WATER MAIN SEQUENCE:
- PHASE 1:
1. INSTALL TEMPORARY WATER FROM 560 MAPLEWOOD AVENUE BY WAY OF CUTTS STREET TO 940 MAPLEWOOD AVENUE. INSTALL GATE VALVE AT 940 MAPLEWOOD AVENUE ON EXISTING WATER MAIN. VALVE TO REMAIN CLOSED DURING CONSTRUCTION OF PHASES I AND II.
 2. WATER SUPPLY FOR TEMPORARY WATER WILL BE FED FROM HYDRANTS LOCATED AT 560 MAPLEWOOD AVENUE BY WAY OF CUTTS STREET AND 48 FAIRVIEW AVENUE BY WAY OF EDMOND AVENUE; TEST AND CHLORINATE TEMPORARY WATER.
 3. REMOVE AND REPLACE EXISTING WATER MAIN FROM NEW GATE VALVE LOCATED AT 940 MAPLEWOOD AVENUE TO 16" UNDERGROUND WATER MAIN NEAR CUTTS STREET AND MAPLEWOOD AVENUE INTERSECTION; TEST AND CHLORINATE NEW WATER MAIN.
 4. CONNECT ALL SERVICES AND SIDE STREETS.
 5. REMOVE TEMPORARY WATER / RELOCATE TO PHASE II.

TLD TEMP WATER DESIGN (40 SCALE).DWG 2/2/2018

TLD TEMP WATER DESIGN (40 SCALE).DWG 2/2/2018



POSSIBLE WATER MAIN SEQUENCE:

PHASE 3:

1. INSTALL TEMPORARY WATER FED FROM HYDRANTS LOCATED AT 560 MAPLEWOOD AVENUE BY WAY OF CUTTS STREET AND 651 MAPLEWOOD AVENUE TO SERVICE CENTRAL AVENUE AND ASHLAND STREET. CLOSE VALVES LOCATED AT 207 CUTTS STREET, 20 CENTRAL AVENUE BY WAY OF BEECHWOOD STREET, AND 42 CUTTS STREET BY WAY OF ASHLAND STREET.
2. TEST AND CHLORINATE TEMPORARY WATER.
3. REMOVE AND REPLACE EXISTING WATER MAIN FROM CENTRAL AVENUE TO VALVE LOCATED AT 207 CUTTS STREET AND ASHLAND STREET TO VALVE LOCATED AT 42 CUTTS STREET; TEST AND CHLORINATE NEW WATER MAIN.
4. CONNECT ALL SERVICES AND SIDE STREET.
5. REMOVE TEMPORARY WATER / RELOCATED TO CUTTS STREET.

POSSIBLE WATER MAIN SEQUENCE:

PHASE 4:

1. INSTALL TEMPORARY WATER FED FROM HYDRANTS LOCATED AT 560 MAPLEWOOD AVENUE BY WAY OF CUTTS STREET AND 651 MAPLEWOOD AVENUE TO SERVICE CUTTS STREET AND BEECHWOOD STREET. CLOSE VALVES LOCATED AT 180 CUTTS STREET, 20 CENTRAL AVENUE BY WAY OF BEECHWOOD STREET, AND 42 CUTTS STREET BY WAY OF ASHLAND STREET.
2. INSTALL TEMPORARY WATER TO HYDRANT LOCATED AT 79 LESLIE DRIVE TO BACK FEED LOCAL STREET.
3. TEST AND CHLORINATE TEMPORARY WATER.
4. REMOVE AND REPLACE EXISTING WATER MAIN FROM CUTTS STREET AND BEECHWOOD STREET; TEST AND CHLORINATE NEW WATER MAIN.
5. CONNECT ALL SERVICES AND SIDE STREET.
6. REMOVE TEMPORARY WATER.

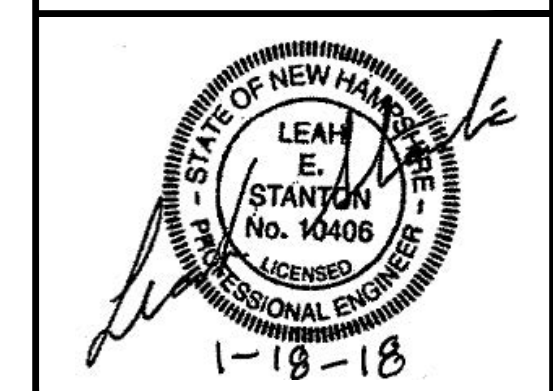
MATCHLINE - SEE SHEET 63

PLAN
SCALE: 1" = 40'

MATCHLINE - SEE SHEET 63

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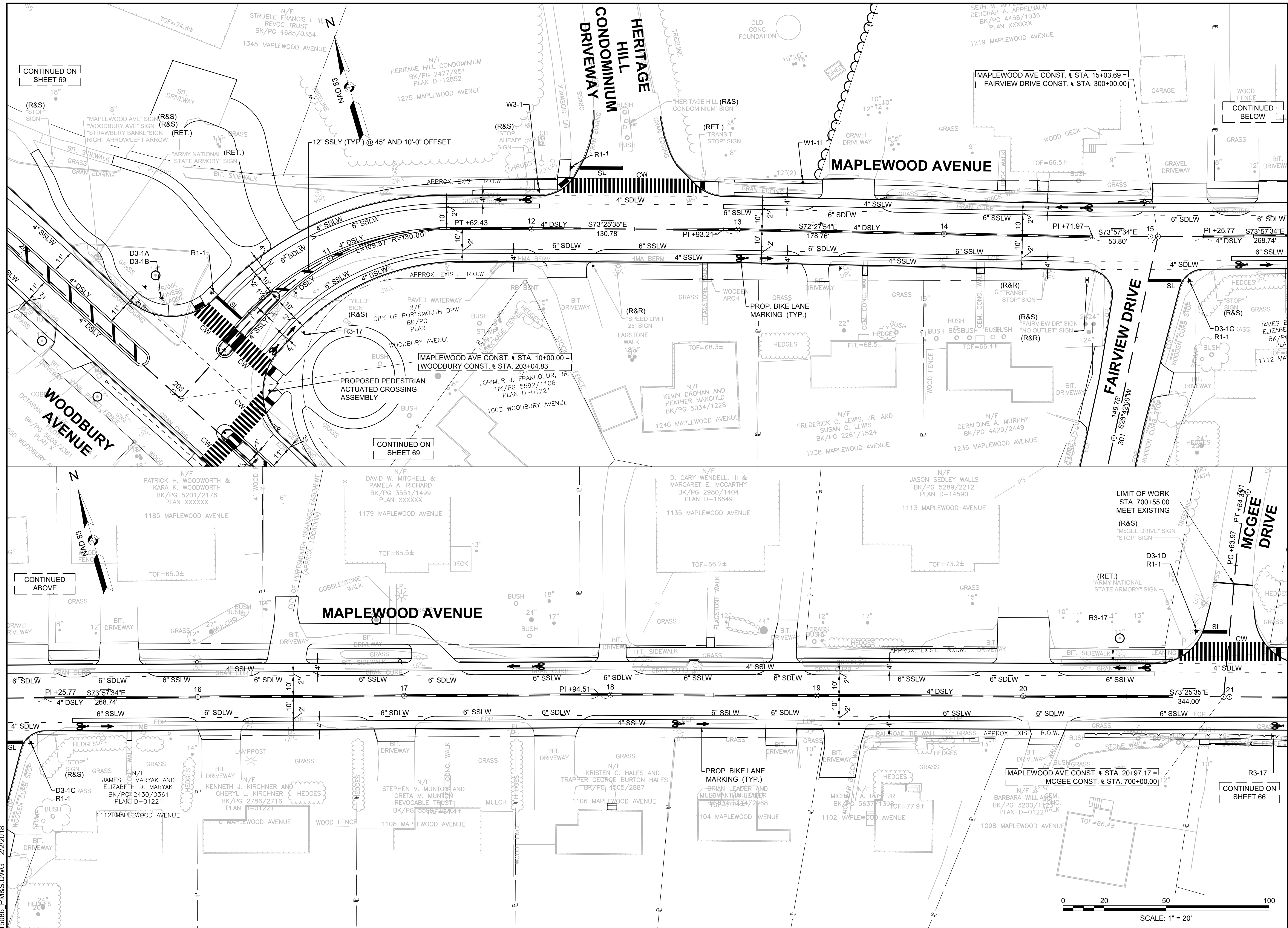
PREPARED FOR:
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: TLD
CHECKED BY: LES

TEMPORARY WATER - CUTTS / CENTRAL AREA
SCALE: HORIZ: 1" = 40'
VERT: 1" = 4'
2015086.00
64 OF 184



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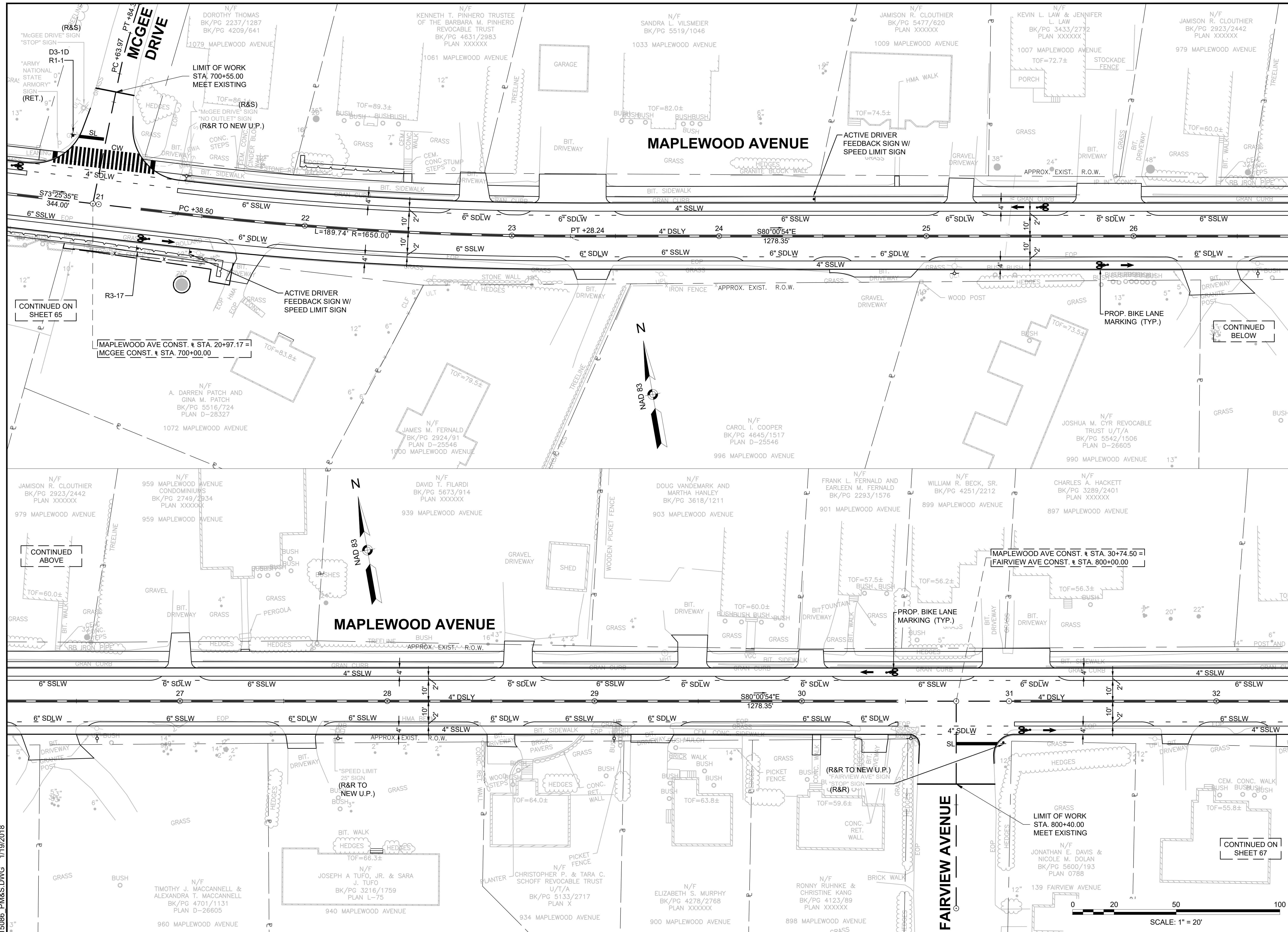
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: TQN
 CHECKED BY: JPJ

PAVEMENT MARKING & SIGNING PLANS
 SCALE: 1" = 20'
 2015086.00
 65 OF 184

15086 PIM&S.DWG 2/2/2018



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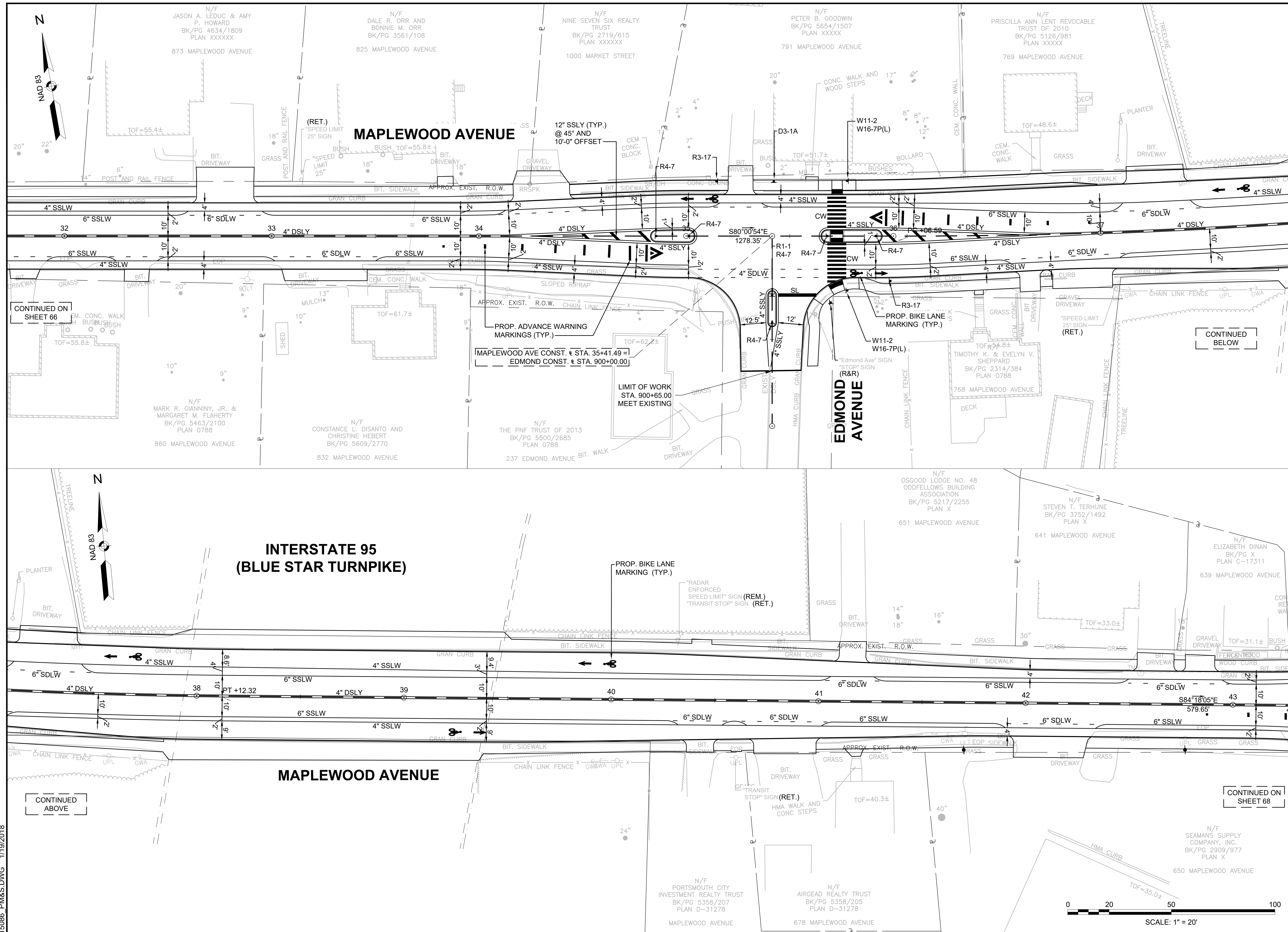
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS		
NO.	REVISION	DATE

PAVEMENT MARKING & SIGNING PLANS

SCALE: 1" = 20'
 2015086.00
 66 OF 184

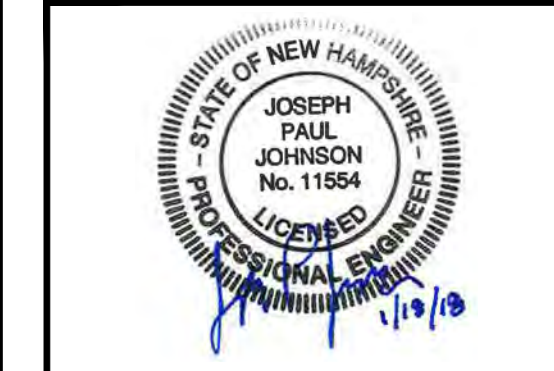
15086 PMS&S.DWG 1/19/2018



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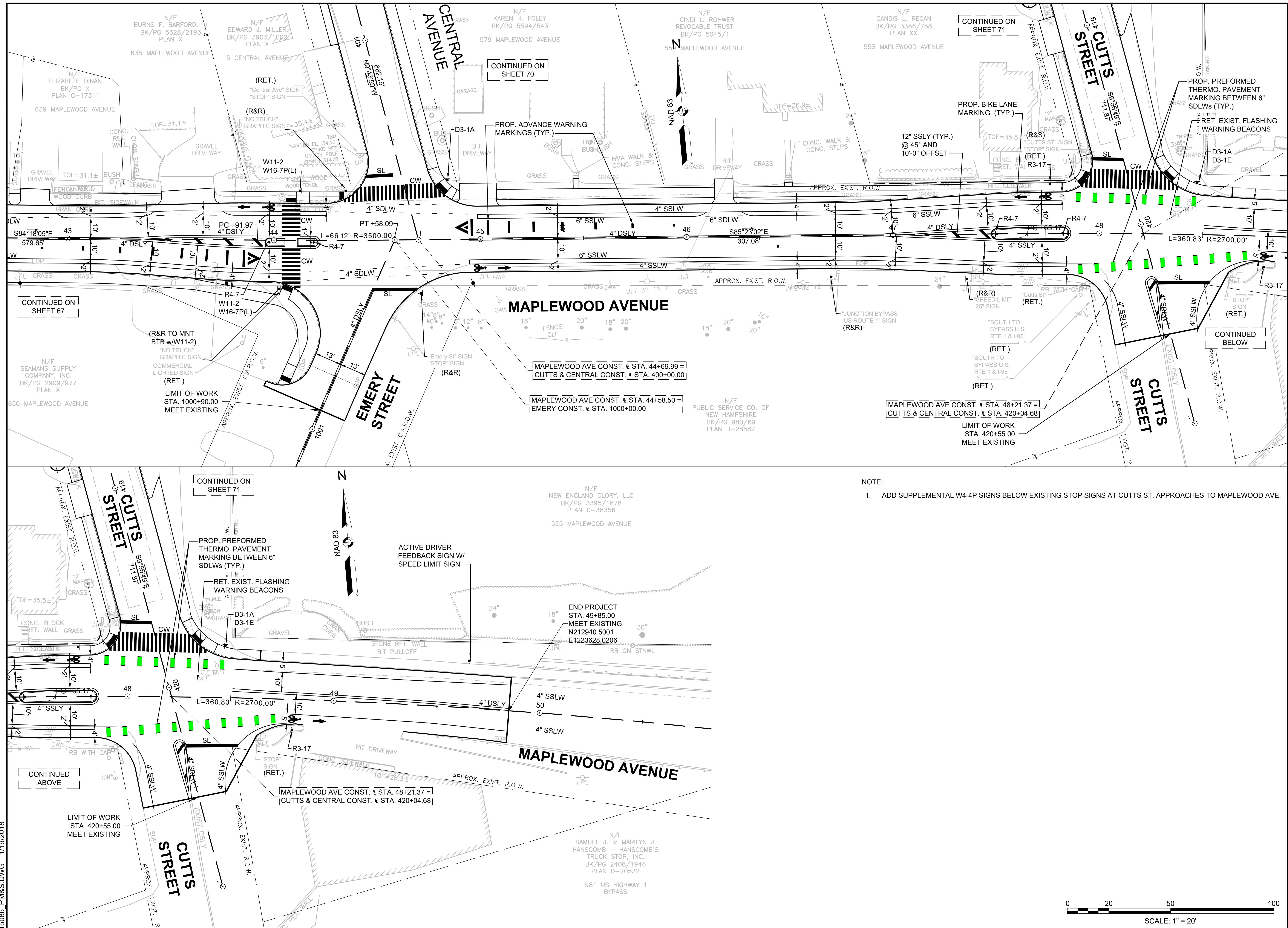
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: TQN
 CHECKED BY: JPJ

PAVEMENT MARKING & SIGNING PLANS

SCALE: 1" = 20'
 2015086.00
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NOTE:
 1. ADD SUPPLEMENTAL W4-4P SIGNS BELOW EXISTING STOP SIGNS AT CUTTS ST. APPROACHES TO MAPLEWOOD AVE.

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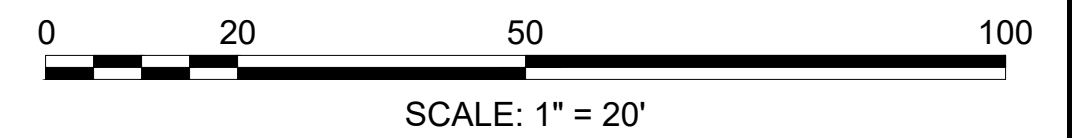
PREPARED FOR
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

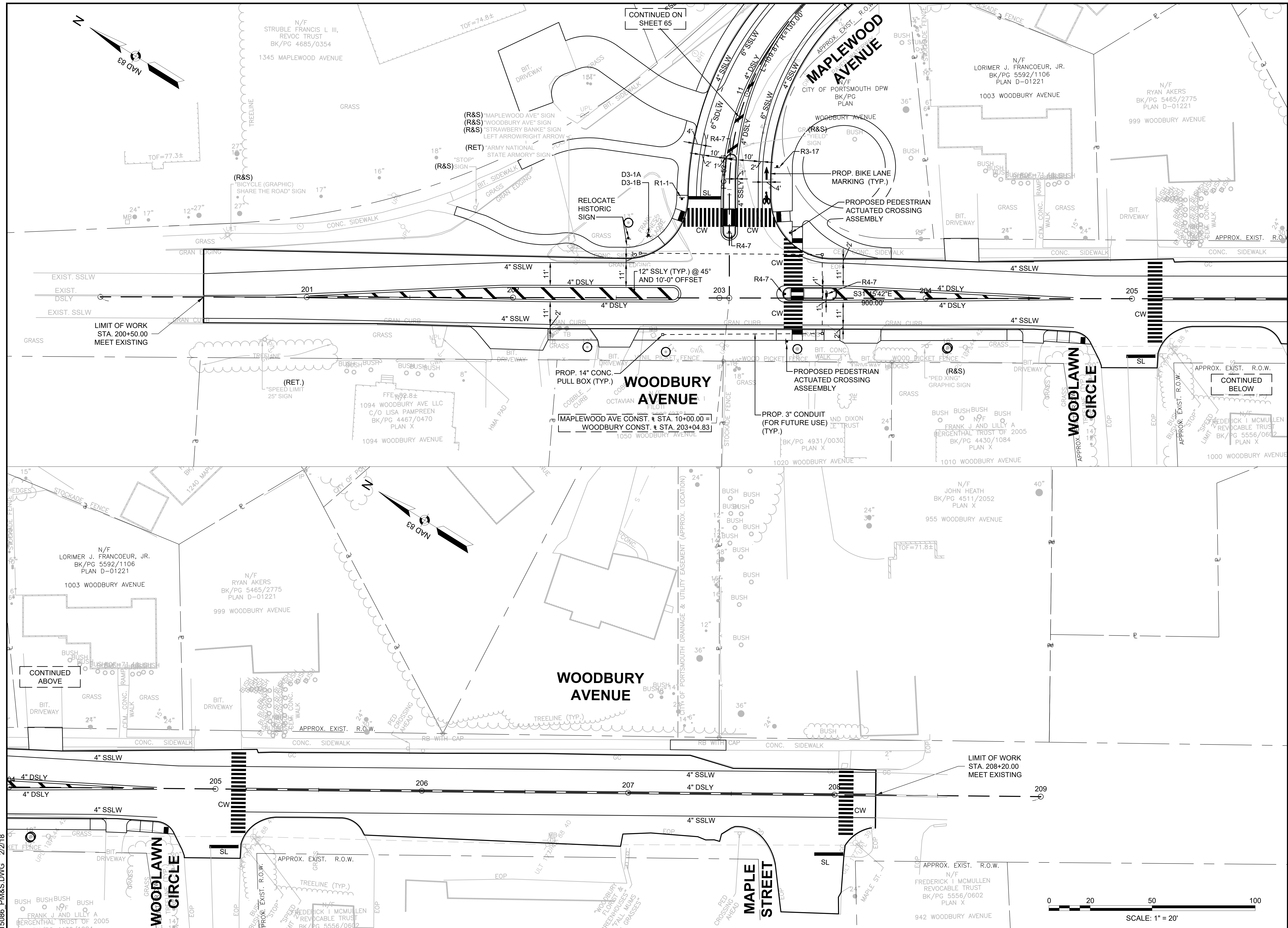
REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: TQN CHECKED BY: JPJ

PAVEMENT MARKING & SIGNING PLANS
 SCALE: 1" = 20'
 2015086.00
 68 OF 184



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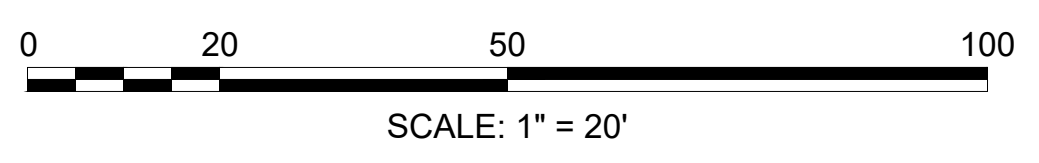
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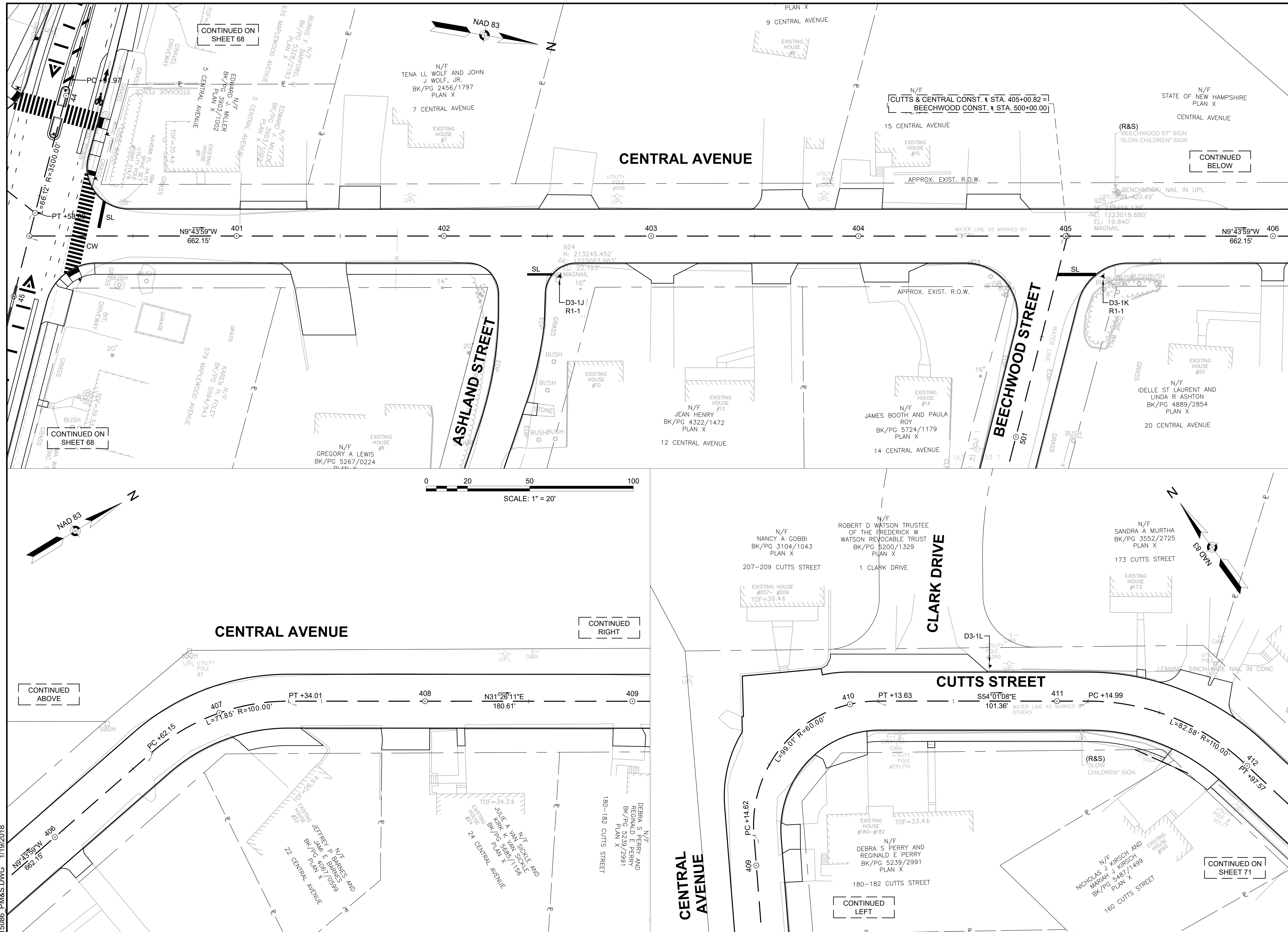
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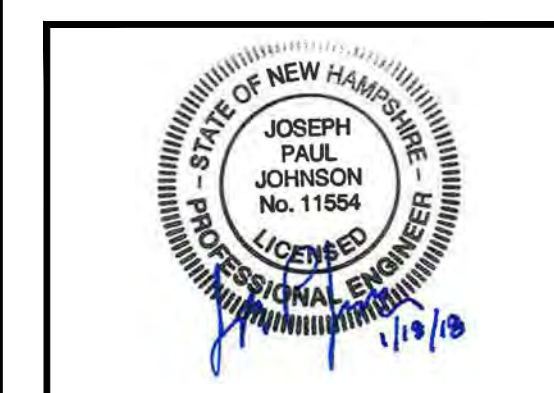


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IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH

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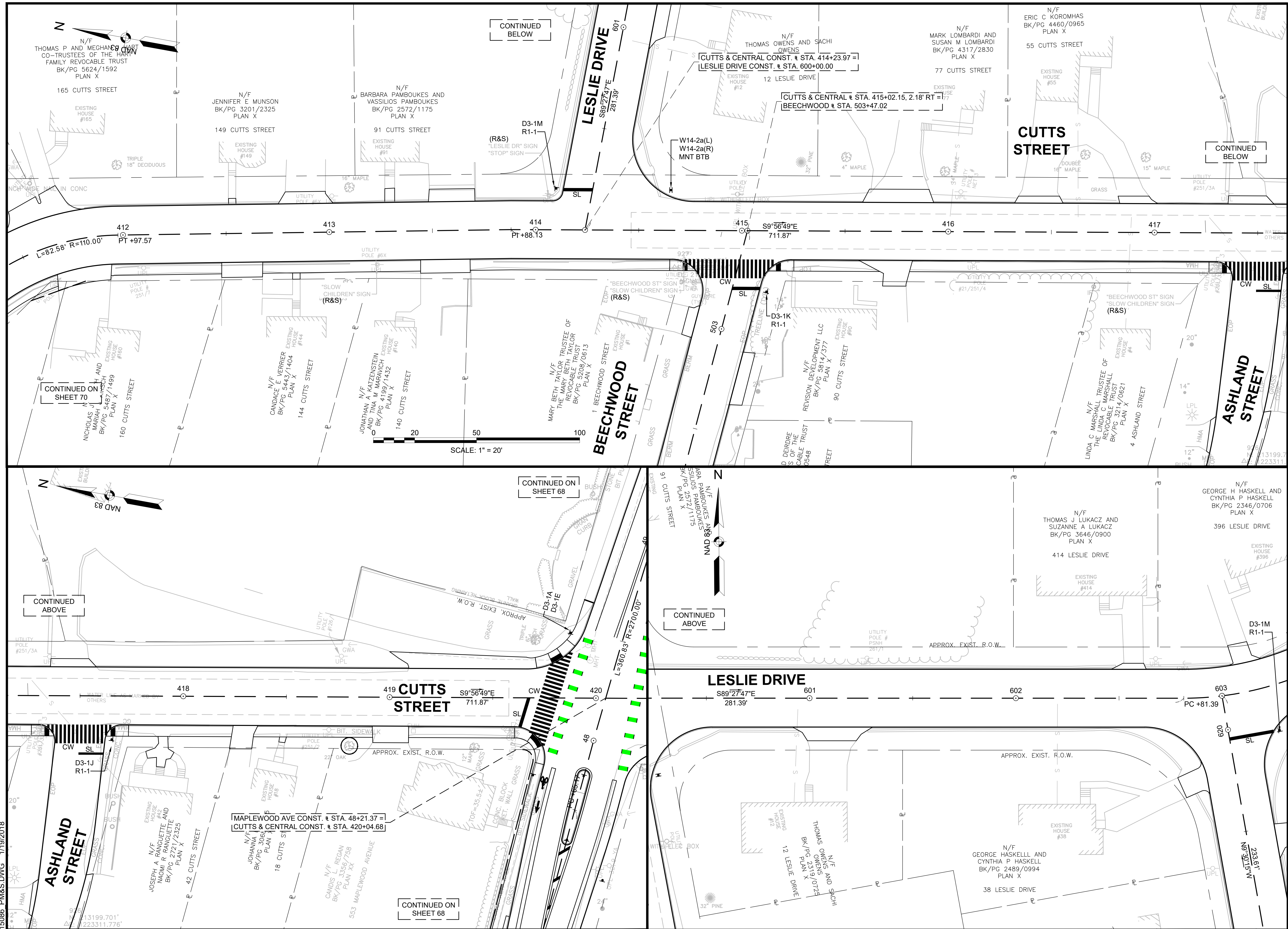
REVISIONS		
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PAVEMENT MARKING & SIGNING PLANS

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 70 OF 184

15086 PIM&S.DWG 1/19/2018



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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

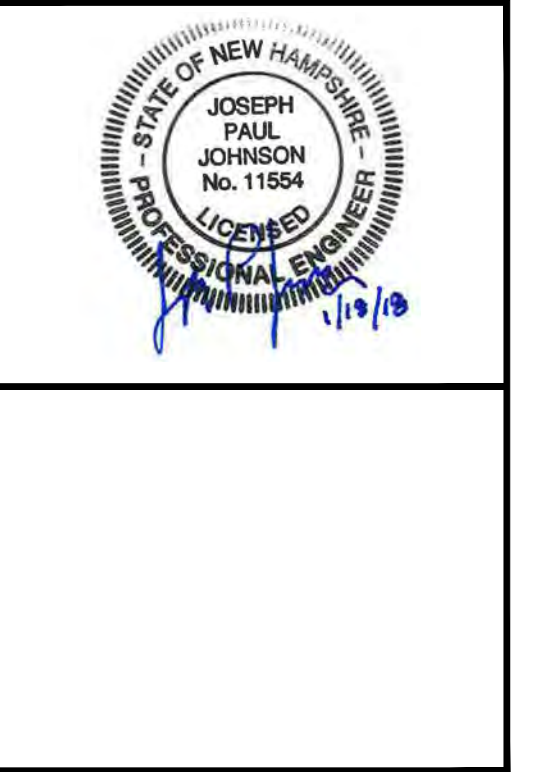
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PAVEMENT MARKING & SIGNING PLANS

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 71 of 184

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

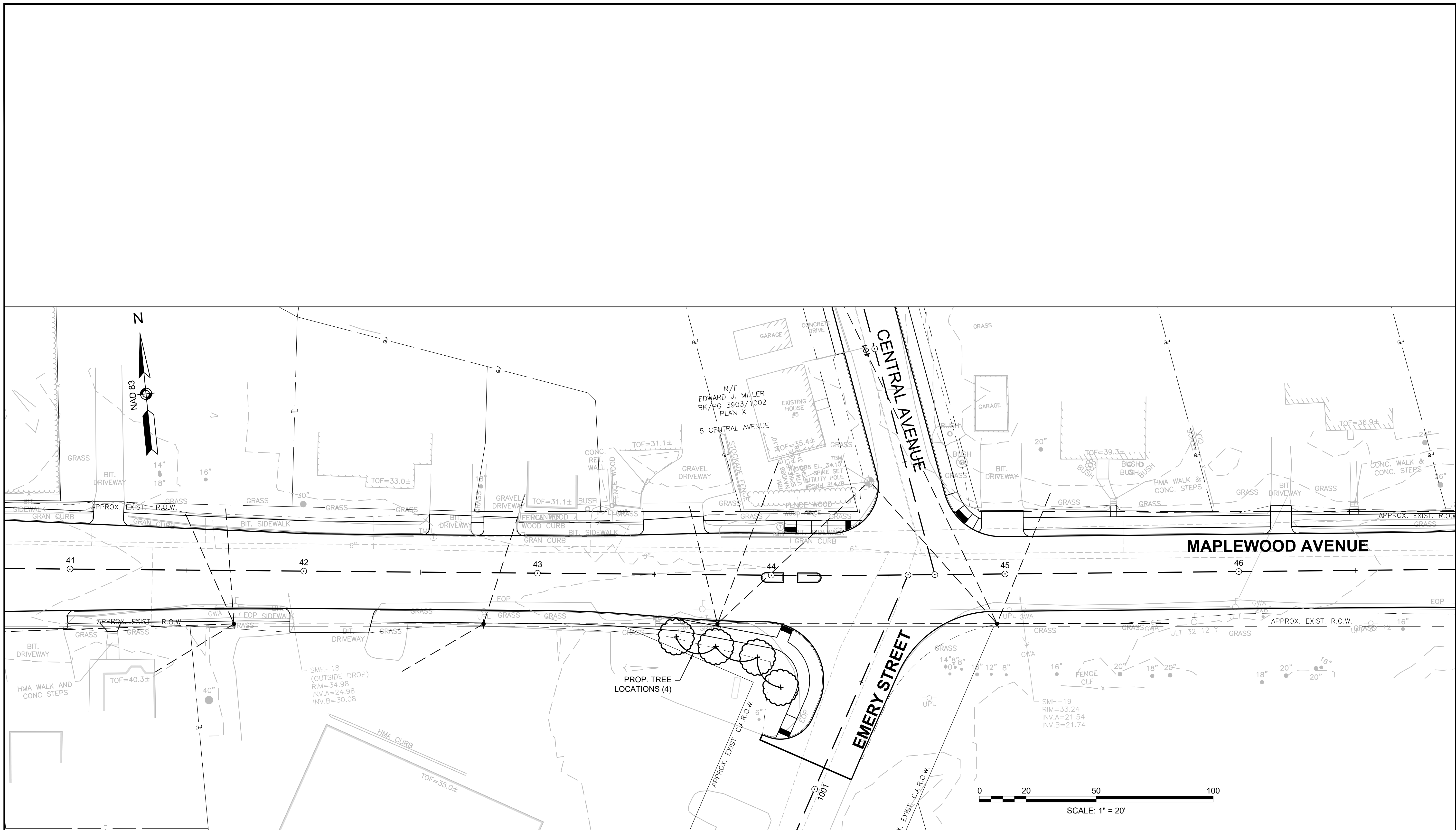
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	WIDTH (INCHES)	HEIGHT (INCHES)		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER			
R1-1	30	30		MUTCD STANDARD	MUTCD STANDARD	14	RED	WHITE	WHITE	STEEL BREAKAWAY (14 REQ'D)	6.25	87.50
R3-2	24	24		MUTCD STANDARD	MUTCD STANDARD	1	WHITE	BLACK ARROW/RED SYMBOL	WHITE	STEEL BREAKAWAY (1 REQ'D)	4.00	4.00
R3-17	24	18		MUTCD STANDARD	MUTCD STANDARD	12	BLACK & WHITE	BLACK TEXT WHITE SYMBOL	WHITE	STEEL BREAKAWAY (12 REQ'D)	3.00	36.00
R4-7	18	30		MUTCD STANDARD	MUTCD STANDARD	14	WHITE	BLACK	BLACK	STEEL BREAKAWAY (13 REQ'D) 1 MNT w/R1-1	3.75	52.50
W1-1L	30	30		MUTCD STANDARD	MUTCD STANDARD	1	YELLOW	BLACK	BLACK	STEEL BREAKAWAY (1 REQ'D)	6.25	6.25
W3-1	30	30		MUTCD STANDARD	MUTCD STANDARD	1	YELLOW	BLACK & RED	BLACK	STEEL BREAKAWAY (1 REQ'D)	6.25	6.25
W4-4	24	12	CROSS TRAFFIC DOES NOT STOP	MUTCD STANDARD	MUTCD STANDARD	2	YELLOW	BLACK	BLACK	MNT w/R1-1	2.00	4.00
W11-2	30	30		NH STANDARD	NH STANDARD	8	YELLOW	BLACK	BLACK	STEEL BREAKAWAY (8 REQ'D)	6.25	50.00
W14-1a(L)	36	8	← DEAD END	MUTCD STANDARD	MUTCD STANDARD	1	YELLOW	BLACK	BLACK	STEEL BREAKAWAY (1 REQ'D)	2.00	2.00
W14-1a(R)	36	8	DEAD END →	MUTCD STANDARD	MUTCD STANDARD	1	YELLOW	BLACK	BLACK	MNT BTB w/W14-2a(L)	2.00	2.00
W16-7P(L)	24	12		MUTCD STANDARD	MUTCD STANDARD	8	YELLOW	BLACK	BLACK	P5 8 MNT w/W11-2	2.00	16.00
W16-7P(R)	24	12		MUTCD STANDARD	MUTCD STANDARD	2	YELLOW	BLACK	BLACK	P5 2 MNT w/W11-2	2.00	4.00

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET		
	WIDTH (INCHES)	HEIGHT (INCHES)		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER					
D3-1A	48	12	Maplewood Ave	6"C/4.5"C	4.5"C	3"	3"	6	GREEN	WHITE	WHITE	STEEL BREAKAWAY (6 REQ'D)	4.00	24.00
D3-1B	48	12	Woodbury Ave	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/D3-1A	4.00	4.00
D3-1C	42	12	Fairview Dr	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/R1-1	3.50	3.50
D3-1D	36	12	McGee Dr	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/R1-1	3.00	3.00
D3-1E	30	12	Cutts St	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/D3-1A	2.50	2.50
D3-1F	42	12	Prospect St	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/R1-1	3.50	3.50
D3-1G	36	12	Dennett St	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/D3-1A	3.00	3.00
D3-1H	42	12	Dearborn St	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/R1-1	3.50	3.50
D3-1J	42	12	Ashland St	6"D/4.5"D	4.5"D	3"	3"	2	GREEN	WHITE	WHITE	MNT w/R1-1	3.50	7.00
D3-1K	48	12	Beechwood St	6"D/4.5"D	4.5"D	3"	3"	2	GREEN	WHITE	WHITE	MNT w/R1-1	4.00	8.00
D3-1L	30	12	Clark Dr	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	STEEL BREAKAWAY (1 REQ'D)	2.50	2.50
D3-1M	30	12	Leslie Dr	6"D/4.5"D	4.5"D	3"	3"	1	GREEN	WHITE	WHITE	MNT w/R1-1	2.50	2.50

- NOTES:
- ALL WARNING, REGULATORY AND ROUTE MARKERS SHALL BE FABRICATED WITH HIGH INTENSITY ENCAPSULATED LENS REFLECTIVE SHEETING TYPE III OR IV.
 - ALL SIGNS NOTED AS "(R&R)" SHALL BE MOUNTED ON NEW BREAKAWAY STEEL SIGN POSTS OR AS OTHERWISE INDICATED.
 - ALL BREAKAWAY STEEL SIGN POSTS SHALL BE TELESCOPIC TYPE POSTS.
 - QUANTITIES OF SIGNS AND POSTS SHOWN ON THIS SHEET MAY DIFFER FROM THE PAVEMENT MARKING AND SIGNING PLANS. WHERE DIFFERENCES OCCUR, THE PAVEMENT MARKING AND SIGNING PLANS SHALL PREVAIL.

REVISIONS		
NO.	REVISION	DATE

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NOTE: TREE LOCATIONS SHOWN IN APPROXIMATE LOCATIONS ONLY. FINAL SPECIES AND LOCATIONS WILL BE PROVIDED BY THE OWNER.

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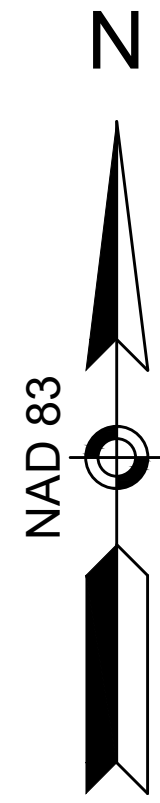
**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS
 CHECKED BY: JPJ

LANDSCAPING PLAN AND DETAILS

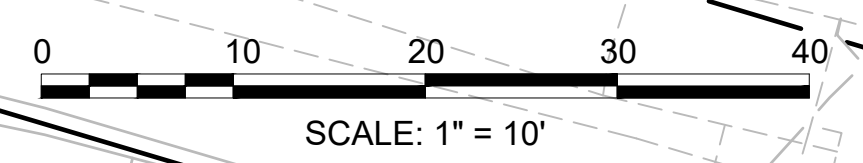
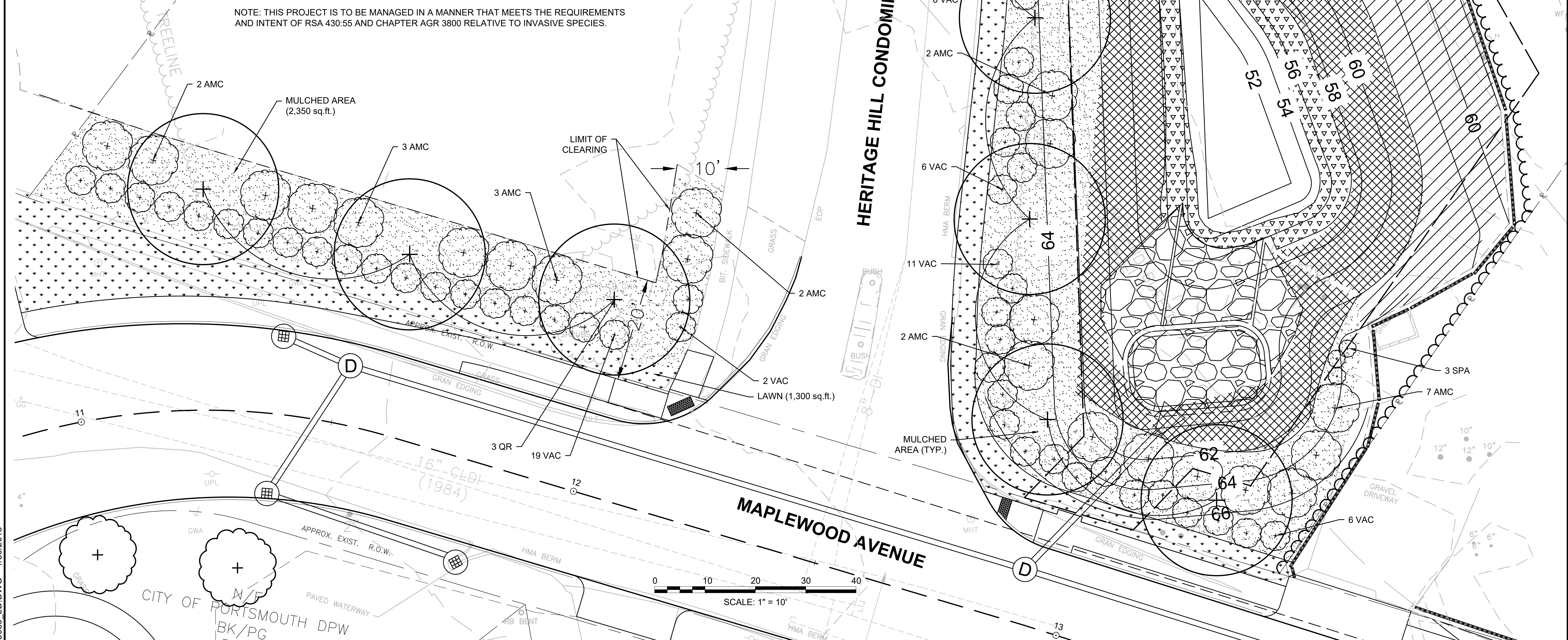
SCALE:
 1" = 20'
 2015086.00



PLANTING SCHEDULE

Symbol	Scientific Name	Common Name	Size	Quantity	Spacing	Notes
TREES						
AR	ACER rubrum 'Red Sunset'	Red Maple	1.5-2" cal.	6	see plan	Excellent reliable orange to red fall color. Vigorous. Very hardy
QR	QUERCUS rubra	Northern Red Oak	1.5-2" cal.	3	see plan	Adaptable and hardy large tree with brilliant fall color
SHRUBS						
AMC	AMELANCHIER canadensis	Canadian Serviceberry	5-6'	26	see plan	Deciduous, early-flowering, small tree. White flowers
COS	CORNUS sericea 'Artic Fire'	Artic Fire Red Twig Dogwood	3-4' ht	3	see plan	Compact, dense form growing wider than tall. Bright red bark
SPA	SPIRAEA alba	White Meadowsweet	3-4' ht	3	see plan	Common to wet meadow edges, white flowers in summer
VAC	VACCINIUM corymbosum 'Patriot'	Northern Highbush Blueberry	3-4' ht	56	see plan	Early crop of large sweet blueberries and profusion of pink-tinged white flowers
ZONE 1-2 (Deep water pool)						
STP	STUCKENIA pectinata	Sago Pondweed	bare root	200	see plan	Submerged perennial plant with narrow thread-like leaves.
VAA	VALLISNERIA americana	American Eelgrass	bare root	200	see plan	Perennial long-leaved plant that provides habitat for fish and oxygenates the water
SEED MIX						
LAWN				2520	sq. ft.	
SEED 1	New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites			3740	sq. ft.	
SEED 2	New England Conservation/Wildlife Mix			1590	sq. ft.	

NOTE: THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:55 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.



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MAPLEWOOD AVENUE
PORTSMOUTH, NH

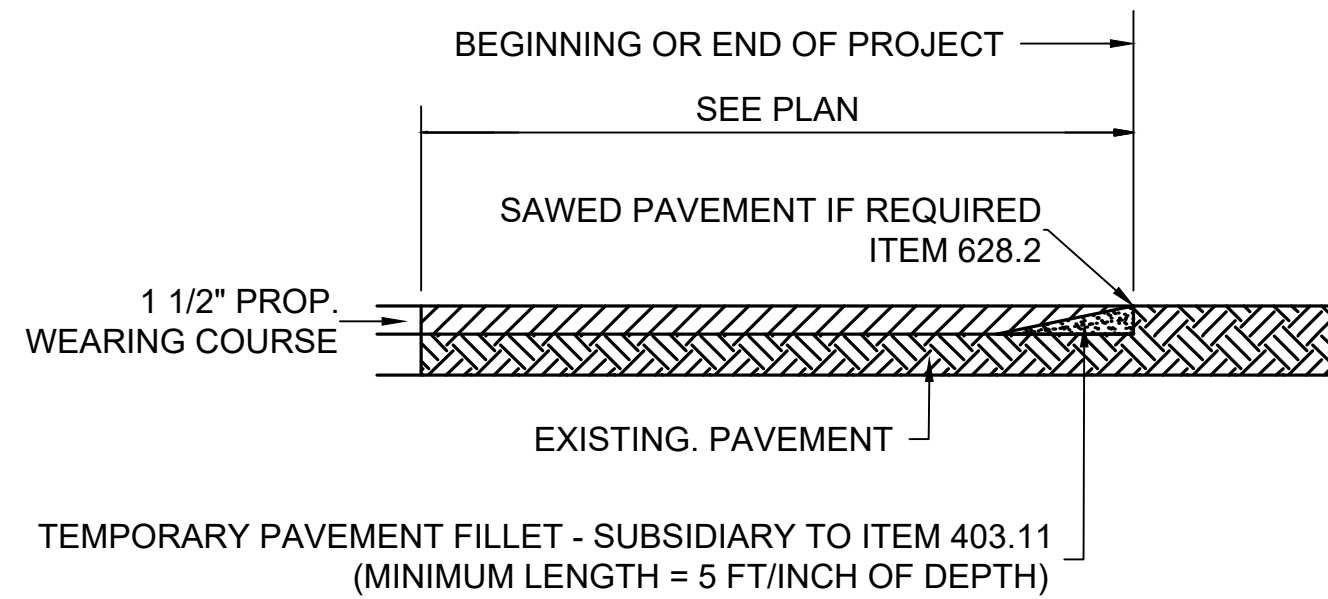
REVISIONS		
NO.	REVISION	DATE

10/25/17
 DRAWN/DESIGN BY: CLS
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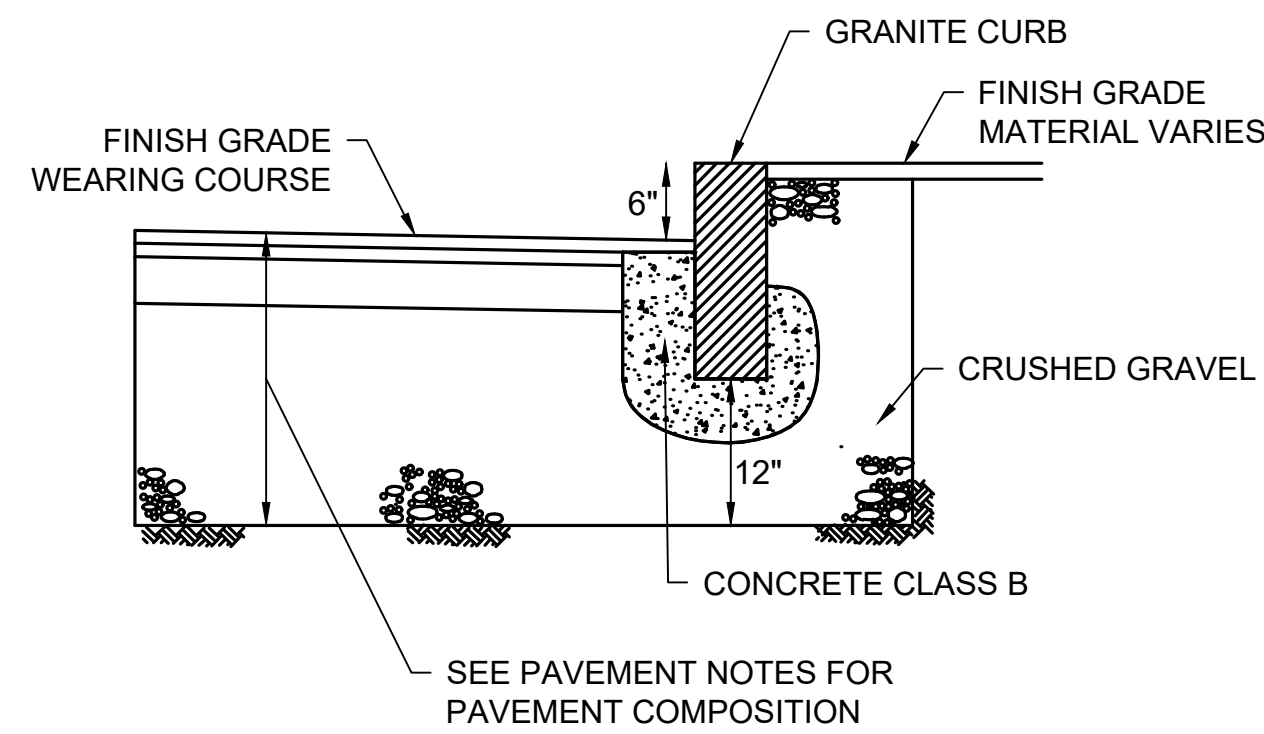
LANDSCAPING PLAN AND DETAILS

SCALE: 1" = 10'
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 75 OF 184

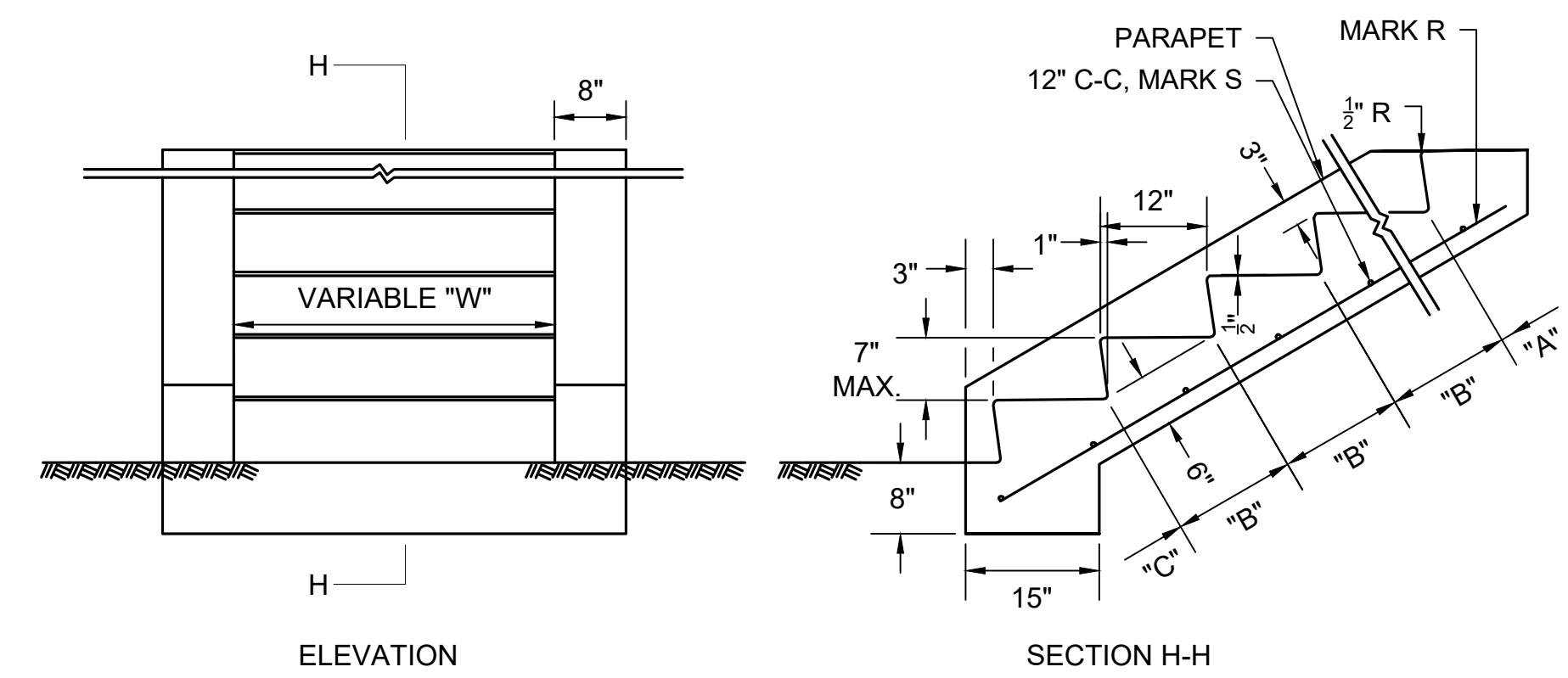
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INLAY PAVEMENT MATCH TYPICAL
NOT TO SCALE

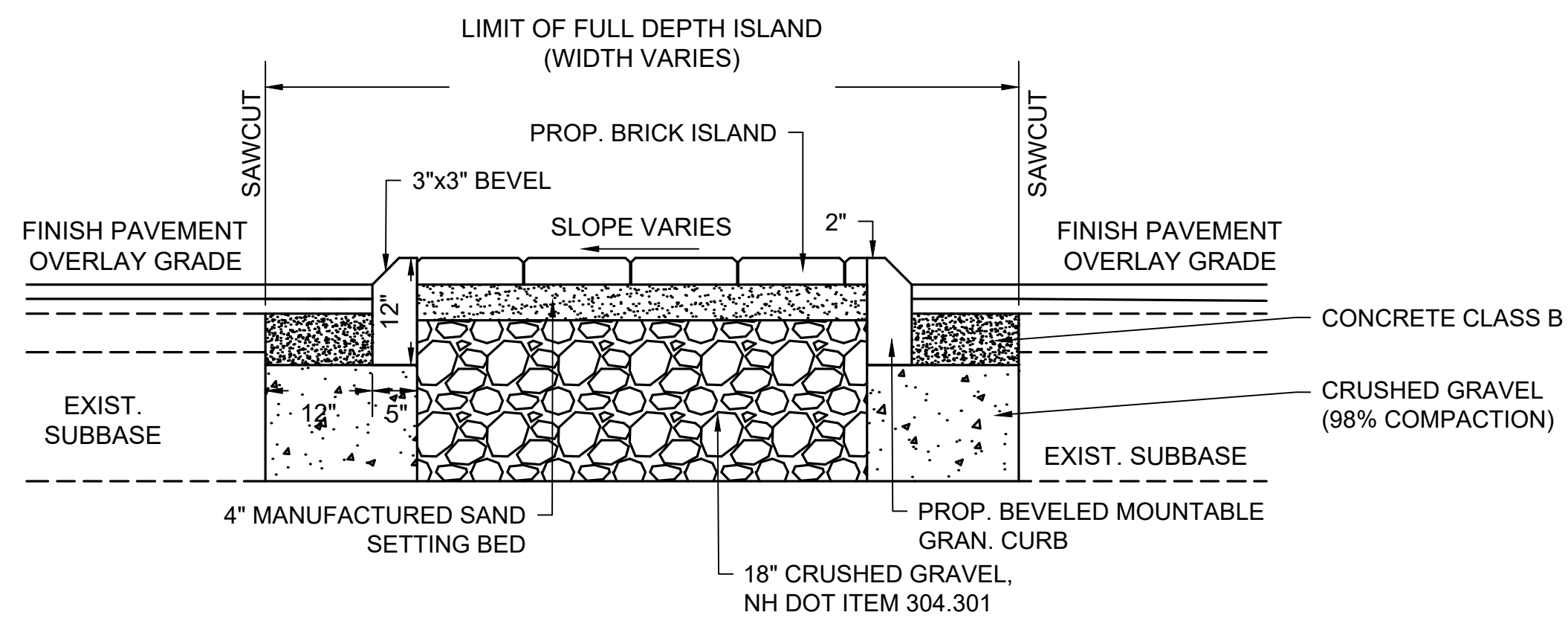


GRANITE CURB
NOT TO SCALE

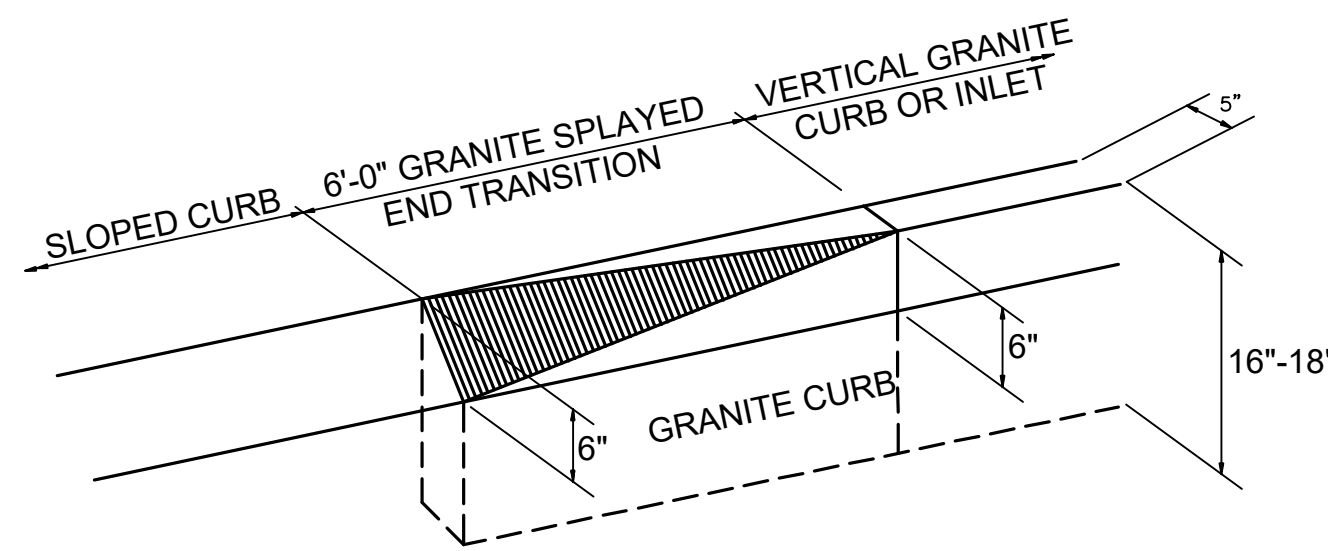


REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH
R	# 5	1 EA. PARAPET	8" FOR "A"
	1.043 # / FT	1 EA. FT. OF WIDTH "W"	+13" FOR "B" +16" FOR "C"
S	# 4	1 FOR "A"	6" EA. PARAPET
	0.668 # / FT	1 FOR "B"	+12"/FT. OF WIDTH "W"
		1 FOR "C"	

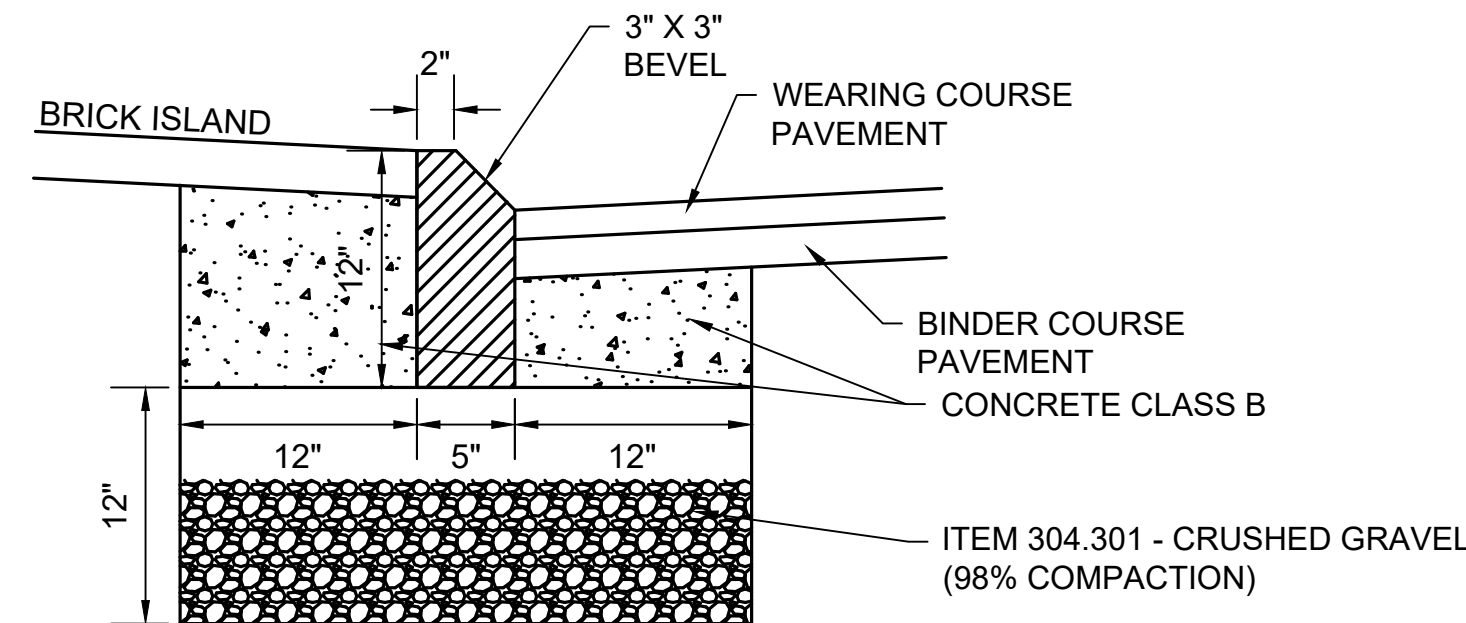
CONCRETE STEPS
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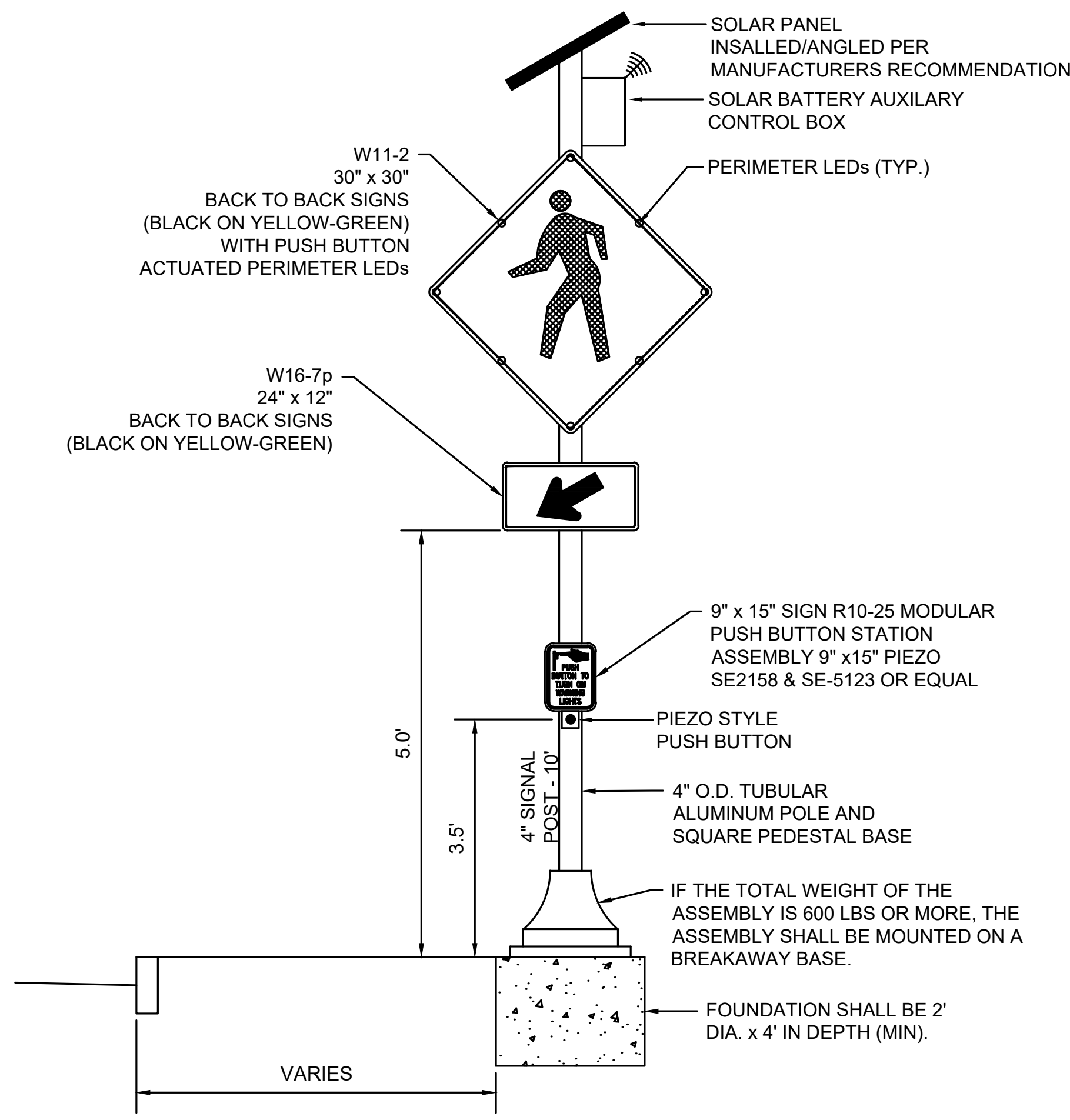
BRICK ISLAND W/ BEVELED MOUNTABLE GRANITE CURB DETAIL
NOT TO SCALE



STRAIGHT TO SLOPE CURB TRANSITION
NOT TO SCALE



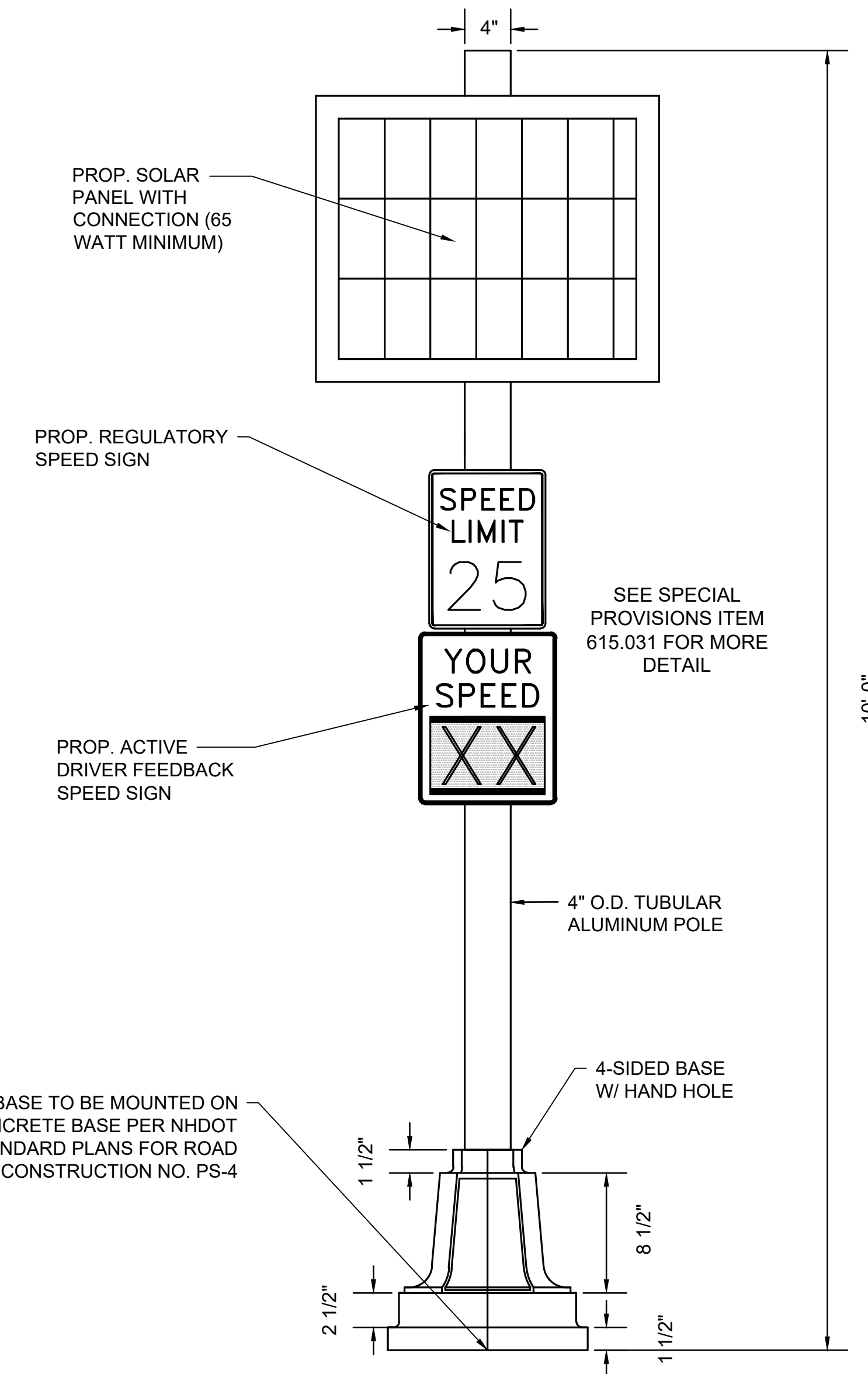
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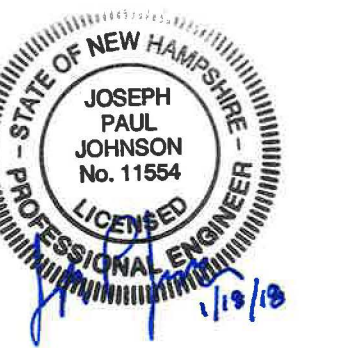
PEDESTRIAN ACTUATED CROSSING ASSEMBLY
NOT TO SCALE

NOTES:

- FINAL LOCATIONS OF THE CROSSING ASSEMBLY WILL BE COORDINATED IN THE FIELD WITH THE ENGINEER.
- TREE TRIMMING NEEDED TO IMPROVE VISIBILITY OF THE CROSSING ASSEMBLIES SHALL BE INCIDENTAL TO ITEM 616.21.
- PUSH BUTTON SHALL BE ORIENTED TO FACE MOST ACCESSIBLE LOCATION ON ADJACENT SIDEWALK AS DIRECTED BY THE ENGINEER.
- CROSSING ASSEMBLY FOUNDATION SHALL BE FLUSH WITH ADJACENT SIDEWALK TO ALLOW FOR SIDEWALK PLOW PASSAGE.
- POST AND BASE SHALL BE BLACK, POWDER COATED.



ACTIVE DRIVER FEEDBACK SPEED SIGN MOUNTED ON A STANDARD TRAFFIC SIGNAL POST & BASE
NOT TO SCALE



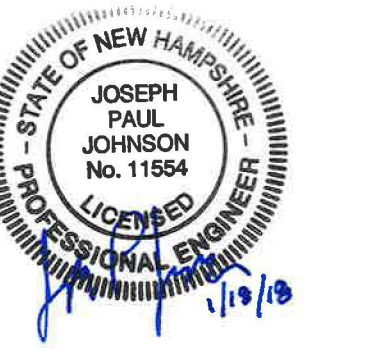
IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

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DRAWN/DESIGN BY: DPE CHECKED BY: JPJ

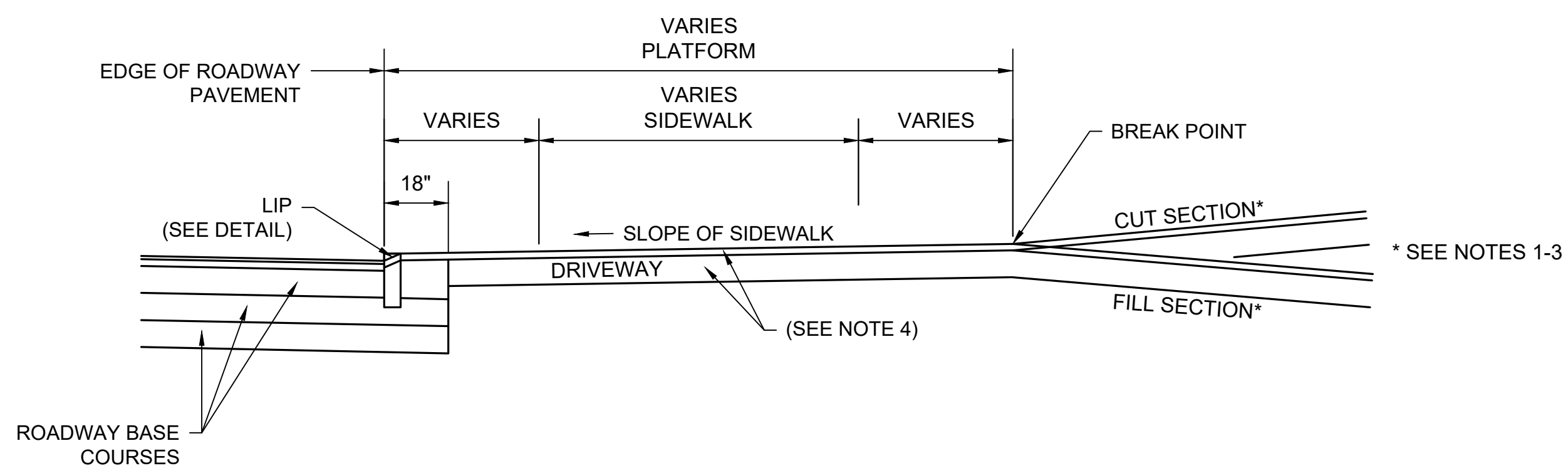
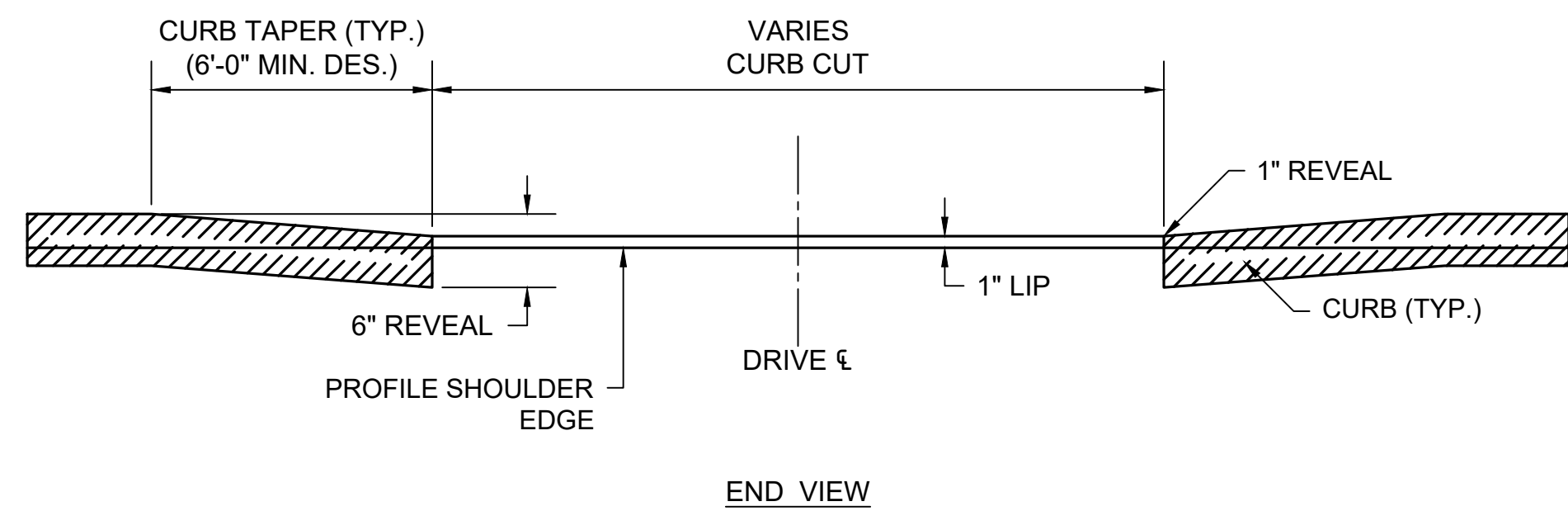
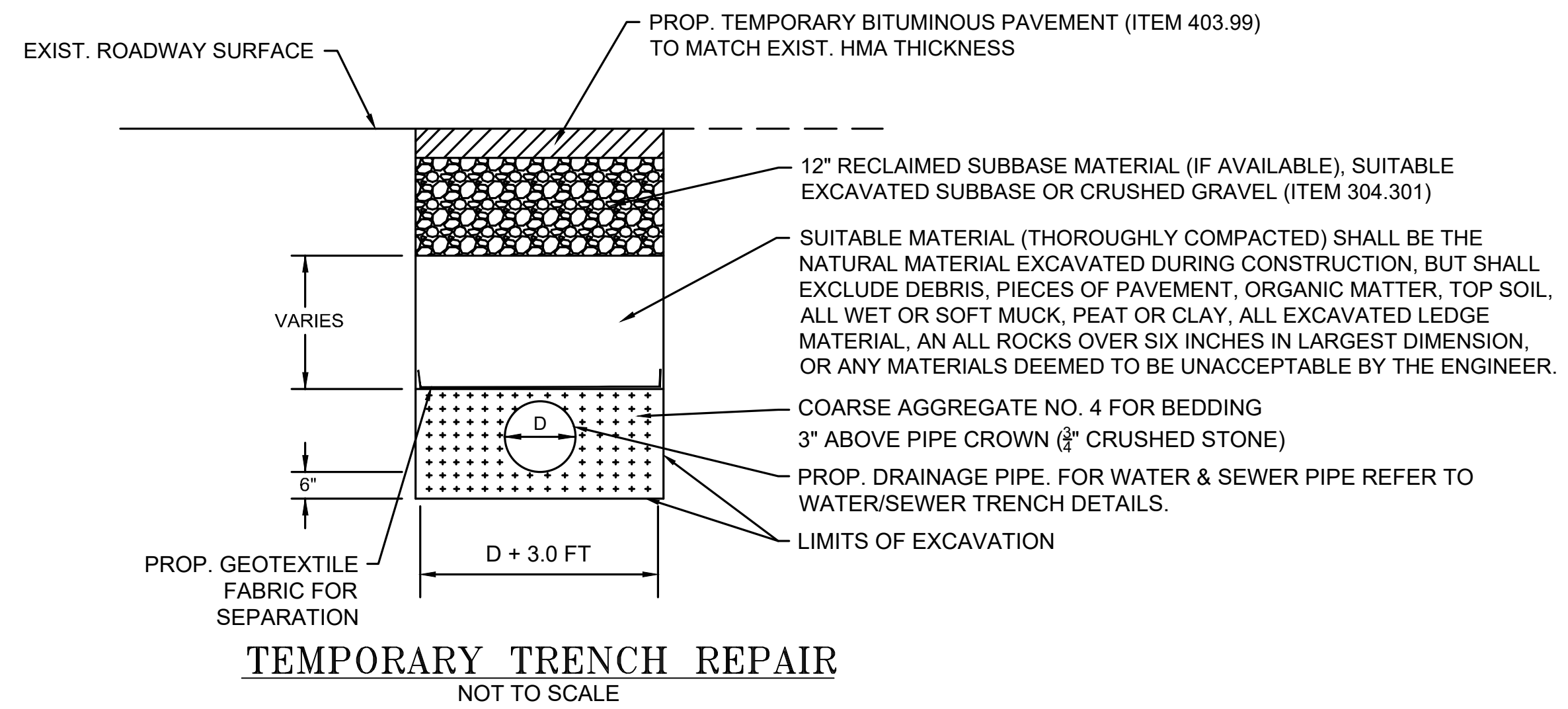
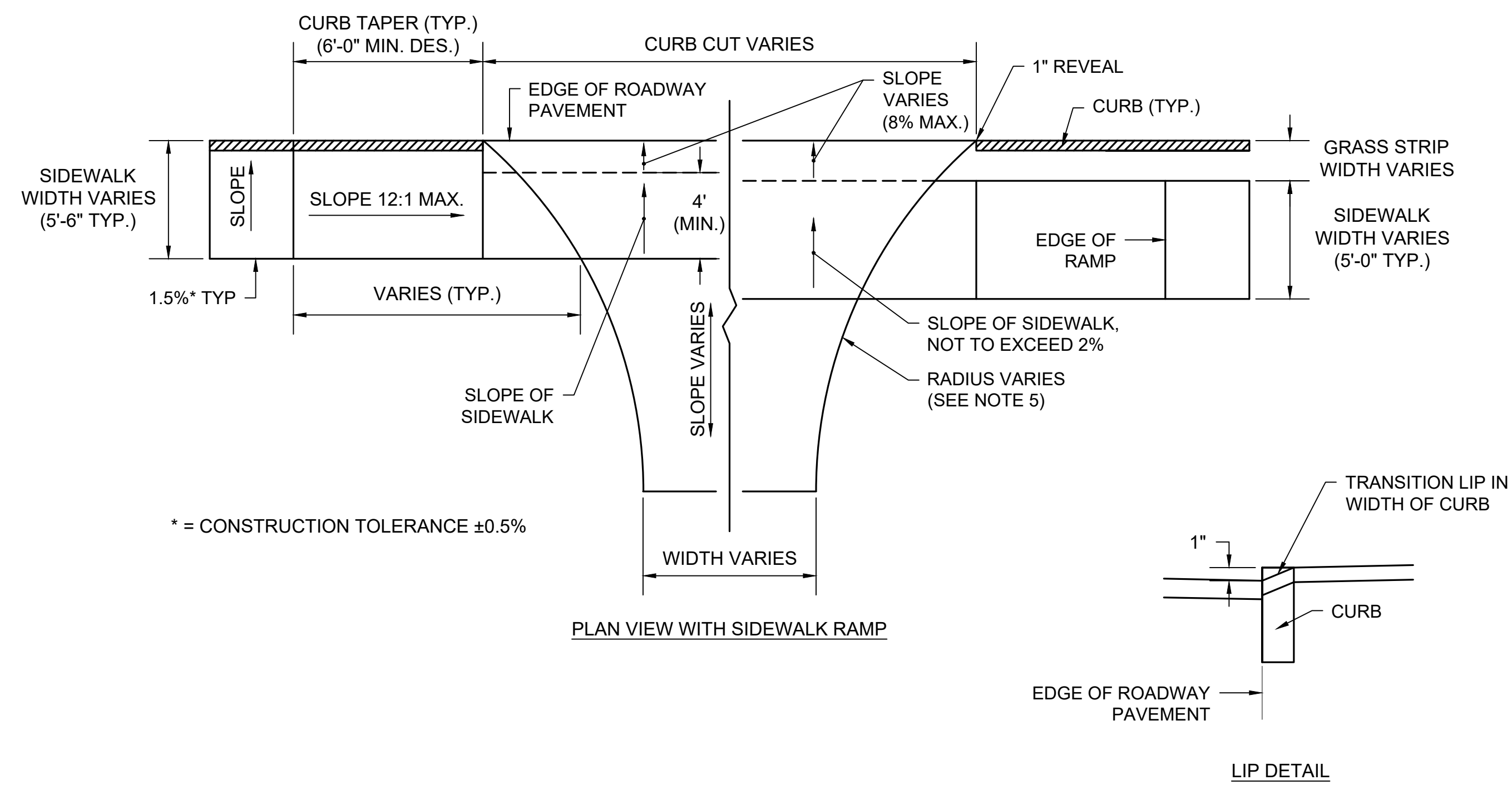
STANDARD DETAIL SHEETS
ROADWAY
DETAILS

SCALE: N.T.S.
2015086.00



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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



- NOTES:**
- GRADES OF MAJOR ENTRANCES BEYOND THE PLATFORM SHOULD NOT EXCEED 8%.
 - GRADES OF OTHER DRIVES BEYOND THE PLATFORM SHOULD NOT EXCEED 15%.
 - THE ALGEBRAIC DIFFERENCE BETWEEN TWO ADJACENT GRADES SHOULD NOT EXCEED 10%.
 - SEE SHEET 7 FOR PAVEMENT NOTES
 - FOR DESIGN CRITERIA AND OTHER ADDITIONAL INFORMATION, REFER TO THE NHDOT DRIVEWAY MANUAL.
 - DITCHES ARE RECOMMENDED FOR UNCURBED DRIVEWAYS IN CUT SLOPES.
 - USE SLOPED END SECTIONS ON DRIVE PIPES FOR UNCURBED DRIVEWAYS.
 - CURBING CAN BE FLARED TO FIT DRIVE RADII IF APPROPRIATE OR ENDED AS DETAILED ABOVE.

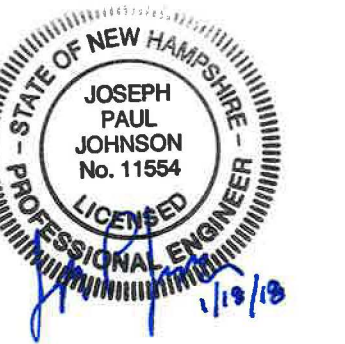
TYPICAL URBAN CURVED DRIVE IN CUT/FILL SECTION
 NOT TO SCALE

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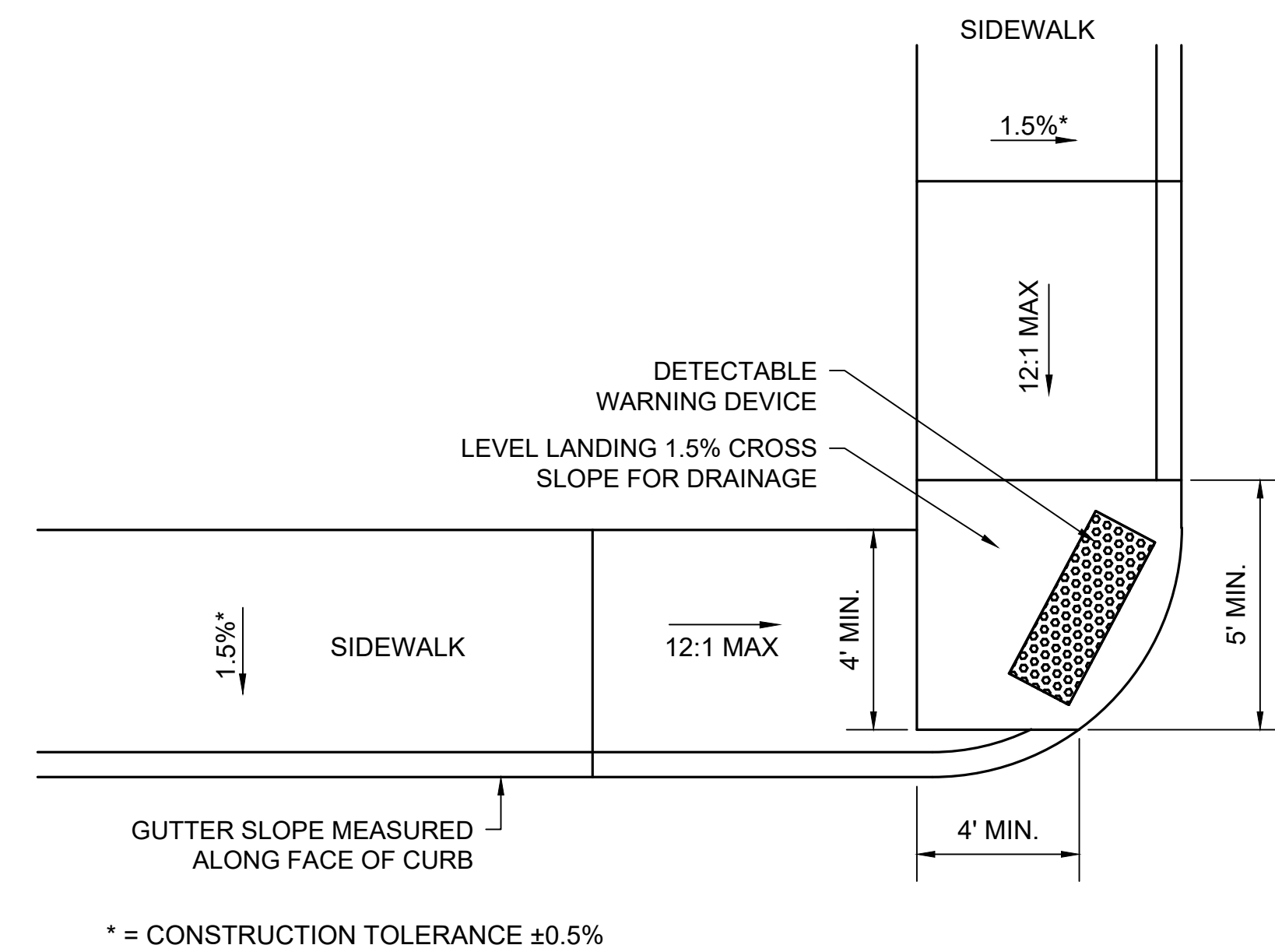
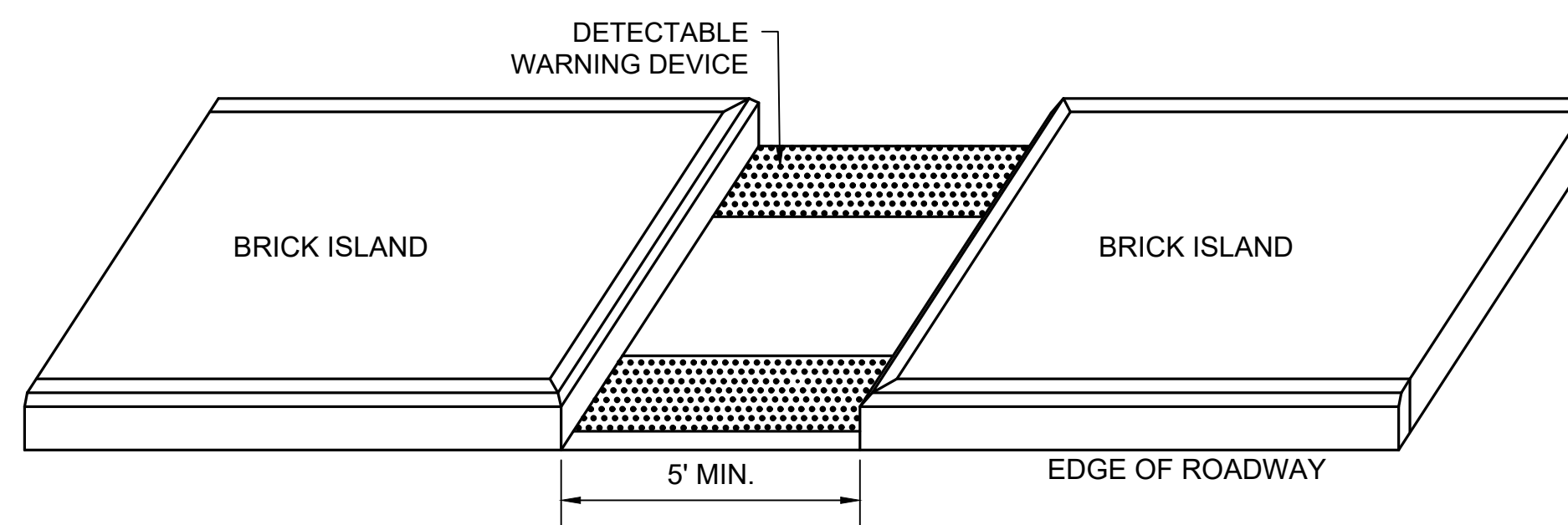
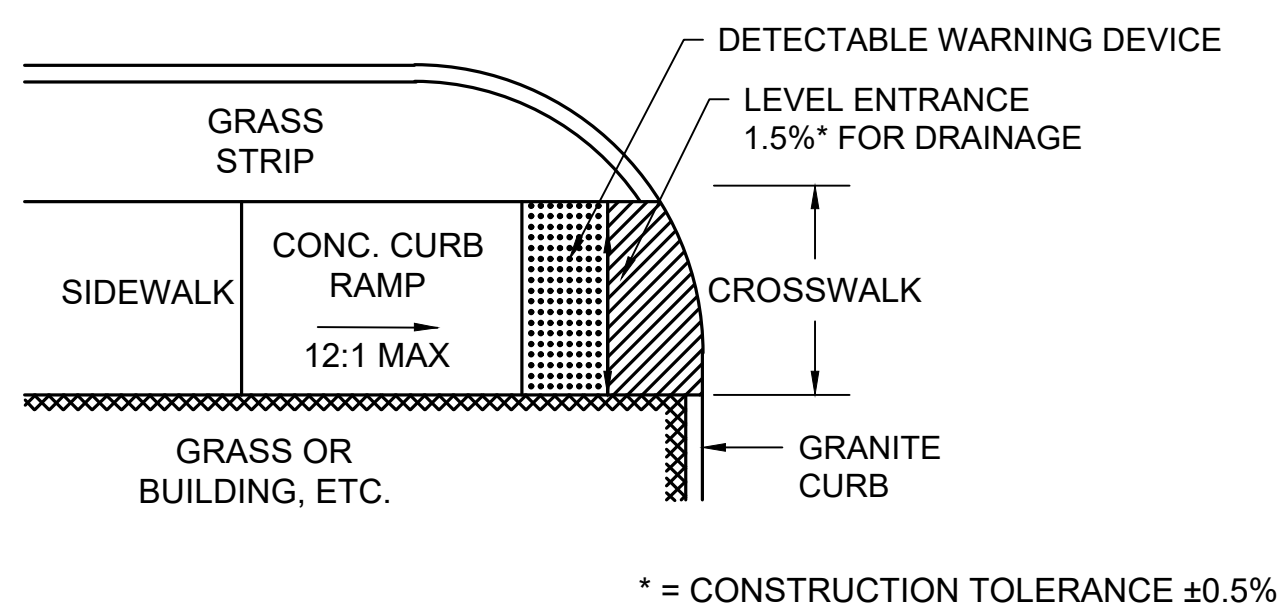
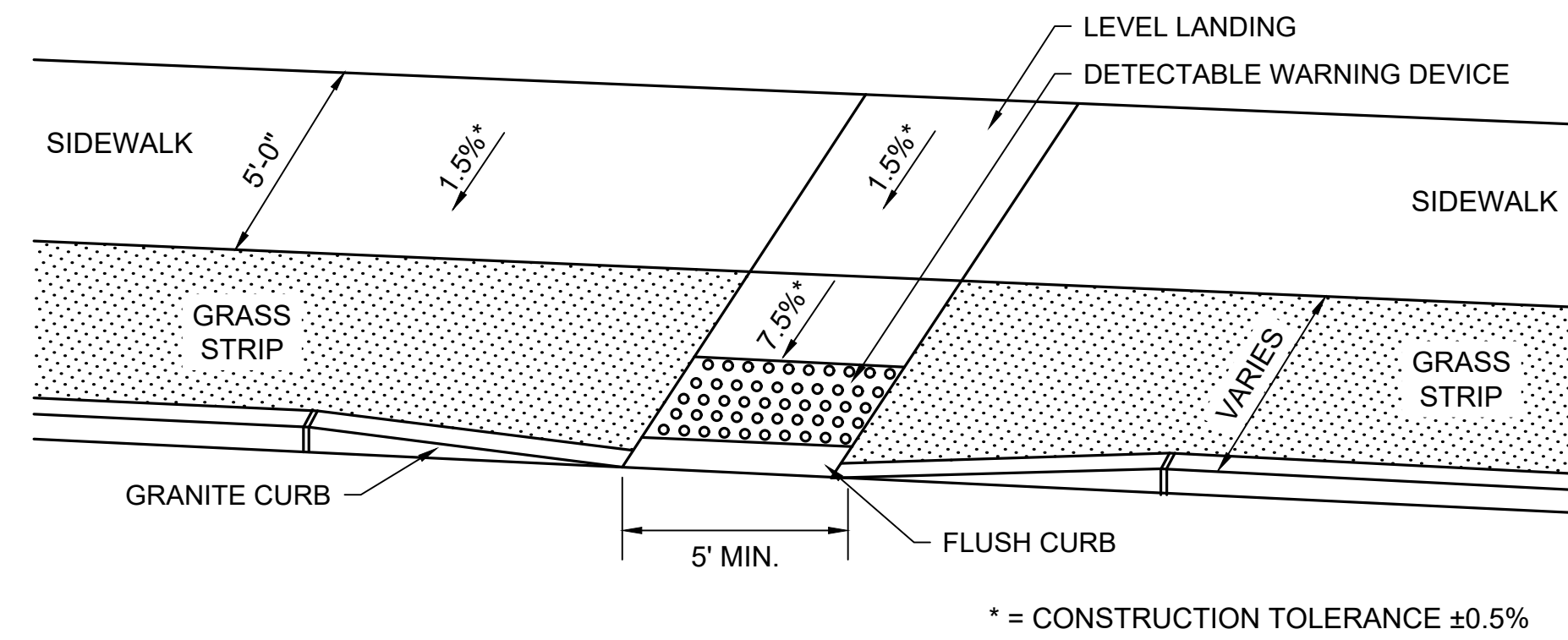
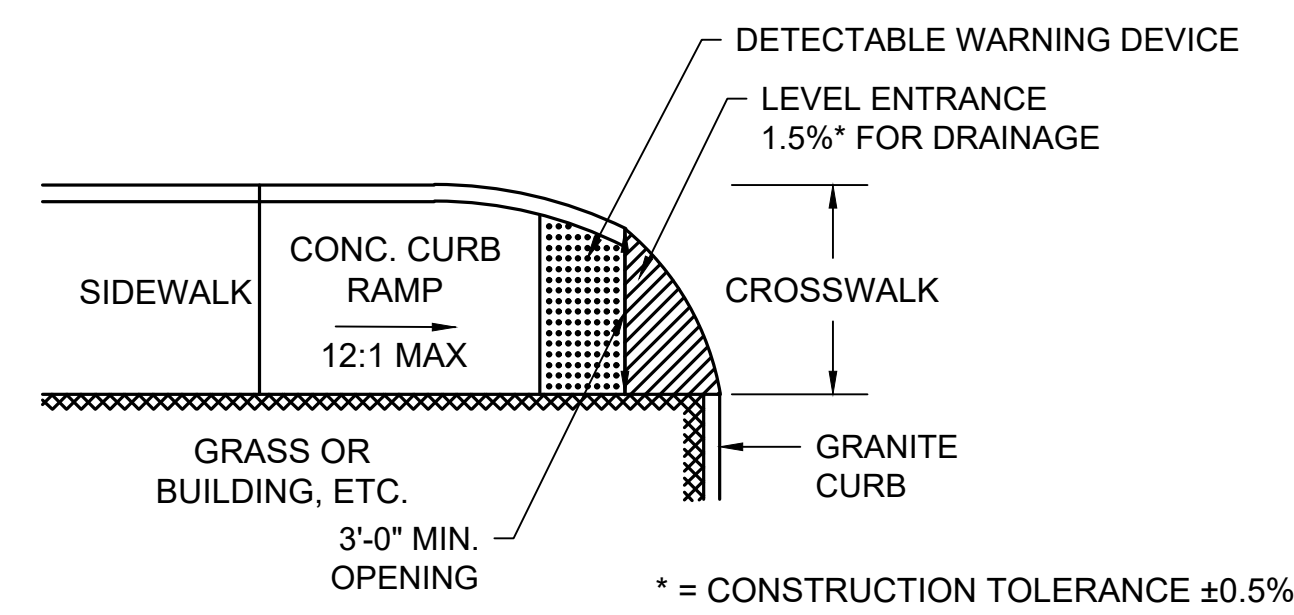
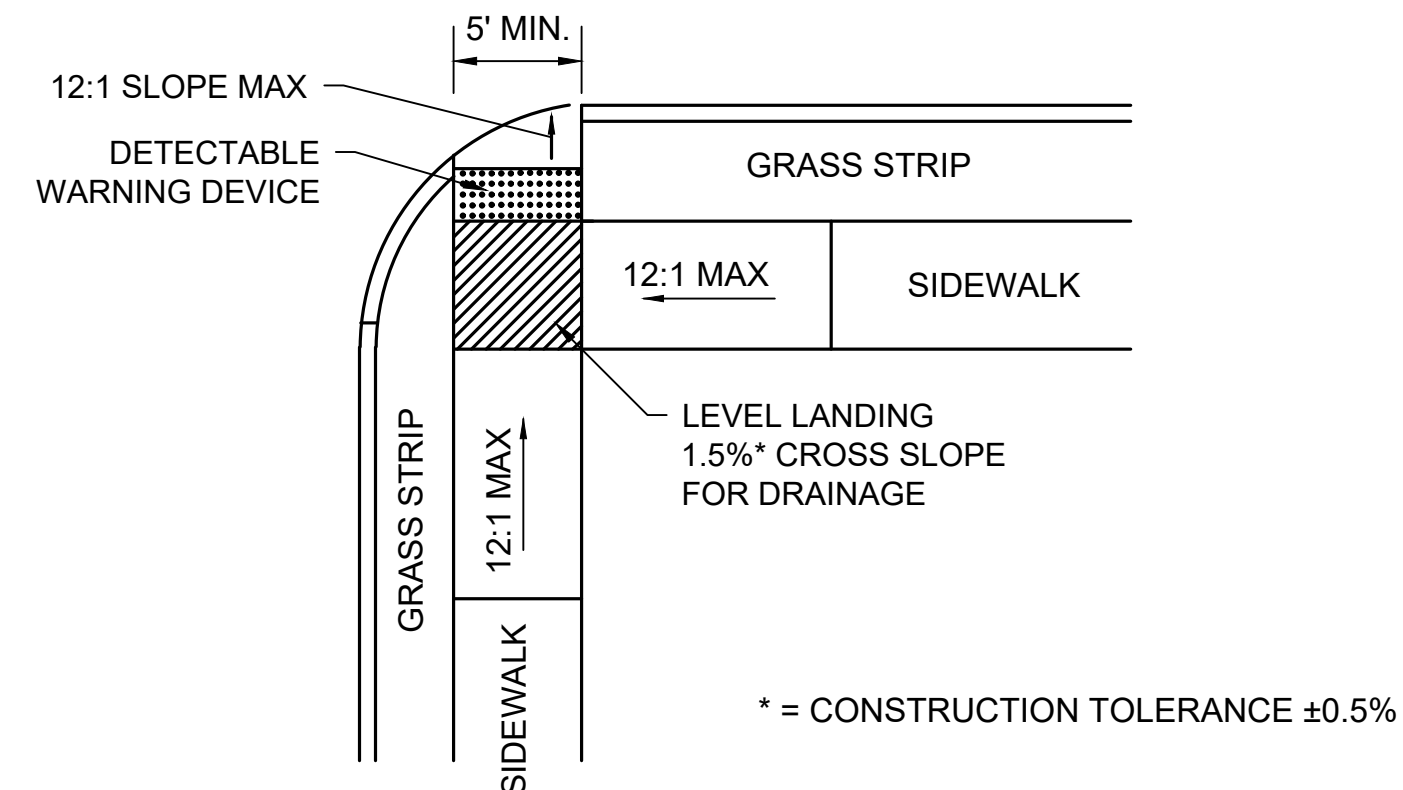
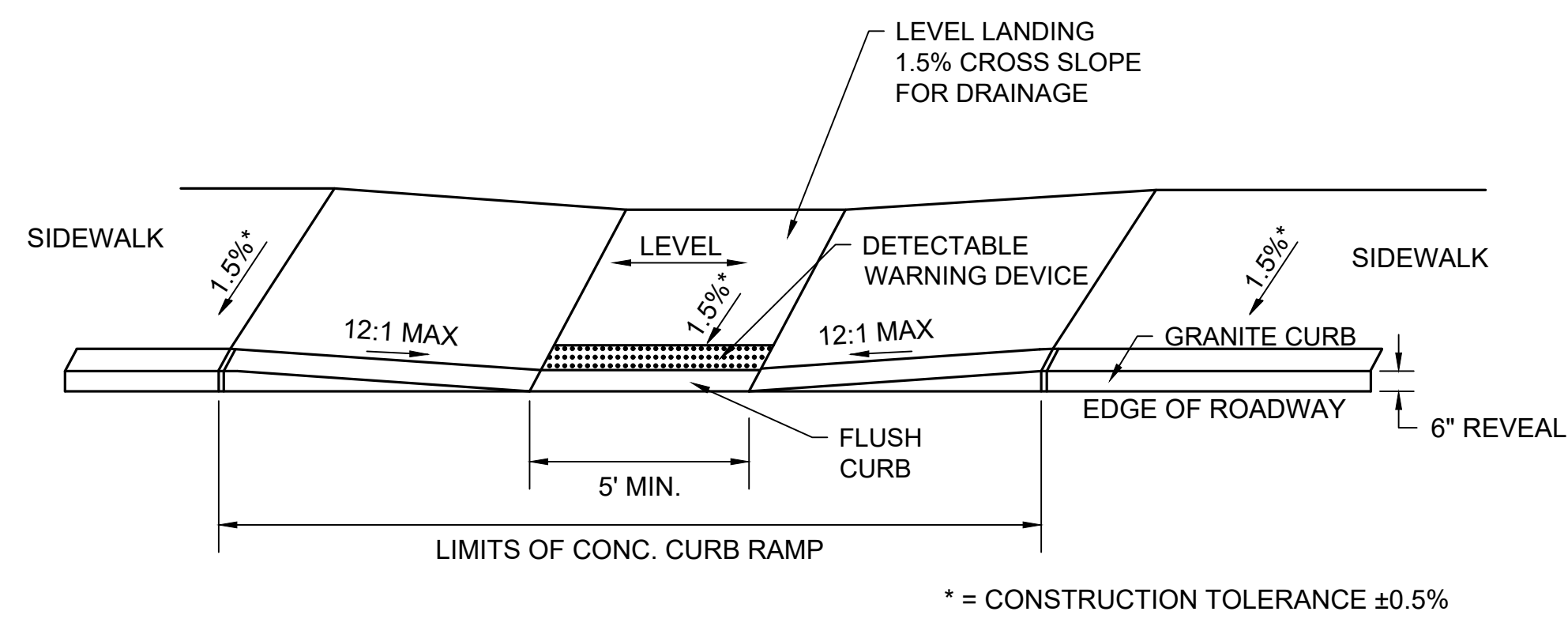
**STANDARD
 DETAIL SHEETS
 ROADWAY
 DETAILS**

SCALE: N.T.S.
 2015086.00
 77 OF 184



PREPARED FOR
 DEPARTMENT OF PUBLIC WORKS
 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



NOTES:

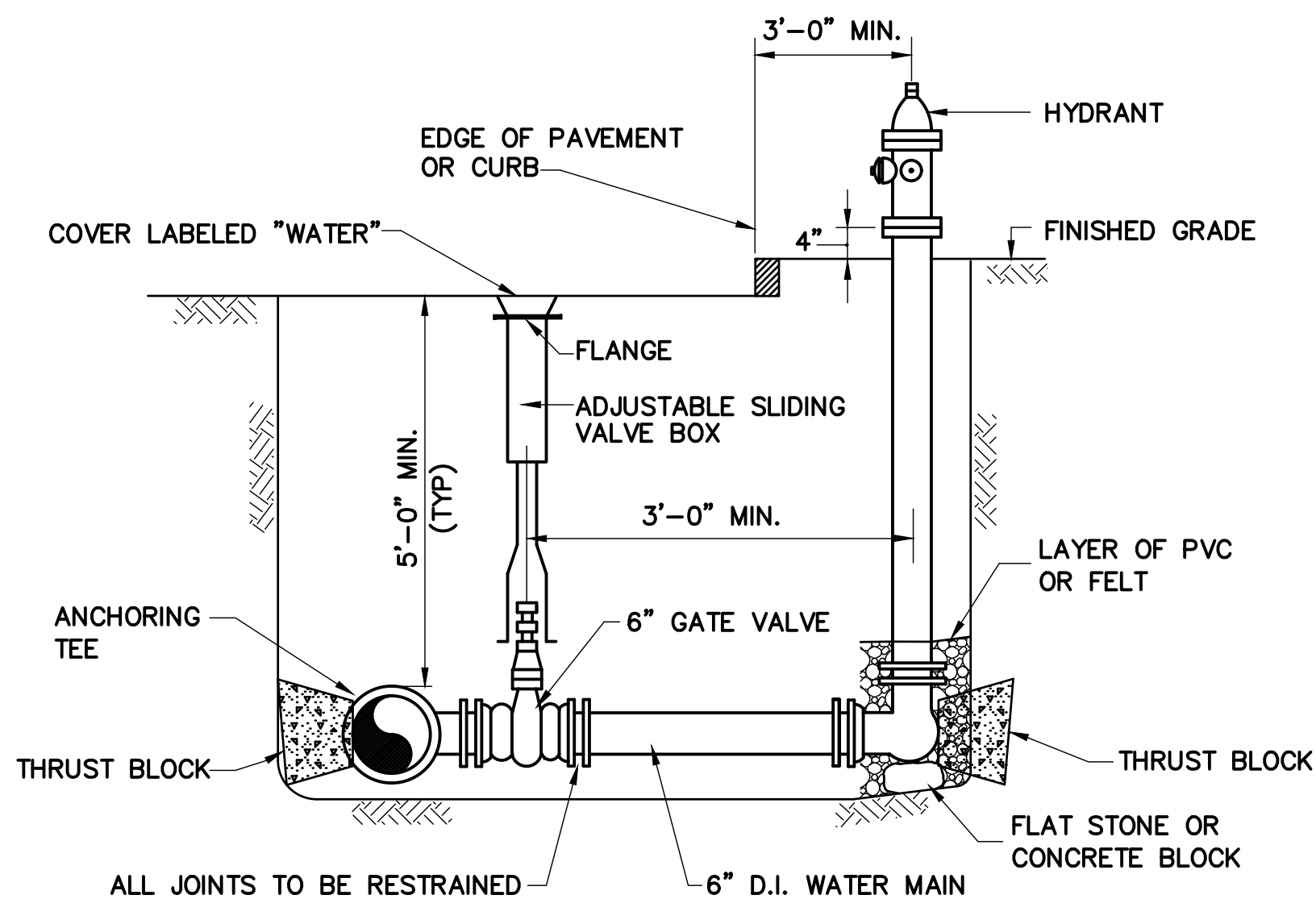
- A MINIMUM RUNNING SLOPE OF 1.5% THROUGH THE CUT THROUGH SHALL BE PROVIDED TO PREVENT PUDDLING WITHIN THE CUT THROUGH.
- A 2' DETECTABLE WARNING DEVICE SHALL BE LOCATED AT EACH EXIT/ENTRANCE TO THE CEM. CONC. CUT THROUGH.
- THE CEM. CONC. PATH THROUGH THE ISLAND SHALL BE ADA COMPLIANT IN TERMS OF MAX. RUNNING SLOPE AND CROSS SLOPE.

