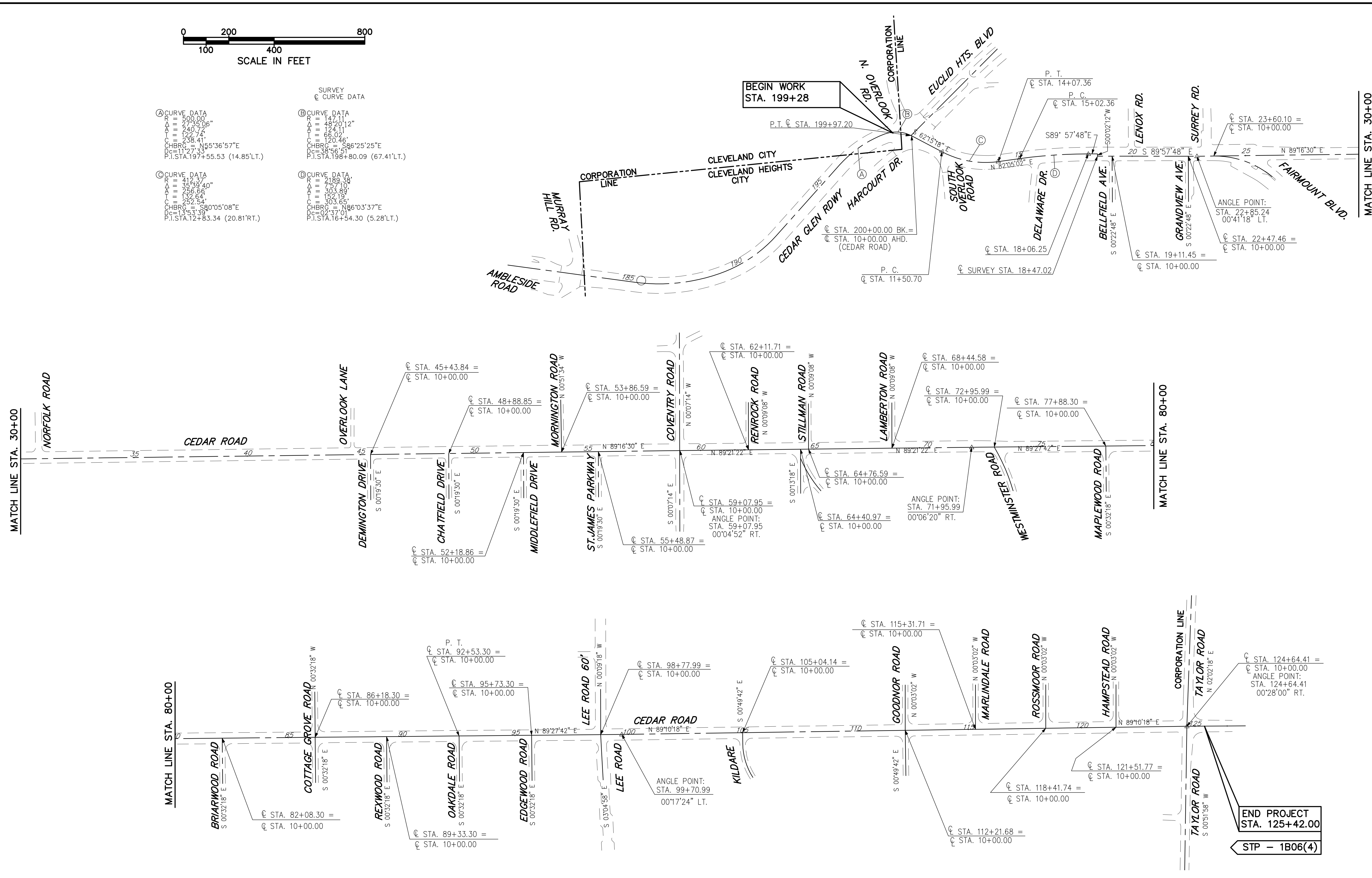


SURVEY C CURVE DATA		SURVEY C CURVE DATA	
① CURVE DATA		② CURVE DATA	
R = 500.00		R = 147.11	
Δ = 27°35'06"		Δ = 48°20'12"	
T = 240.72		T = 192.11	
C = 122.72		C = 66.02	
CHBRG = N55°36'57"E		CHBRG = S86°25'25"E	
DC = 11'27.33		DC = 38'56.51	
P.I. STA. 197+55.53 (14.85'LT.)		P.I. STA. 198+80.09 (67.41'LT.)	
③ CURVE DATA		④ CURVE DATA	
R = 412.37		R = 2189.38	
Δ = 56°39'40"		Δ = 75°10'30"	
T = 256.66		T = 303.89	
C = 132.64		C = 152.19	
CHBRG = S80°05'08"E		CHBRG = N86°03'37"E	
DC = 13'53.39		DC = 02'37.01	
P.I. STA. 12+83.34 (20.81'RT.)		P.I. STA. 16+54.30 (5.28'LT.)	



SCALE AS NOTED

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SCHEMATIC PLAN

CUY - CEDAR ROAD

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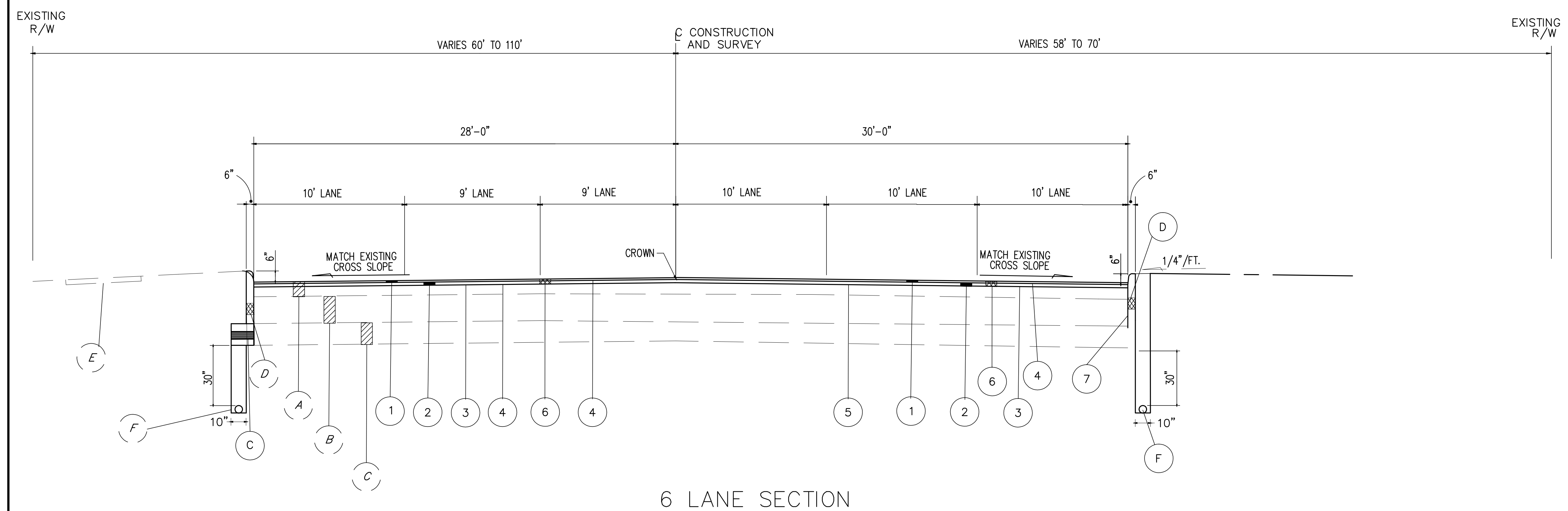
TYPICAL SECTIONS

CUY - CEDAR ROAD

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LEGEND

- ① ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN
- ② ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN
- ③ ITEM 254 - PATCHING PLANED SURFACE
- ④ ITEM SPECIAL - TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COARSE (@ 0.04 GAL/SY)
- ⑤ ITEM SPECIAL - TACK COAT, TRACKLESS TACK (@ 0.08 GAL/SY)
- ⑥ ITEM 254 - PAVEMENT PLANING, BITUMINOUS (3" THICKNESS)
- ⑦ ITEM 609 - CURB, TYPE 6, COMPLETE IN PLACE, AS PER PLAN, LOCATIONS AS DIRECTE
- A EXISTING ASPHALT SURFACE (AVG. THICKNESS 4 1/2")
- B EXISTING CONCRETE BASE (AVG. THICKNESS 8")
- C EXISTING SUBBASE (AVERAGE THICKNESS 6")
- D EXISTING CONCRETE CURB
- E EXISTING SIDEWALK
- F EXISTING UNDERDRAIN



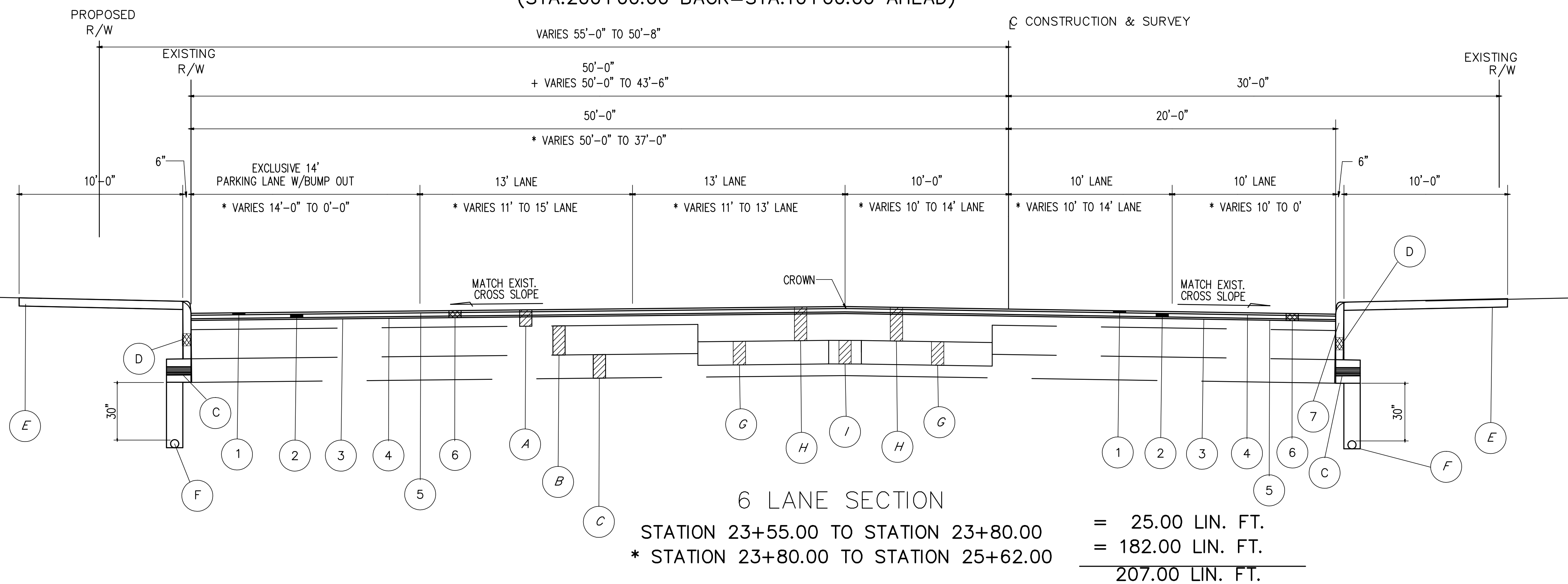
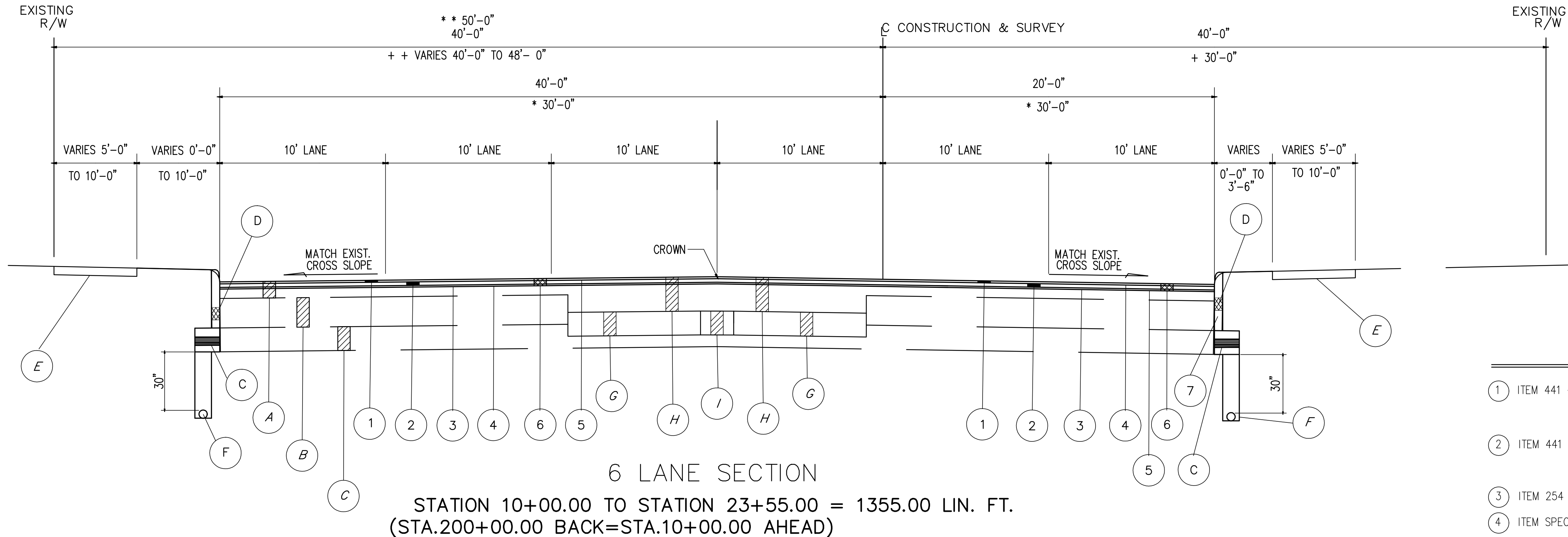
6 LANE SECTION

** STATION 199+28.00 TO STATION 200+00.00 = 72.00 LIN.FT.
(STA.200+00.00 BACK=STA.10+00.00 AHEAD)

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FOR PAVEMENT REPAIR DETAILS SEE SHEET

- + STATION 18+47.00 TO STATION 23+05.00
- * STATION 10+00.00 TO STATION 18+47.00
- + + STATION 11+50.00 TO STATION 14+55.00
- * * STATION 18+47.00 TO STATION 23+05.00



- LEGEND**
- ① ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN
 - ② ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN
 - ③ ITEM 254 - PATCHING PLANED SURFACE
 - ④ ITEM SPECIAL - TACK COAT, TRACKLESS TACK, FOR INTERMEDIATE COARSE (@ 0.04 GAL/SY)
 - ⑤ ITEM SPECIAL - TACK COAT, TRACKLESS TACK (@ 0.08 GAL/SY)
 - ⑥ ITEM 254 - PAVEMENT PLANING, BITUMINOUS (3" THICKNESS)
 - ⑦ ITEM 609 - CURB, TYPE 6, COMPLETE IN PLACE, AS PER PLAN, LOCATIONS AS DIRECTED

- (A) EXISTING ASPHALT SURFACE (AVG. THICKNESS 4 1/2")
- (B) EXISTING CONCRETE BASE (AVG. THICKNESS 8")
- (C) EXISTING SUBBASE (AVERAGE THICKNESS 6")
- (D) EXISTING CONCRETE CURB
- (E) EXISTING SIDEWALK
- (F) EXISTING UNDERDRAIN
- (G) EXISTING WOOD TIES
- (H) EXISTING ASPHALT SURFACE OVER WOOD TIES (AVG. THICKNESS 12 1/4")
- (I) EXISTING CONCRETE BASE BETWEEN WOOD TIES (AVG. THICKNESS 6")



HORIZONTAL SCALE AS NOTED

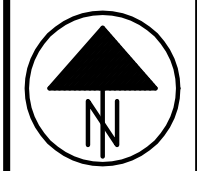
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TYPICAL SECTIONS

CUY - CEDAR ROAD

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+ STATION 24+74.0 TO STATION 25+57.0



HORIZONTAL
SCALE AS NOTED

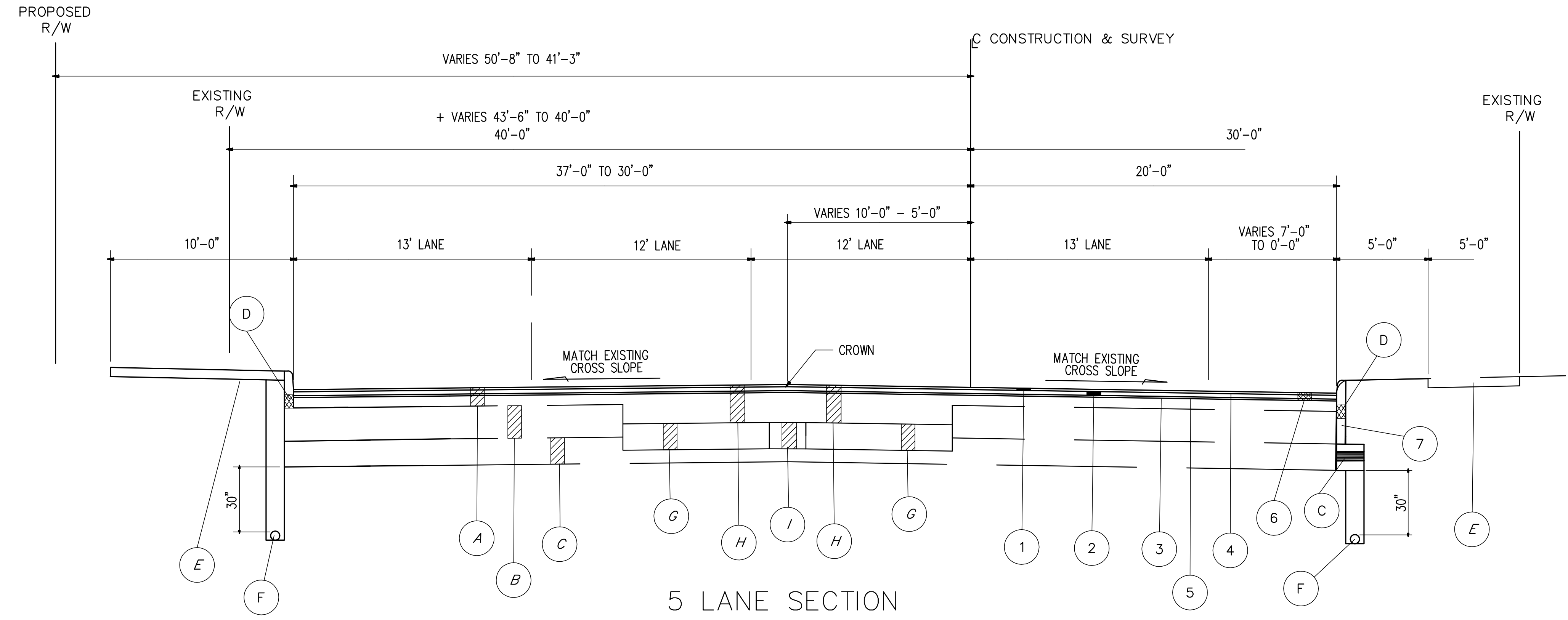
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TYPICAL SECTIONS

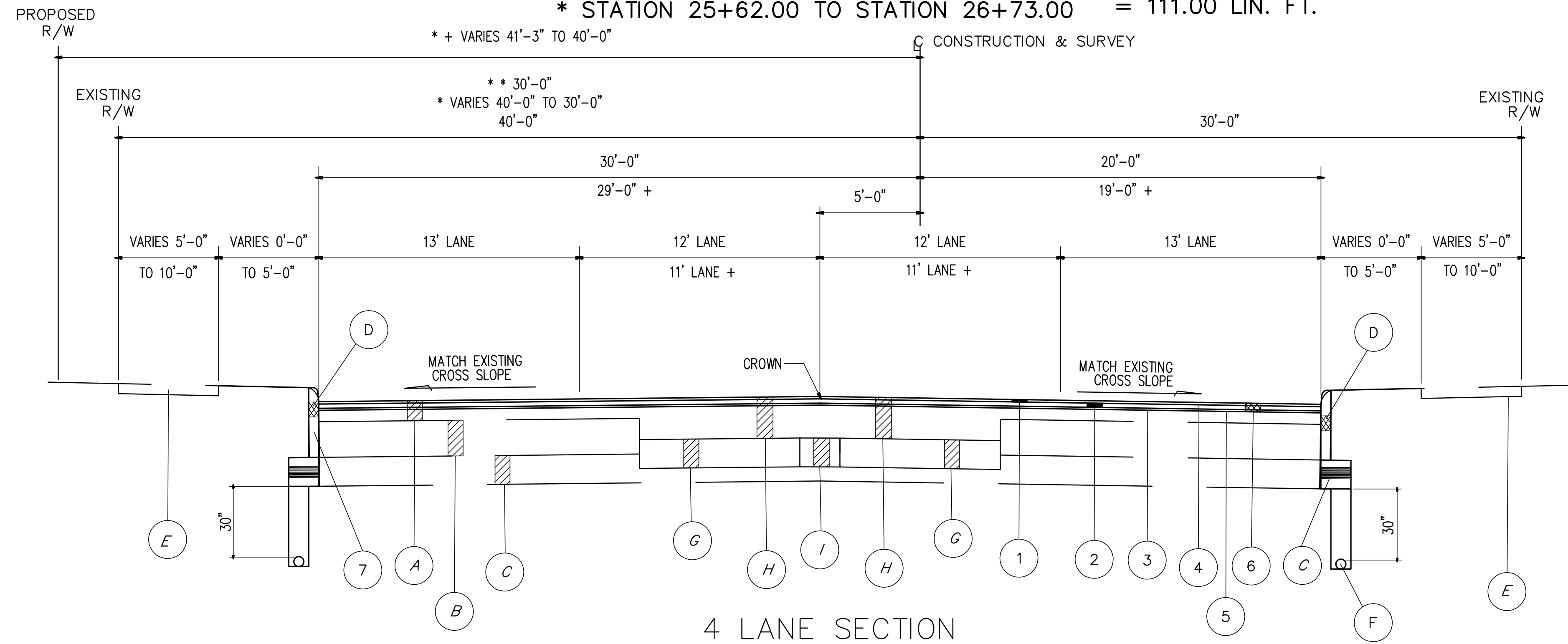
CUY - CEDAR ROAD

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FOR PAVEMENT REPAIR DETAILS SEE SHEETS



* STATION 25+62.00 TO STATION 26+73.00 = 111.00 LIN. FT.



STATION 26+73.00 TO STATION 59+25.00 = 3252.00 LIN. FT.

+ STATION 59+25.00 TO STATION 98+55.00 = 3930.00 LIN. FT.

STATION 98+55.00 TO STATION 125+42.00 = 2687.00 LIN. FT.

= 9869.00 LIN. FT.

+ STATION 25+62.0 TO STATION 26+00.0

LEGEND

- ① ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN
- ② ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN
- ③ ITEM 254 - PATCHING PLANED SURFACE
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- ⑤ ITEM SPECIAL - TACK COAT, TRACKLESS TACK (@ 0.08 GAL/SY)
- ⑥ ITEM 254 - PAVEMENT PLANING, BITUMINOUS (3" THICKNESS)
- ⑦ ITEM 609 - CURB, TYPE 6, COMPLETE IN PLACE, AS PER PLAN, LOCATIONS AS DIRECTED

- (A) EXISTING ASPHALT SURFACE (AVG. THICKNESS 4 1/2")
- (B) EXISTING CONCRETE BASE (AVG. THICKNESS 8")
- (C) EXISTING SUBBASE (AVERAGE THICKNESS 6")
- (D) EXISTING CONCRETE CURB
- (E) EXISTING SIDEWALK
- (F) EXISTING UNDERDRAIN
- (G) EXISTING WOOD TIES
- (H) EXISTING ASPHALT SURFACE OVER WOOD TIES (AVG. THICKNESS 12 1/4")
- (I) EXISTING CONCRETE BASE BETWEEN WOOD TIES (AVG. THICKNESS 6")

* STATION 72+88.0 TO STATION 73+90.0

** STATION 73+90.0 TO STATION 125+42.0

* + STATION 26+73.0 TO STATION 26+90.01

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GENERAL

UTILITIES

THE UTILITIES LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

OHIO UTILITY PROTECTION SERVICE
106 WEST RYEN, ROOM 427
YOUNGSTOWN, OH 44051
PH: 800-362-2746

CITY OF CLEVELAND
ATTN: TINA GOSHA
DIVISION OF WATER
1201 LAKESIDE AVENUE, FLOOR 6
CLEVELAND, OH 44114
PH: 216-664-2444 EXT. 5555

DOMINION EAST OHIO
ATTN: MARY J. LONG
320 SPRINGSIDE DR
SUITE 320
AKRON, OHIO 44333
PH: 330-664-2409

CITY OF CLEVELAND HEIGHTS
ATTN: COLLETTE CLINKSCALE
UTILITIES COMMISSIONER
40 SEVERANCE CIRCLE DRIVE
CLEVELAND HEIGHTS, OH 44118
PH: 216-291-5995

NORTH EAST OHIO REGIONAL
SEWER DISTRICT (NEORS D)
ATTN: DOUG LOPATA
3826 EUCLID AVENUE
CLEVELAND, OH 44115
PH: 216-881-6600

FIRST ENERGY / ILLUMINATING COMPANY
ATTN: MARK ROBINSON
6896 MILLER ROAD
BRECKSVILLE, OH 44141
216-566-5146
EMAIL: ROBINSONME@FIRSTENERGYCORP.COM

AT&T
ATTN: JAMES JANIS
13630 LORAIN ROAD, FLOOR 3
CLEVELAND, OH 44111
216-476-6142

TIME WARNER CABLE
ATTN: MARK HOEFLE
14300 INDUSTRIAL AVE.
MAPLE HEIGHTS, OH 44137
216-663-4004

GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY
ATTN: BRYAN MOORE
1240 WEST 6TH STREET
CLEVELAND, OH 44113
PH: 216-421-2072

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNER AS REQUIRED BY SECTION 153.64 O.R.C. EXISTING RIGHT OF WAY LIMITS HAVE NOT BEEN VERIFIED IN ALL LOCATIONS. AT LOCATIONS IN QUESTION, THE EXISTING RIGHT OF WAY IS SHOWN AT THE BACK OF WALK BASED ON AVAILABLE INFORMATION, PREVIOUS PLAN SETS, AND ENGINEERING JUDGEMENT.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, WORK HOURS WILL BE RESTRICTED TO 7:00 AM TO 7:00 PM.

THE CONTRACTOR SHALL APPLY FOR A NOISE VARIANCE TO PERFORM NIGHT TIME PAVING BETWEEN EAST 55TH STREET AND EAST 93RD STREET. IN THE EVENT A NOISE VARIANCE IS NOT GRANTED BY THE DIRECTOR OF SAFETY, WORK SHALL COMMENCE DURING DAYTIME HOURS AT NO ADDITIONAL COST. ANY ADDITIONAL MAINTENANCE OF TRAFFIC COST WILL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614-MAINTAINING TRAFFIC. NO SEPARATE PAYMENT WILL BE MADE.

DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT. THE NOISE LEVEL RESULTING FROM CONSTRUCTION SHALL BE WITHIN

THE LIMITS SPECIFIED IN OSHA REGULATIONS AND ALL LOCAL ORDINANCES.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE CITY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT OF WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO THE FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRUCT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS A 2 FEET FROM EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE OF THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THIS AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER AT THE CONTRACTOR'S EXPENSE.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, AND CATCH BASINS CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE CITY.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 ITEMS.

COORDINATION

THE CITY OF CLEVELAND HEIGHTS AND THE CONTRACTOR SHALL WORK WITH THE LOCAL BUSINESS OWNERS TO ENSURE ACCESS TO ALL PROPERTIES AT ALL TIMES. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE COORDINATION OR PROVIDING ACCESS TO THE BUSINESSES.

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE ENGINEER.

TYPICAL SECTIONS

EXISTING PAVEMENT SECTIONS AS SHOWN HAVE BEEN DEVELOPED FROM PAVEMENT CORES AND REPRESENT THE WIDTH, DEPTH, AND COMPOSITION OF THE PAVEMENT. OHIO DEPARTMENT OF TRANSPORTATION AND THE CITY OF CLEVELAND DO NOT GUARANTEE THE ACCURACY OF EITHER THE PLANS AGAINST UNFORESEEN EXISTING CONDITIONS.

THE CONTRACTOR BEARS SOLE RESPONSIBILITY TO FURTHER CHECK EXISTING CONDITIONS AGAINST THE PLANS AND PROJECT MANUAL AND ODOT/THE CITY WILL

NOT ENCOUNTER DURING CONSTRUCTION. ROAD PAVEMENT TYPES MAY DIFFER FROM TYPICAL SECTIONS BUT PAVEMENT REMOVED WILL BE PAID UNDER ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, AS PER PLAN OR ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN..

ITEM SPECIAL- MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL - MISCELLANEOUS METAL 174,590 POUNDS

ALL DISCARDED CASTINGS ARE TO REMAIN THE PROPERTY OF THE CITY OF CLEVELAND HEIGHTS AND SHALL BE DELIVERED TO THE CITY OF CLEVELAND HEIGHTS SERVICE YARD.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

ITEMS 202 - PAVEMENT REMOVED. (BUS PAD), AS PER PLAN

THE WORK AND METHOD OF CONSTRUCTION AND MATERIALS FOR CONCRETE BASE SHALL CONFORM TO ODOT ITEM 202 - PAVEMENT REMOVED, EXCEPT AS MODIFIED HEREIN. WORK FOR THIS ITEM SHALL INCLUDE THE REMOVAL OF ANY CURB WITHIN THE LIMITS OF THE PAVEMENT REMOVED, TO THE LOCATIONS DIRECTED, OR AS INDICATED IN THE PLANS. PAYMENT FOR THE OPERATION DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT CONTRACT BID PRICE OF:

ITEM 202 - PAVEMENT REMOVED, (BUS PAD), AS PER PLAN

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN

THE ENGINEER SHALL IDENTIFY AREAS REQUIRING PARTIAL DEPTH PAVEMENT REPAIR AFTER INITIAL PAVEMENT PLANING IS COMPLETE. ALL APPLICABLE PROVISIONS OF ITEM 251, AS SET FORTH IN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

APPROVED REMOVAL METHODS SHALL SATISFACTORILY ESTABLISH A NEAT VERTICAL FACE ALONG THE ENTIRE PERIMETER OF THE REPAIR AREA IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND COMPACTION OF THE ASPHALT CONCRETE PATCHING MATERIAL, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. REMOVAL DEPTHS SHALL BE THREE INCH. (3")

PARTIALLY EMBEDDED STEEL MESH EXPOSED SHALL BE WIRE-BRUSHED OR OTHERWISE CLEANED TO REMOVE ALL LOOSE RUST. LOOSENED OR TOTALLY EXPOSED WIRE MESH REINFORCING SHALL BE CUT AND REMOVED AS REQUIRED WITHOUT DISPLACEMENT OR DISRUPTION TO THE REINFORCEMENT AND/OR PAVEMENT TO REMAIN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR PARTIAL DEPTH PAVEMENT REPAIR.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN 160.5 CU. YD.

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GENERAL NOTES

CUY - CEDAR ROAD

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GENERAL (CONT.)

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

THE WORK AND METHOD OF CONSTRUCTION AND MATERIALS FOR BITUMINOUS PAVEMENT PLANING SHALL CONFORM TO ODOT ITEM 254 – PAVEMENT PLANING, EXCEPT AS MODIFIED HEREIN:

BITUMINOUS PAVEMENT PLANING SHALL INCLUDE PLANING OF ANY CONCRETE PATCHES AND/OR TRENCH CAPS WHETHER EXPOSED OR COVERED BY AN ASPHALT LAYER. IF THE CONTRACTOR SHOULD ENCOUNTER CONCRETE PAVEMENT WHILE PLANING THE REQUIRED 3.00" OF ASPHALT, THE CONTRACTOR SHALL REMOVE WHATEVER CONCRETE NECESSARY TO ACHIEVE THE INDICATED DEPTH OF REMOVAL AT NO ADDITIONAL COST.

PAVEMENT PLANING SHALL INCLUDE CLEANING AND REMOVAL OF DEBRIS AND LOOSE PIECES OF ASPHALT CONCRETE TO THE SATISFACTION OF THE CITY PRIOR TO THE INSTALLATION OF THE INTERMEDIATE COURSE.

PAYMENT FOR THE OPERATION DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE OF:

ITEM 254 – PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

IN CONJUNCTION WITH THE ABOVE AND IN ACCORDANCE WITH THE PROVISIONS OF SECTION 254.05 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, THE FOLLOWING ESTIMATE QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 254 – PATCHING PLANED SURFACE 4,000 SQ. YD.

ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN

WHEN THIS ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 255, AS SET FORTH IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY EXCEPT AS MODIFIED HEREIN.

THE FULL DEPTH RIGID PAVEMENT REMOVAL WORK SHALL INCLUDE THE REMOVAL OF DETERIORATED ASPHALT, AND/OR CONCRETE PAVEMENT UNDER THE MILLED SURFACE, INCLUDING OLD UTILITY TRENCH AREAS, AND OTHER PAVEMENT PATCH AREAS ALONG THE MAINLINE, OF VARIOUS PAVEMENT COMPOSITIONS, REGARDLESS OF SHAPE OR SIZE.

FULL DEPTH SAW CUTS SHALL BE MADE ALONG THE ENTIRE PERIMETER OF THE GENERALLY RECTANGULAR SHAPED REMOVAL AREAS, IN ORDER TO ESTABLISH NEAT VERTICAL FACES. THE COST OF ALL SAW CUTTING WORK SHALL BE CONSIDERED INCIDENTAL TO THIS PAY ITEM. THE CONTRACTOR SHALL USE APPROVED METHODS FOR REMOVAL OF THE FULL DEPTH PAVEMENT REPLACEMENT AREAS, THAT WILL MINIMIZE DAMAGE TO THE SURROUNDING AREA.

APPROVED METHODS FOR REMOVAL OF THE REMAINING (AFTER PLANING) ASPHALT CONCRETE OVERLAY, AND WHERE REQUIRED, CONCRETE BASE COURSE SHALL SATISFACTORILY ESTABLISH A NEAR VERTICAL FACE ALONG THE ENTIRE PERIMETER OF THE RECTANGULARLY SHAPED REMOVAL AREAS IN ORDER TO SUBSEQUENTLY PERMIT THE PROPER PLACEMENT AND AND COMPACTION OF THE REPLACEMENT MATERIALS.

IF NECESSARY, UNSUITABLE SUBGRADE AND SUBBASE SHALL BE EXCAVATED AND REPLACED UNDER A SEPARATE PAY ITEM, AS DIRECTED BY THE ENGINEER.

THE FULL DEPTH RIGID REPLACEMENT SHALL INCLUDE SAW CUTTING, REMOVAL OF ASPHALT, BRICK, CONCRETE BASE AND SUBBASE, PLACEMENT OF NEW 304 AGGREGATE BASE, AND THE PLACEMENT OF A CONCRETE PAVEMENT BASE COURSE. THE TOP OF THE CONCRETE SHALL BE CONSTRUCTED TO THE SAME DEPTH AS THE CONCRETE BASE SURROUNDING THE REPAIR AREA, USING DOWEL BARS.

THE FOLLOWING ESTIMATED QUANTITIES, OVER AND ABOVE THOSE QUANTIFIED IN THE PLANS ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR FULL DEPTH PAVEMENT REPAIRS (INCLUDING REPAIRS AROUND CATCH BASINS), ARE CARRIED TO THE QUANTITY CALCULATIONS FOR THIS WORK AND PAYMENT IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

ITEM 255 – FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN 2,166.7 SQ. YD

ITEM SPECIAL – TACK COAT, TRACKLESS TACK

ITEM SPECIAL – TACK COAT, TRACKLESS TACK FOR INTERMEDIATE COURSE

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH A TRACKLESS TACK ASPHALT EMULSION.

FURNISH MATERIALS ACCORDING TO THE DEPARTMENT'S APPROVED LIST.

MEET ALL REQUIREMENTS OF ITEM 407 TACK COAT IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS REQUIRED BY THE CONTRACT, EXCEPT AS NOTED BELOW.

MATERIAL: MEET ALL PROPERTIES OF THE APPROVED MANUFACTURER'S TRACKLESS TACK SPECIFICATION REQUIREMENTS ON FILE WITH THE LABORATORY AT TIME OF PLACEMENT.

ACCEPTANCE AND SAMPLING OF MATERIALS: SUPPLY CERTIFIED TEST DATA TO THE ENGINEER AND TO THE DISTRICT LABORATORY DEMONSTRATING THE TRACKLESS TACK SUPPLIED WAS TESTED FOR AND MEETS ALL MATERIAL PROPERTIES SHOWN ON THE DEPARTMENT'S APPROVED LIST.

DURING CONSTRUCTION, ODOT PERSONNEL WILL SAMPLE FROM THE DISTRIBUTOR AND SUPPLY TO THE DISTRICT TEST LAB A MINIMUM OF ONE QUART OF TRACKLESS TACK FOR EVERY 25,000 GALLONS USED ON THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE PROPER PLASTIC QUART SAMPLING CONTAINER. CLEARLY MARK ON THE SAMPLE WITH THE MANUFACTURER'S NAME, PROJECT NUMBER, AND THE WORDS "TRACKLESS TACK".

EQUIPMENT: FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF PREVIOUSLY USED MATERIAL CHARGE IS DIFFERENT THAN THE PROPOSED MATERIAL.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE TRACKLESS TACK WITH A DISTRIBUTOR ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. IF TRACKLESS TACK IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ENSURE ALL NOZZLES AND SPRAY PATTERNS ARE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. PLACE THE ANGLE OF THE NOZZLE AT A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.1 GALLONS PER SQUARE YARD. DO NOT DILUTE TRACKLESS TACK. RECOMMENDED APPLICATION TEMPERATURE IS 160 °F TO 180 °F. DO NOT EXCEED 180 °F. THE ENGINEER WILL APPROVE THE QUANTITY, RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TRACKLESS TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

PERFORMANCE OF TRACKLESS TACK: DETERMINE TIME TO SET FOR THE MATERIAL TO BECOME TRACKLESS. THE ENGINEER WILL REPORT ANY ISSUES WITH EXCESSIVE TIME TO SET, OR AFTER SET ISSUES WITH STICKINESS, OR PICKUP OF THE TACK TO THE DISTRICT TESTING ENGINEER AND NEW PRODUCT ENGINEER, BRAD YOUNG 614-351-2882.

IF THE CERTIFIED TEST DATA FAILS TO MEET THE LAB TESTING CRITERIA, OR FIELD SAMPLES FAIL TO MEET THE LAB TEST CRITERIA, OR THE TRACKLESS TACK FAILS TO PERFORM SATISFACTORY IN THE FIELD, AS NOTED ABOVE, THE CONTRACTOR WILL BE REQUIRED TO REPLACE AND SUPPLY ANOTHER APPROVED TRACKLESS TACK PRODUCT FOR THE REMAINDER OF THE PROJECT AT NO ADDITIONAL COST TO THE DEPARTMENT.

ANY FAILING TRACKLESS TACK PRODUCT WILL BE REMOVED FROM THE DEPARTMENT'S APPROVED LIST.

ASPHALT CONCRETE – R.A.P. LIMIT

RECYCLED MATERIAL SHALL BE LIMITED TO WEARING COURSE MAXIMUM OF 10%, INTERMEDIATE COURSE MAXIMUM OF 20%, AND BITUMINOUS BASE COURSE MAXIMUM OF 30%.

ITEM 441 – ASPHALT CONCRETE SURFACE COURSE , TYPE 1 (448), PG 70-22M, AS PER PLAN

THE COURSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. RECYCLED MATERIAL USED IN THE SURFACE COURSE SHALL BE LIMITED TO A MAXIMUM OF 10%.

ITEM 875 – LONGITUDINAL JOINT ADHESIVE SHALL BE INCLUDED IN THE CONTRACT UNIT BID PRICE OF:

ITEM 441 – ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 70-22M, AS PER PLAN

ITEM 441 – ASPHALT CONCRETE SURFACE COURSE , TYPE 1 (448), PG 64-22, AS PER PLAN

THIS SURFACE COURSE MIX IS TO BE USED FOR MINOR SIDE ROAD TURN OUT AREAS AS SHOWED ON THE PLANS. THE USE OF GRAVEL FOR COARSE VIRGIN AGGREGATE IS PROHIBITED FOR THIS ITEM.

ITEM 441 – ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG 64-22, AS PER PLAN

RECYCLED MATERIAL IN THE INTERMEDIATE COURSES SHALL BE LIMITED TO A MAXIMUM OF 20%

ASPHALT CONCRETE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL, WITH A CERTIFIED PG BINDER, THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD TRANSVERSE CONSTRUCTION JOINTS PER 401.17.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

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GENERAL NOTES

CUY – CEDAR ROAD

GENERAL (CONT.)

ITEM 632 – DETECTOR LOOP, AS PER PLAN

AN ESTIMATED QUANTITY OF ITEM 632 – DETECTOR LOOP, AS PER PLAN HAS BEEN PROVIDED FOR THE PURPOSE OF REPLACING DAMAGED DETECTOR LOOPS AND/OR UPGRADING DETECTOR LOOPS TO IMPROVE MOTORCYCLE DETECTION. IT IS IMPERATIVE THAT THE REPLACEMENT OF THE DETECTOR LOOPS BE INSTALLED AND FULLY FUNCTIONAL IN THE SHORTEST POSSIBLE TIME. THE CONTRACTOR SHALL HAVE REPLACEMENT DETECTOR LOOPS INSTALLED AND FULLY FUNCTIONAL WITHIN 7 CALENDAR DAYS OF DESTRUCTION OF THE EXISTING DETECTOR LOOPS.

THE CONTRACTOR SHALL NOTIFY THE CITY OF CLEVELAND HEIGHTS, (216) 291-2470 FIVE WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE THE DETECTOR LOOP INSTALLATIONS. THIS NOTIFICATION IS NEEDED FOR THE CITY OF CLEVELAND HEIGHTS TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RE-NOTIFY CITY OF CLEVELAND HEIGHTS WITHIN 2 WORKING DAYS AFTER THE DAMAGED DETECTOR LOOPS ARE REPLACED SO THAT THE CITY OF CLEVELAND HEIGHTS CAN RESTORE SIGNAL TIMINGS TO THE ORIGINAL SETTINGS.

FAILURE TO COMPLY WITH THE ABOVE STATED REQUIREMENTS WILL RESULT IN THE ASSESSMENT OF DISINCENTIVES OF \$1000 PER DAY FOR EACH CALENDAR DAY BEYOND THE SPECIFIED LIMIT.

THE DETECTOR LOOP SHALL BE PLACED AT THE STOP BAR. THE NEW DETECTOR LOOPS SHALL BE AT THE LOCATION OF THE CURRENT LOOP AND SHALL BE APPROVED BY THE ENGINEER IN WRITING PRIOR TO INSTALLATION. AFTER THE PLANING AND PAVEMENT REPAIR OPERATIONS ARE COMPLETED WITHIN THE AFFECTED AREAS THE DETECTOR LOOPS SHALL NOT BE CUT INTO THE SURFACE COURSE. RUN THE WIRE CONTINUOUSLY AROUND THE LOOP PERIMETER AND THROUGH A SLOT LEADING TO THE PAVEMENT EDGE AND BY UNDERGROUND CONDUIT TO A ROADSIDE PULL BOX FOR SLACK AND SPLICE. THE CONTRACTOR MAY ONLY SPLICE THE LOOP DETECTOR LEAD-IN CABLE IN A PULL BOX.

DETECTOR LOOPS SHALL BE 6'X35' POWERHEAD DETECTOR LOOPS. IN ADDITION TO THE REQUIREMENTS OF CMS 632.11, THE CONTRACTOR SHALL PROVIDE A POSITIVE AND EFFECTIVE MEANS FOR REMOVAL OF SOLID RESIDUE RESULTING FROM THE DRY SAW BLADE CUTTING OF LOOP DETECTOR SLOTS IN THE PAVEMENT. THE RESIDUE SHALL BE REMOVED BY VACUUM OR OTHER EFFECTIVE MEANS, BEFORE IT IS BLOWN BY TRAFFIC ACTION OR WIND.

LOOP DETECTOR WIRE TO LEAD-IN CABLE SPLICES WITHIN EPOXY ENCAPSULATED SPLICE ENCLOSURES SHALL BE JOINED BY AN APPROVED CONNECTOR AND SOLDERED PER CMS 632.23 & 725.15. ALL COSTS ASSOCIATED WITH THE SOLDERED SPLICE CONNECTION AND EPOXY SPLICE KIT SHALL BE INCLUDED WITH THE DETECTOR LOOP.

LOOP DETECTOR WIRE ROUTED THROUGH CONDUIT, PULL BOXES, POLES AND PEDESTALS SHALL BE TWISTED PER CMS 632.23.

FURNISH ALL MATERIALS ACCORDING TO ODOT'S QUALIFIED PRODUCTS LIST (QPL).

THE FOLLOWING HAS QUANTITY HAS BEEN CARRIED TO THE TRAFFIC CONTROL GENERAL SUMMARY FOR THE USE AS DIRECTED BY THE ENGINEER.

ITEM 632 – DETECTOR LOOP, AS PER PLAN 16 EACH

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT BID PRICE PER EACH FOR ITEM 632 – DETECTOR LOOP, AS PER PLAN.

STRUCTURES ADJUSTED TO GRADE, RECONSTRUCTED TO GRADE OR REPLACED, AS PER PLAN

ALL ADJUSTMENT, RECONSTRUCTION OR REPLACED WORK, EXCEPT FOR THOSE STRUCTURES OWNED BY PRIVATE COMPANIES, SHALL BE PERFORMED BY THE CONTRACTOR. WHERE APPLICABLE, THE TIME BETWEEN RESETTING THE CASTINGS AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM.

CASTINGS SHALL BE ADJUSTED OR RECONSTRUCTED TO GRADE IN ACCORDANCE WITH 611.10 USING CLAY BRICKS (704.01), CLASS QCMS CONCRETE AND/OR CONCRETE MORTAR, OR PER 638.18 AND AS SPECIFIED BELOW FOR SERVICE BOX AND VALVE BOX ADJUSTMENTS. MAXIMUM CONCRETE MORTAR THICKNESS IS 1-1/2".

THE CONTRACTOR SHALL RESET EXISTING VALVE BOXES OR EXISTING CURB SHUT-OFF VALVE BOXES TO ESTABLISHED GRADE BY RAISING OR LOWERING THE EXISTING CASTINGS OR BY EITHER ADDING, DELETING OR CUTTING THE APPROPRIATE VALVE BOX STEM SECTIONS. IN RAISING OF THE CASTINGS, NO INSERTS WILL BE PERMITTED. ANY VALVE BOXES OR CURB SHUT-OFF VALVE BOXES FOUND TO BE DAMAGED OR UNSUITABLE FOR REUSE SHALL BE REPLACED BY THE CONTRACTOR AND PAID FOR UNDER ITEM SPECIAL – MISCELLANEOUS METAL. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY AS REQUIRED OR AS ORDERED TO COMPLETE THE ITEM.

ADJUST TO GRADE, RECONSTRUCT TO GRADE OR TOTAL REPLACEMENT WORK SHALL, WHERE REQUIRED, INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCKOUT CURB AND/OR PAVEMENT USING MODERATE-SETTING CONCRETE (CLASS QCMS) OR, IF APPROVED/DIRECTED BY THE ENGINEER, FAST-SETTING CONCRETE (CLASS QCFS). TO FACILITATE REMOVAL, THE BLOCKOUT PAVEMENTS SHALL BE SAWED FULL DEPTH ALONG THE LIMITS OF THEIR REMOVAL UNLESS OTHERWISE DESIGNATED/DIRECTED BY THE ENGINEER. UNLESS OTHERWISE APPROVED/DIRECTED BY THE ENGINEER, BLOCKOUT PAVEMENT, REINFORCING STEEL, JOINT MATERIAL AND LOAD TRANSFER DEVICES SHALL BE REPLACED/INSTALLED IN ACCORDANCE WITH THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING CONC 1. ALL COSTS ASSOCIATED WITH THE BLOCKOUT REMOVALS/REPLACEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PER EACH BID ITEMS.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON THE PLAN, REPLACEMENT CASTINGS ARE PAID UNDER ITEM SPECIAL – MISCELLANEOUS METAL.

THE ENGINEER WILL DETERMINE THE ITEM 611 WORK REQUIRED BASED ON THE GUIDELINES STIPULATED BELOW:

- 1. "ADJUST TO GRADE" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 (D) AS NECESSARY TO RAISE THE EXISTING/NEW CASTING NO MORE THAN ONE (1) FOOT FROM ITS EXISTING ELEVATION OR TO LOWER THE EXISTING/NEW CASTING NO MORE THAN SIX (6) INCHES FROM ITS EXISTING ELEVATION. ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE (ITEM 611) ADJUSTED TO GRADE.

- 2. "RECONSTRUCT TO GRADE" SHALL INCLUDE ALL WORK SPECIFIED IN 611.10 (C) AND SHALL ALSO INCLUDE EXISTING/NEW CASTINGS RAISED MORE THAN ONE (1) FOOT FROM THEIR EXISTING ELEVATION OR LOWERED MORE THAN SIX (6) INCHES FROM THEIR EXISTING ELEVATION. IN ADDITION, THIS ITEM WILL INCLUDE ANY SUPPORTING WALL REPAIR WORK NECESSARY, MORE THAN SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

THE WORK LIMIT SHALL BE SPECIFIED BY THE ENGINEER AND PAYMENT SHALL BE MADE UNDER THE APPROPRIATE STRUCTURE RECONSTRUCTED TO GRADE ITEM.

ONLY ONE (1) OF THE ABOVE PAYMENT ITEMS MAY BE USED PER STRUCTURE. ANY SUCH WORK MADE NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENT OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

THE FOLLOWING ESTIMATE QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 611 – CATCH BASIN PARTIALLY RECONSTRUCTED TO GRADE, AS PER PLAN	5 VERT FT.
ITEM 611 – MANHOLE PARTIALLY RECONSTRUCTED TO GRADE, AS PER PLAN	5 VERT FT.
ITEM 638 – VALVE BOX ADJUSTED TO GRADE, RISER RING, AS PER PLAN	10 EA.
ITEM 638 – SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	10 EA.

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NOTIFICATION

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING ENTITIES IN WRITING AND VIA TELEPHONE AT LEAST EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. INCLUDED IN THE NOTIFICATION SHALL BE PROJECTED DATES AND THE TIME FRAMES OF ANY LANE CLOSURES.

ODOT DISTRICT 12
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OHIO 44125
PHONE: 216-581-2100

CITY OF CLEVELAND HEIGHTS
40 SEVERANCE CIRCLE
CLEVELAND HEIGHTS, OHIO 44118
PHONE: 216-291-2470

CITY OF CLEVELAND HEIGHTS POLICE DEPARTMENT
40 SEVERANCE CIRCLE
CLEVELAND HEIGHTS, OHIO 44118
PHONE: 216-321-1234

CITY OF CLEVELAND HEIGHTS FIRE DEPARTMENT
FIRE STATION #1
3445 MAYFIELD ROAD
CLEVELAND HEIGHTS, OHIO 44118
PHONE: 216-291-2673

CITY OF CLEVELAND HEIGHTS BOARD OF EDUCATION
2155 MIRAMAR BLVD.
UNIVERSITY HEIGHTS, OHIO 44118
PHONE: 216-371-7171

CUYAHOGA COUNTY SHERIFF
1215 WEST 3RD STREET
CLEVELAND, OHIO 44113
PHONE: 216-443-6000

SHOULD ANY OF THE PROJECTED DATE AND TIME FRAMES OF THE START AND END OF THE ROAD CLOSURES CHANGE THROUGHOUT THE DURATION OF THE PROJECT, THE ENTITIES LISTED ABOVE MUST BE NOTIFIED IMMEDIATELY OF SUCH CHANGES.

MAINTENANCE OF TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS, AND THE FOLLOWING:

1. A MINIMUM OF ONE (1) TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED DURING THE CONSTRUCTION OF THE WORK.
2. THE CONTRACTOR SHALL INFORM THE ODOT DISTRICT 12 OFFICE (216) 581-2100, EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
3. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION FROM ONE-HALF HOUR AFTER SUNSET TO ONE-HALF HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF THIRTY-FIVE (35) FEET.
4. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THOSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING PAVEMENT MATERIALS.
5. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS, AND INCIDENTALS RELATED THERETO.
6. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED OR PROTECTED AS DIRECTED BY THE ENGINEER. AS A MINIMUM, STEEL ROADWAY PLATES MAY BE USED IN APPROVED LOCATIONS AND MUST BE PINNED IN PLACE AND PROPERLY RAMPED WITH FIRM AND UNYIELDING MATERIAL WITH APPROPRIATE WARNING SIGNS POSTED. THIS PROTECTION SHALL BE INCLUDED AND PAID

UNDER THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

7. ONLY DURING OFF-PEAK PERIODS (IE ANY PERIOD OTHER THAN 6-9AM AND 4-7PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
8. ADDITION TO THE REQUIREMENTS OF ITEM 614 - WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, EDGE, STOP, OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR EACH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER ITEM 614 - WORK ZONE PAVEMENT MARKINGS.
9. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CMS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

COORDINATION

THE CITY OF CLEVELAND HEIGHTS AND THE CONTRACTOR SHALL WORK WITH THE LOCAL BUSINESS OWNERS AND RESIDENTS TO ENSURE ACCESS TO ALL PROPERTIES AT ALL TIMES. HOWEVER, SOME INCONVENIENCES WILL OCCUR. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE COORDINATION OR PROVIDING ACCESS TO THE BUSINESSES AND RESIDENCES.

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

TRAFFIC SIGNING

ADVANCE TRAFFIC SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES AND SIGNS ON BARRICADES BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.

EXISTING PAVEMENT DISPOSAL/CASTING ADJUSTMENT

THE EXISTING ASPHALT PAVEMENT WEARING COURSE AND CONCRETE BASE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ONCE THEY ARE REMOVED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DELINEATE ANY CASTINGS THAT MAY PROTRUDE ABOVE THE EXISTING CONCRETE BASE. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT MATERIAL IN THE VICINITY OF THESE CASTINGS TO PROVIDE AN ADEQUATE RAMP AROUND THE CASTINGS. IN NO CASE SHALL THE CASTING REMAIN EXPOSED WITHOUT PROPER PROTECTION.

SEQUENCE OF CONSTRUCTION

THE CONTRACTOR SHALL SCHEDULE HIS/HER OPERATIONS SO THAT THIS PROJECT IS CONSTRUCTED IN THE FOLLOWING ORDER BY SECTION.

SECTION 1 - EUCLID HEIGHTS BLVD TO NORFOLK ROAD.
STA. 199+28 TO STA. 31+00±

PHASE 1: CONTRACTOR SHALL ELIMINATE PARKING AND SET TEMPORARY TWO-WAY TRAFFIC (TWO LANES TOTAL) TO THE NORTH SIDE OF CEDAR ROAD. THE SURFACE COURSE OF ASPHALT SHALL NOT BE INSTALLED FOR THIS SECTION DURING THIS PHASE OF WORK.

PHASE 2: CONTRACTOR SHALL SHIFT TEMPORARY TRAFFIC TO THE SOUTH SIDE OF CEDAR ROAD. THE SURFACE COURSE OF ASPHALT SHALL NOT BE INSTALLED FOR THIS SECTION DURING THIS PHASE OF WORK.

SECTION 2 - NORFOLK ROAD TO WESTMINSTER ROAD.
STA. 25+50± TO STA. 74+00±

PHASE 3: CONTRACTOR SHALL SET TEMPORARY TWO-WAY TRAFFIC (TWO LANES TOTAL) TO THE NORTH SIDE OF CEDAR ROAD. ONCE ALL WORK ON THE SOUTH SIDE OF CEDAR ROAD IS COMPLETE FOR THIS SECTION THE CONTRACTOR MAY CONTINUE TO PHASE 4.

PHASE 4: CONTRACTOR SHALL SHIFT TEMPORARY TRAFFIC TO THE SOUTH SIDE OF CEDAR ROAD. ONCE ALL WORK ON THE NORTH SIDE OF CEDAR ROAD IS COMPLETE FOR THIS SECTION THE CONTRACTOR MAY CONTINUE TO PHASE 5.

SECTION 3 - WESTMINSTER ROAD TO TAYLOR ROAD.
STA. 74+00± TO STA. 125+42

PHASE 5: CONTRACTOR SHALL SET TEMPORARY TWO-WAY TRAFFIC (TWO LANES TOTAL) TO THE NORTH SIDE OF CEDAR ROAD. ONCE ALL WORK ON THE SOUTH SIDE OF CEDAR ROAD IS COMPLETE FOR THIS SECTION THE CONTRACTOR MAY CONTINUE TO PHASE 6.

PHASE 6: CONTRACTOR SHALL SHIFT TEMPORARY TRAFFIC TO THE SOUTH SIDE OF CEDAR ROAD. ONCE ALL WORK ON THE NORTH SIDE OF CEDAR ROAD IS COMPLETE FOR THIS SECTION THE CONTRACTOR MAY CONTINUE TO PHASE 7.

SECTION 4 - FINALIZE WORK FROM EUCLID HEIGHTS BLVD. TO NORFOLK ROAD.

PHASE 7: CONTRACTOR SHALL SET TEMPORARY TWO-WAY TRAFFIC (TWO LANES TOTAL) TO THE NORTH SIDE OF CEDAR ROAD. ONCE ALL WORK ON THE SOUTH SIDE OF CEDAR ROAD IS COMPLETE FOR THIS SECTION THE CONTRACTOR MAY CONTINUE TO PHASE 8.

PHASE 8: CONTRACTOR SHALL SHIFT TEMPORARY TRAFFIC TO THE SOUTH SIDE OF CEDAR ROAD AND COMPLETE ALL REMAINING WORK LOCATED ON THE NORTH SIDE OF CEDAR ROAD IN THIS SECTION.

DRIVEWAY ACCESS

THIS WORK SHALL BE IN CONJUNCTION WITH ITEM 614 - MAINTAINING TRAFFIC AND ALL COSTS INCURRED FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC - NO ADDITIONAL PAYMENTS WILL BE MADE. ACCESS TO ALL PROPERTY OWNERS, INCLUDING RESIDENCES AND BUSINESSES, SHALL BE MADE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL MAKE AVAILABLE DURING CONSTRUCTION, STEEL PLATES, BRIDGES OR OTHER MEANS APPROVED BY THE ENGINEER TO BRIDGE ACROSS THE HALF WIDTH ROADWAY CONSTRUCTION, TO PROVIDE FULL TIME (TWENTY-FOUR (24) HOURS, SEVEN (7) DAYS A WEEK) ACCESS TO DRIVEWAYS THAT REQUIRE IT. ALL DRIVEWAY CLOSURES AND/OR APRON WORK SHALL BE CONSTRUCTED IN ALTERNATING INTERVALS IN ORDER TO ELIMINATE ABUTTING PROPERTY OWNERS HAVING BOTH OF THEIR DRIVEWAYS CLOSED.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, AT THE PRE-CONSTRUCTION MEETING, HIS PROPOSAL FOR PROVIDING ACCESS TO THE DRIVEWAYS. FOR ESTIMATING PURPOSES,

THE NUMBER OF DRIVE APRONS TO BE MAINTAINED SHOULD BE THE NUMBER OF DRIVEWAYS IN EACH CONSTRUCTION PHASE.

TEMPORARY NO PARKING SIGNS

EXISTING ON-STREET PARKING WHICH CONFLICTS WITH PROPOSED CONSTRUCTION OR WITH PROCEDURES FOR MAINTENANCE OF TRAFFIC SHALL BE TEMPORARILY PROHIBITED. THE CONTRACTOR SHALL SUPPLY AND ERECT R-55LR-12 "NO PARKING" SIGNS. PAYMENT FOR THE "NO PARKING" SIGNS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

PORTABLE CHANGEABLE MESSAGE SIGNS

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO (2) CHANGEABLE MESSAGE SIGNS (PCMS), ON SITE, WITH A MINIMUM LEGIBILITY DISTANCE OF 475 FEET, FOR TWO WEEKS PRIOR TO MOBILIZATION.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONING DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND

OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. PCMS TRAILERS SHALL BE DELINEATED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO ODOT 614.03, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS.

THE PCMS SHALL BE LOCATED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM TRAFFIC.

ALL MESSAGES TO BE DISPLAYED ON THE PCMS WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE PCMS SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD.

THE PCMS SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF ODOT 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND/OR THE CITY TAKING APPROPRIATE ACTION TO SAFETY CONTROL TRAFFIC.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THE PCMS FOR THE DURATION OF THE PROJECT.

PAYMENT FOR THIS ITEM, INCLUDING, BUT NOT LIMITED TO ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE. AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

WORK ZONE MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS IDENTIFIED BY THE ENGINEER FOR WORK ZONE PAVEMENT MARKINGS AND SIGNS PER THE REQUIREMENTS OF CMS 614.04 AND 614.11.

THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED FOR USE AFTER THE MILLING OPERATION AND AFTER PLACEMENT OF THE INTERMEDIATE COURSE:

ITEM 614, WORK ZONE CENTERLINE, CLASS I, 642 PAINT	2.2 MI
ITEM 614, WORK ZONE STOP LINE, CLASS I, 642 PAINT	2,008 FT
ITEM 614, WORK ZONE LANE LINE, CLASS I, 642 PAINT	4.0 MI

INSTALLATION OF PAVEMENT MARKINGS

ALL WORK ZONE PAVEMENT MARKINGS AND SIGNS REQUIRED FOR A PARTICULAR LANE CLOSURE OR TRAFFIC PATTERN SHALL BE INSTALLED ON A SINGLE WORK DAY, AND THE CORRESPONDING TRAFFIC PATTERN SHALL BE IMPLEMENTED IMMEDIATELY. IN ADDITION, THE REQUIREMENTS OF ODOT 614.11 SHALL APPLY.

REPLACEMENT SIGN

FLAT SHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED BUT GOOD CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE REPLACEMENT SIGN SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

REPLACEMENT DRUMS

THE ITEMS WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

CALCULATED
JNS
CHECKED
PJF

MAINTENANCE OF TRAFFIC
GENERAL NOTES

CUY - CEDAR ROAD

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PAYMENT FOR THE NEW DRUMS SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENT OF THE ORIGINAL DRUM.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN CONJUNCTION WITH ITEM 614 - MAINTAINING TRAFFIC AND ALL COSTS INCURRED FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC - NO ADDITIONAL PAYMENTS WILL BE MADE.

PEDESTRIAN ACCESS

DURING TEMPORARY CLOSURE OR RELOCATION OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES, TEMPORARY FACILITIES SHALL BE PROVIDED. THESE FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY. PEDESTRIAN SIDEWALK CLOSURES, CROSSWALK CLOSURES, AND PEDESTRIAN DETOURS OR BYPASSES SHALL BE INSTALLED ACCORDING TO O.M.U.T.C.D. TYPICAL APPLICATIONS TA-28 AND TA-29.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A UNIFORMED LAW ENFORCEMENT OFFICER SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR THE FOLLOWING TASKS:

1. FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.
2. DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (IE, DIRECTING MOTORISTS THROUGH A RED LIGHT).
3. DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
4. WHEN CONSTRUCTION VEHICLES ARE ENTERING/EXITING THE ZONE DIRECTLY FROM/INTO AN OPEN LANE OF TRAFFIC. IF A LANE HAS BEEN CLOSED TO PROVIDE AN ACCELERATION/DECELERATION LANE FOR THE VEHICLE, THE LEO WILL NOT BE REQUIRED.

LAW ENFORCEMENT OFFICERS (L.E.O.'S) SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR 250 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED

BY THE LAW ENFORCEMENT AGENCY INVOLVED. LEO'S USED FOR OTHER THAN REQUIRED IN THESE PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE. THE PHASING OF TRAFFIC SHOWN ON THE PLANS IS DONE IN A WAY THAT LEO'S SHOULD ONLY BE UTILIZED

DURING THE TIMES LISTED ABOVE. HOWEVER, WITH THE TRAFFIC VOLUME IN THIS AREA THE CITY AT ANY TIME MAY DICTATE THE USE OF LEO'S TO HELP CONVEY TRAFFIC.

PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614 MAINTAINING TRAFFIC.

TRAFFIC SIGNAL HEAD ADJUSTMENT

DURING THE CONSTRUCTION OF THE VARIOUS APPROACHES TO ALL THE TRAFFIC SIGNAL CONTROLLED INTERSECTIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING AND IF NECESSARY RELOCATING BOTH THE EXISTING SIGNAL HEADS TO KEEP THE SIGNALIZED INTERSECTION IN COMPLIANCE WITH THE LEGAL REQUIREMENTS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THE ABOVE DESCRIBED ADJUSTING AND/OR RELOCATIONS SHALL BE INCIDENTAL TO THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ALTERNATE MAINTENANCE OF TRAFFIC PLANS

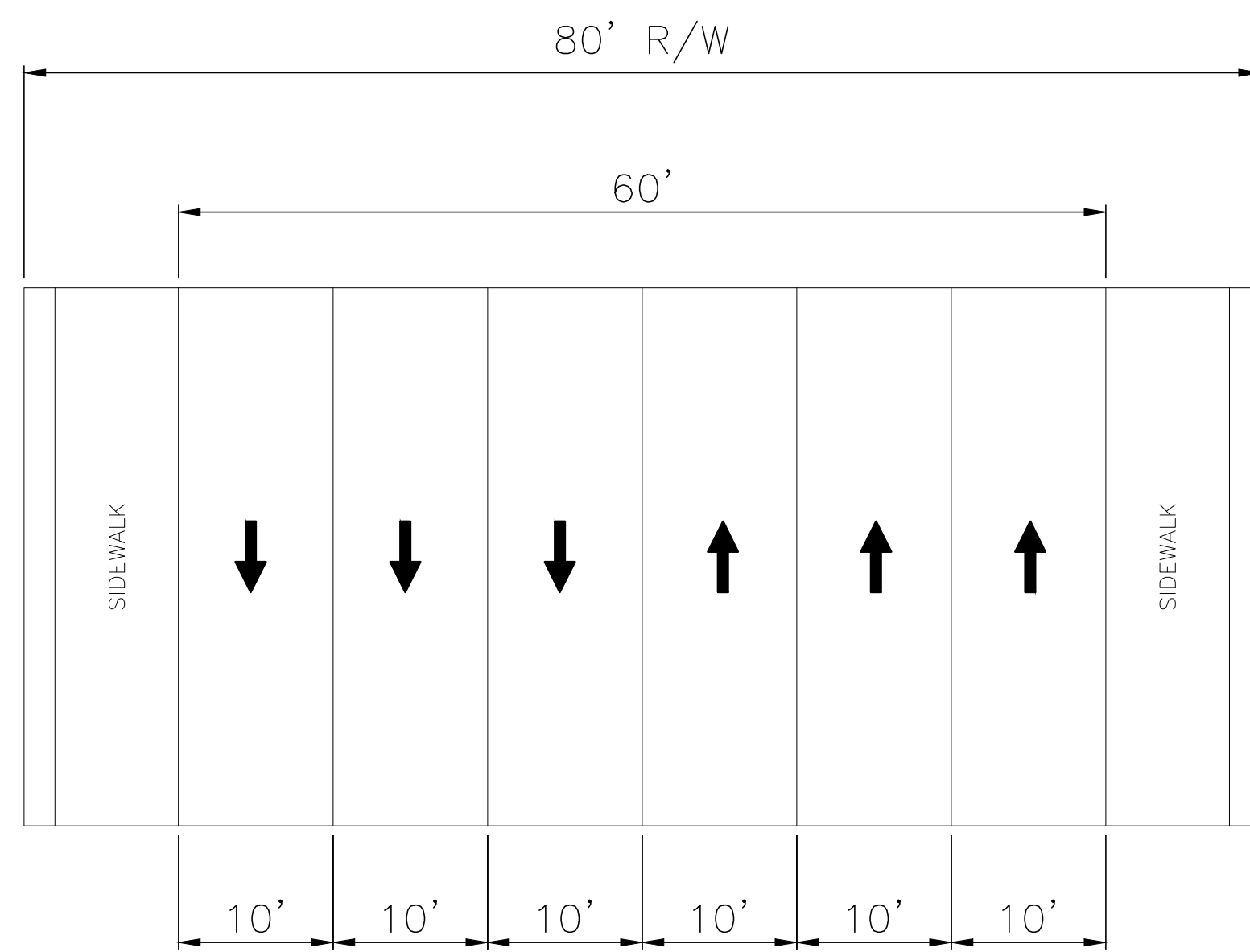
IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLANS SHALL BE PLACED IN EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING BY THE CONSTRUCTION ENGINEER.

CALCULATED
JNS
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PJF

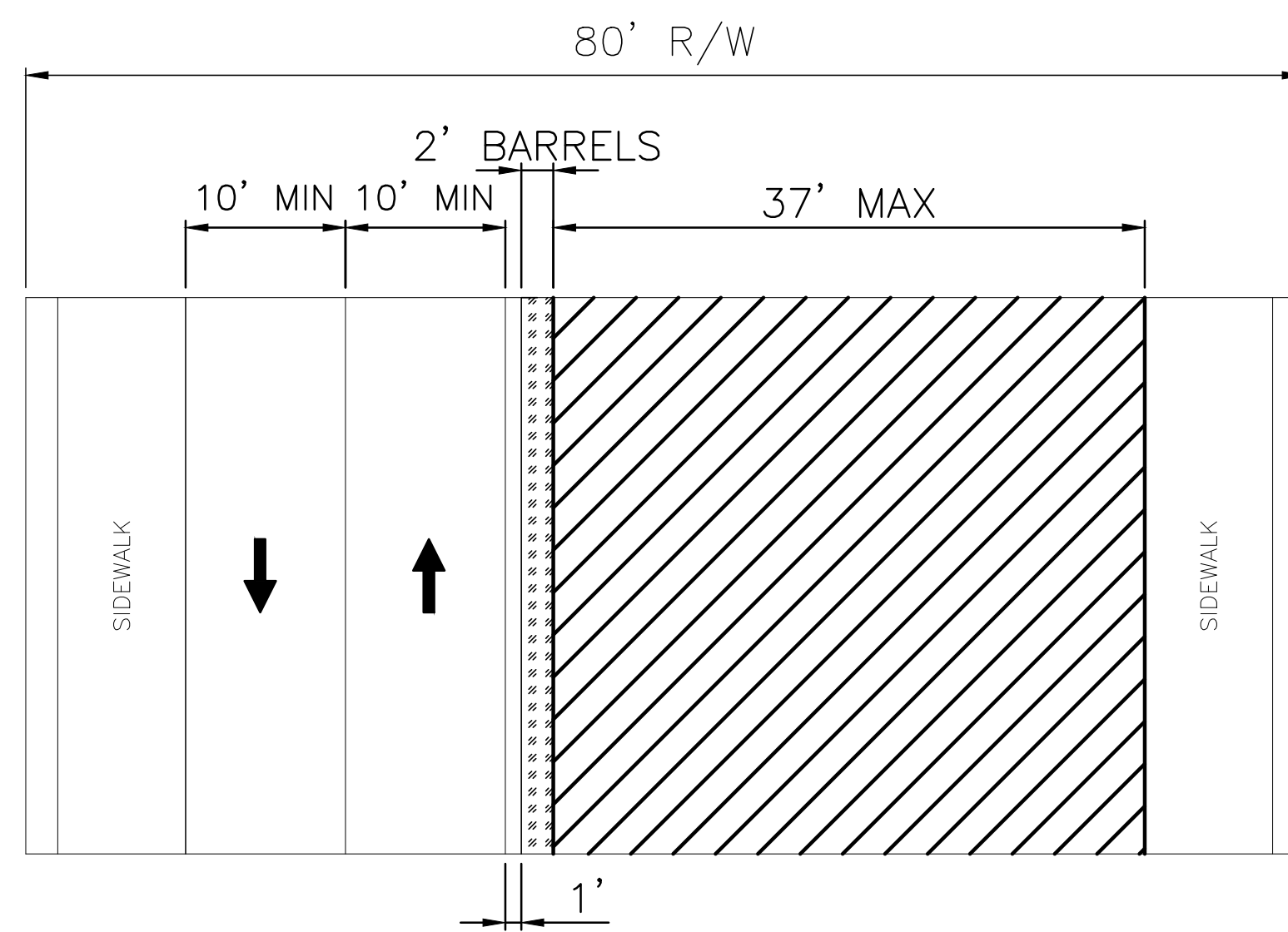
MAINTENANCE OF TRAFFIC
GENERAL NOTES

CUY - CEDAR ROAD

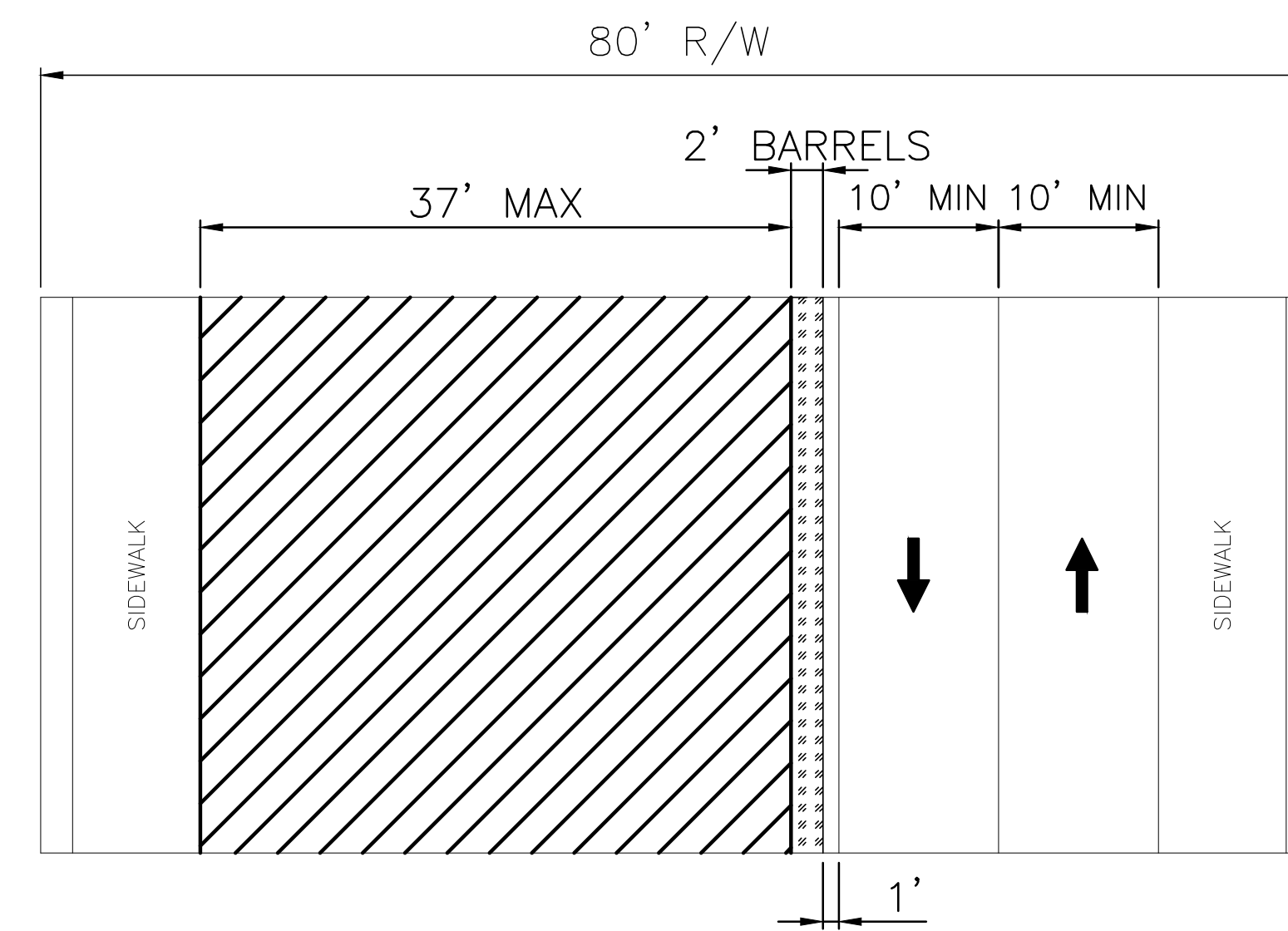
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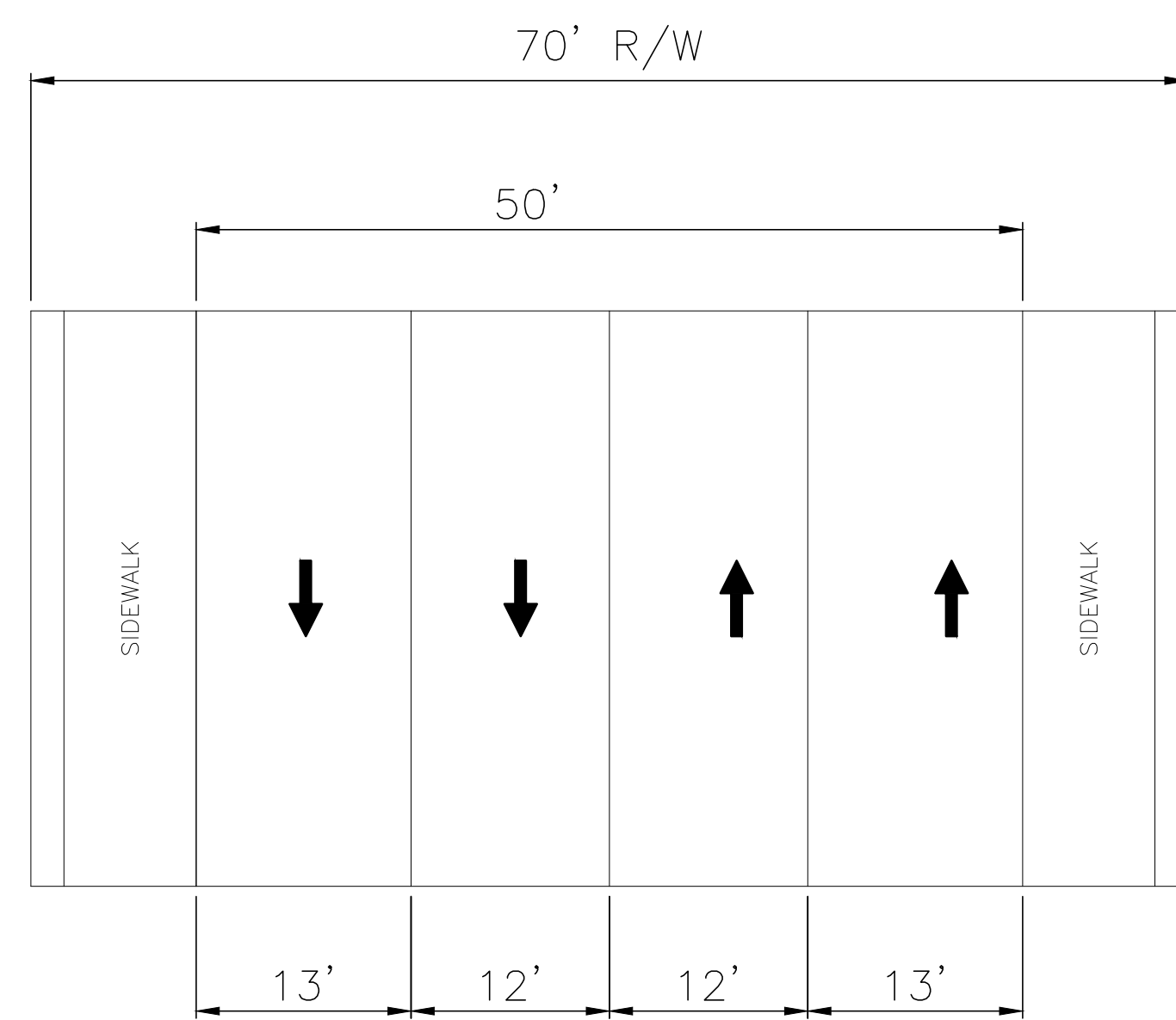
EXISTING CEDAR ROAD
EUCLID HEIGHTS BLVD. TO FAIRMOUNT BLVD.
SECTION 1
STA. 199+28 TO 25+50±