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: DPE
 CHECKED BY: JPJ

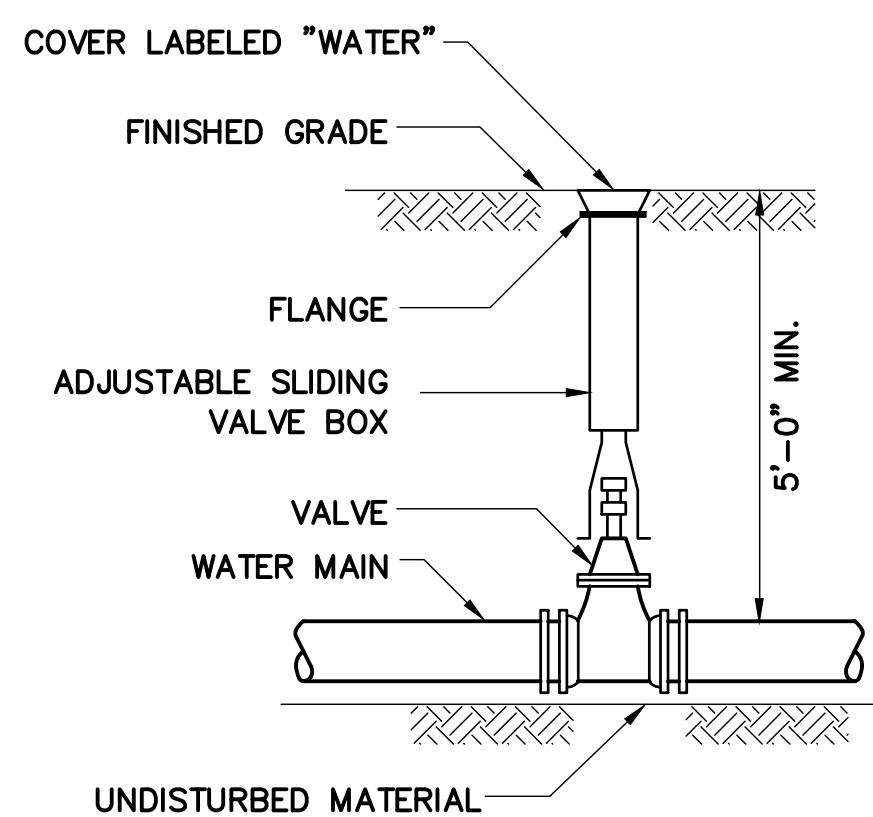
**STANDARD
 DETAIL SHEETS
 CURB RAMP
 DETAILS**

SCALE: N.T.S.
 2015086.00

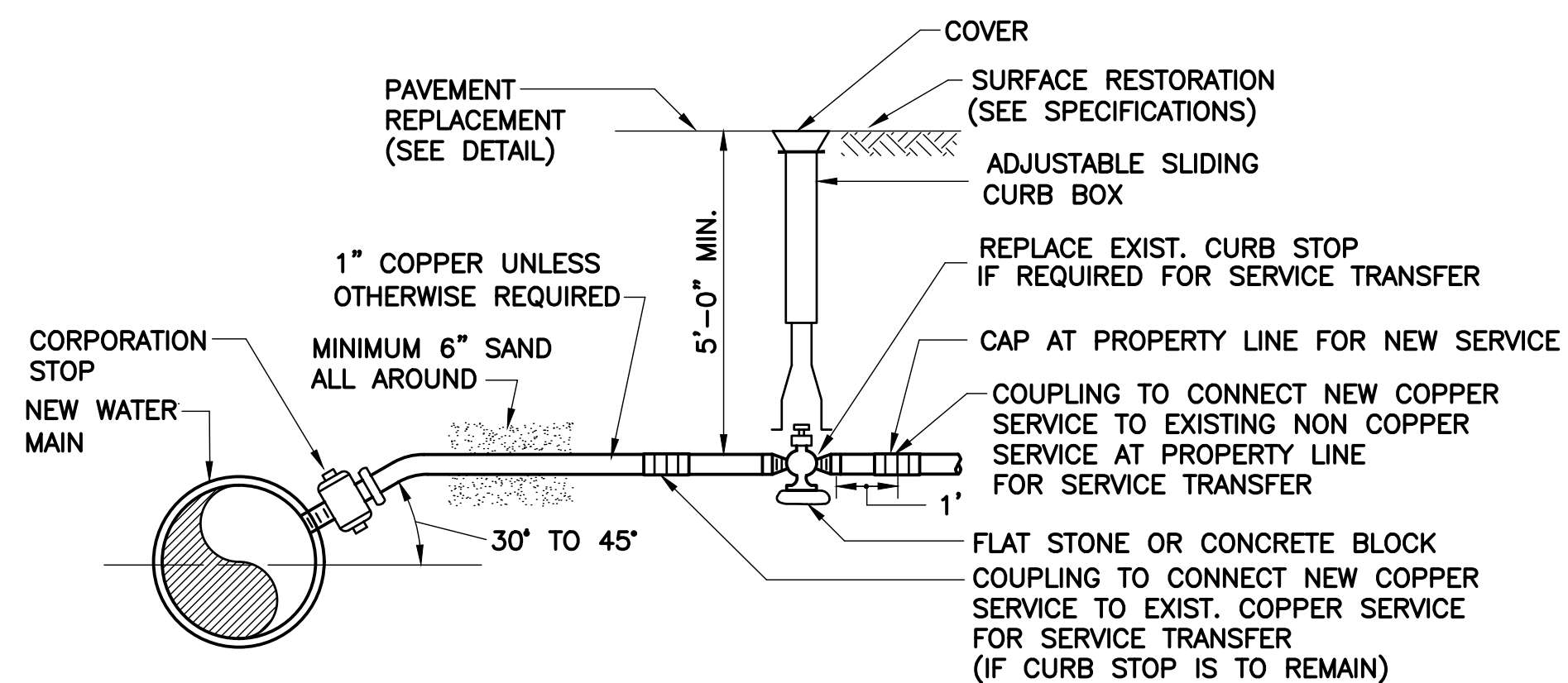


- NOTE:**
1. HYDRANTS SHALL BE DELIVERED FROM FACTORY W/O DRAIN HOLES.
 2. HYDRANT ASSEMBLY INCLUDES MJ ANCHOR TEE.
 3. HYDRANT SHALL BE KENNEDY K-81A GUARDIAN, PER CITY OF PORTSMOUTH OPEN RIGHT STANDARDS.
 4. LOCATE HYDRANTS A MINIMUM OF 3' BEHIND CURBING UNLESS OTHERWISE DIRECTED. REVIEW HYDRANT LOCATIONS WITH PROJECT REPRESENTATIVE PRIOR TO WATER MAIN INSTALLATIONS.

HYDRANT AND VALVE DETAIL
N.T.S.

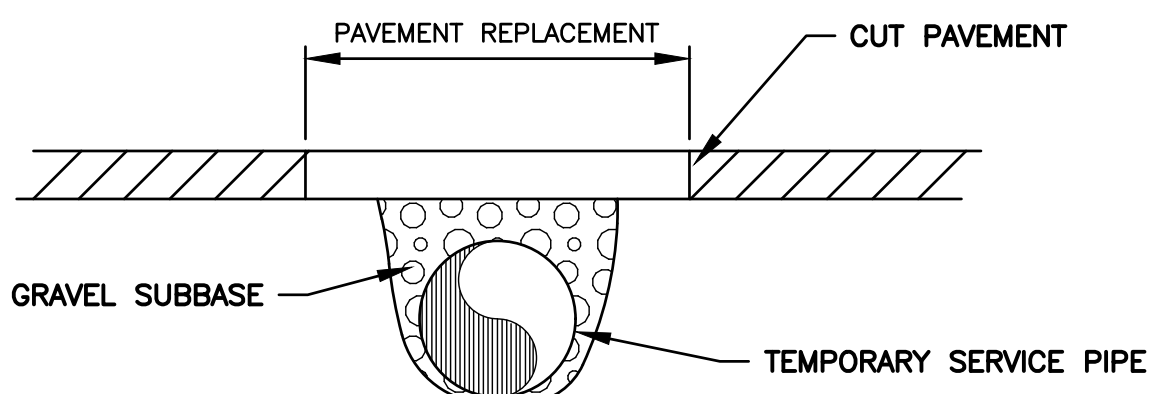
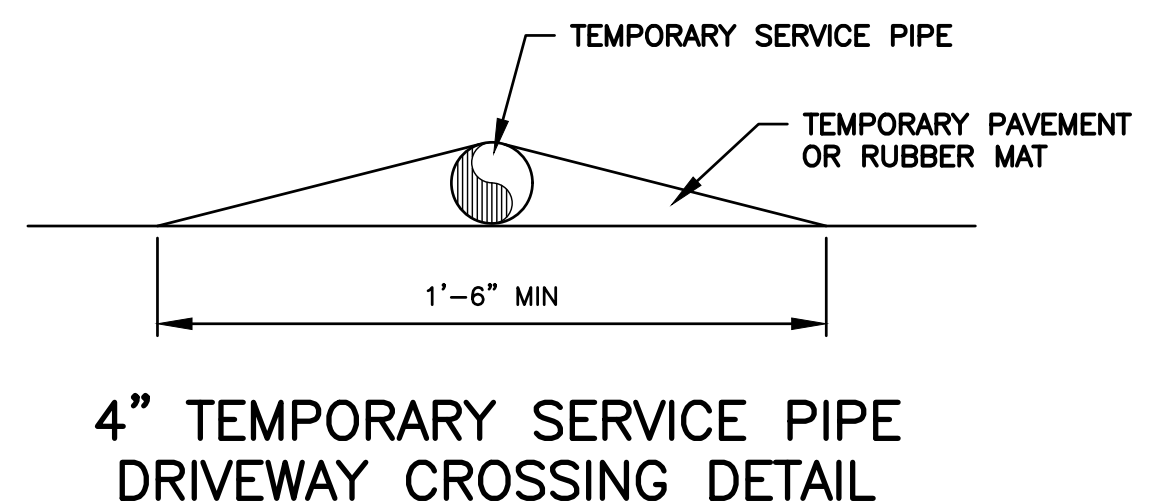


VALVE AND BOX DETAIL
N.T.S.

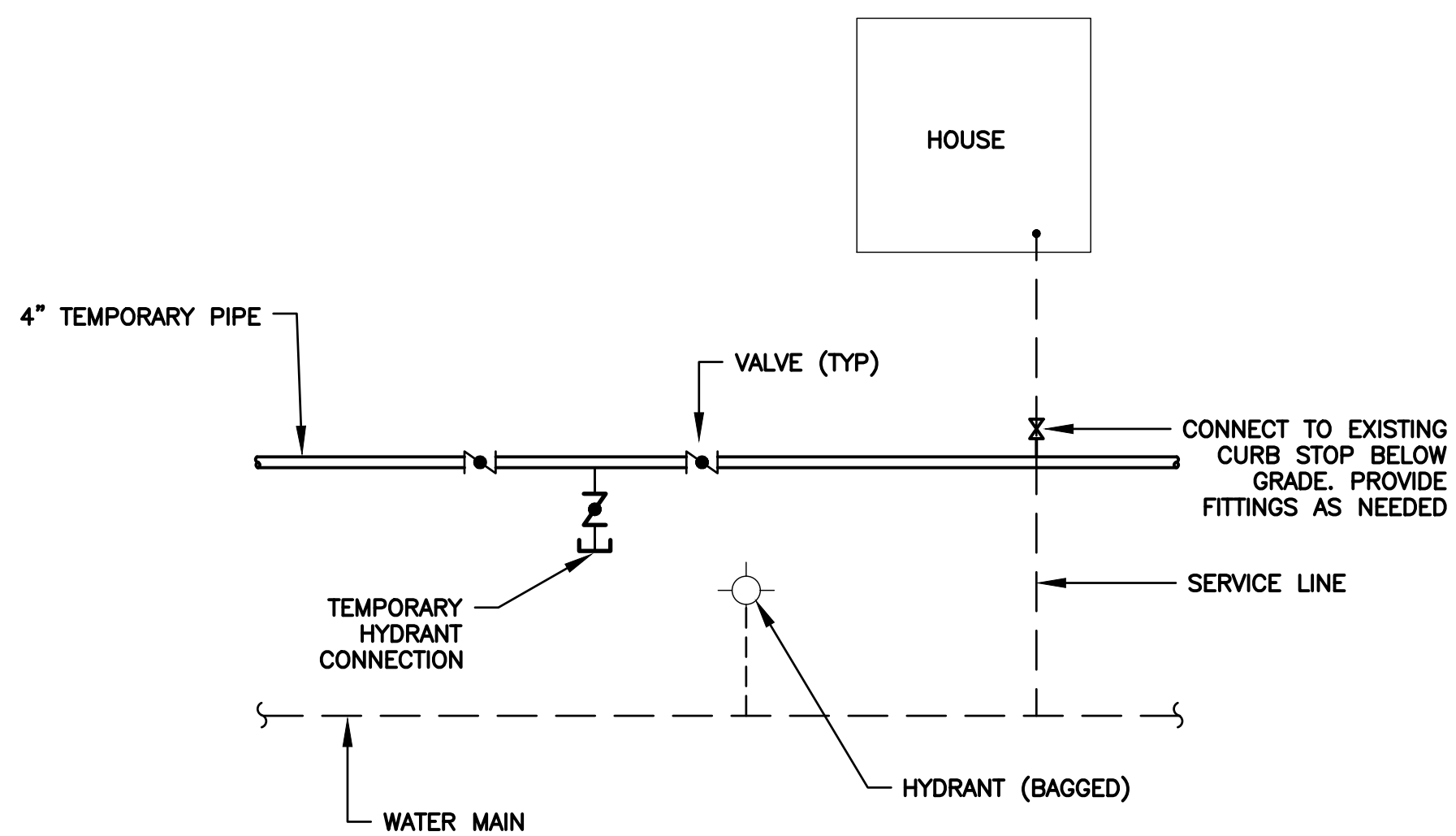


- NOTE:**
1. PROVIDE SADDLE FOR ALL AC AND PVC MAINS AND ALL 2\"/>
 2. DETAIL TO BE USED FOR BLOW-OFFS AS REQUIRED.

WATER SERVICE DETAIL
N.T.S.



TEMPORARY SERVICE PIPE ROADWAY CROSSING DETAIL
N.T.S.



TEMPORARY SERVICE PIPE DETAIL
N.T.S.

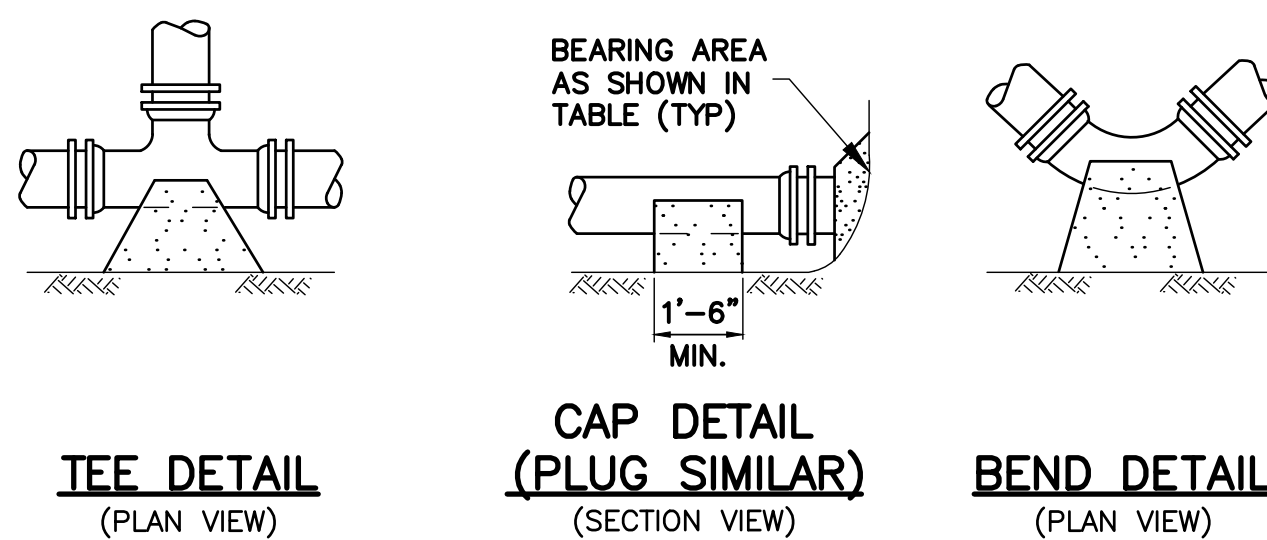


TABLE OF CONCRETE THRUST RESTRAINT MINIMUM BEARING AREAS IN SQUARE FEET AGAINST UNDISTURBED MATERIAL FOR WATER MAIN FITTINGS

SIZE OF MAIN	90° BENDS, TEES, CAPS AND PLUGS	45° BENDS AND WYES	22-1/2° BENDS	11-1/4° BENDS
6", 8"	5	4	2	2
10", 12"	12	9	5	2

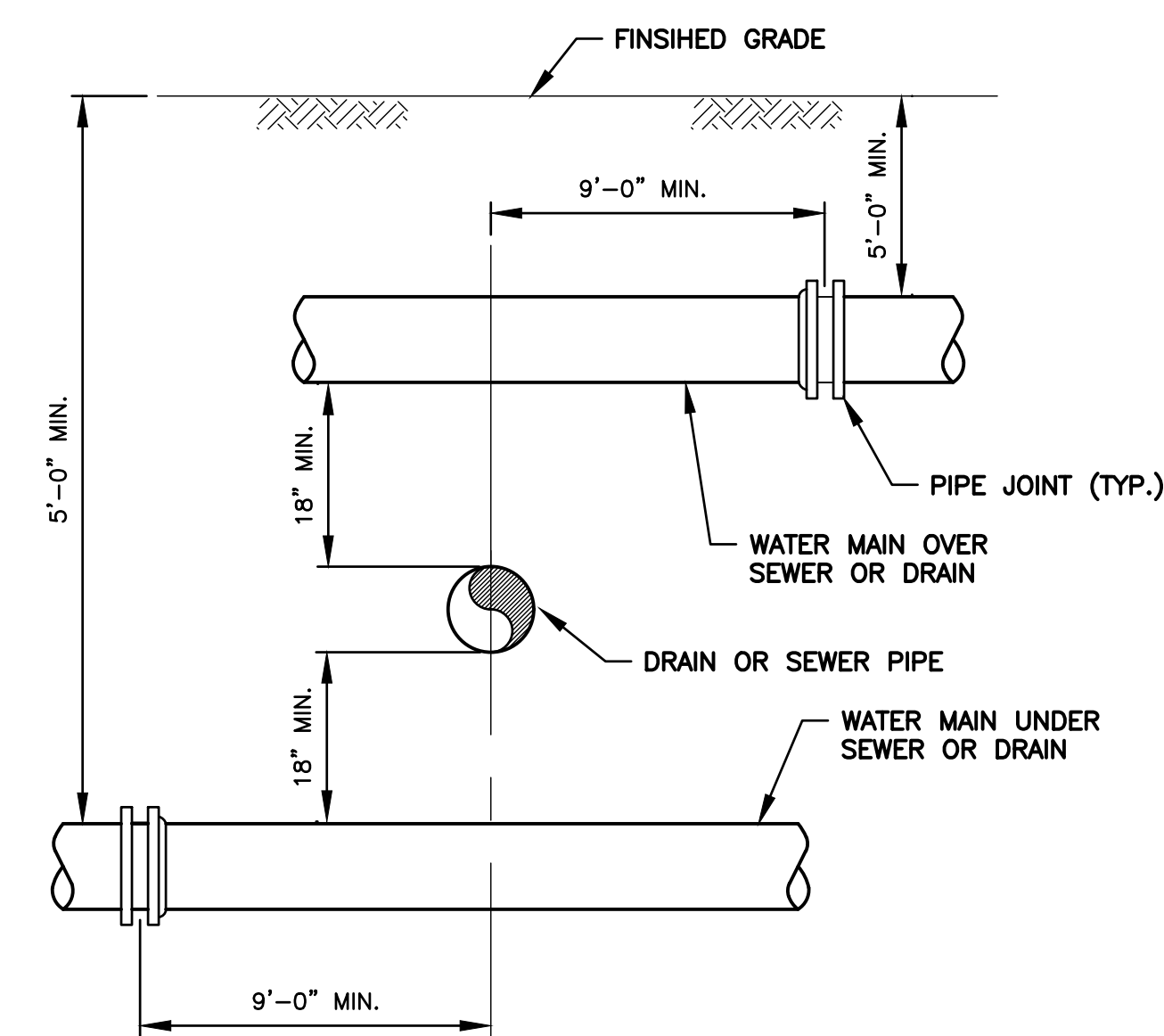
- NOTES:**
1. CONCRETE THRUST RESTRAINT SHALL ONLY BE USED WHERE OTHER MEANS OF RESTRAINT ARE NOT FEASIBLE.
 2. CONTRACTOR SHALL USE CARE TO AVOID PLACEMENT OF CONCRETE ON THE FITTING JOINTS

CONCRETE THRUST RESTRAINT FOR FITTINGS
N.T.S.

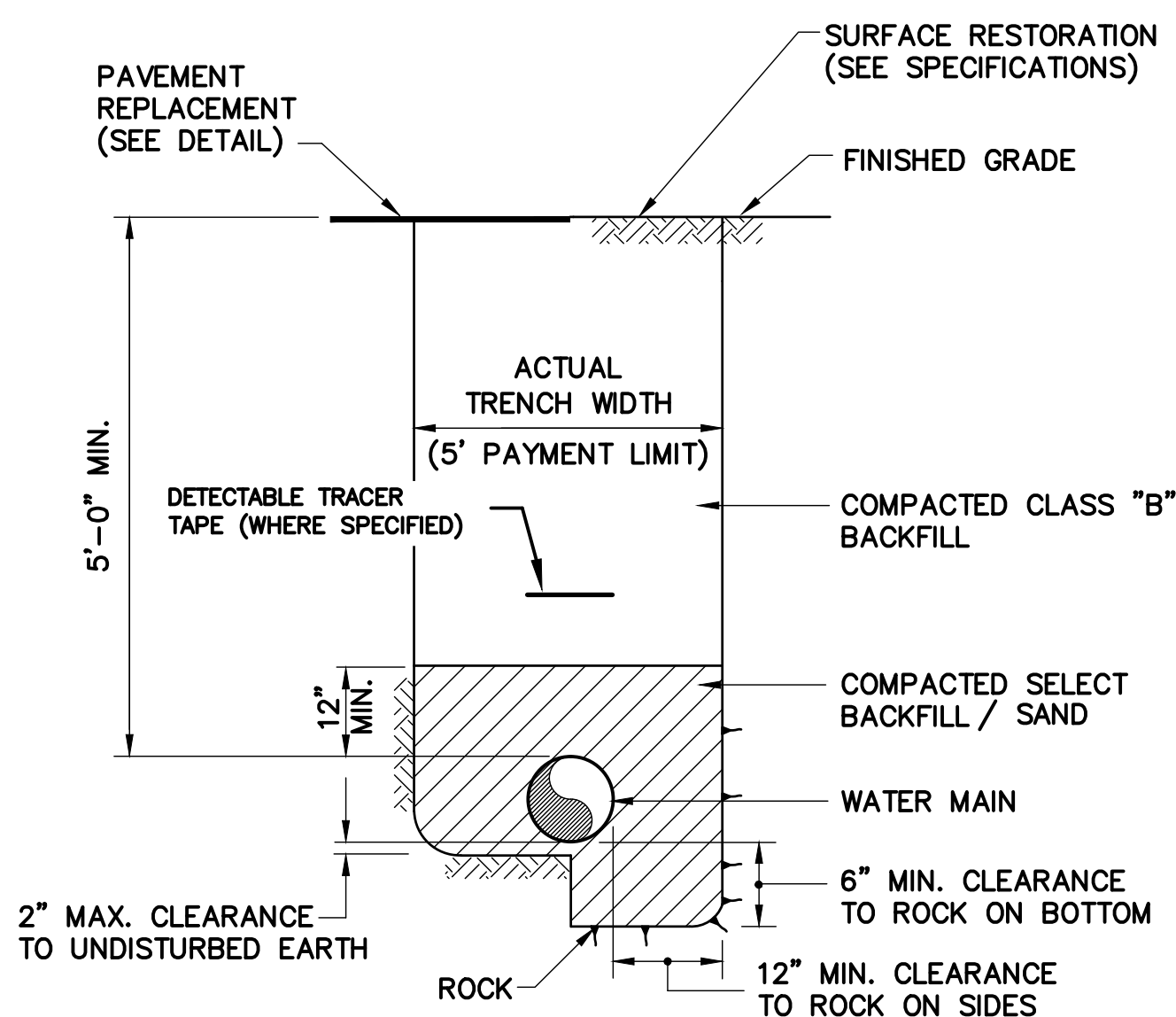
TABLE 1
REQUIRED LENGTH OF RESTRAINED JOINTS FROM FITTINGS (FEET)

PIPE SIZE	90° BEND	45° BEND OR WYE BRANCH	22 1/2° BEND	11 1/4° BEND	PLUG, CAP OR IN-LINE VALVE	TEE (BRANCH)
6"	25 (30.5)	10.5 (12.5)	5 (6)	2.5 (3)	43 (64)	34 (51)
8"	33 (40)	13.5 (16.5)	6.5 (8)	3 (4)	55 (82)	47 (70)
10"	40 (48.5)	16.5 (20)	8 (9.5)	4 (5)	67 (100)	58 (87)
12"	47 (56.5)	19.5 (23.5)	9.5 (11.5)	4.5 (5.5)	79 (118)	70 (105)
16"	59.5 (72)	24.5 (30)	12 (14.5)	6 (7)	101 (152)	92 (139)
20"	72 (86.5)	30 (36)	14.5 (17)	7 (8.5)	123 (184)	114 (171)
24"	84 (100)	35 (41)	16.5 (20)	8 (10)	144 (216)	134 (202)
30"	100 (120)	41 (50)	20 (24)	10 (12)	174 (261)	165 (247)

- NOTES:**
1. RESTRAINED LENGTHS LISTED IN PARENTHESES ARE FOR PIPE WRAPPED IN POLYETHYLENE. THE OTHER ASSOCIATED LENGTHS ARE FOR PLAIN UNWRAPPED DUCTILE IRON PIPE.
 2. THE CONTRACTOR SHALL USE THIS TABLE IN CONJUNCTION WITH THE APPROPRIATE PIPE SPECIFICATION SECTION.



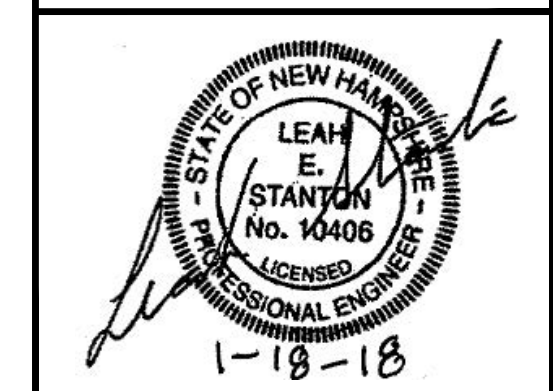
SEWER OR DRAIN CROSSING DETAIL
N.T.S.



WATER MAIN TRENCH DETAIL
N.T.S.

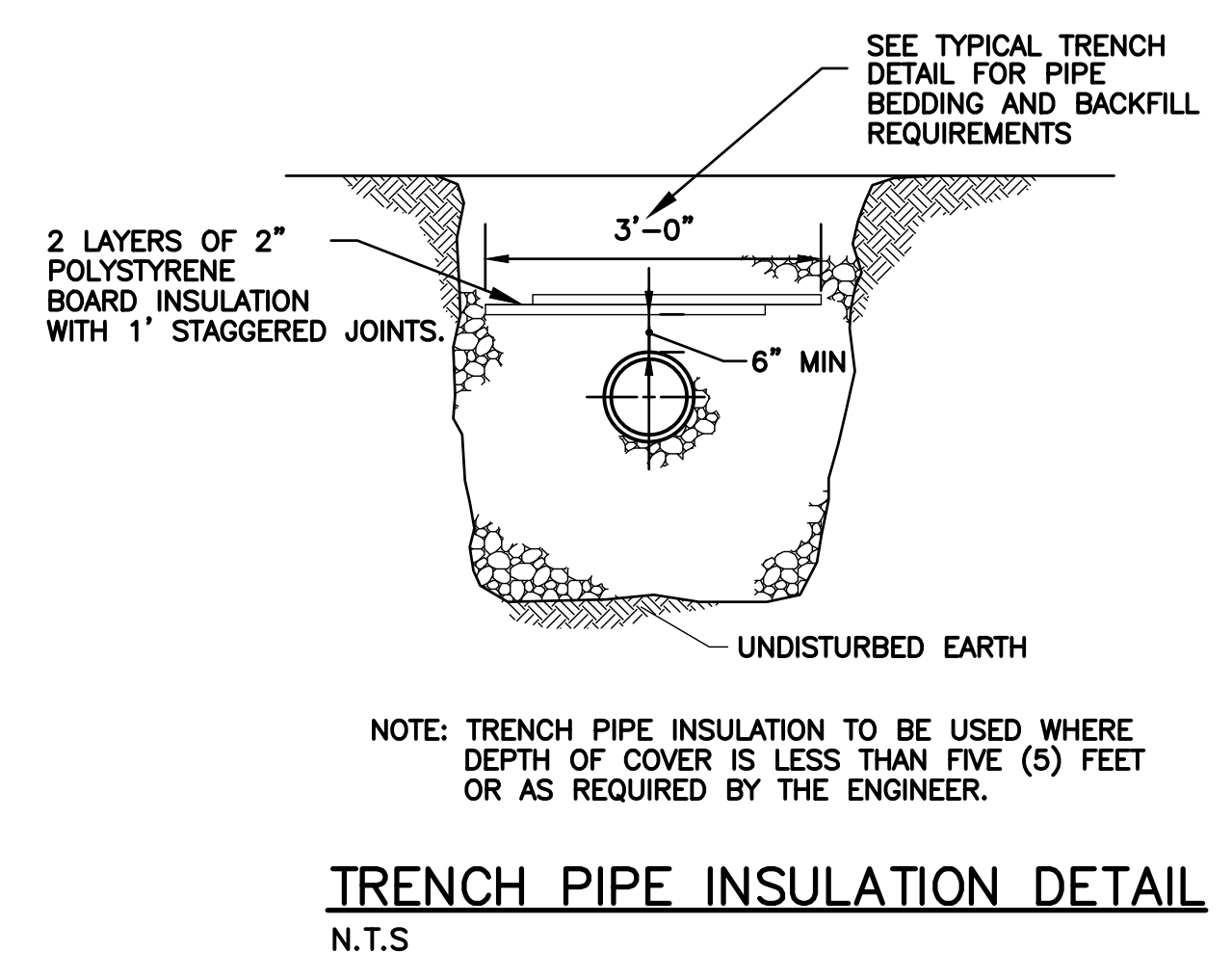
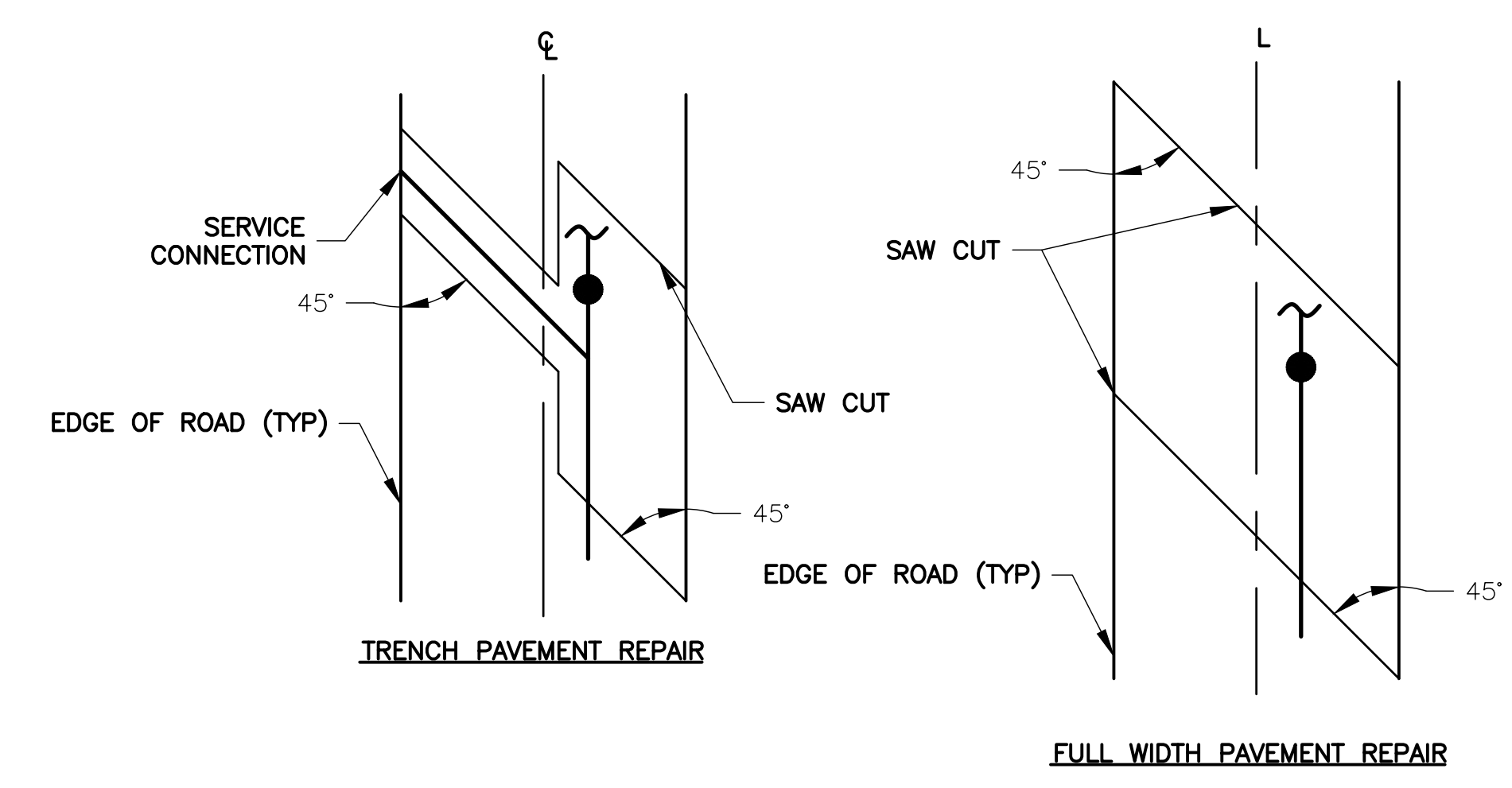
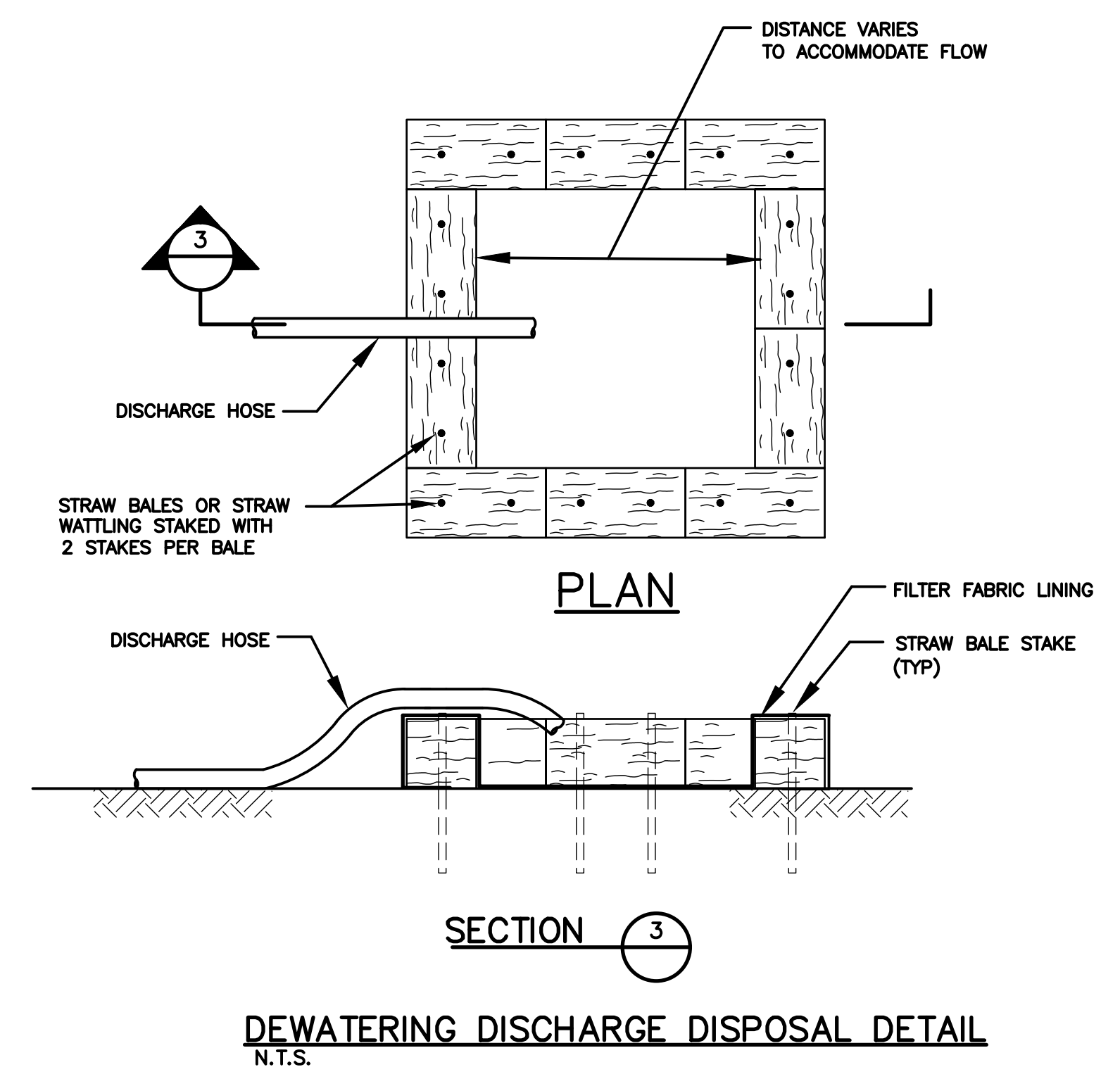
REVISIONS	
REVISION	DATE

2/3/2018
DRAWN/DESIGN BY: CLS/TLN
CHECKED BY: JRN/JMS



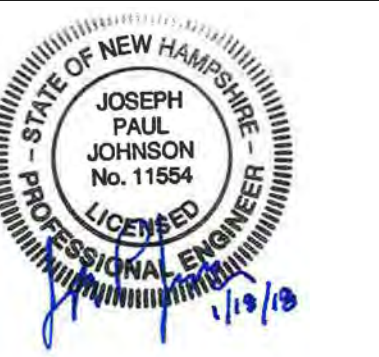
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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



REVISIONS	
REVISION	DATE

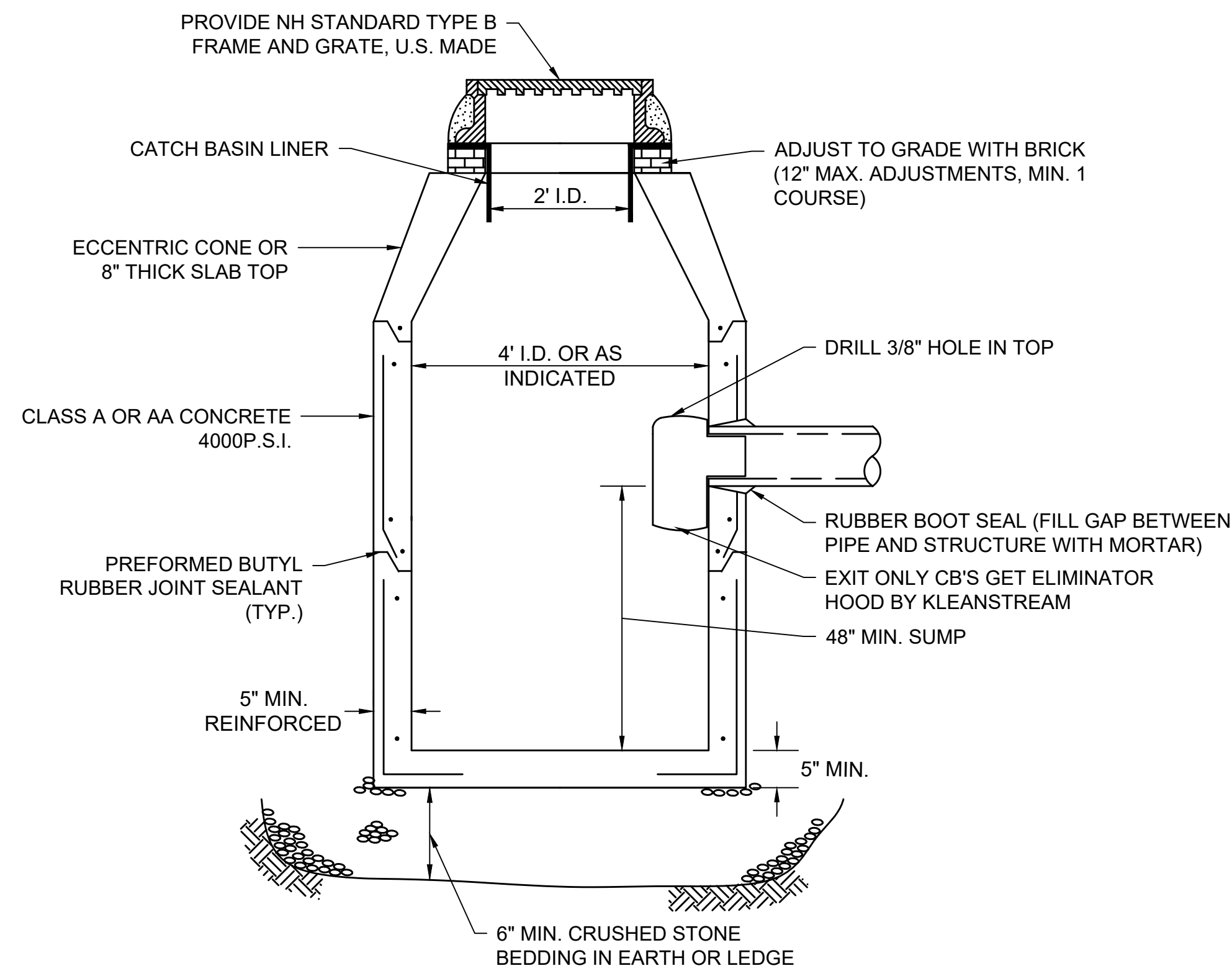
2/5/2018
 DRAWN/DESIGN BY: CLS/TLT CHECKED BY: JRN/JMS



**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

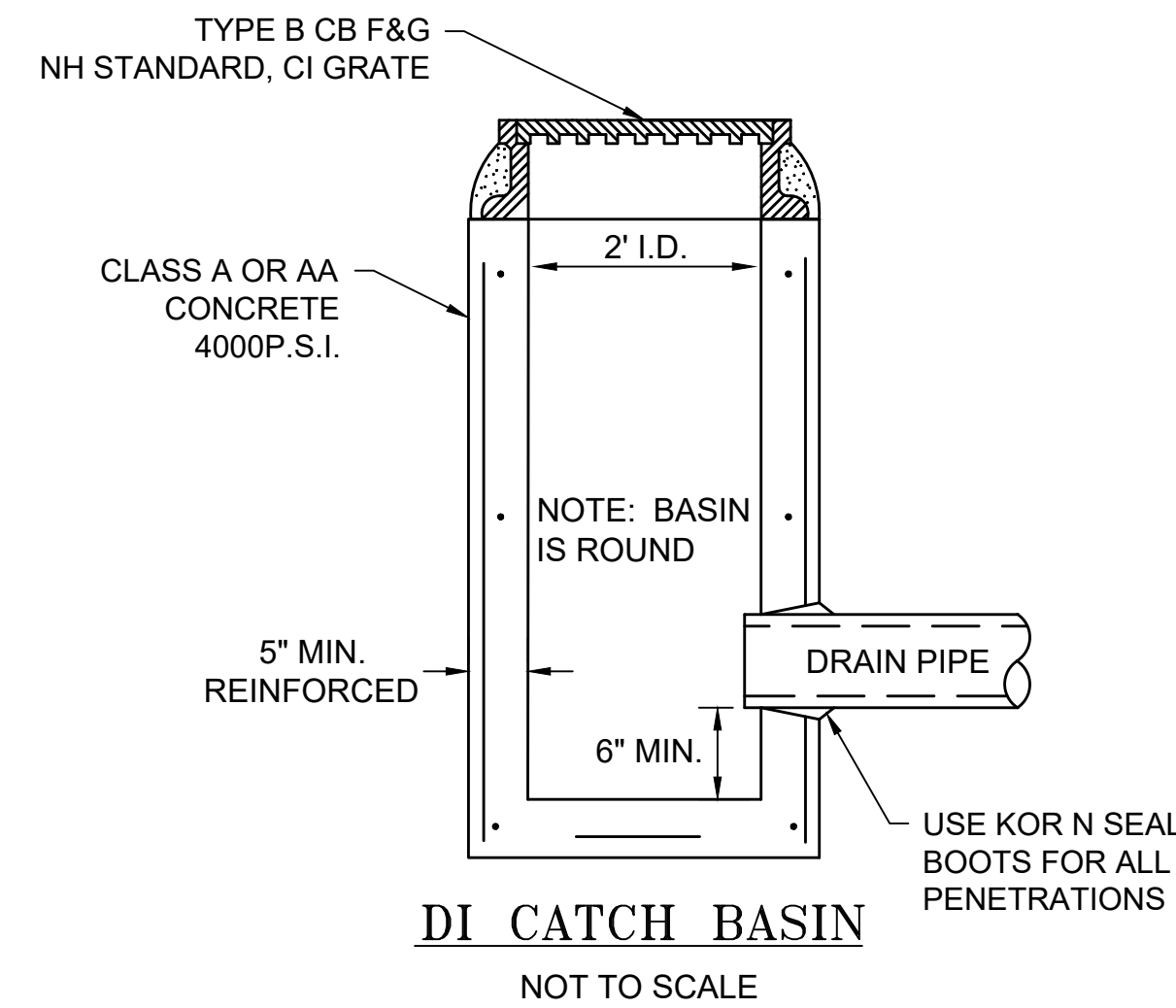
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NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: DPE CHECKED BY: JPJ



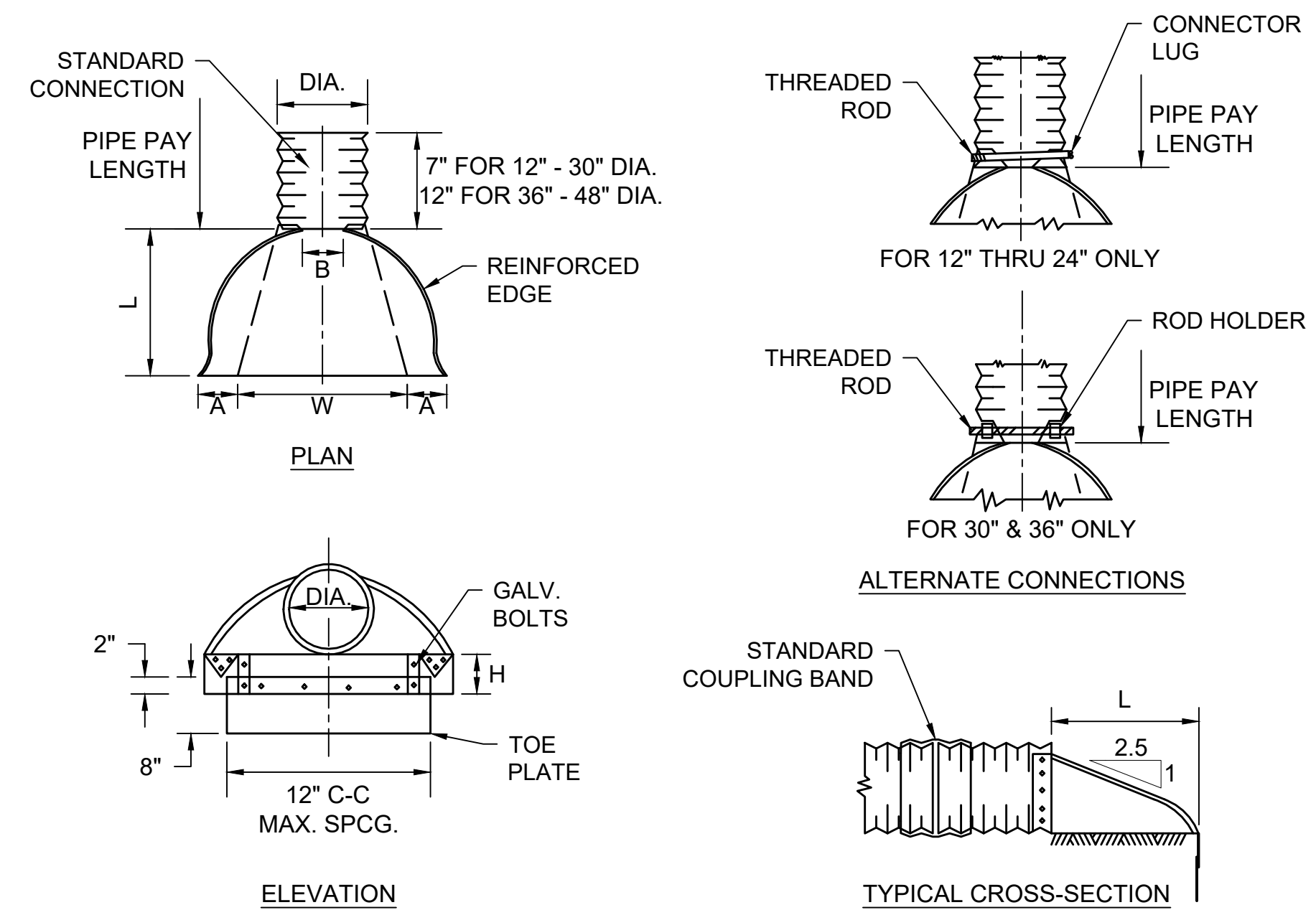
- NOTES:**
1. COAT INTERIOR OF SURFACE WITH APPROVED SALT GUARD FOR ALL STRUCTURES.
 2. ENTIRE STRUCTURE SHALL BE CAPABLE OF WITHSTANDING AN H-20 LOAD. DETAILS OF REINFORCEMENT TO BE FURNISHED BY MANUFACTURER

CONCRETE CATCH BASIN (PRECAST)
 NOT TO SCALE



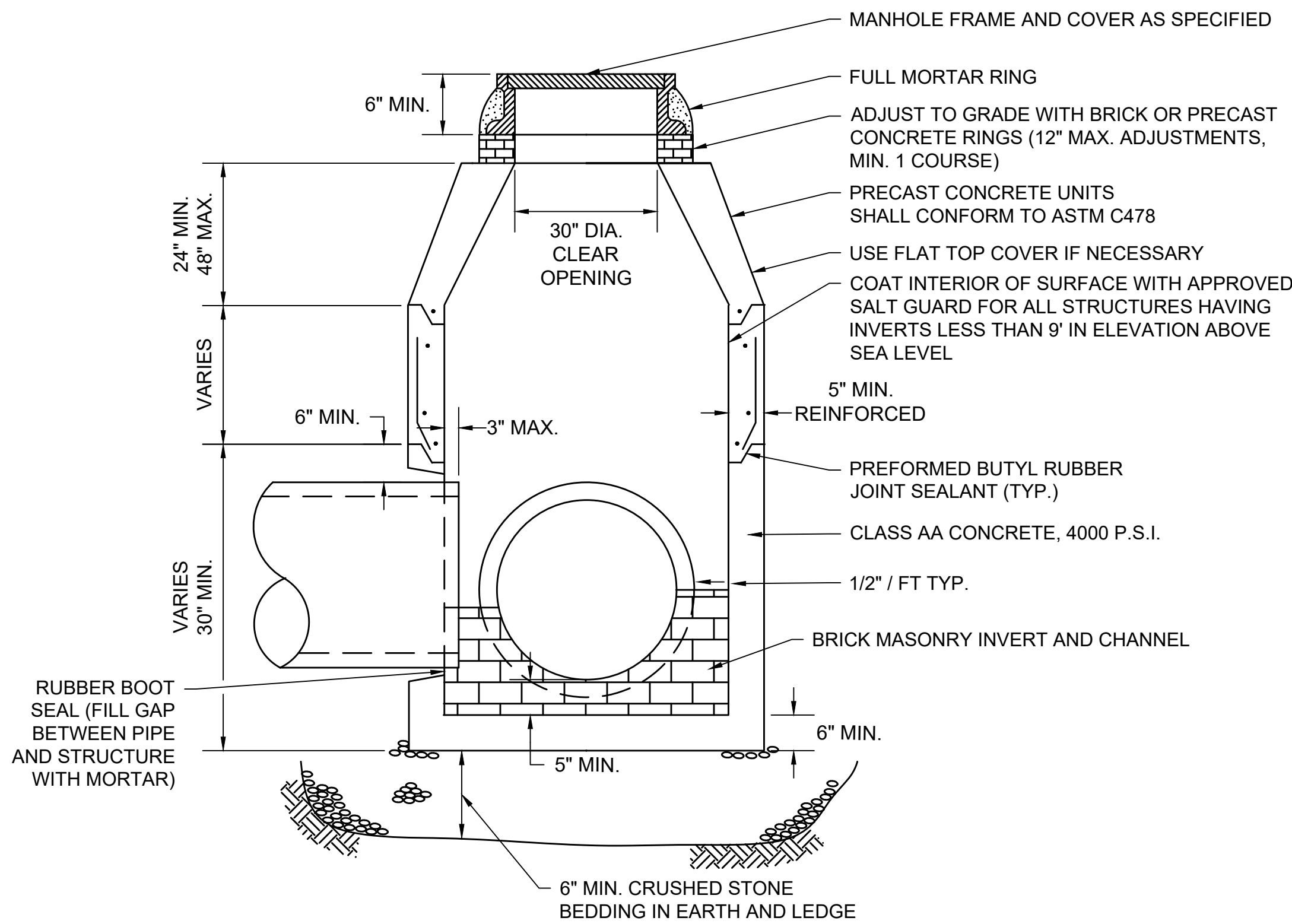
DI CATCH BASIN
 NOT TO SCALE

ITEM NO.	PIPE DIA.	DIMENSIONS				
		A (1" TOL.)	B MAX.	H (1" TOL.)	L (1 1/2" TOL.)	W (2" TOL.)
603.33212	12"	6.5"	10"	6.5"	25"	29"
604.33224	24"	7.5"	18"	6.5"	36"	45"



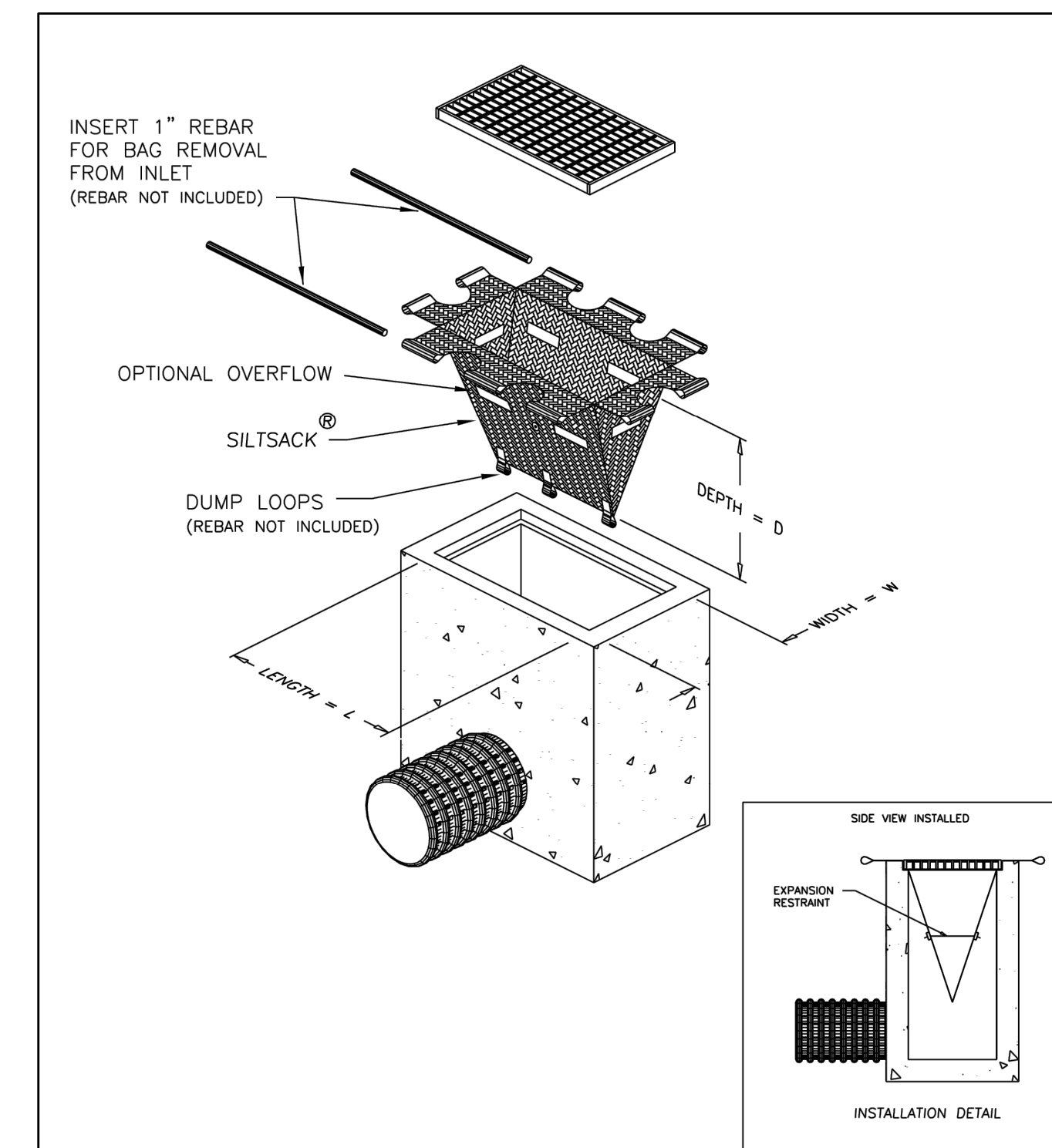
- NOTES:**
1. END SECTION FOR 12" TO 30" DIA. PIPE IN ONE PIECE, FOR 36" TO 48" DIA PIPE TO BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE.
 2. CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME THICKNESS AS END SECTION AND EACH TO BE GALVANIZED.

END SECTION FOR PLASTIC PIPE
 NOT TO SCALE

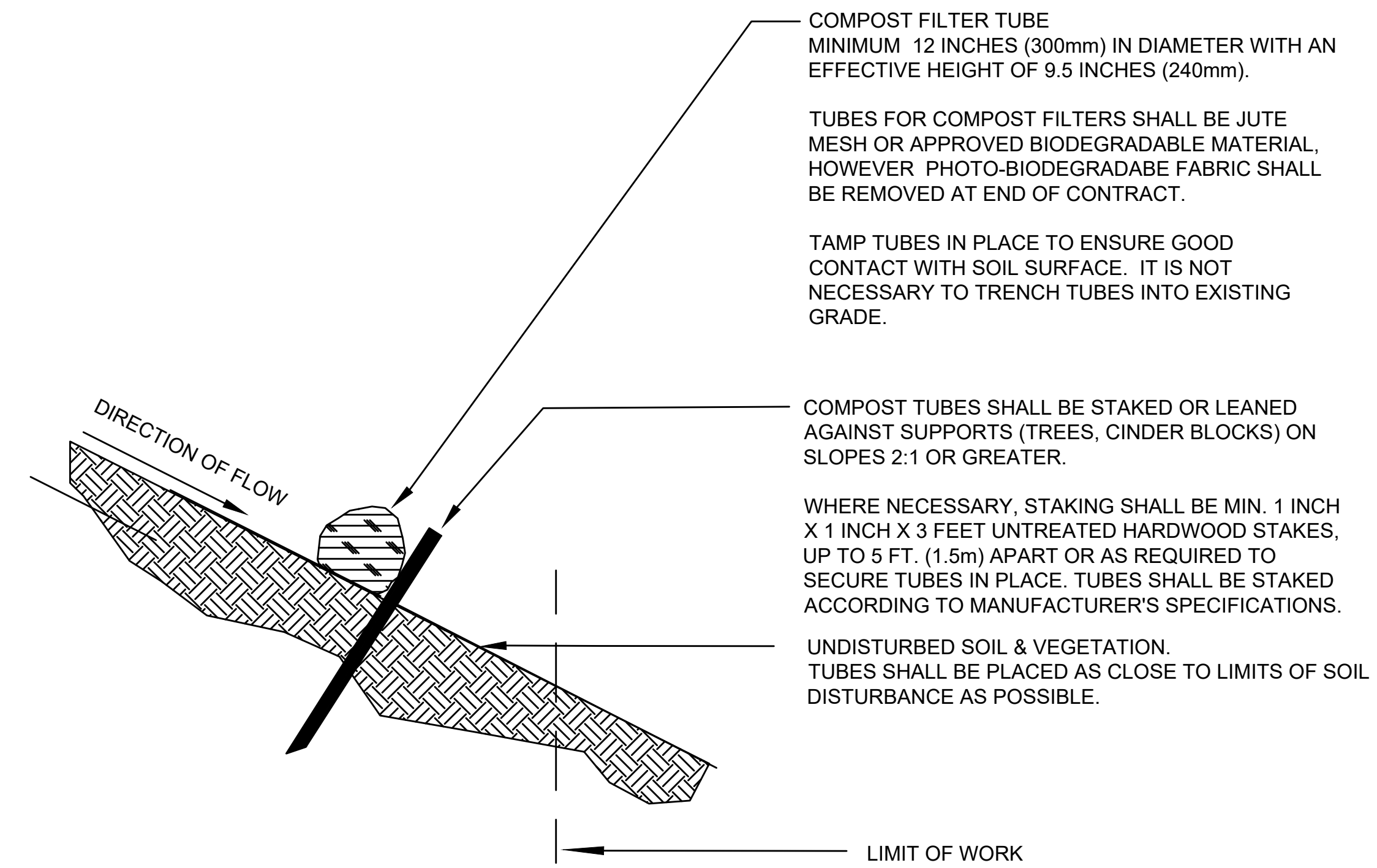


TYPICAL DRAINAGE MANHOLE
 NOT TO SCALE

- NOTES:**
1. BARRELS AND TOP SECTIONS SHALL BE PRECAST REINFORCED CONCRETE.
 2. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C47B.
 3. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE INVERT. INVERT BRICKS SHALL BE LAID ON EDGE. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST POSSIBLE TANGENT TO THE CENTERLINE OF THE PIPES. SHELVES SHALL BE CONSTRUCTED TO AN ELEVATION OF 1/2 THE PIPE DIA. AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL.
 4. FRAMES AND COVERS: DRAIN MANHOLE FRAMES AND COVERS SHALL DUAL HINGED, ERGO XL FROM EJIW - 41421025L01. 32" HINGED AND GASKETED WITH LOCKING CAM AND BE FABRICATED IN THE USA.
 5. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33. STONE SIZE NO. 67.
 - 100% PASSING 1 INCH SCREEN
 - 0-10% PASSING #4 SIEVE
 - 90-100% PASSING 3/4 INCH SCREEN
 - 0-5% PASSING #8 SIEVE
 - 20-55% PASSING 3/8 INCH SCREEN
 WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
 6. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE IS LESS THAN 5 FEET, A REINFORCED CONCRETE SLAB COVER HAVING AN ECCENTRIC ENTRANCE AND CAPABLE OF SUPPORTING H-20 LOADS MAY BE USED.

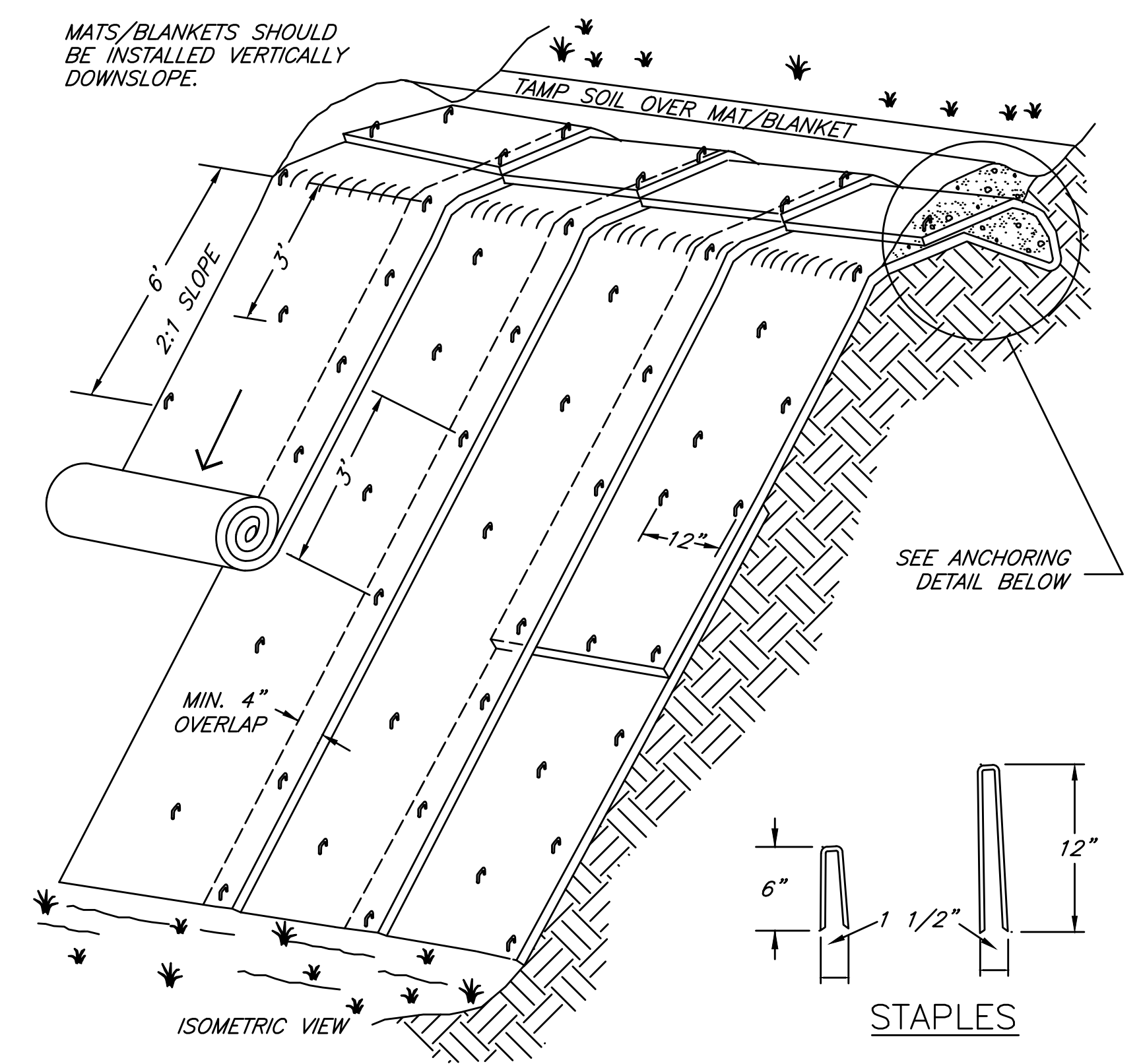
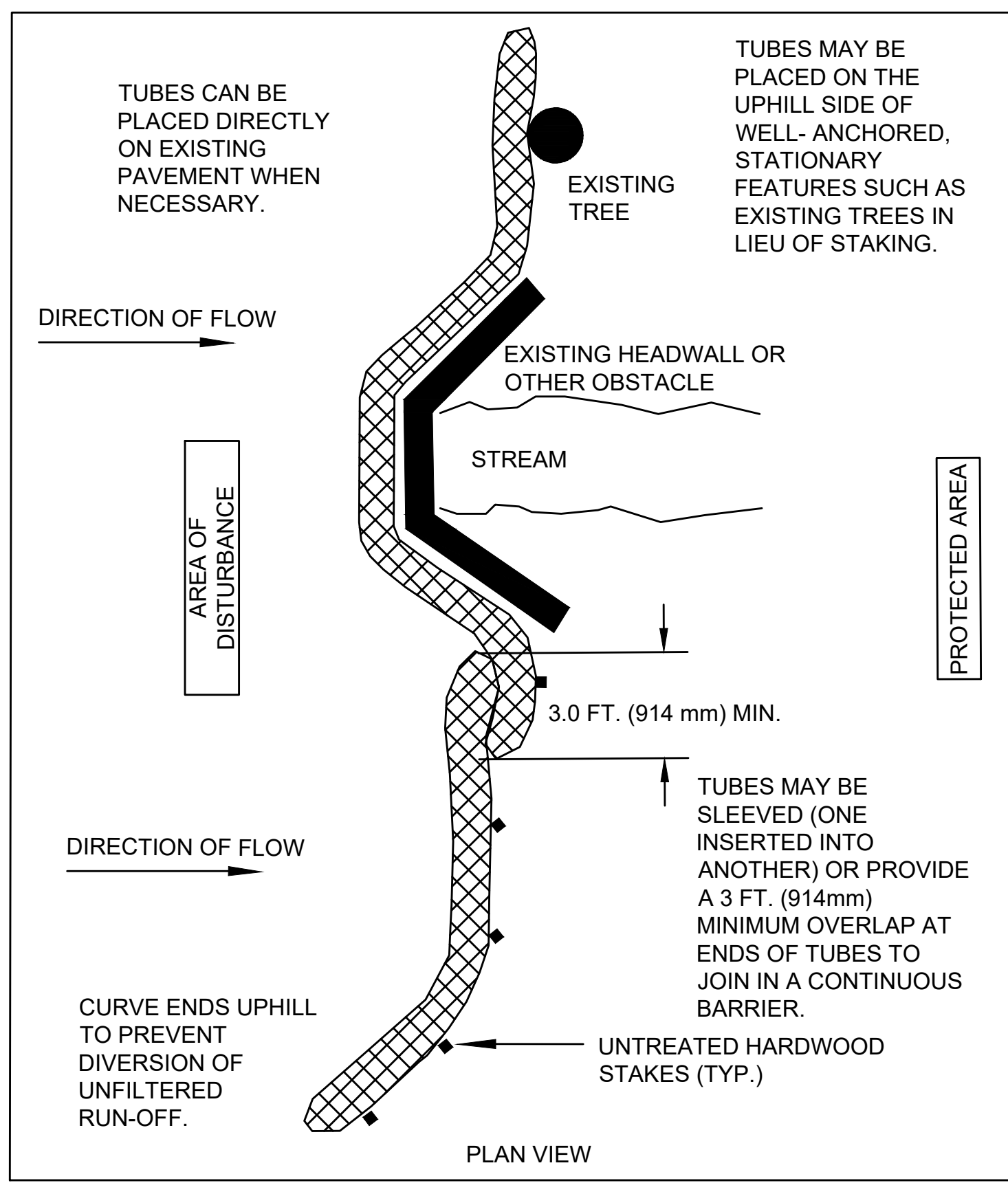


SILT SACK
 NOT TO SCALE

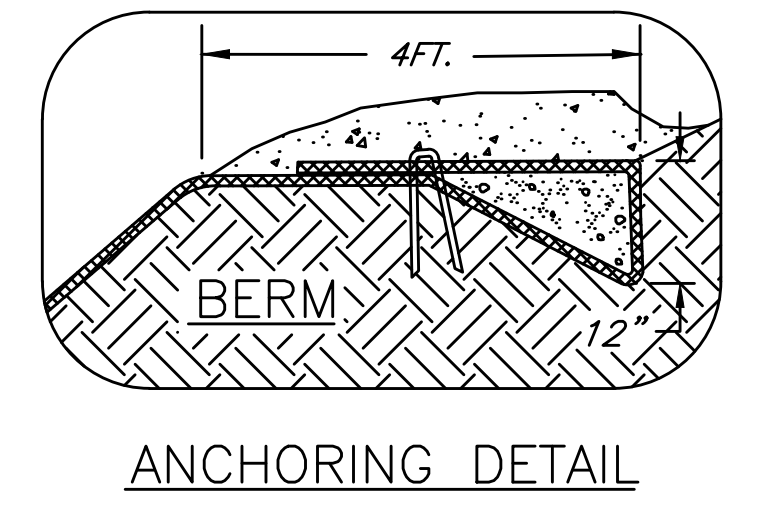


GENERAL NOTES:

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES (300mm) FOR SLOPES UP TO 50 FEET (15.24m) IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. TUBE LOCATION MAY BE SHIFTED TO ADJUST TO LANDSCAPE FEATURES, BUT SHALL PROTECT UNDISTURBED AREA AND VEGETATION TO MAXIMUM EXTENT POSSIBLE.
4. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
5. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
6. ADDITIONAL STAKING SHALL BE USED AT THE DIRECTION OF THE ENGINEER.

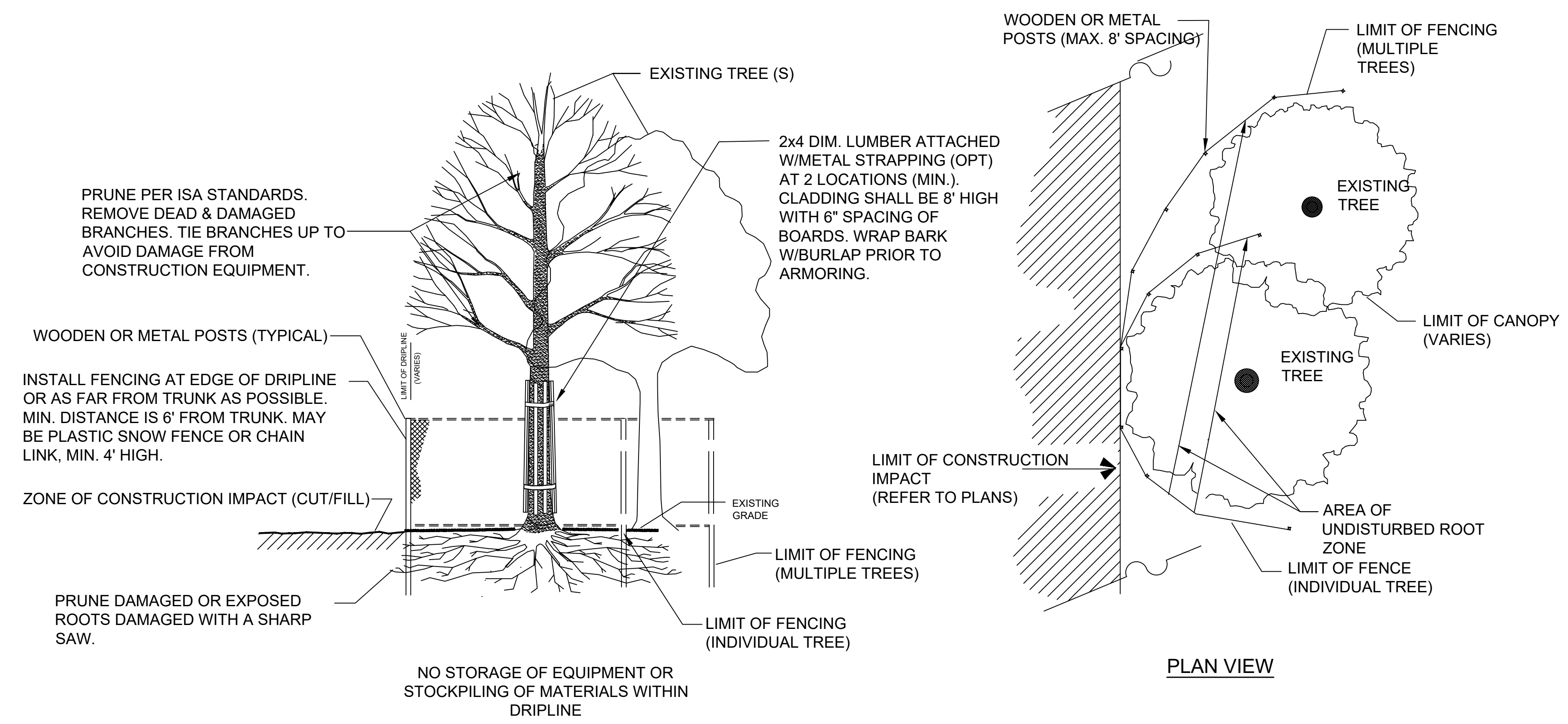


TYPICAL SLOPE SOIL STABILIZATION
NOT TO SCALE



ANCHORING DETAIL

COMPOST SOCK FOR PERIMETER BERM
NOT TO SCALE



TREE PROTECTION - EXISTING TREES
NOT TO SCALE



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PORTSMOUTH, NH 03801

IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: DPE CHECKED BY: JPJ

STANDARD DETAIL SHEETS
EROSION CONTROL DETAILS

SCALE: N.T.S.
2015086.00



PREPARED FOR
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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

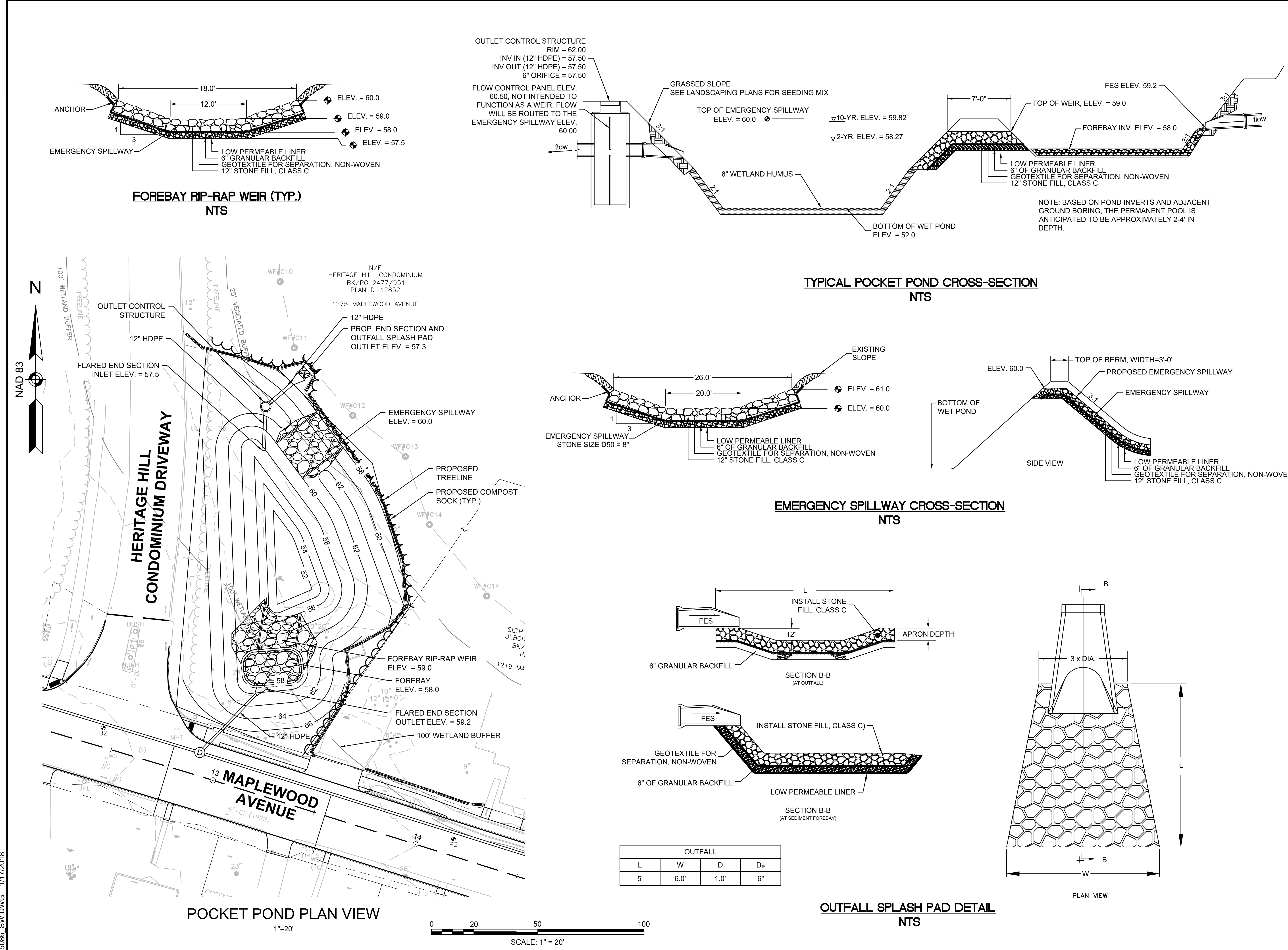
REVISIONS		
1	AOT COMMENTS	11-29-17
NO.	REVISION	DATE
2/5/2018		
DRAWN/DESIGN BY	CHECKED BY	
CLS	JPJ	

**STANDARD
 DETAIL SHEETS
 STORMWATER
 DETAILS**

SCALE: AS NOTED

2015086.00

86 OF 184



15086 SW.DWG 1/17/2018



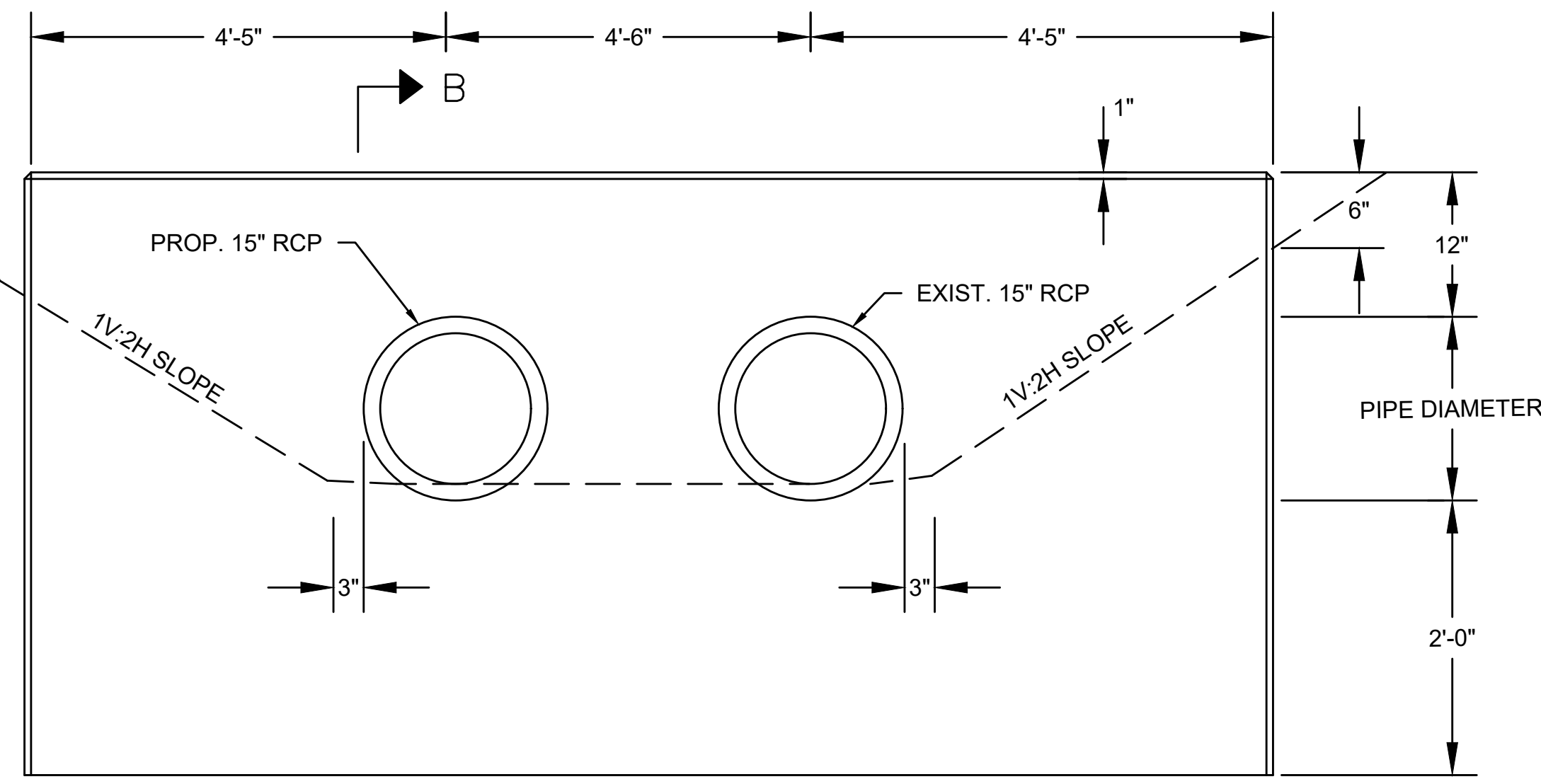
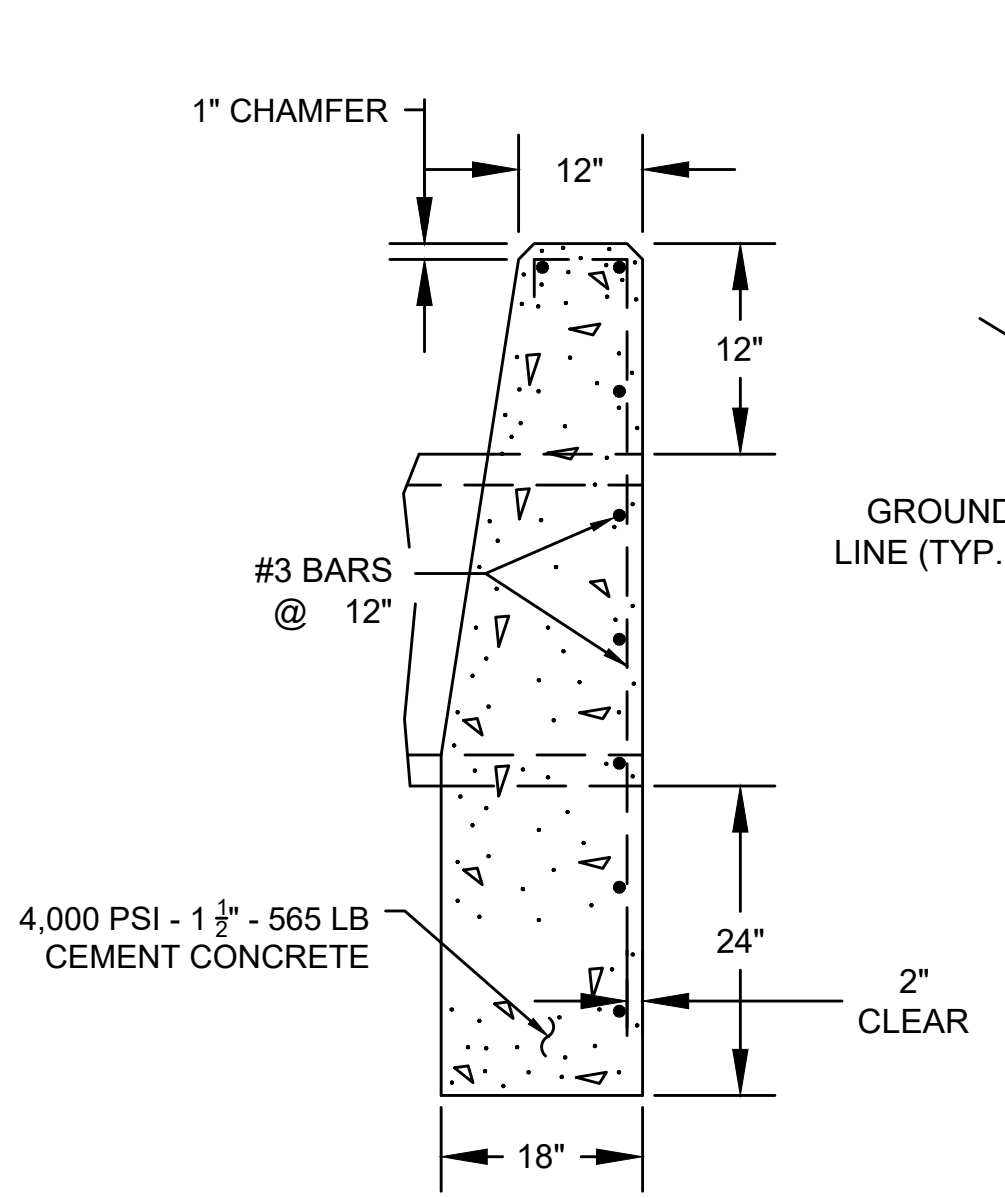
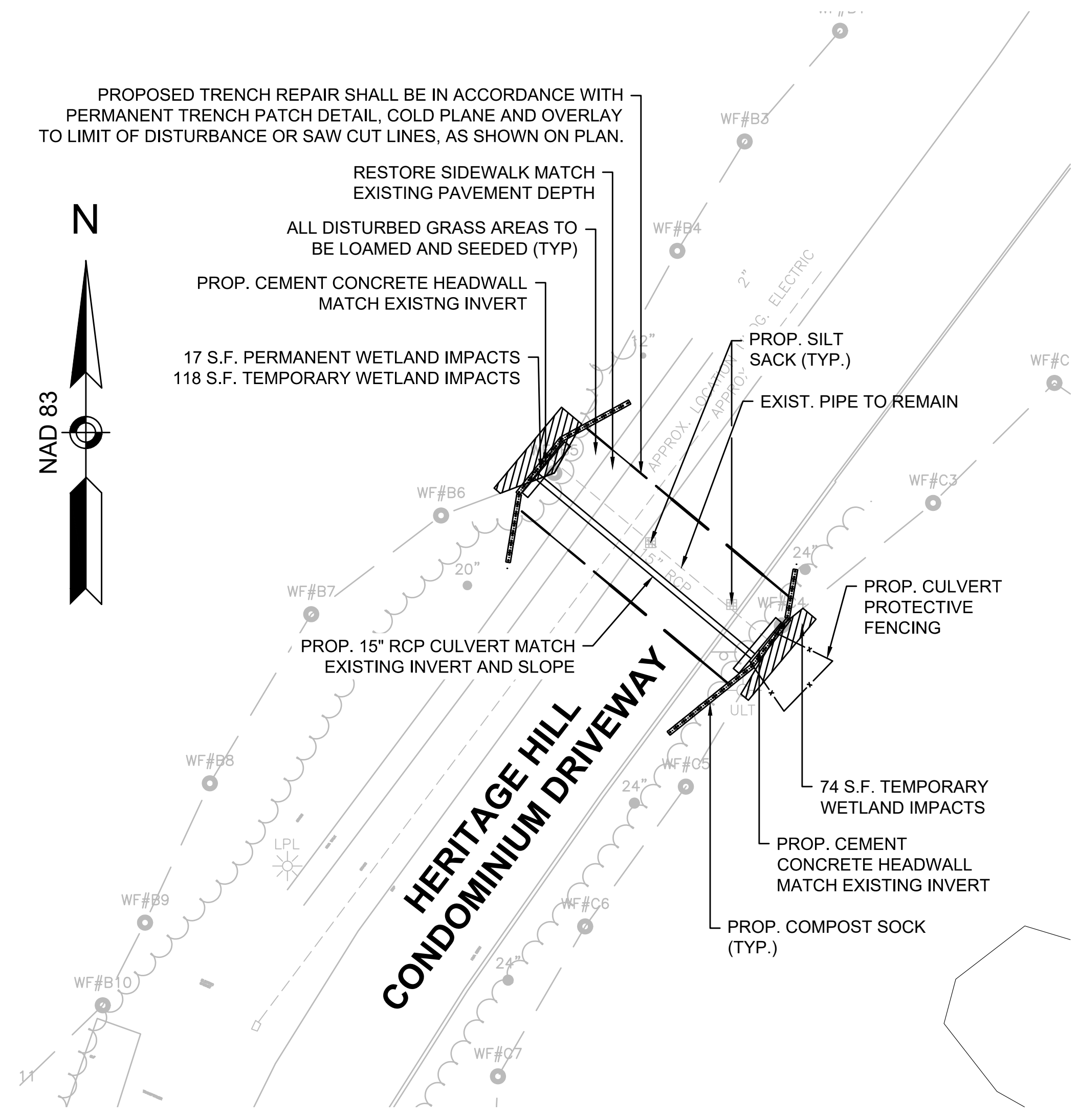
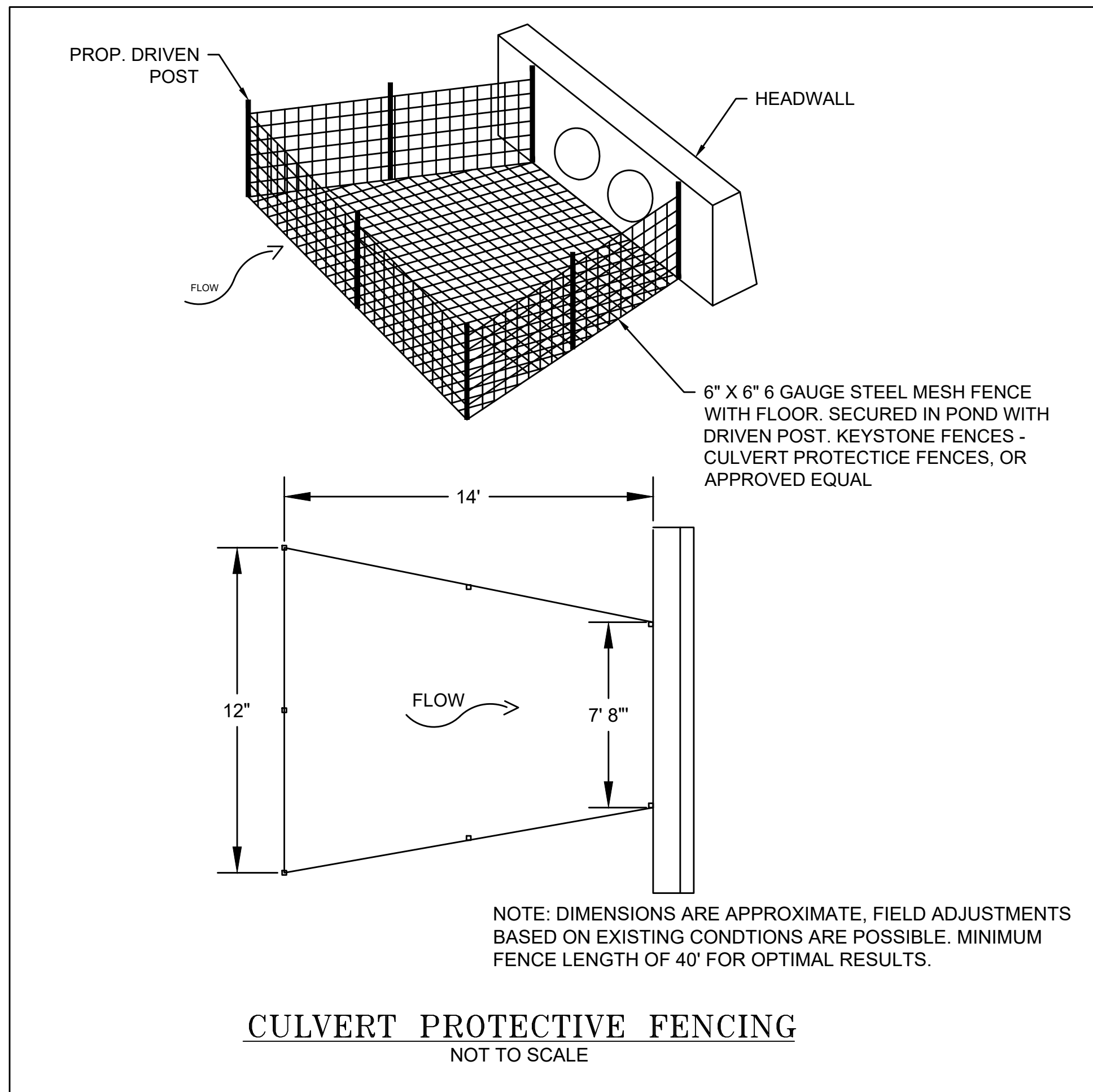
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**IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

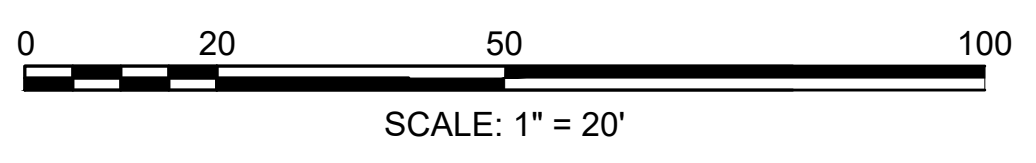
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NO.	REVISION	DATE

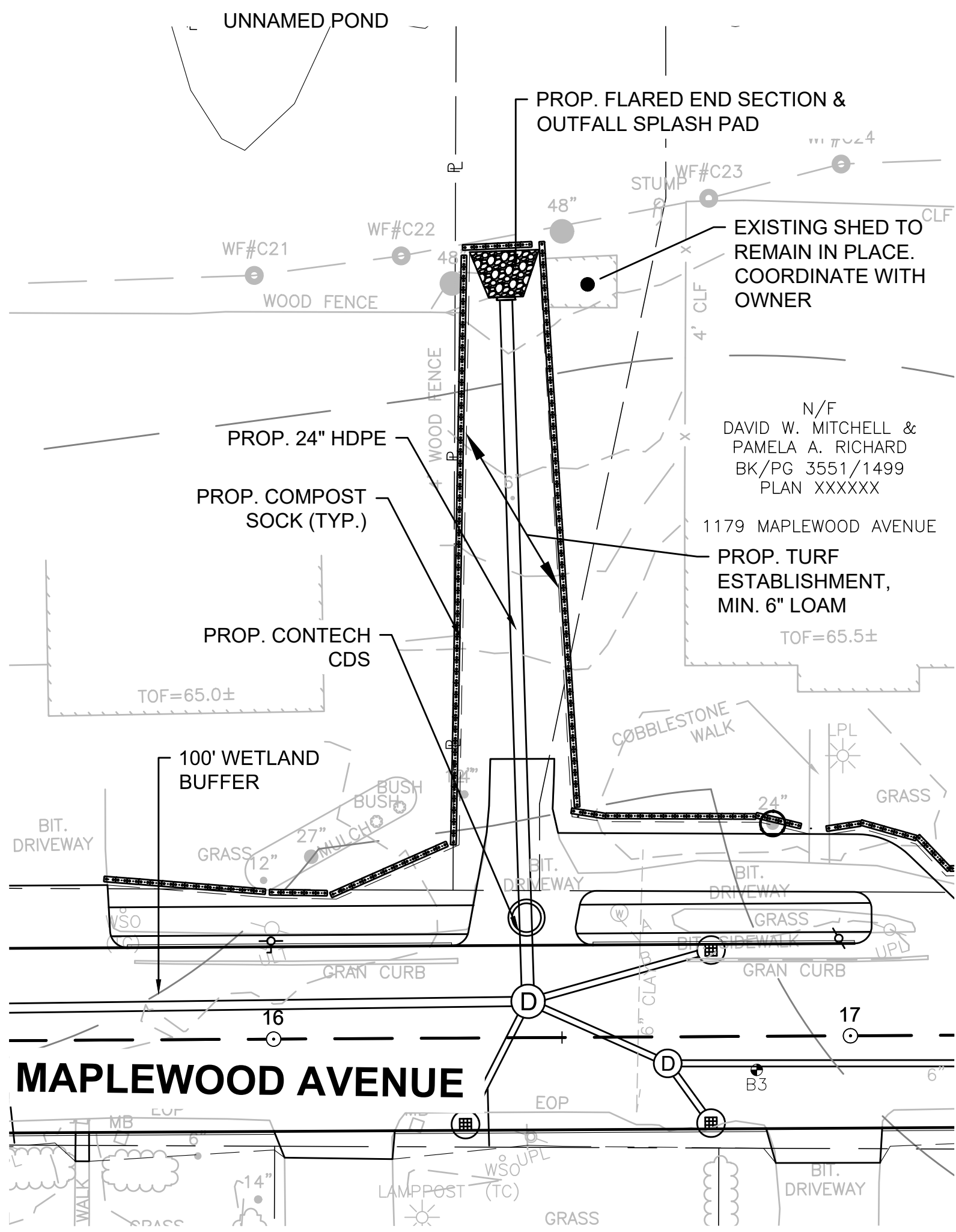
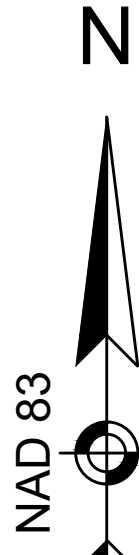
**STANDARD
 DETAIL SHEETS
 STORMWATER
 DETAILS**

SCALE: AS NOTED
 2015086.00

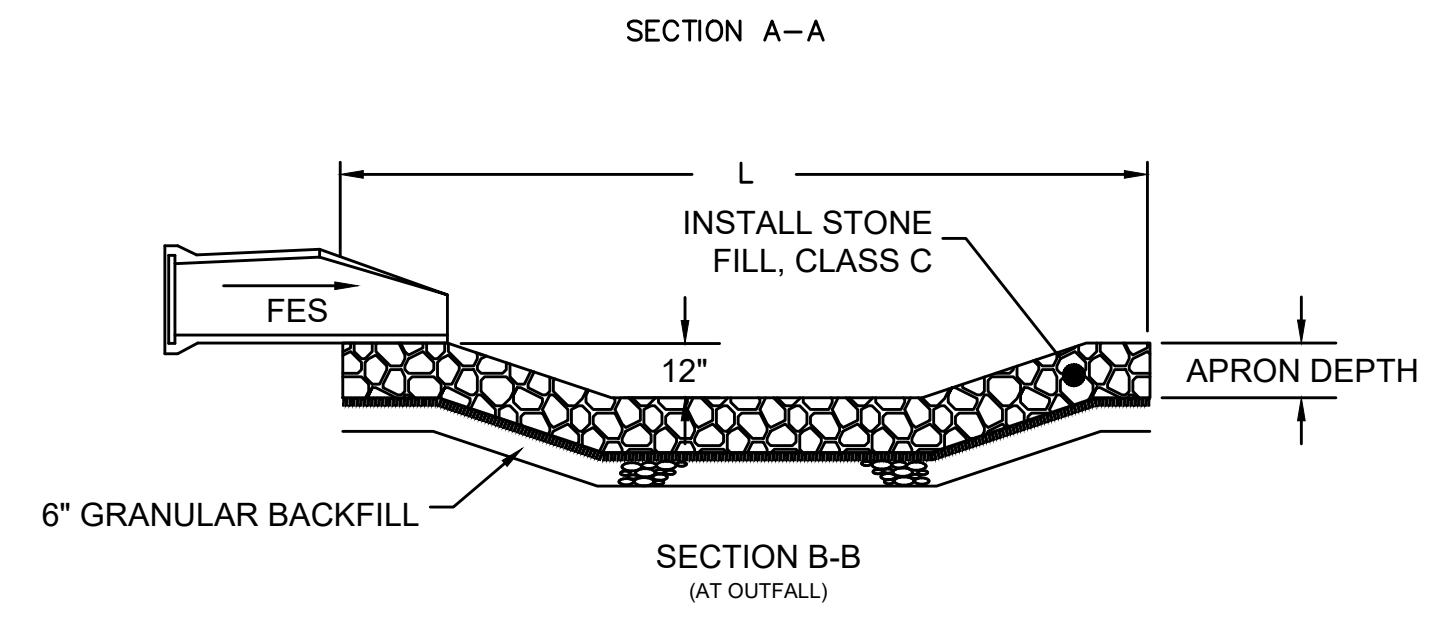
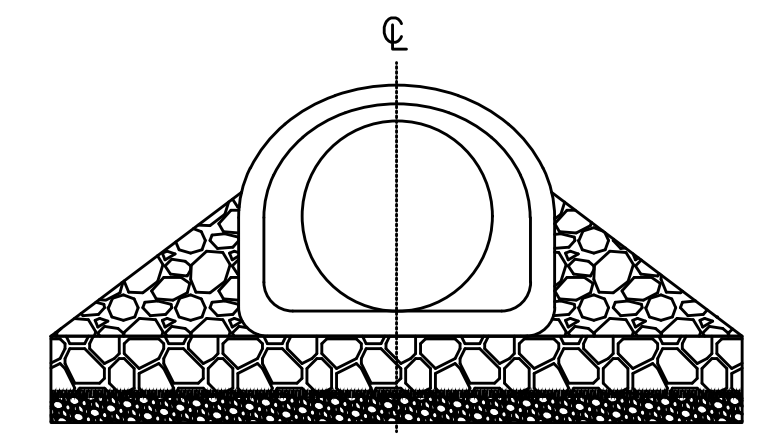


CEMENT CONCRETE HEADWALL - HERITAGE HILL CONDOMINIUM
 N.T.S.



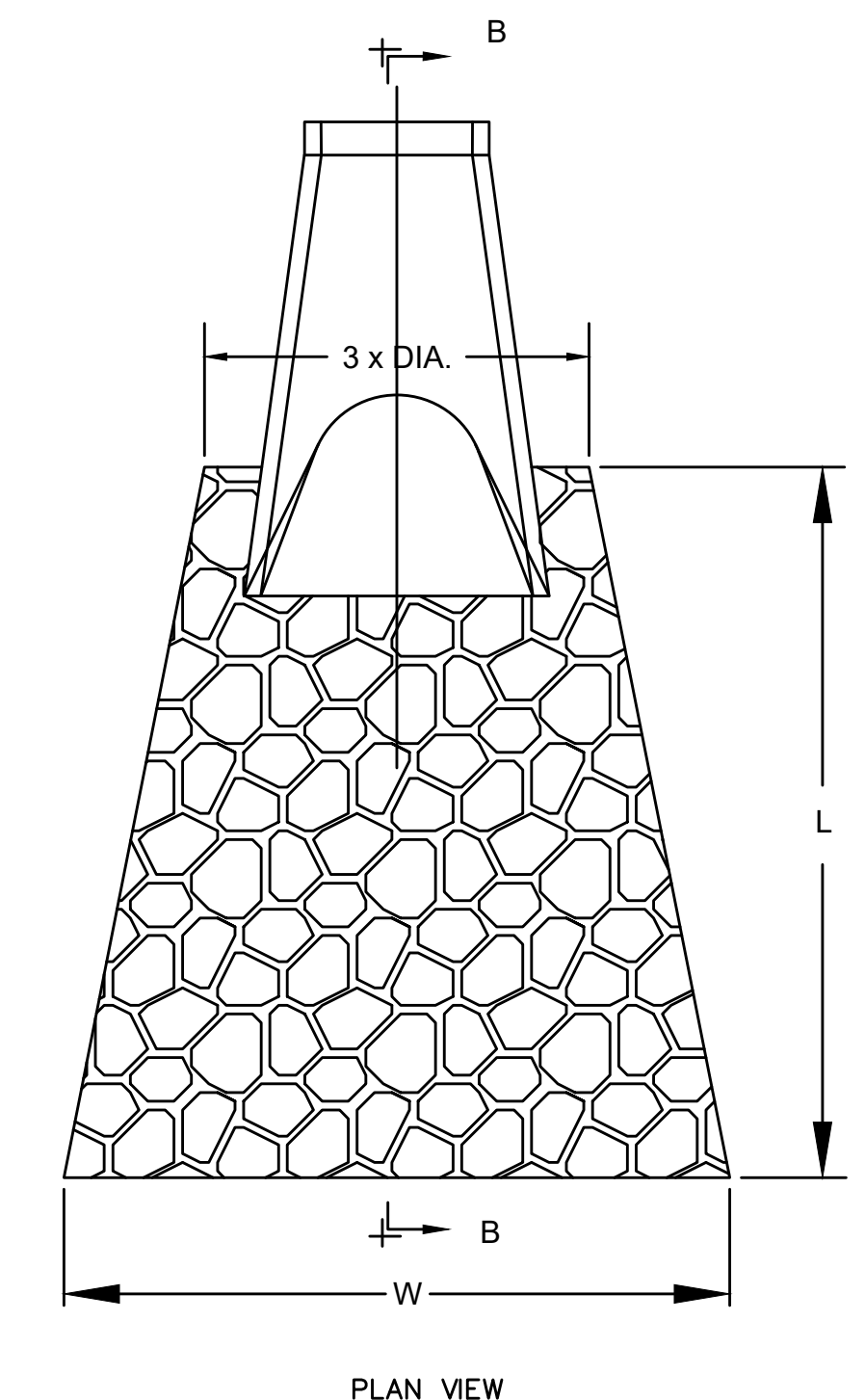


PROPOSED OUTFALL
1" = 20'

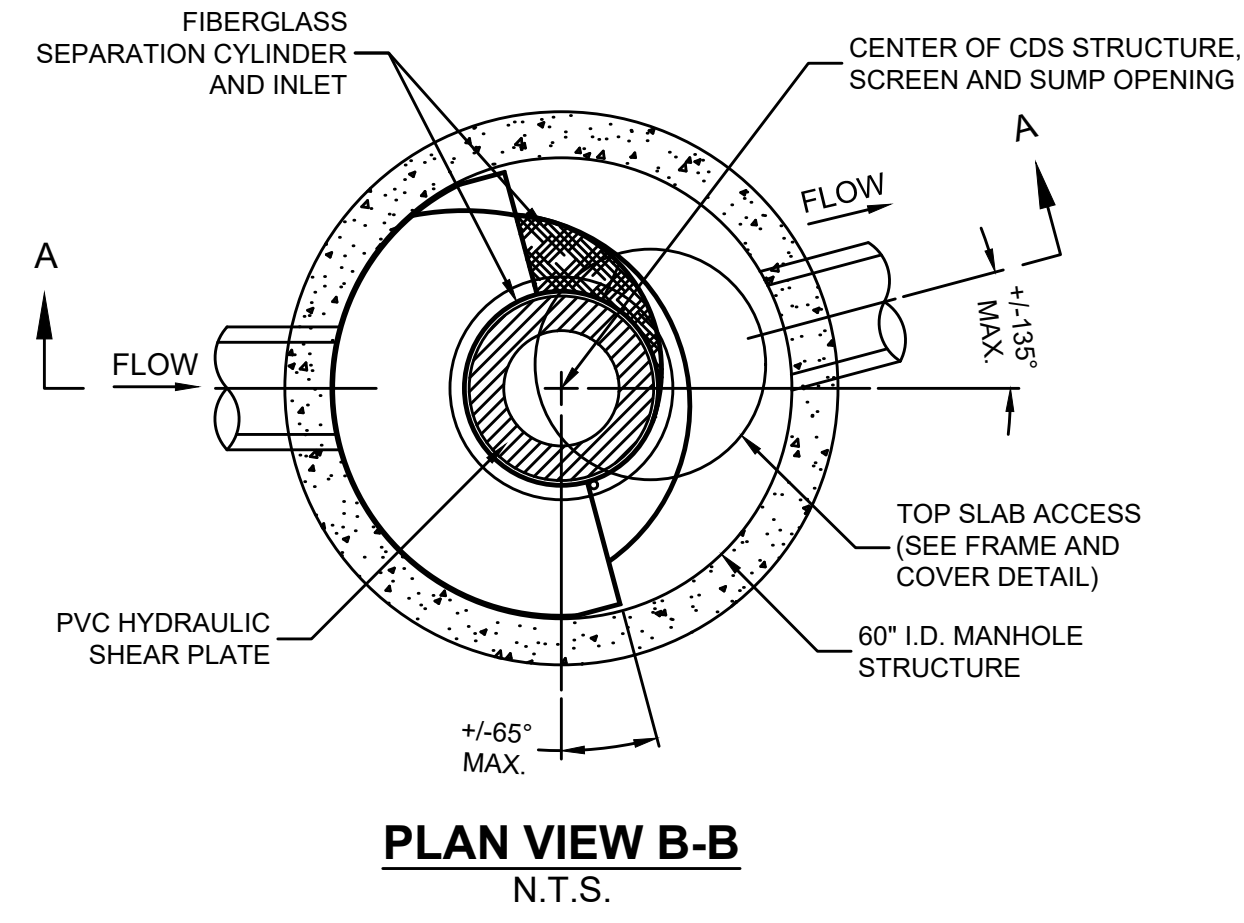


OUTFALL				
L	W	D	D _{in}	
8'	11.33'	2.0'	6"	

OUTFALL SPLASH PAD DETAIL

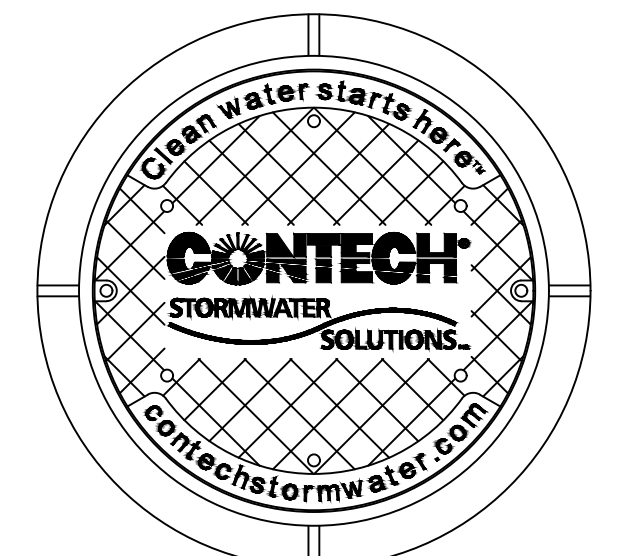


PLAN VIEW



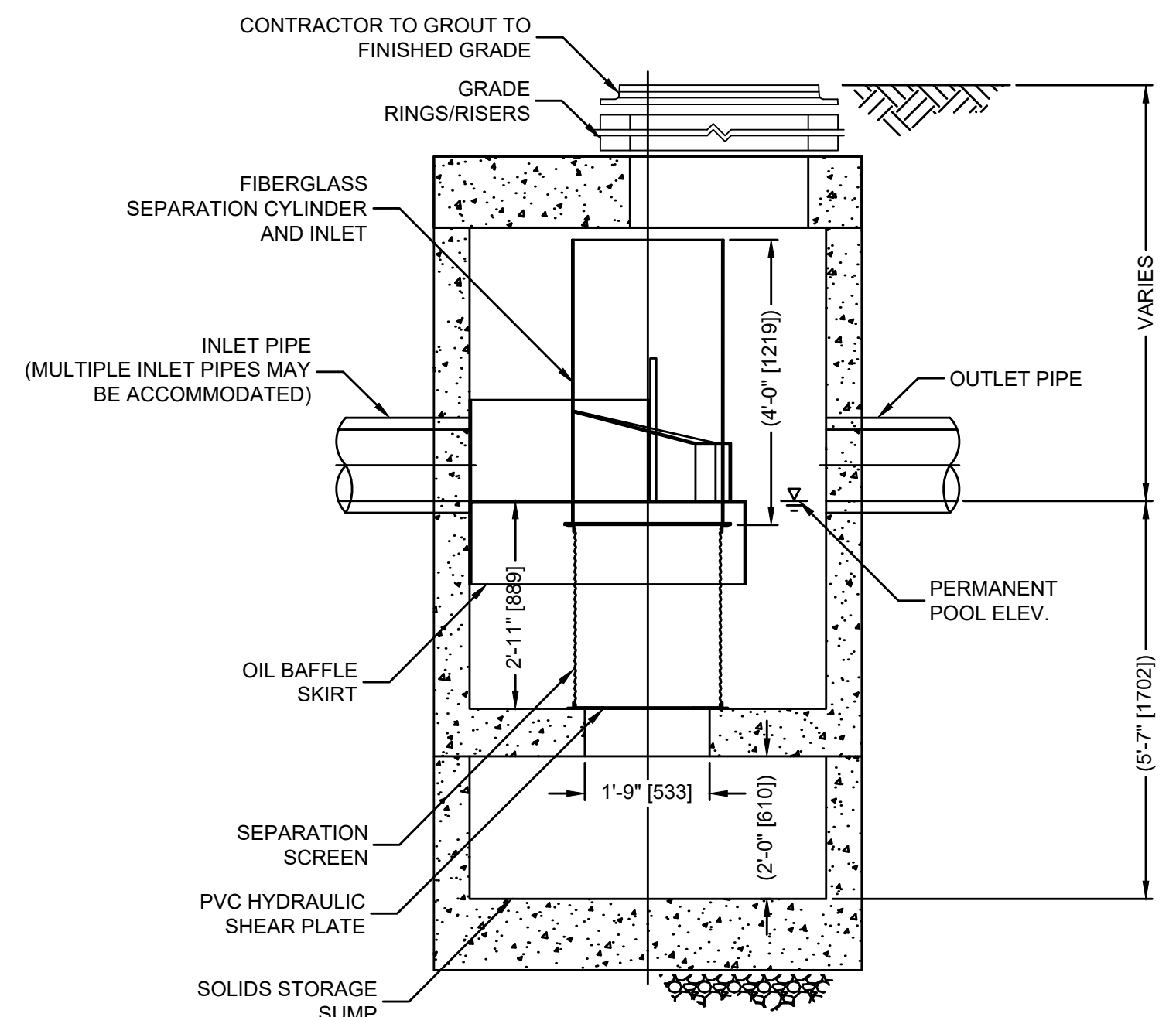
PLAN VIEW B-B
N.T.S.

CDS2025-5-C DESIGN NOTES	
CDS2025-5-C RATED TREATMENT CAPACITY IS 3.2 CFS, OR PER LOCAL REGULATIONS.	
THE STANDARD CDS2025-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.	
CONFIGURATION DESCRIPTION	
GRATED INLET ONLY (NO INLET PIPE)	
GRATED INLET WITH INLET PIPE OR PIPES	
CURB INLET ONLY (NO INLET PIPE)	
CURB INLET WITH INLET PIPE OR PIPES	
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)	
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS	



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS	
STRUCTURE ID	1
WATER QUALITY FLOW RATE (CFS)	3.005
PEAK FLOW RATE (CFS OR L/S)	19.61
RETURN PERIOD OF PEAK FLOW (YRS)	10-YR
SCREEN APERTURE (2400 OR 4700)	MICRON
PIPE DATA:	I.E. MATERIAL DIAMETER
INLET PIPE 1	57.50 HDPE 24"
OUTLET PIPE	57.40 HDPE 24"
RIM ELEVATION	63.536
ANTI-FLOTATION BALLAST	
NOTES/SPECIAL REQUIREMENTS: INSTALLATION TO BE IN ACCORDANCE WITH THE TYPICAL DRAINAGE MANHOLE DETAIL.	
* PER ENGINEER OF RECORD	



ELEVATION A-A
N.T.S.

CONTECH CDS DETAIL
N.T.S.

- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 - FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH CONSTRUCTION PRODUCTS REPRESENTATIVE. www.contech-cpi.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 - STRUCTURE SHALL MEET ASHTO M502 AND CASTINGS SHALL MEET ASHTO M506 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
 - PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 - CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

GPI Greenman-Pedersen, Inc.
Engineering & Construction Services
21 Daniel Street, Second Floor, Portsmouth, NH 03801
Tel: (603) 891-2213 Fax: (978) 658-3044
<http://www.gpinet.com>

Weston & Sampson
Weston & Sampson Engineers, Inc.
Five Centennial Drive, Peabody, MA 01960
978.532.1900 800.SAMPSON
www.westonandsampson.com



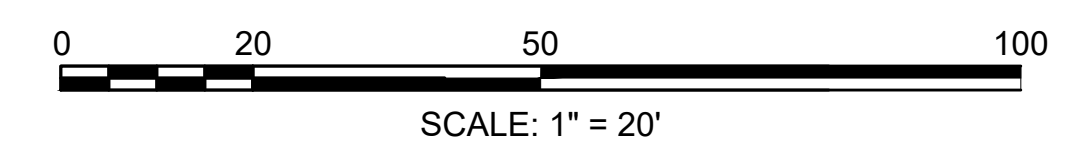
PREPARED FOR
DEPARTMENT OF PUBLIC WORKS
CITY OF PORTSMOUTH
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801

IMPROVEMENTS TO MAPLEWOOD AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH

REVISIONS		
NO.	REVISION	DATE

2/5/2018
DRAWN/DESIGN BY: CLS
CHECKED BY: JPJ

STANDARD DETAIL SHEETS
STORMWATER DETAILS
SCALE: AS NOTED
2015086.00
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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

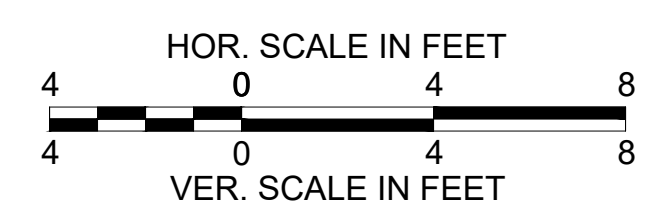
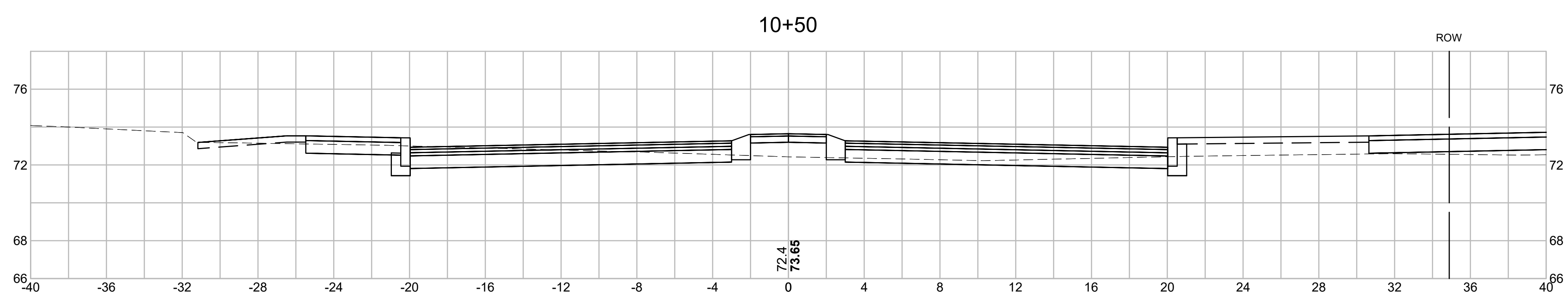
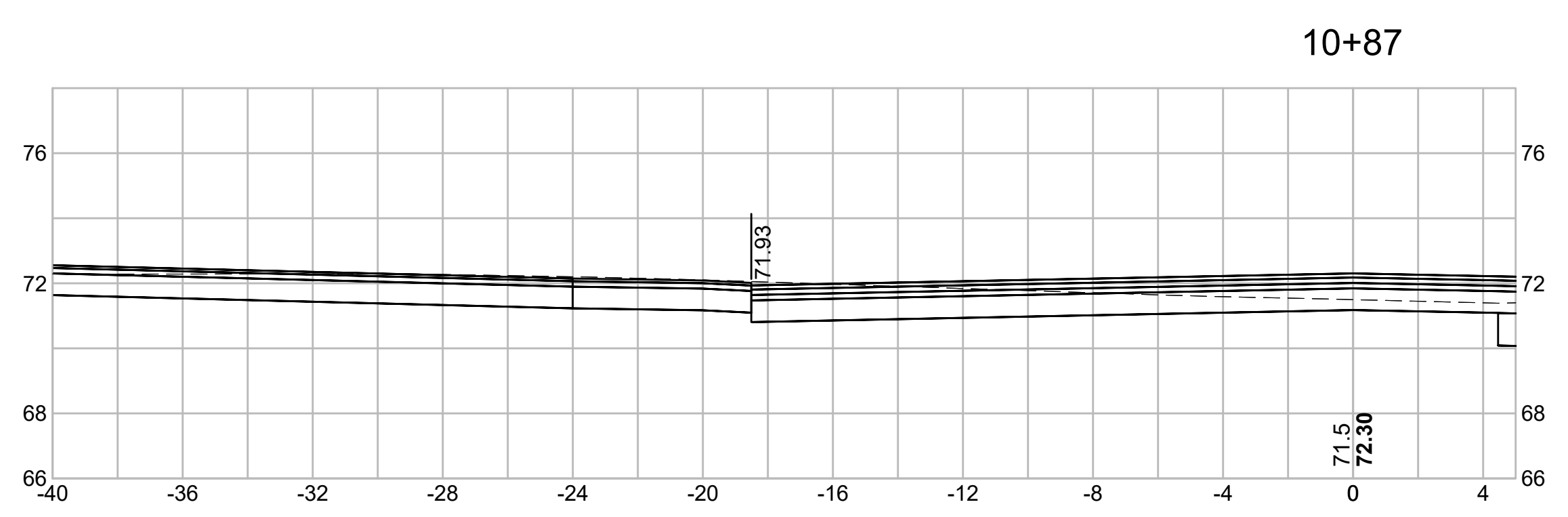
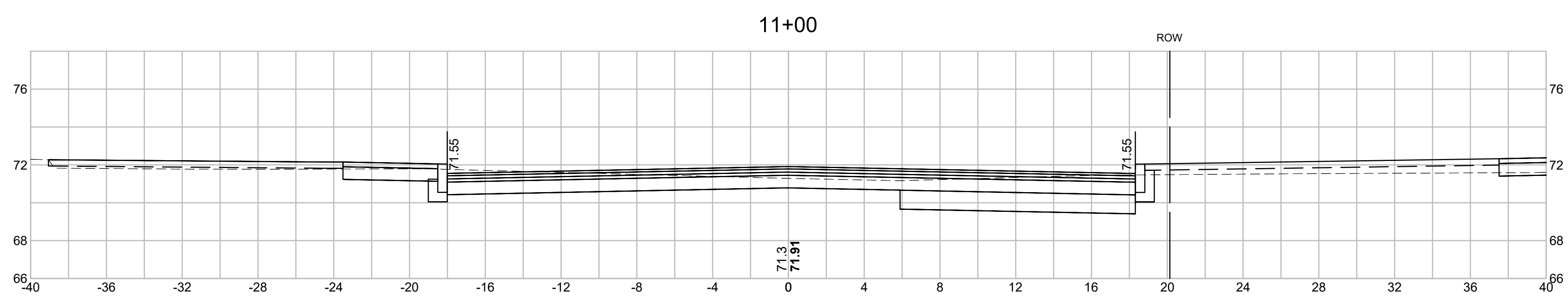
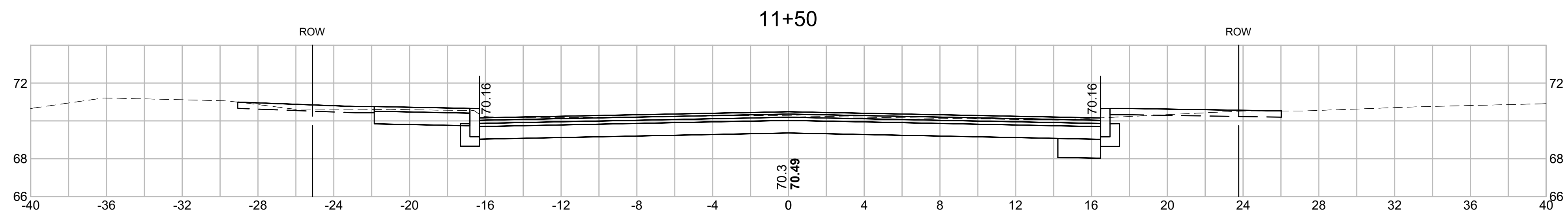
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 WORKS
 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

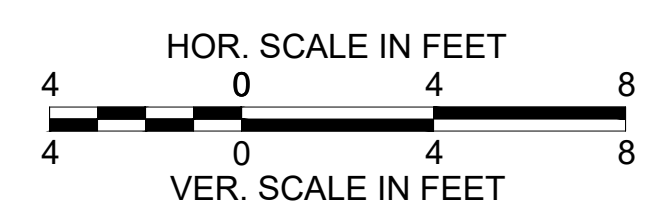
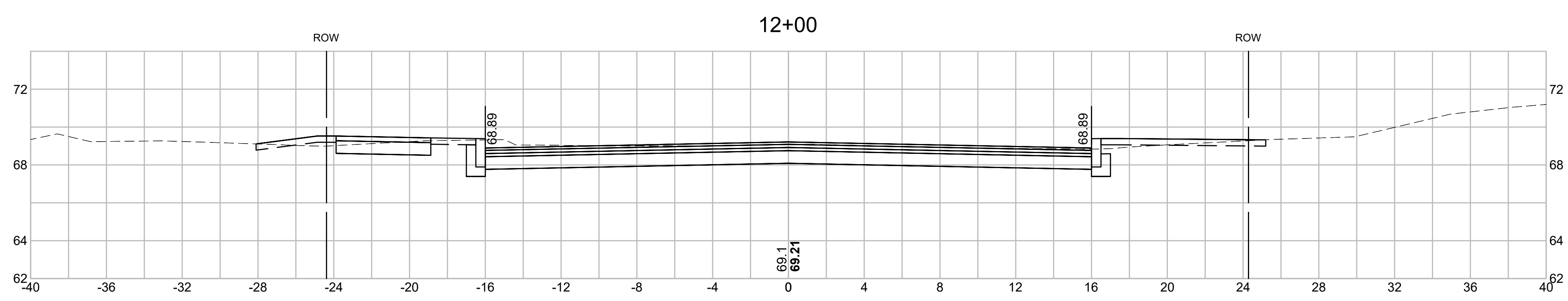
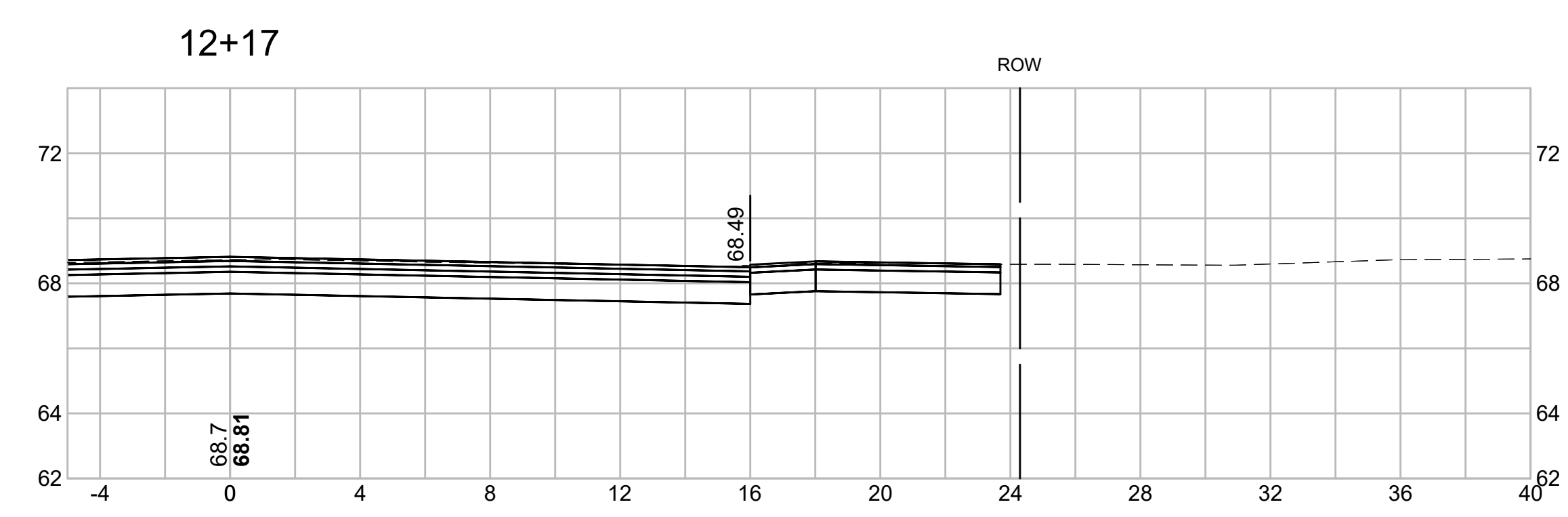
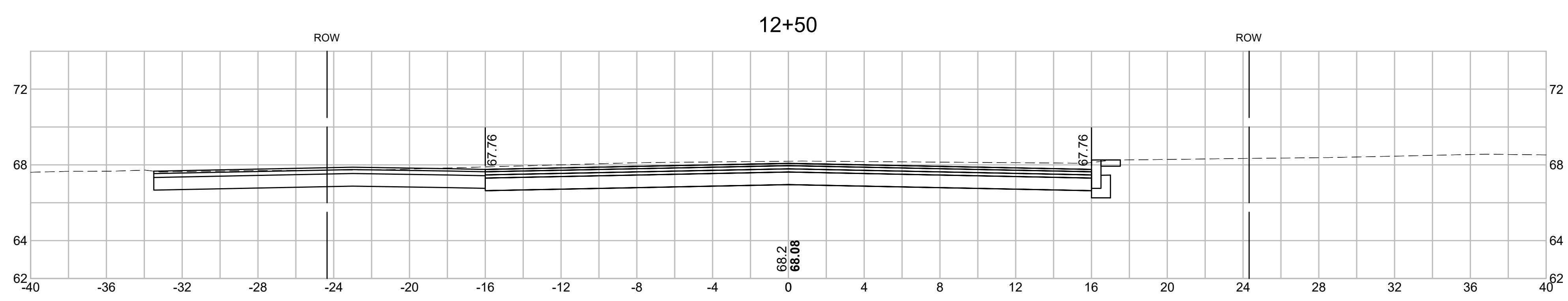
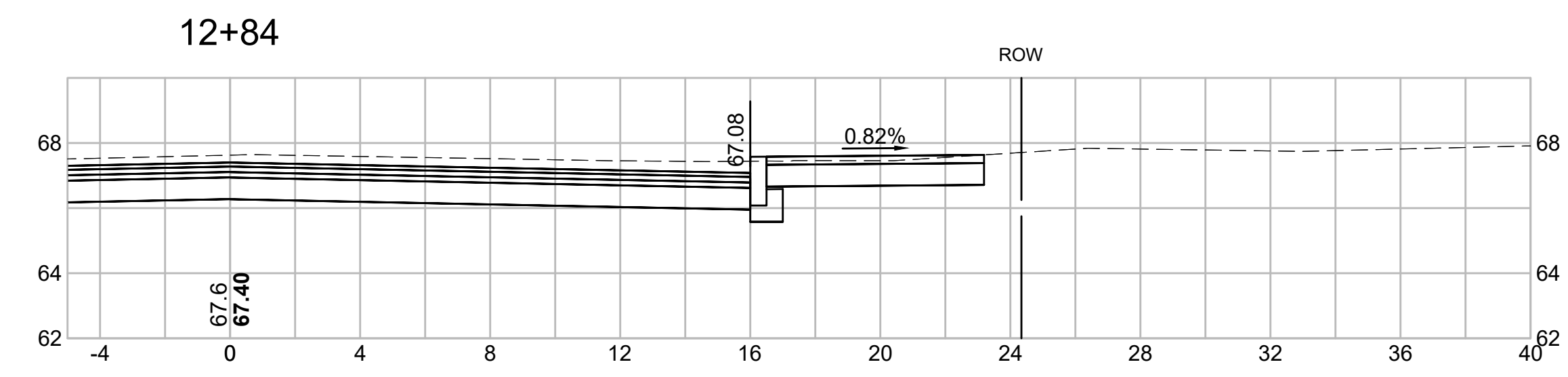
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

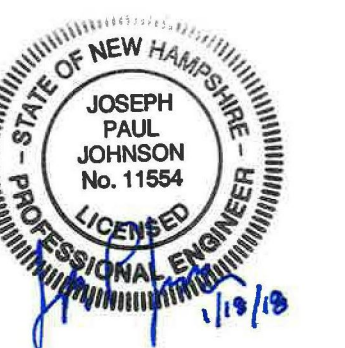
SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

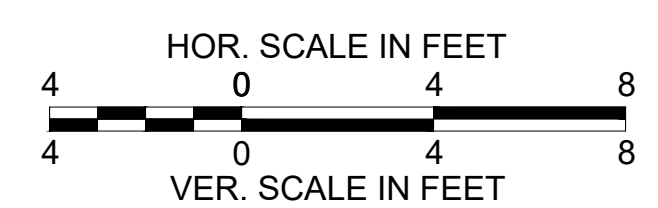
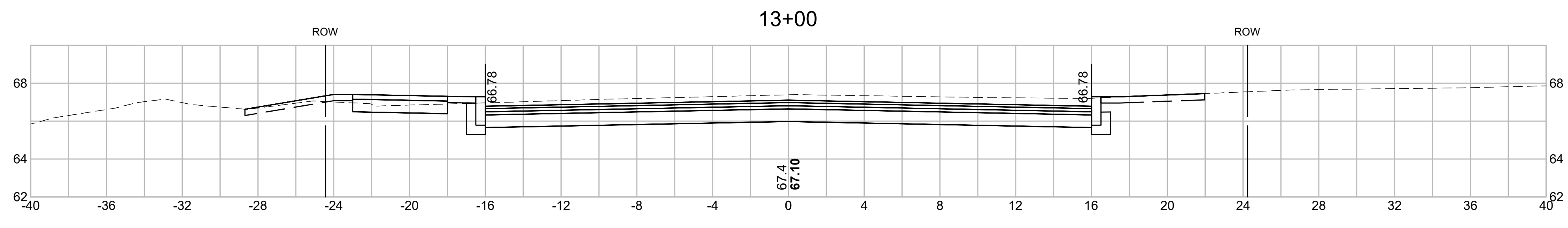
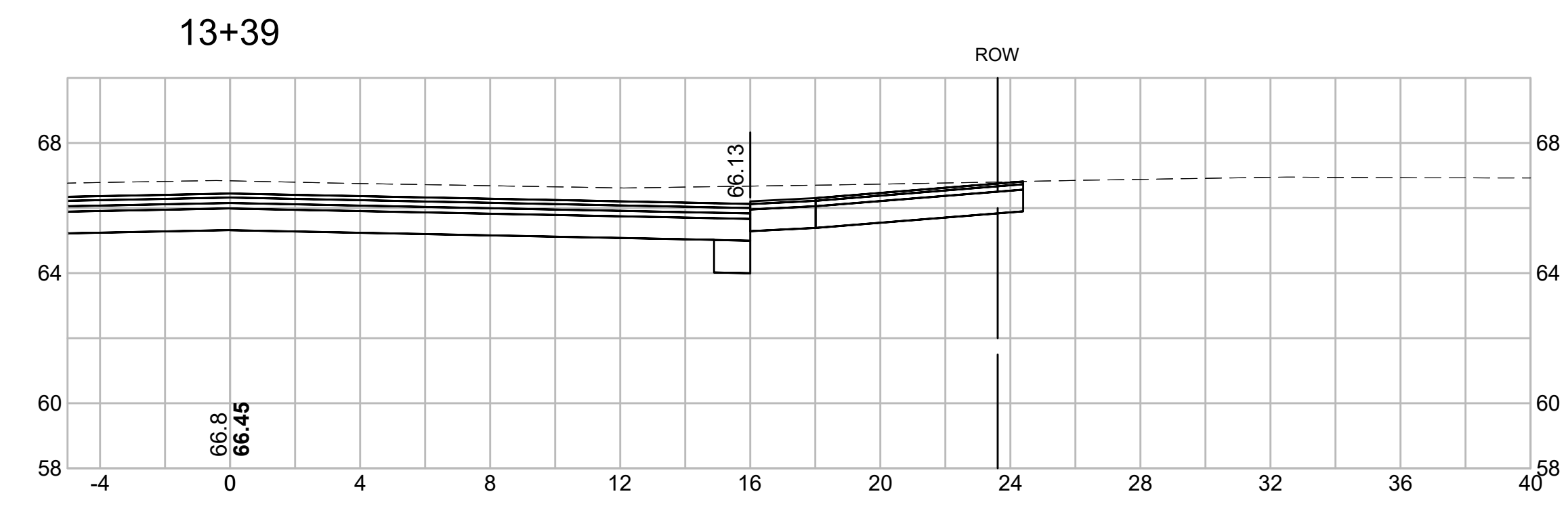
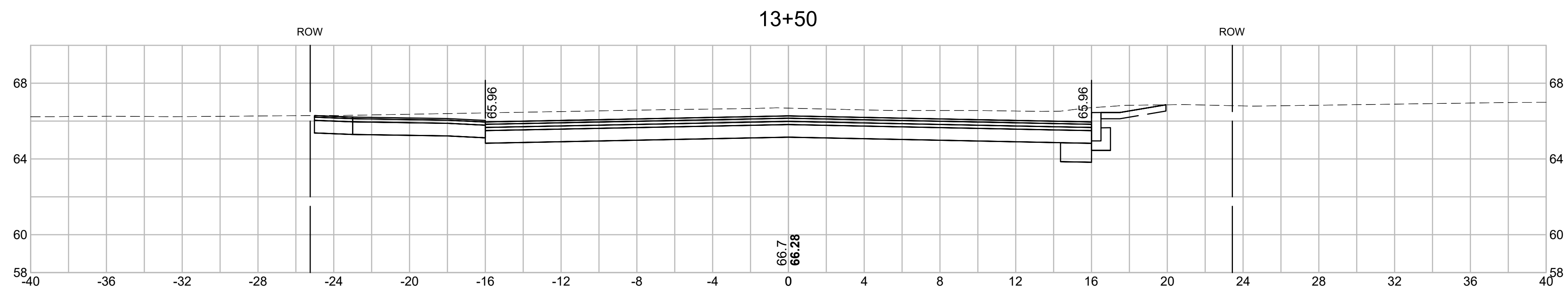
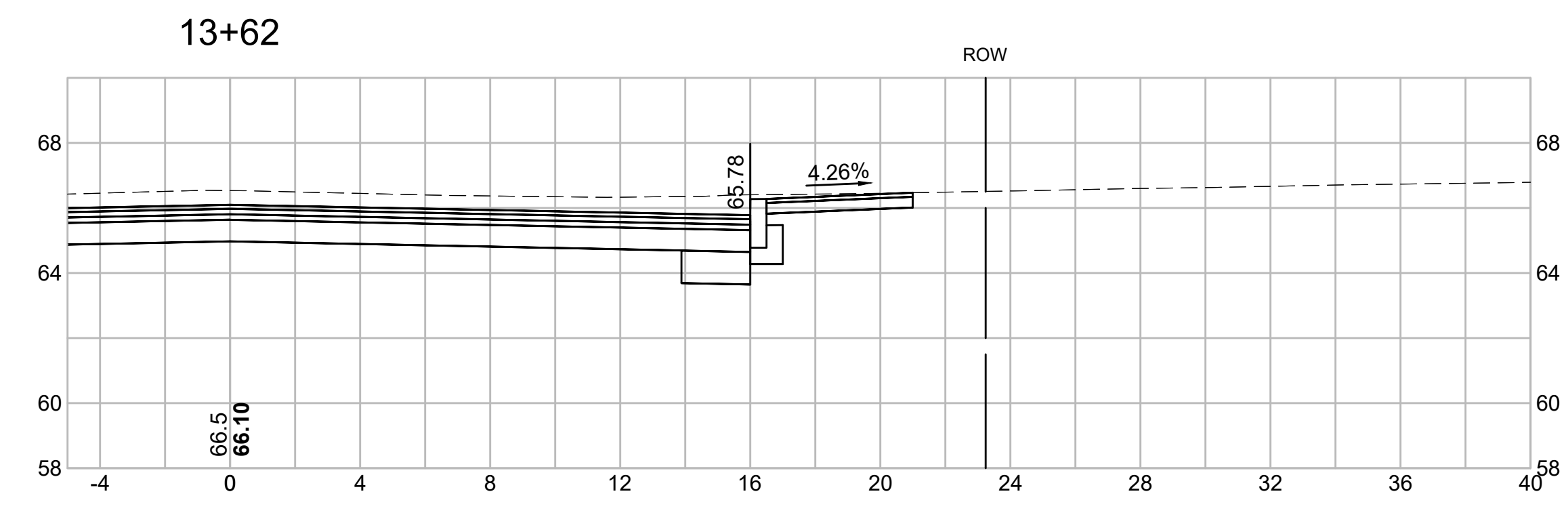
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

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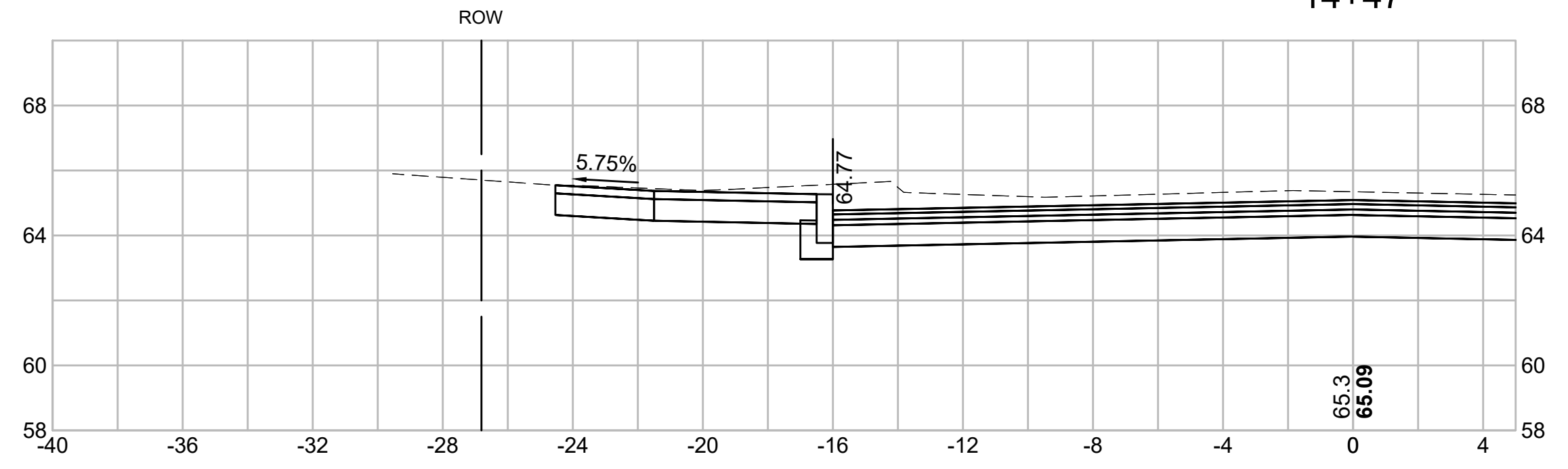
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

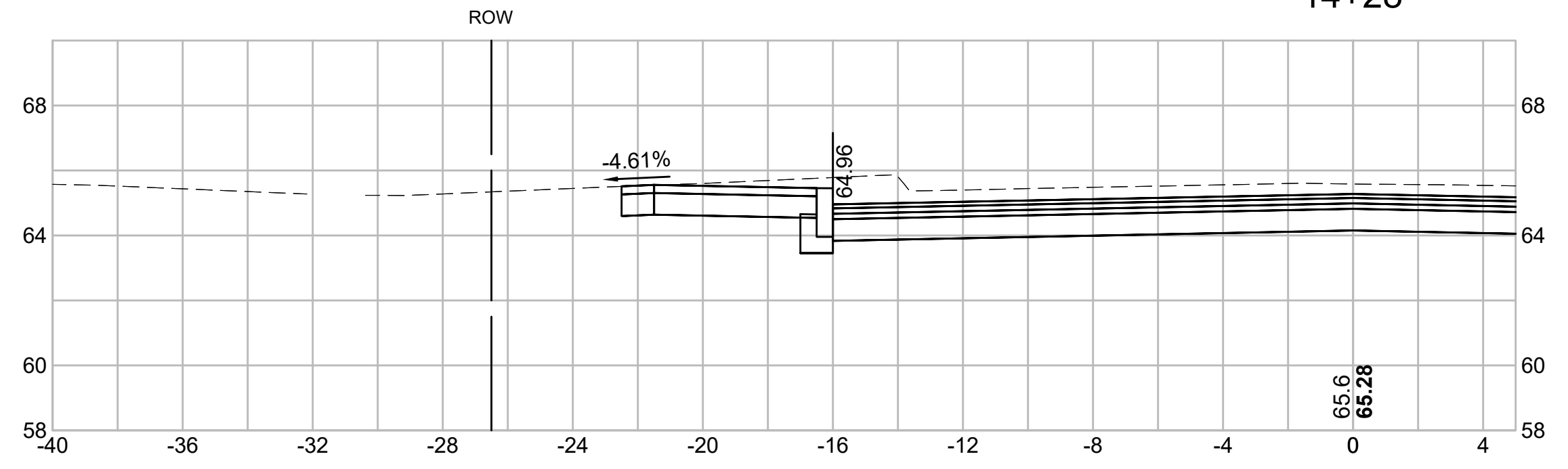
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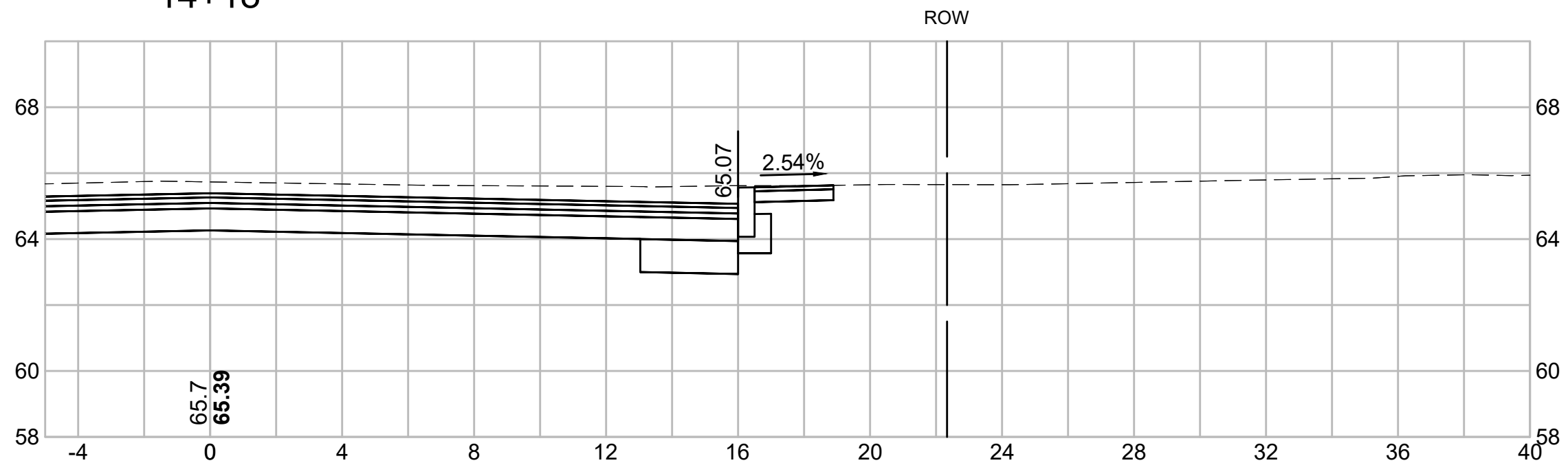
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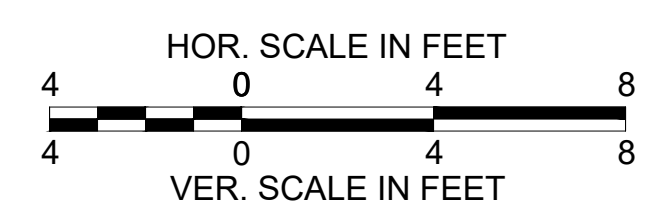
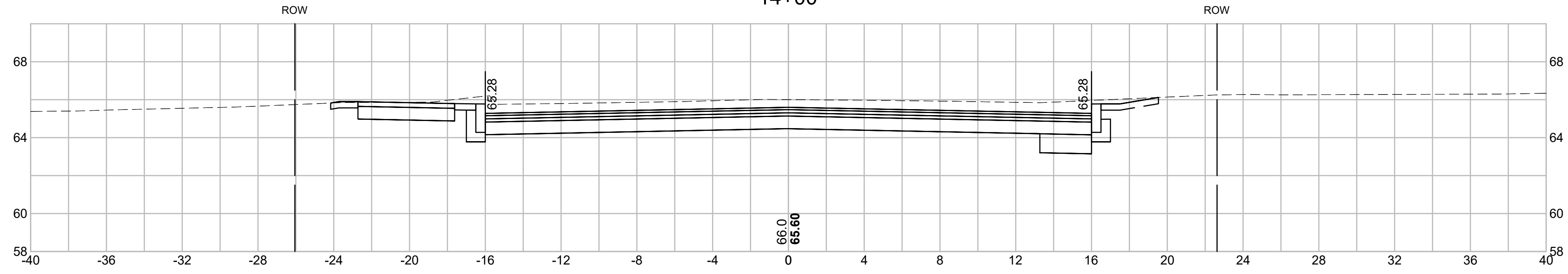
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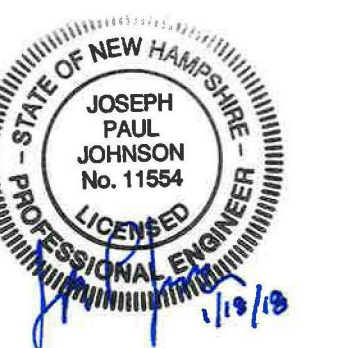


14+18



14+00





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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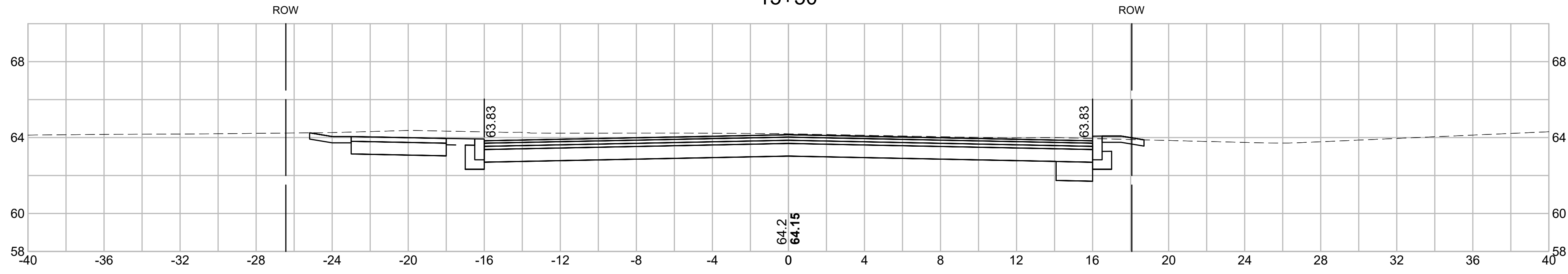
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

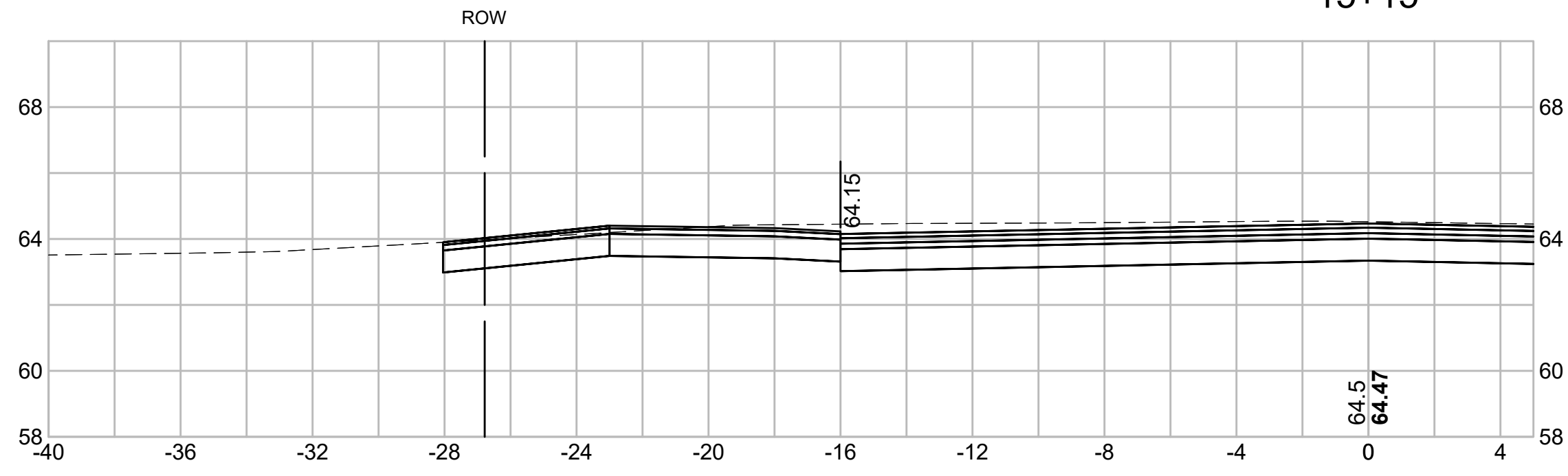
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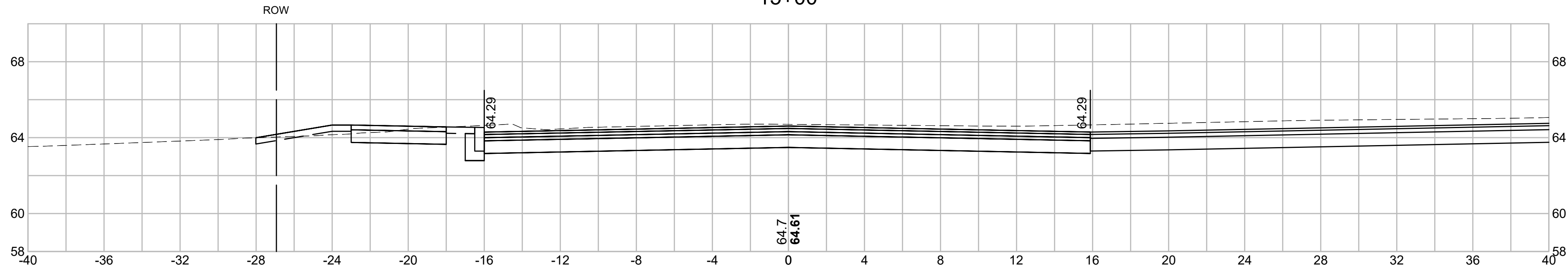
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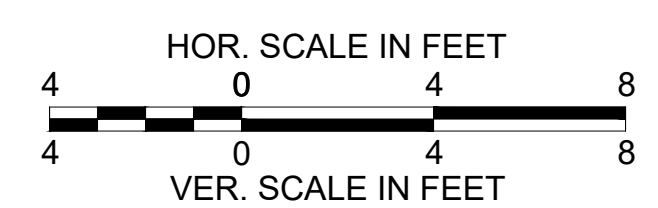
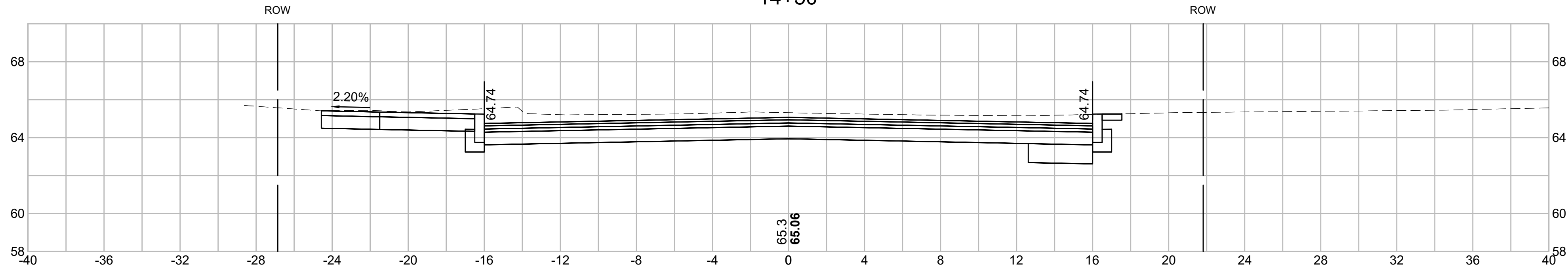
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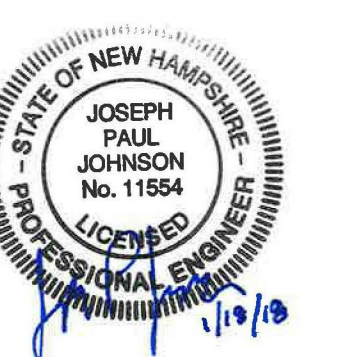


15+00



14+50





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

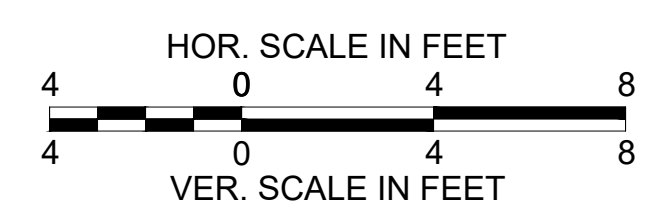
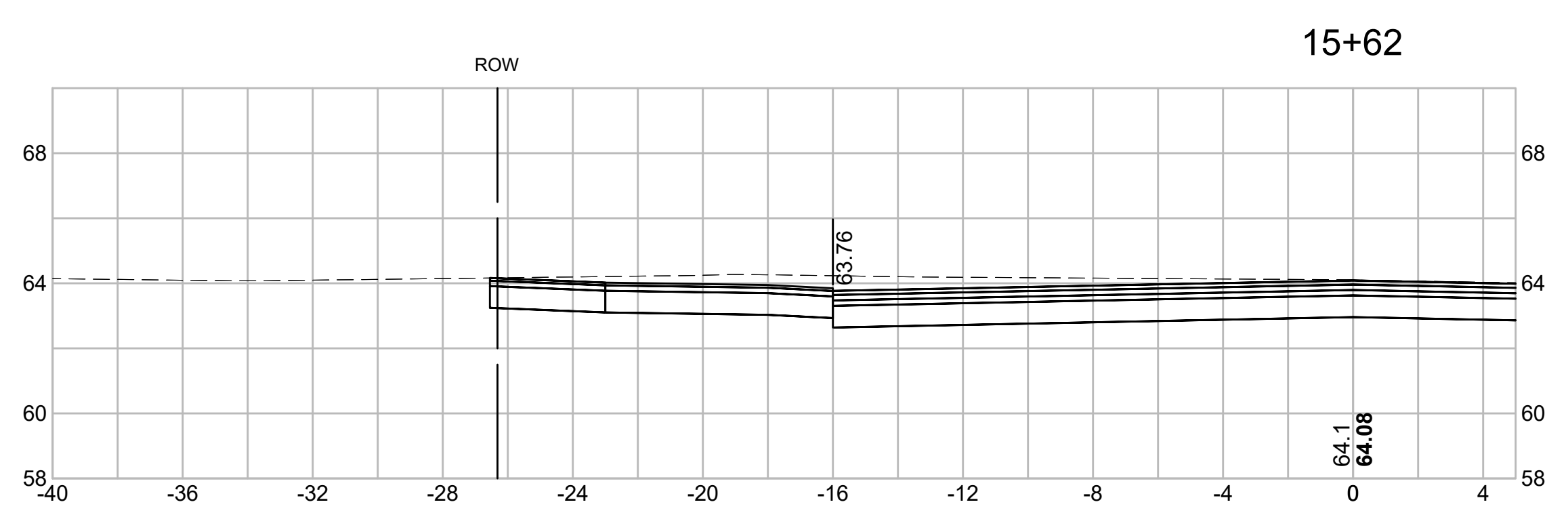
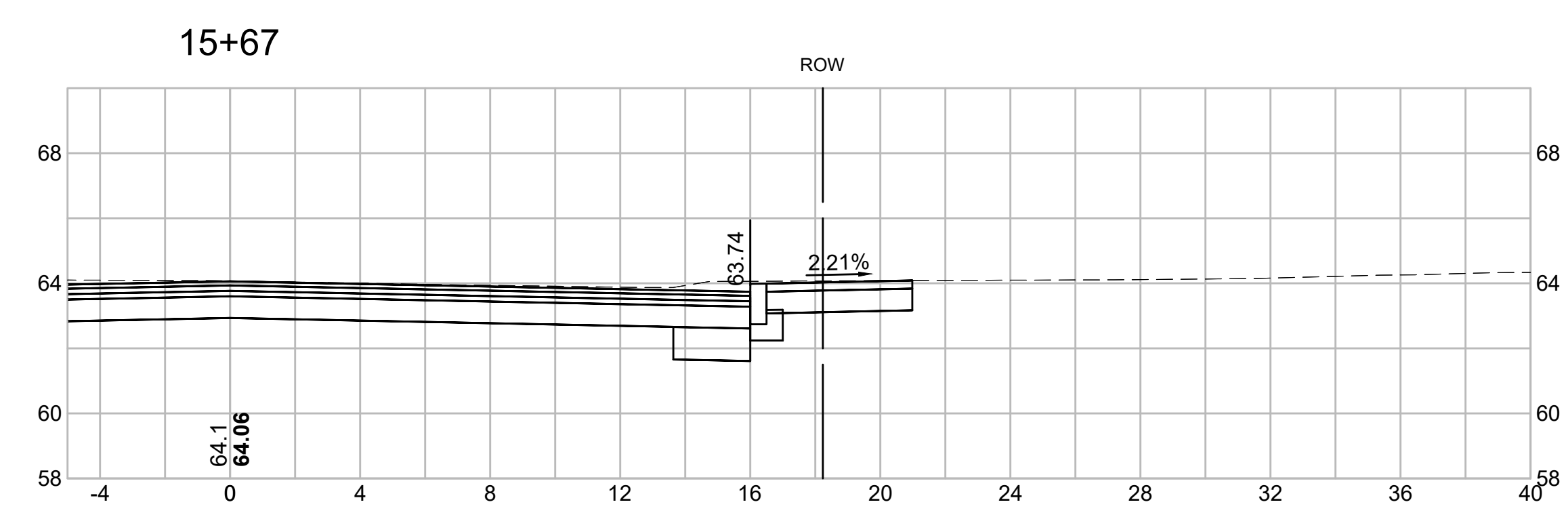
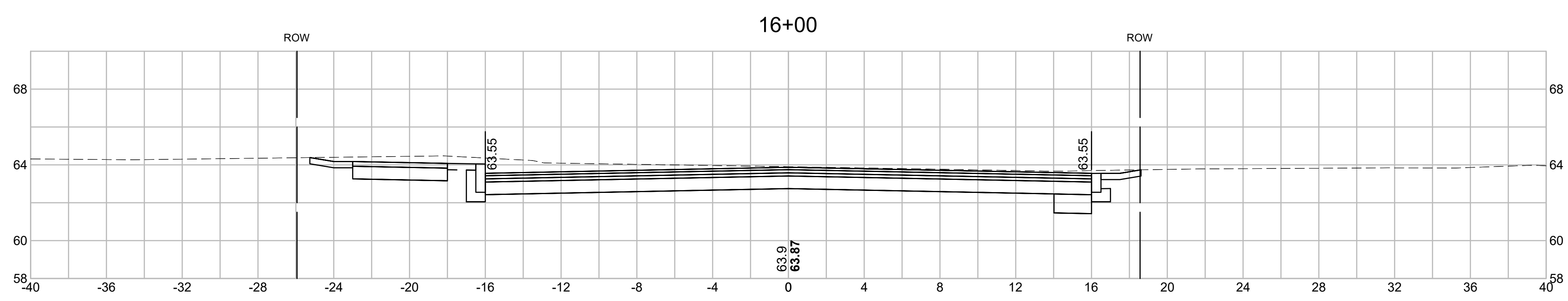
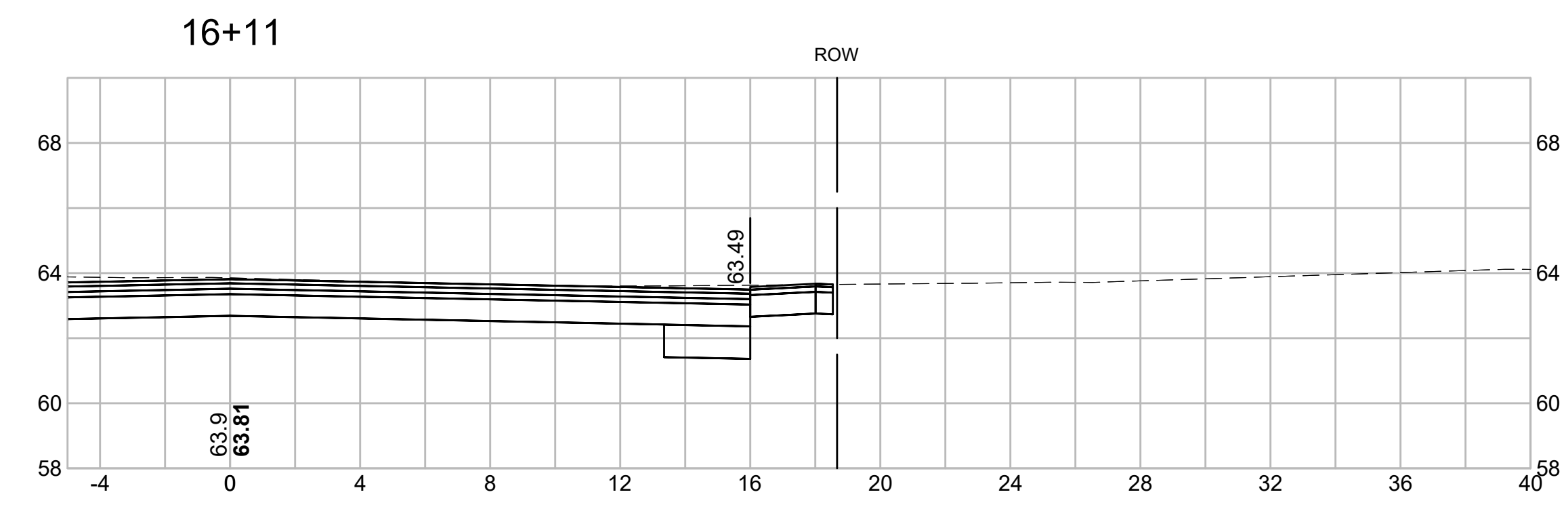
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 WORKS
 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

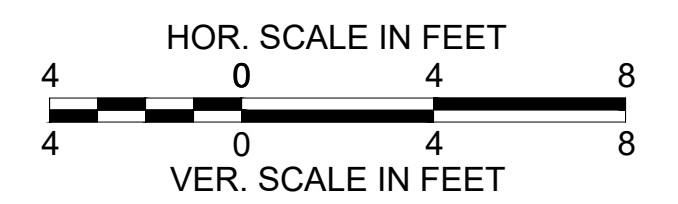
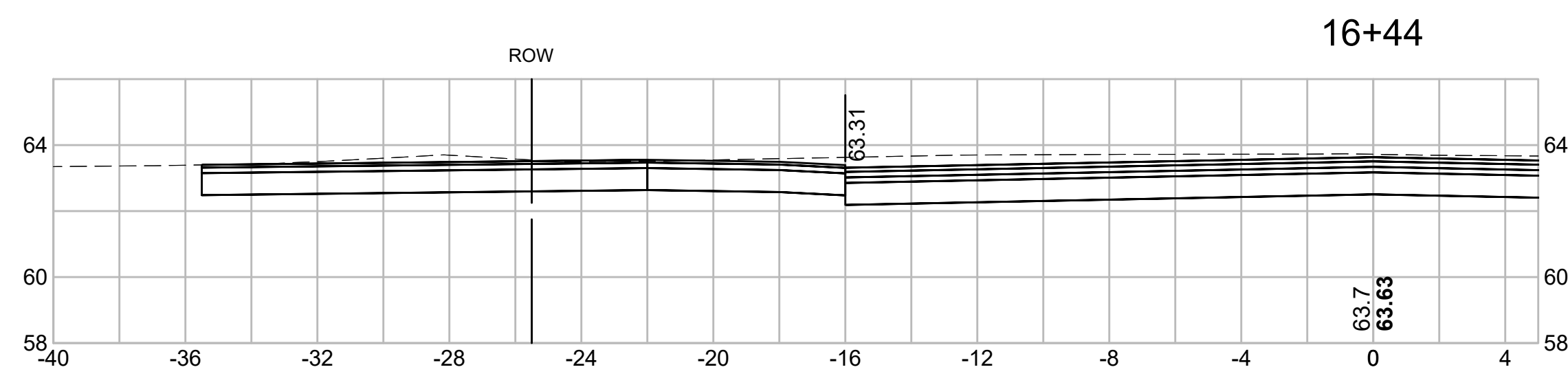
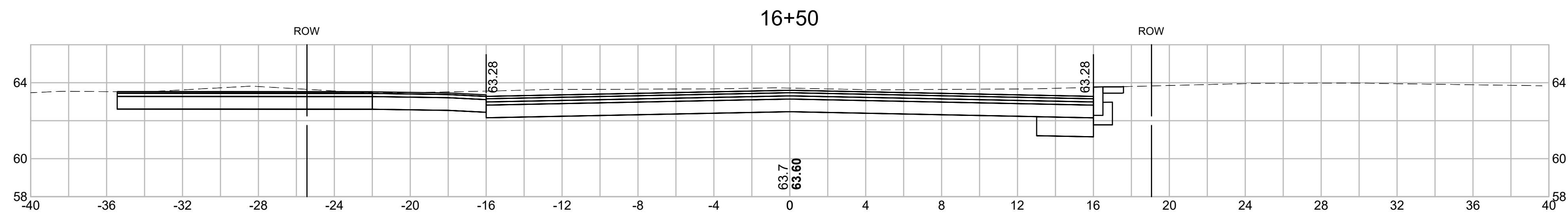
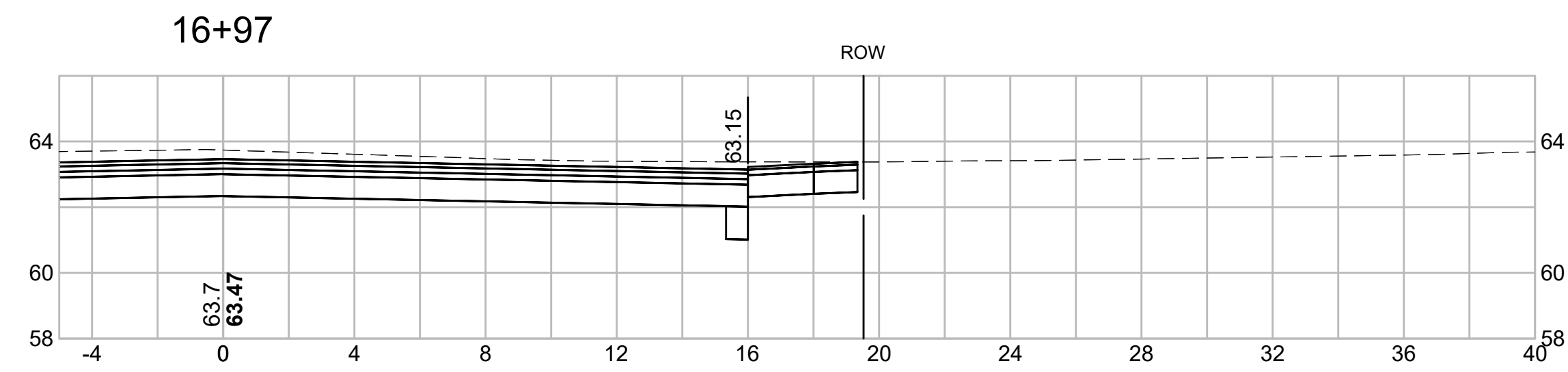
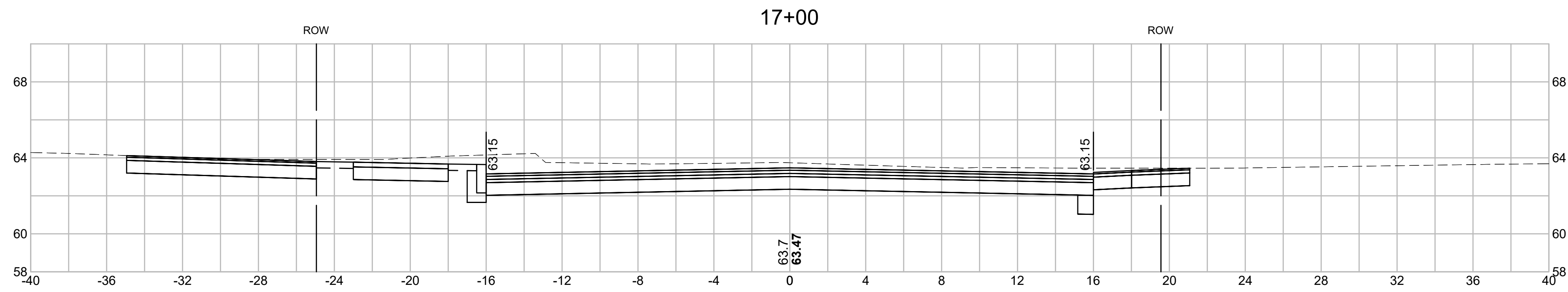
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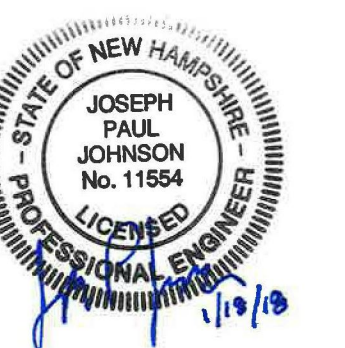
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 WORKS
 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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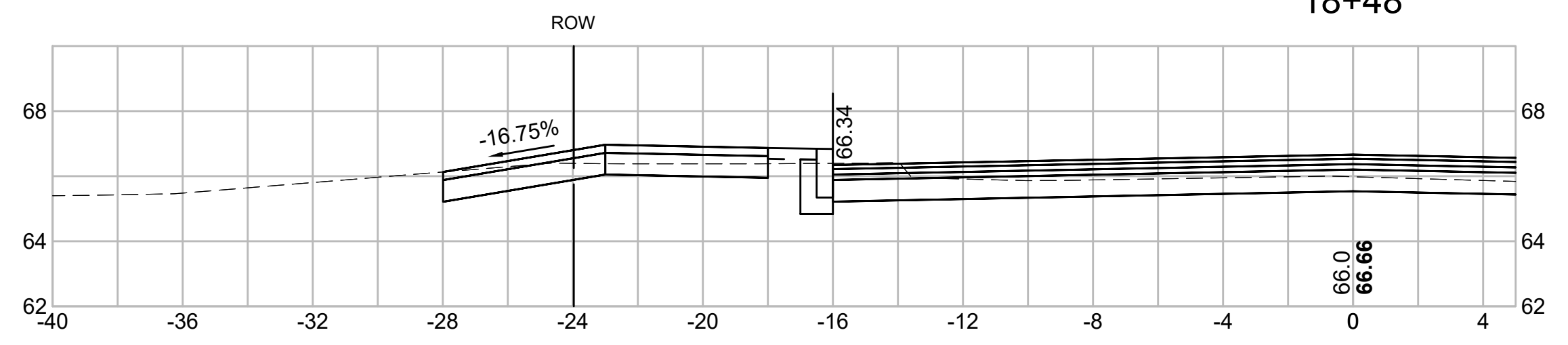
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

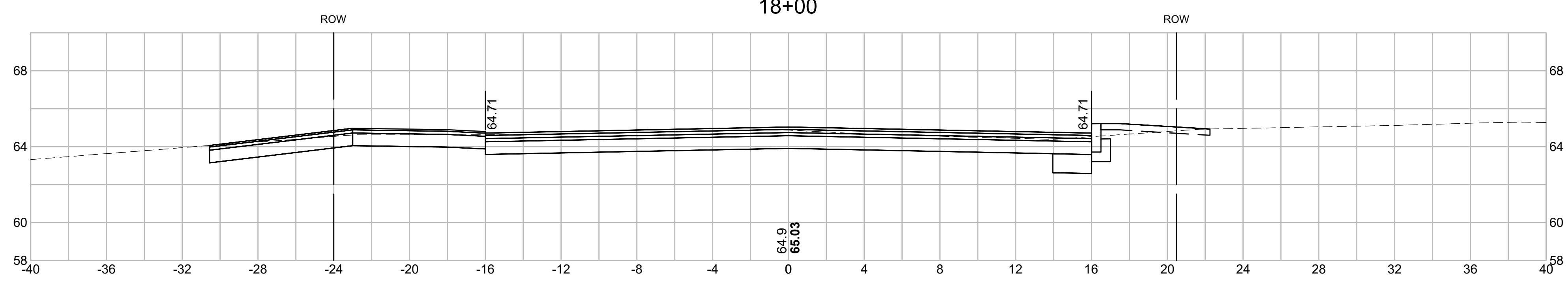
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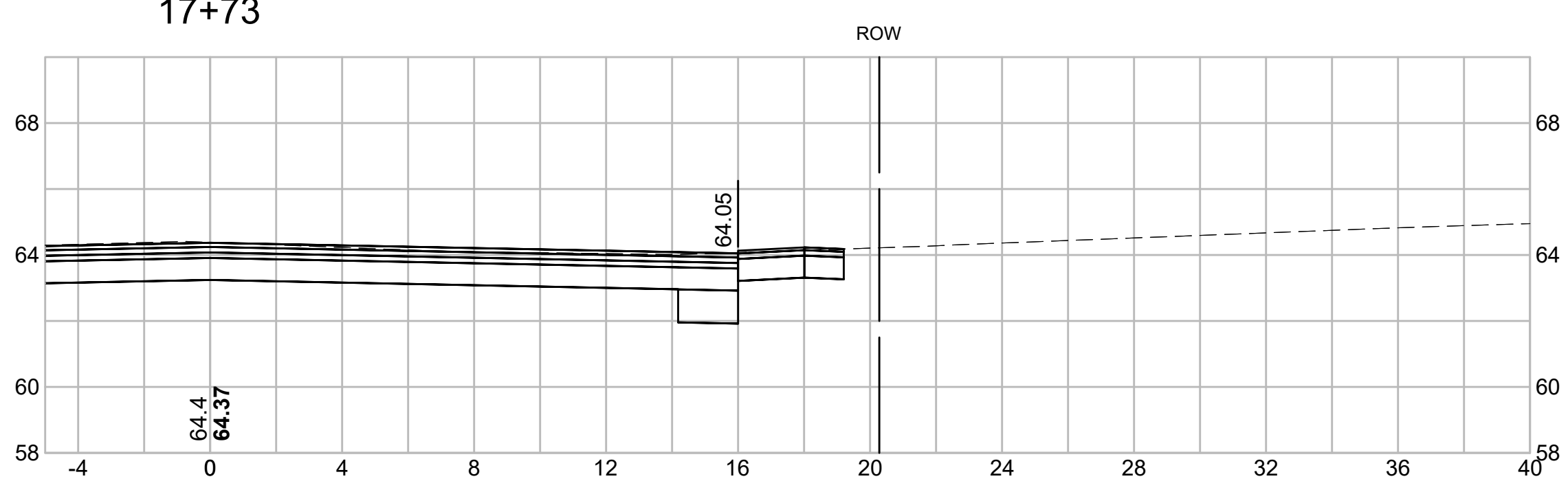
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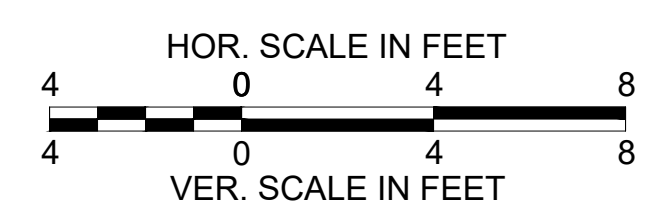
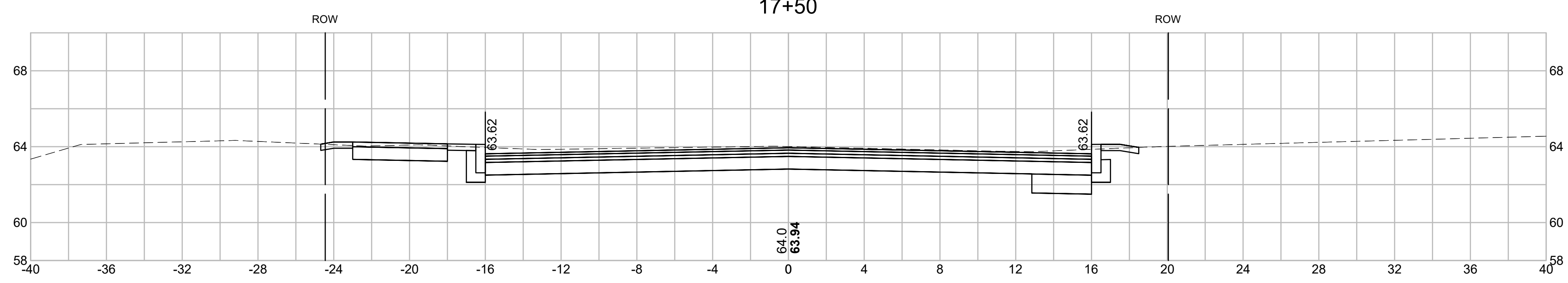
18+00



17+73



17+50



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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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2/5/2018

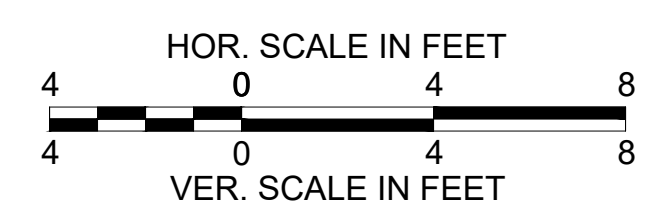
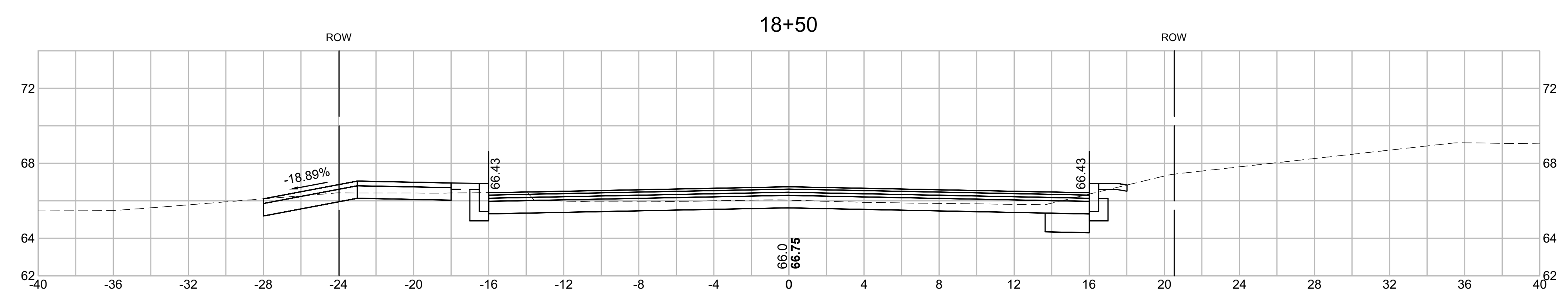
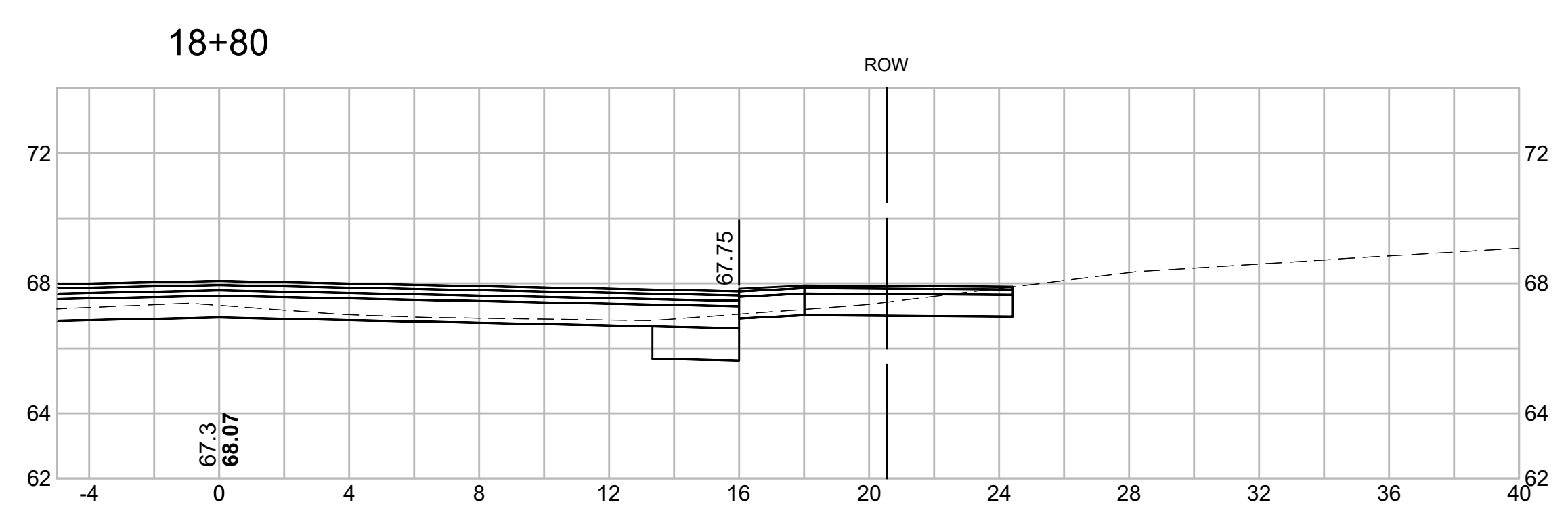
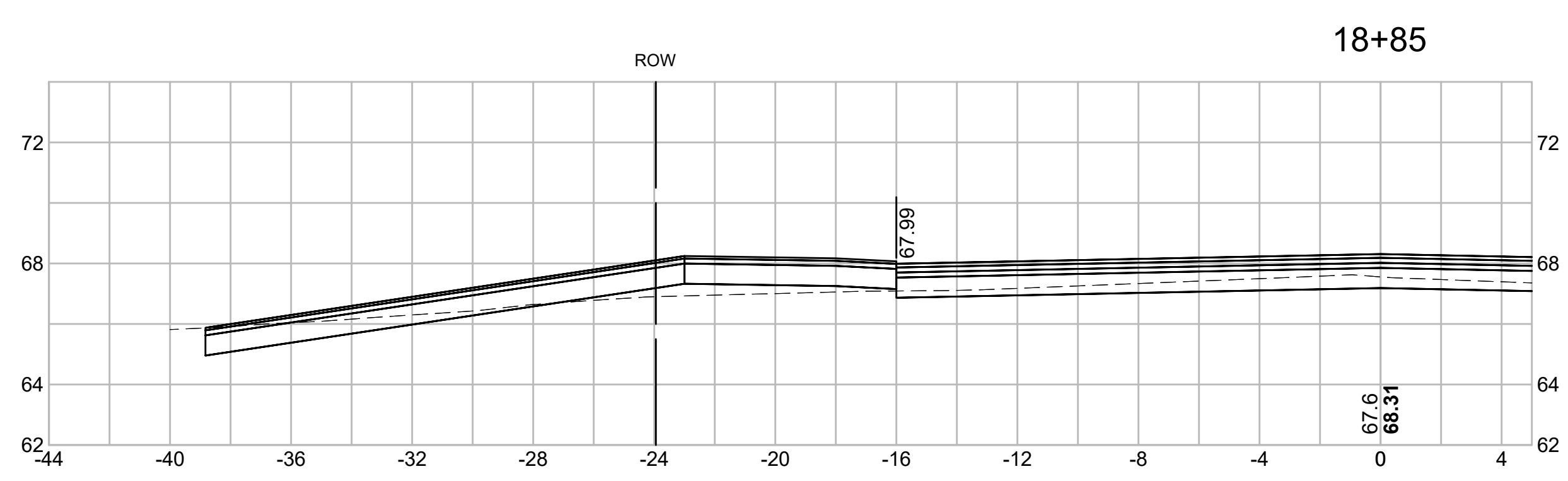
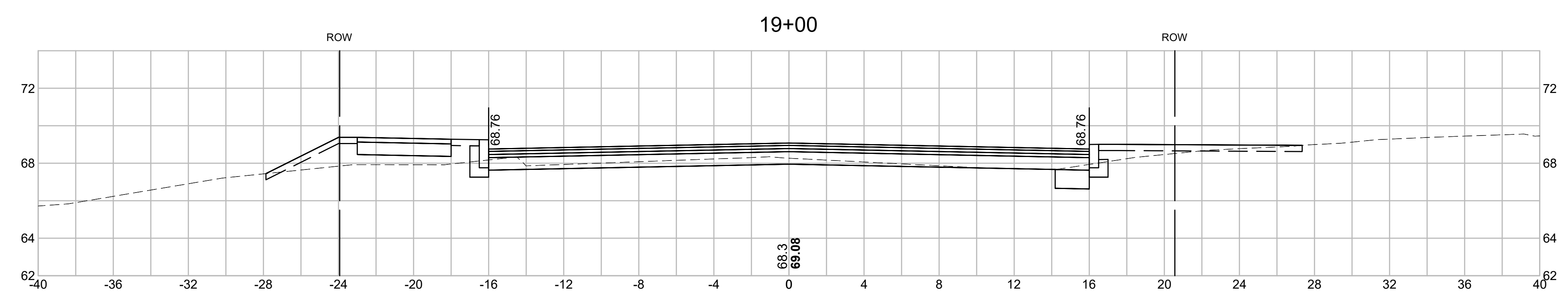
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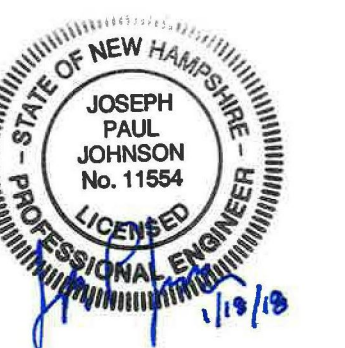
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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2/5/2018

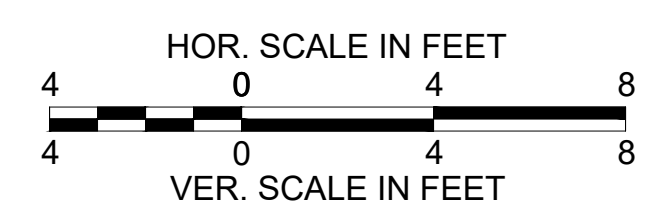
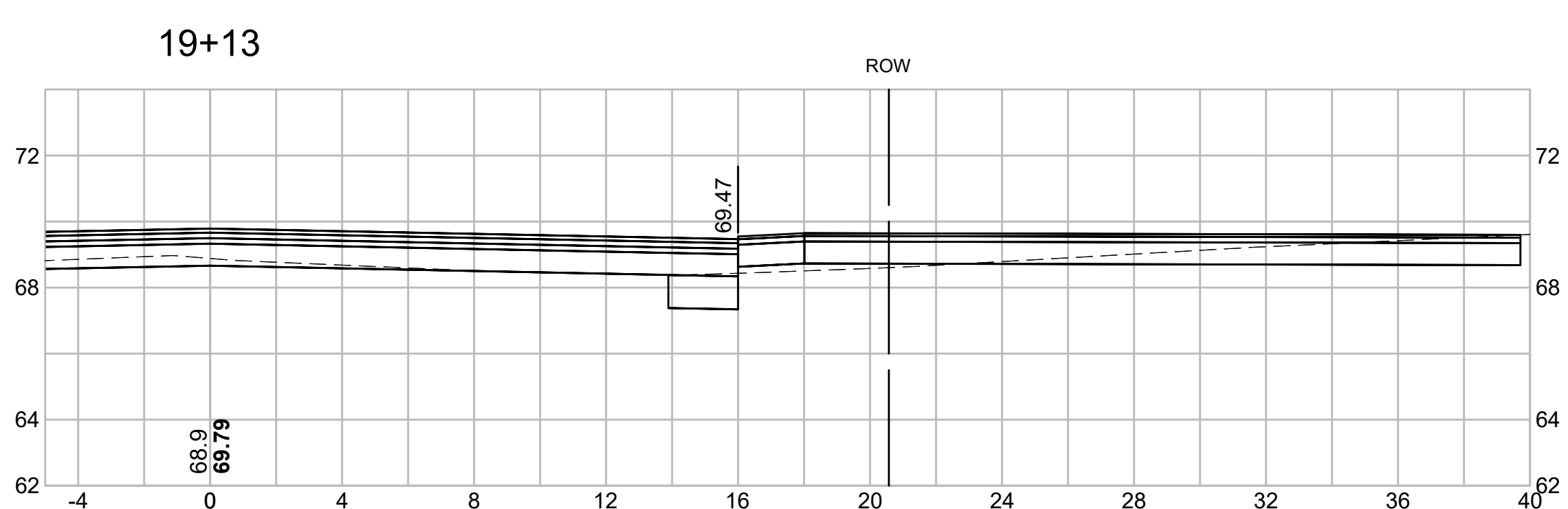
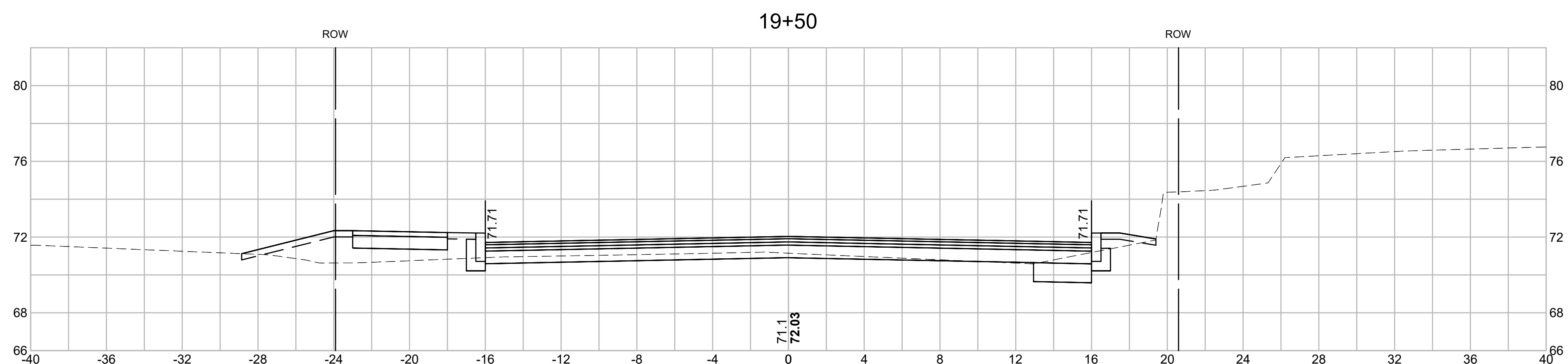
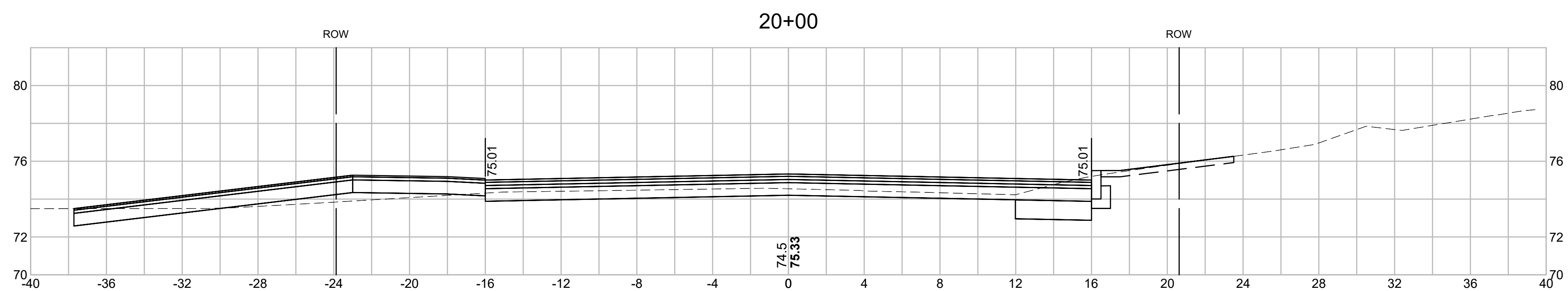
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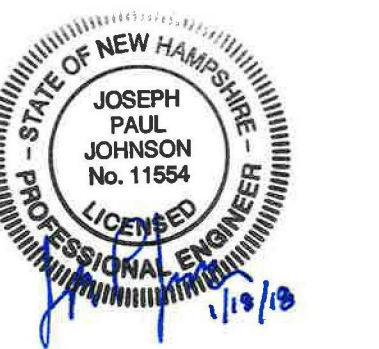
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
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**IMPROVEMENTS TO MAPLEWOOD
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 PORTSMOUTH, NH**

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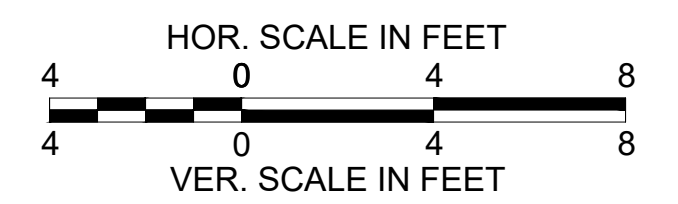
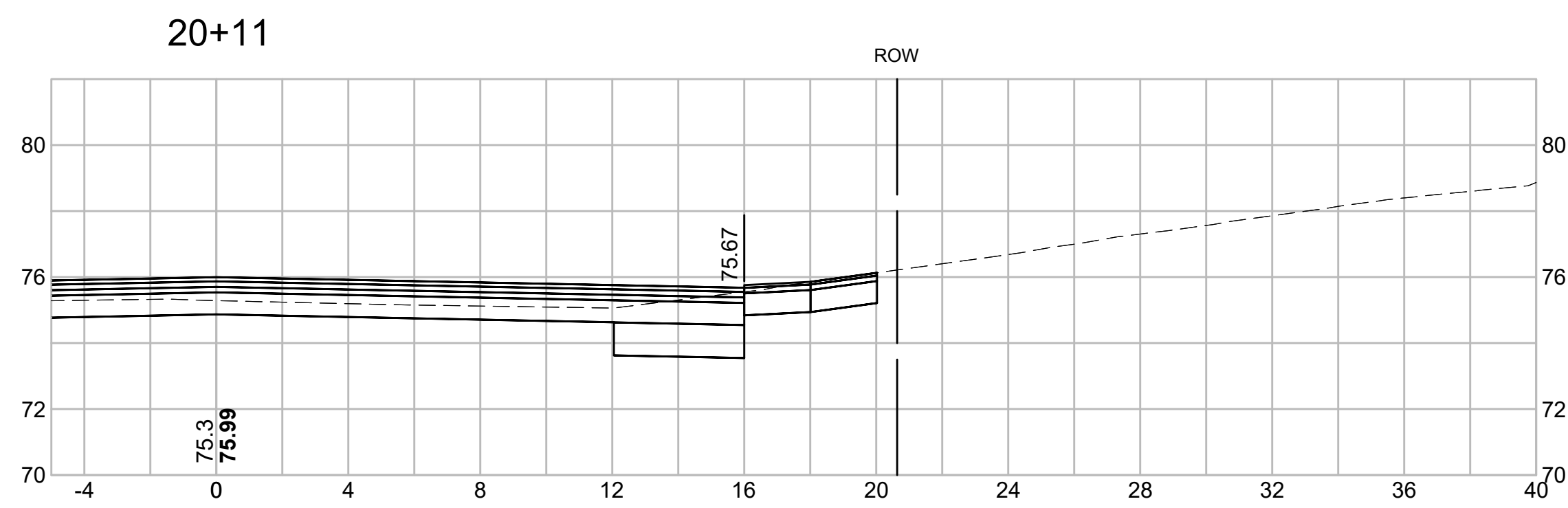
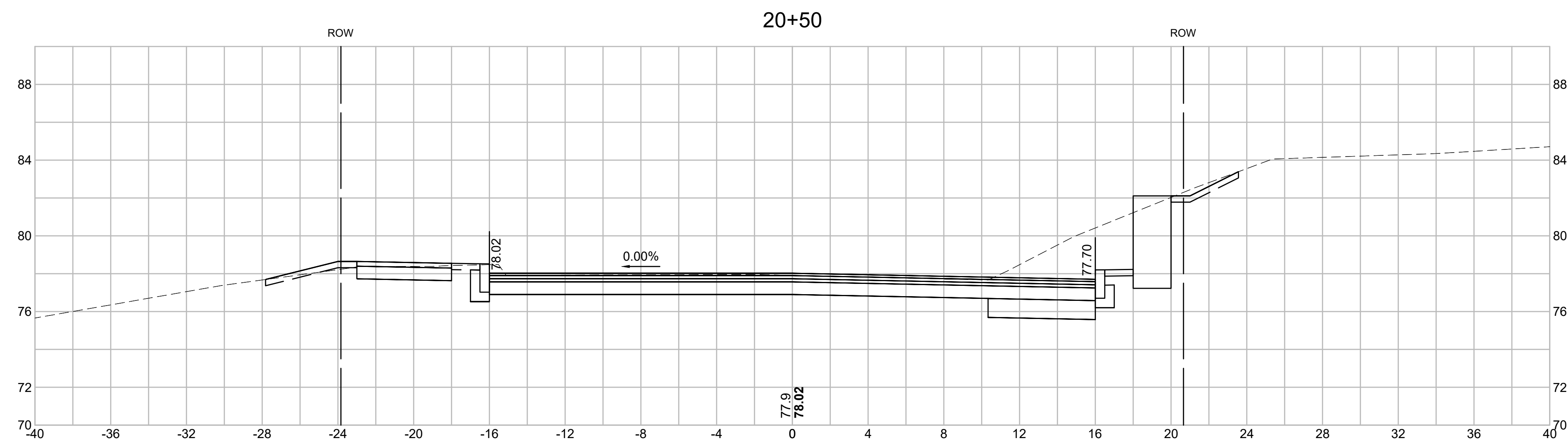
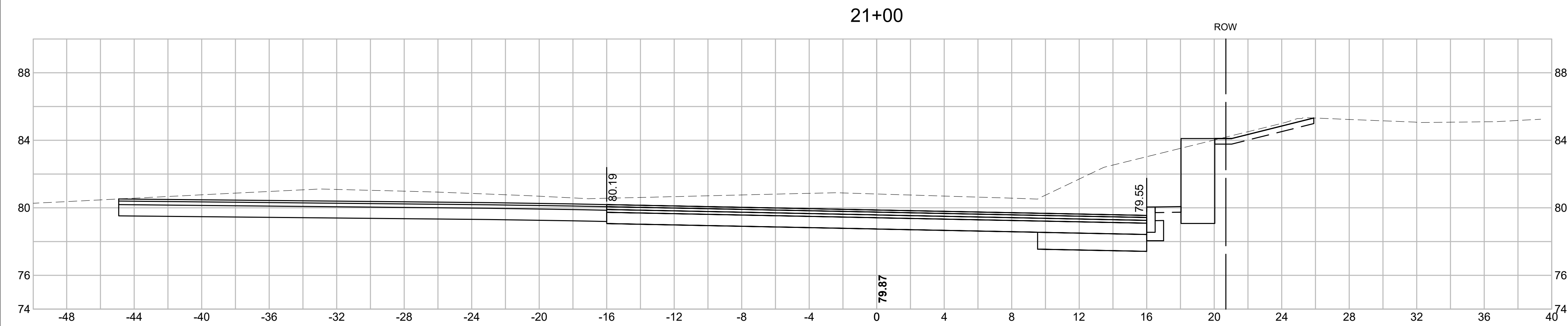
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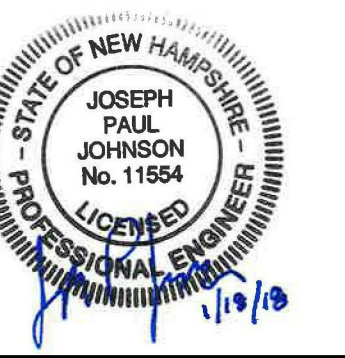
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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**IMPROVEMENTS TO MAPLEWOOD
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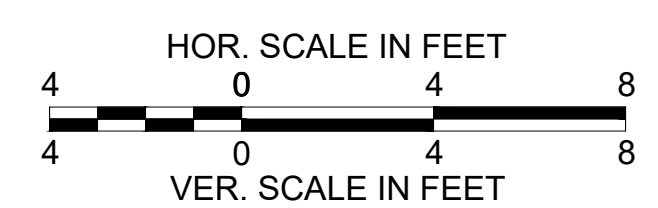
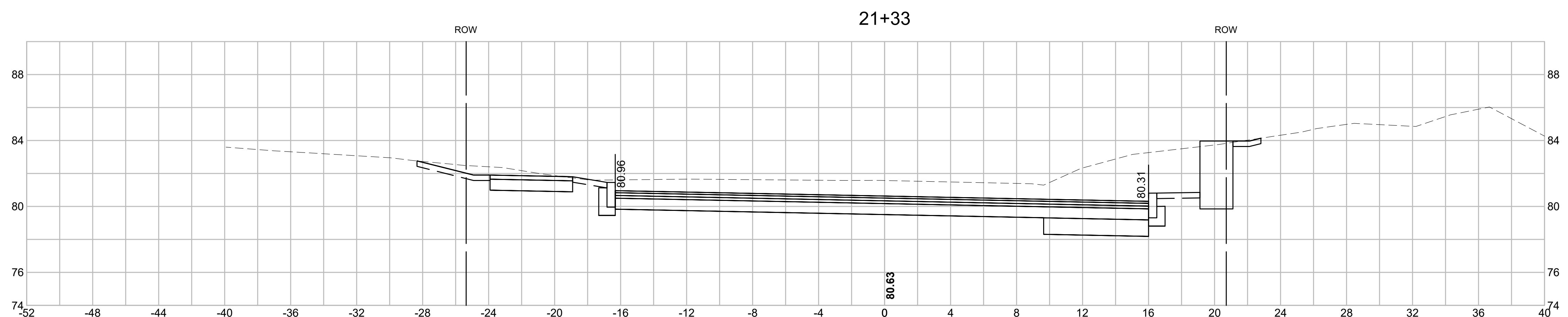
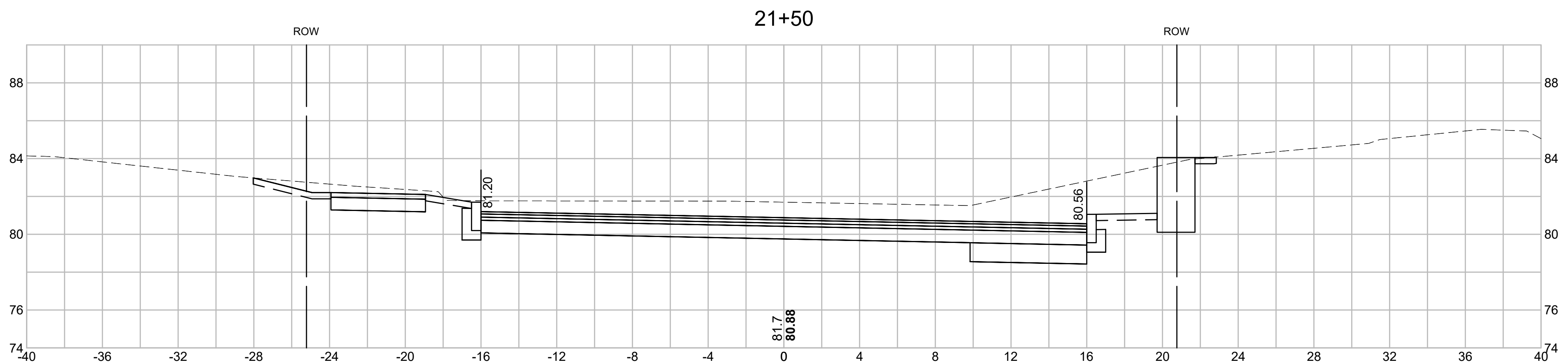
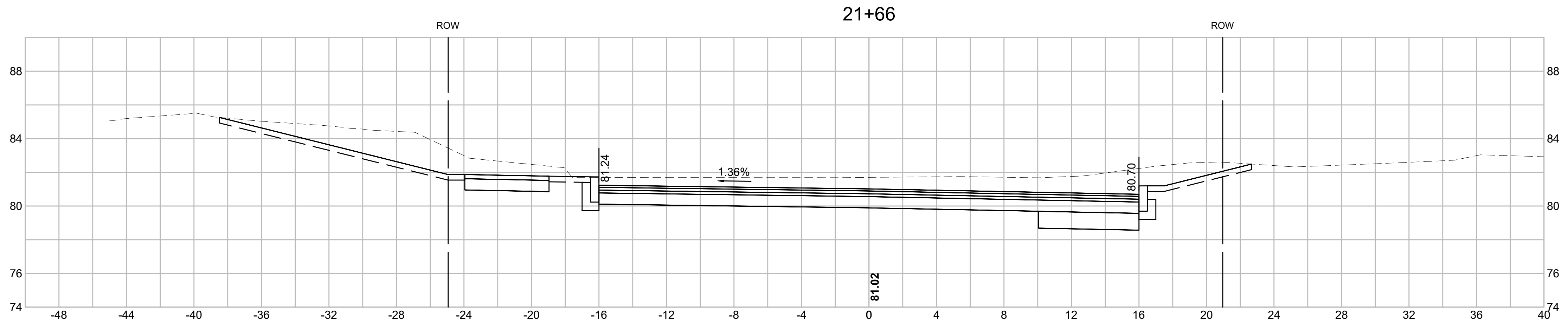
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

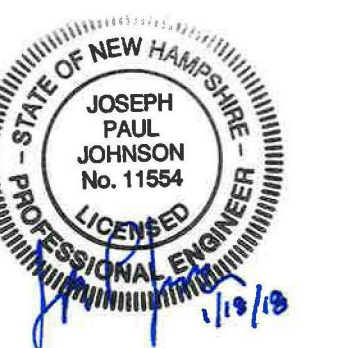
SCALE: 1"=4'

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

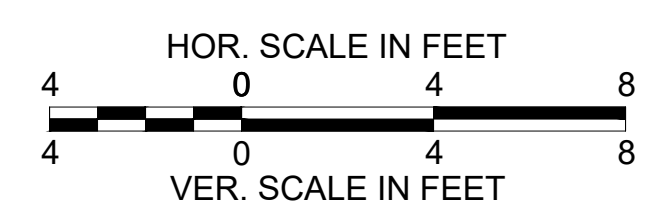
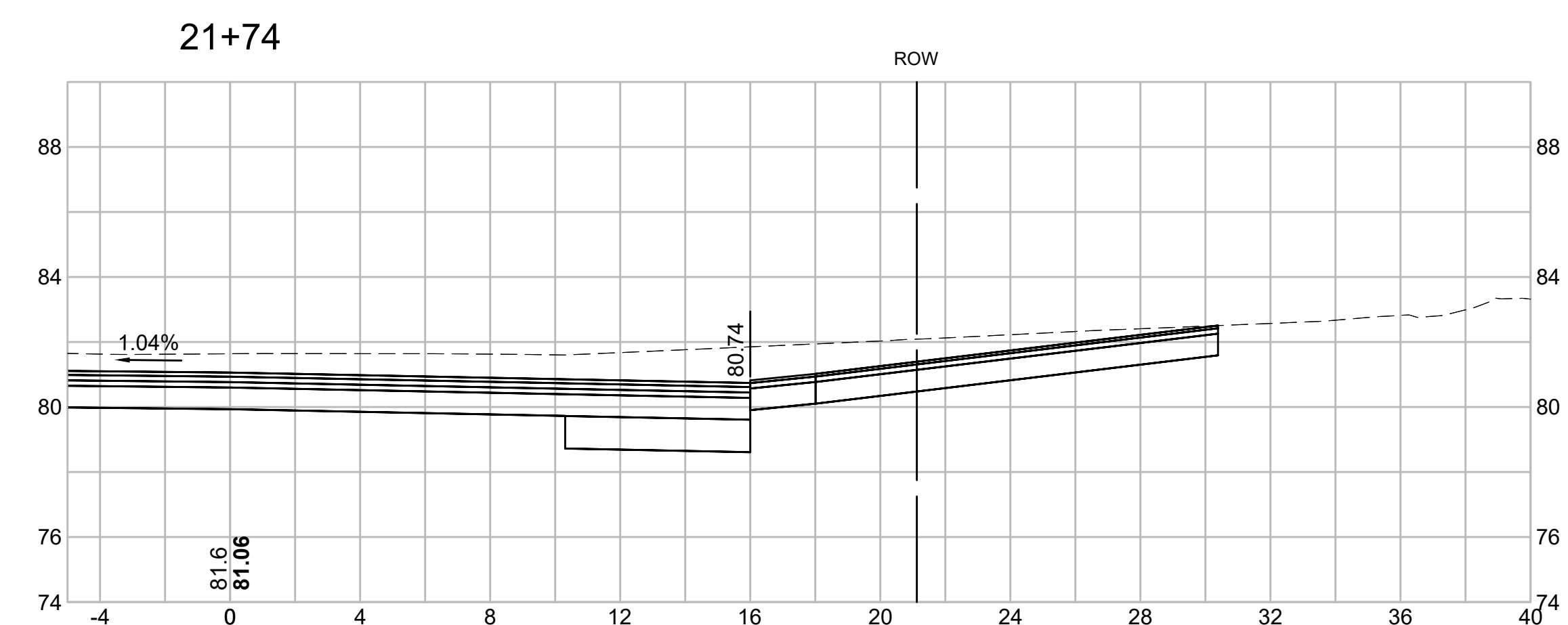
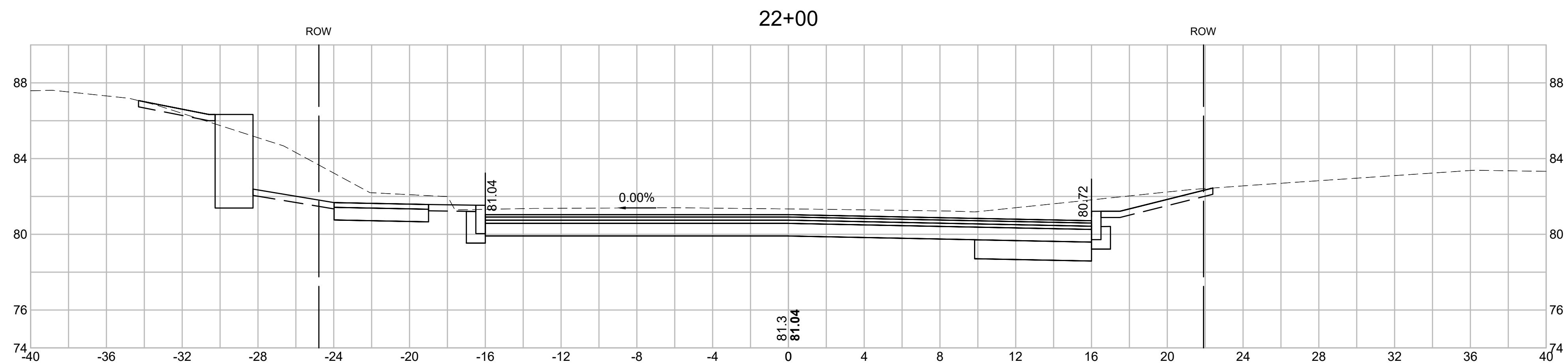
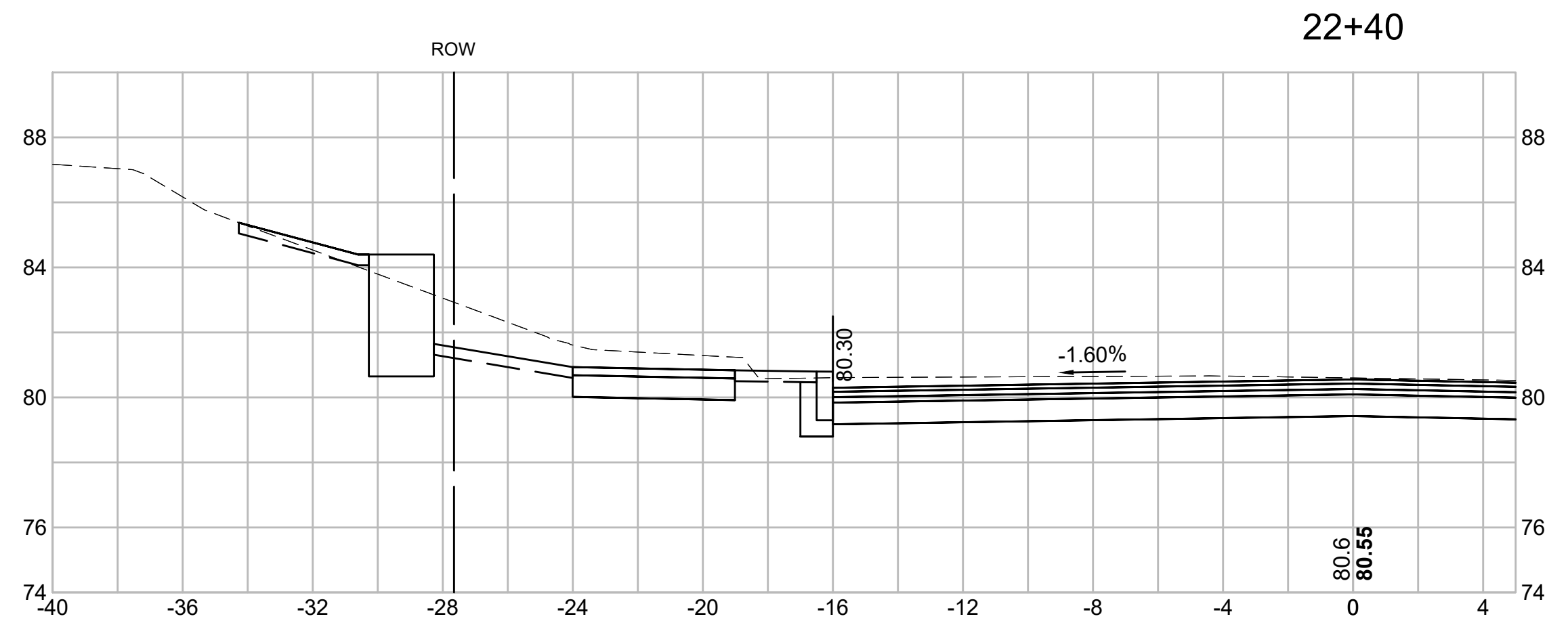
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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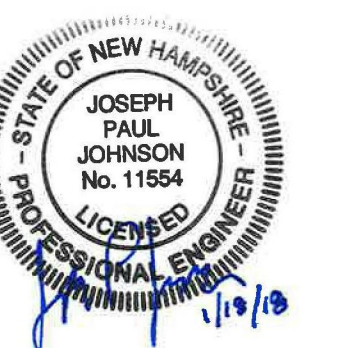
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

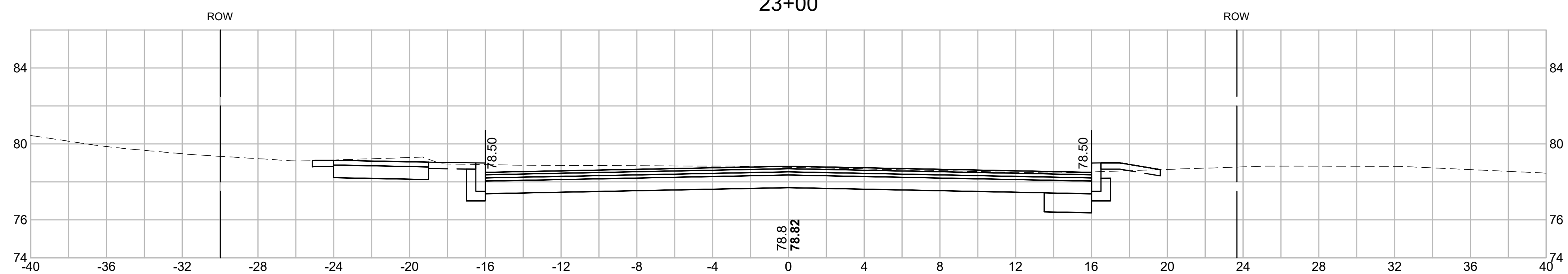
REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

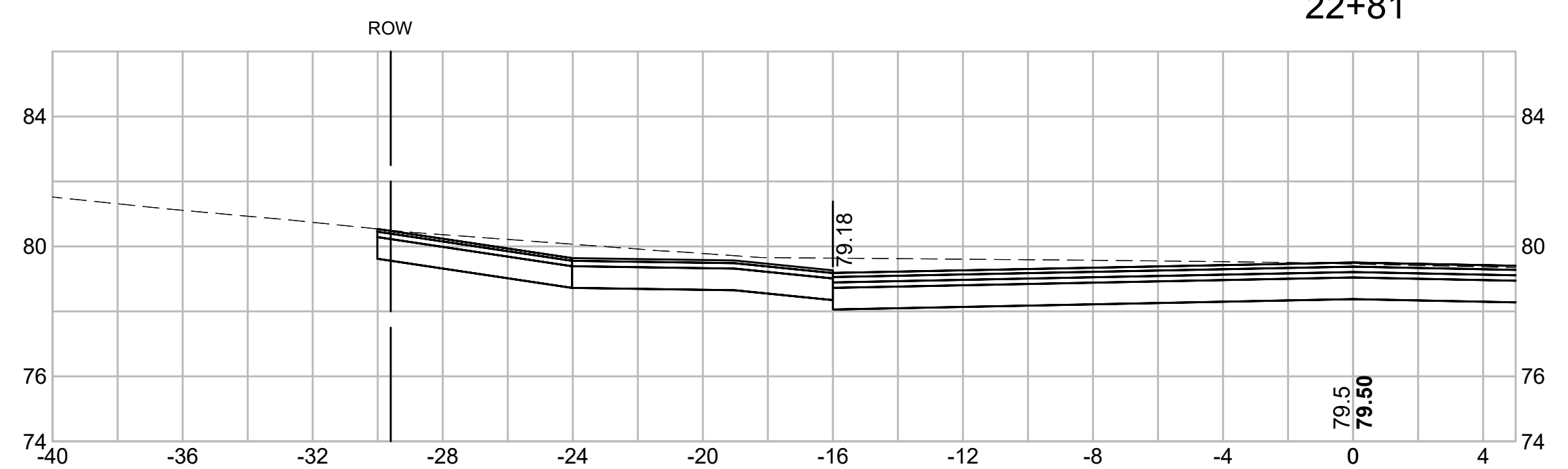
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
 102 OF 184

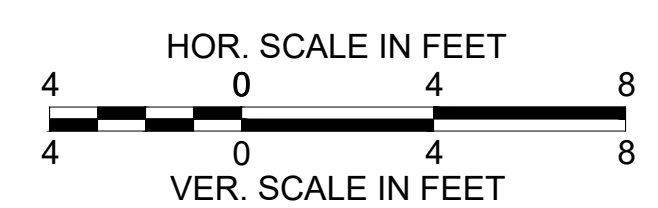
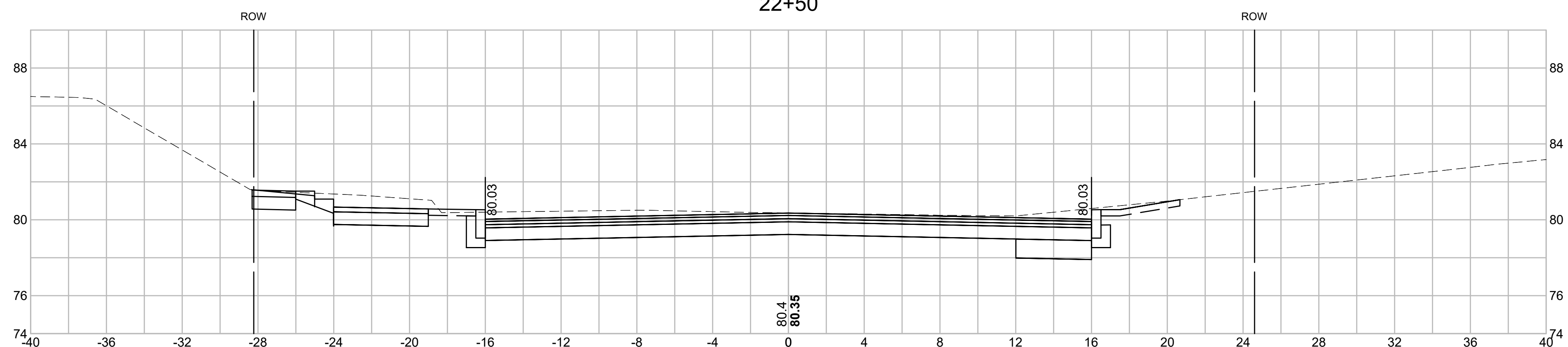
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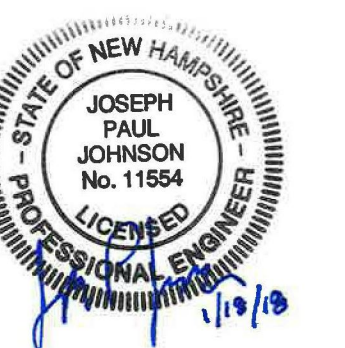


22+81



22+50





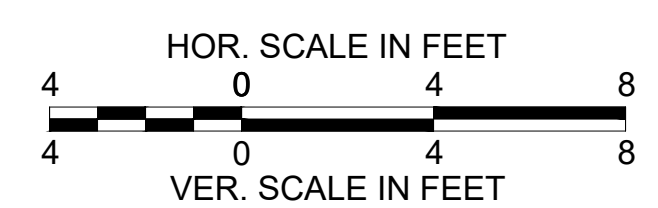
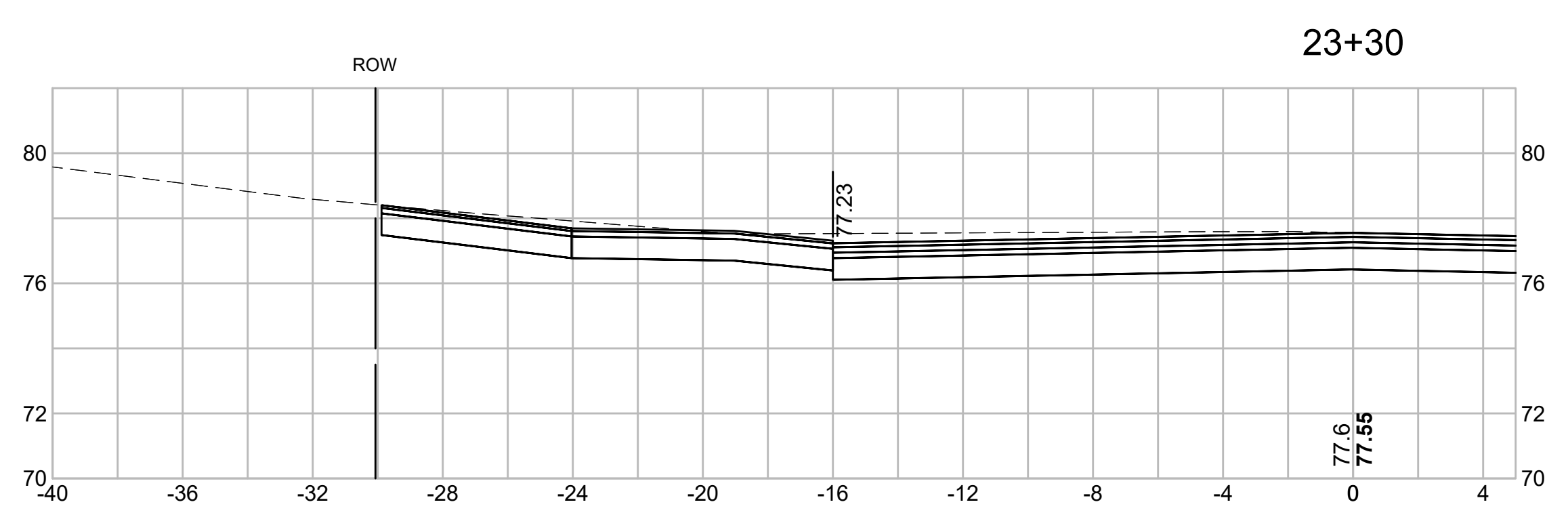
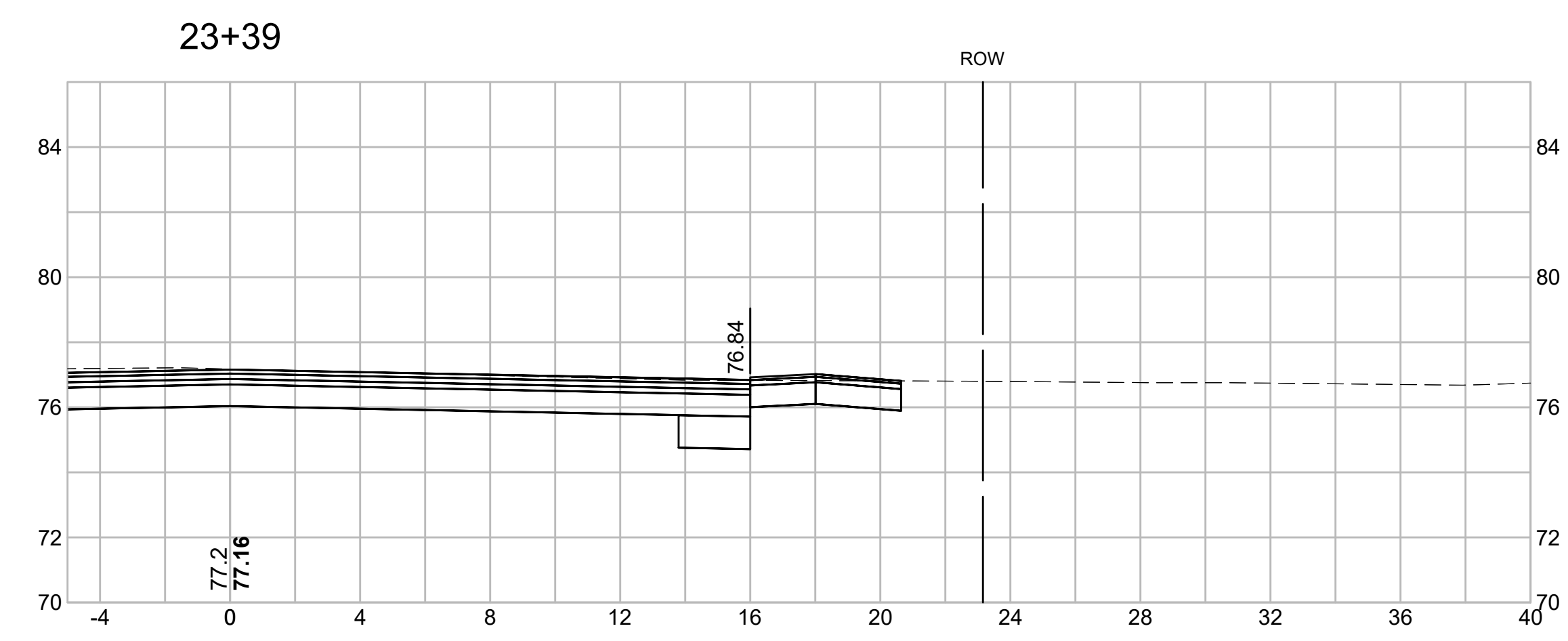
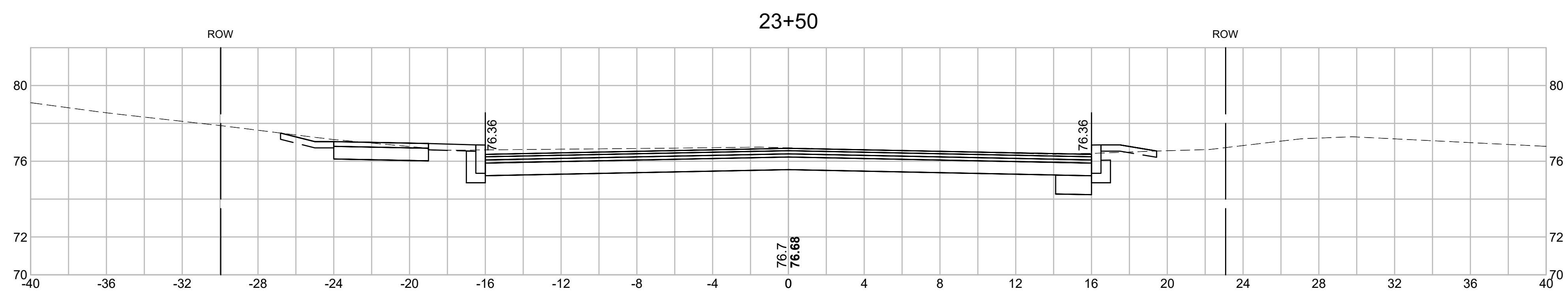
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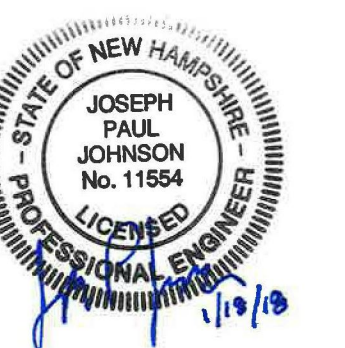
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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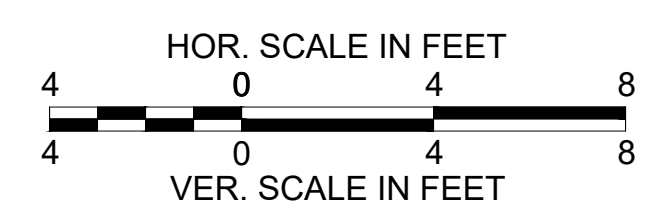
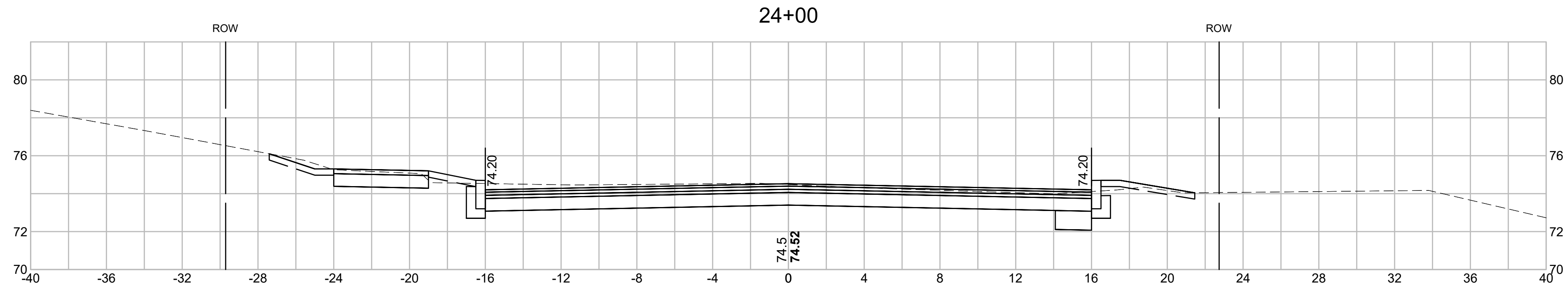
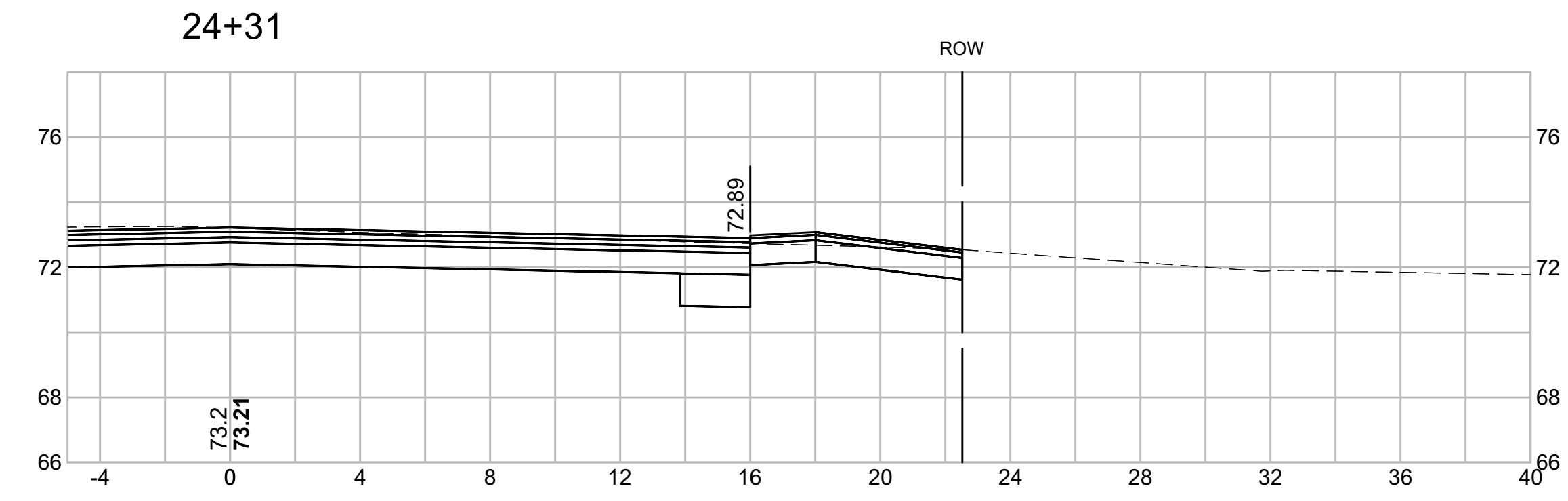
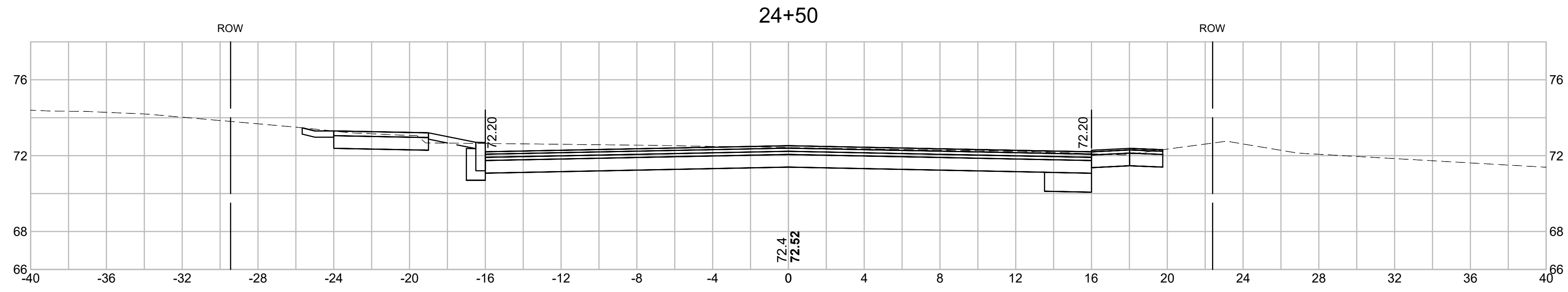
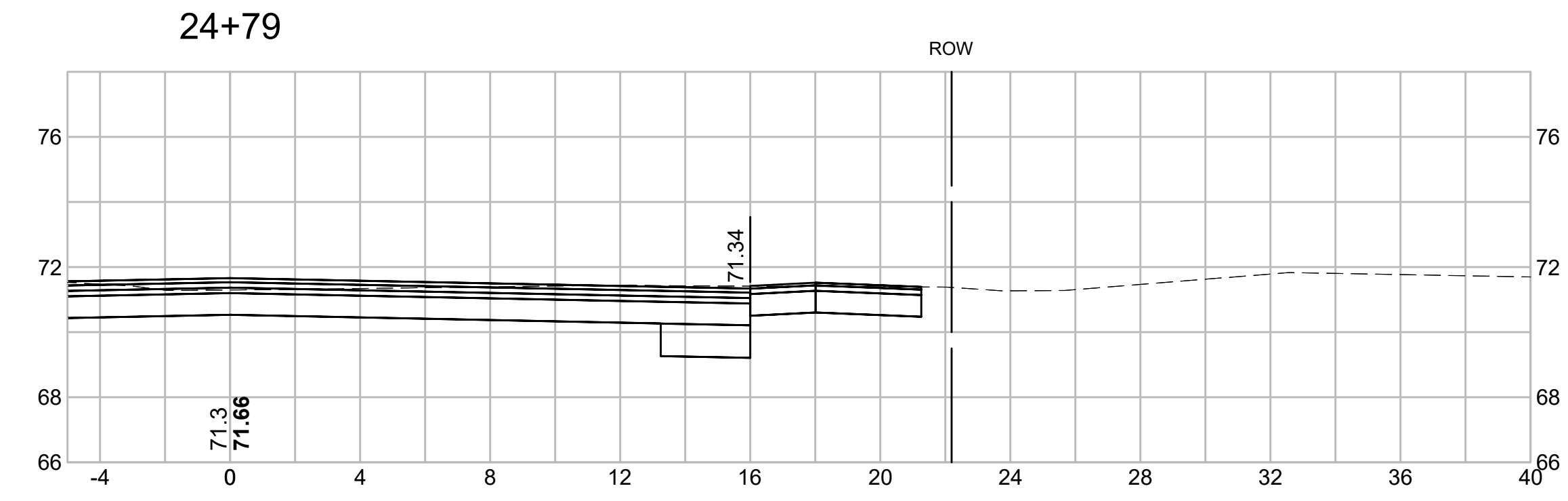
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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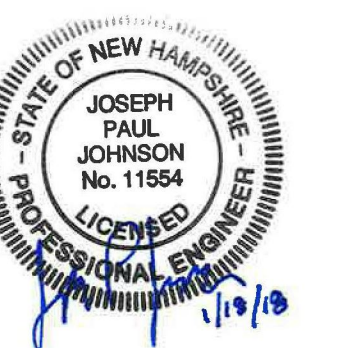
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
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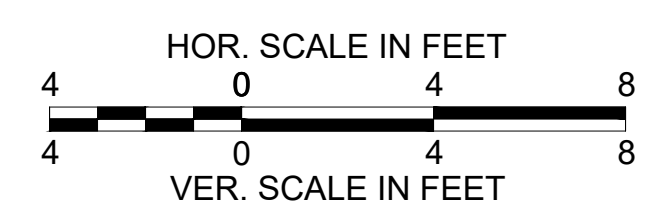
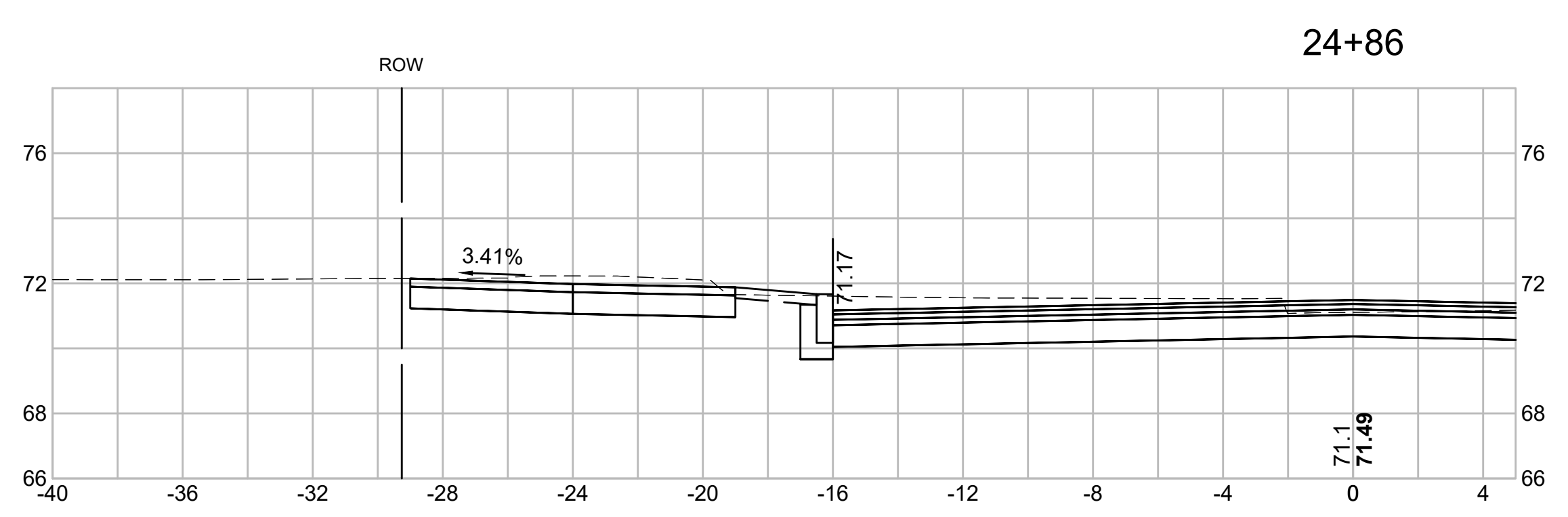
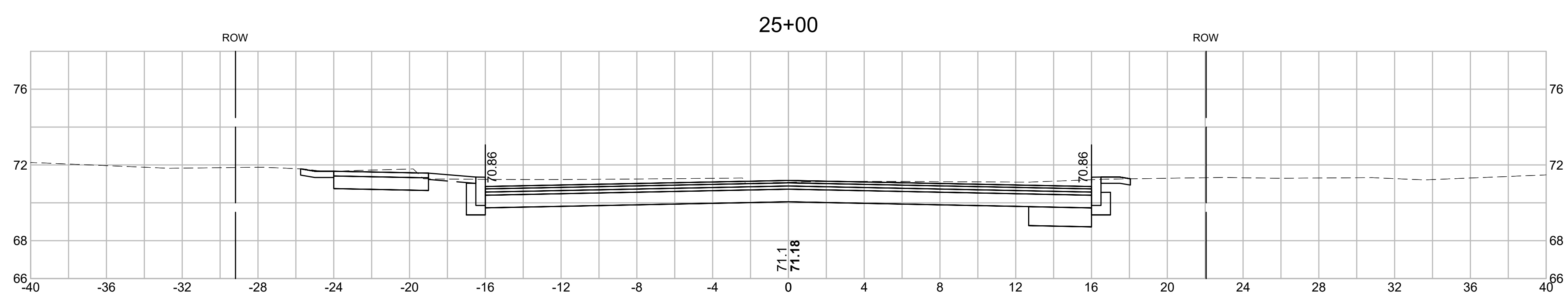
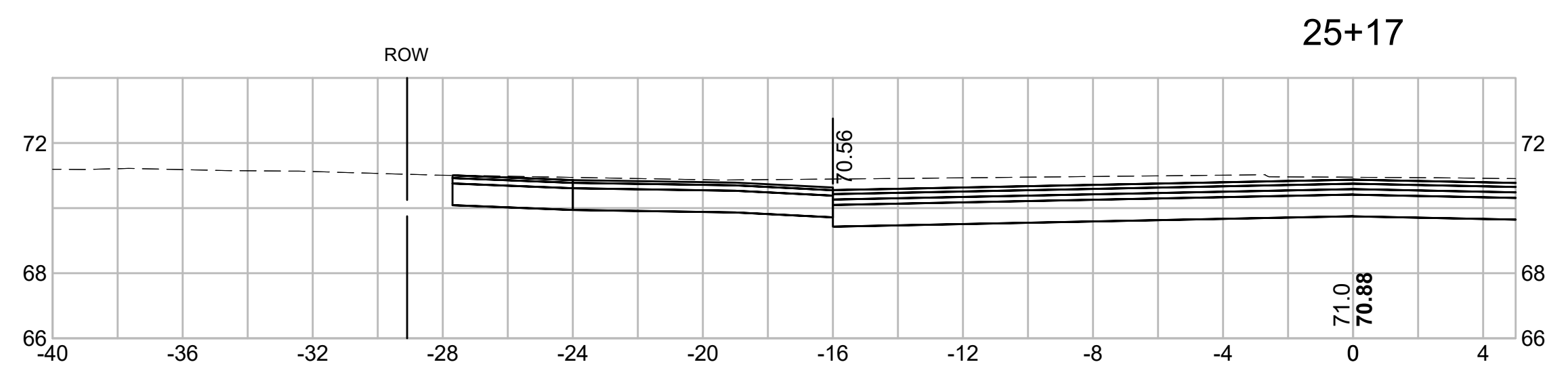
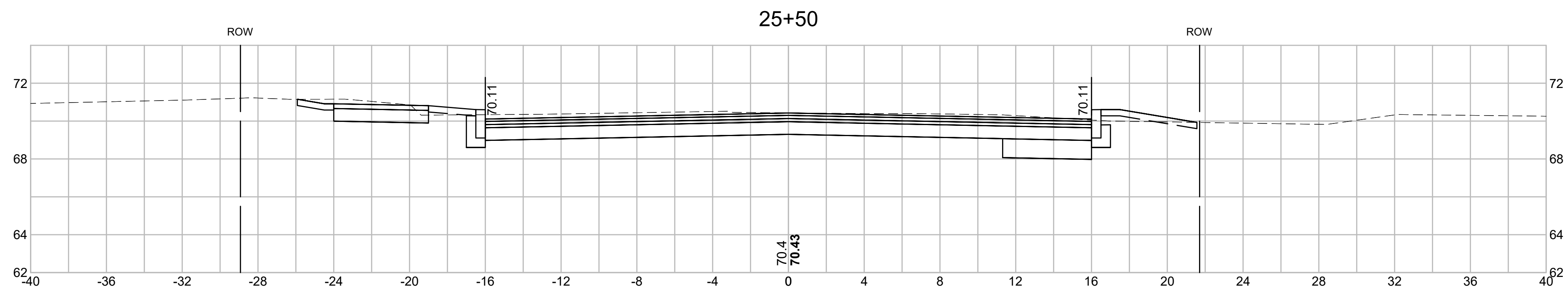
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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2/5/2018