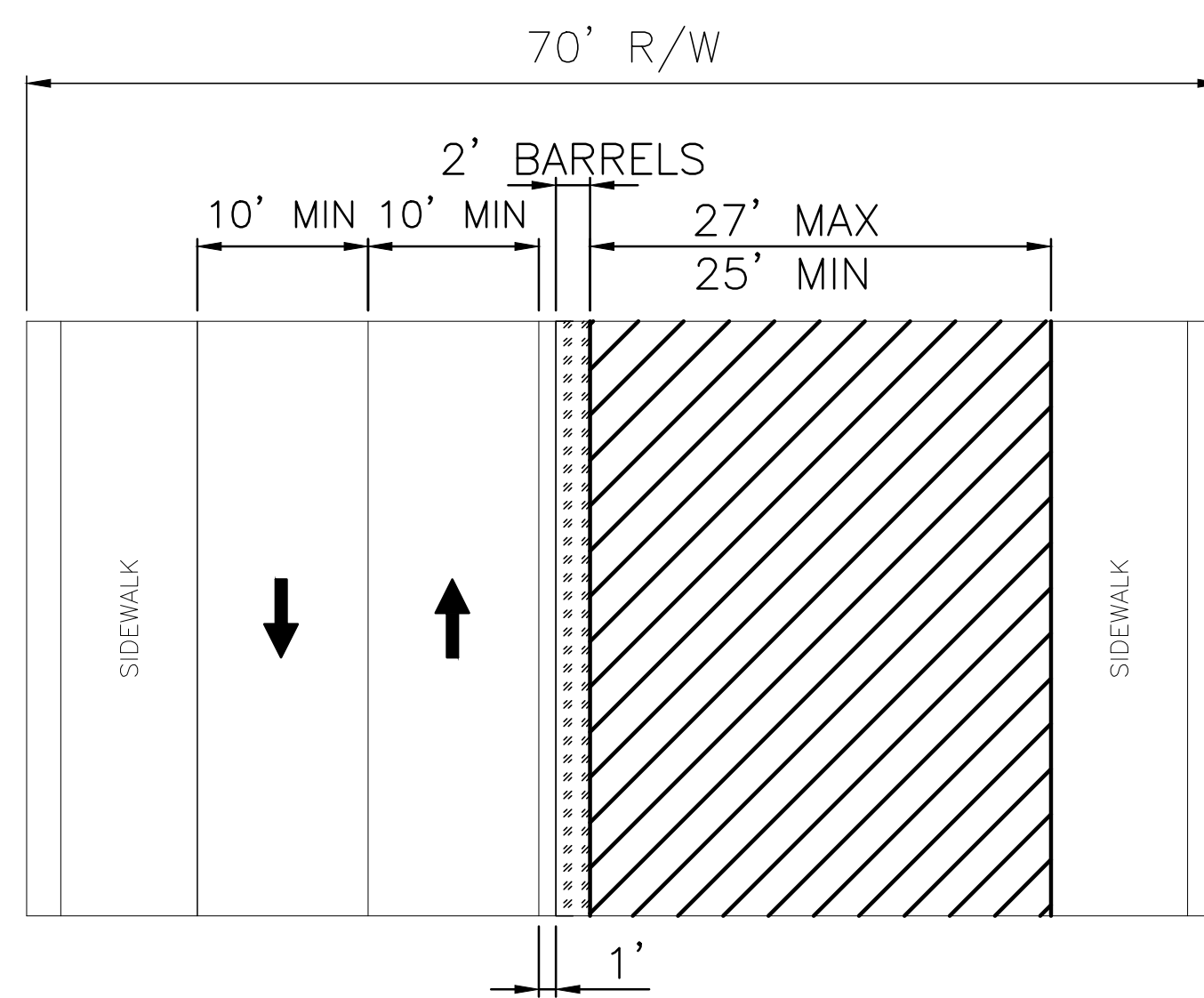
CEDAR ROAD
EUCLID HEIGHTS BLVD. TO FAIRMOUNT BLVD.
PHASE 1



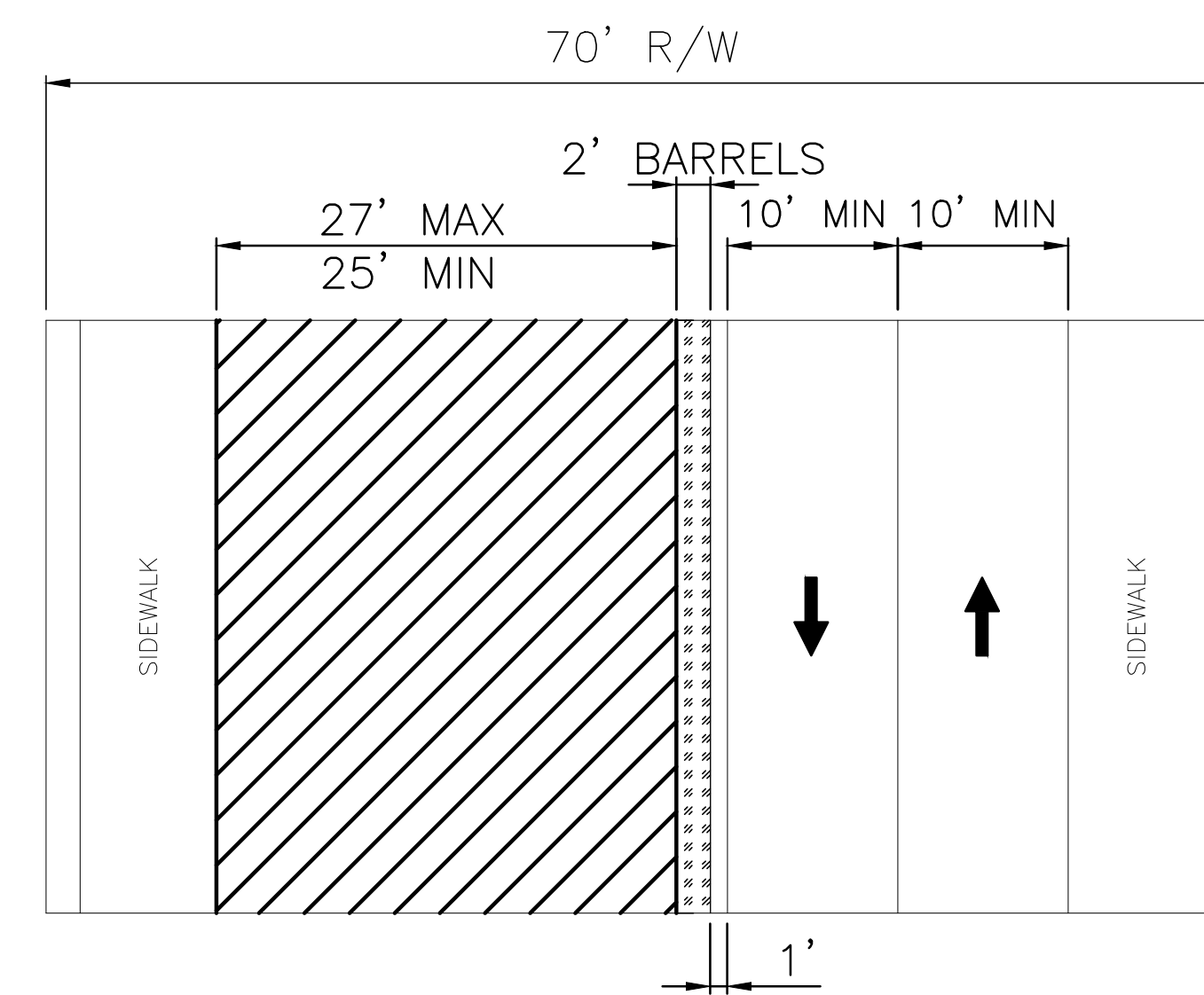
CEDAR ROAD
EUCLID HEIGHTS BLVD. TO FAIRMOUNT BLVD.
PHASE 2



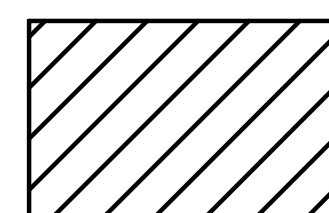
EXISTING CEDAR ROAD
FAIRMOUNT BLVD. TO NORFOLK ROAD
SECTION 1
STA. 25+50± TO 31+00±



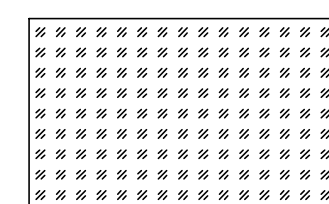
CEDAR ROAD
FAIRMOUNT BLVD. TO NORFOLK ROAD
PHASE 1



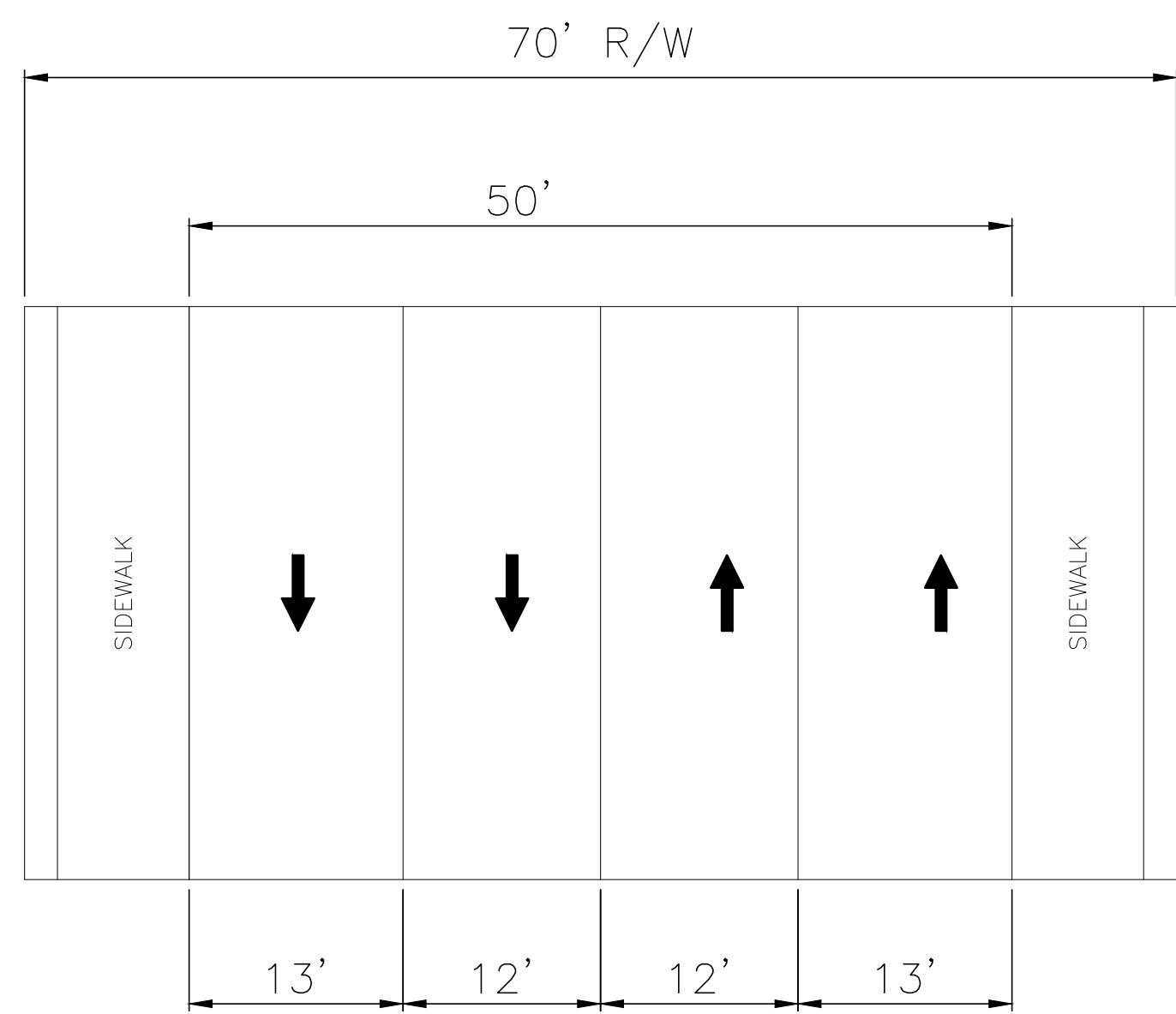
CEDAR ROAD
FAIRMOUNT BLVD. TO NORFOLK ROAD
PHASE 2



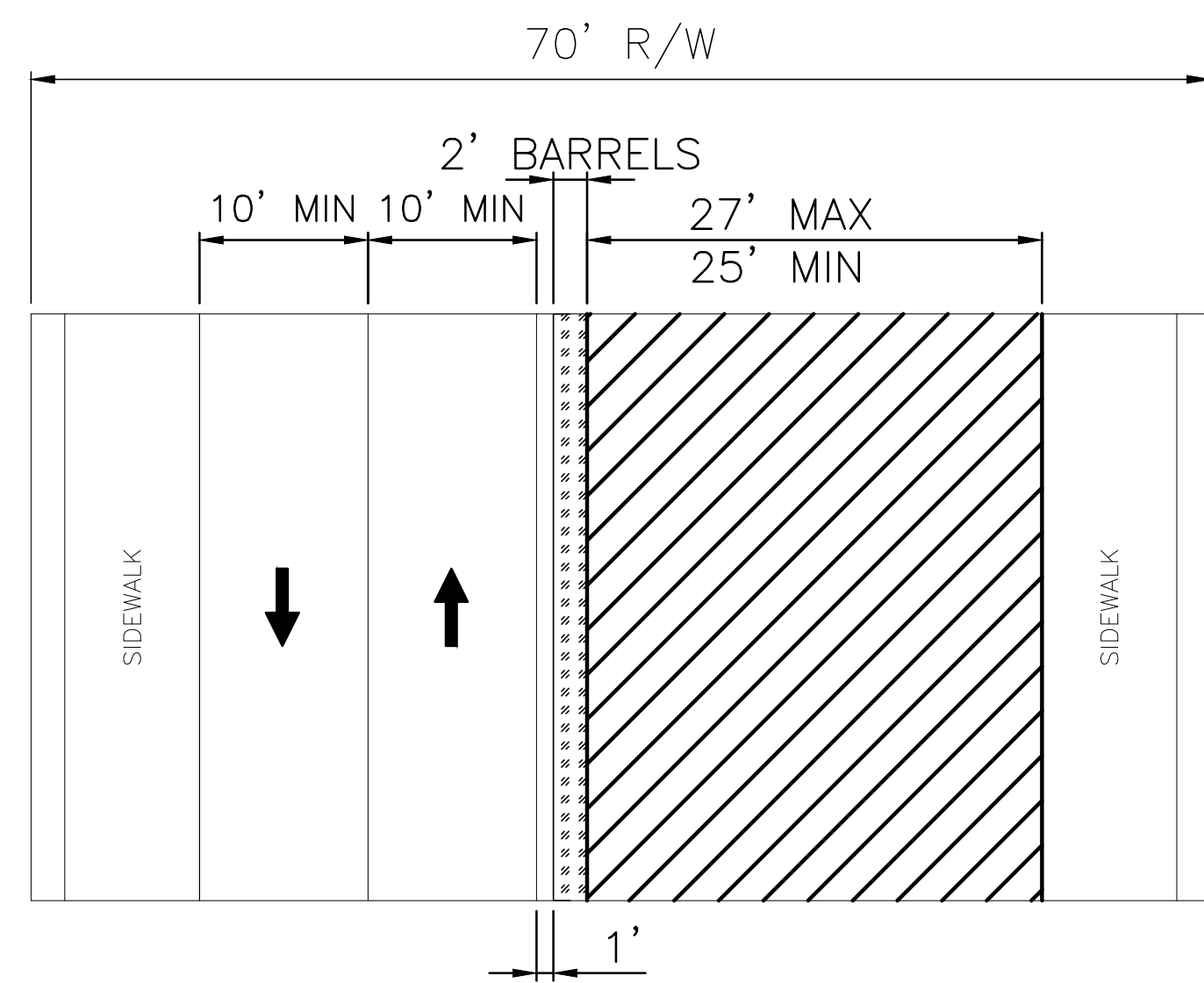
CONSTRUCTION ZONE



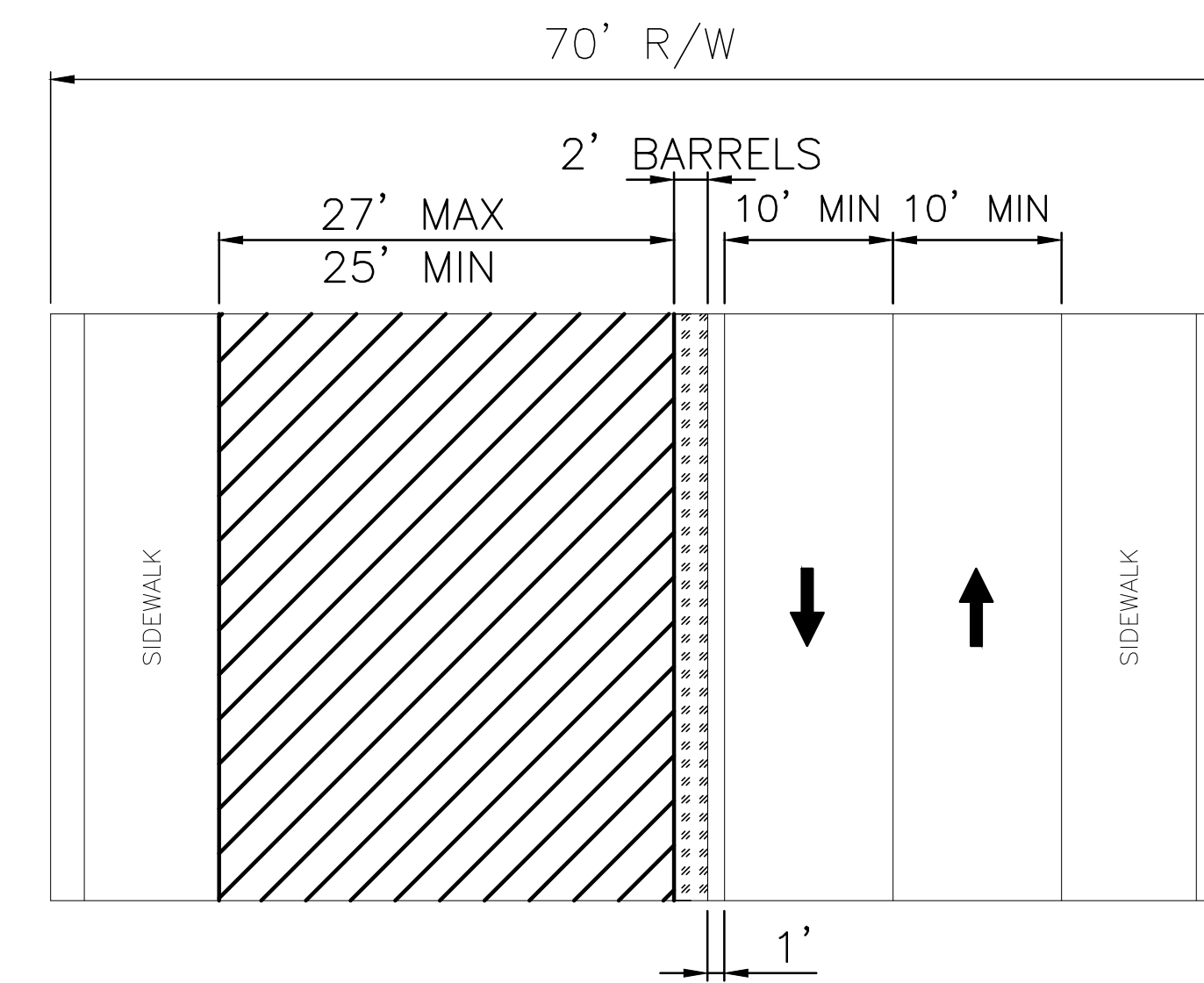
BARRELS



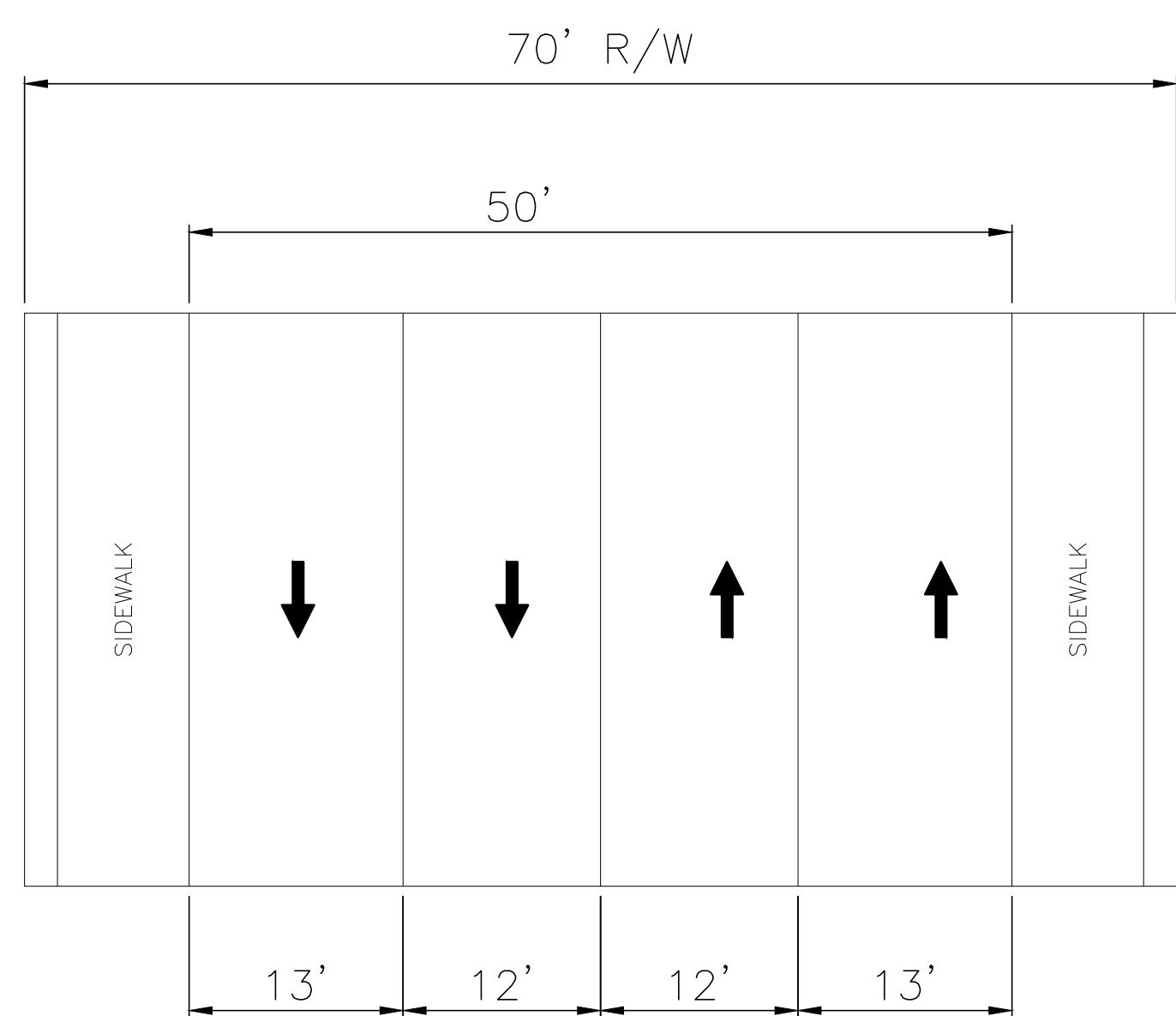
EXISTING CEDAR ROAD
NORFOLK ROAD TO WESTMINSTER ROAD
SECTION 2
STA. 31+00± TO 74+00±



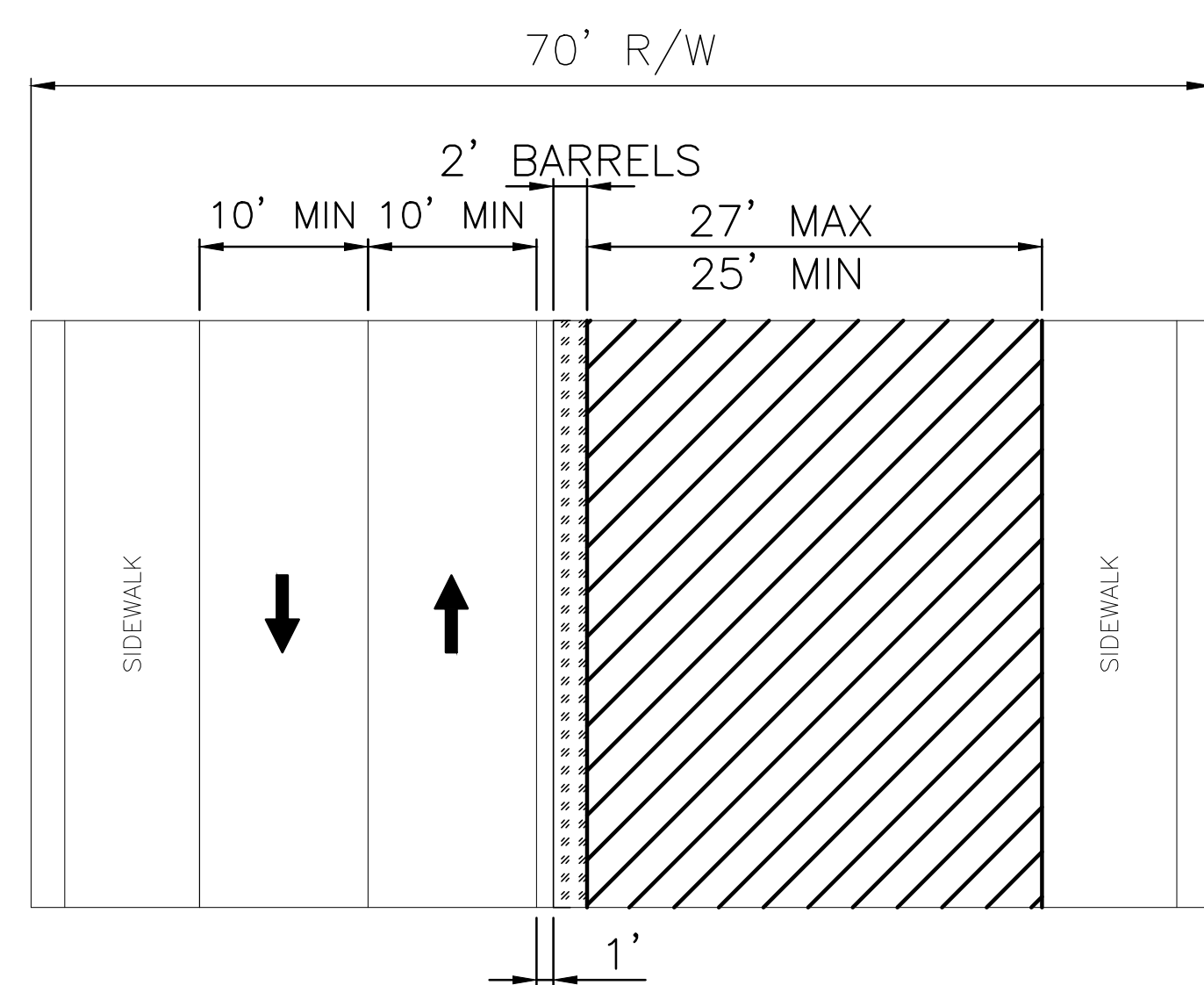
CEDAR ROAD
NORFOLK ROAD TO WESTMINSTER ROAD
PHASE 3



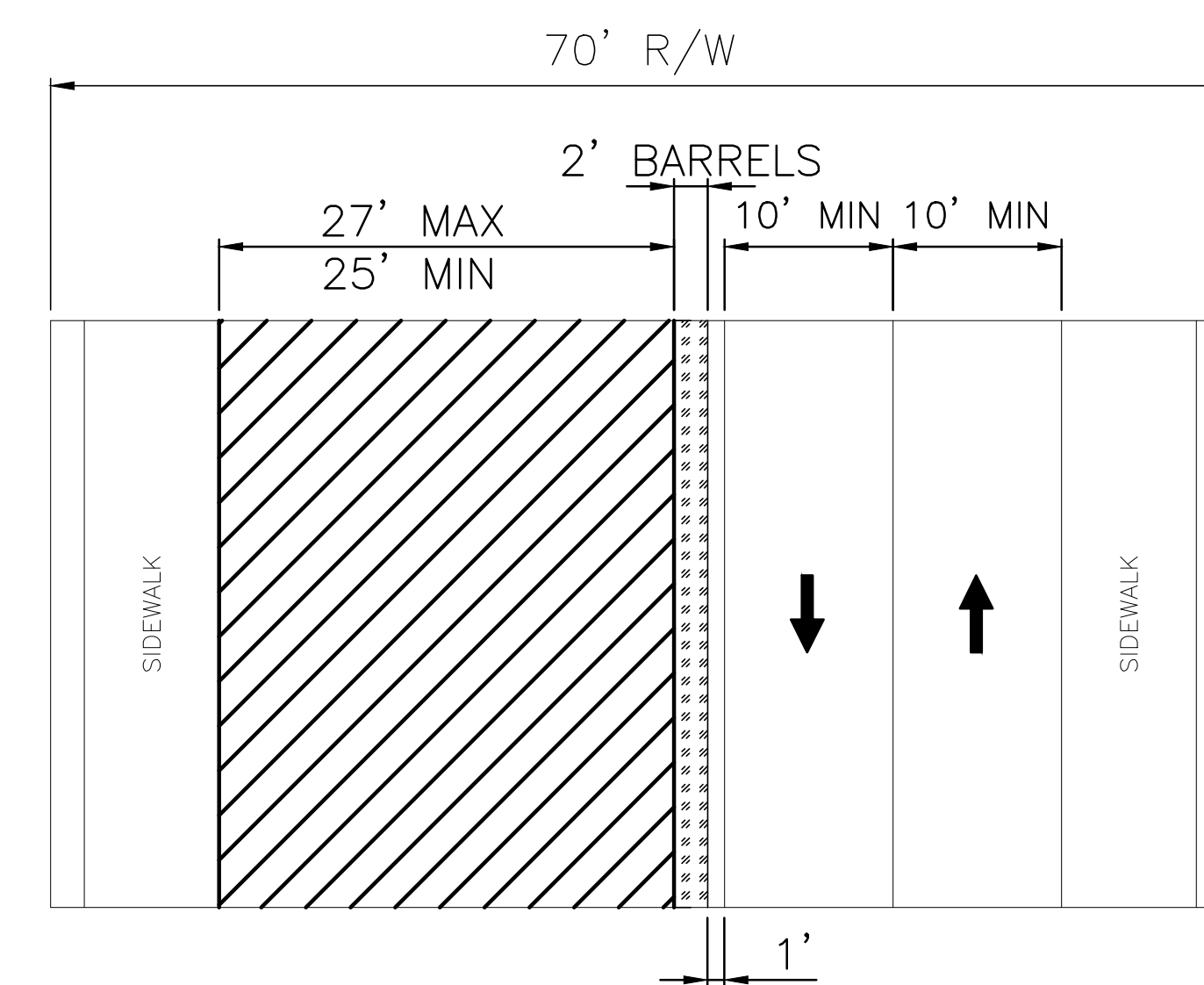
CEDAR ROAD
NORFOLK ROAD TO WESTMINSTER ROAD
PHASE 4



EXISTING CEDAR ROAD
WESTMINSTER ROAD TO TAYLOR ROAD
SECTION 3
STA. 74+00± TO 125+42±

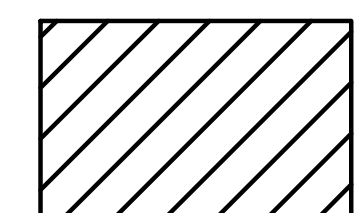


CEDAR ROAD
WESTMINSTER ROAD TO TAYLOR ROAD
PHASE 5

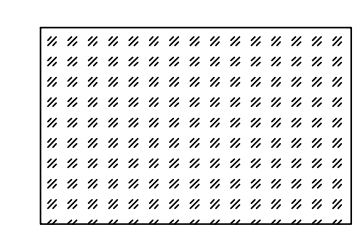


CEDAR ROAD
WESTMINSTER ROAD TO TAYLOR ROAD
PHASE 6

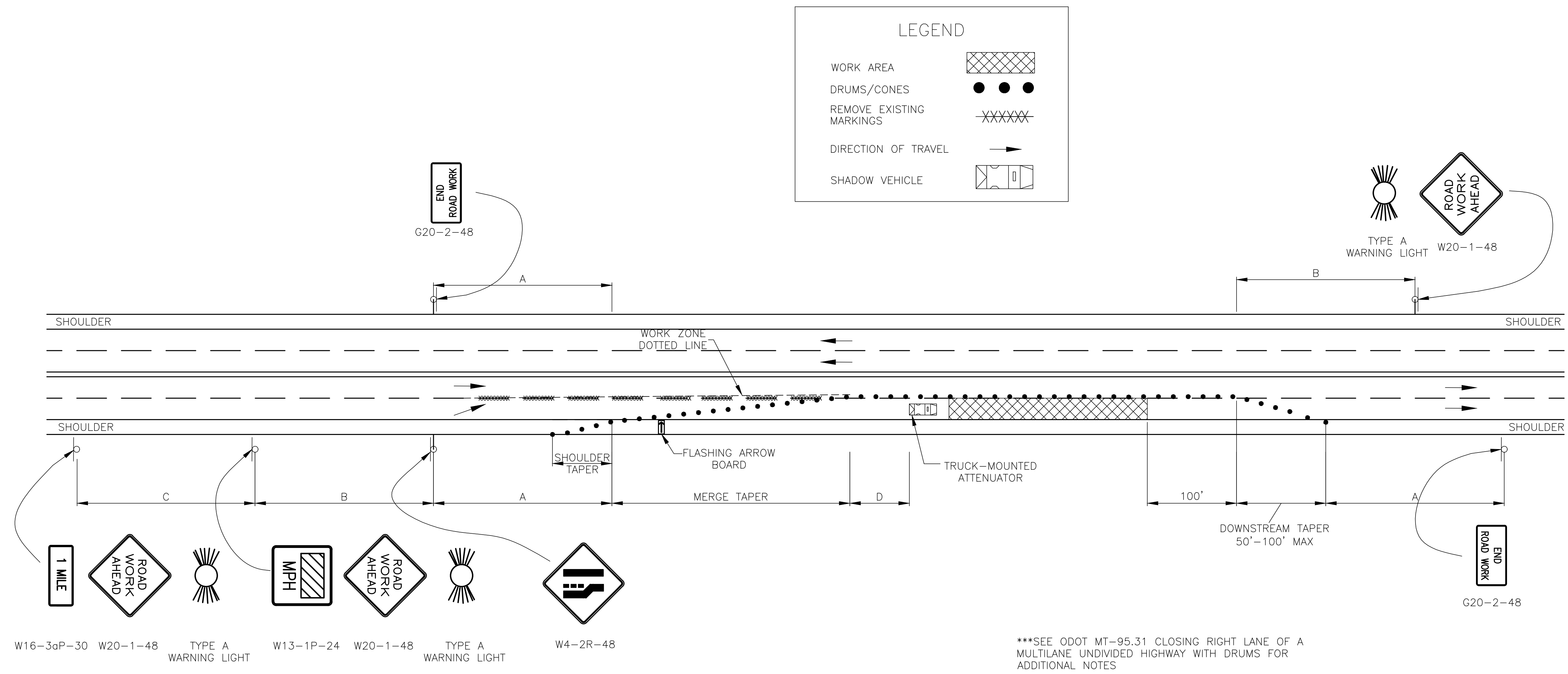
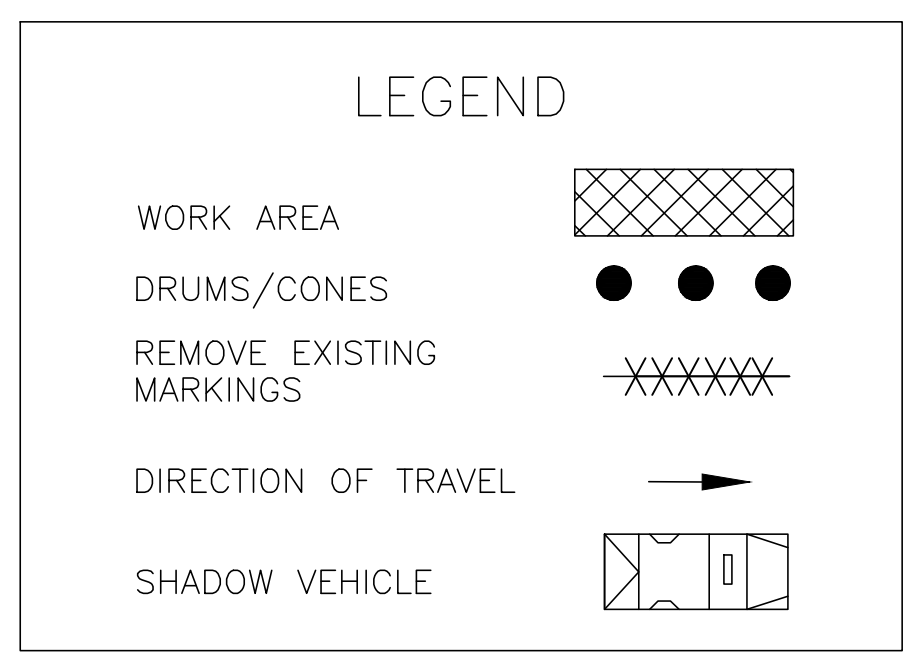
NOTE: SECTION 4, PHASES 7 & 8 SHALL FOLLOW SAME MEASURES AS SECTION 1, PHASES 1 & 2; RESPECTIVELY.



CONSTRUCTION ZONE



BARRELS



W16-3aP-30 W20-1-48 TYPE A WARNING LIGHT W13-1P-24 W20-1-48 TYPE A WARNING LIGHT W4-2R-48

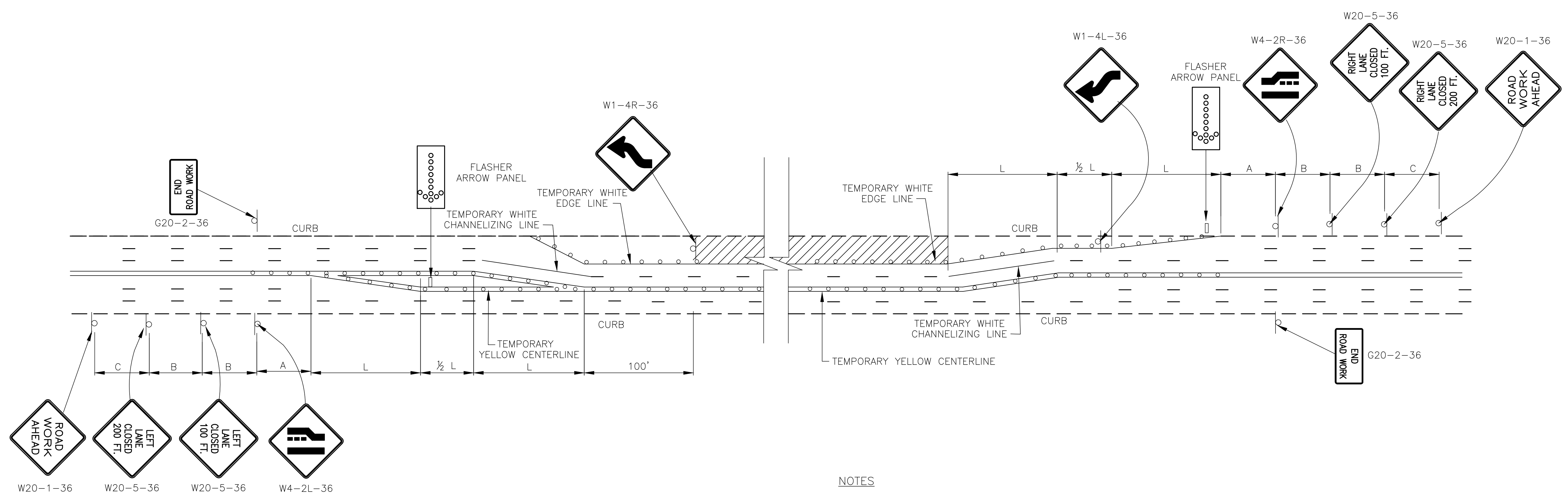
***SEE ODOT MT-95.31 CLOSING RIGHT LANE OF A MULTILANE UNDIVIDED HIGHWAY WITH DRUMS FOR ADDITIONAL NOTES

TABLE I (SIGN SPACING)

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
MAJOR CONVENTIONAL	500	500	500
FREEWAY & EXPRESSWAY	1000	1500	2640

TABLE II

SPEED LIMIT (MPH)	MERGING TAPER RATE MINIMUM	SHOULDER TAPER RATE MINIMUM	MAXIMUM DRUM SPACING (FT)		BUFFER (D) (FT) MINIMUM
			TAPER SEC.	TANGENT SEC.	
25	11:1	4:1	25	40	155
30	15:1	5:1	30	40	200
35	21:1	7:1	35	40	250
40	27:1	9:1	40	80	305
45	45:1	15:1	45	80	360
50	50:1	17:1	50	80	425
55	55:1	19:1	55	80	495



W20-1-36 W20-5-36 W20-5-36 W4-2L-36

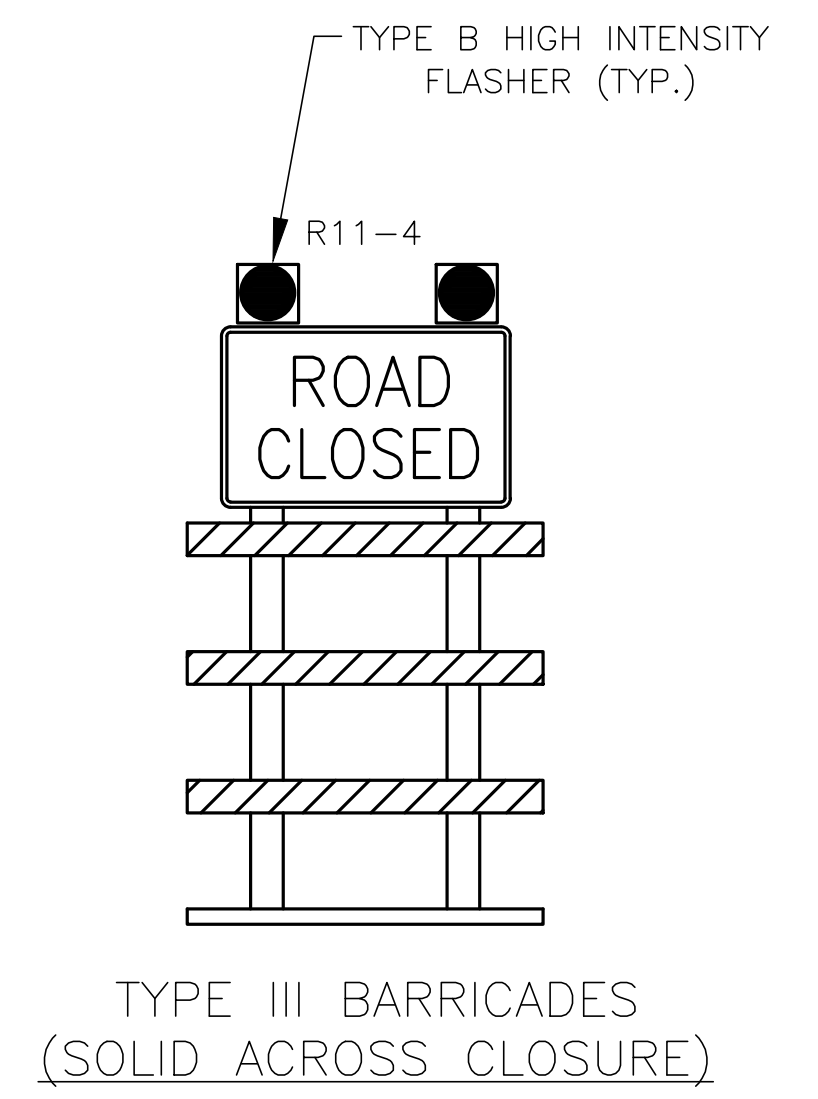
SPEED	L FEET	W FEET
35 MPH	205	10

ROAD TYPE	A FEET	B FEET	C FEET
URBAN LOW SPEED	100	100	100

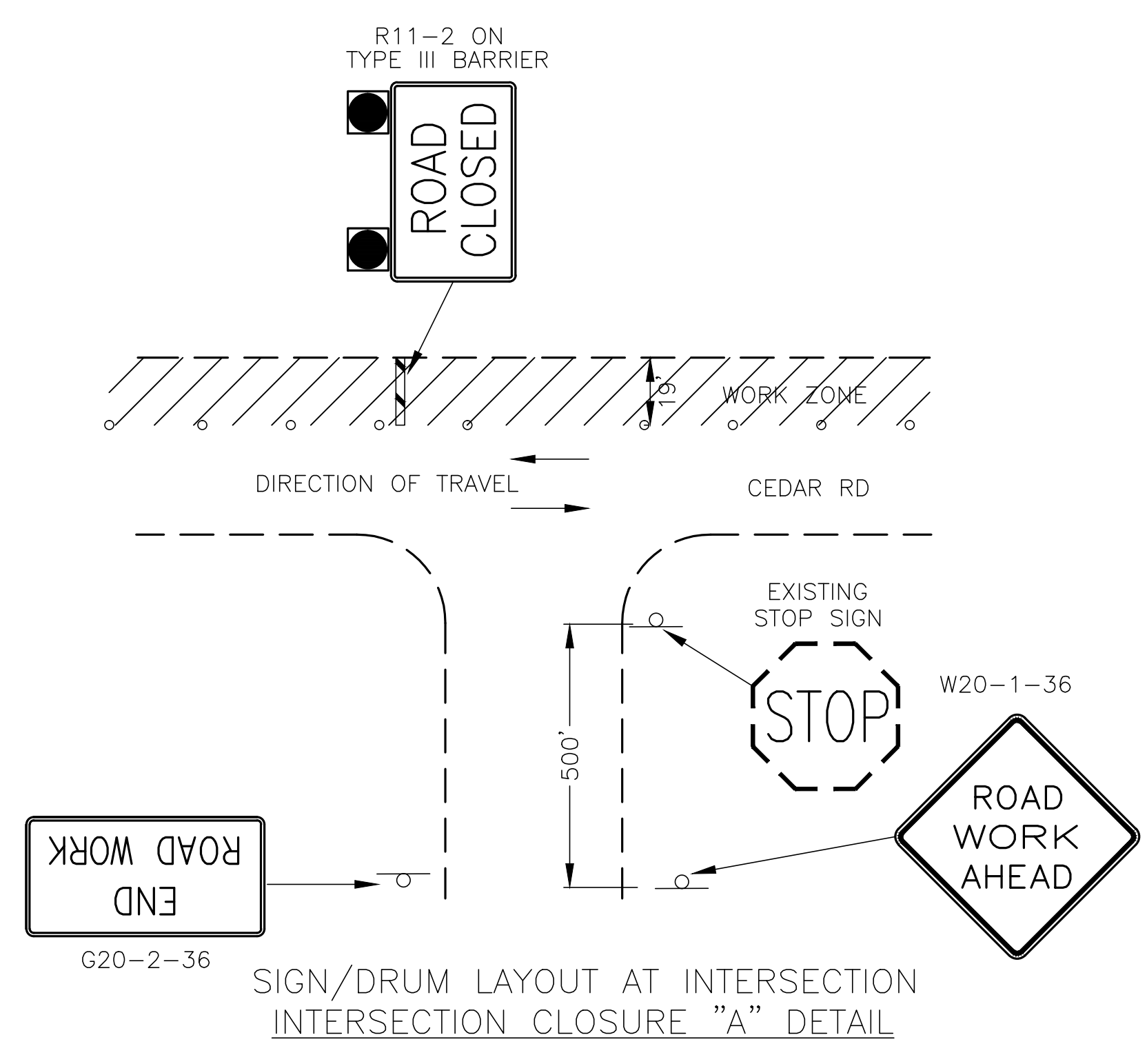
NOTES

1. PAVEMENT MARKINGS NO LONGER APPLICABLE SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICAL. EXCEPT FOR INTERMEDIATE-TERM AND SHORT TERM SITUATIONS, TEMPORARY MARKINGS SHALL BE PROVIDED TO CLEARLY DELINEATE THE TEMPORARY TRAVEL PATHS. FOR SHORT TERM AND INTERMEDIATE-TERM SITUATIONS WHERE IT IS NOT FEASIBLE TO REMOVE AND RESTORE PAVEMENT MARKINGS, CHANNELIZATION SHALL BE MADE DOMINANT BY USING A VERY CLOSE DEVICE SPACING.
2. WARNING LIGHTS MAY BE USED TO SUPPLEMENT CHANNELIZING DEVICES AT NIGHT.
3. A TRUCK MOUNTED ATTENUATOR MAY BE USED ON THE WORK VEHICLE AND/OR THE SHADOW VEHICLE.

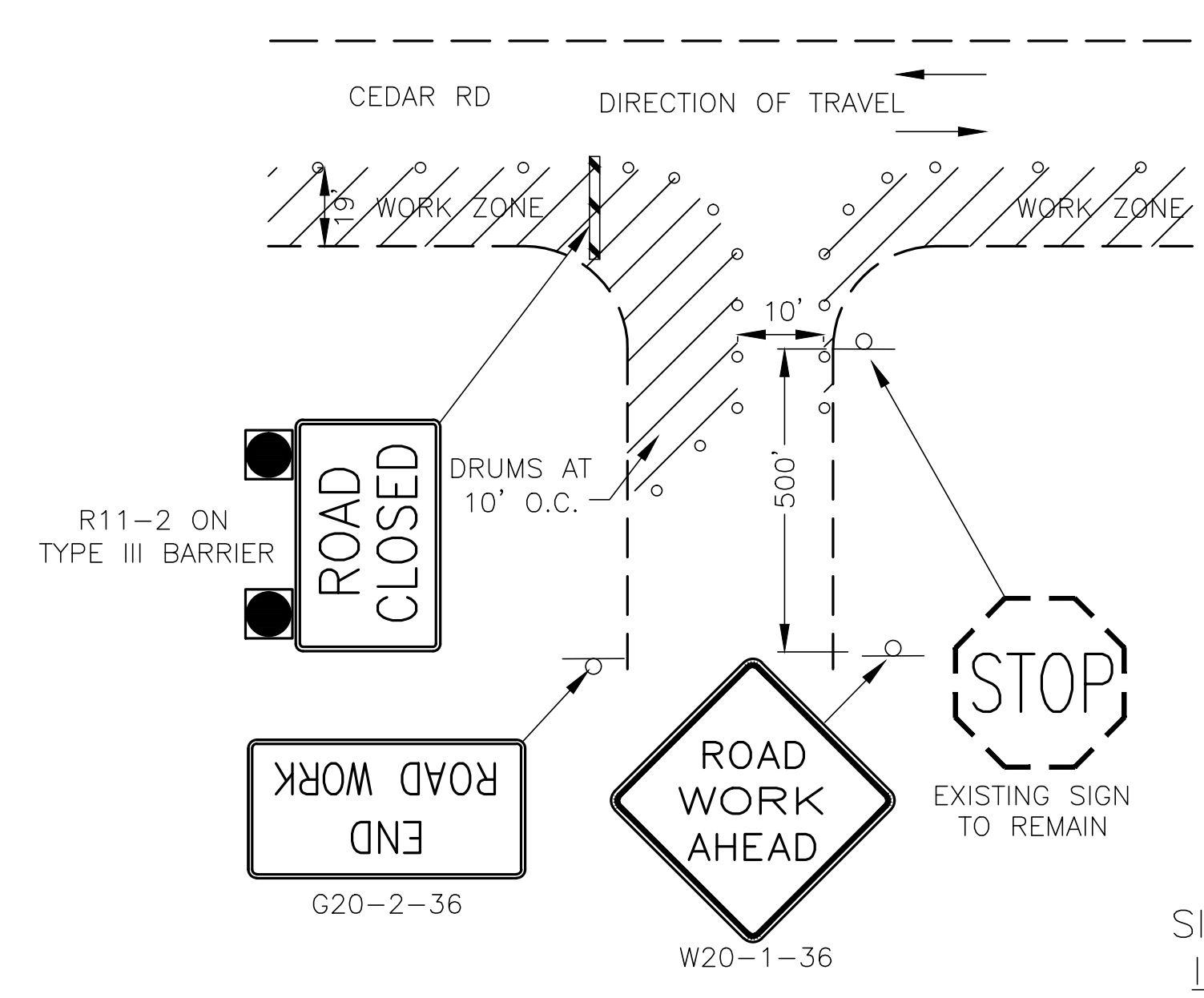
HALF ROAD CLOSURE ON A MULTI-LANE ROAD (TA-32)



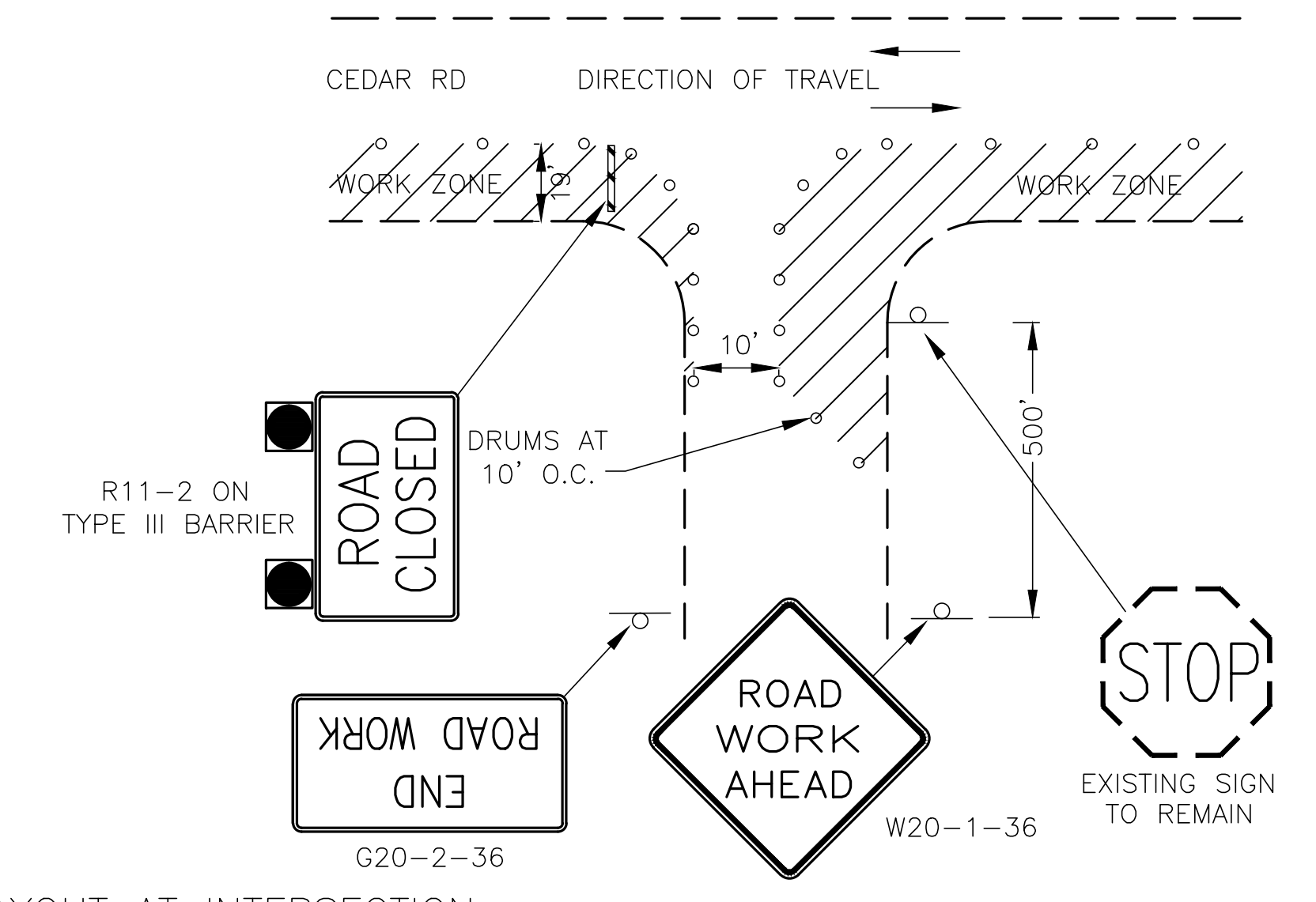
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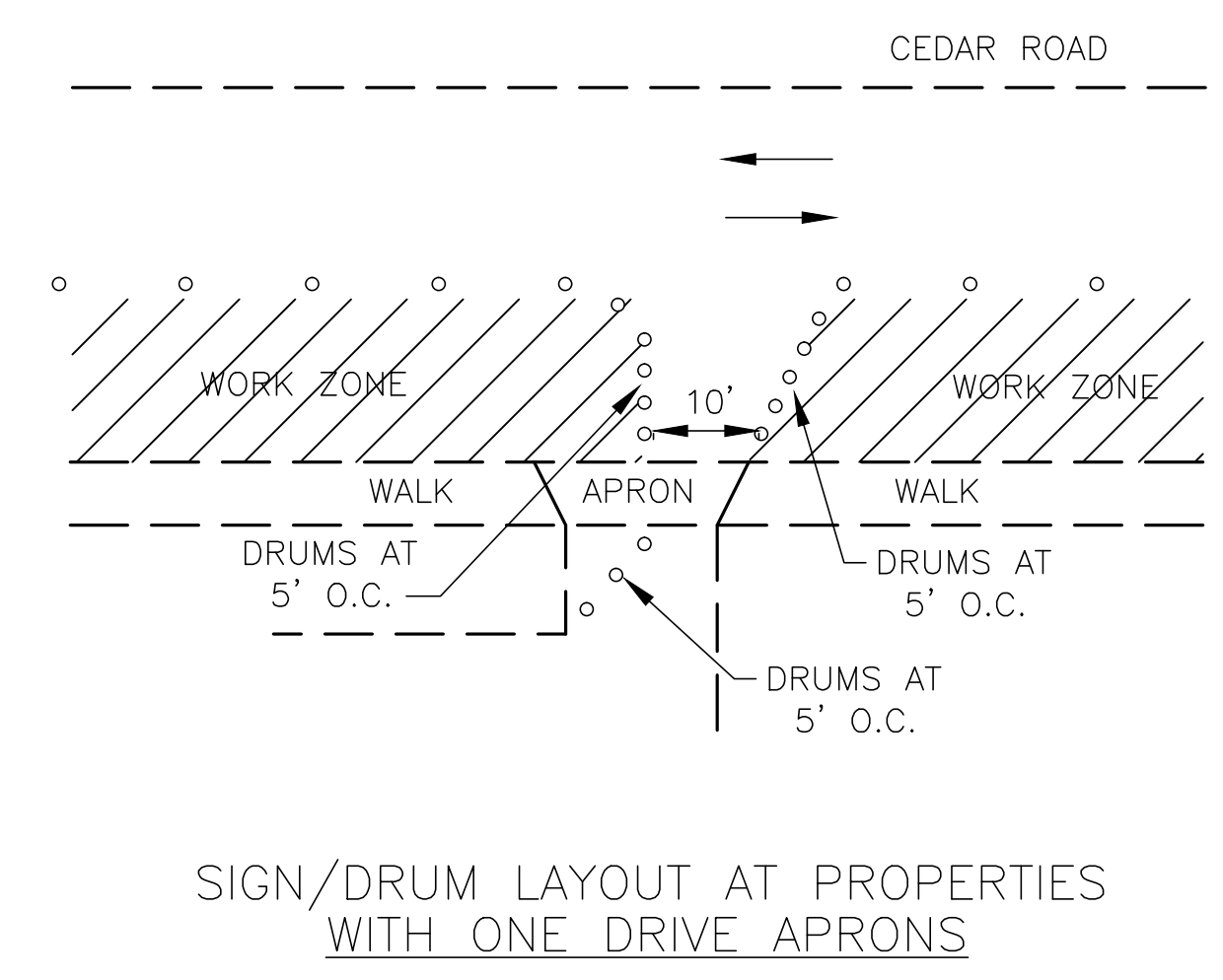
SIGN/DRUM LAYOUT AT INTERSECTION
INTERSECTION CLOSURE "A" DETAIL



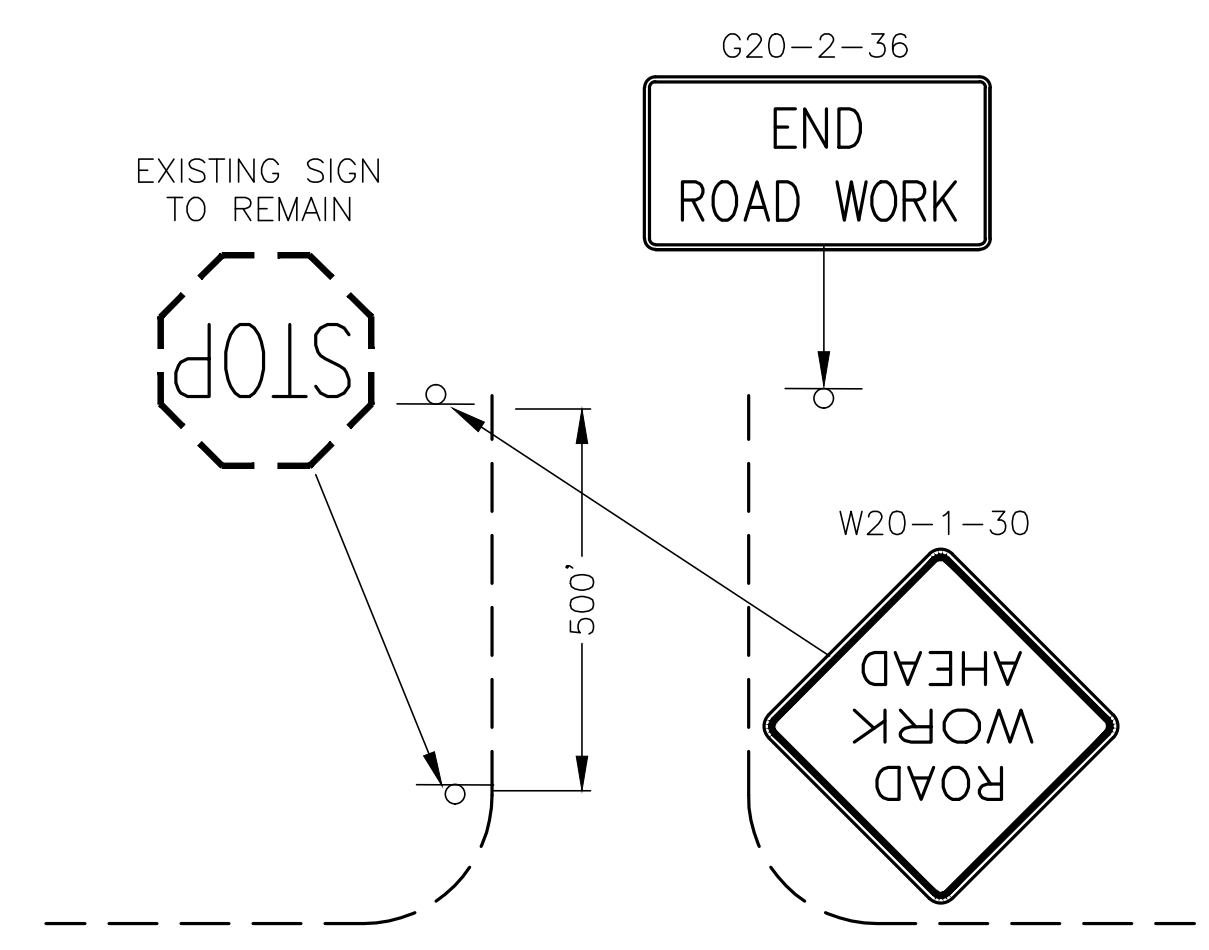
SIGN/DRUM LAYOUT AT INTERSECTION
INTERSECTION CLOSURE "B" DETAIL



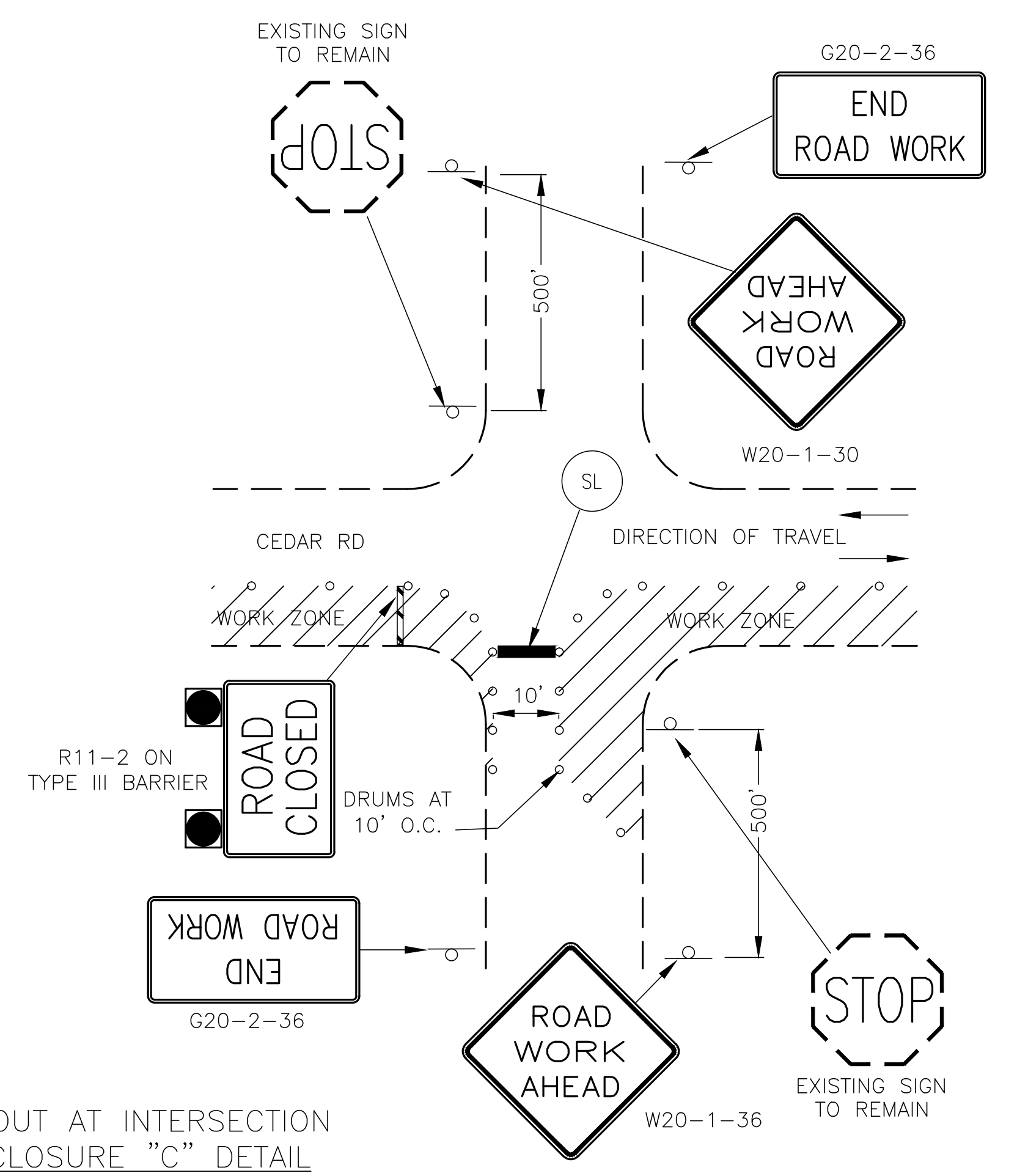
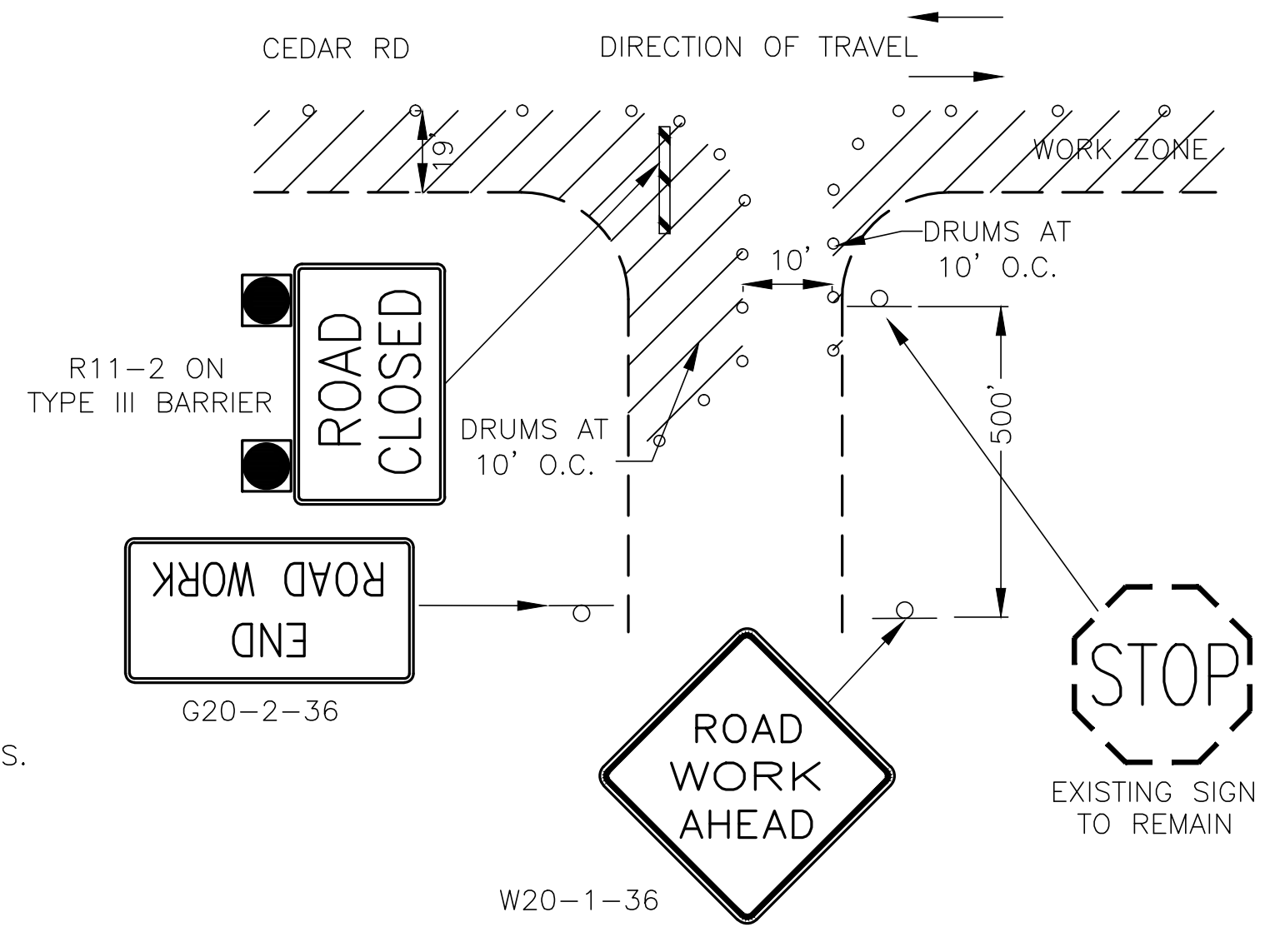
SIGN/DRUM LAYOUT AT INTERSECTION
INTERSECTION CLOSURE "C" DETAIL



SIGN/DRUM LAYOUT AT PROPERTIES
WITH ONE DRIVE APRONS



SIGN/DRUM LAYOUT AT PROPERTIES
WITH TWO DRIVE APRONS



NOTE:
CONSTRUCT ASPHALT RAMP
AS REQUIRED AT CURB FOR ACCESS.

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BARRIER AND CHANNELIZING DEVICE SELECTION TABLES

TABLE I - CHANNELIZATION TYPE WHEN USED BETWEEN THE PEDESTRIAN WALKWAY AND THE WORK AREA

DISTANCE FROM WORK ACTIVITY TO CHANNELIZATION	WORK CHARACTERISTICS *				OPERATION WHICH THROWS STONE, ETC.
	< 2 FT DROPOFF	2 - 5 FT DROPOFF	> 5 FT DROPOFF	DIRT/MUD SPLASHED	
< 5 ft.	A-E	B-E	C-D	D	D-E
5 - 10 ft.	A-E	B-E	B-E	D	B-E
> 10 - 30 ft.	A-E	A-E	B-E	N/A	A-E
> 30 ft.	N/A	A-E	B-E	N/A	A-E

* These requirements shall not apply to paving, grinding or other similar operations.

TABLE II - CHANNELIZATION TYPE WHEN USED BETWEEN THE PEDESTRIAN WALKWAY AND THE VEHICULAR LANE

DISTANCE FROM EDGE OF TRAFFIC LANE TO FACE OF CHANNELIZATION	SPEED LIMIT (MPH)		
	25	30 - 40	> 40
0 - 2 ft.	E	E	E
> 2-6 ft.	B-E	E	E
> 6 ft.	B-E	B-E	E

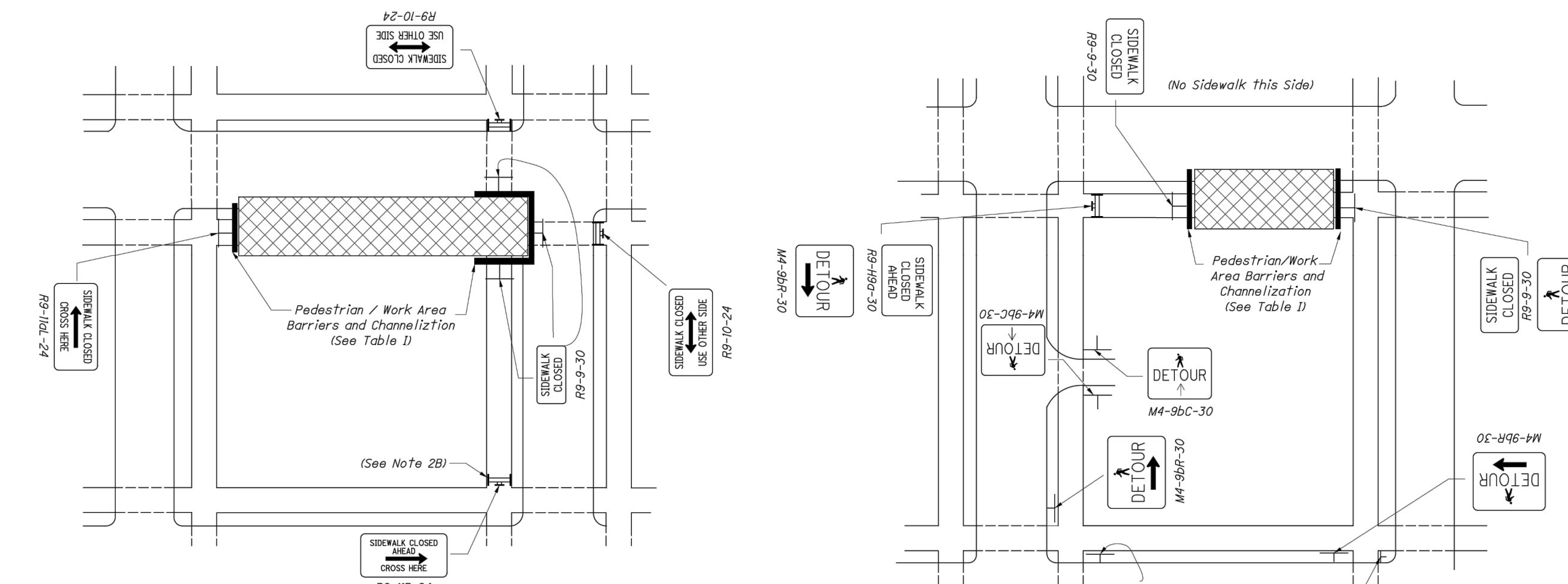
SELECTION LIST

- A. Wood Railing
- B. Snow Fence, Wood or Orange Plastic Construction Fence.
- C. Chain Link Fence, Type CLT
- D. Plywood Wall
- E. Portable Barrier

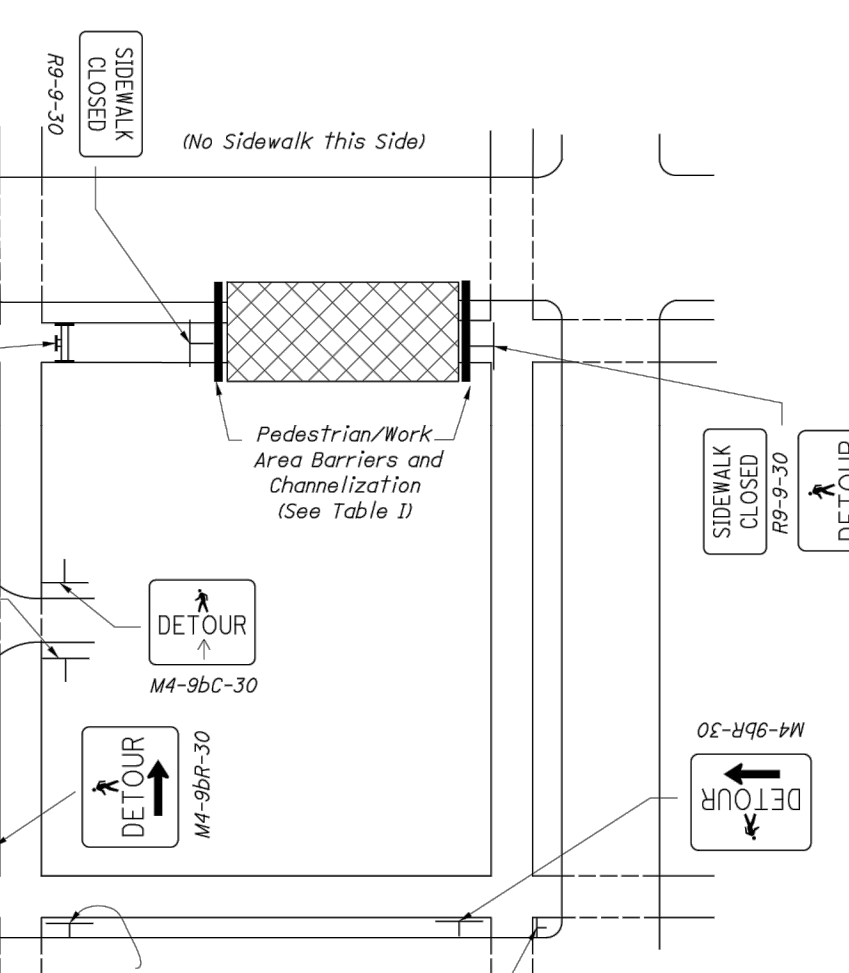
- CHANNELIZATION REQUIREMENTS**
- 7A. All channelization devices used to separate pedestrians from the work area or from the vehicular lane shall be as determined from the adjacent tables.
- 7B. Wood railing shall be a min. of a 2" x 4" rail at 32" above ground. It shall be secured to 2" x 4" posts at not more than 6' spacing with secure attachment hardware. It shall be installed and braced to be essentially rigid and able to support the following loads:
- a) A horizontal transverse load of 100 pounds of each post top.
 - b) A vertical load of 250 pounds of midpoint between each post.
- 7C. Wood snow fence shall be nominally 42" high, securely supported by wood or steel posts at 6' maximum spacing. Plastic/vinyl construction fence shall be bright orange. It shall be securely fastened to wood or metal posts of not more than 6' spacing. It shall be nominally 42" high and the top edge shall not sag below 30" (2" max. sag). Either of the fence sections with extensive broken slats or holes greater than 12" x 12" shall be repaired or replaced.
- 7D. Chain link fence, Type CLT shall conform to CMS 607 and appropriate details on Roadway Standard Construction Drawings T-11, T-3.1 and T-3.2, except that materials need not be new nor shall certification and tests be required.
- 7E. Plywood walls shall be a minimum of 3/4" exterior plywood, supported by a 2" x 4" or heavier framing securely anchored and braced to resist wind load and/or persons. They shall be designed for a minimum wind loading of 30 pounds per square foot (or larger if local codes require). Height of the wall shall be not less than 7' above the walkway and 1' within range of thrown objects, shall be of sufficient height to screen pedestrians and passing cars.
- 7F. When PB is provided, it shall be 32" PB as per CMS 622. Delineation of PB shall be as per SCD MT-101.70.
- 7G. Barrier located along a "runaround" within the roadway pavement shall meet the following requirements:
- a) Be a minimum of 36" in height and continuous with the ground surface.
 - b) Extend along the entire length of the runaround.
 - c) Have no breaks or gaps along the full length of the barrier.
 - d) Have a solid, continuous bottom rail between 4" and 12" in height.
 - e) Be of high contrast color and material.
 - f) Provide temporary ramps and boardwalks as required to ensure a smooth and continuous surface that complies with Americans with Disabilities Act Accessibility Guidelines.

- NOTES:**
- GENERAL**
- 1A. This drawing presents traffic controls only for pedestrian traffic. Vehicular traffic control shall be provided as required.
- 1B. The purpose of the traffic control devices provided herein is to divert and guide pedestrians whose path would otherwise enter the work area. The Contractor must take additional precautions as appropriate to protect other pedestrians or residents (including children) from exposure to hazards resulting from construction operations.
- SIGNS AND BARRICADES**
- 2A. All signs and barricades shall be placed so that they do not cause a hazard for pedestrians. All signs, not on barricades or channelizing devices, near or over active sidewalks shall have a minimum 7' vertical clearance. Signs mounted on barricades or channelizing devices shall have a minimum 7' clearance above the sidewalk.
- 2B. Advance signing for sidewalk closure shall be mounted on Type I Barricade, placed such that they will not block more than one-half the sidewalk.
- PAVEMENT MARKING**
3. Maintain 2' minimum when possible, between the work zone edge line and the barrier or channelizing device separating the pedestrian path from the vehicle path.
- STAGED WORK**
4. For repair or reconstruction work involving sidewalks on both sides of the street, the work shall be staged so that one side is rebuilt before the other is disrupted.
- TEMPORARY WALKWAYS**
- 5A. Pedestrian walkways constructed by the Contractor shall be kept free of any obstructions or hazards including holes, debris and mud. Other walkways damaged or altered by the Contractor shall be immediately repaired or cleaned.
- 5B. For construction of temporary walkway the maximum grade shall be 5 percent unless specified otherwise in the plans. The maximum cross slope shall be 2 percent.
- LIGHTING AND DELINEATION**
- 6A. At night, in otherwise unlighted areas, pedestrian-channelizing devices and barricades and pedestrian detour signs shall be provided with lighting as follows:
- a) Illumination shall provide a minimum of 1.2 foot-candles on temporary walkways.
 - b) Illumination shall be controlled by photocells.
 - c) Illumination fixtures may consist of floodlights or other protected fixtures mounted at least 10' above ground.
 - d) Illumination supports may be standard highway lighting poles, 4" x 4" wood posts or other supports approved by the Engineer.
- 6B. For barricades and channelizing devices located between the pedestrian way and the vehicle travel lane in unlighted areas, the devices shall be delineated or lighted at night as follows:
- a) Delineation of the portable barrier (PB) located between the vehicle lane and the pedestrian path shall be by barrier reflectors on the vehicle side of the PB and by object markers as per Standard Construction Drawing (SCD) MT-101.70.