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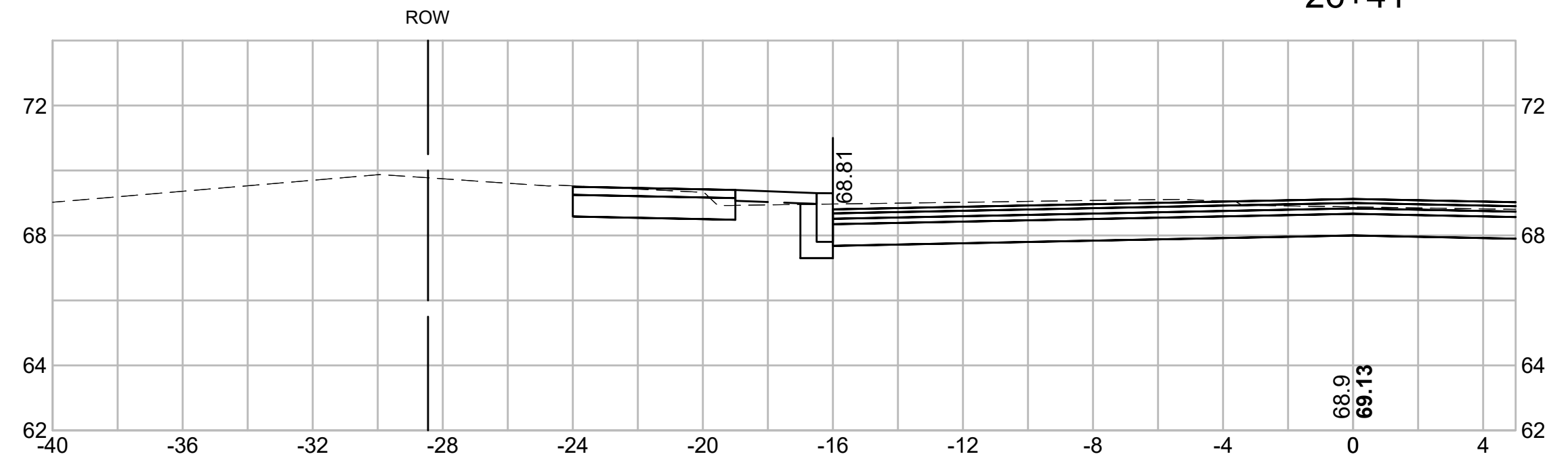
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

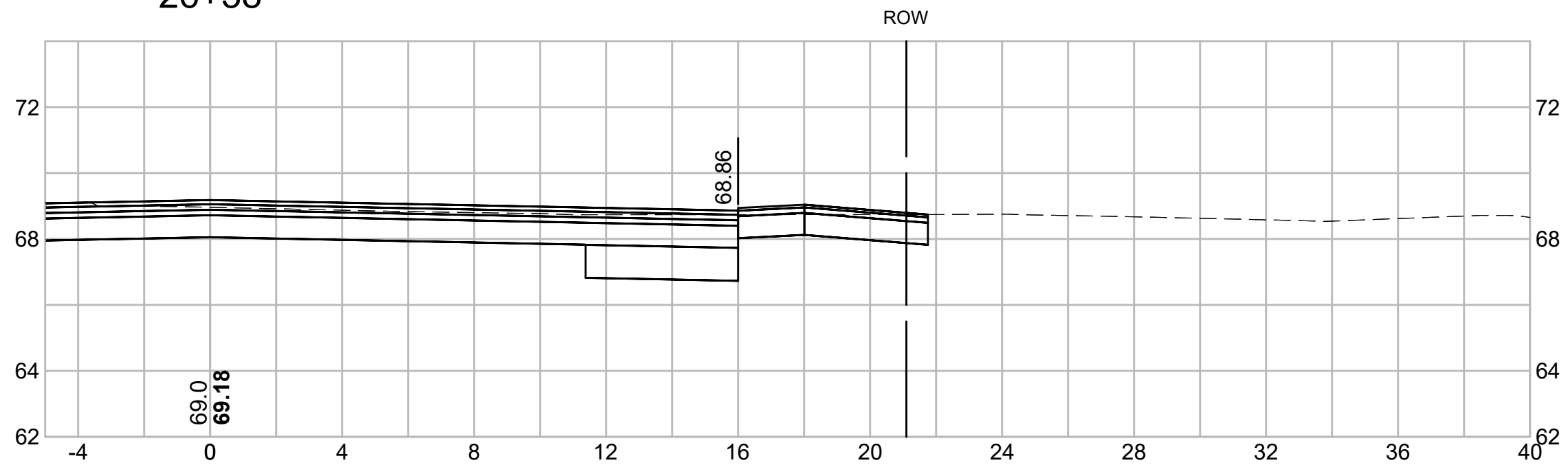
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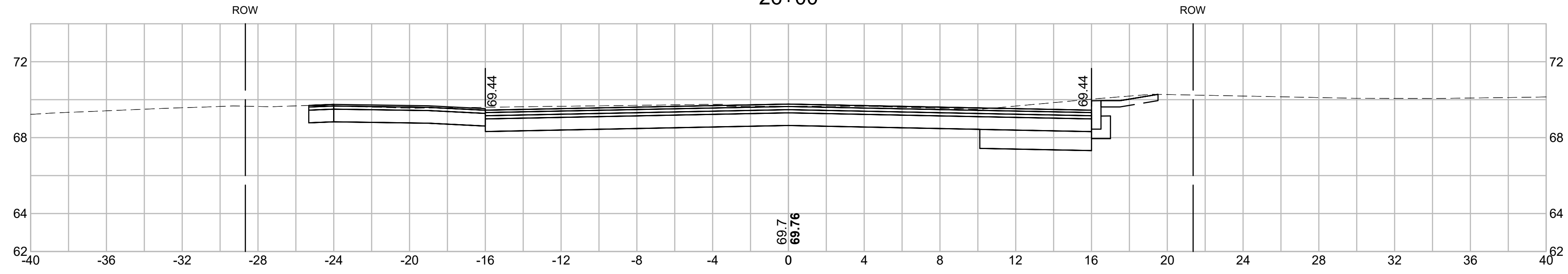
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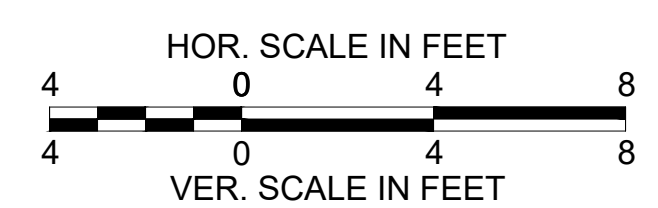
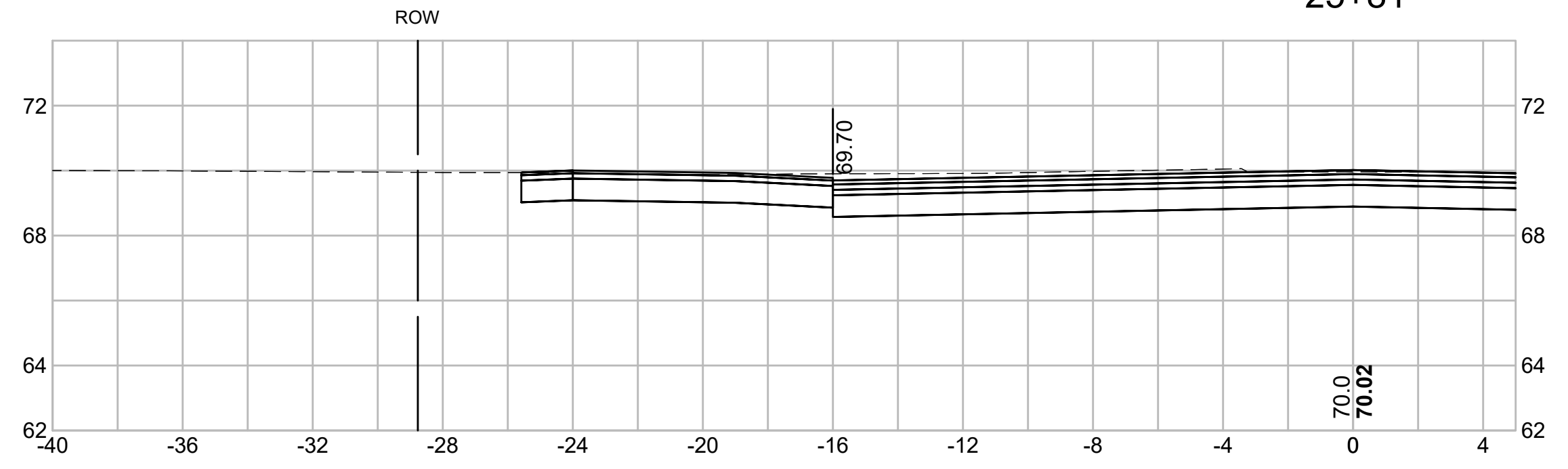
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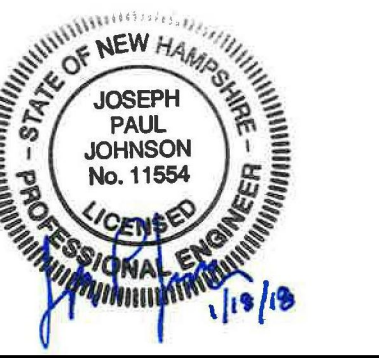


26+00



25+81





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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2/5/2018

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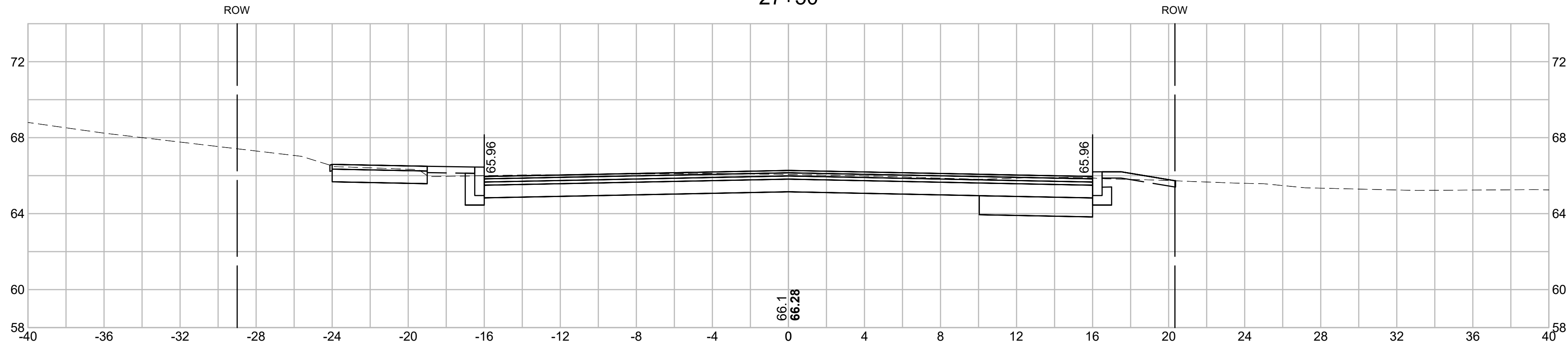
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

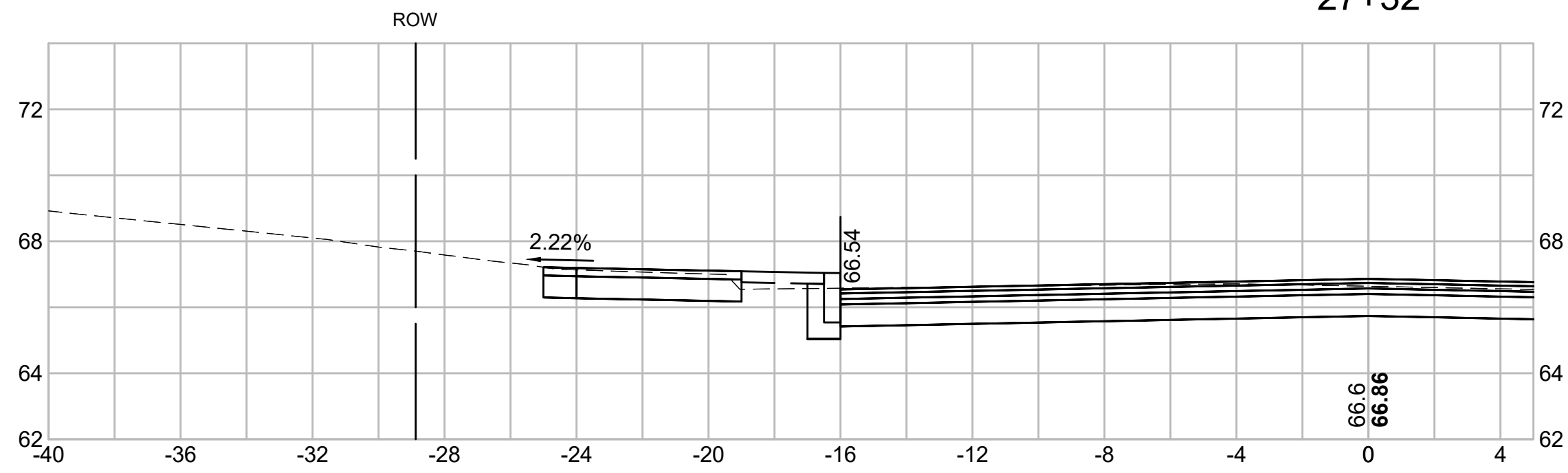
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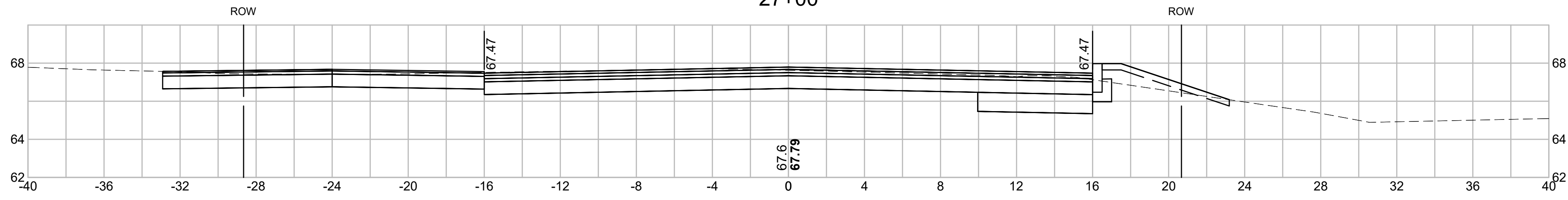
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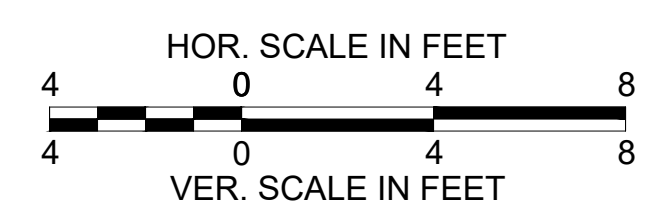
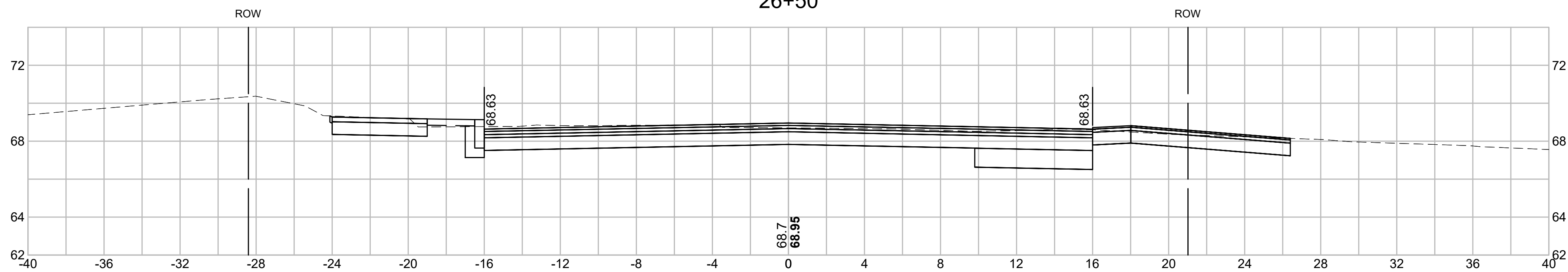
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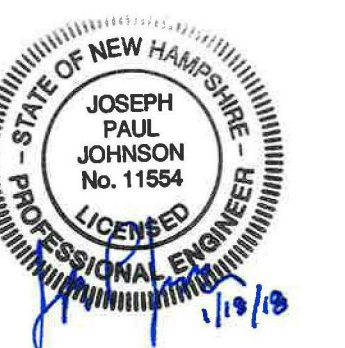


27+00



26+50





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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2/5/2018

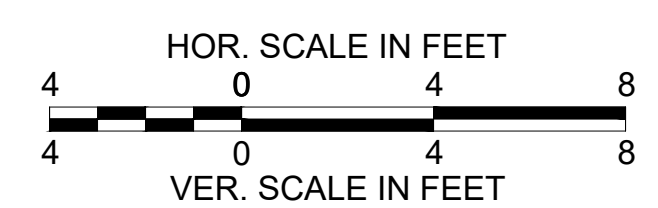
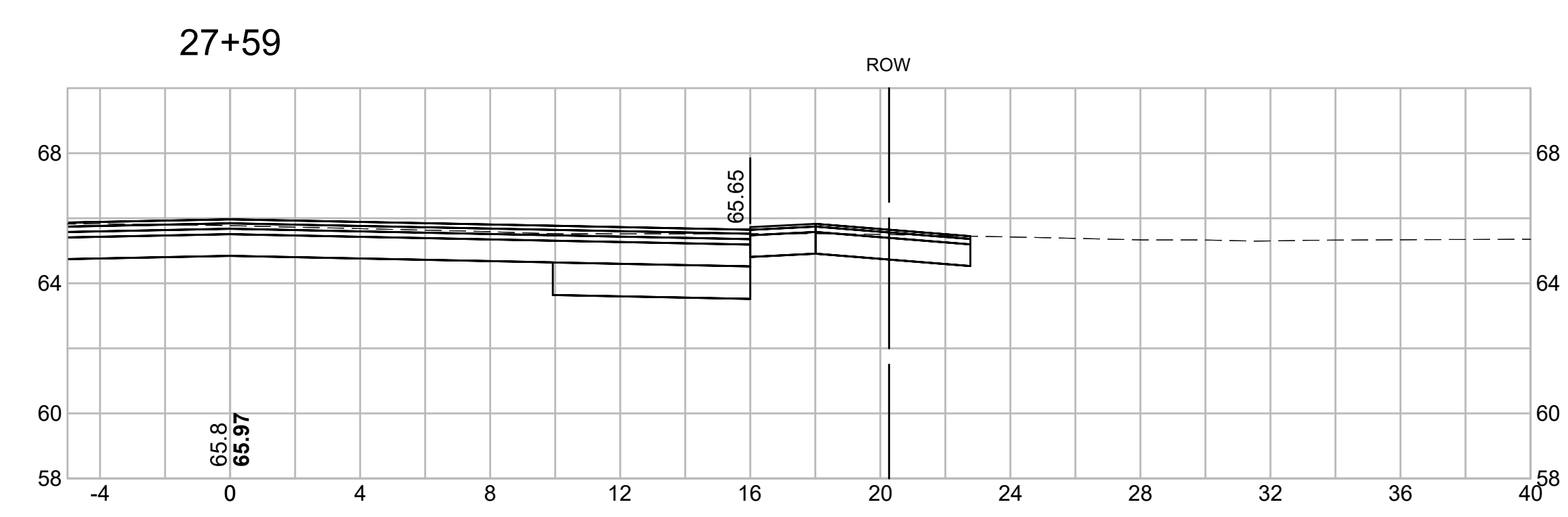
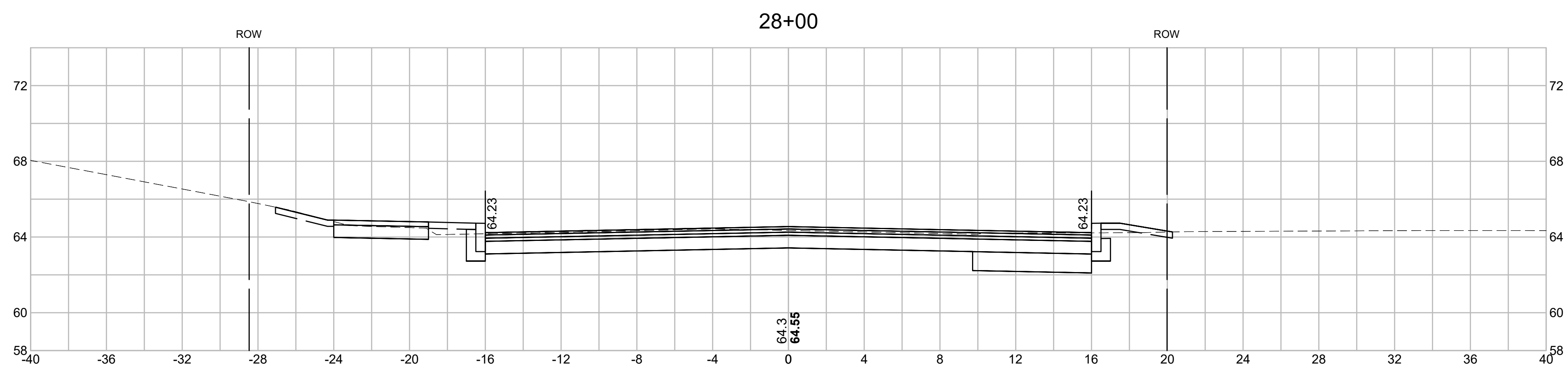
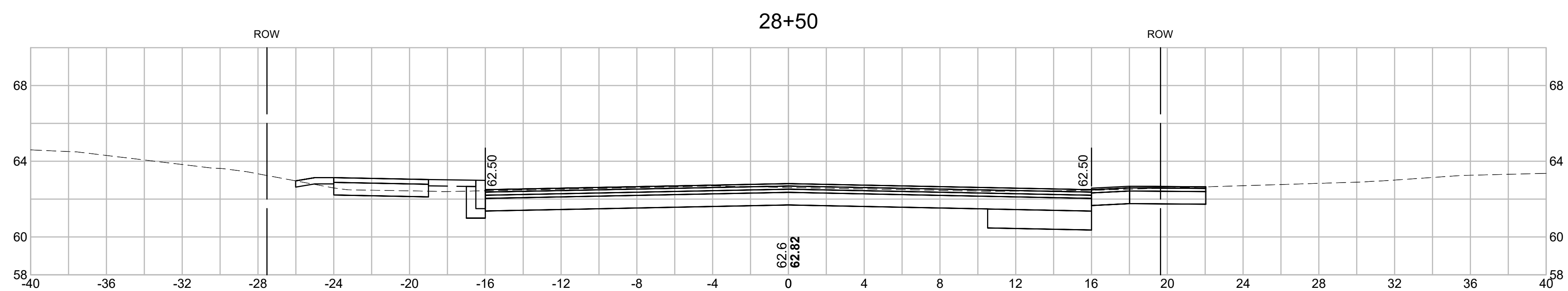
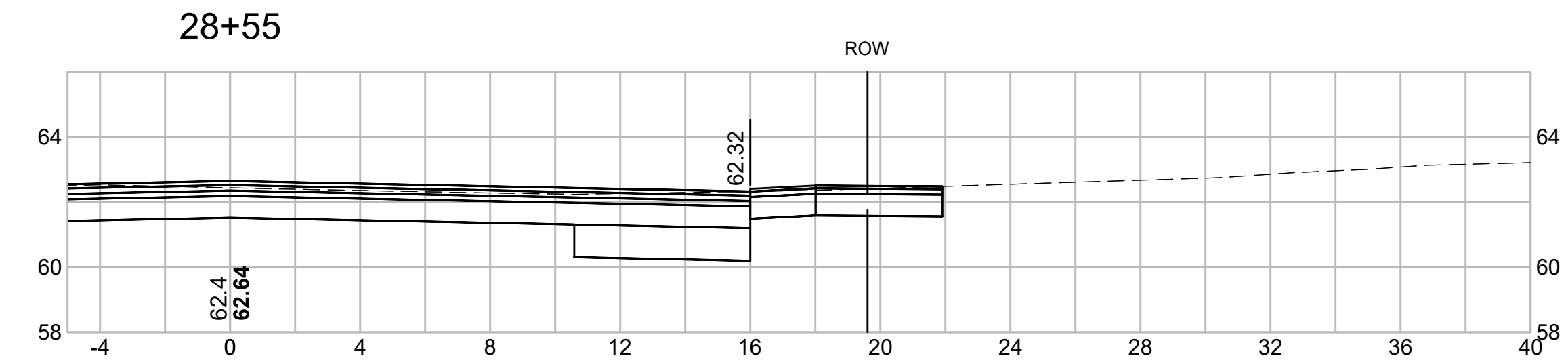
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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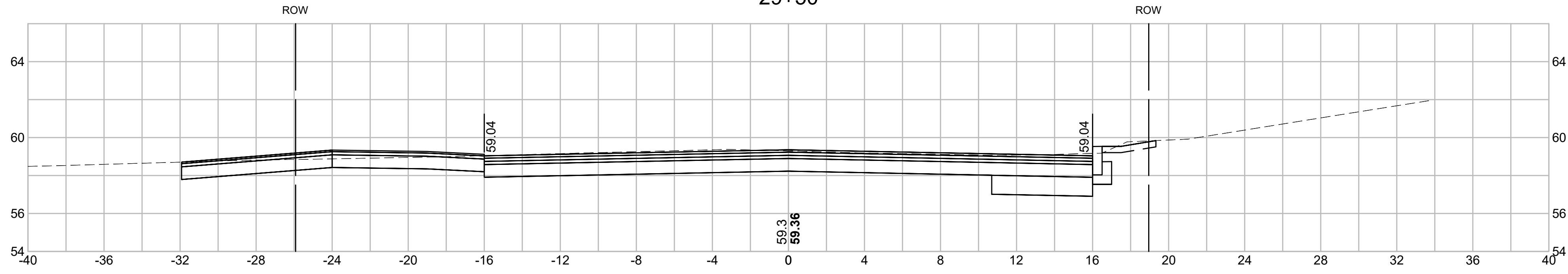
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

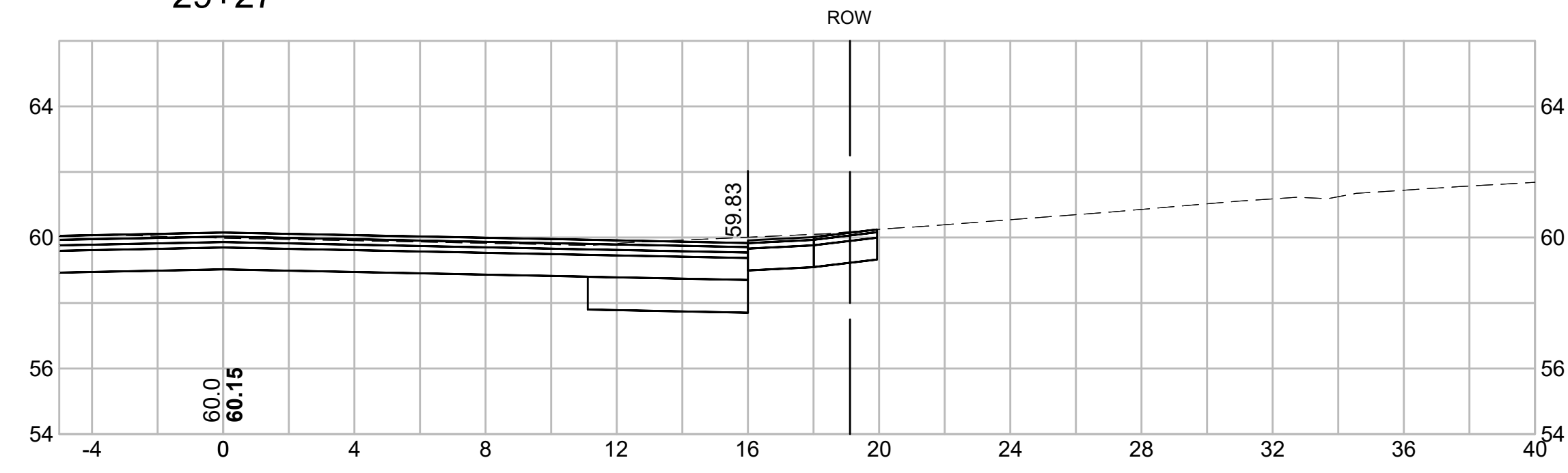
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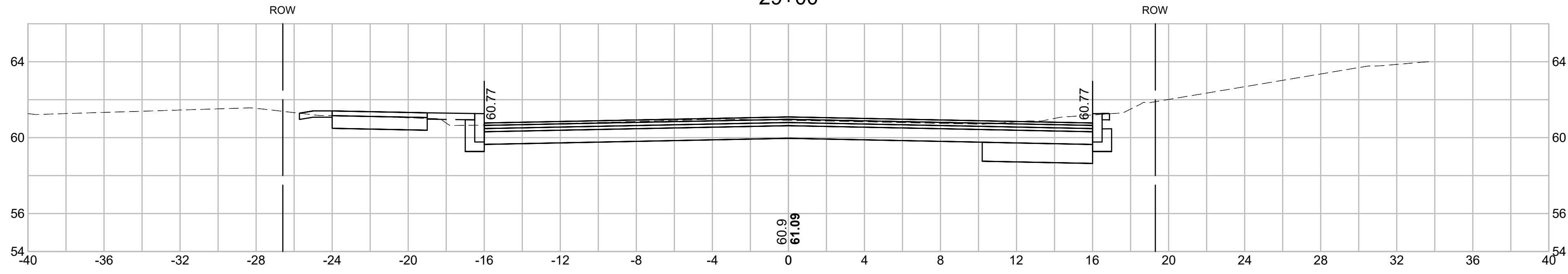
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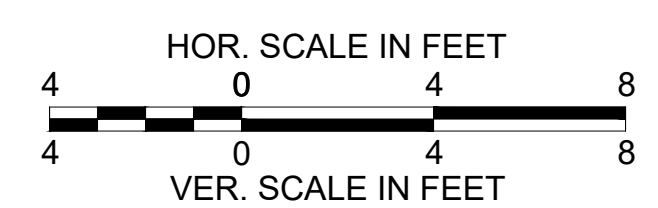
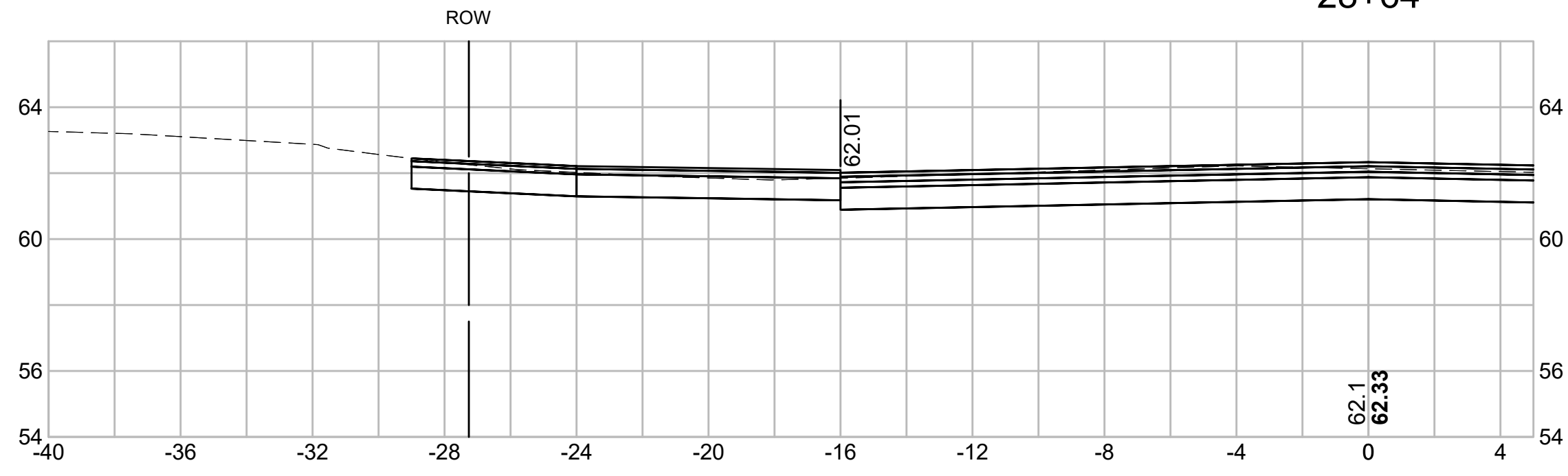
29+27



29+00



28+64





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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

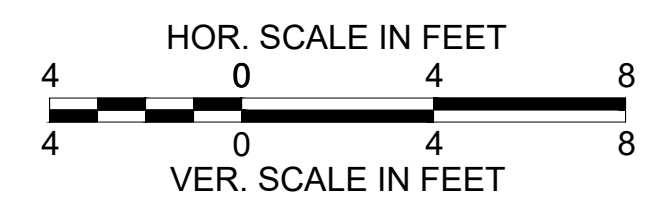
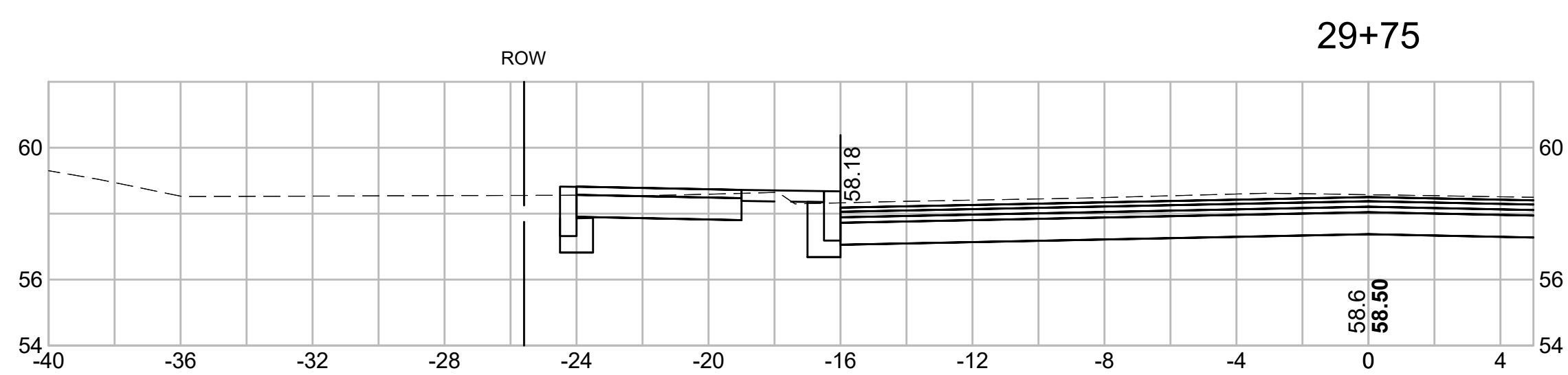
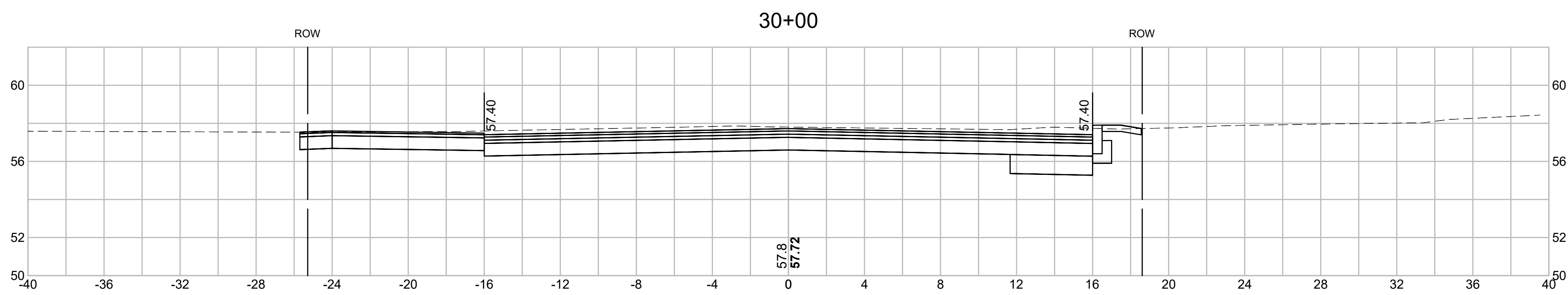
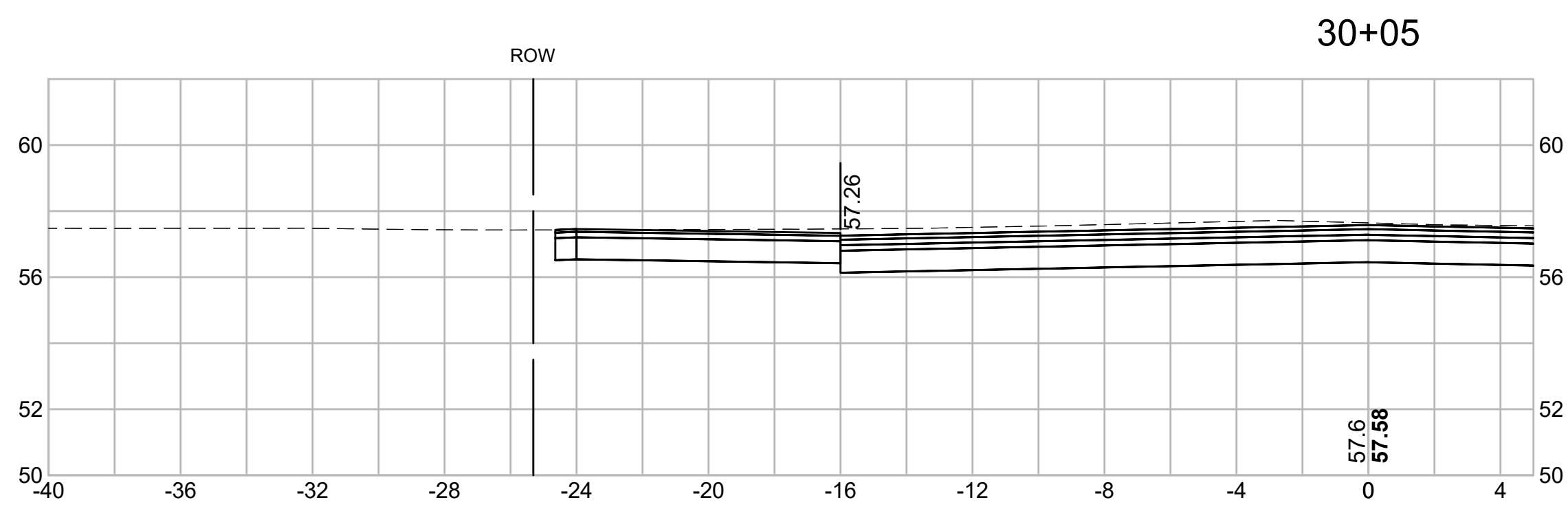
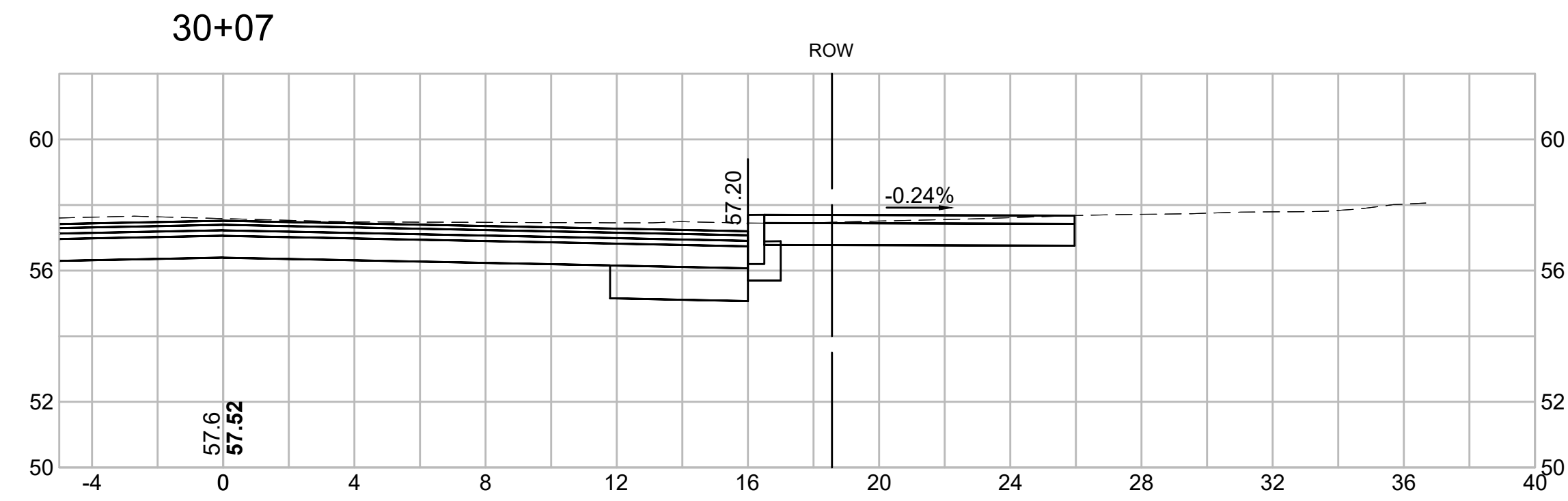
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

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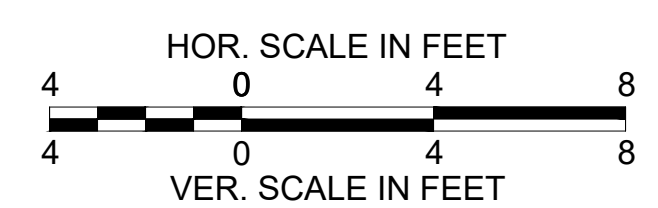
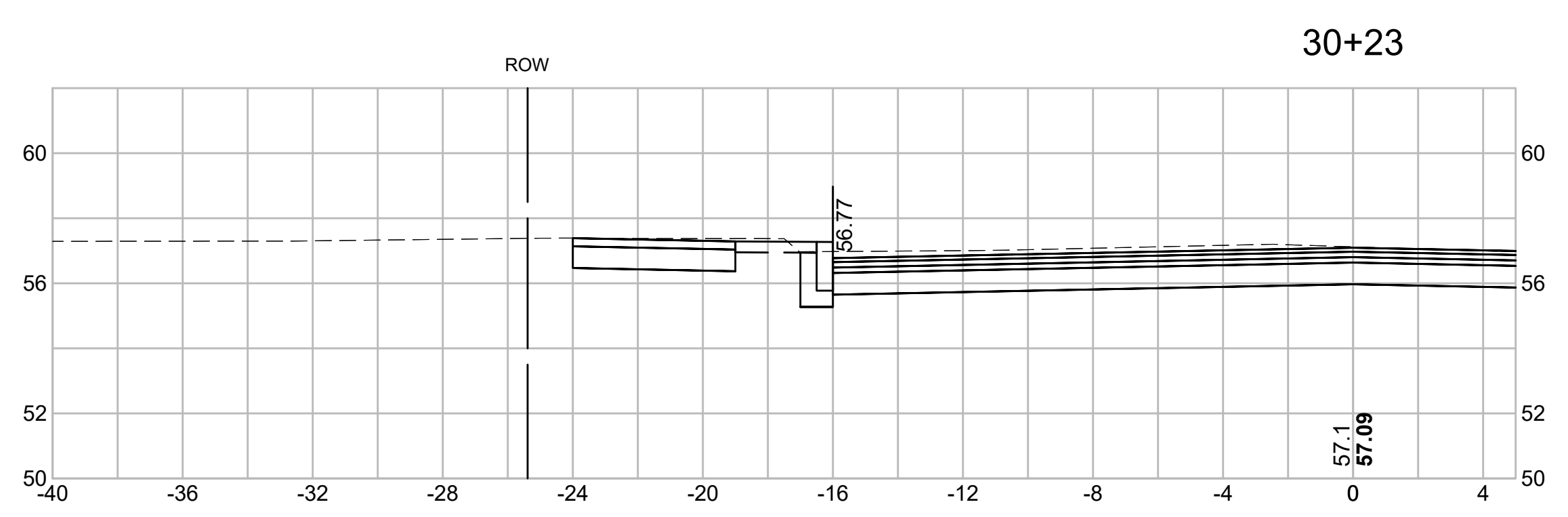
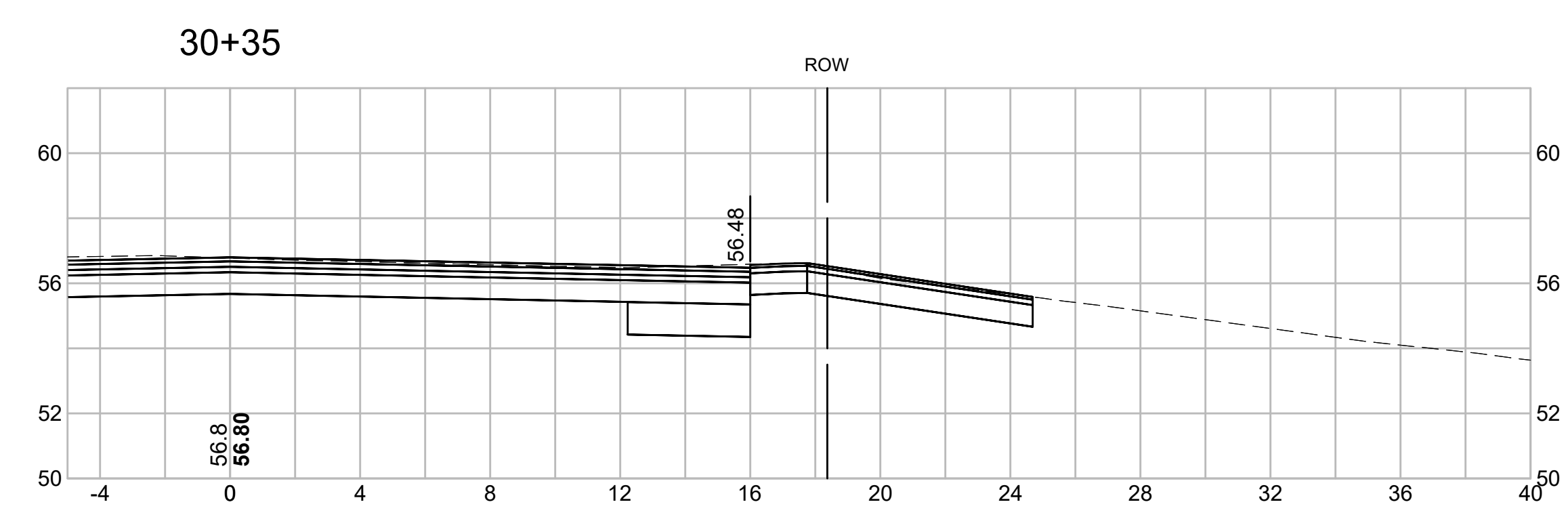
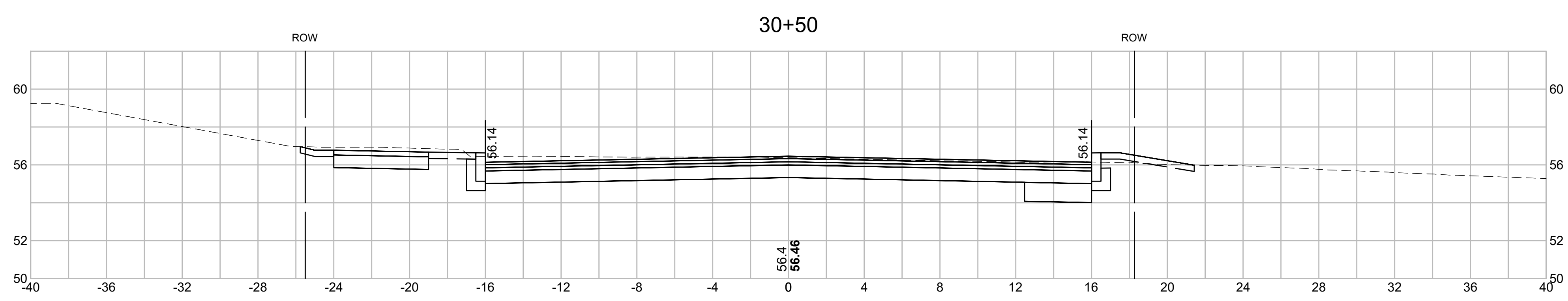
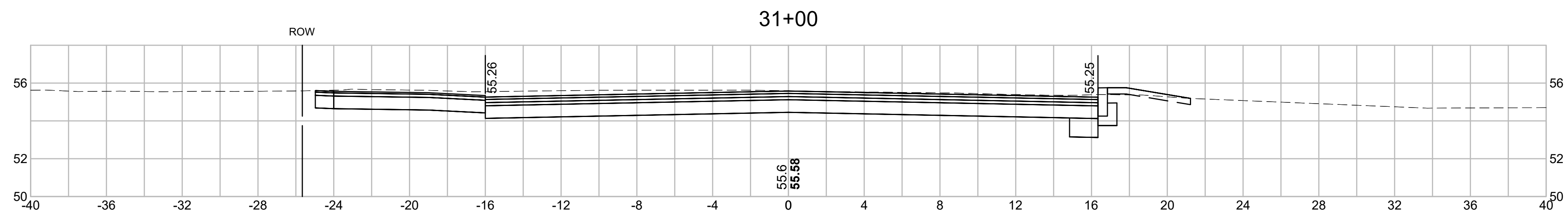
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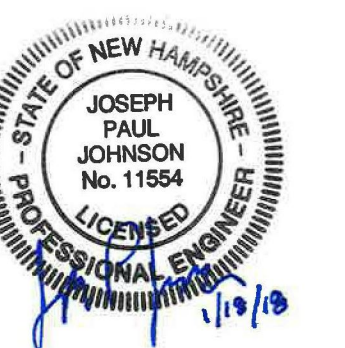
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

**MAPLEWOOD
 AVENUE
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 SECTIONS**

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**IMPROVEMENTS TO MAPLEWOOD
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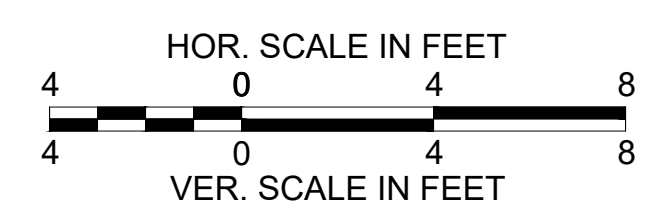
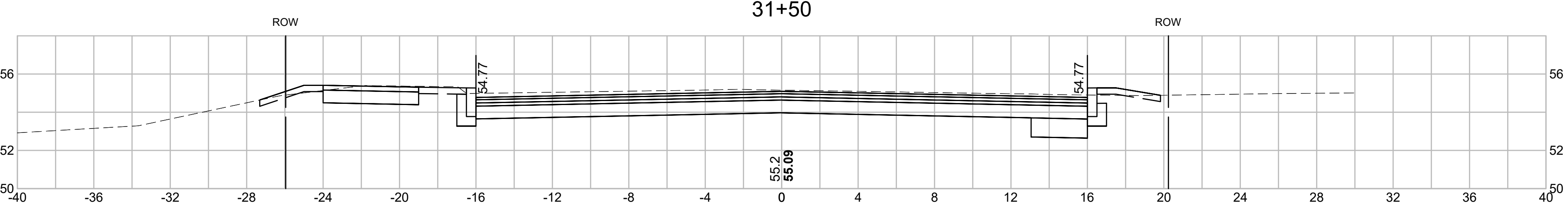
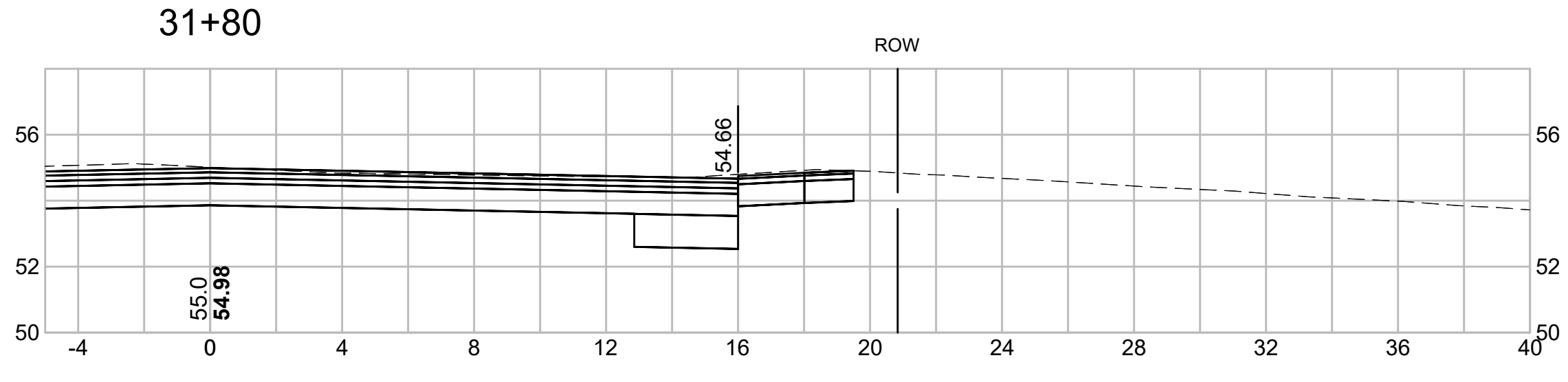
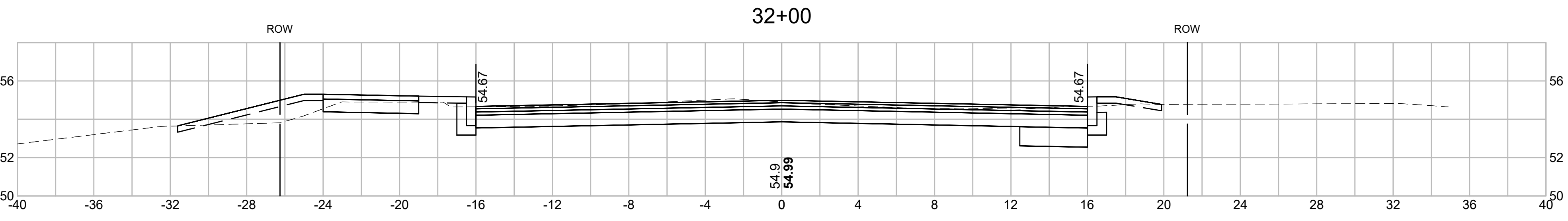
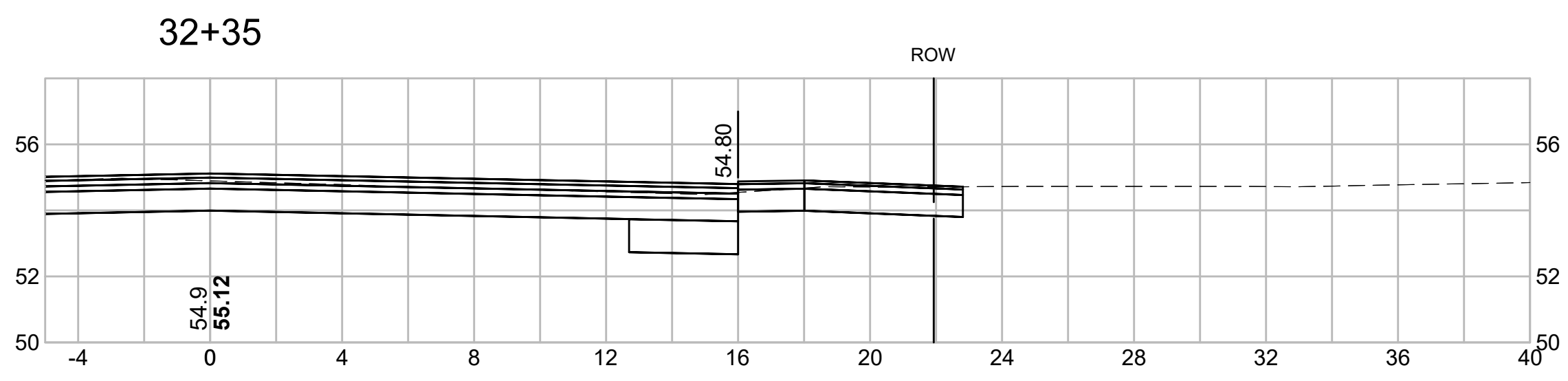
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

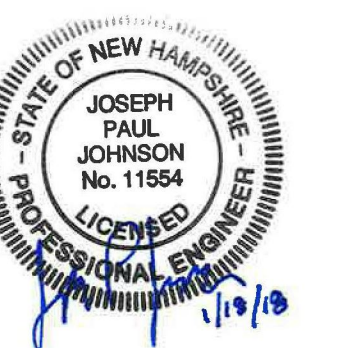
SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

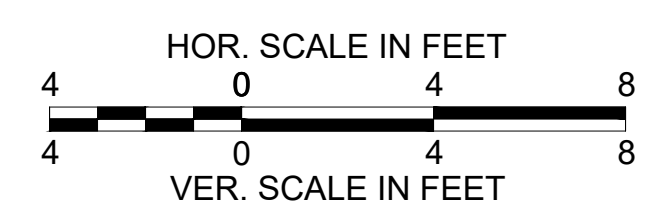
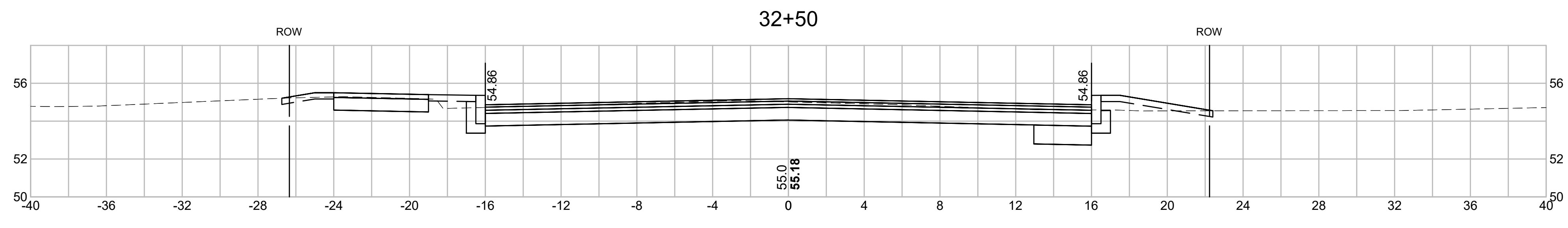
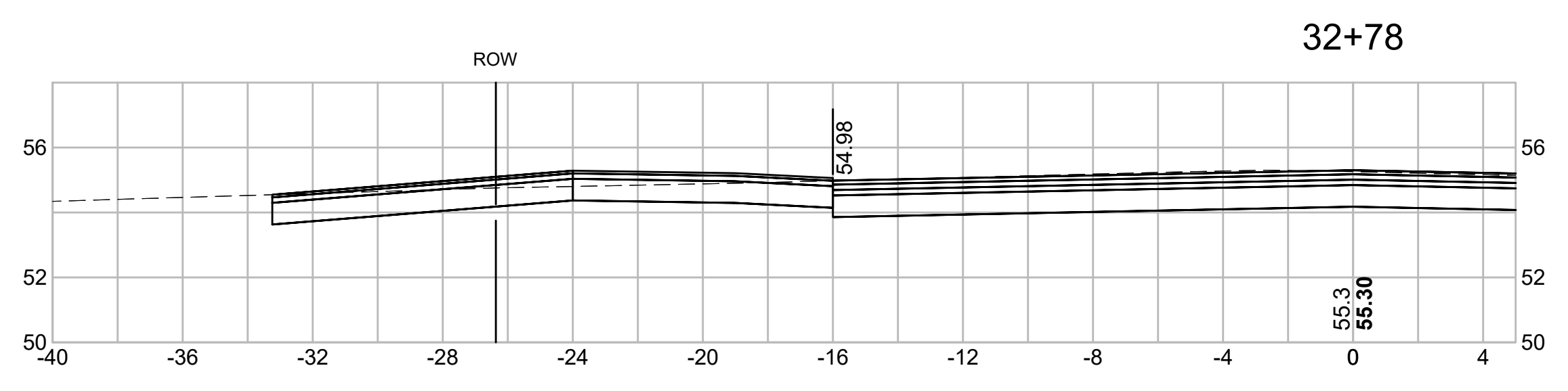
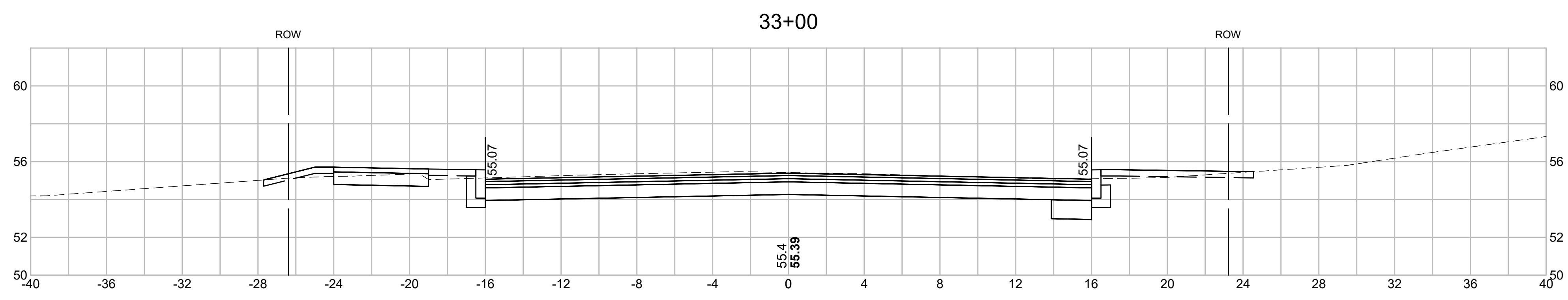
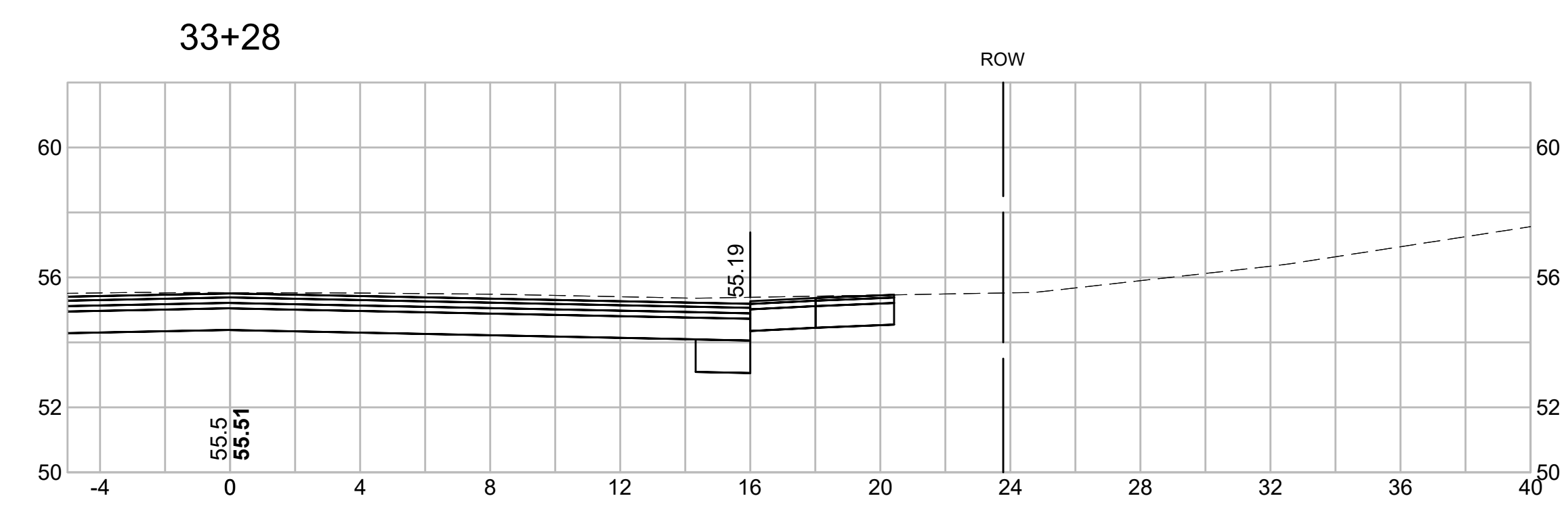
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

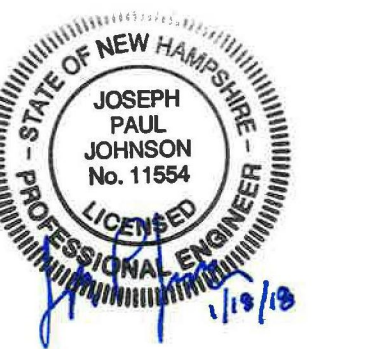
REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

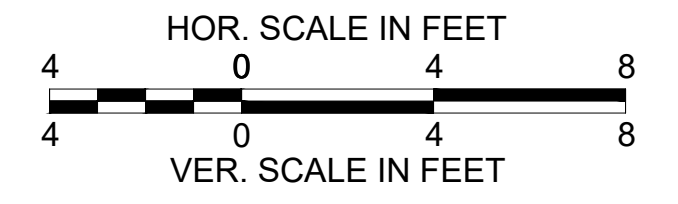
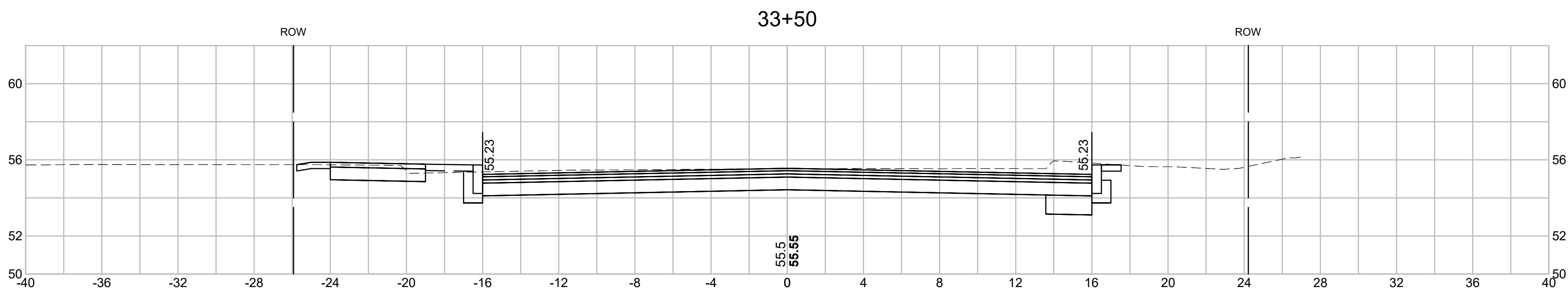
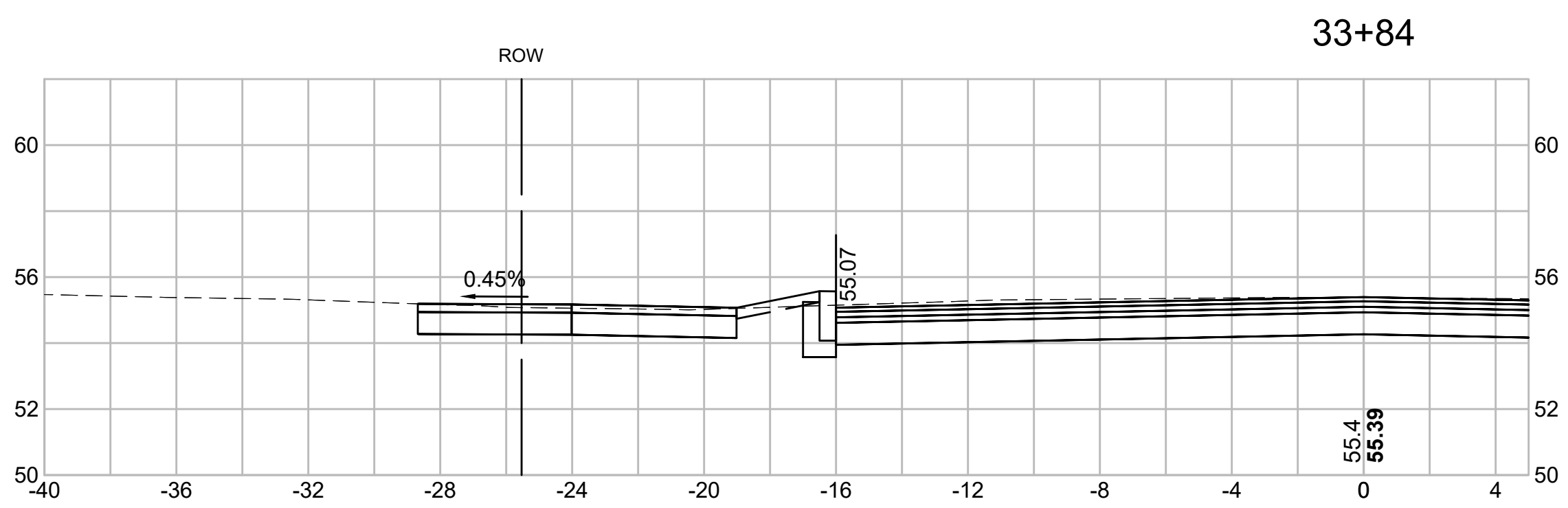
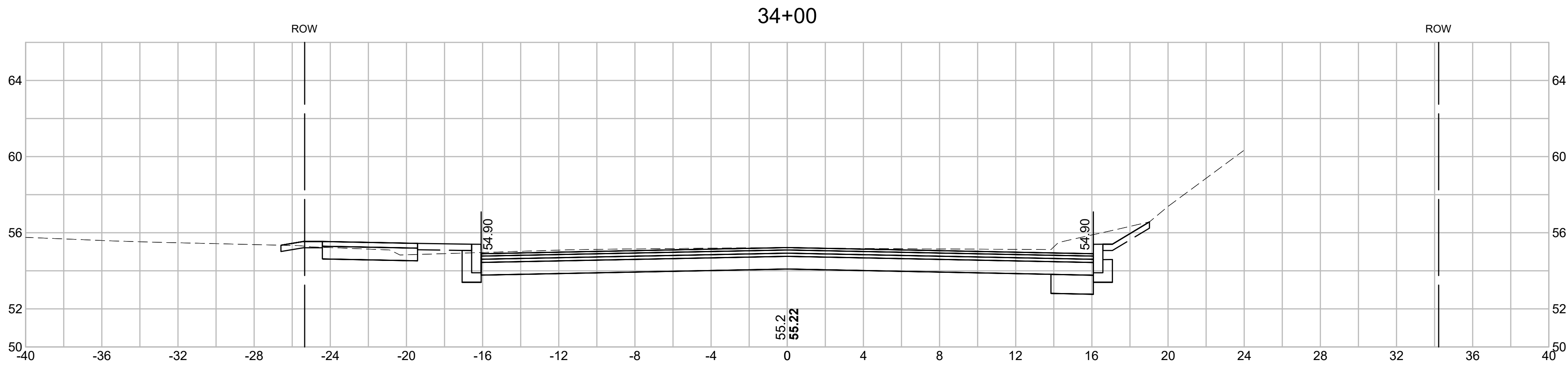
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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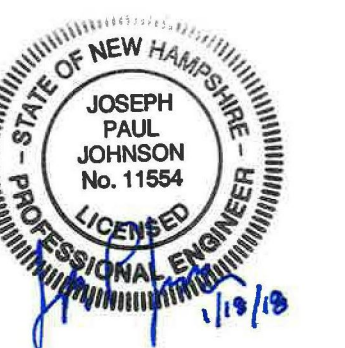
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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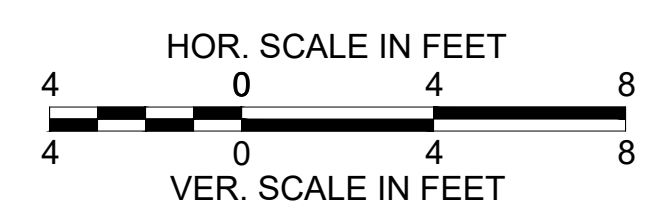
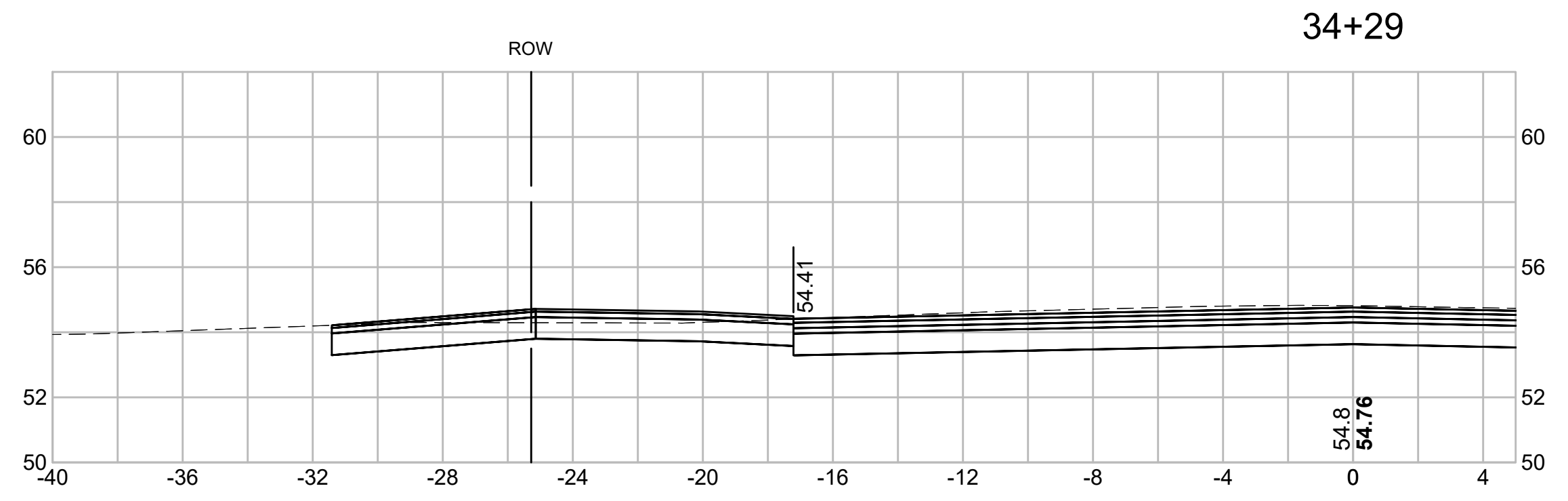
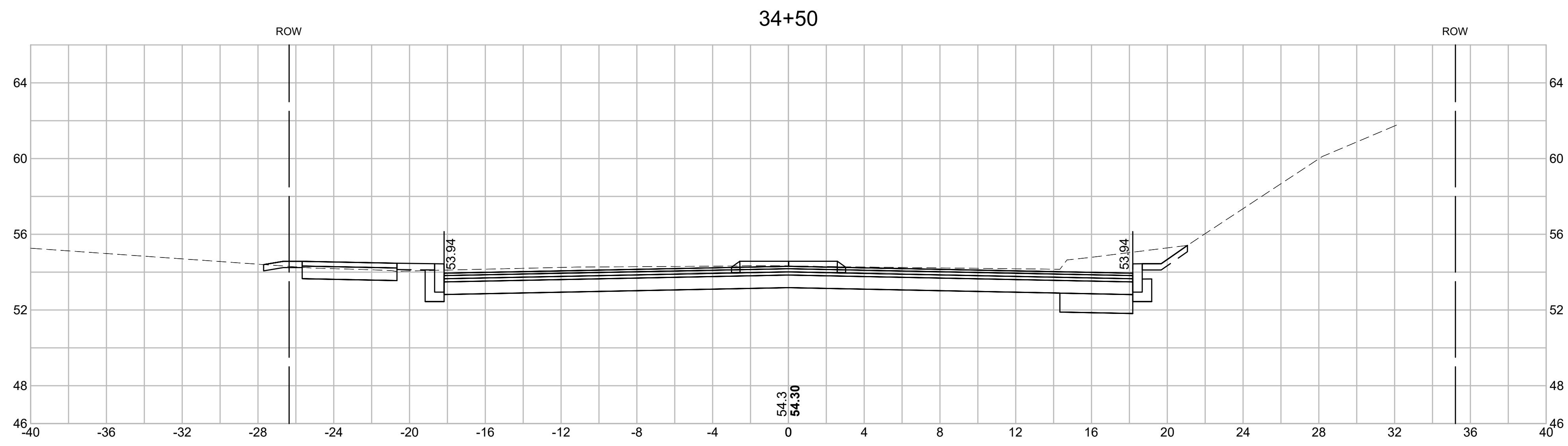
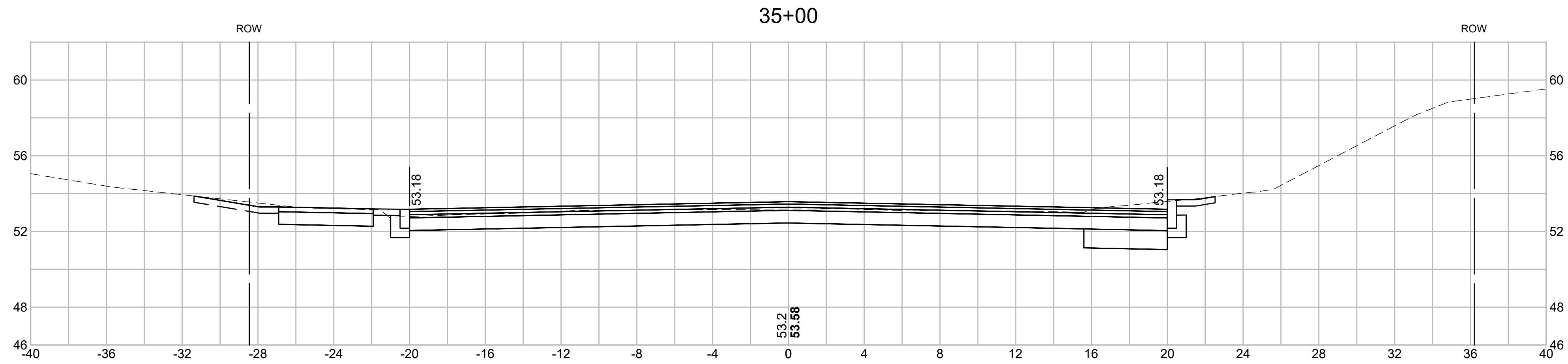
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

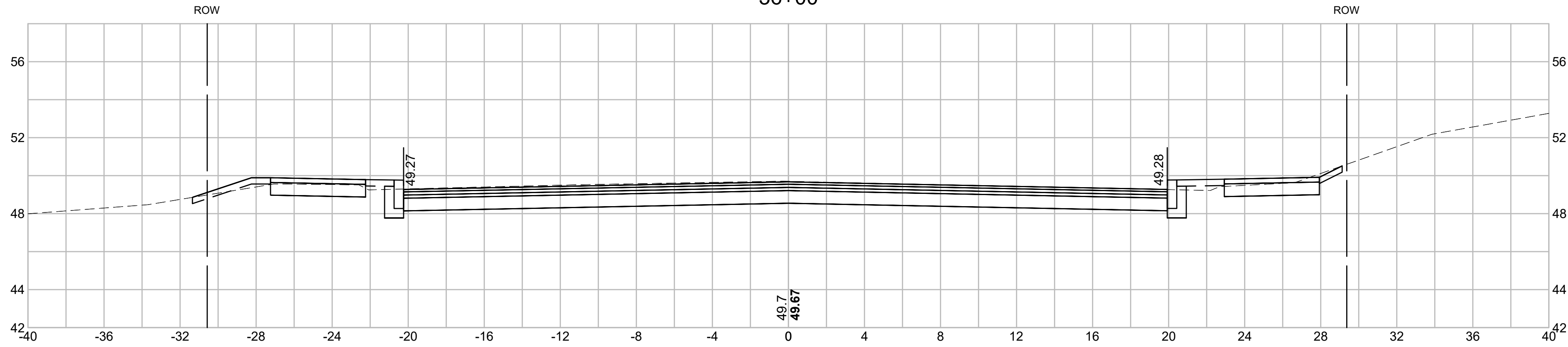
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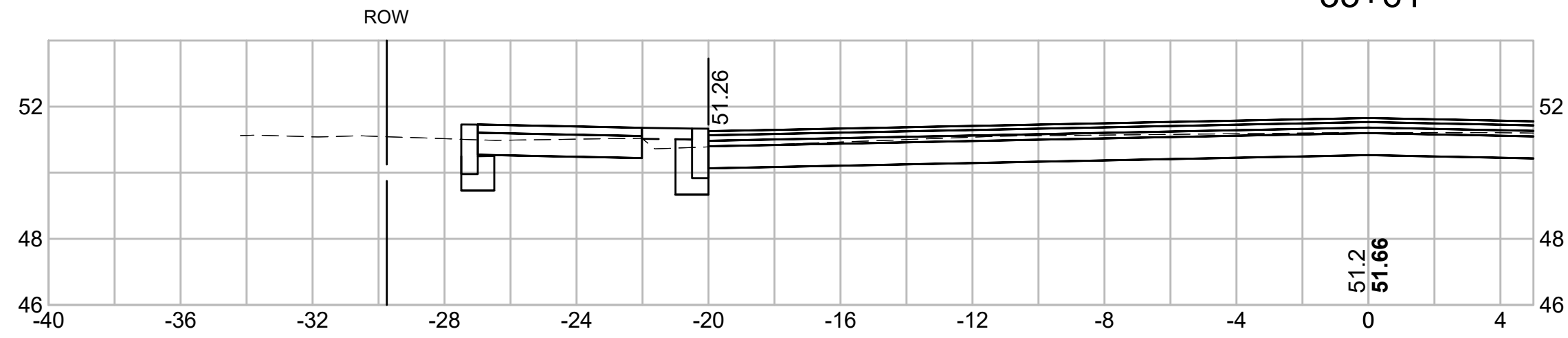
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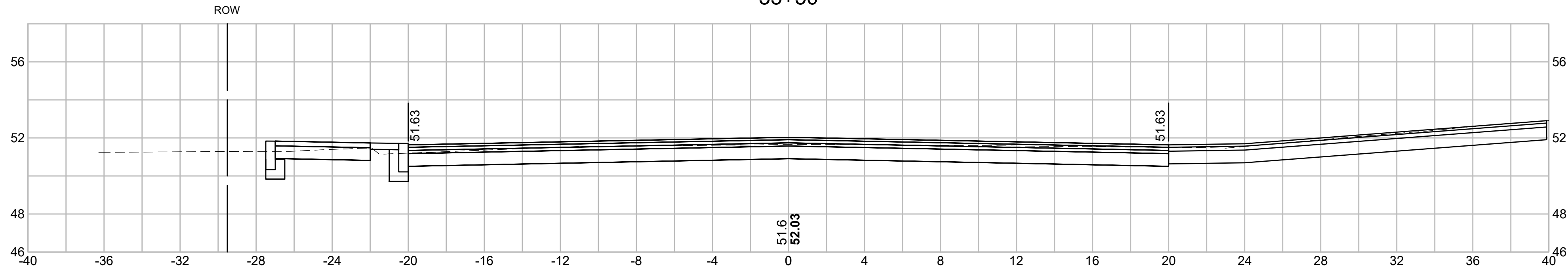
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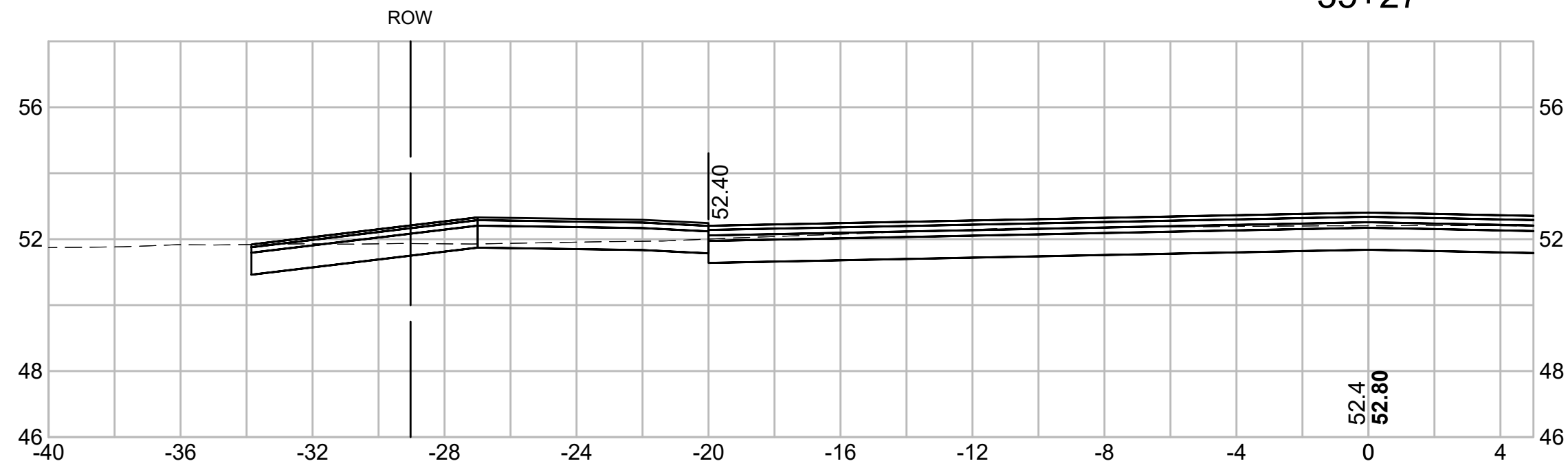
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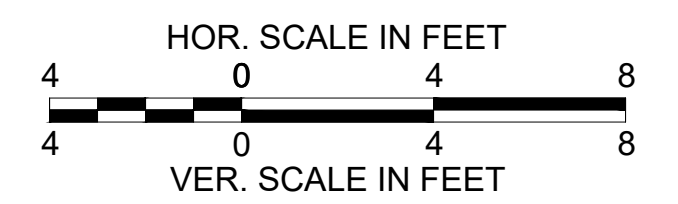
35+50



35+27



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GPI Greenman-Pedersen, Inc.
 Engineering & Construction Services
 21 Daniel Street, Second Floor, Portsmouth, NH 03801
 Tel: (603) 891-2213 Fax: (978) 658-3044
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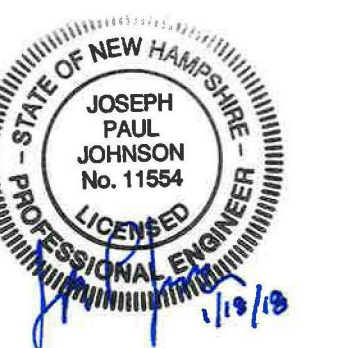
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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NO.	REVISION	DATE

**MAPLEWOOD
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 CROSS
 SECTIONS**

SCALE: 1"=4'

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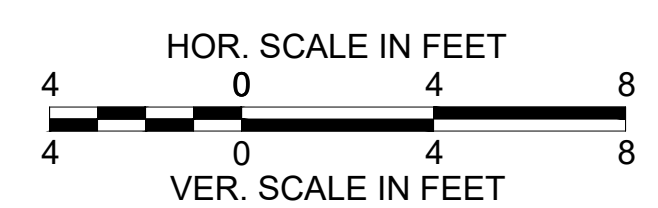
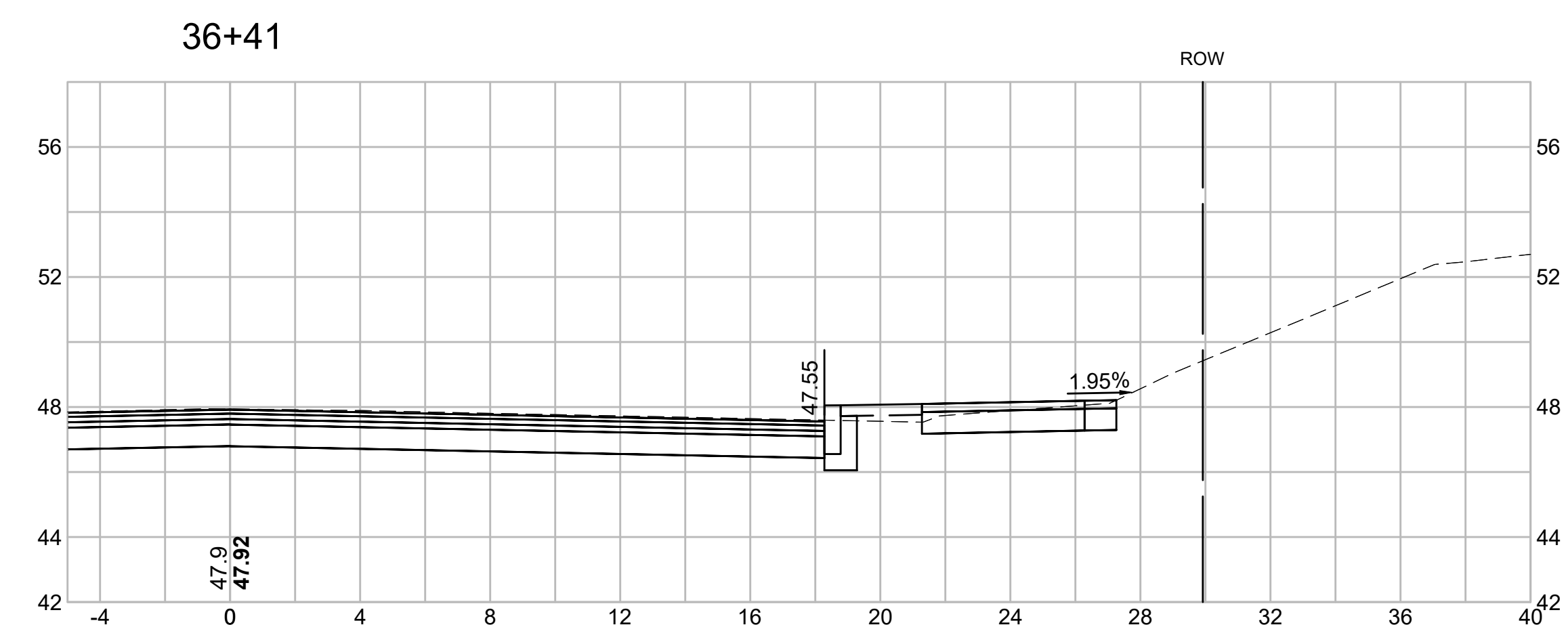
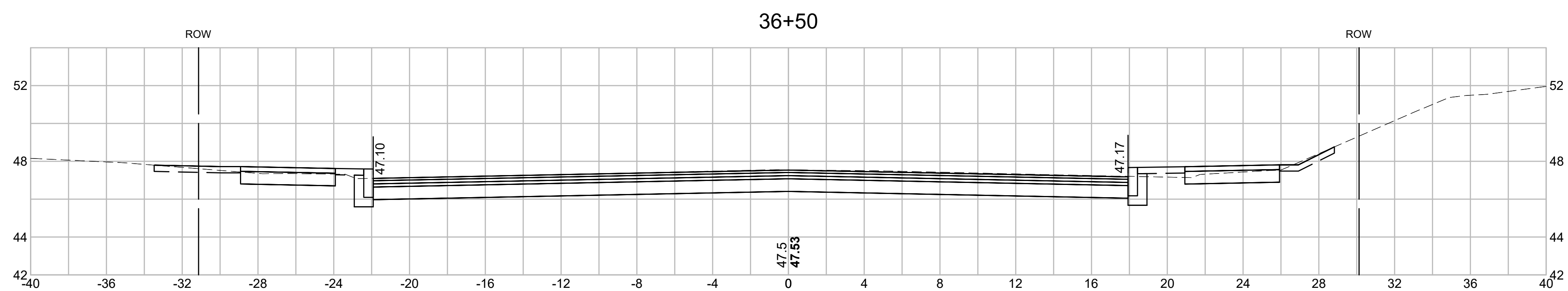
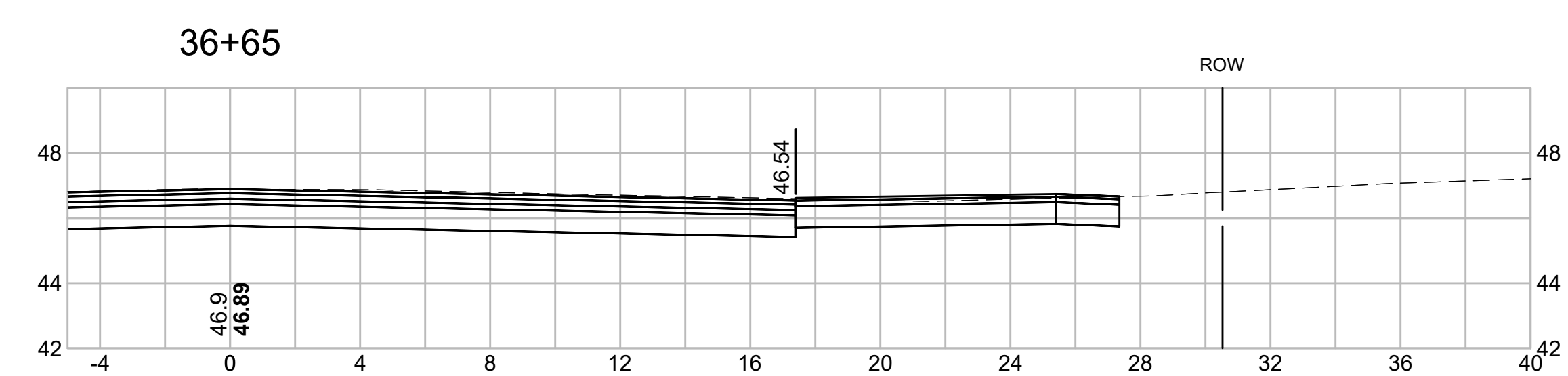
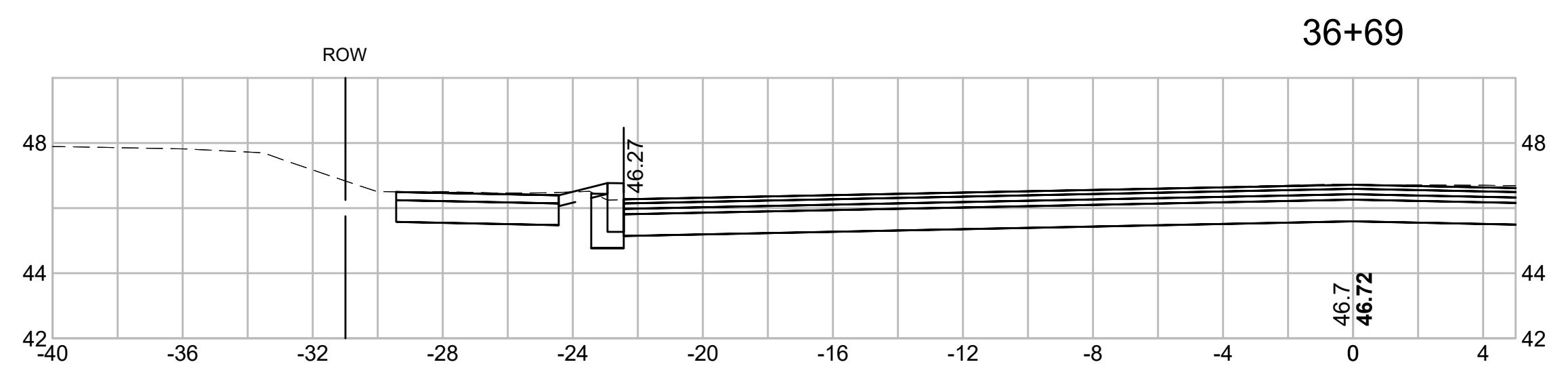
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

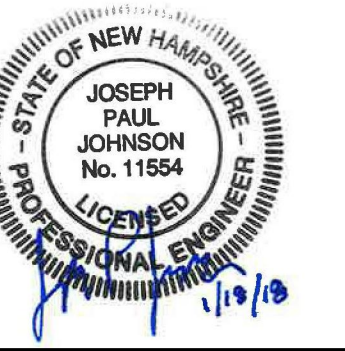
REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS
 CHECKED BY: JPJ

**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

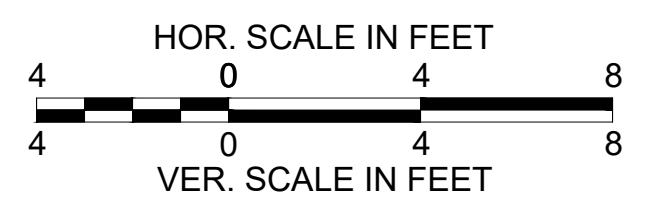
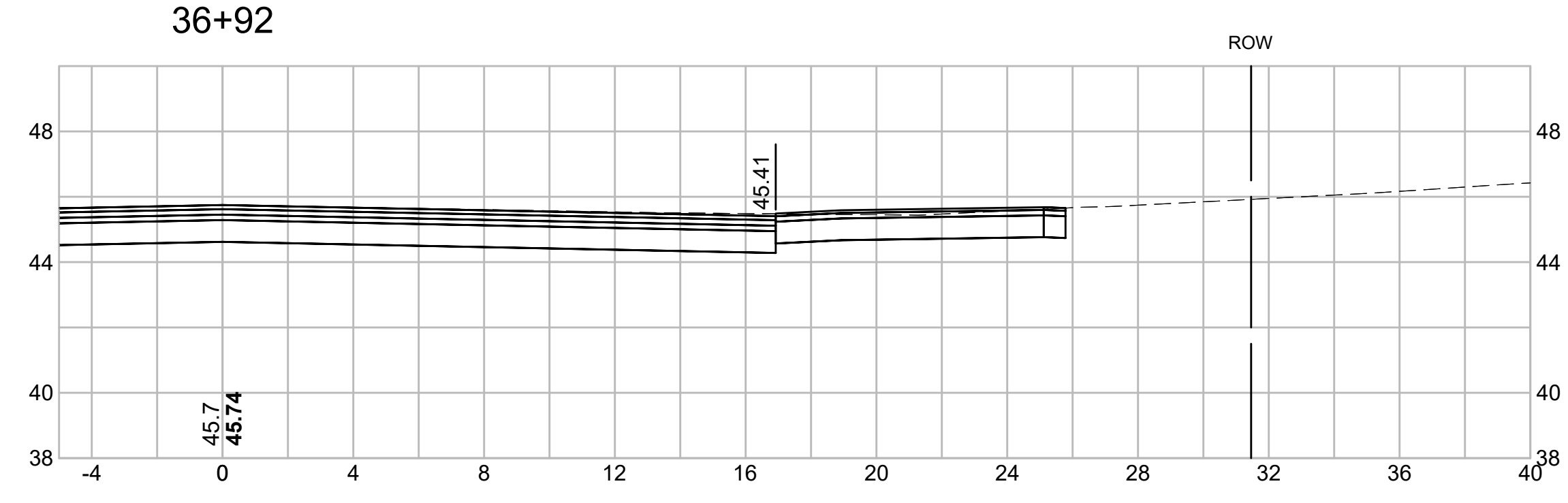
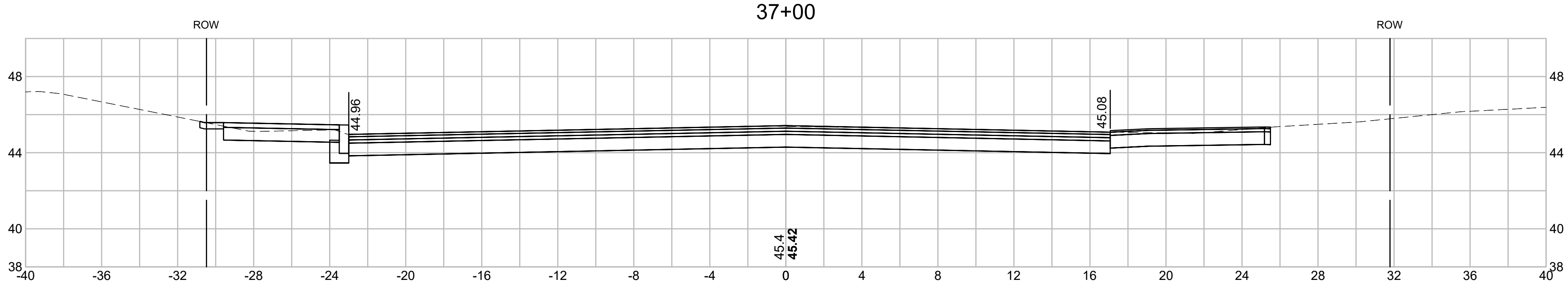
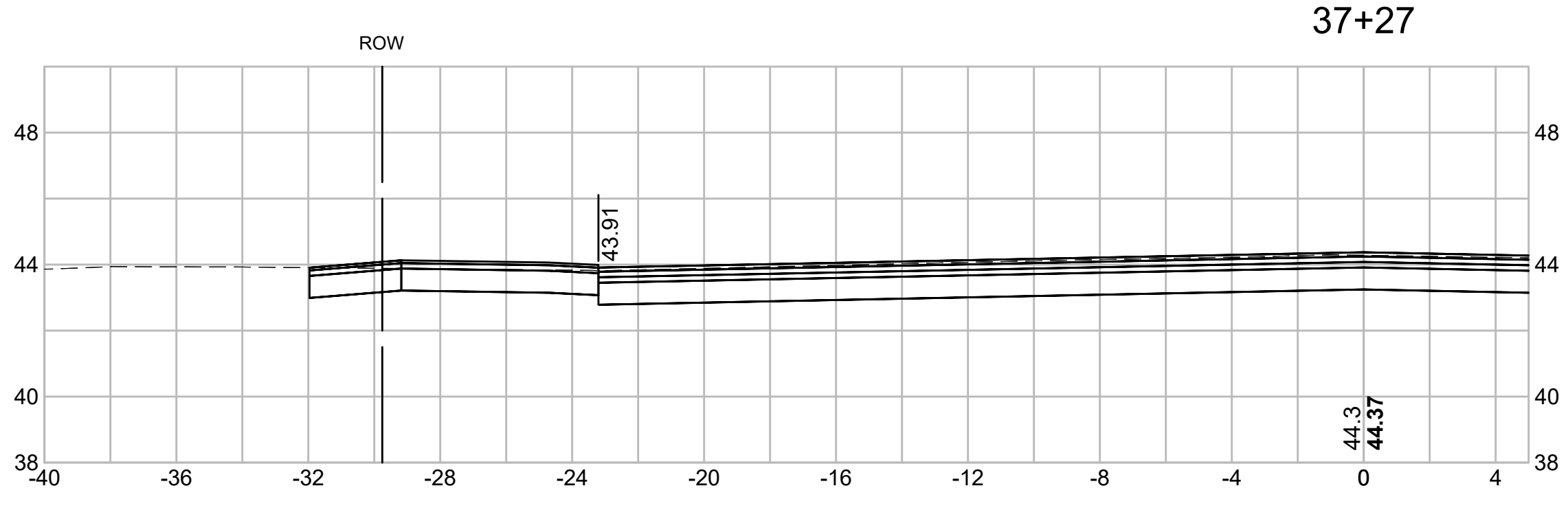
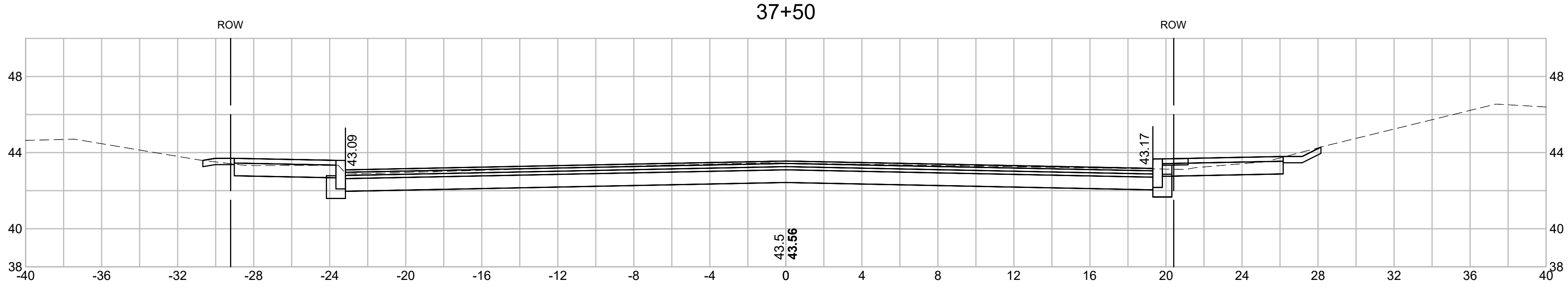
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NO.	REVISION	DATE

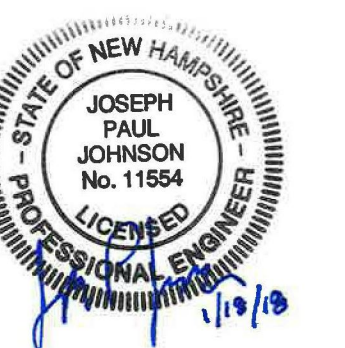
**MAPLEWOOD
 AVENUE
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SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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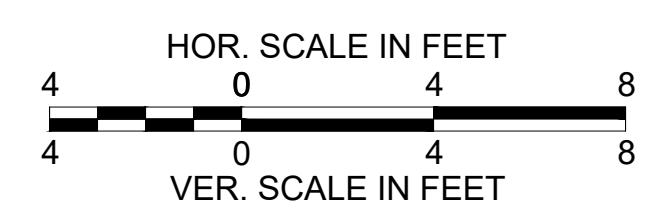
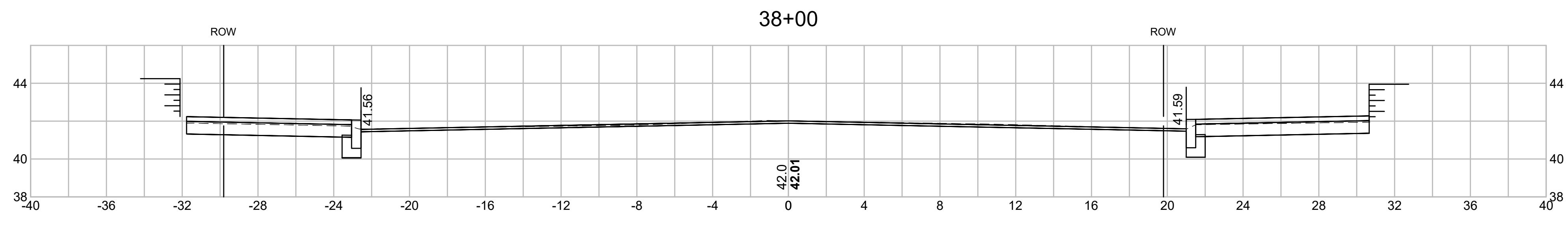
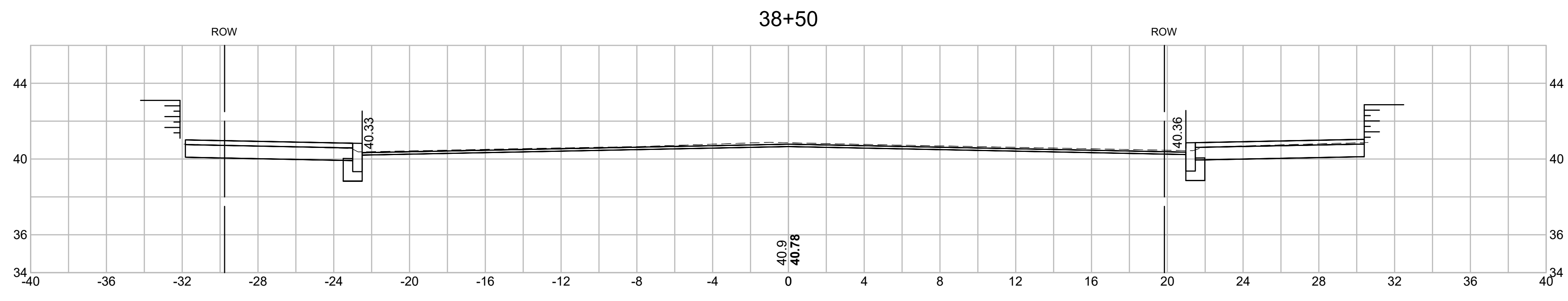
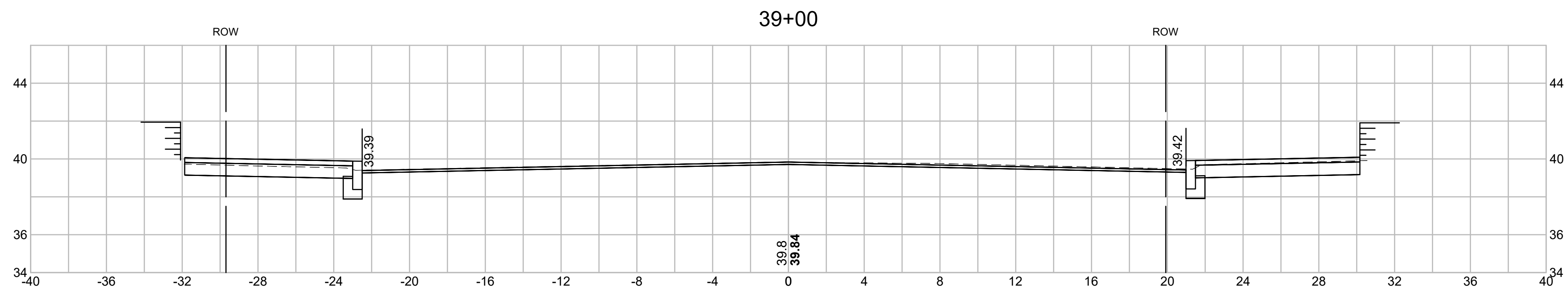
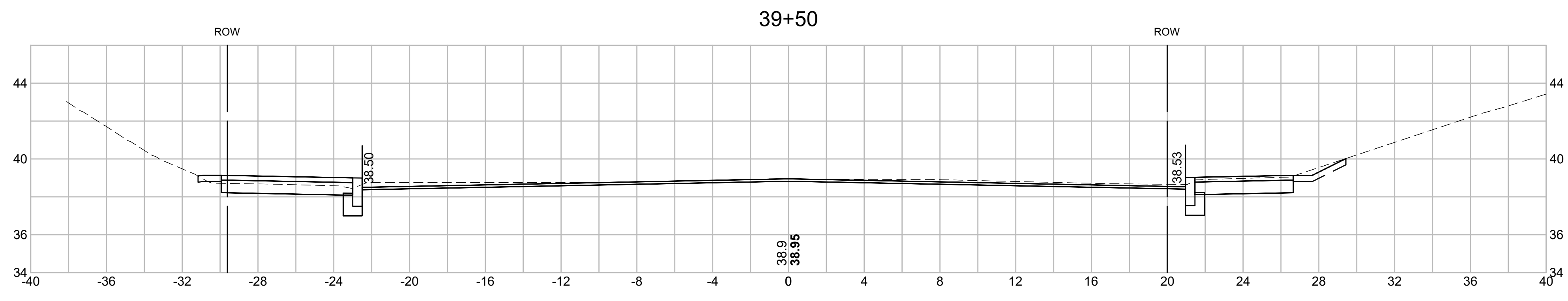
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

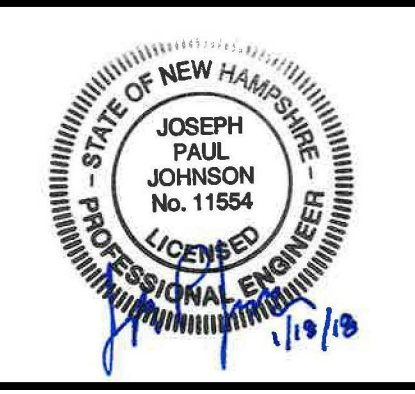
SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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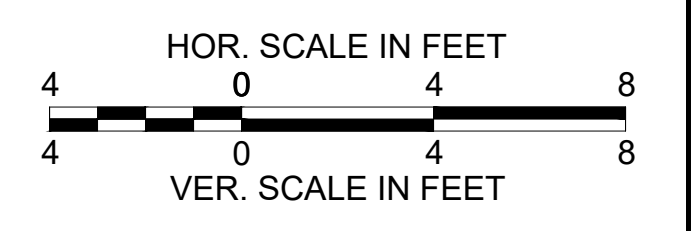
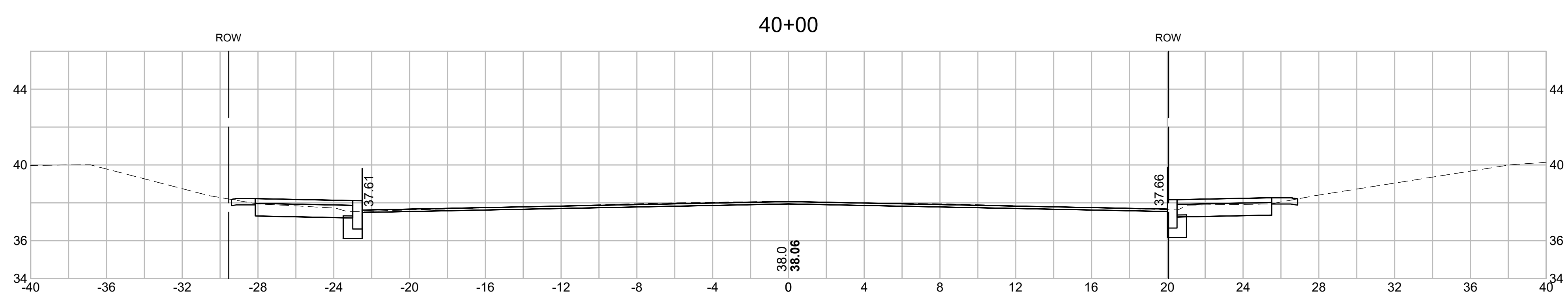
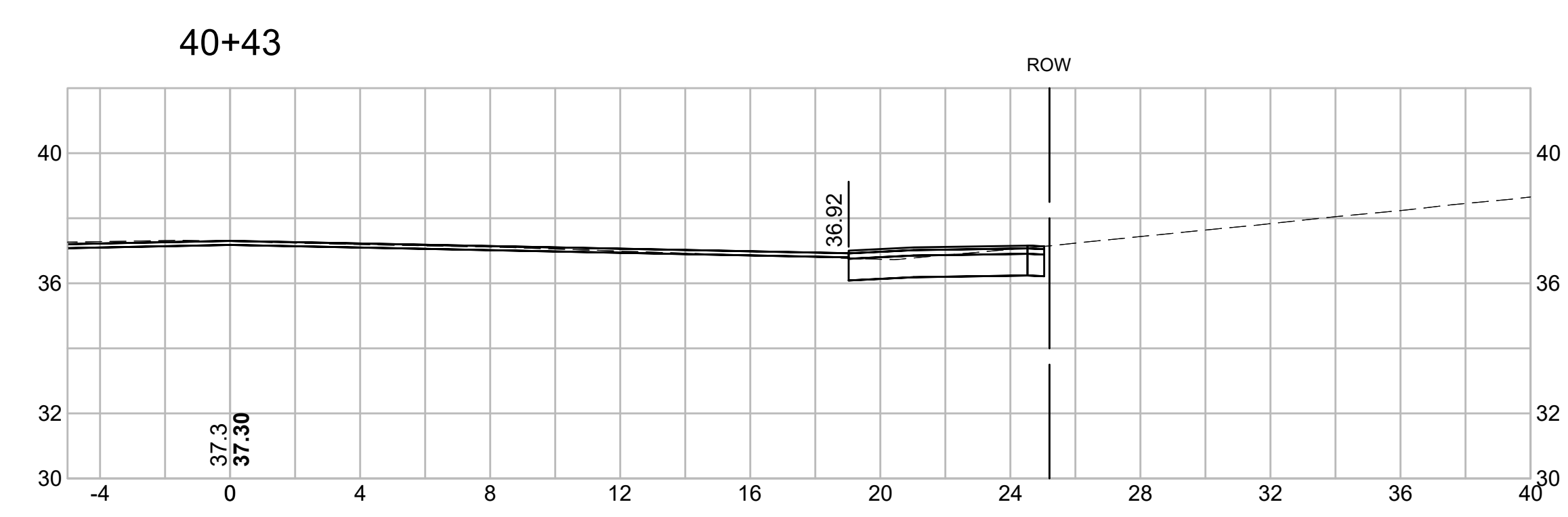
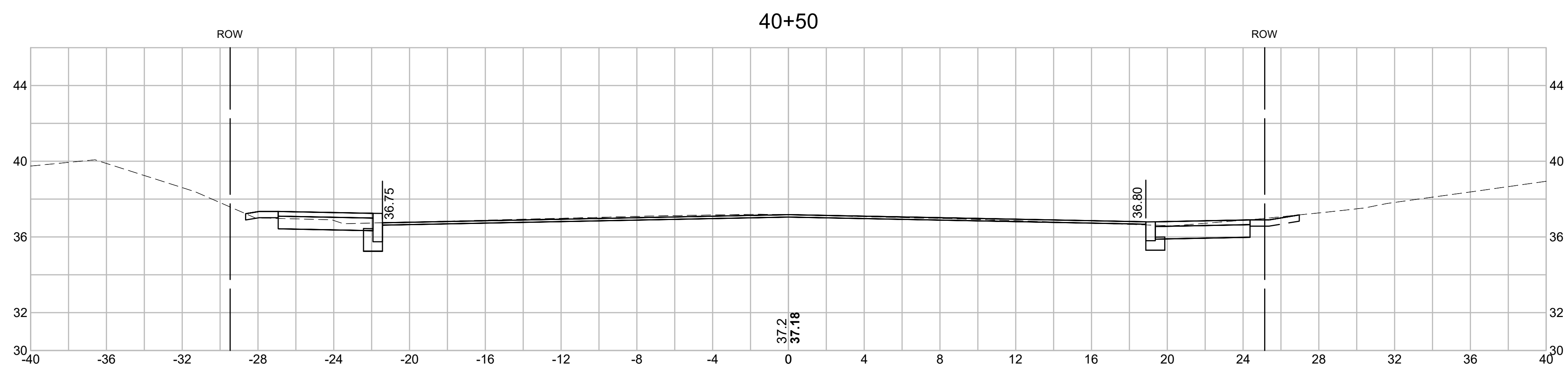
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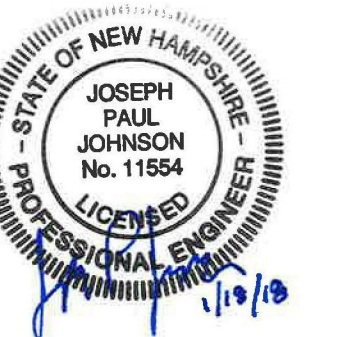
**MAPLEWOOD
 AVENUE
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 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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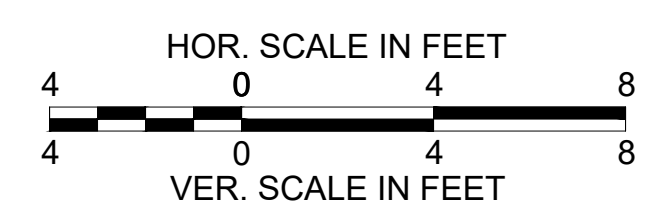
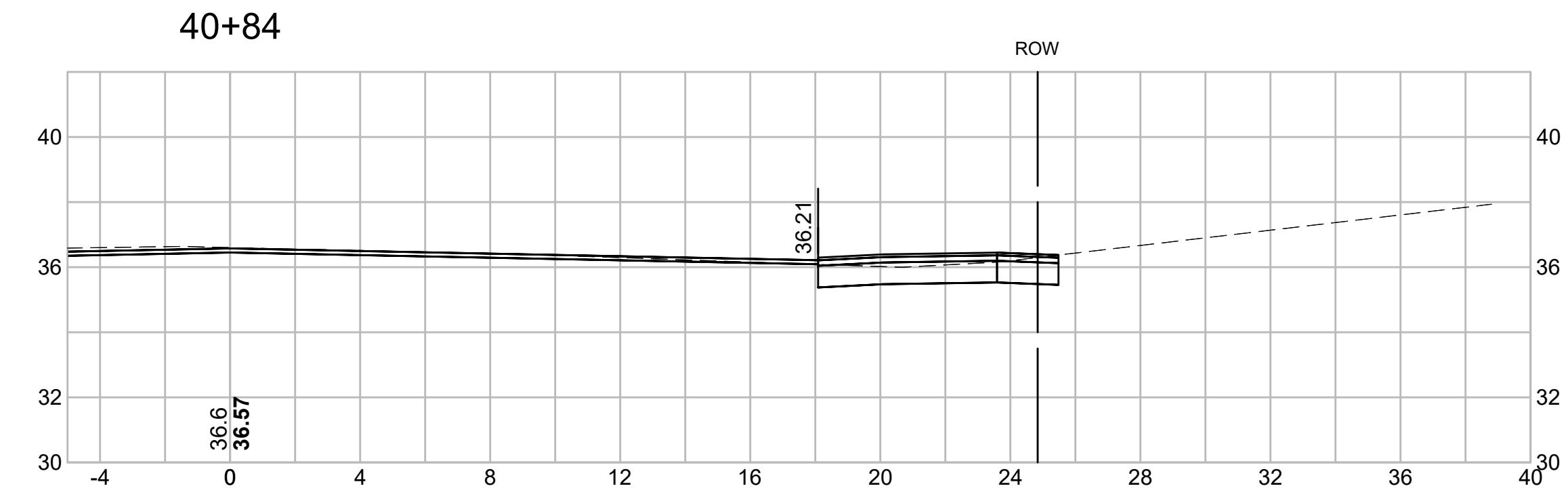
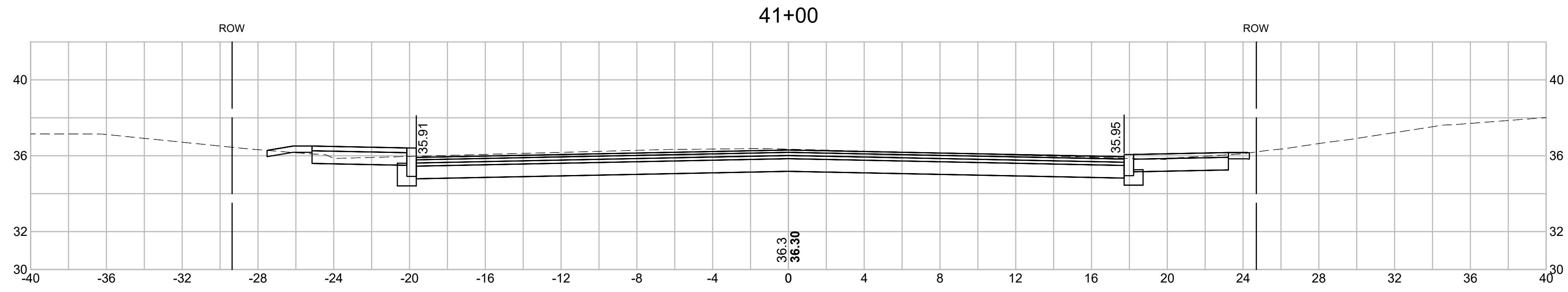
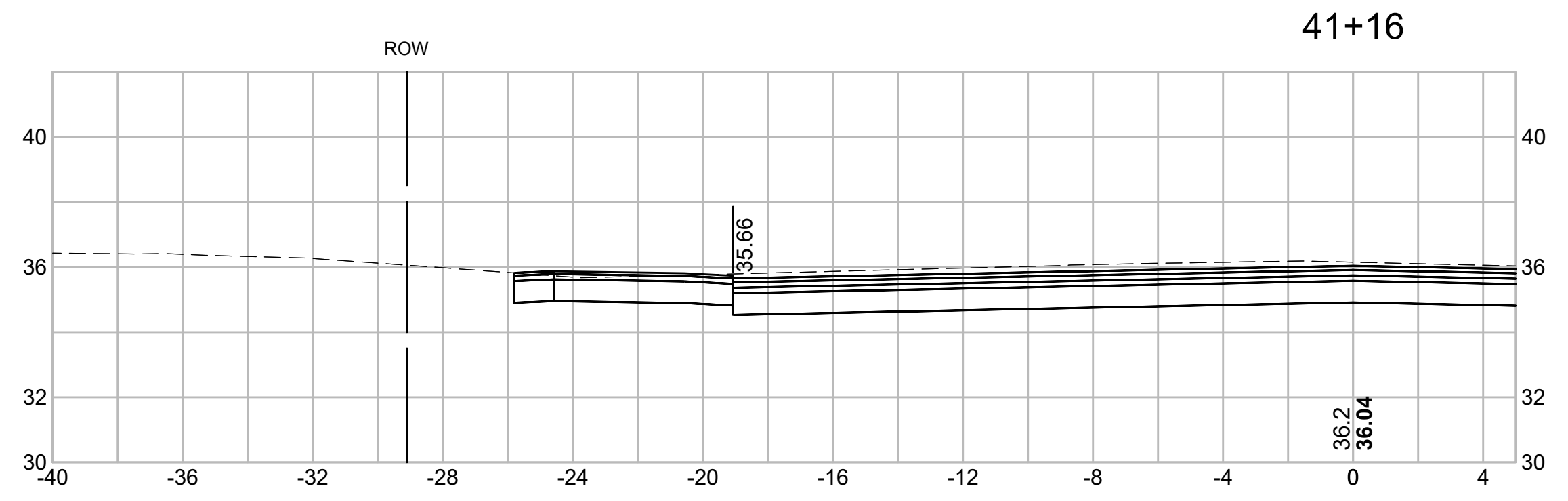
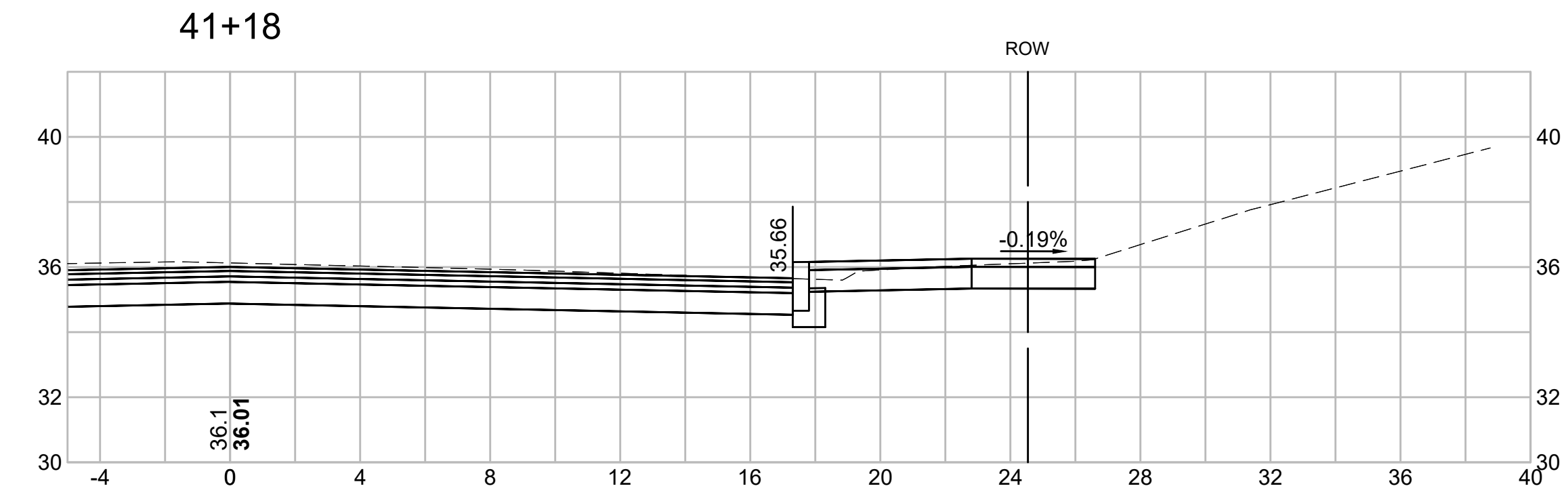
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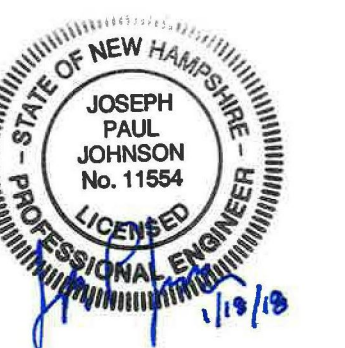
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

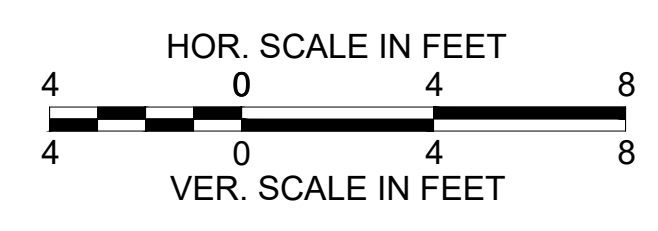
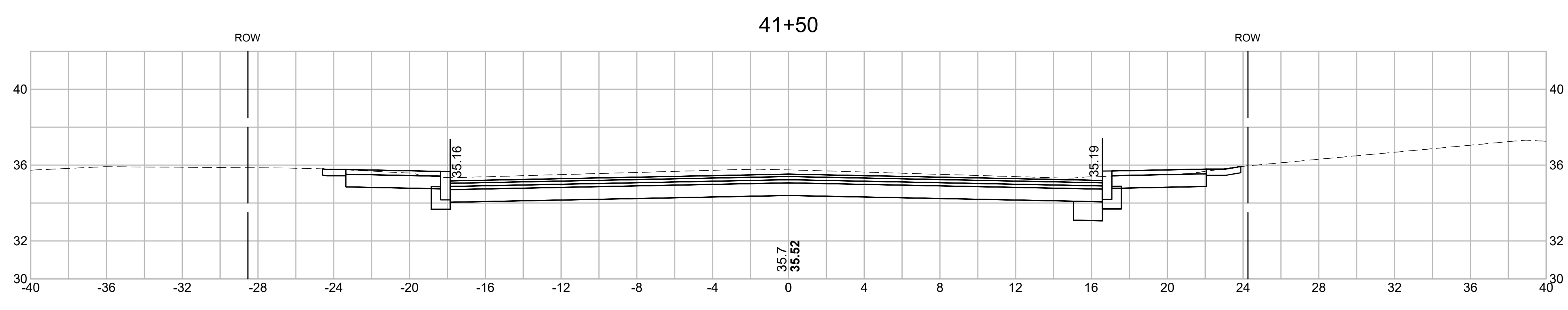
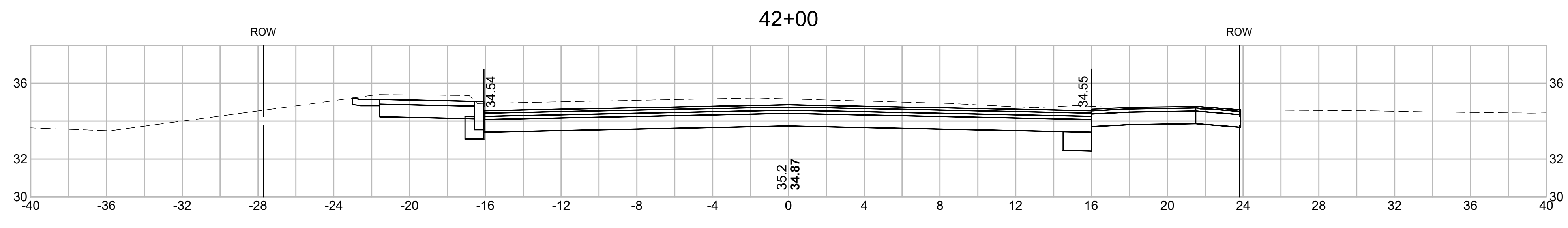
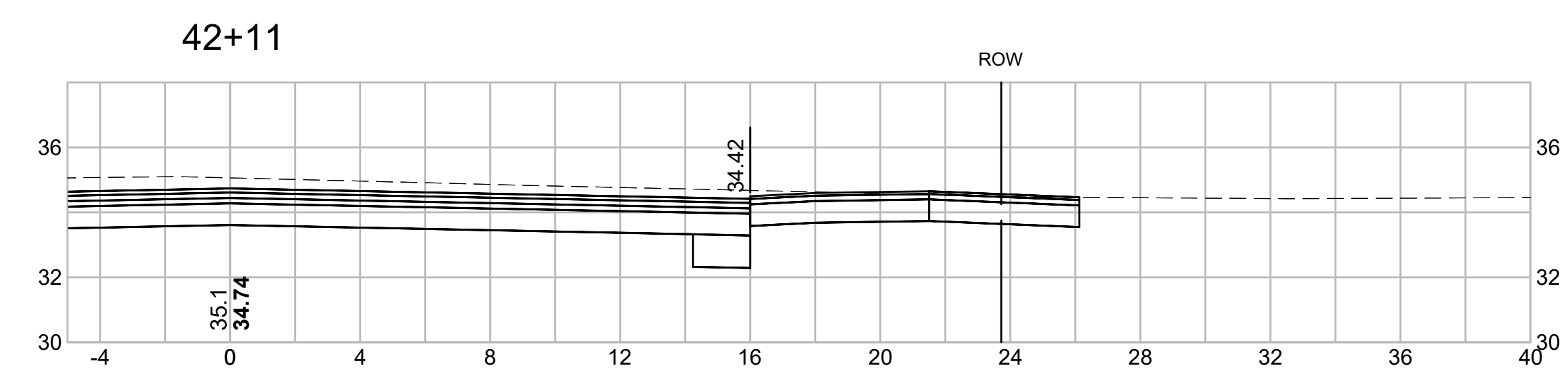
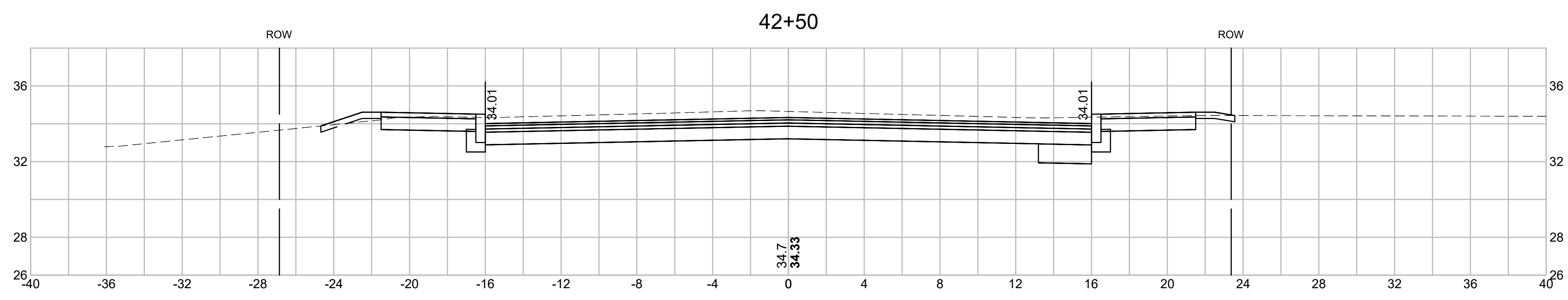
REVISIONS		
NO.	REVISION	DATE

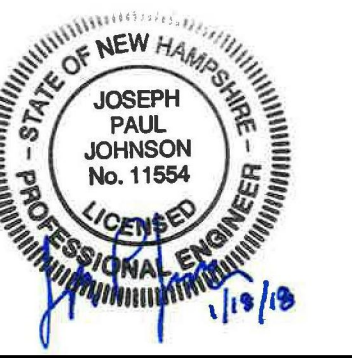
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**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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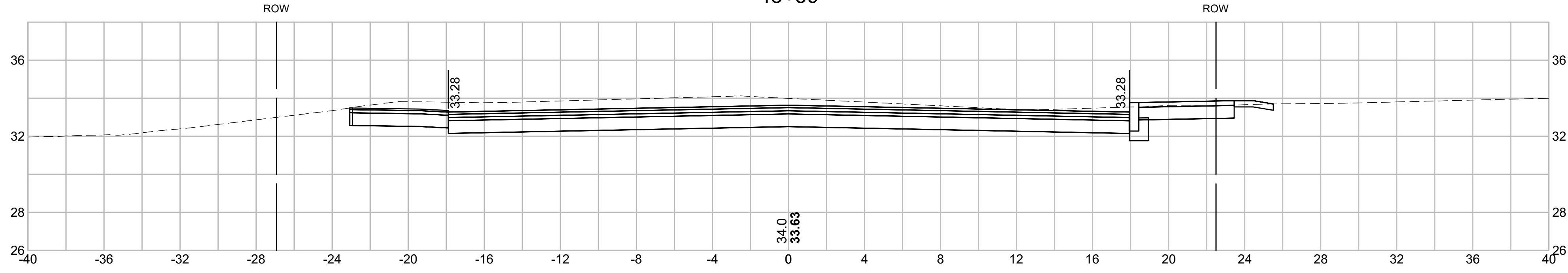
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

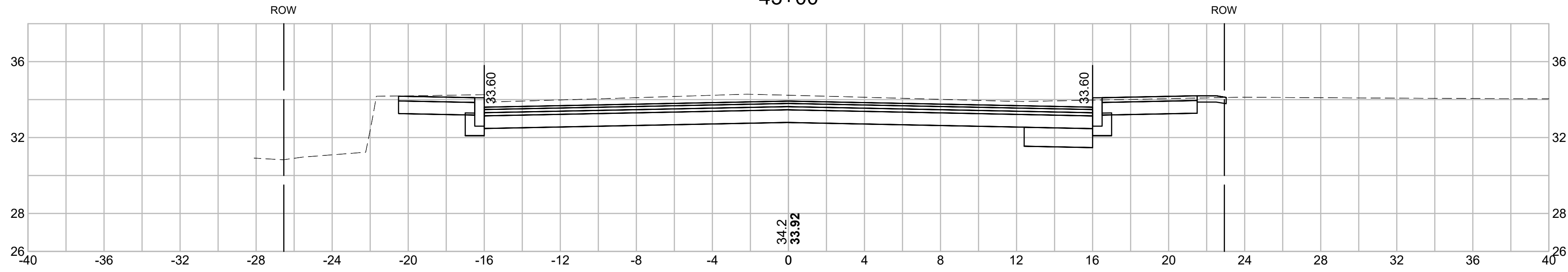
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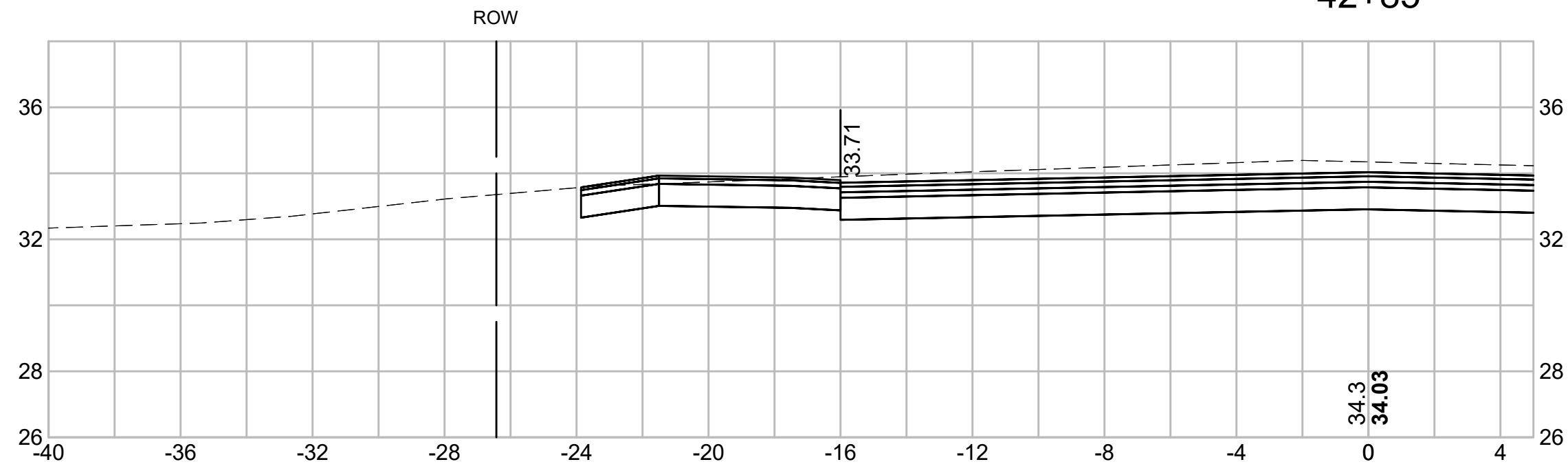
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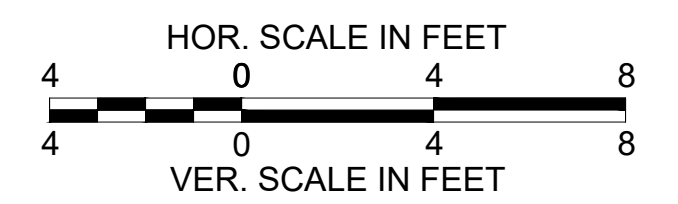
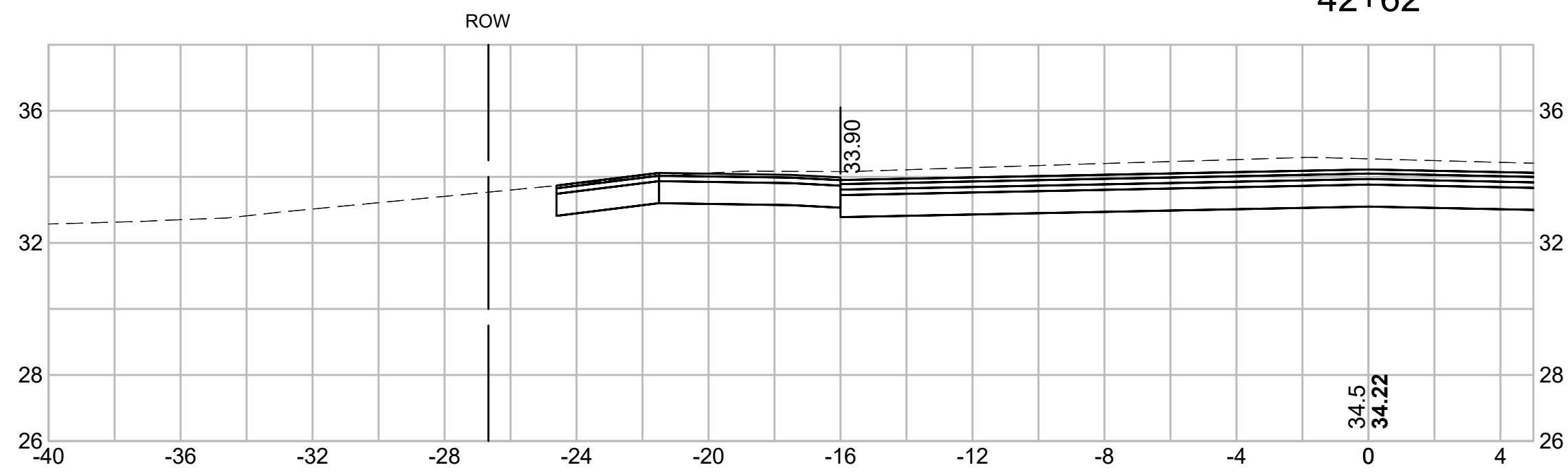
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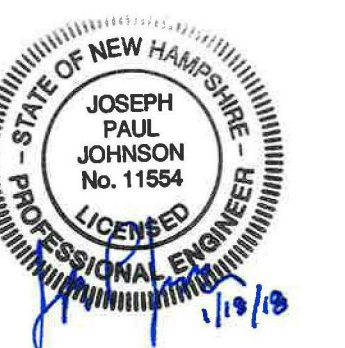


42+85



42+62





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**IMPROVEMENTS TO MAPLEWOOD
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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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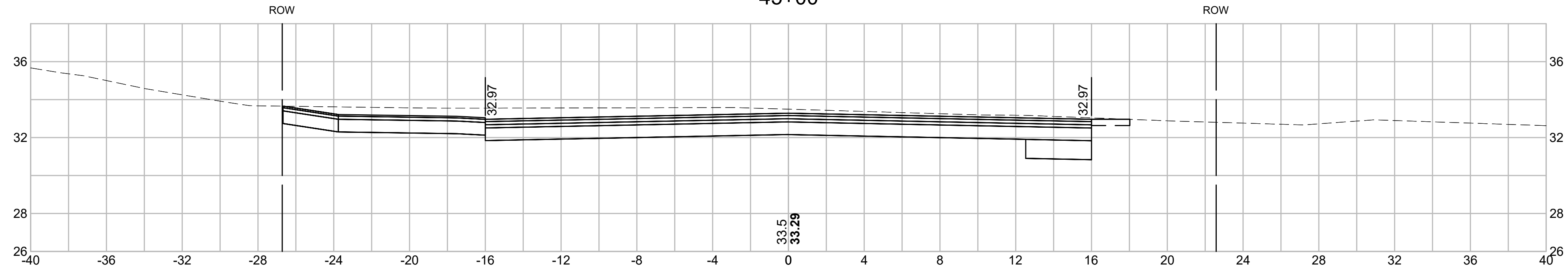
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

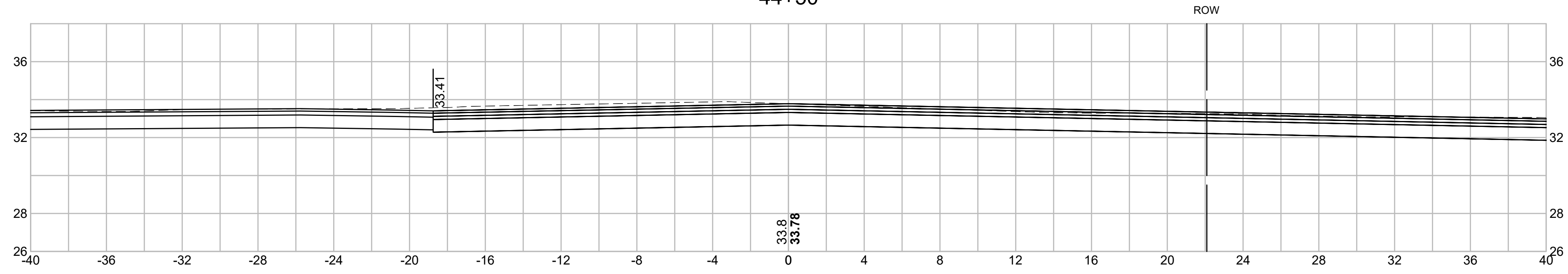
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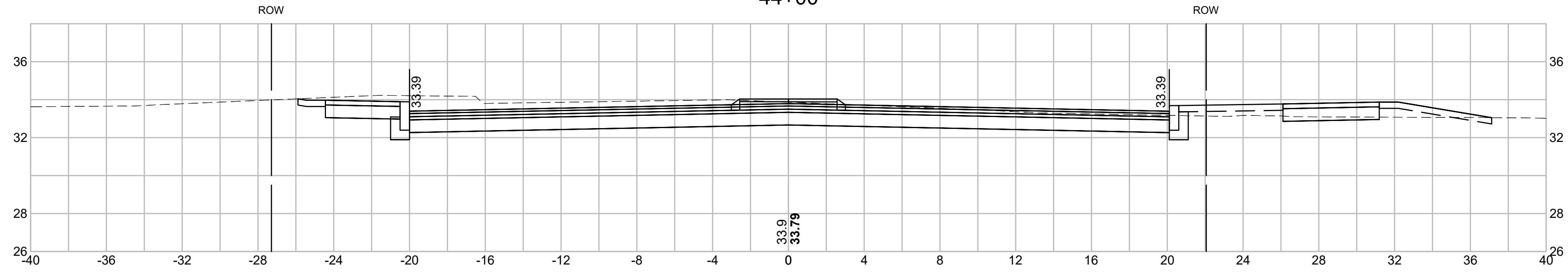
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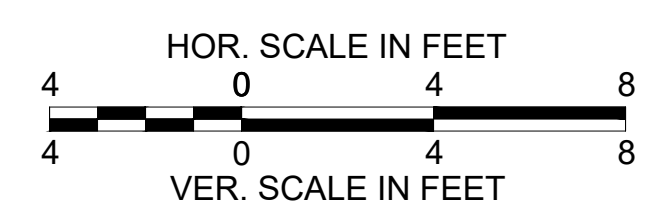
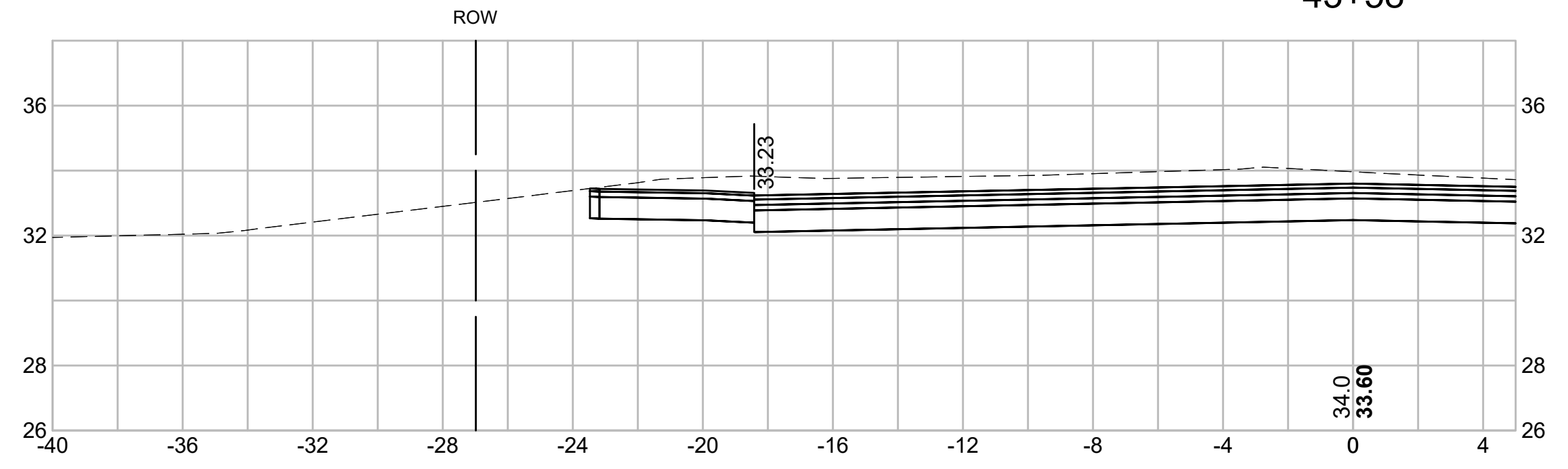
44+50



44+00



43+58





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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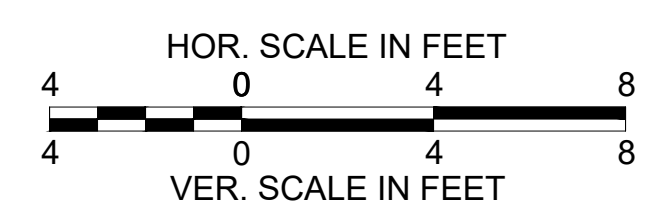
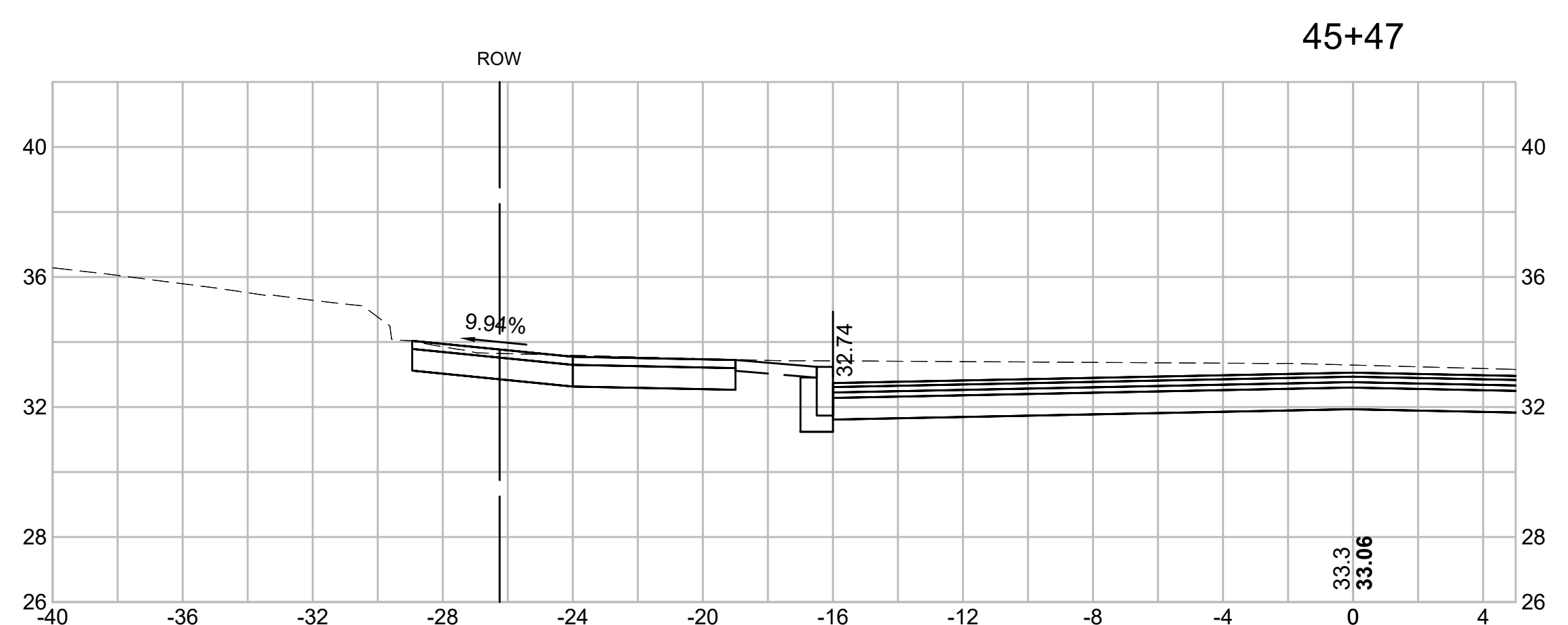
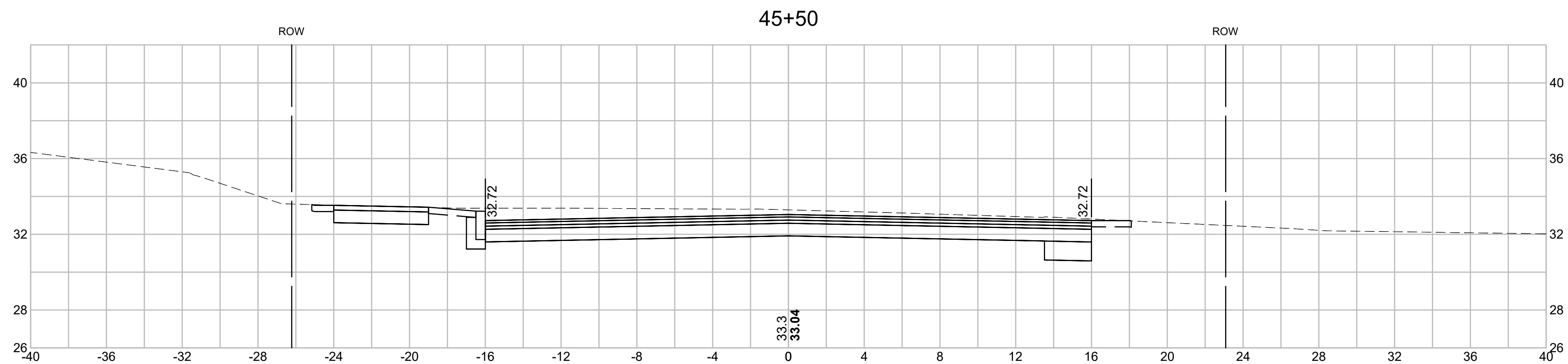
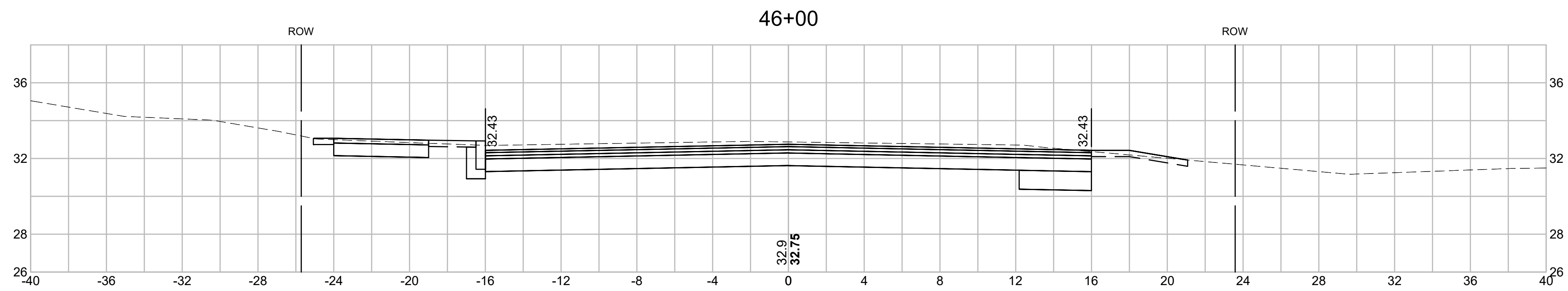
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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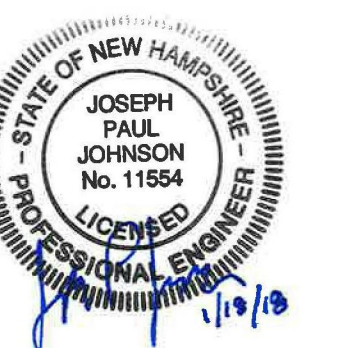
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

125 OF 184





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 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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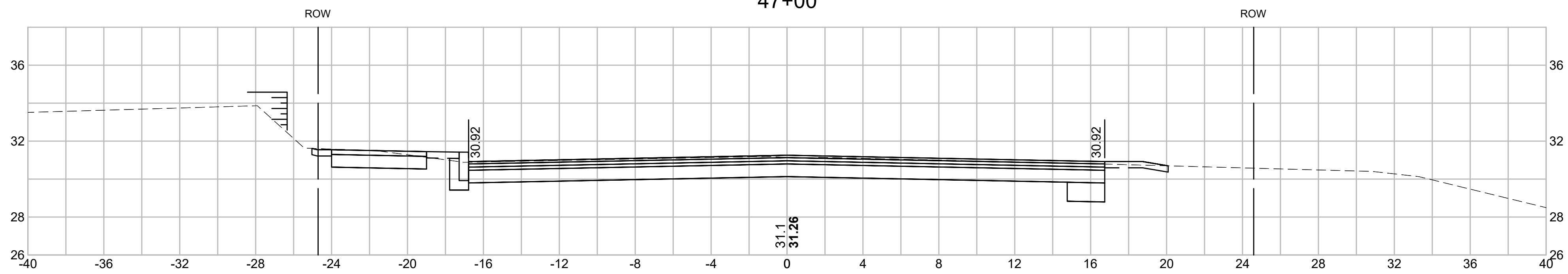
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

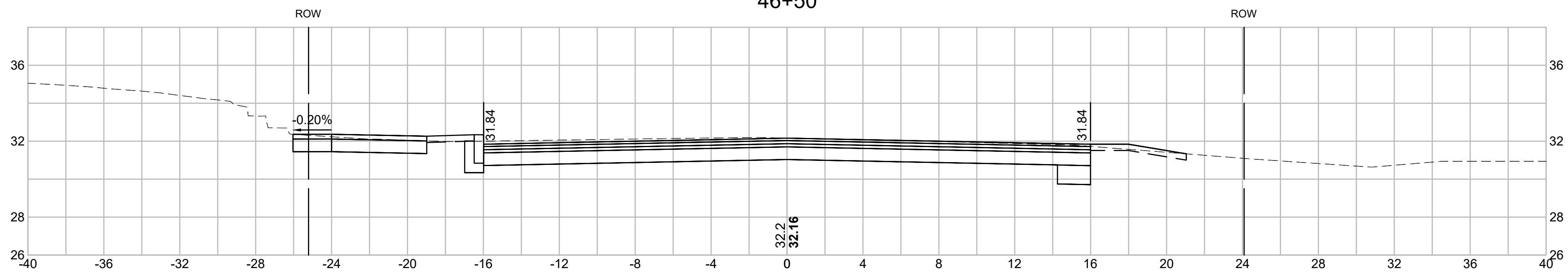
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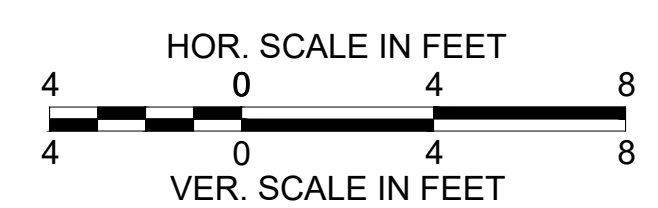
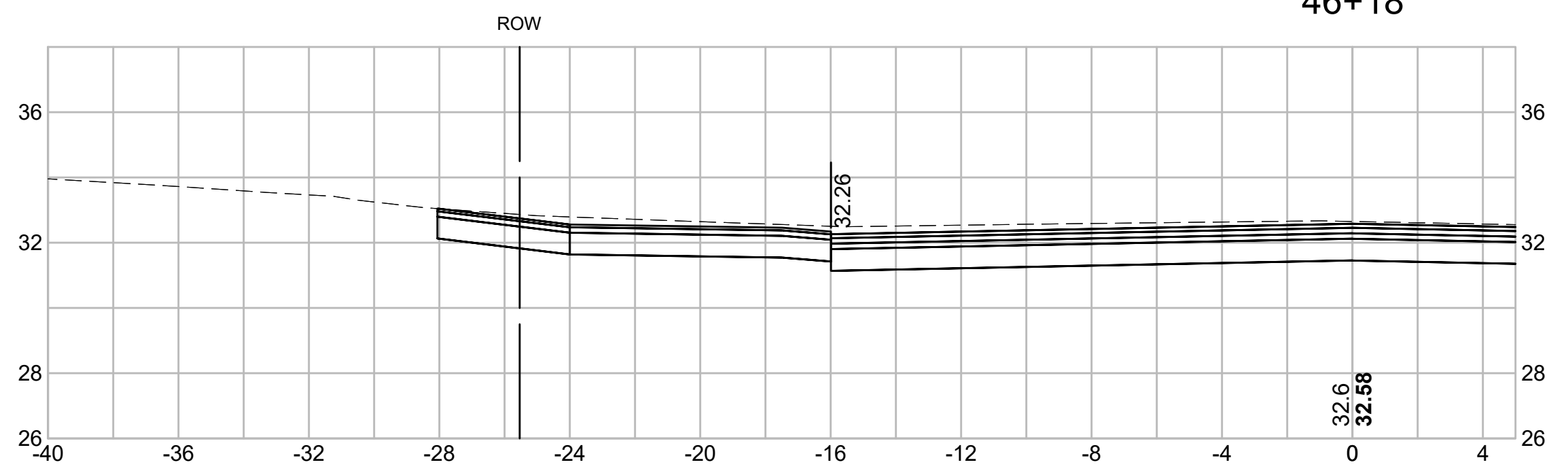
47+00



46+50



46+18



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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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2/5/2018

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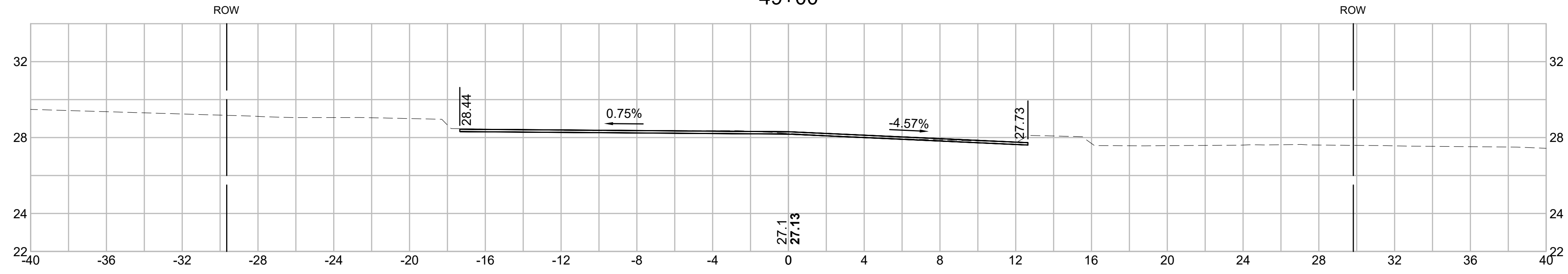
**MAPLEWOOD
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

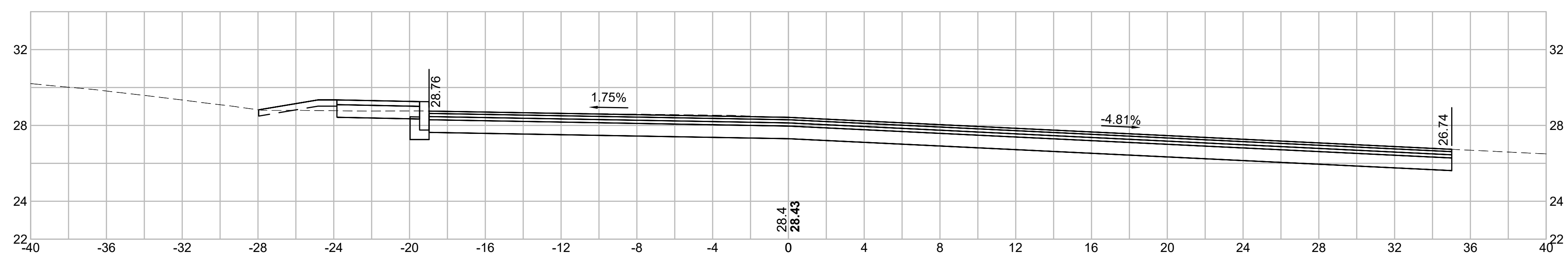
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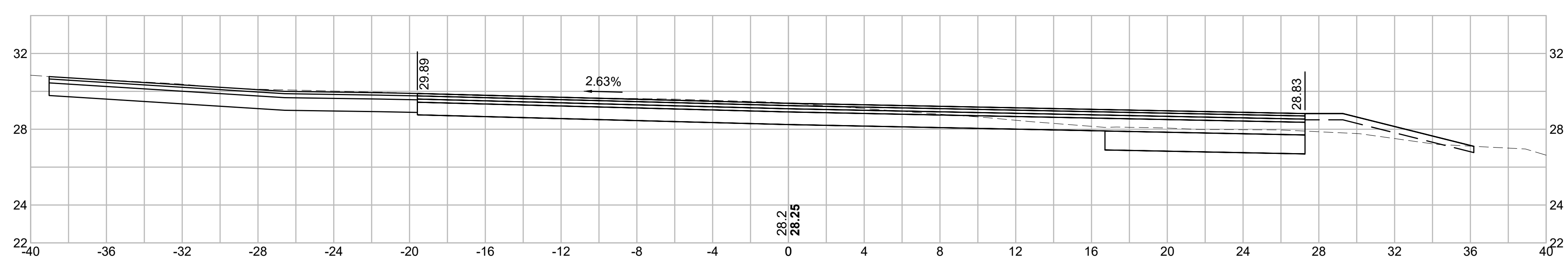
49+00



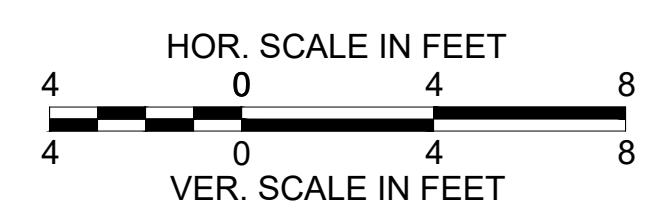
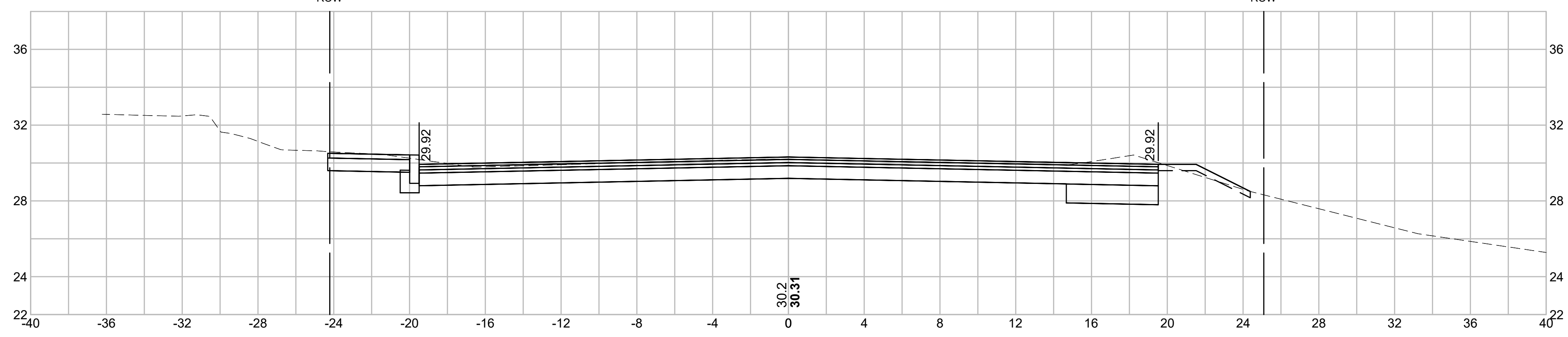
48+50



48+00



47+50



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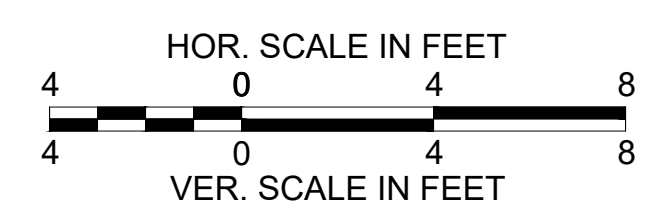
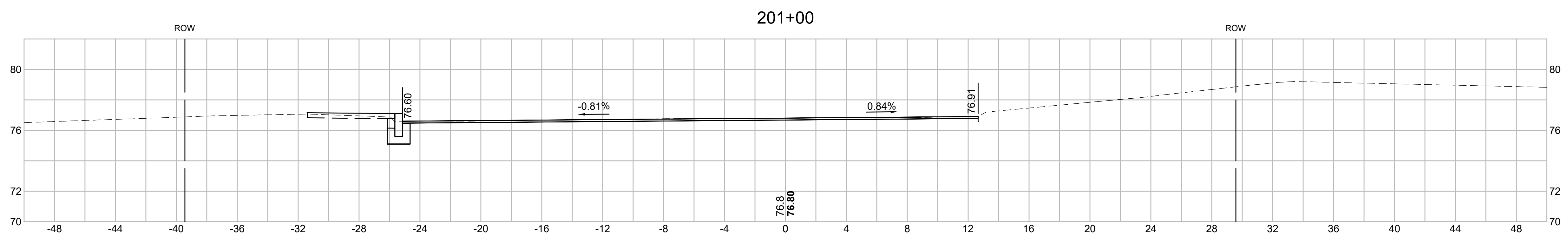
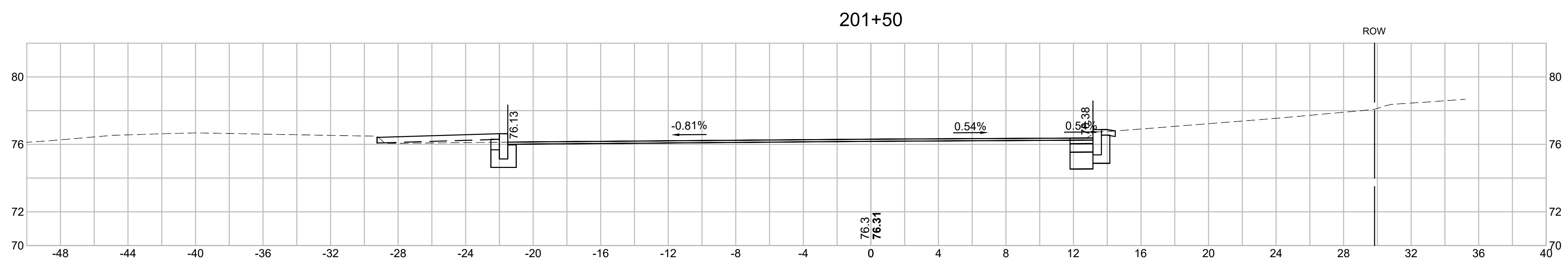
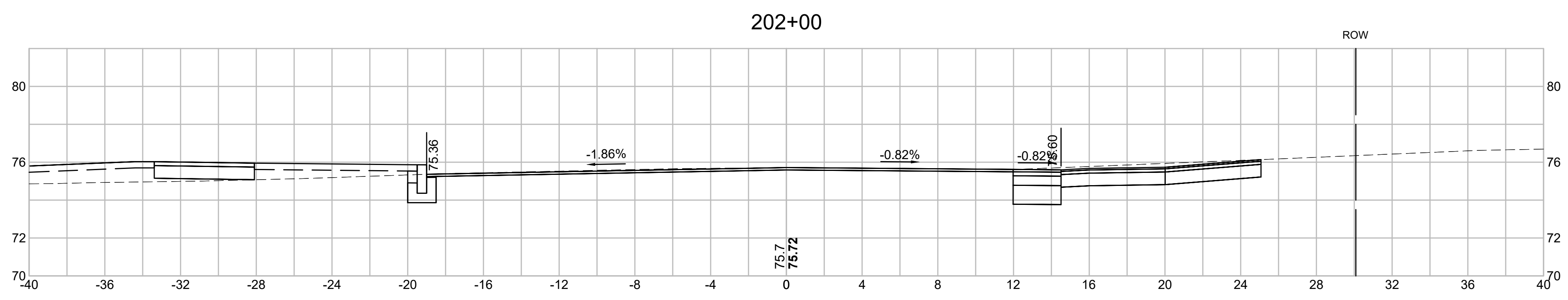
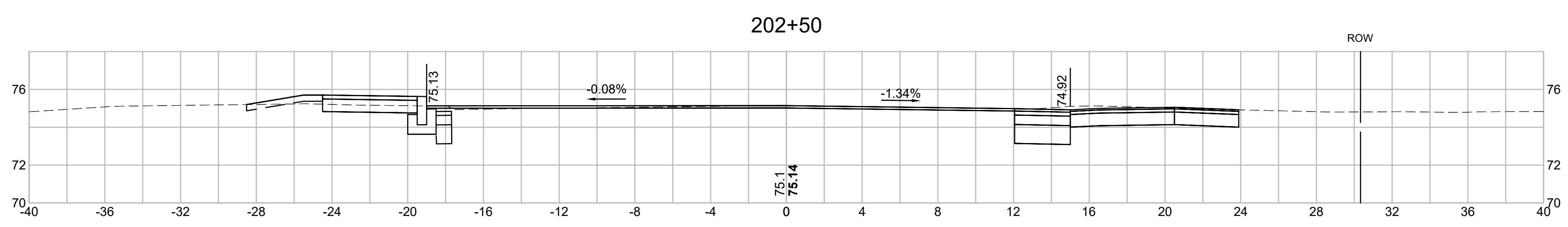
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

**WOODBURY
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
 128 OF 184





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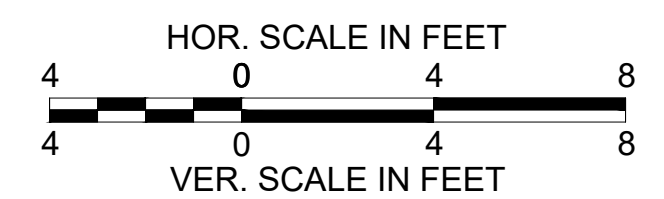
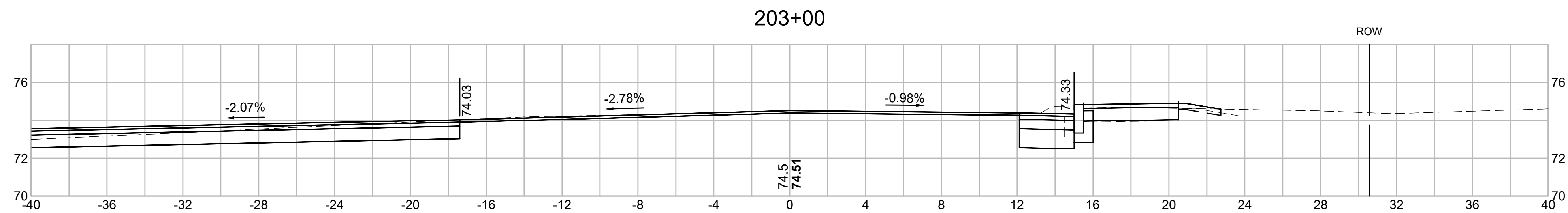
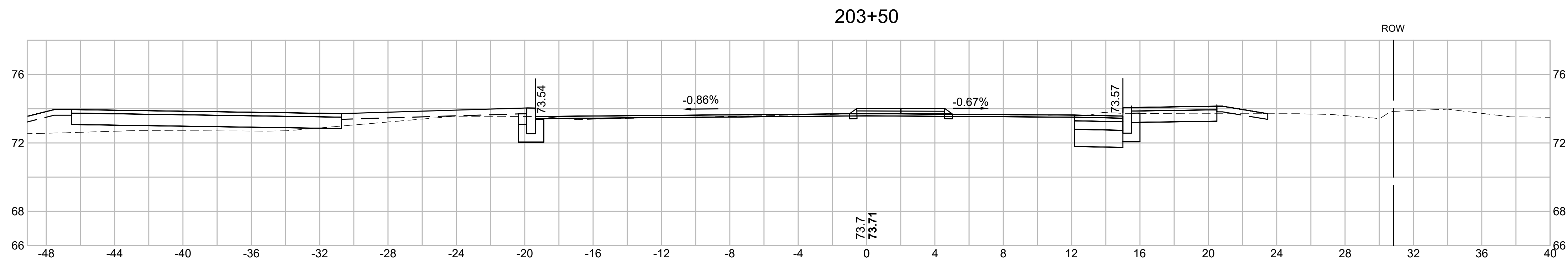
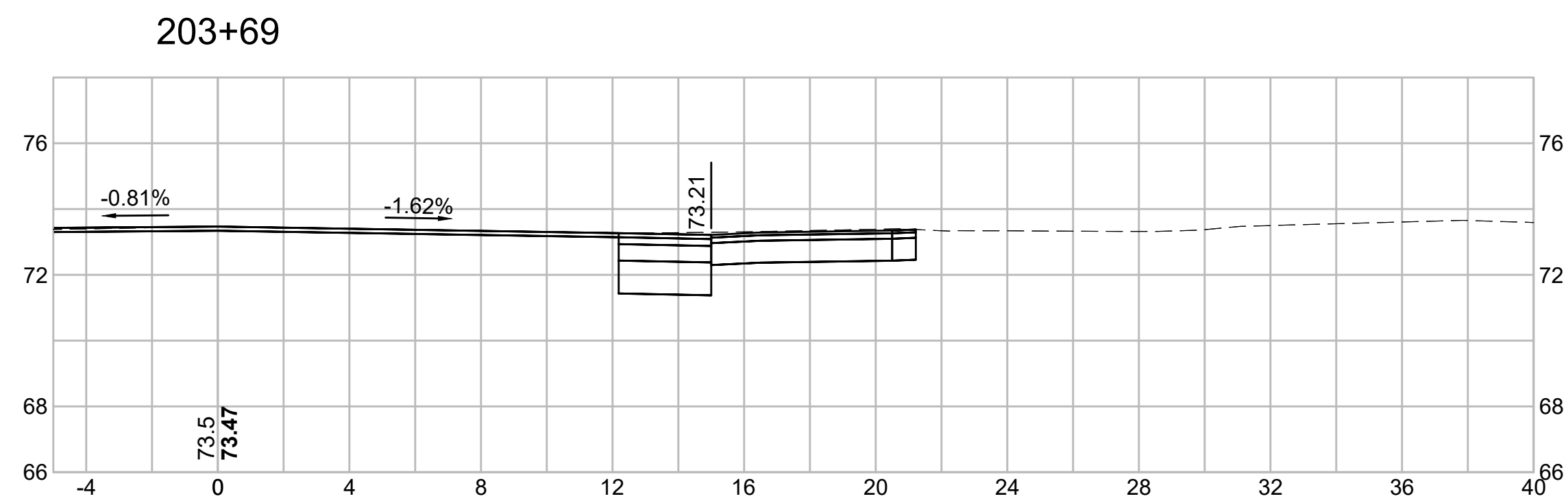
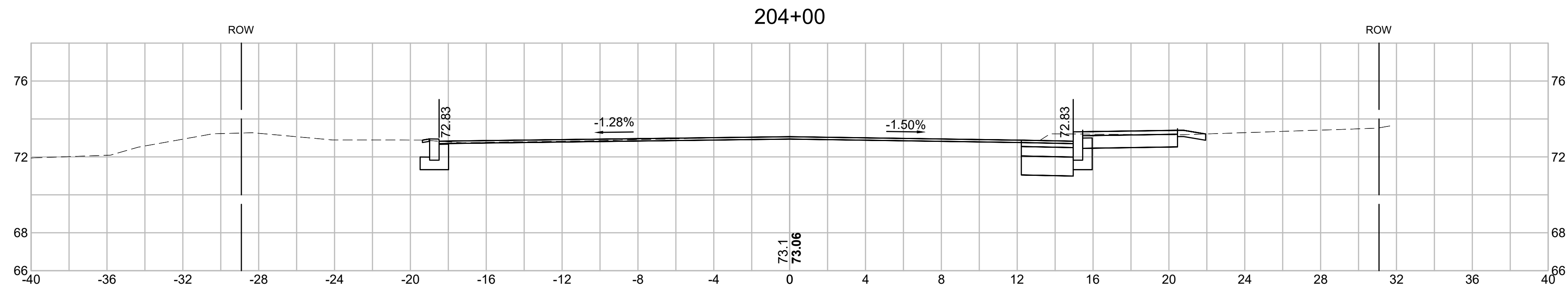
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018
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**WOODBURY
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

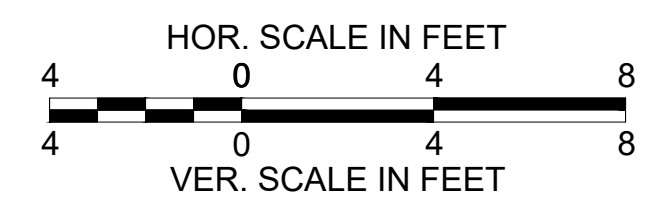
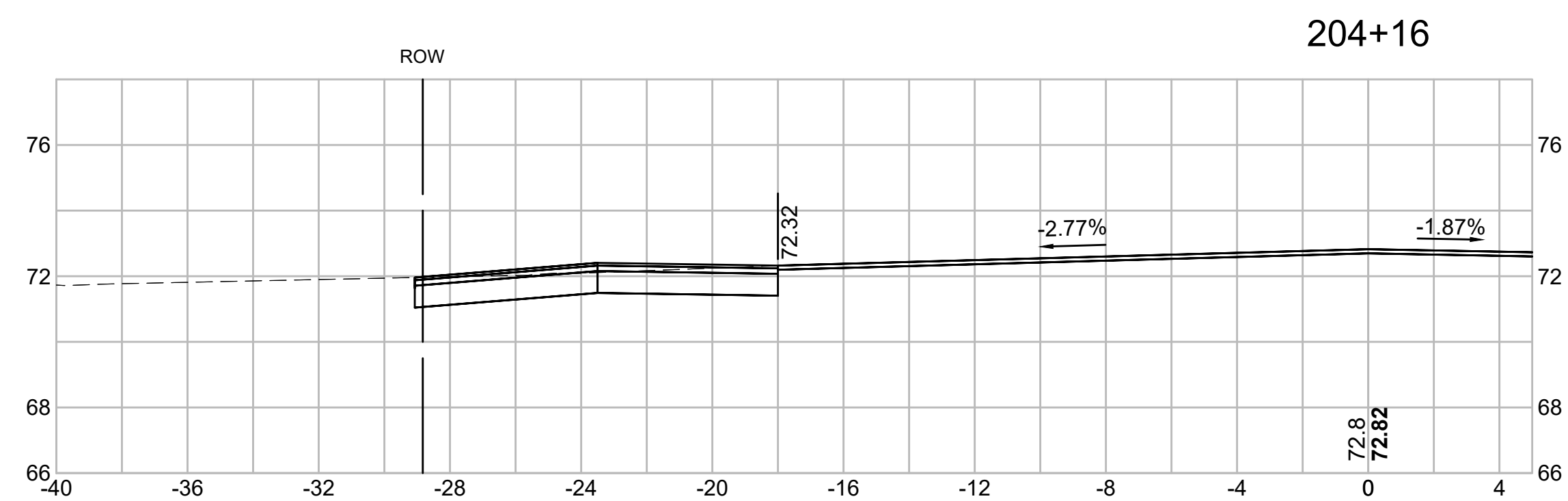
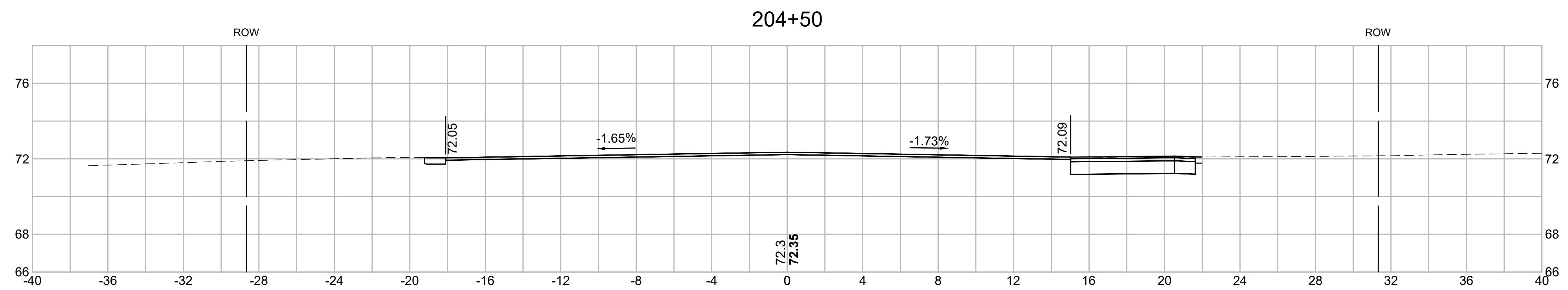
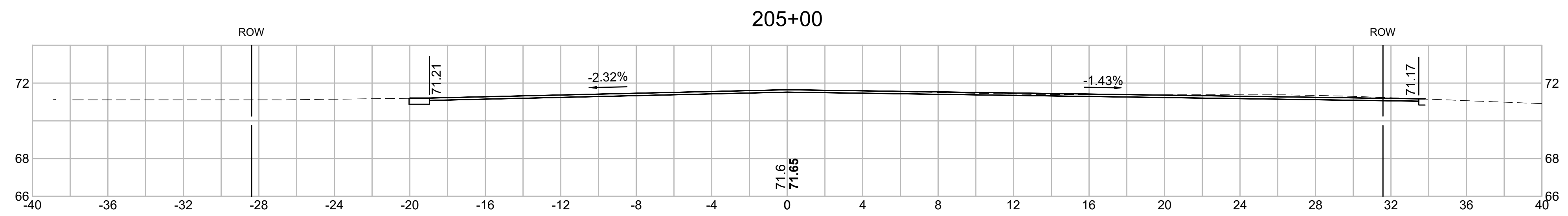
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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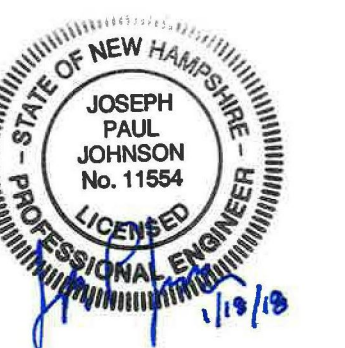
**WOODBURY
 AVENUE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

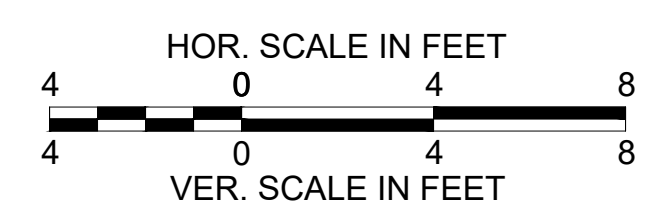
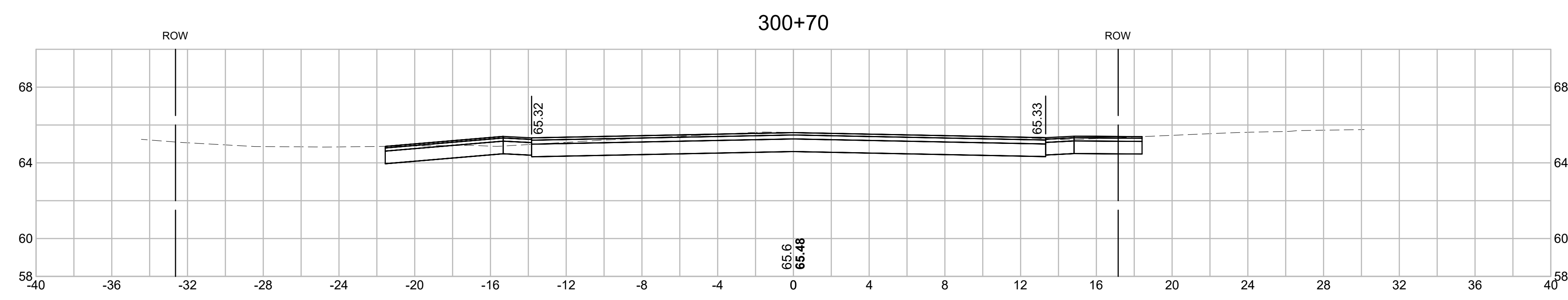
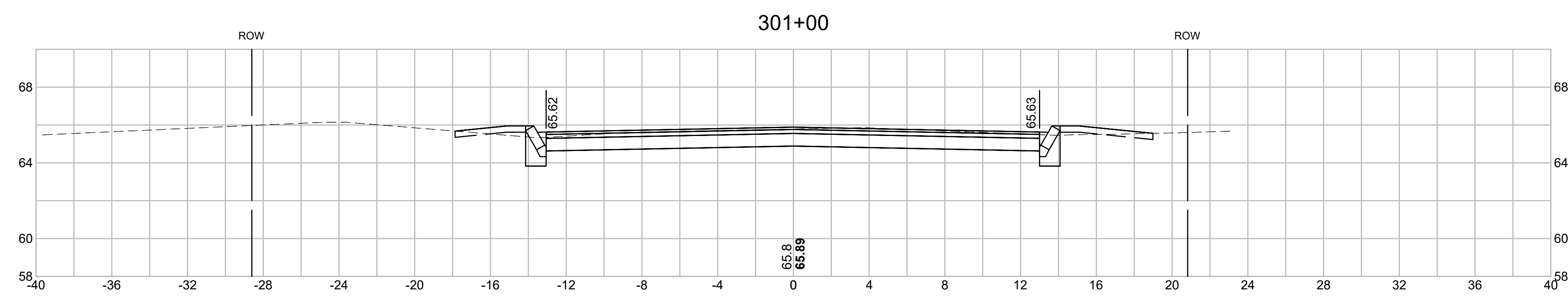
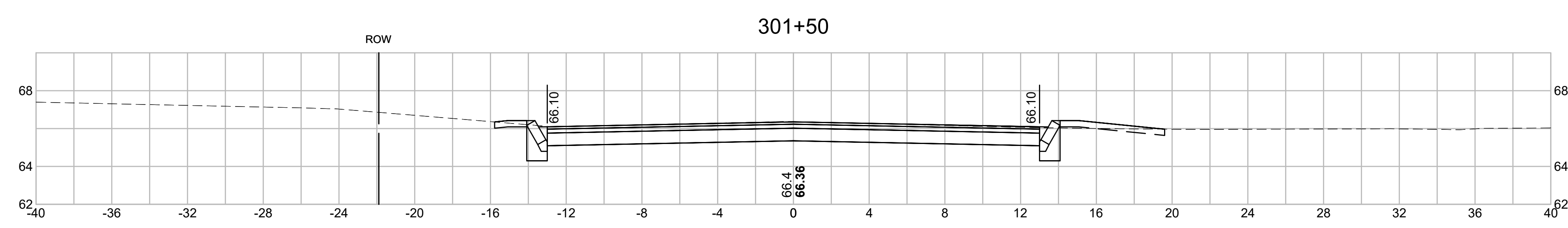
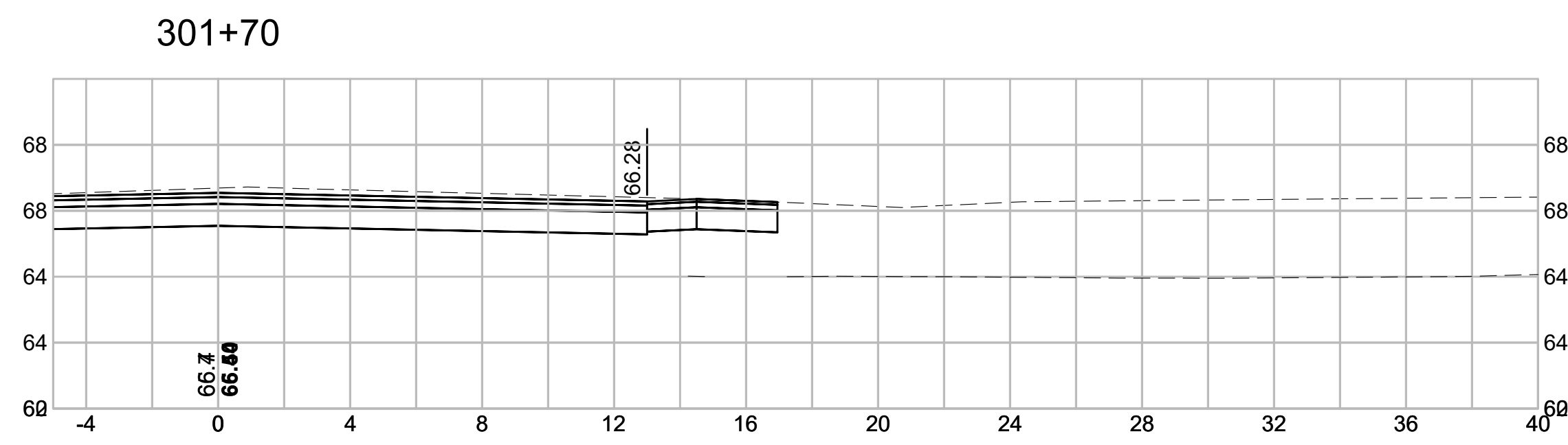
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

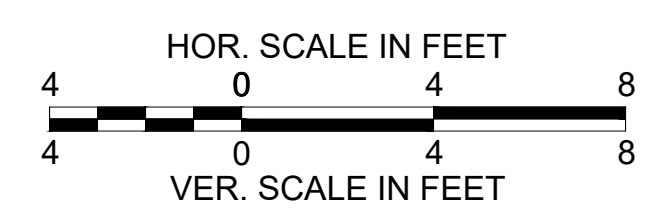
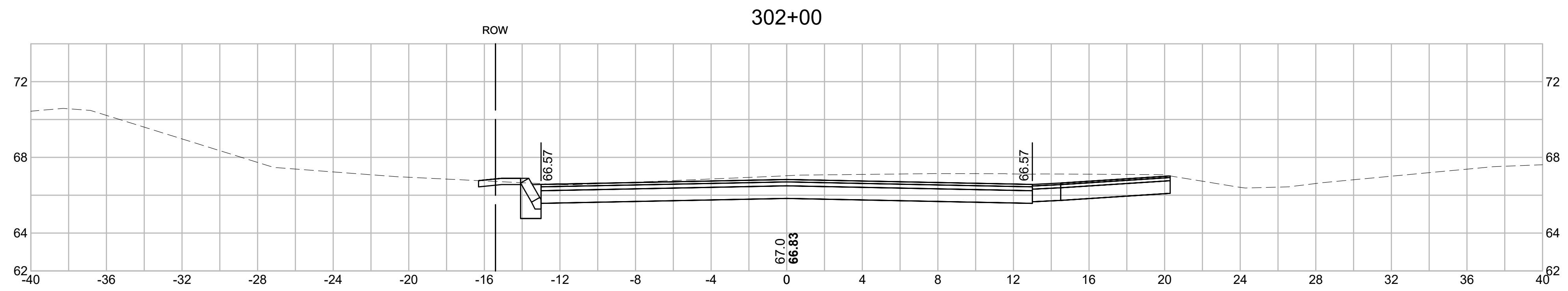
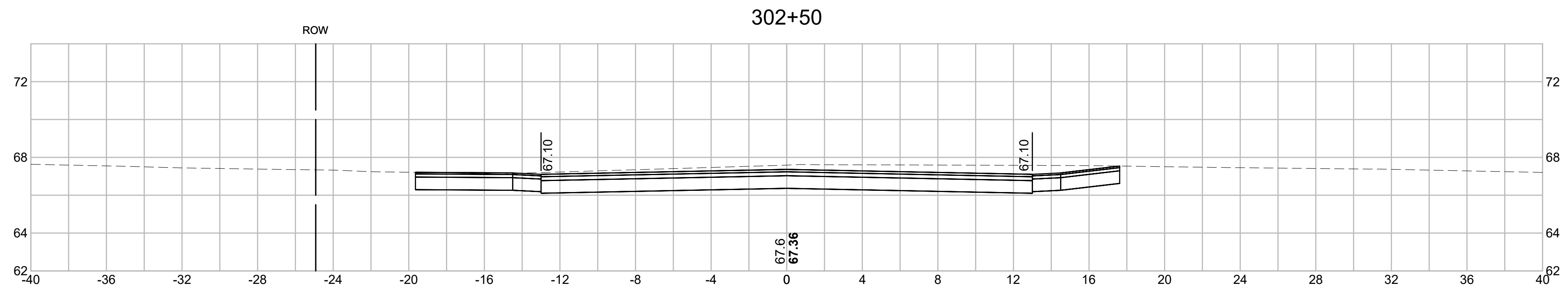
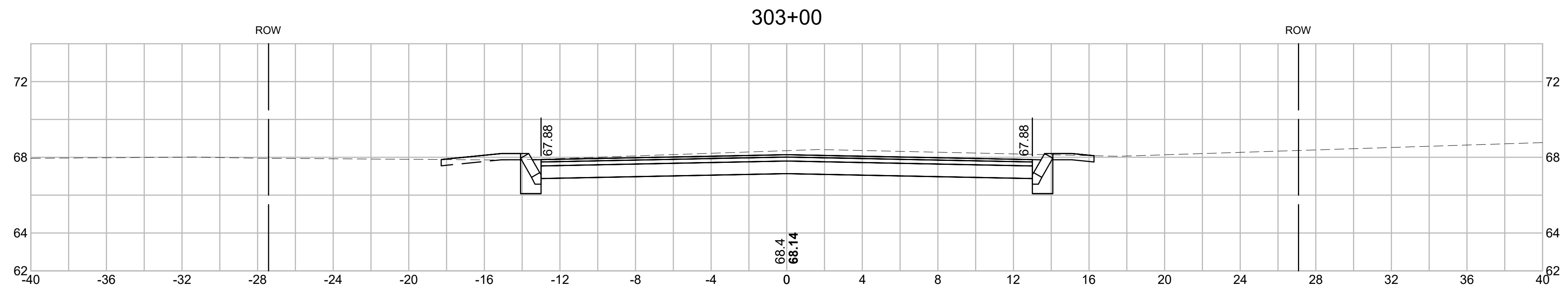
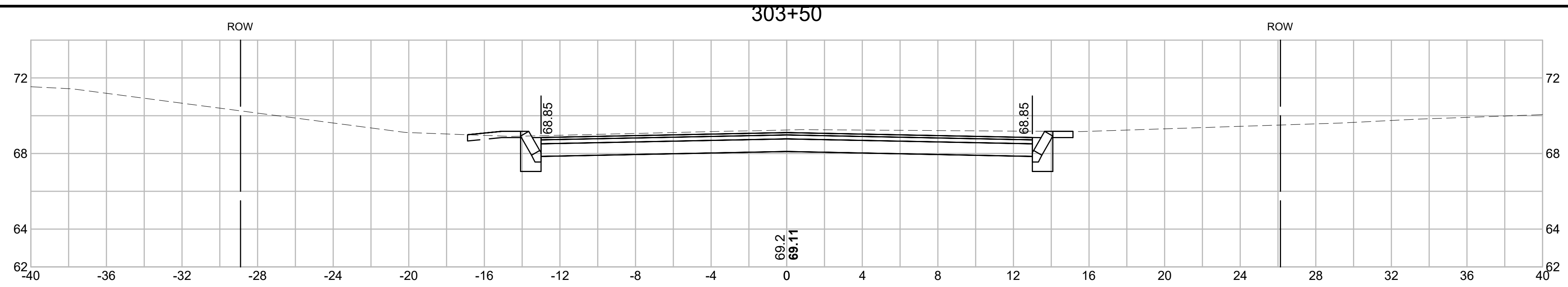
REVISIONS		
NO.	REVISION	DATE

2/5/2018
 DRAWN/DESIGN BY: CLS CHECKED BY: JPJ

**FAIRVIEW
 DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
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GPI Greenman-Pedersen, Inc.
Engineering & Construction Services
21 Daniel Street, Second Floor, Portsmouth, NH 03801
Tel: (603) 891-2213 Fax: (603) 658-3044
http://www.gpinet.com

Weston & Sampson
Weston & Sampson Engineers, Inc.
Five Centennial Drive, Peabody, MA 01960
978.532.1900 800.SAMPSON
www.westonandsampson.com



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**IMPROVEMENTS TO MAPLEWOOD
AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**FAIRVIEW
DRIVE
CROSS
SECTIONS**

SCALE: 1"=4'

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

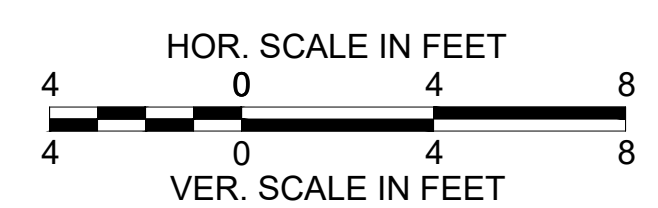
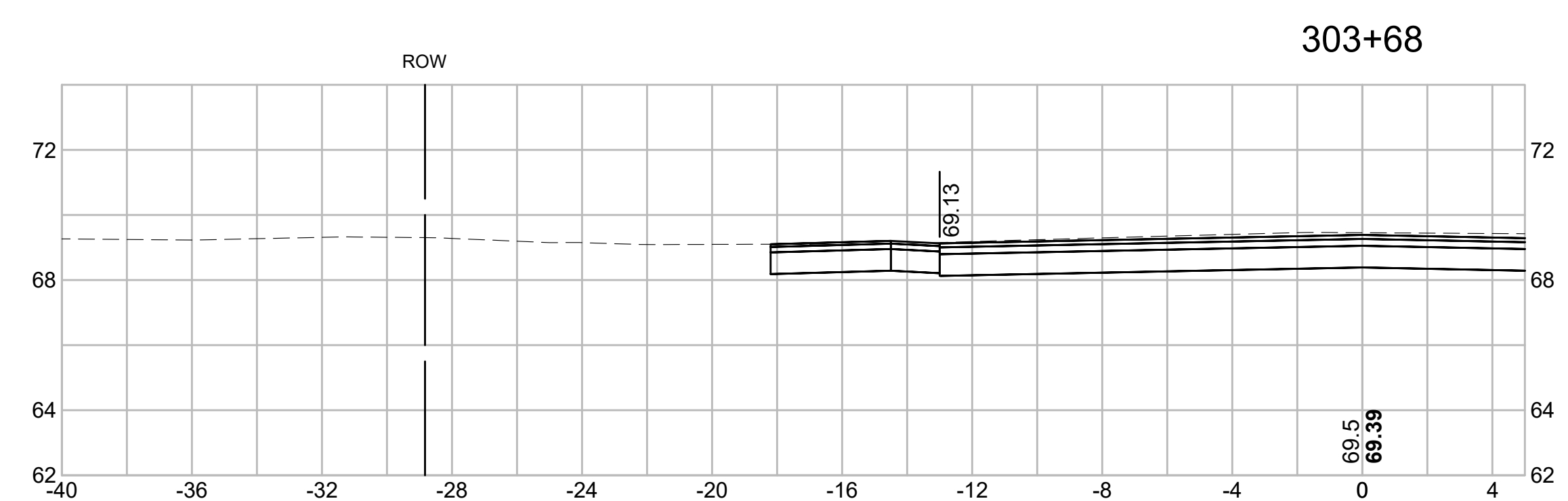
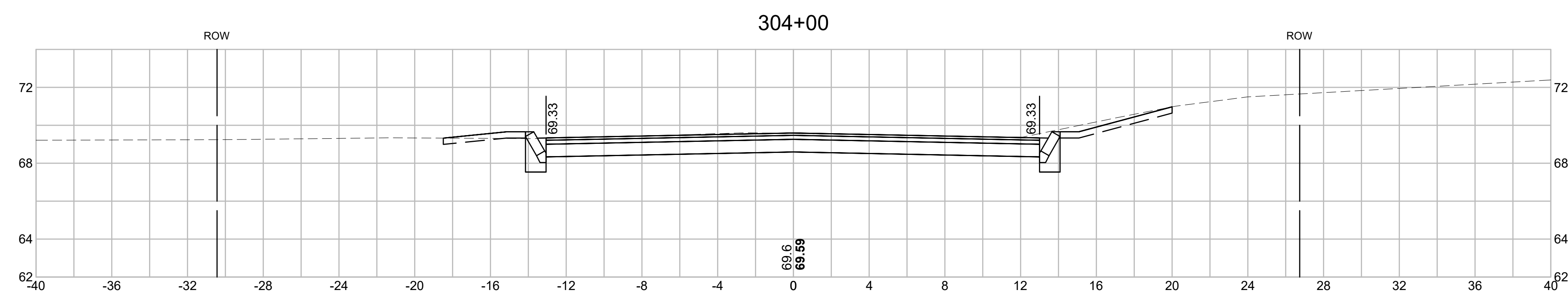
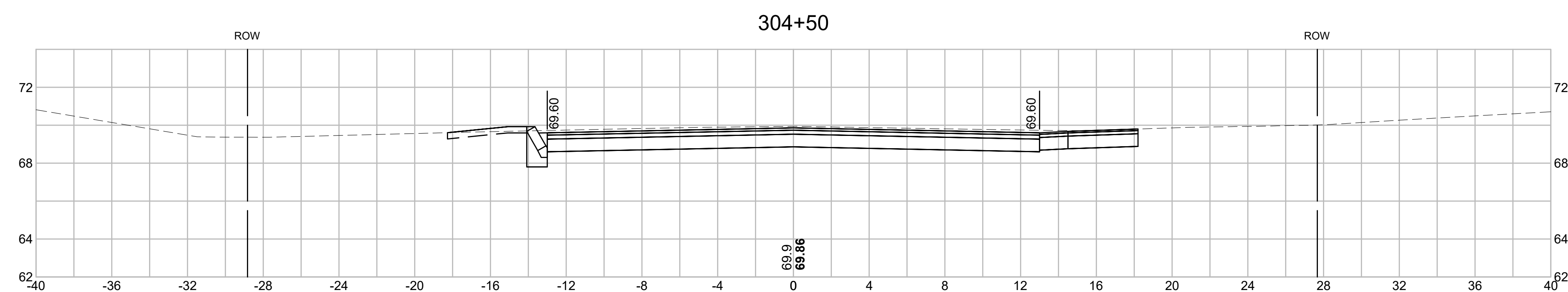
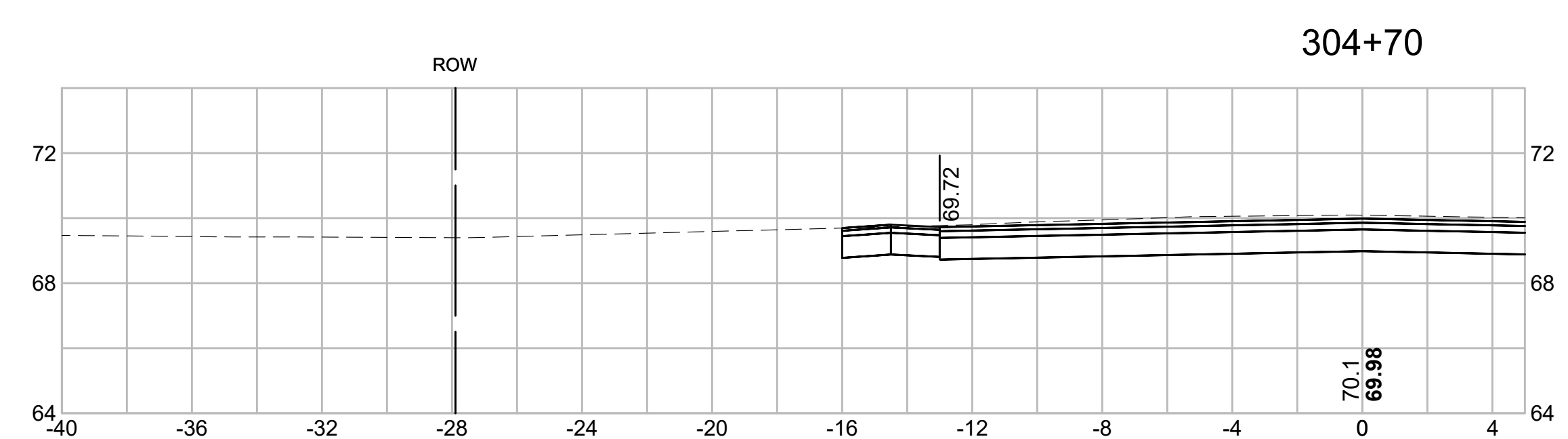
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

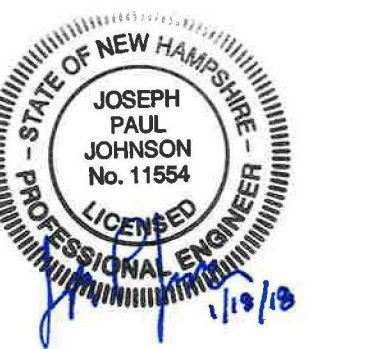
REVISIONS		
NO.	REVISION	DATE

2/5/2018
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**FAIRVIEW
 DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

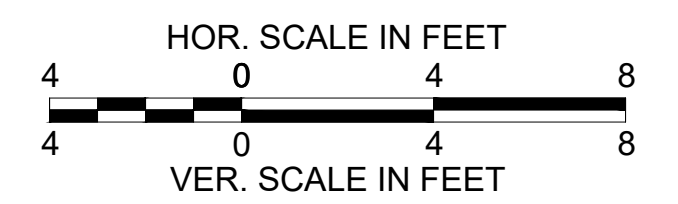
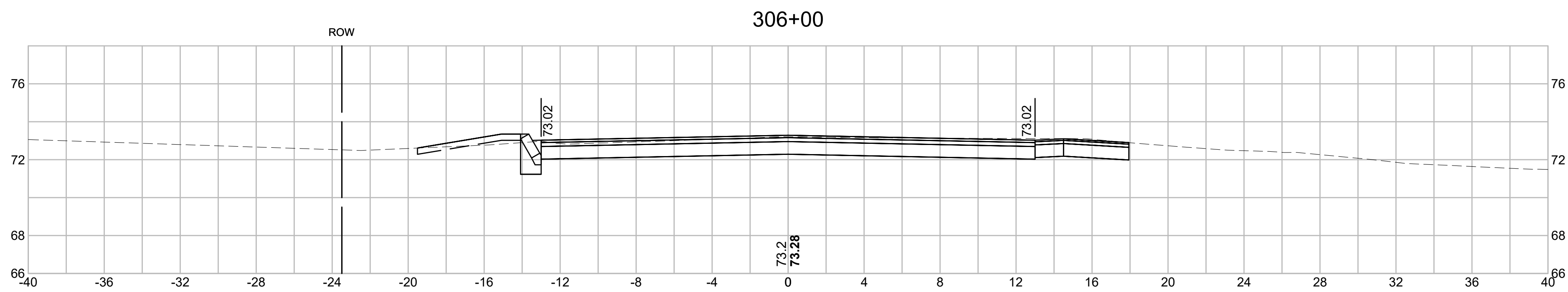
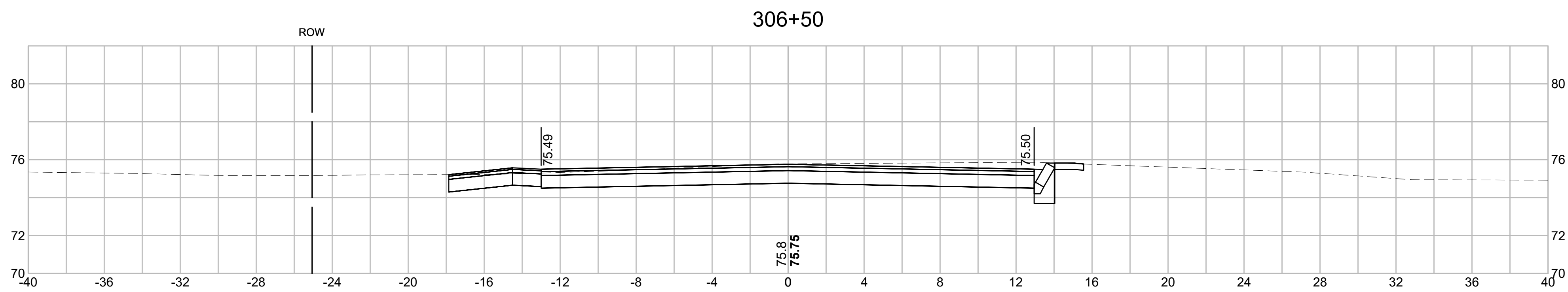
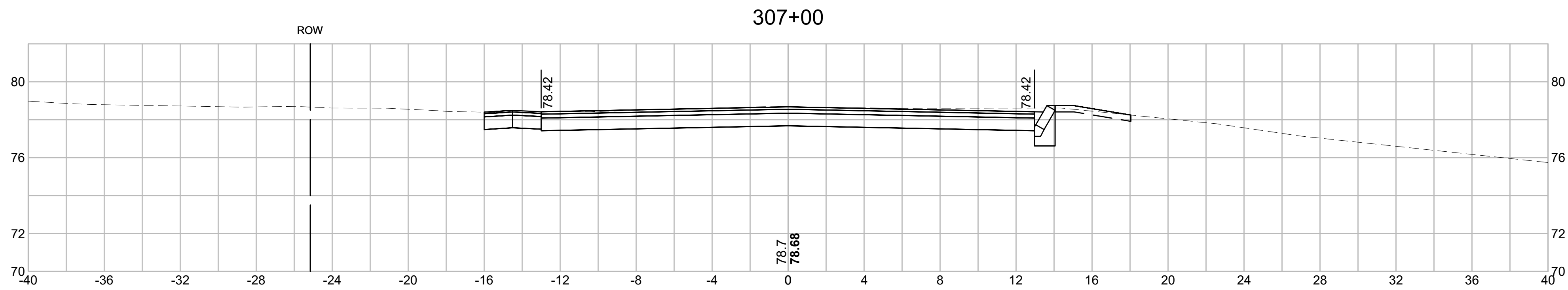
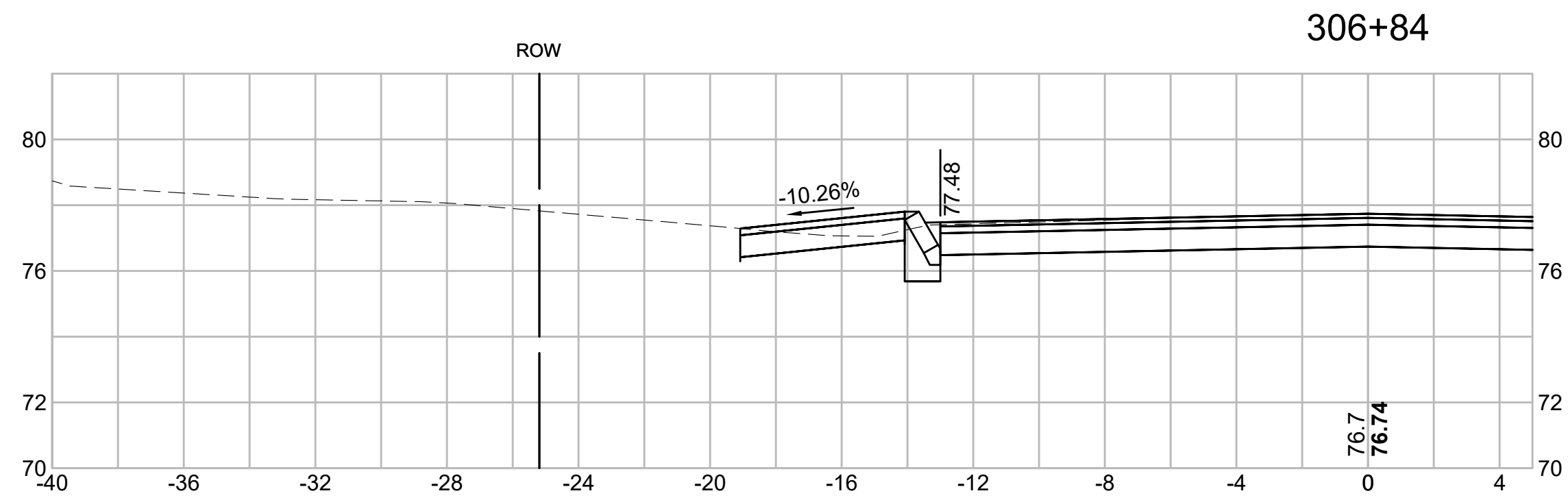
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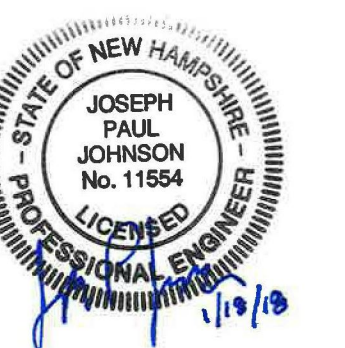
**FAIRVIEW
 DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'

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 CITY OF PORTSMOUTH
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

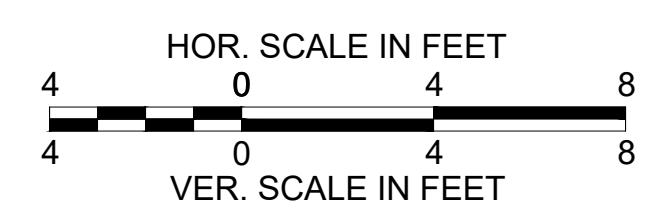
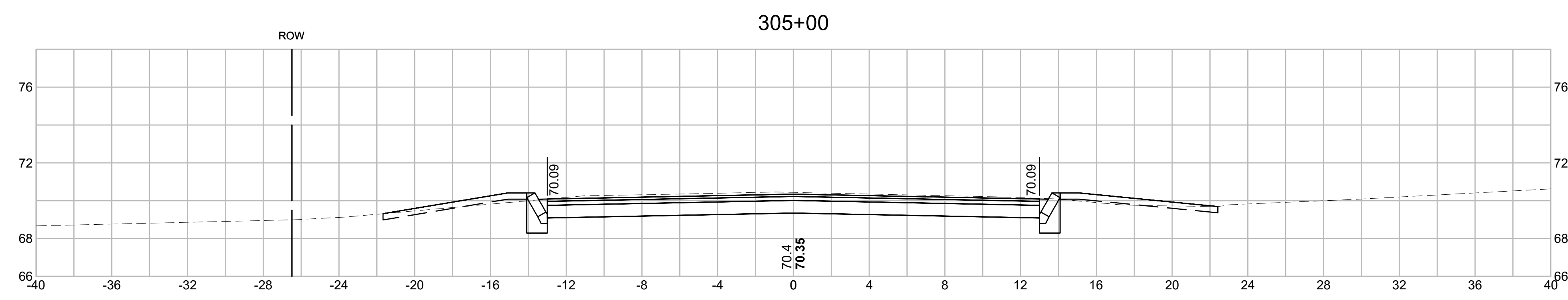
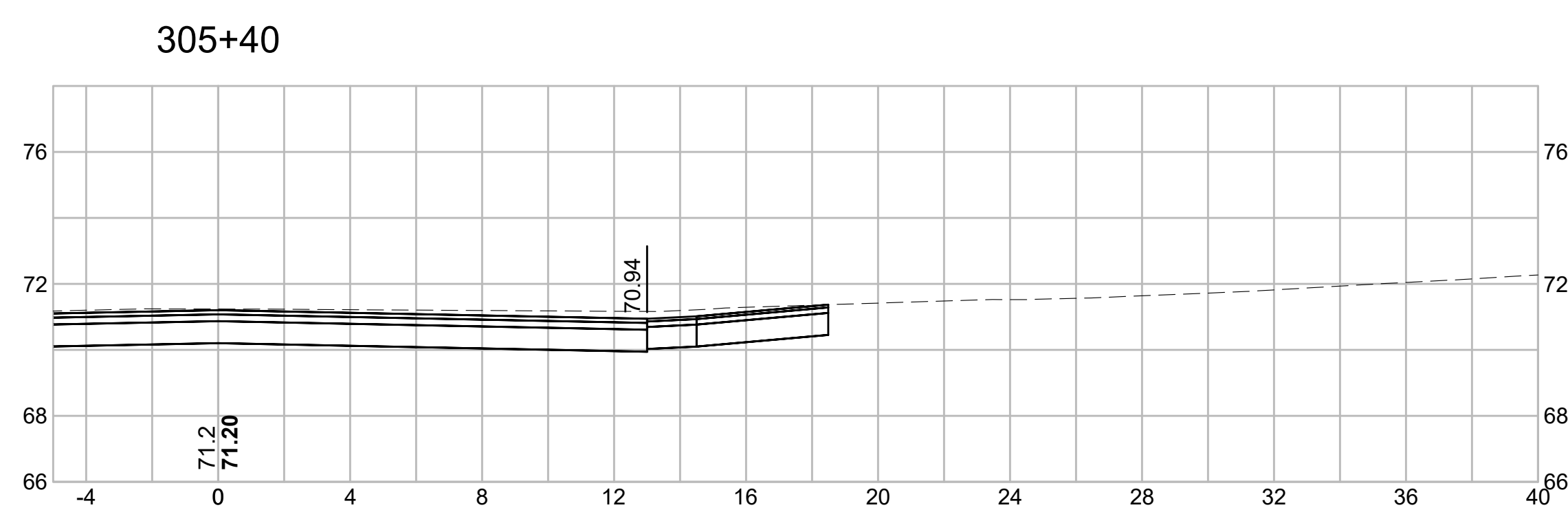
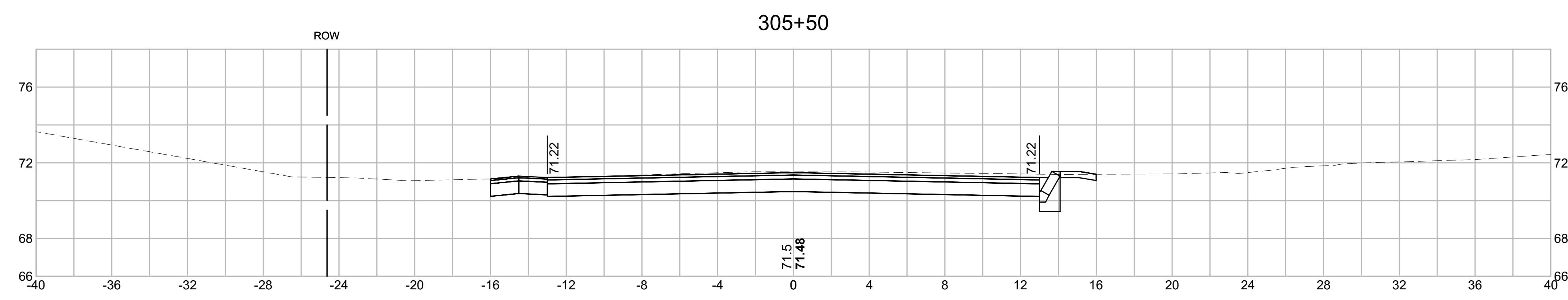
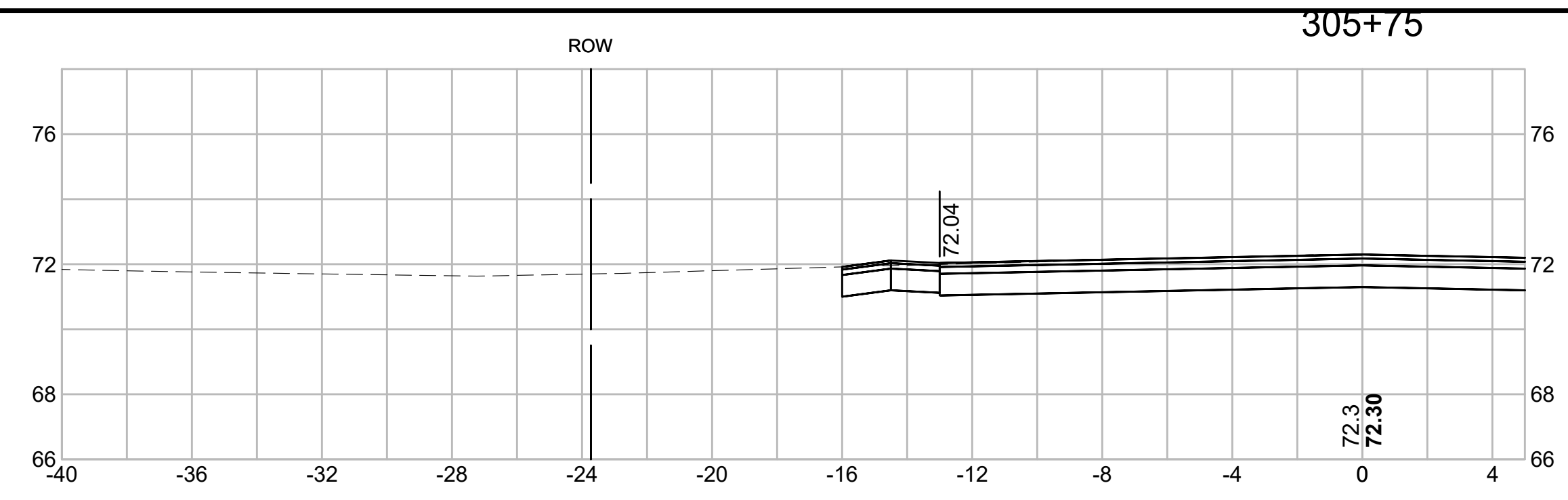
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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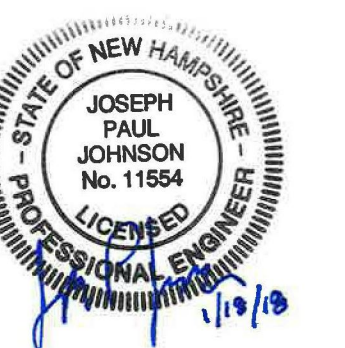
**FAIRVIEW
 DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