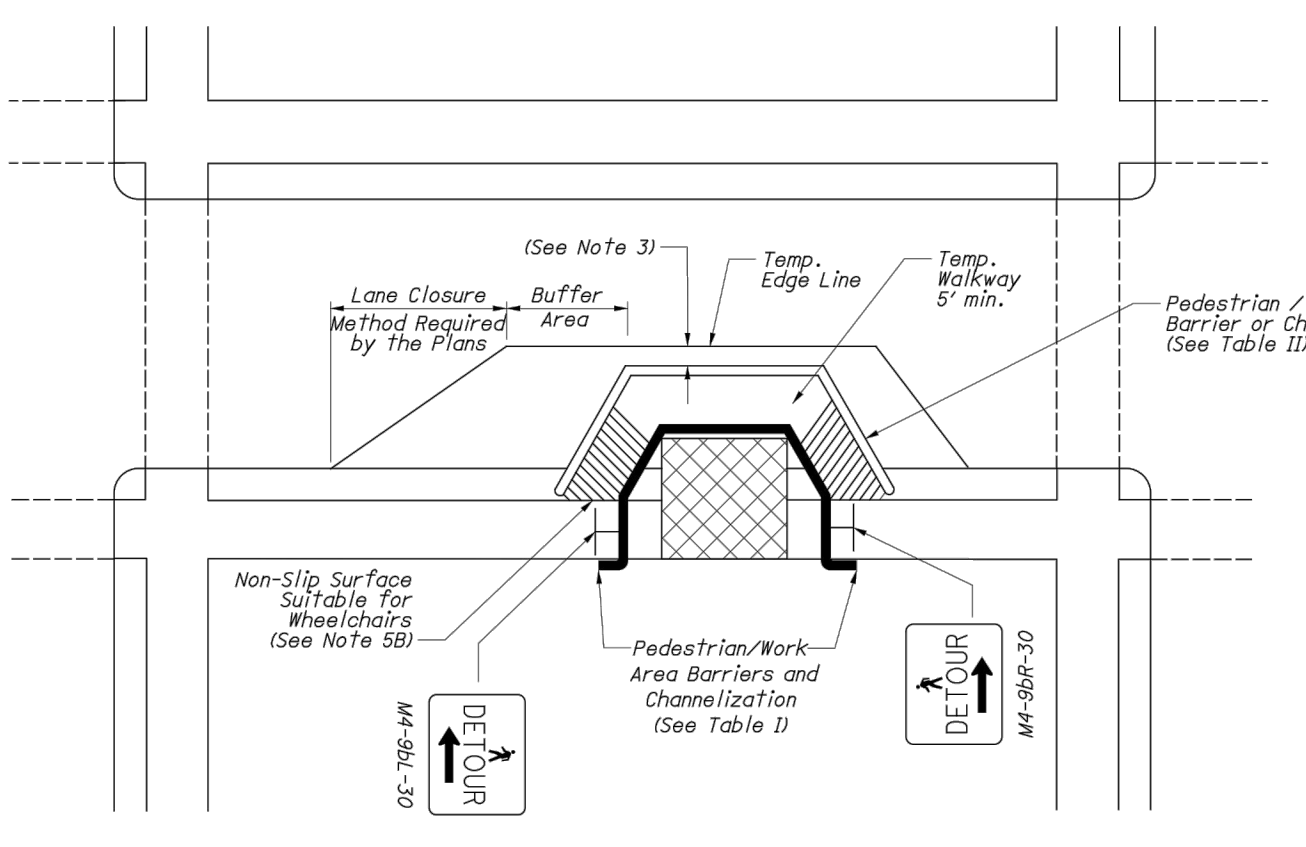
DETOUR TO OTHER SIDE OF STREET



DETOUR TO ANOTHER FACILITY



DETOUR TO TEMPORARY WALKWAY ("RUNAROUND") ON ROADWAY

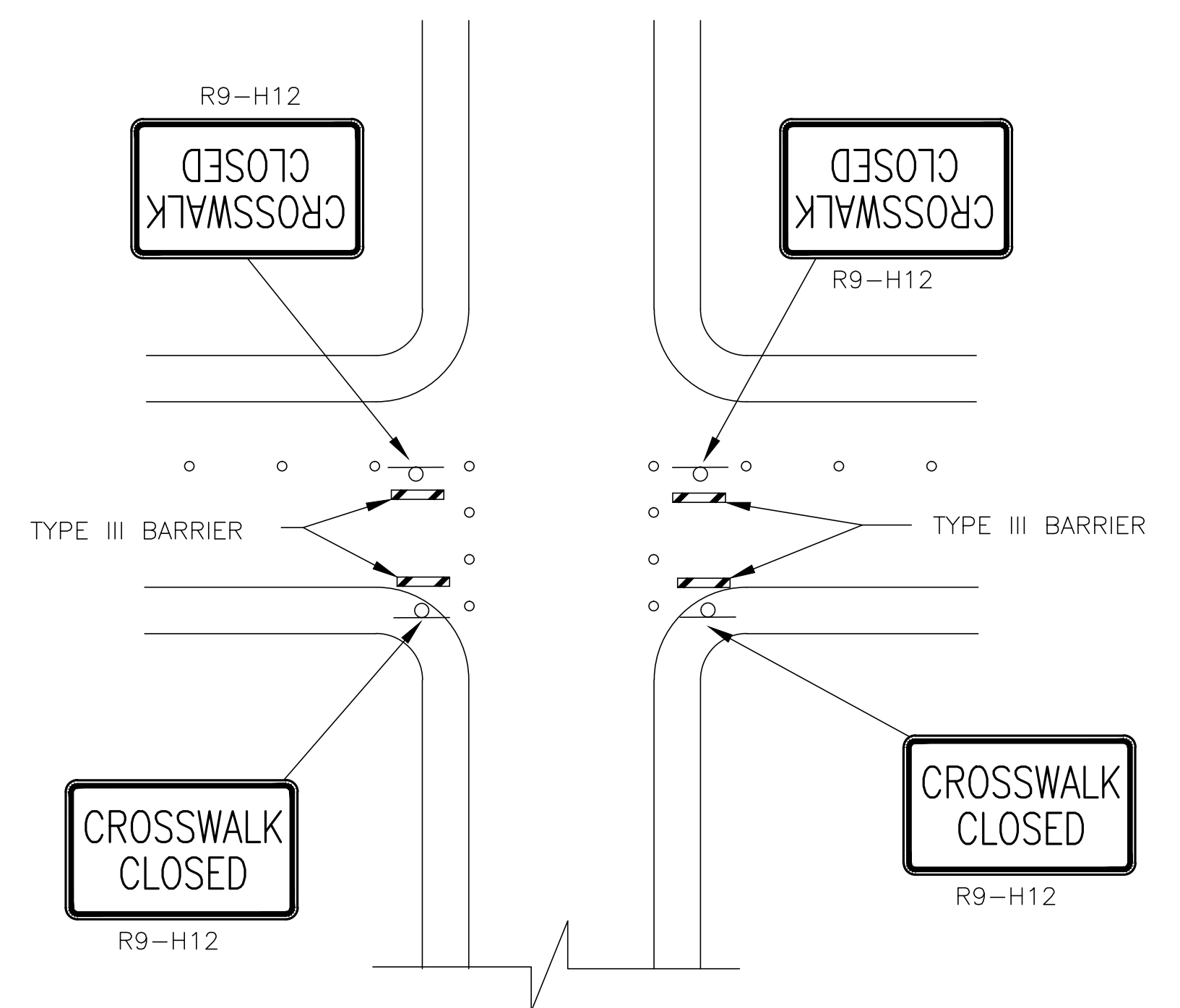


LEGEND

WORK AREA [Symbol]

TYPE I BARRICADE WITH SIGN [Symbol]

SIDEWALK MAINTENANCE OF TRAFFIC DETAIL



CROSSWALK CLOSED AT ALL EXISTING CROSSWALKS ACROSS WORK ZONES

Oct. 05, 2016 - 4:18pm
drawing name: I:\2014\14607\DWG\14607GSUM - Copy.DWG Layout: 17 by: stevens

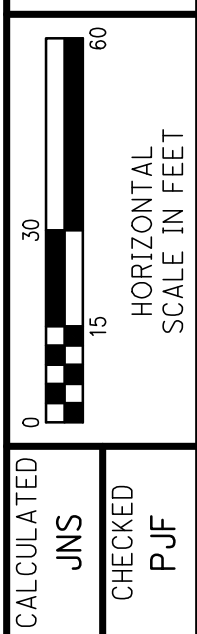
REF. NO.																	GENERAL NOTES	ITEM	GRAND TOTAL	UNIT	DESCRIPTION
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32						
ROADWAY																					
5	350	170		170			195					625	260		190		202	1,960.00	SQ YD	PAVEMENT REMOVED, AS PER PLAN (see sheet 6)	
6				100		600	350	400	200	300	300	200	300	200	200		608	3,150.00	SQ FT	4 INCH CONCRETE WALK, INCLUDING REMOVAL, AS PER PLAN	
7	1200	3200		200		1200	700	800	400	600	600	400	600	400	400		608	10,700.00	SQ FT	6 INCH CONCRETE WALK OR CURB RAMP, INCLUDING REMOVAL, AS PER PLAN	
8	6	16		2		12	7	8	4	6	6	4	6	4	4		608	85.00	EACH	CURB RAMP, AS PER PLAN - ADDITIONAL LABOR FOR FORMING/POURING AND TRUNCATED DOME PLATE - SF OF CONCRETE PAID SEPARATELY	
9	5	2		1		1			1			1	1				623	12.00	EACH	MONUMENT BOX ADJUSTED TO GRADE	
EROSION CONTROL																					
10																	110	659	110.00	CU YD	TOPSOIL
11				30		180	105	120	60	90	90	60	90	60	60		659	945.00	SQ YD	SEEDING AND MULCHING	
12																	1	832	1.00	EACH	EROSION CONTROL
DRAINAGE																					
13				80	50	230	155	170	110	140	140	110	140	110	110		605	1,545.00	FOOT	4 INCH UNCLASSIFIED PIPE UNDERDRAIN, WITH FABRIC WRAP	
14	12	8	6	5	6	8	7	9	6	6	12	8	9	4	2		611	108.00	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN (see sheet 8)	
15																	5	611	5.00	VERT FT	CATCH BASIN PARTIALLY RECONSTRUCTED TO GRADE, AS PER PLAN (see sheet 8)
16	20	21	2	10	12	12	23	21	18	19	30	24	10	7	14		611	243.00	EACH	MANHOLE ADJUSTED TO GRADE, METHOD D.1 (brick), AS PER PLAN (see sheet 8)	
17																	5	611	5.00	VERT FT	MANHOLE PARTIALLY RECONSTRUCTED TO GRADE, AS PER PLAN (see sheet 8)
18	17260	13890	4930	8225	8930	10440	14285	14695	11030	11580	19960	15240	10945	5870	7310		611	174,590.00	POUND	SPECIAL - MISCELLANEOUS METAL (see sheet 6)	
PAVEMENT																					
19	16	16	4	11	11	12	12	11	12	12	12	9	11	8	6		251	160.50	CU YD	PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN (see sheets 6, 39)	
20	212	210	50	146	151	158	160	151	156	157	156	119	155	108	77		253	2,166.70	SQ YD	PAVEMENT REPAIR, AS PER PLAN (see sheet 39)	
21	7056	7011	1667	4878	5022	5278	5322	5033	5211	5244	5211	3956	5167	3589	2578		254	72,222.20	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (see sheet 7)	
1																	4000	254	4,000.00	SQ YD	PATCHING PLANED SURFACE, AS PER PLAN (see sheet 7)
2	212	210	50	146	151	158	160	151	156	157	156	119	155	108	77		255	2,166.70	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC MS, AS PER PLAN (see sheets 7, 39)	
22	71	70	17	49	50	53	53	50	52	52	52	40	52	36	26		204	722.20	CU YD	EXCAVATION OF SUBGRADE AND EMBANKMENT WITH GRANULAR MATERIAL, AS PER PLAN, CONTINGENCY, AS DIRECTED	
23	233	205	58	169	174	175	182	168	169	168	167	133	166	116	90		441	2,374.20	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M, AS PER PLAN (see sheet 7)	
24	12	39				8	2	7	12	14	13	5	13	8			441	134.00	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22, AS PER PLAN (see sheet 7)	
25	343	341	81	237	244	257	259	245	253	255	253	192	251	174	125		441	3,510.80	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22	
26	350	170		170			195					625	260		190		451	1,960.00	SQ YD	12" REINFORCED CONCRETE PAVEMENT, CLASS QC MS: BUS PAD (see sheets 40, 41)	
27				80	50	230	155	170	110	140	140	110	140	110	110		609	1,545.00	FOOT	CURB, TYPE 6, INCLUDING REMOVAL, AS PER PLAN (see sheets 3-5)	
3	529	526	125	366	377	396	399	378	391	393	391	297	388	269	193		407	5,416.60	GALLON	TACK COAT, TRACKLESS TACK	
28	706	701	167	488	502	528	532	503	521	524	521	396	517	359	258		407	7,222.30	GALLON	TACK COAT, TRACKLESS TACK, INTERMEDIATE COURSE	
WATER WORK																					
29	18	9		12	5	6	13	10	5	7	10	12	11	6	10		638	134.00	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN (see sheet 8)	
30																	10	638	10.00	EACH	VALVE BOX ADJUSTED TO GRADE, RISER RING, AS PER PLAN (see sheet 8)
31																	10	638	10.00	EACH	SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN (see sheet 8)
TRAFFIC SURVEILLANCE																					
32	3	2	2	1		1	2				1	2	2				632	16.00	EACH	DETECTOR LOOP, AS PER PLAN (see sheet 8)	
TRAFFIC CONTROL																					
33	0.34	0.94	0.67	0.63	0.68	0.72											644	3.97	MILE	LANE LINE : 4"	
34	0.18	0.42	0.37	0.35	0.42	0.46											644	2.19	MILE	CENTER LINE, SOLID, DOUBLE	
35	410	334			100												644	844.00	FT	CHANNELIZING LINE, 8 INCH	
36	200	656	204	322	271	355											644	2,008.00	FT	STOP LINE	
37	980	1400	916	376	1360	1430											644	6,462.00	FT	CROSSWALK LINE	
38			208	192		150											644	550.00	FT	TRANSVERSE/DIAGONAL LINE	
39		400															644	400.00	SQ FT	ISLAND MARKING	
40		1	2	1	1	1											644	6.00	EACH	SCHOOL SYMBOL MARKING, 72 INCH	
41		200															644	200.00	FT	PARKING LOT STALL MARKING	
42	4	7			2												644	13.00	EACH	LANE ARROW	
43	2	2			2												644	6.00	EACH	WORD ON PAVEMENT, 72 INCH	
44	850	240															644	1,090.00	FT	DOTTED LINE, 4 INCH	
MAINTENANCE OF TRAFFIC																					
45																	250	614	250.00	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE
46	0.34	0.94	0.67	0.63	0.68	0.72											614	4.00	MILE	WORK ZONE LANE LINE, CLASS I, 642 PAINT	
47	0.18	0.42	0.37	0.35	0.42	0.46											614	2.20	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
48	200	656	204	322	271	355											614	2,008.00	FT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	
INCIDENTALS																					
49																	1	614	1.00	LUMP	MAINTAINING TRAFFIC, AS PER PLAN
4																	1	623	1.00	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING
50																	1	624	1.00	LUMP	MOBILIZATION

CALCULATED JNS CHECKED PJJ

GENERAL SUMMARY

CUY - CEDAR ROAD

17
41



CEDAR ROAD PLAN
STA. 198+00 TO STA. 17+00

CUY - CEDAR ROAD

EX. CEI M.H. STA. 199+40.37, 27.63' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 199+52.46, 95.76' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 199+78.02, 1.35' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 199+83.40, 51.97' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. WTR. V. STA. 199+86.16, 41.52' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 199+87.04, 32.08' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 199+89.63, 43.63' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 199+90.61, 48.46' LT.
(ADJUST TO GRADE)

EX. M.H. STA. 199+90.99, 53.45' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 199+91.22, 79.81' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 199+92.49, 58.18' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 199+97.76, 35.79' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 199+99.93, 26.36' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 10+60.02, 41.72' LT.
(ADJUST TO GRADE)

EX. M.H. STA. 10+68.66, 84.93' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 10+71.03, 31.11' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 10+73.66, 81.80' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 10+92.40, 25.59' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. WTR. V. STA. 11+16.69, 21.84' LT.
(ADJUST TO GRADE)

EX. OBT. M.H. STA. 12+29.95, 15.40' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. CB. STA. 12+51.53, 28.88' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 14+61.93, 26.57' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. WTR. V. STA. 15+32.01, 18±' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 15+49.39, 15.47' LT.
(ADJUST TO GRADE)

EX. CB. STA. 15+62.63, 28.73' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 15+68.74, 4.16' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 15+78.66, 7.16' LT.
(ADJUST TO GRADE)

EX. M.H. STA. 11+66.77, 23.61' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 10+79.18, 10.26' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. MON. BOX. STA. 11+50.7, 0.00' RT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 11+72.04, 51.28' RT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 11+76.47, 56.18' RT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 11+82.08, 4.90' RT.
(ADJUST TO GRADE)

EX. CB. STA. 11+84.13, 72.10' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 11+89.19, 80.61' RT.
(ADJUST TO GRADE)

EX. M.H. STA. 11+99.16, 18.36' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 12+04.09, 68.93' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 12+15.29, 21.92' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 12+30.38, 30.14' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. MON. BOX. STA. 14+05±, 0.00' RT.
(ADJUST TO GRADE)

EX. CEI M.H. STA. 14+60.42, 13.23' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

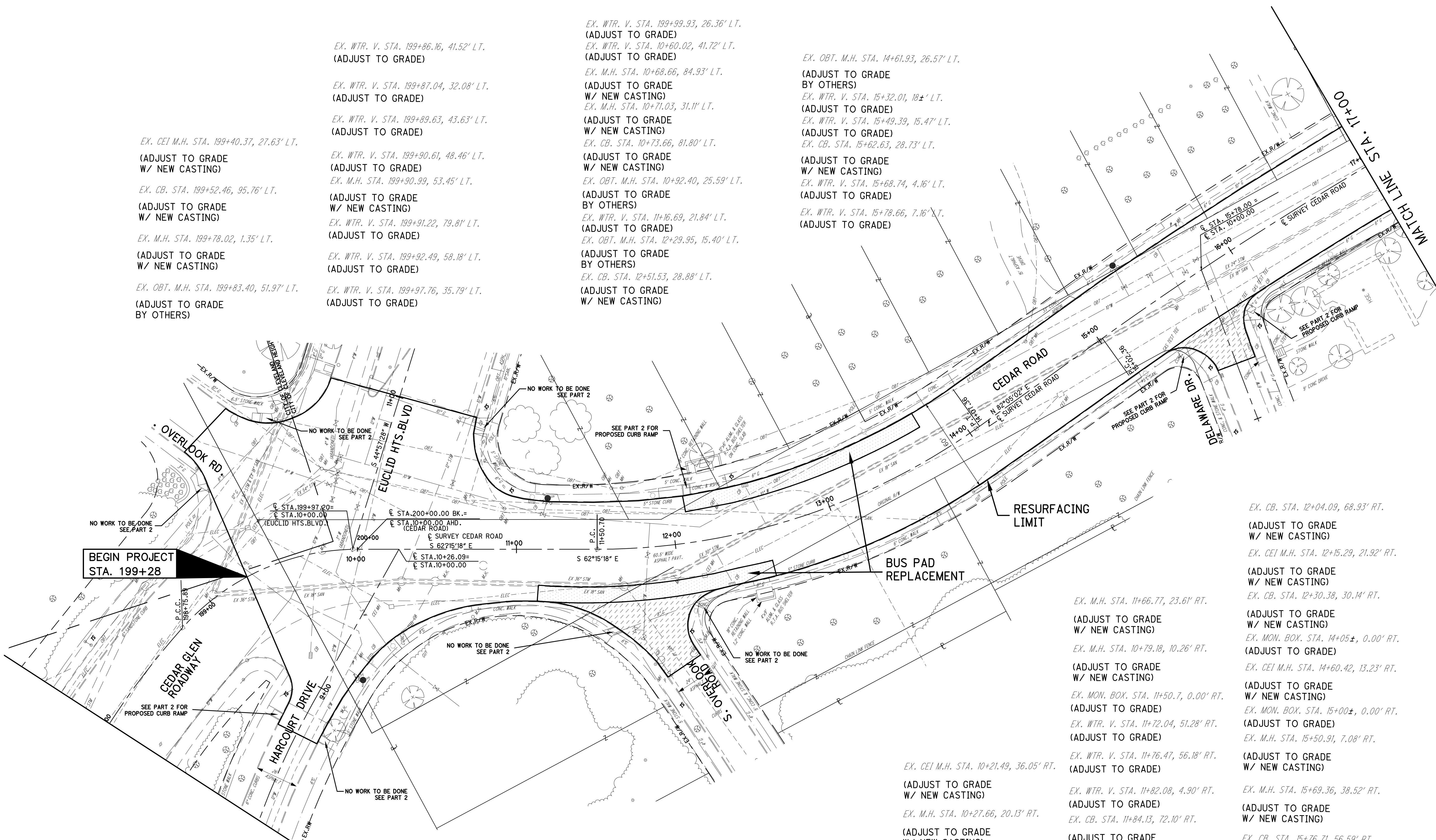
EX. MON. BOX. STA. 15+00±, 0.00' RT.
(ADJUST TO GRADE)

EX. M.H. STA. 15+50.91, 7.08' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 15+76.36, 38.52' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 15+76.71, 56.59' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 16+04.17, 30.81' RT.
(ADJUST TO GRADE
W/ NEW CASTING)




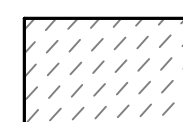
- CONCRETE BUS PAD REMOVAL AND REPLACEMENT
- ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

NOTE: PLEASE SEE PART 2 OF PROJECT FOR STREETSCAPE IMPROVEMENTS IN THIS AREA

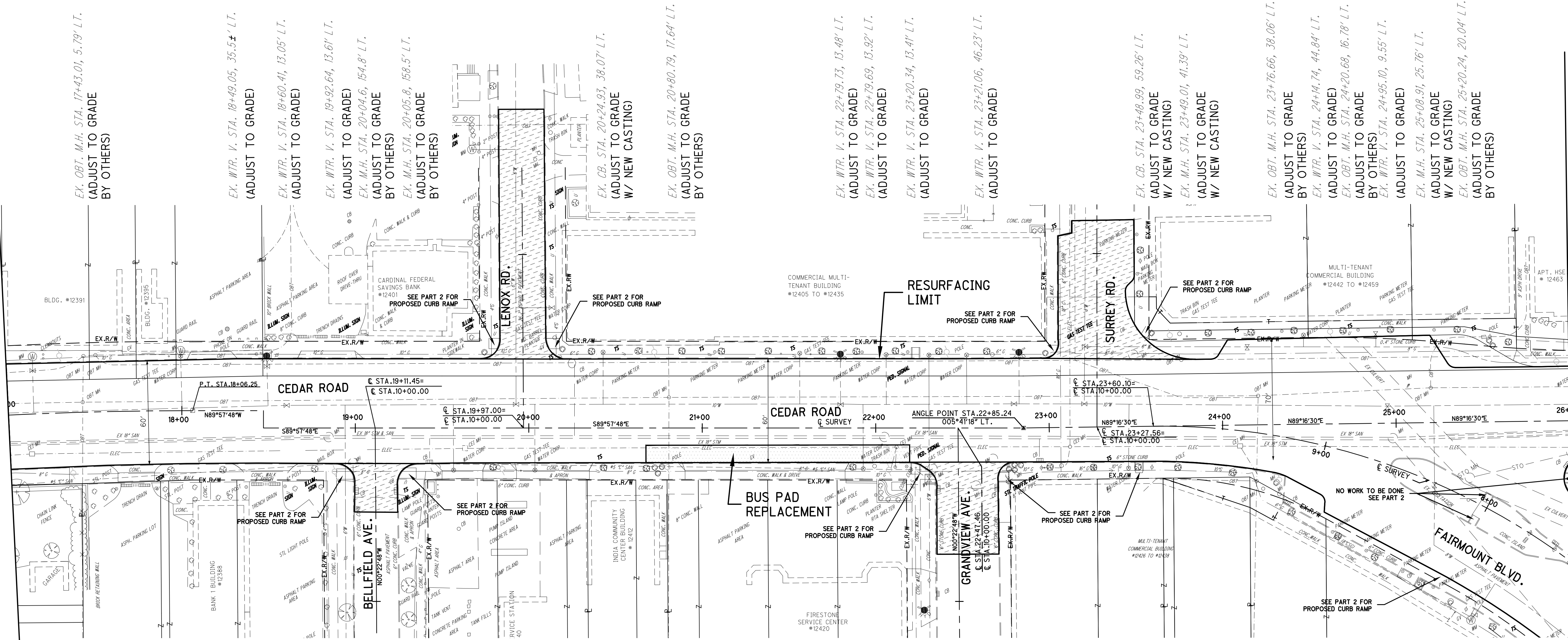
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MATCH LINE STA. 17+00

- EX. CEI M.H. STA. 17+12.6, 22.98' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. MON. BOX STA. 18+06±, 0.00' RT.
(ADJUST TO GRADE)
- EX. M.H. STA. 18+84.6, 5.24' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 18+98.72, 20.15' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CB. STA. 19+00.88, 36.15' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CB. STA. 19+23.33, 36.25' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CB. STA. 19+42.74, 19.43' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CEI M.H. STA. 19+63.43, 11.79' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CEI M.H. STA. 22+12.01, 10.99' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 22+04.28, 5.17' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 22+32.67, 23.37' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CB. STA. 22+36.23, 34.93' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 22+57.84, 33.14' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 22+67.61, 17.75' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CB. STA. 22+69.60, 34.27' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. CB. STA. 22+94.43, 18.61' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. MON. BOX STA. 22+85±, 0.00' RT.
(ADJUST TO GRADE)
- EX. CEI M.H. STA. 23+11.86, 11.15' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 24+09.94, 12.13' RT.
(ADJUST TO GRADE W/ NEW CASTING)
- EX. M.H. STA. 24+98.01, 8.67' RT.
(ADJUST TO GRADE W/ NEW CASTING)

-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

NOTES: PLEASE SEE PART 2 OF PROJECT FOR STREETSCAPE IMPROVEMENTS IN THIS AREA
 PLEASE SEE SHEET 20 FOR FAIRMOUNT BLVD. RESURFACING LIMITS

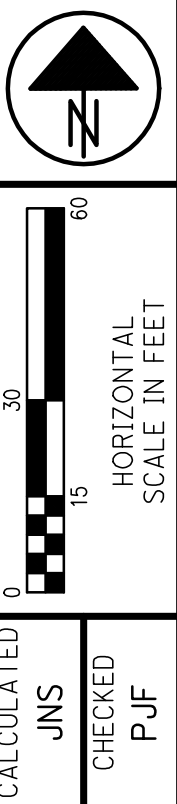


MATCH LINE STA. 26+00

CUY - CEDAR ROAD

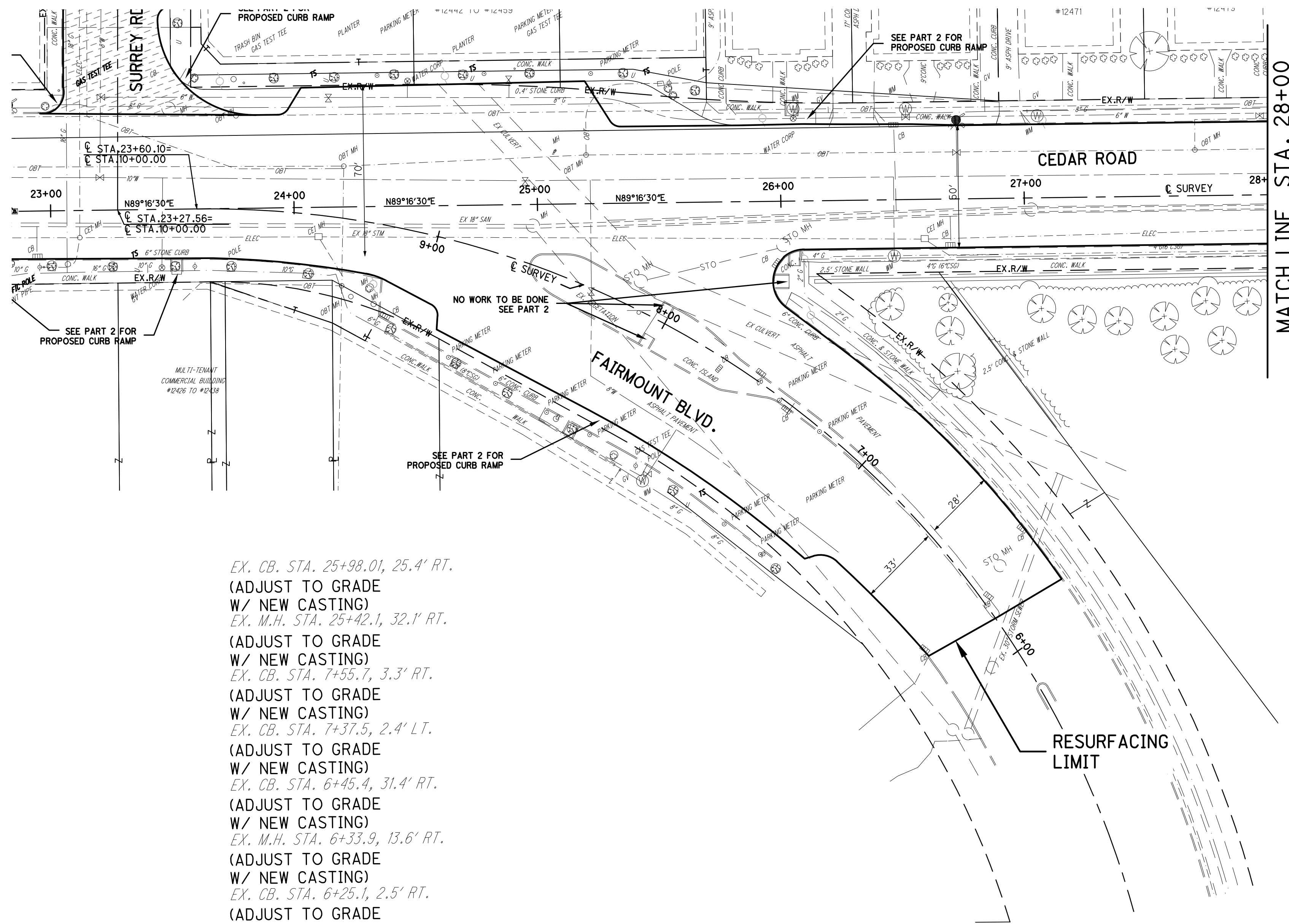
CEDAR ROAD PLAN
 STA. 17+00 TO STA. 26+00

CALCULATED
 JNS
 CHECKED
 PJF


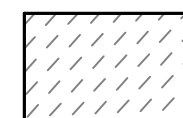


HORIZONTAL SCALE IN FEET

Sep. 22, 2016 - 9:01am
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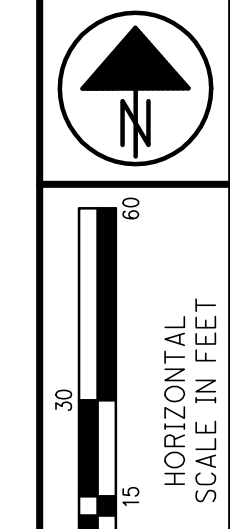


EX. CB. STA. 25+98.01, 25.4' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. M.H. STA. 25+42.1, 32.1' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. CB. STA. 7+55.7, 3.3' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. CB. STA. 7+37.5, 2.4' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. CB. STA. 6+45.4, 31.4' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. M.H. STA. 6+33.9, 13.6' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. CB. STA. 6+25.1, 2.5' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)
 EX. CB. STA. 6+19.4, 30.6' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

NOTE: PLEASE SEE PART 2 OF PROJECT FOR STREETSCAPE IMPROVEMENTS IN THIS AREA

CALCULATED
 JNS
 CHECKED
 PJF



HORIZONTAL SCALE IN FEET

CEDAR ROAD PLAN
 FAIRMOUNT BLVD. LIMITS

CUY - CEDAR ROAD

MATCH LINE STA. 26+00

EX. M.H. STA. 26+00.76, 17.98' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. CEI M.H. STA. 26+58.93, 16.27' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. CB. STA. 26+63.46, 18.85' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. M.H. STA. 27+02.84, 4.79' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. MON. BOX. STA. 28+18.08, 0.00' RT.
(ADJUST TO GRADE)

EX. CEI M.H. STA. 28+81.77, 13.16' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 29+99.04, 5.35' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 30+68.16, 19.03' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 31+11.2, 15.58' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

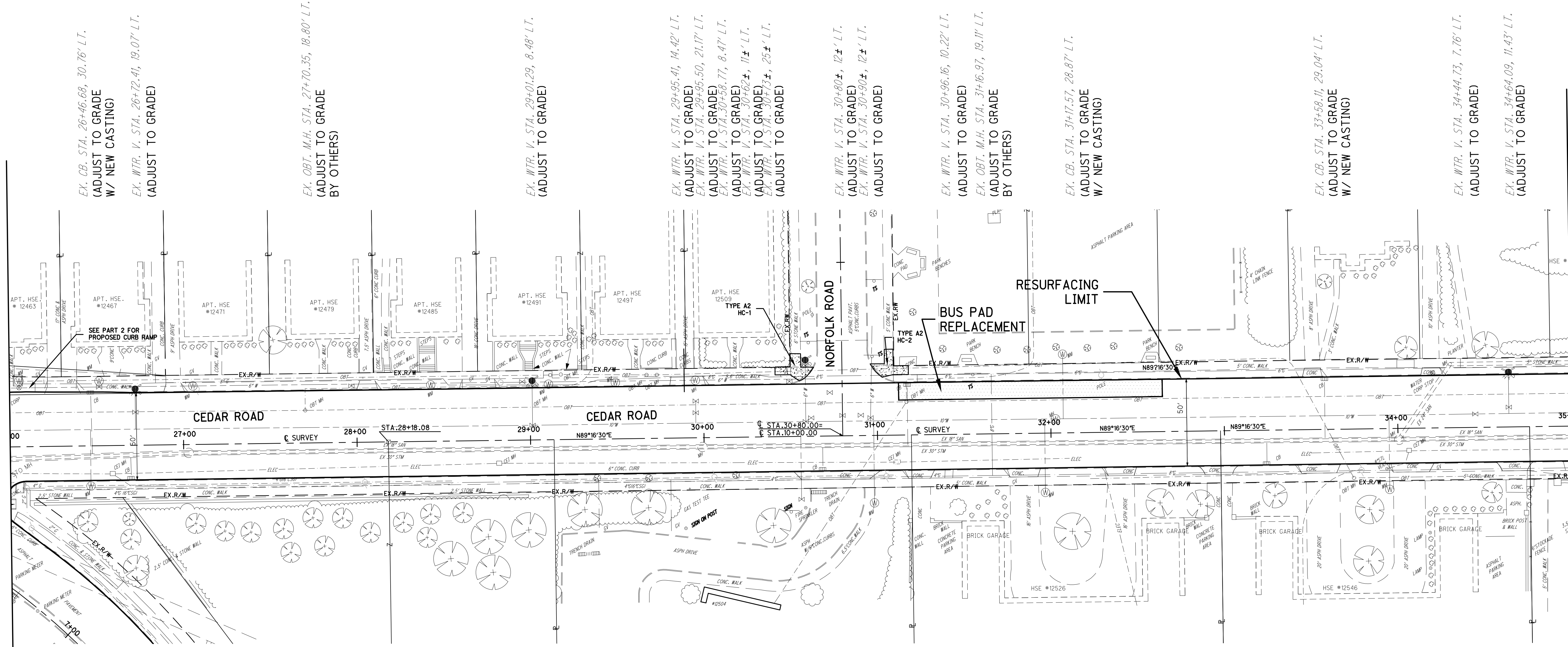
EX. CB. STA. 33+24.1, 19.11' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 34+00.68, 6.51' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 34+06.28, 12.90' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

CONCRETE BUS PAD REMOVAL
AND REPLACEMENT

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, PG64-22, (448), AS PER PLAN



EX. CB. STA. 26+46.68, 30.76' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. WTR. V. STA. 26+72.41, 19.07' LT.
(ADJUST TO GRADE)

EX. OBT. M.H. STA. 27+70.35, 18.80' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. WTR. V. STA. 29+01.29, 8.48' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 29+95.41, 14.42' LT.
(ADJUST TO GRADE)
EX. WTR. V. STA. 29+95.50, 21.17' LT.
(ADJUST TO GRADE)
EX. WTR. V. STA. 30+58.77, 8.47' LT.
(ADJUST TO GRADE)
EX. WTR. V. STA. 30+62.4, 11.1' LT.
(ADJUST TO GRADE)
EX. WTR. V. STA. 30+73.4, 25.4' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 30+80.4, 12.4' LT.
(ADJUST TO GRADE)
EX. WTR. V. STA. 30+90.4, 12.4' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 30+96.16, 10.22' LT.
(ADJUST TO GRADE)
EX. OBT. M.H. STA. 31+16.97, 19.11' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. CB. STA. 31+71.57, 28.87' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 33+58.11, 29.04' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 34+44.73, 7.76' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 34+64.09, 11.43' LT.
(ADJUST TO GRADE)

MATCH LINE STA. 35+00

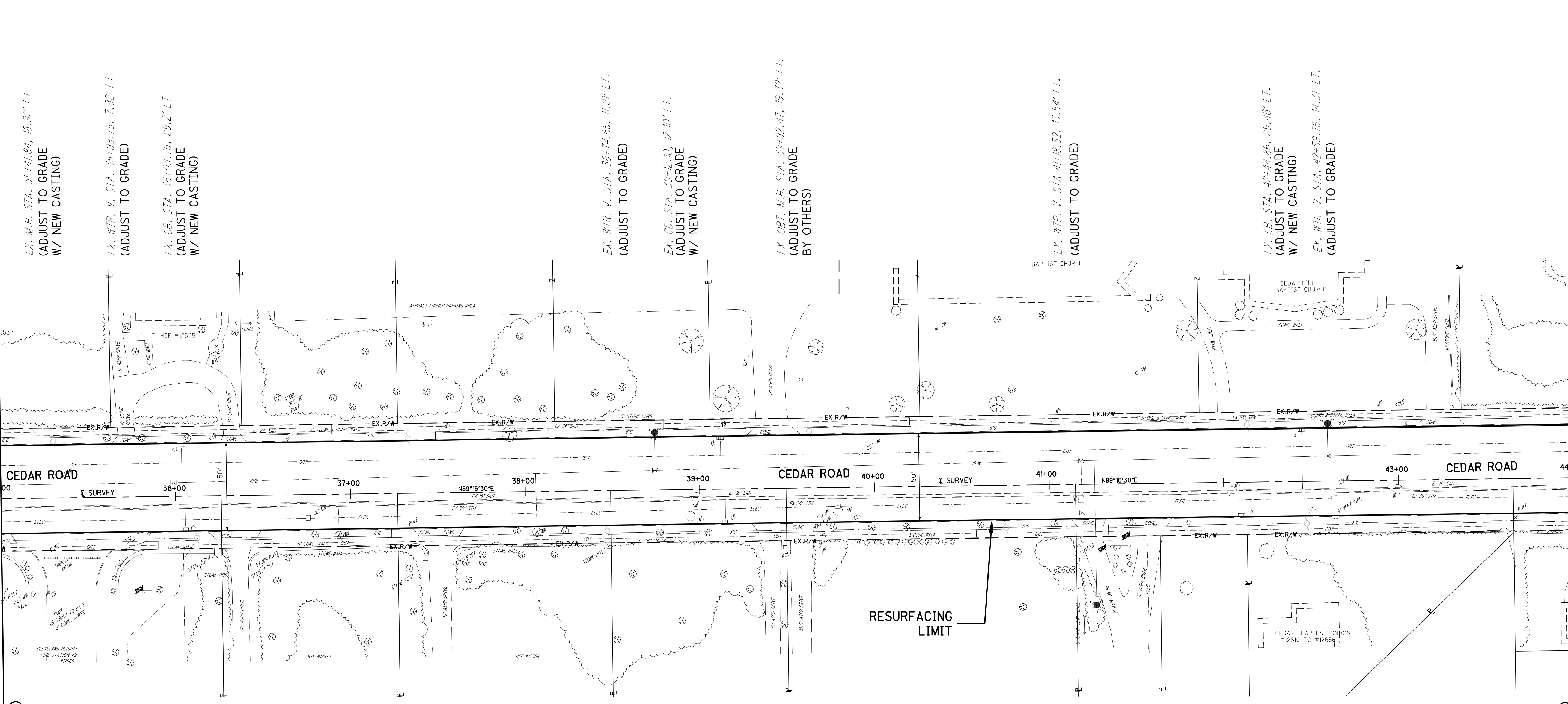
CUY - CEDAR ROAD

CEDAR ROAD PLAN
STA. 26+00 TO STA. 35+00

CALCULATED
JNS
CHECKED
PJF



0 15 30 60
HORIZONTAL
SCALE IN FEET



MATCH LINE STA. 35+00

EX. M.H. STA. 35+41.84, 18.92' L.T.
(ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 35+98.78, 7.82' L.T.
(ADJUST TO GRADE)

EX. CB. STA. 36+03.75, 29.2' L.T.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 36+05.14, 18.95' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. CEI M.H. STA. 36+75.6, 13.65' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 38+94.49, 15.25' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 38+98, 4.53' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 39+14.67, 18.70' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 39+78.82, 13.13' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. CEI M.H. STA. 39+78.94, 10.82' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 41+16.74, 6.97' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 41+18.79, 16.32' RT.
(ADJUST TO GRADE)

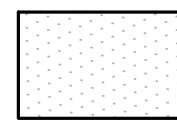
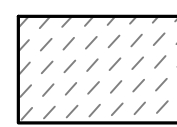
EX. M.H. STA. 42+04.64, 5.2' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. CB. STA. 42+10.06, 18.84' RT.
(ADJUST TO GRADE W/ NEW CASTING)


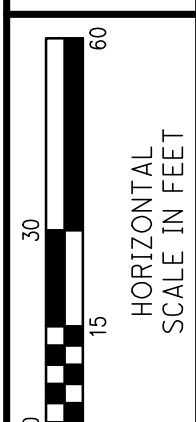
EX. CEI M.H. STA. 42+63.09, 9.93' RT.
(ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 42+99.14, 5.25' RT.
(ADJUST TO GRADE W/ NEW CASTING)

MATCH LINE STA. 44+00

-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

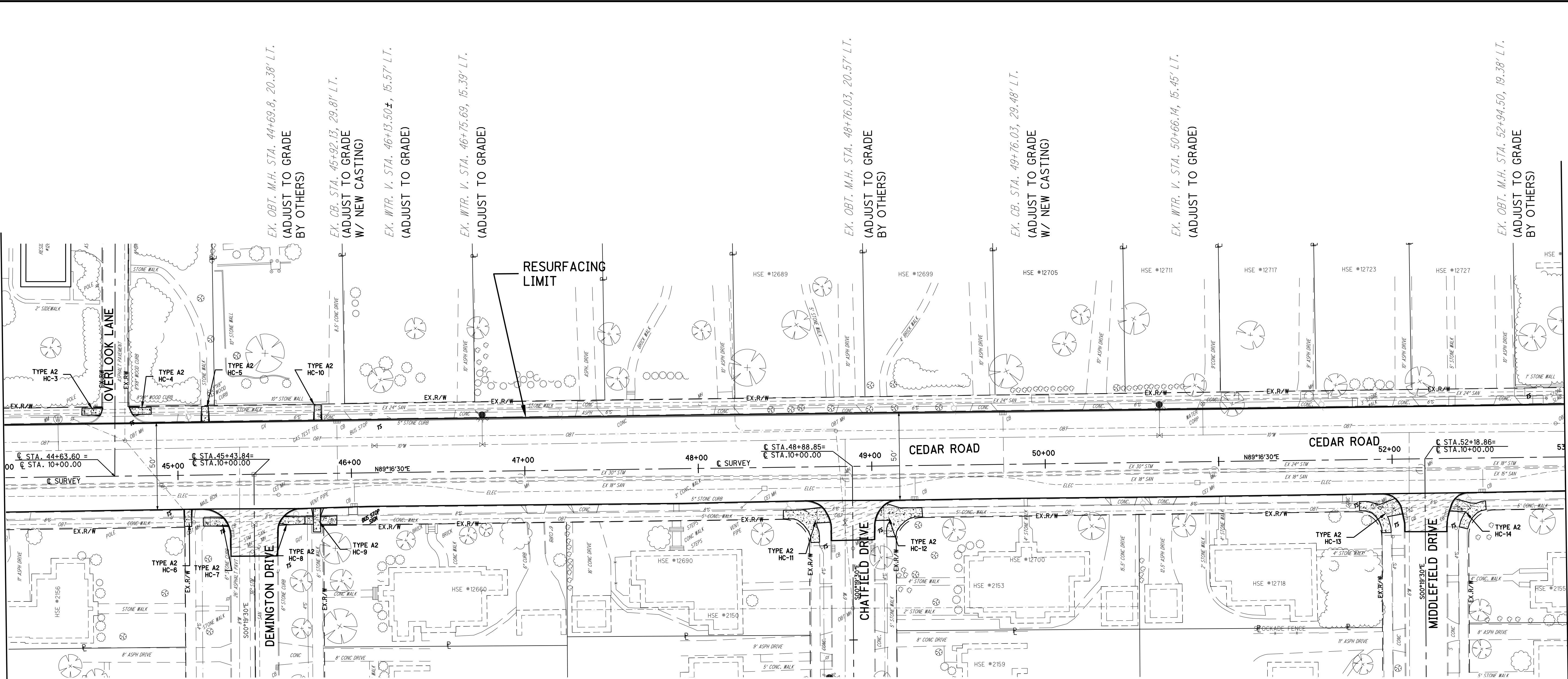
CALCULATED
JNS
CHECKED
PJF

HORIZONTAL SCALE IN FEET

CEDAR ROAD PLAN
STA. 35+00 TO STA. 44+00

CUY - CEDAR ROAD



MATCH LINE STA. 44+00

EX. CB. STA. 45+31±, 34± RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. M.H. STA. 45+42.32, 44.49' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. MOM. BOX. STA. 45+43.84, 0.00± RT.
(ADJUST TO GRADE)
EX. WTR. V. STA. 45+44±, 29.00± RT.
(ADJUST TO GRADE)
EX. M.H. STA. 45+46.16, 41.98' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. CEI M.H. STA. 45+57.83, 11.96' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 46+01.39, 18.50' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

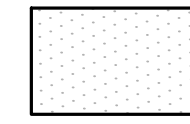

EX. M.H. STA. 46+97.35, 4.56' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 48+38, 12.11' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. WTR. V. STA. 48+84.26, 32.49' RT.
(ADJUST TO GRADE)

EX. M.H. STA. 48+85.60, 6.03' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. CB. STA. 49+24.48, 18.89' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

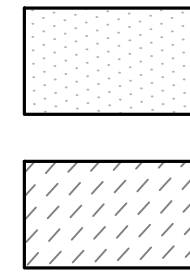
EX. CEI M.H. STA. 50+87±, 12.16' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. M.H. STA. 50+97.27, 5.73' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 52+07.23, 33.04' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. WTR. V. STA. 52+09.45, 29.16' RT.
(ADJUST TO GRADE)
EX. M.H. STA. 52+16.41, 5.91' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. CB. STA. 52+31.05, 31.55' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
EX. CB. STA. 52+21.74, 18.9' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

MATCH LINE STA. 53+00

MATCH LINE STA. 53+00



CONCRETE BUS PAD REMOVAL AND REPLACEMENT

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

EX. CEI M.H. STA. 53+74.99, 12.39' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 54+07.95, 4.43' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 55+39.49, 29.88' RT.
(ADJUST TO GRADE)

EX. M.H. STA. 55+48.62, 35.96' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 55+49.8, 29.95' RT.

(ADJUST TO GRADE)

EX. CB. STA. 55+81.18, 18.75' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 56+28.01, 11.93' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 58+47.95, 4.60' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 58+76.20, 9.54' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 58+85.48, 4.55' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+06.41, 5.41' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+09.42, 5.45' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+12.09, 9.87' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 58+87.73, 41.79' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 58+90.48, 45.31' RT.
(ADJUST TO GRADE)

EX. CEI M.H. STA. 59+00.84, 13.56' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+17.46, 39.47' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+17.46, 39.47' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 59+25.73, 46.73' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+54.79, 12.78' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 59+56.35, 17.86' RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+56.4, 16' ± RT.

(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 61+62.81, 13.53' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 61+91.98, 5.69' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 61+95.93, 0.6' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 53+87.69, 31.74' LT.
(ADJUST TO GRADE)

EX. CB. STA. 54+18.93, 28.84' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 54+47.17, 13.66' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 55+23.28, 21.70' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 55+80.28, 22.24' LT.
(ADJUST TO GRADE)

EX. OBT. M.H. STA. 56+18.25, 20.51' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. CB. STA. 56+51.17, 29.11' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 58+44.82, 25.56' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 58+79.19, 10.36' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 58+98.32, 29.9' LT.
(ADJUST TO GRADE)

EX. OBT. M.H. STA. 58+98.07, 15' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. M.H. STA. 59+07.71, 77.18' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 59+10.55, 82.59' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 59+37.82, 9.58' LT.
(ADJUST TO GRADE)

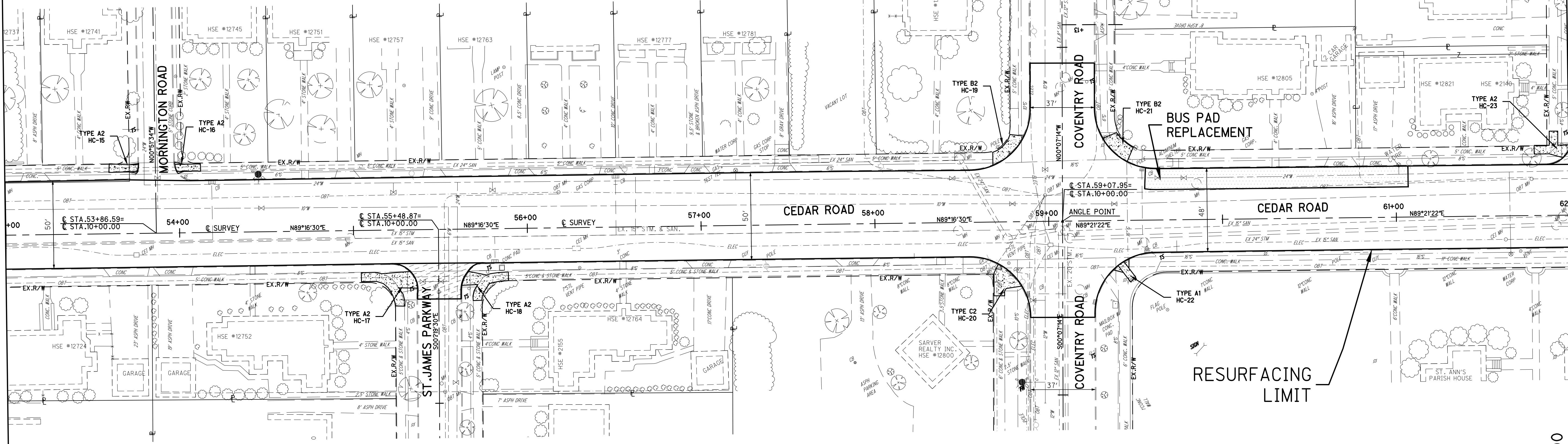
EX. CB. STA. 59+53.88, 28.93' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 59+62.98, 24.3' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 59+77.98, 24.13' LT.
(ADJUST TO GRADE)

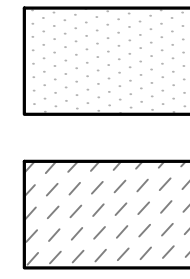
EX. M.H. STA. 59+85.19, 20.80' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 61+78.10, 21.09' LT.
(ADJUST TO GRADE
BY OTHERS)



MATCH LINE STA. 62+00

MATCH LINE STA. 71+00



CONCRETE BUS PAD REMOVAL AND REPLACEMENT

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

EX. MON. BOX. STA. 71+96±, 0.00± RT. (ADJUST TO GRADE)

EX. CEI M.H. STA. 72+90.11, 14.37 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 73+09.65, 25.40 RT. (ADJUST TO GRADE)

EX. M.H. STA. 73+21.7, 4.16 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 73+25.45, 35.41 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 73+73.88, 11.74 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. CB. STA. 73+74.18, 23.29 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. CEI M.H. STA. 75+43.89, 15.09 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 75+53.38, 4.61 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 75+62.06, 12.49 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. CB. STA. 75+62.36, 24.04 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 77+76.49, 34.77 RT. (ADJUST TO GRADE)

EX. CEI M.H. STA. 77+82, 15.46 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 77+88.68, 4.33 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 78+27.98, 11.84 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. CB. STA. 78+28.28, 23.40 RT. (ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 71+01.47, 11.04 LT. (ADJUST TO GRADE)

EX. OBT. M.H. STA. 71+90.37, 17.44 LT. (ADJUST TO GRADE BY OTHERS)

EX. M.H. STA. 73+21.28, 0.89 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 73+73.78, 14.02 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 74+08.49, 11.37 LT. (ADJUST TO GRADE)

EX. M.H. STA. 75+49.40, 0.33 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. CB. STA. 75+68.16, 22.77 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 75+68.27, 13.56 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. WTR. V. STA. 77+02.84, 10.94 LT. (ADJUST TO GRADE)

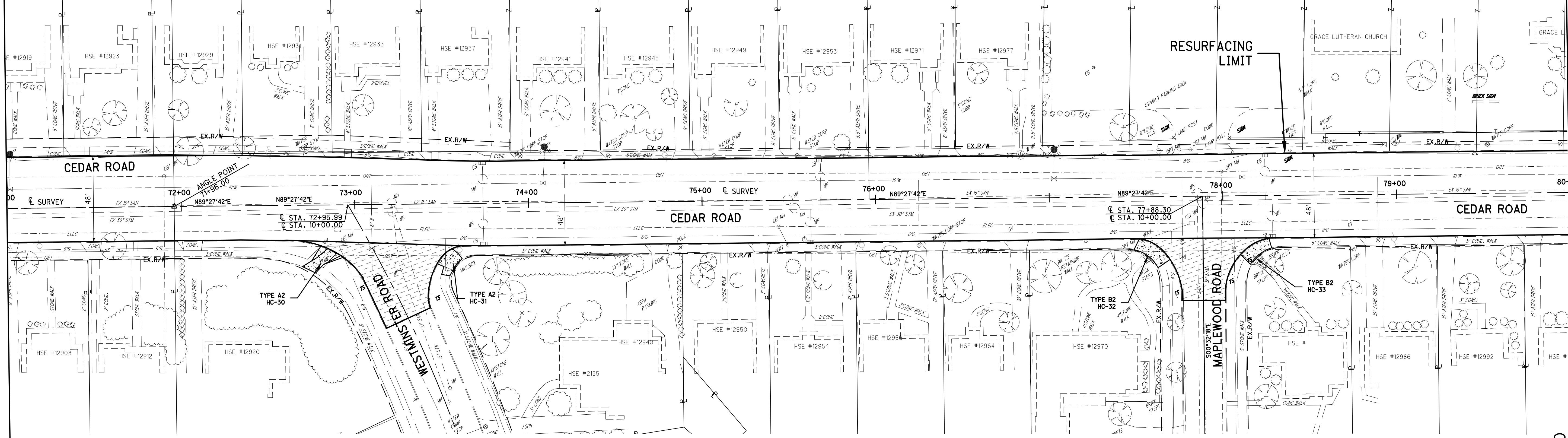
EX. M.H. STA. 77+85.47, 1.79 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. OBT. M.H. STA. 77+99.24, 14.05 LT. (ADJUST TO GRADE BY OTHERS)

EX. WTR. V. STA. 78+11.22, 10.81 LT. (ADJUST TO GRADE)

EX. CB. STA. 78+24.16, 23.17 LT. (ADJUST TO GRADE W/ NEW CASTING)

EX. M.H. STA. 78+24.27, 13.95 LT. (ADJUST TO GRADE W/ NEW CASTING)

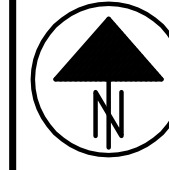


MATCH LINE STA. 80+00

CUY - CEDAR ROAD

CEDAR ROAD PLAN
STA. 71+00 TO STA. 80+00

CALCULATED
JNS
CHECKED
PJF



0 15 30 60
HORIZONTAL
SCALE IN FEET

MATCH LINE STA. 80+00

EX. CEI M.H. STA. 80+07.87, 14.07' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 81+96.8, 30.08' RT.
(ADJUST TO GRADE)

EX. M.H. STA. 82+09.07, 2.52' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 82+17.22, 16.77' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 82+48.54, 23.51' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 82+48.85, 12.04' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CEI M.H. STA. 85+15.02, 14.46' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 86+04, 43.34' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 86+07.15, 30.42' RT.
(ADJUST TO GRADE)

EX. CEI M.H. STA. 86+10.87, 14.10' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 86+20.01, 36.59' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 86+32.58, 42.69' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

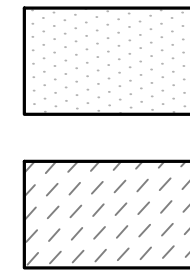
EX. M.H. STA. 86+37.61, 26.13' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 86+45.44, 3.29' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 86+25.99, 3.59' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

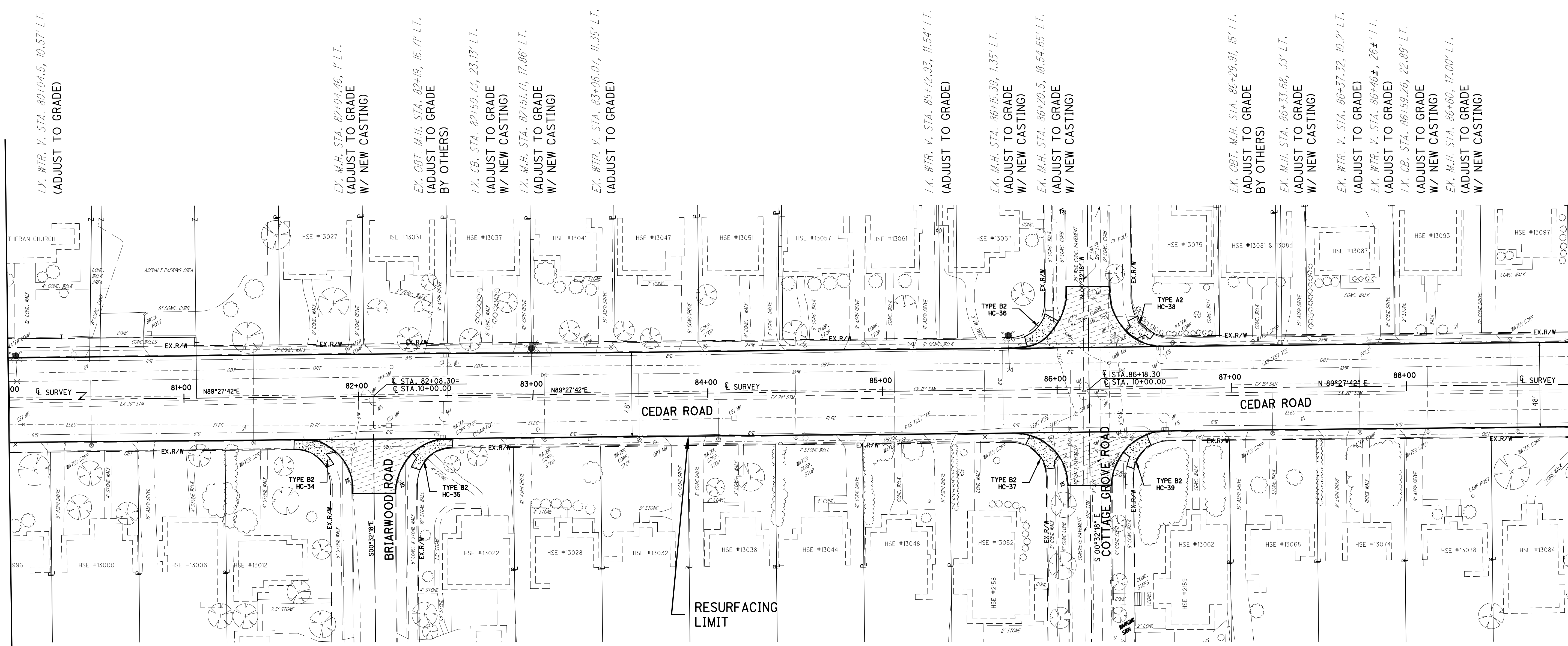
EX. M.H. STA. 86+61.28, 16.91' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 86+61.63, 23.31' RT.
(ADJUST TO GRADE
W/ NEW CASTING)



CONCRETE BUS PAD REMOVAL
AND REPLACEMENT

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE,
TYPE 1, PG64-22, (448), AS PER PLAN



EX. WTR. V. STA. 80+04.5, 10.57' LT.
(ADJUST TO GRADE)

EX. M.H. STA. 82+04.46, 1' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 82+19, 16.71' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. CB. STA. 82+50.73, 23.13' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 82+51.71, 17.86' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 83+06.07, 11.35' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 85+72.93, 11.54' LT.
(ADJUST TO GRADE)

EX. M.H. STA. 86+15.39, 1.35' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 86+20.5, 18.64.65' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 86+29.91, 15' LT.
(ADJUST TO GRADE
BY OTHERS)

EX. M.H. STA. 86+33.68, 33' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 86+37.32, 10.2' LT.
(ADJUST TO GRADE)

EX. WTR. V. STA. 86+46±, 26±' LT.
(ADJUST TO GRADE)

EX. CB. STA. 86+59.26, 22.89' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

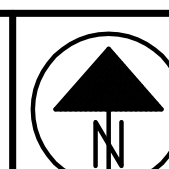
EX. M.H. STA. 86+60, 17.00' LT.
(ADJUST TO GRADE
W/ NEW CASTING)

MATCH LINE STA. 89+00

CUY - CEDAR ROAD


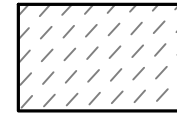
CEDAR ROAD PLAN
STA. 80+00 TO STA. 89+00

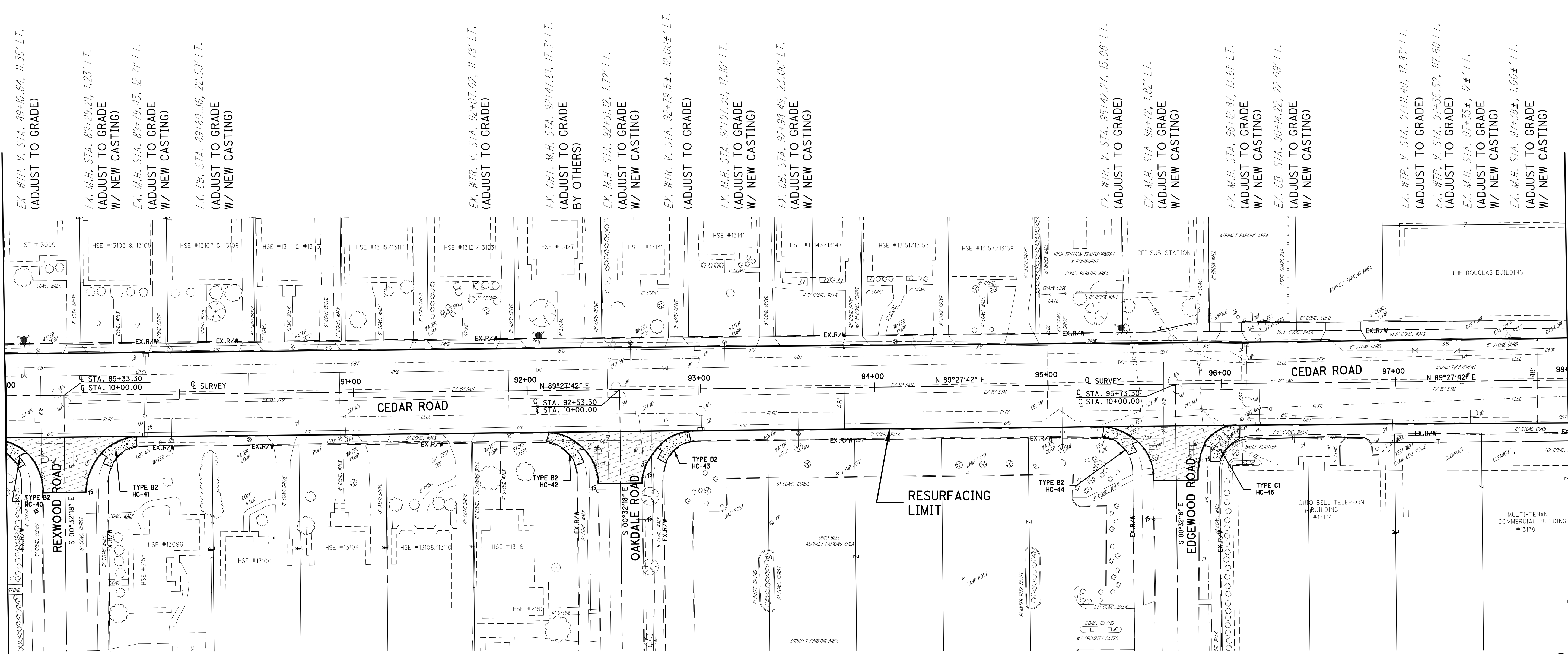
CALCULATED
JNS
CHECKED
PJF



MATCH LINE STA. 89+00

- EX. CEI M.H. STA. 89+17.97, 14.22' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 89+19.94, 33.10' RT.
(ADJUST TO GRADE)
- EX. CB. STA. 89+20.51, 46.13' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 89+22.39, 36.99' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 89+34.38, 4.08' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 89+38.63, 36.29' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 89+46.1, 46.19' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 89+79.37, 23.4' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 89+79.64, 12.23' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CEI M.H. STA. 90+94.84, 13.96' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 92+39.55, 42.56' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 92+40.31, 34.73' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 92+46.5, 28.00±' RT.
(ADJUST TO GRADE)
- EX. M.H. STA. 92+53.82, 3.94' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CEI M.H. STA. 92+63.83, 13.81' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 92+64.55, 35.46' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 92+66.96, 42.84' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 92+99.84, 12.81' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 92+99.93, 23.19' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CEI M.H. STA. 94+99.39, 14.88' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CEI M.H. STA. 95+54.70, 14.97' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 95+59.09, 42.28' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 95+60.07, 35.28' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 95+66.15, 26.63' RT.
(ADJUST TO GRADE)
- EX. M.H. STA. 95+74.60, 2.81' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 95+83.26, 35.42' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 95+85.53, 44.82' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CEI M.H. STA. 95+88.30, 14.99' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 96+11.55, 20.41' RT.
(ADJUST TO GRADE
BY OTHERS)
- EX. M.H. STA. 96+14.69, 10.68' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 96+15.66, 20.66' RT.
(ADJUST TO GRADE
BY OTHERS)
- EX. CB. STA. 96+21.17, 23.24' RT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 96+26.89, 14.94' RT.
(ADJUST TO GRADE)
- EX. M.H. STA. 97+45.22, 18.13' RT.
(ADJUST TO GRADE
W/ NEW CASTING)


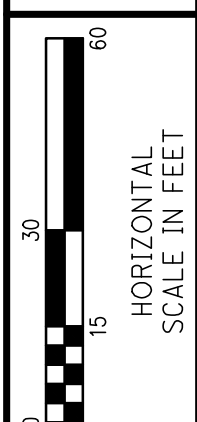
-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN



- EX. WTR. V. STA. 89+10.64, 11.35' LT.
(ADJUST TO GRADE)
- EX. M.H. STA. 89+29.21, 1.23' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 89+79.43, 12.71' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 89+80.36, 22.59' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 92+07.02, 11.78' LT.
(ADJUST TO GRADE)
- EX. OBT. M.H. STA. 92+47.61, 17.3' LT.
(ADJUST TO GRADE
BY OTHERS)
- EX. M.H. STA. 92+51.12, 1.72' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 92+79.5±, 12.00±' LT.
(ADJUST TO GRADE)
- EX. M.H. STA. 92+97.39, 17.10' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 92+98.49, 23.06' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 95+42.21, 13.08' LT.
(ADJUST TO GRADE)
- EX. M.H. STA. 95+72, 1.82' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 96+12.87, 13.61' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. CB. STA. 96+14.22, 22.09' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. WTR. V. STA. 97+11.49, 17.83' LT.
(ADJUST TO GRADE)
- EX. WTR. V. STA. 97+35.52, 117.60' LT.
(ADJUST TO GRADE)
- EX. M.H. STA. 97+35±, 12±' LT.
(ADJUST TO GRADE
W/ NEW CASTING)
- EX. M.H. STA. 97+38±, 1.00±' LT.
(ADJUST TO GRADE
W/ NEW CASTING)


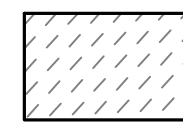
MATCH LINE STA. 98+00

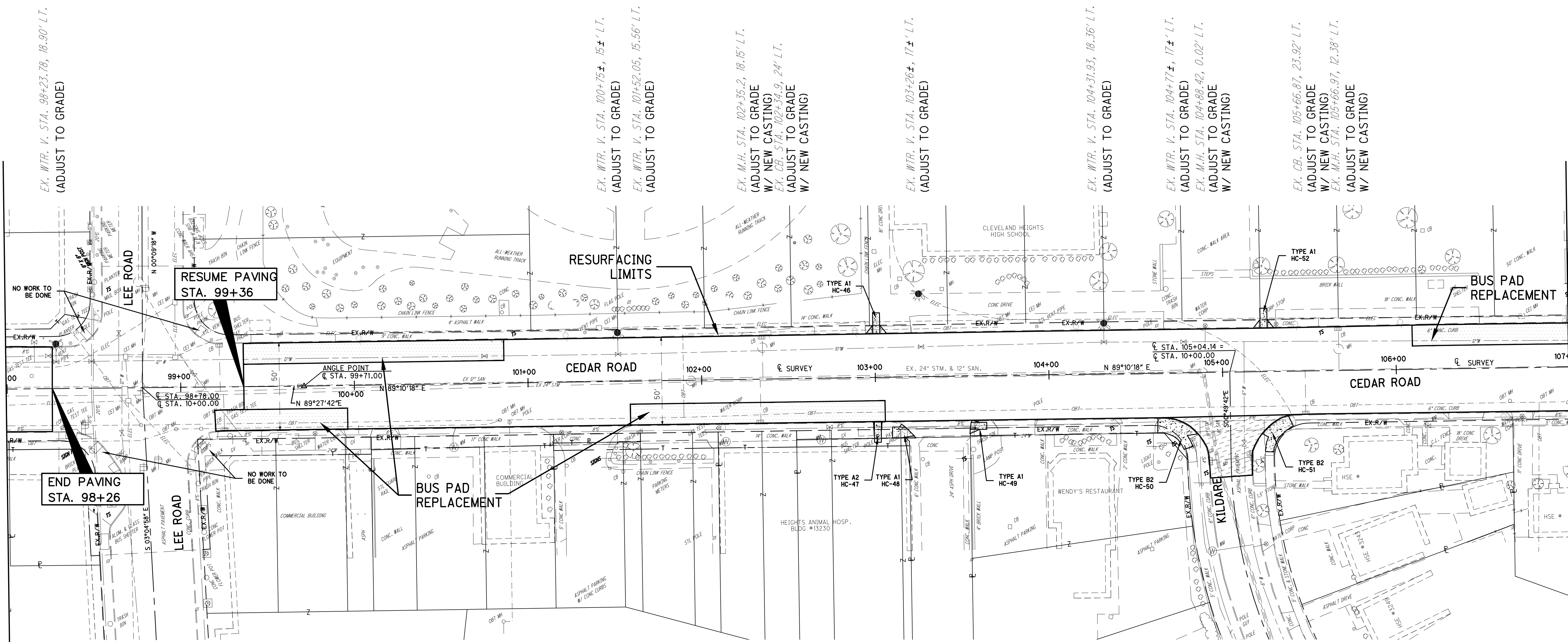
CALCULATED
JNS
CHECKED
PJF

HORIZONTAL
SCALE IN FEET

MATCH LINE STA. 98+00

-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN



EX. WTR. V. STA. 98+23.78, 18.90' L.T.
(ADJUST TO GRADE)

RESUME PAVING
STA. 99+36

END PAVING
STA. 98+26

EX. WTR. V. STA. 100+75±, 15± L.T.
(ADJUST TO GRADE)

EX. WTR. V. STA. 104+52.05, 15.56' L.T.
(ADJUST TO GRADE)

EX. M.H. STA. 102+35.2, 18.15' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 102+34.9, 24' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 103+26±, 17± L.T.
(ADJUST TO GRADE)

EX. WTR. V. STA. 104+31.93, 18.36' L.T.
(ADJUST TO GRADE)

EX. WTR. V. STA. 104+77±, 17± L.T.
(ADJUST TO GRADE)

EX. M.H. STA. 104+88.42, 0.02' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 105+66.87, 23.92' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 105+66.97, 12.38' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 99+24.98, 24.53' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. MON. BOX. STA. 99+68±, 0.00± RT.
(ADJUST TO GRADE)

EX. OBT. M.H. STA. 100+83.5, 22± RT.
(ADJUST TO GRADE
BY OTHERS)

EX. OBT. M.H. STA. 100+89±, 21.25' RT.
(ADJUST TO GRADE
BY OTHERS)

EX. M.H. STA. 101+93.79, 0.32' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 102+33.42, 24.54' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 104+92.42, 50.85' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 104+96.22, 51.42' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 105+11.91, 41.21' RT.
(ADJUST TO GRADE)

EX. CB. STA. 105+16.07, 49.27' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 105+47.56, 24.07' RT.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 106+65.21, 18.96' RT.
(ADJUST TO GRADE
BY OTHERS)

EX. OBT. M.H. STA. 106+80.84, 18.77' RT.
(ADJUST TO GRADE
BY OTHERS)

MATCH LINE STA. 107+00

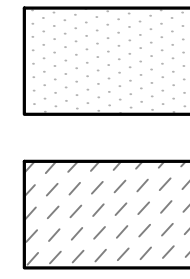
CUY - CEDAR ROAD

CEDAR ROAD PLAN
STA. 98+00 TO STA. 107+00

CALCULATED
JNS
CHECKED
PJF

HORIZONTAL
SCALE IN FEET

MATCH LINE STA. 107+00



CONCRETE BUS PAD REMOVAL AND REPLACEMENT

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

EX. CB. STA. 108+68.5, 24.36' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. OBT. M.H. STA. 3111+00.56, 20' RT.
 (ADJUST TO GRADE
 BY OTHERS)

EX. M.H. STA. 111+24.57, 15.66' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. CB. STA. 112+11.46, 58.62' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. WTR. V. STA. 112+14.98, 33.6' RT.
 (ADJUST TO GRADE)

EX. MON. BOX. STA. 112+21±, 0.00±' RT.
 (ADJUST TO GRADE)

EX. CB. STA. 112+33.69, 58.45' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. M.H. STA. 112+36.77, .03' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. CB. STA. 112+39.08, 40.11' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. CB. STA. 112+64.7, 24.45' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. OBT. M.H. STA. 115+38.62, 20' RT.
 (ADJUST TO GRADE
 BY OTHERS)

EX. M.H. STA. 115+51±, 0.00±' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. CB. STA. 115+18.85, 24.16' RT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. WTR. V. STA. 107+43.18, 14.93' LT.
 (ADJUST TO GRADE)

EX. WTR. V. STA. 107+63.66, 11.86' LT.
 (ADJUST TO GRADE)

EX. M.H. STA. 108+5±, 0.00±' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. M.H. STA. 108+38.25, 19.074' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. CB. STA. 108+38.82, 24.02' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. WTR. V. STA. 110+17.05, 18.27' LT.
 (ADJUST TO GRADE)

EX. M.H. STA. 111+00±, 0.00±' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. WTR. V. STA. 111+28.76, 12.55' LT.
 (ADJUST TO GRADE)

EX. WTR. V. STA. 111+97.86, 15.27' LT.
 (ADJUST TO GRADE)

EX. WTR. V. STA. 112+14.97, 32.33' LT.
 (ADJUST TO GRADE)

EX. CEI M.H. STA. 112+30.19, 31.54' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. CB. STA. 112+64.51, 23.86' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. WTR. V. STA. 112+94.43, 13.64' LT.
 (ADJUST TO GRADE)

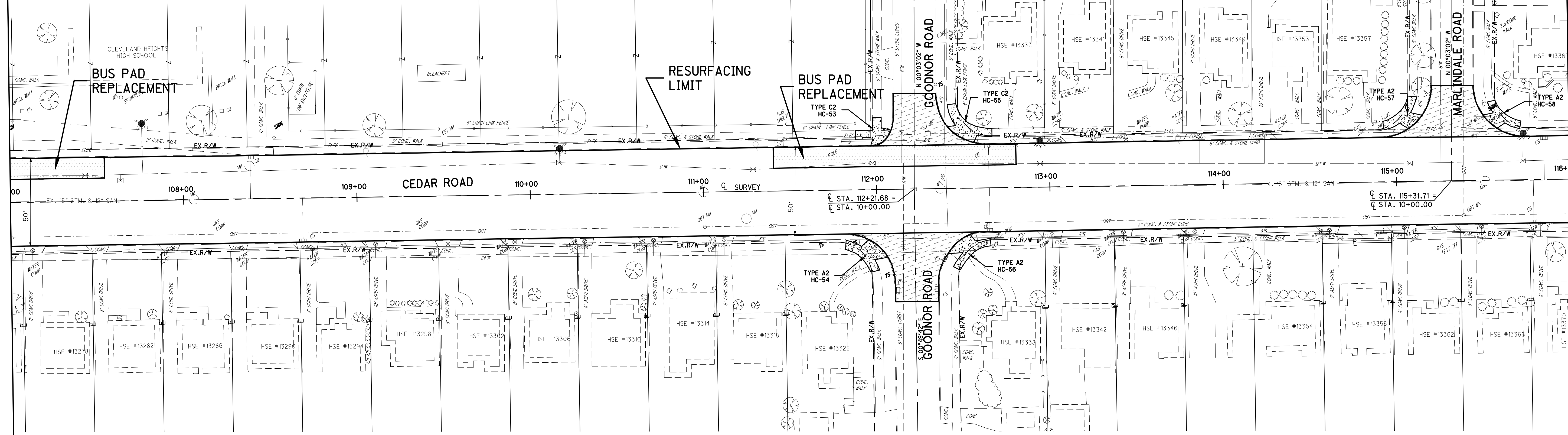
EX. WTR. V. STA. 115+07.87, 10.47' LT.
 (ADJUST TO GRADE)

EX. WTR. V. STA. 115+26.07, 31.93' LT.
 (ADJUST TO GRADE)

EX. CEI M.H. STA. 115+39.26, 29.78' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

EX. WTR. V. STA. 115+73.17, 10.93' LT.
 (ADJUST TO GRADE)

EX. CB. STA. 115+85.62, 23.89' LT.
 (ADJUST TO GRADE
 W/ NEW CASTING)

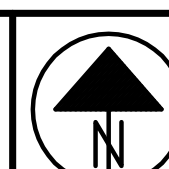


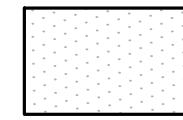
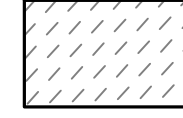
MATCH LINE STA. 116+00

CUY - CEDAR ROAD

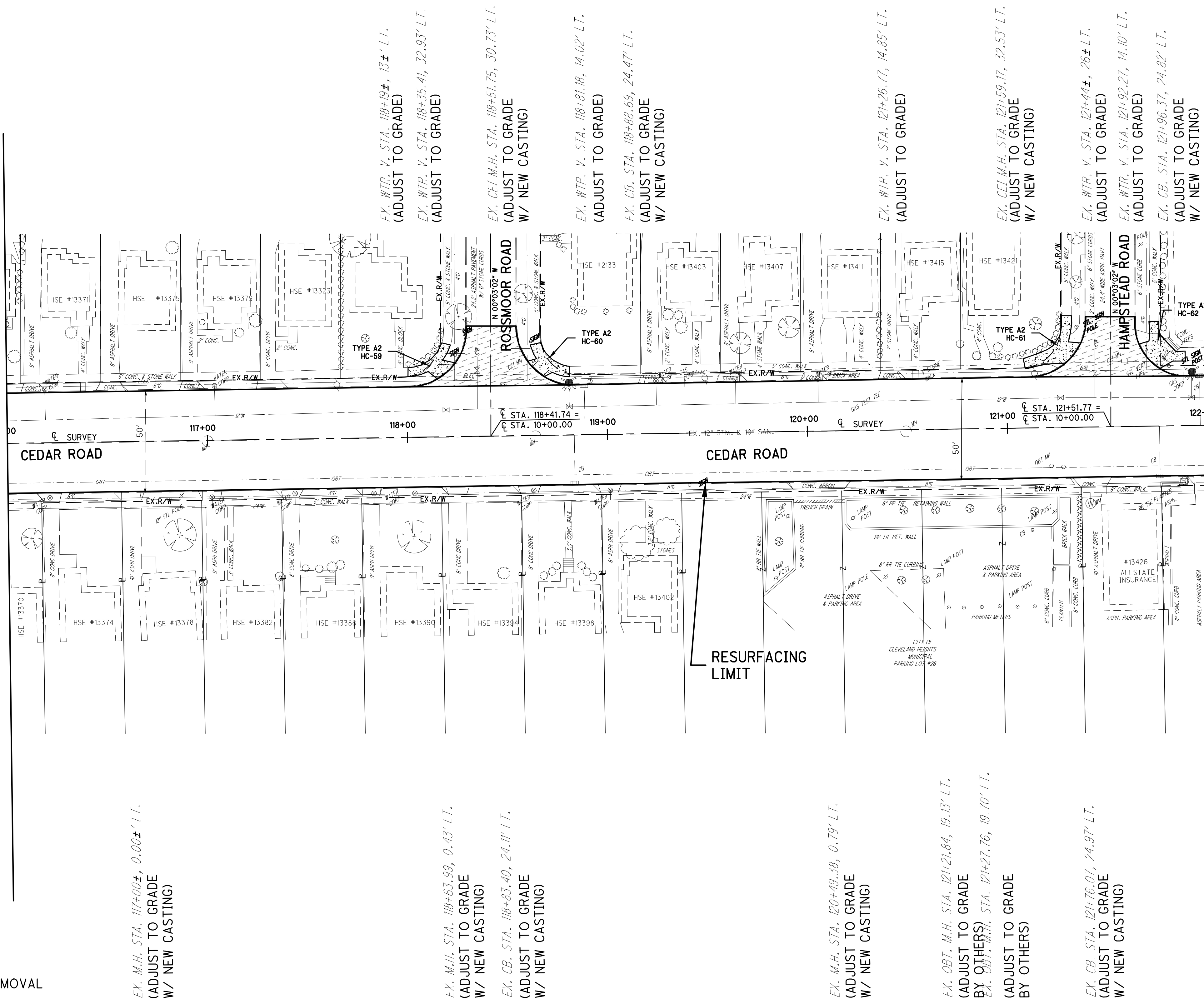
CEDAR ROAD PLAN
 STA. 107+00 TO STA. 116+00

CALCULATED
 JNS
 CHECKED
 PJF



-  CONCRETE BUS PAD REMOVAL AND REPLACEMENT
-  ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

MATCH LINE STA. 116+00



MATCH LINE STA. 122+00

EX. M.H. STA. 117+00±, 0.00' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 118+63.99, 0.43' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. CB. STA. 118+83.40, 24.11' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. M.H. STA. 120+49.38, 0.79' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. OBT. M.H. STA. 121+21.84, 19.13' L.T.
(ADJUST TO GRADE
BY OTHERS)

EX. OBT. M.H. STA. 121+27.76, 19.70' L.T.
(ADJUST TO GRADE
BY OTHERS)

EX. CB. STA. 121+76.07, 24.97' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 118+19±, 13±' L.T.
(ADJUST TO GRADE)

EX. WTR. V. STA. 118+35.41, 32.93' L.T.
(ADJUST TO GRADE)

EX. CEI M.H. STA. 118+51.75, 30.73' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 118+81.18, 14.02' L.T.
(ADJUST TO GRADE)

EX. CB. STA. 118+88.69, 24.47' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

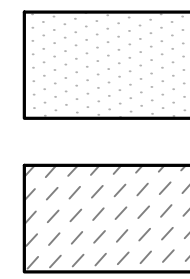
EX. WTR. V. STA. 121+26.77, 14.85' L.T.
(ADJUST TO GRADE)

EX. CEI M.H. STA. 121+59.17, 32.53' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)

EX. WTR. V. STA. 121+44±, 26±' L.T.
(ADJUST TO GRADE)

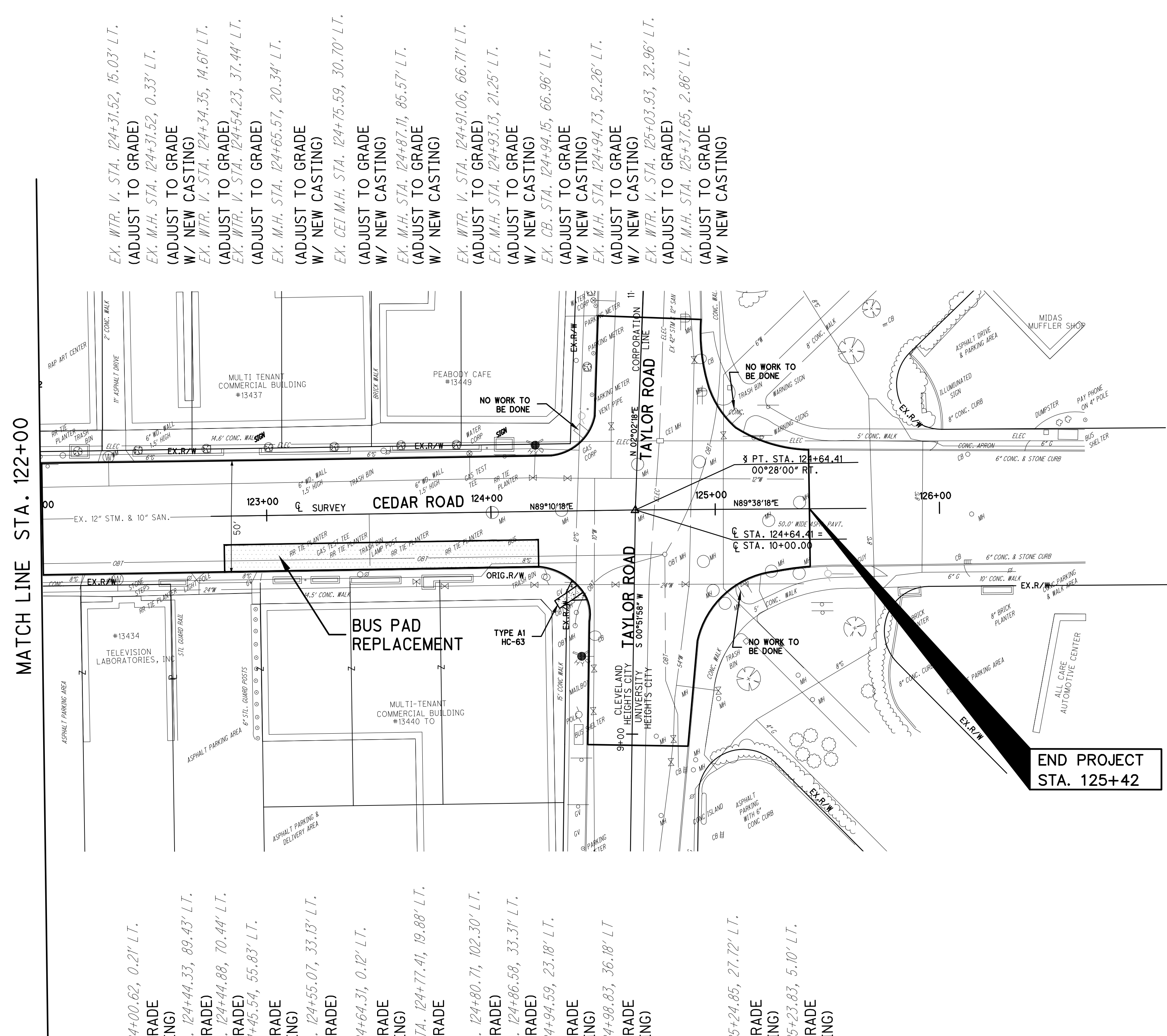
EX. WTR. V. STA. 121+92.27, 14.10' L.T.
(ADJUST TO GRADE)

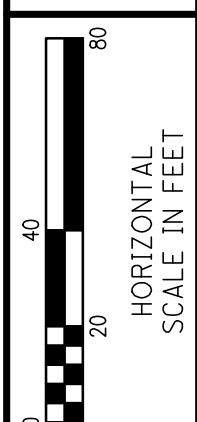
EX. CB. STA. 121+96.37, 24.82' L.T.
(ADJUST TO GRADE
W/ NEW CASTING)



CONCRETE BUS PAD REMOVAL AND REPLACEMENT

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, (448), AS PER PLAN

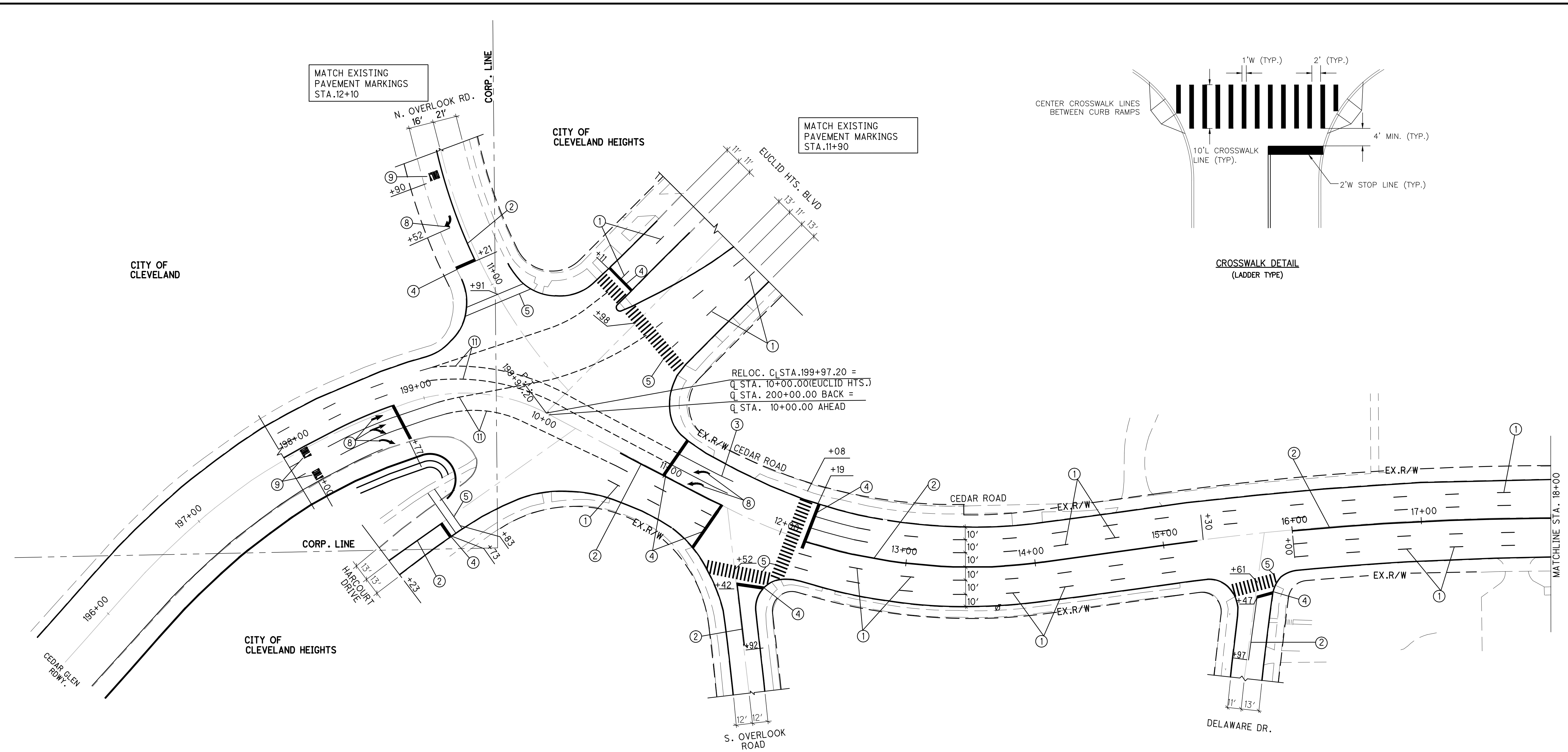
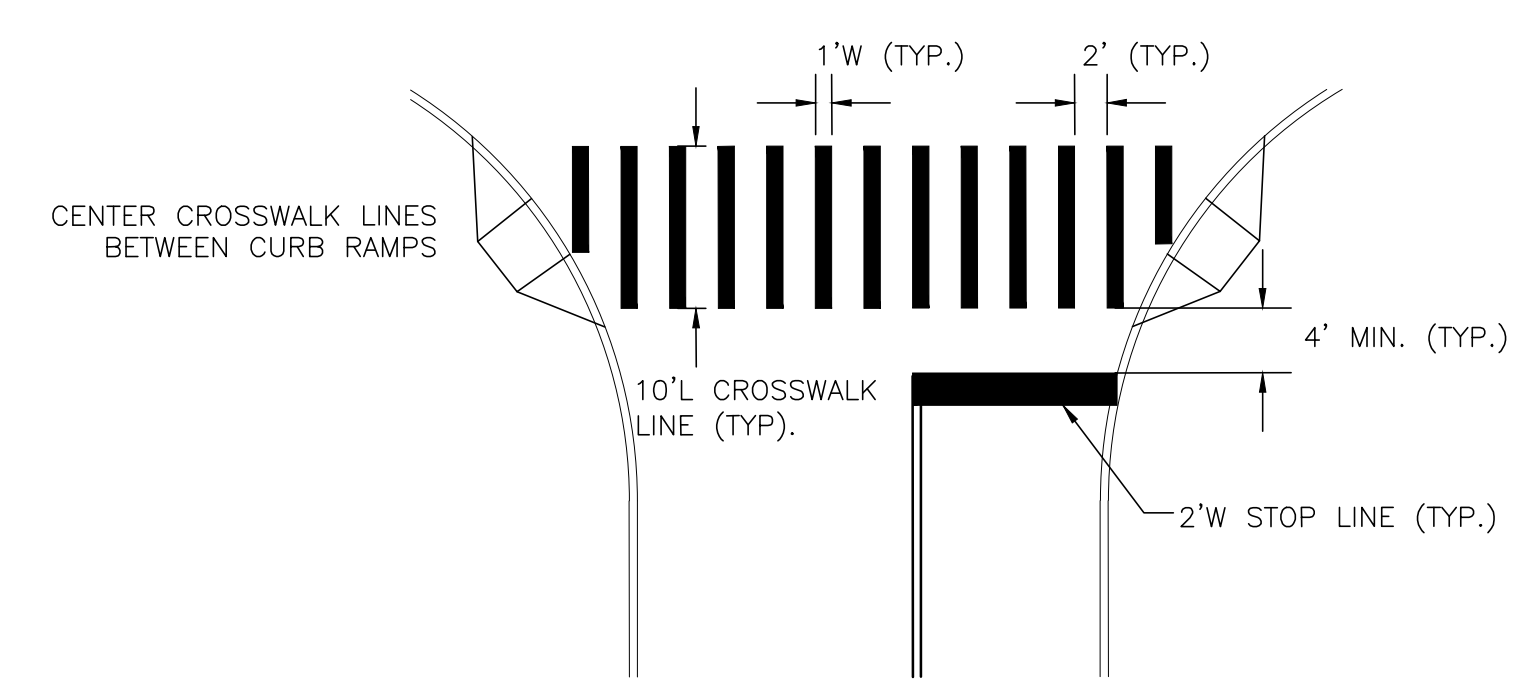




CALCULATED
JNS
CHECKED
PJF

PAVEMENT MARKING PLAN
STA. 199+28 TO STA. 18+00

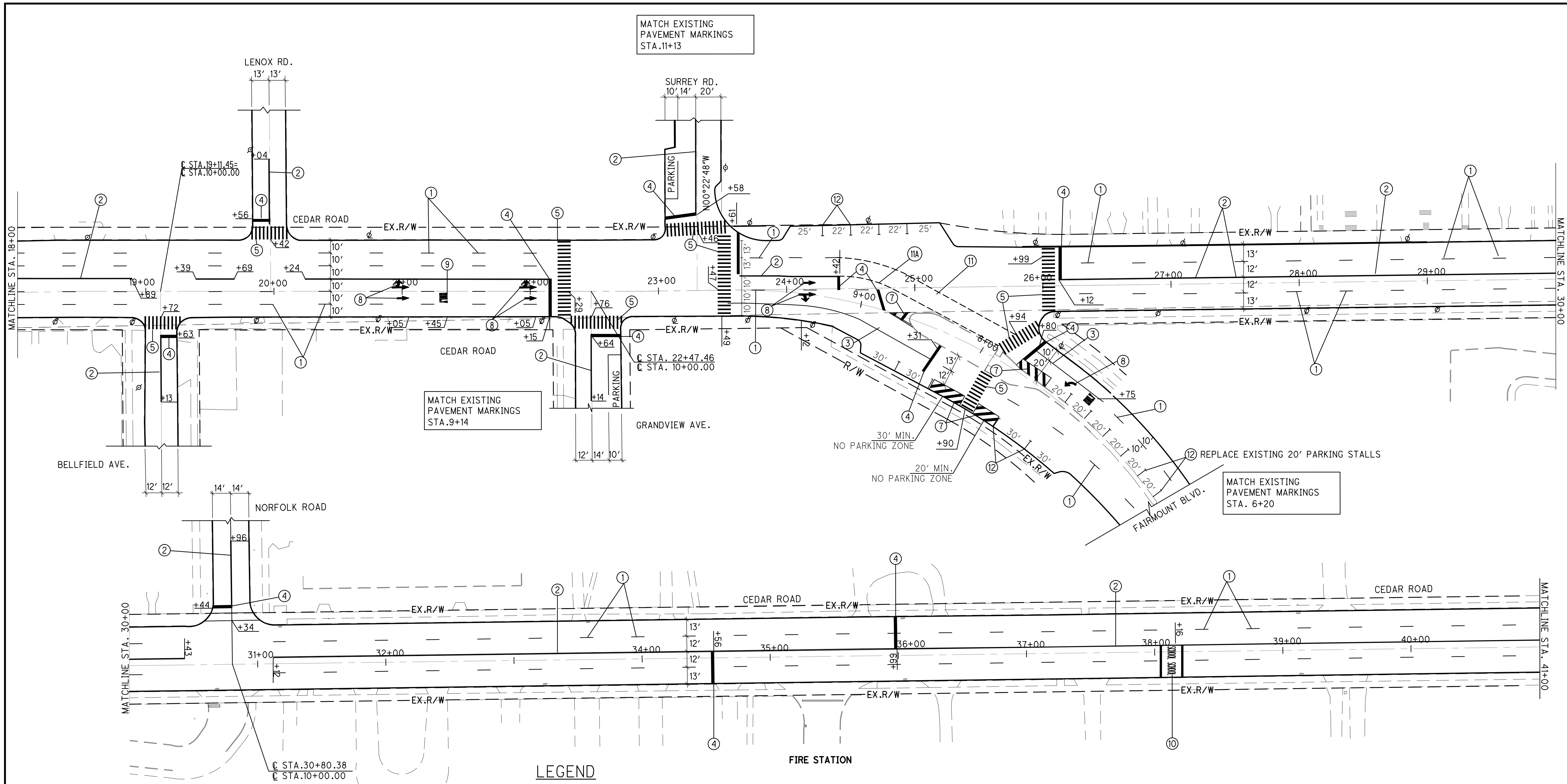
CUY - CEDAR ROAD



LEGEND

- (1) - LANE LINES
- (2) - CENTER LINES, DOUBLE, SOLID
- (3) - CHANNELIZING LINES
- (4) - STOP LINES
- (5) - CROSSWALK LINES
- (6) - TRANSVERSE LINES, WHITE
- (7) - ISLAND MARKING
- (8) - LANE ARROWS
- (9) - WORD ON PAVEMENT, 72"
- (10) - SCHOOL SYMBOL MARKING, 72"
- (11) - DOTTED LINES, 4", WHITE
- (11A) - DOTTED LINES, 4", YELLOW
- (12) - PARKING LOT STALL MARKING

Sep. 22, 2016 - 9:11am
 drawing name: I:\2014\14607\DWG\14607PVTSTRP.DWG Layout: 33 by: silvaroli



MATCH EXISTING
PAVEMENT MARKINGS
STA. 11+13

MATCH EXISTING
PAVEMENT MARKINGS
STA. 9+14

MATCH EXISTING
PAVEMENT MARKINGS
STA. 6+20

LEGEND

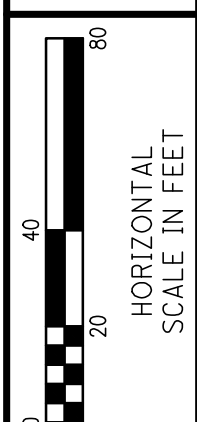
- (1) - LANE LINES
- (2) - CENTER LINES, DOUBLE, SOLID
- (3) - CHANNELIZING LINES
- (4) - STOP LINES
- (5) - CROSSWALK LINES
- (6) - TRANSVERSE LINES, WHITE
- (7) - ISLAND MARKING
- (8) - LANE ARROWS
- (9) - WORD ON PAVEMENT, 72"
- (10) - SCHOOL SYMBOL MARKING, 72"
- (11) - DOTTED LINES, 4", WHITE
- (11A) - DOTTED LINES, 4", YELLOW
- (12) - PARKING LOT STALL MARKING

CALCULATED
JNS
CHECKED
PJF

0 20 40 60 80
HORIZONTAL
SCALE IN FEET

PAVEMENT MARKING PLAN
STA. 18+00 TO STA. 41+00

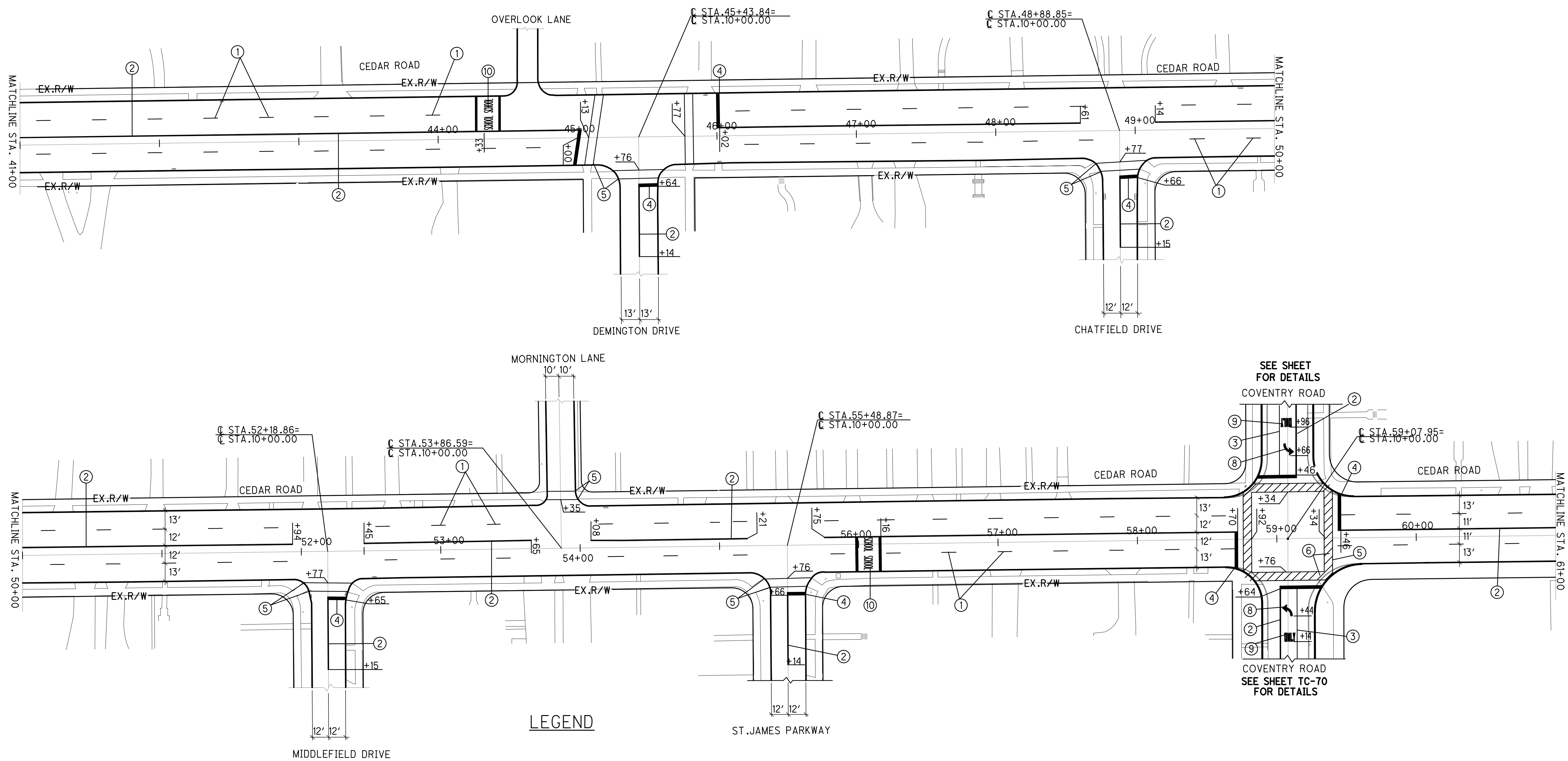
CUY - CEDAR ROAD



CALCULATED
JNS
CHECKED
PJF

PAVEMENT MARKING PLAN
STA. 41+00 TO STA. 61+00

CUY - CEDAR ROAD



LEGEND

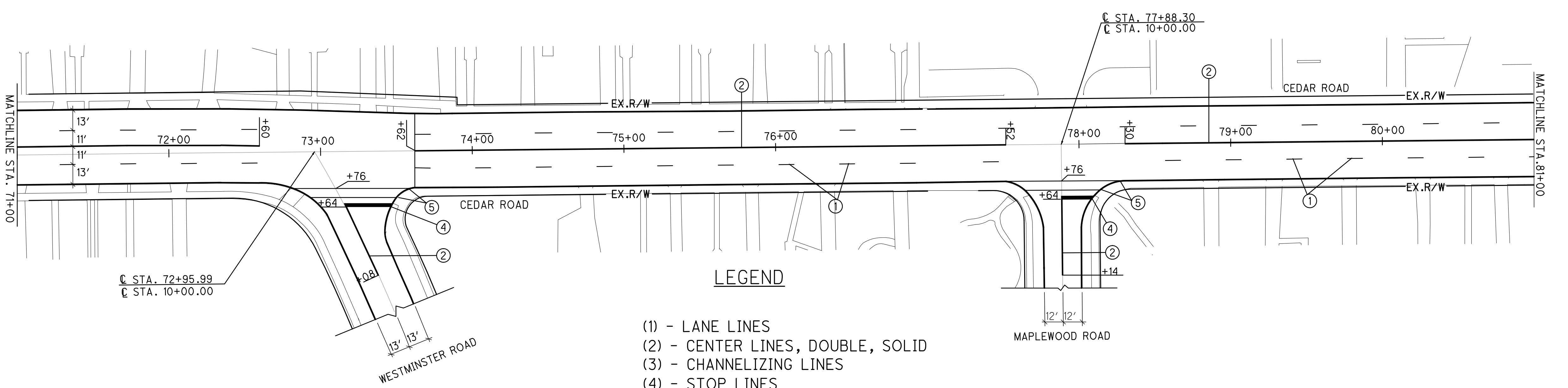
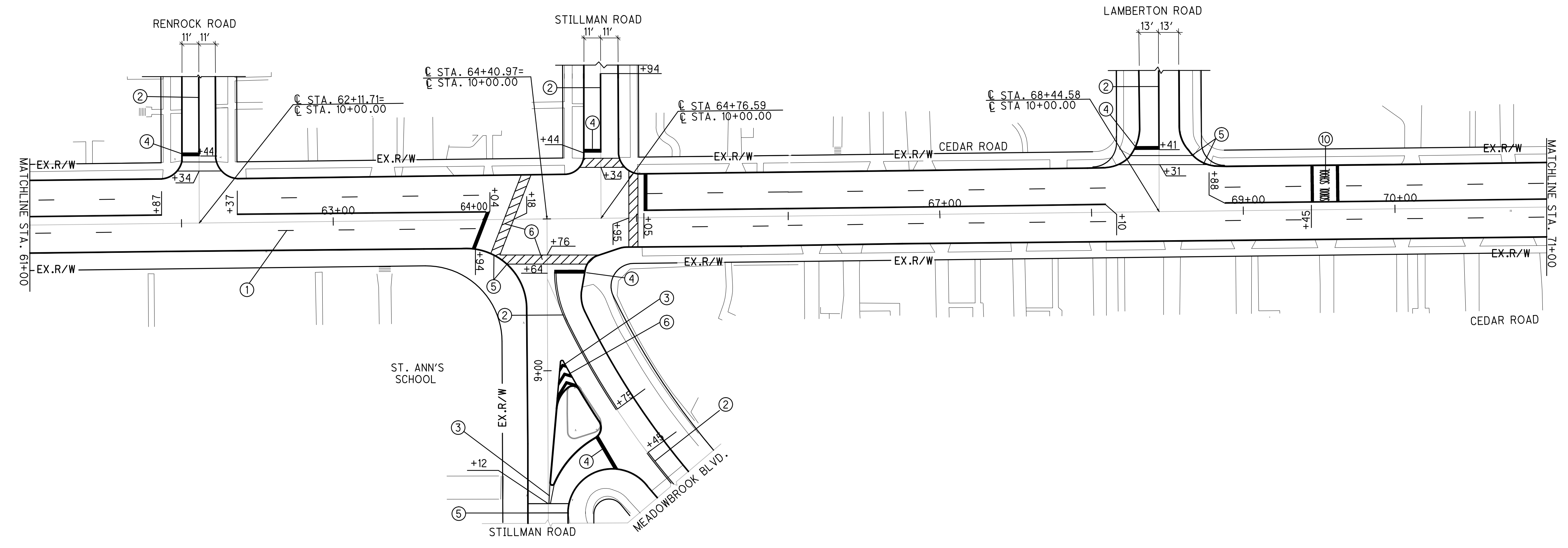
- (1) - LANE LINES
- (2) - CENTER LINES, DOUBLE, SOLID
- (3) - CHANNELIZING LINES
- (4) - STOP LINES
- (5) - CROSSWALK LINES
- (6) - TRANSVERSE LINES, WHITE(6'c/c)
- (7) - ISLAND MARKING
- (8) - LANE ARROWS
- (9)- WORD ON PAVEMENT, 72"
- (10)- SCHOOL SYMBOL MARKING, 72"
- (11)- DOTTED LINES, 4", WHITE
- (11A)-DOTTED LINES, 4", YELLOW
- (12)-PARKING LOT STALL MARKING



CALCULATED
JNS
CHECKED
PJF

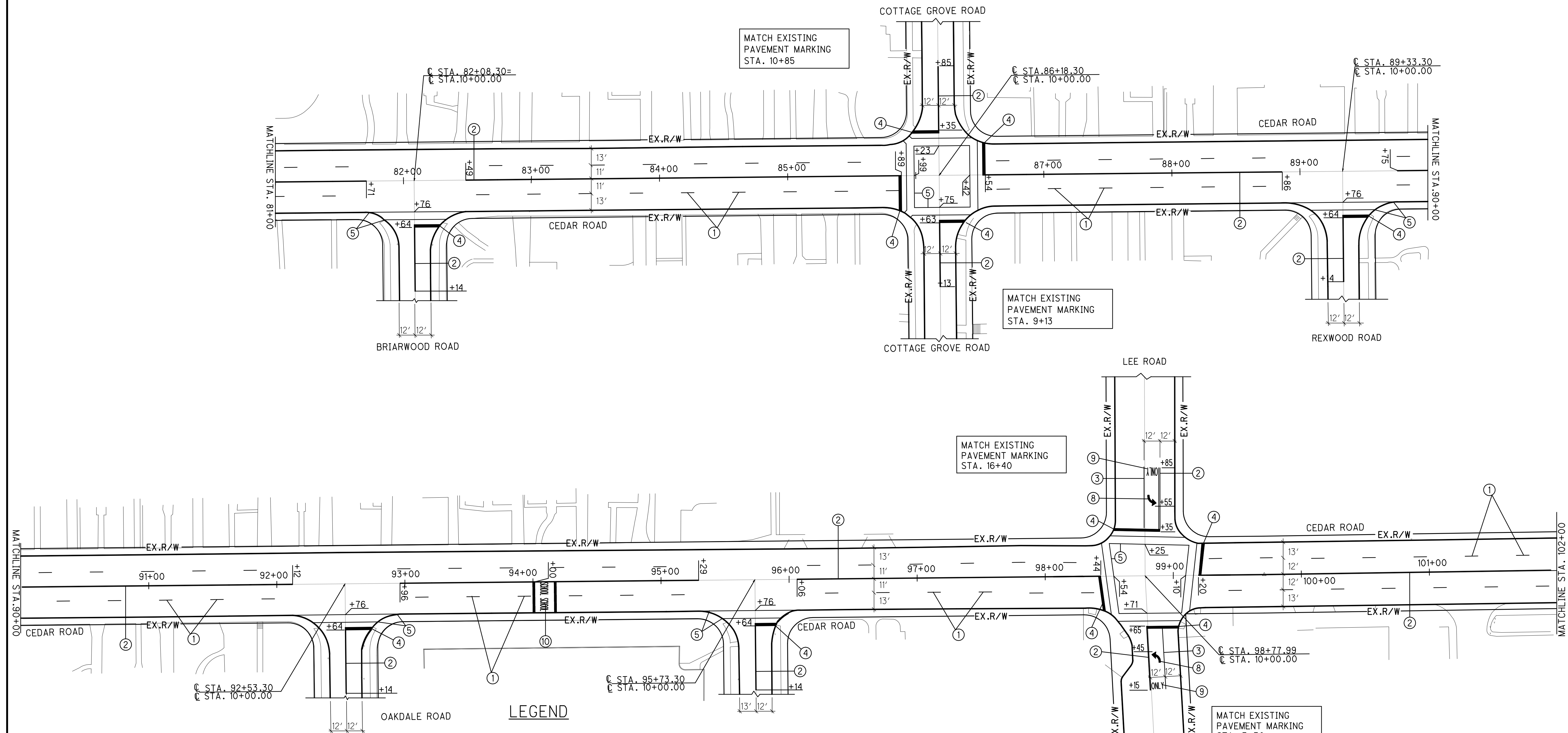
PAVEMENT MARKING PLAN
STA. 61+00 TO STA. 81+00

CUY - CEDAR ROAD



- LEGEND**
- (1) - LANE LINES
 - (2) - CENTER LINES, DOUBLE, SOLID
 - (3) - CHANNELIZING LINES
 - (4) - STOP LINES
 - (5) - CROSSWALK LINES
 - (6) - TRANSVERSE LINES, WHITE(6'c/c)
 - (7) - ISLAND MARKING
 - (8) - LANE ARROWS
 - (9)- WORD ON PAVEMENT, 72"
 - (10)- SCHOOL SYMBOL MARKING, 72"
 - (11)- DOTTED LINES, 4", WHITE
 - (11A)-DOTTED LINES, 4", YELLOW
 - (12)-PARKING LOT STALL MARKING

Sep. 22, 2016 - 9:12am
 drawing name: i:\2014\14607\DWG\14607PVTSTRP.DWG Layout: 36 by: silvaroli



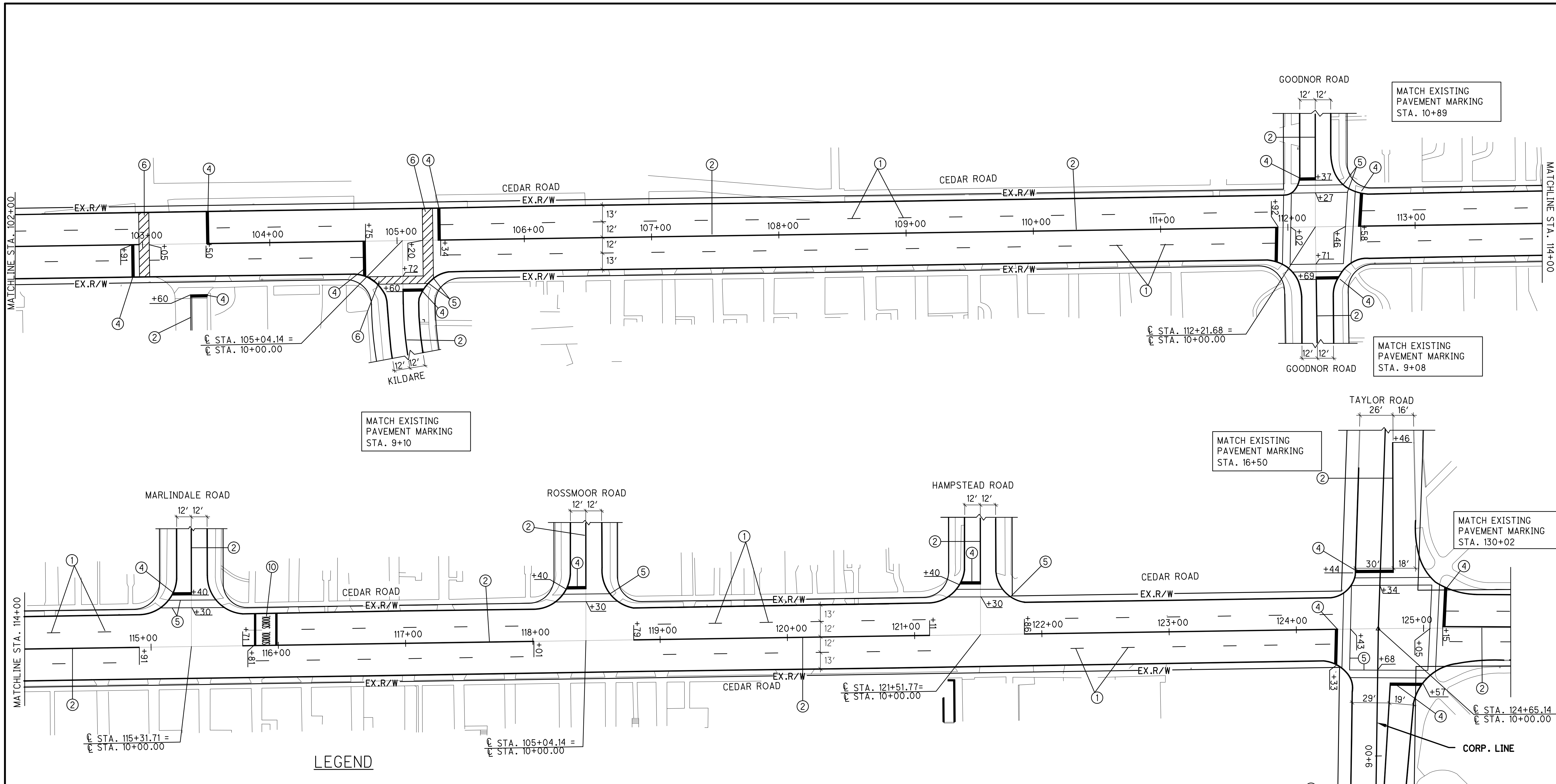
- LEGEND**
- (1) - LANE LINES
 - (2) - CENTER LINES, DOUBLE, SOLID
 - (3) - CHANNELIZING LINES
 - (4) - STOP LINES
 - (5) - CROSSWALK LINES
 - (6) - TRANSVERSE LINES, WHITE(6'c/c)
 - (7) - ISLAND MARKING
 - (8) - LANE ARROWS
 - (9)- WORD ON PAVEMENT, 72"
 - (10)- SCHOOL SYMBOL MARKING, 72"
 - (11)- DOTTED LINES, 4", WHITE
 - (11A)-DOTTED LINES, 4", YELLOW
 - (12)-PARKING LOT STALL MARKING

MATCH EXISTING
PAVEMENT MARKING
STA. 10+85

MATCH EXISTING
PAVEMENT MARKING
STA. 9+13

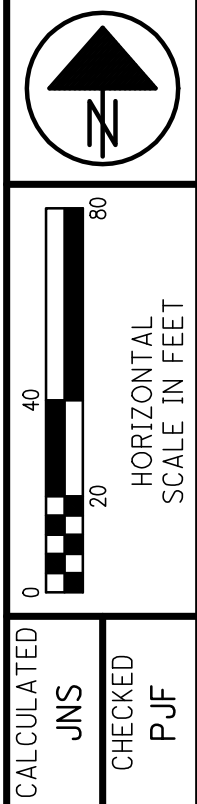
MATCH EXISTING
PAVEMENT MARKING
STA. 16+40

MATCH EXISTING
PAVEMENT MARKING
STA. 3+30



LEGEND

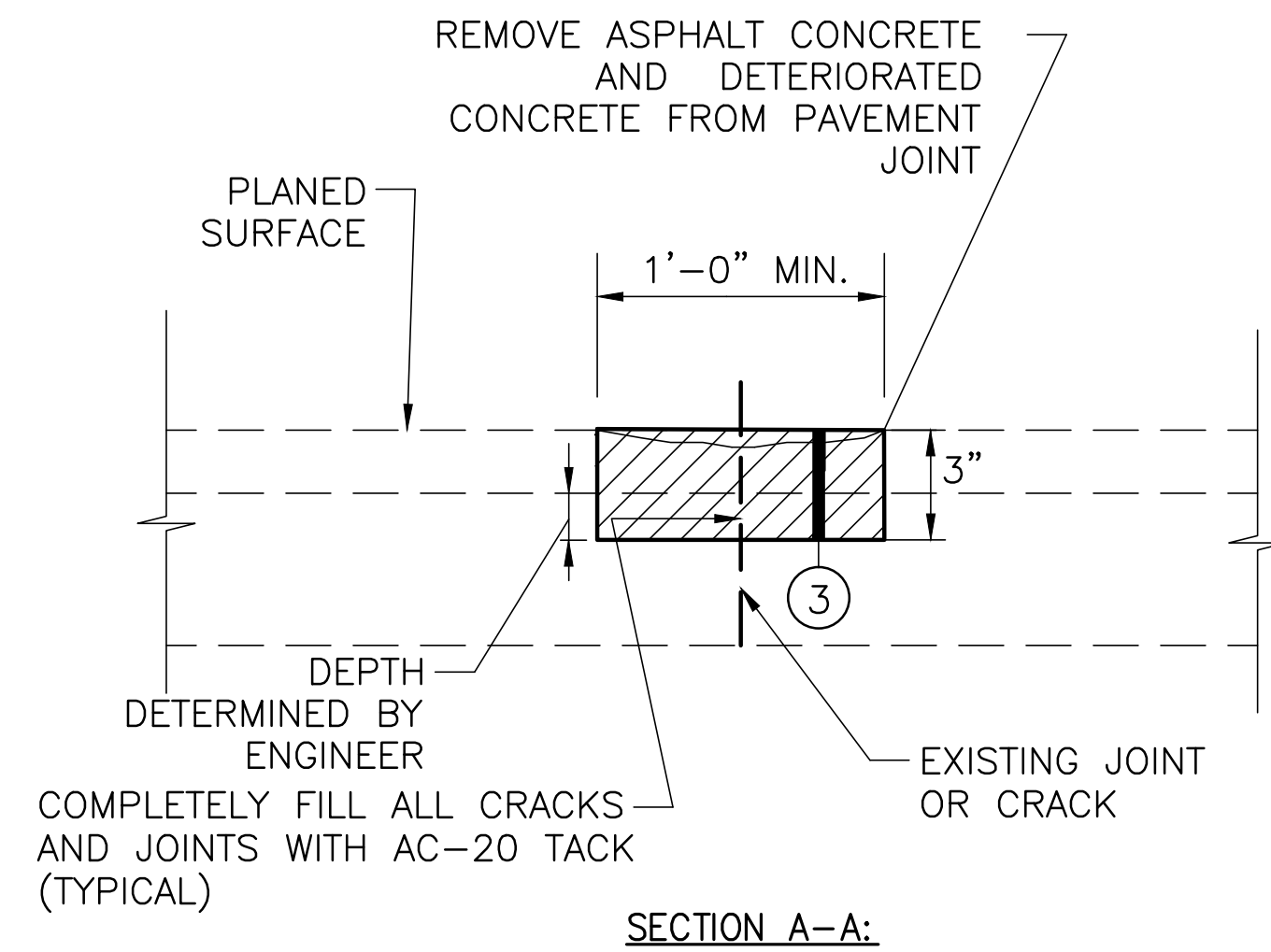
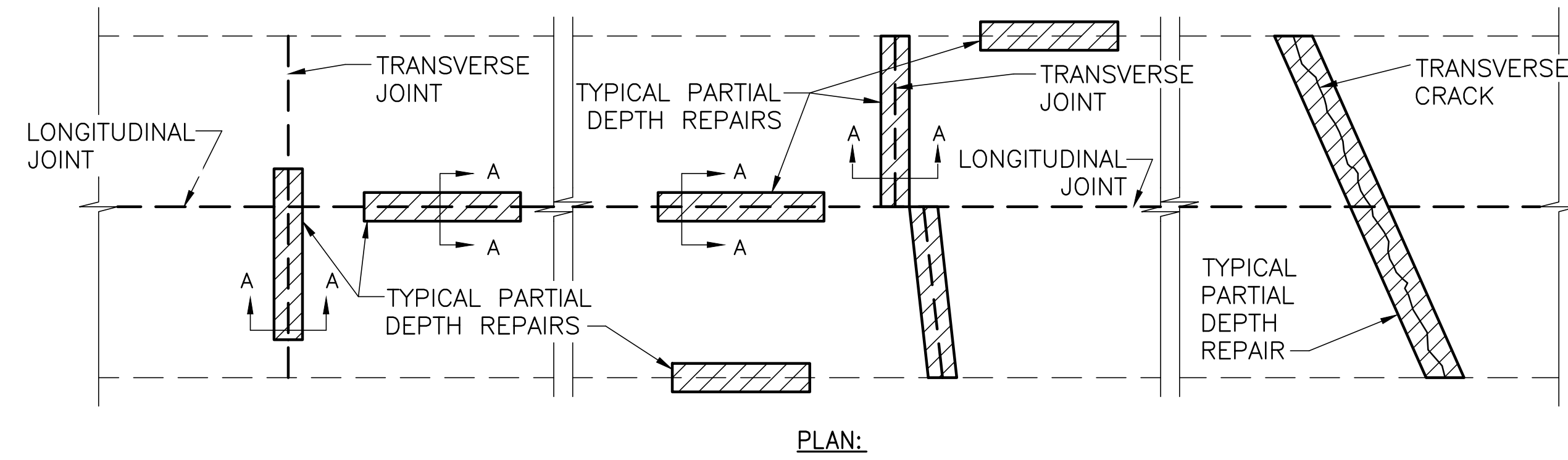
- (1) - LANE LINES
- (2) - CENTER LINES, DOUBLE, SOLID
- (3) - CHANNELIZING LINES
- (4) - STOP LINES
- (5) - CROSSWALK LINES
- (6) - TRANSVERSE LINES, WHITE(6'c/c)
- (7) - ISLAND MARKING
- (8) - LANE ARROWS
- (9)- WORD ON PAVEMENT, 72"
- (10)- SCHOOL SYMBOL MARKING, 72"
- (11)- DOTTED LINES, 4", WHITE
- (11A)-DOTTED LINES, 4", YELLOW
- (12)-PARKING LOT STALL MARKING



CALCULATED JNS
CHECKED PJF

PAVEMENT MARKING PLAN
STA. 102+00 TO STA. 125+42

CUY - CEDAR ROAD



ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR DETAILS

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR NOTES:

- PARTIAL DEPTH REPAIRS SHALL CONSIST OF 3" ASPHALT OR CONCRETE REMOVAL & REPLACEMENT W/ 3" 441 TYPE 2 MATERIAL.
- PLACE AND COMPACT THE ABOVE ASPHALT CONCRETE REPLACEMENT MATERIALS (301 AND 441) IN ONE OR MORE LIFTS IN ACCORDANCE WITH 252.04 OF THE SPECIFICATIONS.

ITEM 255 - FULL DEPTH PAVEMENT REPAIR NOTES:

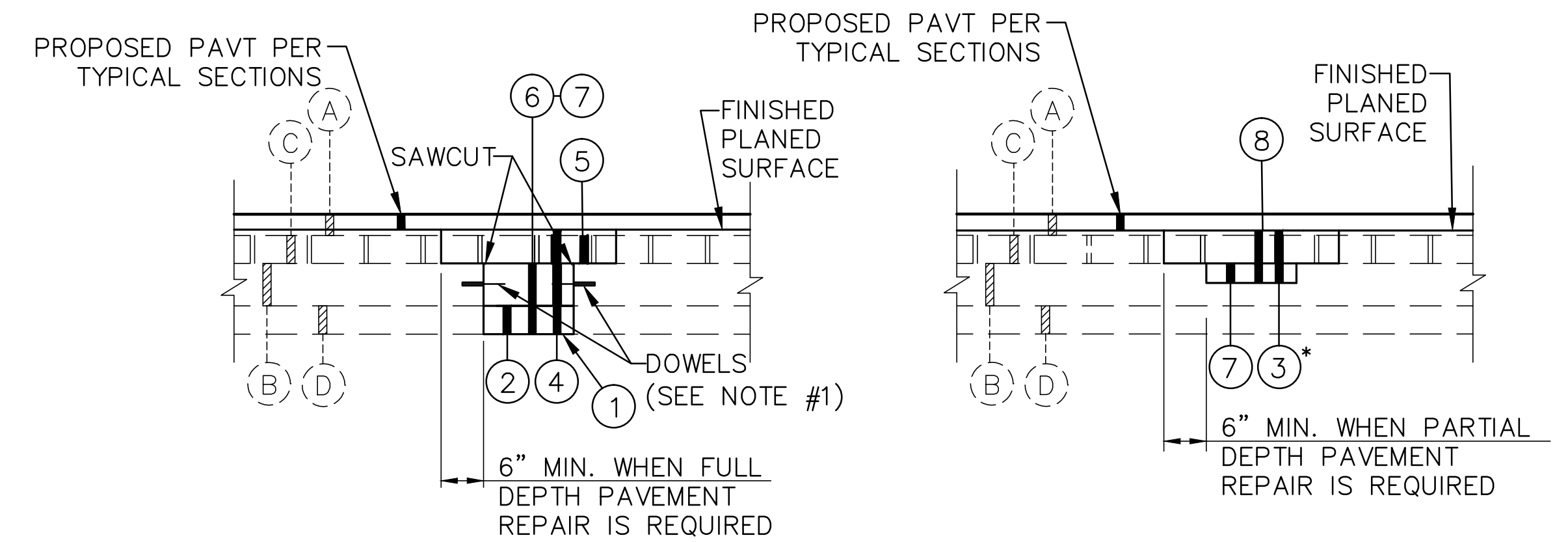
- DOWEL BARS AS PER BP-2.5.
- REMOVE REMAINING ASPHALT AND CONCRETE/BRICK BASE UNDER ITEM 255 - FULL DEPTH REMOVAL AND RIGID REPLACEMENT.
- FULL DEPTH PAVEMENT REPAIRS TO MATCH THE EXISTING PAVEMENT BUILD-UP THICKNESS AND SUBBASE THICKNESS

EXISTING LEGEND

- (A) 4.5"-6" ASPHALT CONCRETE
- (B) 9"± CONCRETE BASE
- (C) BRICK ON SAND CUSHION
- (D) EXISTING AGGREGATE BASE

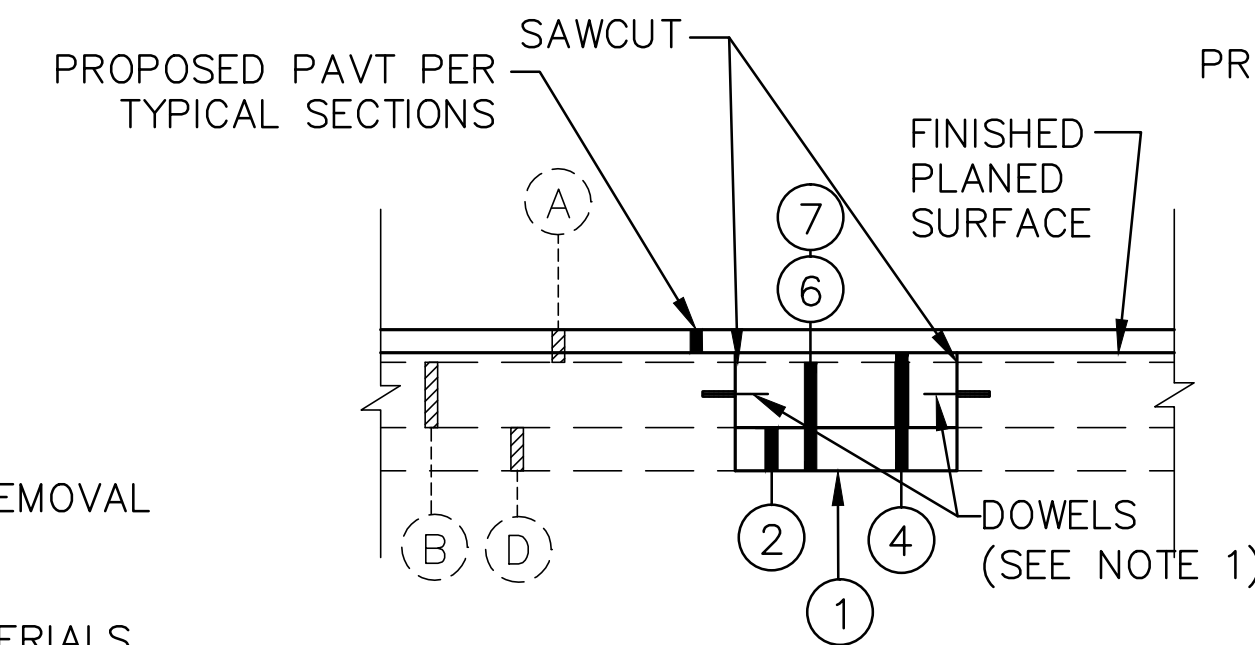
PROPOSED LEGEND

- ① ITEM 204 - SUBGRADE COMPACTION
- ② ITEM 304 - 0" MIN AGGREGATE BASE
- ③ ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN
- ④ ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, AS PER PLAN
- ⑤ ITEM 202 - BRICK BASE/GROUT REMOVED
- ⑥ ITEM 305 - CONCRETE BASE
- ⑦ ITEM 202 - PAVEMENT REMOVED
- ⑧ ITEM 441 - 3" ASPHALT, PG64-22, TYPE 2

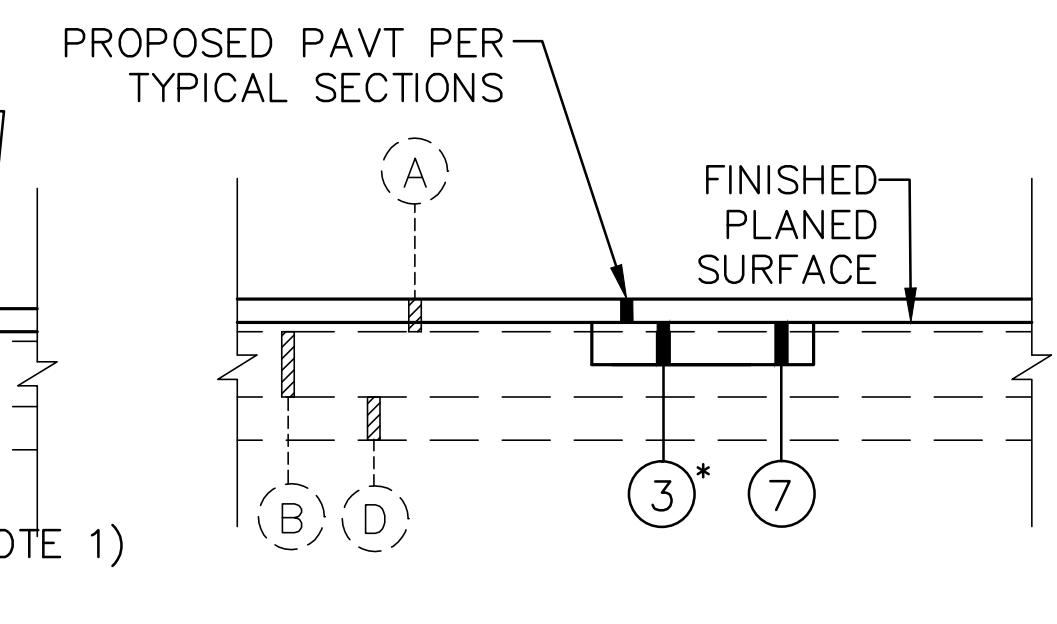


FULL DEPTH PAVEMENT REPAIR WITH A BRICK BASE NO SCALE

PARTIAL DEPTH PAVEMENT REPAIR WITH AN ASPHALT BASE NO SCALE

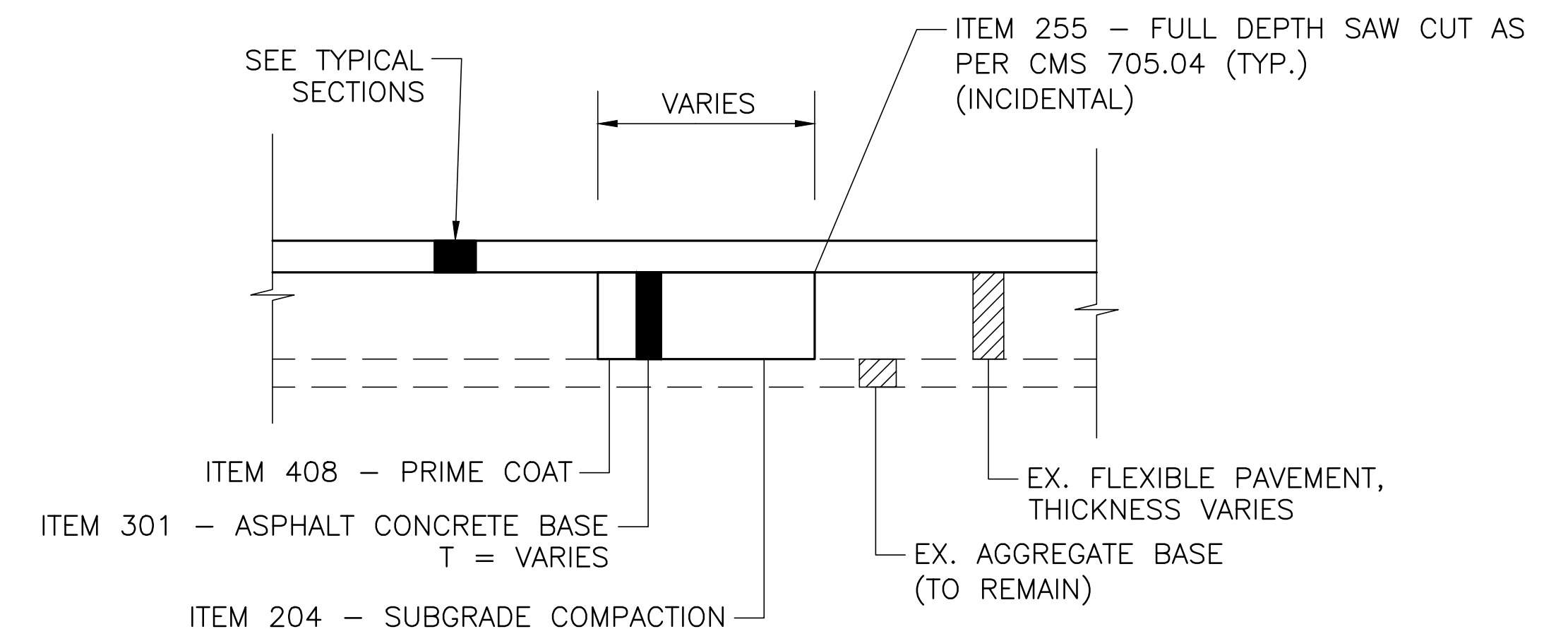


FULL DEPTH PAVEMENT REPAIR WITH A CONCRETE BASE NO SCALE



PARTIAL DEPTH PAVEMENT REPAIR WITH A CONCRETE BASE NO SCALE

* SEE PARTIAL DEPTH PAVEMENT REPAIR DETAILS AND NOTES, THIS SHEET



ITEM 253 - PAVEMENT REPAIR

CONSTRUCTION NOTES:

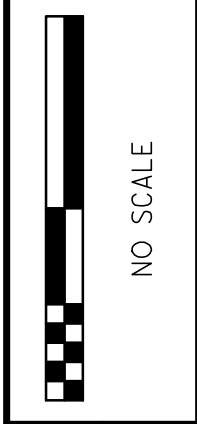
- LOCATIONS AND SIZE OF ALL FULL DEPTH PAVEMENT REPAIRS ARE TO BE DETERMINED BY THE ENGINEER, AFTER PAVEMENT PLANING OPERATIONS.
- THE ENGINEER SHALL DETERMINE WHEN THIS DETAIL IS UTILIZED.
- MAXIMUM LIFT THICKNESS FOR ITEM 301 - ASPHALT CONCRETE BASE IS 6 INCHES.

CALCULATED
JNS
CHECKED
PJF

PAVEMENT DETAILS

CUY - CEDAR ROAD

Sep 22, 2016 9:05am
drawing name: I:\2014\14607\DWG\14607Details.dwg Layout: 39 by: silvaroli



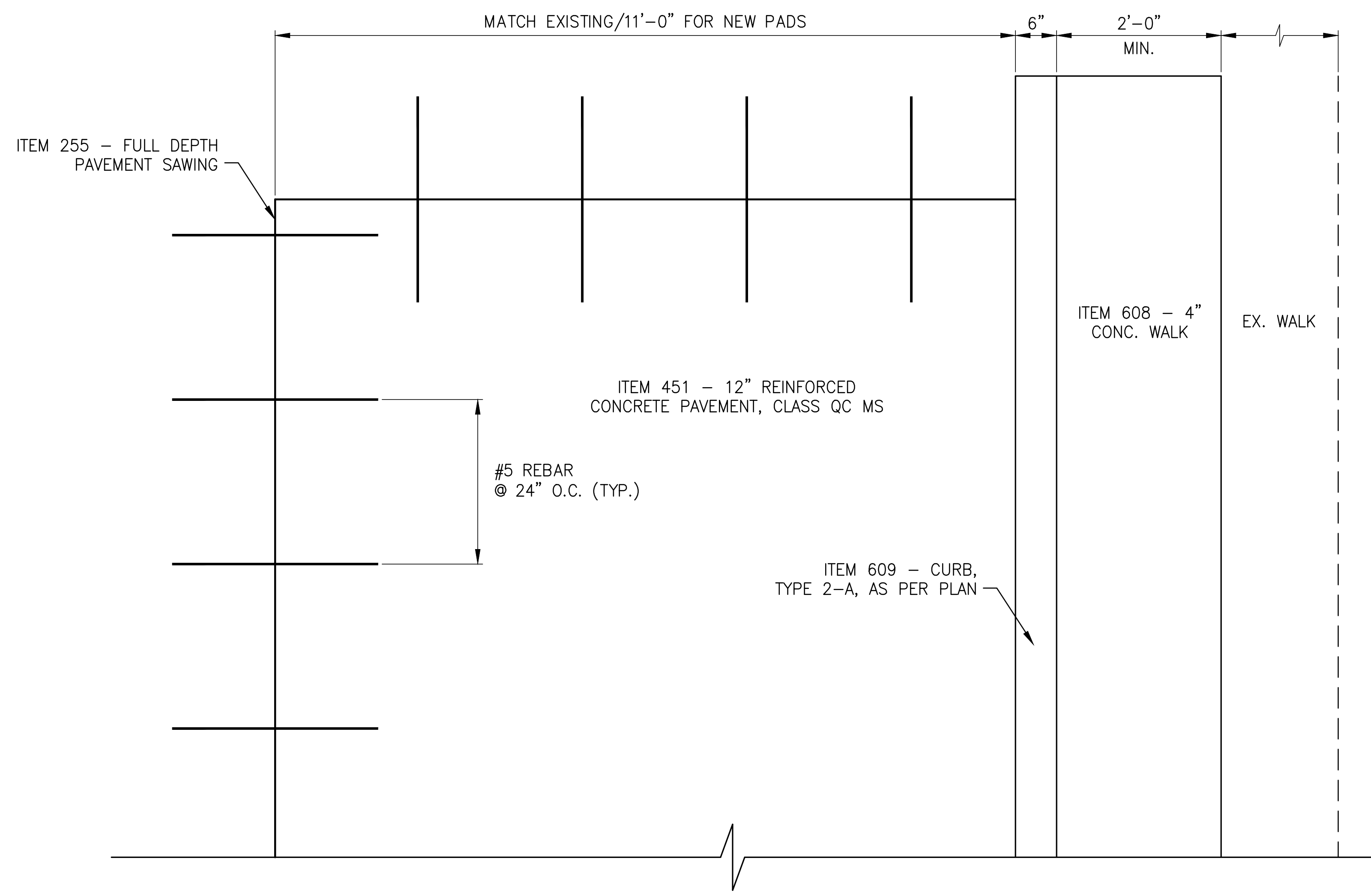
CALCULATED	JNS	CHECKED	PJF
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PAVEMENT DETAILS - BUS PAD REPLACEMENT - METHOD A

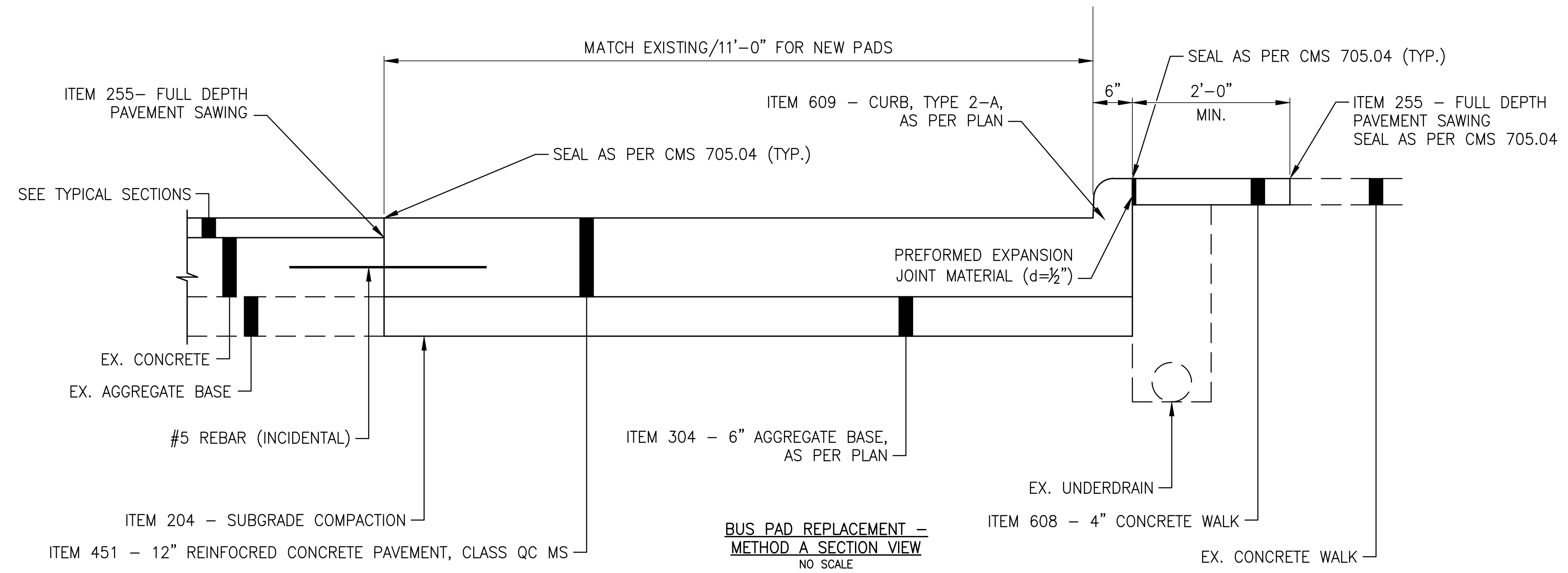
CUY - CEDAR ROAD

NOTES:

- EXISTING WALK TO BE REMOVED A MINIMUM OF 2 FEET, OR TO THE NEAREST JOINT, WHICHEVER COMES FIRST.
- AFTER THE CONCRETE BUS PAD IS REMOVED, THE ENGINEER WILL INSPECT THE EXISTING PAVEMENT FOR CONDITION AND COMPOSITION OF THE EXISTING PAVEMENT.
- UPON EXAMINATION OF THE EXISTING PAVEMENT, THE ENGINEER WILL DIRECT THE CONTRACTOR WHICH METHOD OF BUS PAD REPLACEMENT IS REQUIRED. THE ENGINEER HAS SOLE DISCRETION IN DETERMINING THE METHOD OF REPLACEMENT. SEE METHOD B, SHEET 41.
- A SINGLE BUS PAD MAY INCORPORATE BOTH METHODS OF PLACEMENT, DEPENDING ON THE CONDITION AND COMPOSITION OF THE EXISTING PAVEMENT.
- SAWCUT IS INCIDENTAL TO ITEM 202 - PAVEMENT REMOVED.
- TYPE 2-A CURB IS TO BE INCLUDED IN ITEM 451 - REINFORCED CONCRETE PAVEMENT, CLASS QC MS.: BUS PAD
- MATCH EXISTING TRANSVERSE PAVEMENT JOINTS.



BUS PAD REPLACEMENT - METHOD A PLAN VIEW
NO SCALE



BUS PAD REPLACEMENT - METHOD A SECTION VIEW
NO SCALE

Sep 22, 2016 9:05am drawing name: i:\2014\14607\DWG\14607Details.dwg Layout: 40 by: silveroil



CALCULATED
SAH
CHECKED
EPS

SCHEMATIC PLAN

CUY - CEDAR - FAIRMOUNT

HORIZONTAL / VERTICAL DATUM
(O.M. #236 AND O.M. #488)

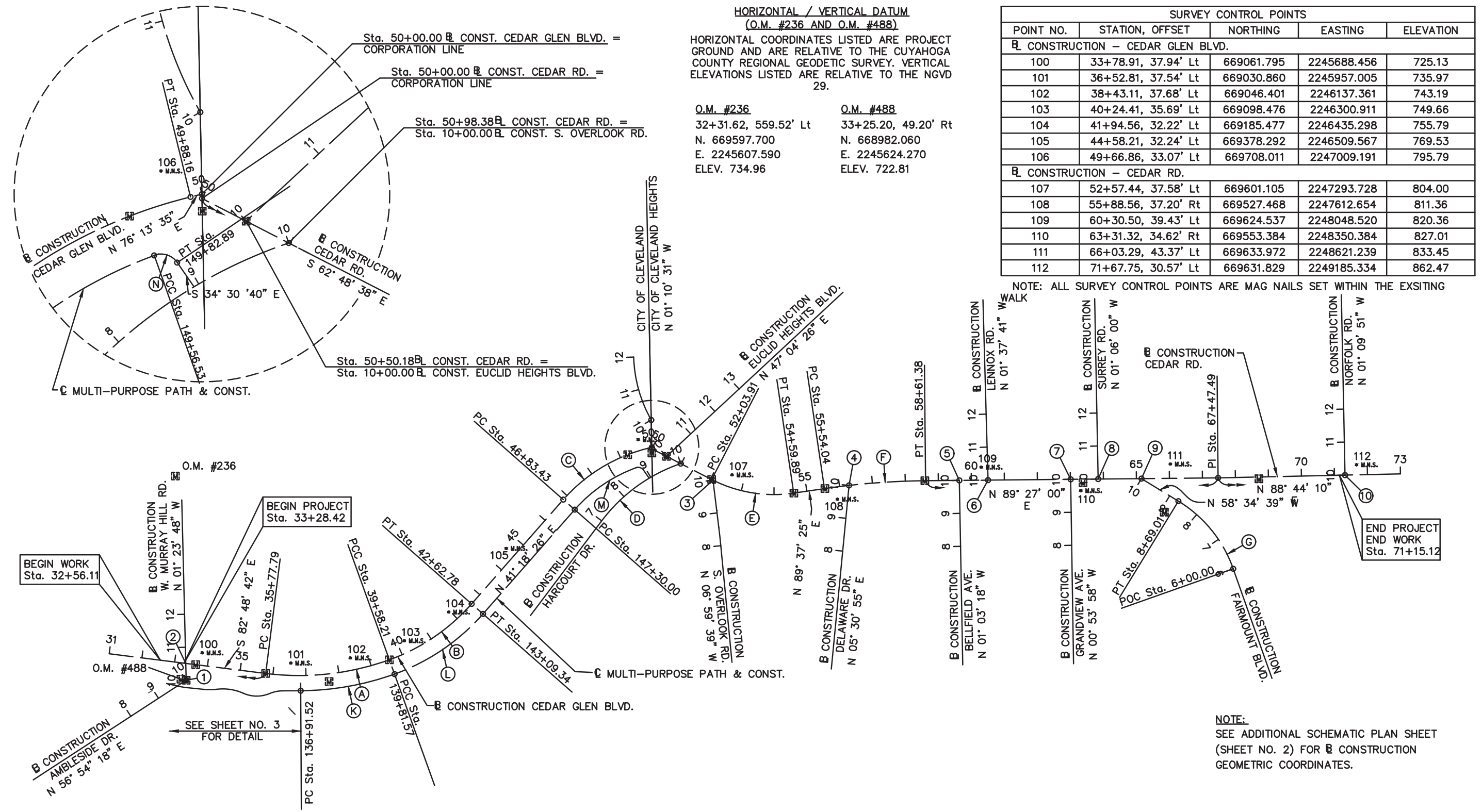
HORIZONTAL COORDINATES LISTED ARE PROJECT GROUND AND ARE RELATIVE TO THE CUYAHOGA COUNTY REGIONAL GEODETIC SURVEY. VERTICAL ELEVATIONS LISTED ARE RELATIVE TO THE NGVD 29.

O.M. #236
32+31.62, 559.52' Lt
N. 669597.700
E. 2245607.590
ELEV. 734.96

O.M. #488
33+25.20, 49.20' Rt
N. 668982.060
E. 2245624.270
ELEV. 722.81

SURVEY CONTROL POINTS				
POINT NO.	STATION, OFFSET	NORTHING	EASTING	ELEVATION
CONSTRUCTION - CEDAR GLEN BLVD.				
100	33+78.91, 37.94' Lt	669061.795	2245688.456	725.13
101	36+52.81, 37.54' Lt	669030.860	2245957.005	735.97
102	38+43.11, 37.68' Lt	669046.401	2246137.361	743.19
103	40+24.41, 35.69' Lt	669098.476	2246300.911	749.66
104	41+94.56, 32.22' Lt	669185.477	2246435.298	755.79
105	44+58.21, 32.24' Lt	669378.292	2246509.567	769.53
106	49+66.86, 33.07' Lt	669708.011	2247009.191	795.79
CONSTRUCTION - CEDAR RD.				
107	52+57.44, 37.58' Lt	669601.105	2247293.728	804.00
108	55+88.56, 37.20' Rt	669527.468	2247612.654	811.36
109	60+30.50, 39.43' Lt	669624.537	2248048.520	820.36
110	63+31.32, 34.62' Rt	669553.384	2248350.384	827.01
111	66+03.29, 43.37' Lt	669633.972	2248621.239	833.45
112	71+67.75, 30.57' Lt	669631.829	2249185.334	862.47

NOTE: ALL SURVEY CONTROL POINTS ARE MAG NAILS SET WITHIN THE EXISTING

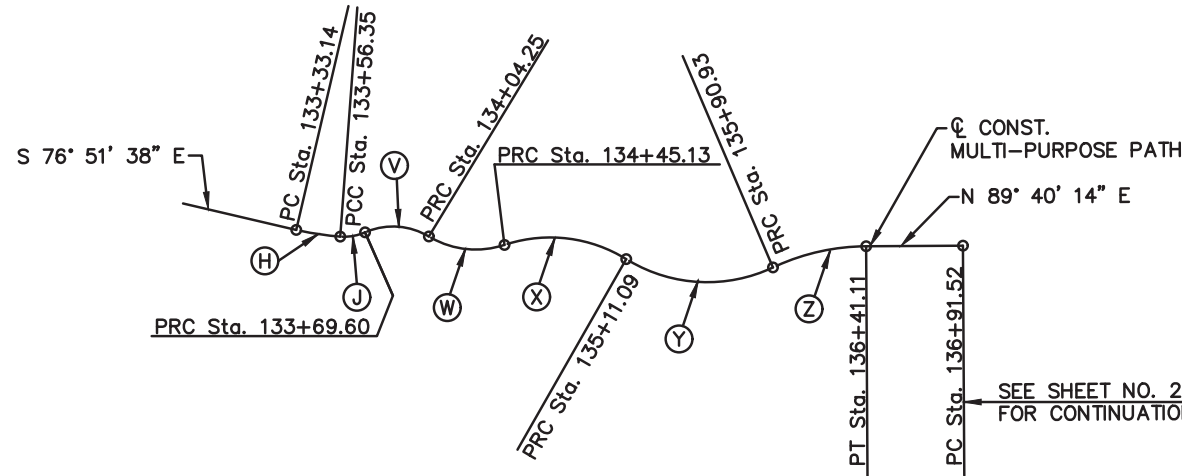


NOTE:
SEE ADDITIONAL SCHEMATIC PLAN SHEET
(SHEET NO. 2) FOR CONSTRUCTION
GEOMETRIC COORDINATES.

CURVE DATA - A Δ= 26° 58' 49" (Lt) Dc= 07° 05' 32" R= 807.86' L= 380.42' CH= N 83° 41' 53" E 376.91'	CURVE DATA - B Δ= 28° 54' 03" (Lt) Dc= 09° 29' 21" R= 603.81' L= 304.57' CH= N 55° 45' 27" E 301.35'	CURVE DATA - C Δ= 34° 55' 09" (Rt) Dc= 11° 27' 33" R= 500.00' L= 304.73' CH= N 58° 46' 00" E 300.03'	CURVE DATA - D Δ= 34° 12' 48" (Rt) Dc= 11° 24' 16" R= 502.40' L= 300.00' CH= N 54° 03' 45" E 295.56'	CURVE DATA - E Δ= 35° 33' 56" (Lt) Dc= 13° 53' 40" R= 412.37' L= 255.97' CH= S 80° 35' 37" E 251.88'	CURVE DATA - F Δ= 07° 49' 35" (Rt) Dc= 02° 32' 47" R= 2250.00' L= 307.34' CH= N 85° 32' 13" E 307.10'
CURVE DATA - G Δ= 34° 15' 55" (Lt) Dc= 14° 32' 29" R= 394.02' L= 235.64' CH= N 41° 26' 41" W 232.14'	CURVE DATA - K Δ= 19° 27' 45" (Lt) Dc= 06° 42' 37" R= 853.86' L= 290.04' CH= N 79° 56' 21" E 288.65'	CURVE DATA - L Δ= 28° 54' 03" (Lt) Dc= 08° 49' 02" R= 649.81' L= 327.77' CH= N 55° 45' 27" E 324.31'	CURVE DATA - M Δ= 28° 35' 23" (Rt) Dc= 12° 37' 13" R= 454.00' L= 226.53' CH= N 55° 36' 07" E 224.20'	CURVE DATA - N Δ= 75° 31' 07" (Rt) R= 20.00' L= 26.36' CH= S 72° 20' 34" E 24.49'	

- ① Sta. 10+00.00 CONSTRUCTION W. MURRAY HILL RD. =
Sta. 10+00.00 CONSTRUCTION AMBLESIDE DR.
- ② Sta. 33+33.72 CONSTRUCTION CEDAR GLEN BLVD. =
Sta. 10+51.08 CONSTRUCTION W. MURRAY HILL RD.
- ③ Sta. 52+08.29 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION S. OVERLOOK RD.
- ④ Sta. 56+29.12 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION DELAWARE DR.
- ⑤ Sta. 59+63.70 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION BELLFIELD AVE.
- ⑥ Sta. 60+50.65 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION LENNOX RD.
- ⑦ Sta. 63+00.93 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION GRANDVIEW AVE.
- ⑧ Sta. 63+84.17 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION SURREY RD.
- ⑨ Sta. 65+15.46 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION FAIRMOUNT BLVD.
- ⑩ Sta. 71+32.09 CONSTRUCTION CEDAR RD. =
Sta. 10+00.00 CONSTRUCTION NORFOLK RD.