135 OF 184





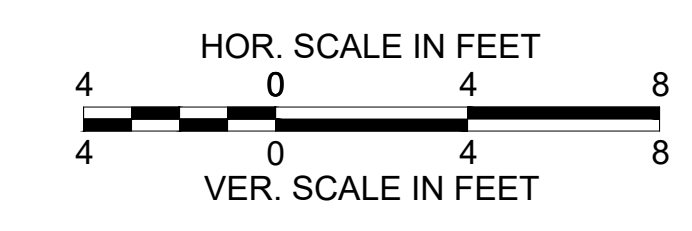
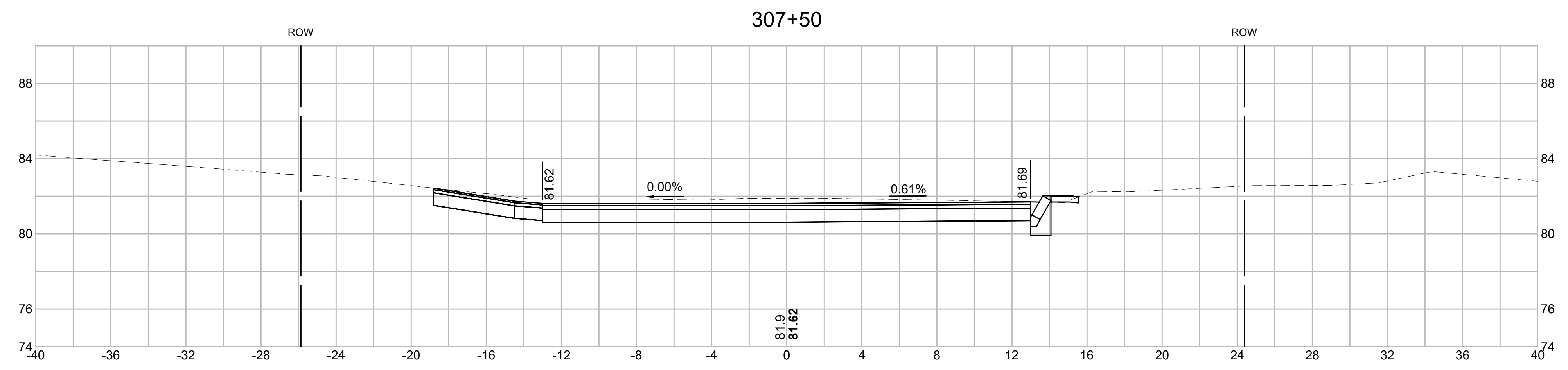
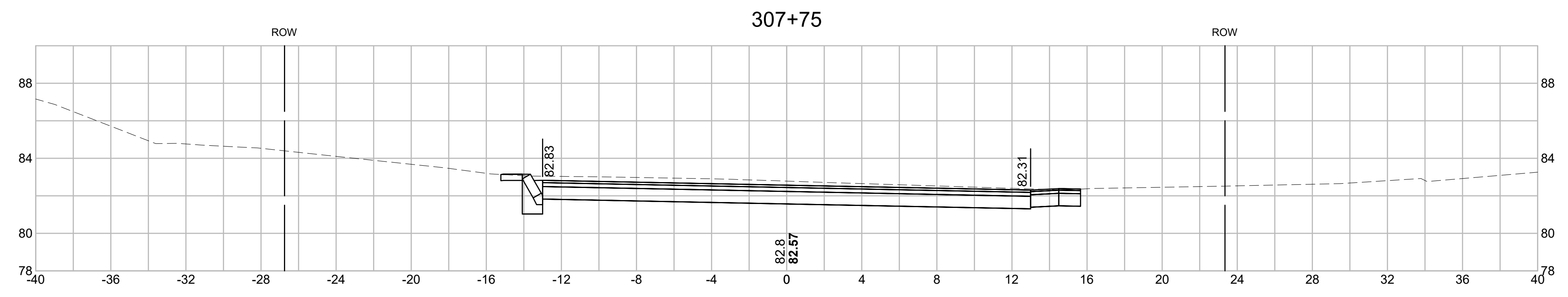
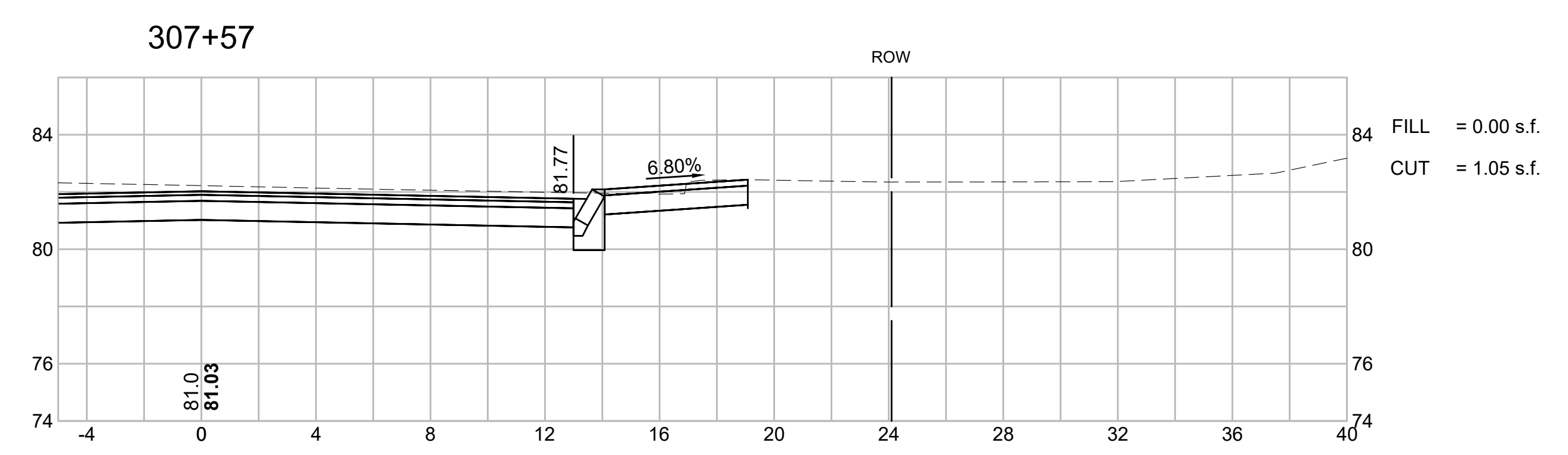
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 680 PEVERLY HILL ROAD
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

**FAIRVIEW
 DRIVE
 CROSS
 SECTIONS**

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

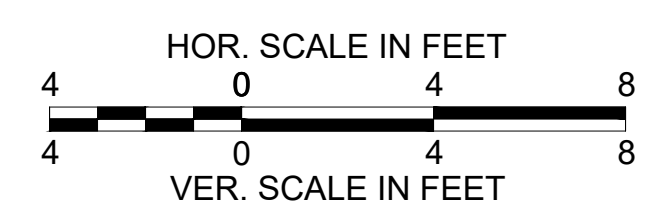
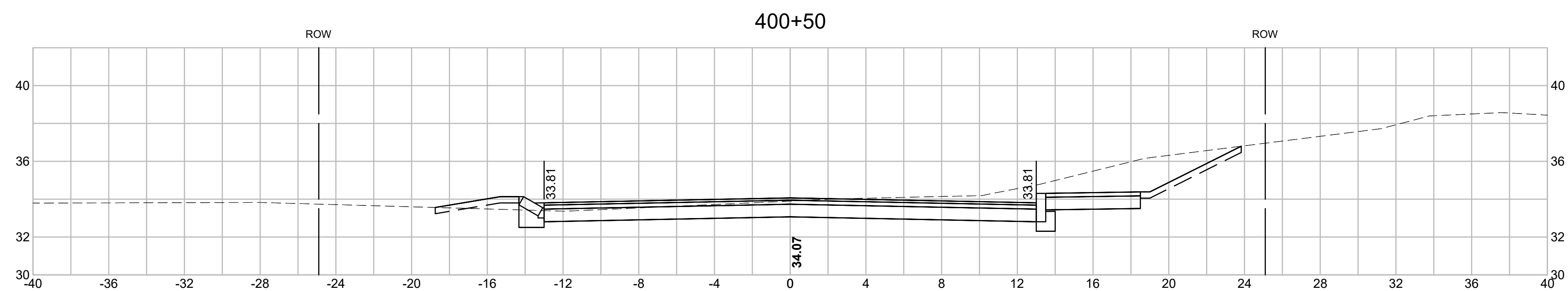
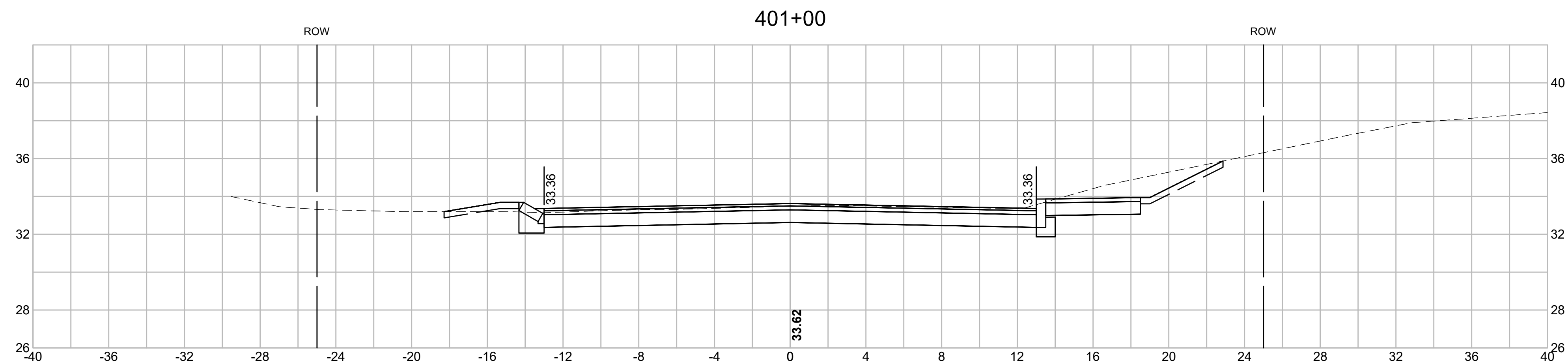
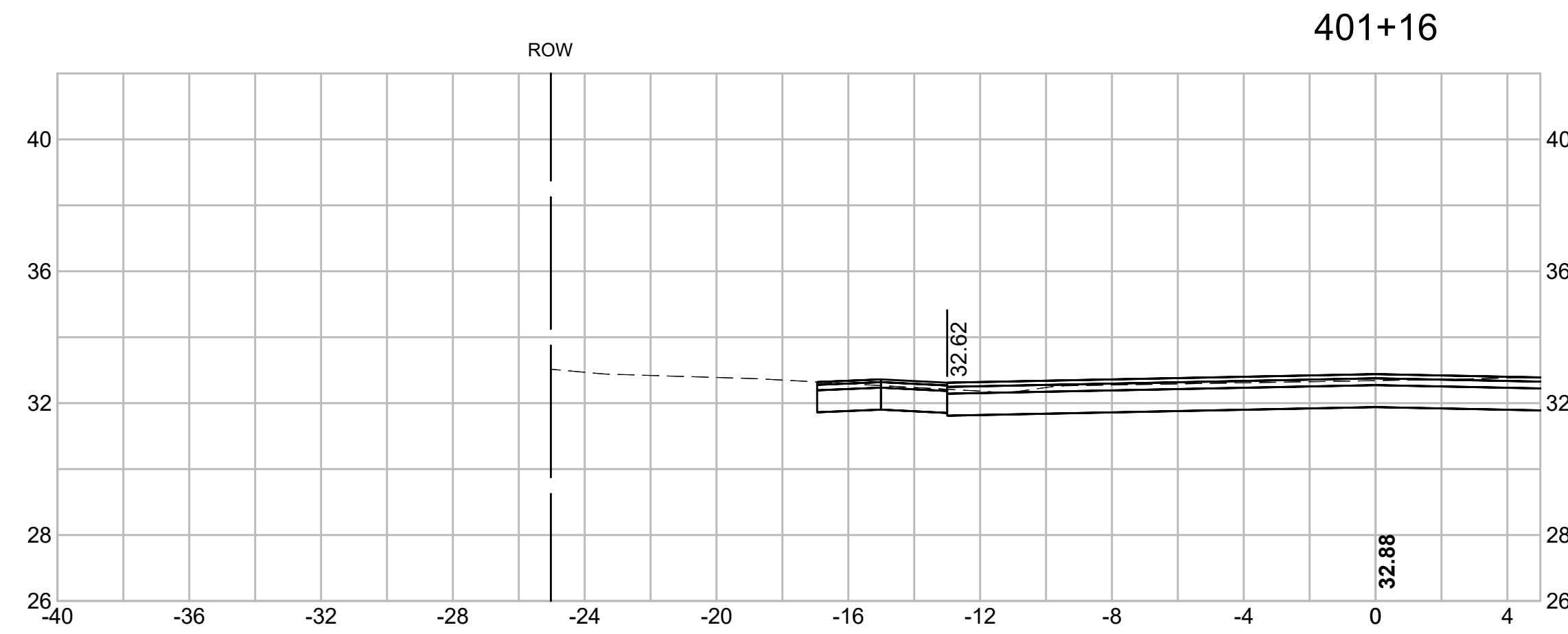
REVISIONS		
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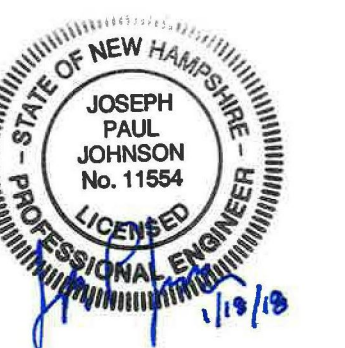
2/5/2018

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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

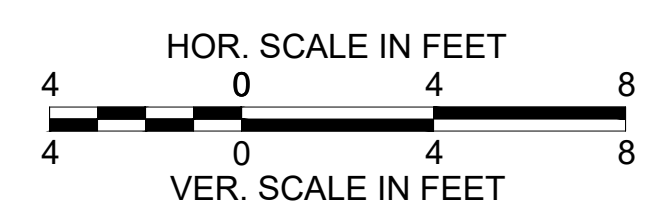
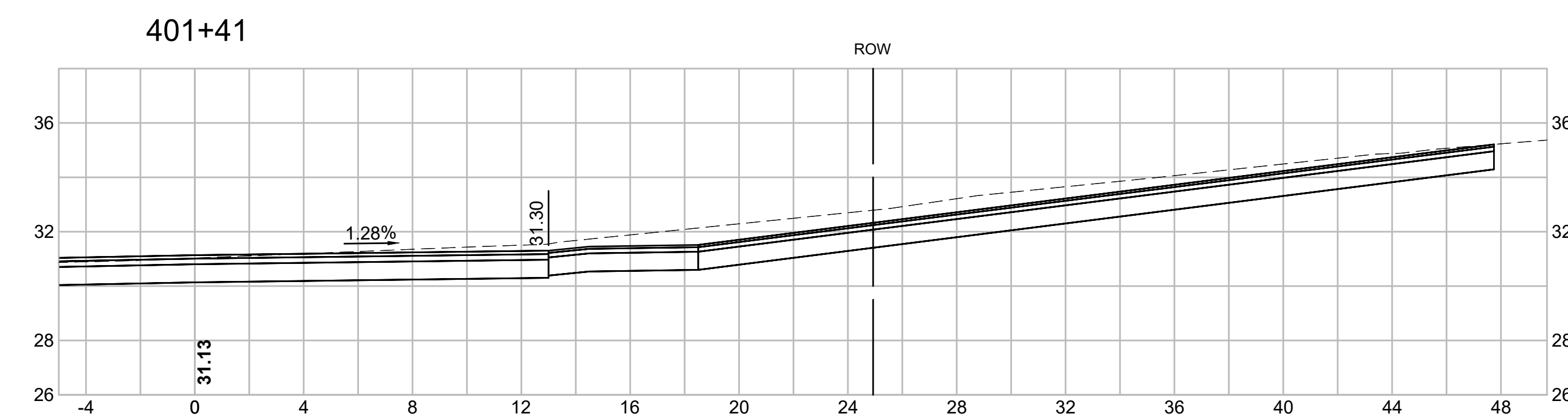
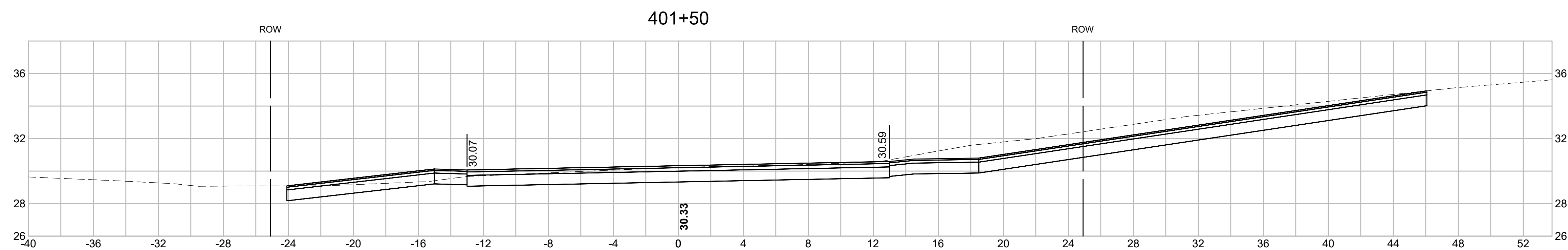
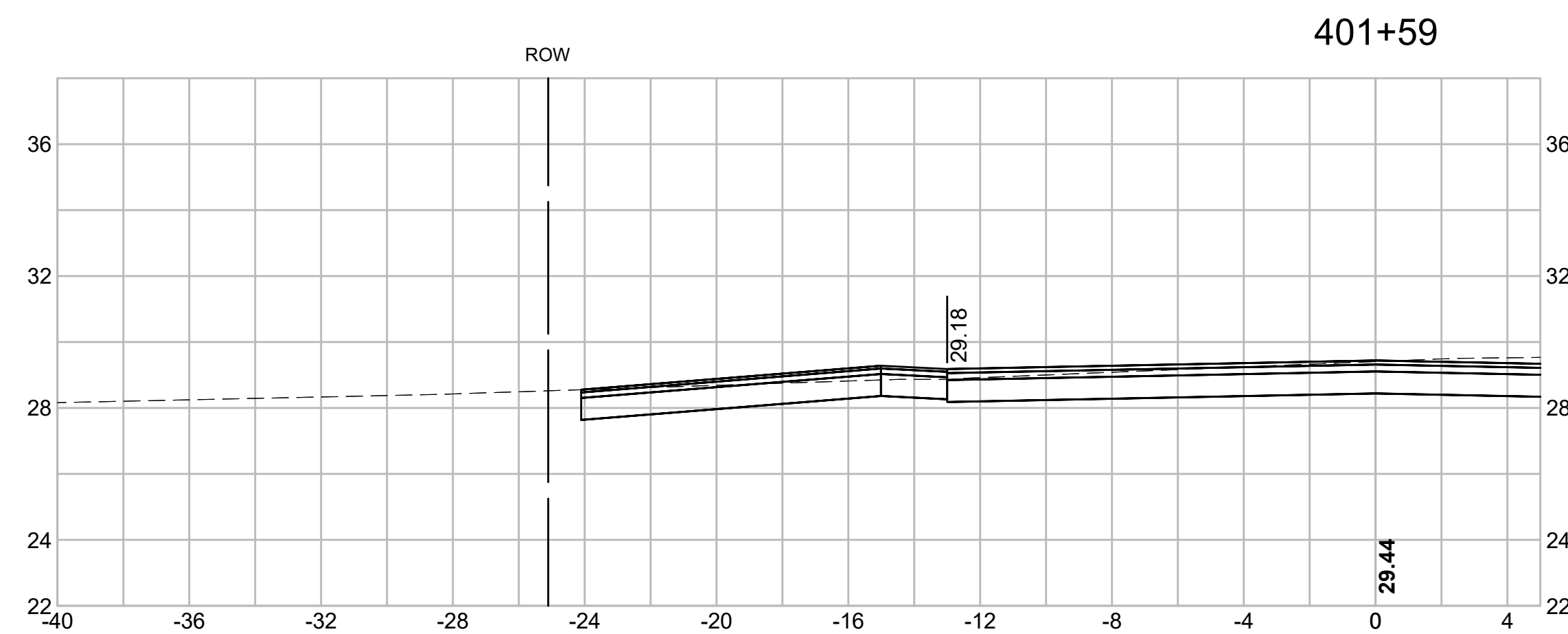
REVISIONS		
NO.	REVISION	DATE

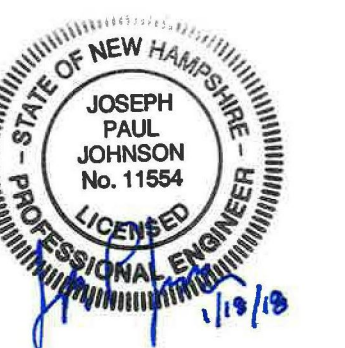
2/5/2018

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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00
 138 OF 184





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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

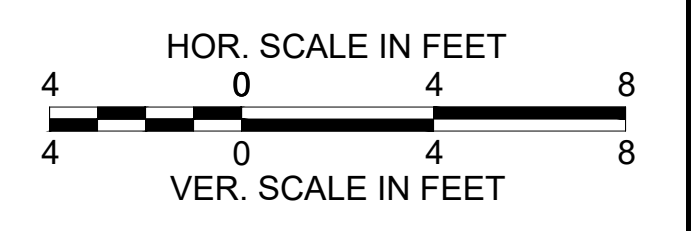
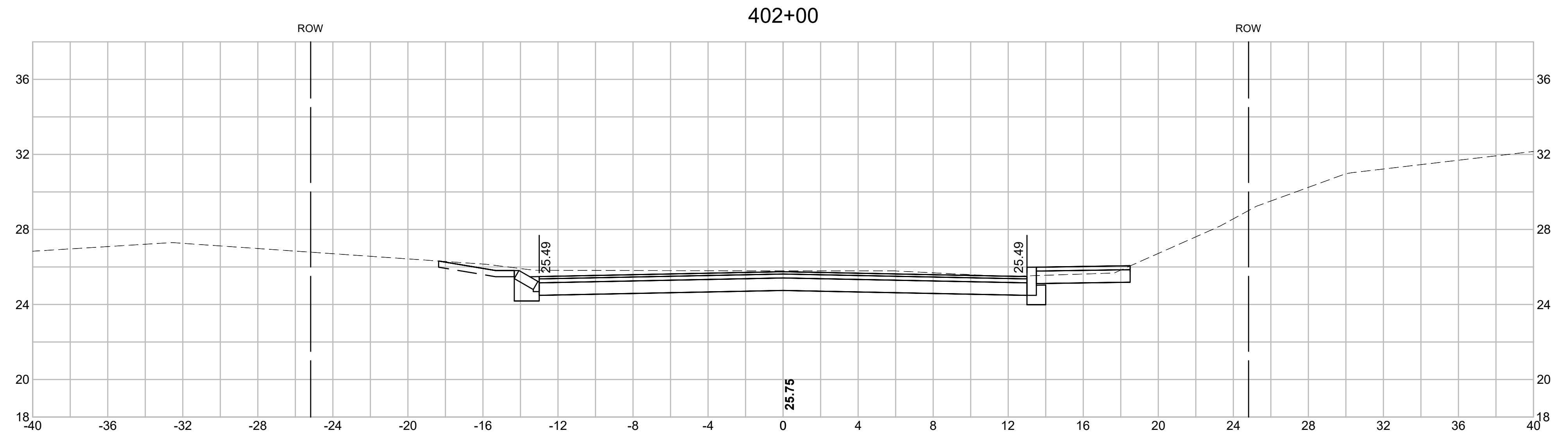
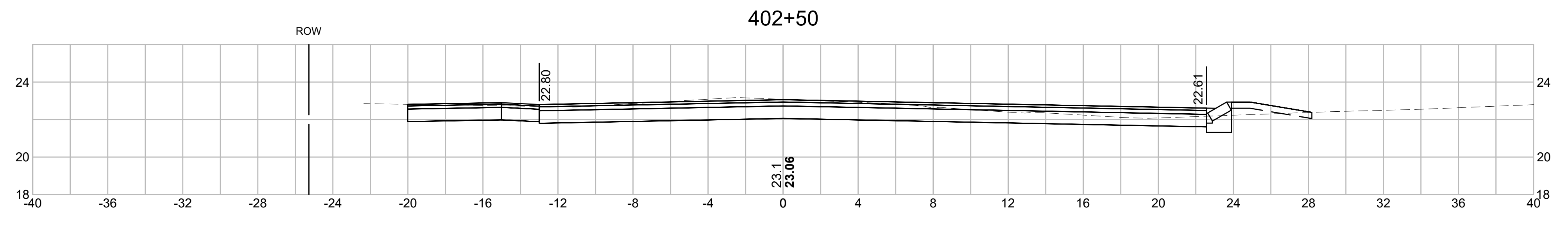
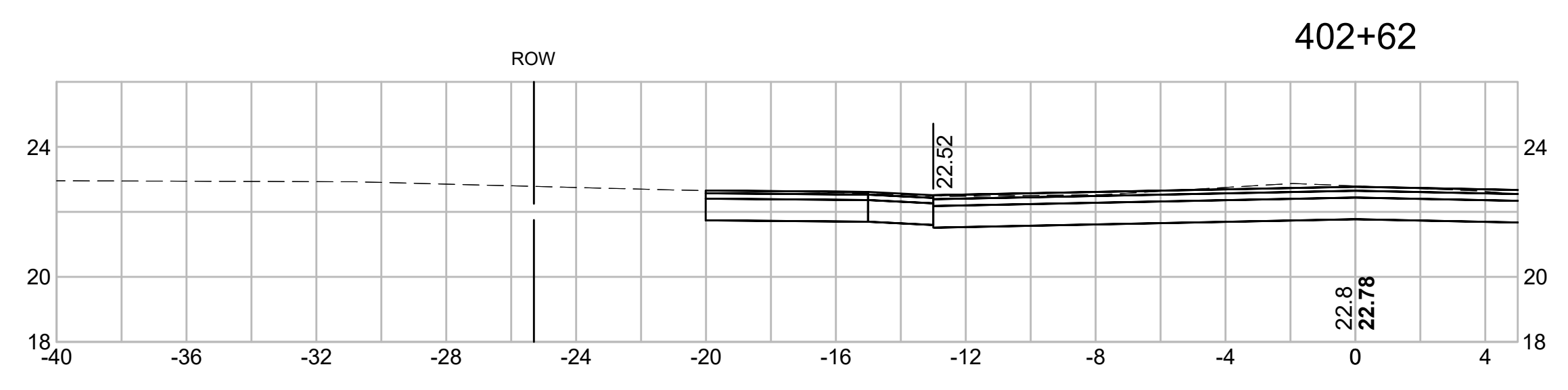
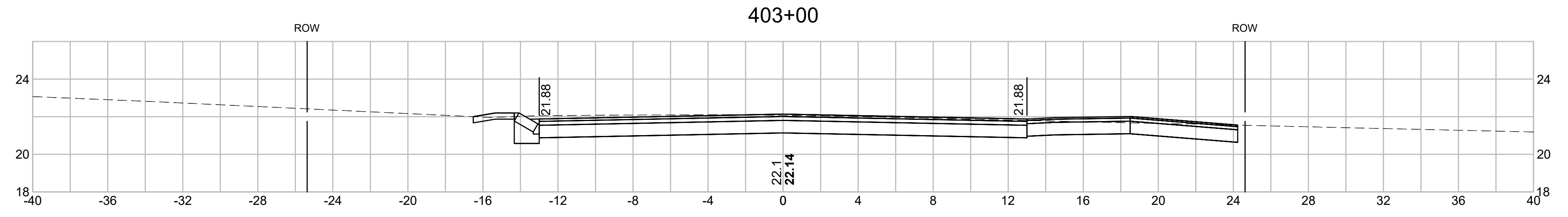
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NO.	REVISION	DATE

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**CENTRAL
 AVENUE &
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

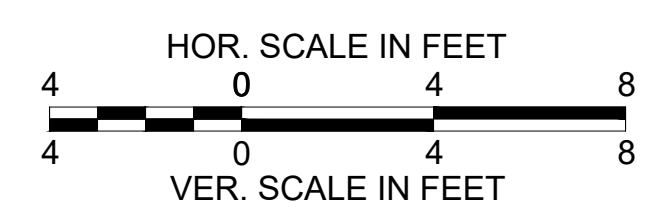
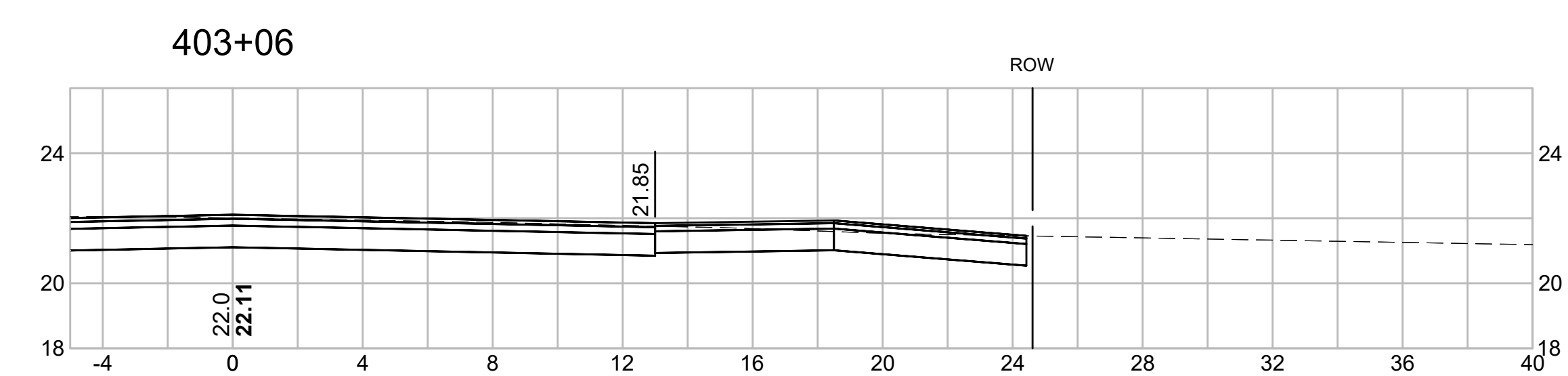
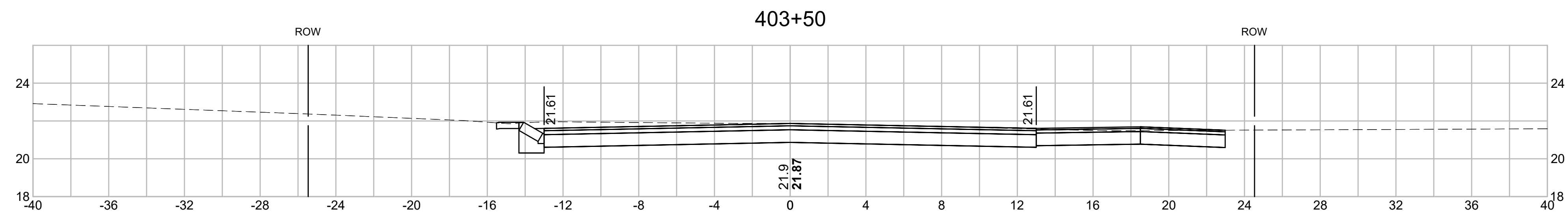
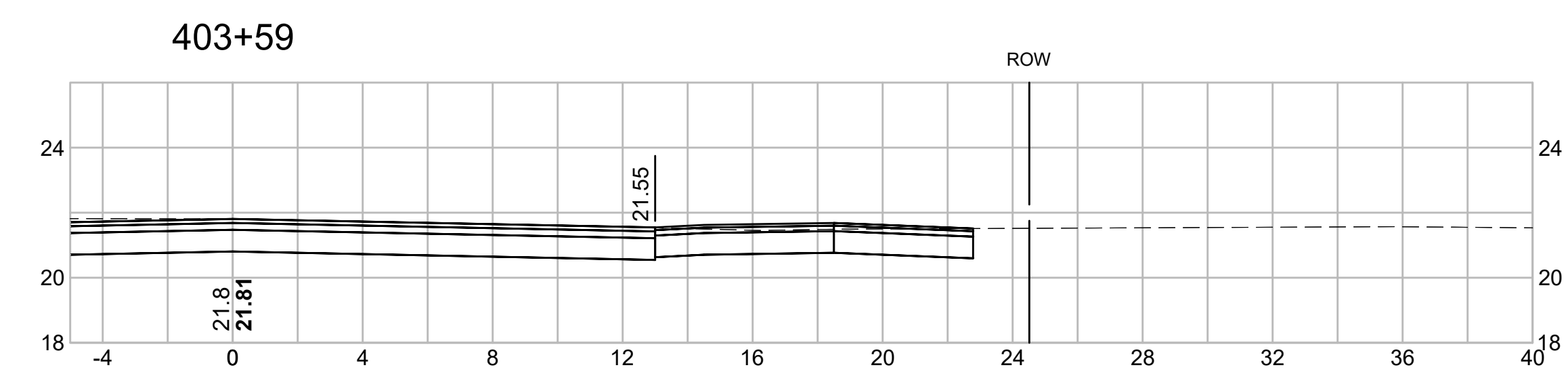
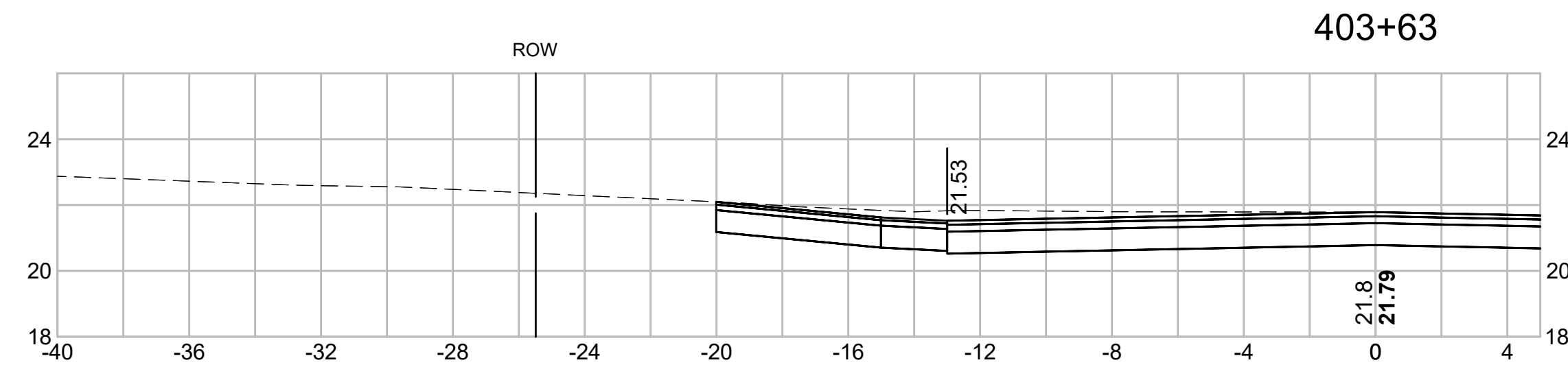
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NO.	REVISION	DATE

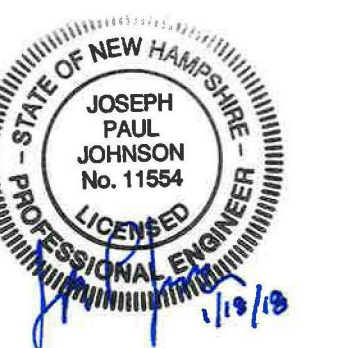
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**CENTRAL
 AVENUE &
 CUTTS STREET
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SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

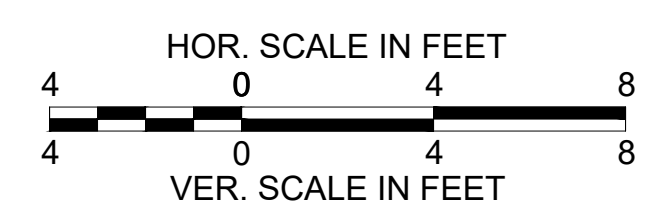
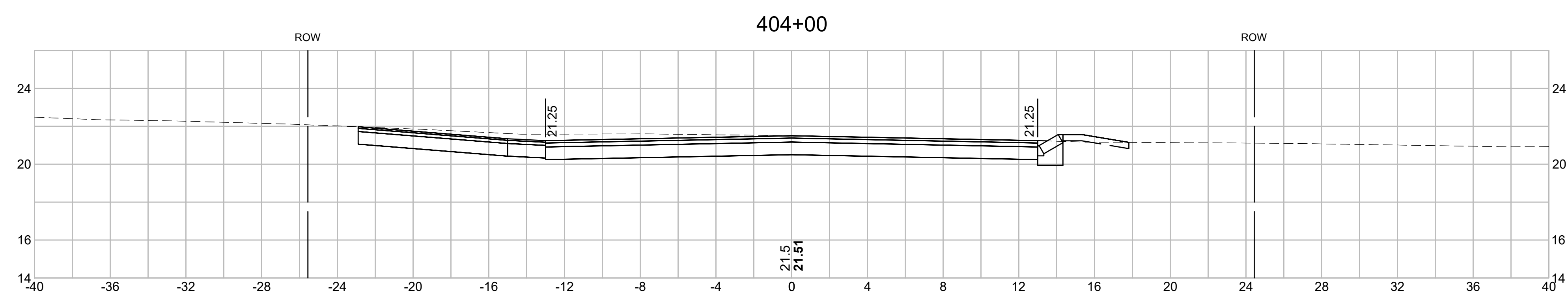
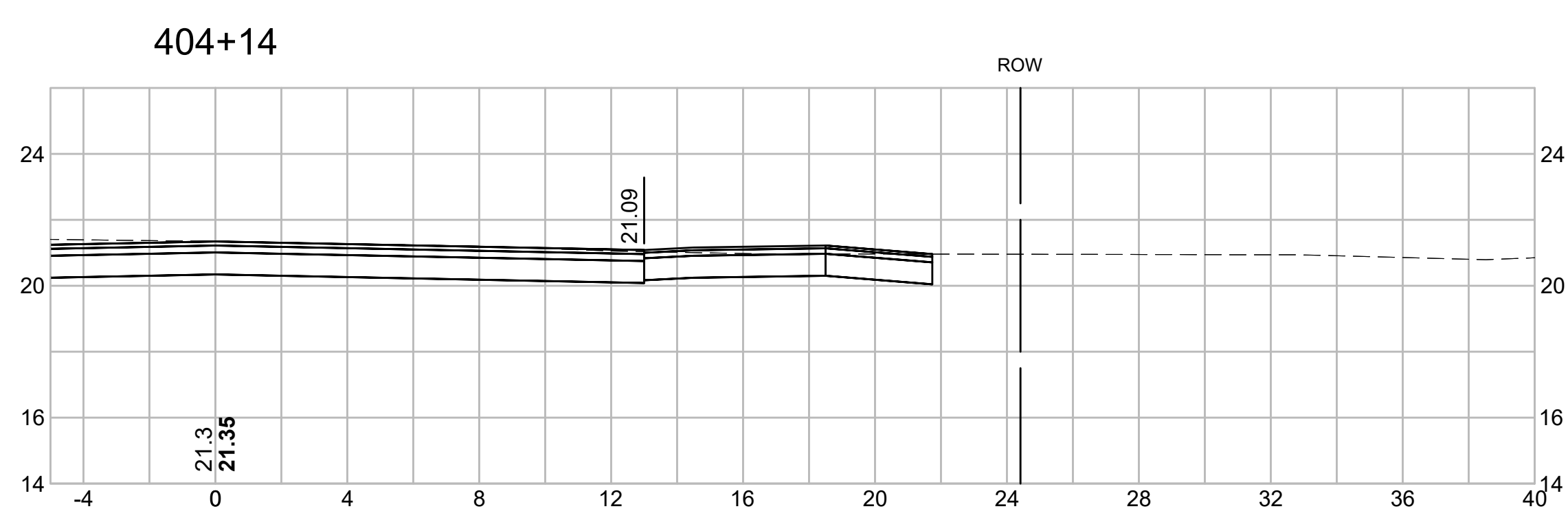
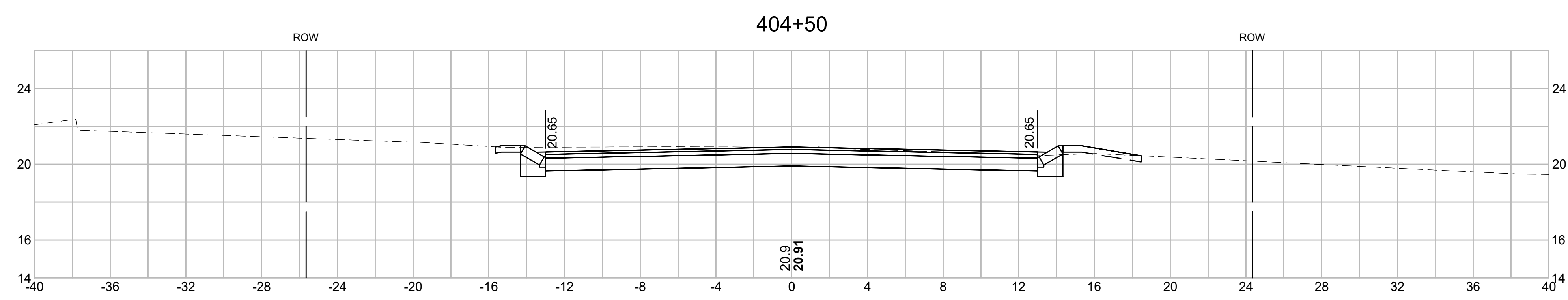
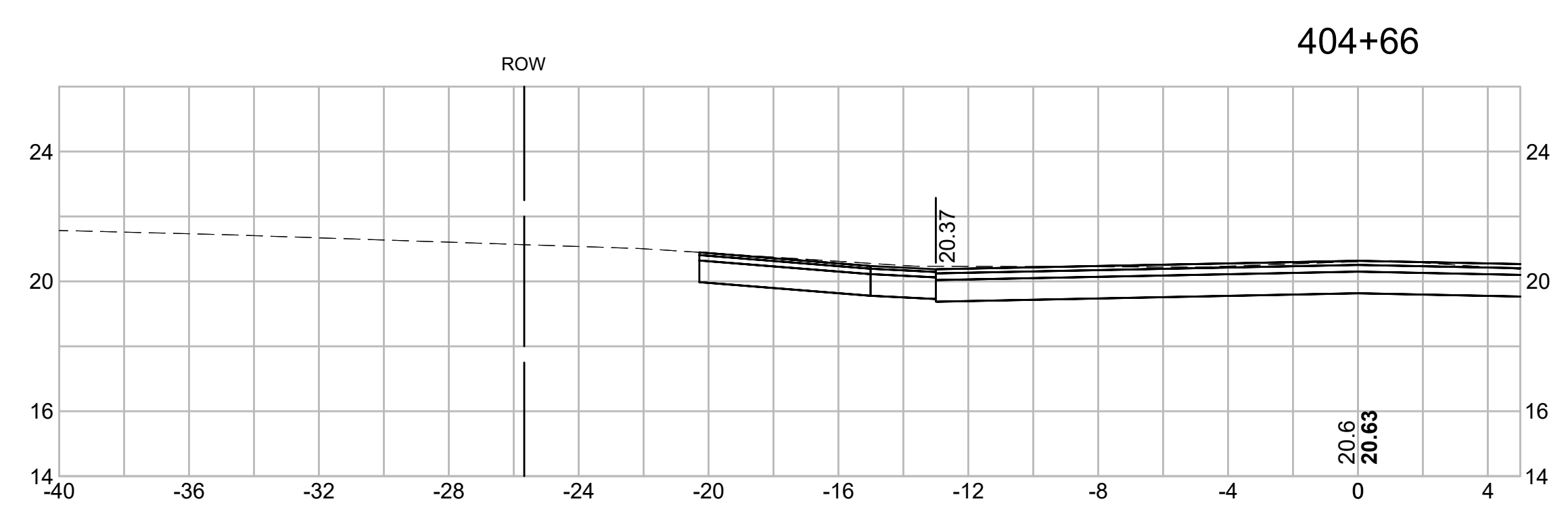
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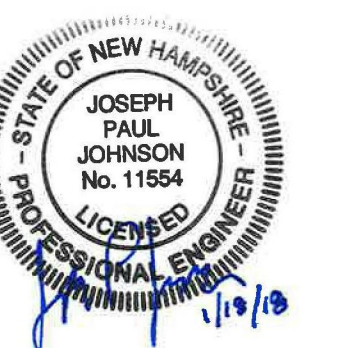
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

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 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

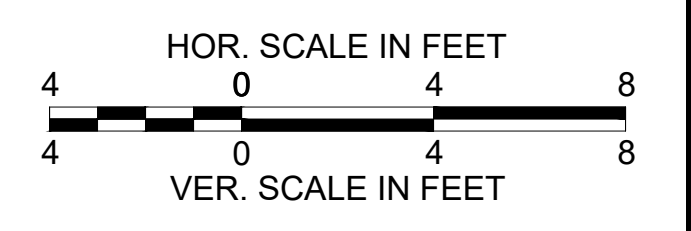
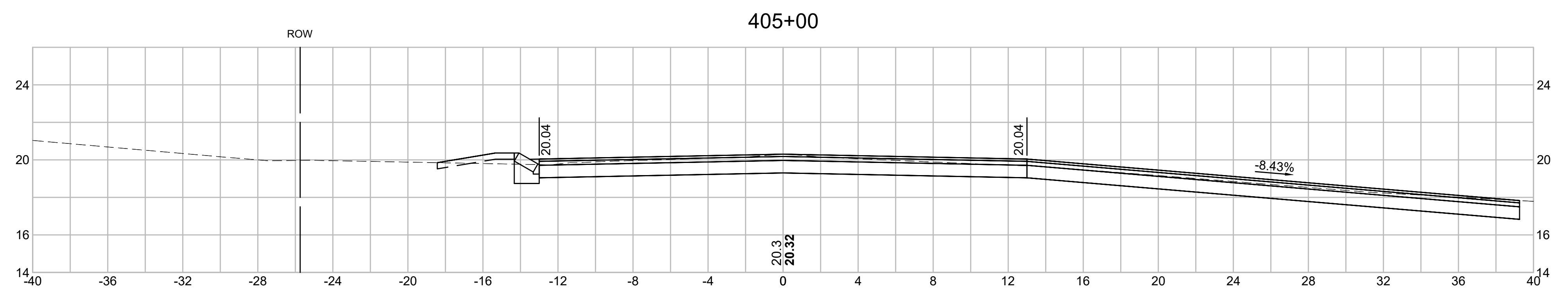
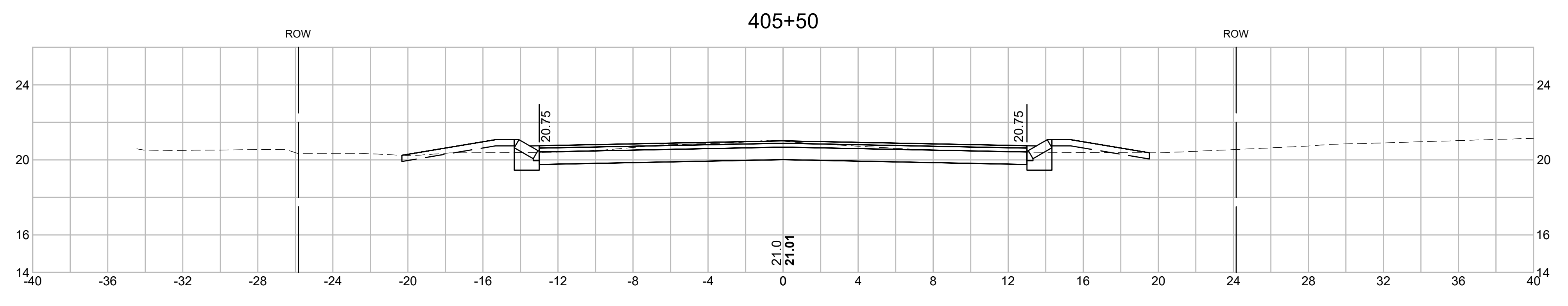
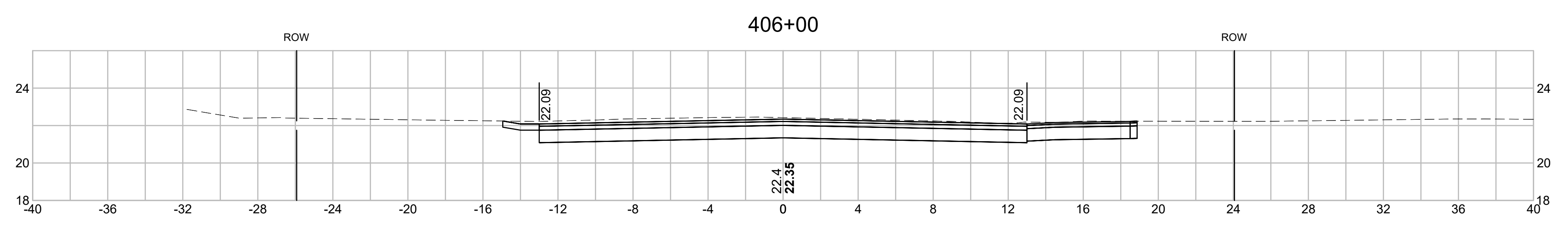
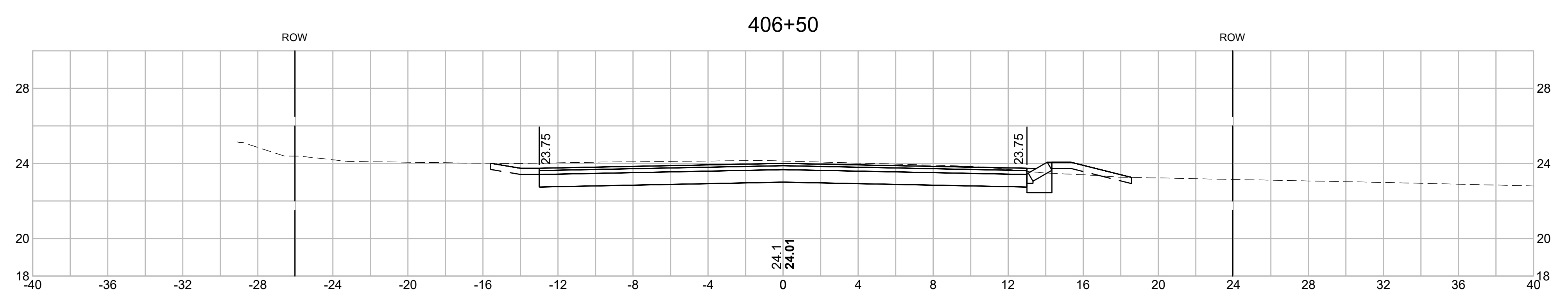
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**CENTRAL
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 CUTTS STREET
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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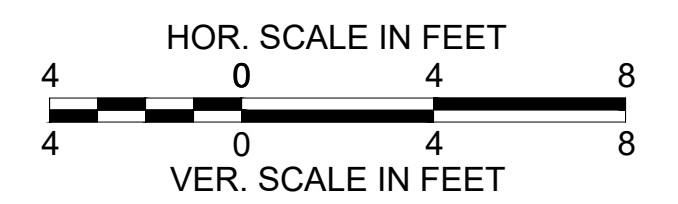
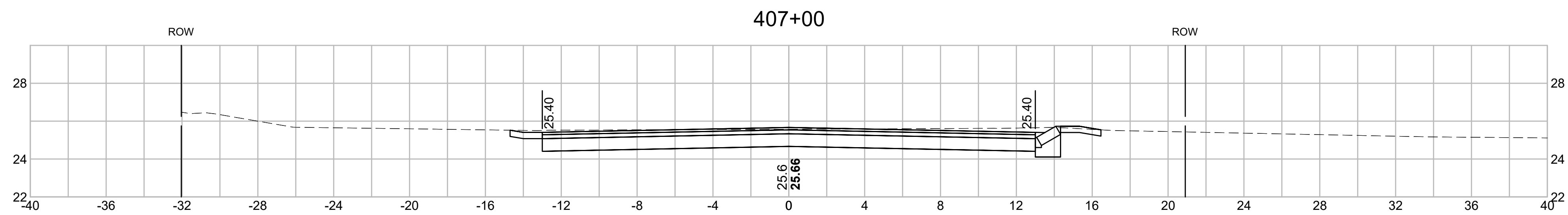
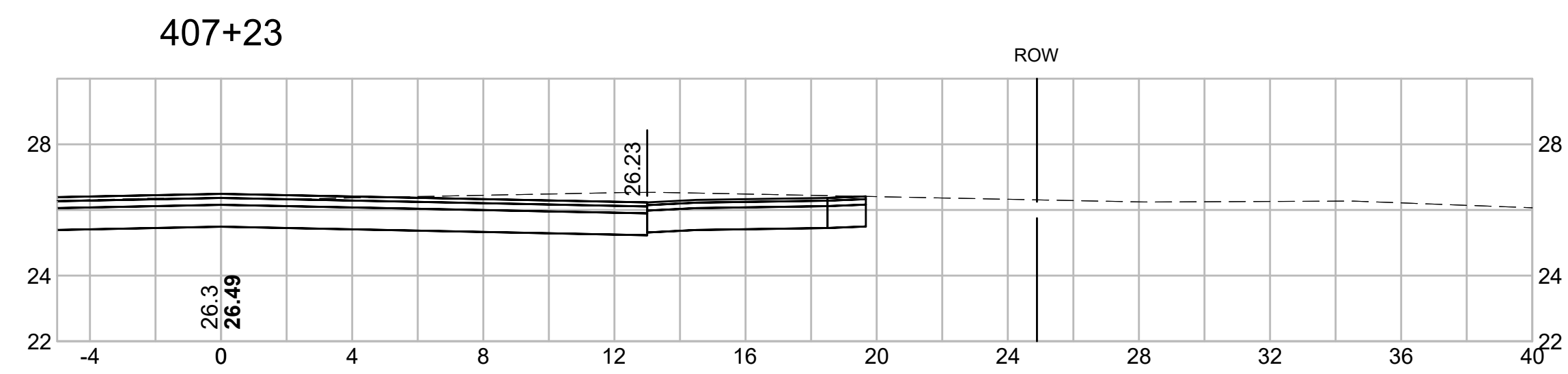
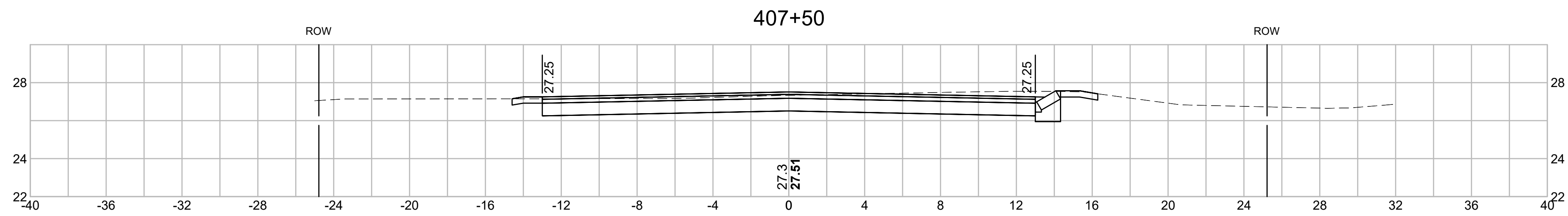
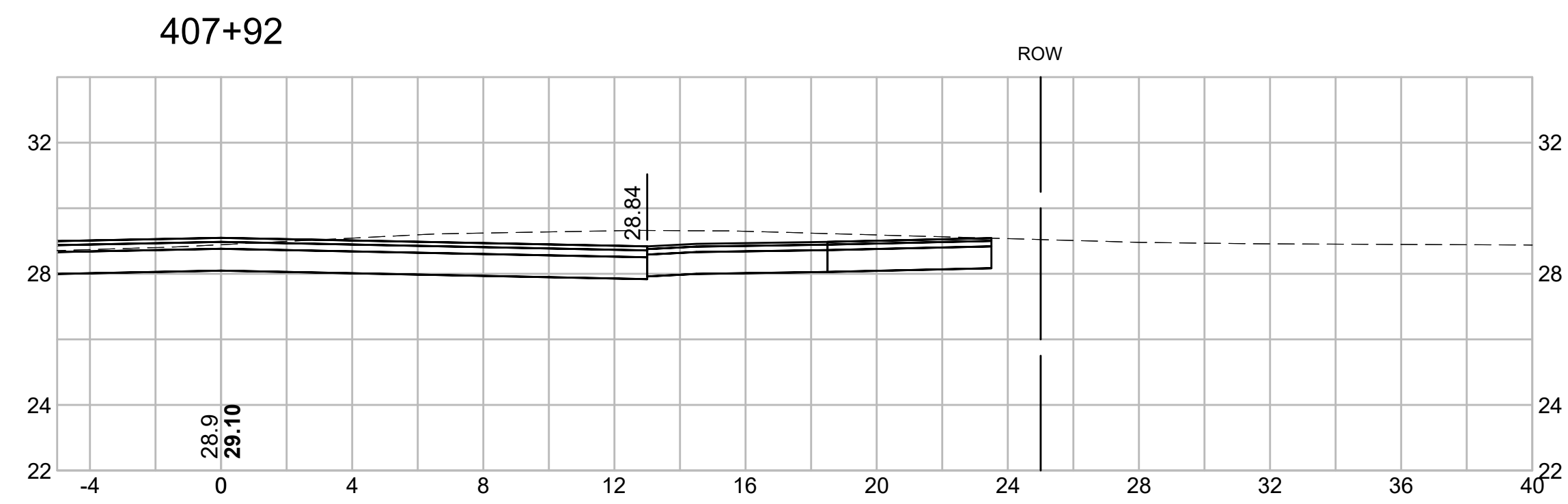
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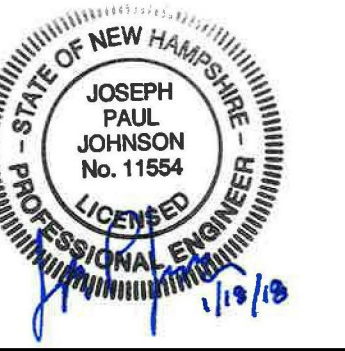
**CENTRAL
 AVENUE &
 CUTTS STREET
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SCALE: 1"=4'

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 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

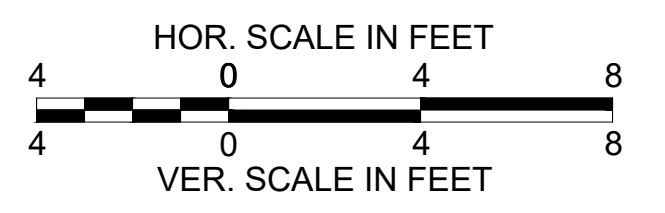
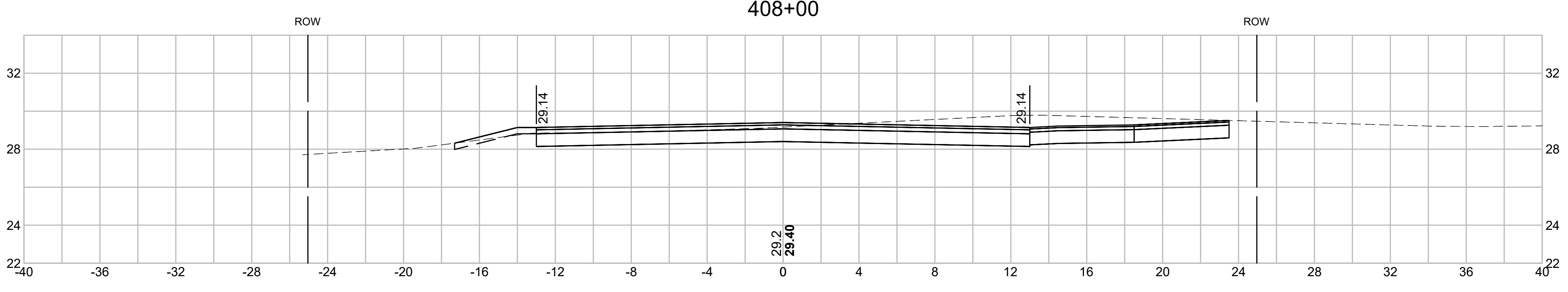
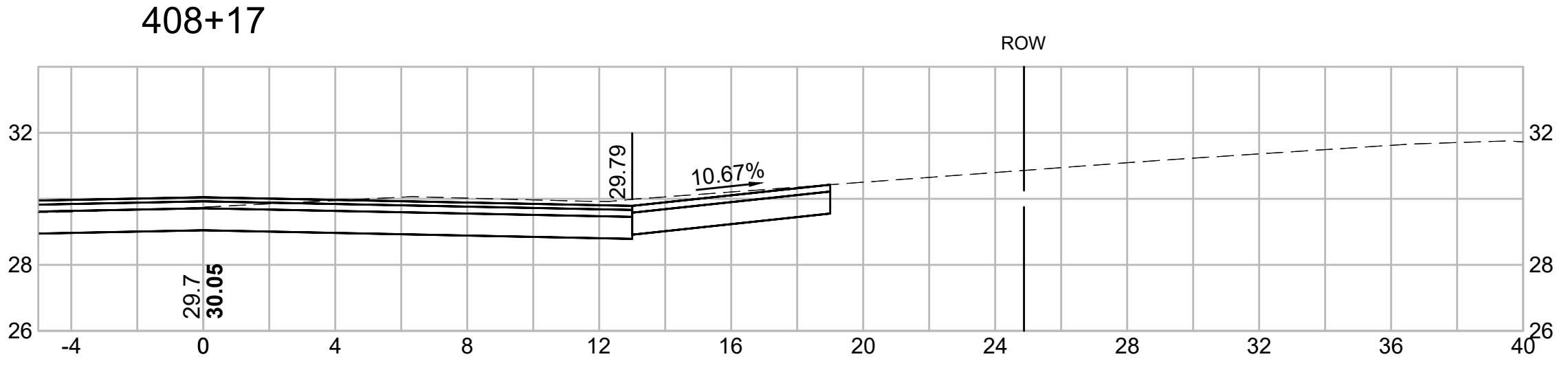
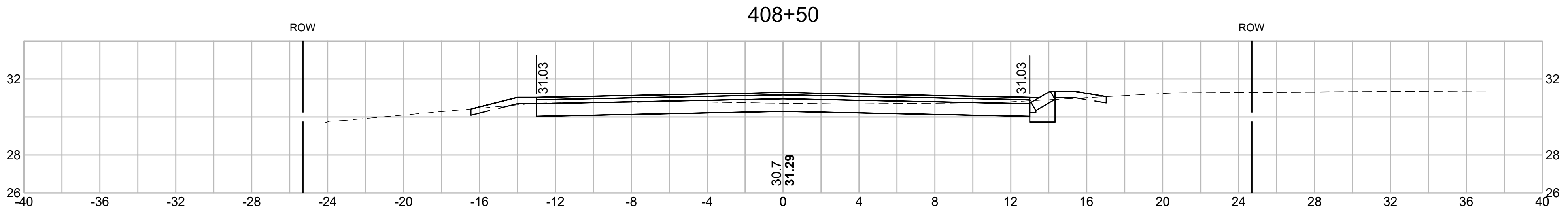
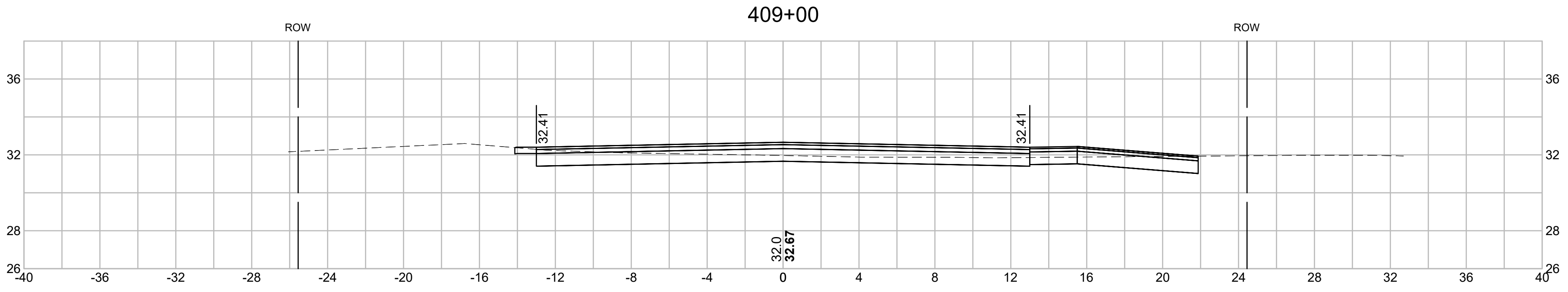
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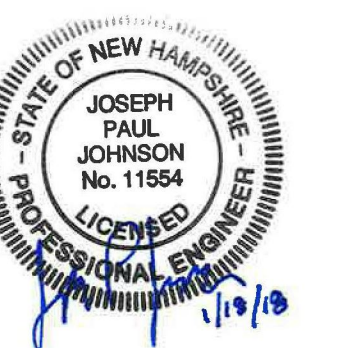
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
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SCALE: 1"=4'
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 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

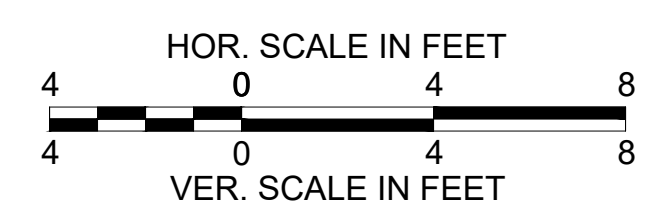
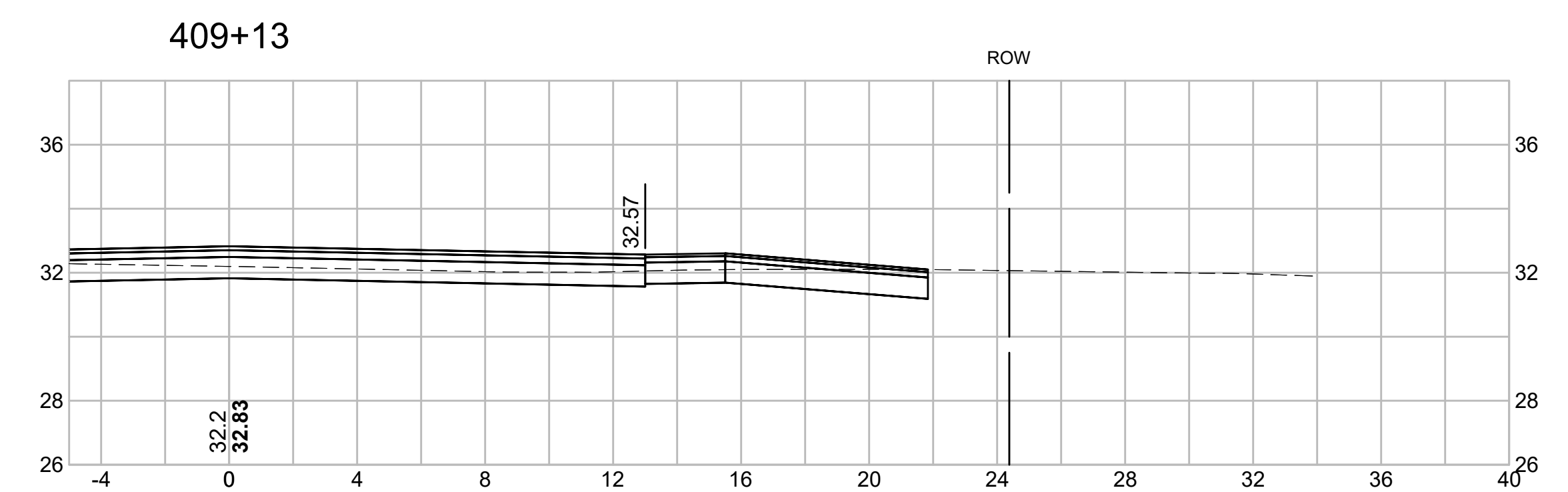
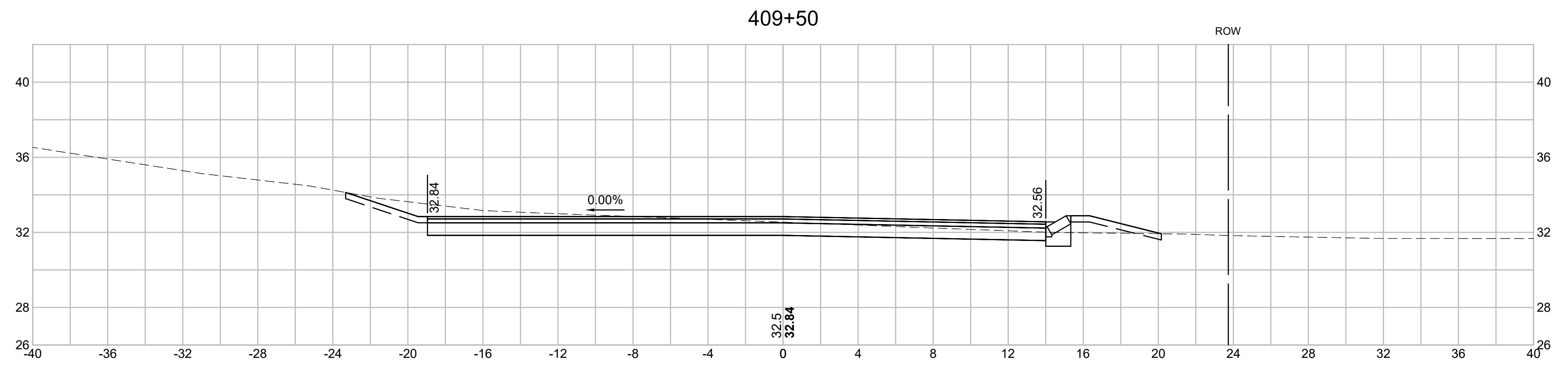
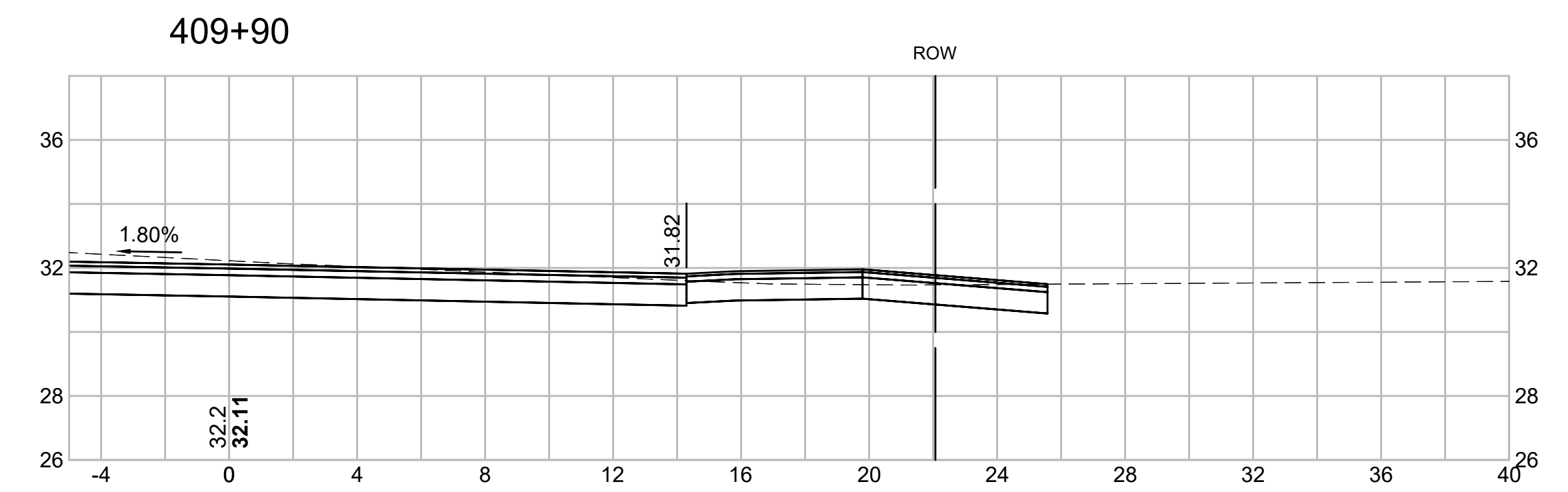
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**CENTRAL
 AVENUE &
 CUTTS STREET
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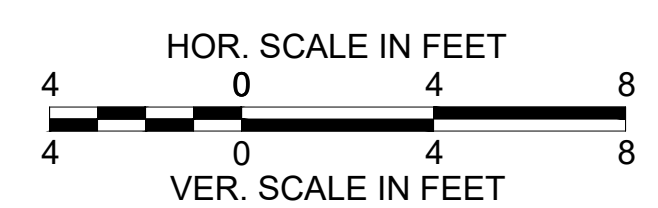
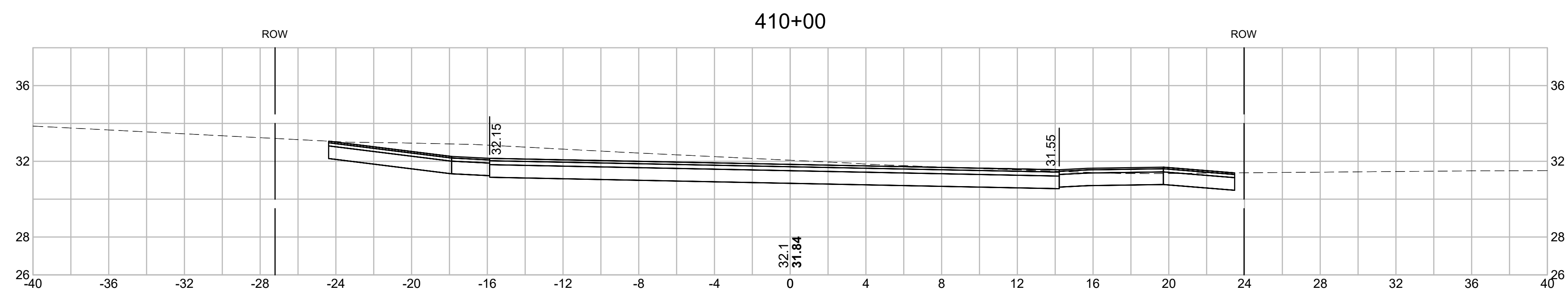
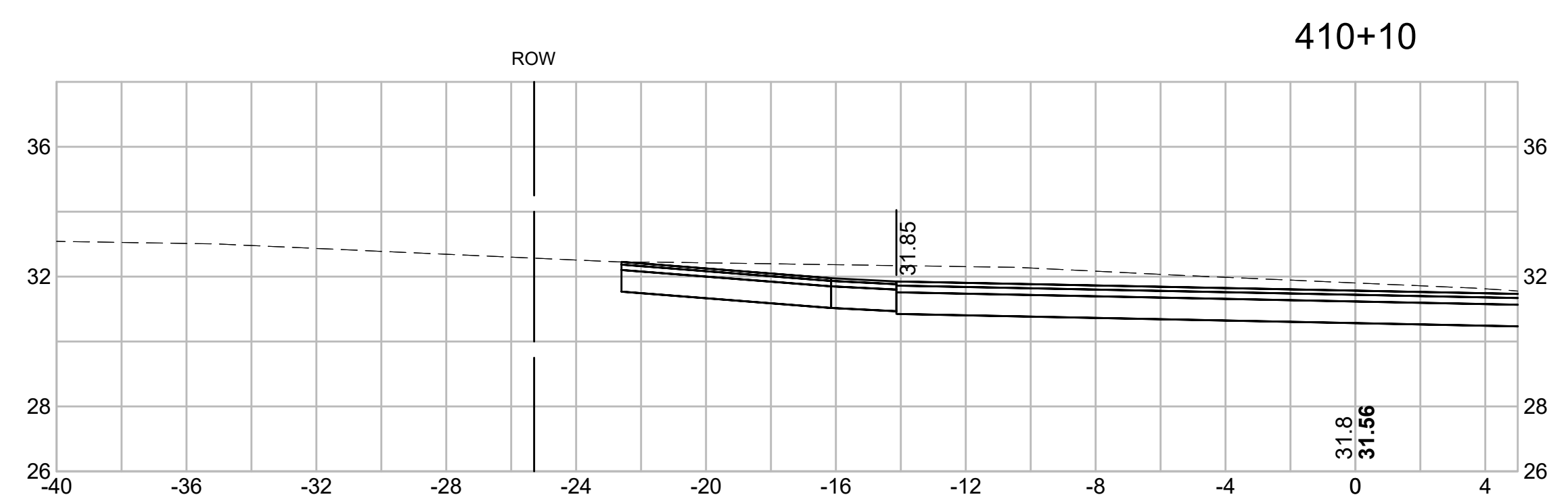
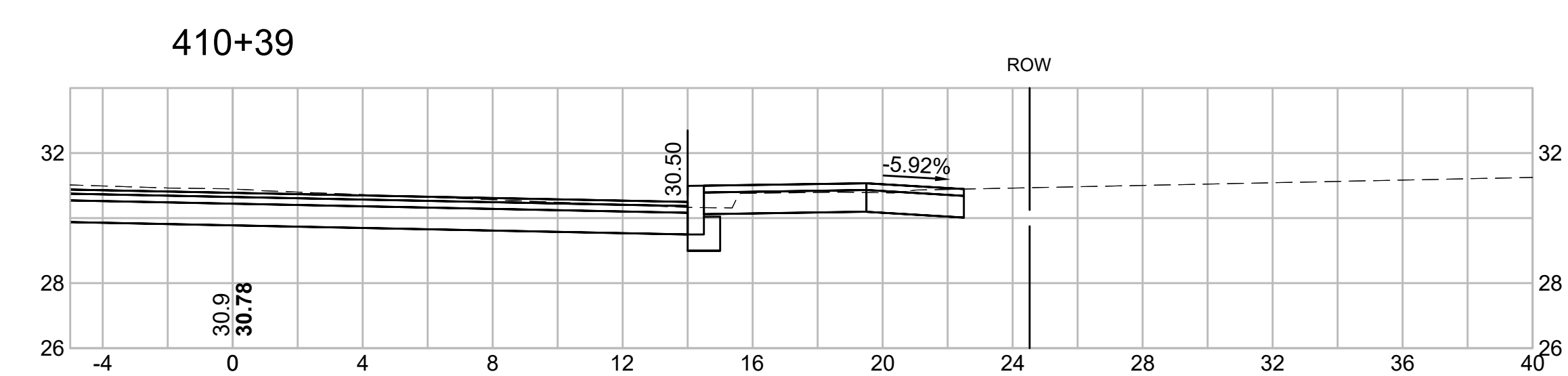
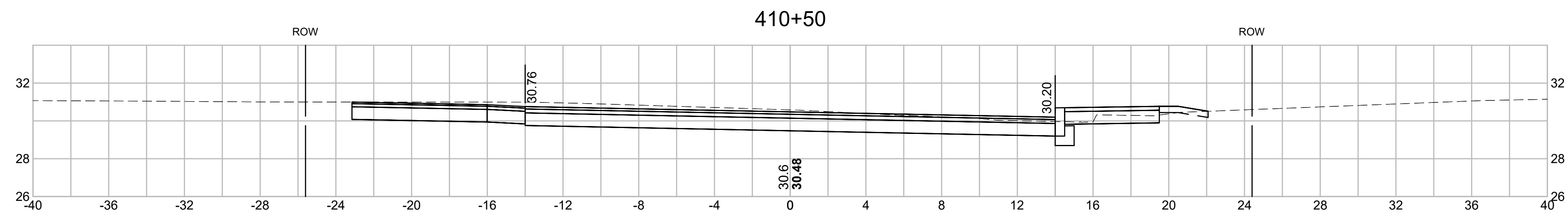
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

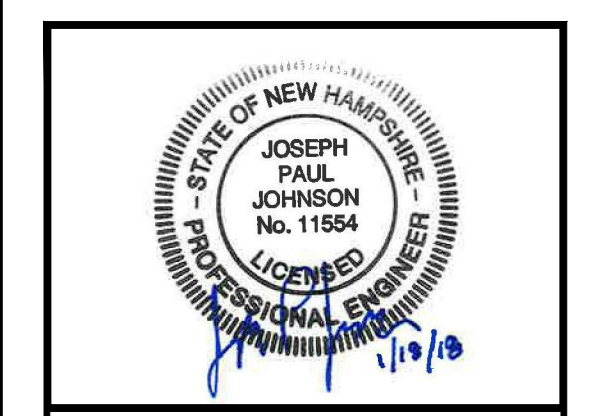
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00





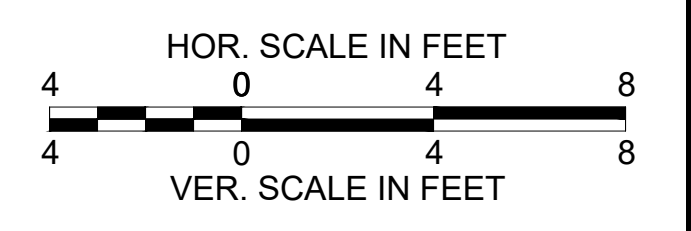
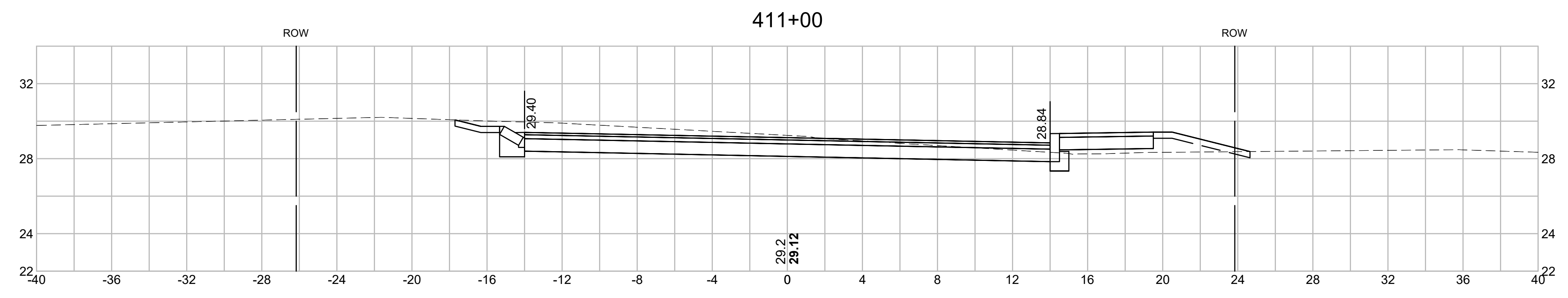
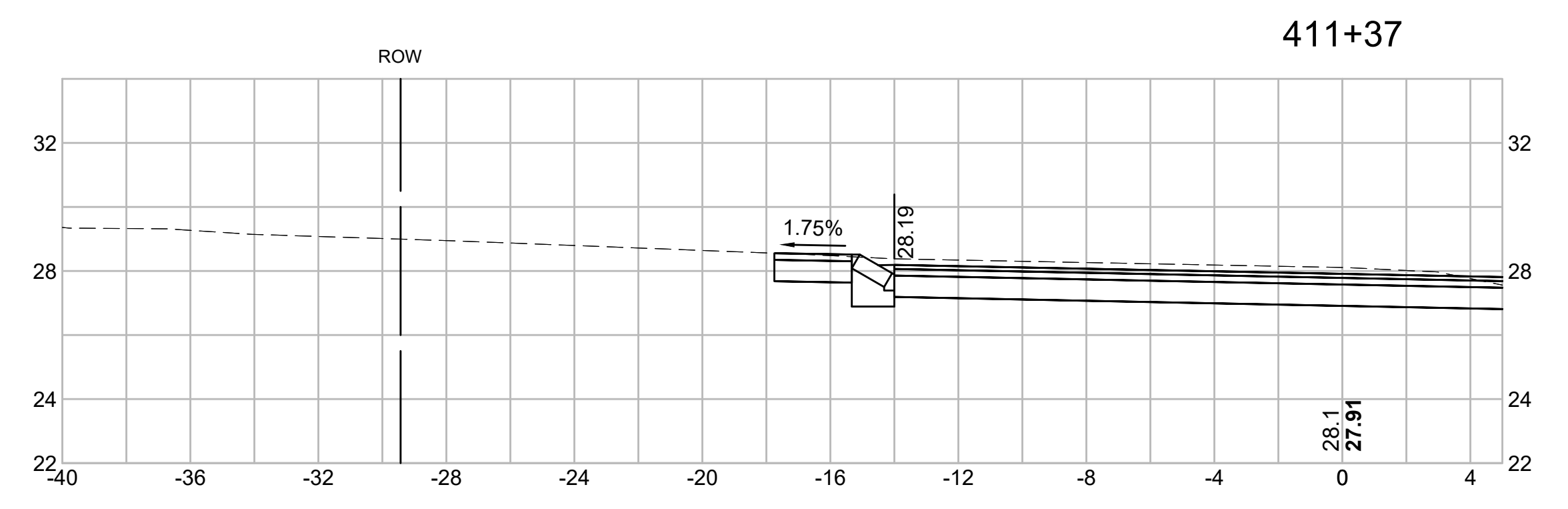
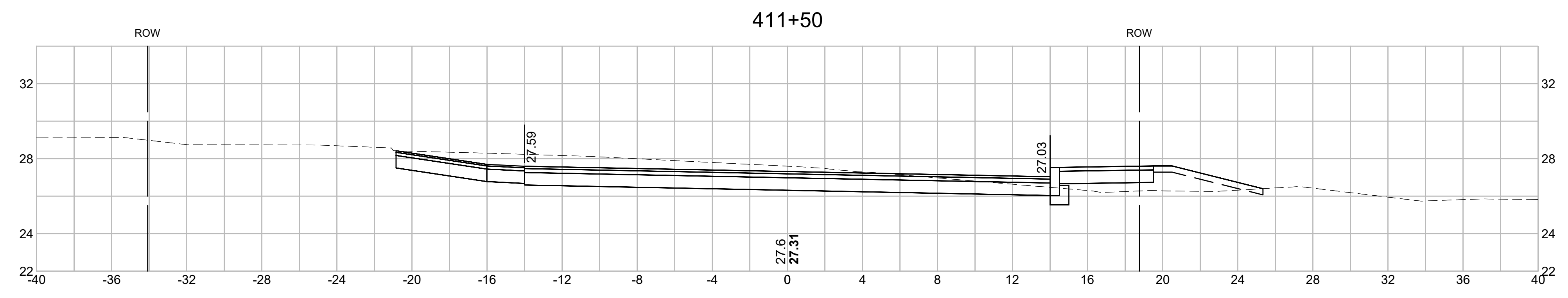
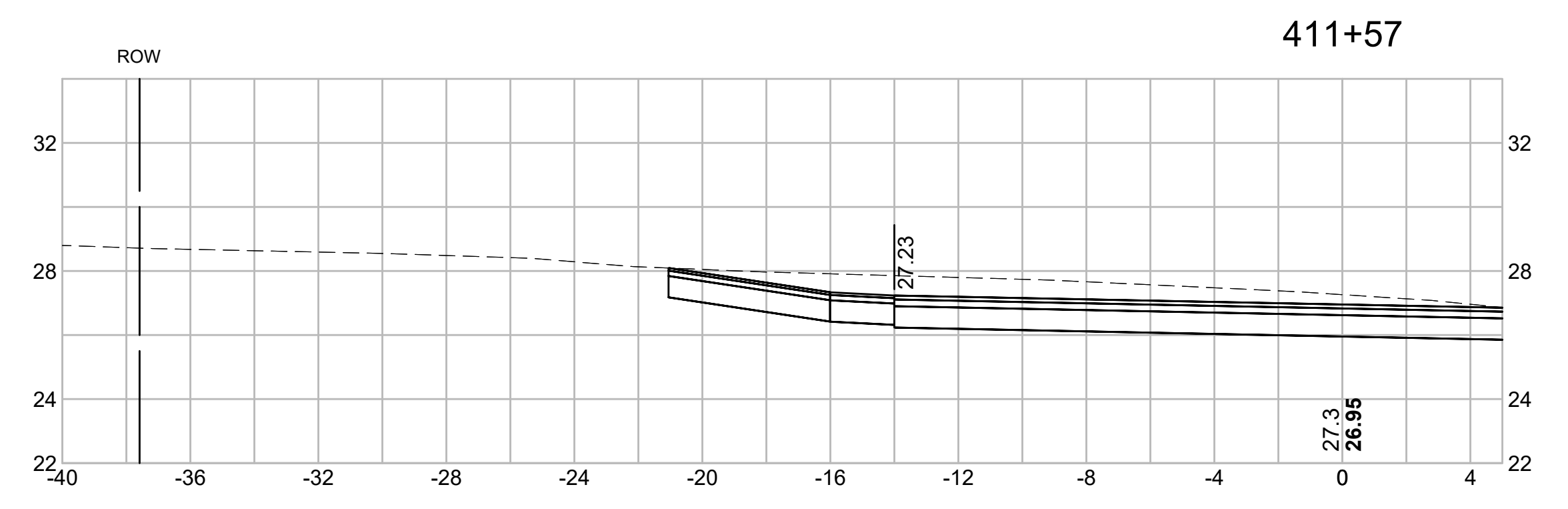
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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

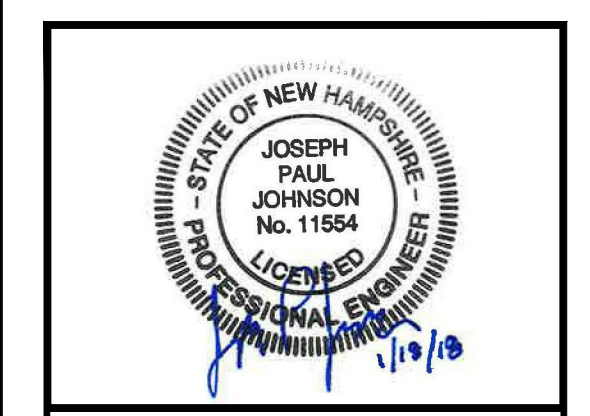
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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**CENTRAL
 AVENUE &
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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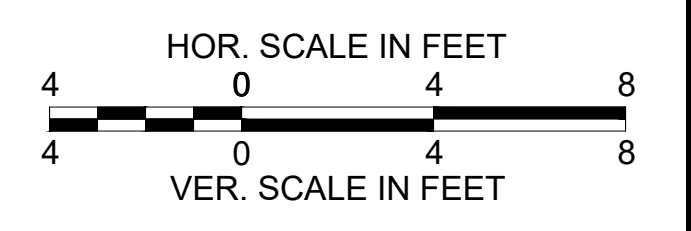
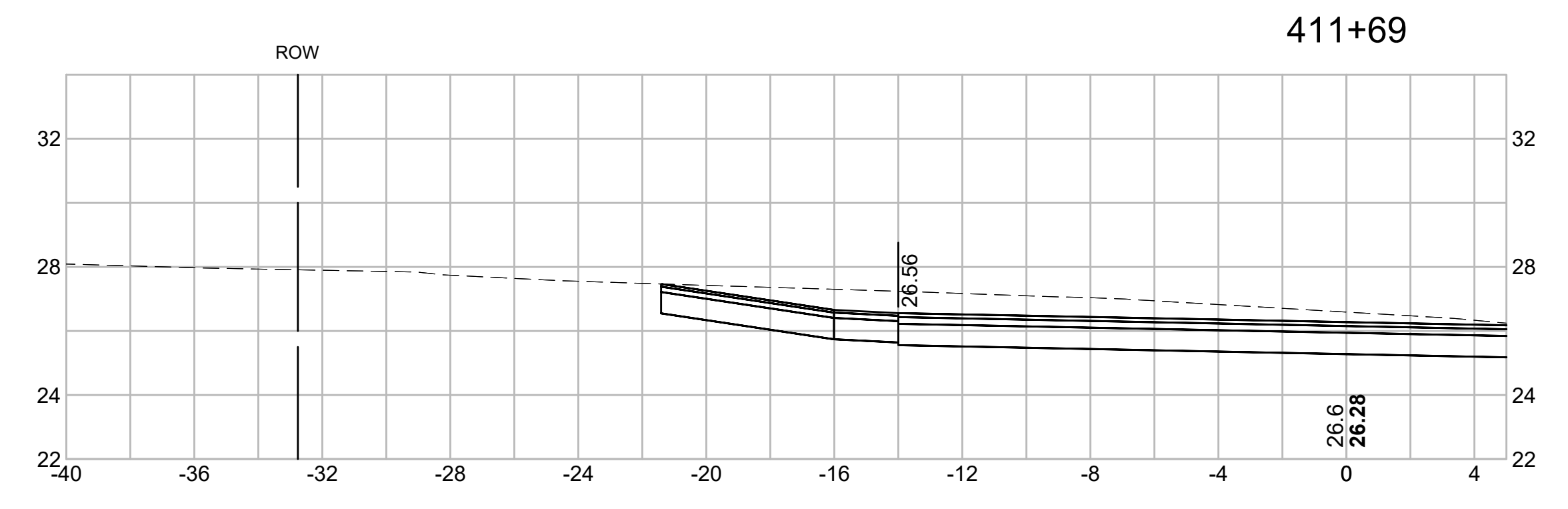
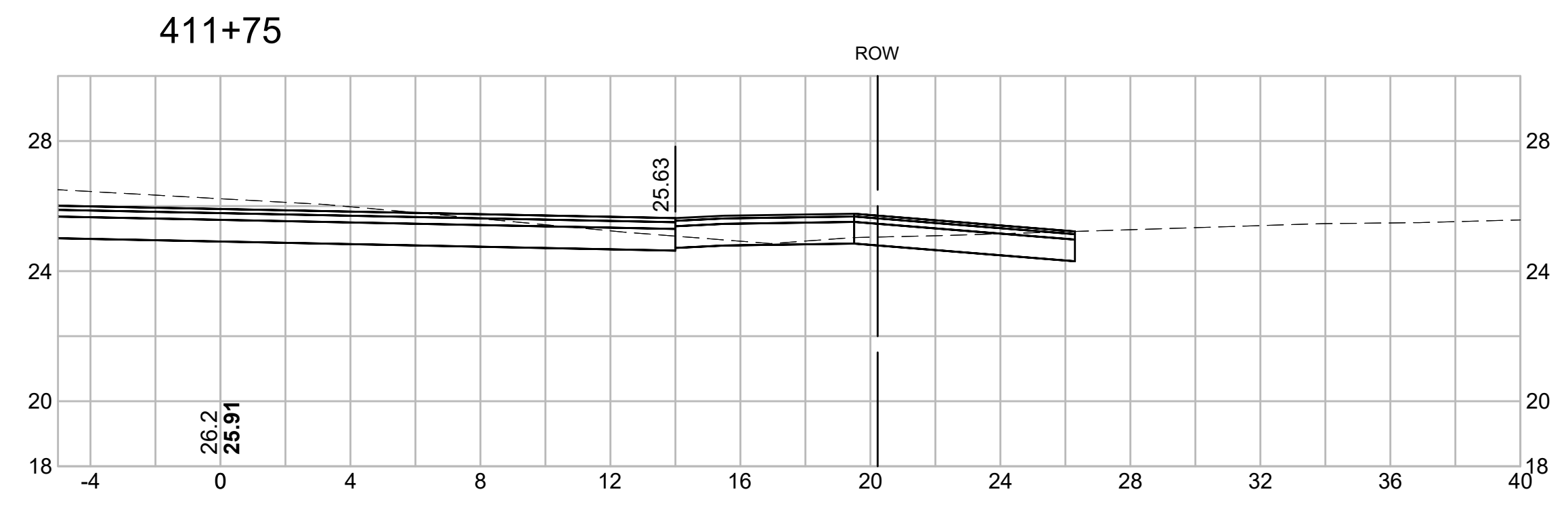
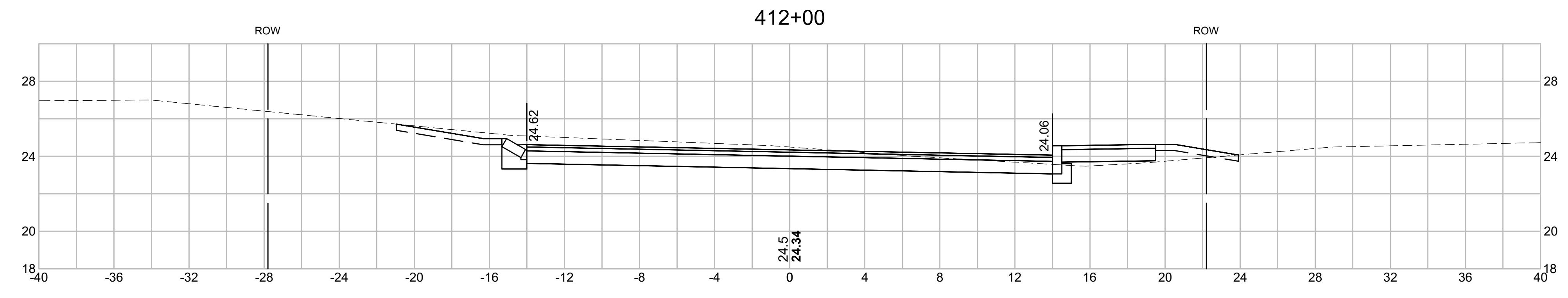
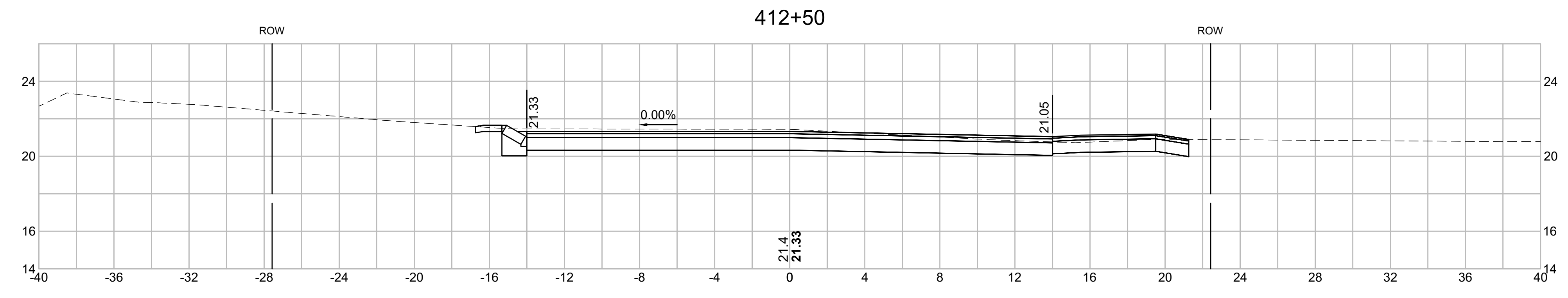
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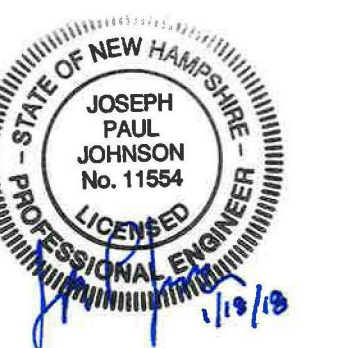
**CENTRAL
 AVENUE &
 CUTTS STREET
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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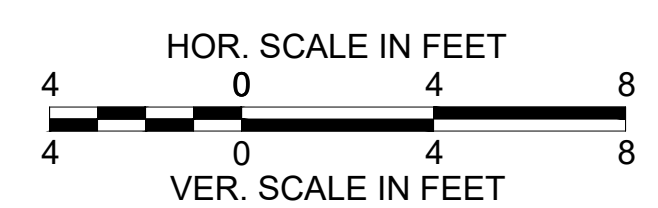
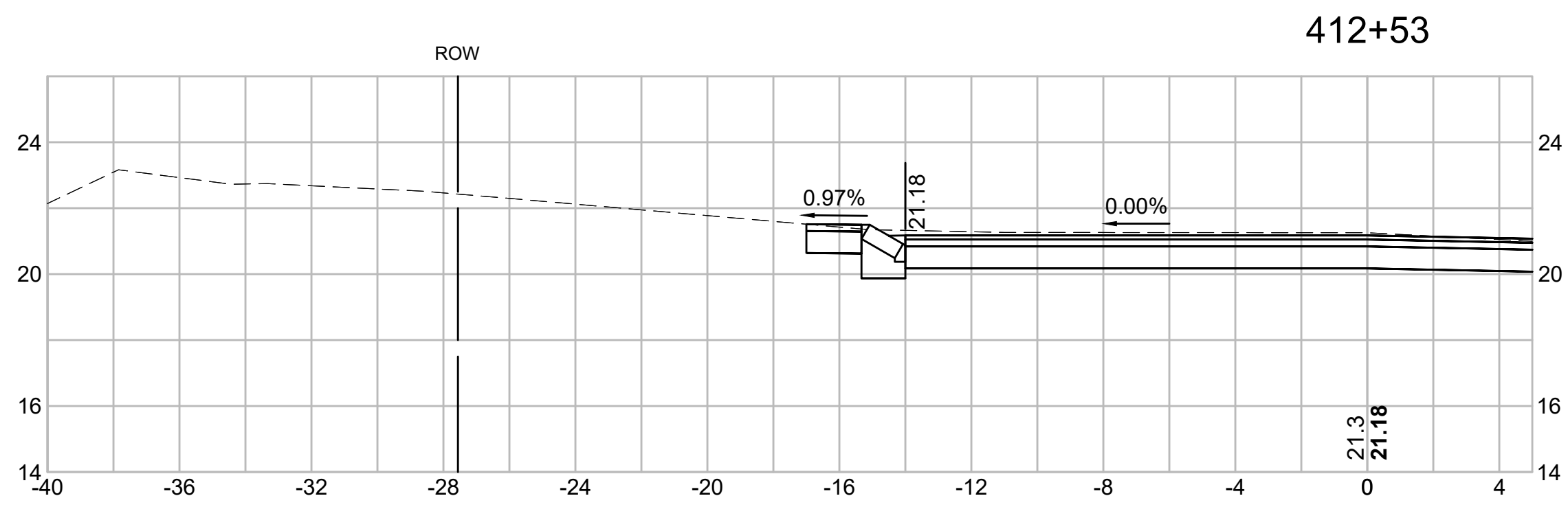
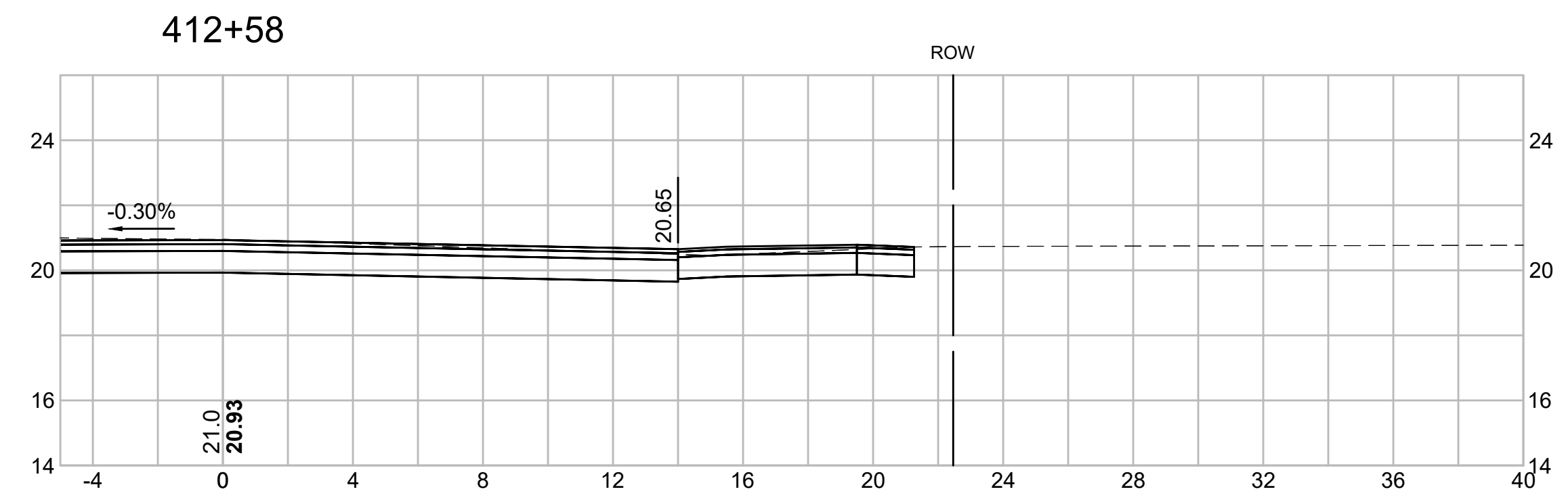
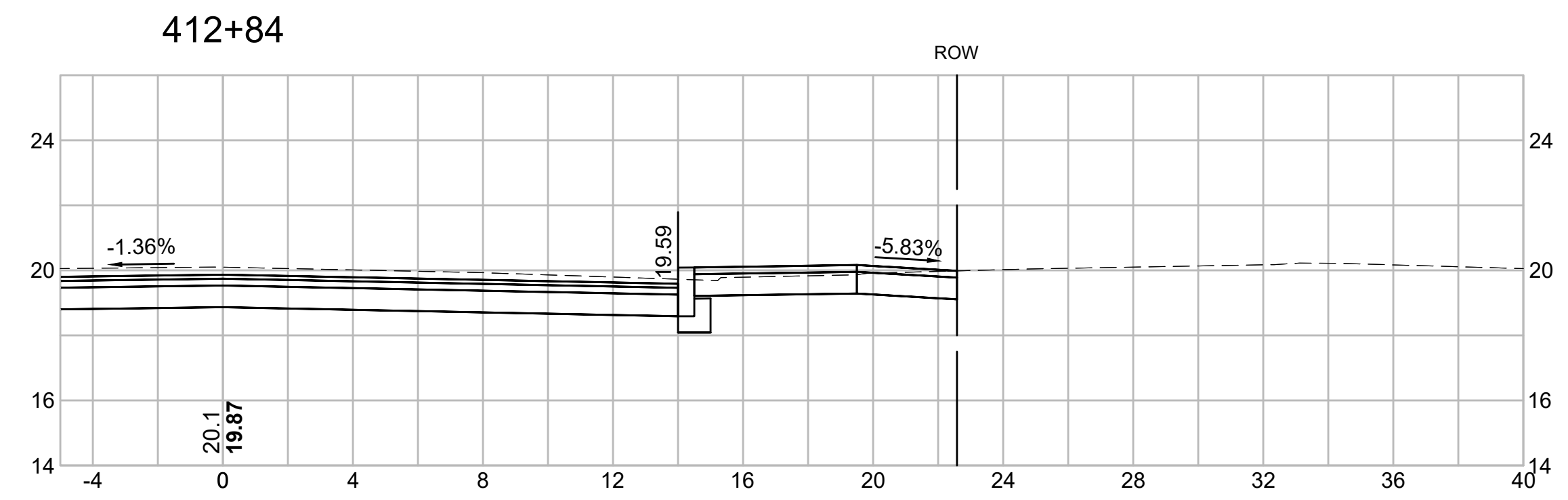
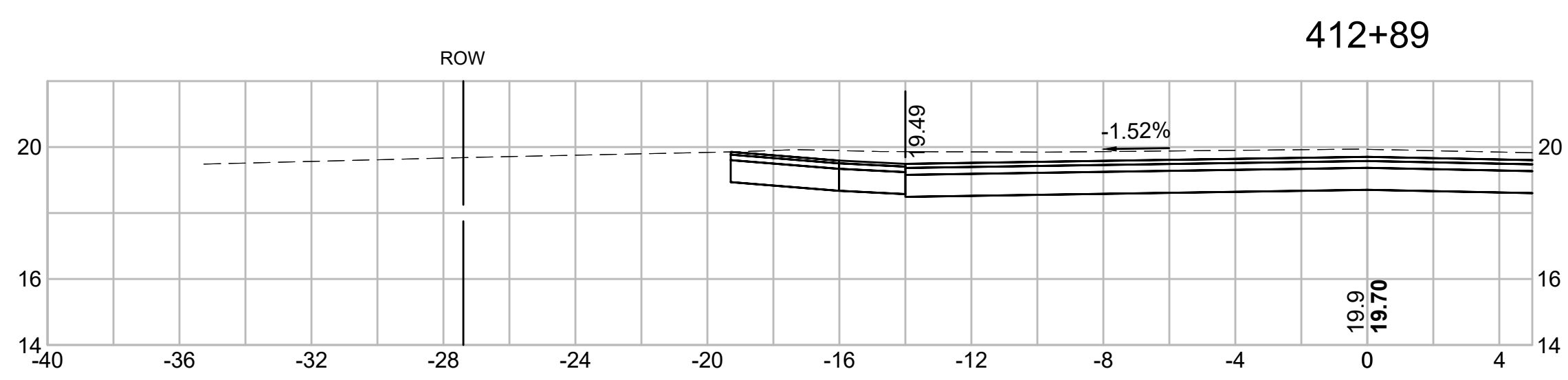
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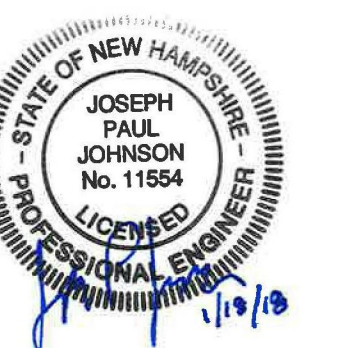
**CENTRAL
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**IMPROVEMENTS TO MAPLEWOOD
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 PORTSMOUTH, NH**

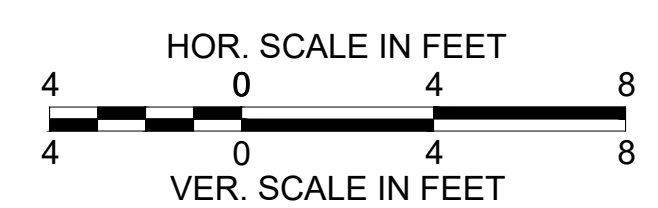
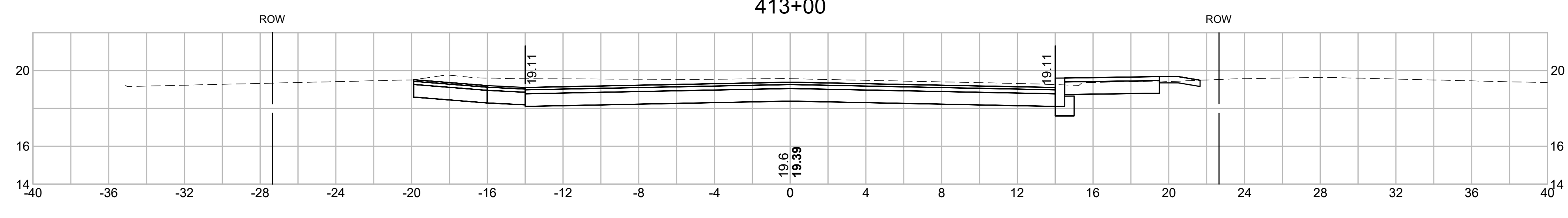
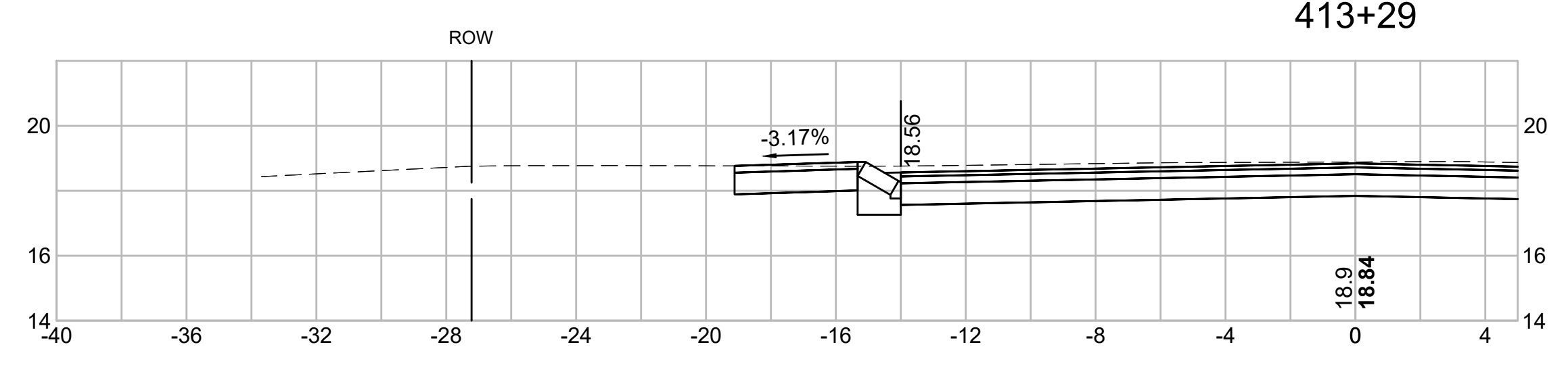
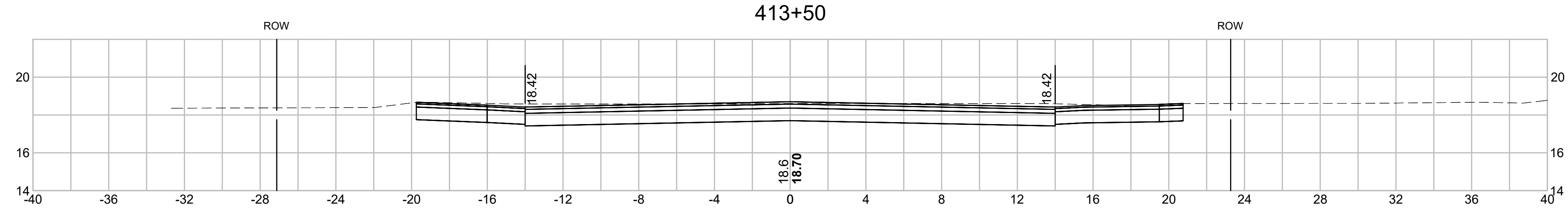
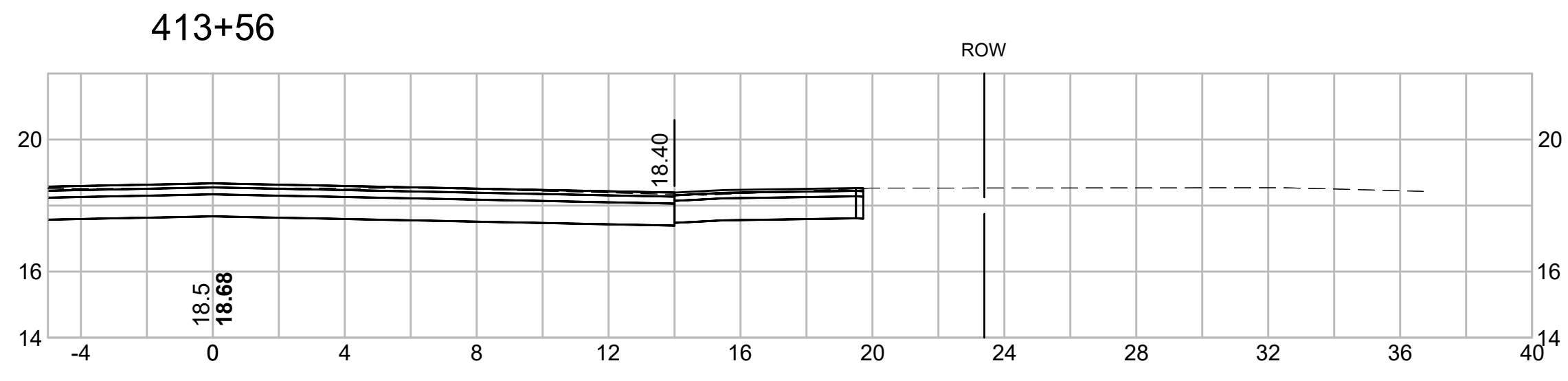
REVISIONS		
NO.	REVISION	DATE

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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
 2015086.00





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

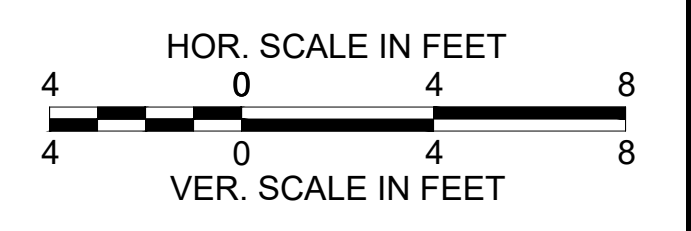
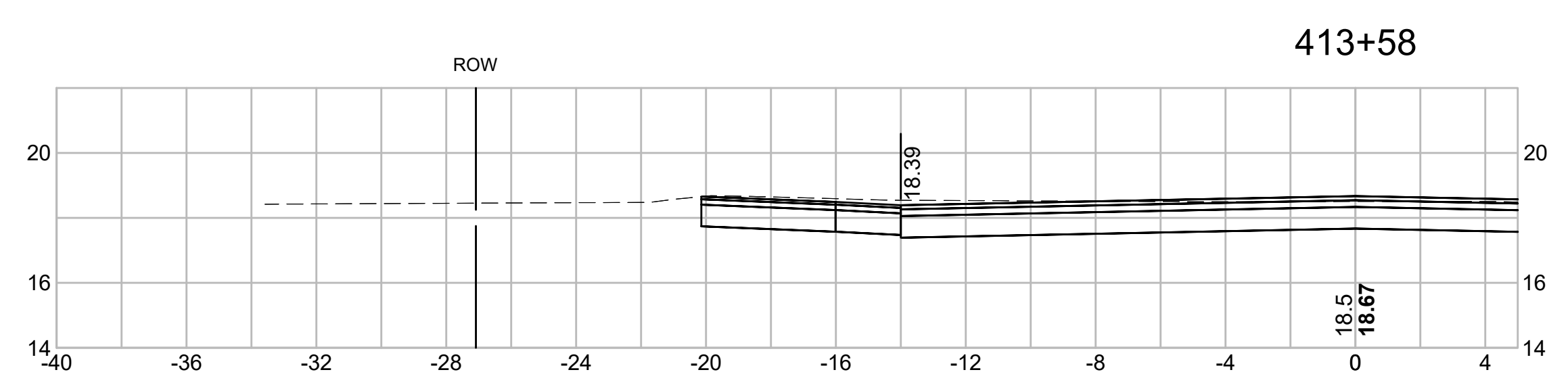
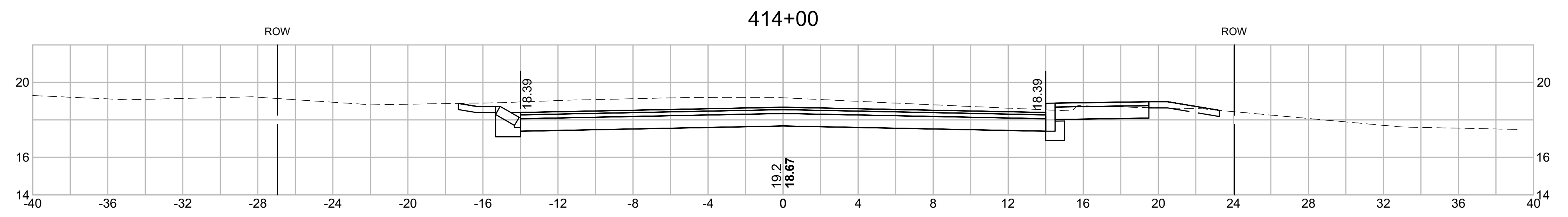
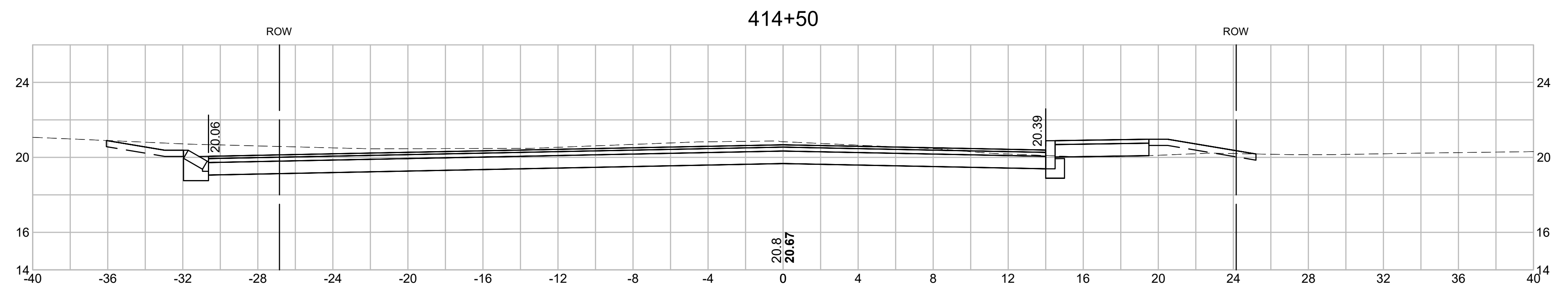
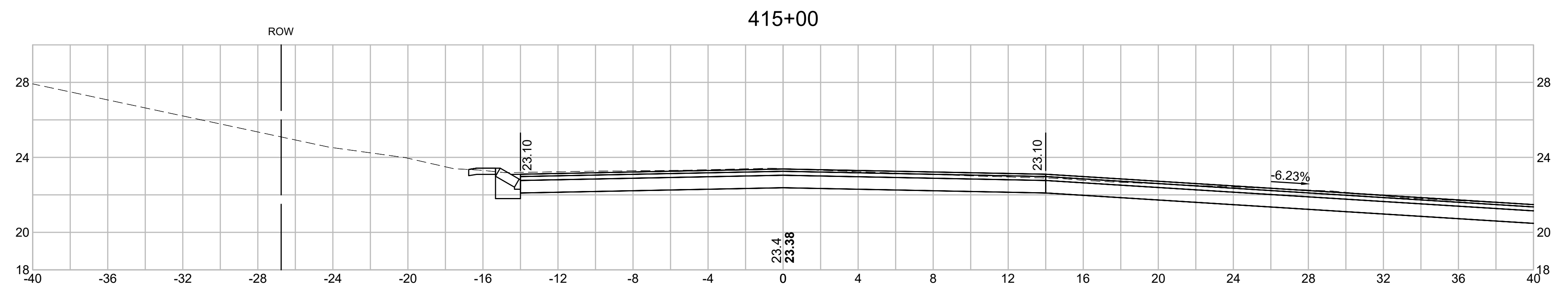
REVISIONS		
NO.	REVISION	DATE