GEOMETRIC COORDINATES		
POINT	NORTHING	EASTING
CONSTRUCTION - CEDAR GLEN BLVD.		
POT Sta. 31+00.00	669059.049	2245406.991
PC Sta. 35+77.79	668999.263	2245881.024
PCC Sta. 39+58.21	669040.635	2246255.660
PT Sta. 42+62.78	669210.205	2246504.776
PC Sta. 46+83.43	669526.193	2246782.448
PT Sta. 49+88.16	669681.767	2247038.995
POT Sta. 50+00.00	669684.586	2247050.496
CONSTRUCTION - CEDAR RD.		
POT Sta. 50+00.00	669680.214	2247050.586
PC Sta. 52+03.91	669587.039	2247231.968
PT Sta. 54+59.89	669545.872	2247480.465
PC Sta. 55+54.04	669559.588	2247573.616
PT Sta. 58+61.38	669583.486	2247879.786
PI Sta. 67+47.49	669591.992	2248765.852
POT Sta. 73+00.00	669604.180	2249318.227
CONSTRUCTION - AMBLESIDE DR.		
POT Sta. 8+00.00	668869.534	2245472.570
POT Sta. 10+00.00	668978.740	2245640.123
CONSTRUCTION - W. MURRAY HILL RD.		
POT Sta. 10+00.00	668978.740	2245640.123
POT Sta. 12+00.00	669178.680	2245635.249
CONSTRUCTION - EUCLID HEIGHTS BLVD.		
POT Sta. 10+00.00	669657.284	2247095.225
POT Sta. 13+00.00	669861.600	2247314.894
CONSTRUCTION - HARCOURT DR.		
POC Sta. 7+00.00	669461.796	2246898.788
POC Sta. 10+00.00	669635.263	2247138.092
CONSTRUCTION - S. OVERLOOK RD.		
POT Sta. 8+00.00	669386.467	2247259.500
POT Sta. 10+00.00	669585.062	2247235.869
CONSTRUCTION - DELAWARE DR.		
POT Sta. 8+00.00	669370.209	2247628.835
POT Sta. 10+00.00	669569.283	2247648.057
CONSTRUCTION - BELLFIELD AVE.		
POT Sta. 8+00.00	669384.502	2247985.781
POT Sta. 10+00.00	669584.468	2247982.098
CONSTRUCTION - LENNOX RD.		
POT Sta. 10+00.00	669585.303	2248069.043
POT Sta. 12+00.00	669785.222	2248063.361
CONSTRUCTION - GRANDVIEW AVE.		
POT Sta. 8+00.00	669387.730	2248322.453
POT Sta. 10+00.00	669587.706	2248319.314
CONSTRUCTION - SURREY RD.		
POT Sta. 10+00.00	669588.505	2248402.549
POT Sta. 12+00.00	669788.468	2248398.710
CONSTRUCTION - FAIRMOUNT BLVD.		
POC Sta. 6+00.00	669316.504	2248811.705
PT Sta. 8+69.01	669521.474	2248645.615
POT Sta. 10+00.00	669589.765	2248533.835
CONSTRUCTION - NORFOLK RD.		
POT Sta. 10+00.00	669600.476	2249150.355
POT Sta. 12+00.00	669800.435	2249146.292



CURVE DATA - H

Δ= 08° 51' 50" (Lt)
 Dc= 38' 11' 50"
 R= 150.00'
 L= 23.21'
 CH= S 81° 17' 33" E
 23.18'

CURVE DATA - J

Δ= 28° 07' 28" (Lt)
 Dc= 212' 12' 24"
 R= 27.00'
 L= 13.25'
 CH= N 80° 12' 48" E
 13.12'

CURVE DATA - V

Δ= 55° 08' 06" (Lt)
 Dc= 159° 09' 18"
 R= 36.00'
 L= 34.64'
 CH= S 86° 16' 53" E
 33.32'

CURVE DATA - W

Δ= 49° 50' 09" (Rt)
 Dc= 121' 54' 21"
 R= 47.00'
 L= 40.88'
 CH= N 83° 37' 55" E
 39.60'

CURVE DATA - X

Δ= 50° 23' 36" (Lt)
 Dc= 76° 23' 40"
 R= 75.00'
 L= 65.96'
 CH= S 83° 21' 12" E
 63.86'

CURVE DATA - Y

Δ= 57° 10' 34" (Lt)
 Dc= 71° 37' 11"
 R= 80.00'
 L= 79.83'
 CH= S 81° 34' 02" E
 76.56'

CURVE DATA - Z

Δ= 25° 00' 12" (Rt)
 Dc= 49° 49' 21"
 R= 115.00'
 L= 50.18'
 CH= N 75° 36' 16" E
 49.79'

SEE SHEET NO. 2
 FOR CONTINUATION

CALCULATED
 SAH
 CHECKED
 EPS

SCHEMATIC PLAN

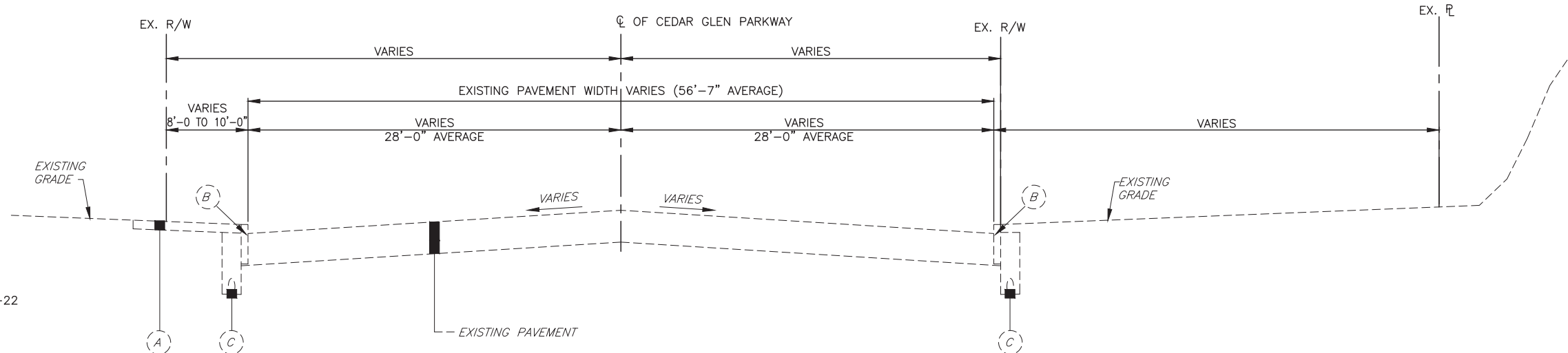
CUY - CEDAR - FAIRMOUNT

EXISTING LEGEND

- (A) EXISTING CONCRETE WALK
- (B) EXISTING CURB
- (C) EXISTING 6" UNDERDRAIN

PROPOSED LEGEND

- ① ITEM 203 - ROADWAY, MISC.: GRADING
- ② TEM 204 - SUBGRADE COMPACTION
- ③ 8" - ITEM 304 - AGGREGATE BASE
- ④ NOT USED
- ⑤ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (@ 0.075 GALLONS/SQ. YD.)
- ⑥ 1 1/2" - ITEM 441 - ASPHALT CONCRETE SURFACE COURSE TYPE 1, (448), PG 64-22
- ⑦ 2" - ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448), PG 64-22
- ⑧ ITEM 659 - SEEDING AND MULCHING
- ⑨ ITEM 660 - SODDING

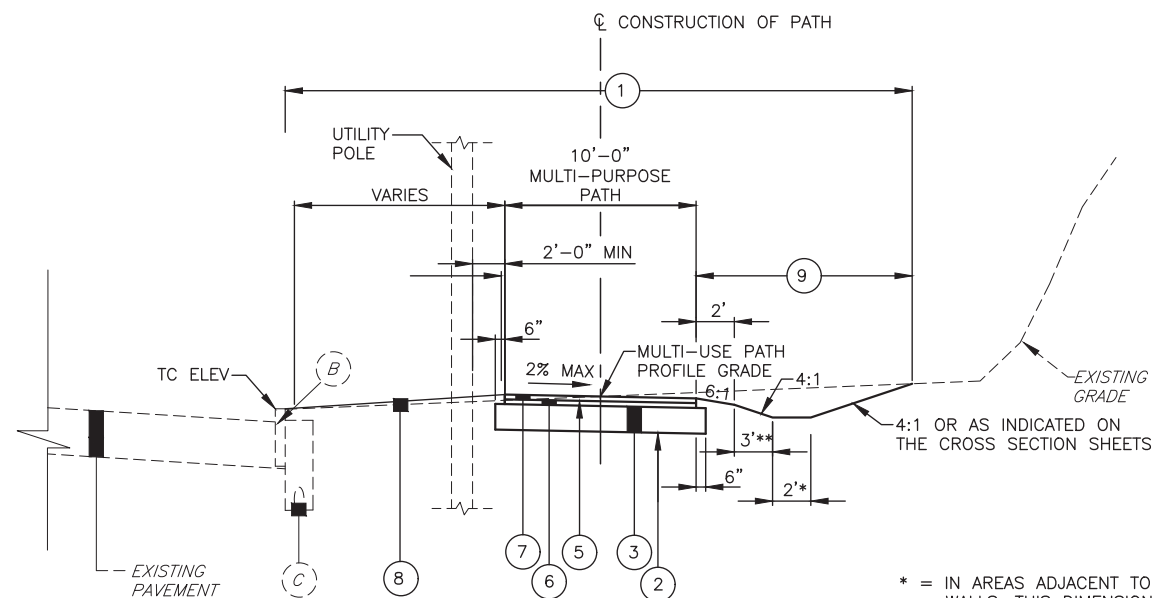


CEDAR GLEN PARKWAY- EXISTING TYPICAL SECTION

STA 33+28.42 TO STA 49+53.63
NO SCALE

NOTES:

1. ALL EXCAVATION AND EMBANKMENT REQUIRED TO CONSTRUCT THE MULTI-PURPOSE PATH AND DETENTION BASIN SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 203 - ROADWAY, MISC.: GRADING..



PROPOSED MULTI-PURPOSE PATH TYPICAL SECTION

STA 133+30.00 TO STA 149+85.75 = 1655.75 FEET
NO SCALE

**MULTI-PURPOSE PATH QUANTITIES
(CARRIED TO GENERAL SUMMARY)**

PATH LENGTH = 1655.75 FT
AREA OF ASPHALT (A) = 1655.75 FT * 10 FT = 16557.50 SQ FT
AREA OF AGGREGATE (B) = 1655.75 FT * 11 FT = 18213.25 SQ FT

ITEM 204 - SUBGRADE COMPACTION
= AREA (B) * 1/27 = 18213.25 SQ FT * 1/27 = 2023.67 SQ YD USE 2024 SQ YD

ITEM 304 - AGGREGATE BASE
= AREA (B) * 1/27 = 18213.25 SQ FT * 1/27 = 449.71 CU YD USE 450 CU YD

ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (@ 0.075 GALLONS/SQ YD)
= AREA (A) * 1/27 = 16557.50 * 1/27 = 137.98 GAL USE 138 GAL

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22
= AREA (A) * 1.5/27 = 16557.50 * 1.5/27 = 76.66 CU YD USE 77 CU YD

ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448)
= AREA (A) * 2/12 * 1/27 = 16557.50 * 2/12 * 1/27 = 102.21 CU YD USE 103 CU YD

- * = IN AREAS ADJACENT TO THE EXISTING WALLS, THIS DIMENSION SHALL BE CHANGED TO 1'.
- ** = IN AREAS ADJACENT TO THE EXISTING WALLS, THIS DIMENSION SHALL BE CHANGED TO 1.5'.

REFER TO CROSS SECTIONS (SHEETS NO. 25 TO 31) FOR FURTHER DETAIL.

TYPICAL SECTIONS

CUY - CEDAR-FAIRMOUNT

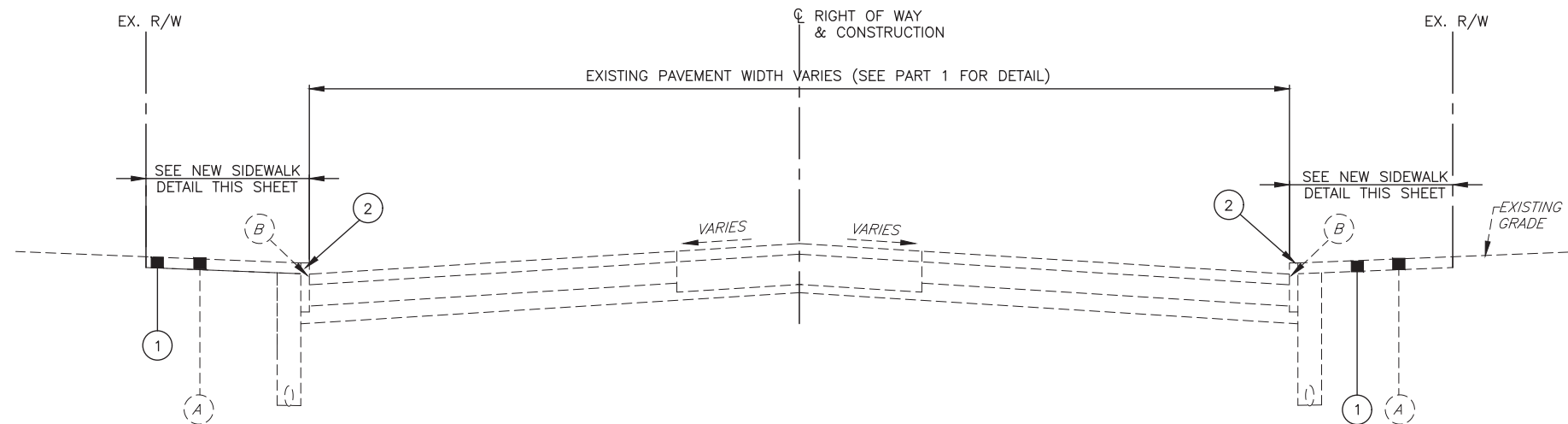
EXISTING LEGEND

- (A) EXISTING CONCRETE WALK
- (B) EXISTING CURB

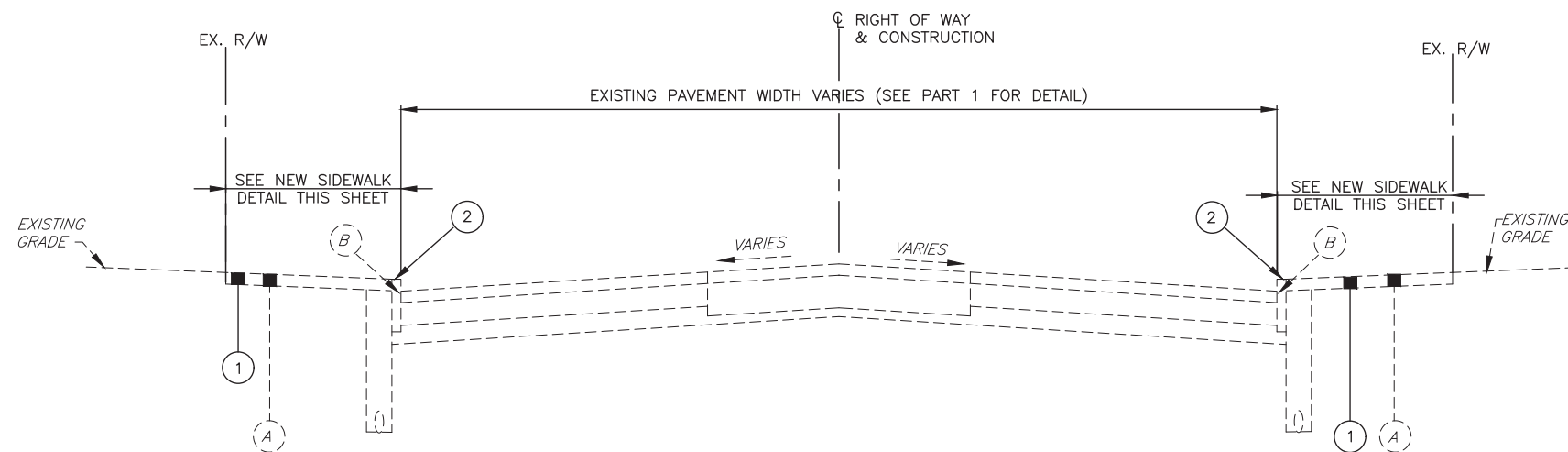
PROPOSED LEGEND

- ① ITEM 202 - WALK REMOVED, AS PER PLAN
- ② ITEM 202 - CURB REMOVED, AS PER PLAN
- ③ ITEM 202 - PAVEMENT REMOVED
- ④ ITEM 203 - EMBANKMENT (SEE NOTE 2 THIS SHEET)
- ⑤ ITEM 608 - 6" CONCRETE WALK, AS PER PLAN*
- ⑥ ITEM 608 - WALKWAY, MISC.: INTEGRALLY COLORED CONCRETE*
- ⑦ ITEM 608 - WALKWAY, MISC.: STAMPED AND INTEGRALLY COLORED CONCRETE*
- ⑧ ITEM 608 - WALKWAY, MISC.: UNIT PAVERS*
- ⑨ ITEM 609 - CURB, TYPE 6, AS PER PLAN
- ⑩ ITEM 660 - SODDING
- ⑪ ITEM 661 - PLANTING, MISC.: TREE GRATE*

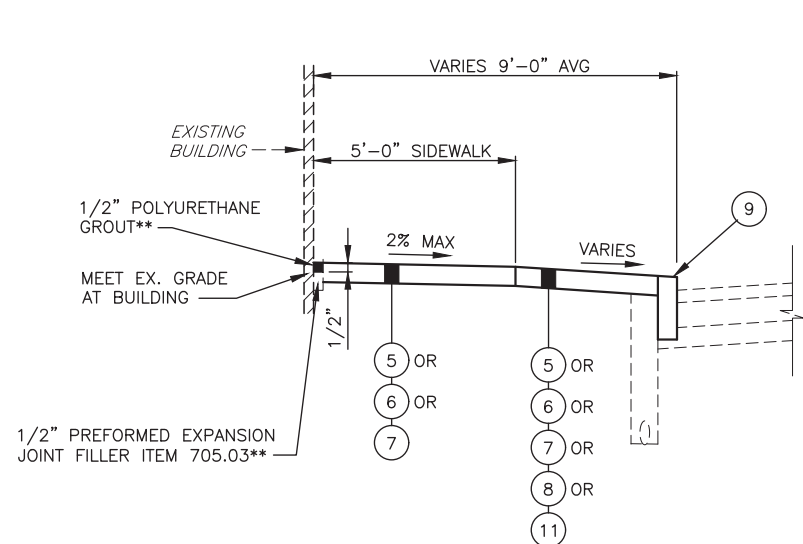
*=SEE STREETSCAPE PLANS FOR LOCATIONS



CEDAR ROAD-TYPICAL SECTION WEST OF FAIRMOUNT
 STA 51+00.00 TO STA 65+15.46
 NO SCALE

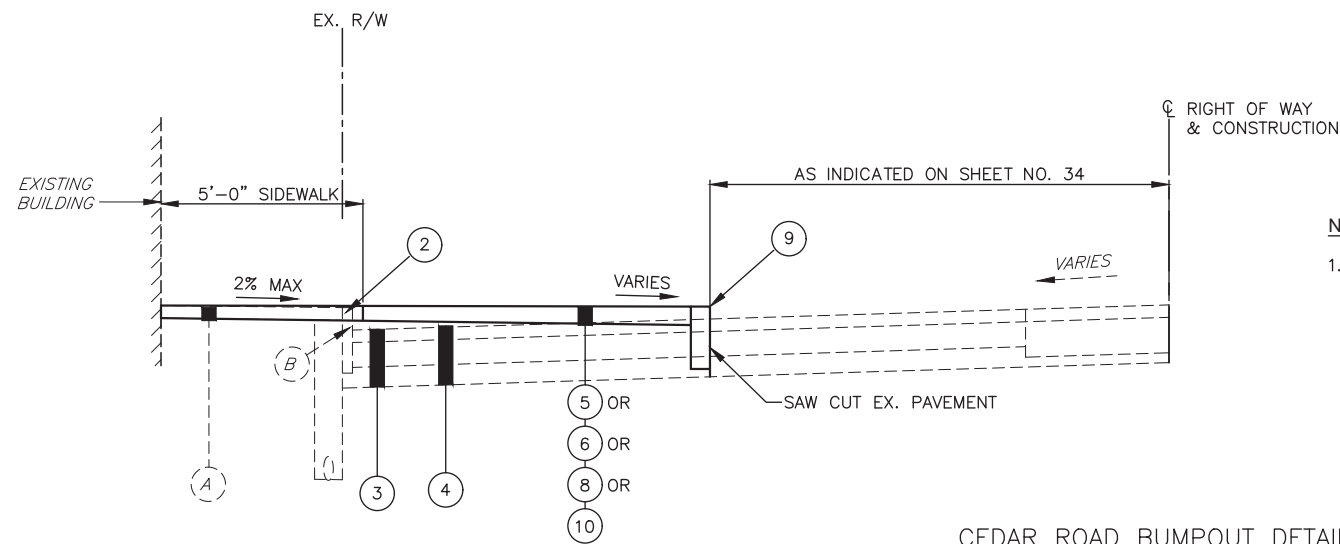


CEDAR ROAD-TYPICAL SECTION EAST OF FAIRMOUNT
 STA 65+15.46 TO STA 71+32.09
 NO SCALE



NEW SIDEWALK DETAIL
 NO SCALE

** INCIDENTAL TO PERTINENT ITEM 608



CEDAR ROAD BUMPOUT DETAIL
 NO SCALE

NOTES:

1. ALL EXCAVATION AND EMBANKMENT REQUIRED TO CONSTRUCT THE STREETSCAPING IMPROVEMENTS, INCLUDING THE PAVEMENT BUMP-OUTS, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 203 - ROADWAY, MISC.: GRADING.

CALCULATED
 DRK
 CHECKED
 CJB

TYPICAL SECTIONS

CUY - CEDAR-FAIRMOUNT

GENERAL

SCOPE OF WORK

THIS PROJECT WORK INVOLVES IMPROVEMENTS RELATED TO SIDEWALK AND STREETScape ALONG CEDAR ROAD BETWEEN EUCLID HEIGHTS BOULEVARD AND NORFOLK ROAD AND ALSO FOR IMPROVEMENTS RELATED TO CONSTRUCTION OF A MULTI-PURPOSE PATH ALONG CEDAR GLEN PARKWAY BETWEEN AMBLESIDE ROAD AND HARCOURT DRIVE. THE LENGTH FOR THE STREETScape PORTION IS APPROXIMATELY 0.44 MILES AND THE MULTI-PURPOSE PATH IS 0.31 MILES, WITH AND OVERALL PROJECT LENGTH OF 0.75 MILES. THE PROJECT IS LOCATED IN THE CITY OF CLEVELAND AND CLEVELAND HEIGHTS.

THE SIDEWALK AND STREETScape IMPROVEMENTS INCLUDES SIDEWALKS, CURBS AND DRIVE APRON REMOVAL, INSTALLATION OF NEW CURBING, DRIVE APRONS, SIDEWALKS AND PAVING. ALSO INCLUDED IS THE INSTALLATION OF LANDSCAPING, STREET FURNITURE AND WAY FINDING SIGNAGE. THE MULTI-PURPOSE PATH INCLUDES CLEARING OF SITE AND CONSTRUCTION OF A 10 FOOT WIDE PAVED PATHWAY WITH ASSOCIATED DRAINAGE.

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM RECORD PLANS AND ARE BELIEVED TO REPRESENT THE WIDTH AND COMPOSITION OF THE EXISTING PAVEMENT, BUT THE CITY OF CLEVELAND HEIGHTS DOES NOT GUARANTEE THE ACCURACY OF SAME. (ALSO SEE PART 1)

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK LISTED IN THE GENERAL SUMMARY FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED AT THE ENGINEER'S DISCRETION SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

ROUNDING

THE ROUNDING OF SLOPE BREAK POINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS SECTIONS EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

DOMINION EAST OHIO
320 SPRINGSIDE DRIVE, SUITE 320
AKRON, OHIO 44333
ATTN: MARY J. LONG
PHONE: (330) 664-2409
EMAIL: MARY.J.LONG@DOM.COM

CITY OF CLEVELAND
DIVISION OF WATER
1201 LAKESIDE AVENUE, 6TH FLOOR
CLEVELAND, OHIO 44114
ATTN: ANDREW KRAWCZYK
PHONE: (216) 664-2444, EXT. 5520
FAX: (216) 664-2378

CITY OF CLEVELAND HEIGHTS
40 SEVERANCE CIRCLE,
CLEVELAND HEIGHTS, OHIO 44118
ATTN: ALEX MANNARINO
PHONE: 216-291-4444

CITY OF CLEVELAND HEIGHTS
WATER DEPARTMENT
40 SEVERANCE CIRCLE
CLEVELAND HEIGHTS, OHIO
ATTN: COLLETTE CLINKSCALE
(216) 291-5995

THE ILLUMINATING COMPANY
6896 MILLER ROAD
BRECKSVILLE, OHIO 44141
ATTN: MARK ROBINSON
PHONE: (216) 566-5146
FAX: (216) 431-6209

AT&T, OHIO
13630 LORAIN AVENUE - 3RD FLOOR
CLEVELAND, OHIO 44111
ATTN: JAMES JANIS
PHONE: (216) 476-6142
FAX: (216) 476-601
EMAIL: PJ8191@ATT.NET

NORTHEAST OHIO REGIONAL SEWER
DISTRICT (NEORS D)
3826 EUCLID AVENUE
CLEVELAND, OH 44115-2504
ATTN: DOUG LOPATA
PHONE: 216-881-6600
FAX: LOPATAD@NEORS D.ORG

TIME WARNER CABLE
7 SEVERENCE CIRCLE
CLEVELAND HEIGHTS, OHIO 44118
ATTN: PAT SANTOEMMO
PHONE: 216-575-8016,
EXT. 1216554202
EMAIL: PAT.SANTOEMMO@TWCABLE.COM

CALL OHIO UTILITIES PROJECTION SERVICE TWO (2) WORKING DAYS BEFORE YOU DIG. TOLL FREE NO. 1-800-362-2764 (NON MEMBERS MUST BE CALLED DIRECTLY)

CALL OHIO OIL & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS) TOLL FREE NO. 1-800-925-0988.

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

ELEVATION DATUM

ELEVATIONS SHOWN ARE BASED ON CLEVELAND REGIONAL GEODETIC SURVEY (C.R.G.S.) DATA AND NGVD 29 DATUM. MONUMENTS ARE DESCRIBED ON THE PLANS.

LOCAL LAWS, ORDINANCES AND REGULATIONS

IN ACCORDANCE WITH SECTION 107.01 OF THE GENERAL PROVISIONS, THE CONTRACTOR SHALL STAY FULLY INFORMED OF ALL LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES THAT AFFECT THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE AND COMPLY WITH ALL SUCH LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES AT NO ADDITIONAL COST TO THE PROJECT/STATE.

WORK HOURS AND NOISE CONTROL

THE CONTRACTOR SHALL RESTRICT HIS WORKING HOURS TO THOSE PERMITTED BY LOCAL ORDINANCES OR ANY OTHER APPLICABLE ORDINANCES, LAWS OR REGULATIONS EXCEPT AS HE MAY OBTAIN WRITTEN VARIANCES FROM SUCH ORDINANCES, LAWS OR REGULATIONS FROM THE APPROPRIATE GOVERNING AUTHORITIES. THE NOISE LEVEL RESULTING FROM THE CONSTRUCTION SHALL BE WITHIN THE LIMITS SPECIFIED IN OSHA REGULATIONS AND ALL LOCAL ORDINANCES.

SPECIFICATION REFERENCE

UNLESS OTHERWISE NOTED, REFERENCE TO SPECIFICATION ITEMS SHALL BE CONSTRUED TO BE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, JANUARY 1, 2013 EDITION.

STATIONING AND LOCATIONS

STATIONING AND LOCATIONS INDICATED ON THESE PLANS ARE APPROXIMATE. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD "AS DIRECTED BY THE ENGINEER" AT NO ADDITIONAL COST.

BASE MAPPING

BASE MAPPING WAS PERFORMED BY EUTHENICS, INC. DATED FEBRUARY 2014. CONTRACTOR SHALL VERIFY ALL EXISTING HORIZONTAL AND VERTICAL DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER.

CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES

AT PROJECT LOCATIONS WHERE THE CONTRACTOR IS WORKING ADJACENT TO PROPERTY OR SERVICES OF UTILITY COMPANIES SUCH AS, BUT NOT LIMITED TO, POWER, TELECOMMUNICATIONS, GAS, RAILWAY, ETC. WORK SHALL NOT COMMENCE UNTIL ARRANGEMENTS FOR PROPER PROTECTION OF SUCH FACILITIES HAVE BEEN MADE, AS DIRECTED IN SECTION 107 OF THE ODOT CMS.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION, AND OPERATION (INCLUDING ERECTION, MAINTENANCE AND REMOVAL) OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS, EXCEPT WHERE OTHERWISE NOTED, SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. ALSO SEE PART 1.

COOPERATION BETWEEN CONTRACTORS

IT IS ANTICIPATED THAT OTHER CONTRACTORS WILL BE WORKING ON PROJECTS ADJACENT TO OR WITHIN THE LIMITS OF THIS PROJECT, EITHER FOR THE CITY OR FOR OTHER PUBLIC AGENCIES. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS OPERATIONS, INCLUDING PROVISIONS FOR THE MAINTENANCE OF TRAFFIC, WITH THE CONTRACTORS OF OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT INCLUDING CEI, AT&T, AND DOMINION

PROJECT PROGRESS MEETINGS

PROGRESS MEETINGS WILL BE HELD EVERY TWO (2) WEEKS AT A LOCATION DESIGNATED BY THE CITY OF CLEVELAND HEIGHTS, AND WILL BE ATTENDED BY THE CITY AND CONTRACTOR DECISION-MAKING PERSONNEL.

THE PURPOSE OF THESE MEETINGS IS TO DISCUSS CRITICAL OPERATIONS AND POTENTIAL PROBLEMS. ALSO, THE CONTRACTOR WILL CONFIRM THE NUMBER AND DURATION OF WORK SHIFTS, NUMBER OF WORK CREWS, AND SPECIFIC PORTIONS OF THE WORK TO BE PERFORMED DURING THE FOLLOWING WEEKS.

GREATER CLEVELAND REGIONAL TRANSIT AUTHORITY (RTA)

IF A BUS SHELTER INTERFERES WITH THE CONTRACTOR'S WORK, THE CONTRACTOR IS TO NOTIFY RTA'S BUS SHELTER MAINTENANCE SUPERVISOR, BRYAN MOORE AT 216-451-2072. THESE BUS SHELTERS ARE TO BE RELOCATED BY RTA. THE CONTRACTOR IS TO NOTIFY BRYAN MOORE A MINIMUM OF ONE (1) WEEK PRIOR TO WORKING IN THE VICINITY OF THE BUS SHELTERS. THE WALK UNDER THE BUS SHELTERS SHALL BE 6" THICK AND AREA OF 15'x6'.

DOMINION EAST OHIO GAS (DEO)

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF DOMINION'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION & SHORING). ONE-FOOT MINIMUM VERTICAL AND HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN DOMINION EAST OHIO'S (DEO) EXISTING PIPELINE(S) AND ALL OTHER IMPROVEMENTS. EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY DEO FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES & DEVICES, VALVE BOXES, ETC.). DEO FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL DEO EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF DEO'S PIPELINE WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING DEO FACILITY. PLEASE CONTACT DOMINION'S CORROSION DEPARTMENT: DAVE CUTLIP (330-266-2121), RICK MCDONALD (330-266-2122), OR AL HUMRICHOUSER (330-478-3757).

DEO = THE EAST OHIO GAS COMPANY, DBA DOMINION EAST OHIO, 1-800-362-7557. .

ITEMS REMOVED BY OTHERS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL BY OTHERS OF VARIOUS OBJECTS WITHIN THE RIGHT OF WAY, INCLUDING (BUT NOT LIMITED TO) PRIVATE UTILITY APPURTENANCES, MAIL COLLECTION BOXES, PAPER DISTRIBUTIONS BOXES, AND ORNAMENTAL RAILINGS/FENCES. AT LEAST TWO (2) WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE FOLLOWING:

USPS COLLECTION AND MAIL BOXES: THE CONTRACTOR SHALL CONTACT THE US POST OFFICE (216-443-4046) TO COORDINATE THE TEMPORARY REMOVAL AND REPLACEMENT OF THESE ITEMS.

BUILDING CANOPIES/MISC. ART SCULPTURES

CONTACT KATHRYN LOWE AT THE CEDAR FAIRMOUNT SID: 216-791-3172.

TRASH CANS: THE CONTRACTOR SHALL NOTIFY THE CITY OF CLEVELAND HEIGHTS DIVISION OF REFUSE/RECYCLING (216-691-7300) FOR THE TEMPORARY REMOVAL AND REPLACEMENT OF EXISTING TRASH RECEPTACLES. PRIOR TO THE BEGINNING OF THE CONSTRUCTION.

PARKING METERS: EXISTING PARKING METER HEADS WILL BE REMOVED BY CITY FORCES PRIOR TO CONSTRUCTION OF THE PROJECT. AFTER THE HEADS ARE REMOVED, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE POST AND ANY FOUNDATION. THE CONTRACTOR SHALL IN NO CASE REMOVE ANY PARKING METER OR POST UNTIL THE CITY HAS REMOVED THE METER HEAD. COORDINATE THIS WORK WITH THE CITY OF CLEVELAND HEIGHTS UTILITIES DEPARTMENT, 216-291-5995.

ALL WORK PERFORMED BY THE CONTRACTOR FOR THIS COORDINATION SHALL BE CONSIDERED INCIDENTAL TO ITEM 201, CLEARING AND GRUBBING, AS PER PLAN, AND THE CONTRACTOR SHALL BE DUE NO ADDITIONAL COMPENSATION FOR THIS WORK.

PRIVATE ELECTRICAL SYSTEM

THE OWNERS OF THE FOLLOWING PROPERTIES WILL BE INSTALLING RECEPTACLES AT TREE PITS IN FRONT OF THEIR BUILDING. SYSTEM WILL CONNECT TO THE METER ON INSIDE OF BUILDING. CONTACT PROPERTY OWNER TO OBTAIN COPY OF THEIR PLAN FOR THE SYSTEM AND COORDINATE/SCHEDULE WORK WITH THEIR CONTRACTOR SO THAT THEY CAN INSTALL SYSTEM PRIOR TO NEW PAVEMENT/SIDEWALKS BEING INSTALLED.

- NIGHTTOWN (SHEET NO. 21)
- BRUEGGERS BAGELS/BW3 BUILDING (SHEET NO. 22)
- HEIGHTS MEDICAL CENTER BUILDING (SHEET NO. 24)

PRIVATE HEATED SIDEWALK SYSTEM

THE OWNERS OF THE FOLLOWING PROPERTIES WILL BE INSTALLING A HEATED SIDEWALK SYSTEM IN FRONT OF THEIR BUILDING. CONTACT PROPERTY OWNER TO OBTAIN COPY OF THEIR PLAN FOR THE SYSTEM AND COORDINATE/SCHEDULE WORK WITH THEIR CONTRACTOR SO THAT THEY CAN INSTALL SYSTEM PRIOR TO NEW PAVEMENT/SIDEWALKS BEING INSTALLED.

- NIGHTTOWN (SHEET NO. 21)
- HEIGHTS MEDICAL CENTER BUILDING (SHEET NO. 24)

ROADWAY


ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OR AS NECESSARY TO CONSTRUCT THE MULTI-PURPOSE PATH AND DETENTION BASIN UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN.

THIS ITEM SHALL ALSO INCLUDE REMOVAL OF GROUND VEGETATION AND TRIMMING OF ALL TREES THAT ARE NOT MARKED AS REMOVAL, BUT ARE IN CLOSE PROXIMITY OF THE PROPOSED MULTI-PURPOSE PATH. ALL TREE BRANCHES WITHIN THE CLEARANCE ENVELOP OF 15 FEET ABOVE AND 15 FEET FROM THE EDGE OF THE PROPOSED MULTI-PURPOSE PATH SHALL BE TRIMMED AS PART OF THIS ITEM.

THE LOCATION, SIZE, AREA OF TREE PIT AND NUMBER OF TREES SPECIFIED ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VISITING THE SITE TO ASCERTAIN THE EXTENT OF WORK INVOLVED PRIOR TO SUBMITTING THE BID FOR THE CONTRACT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR REMOVAL OF TREES, ETC.

THE FOLLOWING SYMBOL ON THE PLANS REPRESENT TREE TO BE REMOVED:

 TREE REMOVED (VARIOUS SIZES)
CLEARING OF TREES SHALL ONLY OCCUR BETWEEN OCTOBER 1 AND MARCH 31

ALL PRUNING OR REMOVAL OF TREES SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY THAT THE WORK IS BEING PERFORMED IN. FOR TREES IN CLEVELAND, CONTACT THE URBAN FORESTRY SECTION (216-664-3104). FOR WORK IN CLEVELAND HEIGHTS, CONTACT FORESTRY (216-691-7300). ANY PERMITS REQUIRED FOR THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND ALL COSTS INCLUDED IN THIS ITEM FOR PAYMENT.

INVASIVE SPECIES (SUCH AS JAPANESE KNOTWOOD) REQUIRING REMOVAL SHALL BE TREATED WITH AN HERBICIDE THAT HAS BEEN DEMONSTRATED AS BEING EFFECTIVE IN CONTROLLING THE PLANT. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING AND PAYING FOR ALL PERMITS REQUIRED FOR THIS WORK.

EXISTING TREE GRATES BEING REMOVED SHALL BE SALVAGED AND STORED ON SITE FOR REMOVAL BY OTHERS. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL OTHER SURFACE OBJECTS INCLUDING CONCRETE BLOCKS, BRICKS, STONES, BOULDERS, RAILROAD TIES OR ANY OTHER SURFACE OBJECTS WITHIN THE PROPOSED CONSTRUCTION LIMITS. ALL EXISTING STREETScape AMENITIES IN THE PROJECT LIMITS (SUCH AS BICYCLE RACKS AND CONCRETE PLANTERS AND TRASH CANS) THAT ARE NOT SPECIFICALLY LABELED AS BEING SALVAGED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

THE CONTRACTOR SHALL NOTIFY KATHRYN LOWE (216-791-3172) TO ARRANGE THE DISCONNECTION OF POWER TO THE EXISTING TREE PIT ELECTRIC OUTLETS PRIOR TO REMOVAL OF THE PITS.

PAYMENT FOR THIS WORK SHALL BE CONSIDERED AT THE UNIT PRICE BID LUMP SUM FOR: ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN LUMP

PAVEMENT RESTORATION

THE COST FOR PAVEMENT RESTORATION FOR PIPE/CONDUIT OR ANY OTHER ITEMS UNLESS SPECIFICALLY ITEMIZED, SHALL BE INCLUDED WITH THE PERTINENT ITEM. NO SEPARATE PAYMENT WILL BE MADE.

CALCULATED DRK CHECKED CJB

GENERAL NOTES

CUY - CEDAR-FAIRMOUNT

7/65

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

ITEM 611 – CATCH BASIN, MISC.: CATCH BASIN CLEANOUT

ITEM SPECIAL – PIPE CLEANOUT, 24" AND UNDER

THIS WORK SHALL CONSIST OF CLEANING, REMOVING AND DISPOSING OF ALL SLUDGE, DIRT, SAND, GRAVEL, ROOTS, GREASE, SEDIMENT, AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS AND STRUCTURES SPECIFIED IN THE PLANS OR AS INDICATED BY THE ENGINEER. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17.

PRECAUTIONS SHALL BE TAKEN TO PROTECT THE DRAINAGE SYSTEM AT ALL TIMES. ALL WORKERS SHALL BE EXPERIENCED AND SKILLED IN THE USE OF THE EQUIPMENT USED. THE ENGINEER RESERVES THE RIGHT TO PROHIBIT USE OF ANY EQUIPMENT OR METHOD DEEMED INAPPROPRIATE FOR THE INTENDED WORK. WASHING SEDIMENT, DEBRIS, OR ANY OTHER ITEMS FROM THE DRAINAGE SYSTEM DOWNSTREAM SHALL NOT BE PERMITTED.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 202 SPECIAL – PIPE CLEANOUT, 24" AND UNDER THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

ITEM SPECIAL – PIPE CLEANOUT, 24" AND UNDER 200 FT
 ITEM 611 – CATCH BASIN, MISC.: CATCH BASIN CLEANOUT 10 EA

ITEM 611 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN

THE CONTRACTOR SHALL ADJUST THE MANHOLE FRAME AND COVER IN CONFORMANCE WITH 611.10 (D), WITH THE FOLLOWING MODIFICATIONS SPECIFIED HEREIN.

THE CASTING SHALL BE ADJUSTED USING CLAY BRICKS (704.01), CLASS QC1 CONCRETE (511) AND/OR CONCRETE MORTAR (602), AS NECESSARY, AND BY RESETTING THE EXISTING FRAME IN A BED OF CONCRETE MORTAR OR CLASS QC1 CONCRETE. NO GRADE RINGS OR METAL ADJUSTING RINGS (CASTINGS) ARE PERMITTED. MAXIMUM CONCRETE MORTAR THICKNESS IS 1 1/2".

ANY SUPPORTING WALL REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. ANY REPLACEMENT CASTINGS SHALL BE PAID FOR UNDER ITEM SPECIAL – MISCELLANEOUS METAL.

ITEM 611 – MANHOLE NO. 3, AS PER PLAN

THIS ITEM SHALL BE AS PER ITEM 611 OF THE CONSTRUCTION MATERIALS SPECIFICATIONS AND IT SHALL INCLUDE ALL LABOR AND MATERIAL TO REMOVE THE EXISTING INLET TO SOUND MATERIAL, REPLACE OR REBUILD WALLS, CONNECTION OF PROPOSED 12" CONDUIT

ITEM 611 – CATCH BASIN, CUYAHOGA COUNTY NO. 3C, AS PER PLAN

ITEM 611 – CATCH BASIN, CUYAHOGA COUNTY TWIN 3C, AS PER PLAN

AT THE LOCATIONS SHOWN IN THE DRAWINGS, THE CONTRACTOR SHALL FURNISH AND INSTALL A CUYAHOGA COUNTY NO. 3C CATCH BASIN OR A TWIN 3C CATCH BASIN, AS SHOWN ON THE DETAIL ON SHEET NO. 36. ALL 3C CATCH BASINS SHALL BE SUMPED AND TRAPPED AS SHOWN ON THE DETAIL ON THAT SHEET.

ITEM 611 – CATCH BASIN, NO. 2-2B, AS PER PLAN (A)

WHERE INDICATED ON THE DRAWINGS, NO. 2-2B CATCH BASINS SHALL HAVE THE FOLLOWING:

- BICYCLE-SAFE GRATES AS SPECIFIED IN ODOT STANDARD CONSTRUCTION DRAWING CB-1.1.
- A 2'-0" SUMP, MEASURED FROM THE INVERT OF THE OUTLET PIPE TO THE INSIDE BOTTOM OF THE CATCH BASIN.

PRIOR TO ORDERING ANY 2-2B CATCH BASINS, THE CONTRACTOR SHALL CLEAN ALL DEBRIS, DIRT, ETC. OUT OF THE EXISTING DOWNSTREAM CATCH BASIN THAT THE 2-2B CATCH BASIN IS DRAINING INTO AND VERIFY THE INVERT OF THE EXISTING BASIN. IF THE NEW STORM SEWER CANNOT BE INSTALLED AT THE INVERT INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AND PROVIDE THE INVERT OF THE EXISTING BASIN.

CLEANING OUT OF THE EXISTING CATCH BASINS ARE INCLUDED UNDER SEPARATE BID ITEM FOR PAYMENT.

ITEM 611 – CATCH BASIN, NO. 2-2B, AS PER PLAN (B)

WHERE INDICATED ON THE DRAWINGS, NO. 2-2B CATCH BASINS SHALL HAVE THE FOLLOWING:

- BICYCLE-SAFE GRATES AS SPECIFIED IN ODOT STANDARD CONSTRUCTION DRAWING CB-1.1.
- A 2'-0" SUMP, MEASURED FROM THE INVERT OF THE OUTLET PIPE TO THE INSIDE BOTTOM OF THE CATCH BASIN.
- A CAST IRON TRAP SHALL BE INSTALLED IN THE CATCH BASIN WALL. THE TRAP SHALL BE A NEENAH R-3707-12; EAST JORDAN 5964-12; OR APPROVED EQUAL.
- A COUPLING CONNECTING THE CAST IRON TRAP TO THE OUTLET PIPE.

ITEM 611 – DRAINAGE STRUCTURE, MISC.: SEWER CLEANOUT ADJUSTED TO GRADE

AT THE LOCATIONS SHOWN IN THE DRAWINGS, THE CONTRACTOR SHALL ADJUST EXISTING CLEANOUTS LOCATED WITHIN PAVED AREAS TO FINISHED GRADE AS SHOWN ON THE DETAIL ON SHEET NO. 37.

IN ADDITION TO THE LOCATIONS SHOWN ON THE DRAWINGS, THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO ADJUST EXISTING CLEANOUTS TO GRADE THAT MAY BE ENCOUNTERED DURING THE REMOVAL AND REPLACEMENT OF THE SIDEWALK:

ITEM 611 – DRAINAGE STRUCTURE, MISC.: SEWER CLEANOUT ADJUSTED TO GRADE 5 EACH

ITEM SPECIAL – MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE, AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE PRIOR APPROVAL OF THE ENGINEER.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE, AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT NO ADDITIONAL COST TO THE PROJECT.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

SPECIAL, MISCELLANEOUS METAL 2000 POUNDS

TRAFFIC SIGNAL

SEE SHEET NO. 39 FOR TRAFFIC SIGNAL GENERAL NOTES.

WATER WORK

ITEM 604 – MANHOLE ADJUSTED TO GRADE, AS PER PLAN (WATER)

THE CONTRACTOR SHALL ADJUST THE EXISTING WATER MANHOLE FRAME AND COVER TO FIT THE REVISED GRADE BY EXCAVATING AROUND THE FRAME AND RAISING OR LOWERING THE FRAME AND COVER BY ADDING OR REMOVING THE EXISTING BRICKS AND MORTAR. USE OF ADJUSTING RINGS SHALL NOT BE PERMITTED. IF REQUIRED BY THE ENGINEER, NEW FRAMES AND COVERS WILL BE PAID FOR UNDER "ITEM SPECIAL – MISCELLANEOUS METAL WORK."

THE WORK INCLUDED IN THIS ITEM SHALL BE PAID FOR UNDER THE UNIT PRICE BID FOR ITEM 604, MANHOLE ADJUSTED TO GRADE, AS PER PLAN (WATER), WHICH PRICE AND PAYMENT SHALL CONSTITUTE FULL COMPENSATION FOR ADJUSTING THE MANHOLE FRAME AND COVER, EXCAVATION, TAMPING EARTH, BRICK AND MASONRY MATERIAL, AND FOR ALL LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM.

ITEM SPECIAL – SHORTEN AND ADJUST HYDRANT TO GRADE

THIS WORK SHALL INCLUDE THE SHORTENING AND VERTICAL ADJUSTMENT OF EXISTING FIRE HYDRANTS, AS SHOWN ON CLEVELAND WATER DEPARTMENT STANDARD DRAWING NO. STD-H02 (ON SHEET NO. 37), AND IN CONFORMANCE WITH THE MOST CURRENT VERSION OF THE CLEVELAND DIVISION OF WATER NOTES (FOUND AT www.clevelandwater.com).

ENVIRONMENTAL

ENVIRONMENTAL COMMITMENTS

THE FOLLOWING ENVIRONMENTAL COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT AND MUST BE IMPLEMENTED DURING THE CONSTRUCTION:

1. A PETROLEUM CONTAMINATED SOIL PLAN NOTE HAS BEEN DEVELOPED IN THE CONSTRUCTION PLANS FOR ANY DEEP EXCAVATION ACTIVITIES IN THE RIGHT-OF-WAY IN FRONT OF 12451 CEDAR ROAD. PLEASE REFER TO ITEM SPECIAL RELATED WORK INVOLVING CONTAMINATED SOIL.
2. THE CONTRACTOR WILL BE REQUIRED TO CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH THE CITY CLEVELAND HEIGHTS AND ODOT.

ENDANGERED BAT HABITAT REMOVAL

THE PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

WORK INVOLVING PETROLEUM CONTAMINATED SOIL

ENVIRONMENTAL STUDIES HAVE SHOWN THAT THERE IS THE POTENTIAL FOR ENCOUNTERING PETROLEUM CONTAMINATED SOILS AT THE FOLLOWING PROPERTIES.

1. 12451 CEDAR ROAD

THESE PROPERTIES WERE TESTED AND MAY CONTAIN PETROLEUM SUBSTANCES. THESE SUBSTANCES MAY BE PRESENT WITHIN THE EXCAVATION LIMITS FOR PROPOSED UNDERDRAINS, PROPOSED STORM SEWER, OTHER UTILITIES AND/OR ROADWAY CONSTRUCT

THE LOCATIONS OF THE PETROLEUM CONTAMINATED SOILS ARE ADJACENT TO THE PROPERTIES MENTIONED ABOVE WITHIN THE RIGHT OF WAY. THE CONTRACTOR SHALL MANAGE THESE MATERIALS ACCORDING TO THE FOLLOWING NOTES. THE ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK. ALL EXCAVATIONS WITHIN THE AFOREMENTIONED LIMITS SHALL BE PAID FOR UNDER THE ORIGINAL PLAN BID ITEMS.

ALL MATERIALS EXCAVATED BY THE CONTRACTOR IN THE IDENTIFIED AREAS MAY BE STOCKPILED IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE EXCAVATED MATERIAL IN A LINED AND COVERED ROLL OFF BOX. THE ENGINEER MAY PERMIT TEMPORARY STORAGE OF THE EXCAVATED MATERIAL ON AN IMPERMEABLE MEMBRANE. THE MEMBRANE SHALL BE

SURROUNDED BY BALES OF STRAW TO PREVENT THE SUSPECTED SOILS FROM COMING IN CONTACT WITH PRECIPITATION AND/OR SURFACE RUNOFF. THE ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED CONTAMINATED MATERIAL INTO TRUCKS. THE MATERIAL SHALL BE PROPERLY TESTED, TRANSPORTED, AND DISPOSED OF IN A LICENSED (BY THE LOCAL HEALTH DEPARTMENT) AND PERMITTED (BY THE OHIO ENVIRONMENTAL PROTECTION AGENCY) SOLID WASTE FACILITY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS AND TO TRANSPORT THE MATERIALS TO A LICENSED AND PERMITTED SOLID WASTE DISPOSAL FACILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING ANY ADDITIONAL SAMPLING AND ANALYSIS OF THIS MATERIAL.

THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PROPERLY HANDLE, STORE (IF NECESSARY), TEST FOR DISPOSAL, TRANSPORT, AND DISPOSE OF REGULATED MATERIALS, INCLUDING ANY REQUIRED PERMITS, APPROVALS, OR FEES WITHIN THE LIMITS IDENTIFIED ABOVE. PAYMENT FOR SUCH WORK SHALL BE MADE AT THE CONTRACT PRICE PER TON. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTE ABOVE:

ITEM SPECIAL – WORK INVOLVING PETROLEUM CONTAMINATED SOIL 500 TONS

MISCELLANEOUS

ITEM SPECIAL – AS-BUILT CONSTRUCTION PLANS

AT THE CONCLUSION OF THE ALL CONSTRUCTION ACTIVITIES AND BEFORE THE FINAL PAYMENT IS GRANTED, THE CONTRACTOR SHALL PROVIDE "RECORD" DRAWINGS OF THE FINAL CONDITIONS CONSTRUCTED, SHOWING LOCATIONS, ELEVATIONS, CONDUIT INVERTS, CHANGES THAT WERE MADE TO THE DESIGN PLANS FEATURES ON ROADWAYS BOTH HORIZONTAL AND VERTICAL, CHANGES TO SUB-SUMMARIES AND GENERAL SUMMARIES AND ALL OTHER PERTINENT INFORMATION TO THE CONSTRUCTION MANAGER DESIGNATED BY THE CITY OF CLEVELAND HEIGHTS.

THE SET OF RECORD DRAWINGS SHALL BE ON ELECTRONIC FILE MEDIA (PDF FILE DRAWINGS) BY INCORPORATING THE INFORMATION ON THE DESIGN CAD FILES PROVIDED BY THE CITY. THE INSPECTOR SHALL SIGN THE SHEETS VERIFYING THAT ALL CHANGES HAVE BEEN SHOWN ON THE "AS-BUILT" DRAWINGS. THE INSPECTOR IS NOT RESPONSIBLE FOR THE ACCURACY OF THE LOCATIONS OR ELEVATIONS. ALL ELEVATIONS AND LOCATIONS ARE TO BE CERTIFIED BY THE REGISTERED SURVEYOR, LICENSED TO PRACTICE IN THE STATE OF OHIO.

PAYMENT FOR THIS WORK WILL BE MADE AT THE LUMP SUM BID FOR ITEM SPECIAL – AS-BUILT CONSTRUCTION PLANS AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTALS NECESSARY TO PERFORM THE REQUIRED WORK.

ITEM SPECIAL – MISC.: PRECONSTRUCTION VIDEO DOCUMENTATION

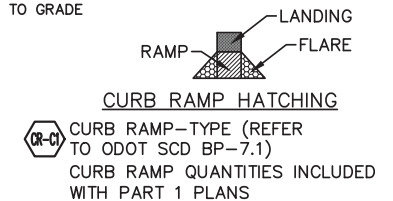
PRIOR TO THE DELIVERY OF ANY MATERIALS OR SUPPLIES TO THE SITE OF ANY WORK OR TO THE BEGINNING OF ANY OF THE CONSTRUCTION WORK, THE CONTRACTOR SHALL PROVIDE PRECONSTRUCTION AUDIO-VIDEO TAPING FOR THE PURPOSE OF ESTABLISHING THE SURFACE CONDITIONS EXISTING IN ALL AREAS AFFECTED AND "DIRECTLY ADJACENT TO" BY THE WORK. "DIRECTLY ADJACENT TO" IS DEFINED AS WITHIN 15 FEET OF THE RIGHT OF WAY.

VIDEO TAPING SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, DRIVEWAYS, DRIVEWAY APRONS, PARKING LOTS THAT ARE ADJACENT TO THE PROJECT, BUILDING FASCIA'S, BUSINESS BUILDING INGRESS AND EGRESS POINTS, ACCESS DOORS, DRIVEWAY ACCESS, BILLBOARDS, SIGNS, AND OTHER MISCELLANEOUS ITEMS IN AND DIRECTLY ADJACENT TO THE RIGHT OF WAY SHALL BE DOCUMENTED FOR CONTRACT ADMINISTRATION.

TWO PASSES IN EACH DIRECTION ARE REQUIRED TO COMPLETE THIS ACTIVITY; ONE FOCUSING ON RIGHT OF WAY AND ONE FOCUSING ON PRIVATE PROPERTY. THE PRECONSTRUCTION VIDEOGRAPHY SHALL BE PERFORMED BY AN INDEPENDENT COMPANY HAVING HAD PREVIOUS EXPERIENCE IN SIMILAR TYPE OF WORK. THE CONTRACTOR SHALL PROVIDE ONE COPY OF THE PRECONSTRUCTION VIDEOGRAPHY TO THE ODOT AND ONE COPY FOR THEMSELVES. THE FULL COST OF FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT TO PERFORM THE REQUIRED AUDIO-VIDEO TAPING AS DESCRIBED HEREIN SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM SPECIAL – PRECONSTRUCTION VIDEO DOCUMENTATION, AS PER PLAN.

LEGEND

- DRIVEWAY REPLACEMENT
- PROPOSED DRAINAGE
- EXISTING WATER CURB STOP/METER/VALVE ADJUSTED TO GRADE
- EXISTING TRAFFIC PULL BOX ADJUSTED TO GRADE
- EXISTING MANHOLE ADJUSTED TO GRADE
- EXISTING CLEANOUT ADJUSTED TO GRADE (SEE DETAIL SHEET NO. 37)
- TREE REMOVAL
- CONCRETE SIDEWALK/DRIVEWAY APRON REMOVAL
- FULL DEPTH PAVEMENT REMOVAL
- MULTI-PURPOSE PATH
- COMMERCIAL DRIVEWAY (SEE DETAIL, SHEET NO. 33)



- EXIST. STREETScape ITEMS:**
- PRECAST CONCRETE PLANTER
 - PRECAST CONCRETE TRASH RECEPTACLE
 - METAL TRASH RECEPTACLE
 - BICYCLE RACK
 - TREE PIT ELECTRIC OUTLET

MAINTENANCE OF TRAFFIC

FLAGGING REQUIREMENTS

WHERE NECESSARY, OR AS ORDERED BY THE ENGINEER, THE CONTRACTOR SHALL PROVIDE A FLAGGER WITH APPROPRIATE SIGNING WHENEVER OPERATIONS INTERFERE WITH TRAFFIC. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO: DELIVERY/REMOVAL OF MATERIALS. LIFTING OPERATIONS, DIRECTING DRIVEWAYS AND CROSS STREET TRAFFIC, ONE-LANE CROSS STREET OPERATIONS AND OTHER ACTIVITIES. THE SOLE DUTY OF SUCH FLAGGERS SHALL BE TO DIRECT TRAFFIC PROPERLY AT ALL TIMES. THEY SHALL NOT BE USED TO MOVE TEMPORARY SIGNS OR ASSIST OTHER WORK AND SHALL BE POSITIONED APPROPRIATELY IN ADVANCE OF THE WORK. FLAGGERS SHALL BE EQUIPPED WITH TWO-WAY RADIOS. IN ACCORDANCE WITH SUBSECTION 301.9 (C) 4 OF THE MUTCD, WHERE ONE -LANE ROADWAY SECTIONS EXCEED 150' IN LENGTH, OR WHERE IN THE OPINION OF THE ENGINEER THE USAGE OF SUCH RADIOS IS NECESSARY TO CONTROL TRAFFIC. SUCH RADIOS SHALL HAVE SUFFICIENT TRANSMITTING POWER TO REACH ALL POINTS WITHIN THE LENGTH OF THE ONE -LANE ROAD OPERATION. THE COST OF SUCH FLAGGING SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC (IN PART 1).

MAINTENANCE OF PEDESTRIAN TRAFFIC

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ANY BUILDING, RTA BUS STOP OR PROPERTY WHERE WALK IS BEING REPLACED OR REMOVED IN FRONT OF A DOORWAY. THIS MAY BE DONE BY USING SHEETS OF PLYWOOD, STEEL PLATING OR ANY OTHER MEANS ACCEPTABLE TO ENGINEER. IF TWO OR MORE ENTRANCES EXIST INTO A BUILDING, THE CONTRACTOR SHALL REPLACE WALK IN FRONT OF ONLY ONE ENTRANCE AT A TIME. CONES, BARRICADES OR TEMPORARY FENCING SHALL BE ERECTED WHERE NECESSARY TO PROTECT PEDESTRIANS FROM HAZARDS, AS DIRECTED BY THE ENGINEER. THE COST OF MATERIALS AND LABOR NECESSARY TO ERECT CONES, BARRICADES OR TEMPORARY FENCING AND TO PLACE PLYWOOD OR STEEL PLATING SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC. THE CONTRACTOR MAY CHOOSE TO MAINTAIN PEDESTRIAN ACCESS WITH THE USE OF ITEM 608 - TEMPORARY ASPHALT CONCRETE WALK, AS PER PLAN. THE THICKNESS SHALL BE 2" AND PAYMENT WILL BE PER SQUARE FOOT. PAYMENT SHALL INCLUDE THE PLACEMENT AND REMOVAL OF THE TEMPORARY ASPHALT CONCRETE WALK, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY. THE AMOUNT OF MATERIAL AND LOCATIONS WHERE USED SHALL BE RECORDED AS USED AND PAYMENT WILL BE BASED ON FINAL MEASUREMENTS.

ITEM 608 - TEMPORARY ASPHALT CONCRETE WALK, AS PER PLAN 1,000 SQ. FT.

THE CONTRACTOR SHALL TAKE ADEQUATE PROVISIONS (I.E. TEMPORARY WALKWAYS, DETOURS, ETC.) FOR THE SAFETY OF PEDESTRIANS WITHIN THE WORK ZONE. AT EXISTING SIDEWALK OR CROSSWALK LOCATIONS WHERE PEDESTRIAN TRAFFIC CAN NOT BE MAINTAINED, PROVIDE PEDESTRIAN TRAFFIC CONTROL IN ACCORDANCE WITH THE OMUTCD, CURRENT EDITION, LATEST REVISION, FIGURES 6H-28 (SIDEWALK DETOUR OR DIVERSION, TA-28) AND 6H-29 (CROSSWALK CLOSURES AND PEDESTRIAN DETOURS, TA-29). THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO THE FRONT DOORS OF ALL STORES, OFFICES, RTA BUS STOPS, ETC., AS WELL AS ACCESS TO ALL RESIDENCES, DURING HIS/HER CONSTRUCTION, WITH TEMPORARY CONCRETE OR ASPHALT PAVEMENTS OR PEDESTRIAN BRIDGES. THE PEDESTRIAN BRIDGES ARE DETAILED ON THIS SHEET. EXISTING CONCRETE OR ASPHALT PAVEMENTS (PRIOR TO DEMOLITION) MAY BE USED FOR THE PURPOSES OF REROUTING PEDESTRIAN TRAFFIC. THESE PROVISIONS SHALL BE ADHERED TO TO MAINTAIN ACCESS TO BUILDING ENTRANCES AT ALL TIMES. TEMPORARY ACCESS TO ALL BUILDING ENTRANCES SHALL BE PROVIDED IMMEDIATELY UPON REMOVAL OF EXISTING PAVEMENT. IF A PORTION OF THE PEDESTRIAN WAY IS REROUTED DUE TO CONSTRUCTION, THE PATH OF TRAVEL SHALL BE CLEARLY DEFINED. THE CONTRACTOR SHALL SUBMIT A PEDESTRIAN ACCESS PLAN (INDICATING ADA-COMPLIANT PEDESTRIAN ACCESS, LUMINATION, REROUTING AND NOTIFICATION) TO THE ENGINEER FOR REVIEW AND APPROVAL. "SIDEWALK CLOSED" SIGNS ON THE MAINTENANCE OF TRAFFIC PLANS REFER TO THE EXISTING SIDEWALKS AND DO NOT AUTHORIZE THE CONTRACTOR TO ELIMINATE PEDESTRIAN ACCESS TO ANY BUSINESSES OR RESIDENCES.

THE COST OF THIS WORK SHALL BE INCLUDED UNDER THE LUMP SUM BID FOR ITEM 614 -MAINTAINING TRAFFIC (IN PART 1).

THE CONTRACTOR SHALL NOTE THAT SEVERAL EVENTS, INCLUDING THE SUMMER FESTIVAL AND OUTDOOR CONCERTS, MAY TAKE PLACE DURING THE TIME THAT CONSTRUCTION IS OCCURRING. THE CONTRACTOR SHALL NOT HAVE CONSTRUCTION ACTIVITIES DURING THESE EVENTS, AND SHALL SECURE THE WORK SITE AS NEEDED FOR THE DURATION OF THESE EVENTS. THE CONTRACTOR SHALL COORDINATE THIS ITEM WITH THE CEDAR FAIRMOUNT SPECIAL IMPROVEMENT DISTRICT AT 216-791-3172.

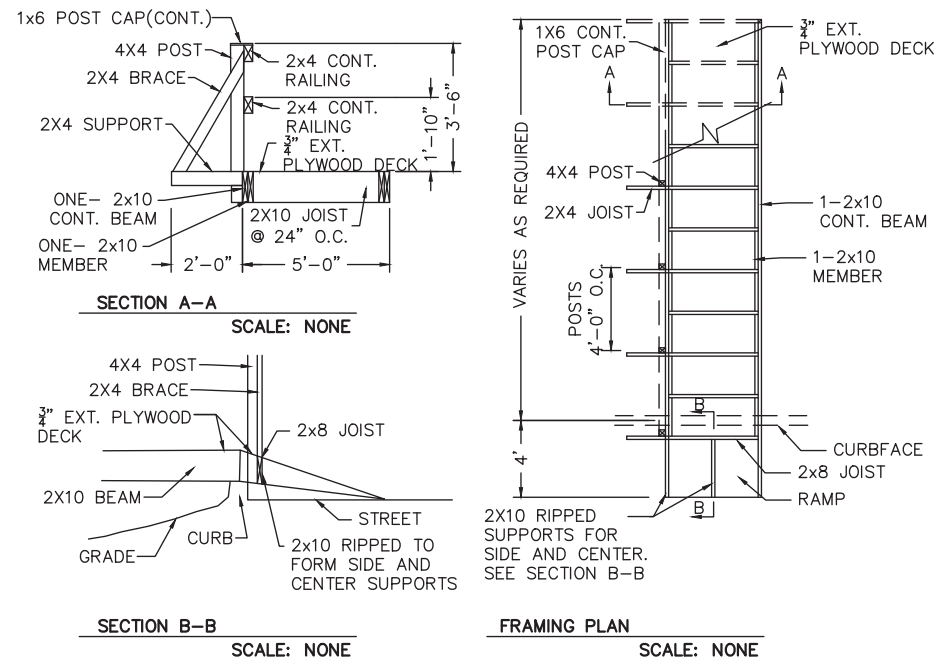
PEDESTRIAN ACCESS

DURING TEMPORARY CLOSURE OR RELOCATION OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES, TEMPORARY FACILITIES SHALL BE PROVIDED. THESE FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY. PEDESTRIAN SIDEWALK CLOSURES, CROSSWALK CLOSURES AND PEDESTRIAN DETOURS OR BYPASSES SHALL BE INSTALLED ACCORDING TO OMUTCD TYPICAL APPLICATIONS TA-28 AND TA-29 AND ODOT STD DWG MT-110-10.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIAL SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC, (IN PART 1), UNLESS SEPARATELY ITEMIZED IN THE PLAN.

TEMPORARY FACILITIES & CONSTRUCTION IN THE PEDESTRIAN ACCESS ROUTE

AN ALTERNATE PEDESTRIAN CIRCULATION PATH SHALL BE PROVIDED WHENEVER THE EXISTING PEDESTRIAN ACCESS ROUTE IN THE PUBLIC RIGHT-OF-WAY IS BLOCKED BY CONSTRUCTION, ALTERATION AND MAINTENANCE OR OTHER TEMPORARY CONDITIONS. THE ALTERNATE PEDESTRIAN CIRCULATION PATH SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACCESSIBILITY GUIDELINES (ADAAG) AND SIGNAGE SHALL BE INSTALLED IN ACCORDANCE WITH THE MUTCD.



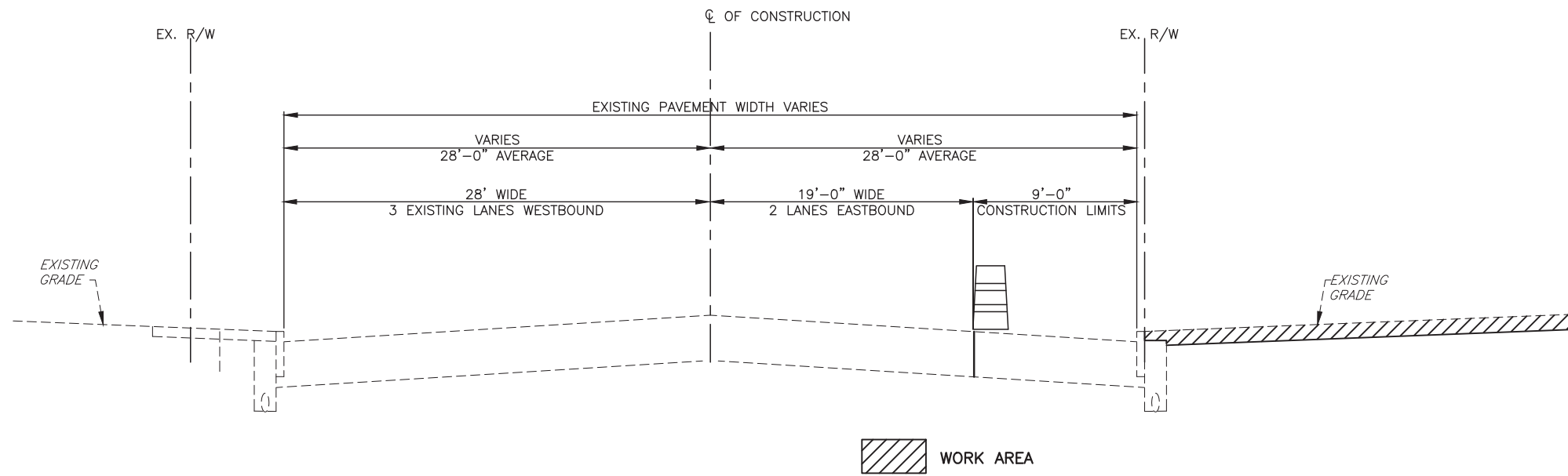
- NOTES:
1. CONTRACTOR SHALL ESTABLISH A 5' WIDE PEDESTRIAN ZONE, INDICATED BY BARRICADES AND LIGHTS ALONG THE PORTION OF THE SITE UNDER CONSTRUCTION TO PROVIDE ACCESS TO TEMPORARY WOOD WALKWAYS.
 2. RAMP AT BUILDING ENTRANCE MUST BE ADJUSTED TO ACCOMMODATE VARYING ENTRANCE CONDITIONS.

PEDESTRIAN TEMPORARY WALKWAYS (OR EQUAL)
INCLUDED IN ITEM 614 - MAINTAINING TRAFFIC (IN PART 1)

CALCULATED
DRK
CHECKED
CJB

MAINTENANCE OF TRAFFIC MISC

CUY - CEDAR-FAIRMOUNT



CEDAR GLEN PARKWAY - PHASE 1
 PER MT-95.31
 AMBLESIDE DRIVE TO CEDAR ROAD
 STA 33+28.42 TO 50+00.00
 DAILY CLOSURE AS NEEDED:
 NO RUSH HOUR CLOSURES

CALCULATED
 DRK
 CHECKED
 CJB

MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS

CUY - CEDAR-FAIRMOUNT

SHEET NUMBER																			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	
4	7	8	9	10	15	16	17	18	19	20	21	22	23	24	34	39	40	41							
																							ROADWAY		
	LS																			201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	7
												110		212						202	23001	322	SQ YD	PAVEMENT REMOVED, AS PER PLAN	8
	750				235	2033					2932	2896	7399	10607						202	30001	26852	SQ FT	WALK REMOVED, AS PER PLAN	8
	500										62	624	564	896						202	32001	2646	FT	CURB REMOVED, AS PER PLAN	8
													1							202	58000	1	EACH	MANHOLE REMOVED	
								1					1		1					202	58100	3	EACH	CATCH BASIN REMOVED	
				200																SPECIAL	20270100	200	FT	PIPE CLEANOUT, 24" AND UNDER	
	LS																			202	98001	LS		REMOVAL, MISC.: DRAINAGE CHANNEL	8
							1	1		1										202	98100	3	EACH	REMOVAL, MISC.: POLE AND POLE FOUNDATION	8
	LS																			203	98500	LS		ROADWAY, MISC.: GRADING	8
2024																				204	10000	2024	SY	SUBGRADE COMPACTION	
										173										607	98000	173	FT	FENCE, MISC.: WOOD FENCE	RM-5.2
						564														608	13000	564	SF	6" CONCRETE WALK	8
												229								608	13001	229	SF	6" CONCRETE WALK, AS PER PLAN	SPEC BOOK
													2							608	49001	2	EACH	CURB RAMP, AS PER PLAN	SPEC BOOK
										40										608	53020	40	SF	DETECTABLE WARNING	
				LS																SPECIAL	69091000	LS		AS-BUILT CONSTRUCTION PLANS	9
		5																		SPECIAL	69098000	5	EACH	SPECIAL-MISC.: FILLING SIDEWALK VAULT	8
			LS																	SPECIAL	69098400	LS		SPECIAL-MISC.: PRECONSTRUCTION VIDEO DOCUMENTATION	9
																							EROSION CONTROL		
				24																616	10000	24	M GAL	WATER	
				3																616	20000	3	TON	CALCIUM CHLORIDE	
				478																659	00300	478	CY	TOPSOIL	
				2700																659	10000	2700	SY	SEEDING AND MULCHING	
				135																659	14000	135	SY	REPAIR SEEDING AND MULCHING	
				135																659	15000	135	SY	INTER-SEEDING	
				0.6																659	20000	0.6	TON	COMMERCIAL FERTILIZER	
				0.9																659	31000	0.9	ACRE	LIME	
				12																659	35000	12	MGAL	WATER	
				6																659	40000	6	MSF	MOWING	
				1600																660	25000	1600	SY	SODDING, STAKED	
				LS																832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
				10000																832	30000	10000	EACH	EROSION CONTROL	
																							ENVIRONMENTAL		
										500										SPECIAL	69065016	500	TON	WORK INVOLVING PETROLEUM CONTAMINATED SOIL	9

GENERAL SUMMARY

CUY - CEDAR-FAIRMOUNT

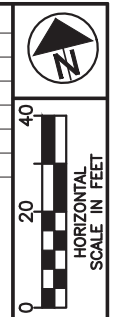
SHEET NUMBER																			ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.													
4	7	8	9	10	15	16	17	18	19	20	21	22	23	24	34	39	40	41																			
																							TRAFFIC SIGNAL														
																			15	49	64	FT	CONDUIT, 2", 725.051, AS PER PLAN	39													
																				2	2	EACH	PULL BOX REMOVED AND REPLACED, AS PER PLAN	39													
																				2	2	EACH	PULL BOX, MISC.: 13"x 24"	39													
																			6	1	7	EACH	PULL BOX, MISC.: PULL BOX ADJUSTED TO GRADE	39													
																			1	1	2	EACH	GROUND ROD, AS PER PLAN	39													
																			15	49	64	FT	PLASTIC CAUTION TAPE, AS PER PLAN	39													
																				3	3	EACH	PEDESTRIAN SIGNAL HEAD (LED), (COUNTDOWN), TYPE D2														
																				3	3	EACH	COVERING OF PEDESTRIAN SIGNAL HEAD														
																			2	2	4	EACH	PEDESTRIAN PUSHBUTTON														
																				130	130	FEET	MESSENGER WIRE, 3 STRAND, 1/4" DIAMETER WITH ACCESSORIES														
																			68	425	493	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG														
																				1	1	EACH	PEDESTAL FOUNDATION														
																			62	179	241	FT	LOOP DETECTOR LEAD-IN CABLE														
																				2	2	EACH	CONDUIT RISER, 2" DIAMETER														
																				1	1	EACH	PEDESTAL, 8', TRANSFORMER BASE														
																				1	1	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: AMBLESIDE AVENUE	39													
																			1		1	EACH	REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: SURREY AVENUE	34													
																			2		2	EACH	REUSE OF TRAFFIC CONTROL ITEM: PEDESTAL														
																			2		2	EACH	REUSE OF PEDESTRIAN SIGNAL HEAD														
																								LANDSCAPING/STREETSCAPING													
																			(FOR REMAINDER OF LANDSCAPING/STREETSCAPING ITEMS SEE SHEET NO. 42)																		
																			18	9	27	EACH	DECIDUOUS SHRUB, 15" HEIGHT, Double Play Big Bang Spiraera, #3 CONT														
																								MAINTENANCE OF TRAFFIC													
																			608	21200	1000	SF	TEMPORARY ASPHALT CONCRETE WALK														

CALCULATED
DRK
CHECKED
CJB

GENERAL SUMMARY

CUY - CEDAR-FAIRMOUNT

CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
25	DRAINAGE DETAILS
40	SIGNALIZATION PLAN



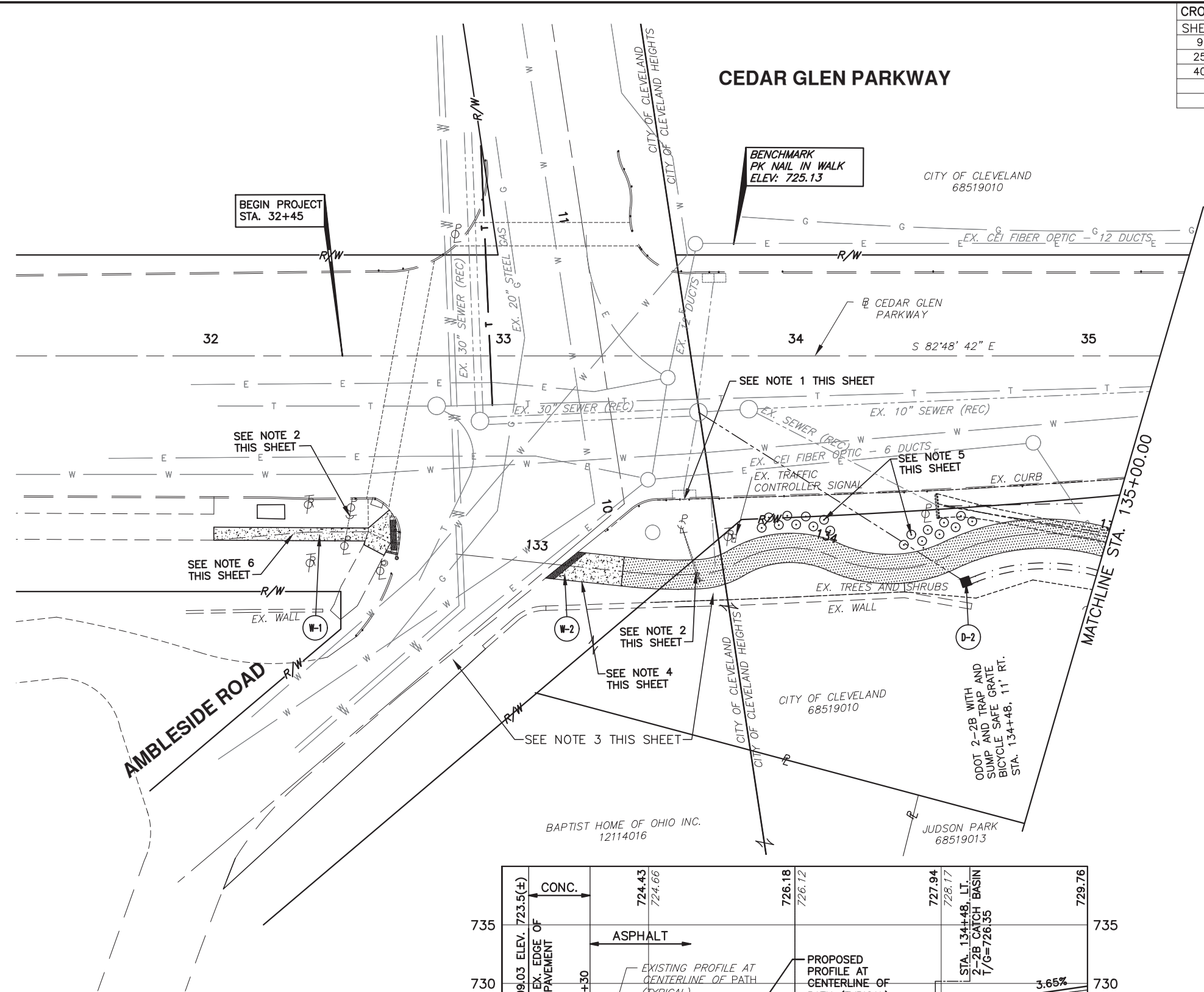
CALCULATED
DRK
CHECKED
CJB

MULTI-PURPOSE PATH PLAN SHEET
STA 131+00.00 TO 135+00.00

CUY - CEDAR - FAIRMOUNT

15
65

CEDAR GLEN PARKWAY



NOTES:

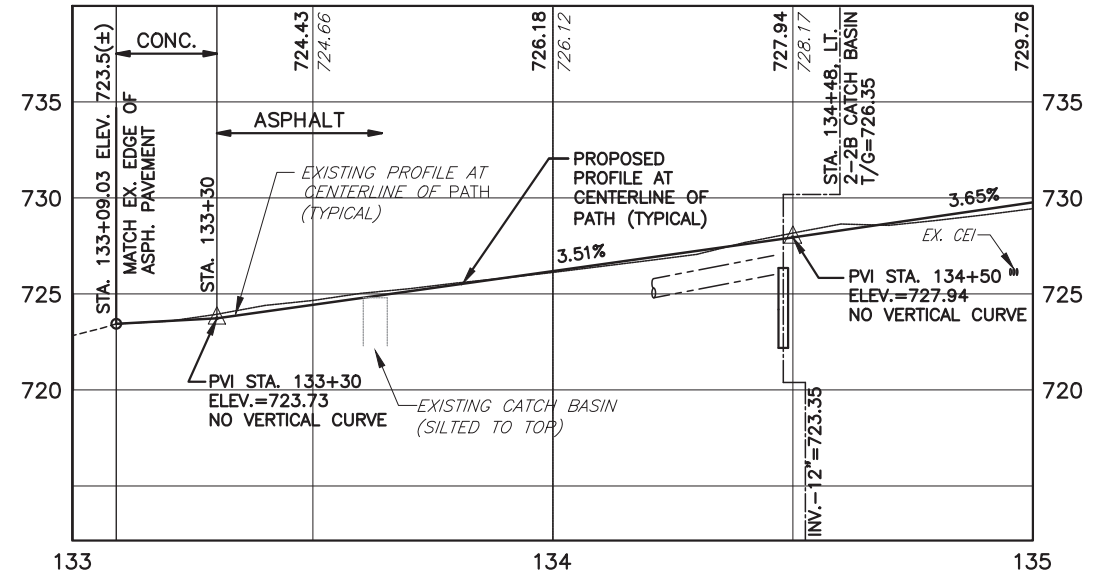
- CONTRACTOR IS TO CLEAN OUT THE EXISTING CATCH BASIN AND VERIFY ITS DEPTH PRIOR TO ORDERING ANY STRUCTURES DRAINING INTO IT.
- EXISTING UTILITY POLE GUY ANCHORS AND WIRES TO BE RELOCATED BY OTHERS.
- CONTRACTOR IS TO CLEAR ALL GROWTH, TREES (INCLUDING OVERHANGING BRANCHES), SHRUBS, AND ALL OTHER ITEMS WITHIN 10 FEET OF THE AMBLESIDE ROAD EDGE OF PAVEMENT AND TO THE FACE OF THE EXISTING WALL ALONG THE ALL-PURPOSE PATH.
- FROM AMBLESIDE ROAD TO STA. 133+30, THE MULTI-PURPOSE PATH SHALL BE ITEM 608, 6" CONCRETE WALK. INSTALL DETECTABLE WARNING (CONFORMING TO THE "DETECTABLE WARNINGS NOTE" ON SCD BP-7.1) ACROSS THE WIDTH OF MULTI-PURPOSE PATH.
- FURNISH AND PLANT (18) EACH ODOT ITEM 661 - DECIDUOUS SHRUBS, "DOUBLE PLAY BIG BANG SPIRAEA" (*SPIRAEA JAPONICA "TRACY"*), 15" HIGH, 3' O.C., UNLESS OTHERWISE DIRECTED BY THE CITY OF CLEVELAND. PLANT SHRUBS AS PER THE "SHRUB PLANTING DETAIL" ON SHEET 63.
- THE CONTRACTOR SHALL WIDEN THE EXISTING CONCRETE SIDEWALK WEST OF AMBLESIDE ROAD TO A MINIMUM WIDTH OF 14.5 FEET (MEASURED FROM THE BACK OF CURB) AND PROVIDE A MINIMUM 10 FOOT WIDE CURB RAMP. INSTALL DETECTABLE WARNING (CONFORMING TO THE "DETECTABLE WARNINGS NOTE" ON SCD BP-7.1) ACROSS THE WIDTH OF MULTI-PURPOSE PATH.
- SEE SHEET NO. 37 FOR PAVEMENT SEWER TRENCH REPAIR DETAIL

SIDEWALK QUANTITIES

REF NO.	STATION TO STATION	SIDE	202	608	608
			WALK REMOVED AS PER PLAN	CONCRETE WALK	DETECTABLE WARNING
			SQ FT	SQ FT	SQ FT
W-1	131+89 TO 132+53	L/R	235	354	20
W-2	133+04 TO 133+30	L/R		210	20
TOTALS TO GENERAL SUMMARY			253	564	40

DRAINAGE QUANTITIES

REF NO.	STATION TO STATION	SIDE	611	611
			12" CONDUIT, TYPE B	CATCH BASIN, NO. 2-2B, AS PER PLAN (B)
			FT	EACH
D-1	NOT USED			
D-2	133+55 TO 134+48	L/R	108	1
TOTALS TO GENERAL SUMMARY			108	1



CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
18	DRAINAGE QUANTITIES
26	DRAINAGE DETAILS



NOTES:

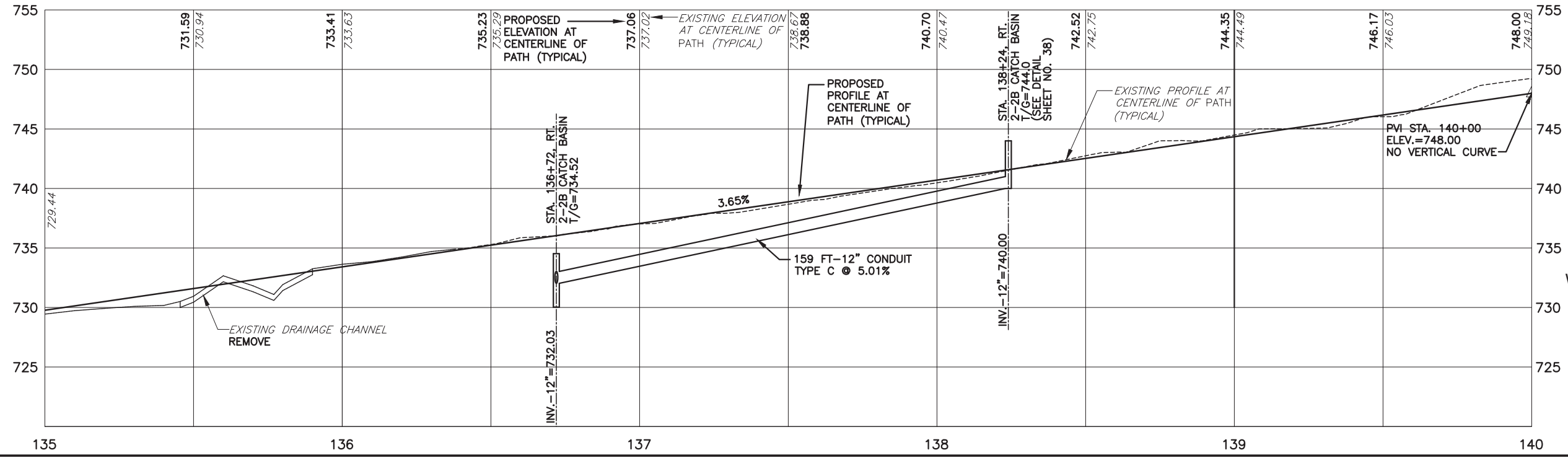
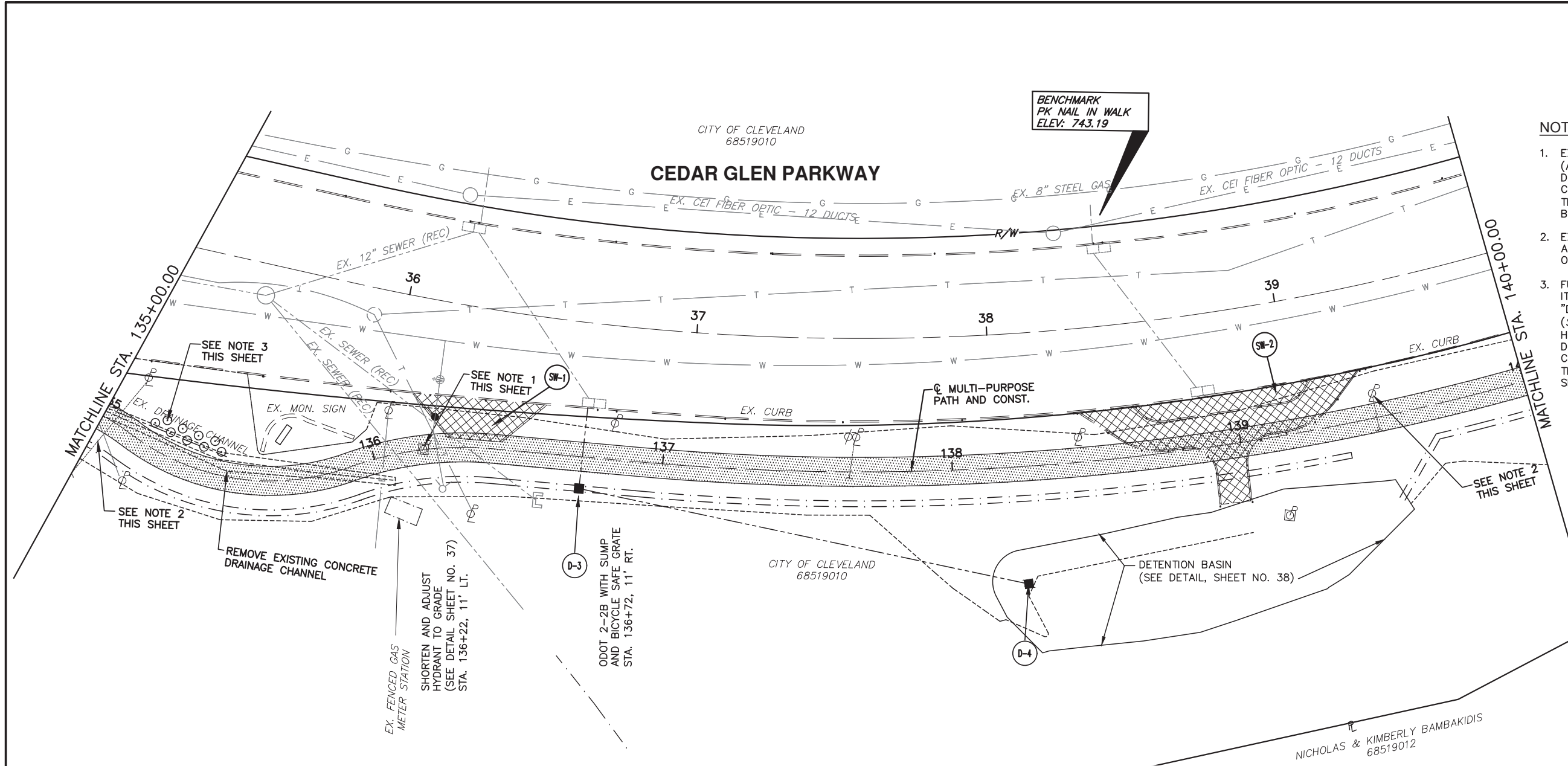
- EXISTING METAL TROLLEY POLE (ABANDONED) TO BE REMOVED AND DISPOSED OF. ABANDON THE EXISTING CONCRETE FOUNDATION BY REMOVING THE CONCRETE TO A MINIMUM OF 1' BELOW THE BIKE PATH SUBGRADE.
- EXISTING UTILITY POLE GUY ANCHORS AND WIRES TO BE RELOCATED BY OTHERS.
- FURNISH AND PLANT (9) EACH ODOT ITEM 661 - DECIDUOUS SHRUBS, "DOUBLE PLAY BIG BANG SPIRAEA" (*SPIRAEA JAPONICA 'TRACY'*), 15" HIGH, 3" O.C., UNLESS OTHERWISE DIRECTED BY THE CITY OF CLEVELAND. PLANT SHRUBS AS PER THE "SHRUB PLANTING DETAIL" ON SHEET 63.