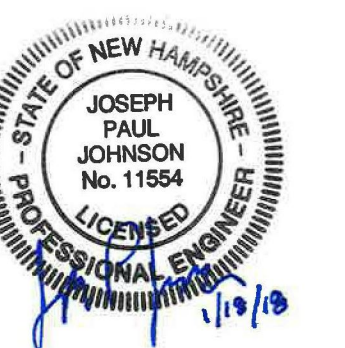
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

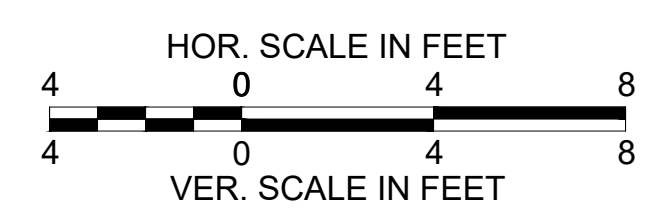
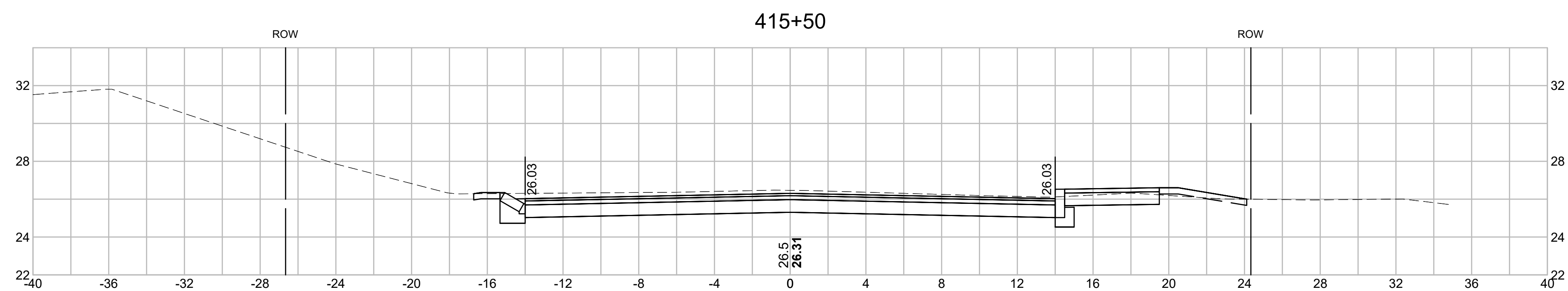
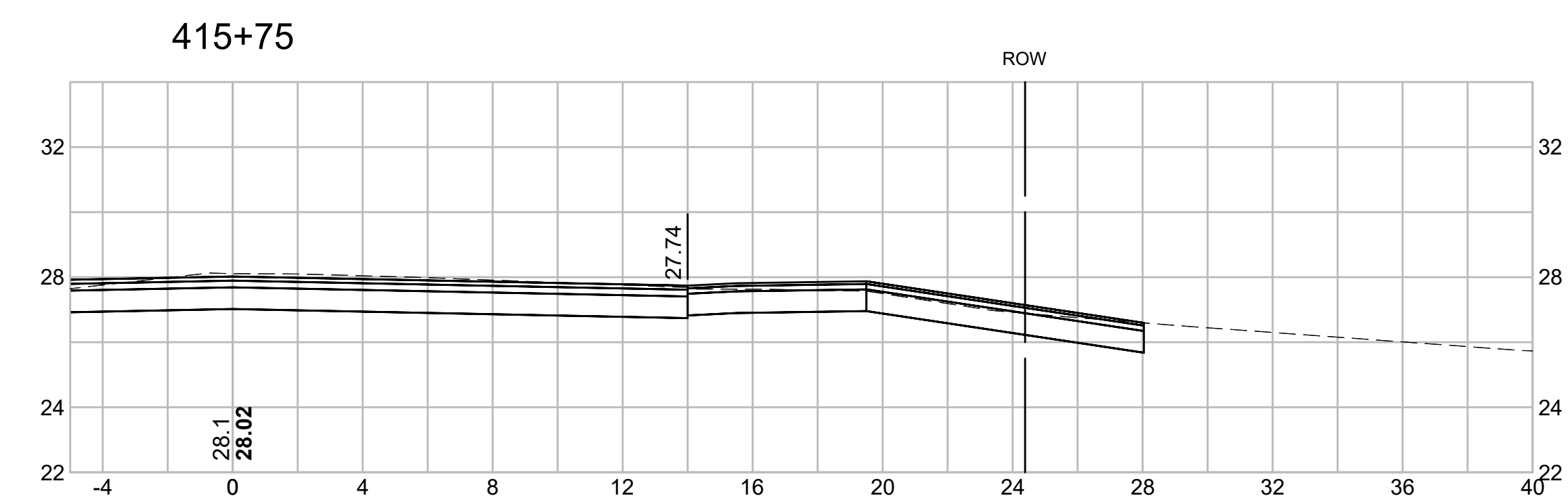
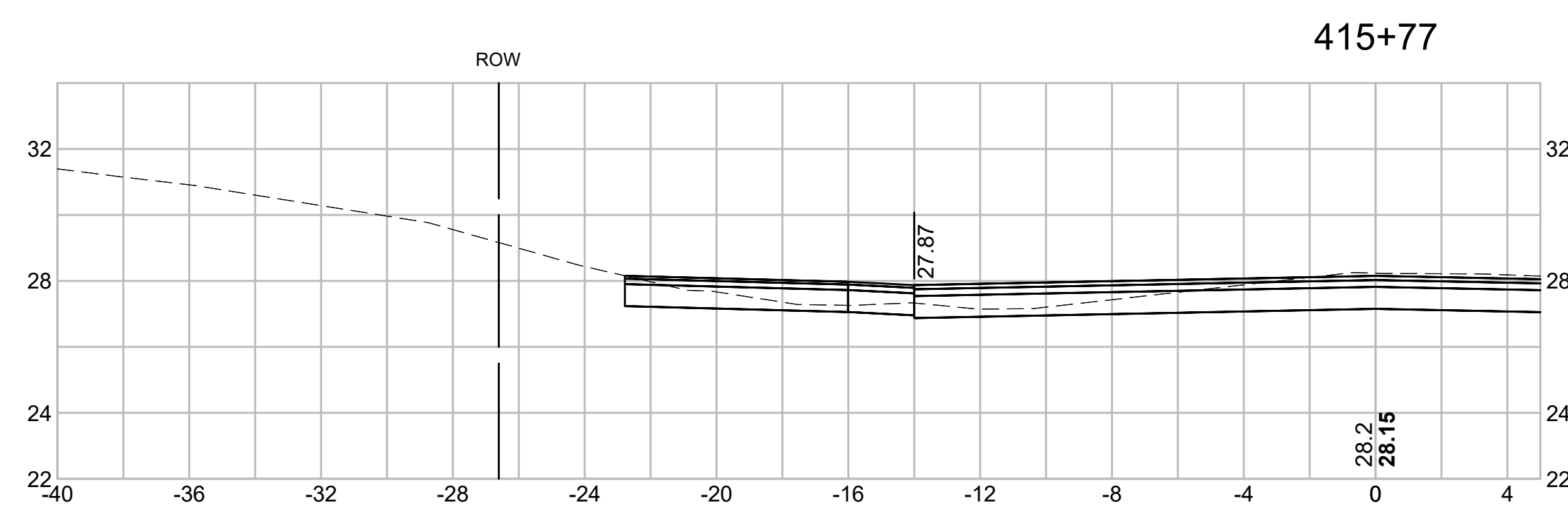
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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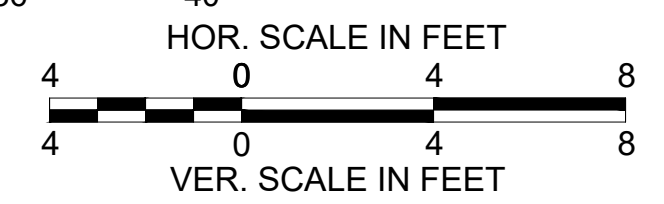
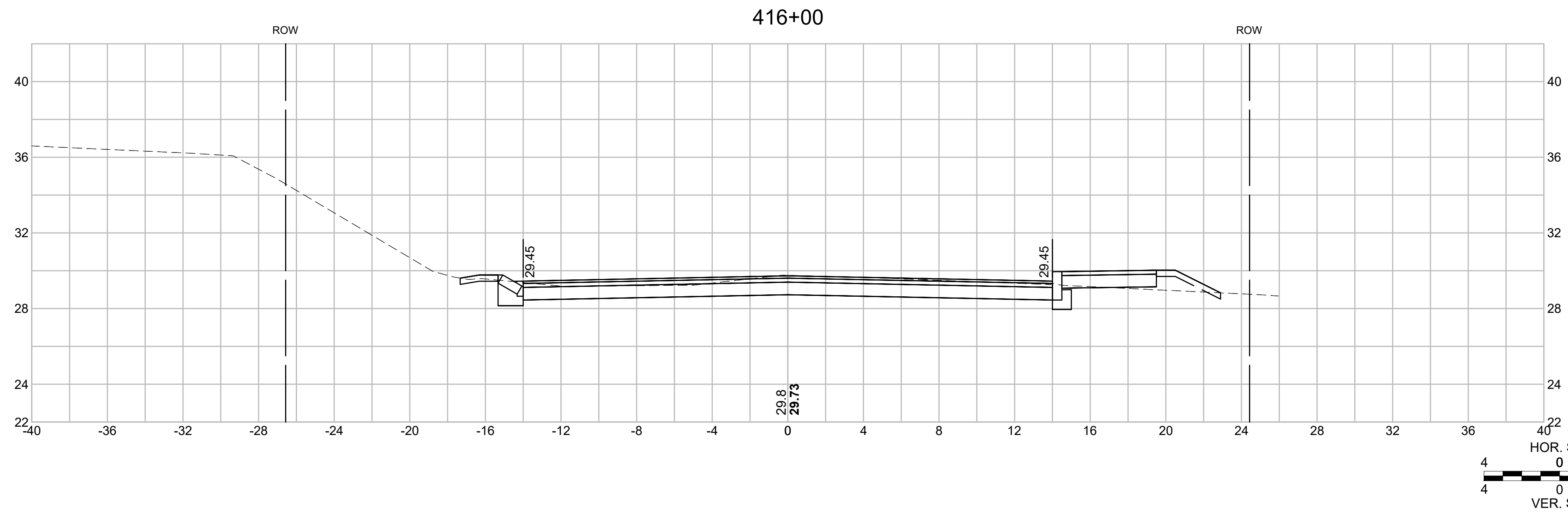
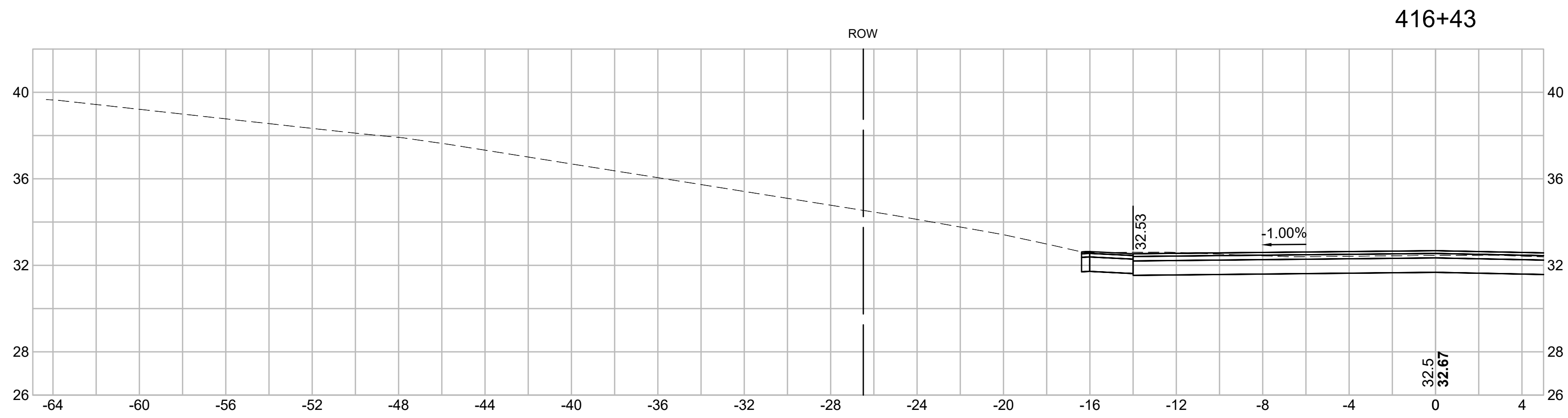
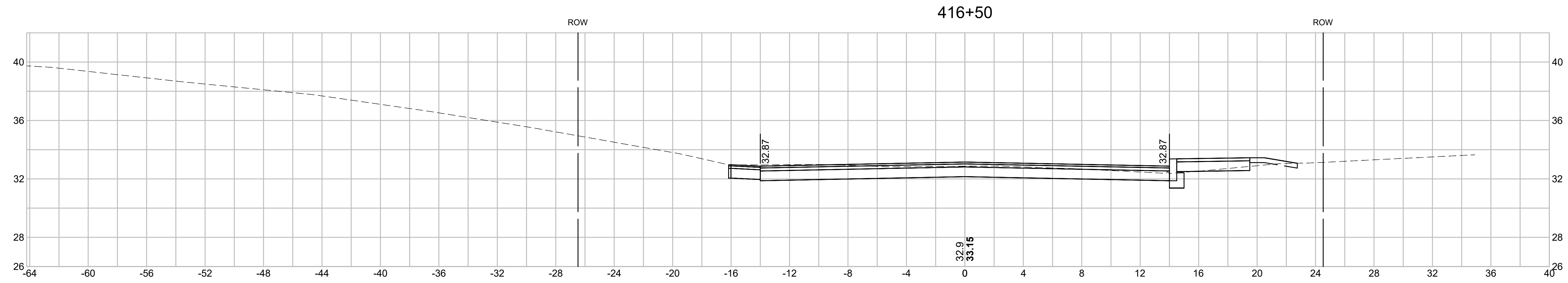
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

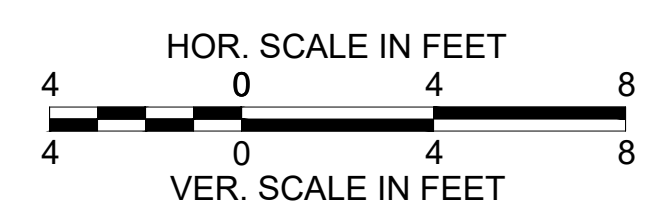
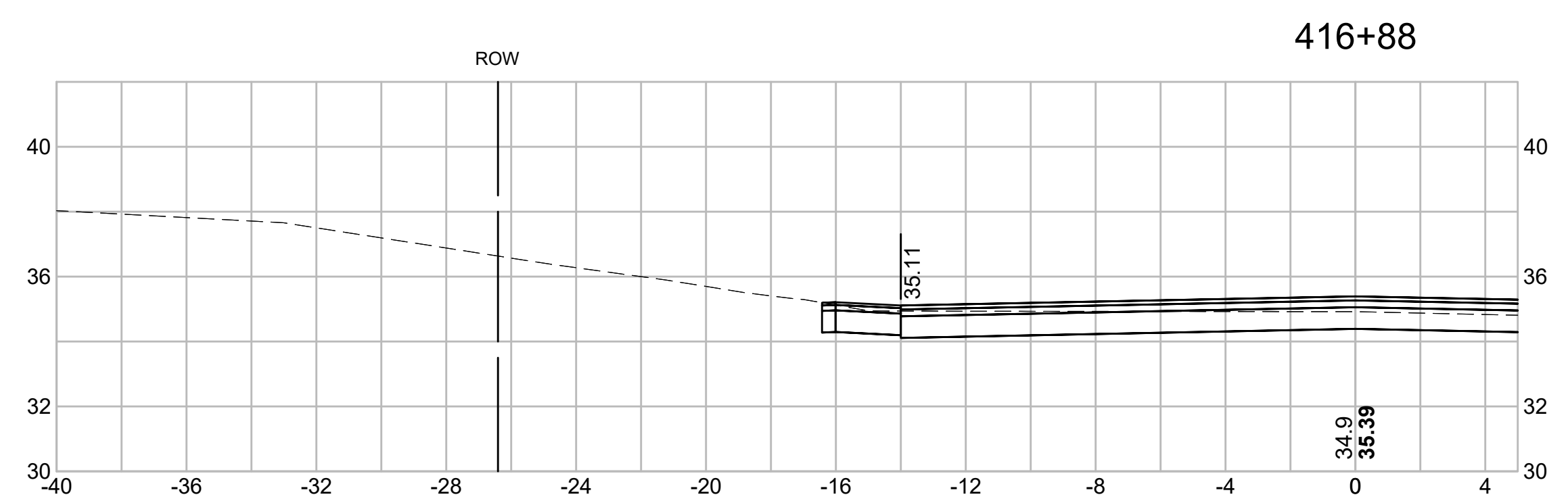
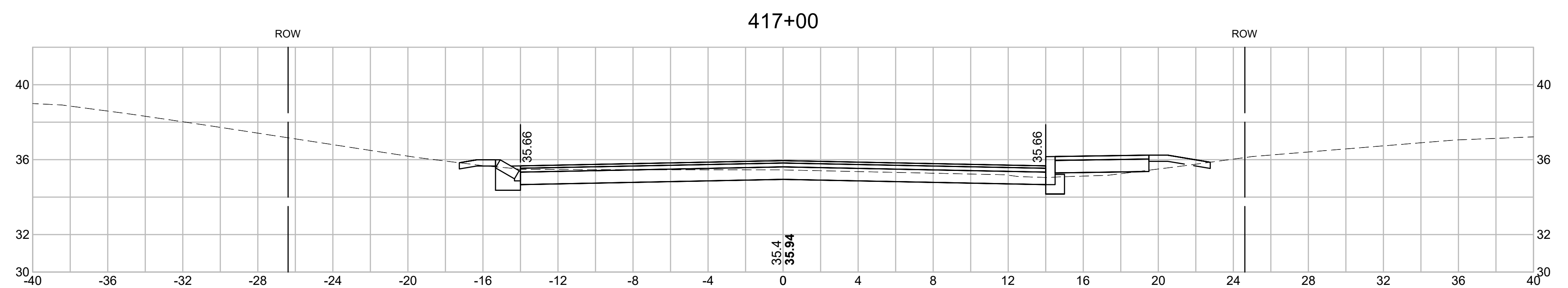
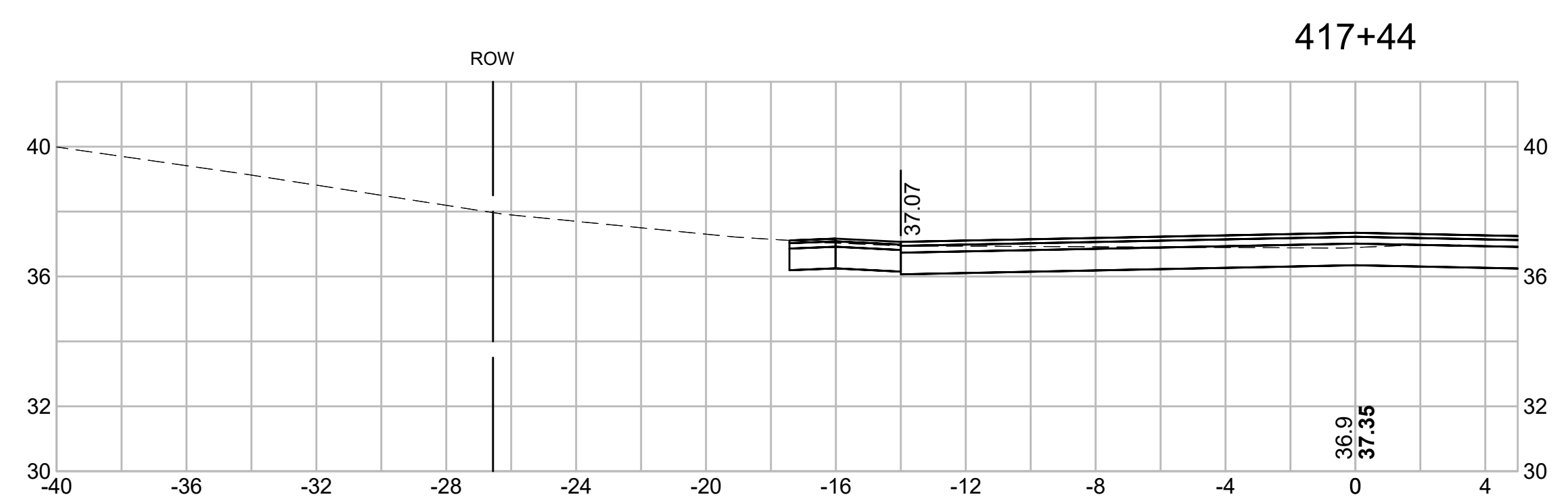
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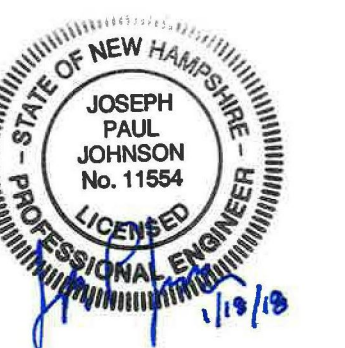
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

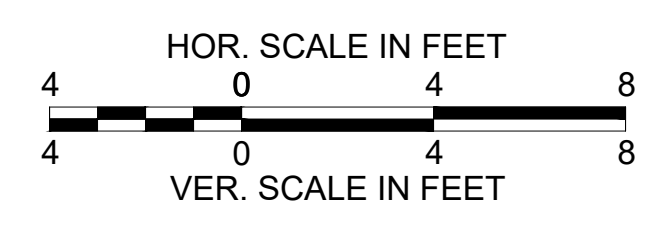
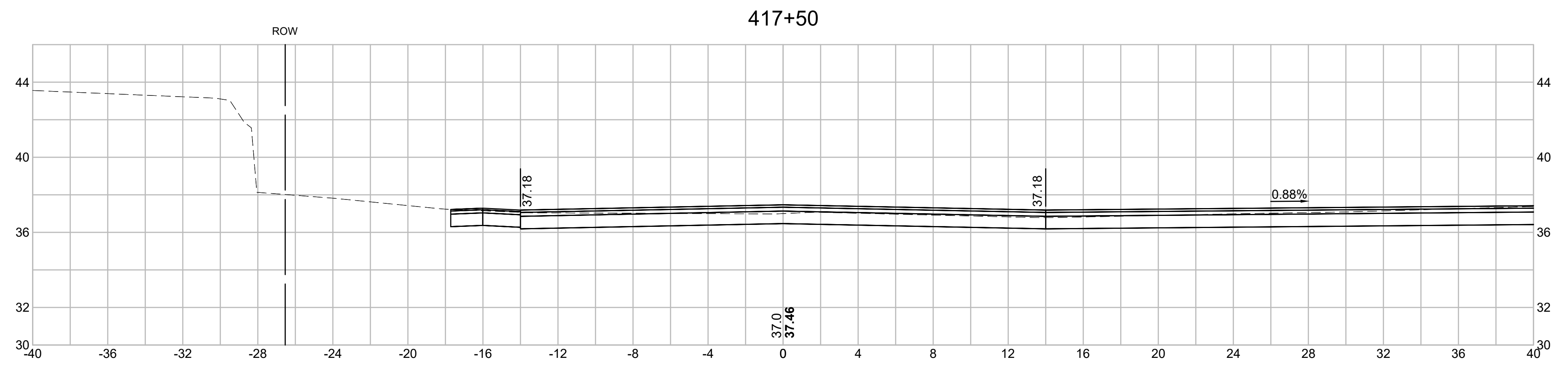
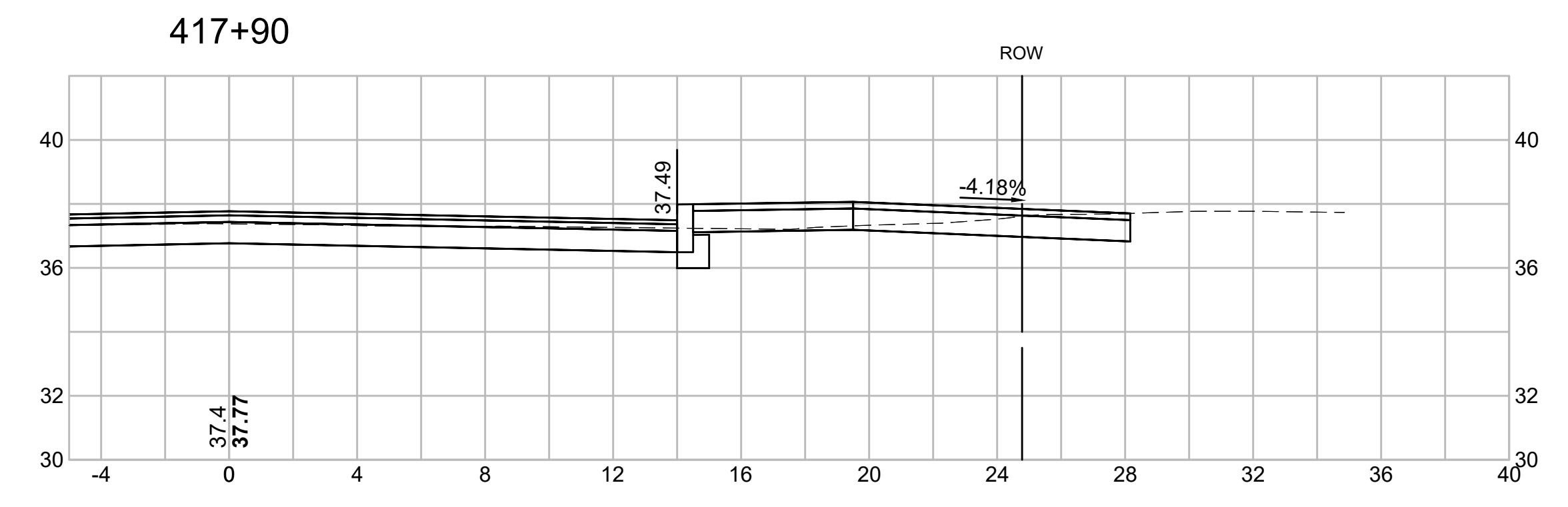
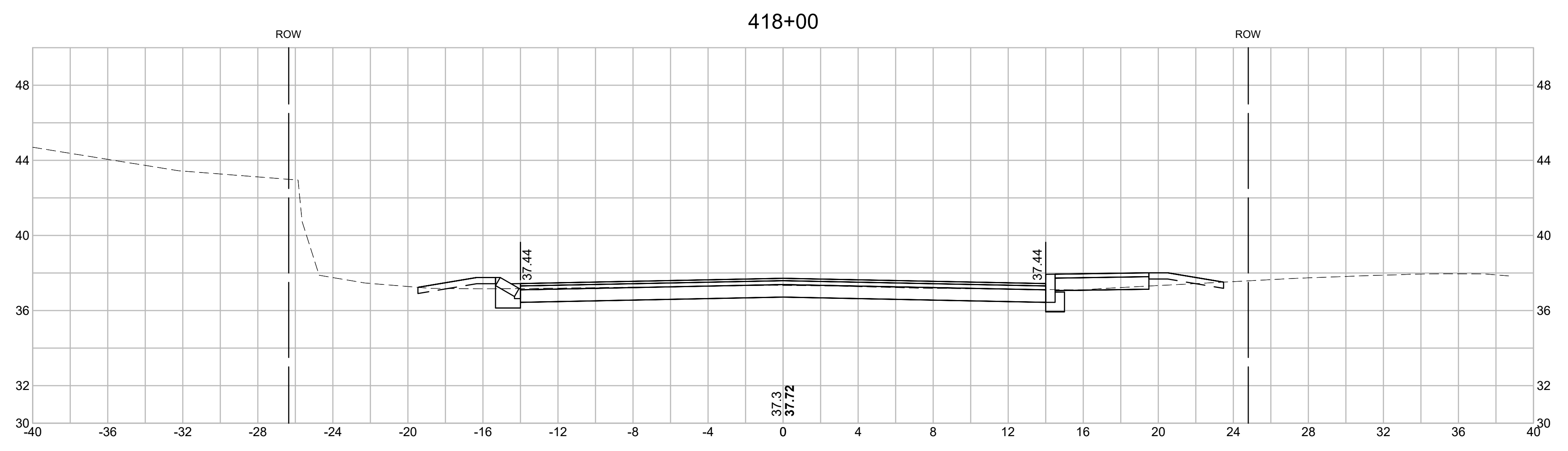
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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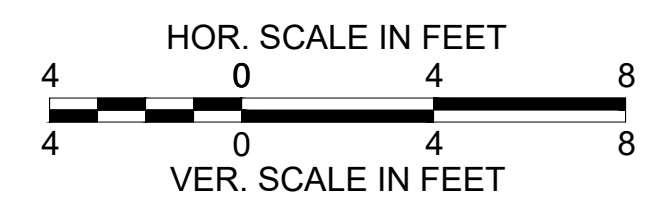
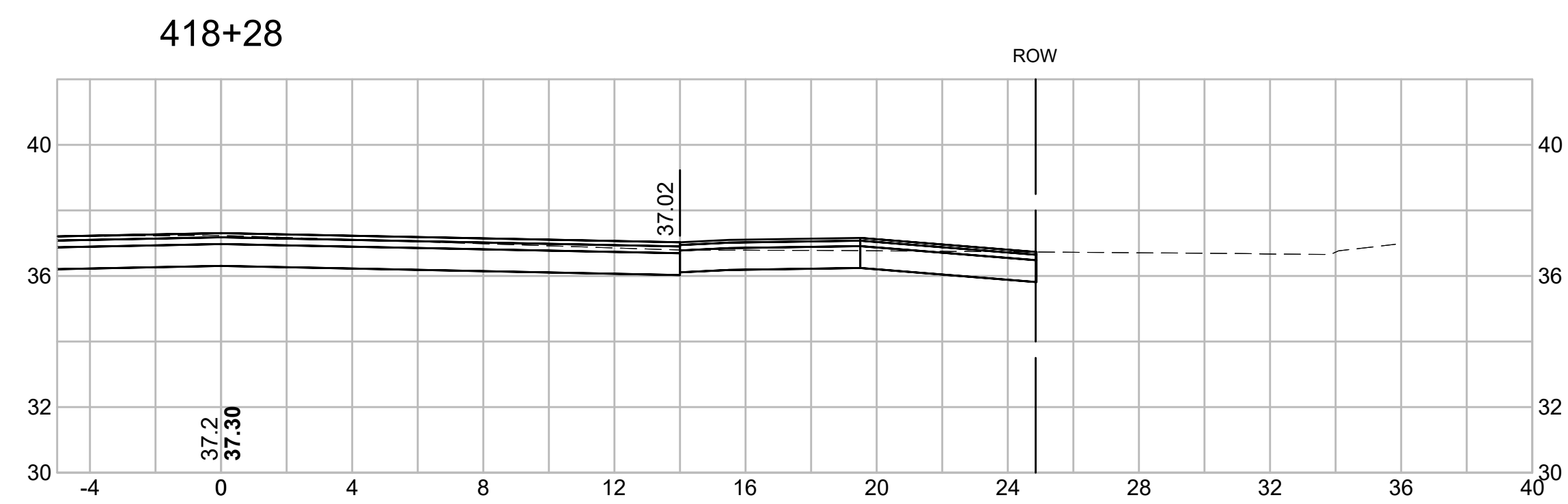
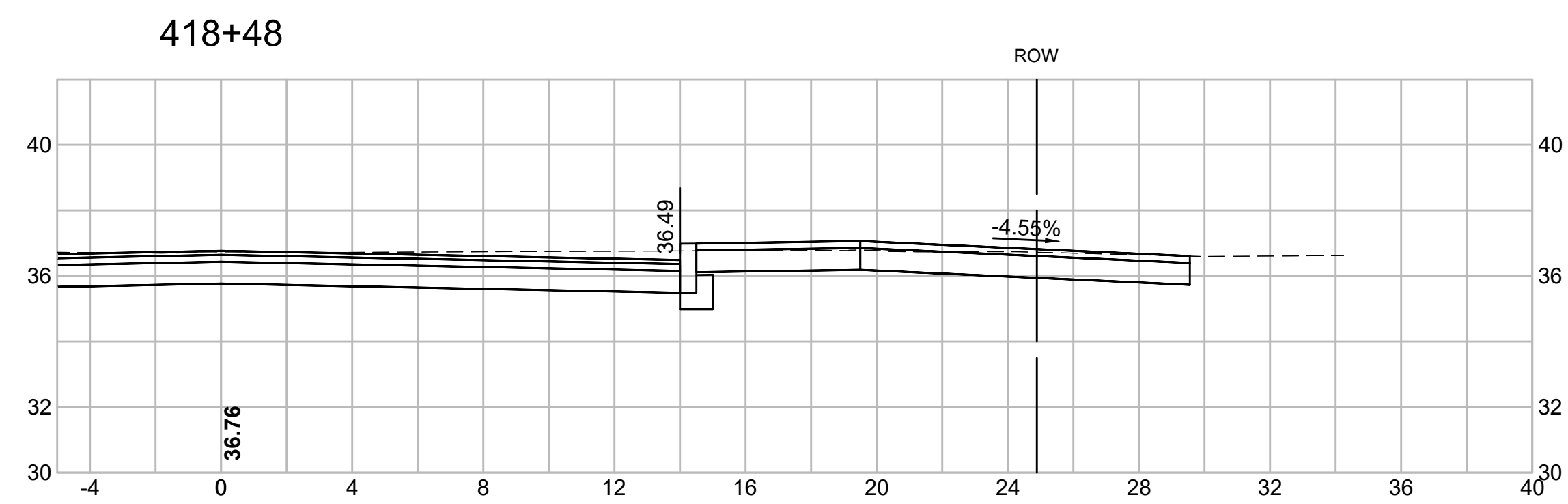
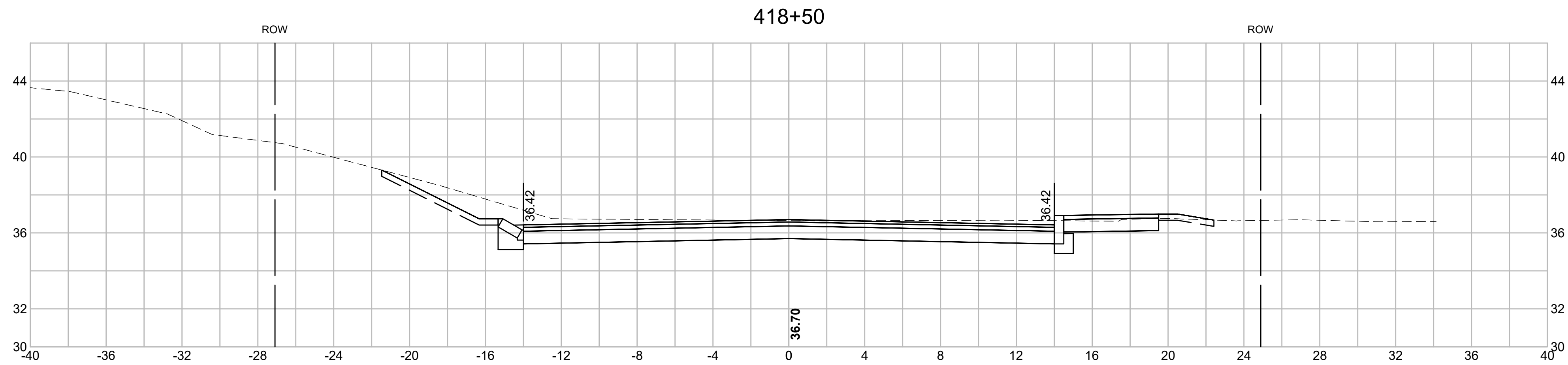
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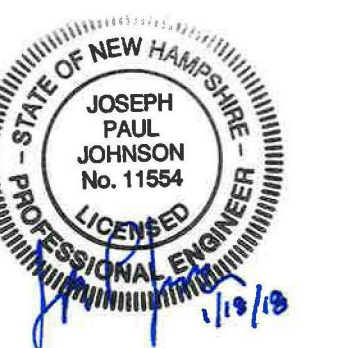
**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'

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 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

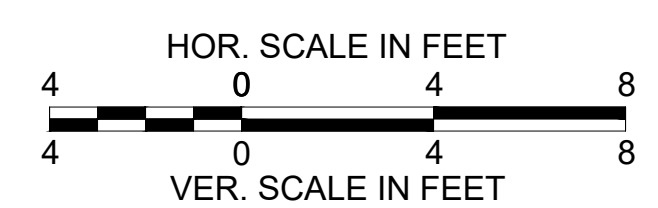
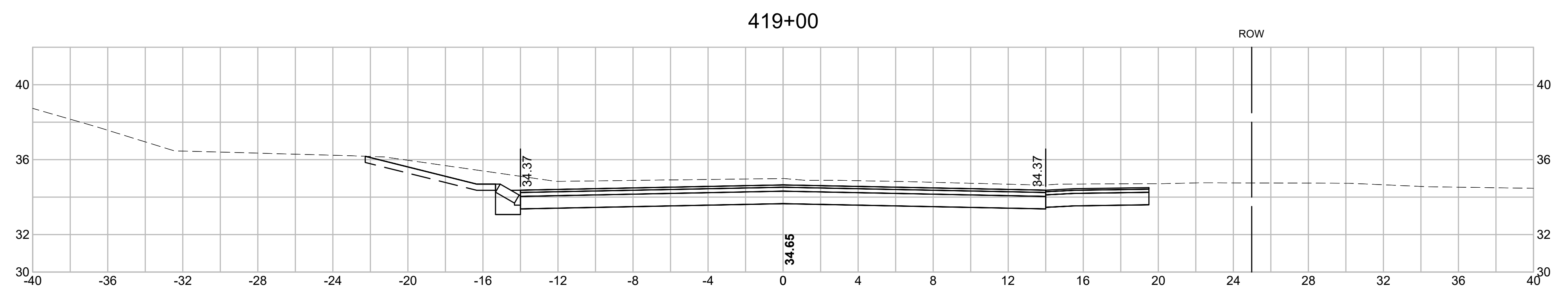
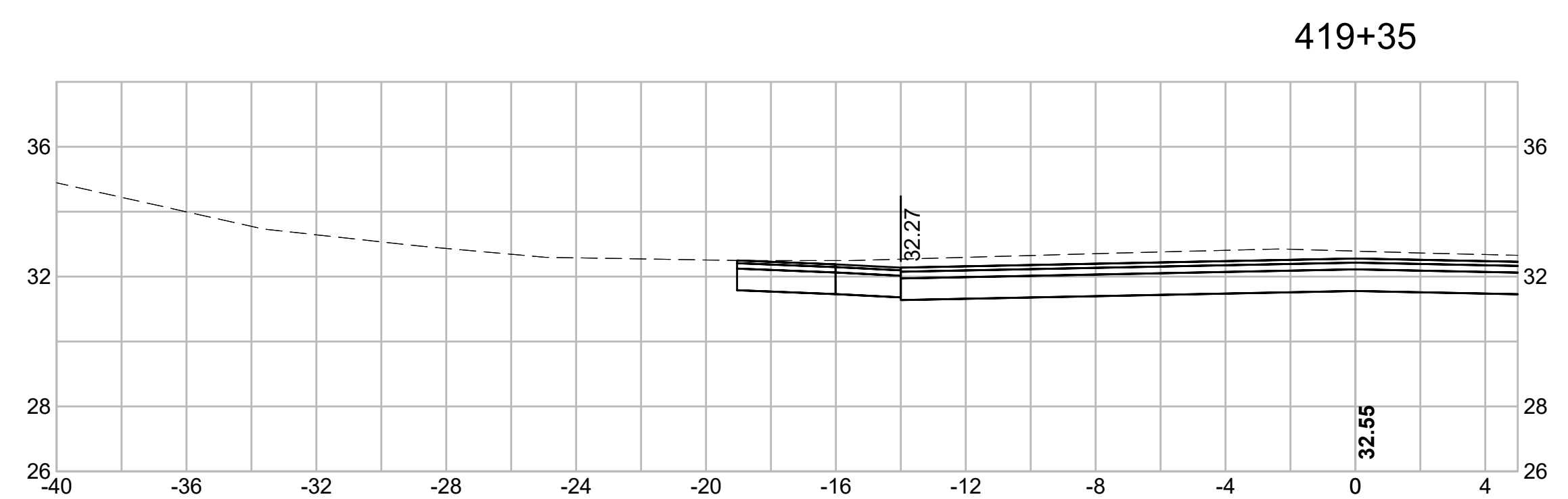
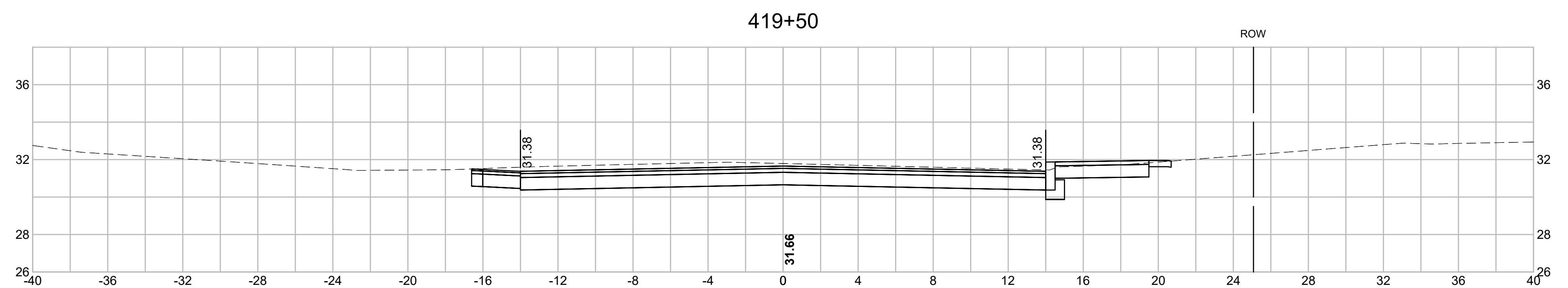
REVISIONS		
NO.	REVISION	DATE

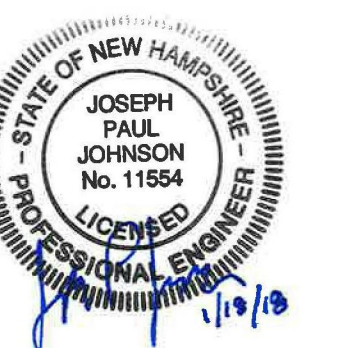
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**CENTRAL
 AVENUE &
 CUTTS STREET
 CROSS
 SECTIONS**

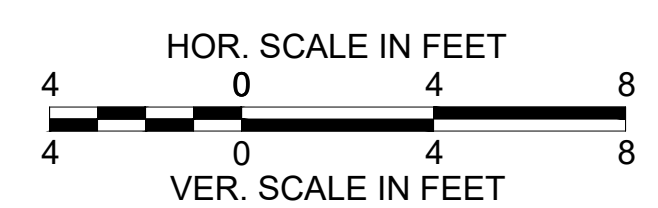
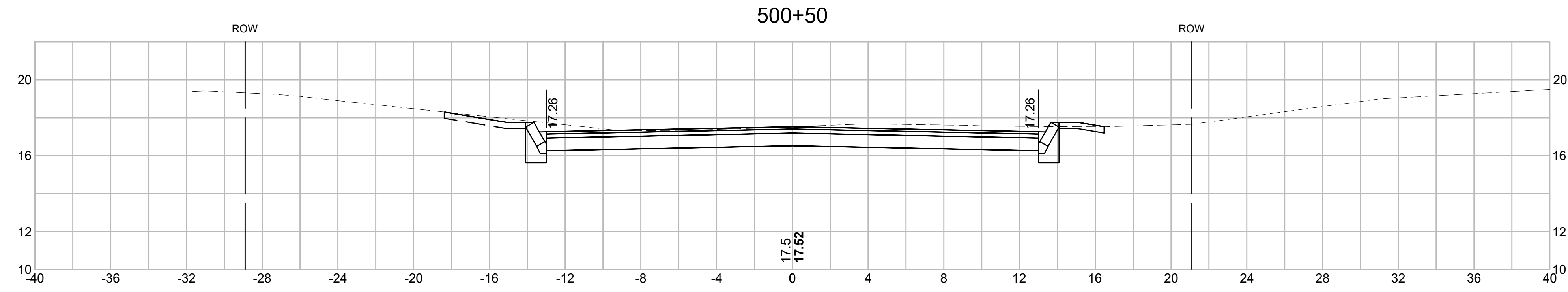
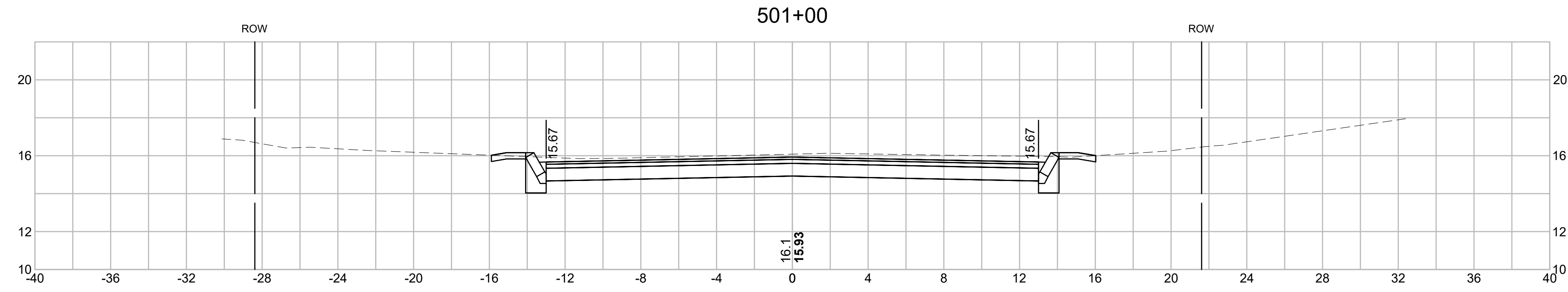
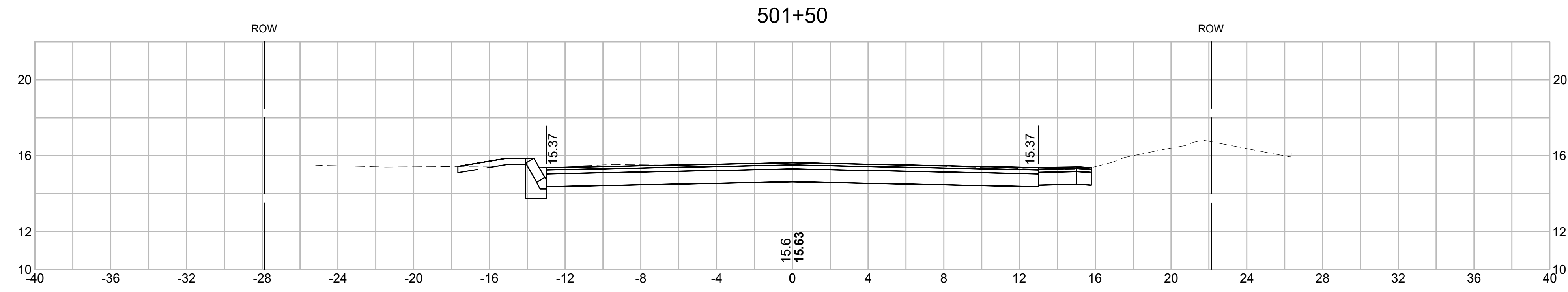
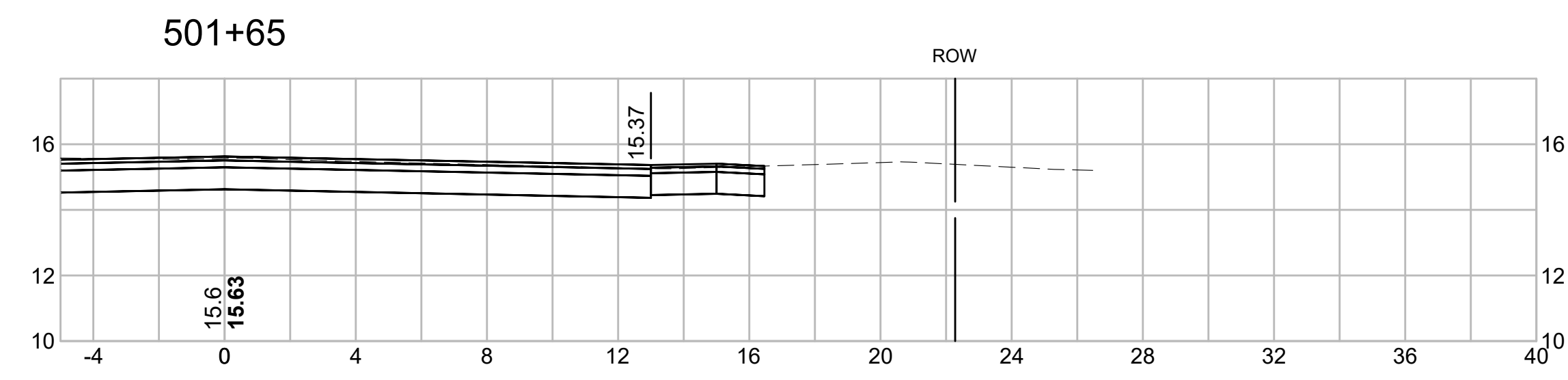
SCALE: 1"=4'
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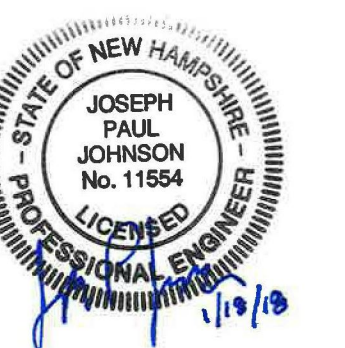
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



REVISIONS		
NO.	REVISION	DATE

2/5/2018
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**BEECHWOOD
 STREET
 CROSS
 SECTIONS**
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

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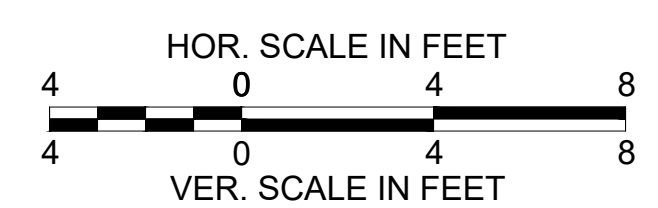
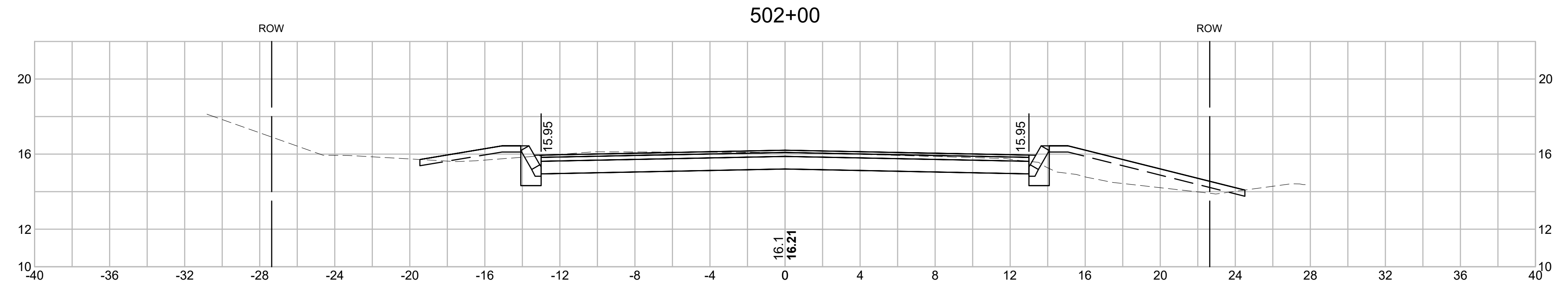
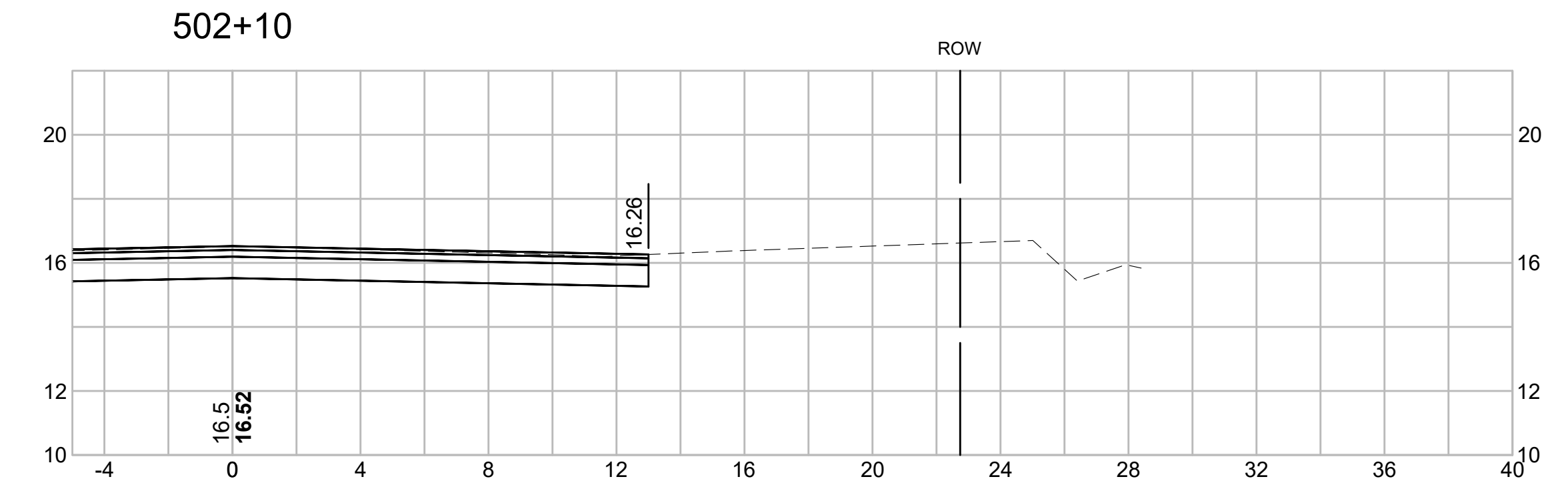
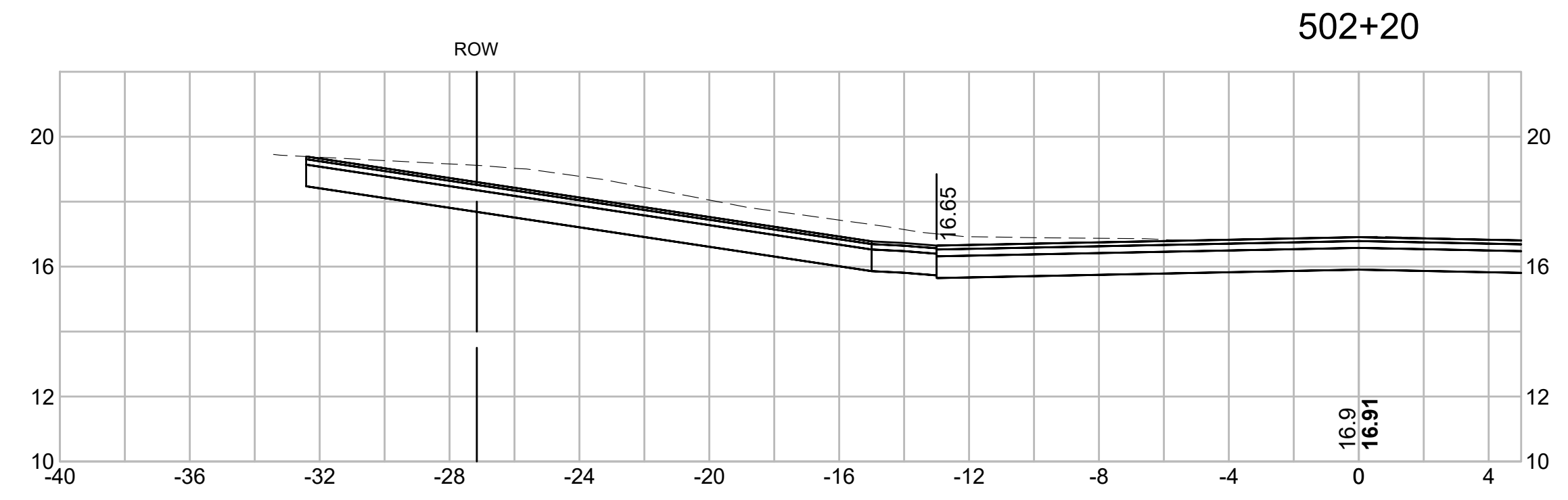
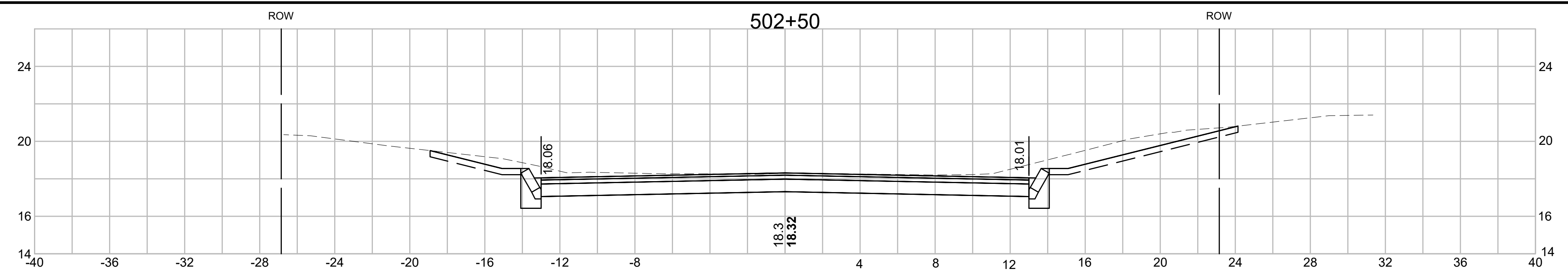
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**BEECHWOOD
 STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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 CITY OF PORTSMOUTH
 680 PEVERLY HILL ROAD
 PORTSMOUTH, NH 03801

**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

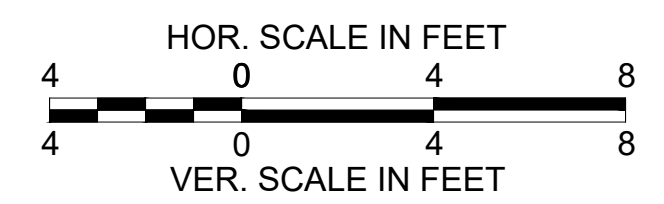
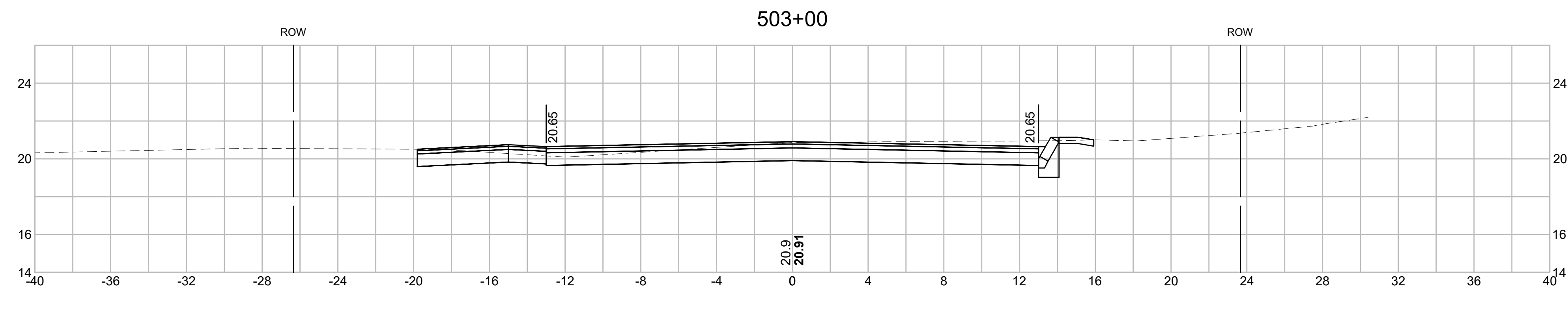
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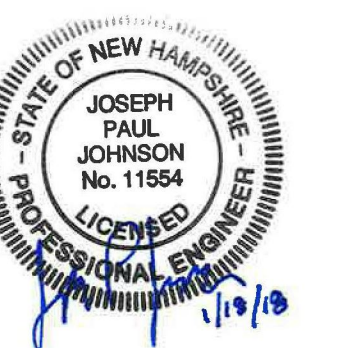
**BEECHWOOD
 STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'

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 680 PEVERLY HILL ROAD
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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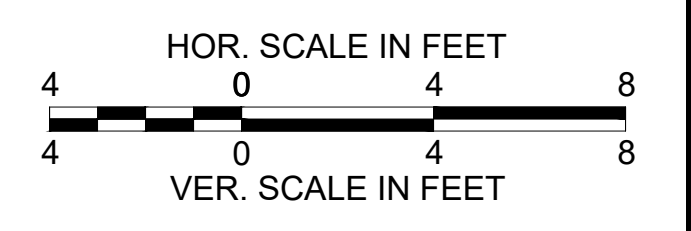
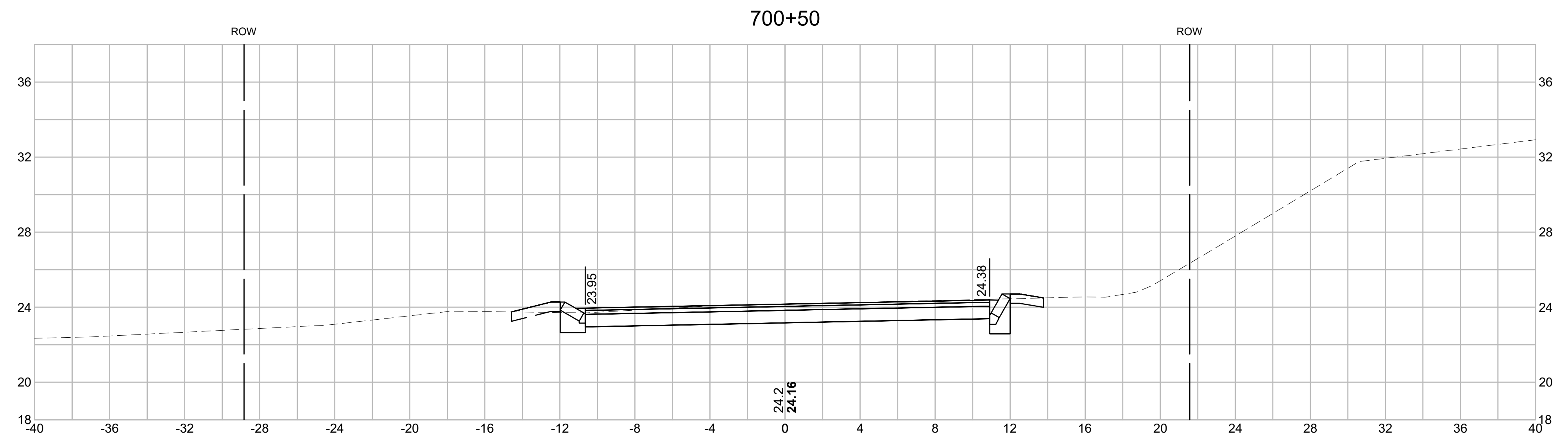
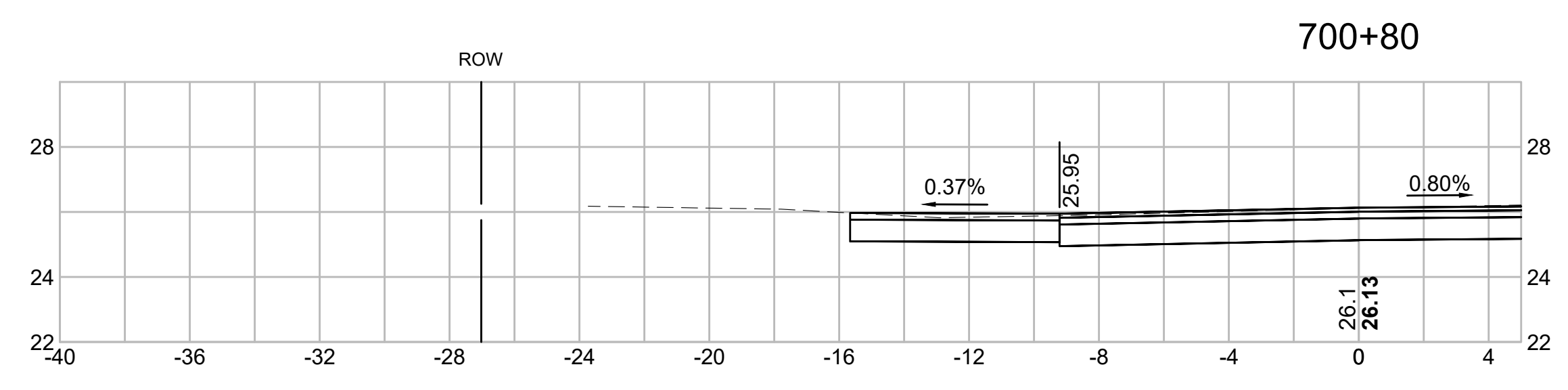
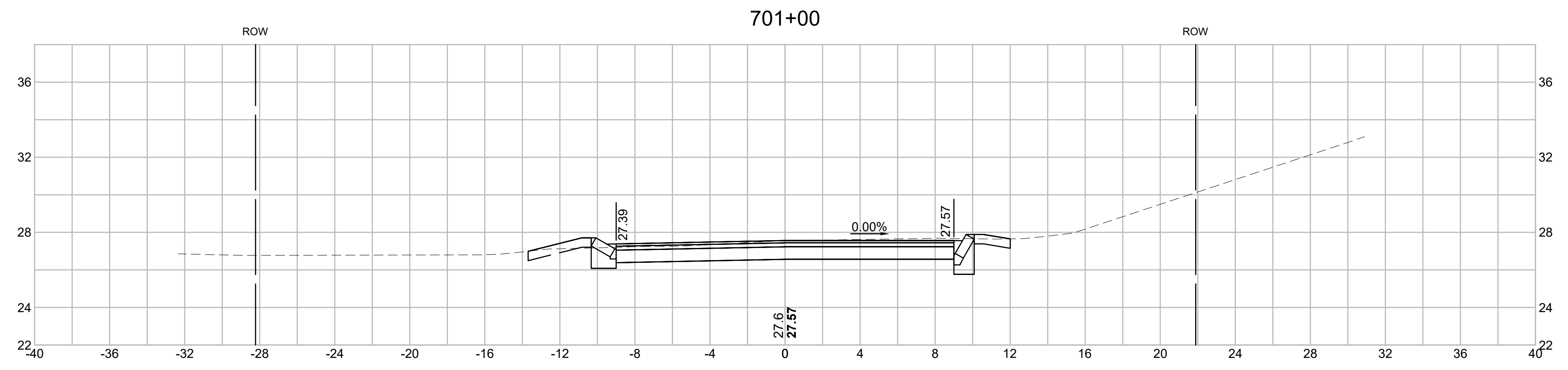
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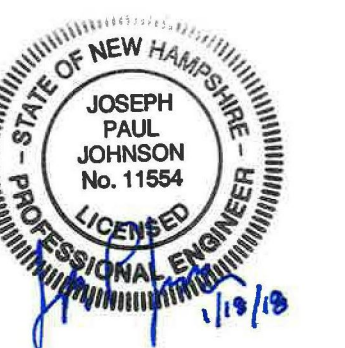
**ASHLAND
 STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

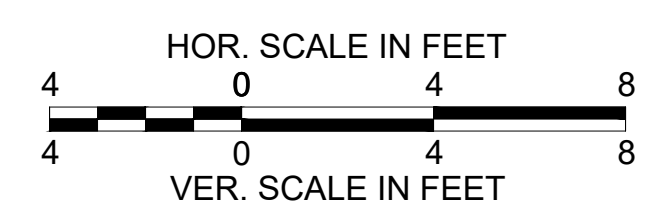
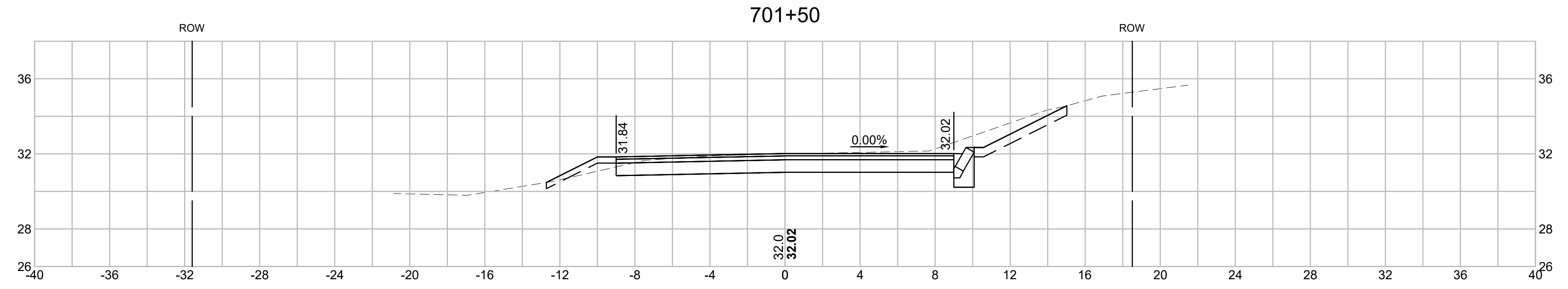
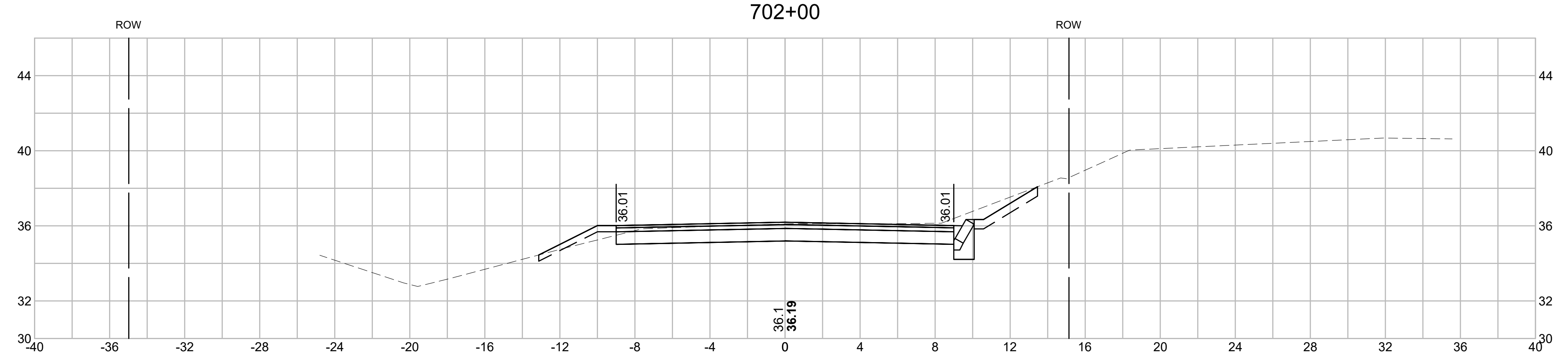
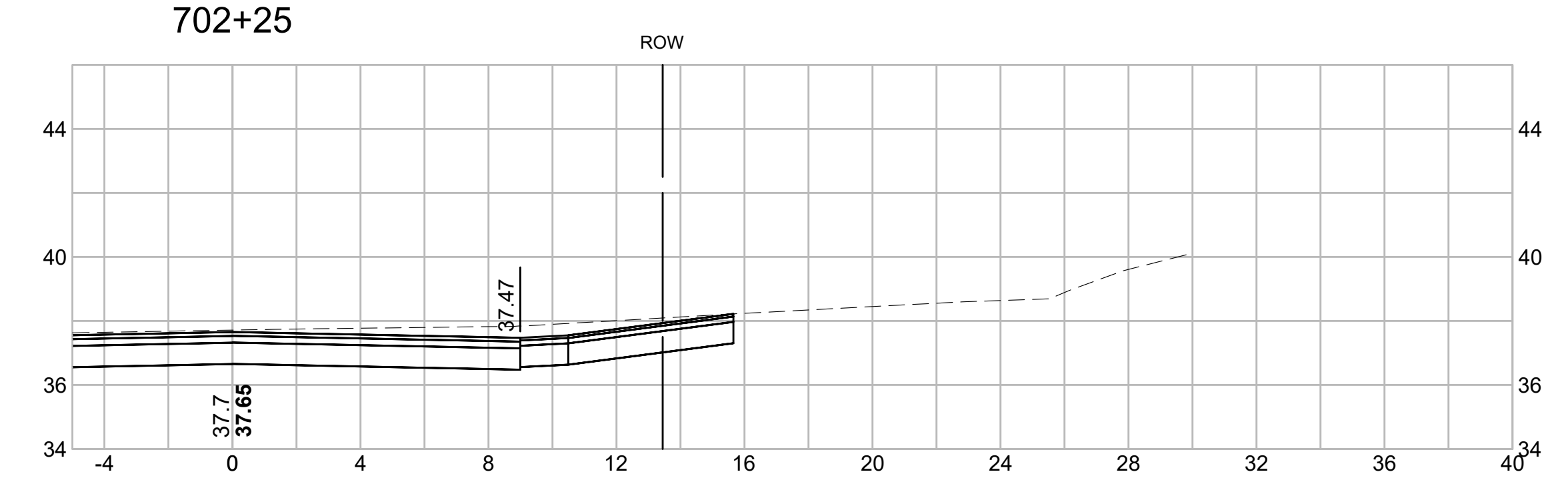
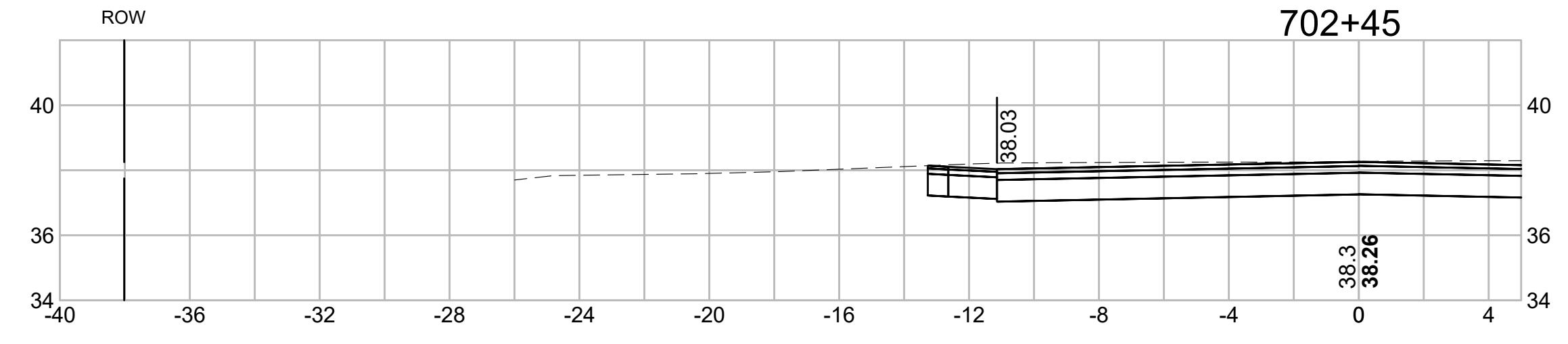
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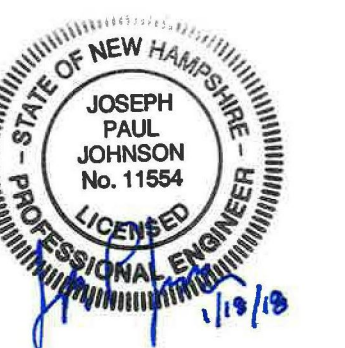
**ASHLAND
 STREET
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 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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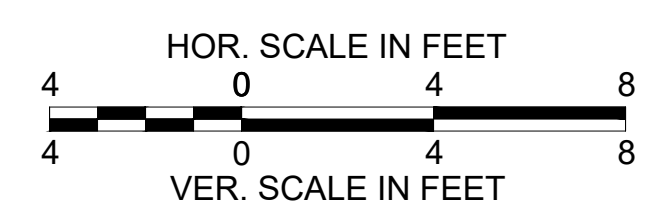
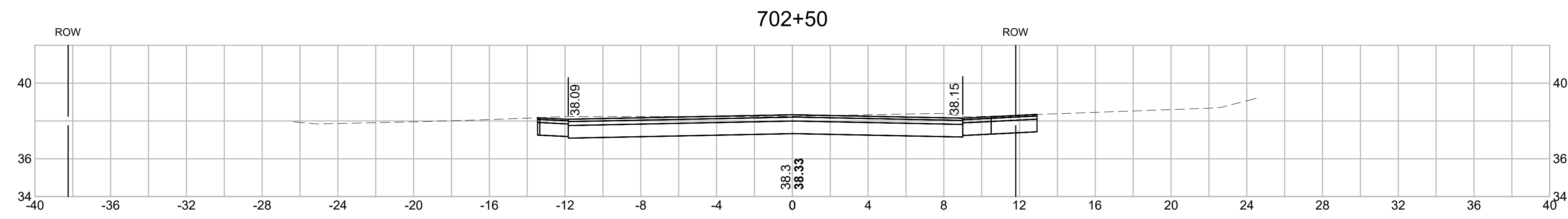
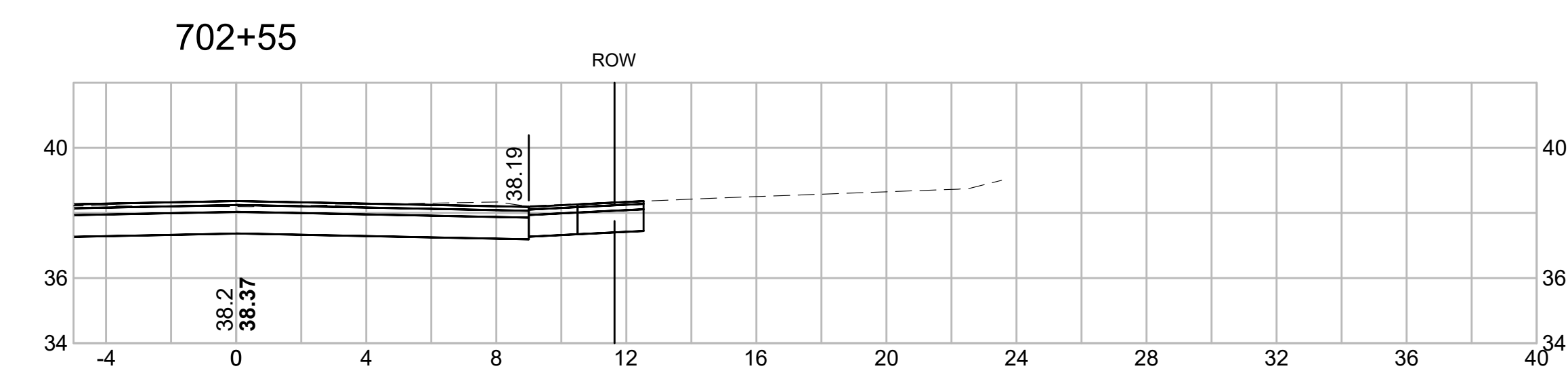
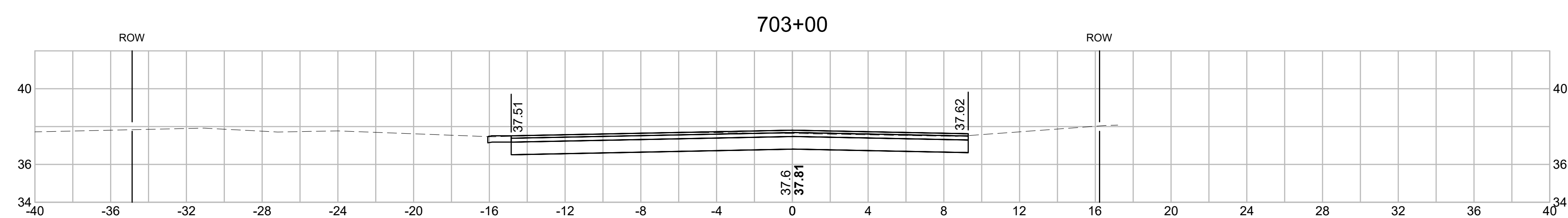
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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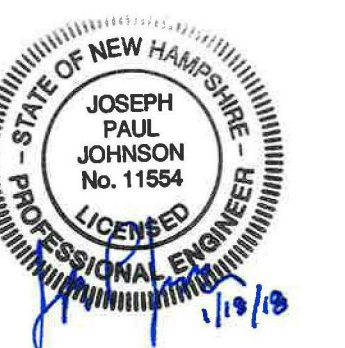
**ASHLAND
 STREET
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

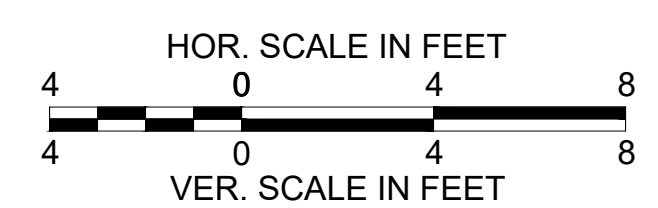
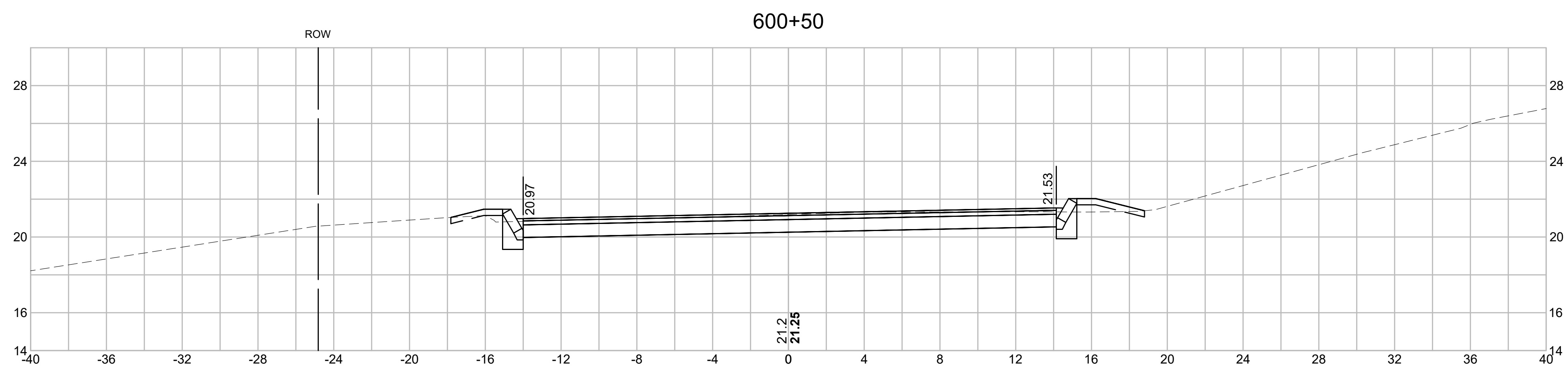
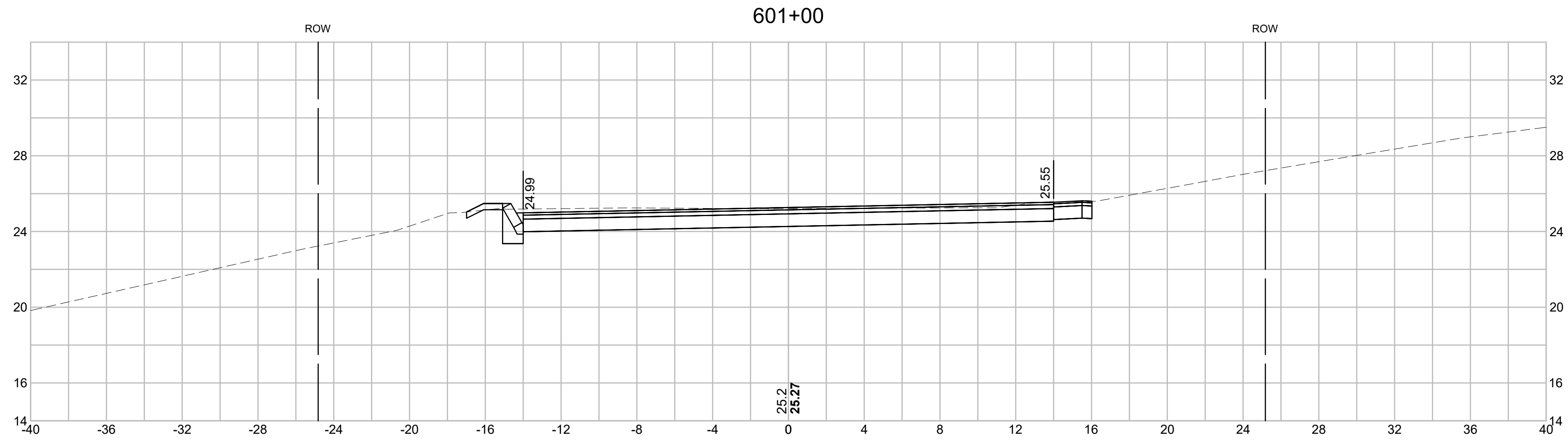
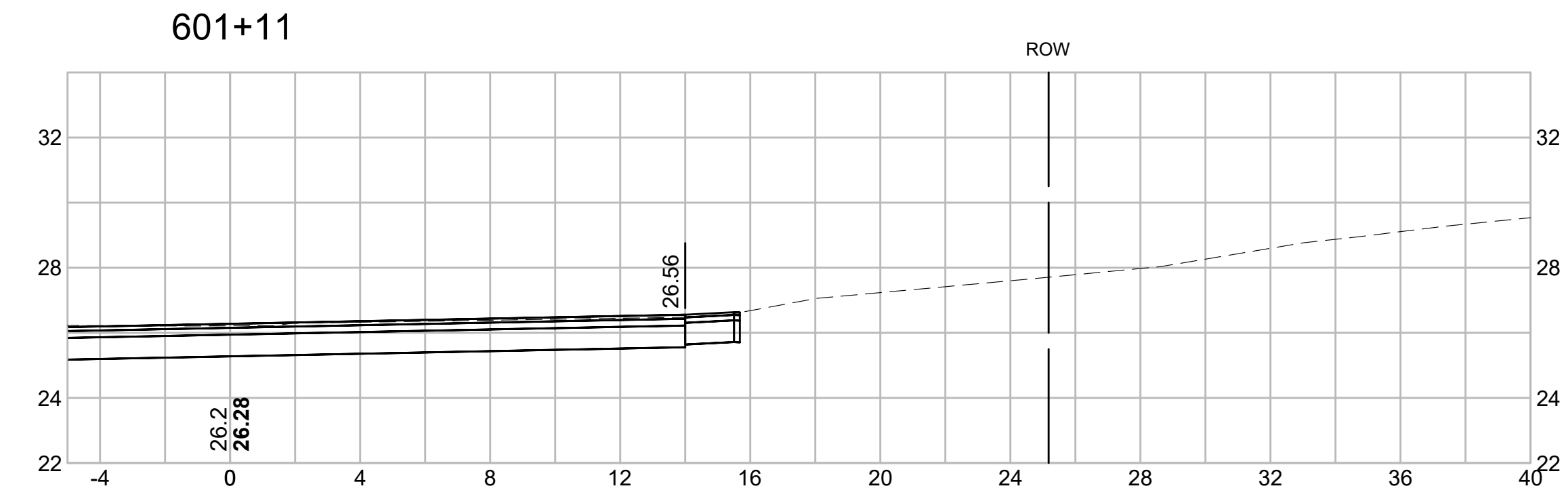
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**LESLIE DRIVE
 CROSS
 SECTIONS**

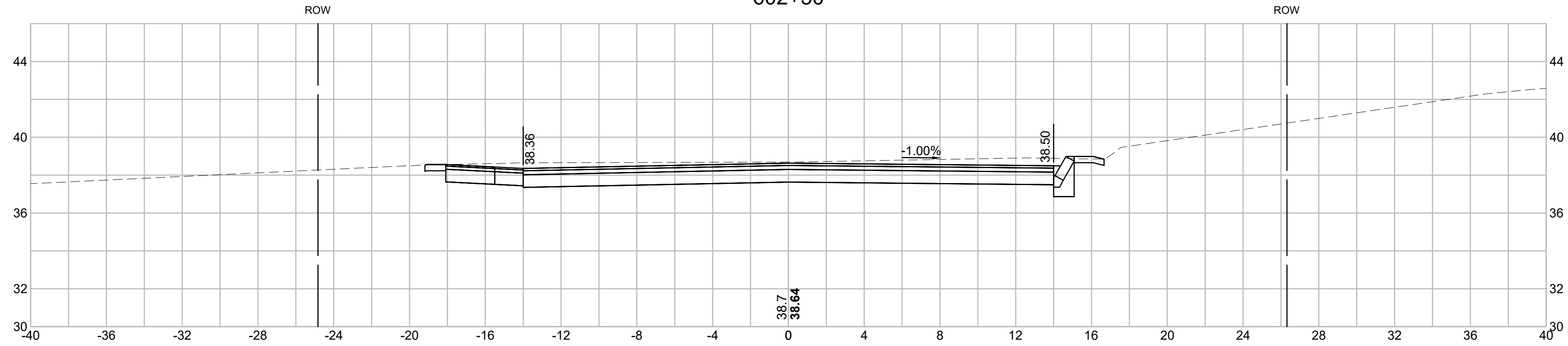
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2015086.00

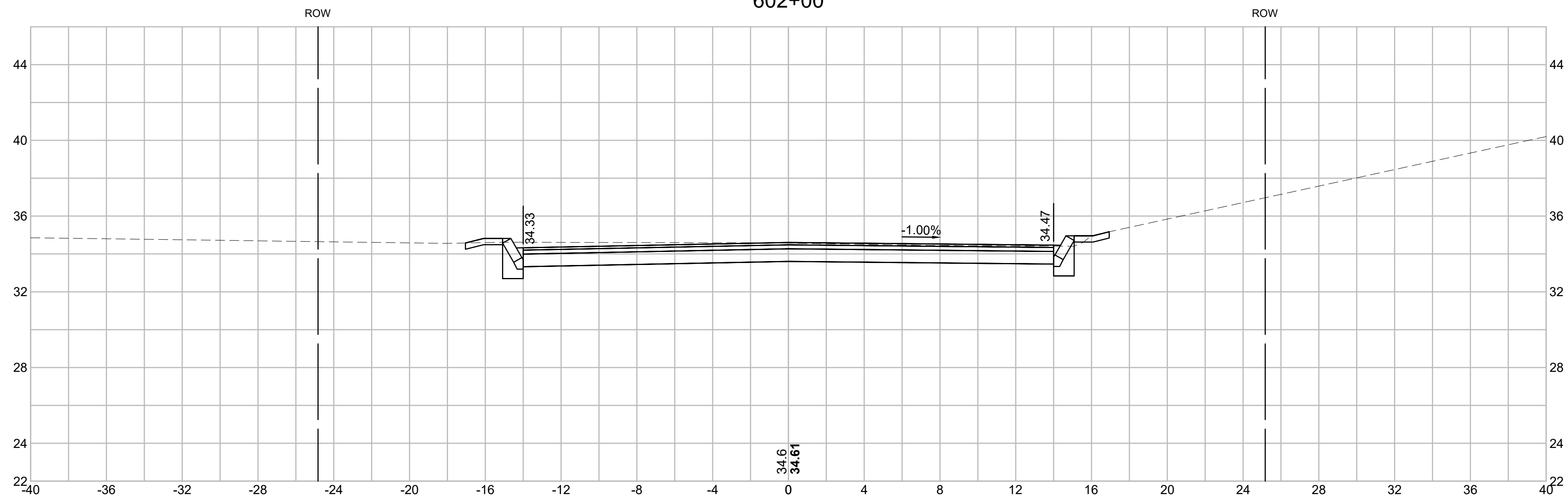
164 OF 184



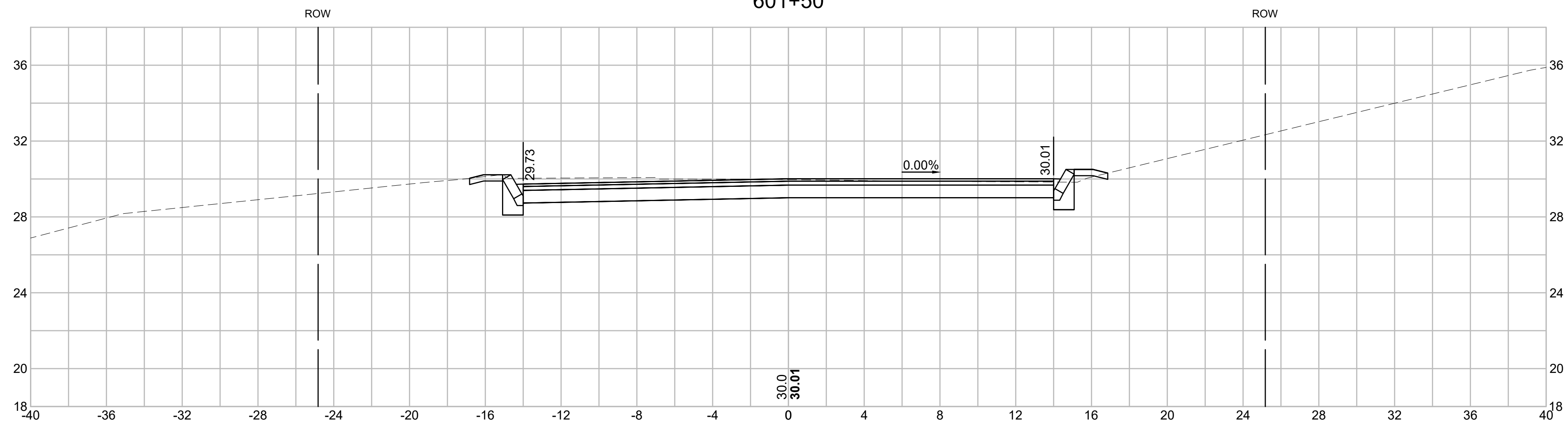
602+50



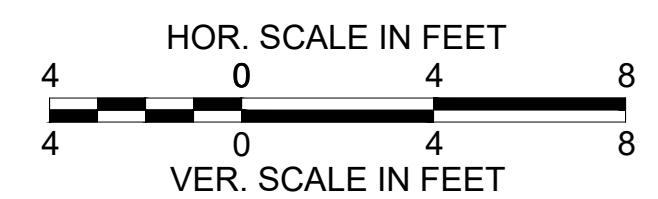
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601+50

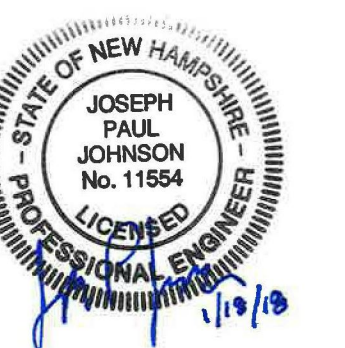


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GPI Greenman-Pedersen, Inc.
Engineering & Construction Services
21 Daniel Street, Second Floor, Portsmouth, NH 03801
Tel: (603) 891-2213 Fax: (603) 658-3044
http://www.gpinet.com

Weston & Sampson
Weston & Sampson Engineers, Inc.
Five Centennial Drive, Peabody, MA 01960
978.532.1900 800.SAMPSON
www.westonandsampson.com



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**IMPROVEMENTS TO MAPLEWOOD
AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

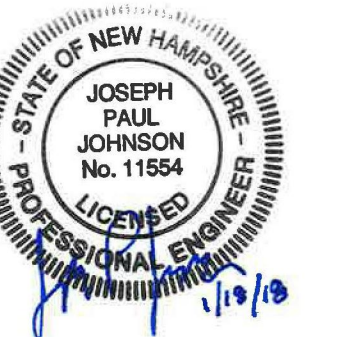
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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**LESLIE DRIVE
CROSS
SECTIONS**

SCALE: 1"=4'

2015086.00

165 OF 184



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 CITY OF PORTSMOUTH
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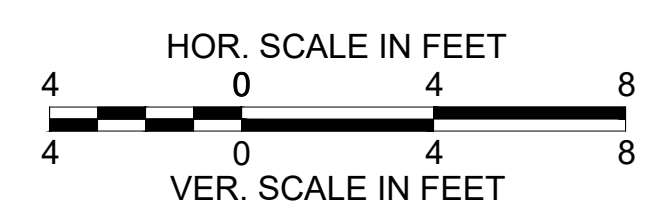
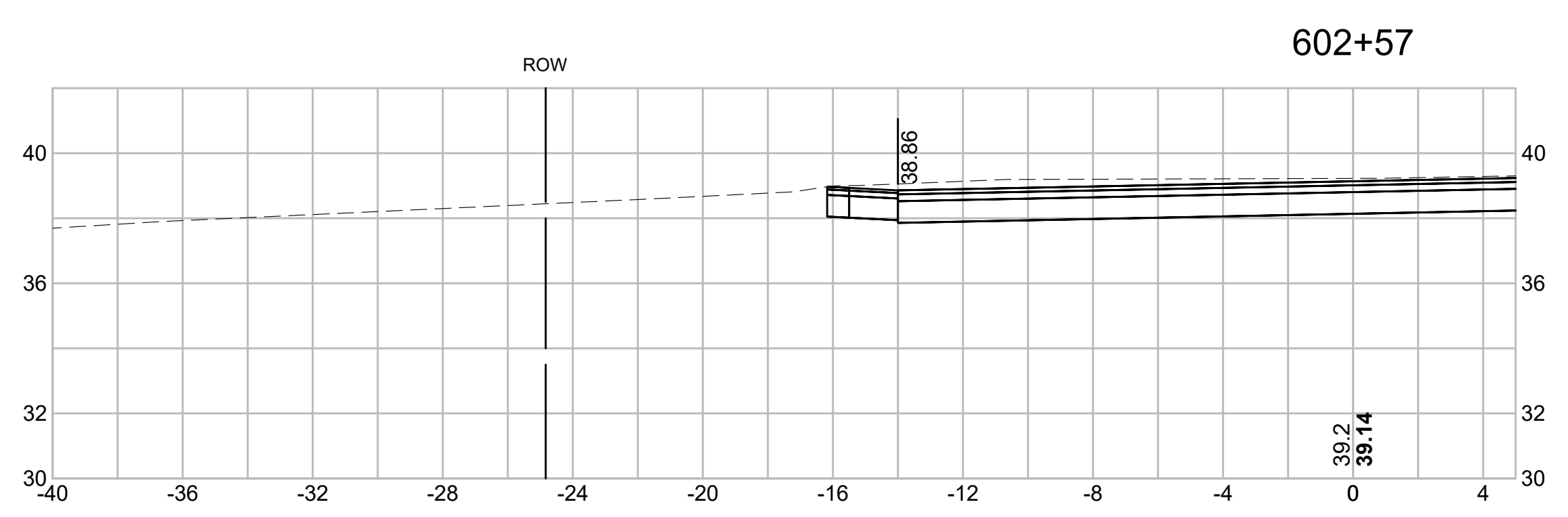
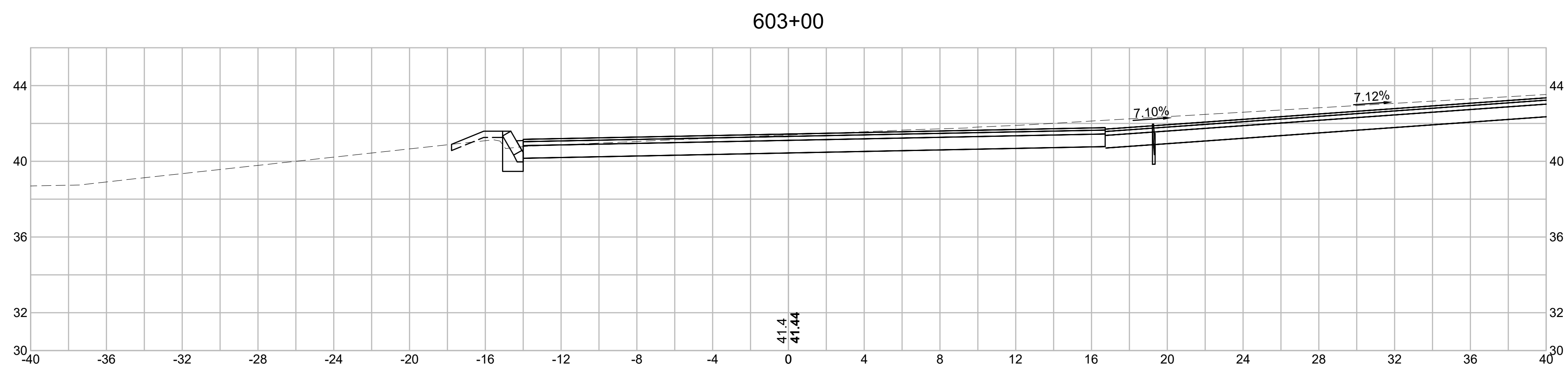
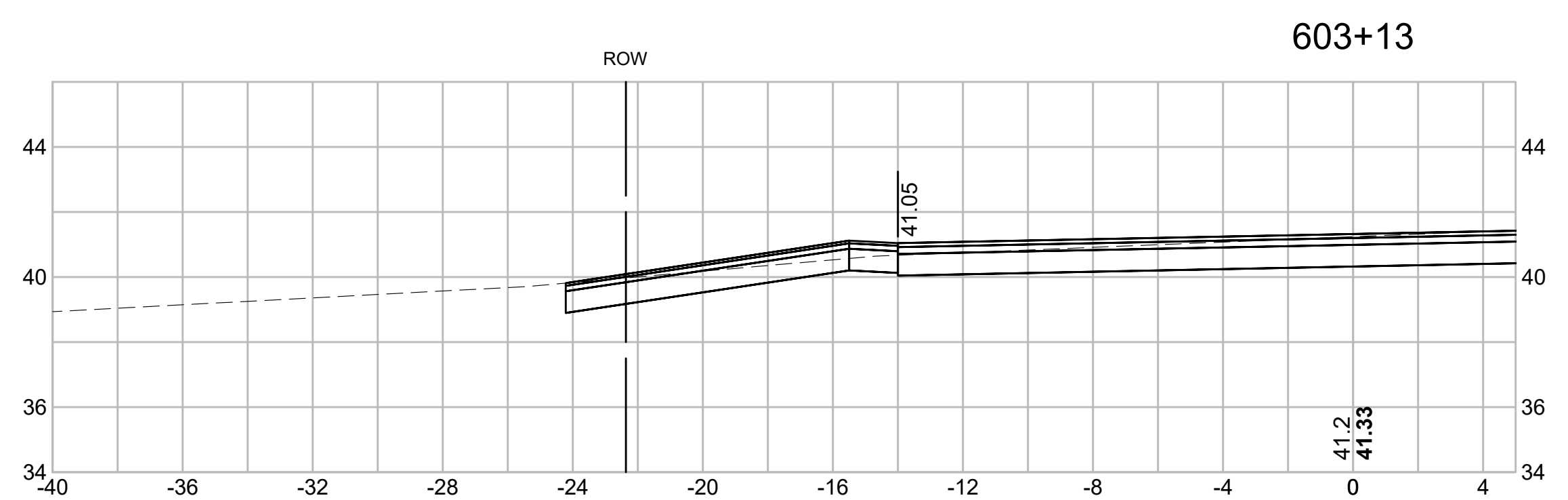
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

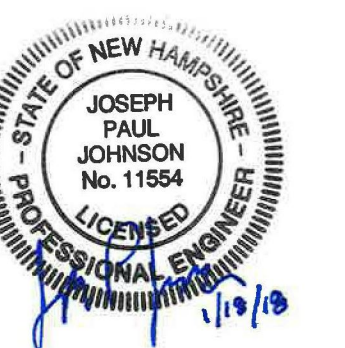
REVISIONS		
NO.	REVISION	DATE

2/5/2018
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**LESLIE DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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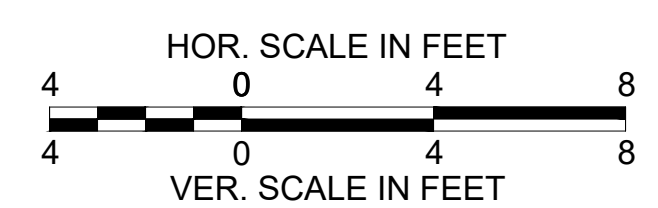
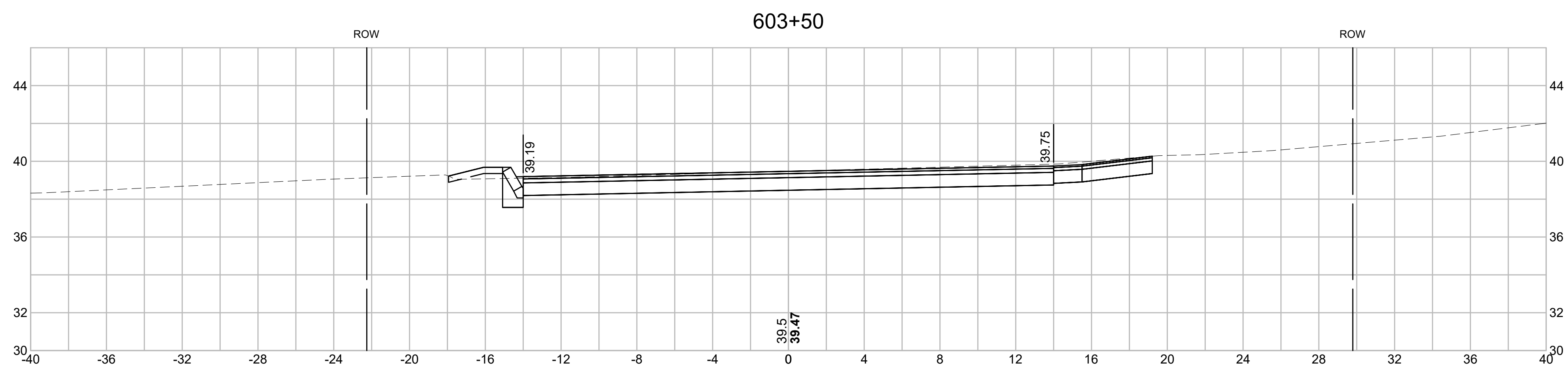
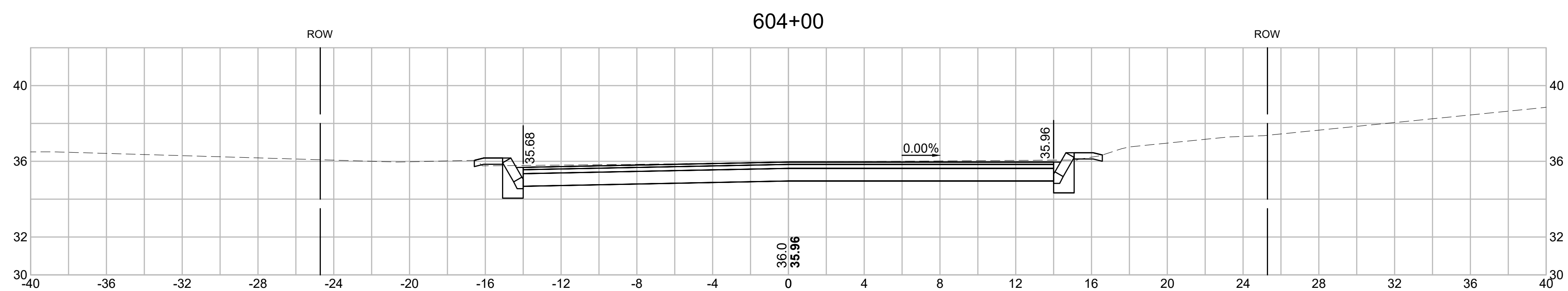
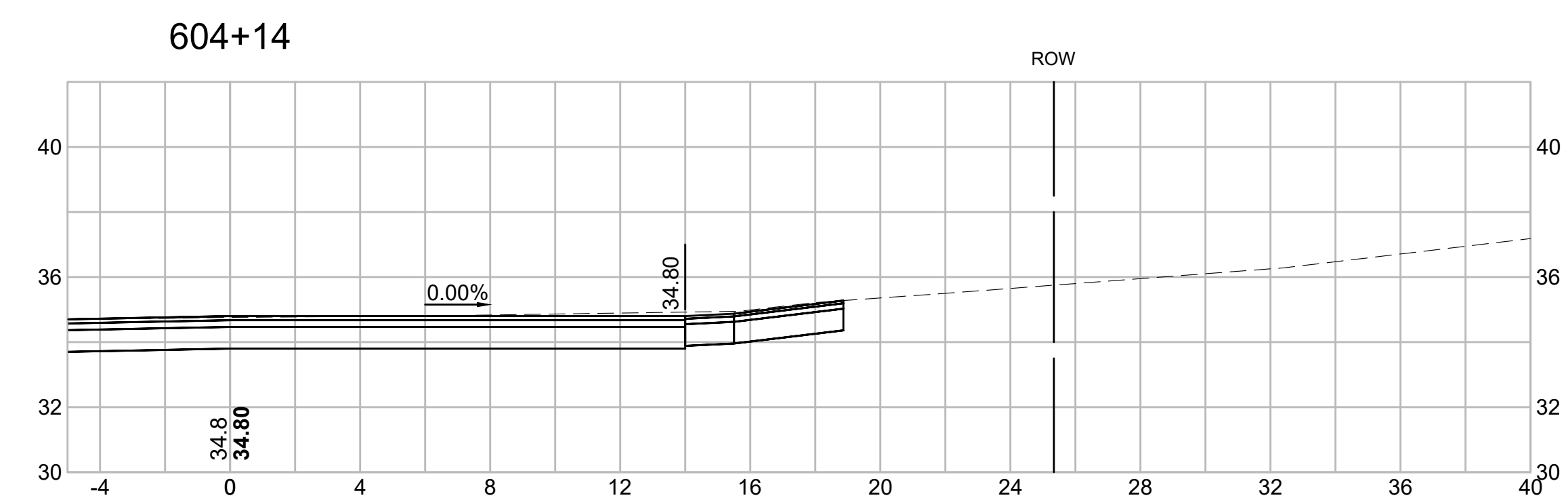
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

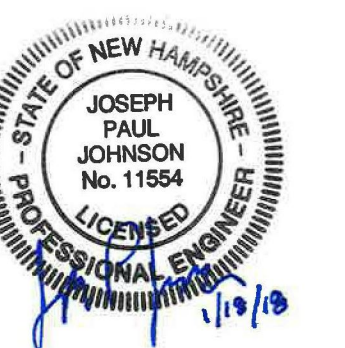
2/5/2018
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**LESLIE DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
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2/5/2018

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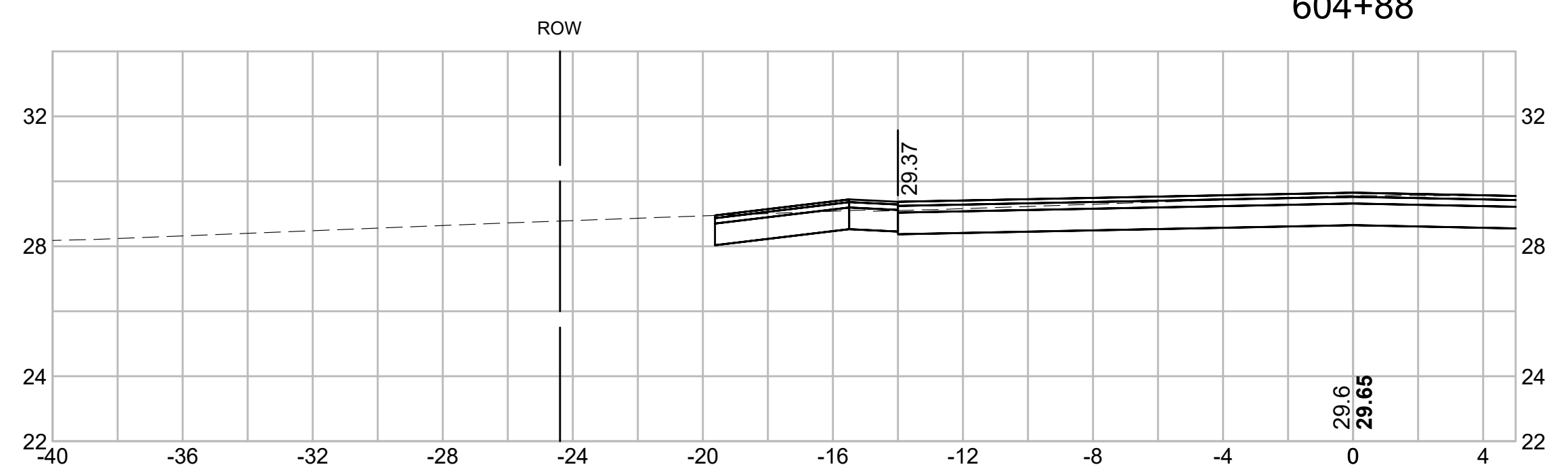
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 SECTIONS**

SCALE: 1"=4'

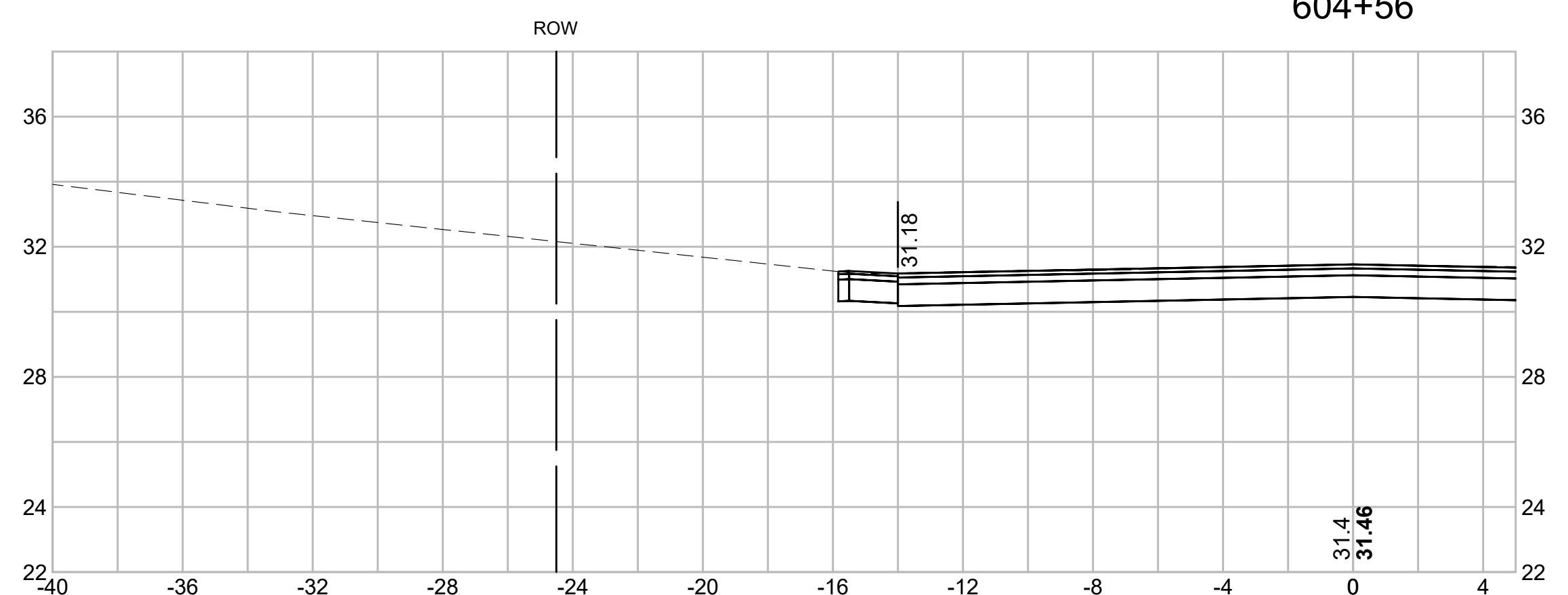
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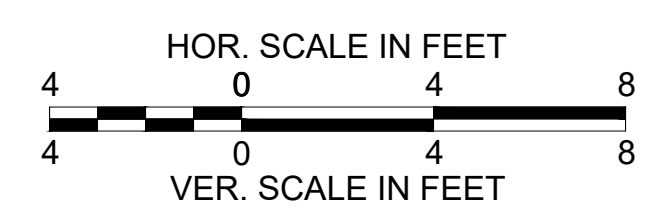
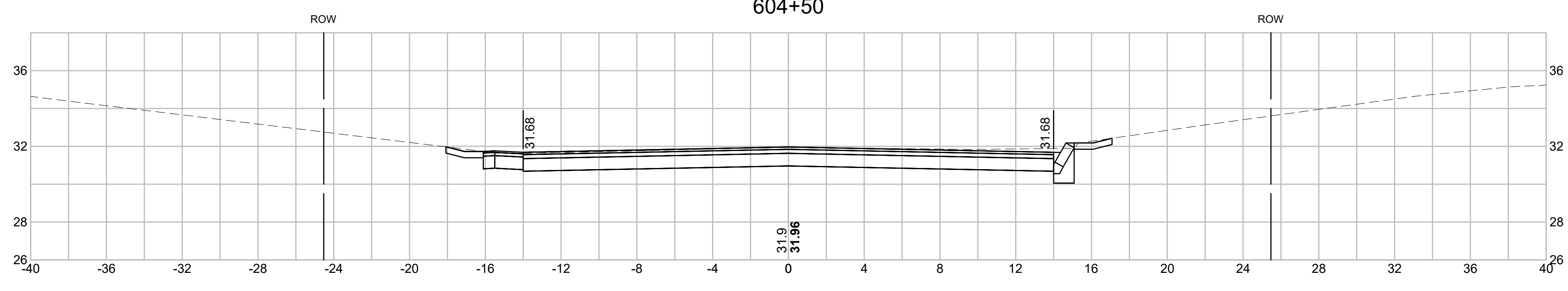
604+88