CALCULATED	DRK	CHECKED	CJB
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MULTI-PURPOSE PATH PLAN SHEET
 STA 135+00.00 TO 140+00.00

CUY - CEDAR - FAIRMOUNT

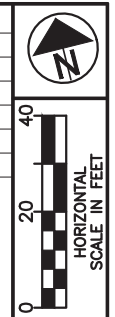
16
65



WALK REMOVAL QUANTITIES

REF NO.	STATION TO STATION	SIDE	202 WALK REMOVED, AS PER PLAN SQ FT
SW-1	136+16 TO 136+58	LT	465
SW-2	138+46 TO 139+45	L/R	1568
TOTAL TO GENERAL SUMMARY			2033

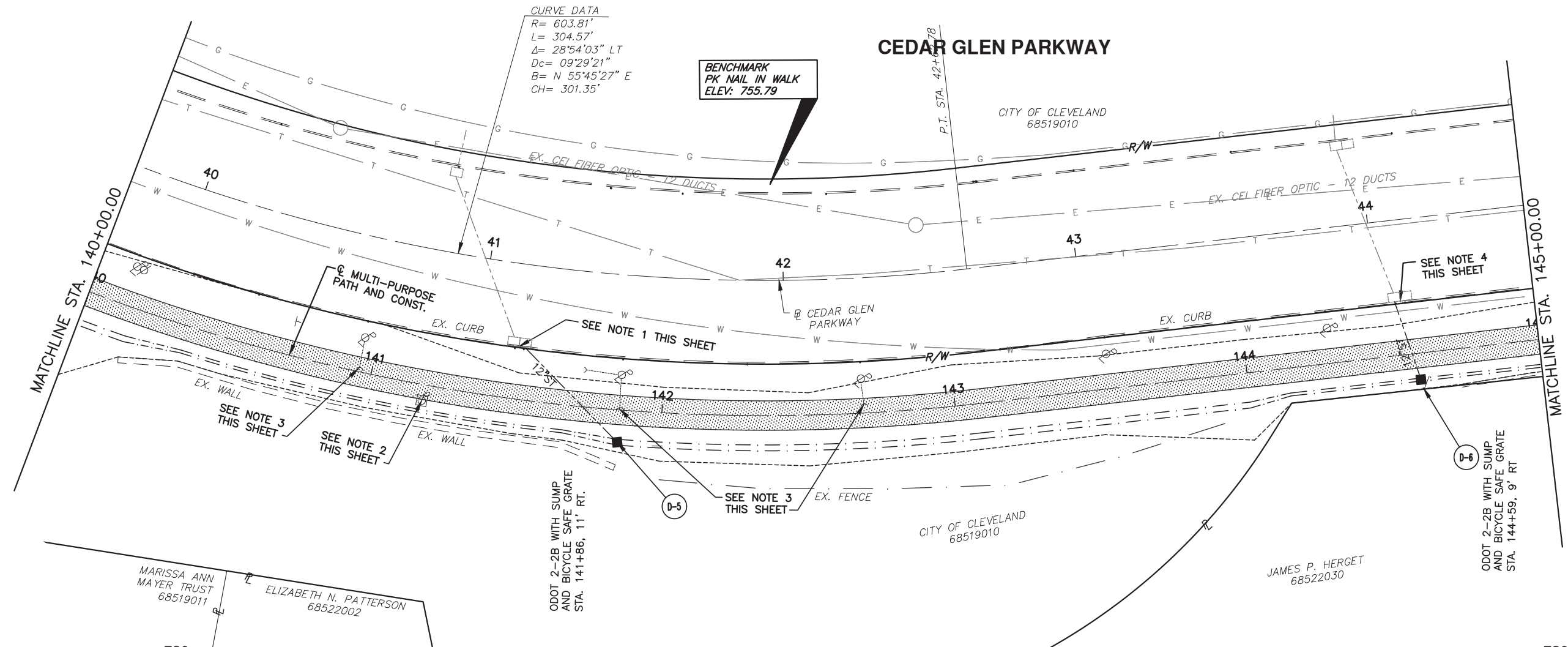
CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
18	DRAINAGE QUANTITIES
29-30	DRAINAGE DETAILS



CALCULATED
DRK
CHECKED
CJB

MULTI-PURPOSE PATH PLAN SHEET
 STA 140+00.00 TO 145+00.00

CUY - CEDAR - FAIRMOUNT

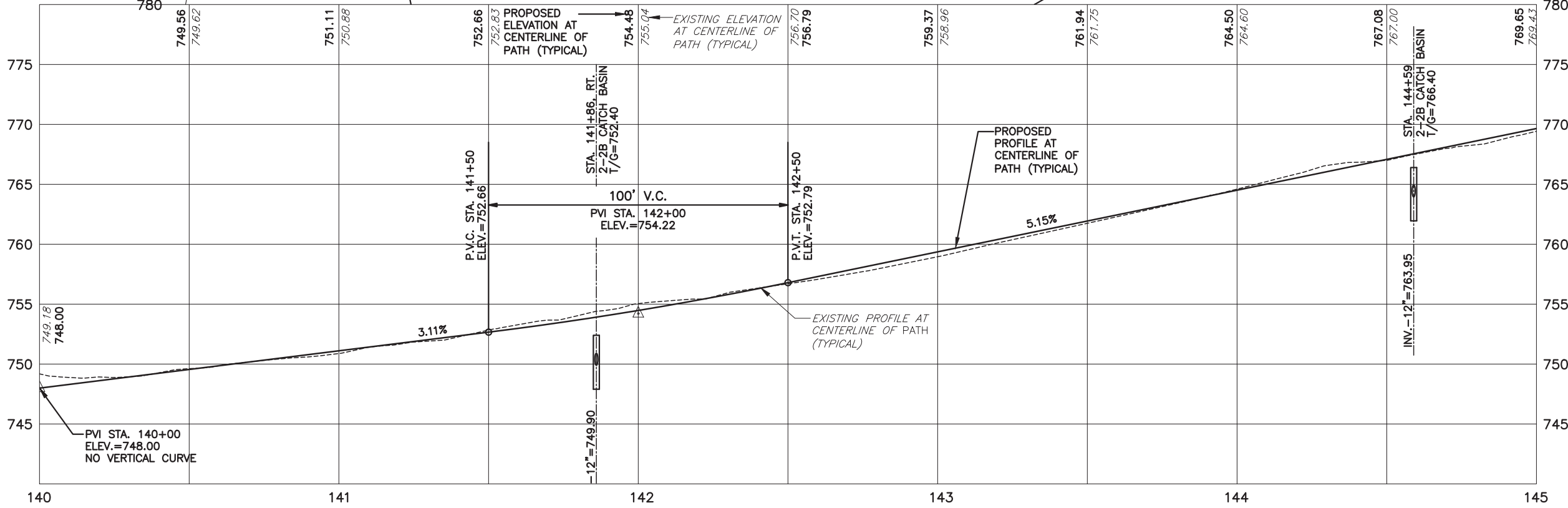


NOTES:

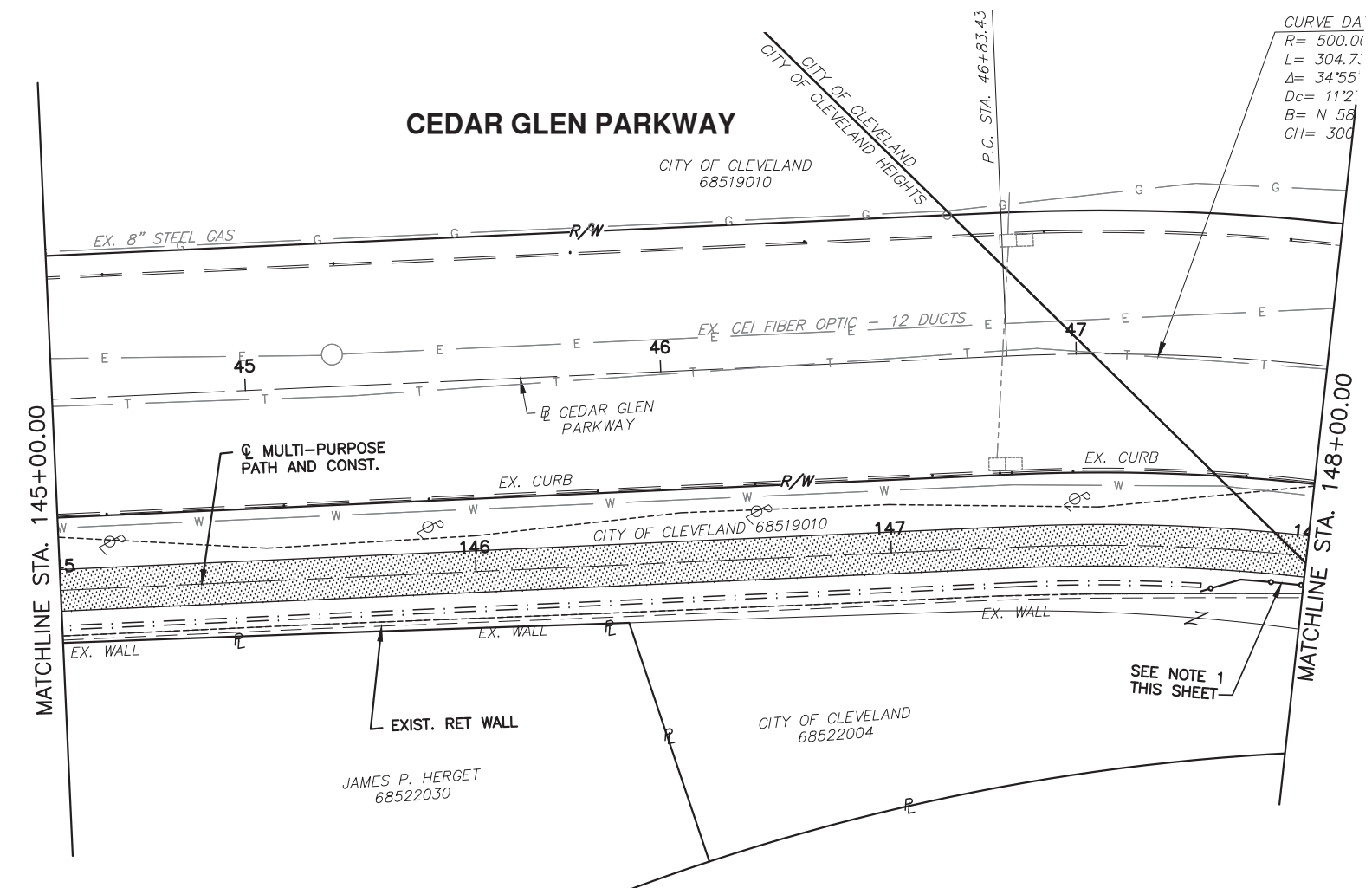
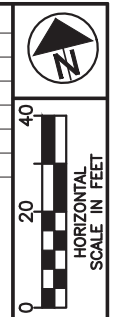
- CONTRACTOR IS TO CLEAN OUT THE EXISTING CATCH BASIN AND VERIFY ITS DEPTH PRIOR TO ORDERING ANY STRUCTURES DRAINING INTO IT.
- EXISTING METAL TROLLEY POLE (ABANDONED) TO BE REMOVED AND DISPOSED OF. ABANDON THE EXISTING CONCRETE FOUNDATION AS PER ITEM 202, REMOVAL, MISC.: POLE FOUNDATION.
- EXISTING UTILITY POLE GUY ANCHORS AND WIRES TO BE RELOCATED BY OTHERS.
- THIS CATCH BASIN IS IN VERY POOR CONDITION. SHOULD IT NOT HAVE BEEN REPLACED PRIOR TO CONSTRUCTION OF THIS PROJECT, THE CONTRACTOR SHALL REMOVE THE EXISTING CATCH BASIN AND REPLACE IT WITH A CUYAHOGA COUNTY TWIN 3C CATCH BASIN (AS PER COUNTY SCD CB-3C2) WITH SUMP AND TRAP (AS PER COUNTY SCD CB-3C S/T).

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED ON SHEET NO. 18 FOR THIS WORK, TO BE USED ONLY AS DIRECTED BY THE ENGINEER:

- ITEM 202, CATCH BASIN REMOVED 1 EACH
- ITEM 611, CATCH BASIN, CUYAHOGA COUNTY TWIN 3C, AS PER PLAN 1 EACH
- ITEM 611, 12" CONDUIT, TYPE B 5 FEET

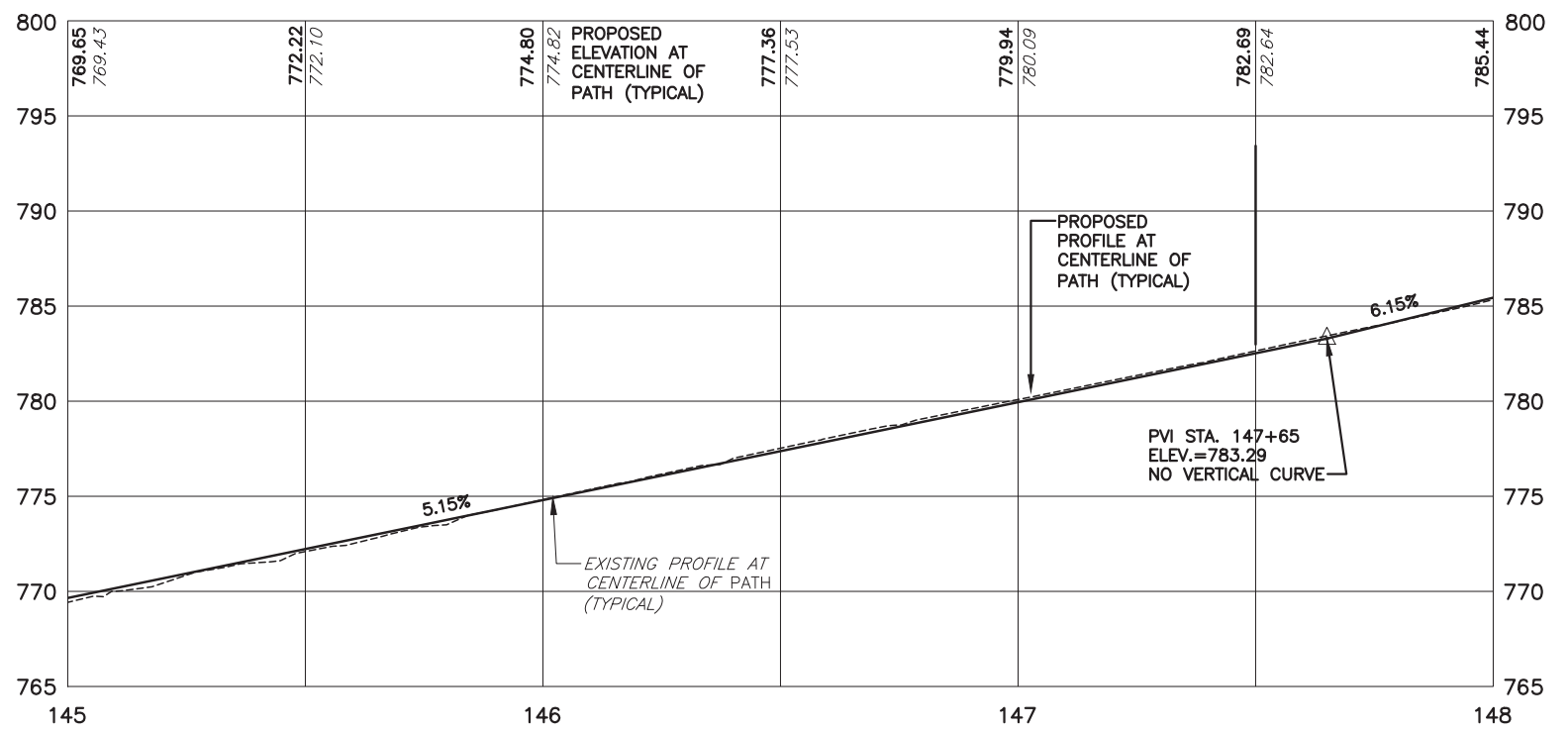


CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND



NOTES:

- INSTALL BIKEWAY RAILING AS SHOWN ON STANDARD CONSTRUCTION DRAWING RM-5.2, AS FOLLOWS:
 STA. 147+75, 10.5' RT.: BEGIN BIKEWAY RAILING
 STA. 147+84.5, 7' RT.: BIKEWAY RAILING ANGLE POINT
 STA. 149+27, 7' RT.: BIKEWAY RAILING ANGLE POINT
 STA. 149+45, 17' RT.: END BIKEWAY RAILING

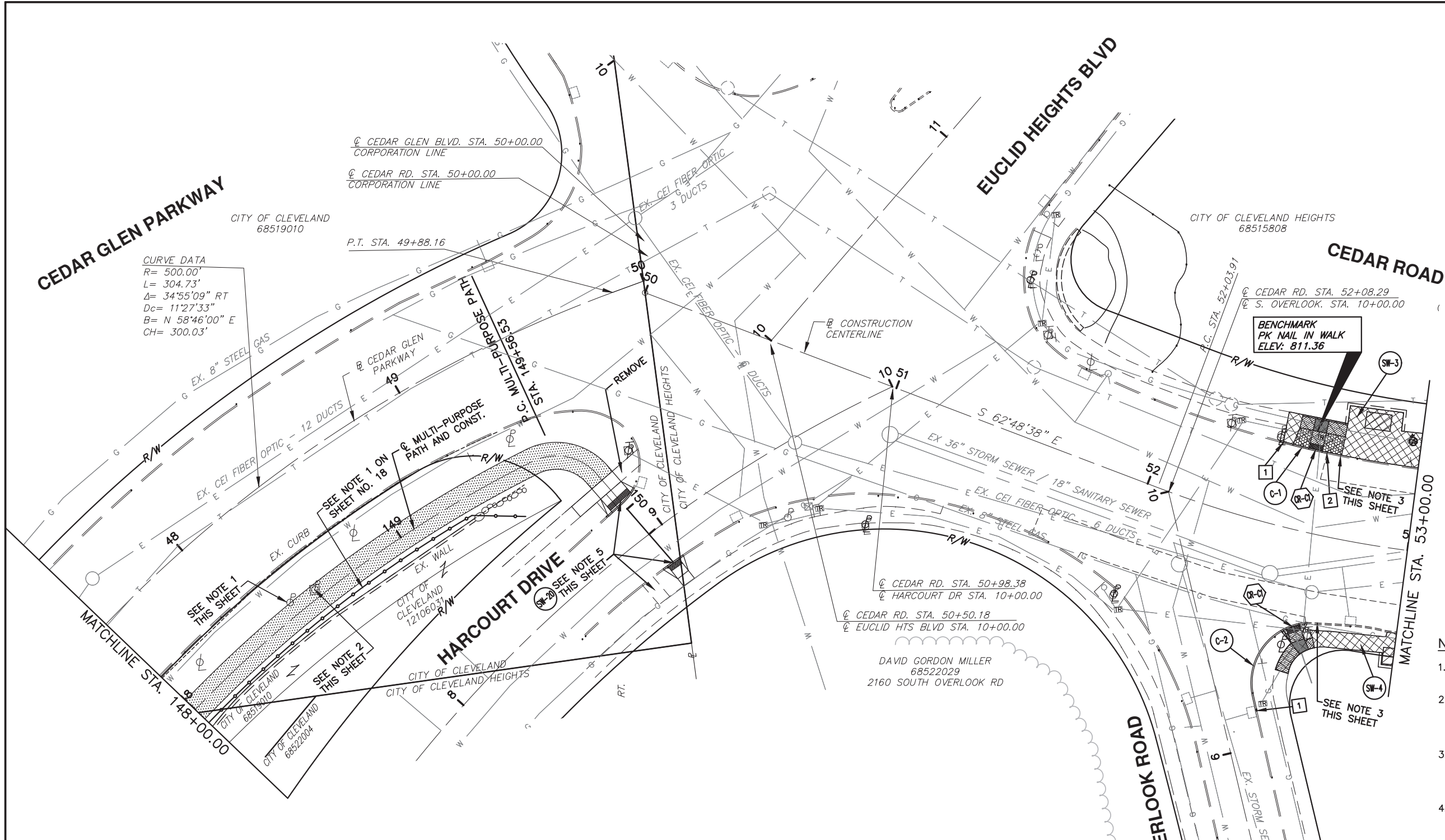
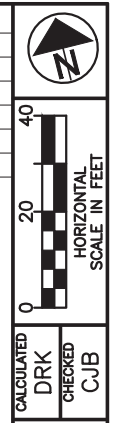


SHEET NO.	REF NO.	STATION TO STATION	SIDE	DRAINAGE QUANTITIES					
				202 CATCH BASIN REMOVED	611 12\" CONDUIT, TYPE B	611 12\" CONDUIT, TYPE C	611 CATCH BASIN, CUY. CO. TWIN 3C, AS PER PLAN	611 DRAINAGE STRUCTURE, MISC. NO. 2-2B OUTLET STRUCTURE	611 CATCH BASIN, NO. 2-2B AS PER PLAN (A)
				EACH	FT	FT	EACH	EACH	
16	D-3	136+72 TO 136+75	L/R		26				1
	D-4	136+72 TO 138+74	L/R			159		1	
17	D-5	141+49 TO 141+86	L/R		45				1
	D-6	144+54 TO 144+59	L/R	1	33		1		1
TOTALS TO GENERAL SUMMARY				1	104	159	1	1	3

MULTI-PURPOSE PATH PLAN SHEET
 STA 145+00.00 TO 148+00.00

CUY- CEDAR-FAIRMOUNT

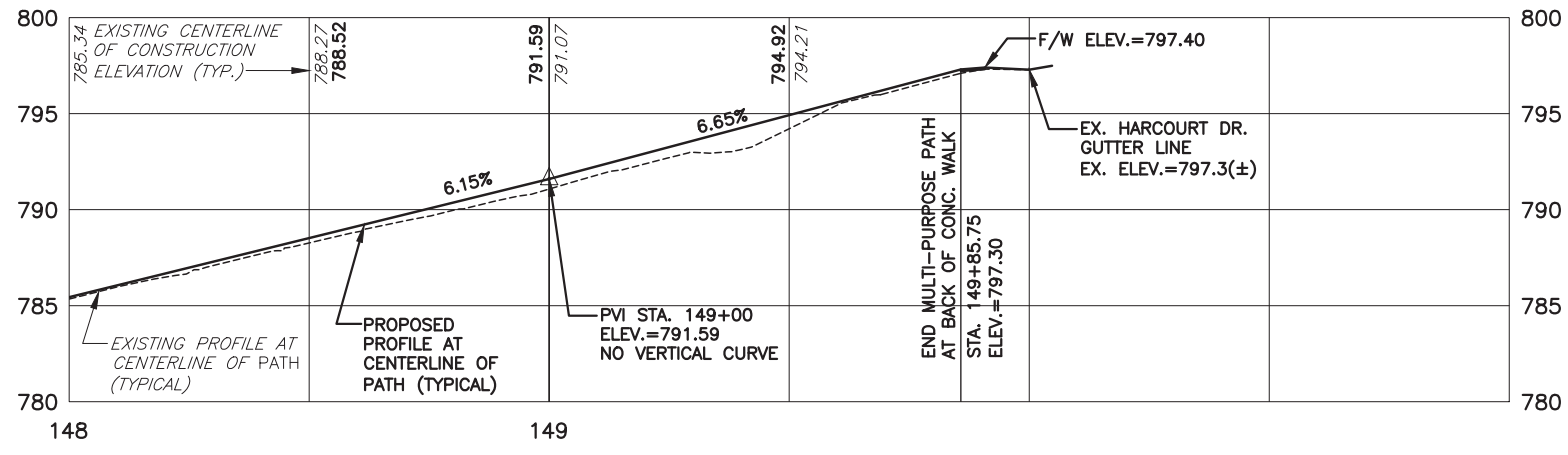
CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
55	STREETSCAPE PLAN
48	LANDSCAPE PLAN



CURVE DATA
 R= 500.00'
 L= 304.73'
 Δ= 34°55'09" RT
 Dc= 11°27'33"
 B= N 58°46'00" E
 CH= 300.03'

NOTES:

- EXISTING UTILITY POLE TO BE RELOCATED BY OTHERS.
- EXISTING METAL TROLLEY POLE AND FOUNDATION (ABANDONED) TO BE REMOVED AND DISPOSED OF.
- CURB ADJACENT TO THE EXISTING BUS STOP PAD WILL BE REMOVED AND REPLACED WITH THE PART 1 PLANS.
- SEE PART 1 PLANS FOR CURB RAMP QUANTITIES UNLESS OTHERWISE INDICATED.
- REMOVE EXISTING CONCRETE WALK AND INSTALL NEW WALK WITH TYPE A2 CURB RAMP.



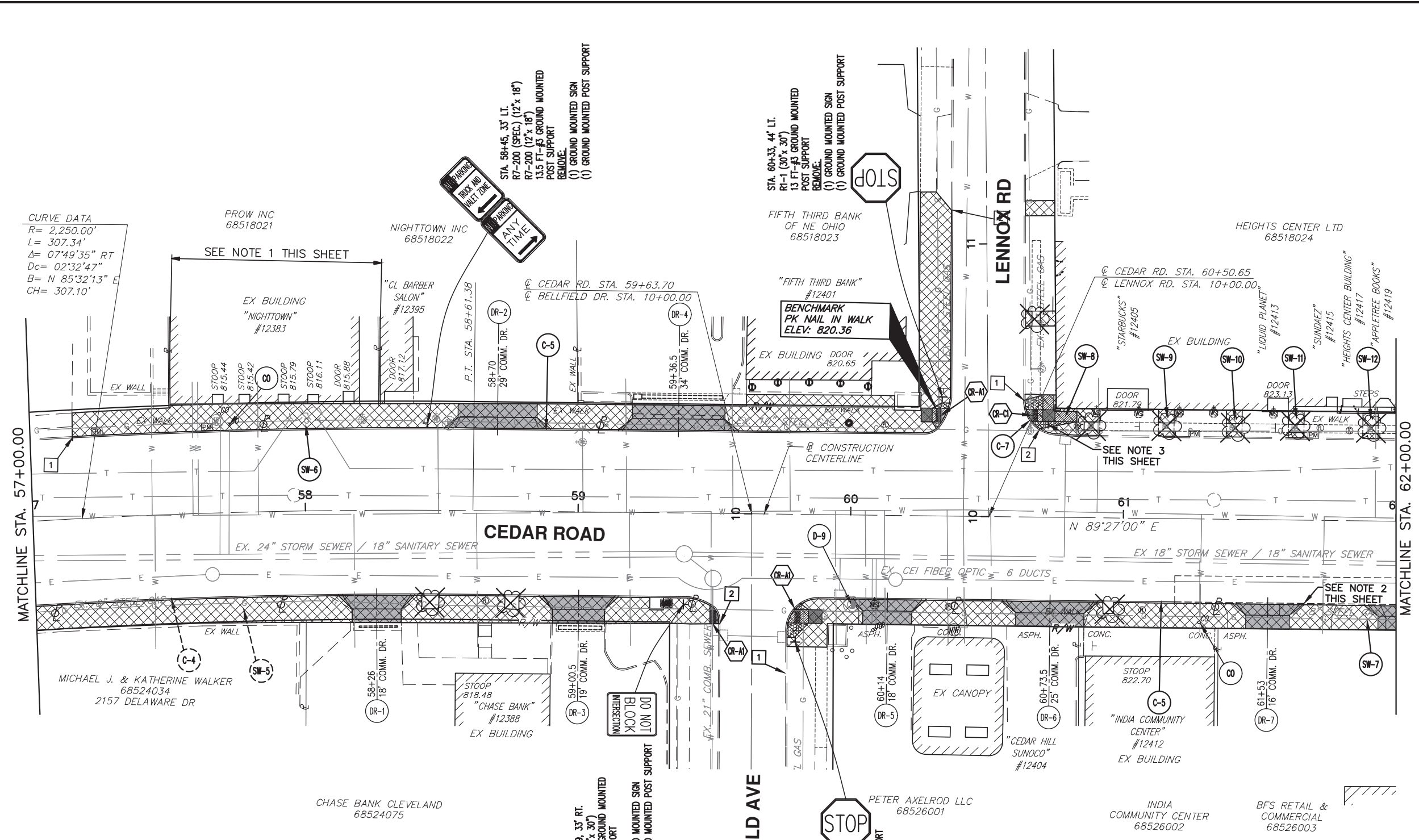
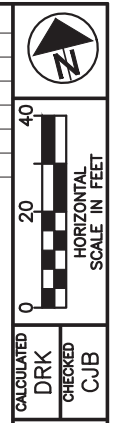
WALK REMOVAL AND CURB QUANTITIES

REF NO.	STATION TO STATION	SIDE	202	202	608	608	609
			WALK REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN
			SQ FT	FT	SQ FT	EACH	FT
C-1	52+45 TO 52+63	LT		18			18
C-2	9+13 (S OVERLOOK) TO 52+68	RT		44			44
SW-3	52+45 TO 52+63	LT	785				
SW-4	52+62 TO 9+33 (DELAWARE)	RT	2147				
SW-20	50+11 TO 50+55	RT			229	2	
TOTALS TO GENERAL SUMMARY			2932	62	229	2	62

MULTI-PURPOSE PATH PLAN SHEET
STA 148+00.00 TO 53+00.00

CUY - CEDAR - FAIRMOUNT

CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
20	C-4 & SW-5 QUANTITIES
57-58	STREETSCAPE PLAN
49-50	LANDSCAPE PLAN



CURVE DATA
 R= 2,250.00'
 L= 307.34'
 Δ= 07°49'35" RT
 Dc= 02°32'47"
 B= N 85°32'13" E
 CH= 307.10'

PROW INC
68518021

NIGHTTOWN INC
68518022

FIFTH THIRD BANK
OF NE OHIO
68518023

HEIGHTS CENTER LTD
68518024

MICHAEL J. & KATHERINE WALKER
68524034
2157 DELAWARE DR

CHASE BANK CLEVELAND
68524075

PETER AXELROD LLC
68526001

INDIA
COMMUNITY CENTER
68526002

BFS RETAIL &
COMMERCIAL
68526003

NOTES:

- PROPERTY OWNER WILL BE INSTALLING RECEPTACLES AND A HEATED SIDEWALK SYSTEM IN FRONT OF THEIR BUILDING. REFER TO NOTES ON SHEET NO. 7 FOR INFORMATION REGARDING THIS WORK.
- CURB ADJACENT TO THE EXISTING BUS STOP PAD WILL BE REMOVED AND REPLACED WITH THE PART 1 PLANS.
- REMOVE EXIST. STREET NAME SIGN SUPPORT AND INSTALL NEW STREET NAME SIGN SUPPORT, NO. 3 POST (13.5 FT). REMOVE AND REERECT EXISTING STREET NAME SIGN.
- SEE PART 1 PLANS FOR CURB RAMP QUANTITIES.

STA. 59+39, 47 RT.
R10-7 (24" x 30")
13 FT-#3 GROUND MOUNTED
POST SUPPORT
REMOVE.
(1) GROUND MOUNTED SIGN
(1) GROUND MOUNTED POST SUPPORT

STA. 59+80, 47 RT.
R1-1 (30" x 30")
13 FT-#3 GROUND MOUNTED
POST SUPPORT
REMOVE.
(1) GROUND MOUNTED SIGN
(1) GROUND MOUNTED POST SUPPORT

DO NOT
BLOCK
INTERSECTION

BELLFIELD AVE

LENNOX RD

DRIVEWAY QUANTITIES

REF NO.	DRIVE STATION	SIDE	452 8" NON- REINFORCED CONCRETE PAVEMENT, AS PER PLAN SQ YD
DR-1	58+26	RT	23
DR-2	58+70	LT	32
DR-3	59+00.5	RT	23
DR-4	59+36	LT	37
DR-5	60+14	RT	21
DR-6	60+73.5	RT	28
DR-7	61+53	RT	19
TOTALS TO GENERAL SUMMARY			183

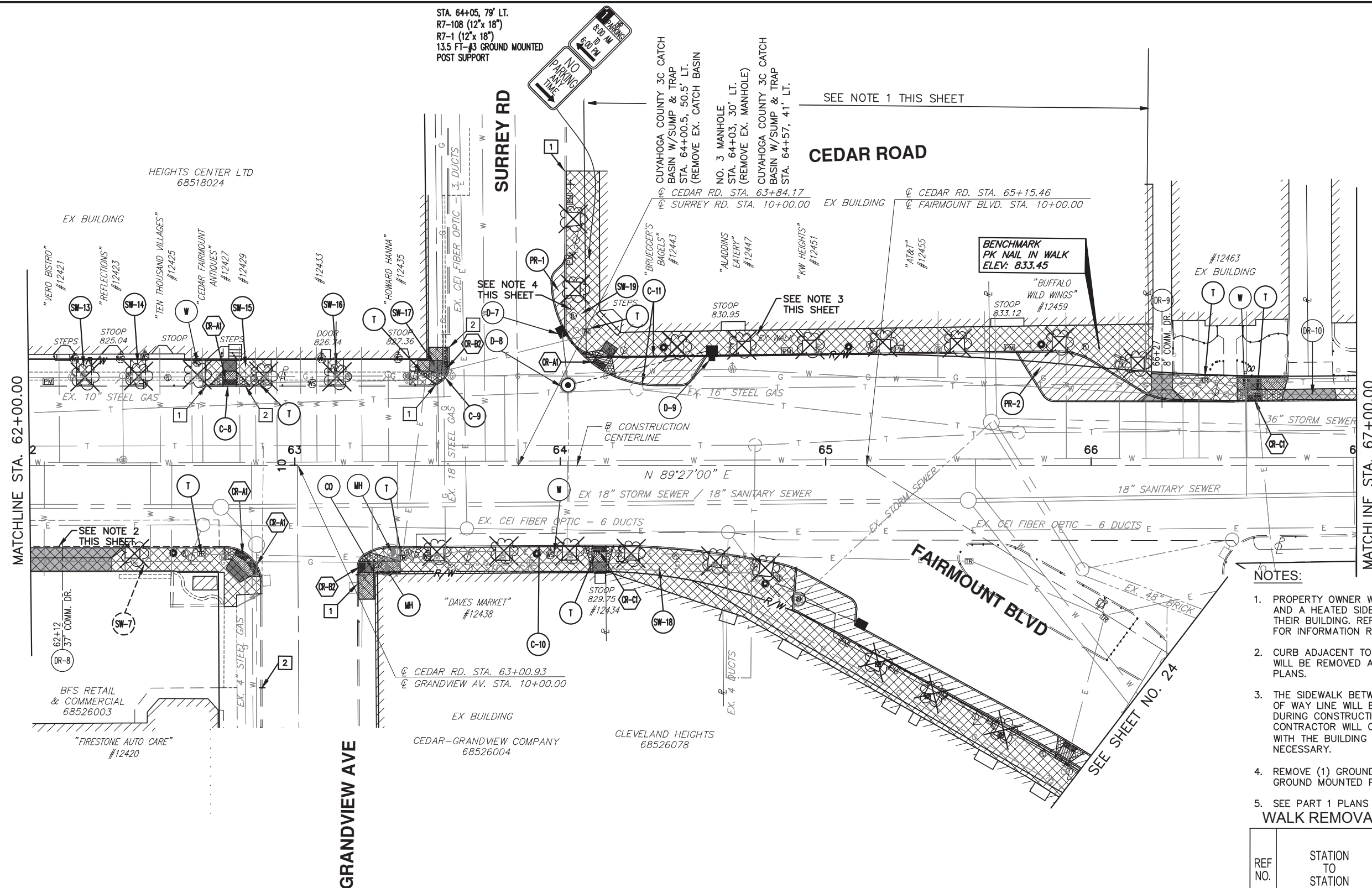
WALK REMOVAL AND CURB QUANTITIES

REF NO.	STATION TO STATION	SIDE	202	202	609
			WALK REMOVED, AS PER PLAN SQ FT	CURB REMOVED, AS PER PLAN FT	CURB, TYPE 6, AS PER PLAN FT
C-5	57+12 TO 11+12 (LENNOX)	LT		400	400
C-6	9+56 (BELLFIELD) TO 61+19	RT		151	151
C-7	10+43 (LENNOX) TO 60+69	LT		13	13
SW-6	57+16 TO 11+12 (LENNOX)	LT	4018		
SW-7	9+51 (BELLFIELD) TO 9+49 (GRANDVIEW)	RT	2959		
SW-8	10+45 (LENNOX) TO 60+91	LT	270		
SW-9	61+12 TO 61+18	LT	39		
SW-10	61+37 TO 61+43	LT	39		
SW-11	61+60 TO 61+66	LT	39		
SW-12	61+87 TO 61+93	LT	35		
TOTALS TO GENERAL SUMMARY			7399	564	564

PLAN SHEET
STA 57+00.00 TO 62+00.00

CUY - CEDAR - FAIRMOUNT

CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
21	SW-7 QUANTITIES
34	BUMP OUT/DRAINAGE DETAILS
58-59, 61	STREETSCAPE PLAN
50-51, 53	LANDSCAPE PLAN



- NOTES:**
- PROPERTY OWNER WILL BE INSTALLING RECEPTACLES AND A HEATED SIDEWALK SYSTEM IN FRONT OF THEIR BUILDING. REFER TO NOTES ON SHEET NO. 7 FOR INFORMATION REGARDING THIS WORK.
 - CURB ADJACENT TO THE EXISTING BUS STOP PAD WILL BE REMOVED AND REPLACED WITH THE PART 1 PLANS.
 - THE SIDEWALK BETWEEN THE BUILDING AND RIGHT OF WAY LINE WILL BE REPLACED BY OTHERS DURING CONSTRUCTION OF THIS PROJECT. CONTRACTOR WILL COORDINATE THEIR OPERATIONS WITH THE BUILDING OWNER'S CONTRACTOR AS NECESSARY.
 - REMOVE (1) GROUND MOUNTED SIGN AND (1) GROUND MOUNTED POST SUPPORT
 - SEE PART 1 PLANS FOR CURB RAMP QUANTITIES.
- WALK REMOVAL AND CURB QUANTITIES**

REF NO.	STATION TO STATION	SIDE	202	202	609
			WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	CURB, TYPE 6, AS PER PLAN
			SQ FT	FT	FT
C-8	62+66 TO 62+81	LT		15	15
C-9	63+53 TO 10+45 (SURREY)	LT		17	17
C-10	9+55 (G'VIEW) TO 7+12 (F'MOUNT)	RT		458	458
C-11	11+10 (SURREY) TO 67+38	LT		406	423
SW-13	62+18 TO 62+24	LT	39		
SW-14	62+38 TO 62+44	LT	39		
SW-15	62+66 TO 62+91	LT	219		
SW-16	63+12 TO 63+18	LT	39		
SW-17	63+43 TO 10+45 (SURREY)	LT	153		
SW-18	9+49 (G'VIEW) TO 7+07 (F'MOUNT)	RT	5081		
SW-19	11+10 (SURREY) TO 71+12	LT	5037		
TOTALS TO GENERAL SUMMARY			10607	896	913

DRAINAGE QUANTITIES

REF NO.	STATION TO STATION	SIDE	202	202	611	611	611
			CATCH BASIN REMOVED	MANHOLE REMOVED	12" CONDUIT, TYPE B,	CATCH BASIN, CUY. CO. 3C, AS PER PLAN	NO. 3 MANHOLE
			EACH	EACH	FT	EACH	EACH
D-7	64+00.5 TO 64+03	LT	1		21	1	
D-8	64+03	LT		1	4		1
D-9	64+03 TO 64+57	LT			55	1	
TOTALS TO GENERAL SUMMARY			1	1	80	2	1

PAVEMENT REMOVAL QUANTITIES

REF NO.	STATION TO STATION	SIDE	202
			PAVEMENT REMOVED, AS PER PLAN
			SQ YD
PR-1	10+79 (SURREY) TO 64+55	LT	42
PR-2	65+72 TO 66+36	LT	68
TOTALS TO GENERAL SUMMARY			110

DRIVEWAY QUANTITIES

REF NO.	DRIVE STATION	SIDE	452
			8" NON-REINFORCED CONCRETE PAVEMENT, AS PER PLAN
			SQ YD
DR-8	62+12	RT	39
DR-9	66+27	LT	12
DR-10	MATCH EX.	LT	9
TOTALS TO GENERAL SUMMARY			60

PLAN SHEET
 STA 62+00.00 TO 67+00.00

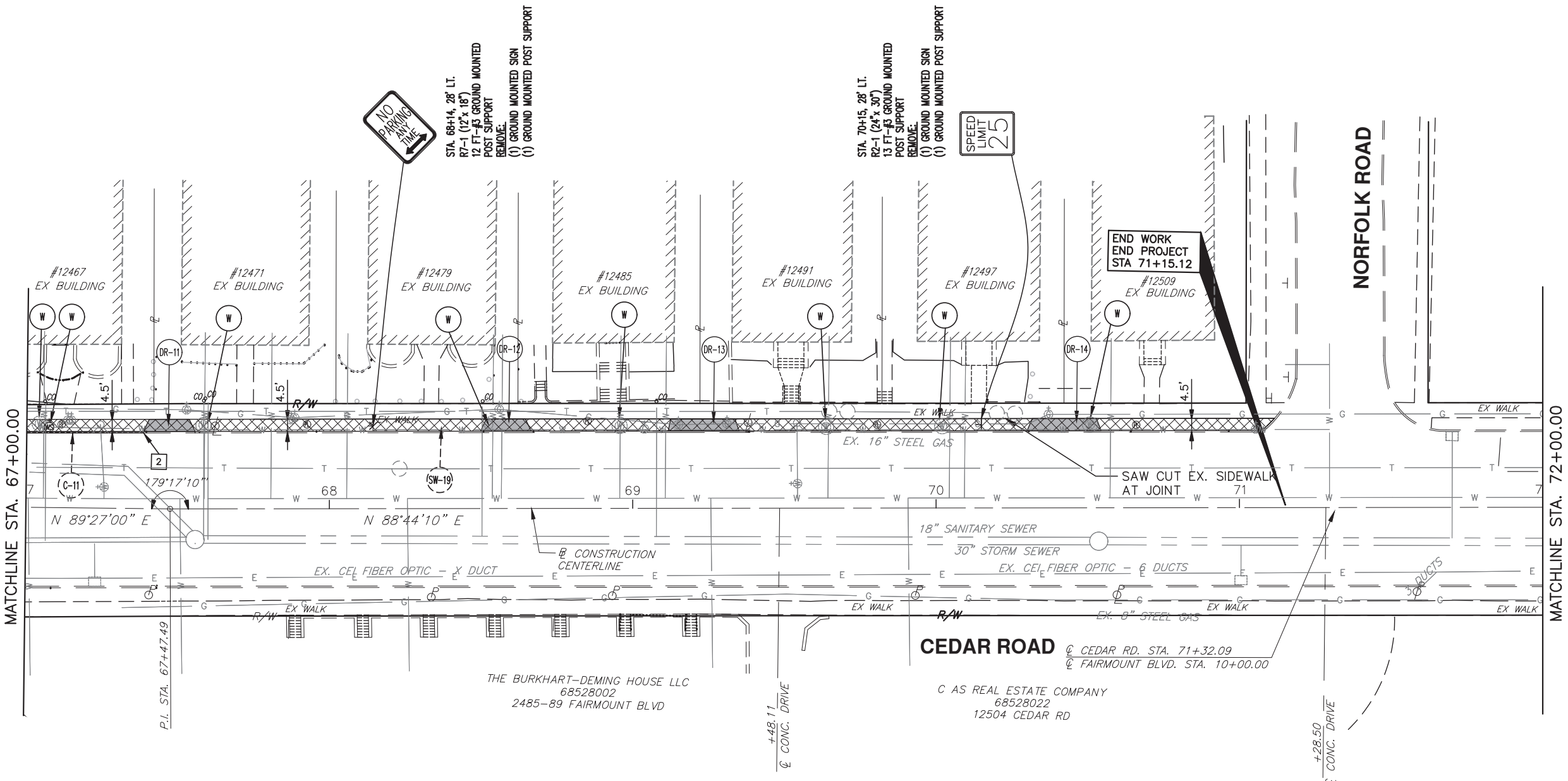
CUY - CEDAR - FAIRMOUNT

CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
22	C-11 & SW-20 QUANTITIES
61-62	STREETSCAPE PLAN
53-54	LANDSCAPE PLAN





 HORIZONTAL SCALE IN FEET



DRIVEWAY QUANTITIES

REF NO.	DRIVE STATION	SIDE	452 8\"/>
DR-11	MATCH EX.	LT	7
DR-12	MATCH EX.	LT	7
DR-13	MATCH EX.	LT	10
DR-14	MATCH EX.	LT	11
TOTALS TO GENERAL SUMMARY			35

PLAN SHEET
 STA 67+00.00 TO 72+00.00

CUY- CEDAR-FAIRMOUNT

CROSS REFERENCE	
SHEET	DESCRIPTION
9	LEGEND
22	C-10 & SW-18 QUANTITIES
35	BUMP OUT/DRAINAGE DETAILS
60	STREETSCAPE PLAN
52	LANDSCAPE PLAN

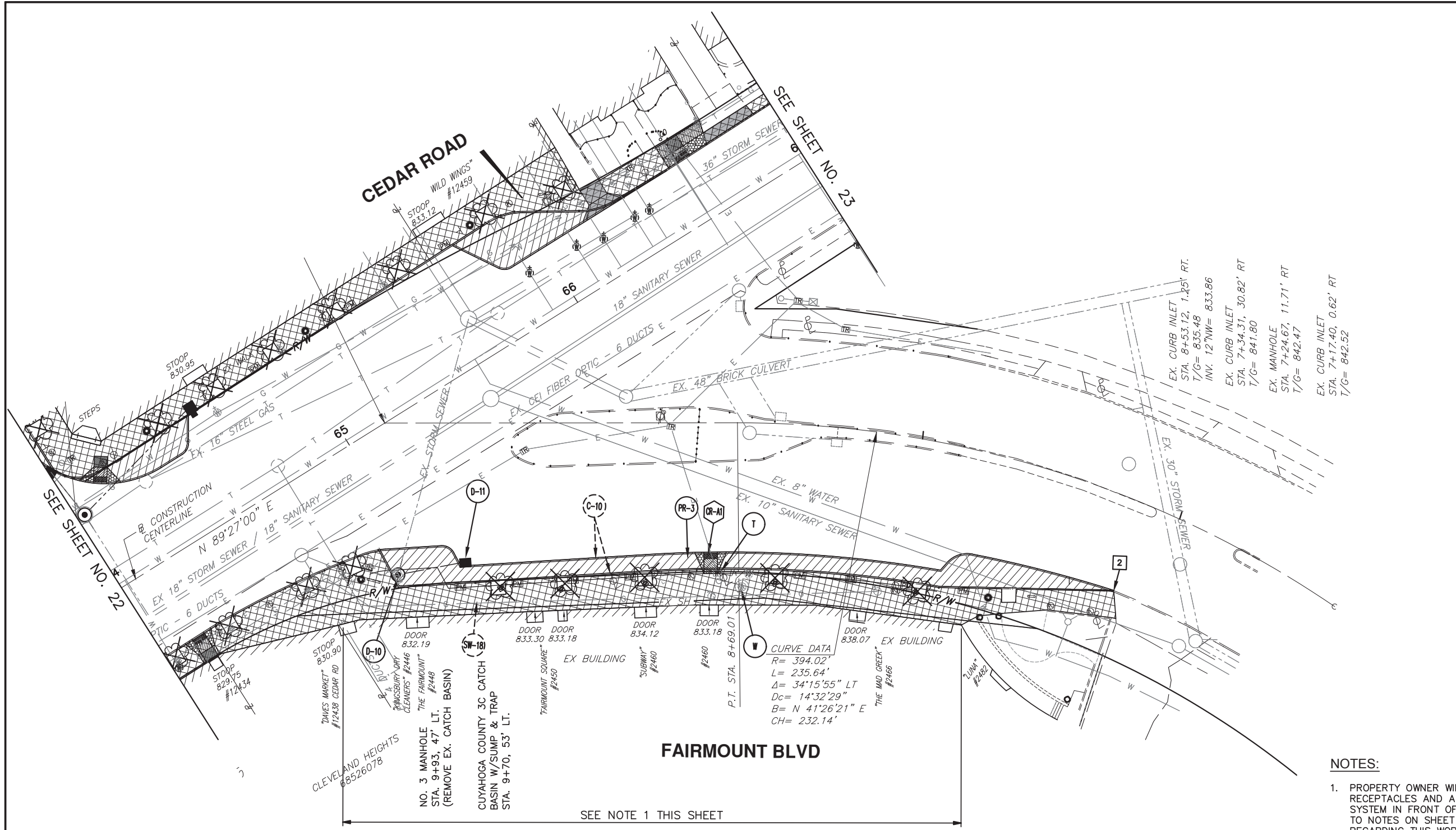


CALCULATED
DRK
CHECKED
CJB

PLAN SHEET
STA 2+00.00 TO 10+00.00

CUY - CEDAR - FAIRMOUNT

24
65



EX. CURB INLET
STA. 8+53.12, 1.45' RT.
T/G= 835.48
INV. 12'NW= 833.86

EX. CURB INLET
STA. 7+34.31, 30.82' RT
T/G= 841.80

EX. MANHOLE
STA. 7+24.67, 11.71' RT
T/G= 842.47

EX. CURB INLET
STA. 7+17.40, 0.62' RT
T/G= 842.52

CURVE DATA
R= 394.02'
L= 235.64'
Δ= 34°15'55" LT
Dc= 14°32'29"
B= N 41°26'21" E
CH= 232.14'

NO. 3 MANHOLE
STA. 9+93, 47' LT.
(REMOVE EX. CATCH BASIN)

CUYAHOGA COUNTY 3C CATCH
BASIN W/SUMP & TRAP
STA. 9+70, 53' LT.

- NOTES:**
- PROPERTY OWNER WILL BE INSTALLING RECEPTACLES AND A HEATED SIDEWALK SYSTEM IN FRONT OF THEIR BUILDING. REFER TO NOTES ON SHEET NO. 7 FOR INFORMATION REGARDING THIS WORK.
 - SEE PART 1 PLANS FOR CURB RAMP QUANTITIES.

DRAINAGE QUANTITIES

REF NO.	STATION TO STATION	SIDE	202	611	611	611
			CATCH BASIN REMOVED	12" CONDUIT, TYPE C	CATCH BASIN, CUY. CO. 3C, AS PER PLAN	NO. 3 MANHOLE
			EACH	FT	EACH	EACH
D-10	9+93	LT	1	5		1
D-11	9+70 TO 9+93	LT		27	1	
TOTALS TO GENERAL SUMMARY			1	32	1	1

PAVEMENT REMOVAL QUANTITIES

REF NO.	STATION TO STATION	SIDE	202
			PAVEMENT REMOVED, AS PER PLAN
			SQ YD
PR-3	7+12 TO 10+02	LT	212
TOTALS TO GENERAL SUMMARY			212

SEE NOTE 1 THIS SHEET

SEE SHEET NO. 22

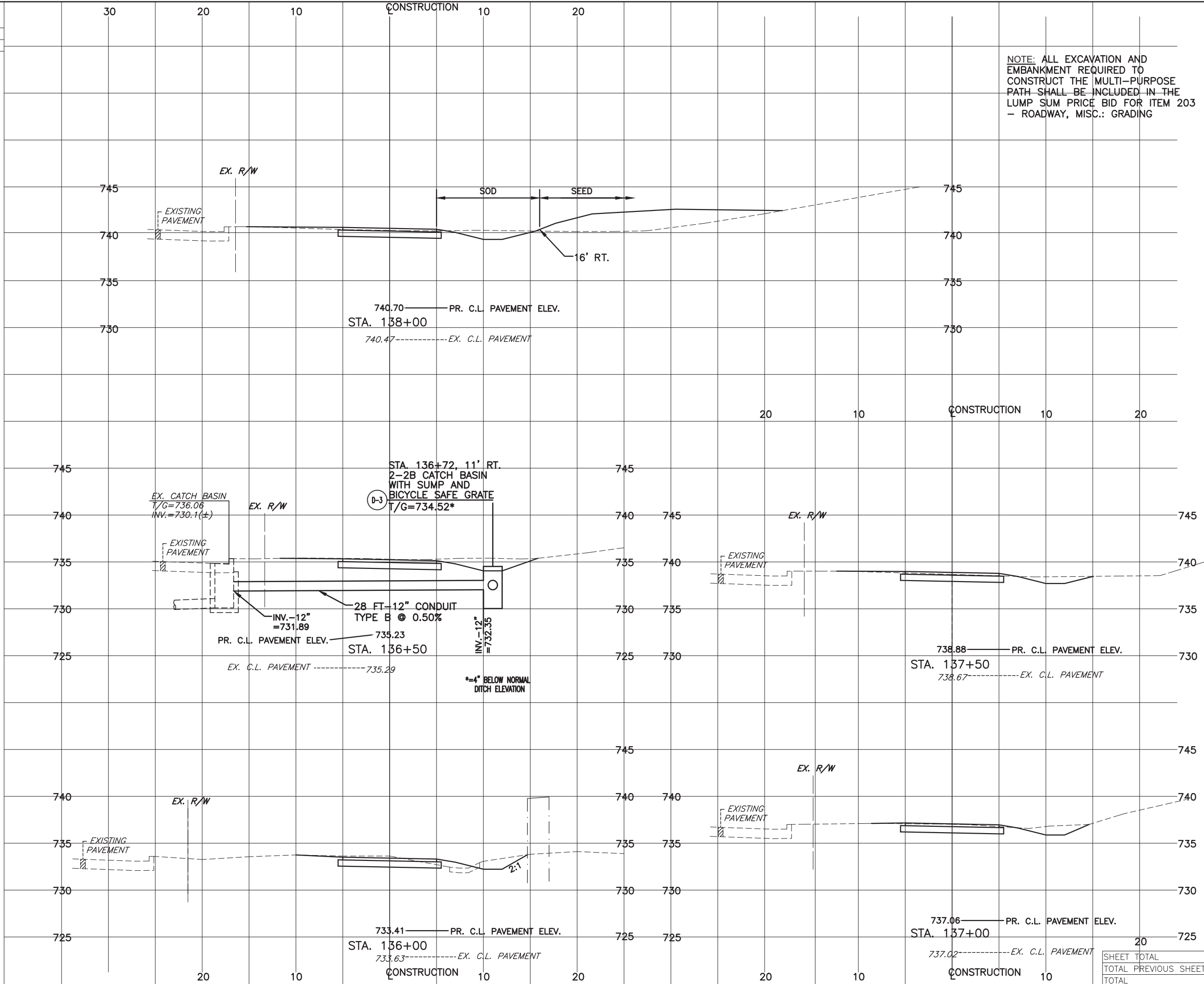
SEE SHEET NO. 23

END AREA		VOLUME	
CUT	FILL	CUT	FILL
---	---	---	---

PID			
DATE: OCT. 2015			
END AREA		VOLUME	
CUT	FILL	CUT	FILL
---	---	---	---

CALCULATED	---
SMS	---
CHECKED	---

NOTE: ALL EXCAVATION AND EMBANKMENT REQUIRED TO CONSTRUCT THE MULTI-PURPOSE PATH SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 203 - ROADWAY, MISC.: GRADING



MULTI-PURPOSE PATH CROSS SECTIONS
STA. 136+00 TO STA. 138+00

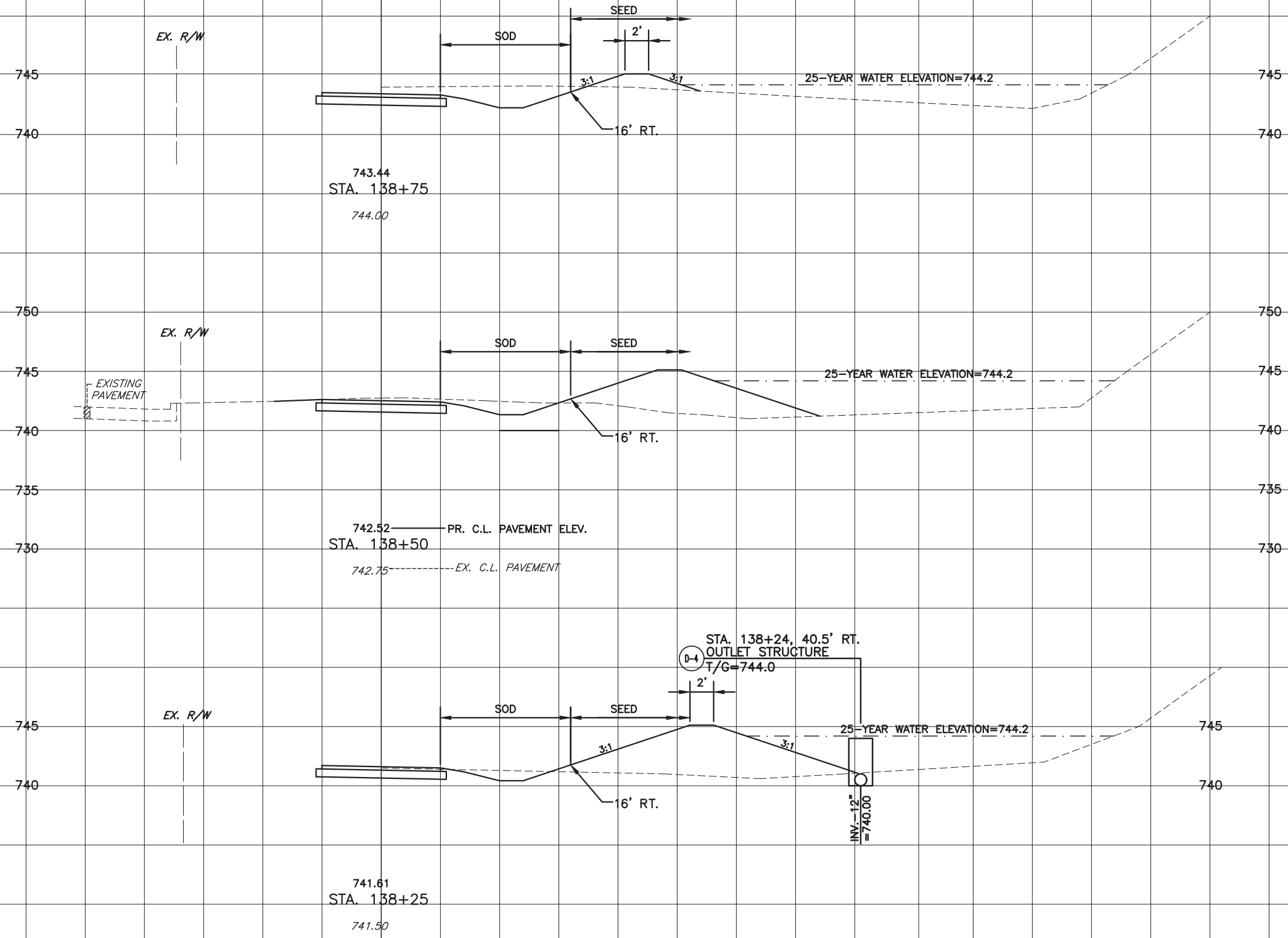
CUY - CEDAR-FAIRMOUNT

SHEET TOTAL	---	---
TOTAL PREVIOUS SHEET	---	---
TOTAL	---	---

END AREA		VOLUME	
CUT	FILL	CUT	FILL
---	---	---	---

30 20 10 CONSTRUCTION 10 20

NOTE: ALL EXCAVATION AND EMBANKMENT REQUIRED TO CONSTRUCT THE DETENTION BASIN AND THE MULTI-PURPOSE PATH SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 203 - ROADWAY, MISC.: GRADING



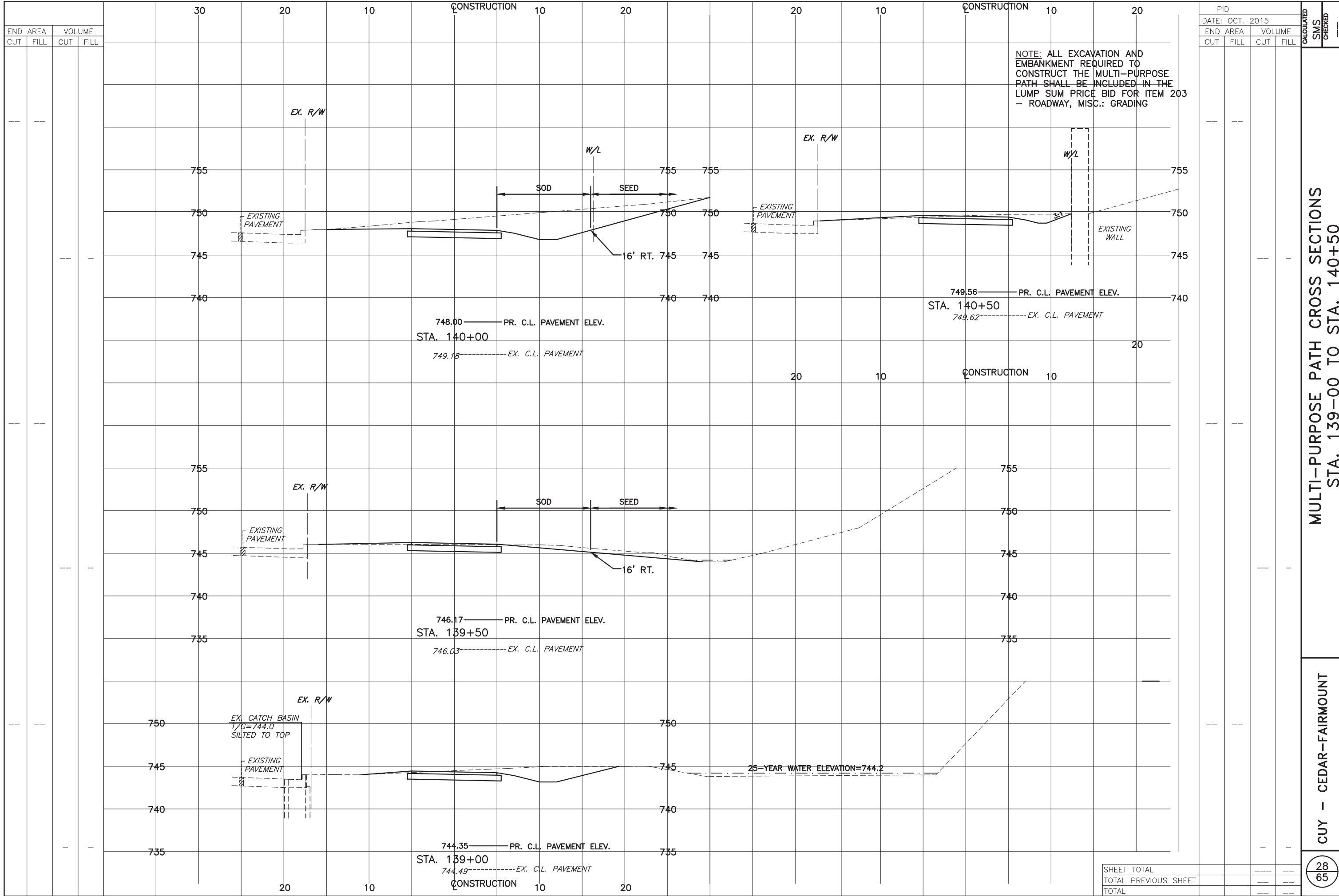
PID			
DATE: OCT. 2015			
END AREA		VOLUME	
CUT	FILL	CUT	FILL
---	---	---	---

CALCULATED	SMS
CHECKED	---

MULTI-PURPOSE PATH CROSS SECTIONS
STA. 138+25 TO STA. 138+75

CUY - CEDAR-FAIRMOUNT

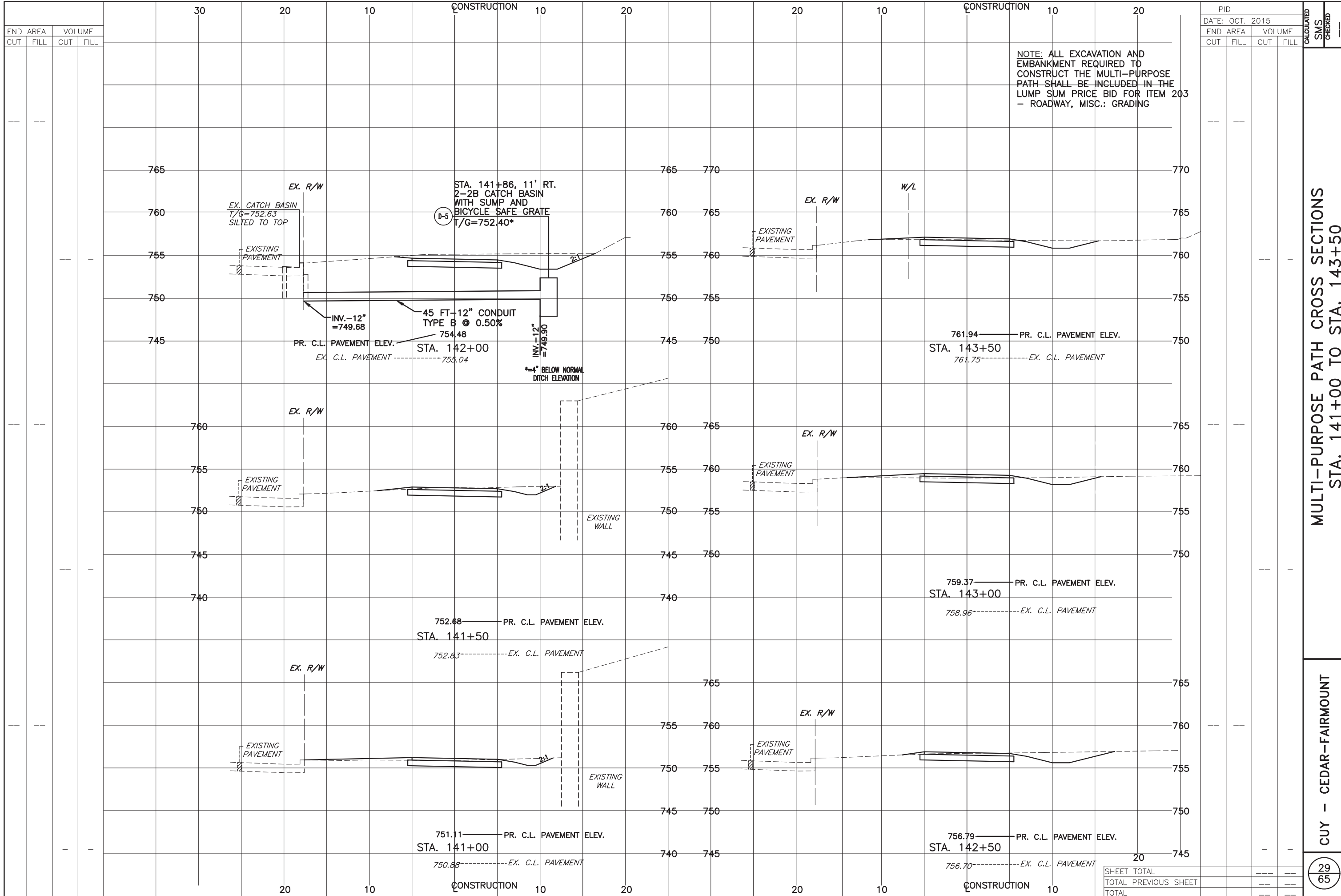
SHEET TOTAL	---	---
TOTAL PREVIOUS SHEET	---	---
TOTAL	---	---



PID			
DATE: OCT. 2015			
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED			
SMS			
CHECKED			
MULTI-PURPOSE PATH CROSS SECTIONS STA. 139-00 TO STA. 140+50			
CUY - CEDAR-FAIRMOUNT			

SHEET TOTAL	---	---
TOTAL PREVIOUS SHEET	---	---
TOTAL	---	---



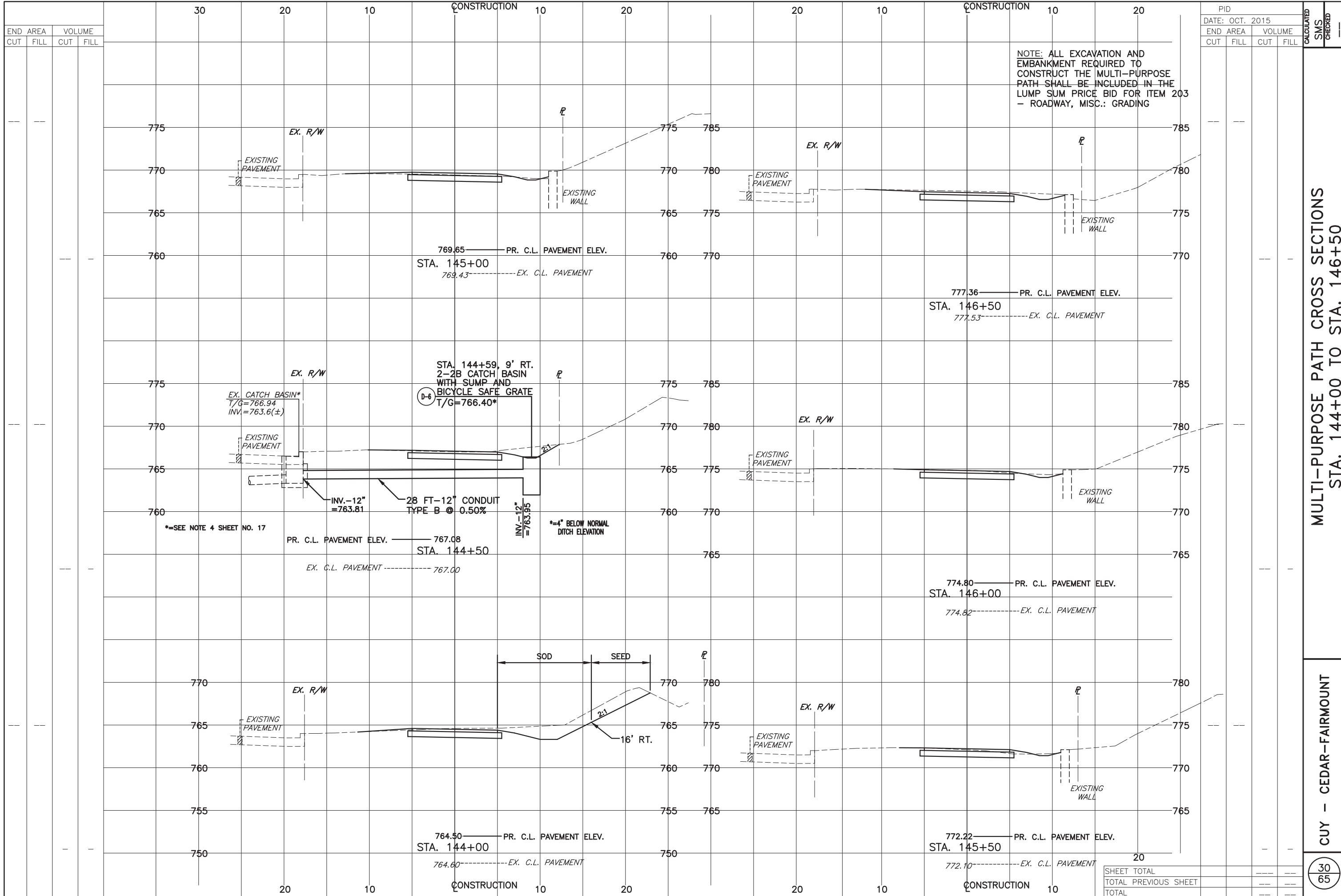
PID			
DATE: OCT. 2015			
END AREA		VOLUME	
CUT	FILL	CUT	FILL
---	---	---	---

CALCULATED	---
SMS	---
CHECKED	---

MULTI-PURPOSE PATH CROSS SECTIONS
 STA. 141+00 TO STA. 143+50

CUY - CEDAR-FAIRMOUNT

SHEET TOTAL	---	---
TOTAL PREVIOUS SHEET	---	---
TOTAL	---	---



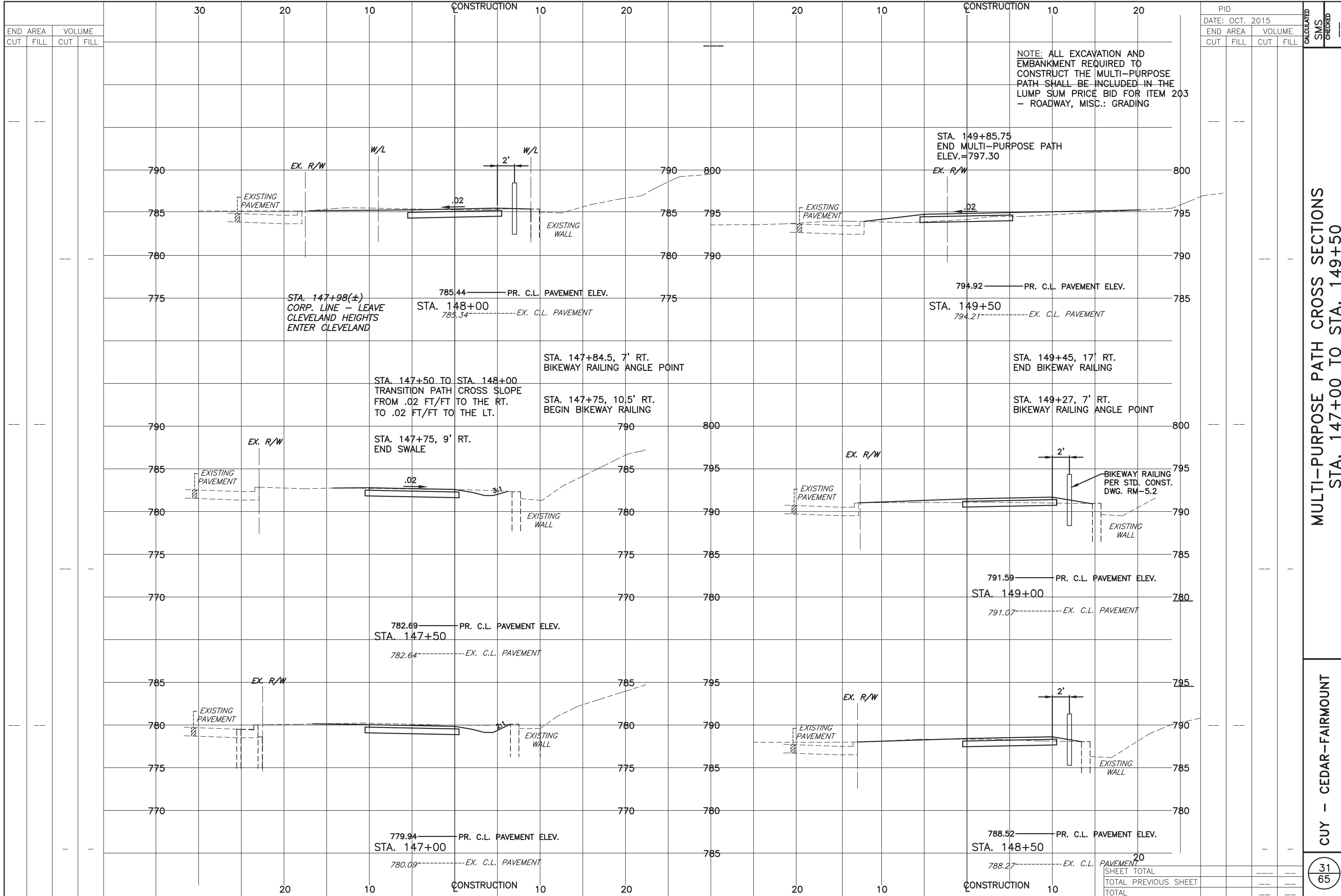
END AREA		VOLUME	
CUT	FILL	CUT	FILL
---	---	---	---

END AREA		VOLUME		CALCULATED	SMS	CHECKED
CUT	FILL	CUT	FILL			
---	---	---	---	---	---	---

MULTI-PURPOSE PATH CROSS SECTIONS
STA. 144+00 TO STA. 146+50

CUY - CEDAR-FAIRMOUNT

SHEET TOTAL	---	---
TOTAL PREVIOUS SHEET	---	---
TOTAL	---	---



PID			
DATE: OCT. 2015			
END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED
SMS
CHECKED

MULTI-PURPOSE PATH CROSS SECTIONS
 STA. 147+00 TO STA. 149+50

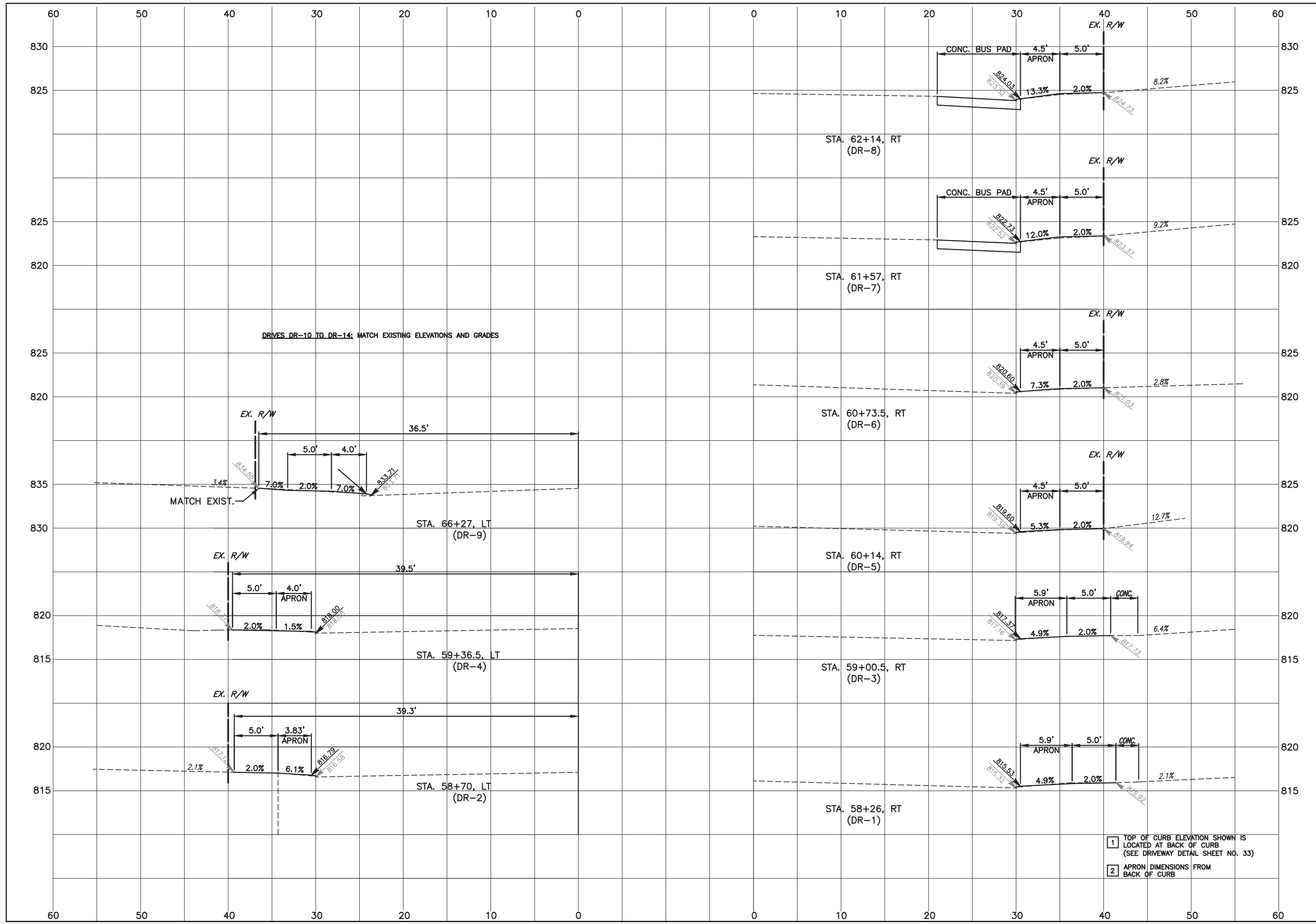
CUY - CEDAR-FAIRMOUNT

31	85
SHEET TOTAL	
TOTAL PREVIOUS SHEET	
TOTAL	

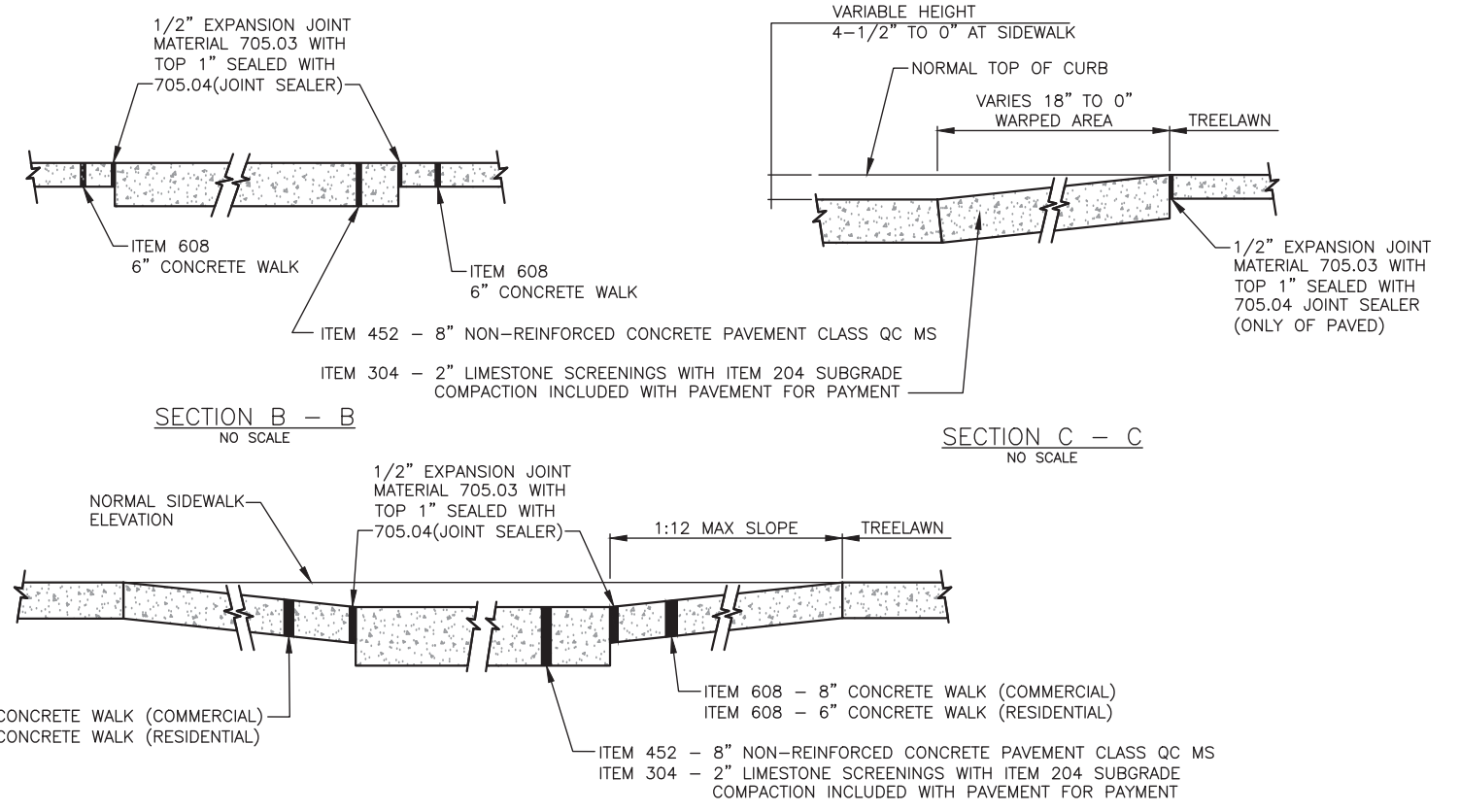
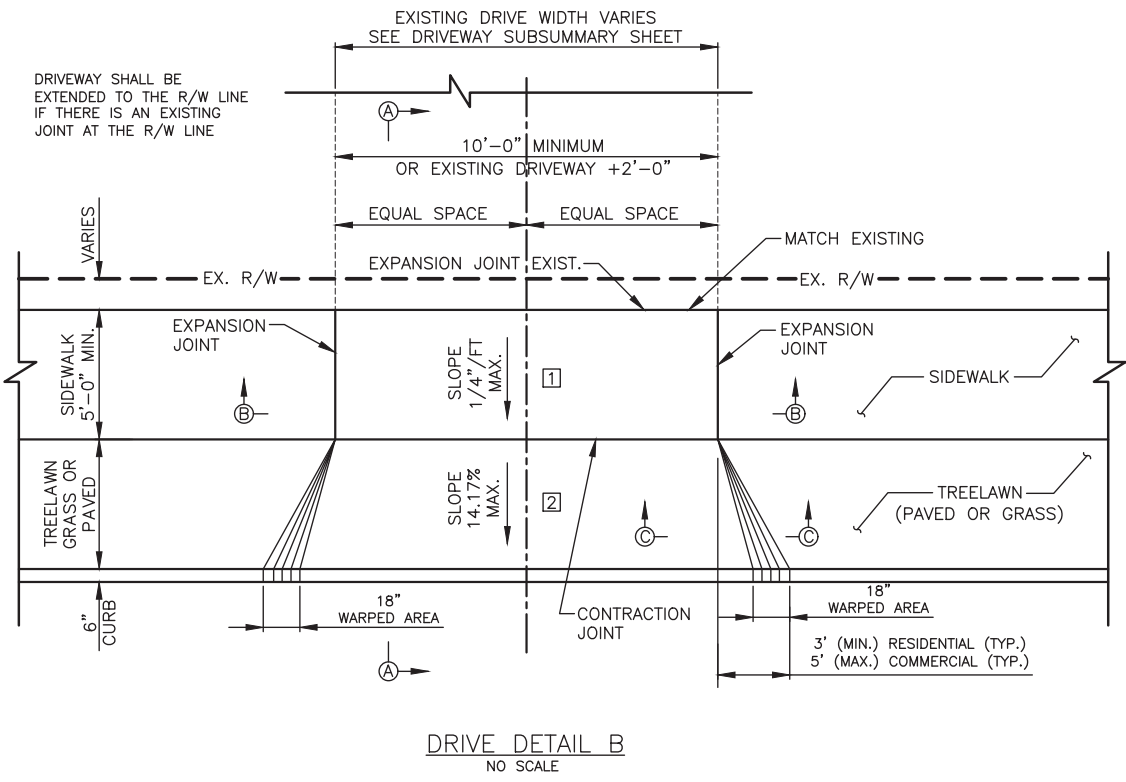
CALCULATED
DRK
CHECKED
CJB

DRIVEWAY PROFILES
CEDAR ROAD

CUY - CEDAR-FAIRMOUNT



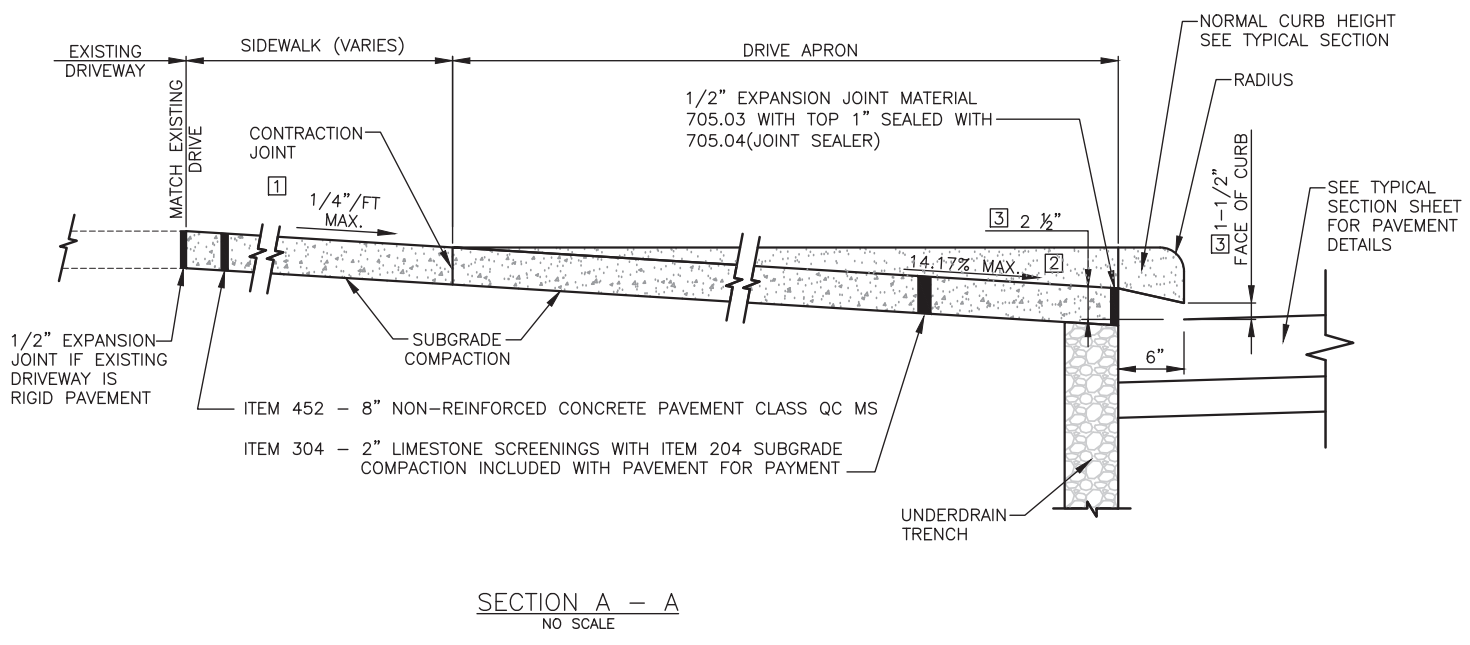
- 1 TOP OF CURB ELEVATION SHOWN IS LOCATED AT BACK OF CURB (SEE DRIVEWAY DETAIL SHEET NO. 33)
- 2 APRON DIMENSIONS FROM BACK OF CURB



DEPRESSED WALK DRIVE
SECTION B - C
NO SCALE

- NOTES:
- 1] SIDEWALKS AT DRIVE APRONS SLOPE AT 1/8" PER FOOT MINIMUM TO 1/4" PER FOOT MAXIMUM.
 - 2] DRIVEWAY APRONS SLOPE AT 1.0% MINIMUM FROM BACK OF CURB TO FACE OF SIDEWALK.
 - 3] WHERE SLOPE IS LESS THAN 1.0% CURB CUT CAN BE REDUCED TO LESS THAN 1-1/2" AS REQUIRED TO PROVIDE FOR POSITIVE DRAINAGE TO THE STREET GUTTER (SEE DRIVE PROFILES AND PAVEMENT TABLES FOR LOCATIONS)

SIDEWALK, DRIVEWAY AND APRON SHALL BE PLACED ON COMPACTED 2" THICK BASE OF LIMESTONE SCREENINGS.



JOINTING: CONCRETE PAVEMENT

1. UNTIED - NONREINFORCED P,C, CONCRETE PAVEMENT SLABS
2. SPACING FOR SAWED OR IMPRESSED CONTRACTION AND/OR CONSTRUCTION JOINTS

CONCRETE THICKNESS	RECOMMENDED SLAB SIZE	MAXIMUM SLAB SIZE
4"	5' x 5'	6' x 6'
6"	8' x 8'	9' x 9'
8"	10' x 10'	12' x 12'

JOINTS SHALL BE 1/4 THE DEPTH OF THE SLAB


FOR PLAN, SEE SHEETS 21 - 23.
FOR DRIVE PROFILE, SEE SHEET 32.

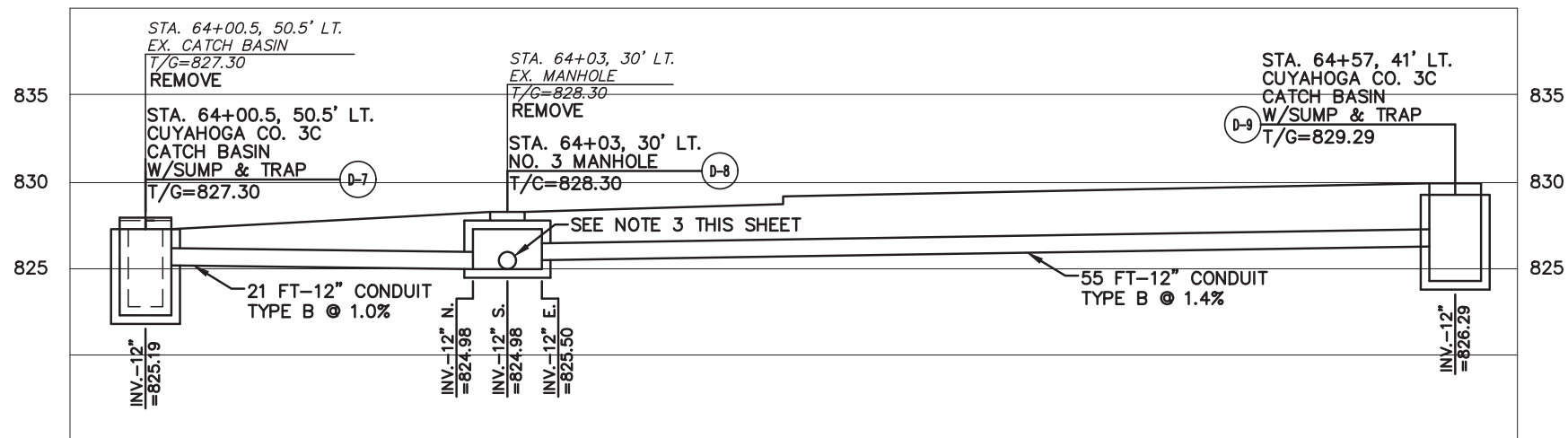
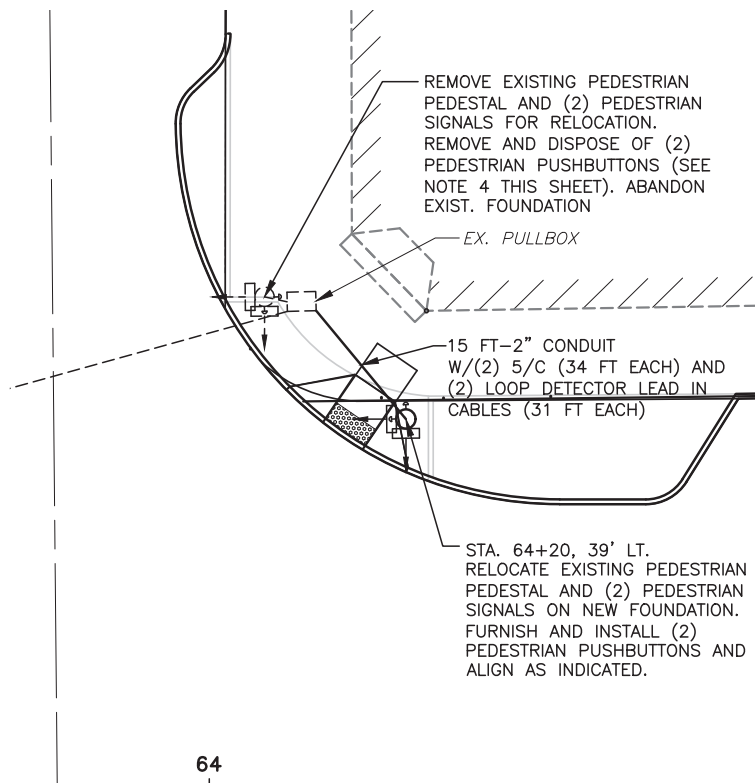
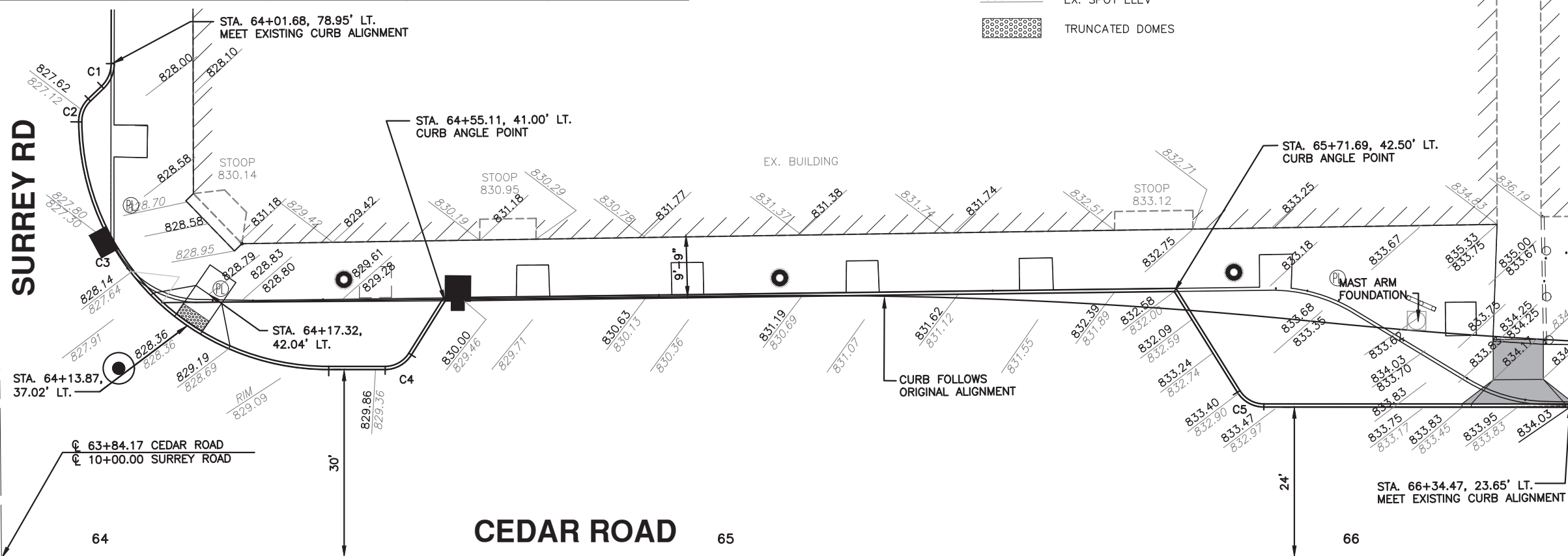
- ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, AS PER PLAN
- IN ADDITION TO THE FURNISHING AND INSTALLATION OF THE CONCRETE, THE UNIT PRICE BID FOR THIS ITEM SHALL ALSO INCLUDE THE FOLLOWING WORK:
- ANY ADDITIONAL EXCAVATION AND REMOVAL OF EXCAVATED MATERIAL REQUIRED TO CONSTRUCT THE DRIVEWAY AND SUBBASE, IN CONFORMANCE WITH ITEM 203.
 - SUBGRADE COMPACTION, IN CONFORMANCE WITH ITEM 204.
 - FURNISHING, INSTALLATION, AND COMPACTION OF THE 2 INCH LAYER OF LIMESTONE SCREENINGS

CURB RADII TABLE

CURVE NUMBER	C1	C2	C3	C4	C5
DELTA	46° 05' 48"	47° 15' 26"	89° 27' 00"	57° 59' 41"	57° 59' 41"
RADIUS	5.00'	5.00'	40.00'	5.00'	5.00'
LENGTH	4.02'	4.12'	62.45'	5.06'	5.06'
TANGENT	2.13'	2.19'	39.62'	2.77'	2.77'
CHORD	3.92'	4.01'	56.30'	4.85'	4.85'
CURB PC STATION	64+01.70, 78.95' LT.	63+98.04, 73.32' LT.	63+96.50, 69.62' LT.	64+45.48, 30.00' LT.	65+81.98, 26.04' LT.
CURB PT STATION	64+00.16, 75.35' LT.	63+96.50, 69.62' LT.	64+36.50, 30.00' LT.	64+49.72, 32.35' LT.	65+86.22, 23.69' LT.

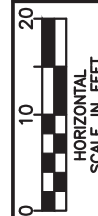
LEGEND

- 605.00 PR. TOP OF CURB ELEV
- 605.50 PR. BOTTOM OF CURB ELEV
- 605.00 PR. SPOT ELEV
- 605.00 EX. SPOT ELEV
-  TRUNCATED DOMES



NOTES:

- 1.) ALL DIMENSIONS ARE TO FACE OF CURB.
- 2.) SHEET IS FOR GRADES ONLY. FLATWORK IS AS PER SHEET 59 AND 61
- 3.) CONNECT THE NEW MANHOLE TO THE EXISTING OUTLET PIPE USING 4 FEET (±) OF 12" STORM PIPE AND A CONCRETE COLLAR OR FLEXIBLE COUPLING.
- 4.) REMOVAL OF THE EXISTING PEDESTRIAN SIGNALS AND PEDESTAL FOR REUSE; REMOVAL AND DISPOSAL OF THE PUSH BUTTONS; AND ABANDONING OF THE EXISTING PEDESTAL FOUNDATION TO BE PAID FOR UNDER THE UNIT PRICE PER EACH FOR ITEM 632-REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: SURREY AVENUE.



CALCULATED DRK CHECKED CJB

GRADING DETAIL CEDAR BUMP OUT

CUY - CEDAR - FAIRMOUNT




CALCULATED
DRK
CHECKED
CJB

GRADING DETAIL
FAIRMOUNT BUMP OUT

CUY - CEDAR - FAIRMOUNT

LEGEND

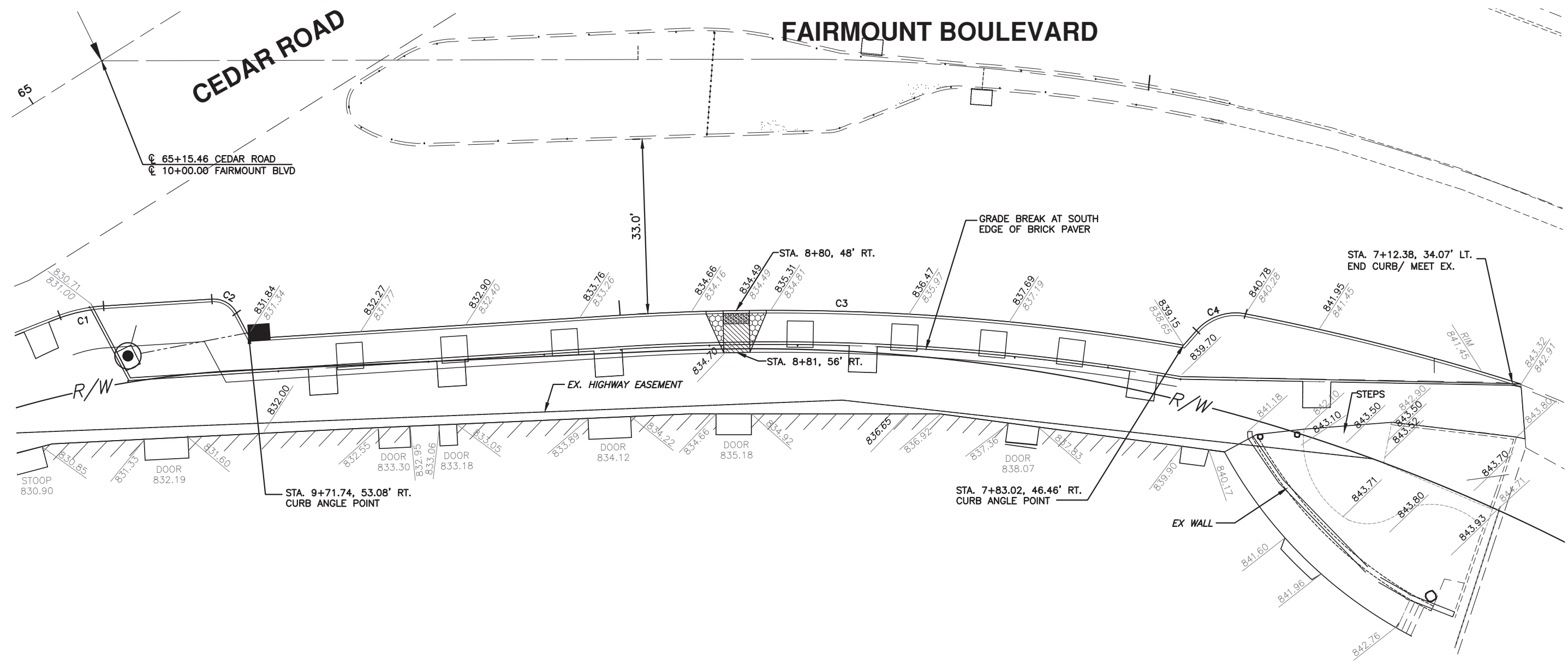
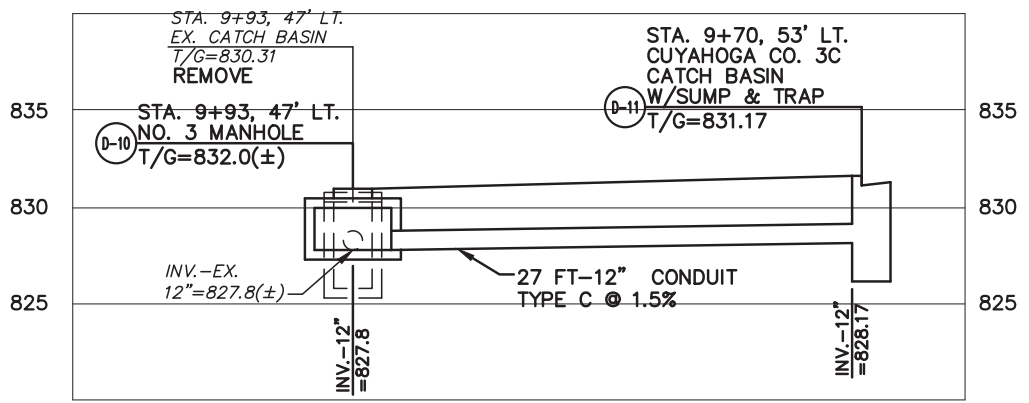
- 605.00 PR. TOP OF CURB ELEV
- 605.50 PR. BOTTOM OF CURB ELEV
- 605.00 PR. SPOT ELEV
- 605.00 EX. SPOT ELEV
-  TRUNCATED DOMES

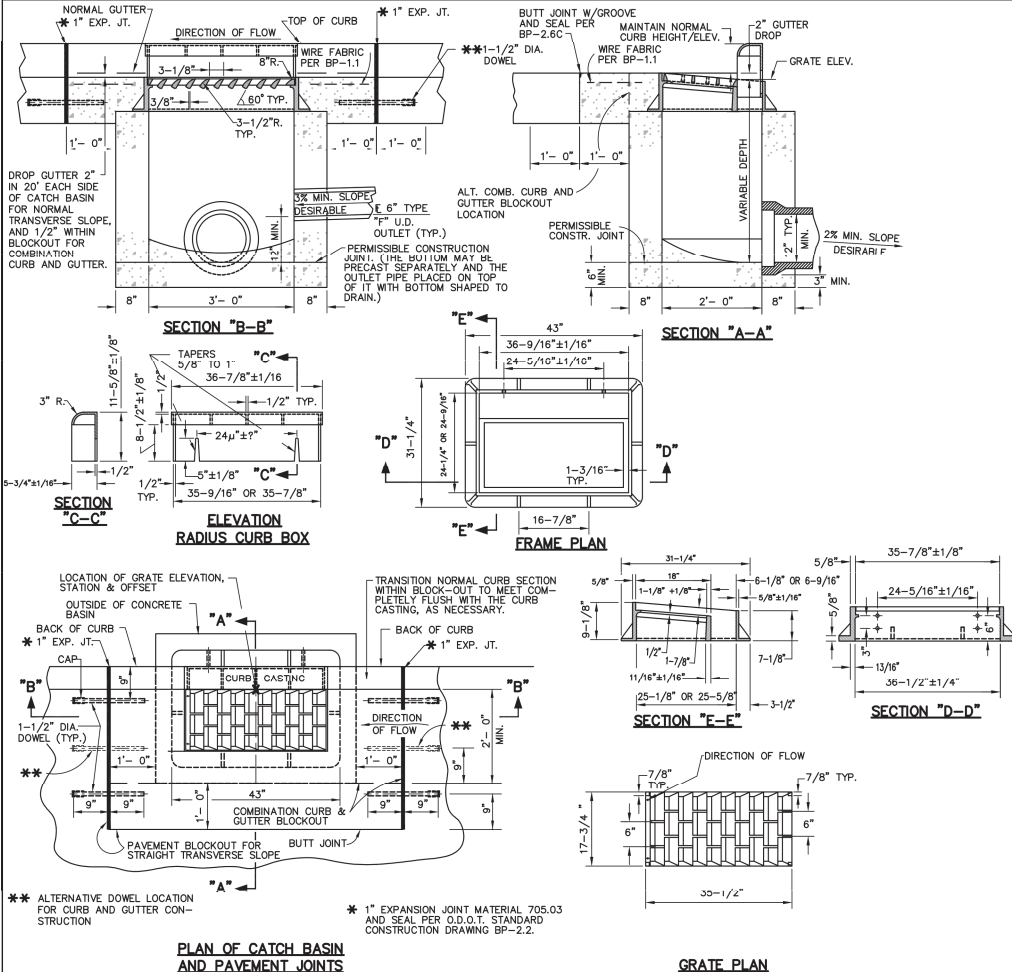
NOTES:

- 1.) ALL CURB RAMPS SHALL BE A.D.A. COMPLIANT WITH TRUNCATED DOMES AND SHALL COMPLY WITH ODOT STANDARD CONSTRUCTION DRAWINGS FOR CURB RAMPS.
- 2.) ALL DIMENSIONS ARE TO FACE OF CURB.
- 3.) SHEET IS FOR GRADES ONLY. FLATWORK IS AS PER SHEET 52.

CURB RADII TABLE

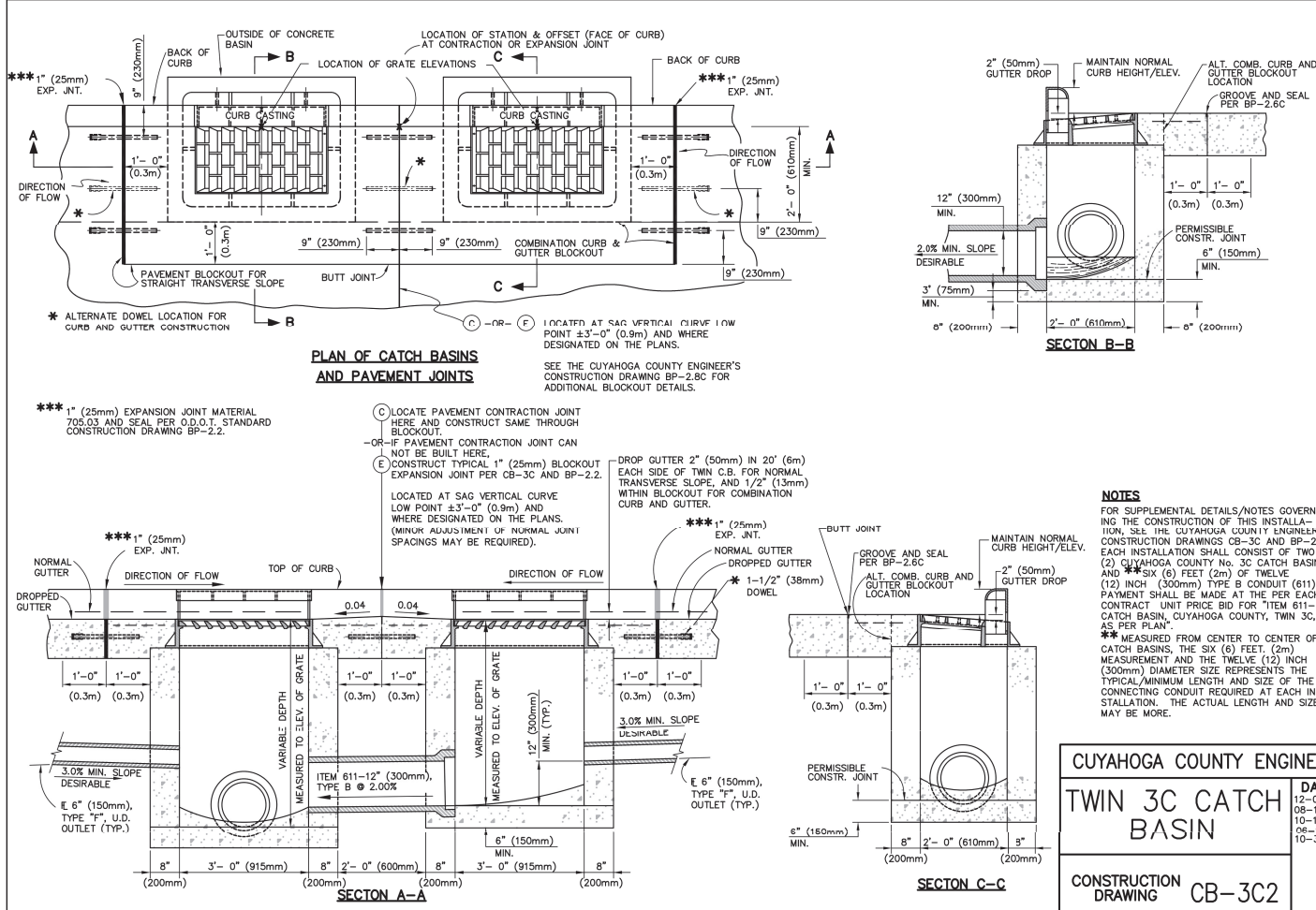
CURVE NUMBER	C1	C2	C3	C4
DELTA	16° 58' 10"	65° 35' 23"	13° 19' 09"	59° 30' 29"
RADIUS	30.00'	5.00'	464.27'	10.00'
LENGTH	8.89'	5.72'	107.93'	10.39'
TANGENT	4.48'	3.22'	54.21'	5.72'
CHORD	8.85'	5.42'	107.68'	9.93'
CURB PC STATION	9+99.73, 46.77' LT.	9+74.34, 48.16' LT.	7+82.58, 48.77' LT.	7+71.23, 37.95' LT.
CURB PT STATION	10+08.15, 48.52 LT.	9+79.06, 79.06' LT.	9+01.15, 46.47' LT.	7+80.84, 43.22' LT.



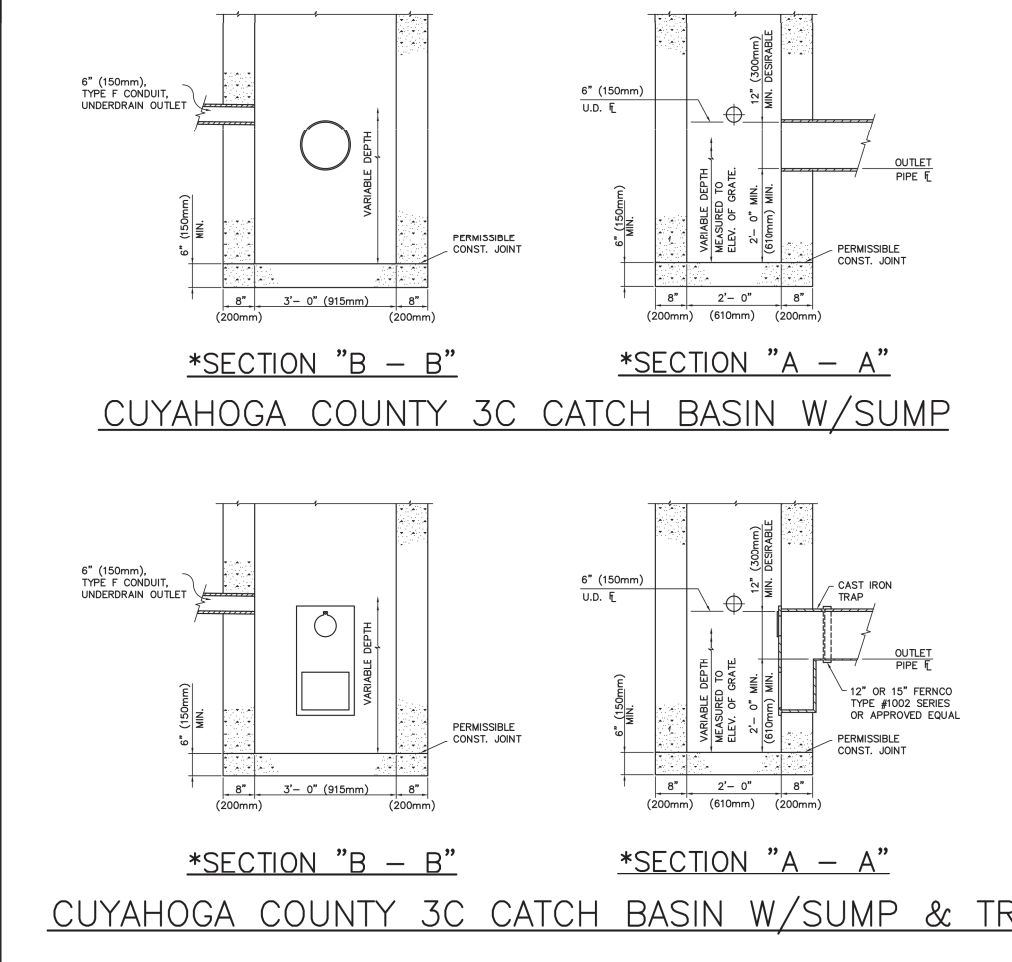


NOTES
CASTINGS SHALL MINIMALLY MEET THE REQUIREMENTS OF 611-12, ASTM A 48, AND MINIMALLY BE OF CLASS 35B GRAY IRON.
 MINIMUM WEIGHTS: 3C FRAME = 300 LBS. ± 5%
 3C GRATE = 135 LBS. ± 5%
 3C CURB CASTING = 100 LBS. ± 5%
 SUBJECT TO THE ABOVE, THE FOLLOWING OR APPROVED EQUAL CASTINGS ARE ACCEPTED.
 NEENAH No. R-3246-CL OR EAST JORDAN No. 7035 WITH TYPE M6 GRATE AND TYPE T6 CURB CASTING.
 THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE CURB CASTING: "DUMP NO WASTE" AND "DRAINS TO WATERWAY"
 TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 3/4". "WATERWAY" MAY BE SUBSTITUTED WITH "STREAM", "RIVER", "LAKE", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.
BEARING AREAS OF FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND LEVEL SURFACE. NO PROJECTIONS SHALL EXIST ON BEARING AREAS AND THE GRATE SHALL SEAT IN ITS FRAME WITHOUT ROCKING. EACH FRAME AND GRATE SHALL BE FITTED, MATCHED AND MARKED BEFORE DELIVERY TO THE PROJECT.
DOWELS FOUR (4) 1-1/2" x 18" DOWELS ARE REQUIRED FOR CONCRETE PAVEMENT OR GUTTER BLOCKOUT. SEE BP-2.2 FOR DOWEL DETAILS.
BRICK CONCRETE BLOCK OR CAST-IN-PLACE CONCRETE SIDE WALLS, WHEN USED IN LIEU OF PRECAST CONCRETE, SHALL BE EIGHT (8) INCHES NOMINAL THICKNESS.
PRECAST CONSTRUCTION IS PERMITTED (EXCEPT FOR THE BLOCKOUT PAVEMENT) AND CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF SIX (6) INCHES AND REINFORCING SHALL BE SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE. THE WALL THICKNESS REDUCTION SHALL BE FROM THE OUTSIDE.
OPENINGS THE MAXIMUM PIPE OPENING SHALL BE THE O.D. OF THE PIPE BEING CONNECTED PLUS TWO (2) INCHES WHEN FABRICATED OR FIELD CUT. FILL ANY VOIDS WITH MORTAR PER 611.10.B.
BLOCKOUT WHERE EITHER SIDE OF THE CATCH BASIN BLOCKOUT IS ADJACENT TO A CONTRACTION JOINT (AS IS TYPICALLY DESIRABLE), THE CONTRACTION JOINT SHALL BE CONTINUED, IN KIND, WITHIN THE LIMITS OF THE BLOCKOUT, EXCEPT AS SPECIFIED ABOVE. BLOCKOUTS SHALL BE LOCATED NO CLOSER THAN FIVE (5) FEET FROM THE NEAREST PAVEMENT JOINT. SEE THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING BP-2.8C FOR ADDITIONAL BLOCKOUT DETAILS.
 WHERE THE SPECIFIED CATCH BASIN WORK REQUIRES THE CONSTRUCTION/RECONSTRUCTION OF BLOCKOUTS IN EXISTING PAVEMENT, THE BLOCKOUTS SHALL CONFORM, AS CLOSELY AS POSSIBLE, TO THE DETAILS SHOWN HEREON EXCEPT THAT THE DOWELS SHALL BE PLACED/REPLACED IN ACCORDANCE WITH THE SECTION-TYPE "X" JOINT PER CUYAHOGA COUNTY CONSTRUCTION DRAWING BP-2.8C (SECTION-TYPE "X" JOINT WHERE BLOCKOUT JOINT IS AT AN EXISTING CONTRACTION OR MINOR JOINT LOCATION). PAYMENT SHALL BE INCLUDED IN THE ITEM 611-CATCH BASIN, CUYAHOGA COUNTY NO. 3C, AS PER PLAN.
 A CLASS "OC MS" CONCRETE APPROX. THE SIZE OF THE TWO (2) FOOT MINIMUM GUTTER BLOCKOUT, SHALL BE PLACED TO SET FLUSH WITH THE INTERMEDIATE COURSE IN FULL DEPTH/WIDTH FLEXIBLE PAVEMENT (NO DOWELS REQUIRED) WITH THE COST INCLUDED IN THE CATCH BASIN BID PRICE.
ANY/ALL EXTRA MATERIAL, LABOR AND EQUIPMENT REQUIRED TO CONSTRUCT THE PAVEMENT, CURB, SUBBASE, SURFPADE AND BACKFILL WITHIN THE BLOCKOUT AREAS, IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL BE INCLUDED IN THE UNIT PRICE BID, PER EACH, FOR THE ITEM 611-CATCH BASIN, CUYAHOGA COUNTY NO. 3C, AS PER PLAN.
 THIS CATCH BASIN IS NOT INTENDED FOR USE WITH MOUNTABLE TYPE CURBS NOR SHOULD IT BE LOCATED WITHIN A DRIVE APRON. (SEE O.D.O.T. STANDARD CONSTRUCTION DRAWING CB-2.3).

CUYAHOGA COUNTY ENGINEER	
CATCH BASIN	DATE
CONSTRUCTION DRAWING CB-3C (ENGLISH VERSION)	05-05-97 12-07-99 10-15-00 10-29-01 03-01-05 08-28-07 10-10-08 06-16-11 10-31-13

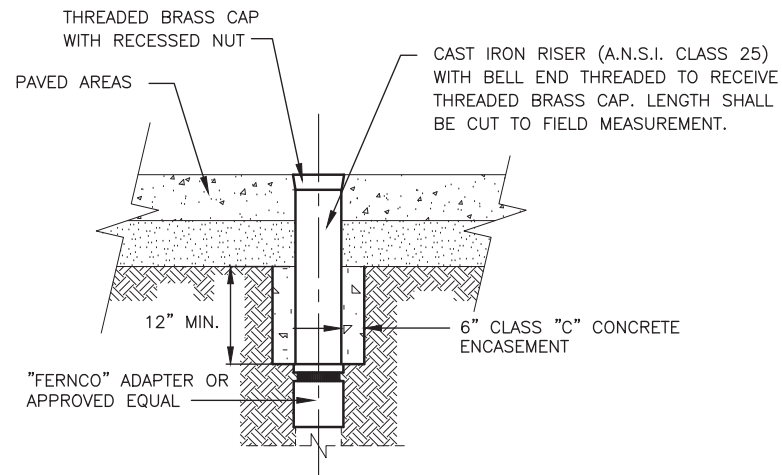


CUYAHOGA COUNTY ENGINEER	
TWIN 3C CATCH BASIN	DATE
CONSTRUCTION DRAWING CB-302	12-07-07 08-15-10 10-10-06 10-10-31



NOTES
 * TO BE USED IN CONJUNCTION WITH THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING CB-3C (CB-30M). SUMP AND TRAPS ARE REQUIRED FOR COMBINATION (STORM/SANITARY) SEWER SYSTEMS.
CASTING CAST IRON TRAP SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF 611.02.0 (711.12, ASTM A 48, AND MINIMALLY BE CLASS 35B GRAY IRON), AND SHALL HAVE A MINIMUM WEIGHT OF ONE-HUNDRED AND FORTY-FIVE (145) POUNDS (66 kg) ± 5%. PROVIDED THEY COMPLY WITH THE SPECIFICATIONS, DETAILS, DIMENSIONS AND MINIMUM WEIGHTS, NEENAH No. R-3707-12, EAST JORDAN No. 5964-12 OR APPROVED EQUAL CASTINGS ARE ACCEPTABLE. IF FIFTEEN (15) INCH (375mm) OUTLET PIPES ARE REQUIRED, USE NEENAH No. R-3707-15, EAST JORDAN No. 5964-15 OR APPROVED EQUAL CASTINGS HAVING A MINIMUM WEIGHT OF ONE-HUNDRED AND SIXTY (160) POUNDS (73 kg) ± 5%.
PAYMENT ALL MATERIALS (INCLUDING TRAP), LABOR, EXCAVATION AND BACKFILL SHALL BE PAID UNDER ITEM 611 - CATCH BASIN, CUYAHOGA COUNTY NO. 3C WITH SUMP AND TRAP, AS PER PLAN OR ITEM 611 - CATCH BASIN, CUYAHOGA COUNTY NO. 3C WITH SUMP, AS PER PLAN.

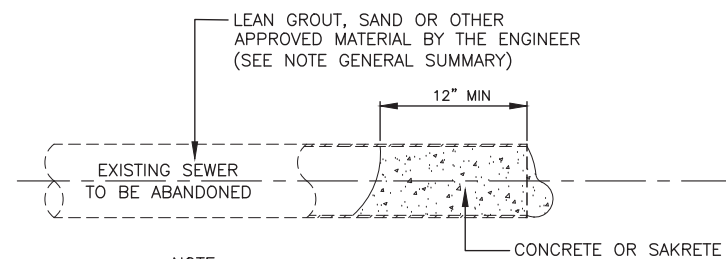
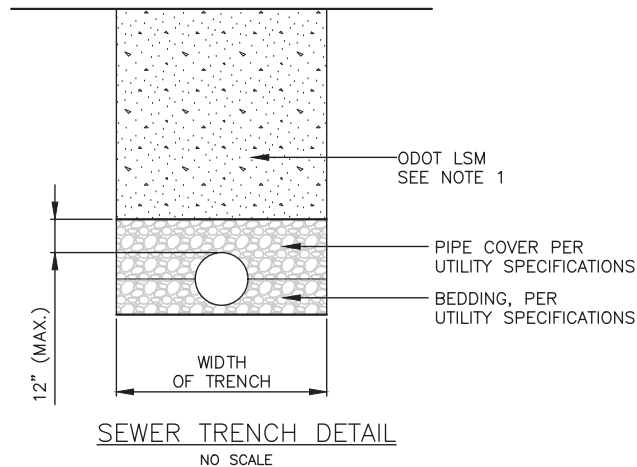
CUYAHOGA COUNTY ENGINEER	
CATCH BASIN WITH SUMP OR WITH SUMP AND TRAP	DATE
CONSTRUCTION DRAWING CB-3C S/T	12-07-99 10-29-01 07-07-09 10-31-13



ITEM 611 - DRAINAGE STRUCTURE, MISC.:
SEWER CLEANOUT ADJUSTED TO GRADE

NOTE:

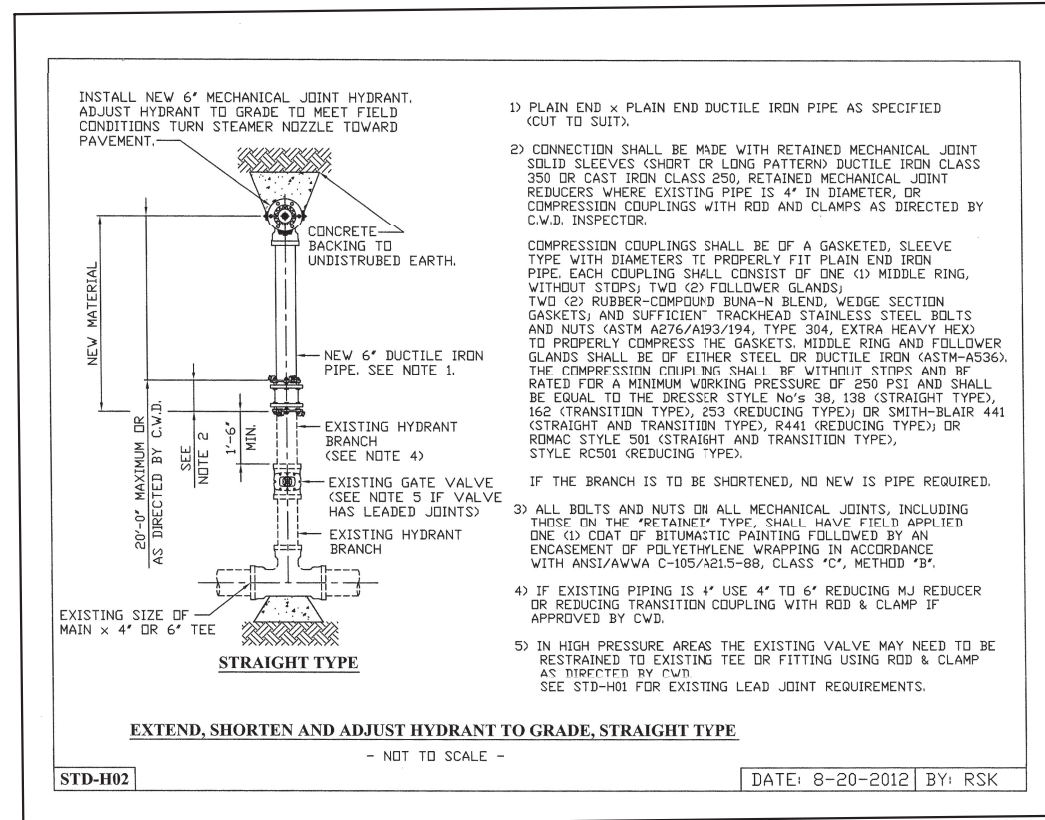
- 1.) ALL BACKFILL MATERIALS USED UNDER ANY PAVEMENTS SHALL BE LOW STRENGTH MORTAR PLACED FROM THE INITIAL ONE FOOT FILL OVER THE TOP OF UTILITIES. TO PREVENT FLOTATION AND ENTRY OF FLOWABLE FILL INTO ANY OTHER AREAS, TO THE SUBGRADE.
 - 2.) COVER ALL JOINTS IN PIPE IN THE TRENCH AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL.
- REPAIR TECHNIQUES OVER PRIVATE UTILITIES SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARD REPAIR PROCEDURES.



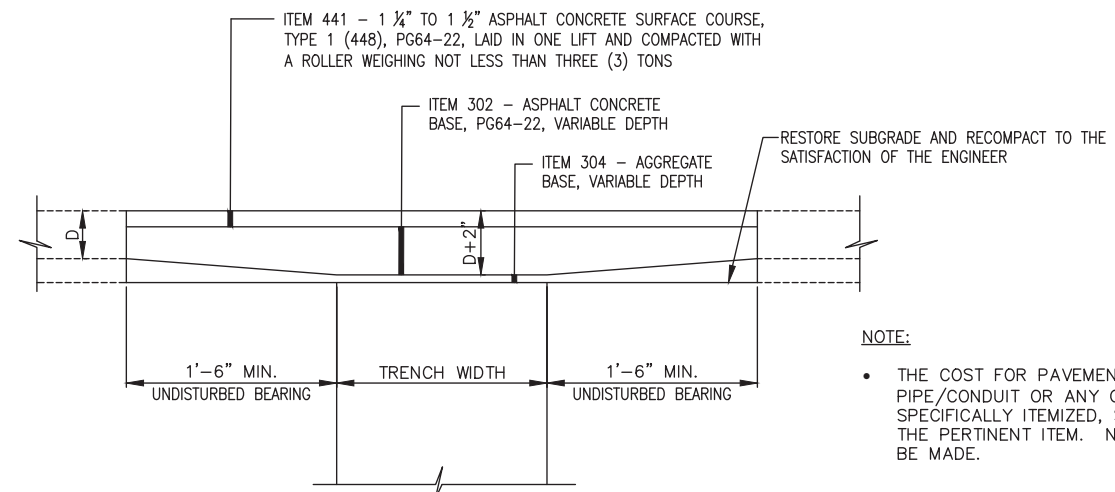
NOTE:

- 1.) DRAIN SEWER PRIOR TO ABANDONMENT
- 2.) CUT PIPE AT BOTH ENDS OF ABANDONMENT PLUG END OF PIPE PRIOR TO MAINLINE SEWER, ONCE CONCRETE HAS DRIED, BACKFILL PIPE AND PLUG UPSTREAM END.
- 3.) CONCRETE SHALL NOT ENTER EXISTING MAIN LINE SEWER.
- 4.) COST OF BULKHEADS AND BACKFILL OF PIPE SHALL BE INCLUDED INTO THE COST FOR ITEM SPECIAL FILL AND PLUG EXISTING CONDUIT

SPECIAL - FILL AND PLUG EXISTING
CONDUIT



ITEM SPECIAL - SHORTEN AND ADJUST
HYDRANT TO GRADE



NOTE:

- THE COST FOR PAVEMENT RESTORATION FOR PIPE/CONDUIT OR ANY OTHER ITEMS UNLESS SPECIFICALLY ITEMIZED, SHALL BE INCLUDED WITH THE PERTINENT ITEM. NO SEPARATE PAYMENT WILL BE MADE.

ASPHALT PAVEMENT SEWER
TRENCH REPAIR DETAIL

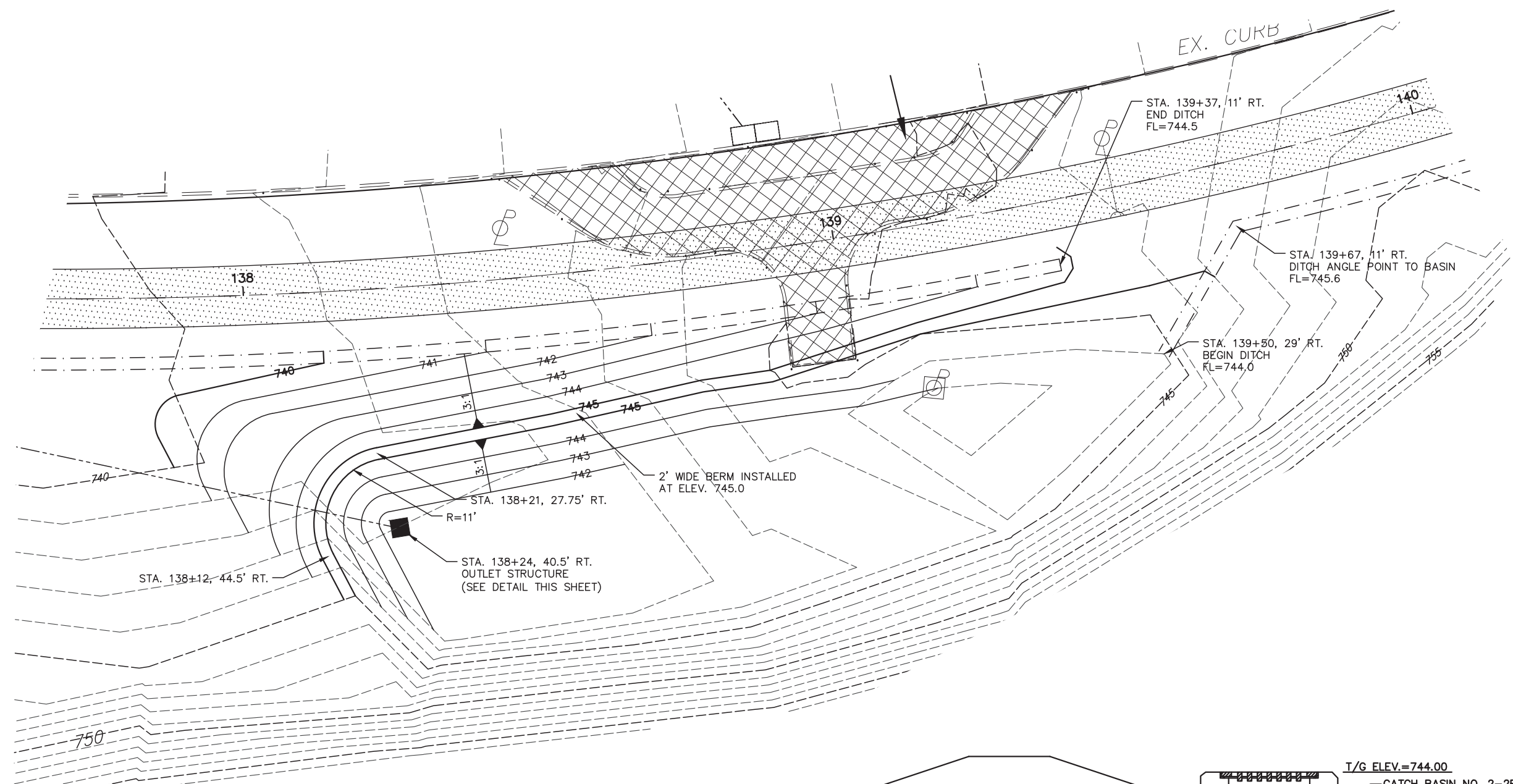
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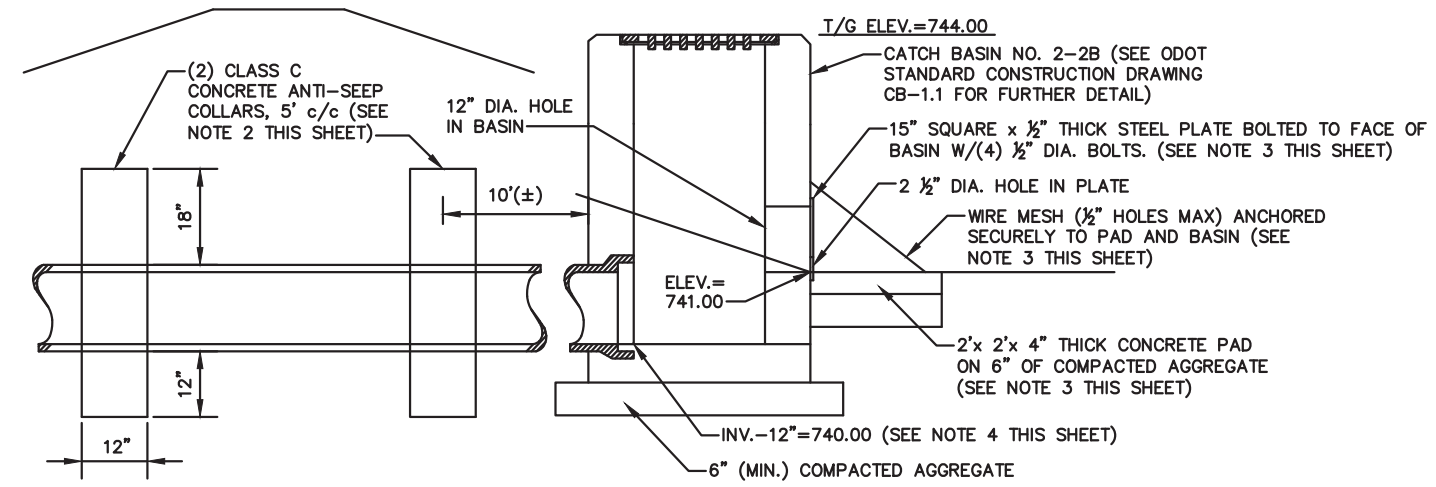
DETENTION BASIN
PLAN AND DETAILS

CUY - CEDAR - FAIRMOUNT



NOTES:

- CONTRACTOR IS TO REMOVE TREES, UNDERBRUSH, ETC. AS NECESSARY IN ORDER TO INSTALL THE BERM, OUTLET STRUCTURE, AND STORM SEWER.
- ANTI-SEEP COLLARS TO EXTEND A MINIMUM OF 6 INCHES BEYOND THE PIPE TRENCH WALLS. COLLARS ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 611-DRAINAGE STRUCTURE, MISC.: OUTLET STRUCTURE.
- STEEL PLATE AND TRASH TRAP WIRE MESH AND BASE ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 611-DRAINAGE STRUCTURE, MISC.: OUTLET STRUCTURE.
- PROVIDE WATERTIGHT CONNECTION WHERE THE OUTLET PIPE CONNECTS TO THE OUTLET STRUCTURE.



ITEM 611, DRAINAGE STRUCTURE, MISC.: OUTLET STRUCTURE

GENERAL

1. THE CONTRACTOR SHALL SUBMIT COPIES OF ALL MANUFACTURER PRODUCT SHEETS FOR ALL TRAFFIC SIGNAL EQUIPMENT TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING.
2. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING A MINIMUM OF ONE WEEK PRIOR TO PERFORMING ANY WORK THAT AFFECTS THE EXISTING TRAFFIC SIGNAL EQUIPMENT AND/OR OPERATION:

CEDAR GLEN/AMBLESIDE TRAFFIC SIGNAL:
 CITY OF CLEVELAND DIVISION OF TRAFFIC ENGINEERING
 ANDREW R. CROSS, TRAFFIC ENGINEER PHONE: (216) 664-3197

CEDAR/EUCLID HEIGHTS AND CEDAR/FAIRMOUNT TRAFFIC SIGNAL:
 ALEX MANNARINO, PUBLIC WORKS DIRECTOR PHONE: (216) 691-7300

MAINTENANCE OF TRAFFIC SIGNAL OPERATIONS:

AT ALL EXISTING SIGNALIZED INTERSECTIONS THAT REQUIRE THE CONTRACTOR TO MODIFY OR OTHERWISE DISTURB THE INSTALLATION, THE CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN THE ENTIRE INSTALLATION FROM THE TIME OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY RESTORED TO ITS ORIGINAL CONDITION, AND THE WORK HAS BEEN ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE CITY THAT THE SIGNAL IS LOCATED IN AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES MAY BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER WITH THE SIGNAL BACK TO SERVICE WITHIN EIGHT (8) HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE ALL DAMAGED EQUIPMENT SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. THE SIGNAL SHALL BE BACK IN SERVICE WITHIN EIGHT (8) HOURS AFTER THE CONTRACTOR'S NOTIFICATION OF THE OUTAGE OR MALFUNCTION.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED 8-HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENT AS SOON THEREAFTER AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OCCURS AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE.

WHERE OUTAGES ARE THE DIRECT RESULT OF A VEHICLE ACCIDENT, THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION AT THESE LOCATIONS WITHIN HIS OR HER RESPONSIBILITY, WITHIN PERIODS AS OUTLINED ABOVE, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15 AND ANY SUBSEQUENT BILLINGS BY THE CITY OF CLEVELAND OR CLEVELAND HEIGHTS FOR POLICE SERVICE AND/OR MAINTENANCE SERVICES BY STATE AND/OR CITY FORCES SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE THE CONTRACTOR IN ACCORDANCE WITH PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES OR HE MAY CHOOSE TO ENTER INTO A COOPERATIVE UNDERSTANDING WITH THE LOCAL MAINTAINING AGENCY TO PROVIDE THE MAINTENANCE. THE CONTRACTOR SHALL INFORM THE ENGINEER, IN WRITING, OF THE MAINTENANCE METHOD SELECTED.

ANY VEHICULAR OR PEDESTRIAN TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING, WHICH WILL BE OUT OF OPERATION, SHALL BE COVERED IN THE MANNER DESCRIBED IN SECTION 632.25.

ALL COST RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICES BID FOR THE VARIOUS TRAFFIC SIGNAL ITEMS.

ITEM 625 - PULL BOX, MISC.: 13"x 24"

PULL BOXES FURNISHED AND INSTALLED SHALL MEET THE FOLLOWING SPECIFICATIONS:

1. THE EXTERIOR DIMENSIONS AT THE TOP SHALL BE 13"x 24" (NOMINAL).
2. THE BOX SHALL BE 24" DEEP (NOMINAL) AND SHALL TAPER OUTWARD FROM THE TOP TO THE OPEN BOTTOM.
3. THE INSIDE DIMENSIONS AT THE BOTTOM SHALL BE 11-7/8"x 21-3/8" (MINIMUM).
4. THE BOX, WITHOUT COVER, SHALL WEIGH APPROXIMATELY 64 POUNDS.
5. THE COVER SHALL BE 13-3/4"x 23-1/2"x 2" AND SHALL WEIGH APPROXIMATELY 34 POUNDS.
6. **LOAD CAPACITY:** THE BOX AND COVER SHALL BE CAPABLE OF SUPPORTING A LOAD OF 20,000 POUNDS ON A 10"x 10" AREA, TESTED IN ACCORDANCE WITH "WESTERN UNDERGROUND COMMITTEE GUIDE 3.6". THE COVER DEFLECTION SHALL NOT EXCEED 1/2" AT DESIGN LOAD. THE COVER AND BOX SHALL SHOW NO SIGNS OF DAMAGE AFTER TEN (10) CYCLES AT DESIGN LOAD.
7. **MATERIAL AND CONSTRUCTION:**
 - a. THE BOX SHALL BE CONSTRUCTED OF FIBERGLASS REINFORCED POLYMER (FRP) WITH ISOPHTHALIT POLYESTER USING THE SPRAY-UP AND ROLL CONSTRUCTION METHOD. THE MATERIAL SHALL HAVE STABILIZERS TO RESIST ULTRAVIOLET (UV) DEGRADATION IN ACCORDANCE WITH ASTM D-790 AND ASTM D-11501-71, SECTION 6, PROCEDURE B.
 - b. THE TOP RING OF THE BOX SHALL BE MADE OF POLYMER CONCRETE USING A POLYESTER BINDER WITH AGGREGATE FILLERS AND CHOPPED FIBERGLASS WITH MINIMUM TENSILE STRENGTH OF 1900 PSI. THE RING SHALL HAVE THE SAME UV RESISTANCE AS THE FRPMATERIAL. THE THREADED INSERTS FOR THE COVER BOLTS SHALL BE STAINLESS STEEL.
 - c. THE COVER SHALL BE MADE WITH A THICK MOLDING COMPOUND (TMC) USING THE COMPRESSION MOLDING METHOD. THE TMC SHALL CONSIST OF A MINIMUM OF TEN PERCENT (10%) FIBERGLASS IN A CALCIUM CARBONATE AND POLYESTER RESIN MATRIX. THE COVER SHALL BE MARKED WITH THE WORD "TRAFFIC" IN 2 LETTERS, EMBOSSED INTO THE TMC AND SHALL HAVE A NON-SKID SURFACE AND THE SAME UV RESISTANCE AS THE FRP MATERIAL.
 - d. THE COVER SHALL BE SECURED TO THE BOX USING TWO HEX HEAD STAINLESS STEEL BOLTS AND WASHERS WHICH SHALL ATTACH TO THREADED INSERTS IN THE BODY OF THE BOX.
8. **CONDUIT OPENINGS:**
 - a. THE OPENINGS IN THE SIDE OF THE PULL BOX, WHICH ARE REQUIRED TO INSERT CONDUIT (INTO THE PULL BOX) SHALL BE DRILLED OR SAWN IN THE FIELD, ONCE THESE LOCATIONS HAVE BEEN DETERMINED. THE OPENINGS SHALL NOT EXCEED THE OUTSIDE DIAMETER OF THE CONDUIT BY MORE THAN FIVE PERCENT (5%). ALL OPENINGS IN THE SIDE OF THE PULL BOX SHALL BE THOROUGHLY GROUTED WITH CEMENT MORTAR AFTER PLACING THE CONDUIT.
 - b. THE EXACT LOCATIONS OF THE PULL BOXES ARE TO BE STAKED AND CHECKED BY THE ENGINEER PRIOR TO PLACEMENT TO VERIFY CLEARANCE OF UNDERGROUND FACILITIES AND ANY ABOVE GROUND OBSTRUCTIONS. IF THERE ARE ANY CONFLICTS, THESE WILL BE ADJUSTED AS DIRECTED BY THE ENGINEER. PAYMENT FOR THIS ADJUSTMENT IS INCIDENTAL TO THESE ITEMS.
9. **PULL BOX DRAIN:** PULL BOXES ARE TO PROVIDED A 4" DRAIN TO THE NEAREST STORM INLET, UNDERDRAIN, OR OTHER SUITABLE OUTLET FROM THE PULL BOX. TWENTY (20) FEET OF 4" PVC CONDUIT SHALL BE USED AND INCLUDED IN THE PRICE OF THE PULL BOX. ADDITIONAL 4" CONDUIT IN THE AMOUNT OF 100 L.F. HAS BEEN INCLUDED IN THE BID PROPOSAL FOR USE AS DIRECTED BY THE ENGINEER. FAILURE TO INSTALL DRAIN CONDUIT SHALL RESULT IN A PENALTY EQUAL TO THE PRICE BID FOR THE AFFECTED PULL BOXES. PAYMENT FOR PULL BOX ITEMS SHALL NOT BE MADE UNTIL PULL BOXES, INCLUDING UNDER DRAIN, HAVE BEEN COMPLETELY INSTALLED.
10. **PAYMENT:** PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE BID AND SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND OTHER INCIDENTALS NECESSARY FOR THE ACTUALLY COMPLETED AND ACCEPTED QUANTITIES OF: ITEM 625, PULL BOX, MISC.: 13" X 24", AS PER PLAN.

ITEM 625 - PULL BOX, MISC.: PULL BOX ADJUSTED TO GRADE

THIS ITEM OF WORK SHALL REQUIRE THE CONTRACTOR TO RAISE OR LOWER THE EXISTING PULL BOX SO THAT THE TOP OF THE PULL BOX IS LEVEL WITH THE ADJACENT PAVEMENT. EXTREME CARE SHOULD BE EXERCISED BY THE CONTRACTOR IN THE EXCAVATION IN THE EXCAVATION, RAISING, LOWERING, AND/OR REMOVAL OF THE EXISTING PULL BOX SO AS TO NOT DAMAGE THE EXISTING PULL BOX, CONDUIT(S), AND/OR CABLE(S).

IF RAISING THE PULL BOX TO GRADE, NO. 8 AGGREGATE SHALL BE USED. IF LOWERING THE PULL BOX TO GRADE, EXISTING AGGREGATE AND/OR DIRT SHALL BE REMOVED AND A NEW SIX INCH (6") LAYER OF NO. 8 AGGREGATE INSTALLED.

ALL OPENINGS IN THE PULL BOX SHALL BE REGROUTED IF NEEDED. THE CONTRACTOR SHALL INSTALL ANY EXTENSION(S) TO THE EXISTING CONDUIT(S) IF NECESSARY, TO INSURE PROPER ORIENTATION IN THE EXISTING PULL BOX. THE EXTENSION(S) SHALL BE COMPATIBLE WITH THE EXISTING CONDUIT SIZE AND TYPE.

IF THE EXISTING CABLES MUST BE SEVERED TO INSTALL THE CONDUIT EXTENSION(S), THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL CABLE SPLICE KIT(S) OR CONNECTOR(S) CONFORMING TO THE REQUIREMENTS OF CMS 725.15. IF THE SEVERING OF THE EXISTING CABLE WILL CAUSE A DISRUPTION TO THE OPERATION OF THE EXISTING TRAFFIC SIGNAL, THE CONTRACTOR SHALL PROVIDE FLAGGERS AND SIGNS AS PER THE OMUTCD TO CONTROL TRAFFIC UNTIL THE SEVERED CABLE IS REPAIRED. SIGNAL CABLE SHALL NOT BE CUT AND SPLICED UNDER ANY CONDITION. ALL WORK SHALL BE PER SCD HL-30.11.

PULL BOXES THAT ARE WITHIN PROPOSED CURB RAMPS SHALL BE RELOCATED SO THAT THEY ARE OUTSIDE THE LIMITS OF THE DETECTABLE WARNINGS IF AT ALL POSSIBLE.

PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED TO PERFORM THE ITEM OF WORK AS DESCRIBED ABOVE. BASIS OF PAYMENT WILL BE AT THE CONTRACT BID PRICE FOR EACH.

SHOULD THE EXISTING PULL BOX BE FOUND IN A CONDITION WHERE IT CANNOT BE SALVAGED AND MUST BE REPLACED, THE CONTRACTOR, WITH THE APPROVAL OF THE ENGINEER, SHALL REMOVED AND REPLACED AS PER ITEM 625-PULL BOX REMOVED AND REPLACED, AS PER PLAN.

ITEM 625 - PULL BOX REMOVED AND REPLACED, AS PER PLAN

IF AN EXISTING PULL BOX IS FOUND IN A CONDITION WHERE IT CANNOT BE SALVAGED, IT SHALL BE REMOVED AND REPLACED, AS FOLLOWS:

THIS ITEM SHALL CONSIST OF THE CAREFUL REMOVAL OF AN EXISTING DAMAGED PULL BOX AND THE INSTALLATION OF A NEW PORTLAND CONCRETE PULL BOX. THE NEW PULL BOX SHALL MATCH THE DIMENSIONS OF THE EXISTING PULL BOX UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

EXTREME CARE SHALL BE EXERCISED BY THE CONTRACTOR IN THE EXCAVATION AND REMOVAL OF THE EXISTING PULL BOX SO AS NOT TO DAMAGE THE EXISTING CONDUIT(S) AND/OR CABLE(S). THE CONTRACTOR SHALL FURNISH, AND INSTALL, IF NECESSARY ANY EXTENSION(S) TO THE EXISTING CONDUIT(S) TO INSURE PROPER ORIENTATION IN THE NEW PULL BOX. THE EXTENSION(S) MAY BE OF CABLE DUCT, PVC PIPE, OR RIGID CONDUIT MATERIAL AS LONG AS IT IS COMPATIBLE WITH THE EXISTING CONDUIT SIZE. IF THE EXISTING CABLE(S) MUST BE SEVERED TO INSTALL THE CONDUIT EXTENSION(S) THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL A CABLE SPLICE KIT OR CONNECTOR KIT CONFORMING TO THE REQUIREMENTS OF CMS 725.15.

ALSO INCLUDED SHALL BE ANY WATERPROOF CONNECTOR KITS, TESTING, AND ANY INCIDENTALS REQUIRED TO RETURN THE CIRCUIT TO NORMAL OPERATION.

THE REPLACEMENT PULL BOX SHALL BE PER CMS 625.11, 725.08, AND SCD HL-30.11.

PAYMENT FOR THIS ITEM WILL BE MADE AT THE CONTRACT UNIT PRICE PER EACH AND SHALL INCLUDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO PERFORM THIS ITEM OF WORK AS DESCRIBED ABOVE. THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS WORK:

ITEM 625 - PULL BOX REMOVED AND REPLACED, AS PER PLAN 2 EACH

ITEM 625 - GROUND ROD, AS PER PLAN

ALL GROUND RODS SHALL BE 1" DIAMETER, COPPER CLAD STEEL. ALL GROUND RODS ARE TO BE BONDED ELECTRICALLY TO THE FOUNDATION REINFORCEMENT.

ITEM 625 - PLASTIC CAUTION TAPE AS PER PLAN

THE LOCATION OF THE CONDUIT IN THE TRENCH SHALL BE MARKED BY THE USE OF A CONTINUOUS IDENTIFYING TAPE BURIED IN THAT TRENCH ABOVE THE LINE. THE IDENTIFYING TAPE SHALL BE AN INERT MATERIAL APPROXIMATELY 6" WIDE COMPOSED OF POLYETHYLENE PLASTIC AND SHALL BE HIGHLY RESISTANT TO ALKALIS, ACIDS OR OTHER CHEMICAL COMPONENTS LIKELY TO BE ENCOUNTERED IN SOILS. THE TYPE SHALL BE RED WITH THE WORDS "ELECTRIC LINE BURIED BELOW" PRINTED IN BLACK LETTERS ON ONE SIDE ONLY. IT SHALL BE SUPPLIED IN CONTINUOUS ROLLS WITH THE IDENTIFYING LETTERS REPEATED FOR THE FULL LENGTH OF THE TAPE. THE CONTRACTOR SHALL BURY THE TAPE IN THE TRENCH WITH ONE STRIP PLACED APPROXIMATELY DOWN THE CENTERLINE AND 8" TO 12" BELOW THE FINAL GRADE. IT SHALL BE PLACED IN THE TRENCH WITH THE PRINTED SIDE UP AND SHALL BE ESSENTIALLY PARALLEL TO THE FINISHED SURFACE. THE CONTRACTOR SHALL TAKE ANY NECESSARY PRECAUTIONS TO INSURE THAT THE TAPE IS NOT PULLED, DISTORTED OR OTHERWISE MISPLACED IN COMPLETING THE TRENCH BACKFILLING. THE TAPE SHALL BE "TERRA TAPE", "ALLEN SYSTEM'S" OR AN EQUAL AS APPROVED BY THE ENGINEER IN ADVANCE.

ITEM 625 - CONDUIT (BY SIZE), AS PER PLAN

THE COST OF TRENCHING REQUIRED TO INSTALL THE TRAFFIC SIGNAL CONDUIT SHALL BE INCLUDED IN THE COST OF THE CONDUIT FOR PAYMENT.

ITEM 632 - REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM: AMBLESIDE AVENUE

CONTRACTOR IS TO REMOVE THE EXISTING PEDESTRIAN SIGNAL, PUSHBUTTON, AND ALL OVERHEAD WIRING AND CONDUITS AT THE SOUTHWEST CORNER OF CEDAR ROAD AND AMBLESIDE DRIVE. THE PEDESTRIAN SIGNAL AND PUSHBUTTON SHALL BE DELIVERED TO THE CITY. CONTACT TRAFFIC ENGINEERING AT (216) 664-3194. PAYMENT FOR THIS WORK SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM 632, REMOVAL OF MISCELLANEOUS TRAFFIC SIGNAL ITEM.



CALCULATED
 DIRK
 CHECKED
 CJB

TRAFFIC CONTROL GENERAL NOTES

CUY - CEDAR - FAIRMOUNT



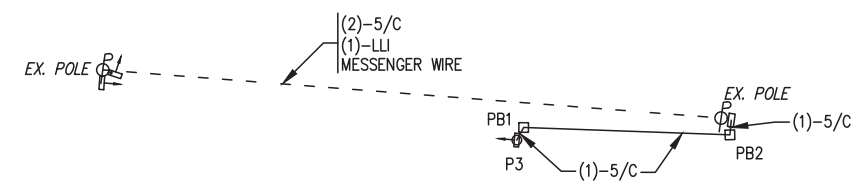
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MULTI-PURPOSE PATH
SIGNALIZATION PLAN

CUY- CEDAR-FAIRMOUNT

NOTES:

1. CONTRACTOR IS TO REMOVE EXIST. PEDESTRIAN SIGNAL, PUSHBUTTON, AND ALL OVERHEAD WIRING AND CONDUITS. REFER TO TRAFFIC CONTROL GENERAL NOTES (SEE SHEET NO. 39 FOR FURTHER INFORMATION).
2. CONTRACTOR IS TO PROVIDE ALL FITTINGS NECESSARY TO CONNECT THE NEW CONDUIT RISER TO THE EXISTING POLE-MOUNTED CONTROLLER. COORDINATE ALL WORK WITH CITY OF CLEVELAND TRAFFIC ENGINEERING.
3. REMOVE AND REPLACE THE EXISTING PUSHBUTTON AND PUSHBUTTON SIGN ON THE POLE AT THE NORTHWEST CORNER OF CEDAR GLEN PARKWAY AND MURRAY HILL ROAD. SPLICE THE NEW PUSHBUTTON WIRING INTO THE EXISTING WIRING. A CONTINGENCY QUANTITY OF 10 FEET OF LLI HAS BEEN INCLUDED FOR THIS WORK.