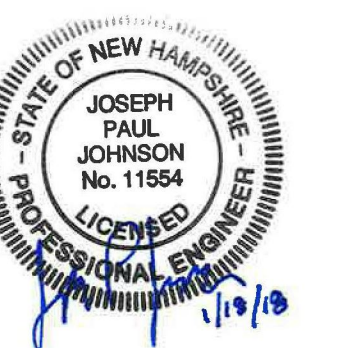
604+56



604+50



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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

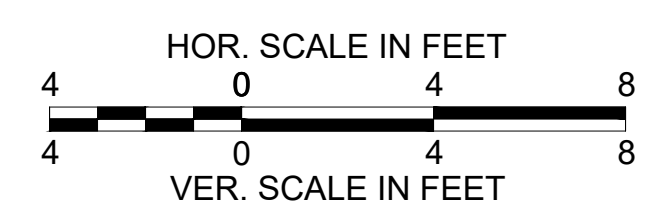
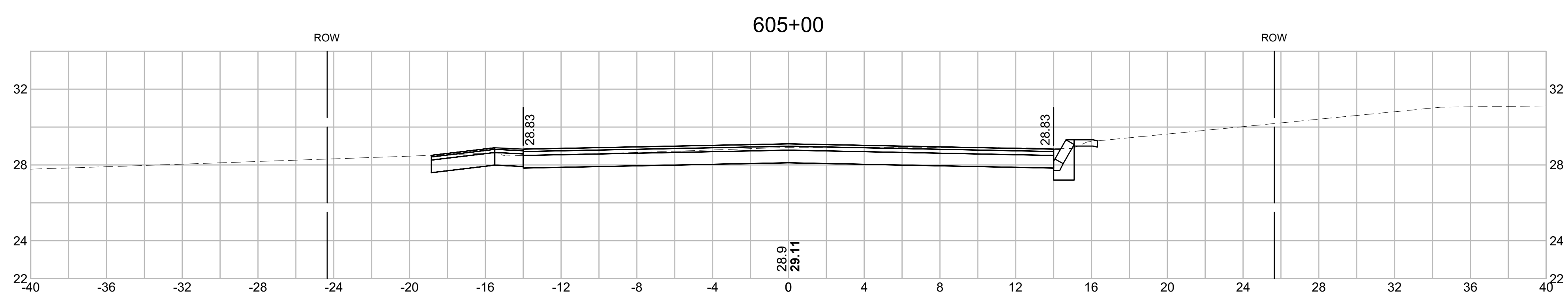
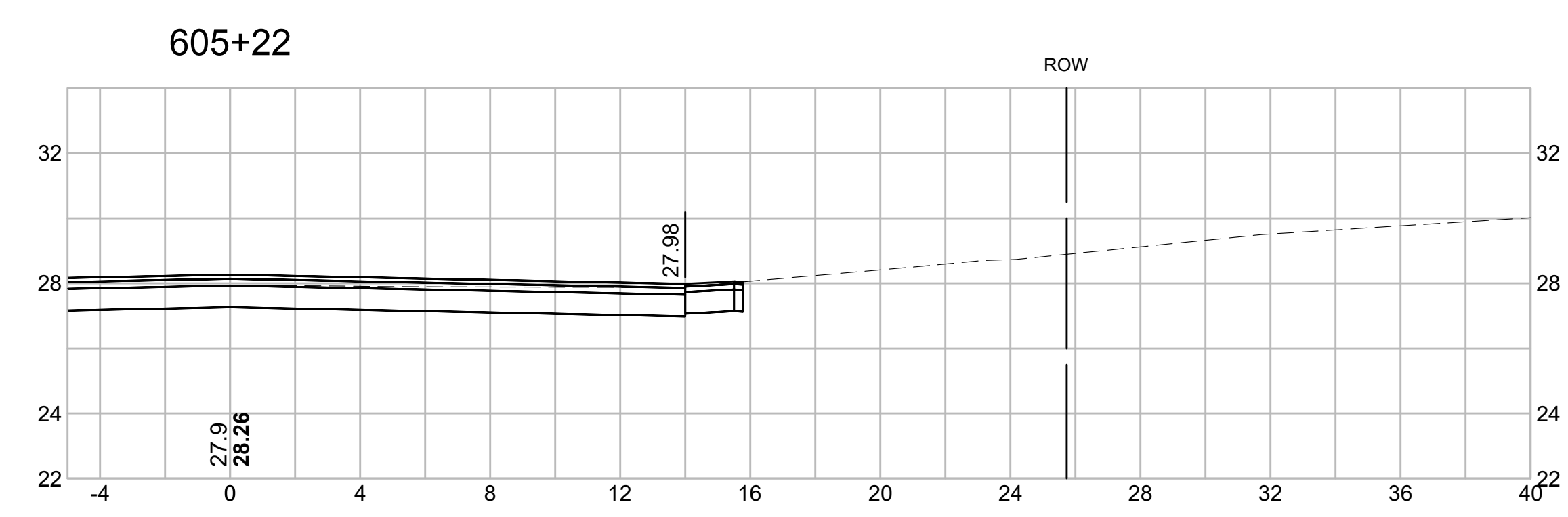
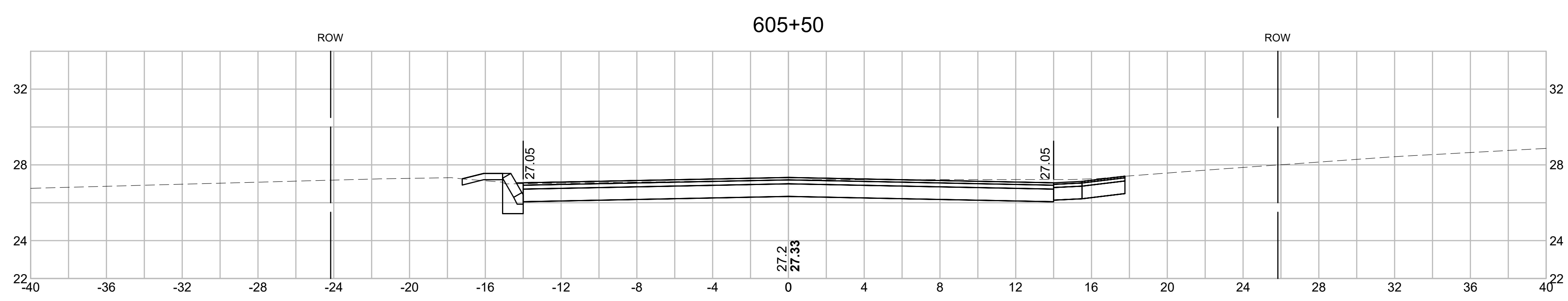
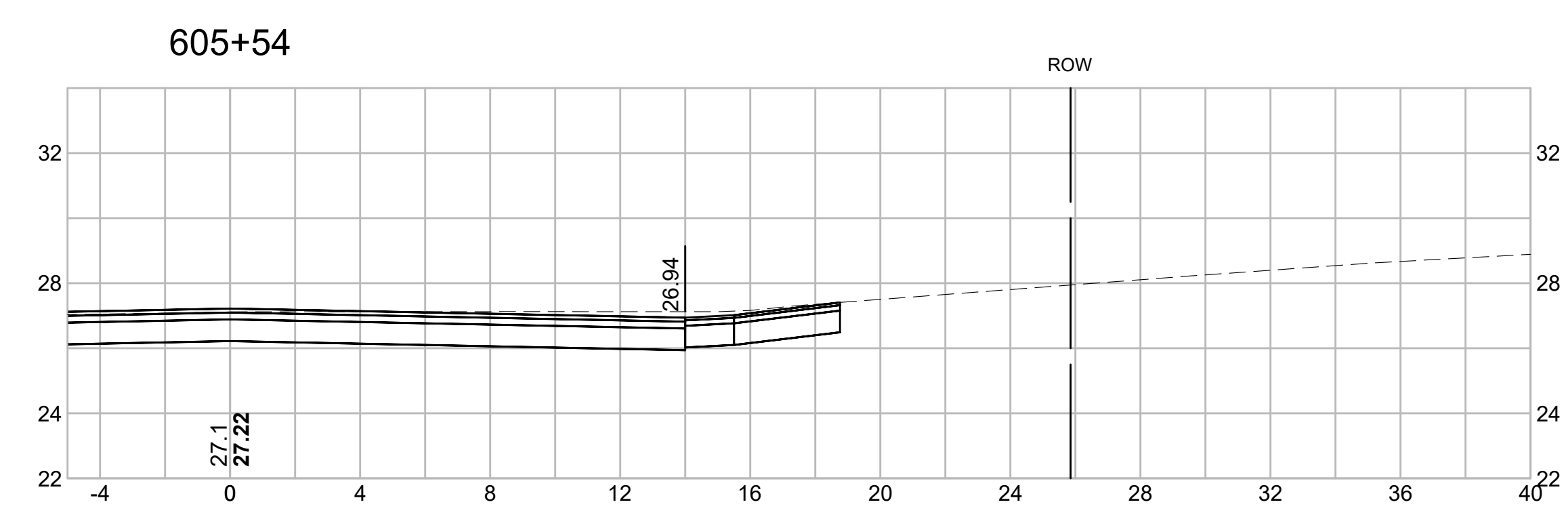
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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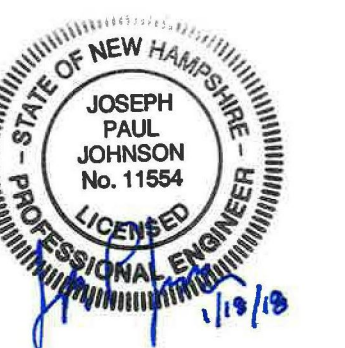
**LESLIE DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

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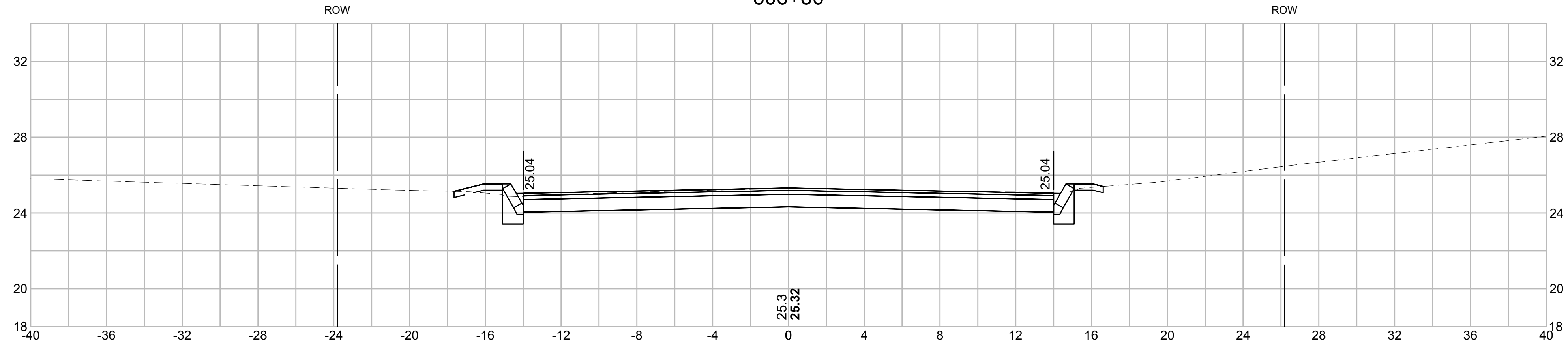
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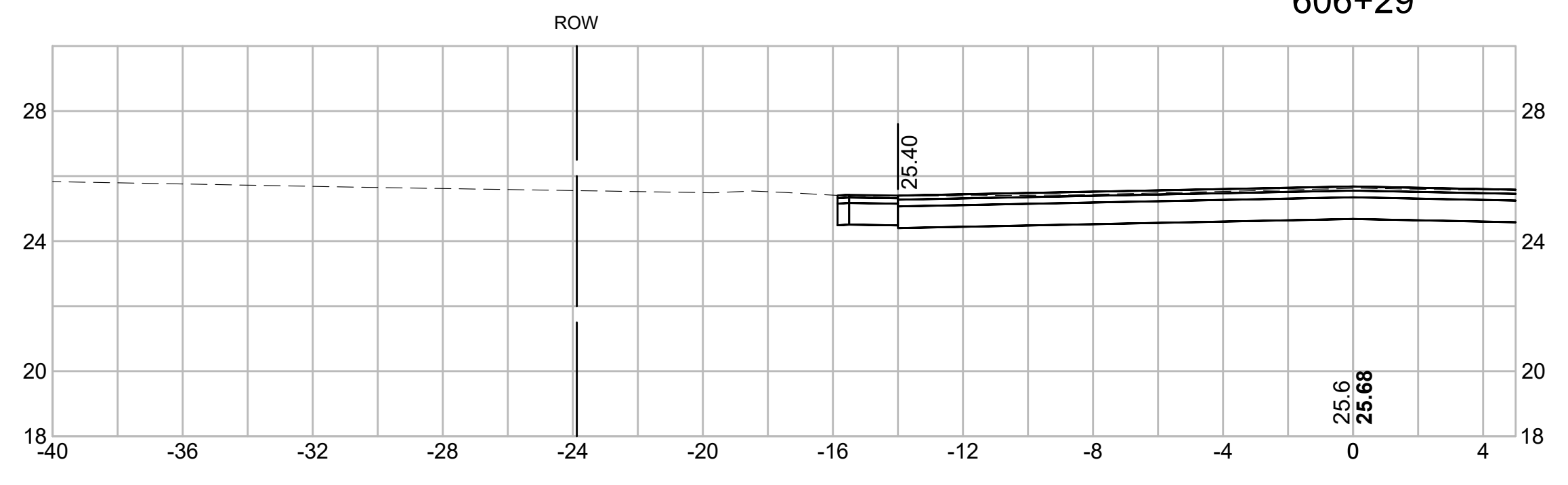
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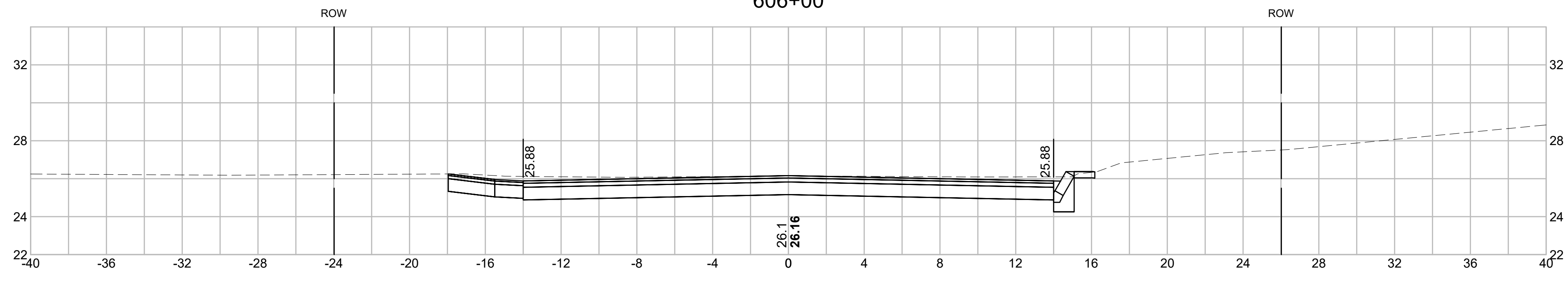
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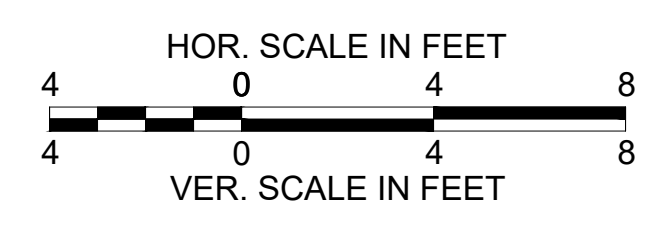
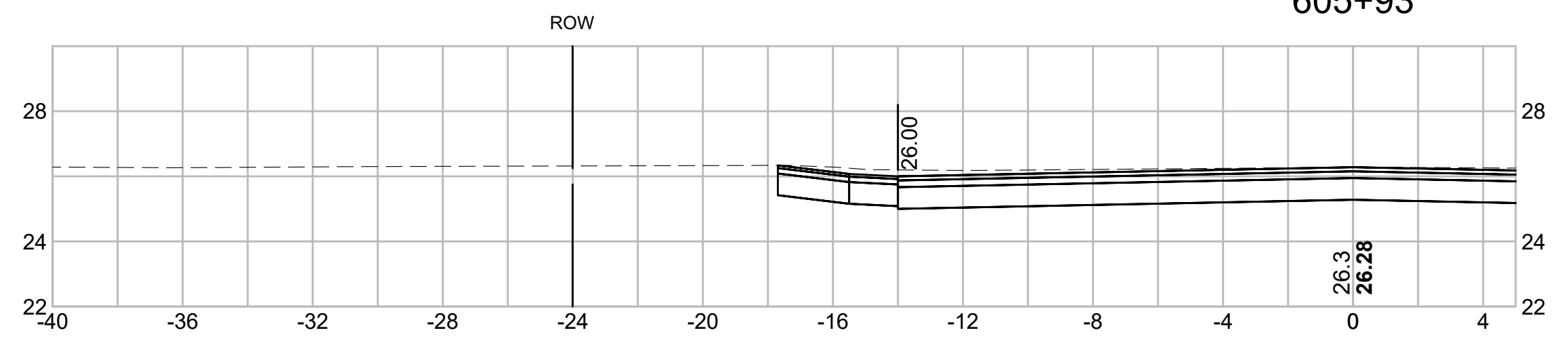
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606+00



605+93





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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

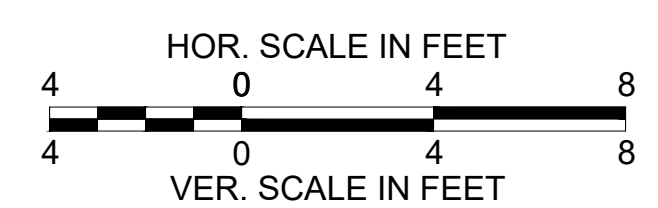
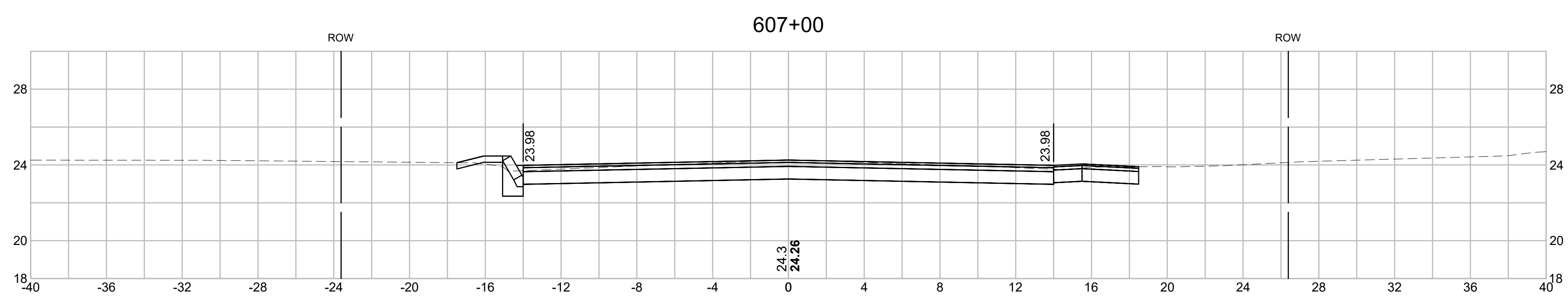
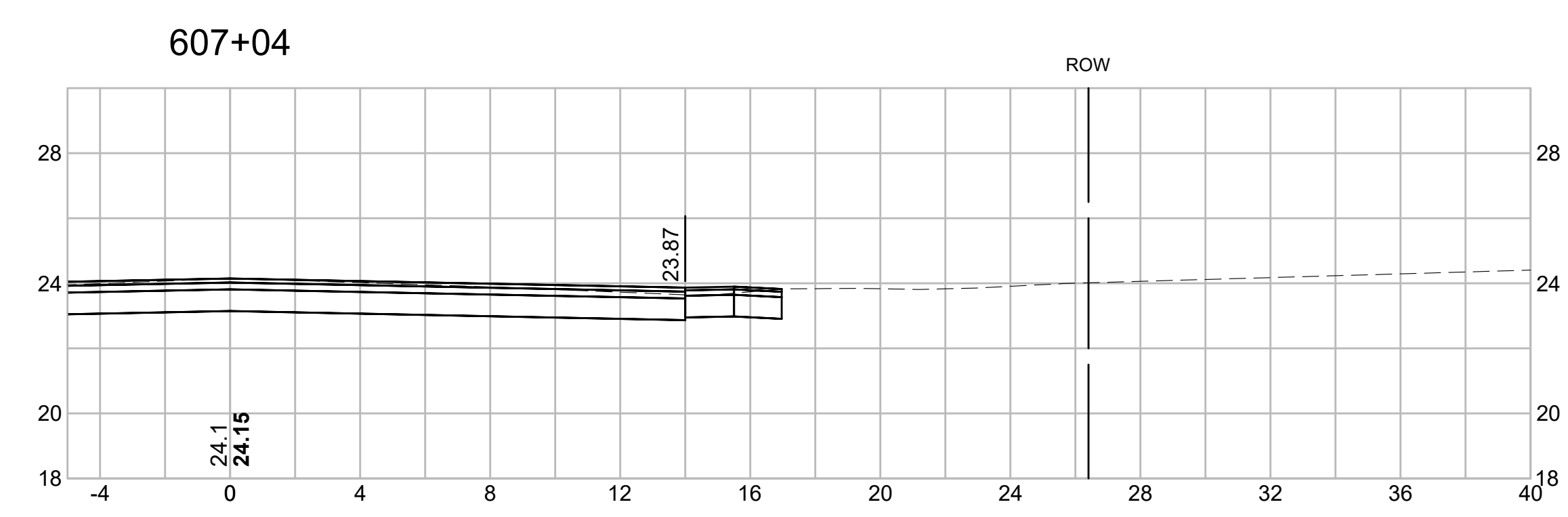
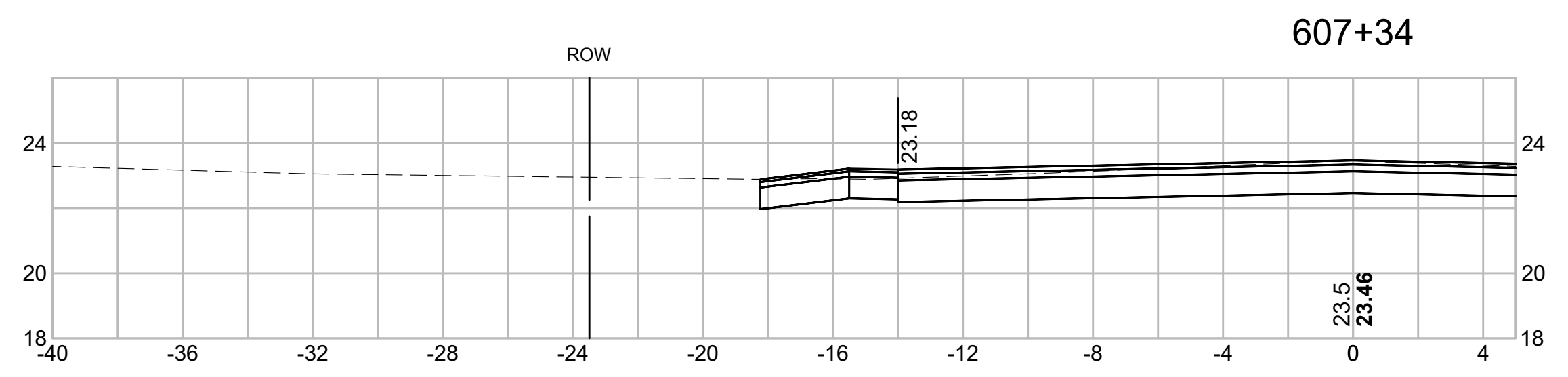
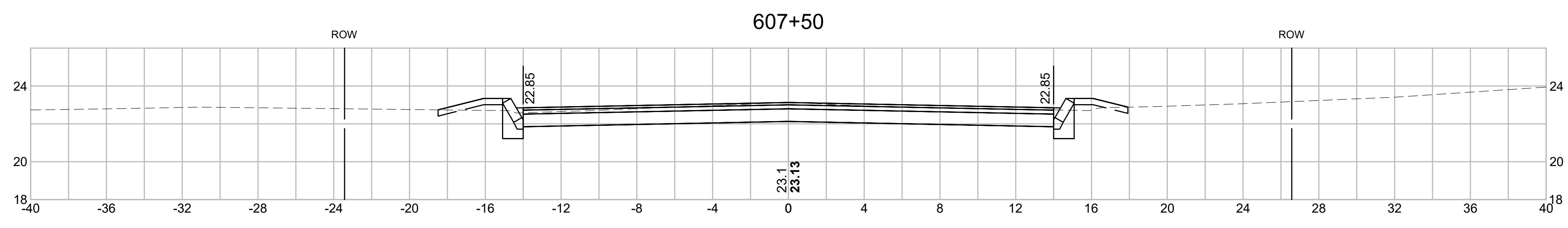
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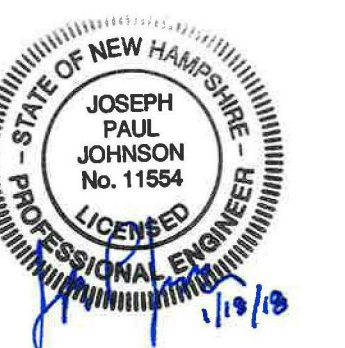
**LESLIE DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

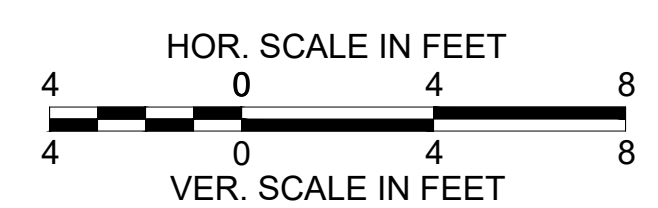
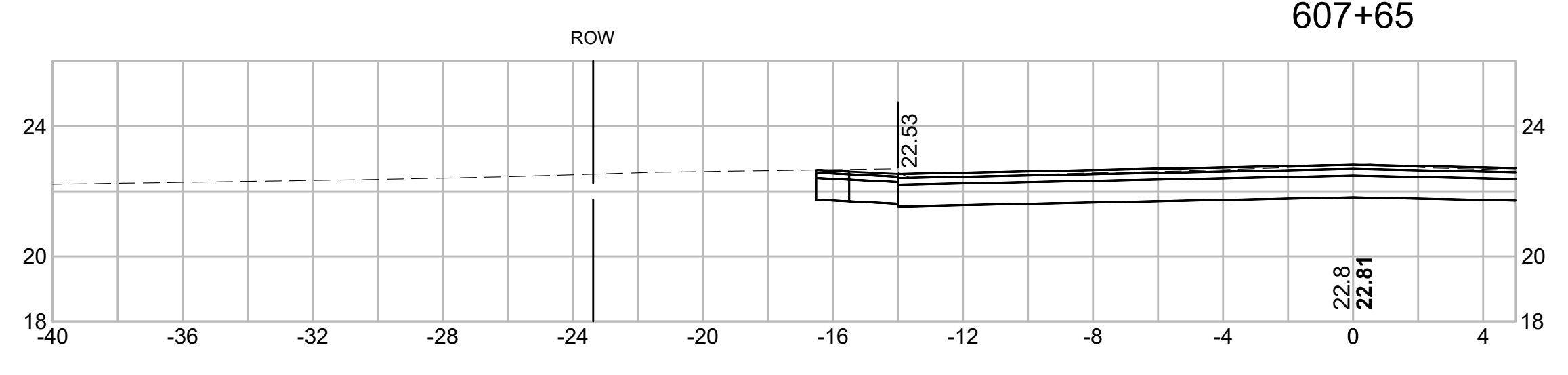
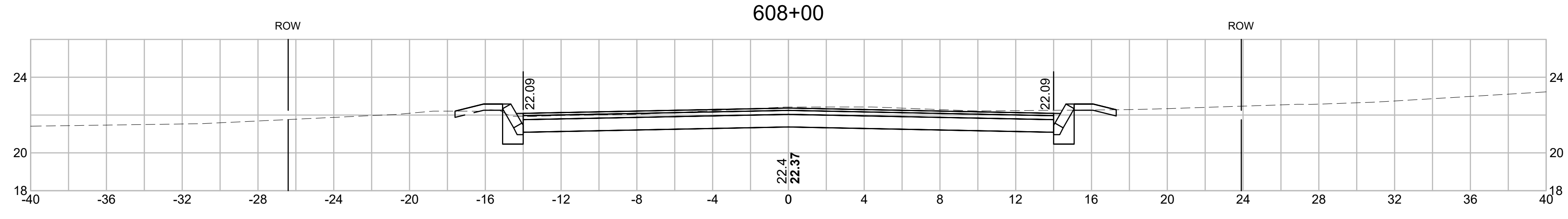
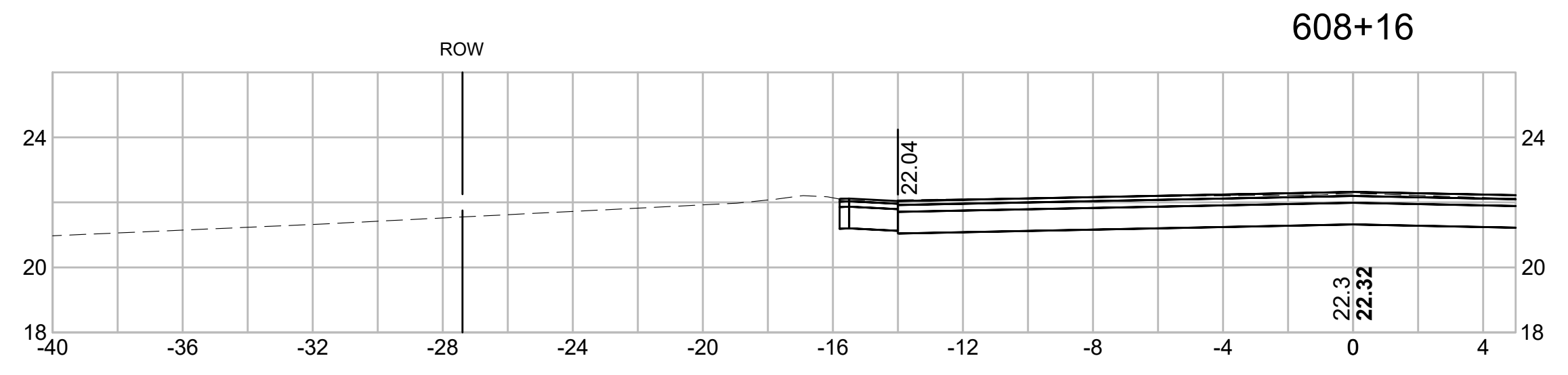
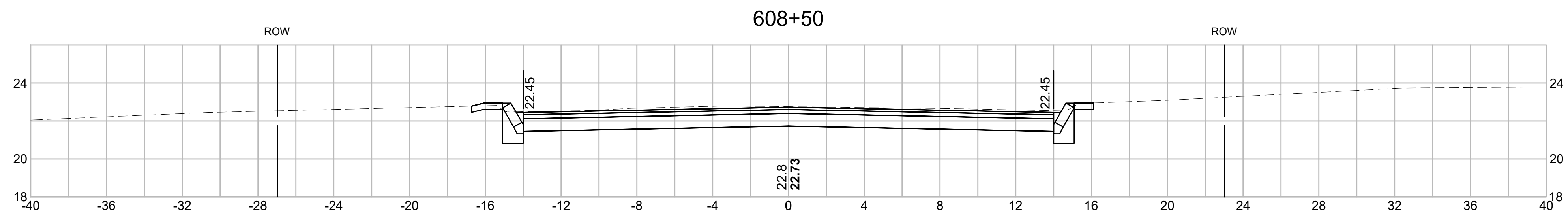
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



REVISIONS		
NO.	REVISION	DATE

2/5/2018

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**LESLIE DRIVE
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 SECTIONS**

SCALE: 1"=4'

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**IMPROVEMENTS TO MAPLEWOOD
AVENUE & ADJACENT AREAS
MAPLEWOOD AVENUE
PORTSMOUTH, NH**

REVISIONS		
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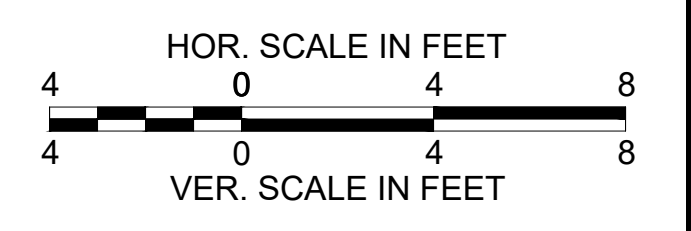
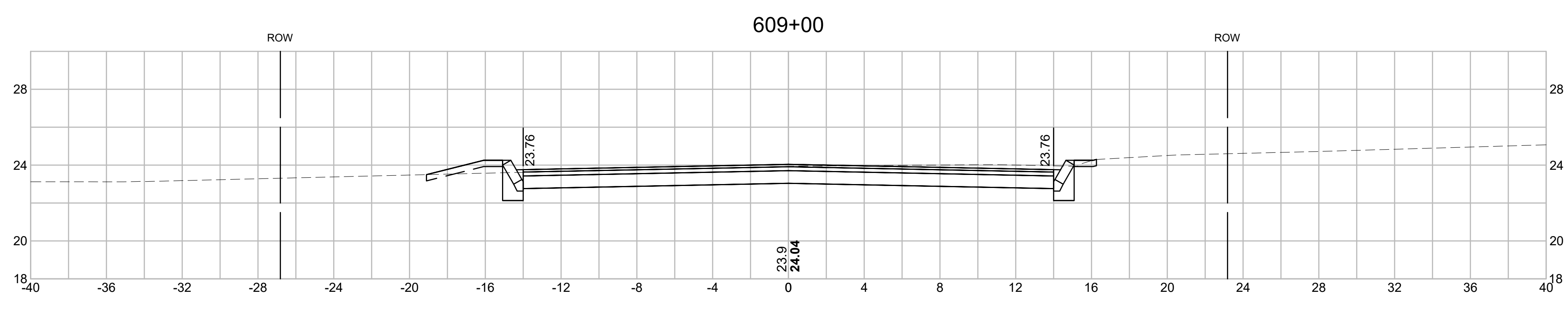
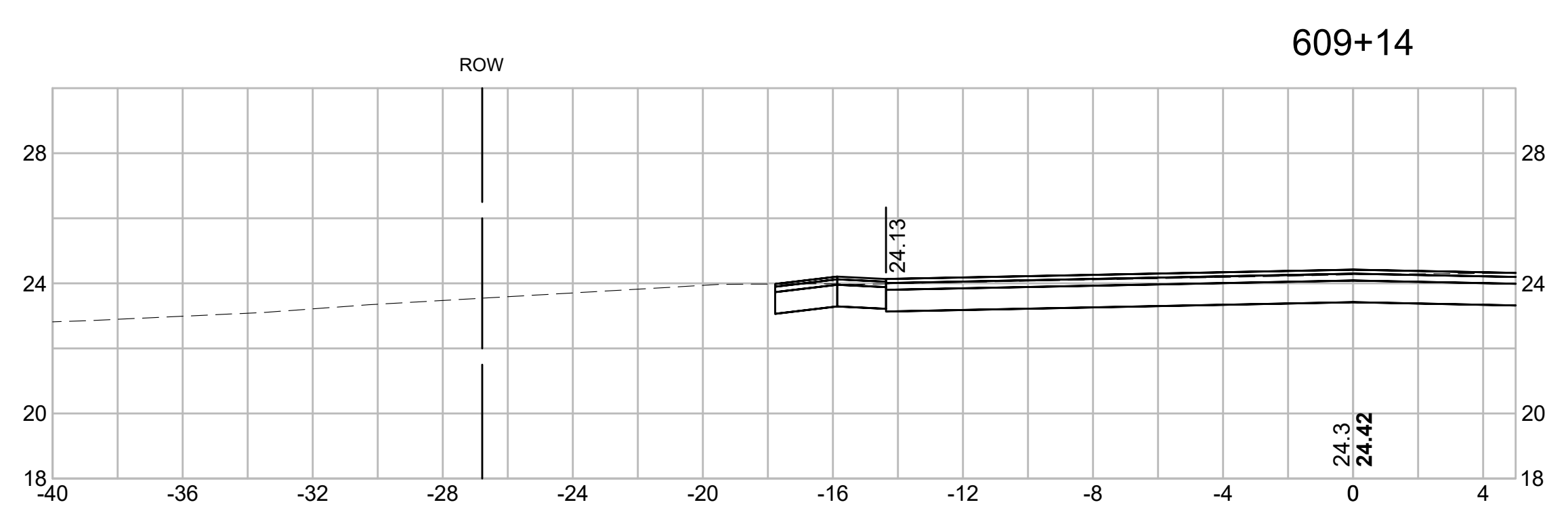
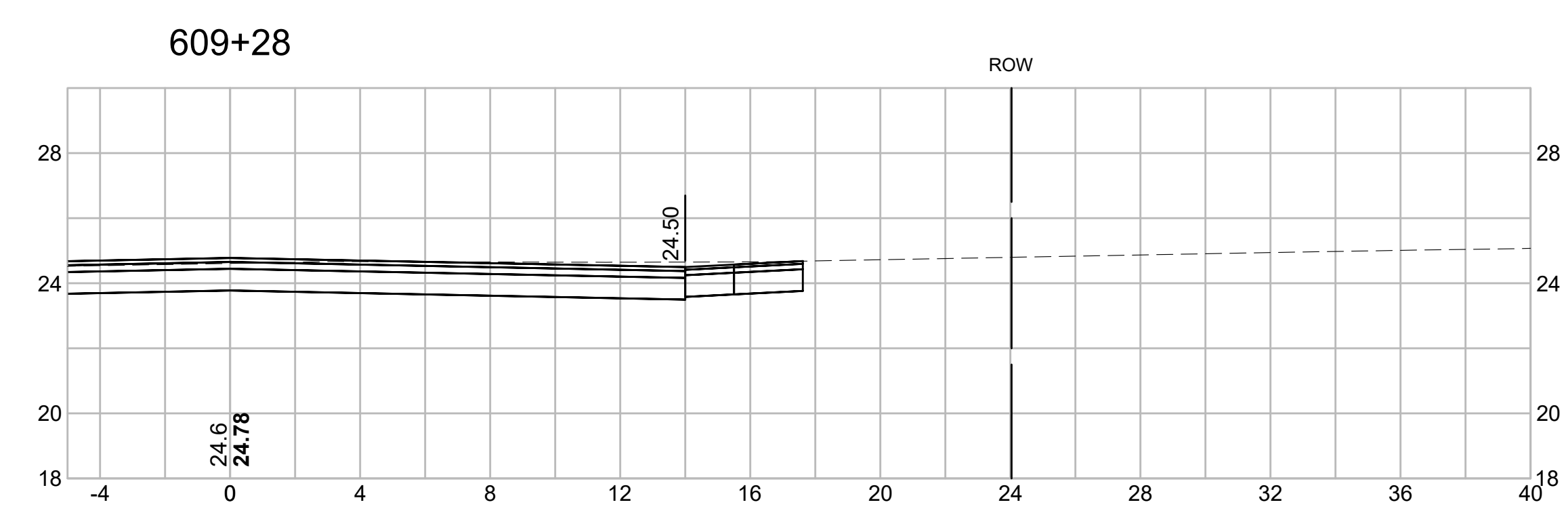
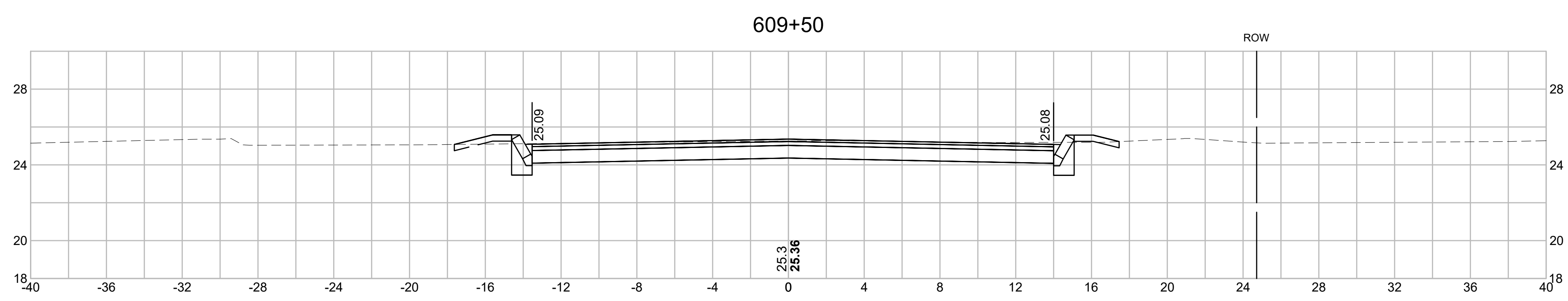
DRAWN/DESIGN BY CLS	CHECKED BY JPJ
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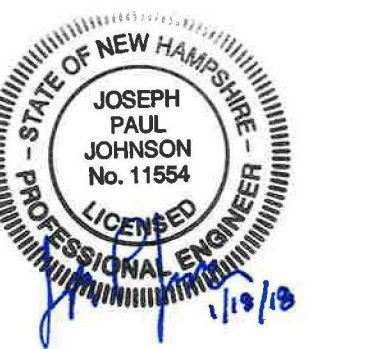
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CROSS
SECTIONS**

SCALE: 1"=4'

2015086.00

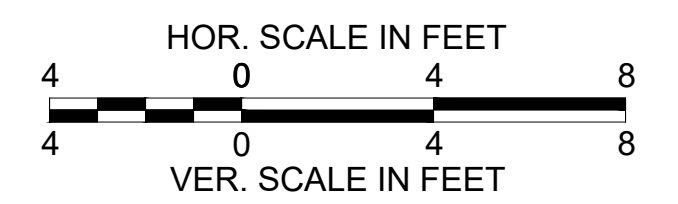
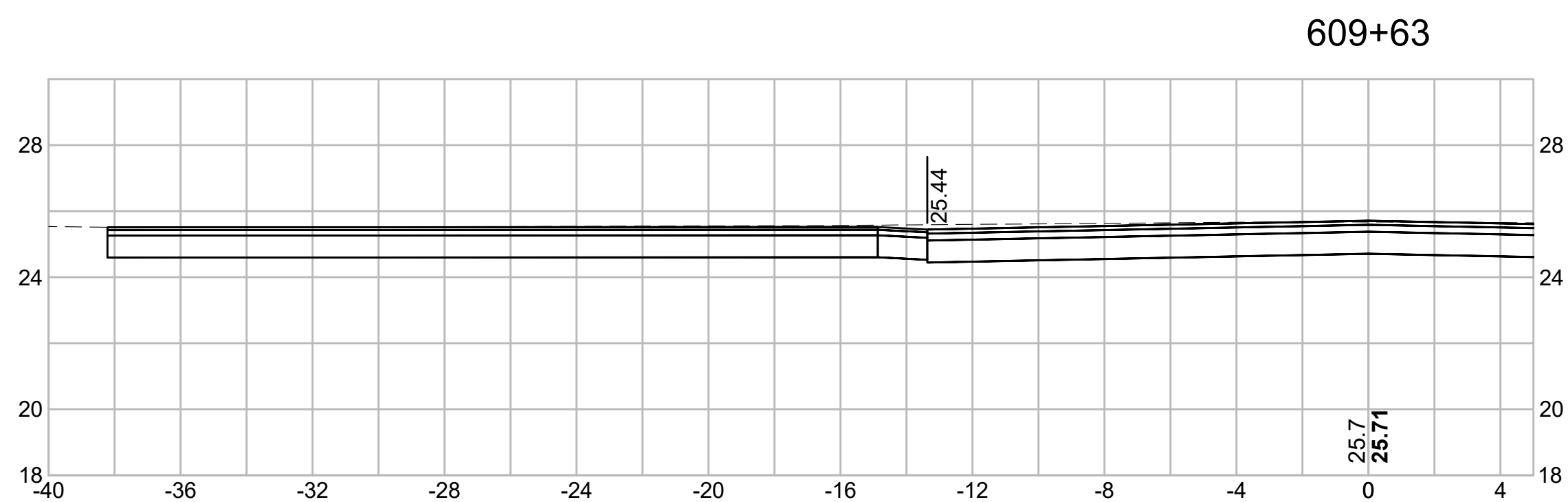
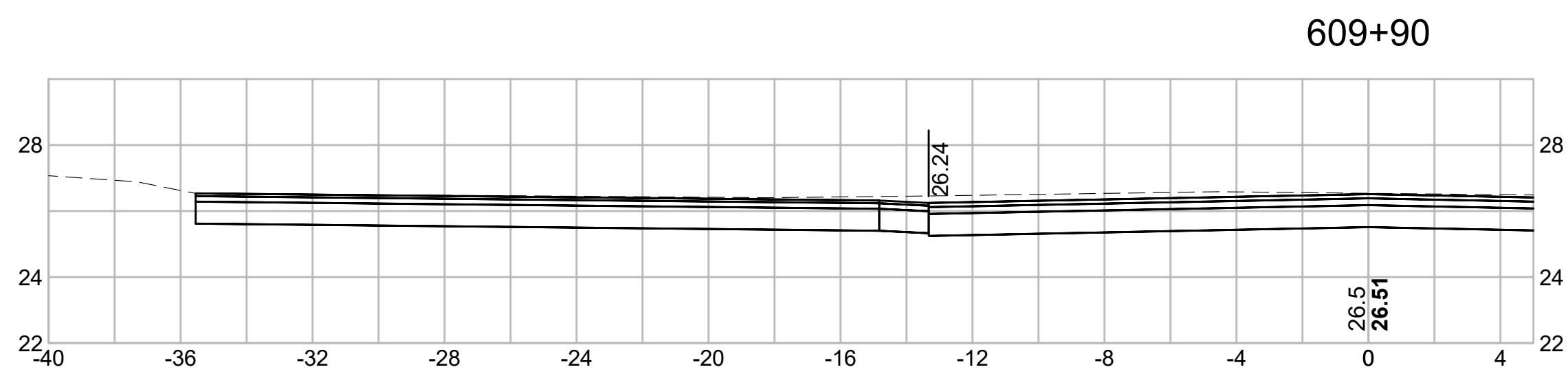
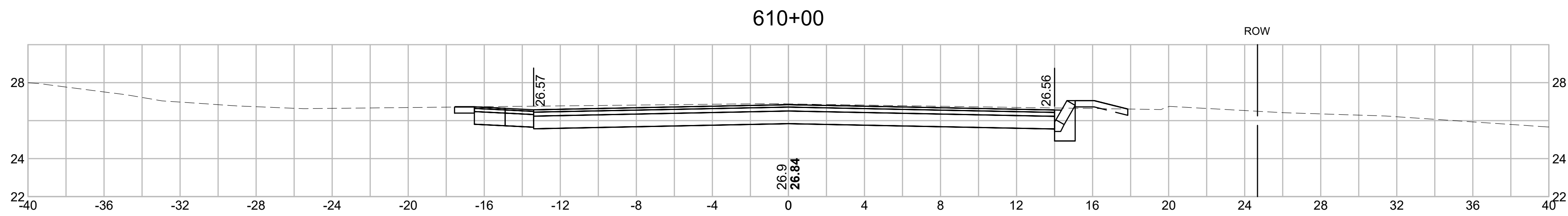
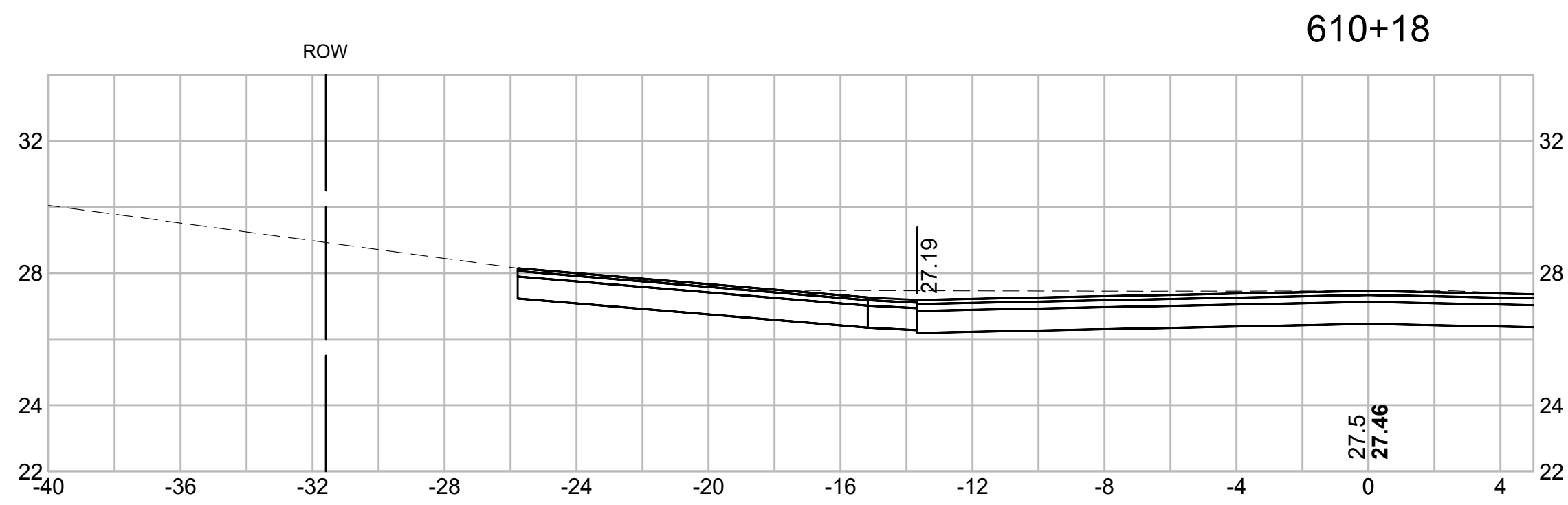
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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**



REVISIONS		
NO.	REVISION	DATE

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CLS	JPJ

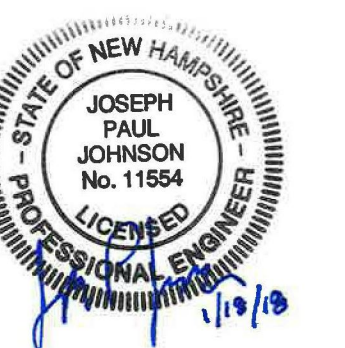
**LESLIE DRIVE
 CROSS
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SCALE: 1"=4'

2015086.00

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**IMPROVEMENTS TO MAPLEWOOD
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 PORTSMOUTH, NH**

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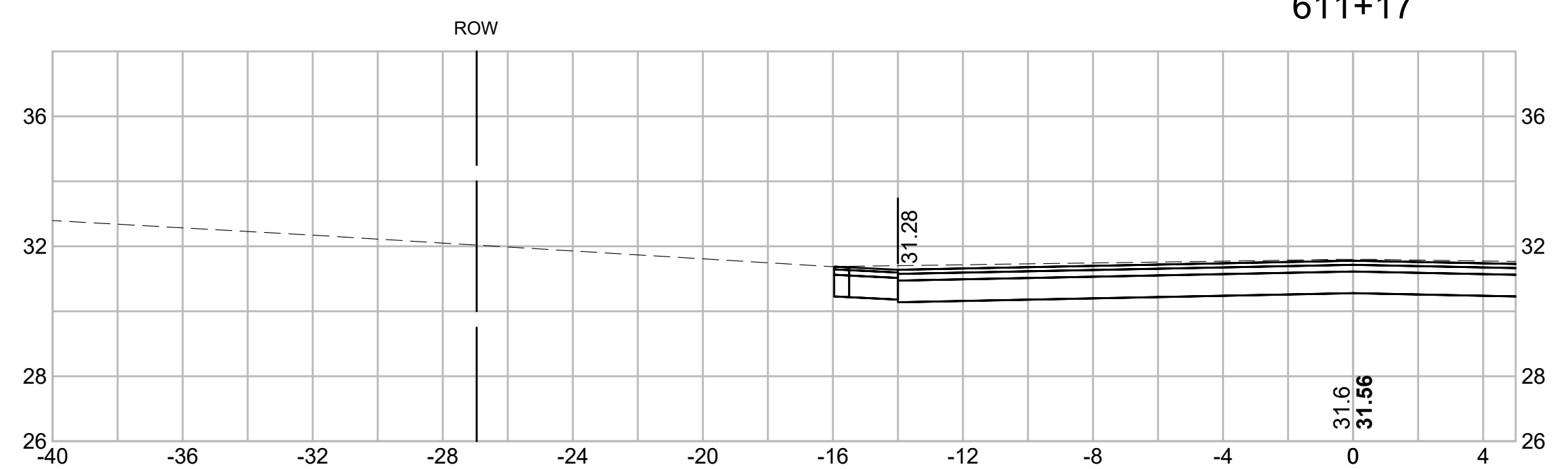
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 SECTIONS**

SCALE: 1"=4'

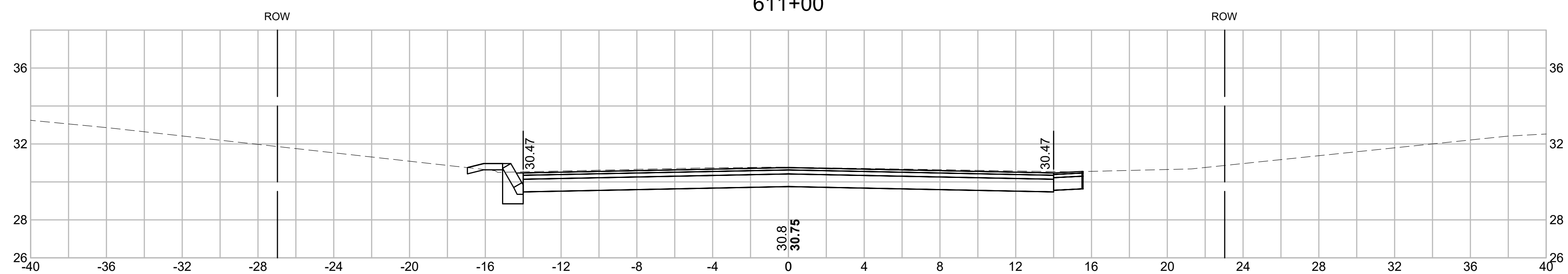
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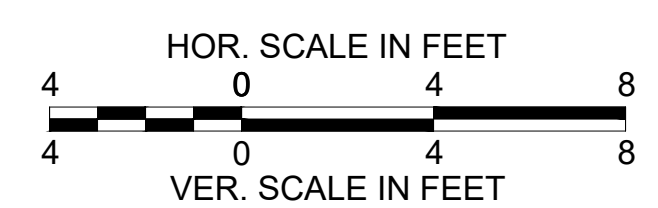
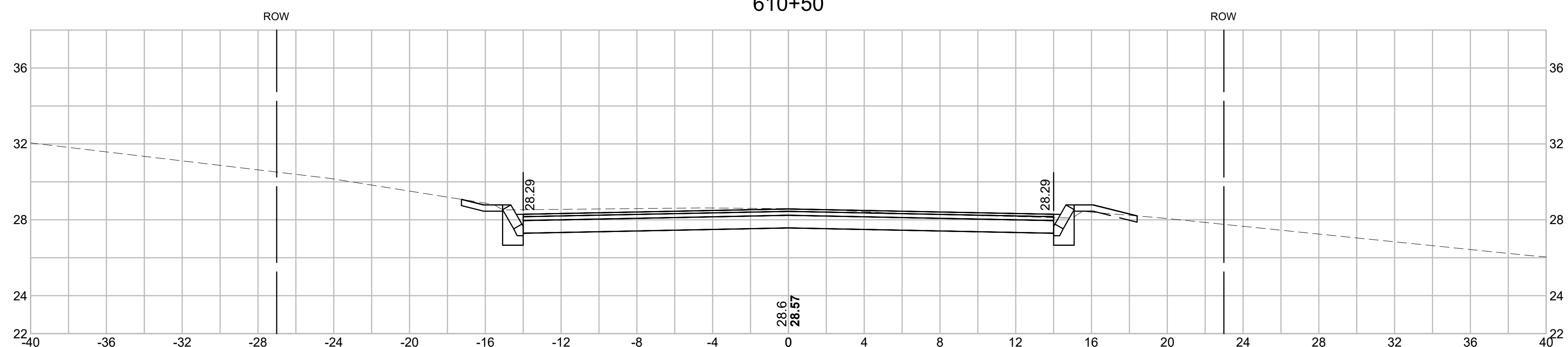
611+17



611+00



610+50





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**IMPROVEMENTS TO MAPLEWOOD
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 PORTSMOUTH, NH**

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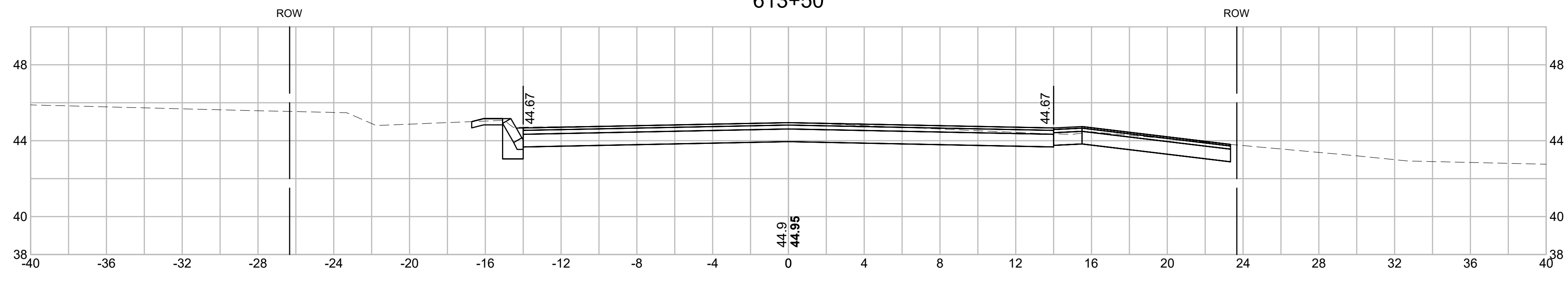
**LESLIE DRIVE
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SCALE: 1"=4'

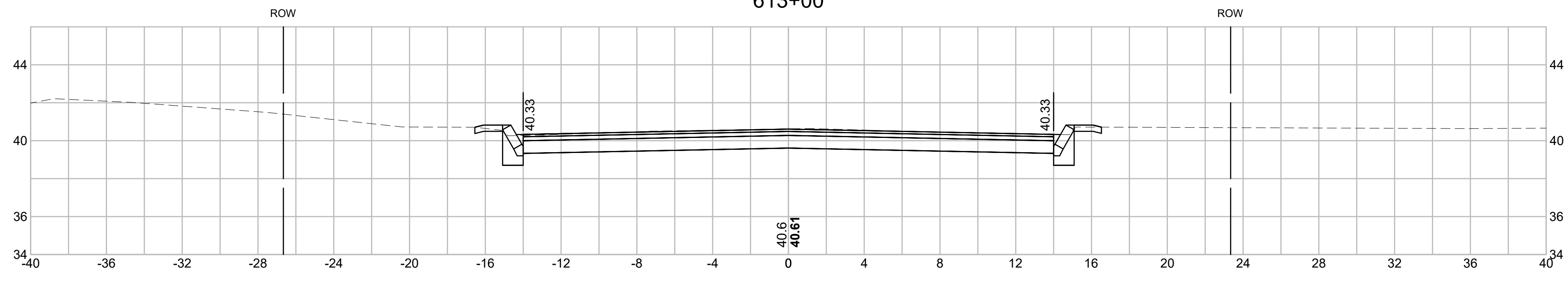
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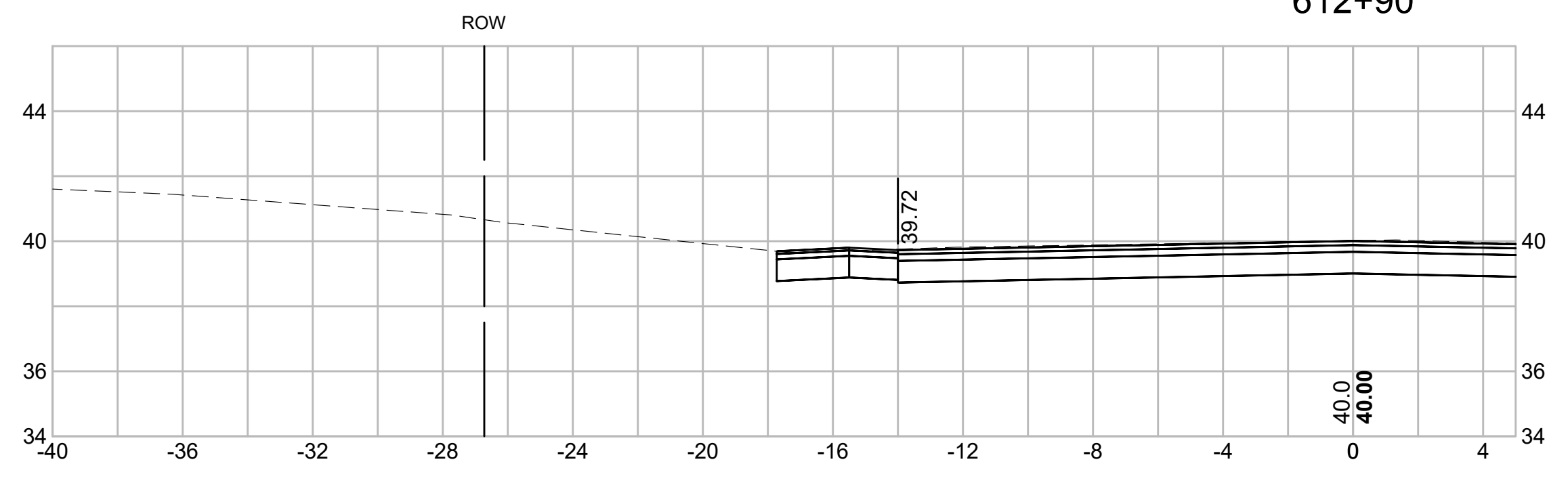
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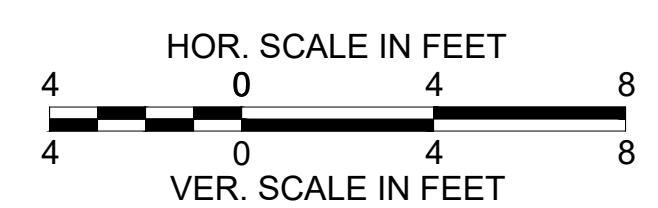
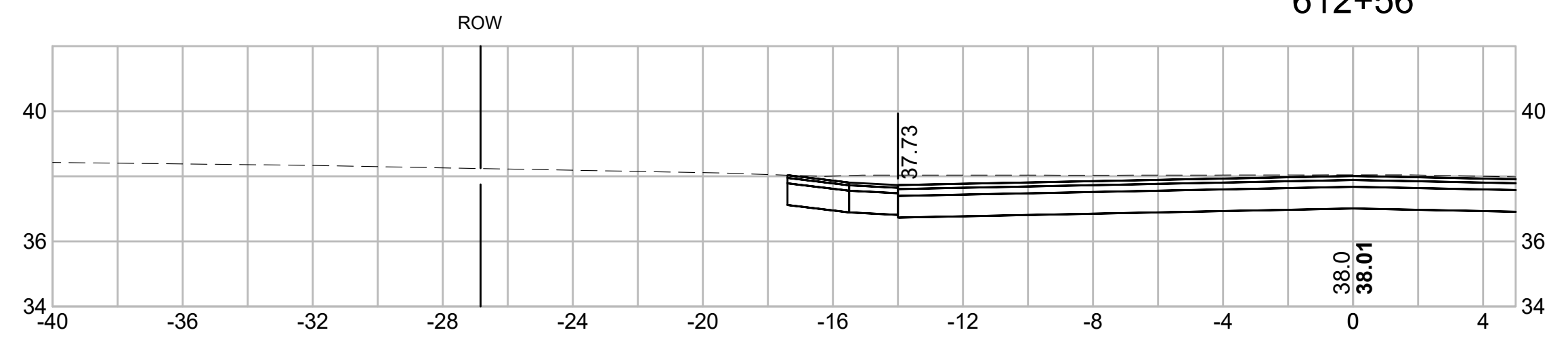
613+00



612+90



612+56



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**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

REVISIONS		
NO.	REVISION	DATE

2/5/2018

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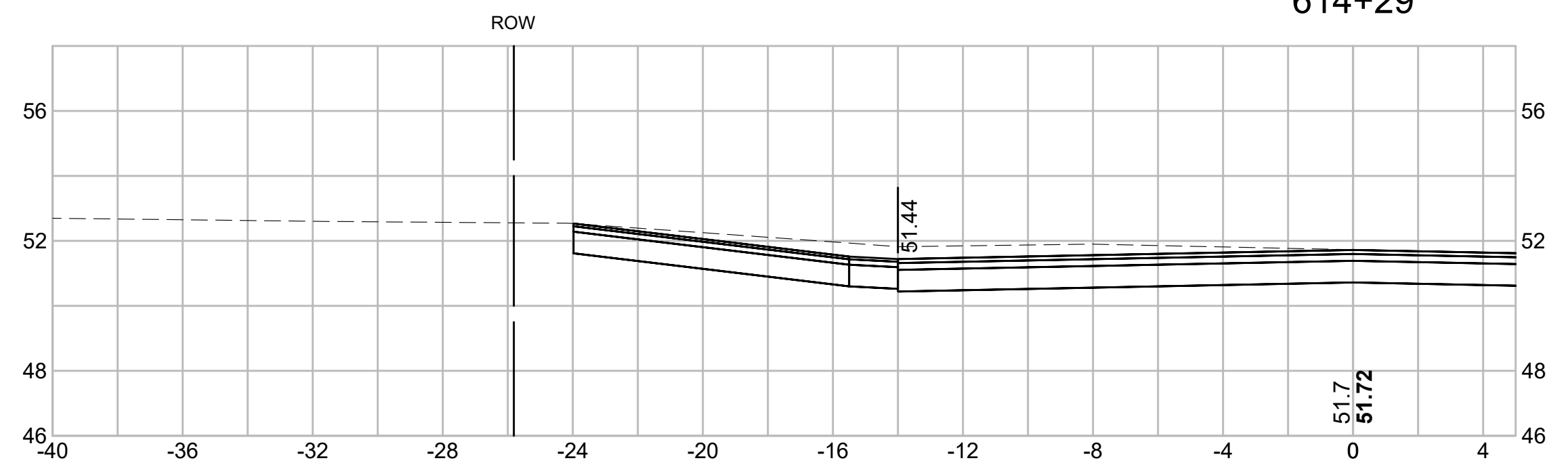
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 CROSS
 SECTIONS**

SCALE: 1"=4'

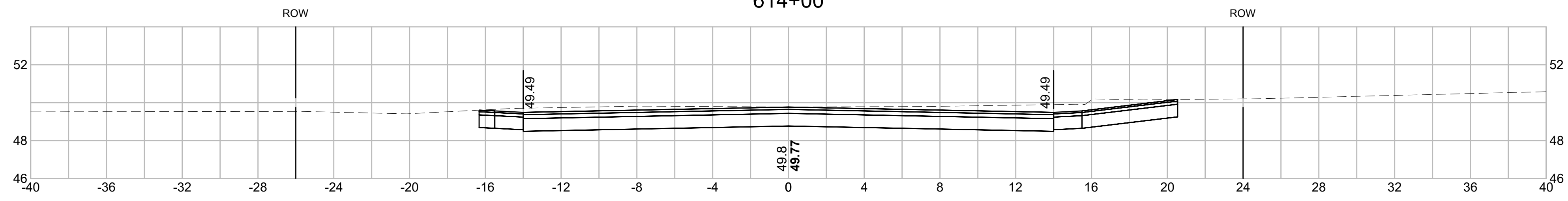
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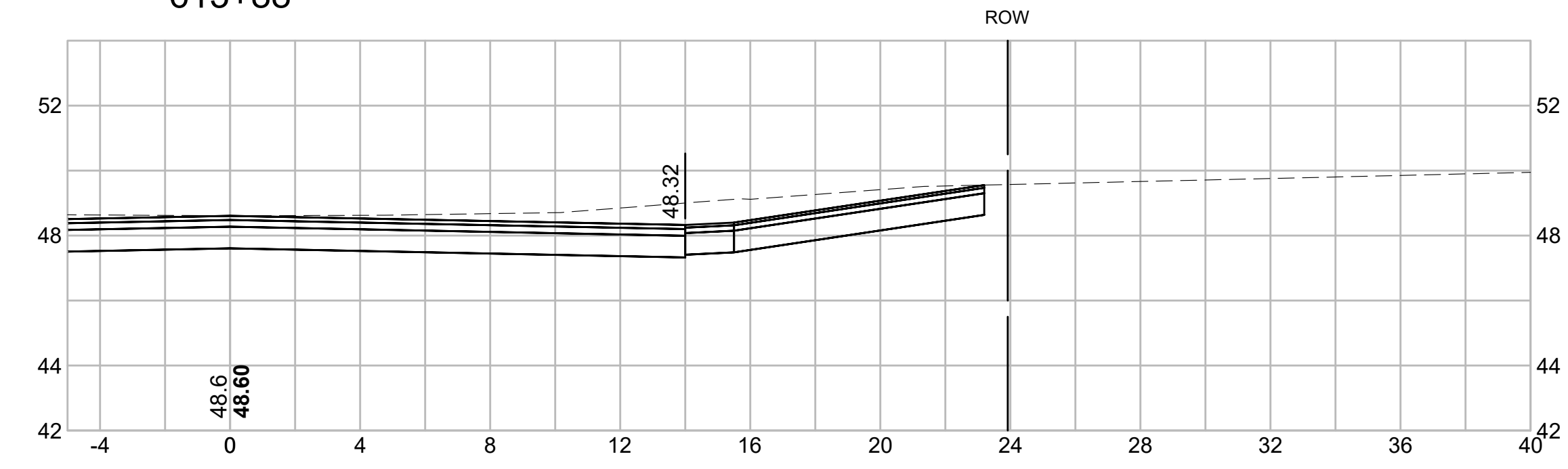
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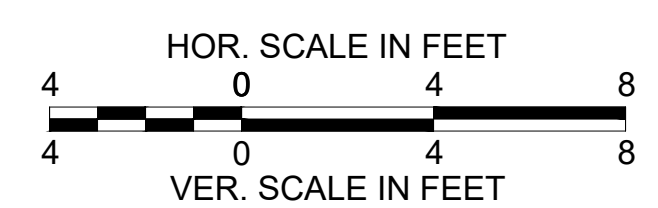
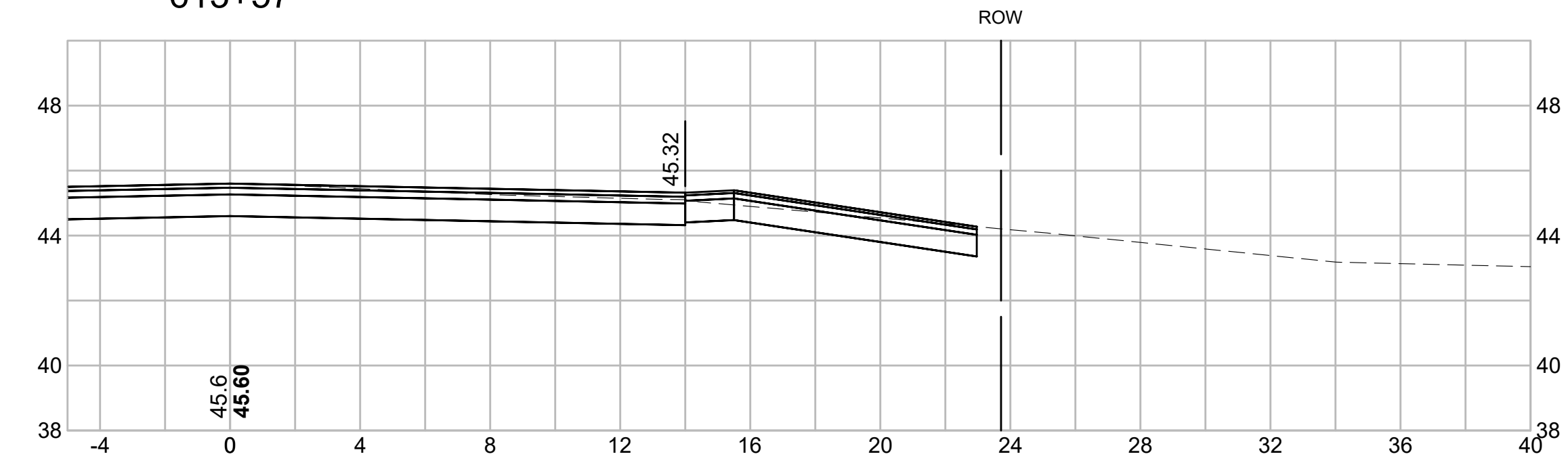
614+00



613+88



613+57





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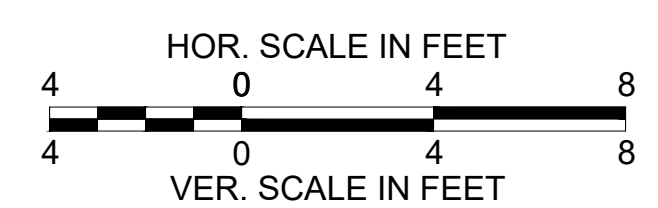
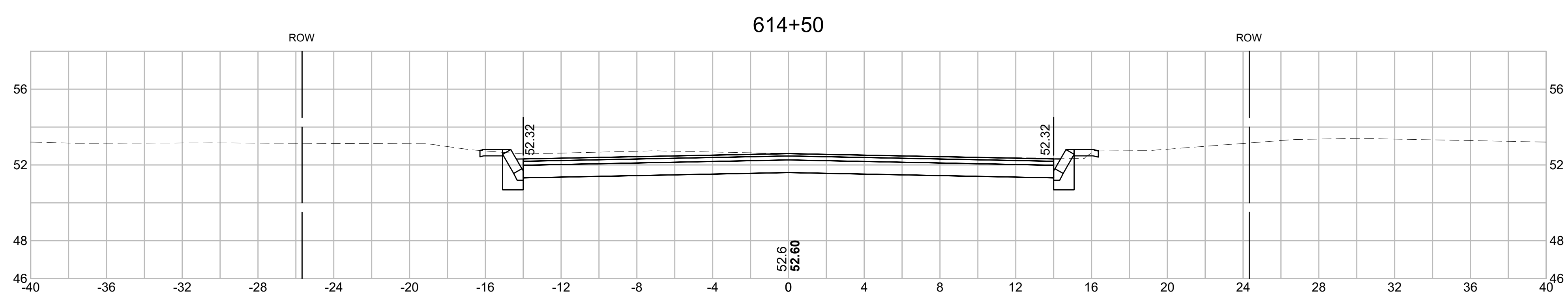
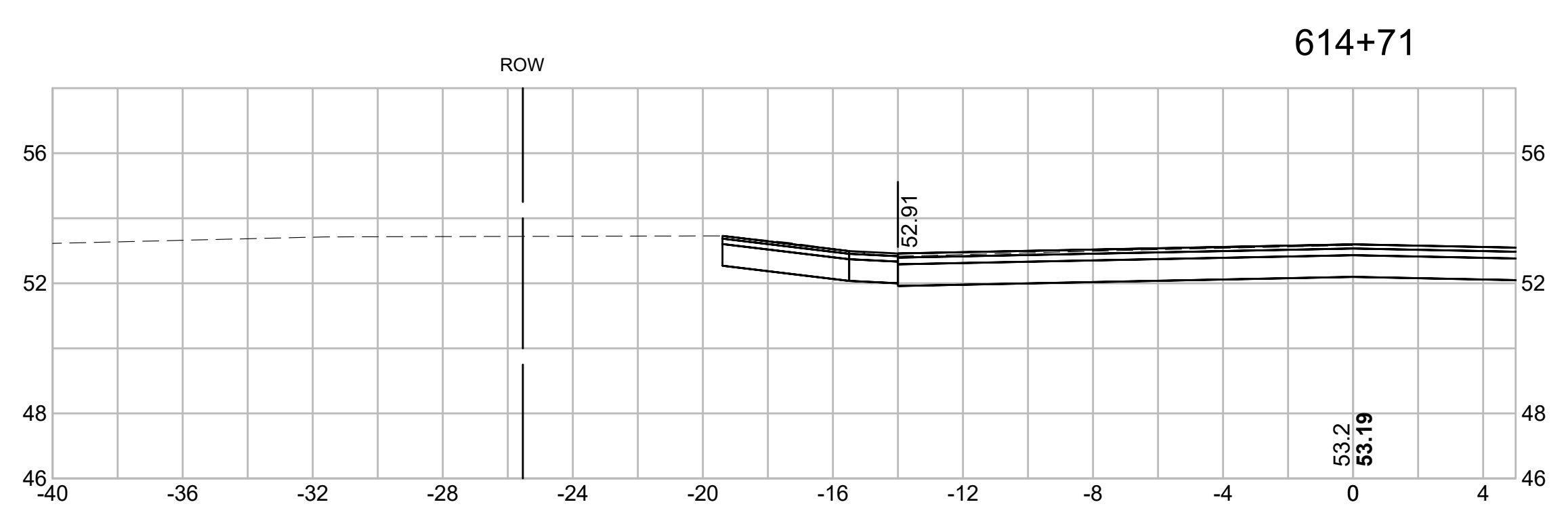
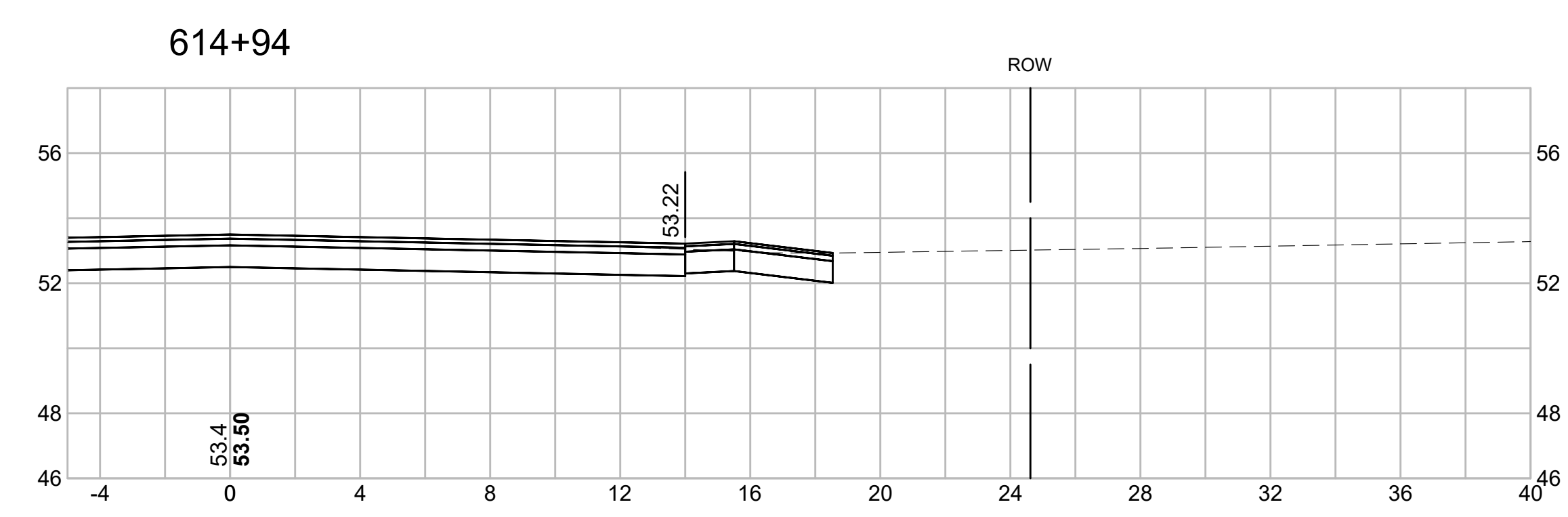
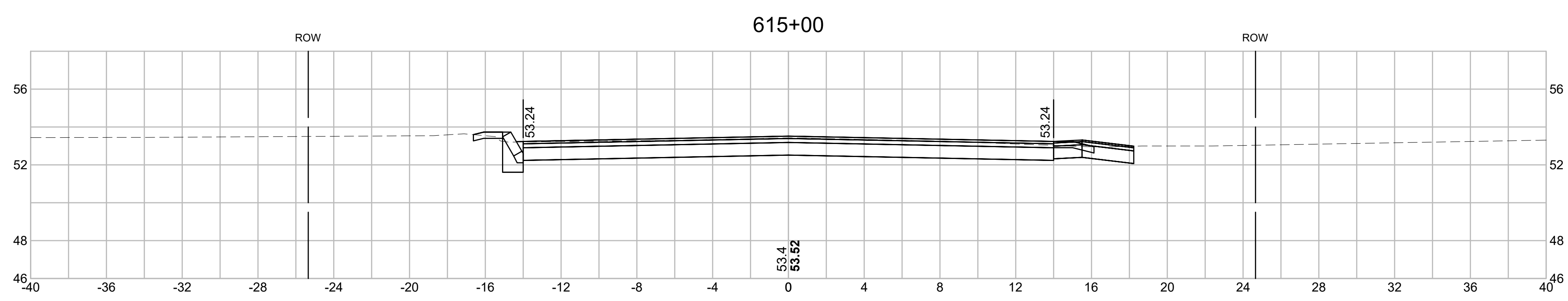
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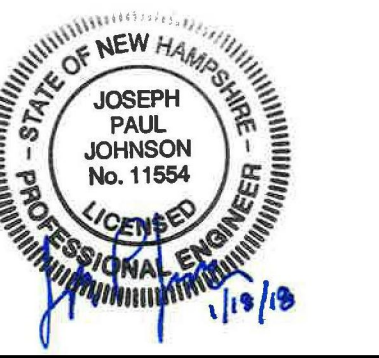
**LESLIE DRIVE
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 SECTIONS**

SCALE: 1"=4'

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 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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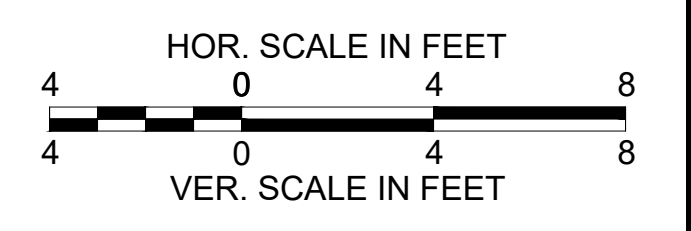
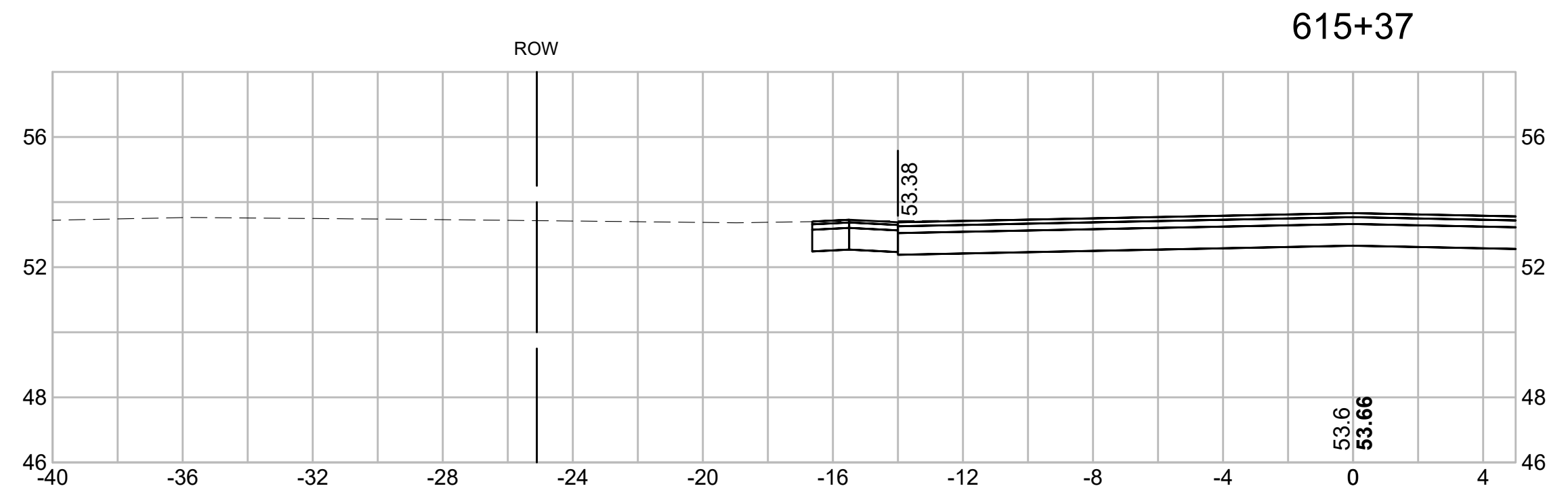
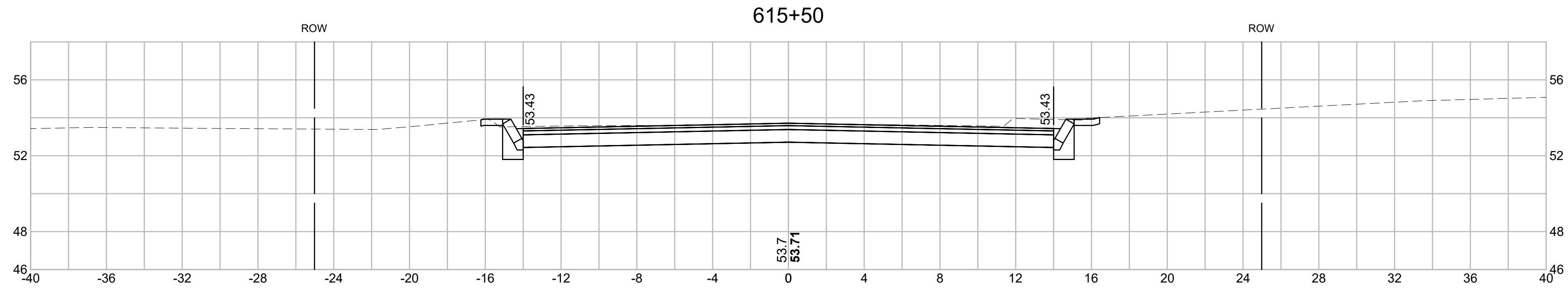
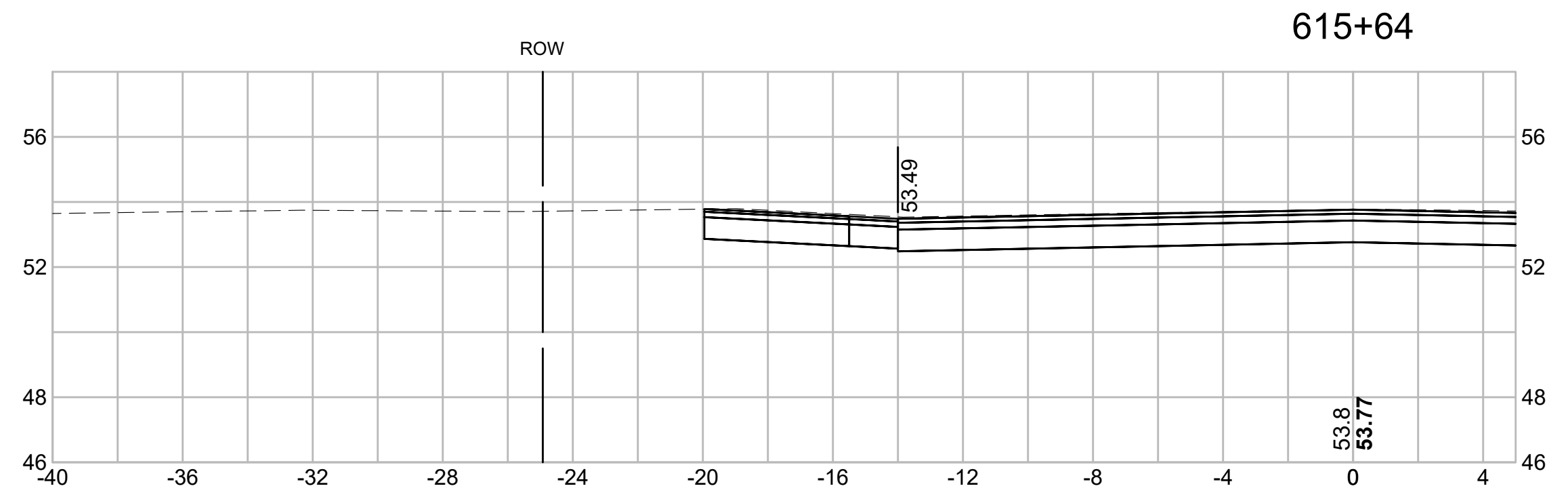
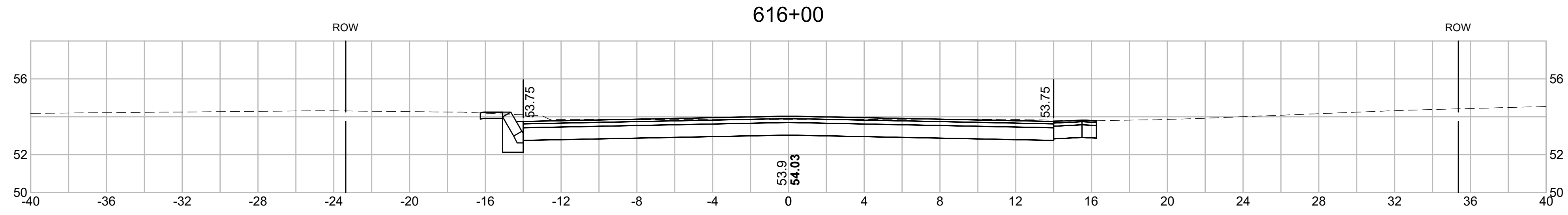
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SCALE: 1"=4'

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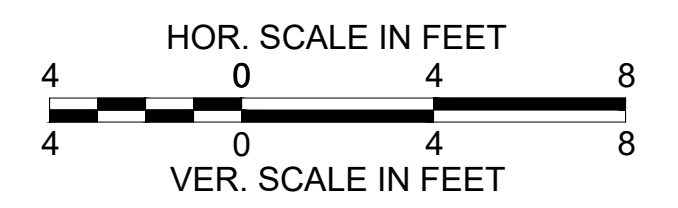
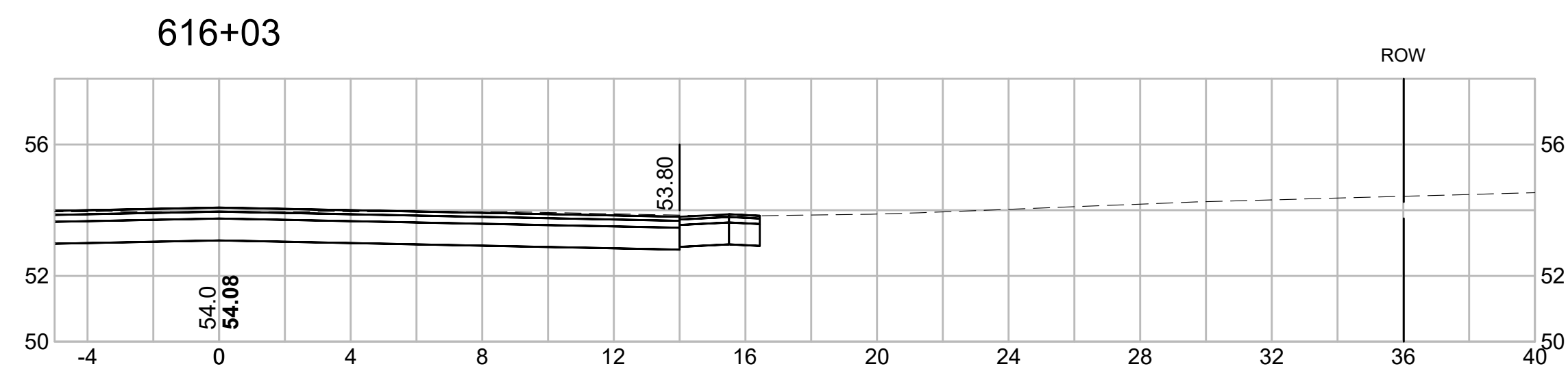
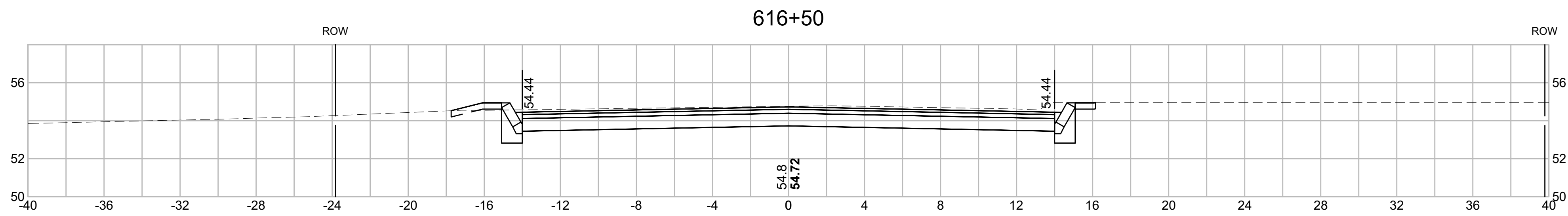
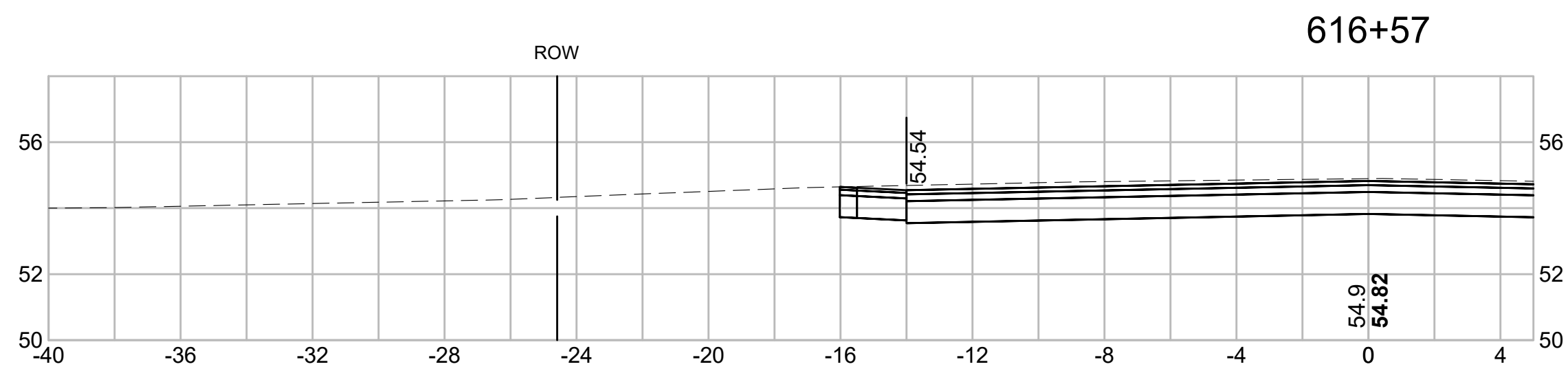
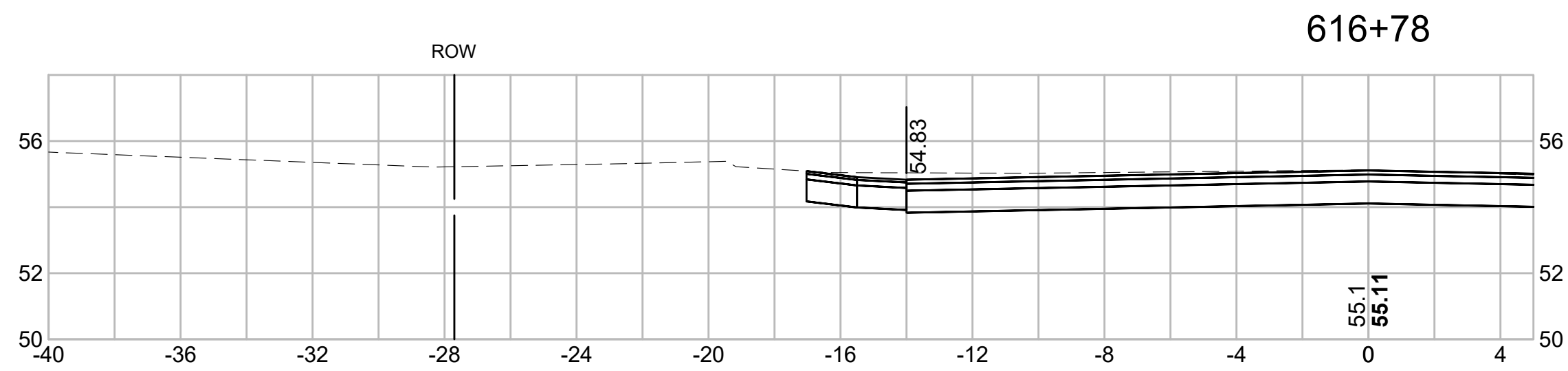
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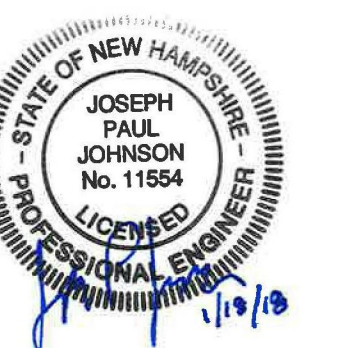
**IMPROVEMENTS TO MAPLEWOOD
 AVENUE & ADJACENT AREAS
 MAPLEWOOD AVENUE
 PORTSMOUTH, NH**

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NO.	REVISION	DATE

**LESLIE DRIVE
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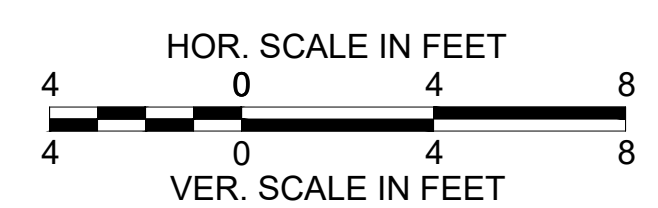
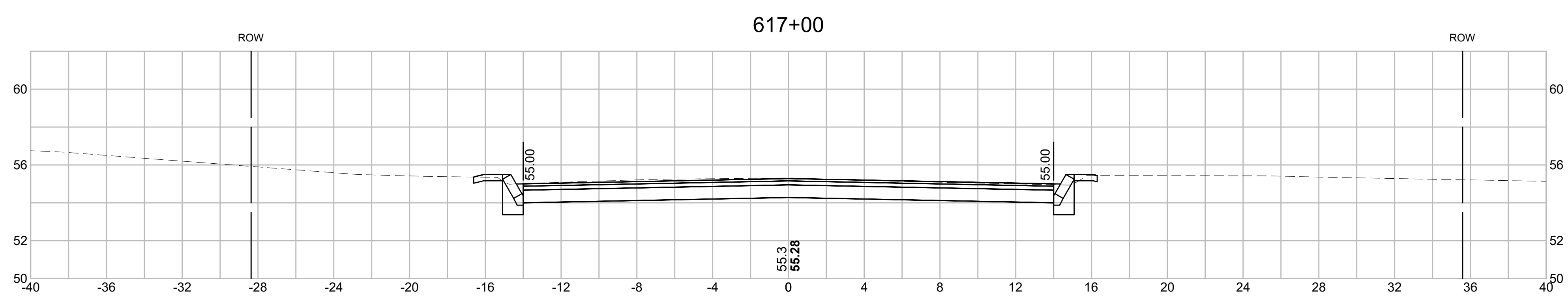
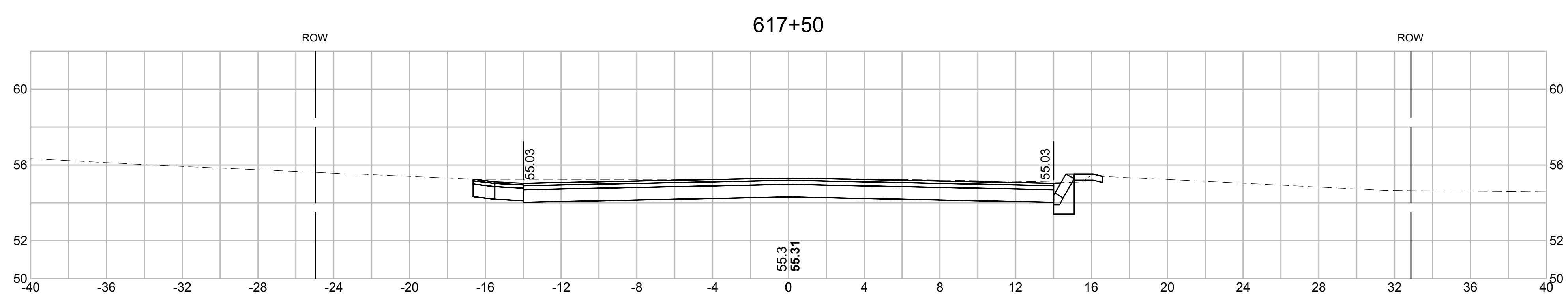
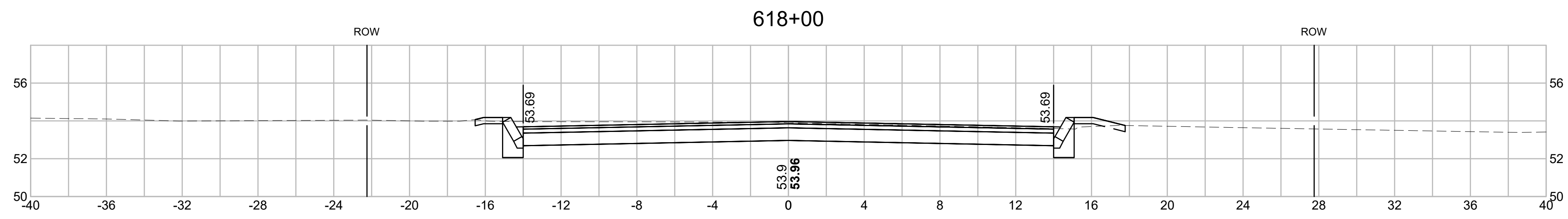
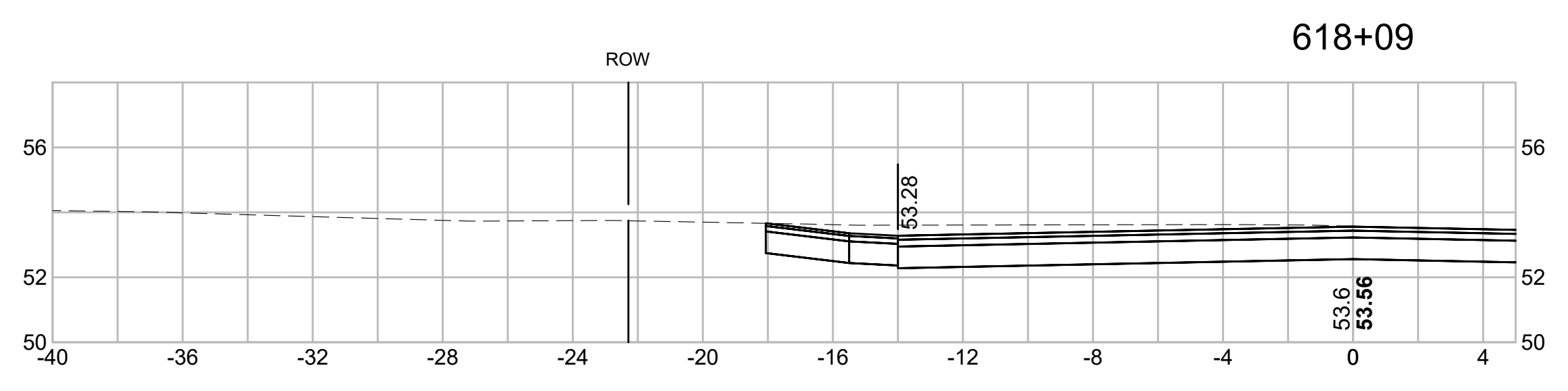
SCALE: 1"=4'
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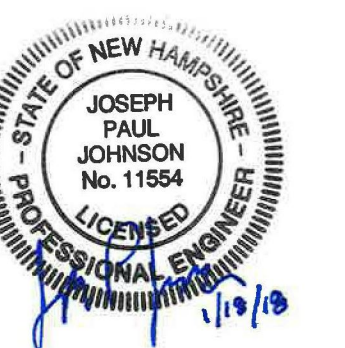
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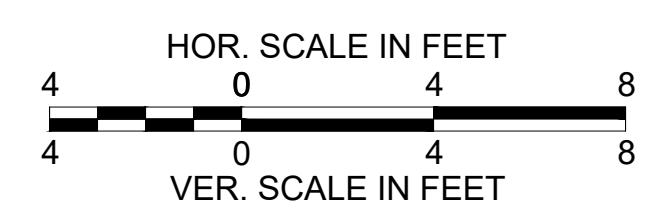
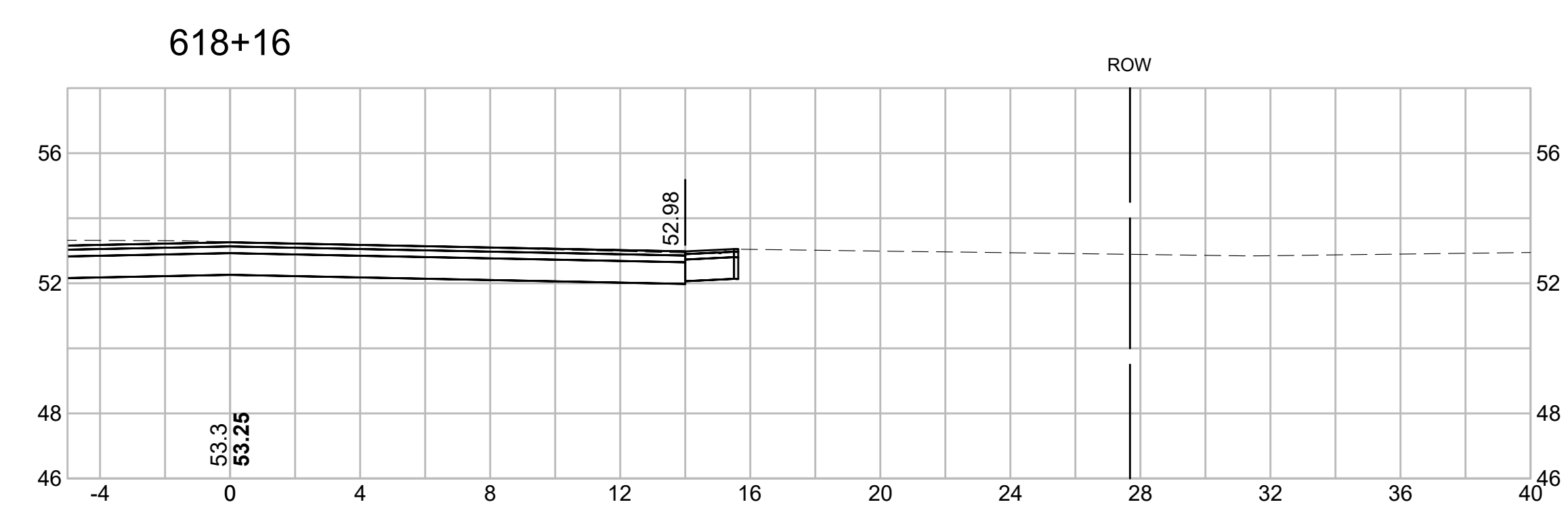
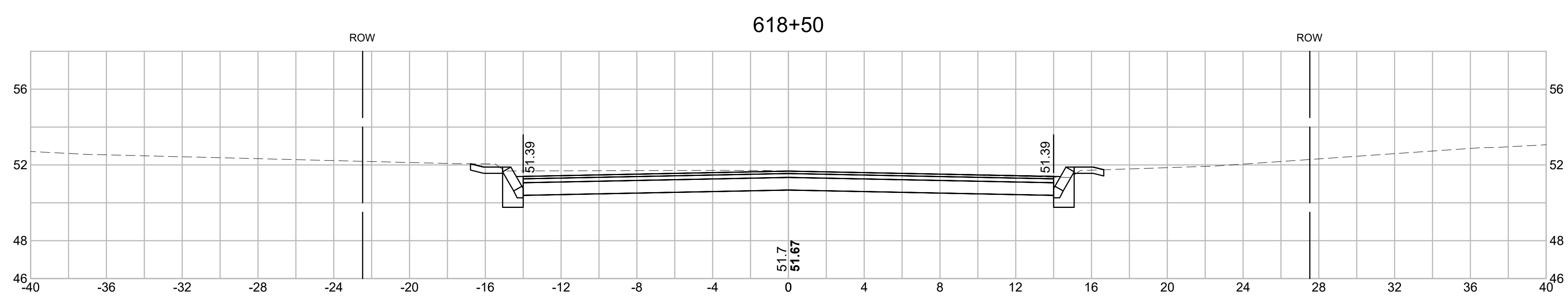
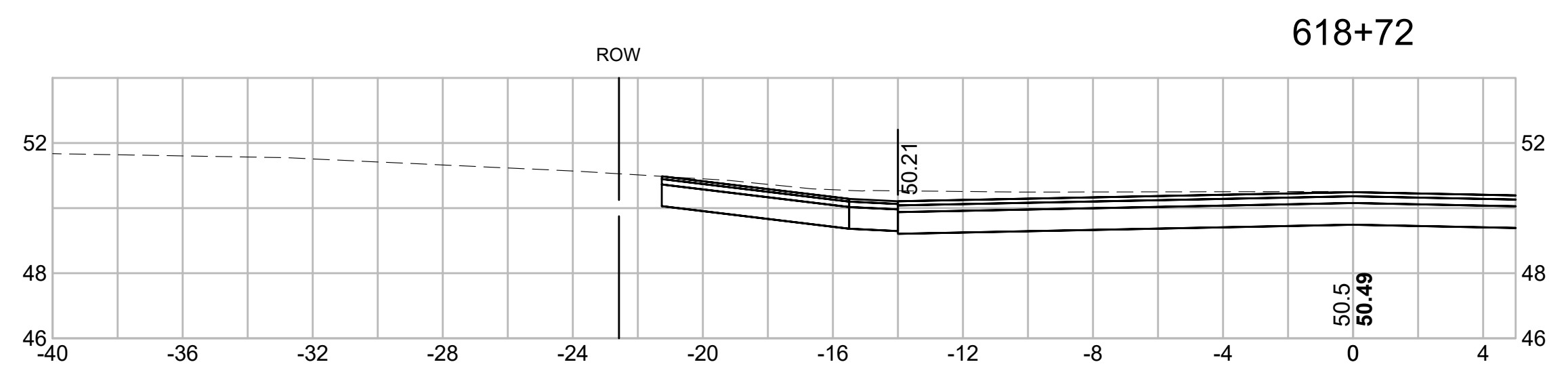
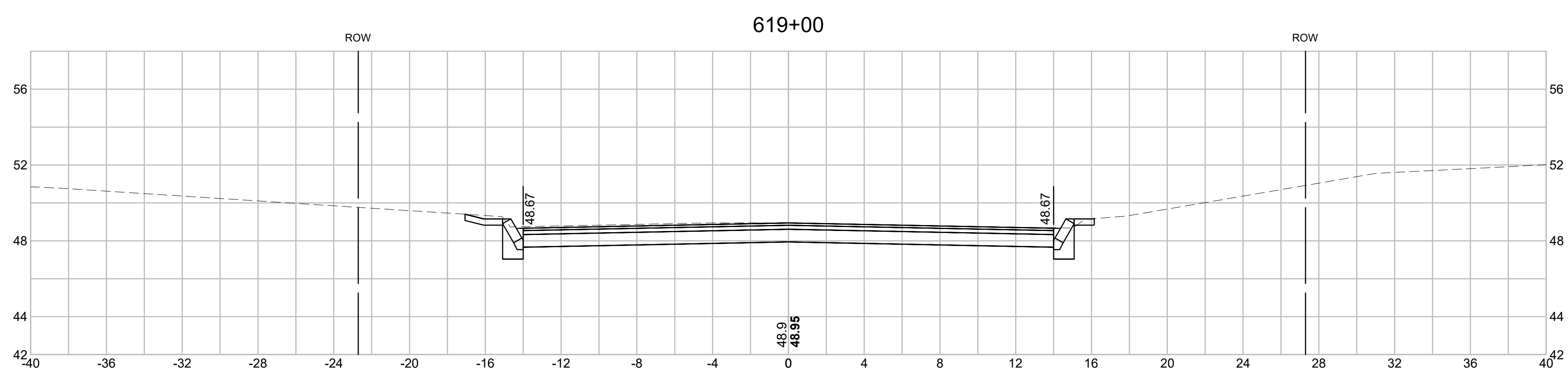
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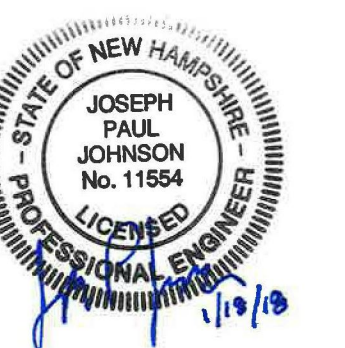
**LESLIE DRIVE
 CROSS
 SECTIONS**

SCALE: 1"=4'

2015086.00

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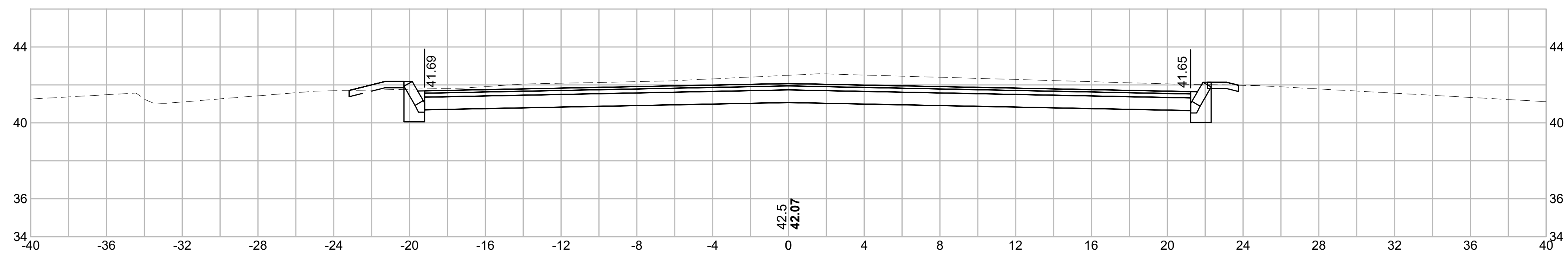
**LESLIE DRIVE
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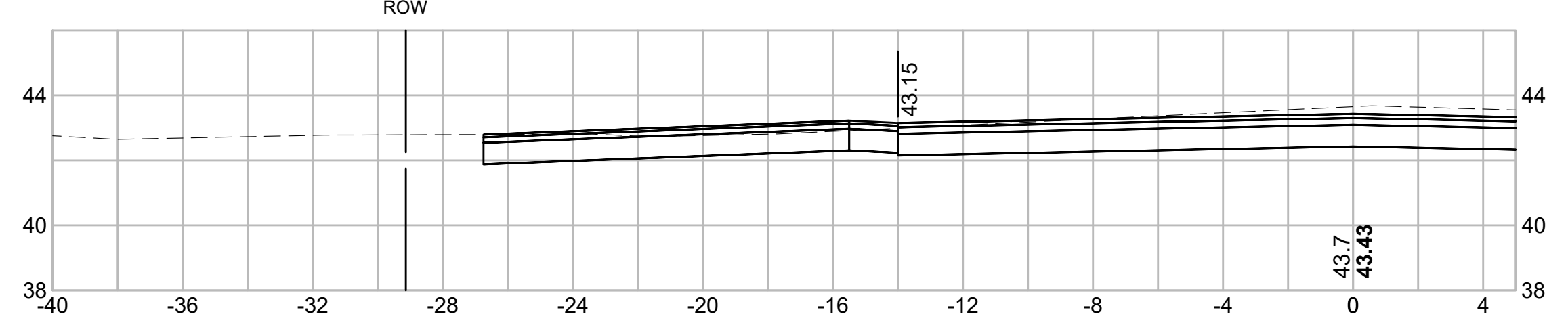
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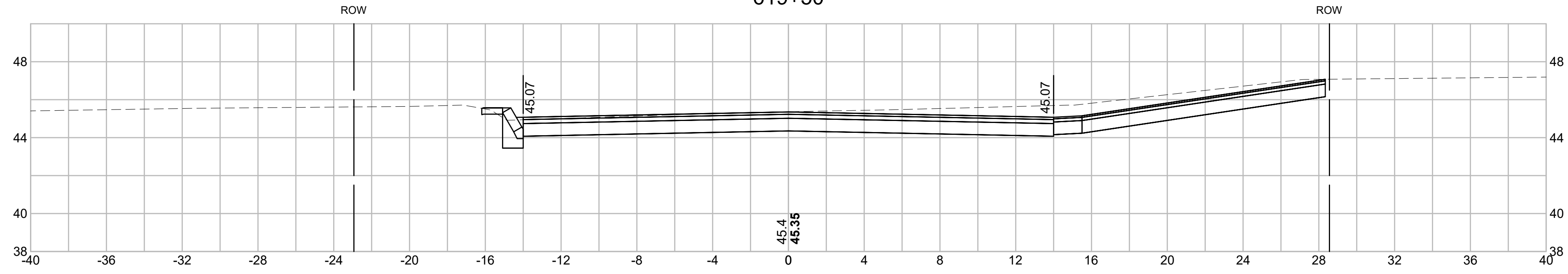
619+95



619+76



619+50



619+45