WIRING DIAGRAM



R10-3-9(R)
(2) REQUIRED

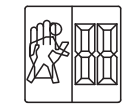
PEDESTRIAN PUSHBUTTON SIGNS



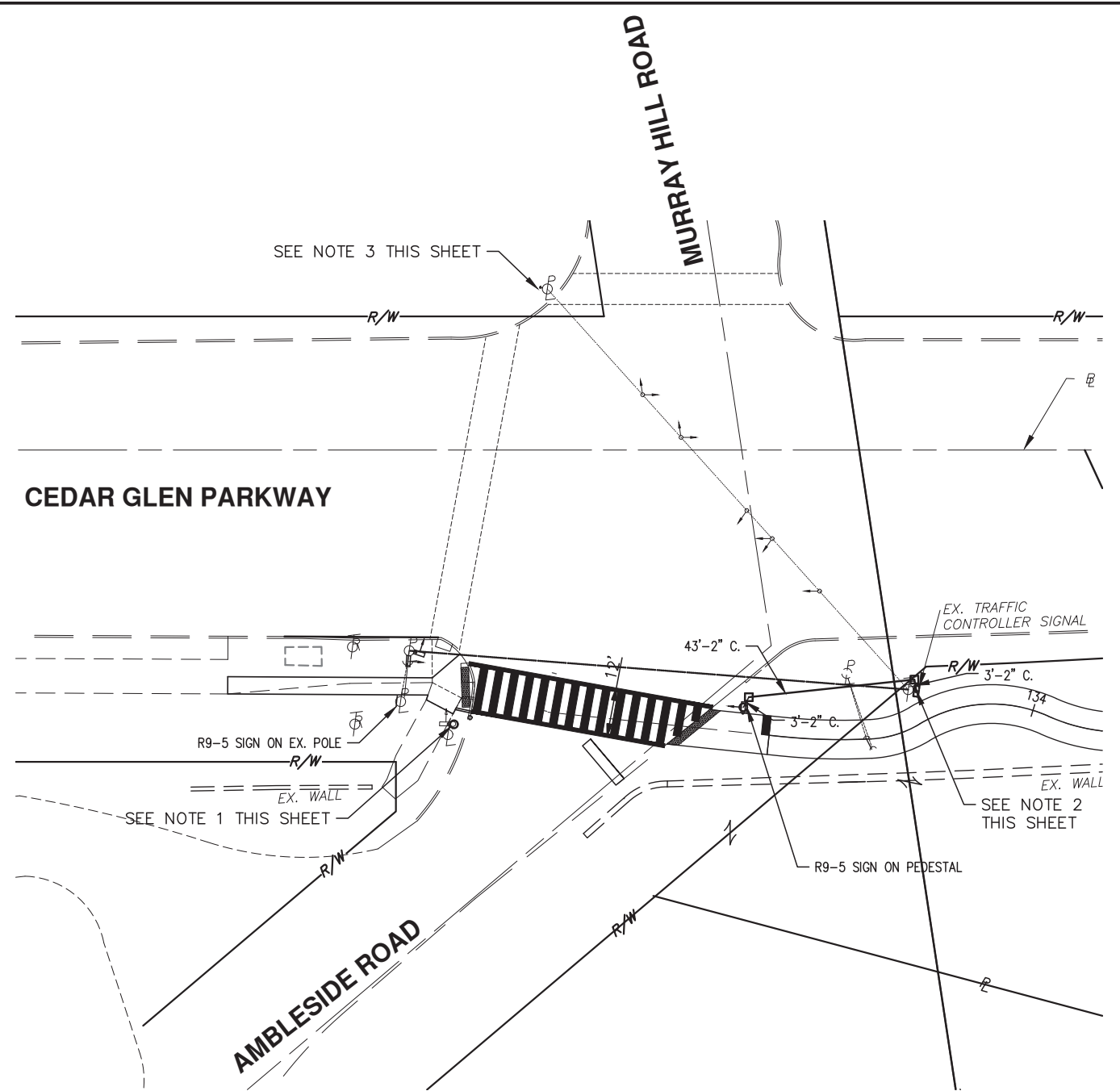
R9-5
12" x 18"
(2) REQUIRED

SIGNS

TYPE D2 (LED) (COUNTDOWN)



SIGNAL HEADS



STA. 132+35, 12' LT.
EX. WOOD POLE
INSTALL PEDESTRIAN SIGNAL
AND PUSHBUTTON (FOR
CROSSING CEDAR ROAD)
INSTALL PEDESTRIAN SIGNAL
(FOR CROSSING AMBLESIDE
ROAD)

STA. 133+23, 6.5' LT.
P3: 8' PEDESTAL WITH
TRANSFORMER BASE AND
PEDESTRIAN SIGNAL

STA. 133+24, 9' LT.
PB1: 13" x 24" PULLBOX

STA. 133+73, 11' LT.
PB2: 13" x 24" PULLBOX

5)

NOTES (FOR ALL SHEETS)

- CONTACT THE OHIO UTILITIES PROTECTION SERVICE PRIOR TO COMMENCEMENT OF ANY DEMOLITION OR CONSTRUCTION: 811 OR 1-800-362-2764. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO ONSET OF WORK AND COORDINATE ACCORDINGLY. CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES LOCATED ON SITE WHETHER SHOWN OR NOT. IN THE CASE OF A CONFLICT, NOTIFY LANDSCAPE ARCHITECT. LOCATION OF UNDERGROUND UTILITIES ON DRAWINGS DO NOT PURPORT TO BE 100% ACCURATE AND/OR COMPLETE AND SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY SUPPORT PRECAUTIONS AND/OR DAMAGES INCURRED.
- CONTRACTOR TO VERIFY UTILITY ROUTINGS AND COORDINATE THIS WORK WITH EXISTING UTILITY LOCATIONS. ADJUST PLANT MATERIAL ACCORDINGLY.
- PROTECT EXISTING WORK TO REMAIN INCLUDING SIDEWALKS, CURBS, STEPS AND WALLS THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE ALL VEHICULAR PARKING ENTRY AND EXIT TO CONSTRUCTION AREA WITH OWNER'S REPRESENTATIVE. CONTRACTOR HAS SOLE RESPONSIBILITY TO RESTORE AND/OR REPLACE ANY AREA DISTURBED BY CONSTRUCTION VEHICLES DURING ANY PHASE OF DEMOLITION OR CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES THAT OCCUR TO ANY EXISTING ITEM SCHEDULED TO REMAIN DURING ANY PHASE OF DEMOLITION OR CONSTRUCTION. ANY ITEM DAMAGED SHALL BE REPLACED/REPAIRED AT CONTRACTOR'S EXPENSE.
- PROVIDE EXPANSION JOINTS WHERE SHOWN ON PLANS AND AS DETAILED ON CIVIL PLANS. PROVIDE EXPANSION JOINTS WHEREVER CONCRETE PAVING ABUTS WALLS, CURBS, VERTICAL FACES, EXISTING PAVING AND AT MATERIAL CHANGES. EXPANSION JOINTS SHALL BE 1/2" WITH PRE-MOLDED FILLER AND SEALANT; SEALANT COLOR TO MATCH ADJACENT PAVING COLOR.
- PROVIDE SAWCUT CONTROL JOINTS IN CONCRETE PAVING AS SHOWN ON PLANS (INTERVALS OF APPROXIMATELY 5'-0" O.C.). ALIGN JOINTS WITH WALLS, CURBS, CORNERS AND OTHER ADJACENT FEATURES TO CONTROL PAVEMENT CRACKING AS INDICATED ON PLANS.
- PROVIDE AGED, DOUBLE SHREDDED HARDWOOD BARK MULCH 3" DEEP MIN. AT PLANTING BEDS NOT COVERED BY A TREE GRATE. PROVIDE A MIN. 3' DIAMETER MULCH BED AROUND EACH INDIVIDUAL TREE UNLESS TREES ARE INCORPORATED IN A PLANTING BED OR ARE WITHIN A COVERED TREE PIT. MULCH COLOR TO BE BLACK.
- ALL PLANTING BEDS TO RECEIVE A MIN. 6" DEPTH OF SOIL MIX AFTER FINAL GRADE IS ESTABLISHED. SEE ODOT ITEM FOR SOIL MIXTURE. ALL SEEDED AREAS TO RECEIVE CLEAN FINE GRADED TOPSOIL, FREE OF ALL ROCKS AND DELETERIOUS DEBRIS.
- ANY PLANT MATERIAL SUBSTITUTIONS TO BE VERIFIED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- PLACEMENT OF PLANTING MATERIALS SHALL NOT AFFECT THE INTENDED DRAINAGE PATTERN OF THE FINAL GRADING PLAN. THIS INCLUDES BUT IS NOT LIMITED TO PLACING PLANT MATERIALS IN SWALES OR CREATING MOUNDS THAT BLOCK THE INTENDED SURFACE DRAINAGE PATTERN.
- IN ORDER TO MAINTAIN ALL EXISTING TREES, USE EXTREME CAUTION TO NOT UNNECESSARILY HARM TREE ROOTS DURING CONSTRUCTION.
- DO NOT SCALE DRAWINGS. DIMENSIONS SHOWN ARE TO CENTERLINES, CENTERS AND EDGES OF FEATURES UNLESS OTHERWISE NOTED.

LANDSCAPE / HARDSCAPE GENERAL SUMMARY – QUANTITIES

DRAWING NUMBER																	ABB.	ITEM	ITEM EXT.	UNIT	DESCRIPTION	SEE SHT. NO.			
L-006 47	L-007 48	L-008 49	L-009 50	L-010 51	L-011 52	L-012 53	L-013 54	L-014 55	L-015 56	L-016 57	L-017 58	L-018 59	L-019 60	L-020 61	L-021 62	TOTAL									
2		2	2	7	3												16		SPECIAL	68014550	EACH	TRASH RECEPTACLE	47,49,50,51,52		
		1	2	2	5												10		SPECIAL	69098000	EACH	SPECIAL-MISC.: BENCH	49,50,51,52		
		1		2	3	3											9		SPECIAL	69050560	EACH	BIKE RACK	49,51,52,53		
				3	4	2											9		661	99900	EACH	PLANTING, MISC.: TREE GRATES	52		
				6	9												15		661	99900	EACH	PLANTING, MISC.: PLANTER (TYPE A)	47(REF),50,51		
				2	4												6		661	99900	EACH	PLANTING, MISC.: PLANTER (TYPE B)	47(REF),50,51		
	1																1		SPECIAL	69098000	EACH	SPECIAL-MISC.: EXISTING CEDAR FAIRMOUNT DISTRICT SIGN	48		
45	43	7	18	12	38	21	36										220		659	00300	CU YD	TOPSOIL	47,48,49,50,51,52,53,54		
		2	2	6	19	3											32		661	00500	CU YD	MULCH	49,50,51,52,53		
2,428	2,289	232	840			876	1,960										8,625		659	98400	SQ FT	SEEDING, MISC.: TURF SEED MIX	47,48,49,50,53,54		
				10													10		AC FI	661	14000	EACH	PERENNIALS, #2 CONT., ACHILLEA X 'CORONATION GOLD'	52	
		12	12	27	13	8											72		CA KF	661	14000	EACH	PERENNIALS, #2 CONT., CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	49,50,51,52,53	
					102												102		CA MO	661	14000	EACH	PERENNIALS, #1 CONT., CAREX MOROWII 'ICE DANCE'	52	
					29	35	14										78		HE HR	661	14000	EACH	PERENNIALS, #2 CONT., HEMEROCALLIS 'HAPPY RETURNS'	51,52,53	
					8	15	6										29		NE FA	661	14000	EACH	PERENNIALS, #2 CONT., NEPETA X FAASSENII 'WALKER'S LOW'	51,52,53	
					10												10		PE AT	661	14000	EACH	PERENNIALS, #2 CONT., PEROVSKIA ATRIPLICIFOLIA 'RUSSIAN SAGE'	52	
						43											43		RU FU	661	14000	EACH	PERENNIALS, #2 CONT., RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM'	52	
					22	16	12										50		SA MN	661	14000	EACH	PERENNIALS, #2 CONT., SALVIA NEMEROSA 'MAY NIGHT'	51,52,53	
					19	9	6										34		PO FR	661	20020	EACH	DECIDUOUS SHRUB, 18" HEIGHT, POTENTILLA FRUTICOSA 'ABBOTSWOOD'	51,52,53	
		6	6	4													16		SP NF	661	20020	EACH	DECIDUOUS SHRUB, 18" HEIGHT, SPIRAEA X 'NEON FLASH'	49,50,51	
						19											19		JU SC	661	30070	EACH	EVERGREEN SHRUB, 2.5' HEIGHT, JUNIPERUS SQUAMATA 'BLUE STAR'	52	
					3	6	2										11		UL FR	661	40120	EACH	DECIDUOUS TREE, 3" CALIPER, ULMUS 'FRONTIER'	51,52,53	
																	5,000		661	31000	GALLON	LANDSCAPE WATERING			
									1,170	2,285	2,580	4,350	2,527	2,950	1,507	1,030	18,399		P1	608	10001	SF	4" CONCRETE WALK, AS PER PLAN	55,56,57,58,59,60,61,62	
										290	480	297	349	115			1,531		P2	608	98000	SF	WALKWAY, MISC.: INTEGRAL COLORED CONCRETE	57,58,59,60,61	
										880	215	588	400	420	200		2,703		P3	608	98000	SF	WALKWAY, MISC.: STAMPED & INTEGRALLY COLORED CONCRETE	57,58,59,60,61,62	
										530	1016	615	581	980	345		4,067		P4	608	98000	SF	WALKWAY, MISC.: UNIT PAVER	55,57,58,59,60,61	
										150	100	40	140	65	40	235	320	1,090		P5	608	98000	SF	WALKWAY, MISC.: PATCH & REPAIR EXISTING CONCRETE	55,56,57,58,59,60,61,62
												75	120	25			220		608	98100	LF	WALKWAY, MISC.: CURB EDGE RESTRAINT	59,60,61		



CALCULATED
KJK
CHECKED
AJP

LANDSCAPE GENERAL SUMMARY
LANDSCAPE NOTES

CUY – CEDAR – FAIRMOUNT

L-001

PLAN NOTES

ITEM: 608 - 98000 CONCRETE UNIT PAVERS AS PER PLAN:

PART 1 - GENERAL

1.01 SUMMARY

A. SECTION INCLUDES THE FOLLOWING:

- 1. CONCRETE PAVERS
- 2. JOINT SAND
- 3. SETTING BED SAND
- 4. BASE CONDITION
- 5. GEOTEXTILE FABRIC
- 6. SUBBASE AGGREGATE

1.02 REFERENCES

NOTE: DESIGN STREET, INDUSTRIAL, PORT AND AIRPORT PAVEMENT THICKNESSES IN CONSULTATION WITH A QUALIFIED CIVIL ENGINEER, IN ACCORDANCE WITH ESTABLISHED FLEXIBLE PAVEMENT DESIGN PROCEDURES, LOCKPAVE® SOFTWARE, AND IN ACCORDANCE WITH INTERLOCKING CONCRETE PAVEMENT INSTITUTE TECHNICAL BULLETINS. SAMPLE CONSTRUCTION DETAIL DRAWINGS ARE AVAILABLE FROM UNILOCK®. THIS SPECIFICATION MAY REQUIRE MODIFICATIONS.

- A. ASTM INTERNATIONAL, LATEST EDITION:
 - 1. C 33, STANDARD SPECIFICATION FOR CONCRETE AGGREGATES.
 - 2. C 67, STANDARD TEST METHODS FOR SAMPLING AND TESTING BRICK AND STRUCTURAL CLAY TILE, SECTION 8, FREEZING AND THAWING.
 - 4. C 136, STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES.
 - 5. C 140, STANDARD TEST METHODS FOR SAMPLING AND TESTING CONCRETE MASONRY UNITS AND RELATED UNITS.
 - 6. C 144 STANDARD SPECIFICATIONS FOR AGGREGATE FOR MASONRY MORTAR.
 - 7. D 448, STANDARD CLASSIFICATION FOR SIZES OF AGGREGATE FOR ROAD AND BRIDGE CONSTRUCTION.
 - 8. C 936, STANDARD SPECIFICATION FOR SOLID CONCRETE INTERLOCKING PAVING UNITS.
 - 9. C 979, STANDARD SPECIFICATION FOR PIGMENTS FOR INTEGRALLY COLORED CONCRETE.
 - 10. D 698 TEST METHODS FOR MOISTURE DENSITY RELATIONS OF SOIL AND SOIL AGGREGATE MIXTURES USING A 5.5 LB (2.4 N) RAMMER AND 12 IN. (305 MM) DROP.
 - 11. D 1557 TEST METHODS FOR MOISTURE DENSITY RELATIONS OF SOIL AND SOIL AGGREGATE MIXTURES USING A 10 LB (44.5 N) RAMMER AND 18 IN. (457 MM) DROP.
 - 12. C1645 STANDARD TEST METHOD FOR FREEZE-THAW AND DE-ICING SALT DURABILITY OF SOLID CONCRETE INTERLOCKING PAVING UNITS
 - 13. D 1883, TEST METHOD FOR CALIFORNIA BEARING RATIO OF LABORATORY-COMPACTED SOILS.
 - 14. D 2940 GRADED AGGREGATE MATERIAL FOR BASES OR SUBBASES FOR HIGHWAYS OR AIRPORTS.
 - 15. D 4254, STANDARD TEST METHODS FOR MINIMUM INDEX DENSITY AND UNIT WEIGHT OF SOILS AND CALCULATION OF RELATIVE DENSITY.
 - 16. D 5261, STANDARD TEST METHOD FOR MEASURING MASS PER UNIT AREA OF GEOTEXTILES
 - 17. D 4632, STANDARD TEST METHOD FOR GRAB BREAKING LOAD AND ELONGATION OF GEOTEXTILES
 - 18. D 4533, STANDARD TEST METHOD FOR INDEX TRAPEZOIDAL TEARING STRENGTH OF GEOTEXTILES
 - 19. D 4833, STANDARD TEST METHOD FOR INDEX PUNCTURE RESISTANCE OF GEOTEXTILES, GEOMEMBRANES AND RELATED PRODUCTS
 - 20. D 4491, STANDARD TEST METHOD FOR WATER PERMEABILITY OF GEOTEXTILES BY PERMITTIVITY
 - 21. D 4751, STANDARD TEST METHOD FOR DETERMINING APPARENT OPENING SIZE OF A GEOTEXTILE
 - 22. D 4354, STANDARD PRACTICE FOR SAMPLING OF GEOSYNTHETICS FOR TESTING
 - 23. D 4759, STANDARD PRACTICE FOR DETERMINING THE SPECIFICATIONS CONFORMANCE OF GEOSYNTHETICS
- NOTE: IN ORDER TO DETERMINE THE LATEST VERSION OF THE LISTED SPECIFICATIONS AND STANDARDS, PLEASE CONSULT THE ASTM WEB PAGE (WWW.ASTM.COM)

1.03 SUBMITTALS

- A. CONCRETE PAVERS:
 - 1. SAMPLES FOR VERIFICATION: THREE REPRESENTATIVE FULL-SIZE SAMPLES OF EACH PAVER TYPE, THICKNESS, COLOR AND FINISH THAT INDICATE THE RANGE OF COLOR VARIATION AND TEXTURE EXPECTED UPON PROJECT COMPLETION.
 - 2. ACCEPTED SAMPLES BECOME THE STANDARD OF ACCEPTANCE FOR THE PRODUCT PRODUCED.
 - 3. TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY FOR COMPLIANCE OF CONCRETE PAVERS WITH ASTM C 936.
 - 4. MANUFACTURER'S CATALOG PRODUCT DATA, INSTALLATION INSTRUCTIONS, AND MATERIAL SAFETY DATA SHEETS FOR THE SAFE HANDLING OF THE SPECIFIED MATERIALS AND PRODUCTS.
- B. JOINT AND SETTING BED SAND:
 - 1. PROVIDE REPRESENTATIVE SAMPLES IN CONTAINERS OF JOINT SAND MATERIALS.
 - 2. PROVIDE REPRESENTATIVE SAMPLES IN CONTAINERS OF SETTING BED SAND MATERIALS.
 - 3. TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY FOR SIEVE ANALYSIS PER ASTM C 136 CONFORMING TO THE GRADING REQUIREMENTS OF ASTM C 144.
- C. POLYMERIC JOINT SAND:
 - 1. TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY FOR SIEVE ANALYSIS PER ASTM C 136 CONFORMING TO THE GRADING REQUIREMENTS OF ASTM C 144.
 - 2. SAMPLES FOR INITIAL SELECTION: PROVIDE THREE REPRESENTATIVE SAMPLES IN CONTAINERS OF SETTING BED SAND MATERIAL, CURED AND DRIED, FOR COLOR SELECTION.
 - 3. SAMPLES FOR VERIFICATION: PROVIDE SAMPLES IN CONTAINERS OF POLYMERIC JOINT SAND.
- D. BASE AND SUBBASE AGGREGATE:
 - 1. TEST RESULTS FROM AN INDEPENDENT TESTING LABORATORY FOR SIEVE ANALYSIS PER ASTM C 136.

E. PAVING INSTALLATION CONTRACTOR:

- 1. JOB REFERENCES FROM A MINIMUM OF THREE PROJECTS SIMILAR IN SIZE AND COMPLEXITY. PROVIDE OWNER/CLIENT/GENERAL CONTRACTOR NAMES, POSTAL ADDRESS, PHONE, FAX, AND EMAIL ADDRESS.

1.04 QUALITY ASSURANCE

- A. UTILIZE A MANUFACTURER HAVING AT LEAST TEN YEARS OF EXPERIENCE MANUFACTURING CONCRETE PAVERS ON PROJECTS OF SIMILAR NATURE OR PROJECT SIZE.
 - A. SOURCE LIMITATIONS:
 - 1. OBTAIN CONCRETE PAVERS FROM ONE SOURCE LOCATION WITH THE RESOURCES TO PROVIDE PRODUCTS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES.
 - 2. OBTAIN JOINT AND SETTING BED SANDS FROM ONE SOURCE WITH THE RESOURCES TO PROVIDE MATERIALS AND PRODUCTS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES.
 - 3. OBTAIN POLYMERIC JOINT SAND FROM ONE SOURCE WITH THE RESOURCES TO PROVIDE MATERIALS AND PRODUCTS OF CONSISTENT QUALITY IN APPEARANCE AND PHYSICAL PROPERTIES.
 - C. PAVING CONTRACTOR QUALIFICATIONS:
 - 1. UTILIZE AN INSTALLER HAVING SUCCESSFULLY COMPLETED CONCRETE PAVEMENT INSTALLATION SIMILAR IN DESIGN, MATERIAL, AND EXTENT INDICATED ON THIS PROJECT.
 - D. MOCKUPS:
 - 1. INSTALL A 5 FT X 5 FT PAVEMENT AREA PER EACH PAVING PATTERN INDICATING ALL SPECIFIED UNIT SIZES AND COLORS.
 - 2. USE THIS AREA TO DETERMINE SURCHARGE OF THE SETTING BED SAND LAYER, JOINT SIZES, LINES, LAYING PATTERN(S) AND LEVELNESS. THIS AREA WILL SERVE AS THE STANDARD BY WHICH THE WORKMANSHIP WILL BE JUDGED.
 - 3. SUBJECT TO ACCEPTANCE BY OWNER, MOCK-UP MAY BE RETAINED AS PART OF FINISHED WORK.
 - 4. IF MOCK-UP IS NOT RETAINED, REMOVE AND DISPOSE LEGALLY.

1.05 DELIVERY, STORAGE & HANDLING

- A. DELIVER CONCRETE PAVERS IN MANUFACTURER'S ORIGINAL, UNOPENED AND UNDAMAGED CONTAINER PACKAGING WITH IDENTIFICATION LABELS INTACT.
 - 1. COORDINATE DELIVERY AND PAVING SCHEDULE TO MINIMIZE INTERFERENCE WITH NORMAL USE OF STREETS AND SIDEWALKS ADJACENT TO PAVEMENT INSTALLATION.
 - 2. DELIVER CONCRETE PAVERS TO THE SITE IN STEEL BANDED, PLASTIC BANDED OR PLASTIC WRAPPED PACKAGING CAPABLE OF TRANSFER BY FORKLIFT OR CLAMP LIFT.
 - 3. UNLOAD CONCRETE PAVERS AT JOB SITE IN SUCH A MANNER THAT NO DAMAGE OCCURS TO THE PRODUCT OR ADJACENT SURFACES.
- C. STORE AND PROTECT MATERIALS FREE FROM MUD, DIRT AND OTHER FOREIGN MATERIALS.
- D. PREVENT JOINT AND SETTING BED SAND FROM EXPOSURE TO RAINFALL OR REMOVAL BY WIND WITH SECURE, WATERPROOF COVERING.

E. STORE POLYMERIC JOINT SAND ON ELEVATED PLATFORMS, UNDER A COVER AND/OR IN A DRY LOCATION.

1.06 PROJECT/SITE CONDITIONS

- A. ENVIRONMENTAL REQUIREMENTS:
 - 1. INSTALL CONCRETE PAVERS ONLY ON UNFROZEN AND DRY SETTING BED SAND.
 - 2. INSTALL CONCRETE PAVERS ONLY ON UNFROZEN AND DRY BASE OR SUBBASE AGGREGATE MATERIALS.
 - 3. INSTALL BASE OR SUBBASE AGGREGATES ONLY OVER UNFROZEN SUBGRADE.
 - 4. INSTALL SETTING BED SAND OR CONCRETE PAVERS ONLY WHEN THERE IS NO HEAVY RAIN OR SNOWFALL.

B. WEATHER LIMITATIONS FOR POLYMERIC JOINTING SAND:

- 1. INSTALL POLYMERIC JOINT SAND ONLY WHEN AMBIENT TEMPERATURE IS ABOVE 40°F (5°C), UNDER DRY CONDITIONS WITH NO RAIN FORECAST FOR 24 HOURS AND WHEN SURFACE OF PAVEMENT IS COMPLETELY DRY.
- 1.07 CONCRETE PAVEMENT OVERAGE AND ATTIC STOCK
- A. PROVIDE A MINIMUM OF 5% ADDITIONAL MATERIAL FOR OVERAGE TO BE USED DURING CONSTRUCTION.
 - B. CONTRACTOR TO PROVIDE 100 SQUARE FEET OF EACH PRODUCT AND SIZE USED TO OWNER FOR MAINTENANCE AND REPAIR. FURNISH PAVERS FROM THE SAME PRODUCTION RUN AS INSTALLED MATERIALS.
 - C. MANUFACTURE TO SUPPLY MAINTENANCE AND REINSTATEMENT MANUALS FOR CONCRETE PAVEMENT UNITS.

PART 2 - PRODUCTS

2.01 CONCRETE PAVERS

- A. BASIS-OF-DESIGN PRODUCT: THE CONCRETE PAVEMENT SHAPES ARE BASED ON:
 - 1. UNILOCK:
 - a. IL CAMPO
 - MANUFACTURED BY: UNILOCK (RITTMAN, OH) 12560 SHEETS ROAD RITTMAN, OH 44270 CONTACT: DREW SNOPLY PHONE: 330-414-3480
 - 2. A HANOVER PAVERS:
 - a. ECOGRID
 - b. PERMEABLE
 - MANUFACTURED BY: 5000 HANOVER ROAD HANOVER PA 17331 CONTACT: INFO@HANOVERPAVERS.COM PHONE: (717) 637-0500
- 3. OR APPROVED EQUAL.

- 4. THE SPECIFIED PRODUCTS ESTABLISH MINIMUM REQUIREMENTS THAT SUBSTITUTIONS MUST MEET TO BE CONSIDERED ACCEPTABLE.
 - a. TO OBTAIN ACCEPTANCE OF UNSPECIFIED PRODUCTS, SUBMIT WRITTEN REQUESTS AT LEAST 7 DAYS BEFORE THE BID DATE.

- B. PRODUCT REQUIREMENTS:
 - 1. CONCRETE PAVEMENT TYPE 1: IL CAMPO
 - a. COLOR: TO BE SELECTED BY ARCHITECT FROM FULL COLOR RANGE
 - b. FINISH: BRUSHED (IL CAMPO)
 - c. SIZE: MANUFACTURE THE SIZES INDICATED WITH A MAXIMUM TOLERANCE OF PLUS OR MINUS 1/16 IN ALL DIRECTIONS.
 - 1. 12X12, 4X12, 4X8 (AS INDICATED ON DRAWINGS)
 - NOTE: IMPERIAL DIMENSIONS ARE NOMINAL EQUIVALENTS TO THE METRIC DIMENSIONS.
- C. PROVIDE PAVERS MEETING THE MINIMUM MATERIAL AND PHYSICAL PROPERTIES SET FORTH IN ASTM C 936, STANDARD SPECIFICATION FOR INTERLOCKING CONCRETE PAVING UNITS. EFFLORESCENCE IS NOT A CAUSE FOR REJECTION.
 - 1. AVERAGE COMPRESSIVE STRENGTH 8000 PSI (55MPa) WITH NO INDIVIDUAL UNIT UNDER 7,200 PSI (50 MPa).
 - 2. AVERAGE ABSORPTION OF 5% WITH NO UNIT GREATER THAN 7% WHEN TESTED ACCORDING TO ASTM C 140.
 - 3. RESISTANCE TO 50 FREEZE-THAW CYCLES, WHEN TESTED ACCORDING TO ASTM C1645, WITH NO BREAKAGE GREATER THAN 1.0% LOSS IN DRY WEIGHT OF ANY INDIVIDUAL UNIT. CONDUCT THIS TEST METHOD NOT MORE THAN 12 MONTHS PRIOR TO DELIVERY OF UNITS.
- D. ACCEPT ONLY PIGMENTS IN CONCRETE PAVERS CONFORMING TO ASTM C 979.
 - NOTE: ACI REPORT NO. 212.3R PROVIDES GUIDANCE ON THE USE OF PIGMENTS.

2.02 JOINT SAND

- A. PROVIDE NATURAL JOINT SAND AS FOLLOWS:
 - 1. WASHED, CLEAN, NON-PLASTIC, FREE FROM DELETERIOUS OR FOREIGN MATTER, SYMMETRICALLY SHAPED, NATURAL OR MANUFACTURED FROM CRUSHED ROCK.
 - 2. DO NOT USE LIMESTONE SCREENINGS, STONE DUST, OR SAND FOR THE JOINT SAND MATERIAL THAT DOES NOT CONFORM TO CONFORM TO THE GRADING REQUIREMENTS OF ASTM C 33.
 - 4. UTILIZE SANDS THAT ARE AS HARD AS PRACTICALLY AVAILABLE WHERE CONCRETE PAVERS ARE SUBJECT TO VEHICULAR TRAFFIC.
 - 5. GRADATION AS SHOWN IN TABLE 1 BELOW:

ASTM C 144 SIEVE	NATURAL SAND PERCENT PASSING	MANUFACTURED SAND PERCENT PASSING
NO. 4 (4.75 MM)	100	100
NO. 8 (2.36 MM)	95 TO 100	95 TO 100
NO. 16 (1.18 MM)	70 TO 100	70 TO 100
NO. 30 (0.600 MM)	40 TO 75	40 TO 75
NO. 50 (0.300 MM)	10 TO 30	10 TO 30
NO. 100 (0.150 MM)	2 TO 15	2 TO 15
NO. 200 (0.075)	0 TO 10	0 TO 10

2.03 POLYMERIC JOINT SAND

- A. PROVIDE POLYMERIC JOINT SAND AS MANUFACTURED BY:
 - 1. TECHNISEAL RG+
 - a. PRODUCT TYPE: DRY MIX, CONTAINS POLYMERIC BINDING AGENT, ACTIVATED WITH WATER.
 - b. COLOR: (INSERT COLOR GREY, TAN OR CUSTOM)
 - 2. UNICARE HP POLYMERIC MAX SAND
 - a. PRODUCT TYPE: DRY MIX, CONTAINS POLYMERIC BINDING AGENT, ACTIVATED WITH WATER.
 - b. COLOR: (INSERT COLOR GREY, TAN OR CUSTOM)
 - B. PROVIDE POLYMERIC JOINT SAND MEETING THE MINIMUM MATERIAL AND PHYSICAL PROPERTIES AS FOLLOWS:
 - 1. COMPRESSION STRENGTH: PROVEN RESISTANCE TO COMPRESSION OF 550 PSI AFTER DRYING FOR 7 DAYS UNDER CONTROLLED CONDITIONS (73°F (23°C) AT 50% HUMIDITY).
 - a. TEST SAND SAMPLE SHAPE: CYLINDER (2" (5 CM) DIA. X 4" (10 CM) HIGH).
 - 2. GRADATION AS SHOWN TABLE 1 ABOVE.
 - C. DO NOT USE POLYMERIC JOINT SAND ON THE FOLLOWING PRODUCTS:
 - 1. BELPASSO
 - 2. UMBRIANO
 - 3. SERIES 3000
 - 4. IL CAMPO
 - 5. UNIGRANITE
- NOTE: USING POLYMERIC JOINTING SAND ON THESE PRODUCTS MAY RESULT IN A "WHITISH HAZE" ON THE SURFACE THAT IS DIFFICULT TO REMOVE.

2.04 SETTING BED SAND

- A. PROVIDE SETTING BED SAND AS FOLLOWS:
 - 1. WASHED, CLEAN, NON-PLASTIC, FREE FROM DELETERIOUS OR FOREIGN MATTER, SYMMETRICALLY SHAPED, NATURAL OR MANUFACTURED FROM CRUSHED ROCK.
 - 2. DO NOT USE LIMESTONE SCREENINGS, STONE DUST, OR SAND MATERIAL THAT DOES NOT CONFORM TO CONFORM TO THE GRADING REQUIREMENTS OF ASTM C 33.
 - 3. DO NOT USE MASON SAND OR SAND CONFORMING TO ASTM C 144.
 - 4. UTILIZE SANDS THAT ARE AS HARD AS PRACTICALLY AVAILABLE WHERE CONCRETE PAVERS ARE SUBJECT TO VEHICULAR TRAFFIC.
 - 5. CONFORM TO THE GRADING REQUIREMENTS OF ASTM C 33 WITH MODIFICATIONS AS SHOWN IN TABLE 2 BELOW:

ASTM C 33 SIEVE	PERCENT PASSING
NO. 3/8 IN (9.5 MM)	100
NO. 4 (4.75 MM)	95 TO 100
NO. 8 (2.36 MM)	85 TO 100
NO. 16 (1.18 MM)	50 TO 85
NO. 30 (0.600 MM)	25 TO 60
NO. 50 (0.300 MM)	10 TO 30
NO. 100 (0.150 MM)	2 TO 10
NO. 200 (0.075)	0 TO 1

NOTE: COARSER SAND THAN THAT SPECIFIED IN TABLE 1 ABOVE MAY BE USED FOR JOINT SAND INCLUDING C 33 MATERIAL AS SHOWN IN TABLE 2. USE MATERIAL WHERE THE LARGEST SIEVE SIZE EASILY ENTERS THE SMALLEST JOINTS. FOR EXAMPLE, IF THE SMALLEST PAVEMENT JOINTS ARE 2 MM WIDE, USE SAND 2 MM AND SMALLER IN PARTICLE SIZE. IF C 33 SAND IS USED FOR JOINT SAND, EXTRA EFFORT MAY BE REQUIRED IN

SWEEPING MATERIAL AND COMPACTING THE PAVERS IN ORDER TO COMPLETELY FILL THE JOINTS.

2.05 BASE CONDITION

- A. UNIT PAVERS TO BE INSTALLED OVER 4" REINFORCED CONCRETE SLAB WITH 1" (INSIDE DIAMETER) CAST IN PLACE PVC DRAIN TUBES SPACED AT 4' ON CENTER IN EACH DIRECTION; PROVIDE DRAIN TUBES AT 12' ON CENTER ALONG LENGTH OF CURBING, TYP.

2.06 GEOTEXTILE

- A. PROVIDE GEOTEXTILE MATERIAL CONFORMING TO THE FOLLOWING PERFORMANCE CHARACTERISTICS, MEASURED PER THE TEST METHODS REFERENCED:
 - 1. 4 OZ., NONWOVEN NEEDLE PUNCHED GEOTEXTILE COMPOSED OF 100% POLYPROPYLENE STAPLE FIBERS THAT ARE INERT TO BIOLOGICAL DEGRADATION AND RESISTS NATURALLY ENCOUNTERED CHEMICALS, ALKALIS, AND ACIDS.
 - 2. GRAB TENSILE STRENGTH: ASTM D 4632: 115 LBS.
 - 3. GRAB TENSILE ELONGATION: ASTM D 4632: 50%
 - 4. TRAPEZOIDAL TEAR: ASTM D4533: 50 LBS.
 - 5. PUNCTURE: ASTM D4833: 65 LBS.
 - 6. APPARENT OPENING SIZE: ASTM D 4751: 0.212 MM, 70 U.S. SIEVE
 - 7. PERMITTIVITY: ASTM D 4491: 2.0 SEC -1
 - 8. FLOW RATE: ASTM D 4491: 140 GAL/MIN/S.F.
- B. AS SUPPLIED BY UNILOCK:
 - UNILOCK (RITTMAN, OH) 12560 SHEETS ROAD RITTMAN, OH 44270 CONTACT: DREW SNOPLY PHONE: 330-414-3480
 - 1. CARTHAGE MILLS - FX-40HS
 - 2. U.S. FABRICS - US 115NW
 - 3. MIRAFI - 140N

2.07 EDGE RESTRAINTS

- A. CONCRETE EDGE RESTRAINT AS INDICATED ON DRAWINGS AND IN ALL LOCATIONS WHERE UNIT PAVERS DO NOT ABUT A PAVED SURFACE.
- 2.08 SUBBASE AGGREGATE
 - A. PROVIDE 2" MINIMUM OF COMPACTED AGGREGATE LEVELING COURSE OVER COMPACTED SUBGRADE.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. EXAMINE AREAS INDICATED TO RECEIVE PAVING FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE FOR THE FOLLOWING BEFORE PLACING THE CONCRETE PAVERS.
 - 1. VERIFY THAT GEOTEXTILES, IF APPLICABLE, HAVE BEEN PLACED ACCORDING TO DRAWINGS AND SPECIFICATIONS.
 - 2. VERIFY THE CONCRETE UNDERLAYMENT HAS CURED.
 - 3. VERIFY THE CONCRETE UNDERLAYMENT THICKNESS, STRENGTHS, SURFACE TOLERANCES AND ELEVATIONS CONFORM TO SPECIFIED REQUIREMENTS.
 - 4. PROVIDE WRITTEN DENSITY TEST RESULTS FOR SOIL SUBGRADE, CONCRETE UNDERLAYMENT P.S.I TESTING TO THE OWNER, GENERAL CONTRACTOR AND PAVEMENT INSTALLATION SUBCONTRACTOR.
 - 5. VERIFY LOCATION, TYPE, AND ELEVATIONS OF EDGE RESTRAINTS, CONCRETE CURBING, CONCRETE COLLARS AROUND UTILITY STRUCTURES, AND DRAINAGE INLETS.
- B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
 - 1. BEGINNING OF BEDDING SAND AND CONCRETE PAVEMENT INSTALLATION SIGNIFIES ACCEPTANCE OF BASE AND EDGE RESTRAINTS.

3.02 PREPARATION

- A. VERIFY THE CONCRETE UNDERLAYMENT IS CLEAN AND DRY, CERTIFIED BY GENERAL CONTRACTOR AS MEETING MATERIAL, INSTALLATION AND GRADE SPECIFICATIONS.
 - B. STOCKPILE SETTING BED SAND AND JOINT SAND SUCH THAT THEY ARE FREE FROM STANDING WATER, UNIFORMLY GRADED, FREE OF ANY ORGANIC MATERIAL OR SEDIMENT, DEBRIS, AND READY FOR PLACEMENT.
 - C. VERIFY THAT BASE AND GEOTEXTILE IS READY TO SUPPORT SAND, EDGE RESTRAINTS, AND, PAVERS AND IMPOSED LOADS.
 - D. KEEP AREA WHERE PAVEMENT IS TO BE CONSTRUCTED FREE FROM SEDIMENT DURING ENTIRE JOB. REMOVE AND REPLACE ALL GEOTEXTILE, JOINT SAND AND SETTING BED SAND MATERIALS CONTAMINATED WITH SEDIMENT WITH CLEAN MATERIALS.

3.03 INSTALLATION

- A. SETTING BED SAND
 - 1. PROVIDE AND SPREAD SETTING BED SAND EVENLY OVER THE CONCRETE UNDERLAYMENT AND SCREED TO A NOMINAL THICKNESS OF 1 IN. (25 MM).
 - a. PROTECT SCREDED SETTING BED SAND FROM BEING DISTURBED BY EITHER PEDESTRIAN OR VEHICULAR TRAFFIC.
 - b. SCREED ONLY THE AREA WHICH CAN BE COVERED BY PAVERS IN ONE DAY.
 - c. DO NOT USE SETTING BED SAND MATERIAL TO FILL DEPRESSIONS GREATER IN THE BASE SURFACE.
 - 2. KEEP MOISTURE CONTENT CONSTANT AND DENSITY LOOSE AND CONSTANT UNTIL CONCRETE PAVERS ARE SET AND COMPACTED.
 - 3. SCREED THE SETTING BED SAND USING EITHER AN APPROVED MECHANICAL SPREADER (E.G.: AN ASPHALT PAVER) OR BY THE USE OF SCREED RAILS AND BOARDS.
 - 4. CAREFULLY MAINTAIN SPREAD SETTING BED SAND IN A LOOSE CONDITION, AND PROTECTED AGAINST INCIDENTAL COMPACTION, BOTH PRIOR TO AND FOLLOWING SCREEDING. LOOSEN ANY INCIDENTALLY COMPACTED SAND OR SCREDED SAND LEFT OVERNIGHT BEFORE FURTHER PAVING UNITS ARE PLACED.
 - 5. PROVIDE LIGHTLY SCREDED SETTING BED SAND IN A LOOSE CONDITION TO THE PREDETERMINED DEPTH, ONLY SLIGHTLY AHEAD OF THE PAVING UNITS.
 - 6. FULLY PROTECT SCREED SETTING BED SAND AGAINST INCIDENTAL COMPACTION, INCLUDING COMPACTION BY RAIN. REMOVE ANY SCREDED SETTING BED SAND THAT IS INCIDENTALLY COMPACTED PRIOR TO LAYING OF THE PAVING UNITS. DO NOT PERMIT EITHER PEDESTRIAN OR VEHICULAR TRAFFIC ON THE SCREDED SETTING BED SAND.
 - 7. INSPECT THE SETTING BED SAND COURSE PRIOR TO COMMENCING THE PLACEMENT OF THE CONCRETE PAVERS. ACCEPTANCE OF THE SETTING BED SAND OCCURS WITH THE INITIATION OF CONCRETE PAVEMENT PLACEMENT.



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- B. CONCRETE PAVERS
1. REPLACE CONCRETE PAVERS WITH CHIPS, CRACKS, VOIDS, DISCOLORATIONS, AND OTHER DEFECTS THAT MIGHT BE VISIBLE IN FINISHED WORK.
 2. MIX CONCRETE PAVERS FROM A MINIMUM OF THREE (3) BUNDLES SIMULTANEOUSLY DRAWING THE PAVER VERTICALLY RATHER THAN HORIZONTALLY, AS THEY ARE PLACED, TO PRODUCE UNIFORM BLEND OF COLORS AND TEXTURES. (COLOR VARIATION OCCURS WITH ALL CONCRETE PRODUCTS. THIS PHENOMENON IS INFLUENCED BY A VARIETY OF FACTORS, E.G. MOISTURE CONTENT, CURING CONDITIONS, DIFFERENT AGGREGATES AND, MOST COMMONLY, FROM DIFFERENT PRODUCTION RUNS. BY INSTALLING FROM A MINIMUM OF THREE (3) BUNDLES SIMULTANEOUSLY, VARIATION IN COLOR IS DISPERSED AND BLENDED THROUGHOUT THE PROJECT).
 3. EXERCISE CARE IN HANDLING FACE MIX CONCRETE PAVERS TO PREVENT SURFACES FROM CONTACTING BACKS OR EDGES OF OTHER UNITS.
 4. PROVIDE CONCRETE PAVERS USING LAYING PATTERN AS INDICATED. ADJUST LAYING PATTERN AT PAVEMENT EDGES SUCH THAT CUTTING OF EDGE PAVERS IS MINIMIZED. CUT ALL PAVERS EXPOSED TO VEHICULAR TIRES NO SMALLER THAN ONE-THIRD OF A WHOLE PAVER. BEGIN LAYOUTS AS INDICATED ON DRAWINGS' POINT OF ORIGIN.
 5. USE STRING LINES OR CHALK LINES ON SETTING BED SAND TO HOLD ALL PATTERN LINES TRUE.
 6. SET SURFACE ELEVATION OF PAVERS 1/8 IN. (3 MM) ABOVE ADJACENT DRAINAGE INLETS, CONCRETE COLLARS OR CHANNELS.
 7. PLACE UNITS HAND TIGHT AGAINST SPACER BARS. ADJUST HORIZONTAL PLACEMENT OF LAID PAVERS TO ALIGN STRAIGHT.
 - a. WHEN INSTALLATION IS PERFORMED WITH MECHANICAL EQUIPMENT, USE ONLY UNIT PAVERS WITH SPACER BARS ON SIDES OF EACH UNIT.
 8. PROVIDE SPACE BETWEEN PAVER UNITS OF 1/32 IN. (1 MM) WIDE TO ACHIEVE STRAIGHT BOND LINES.
 9. PREVENT JOINT (BOND) LINES FROM SHIFTING MORE THAN ±1/2 IN. (±13 MM) OVER 50 FT. (15 M) FROM STRING LINES.
 10. FILL GAPS BETWEEN UNITS OR AT EDGES OF THE PAVED AREA THAT EXCEED 3/8 INCH (10 MM) WITH PIECES CUT TO FIT FROM FULL-SIZE UNIT PAVERS.
 11. PREVENT ALL TRAFFIC ON INSTALLED CONCRETE PAVERS UNTIL JOINT SAND HAS BEEN VIBRATED INTO JOINTS. KEEP SKID STEER AND FORKLIFT EQUIPMENT OFF NEWLY LAID CONCRETE PAVERS THAT HAVE NOT RECEIVED INITIAL COMPACTION AND JOINT SAND MATERIAL.
 12. VIBRATE CONCRETE PAVERS INTO LEVELING COURSE WITH A LOW-AMPLITUDE PLATE VIBRATOR CAPABLE OF A TO 5000-LBF (22-KN) COMPACTION FORCE AT 80 TO 90 HZ. PERFORM AT LEAST THREE PASSES ACROSS PAVING WITH VIBRATOR. VIBRATE UNDER THE FOLLOWING CONDITIONS:
 - a. AFTER EDGE PAVERS ARE INSTALLED AND THERE IS A COMPLETED SURFACE OR BEFORE SURFACE IS EXPOSED TO RAIN.
 - b. COMPACT INSTALLED CONCRETE PAVERS TO WITHIN 6 FEET (2 METERS) OF THE LAYING FACE BEFORE ENDING EACH DAY'S WORK. COVER CONCRETE PAVERS THAT HAVE NOT BEEN COMPACTED AND LEVELING COURSE ON WHICH PAVERS HAVE NOT BEEN PLACED, WITH NONSTAINING PLASTIC SHEETS TO PREVENT SETTING BED SAND FROM BECOMING DISTURBED.
 13. PROTECT FACE MIX CONCRETE PAVER SURFACE FROM SCUFFING DURING COMPACTION BY UTILIZING A URETHANE PAD.
 14. REMOVE ANY CRACKED OR STRUCTURALLY DAMAGED CONCRETE PAVERS AND REPLACE WITH NEW UNITS PRIOR TO INSTALLING JOINT SAND MATERIAL.
- F. JOINT SAND
1. PROVIDE, SPREAD AND SWEEP DRY JOINT SAND INTO JOINTS IMMEDIATELY AFTER VIBRATING PAVERS INTO SETTING BED SAND COURSE UNTIL FULL. VIBRATE PAVERS AND ADD JOINT SAND MATERIAL UNTIL JOINTS ARE COMPLETELY FILLED, THEN REMOVE EXCESS MATERIAL. THIS WILL REQUIRE AT LEAST 4 PASSES WITH A PLATE COMPACTOR.
 2. LEAVE ALL WORK TO WITHIN 3 FT. (1 M) OF THE LAYING FACE FULLY COMPACTED WITH SAND-FILLED JOINTS AT THE COMPLETION OF EACH DAY.
 3. REMOVE EXCESS JOINT SAND BROOM CLEAN FROM SURFACE WHEN INSTALLATION IS COMPLETE.
 4. POLYMERIC JOINT SAND
 - a. INSTALL POLYMERIC JOINT SAND PER MANUFACTURERS RECOMMENDED INSTRUCTIONS.
- RETAIN SUBPARAGRAPH ABOVE OR BELOW AND DETAIL ON DRAWINGS IF PAVERS SET IN MORTAR OR EMBEDDED IN CONCRETE ARE USED AS EDGE RESTRAINTS FOR AGGREGATE-SET PAVERS.
- 3.04 FIELD QUALITY CONTROL
- A. VERIFY FINAL ELEVATIONS FOR CONFORMANCE TO THE DRAWINGS AFTER SWEEPING THE SURFACE CLEAN.
 1. PREVENT FINAL CONCRETE PAVER FINISHED GRADE ELEVATIONS FROM DEVIATING MORE THAN ±3/8 IN. (±10 MM) UNDER A 10 FT (3 M) STRAIGHTEDGE OR INDICATED SLOPE, FOR FINISHED SURFACE OF PAVING.
 - B. LIPPAGE: NO GREATER THAN 1/32 IN. (0.8 MM) DIFFERENCE IN HEIGHT BETWEEN CONCRETE PAVERS AND ADJACENT PAVED SURFACES.
- 3.05 REPAIRING, CLEANING AND SEALING
- A. REMOVE AND REPLACE UNIT PAVERS THAT ARE LOOSE, CHIPPED, BROKEN, STAINED, OR OTHERWISE DAMAGED OR THAT DO NOT MATCH ADJOINING UNITS. PROVIDE NEW UNITS TO MATCH ADJOINING UNITS AND INSTALL IN SAME MANNER AS ORIGINAL UNITS, WITH SAME JOINT TREATMENT AND WITH NO EVIDENCE OF REPLACEMENT.
 - B. CLEANING: REMOVE EXCESS DIRT, DEBRIS, STAINS, GRIT, ETC. FROM EXPOSED PAVER SURFACES; WASH AND SCRUB CLEAN.
 1. CLEAN CONCRETE PAVERS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- 3.06 PROTECTION
- A. PROTECT COMPLETED WORK FROM DAMAGE DUE TO SUBSEQUENT CONSTRUCTION ACTIVITY ON THE SITE.



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ITEM 608 - 10001 - 4" CONCRETE WALK, AS PER PLAN

THIS ITEM OF WORK INCLUDES INSTALLATION OF PAVEMENT AS SHOWN ON HARDSCAPE PLANS, SHEETS L-014 - L-021. ALL JOINTING, INCLUDING JOINT SEALER IS COVERED IN THIS PAY ITEM, AS WELL AS #304 BASE UNDER ALL CONCRETE WALKS.

ITEM 608 - 98000 - CONCRETE WALK, AS PER PLAN: INTEGRALLY COLORED PAVING

THIS ITEM OF WORK INCLUDES INSTALLATION OF PAVEMENT LIQUID IRON OXIDE PIGMENTS TO BE ADDED TO CONCRETE FOR AREAS OF "INTEGRALLY COLORED CONCRETE" AS NOTED ON SHEETS L-014 - L-021 FOR 4" CONCRETE WALK.

PART 1 - GENERAL

1.1 SUBMITTALS

- A. PRODUCT DATA: SUBMIT MANUFACTURER'S PRODUCT DATA INCLUDING MIXING INSTRUCTIONS.
- B. SAMPLES: SUBMIT MANUFACTURER'S SAMPLES OF STANDARD CONCRETE COLORS MIXED WITH CEMENT SPECIFIED IN SECTION 037510.
- C. MANUFACTURER'S CERTIFICATION: SUBMIT MANUFACTURER'S CERTIFICATION THAT MATERIALS COMPLY WITH SPECIFIED REQUIREMENTS AND ARE SUITABLE FOR INTENDED APPLICATION.
- D. WARRANTY: SUBMIT MANUFACTURER'S STANDARD WARRANTY.

1.2 QUALITY ASSURANCE

- A. MANUFACTURER'S QUALIFICATIONS:
 - 1. SUFFICIENT PLANT FACILITIES TO PROVIDE QUALITY AND QUANTITY OF MATERIALS AS REQUIRED WITHOUT DELAYING PROGRESS OF THE WORK.
 - 2. MINIMUM OF 10 YEARS' EXPERIENCE IN PRODUCING IRON OXIDE PIGMENTS TO BE ADDED TO CONCRETE
 - 3. 1.3 DELIVERY, STORAGE, AND HANDLING
- A. DELIVERY: DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL UNOPENED CONTAINERS, WITH LABELS CLEARLY IDENTIFYING PRODUCT NAME, MANUFACTURER, COLOR NAME AND NUMBER, WEIGHT, AND MIXING INSTRUCTIONS.

B. STORAGE:

- 1. STORE MATERIALS IN CLEAN, DRY AREA IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 2. KEEP CONTAINERS SEALED UNTIL READY FOR USE
- 3. LIQUID PIGMENTS:
 - a. KEEP FROM FREEZING.
 - b. KEEP CONTAINER LIDS ON.
 - c. RESEAL PARTIAL CONTAINERS.

C. HANDLING:

- 1. HANDLE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 2. PROTECT MATERIALS DURING HANDLING AND MIXING TO PREVENT DAMAGE OR CONTAMINATION.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. L.M. SCOFIELD COMPANY, 4155 SCOFIELD ROAD, DOUGLASVILLE, GA 30134 (770) 920-6000, www.scofield.com
- B. SOLOMAN COLORS, PO BOX 8288, SPRINGFIELD, ILLINOIS 62791. PHONE (800)624-0261 / (217) 522-3112. FAX (800) 624-3147 / (217) 522-3145. WEB SITE WWW.SOLOMONCOLORS.COM. E-MAIL SGS@SOLOMONCOLORS.COM.
- C. OR APPROVED EQUAL

2.2 CONCRETE PIGMENTS

- A. LIQUID IRON OXIDE PIGMENTS: SGS COLOR-FLO LIQUID COLORS.
 - 1. COLOR: TO BE SELECTED BY ARCHITECT FROM MFR'S FULL RANGE OF COLORS, TYP.
 - 2. COMPLIANCE: ASTM C 979
 - 3. MATERIAL: PREDISPERSED IRON OXIDE PIGMENTS CONTAINING HIGH PIGMENT SOLIDS IN AQUEOUS BASE LIQUID.
 - 4. PRODUCE UNIFORM AND CONSISTENT COLOR.
 - 5. PERMANENT, INERT, STABLE TO ATMOSPHERIC CONDITIONS, SUNFAST, WEATHER RESISTANT, ALKALI RESISTANT, WATER INSOLUBLE, LIME PROOF, AND NONBLEEDING.
 - 6. FREE OF DELETERIOUS FILLERS AND EXTENDERS.
 - 7. PARTICLE SIZE: 95 TO 99 PERCENT MINUS 325 MESH.
 - 8. SPECIFIC GRAVITY: 1.9 TO 2.0.

2.3 CONCRETE MATERIALS

- A. MATERIALS:
 - 1. READY-MIXED CONCRETE: ASTM C 94.
 - 2. PORTLAND CEMENT: ASTM C 150. USE SAME SOURCE, BRAND, TYPE, AND COLOR THROUGHOUT PROJECT.
 - 3. COARSE AND FINE AGGREGATES: ASTM C 33. USE SAME SOURCE AND COLOR THROUGHOUT PROJECT.
 - 4. ADMIXTURES: DESIGNED FOR USE WITH CONCRETE PIGMENTS. DO NOT USE CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDES. USE SAME ADMIXTURES THROUGHOUT PROJECT.
- B. CONCRETE MIX DESIGN: AS SPECIFIED IN SECTION 037510, EXCEPT AS SPECIFIED IN THIS SECTION.
 - 1. COLOR PIGMENT WEIGHT: MAXIMUM 10 PERCENT OF CEMENT WEIGHT.
 - 2. WATER TO CEMENT RATIO: MAXIMUM 0.50.
 - 3. USE SAME CONCRETE MIX DESIGN THROUGHOUT PROJECT.

PART 3 - EXECUTION

3.1 APPLICATION - DRY POWDER AND LIQUID IRON OXIDE PIGMENTS

- A. MEASURING, BATCHING, MIXING, AND DELIVERING CONCRETE: AS SPECIFIED IN SECTION 037510, EXCEPT AS SPECIFIED IN THIS SECTION.
 - 1. MEASURE, BATCH, MIX, AND DELIVER CONCRETE WITH PIGMENTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS
 - 2. ENSURE MIXER IS CLEAN AND FREE OF WASHOUT WATER BEFORE LOADING.
 - 3. LOAD MIXER TO A MINIMUM OF 40 PERCENT CAPACITY.
 - 4. DO NOT LOAD MIXER BEYOND RECOMMENDED CAPACITY.
 - 5. ADD CONCRETE MATERIALS TO MIXER IN SAME ORDER FOR EACH BATCH.
 - 6. DO NOT ADD PIGMENT TO MIXER AS FIRST CONCRETE MATERIAL.
 - 7. MAINTAIN CONSISTENT AMOUNTS OF BATCH WATER IN EACH BATCH.
- B. PLACING, FINISHING, CURING CONCRETE: AS SPECIFIED IN SECTION 037510, EXCEPT AS SPECIFIED IN THIS SECTION.

- 2. PLACE, FINISH, AND CURE CONCRETE WITH PIGMENTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 3. ALLOW EXCESS SURFACE WATER TO EVAPORATE BEFORE FINISHING
- 4. DO NOT OVER-FINISH SURFACE. AVOID BURNING SURFACE.
- 5. DO NOT FOG WITH WATER OR COVER SURFACE OF COLORED CONCRETE DURING INITIAL CURING PROCESS FOR A MINIMUM OF 48 HOURS.
- C. ADD LIQUID PIGMENTS TO CONCRETE BATCH AUTOMATICALLY BY USE OF METERING, VOLUMETRIC, OR WEIGHT MEASURING SYSTEM OR MANUALLY BY WEIGHT OR VOLUME IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- D. RECYCLE LIQUID PIGMENTS WHILE IN THEIR CONTAINER BEFORE USE TO ENSURE UNIFORMITY AND PROPER VISCOSITY.
- E. ADD LIQUID PIGMENTS TO CONCRETE BATCH AFTER PREWETTED AGGREGATE AND BEFORE CEMENT ADDITION.
 - 6. 3.2 CLEANING
 - A. CLEAN CONCRETE OF EFFLORESCENCE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - B. ENSURE CONCRETE HAS SUFFICIENTLY CURED BEFORE CLEANING.
 - C. USE CONCRETE CLEANER APPROVED BY PIGMENT MANUFACTURE AND ARCHITECT. DO NOT USE CLEANERS CONTAINING ACID.
 - D. APPLY CLEANER IN ACCORDANCE WITH CLEANER MANUFACTURER'S INSTRUCTIONS.
 - E. BEFORE FINAL INSPECTION, REMOVE PROTECTIVE COVERINGS AND RINSE NEUTRAL PROTECTIVE CLEANER FROM TILE SURFACES.

ITEM 661 - 99900 - PLANTING, MISC.: TREE GRATES, AS PER PLAN

1.1 SECTION INCLUDES

- A. TREE GRATES AS SHOWN ON DRAWINGS AND AS SPECIFIED HEREIN.
- B. SUBMITTALS

1.2 CONTRACTOR SHALL SUBMIT 4 SET(S) OF DRAWINGS OF TREE GRATES AND FRAMES FOR REVIEW BY ARCHITECT PRIOR TO PURCHASE AND INSTALLATION.

1.3 QUALITY ASSURANCE

- A. MANUFACTURER QUALIFICATIONS: MINIMUM 15 YEARS TREE GRATE MANUFACTURING EXPERIENCE
- B. INSTALLER QUALIFICATIONS: 2 YEARS MINIMUM EXPERIENCE INSTALLING TREE GRATES AND SUPPORT FRAMES.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. STORE PRODUCT IN MANUFACTURER'S PACKAGING UNTIL READY TO INSTALL.

1.5 WARRANTY

- A. TREE GRATES AND FRAMES SHALL BE WARRANTED BY THE MANUFACTURE AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A MINIMUM OF FIVE (5) YEARS

PART 2 PRODUCTS

2.1 TREE GRATES AND FRAMES:

- A. MANUFACTURERS:
 - 1. IRONSMITH, INC., OLYMPIAN MODEL 3602
 - 2. NEENAH FOUNDRY: BOULEVARD COLLECTION R-8814-A
 - 3. OR APPROVED EQUAL.
- B. TREE GRATES MATERIAL SHALL BE CAST GRAY IRON FROM 100% RECYCLED MATERIAL. ALL TREE GRATE CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN AND COMPONENT PARTS, AND SHALL FIT TOGETHER IN A SATISFACTORY MANNER. THE CASTINGS SHALL BE OF UNIFORM PATTERN AND QUALITY, FREE FROM BLOWHOLES, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. CASTINGS SHALL BE CLEANED BY SHOT BLASTING.
- C. TREE GRATES SHALL HAVE PLANNED 16" TREE OPENING BUT BE CLOSED WITH REMOVABLE INFILL PANEL
- D. TREE GRATES SHALL HAVE 1/4" MAXIMUM SLOT OPENING FOR PEDESTRIAN SAFETY AND ADA COMPLIANCE
- E. FINISH: GRATES ARE TO BE UNFINISHED
- F. MATCHING STEEL ANGLE FRAMES PROVIDED BY TREE GRATE MANUFACTURER MODEL 3600F SHALL BE PROVIDED WITH INSTALLATION DETAIL(S) PER PLANS.
- G. FRAMES TO BE UNFINISHED

ITEM SPECIAL - 68014550 TRASH RECEPTACLE

ITEM SPECIAL - 69050560 BICYCLE RACK

ITEM SPECIAL - 69098000 BENCH, AS PER PLAN

ITEM 661 - 99900 MISC.: PLANTERS

THIS ITEM WORK CONSISTS OF THE INSTALLATION OF SITE FURNISHINGS AS DETAILED AND SPECIFIED IN THE PLANS INCLUDING ALL HARDWARE, BOLTS, LABOR, MATERIALS REQUIRED TO INSTALL ITEMS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS:

PART 1 - GENERAL

1.1 ACTION SUBMITTALS

- C. PRODUCT DATA: FOR EACH TYPE OF PRODUCT/PROVIDE SHOP DRAWINGS/CUT SHEETS
- D. SAMPLES: FOR EACH EXPOSED PRODUCT AND FOR EACH COLOR AND TEXTURE SPECIFIED.
- E. PRODUCT SCHEDULE: FOR SITE FURNISHINGS. USE SAME DESIGNATIONS INDICATED ON DRAWINGS.

1.2 INFORMATIONAL SUBMITTALS: MATERIAL CERTIFICATES: FOR SITE FURNISHINGS.

1.3 CLOSEOUT SUBMITTALS: MAINTENANCE DATA: FOR SITE FURNISHINGS TO INCLUDE IN MAINTENANCE MANUALS.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. FURNISH EXTRA MATERIALS THAT MATCH PRODUCTS INSTALLED AND THAT ARE PACKAGED WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFIED WITH LABELS DESCRIBING CONTENTS.
 - 1. TRASH RECEPTACLE INNER CONTAINERS: FIVE FULL-SIZE UNITS FOR EACH SIZE INDICATED, BUT NO FEWER THAN TWO UNITS.
 - 2. ANCHORS: ONE SET.

PART 2 - PRODUCTS

2.1 BENCHES:

- A. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
 - 1. CUSTOM BENCHES AS DESIGNED BY THE VILLAGE BLACKSMITH, INC
 - KEN ROBY
 - 11193 TAYLOR MAY RD
 - CHAGRIN FALLS, OHIO 44023

- (440) 543-4977
- 2. GARDA ARCHITECTURAL FABRICATION
 - LOU TOMBAZZI
 - 1873 EAST 55TH STREET
 - CLEVELAND, OHIO
 - (216) 431-6300
 - 2.1. OR APPROVED EQUAL.
- B. ALL BENCH COMPONENTS: HOT DIPPED GALVANIZED
- C. FINISH: BLACK
 - 1. REMOVE GREASE AND OIL RESIDUE FROM GALVANIZED METAL BY MECHANICAL METHODS TO PRODUCE CLEAN, LIGHTLY ETCHED SURFACE THAT PROMOTES ADHESION OF SUBSEQUENTLY APPLIED COATINGS.
 - 2. INTERMEDIATE COAT: SHERWIN WILLIAMS MACROPROXY 646FC B58-600 SERIES
 - 3. FINISH COAT: SHERWIN WILLIAMS 218HS ACRYLIC POLYURETHANE B65-600
- 2.2 TRASH RECEPTACLES:
 - A. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
 - 1. KEYSTONE RIDGE DESIGNS: 32 GALLON READING LITTER RECEPTACLE WITH ELEVATED LEGS AND FLAT LID, POWDER COATED GLOSS BLACK WITH CUSTOM LOGO PANEL (LASER CUT "CEDAR FAIRMOUNT") INTO SIDE OF RECEPTACLE.
 - 2. VICTOR STANLEY: NSDC-36. SIDE DOOR LITTER RECEPTACLE W/ STANDARD CONVEX LID & LEVELING FEET. INCLUDE CUSTOM PLAQUE WITH CEDAR FAIRMOUNT LOGO. BLACK POWDERCOAT.
 - 3. OR APPROVED EQUAL.
- 2.3 BICYCLE RACKS:
 - A. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE THE FOLLOWING:
 - 1. KEYSTONE RIDGE DESIGNS: SONANCE BIKE RACK, 1 LOOP BIKE RACK WITH CAPACITY FOR 3 BIKES, BOLT DOWN, POWDER COATED, GLOSS BLACK WITH CUSTOM LOGO PANEL (LASER CUT APPROX. 12" HIGH BY 21.5" WIDE) AND WELDED (ALL WELDS GROUND SMOOTH) TO BIKE RACK.
 - 2. VICTOR STANLEY: BRWS - 101 CAP. 2 BIKES, SURFACE MOUNT, BLACK POWDERCOAT, CUSTOM LOGO PLAQUE.
 - 3. OR APPROVED EQUAL.
- 2.4 MATERIALS
 - A. STEEL AND IRON: FREE OF SURFACE BLEMISHES AND COMPLYING WITH THE FOLLOWING:
 - 3. PLATES, SHAPES, AND BARS: ASTM A 36/A 36M.
 - 4. STEEL PIPE: STANDARD-WEIGHT STEEL PIPE COMPLYING WITH ASTM A 53/A 53M, OR ELECTRIC-RESISTANCE-WELDED PIPE COMPLYING WITH ASTM A 135/A 135M.
 - 5. TUBING: COLD-FORMED STEEL TUBING COMPLYING WITH ASTM A 500/A 500M. (CONT'D)
- 2.5 PLANTERS:
 - A. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
 - 1. LANDSCAPEFORMS: SORELLA. FABRICATED, WELDED AND GROUND STEEL PANELS ATTACHED TO A RECYCLED PLASTIC BASE, WITH GLIDES AND OPTIONAL DRAIN HOLES. POLYESTER POWDERCOATED.
 - 2. OLD TOWN FIBERGLASS: CARDIFF RECTANGLE. FABRICATED BY THE SPRAY LAMINATE METHOD, FINISHED REINFORCED PLASTIC MATERIAL SHALL BE NOT LESS THAN 5/32" THICK, SEMI-GLOSS.
 - 3. OR APPROVED EQUAL.



CALCULATED
KJK
CHECKED
AJP

LANDSCAPE NOTES

CUY - CEDAR - FAIRMOUNT

L-004

45
65

ITEM SPECIAL - 68014550 TRASH RECEPTACLE
 ITEM SPECIAL - 69050560 BICYCLE RACK
 ITEM SPECIAL - 69098000 BENCH, AS PER PLAN
 ITEM 661 - 99900 MISC.: PLANTERS (CONT'D)

4. MECHANICAL TUBING: COLD-ROLLED, ELECTRIC-RESISTANCE-WELDED CARBON OR ALLOY STEEL TUBING COMPLYING WITH ASTM A 513, OR STEEL TUBING FABRICATED FROM STEEL COMPLYING WITH ASTM A 1011/A 1011M AND COMPLYING WITH DIMENSIONAL TOLERANCES IN ASTM A 500/A 500M; ZINC COATED INTERNALLY AND EXTERNALLY.
5. SHEET: COMMERCIAL STEEL SHEET COMPLYING WITH ASTM A 1011/A 1011M.
- B. ANCHORS, FASTENERS, FITTINGS, AND HARDWARE: GALVANIZED STEEL OR MANUFACTURER'S STANDARD, CORROSION-RESISTANT-COATED OR NONCORRODIBLE MATERIALS, COMMERCIAL QUALITY, TAMPERPROOF, VANDAL AND THEFT RESISTANT, CONCEALED, RECESSED, AND CAPPED OR PLUGGED. INSTALL PER MANUFACTURER'S RECOMMENDATION.
- C. NONSHRINK, NONMETALLIC GROUT: PREMIXED, FACTORY-PACKAGED, NONSTAINING, NONCORROSIVE, NONGASEOUS GROUT COMPLYING WITH ASTM C 1107/C 1107M; RECOMMENDED IN WRITING BY MANUFACTURER, FOR EXTERIOR APPLICATIONS.
- D. GALVANIZING: WHERE INDICATED FOR STEEL AND IRON COMPONENTS, PROVIDE THE FOLLOWING PROTECTIVE ZINC COATING APPLIED TO COMPONENTS AFTER FABRICATION:
 1. ZINC-COATED TUBING: EXTERNAL, ZINC WITH ORGANIC OVERCOAT, CONSISTING OF A MINIMUM OF 0.9 OZ./SQ. FT. (0.27 KG/SQ. M) OF ZINC AFTER WELDING, A CHROMATE CONVERSION COATING, AND A CLEAR, POLYMER FILM. INTERNAL, SAME AS EXTERNAL OR CONSISTING OF 81 PERCENT ZINC PIGMENTED COATING, NOT LESS THAN 0.3 MIL (0.0076 MM) THICK.
 2. HOT-DIP GALVANIZING: ACCORDING TO ASTM A 123/A 123M, ASTM A 153/A 153M, OR ASTM A 924/A 924M.

2.5 FABRICATION

- A. METAL COMPONENTS: FORM TO REQUIRED SHAPES AND SIZES WITH TRUE, CONSISTENT CURVES, LINES, AND ANGLES. SEPARATE METALS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYTIC ACTION.
- B. WELDED CONNECTIONS: WELD CONNECTIONS CONTINUOUSLY. WELD SOLID MEMBERS WITH FULL-LENGTH, FULL-PENETRATION WELDS AND HOLLOW MEMBERS WITH FULL-CIRCUMFERENCE WELDS. AT EXPOSED CONNECTIONS, FINISH SURFACES SMOOTH AND BLENDED SO NO ROUGHNESS OR UNEVENNESS SHOWS AFTER FINISHING AND WELDED SURFACE MATCHES CONTOURS OF ADJOINING SURFACES.
- C. PIPES AND TUBES: FORM SIMPLE AND COMPOUND CURVES BY BENDING MEMBERS IN JIGS TO PRODUCE UNIFORM CURVATURE FOR EACH REPETITIVE CONFIGURATION REQUIRED; MAINTAIN CYLINDRICAL CROSS SECTION OF MEMBER THROUGHOUT ENTIRE BEND WITHOUT BUCKLING, TWISTING, CRACKING, OR OTHERWISE DEFORMING EXPOSED SURFACES OF HANDRAIL AND RAILING COMPONENTS.
- D. EXPOSED SURFACES: POLISHED, SANDED, OR OTHERWISE FINISHED; ALL SURFACES SMOOTH, FREE OF BURRS, BARBS, SPLINTERS, AND SHARPNESS; ALL EDGES AND ENDS ROLLED, ROUNDED, OR CAPPED.
- E. FACTORY ASSEMBLY: ASSEMBLE COMPONENTS IN THE FACTORY TO GREATEST EXTENT POSSIBLE TO MINIMIZE FIELD ASSEMBLY. CLEARLY MARK UNITS FOR ASSEMBLY IN THE FIELD.

2.6 GENERAL FINISH REQUIREMENTS

- A. APPEARANCE OF FINISHED WORK: NOTICEABLE VARIATIONS IN SAME PIECE ARE NOT ACCEPTABLE. VARIATIONS IN APPEARANCE OF ADJOINING COMPONENTS ARE ACCEPTABLE IF THEY ARE WITHIN THE RANGE OF APPROVED SAMPLES AND ARE ASSEMBLED OR INSTALLED TO MINIMIZE CONTRAST.

2.7 STEEL AND GALVANIZED-STEEL FINISHES

- A. BAKED-ENAMEL, POWDER-COAT FINISH: MANUFACTURER'S STANDARD, BAKED, POLYESTER, POWDER-COAT FINISH COMPLYING WITH FINISH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR SURFACE PREPARATION, INCLUDING PRETREATMENT, APPLICATION, BAKING, AND MINIMUM DRY FILM THICKNESS.
- B. PVC FINISH: MANUFACTURER'S STANDARD, UV-LIGHT STABILIZED, MOLD-RESISTANT, SLIP-RESISTANT, MATTE-TEXTURED, DIPPED OR SPRAYED-ON, PVC-PLASTISOL FINISH, WITH FLAME RETARDANT ADDED; COMPLYING WITH COATING MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PRETREATMENT, APPLICATION, AND MINIMUM DRY FILM THICKNESS.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR CORRECT AND LEVEL FINISHED GRADE, MOUNTING SURFACES, INSTALLATION TOLERANCES, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
- B. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.2 INSTALLATION, GENERAL

- A. COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED. COMPLETE FIELD ASSEMBLY OF SITE FURNISHINGS WHERE REQUIRED.
- B. UNLESS OTHERWISE INDICATED, INSTALL SITE FURNISHINGS AFTER LANDSCAPING AND PAVING HAVE BEEN COMPLETED.
- C. INSTALL SITE FURNISHINGS LEVEL, PLUMB, TRUE, AND SECURELY ANCHORED AND POSITIONED AT LOCATIONS INDICATED ON DRAWINGS.
- D. POST SETTING: SET CAST-IN SUPPORT POSTS IN CONCRETE FOOTING WITH SMOOTH TOP, SHAPED TO SHED WATER. PROTECT PORTION OF POSTS ABOVE FOOTING FROM CONCRETE SPLATTER. VERIFY THAT POSTS ARE SET PLUMB OR AT CORRECT ANGLE AND ARE ALIGNED AND AT CORRECT HEIGHT AND SPACING. HOLD POSTS IN POSITION DURING PLACEMENT AND FINISHING OPERATIONS UNTIL CONCRETE IS SUFFICIENTLY CURED.
 1. POSTS SET INTO VOIDS IN CONCRETE: FORM OR CORE-DRILL HOLES FOR INSTALLING POSTS IN CONCRETE TO DEPTH RECOMMENDED IN WRITING BY MANUFACTURER OF SITE FURNISHINGS AND 3/4 INCH (19 MM) LARGER THAN OD OF POST. CLEAN HOLES OF LOOSE MATERIAL, INSERT POSTS, AND FILL ANNULAR SPACE BETWEEN POST AND CONCRETE WITH NONSHRINK, NONMETALLIC GROUT, MIXED AND PLACED TO COMPLY WITH ANCHORING MATERIAL MANUFACTURER'S WRITTEN INSTRUCTIONS, WITH TOP SMOOTHED AND SHAPED TO SHED WATER



CALCULATED
KJK
CHECKED
AJP

LANDSCAPE NOTES

CUY - CEDAR-FAIRMOUNT

L-005

46
65

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CONT.	0
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	0
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	0
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	0
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	0
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	0
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B	0

EUCLID HEIGHTS BLVD.

TURF SEED MIX (OVERSEED)

R.O.W.

EXISTING BUS SHELTER

TURF SEED MIX (OVERSEED)

TRASH CAN, TYP.

TURF SEED MIX (OVERSEED)

MATCHLINE SEE SHT. L-007

CEDAR RD.

TRASH CAN, TYP.

EXISTING BUS SHELTER

R.O.W.

TURF SEED MIX (OVERSEED)

TURF SEED MIX (OVERSEED)

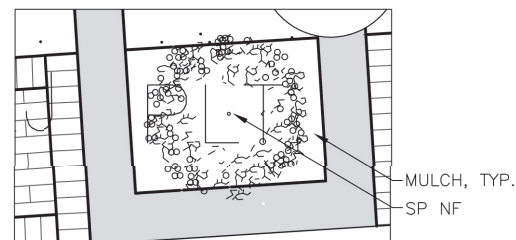
CEDAR ROAD - BLOCK 'A' - LANDSCAPE PLAN

SCALE: 1" = 10'-0"

1
L-006

SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)

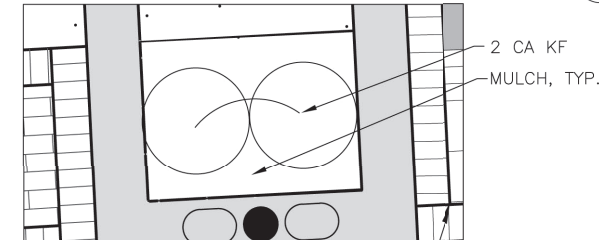
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⊙	TRASH RECEPTACLE, AS PER PLAN	KEYSTONE RIDGE LITTER RECEPTACLE 'READING SERIES'	VICTOR STANLEY: NSDC - 36.		SPECIAL	68014550	2



ENLARGED PLANTER TYPE A

SCALE: 1" = 2'-0"

2
L-006



ENLARGED PLANTER TYPE B

SCALE: 1" = 2'-0"

3
L-006



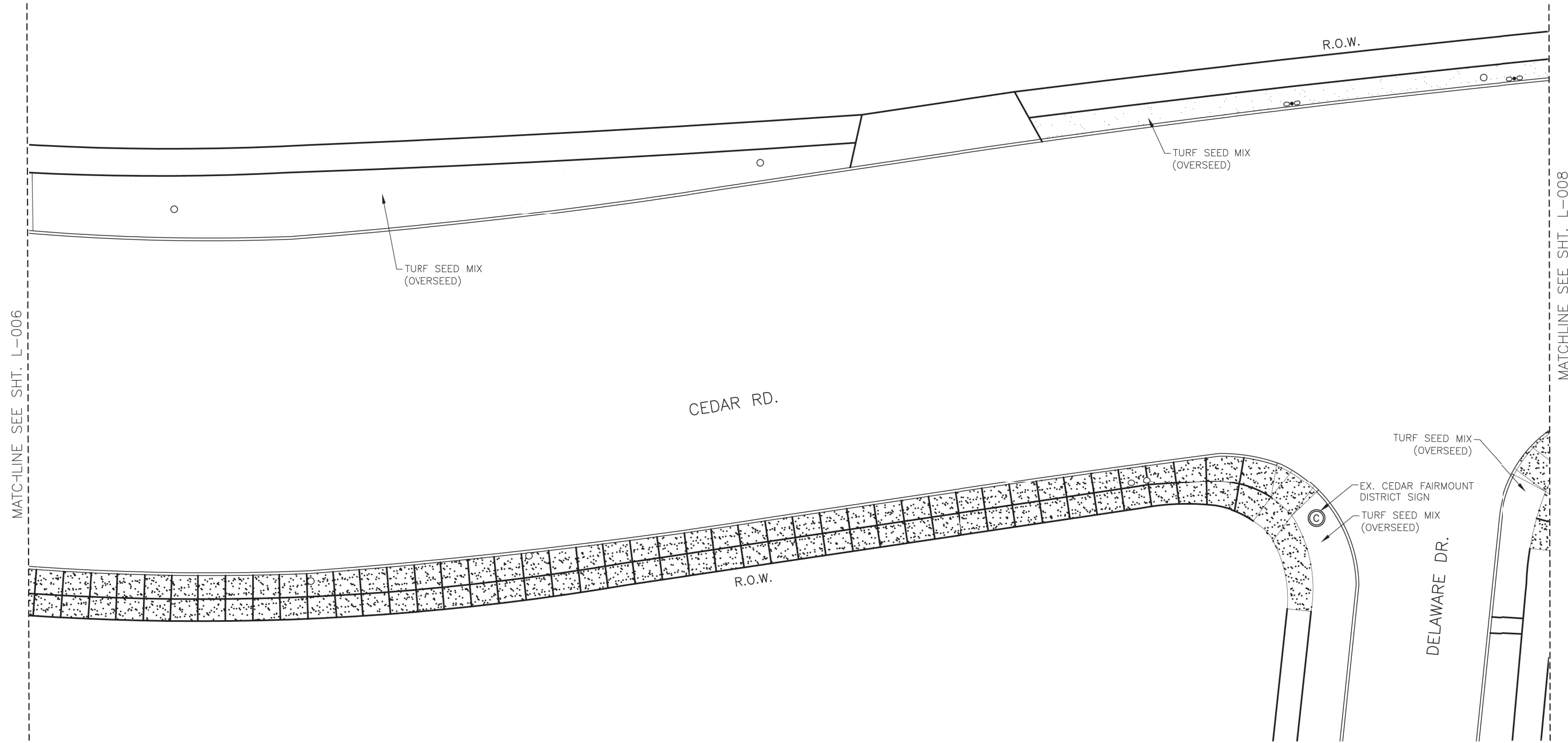
CALCULATED
KJK
CHECKED
AJP

LANDSCAPE & AMENITIES
CEDAR ROAD - BLOCK 'A'

CUY - CEDAR-FAIRMOUNT

L-006

47
65



CALCULATED
 KJK
 CHECKED
 AJP

0 10 20
 HORIZONTAL
 SCALE IN FEET

LANDSCAPE & AMENITIES
 CEDAR ROAD - BLOCK 'B'

CEDAR ROAD - BLOCK 'B' - LANDSCAPE PLAN
 SCALE: 1" = 10'-0"

1
L-007

SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)

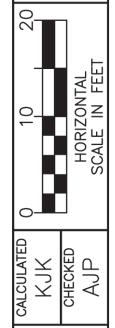
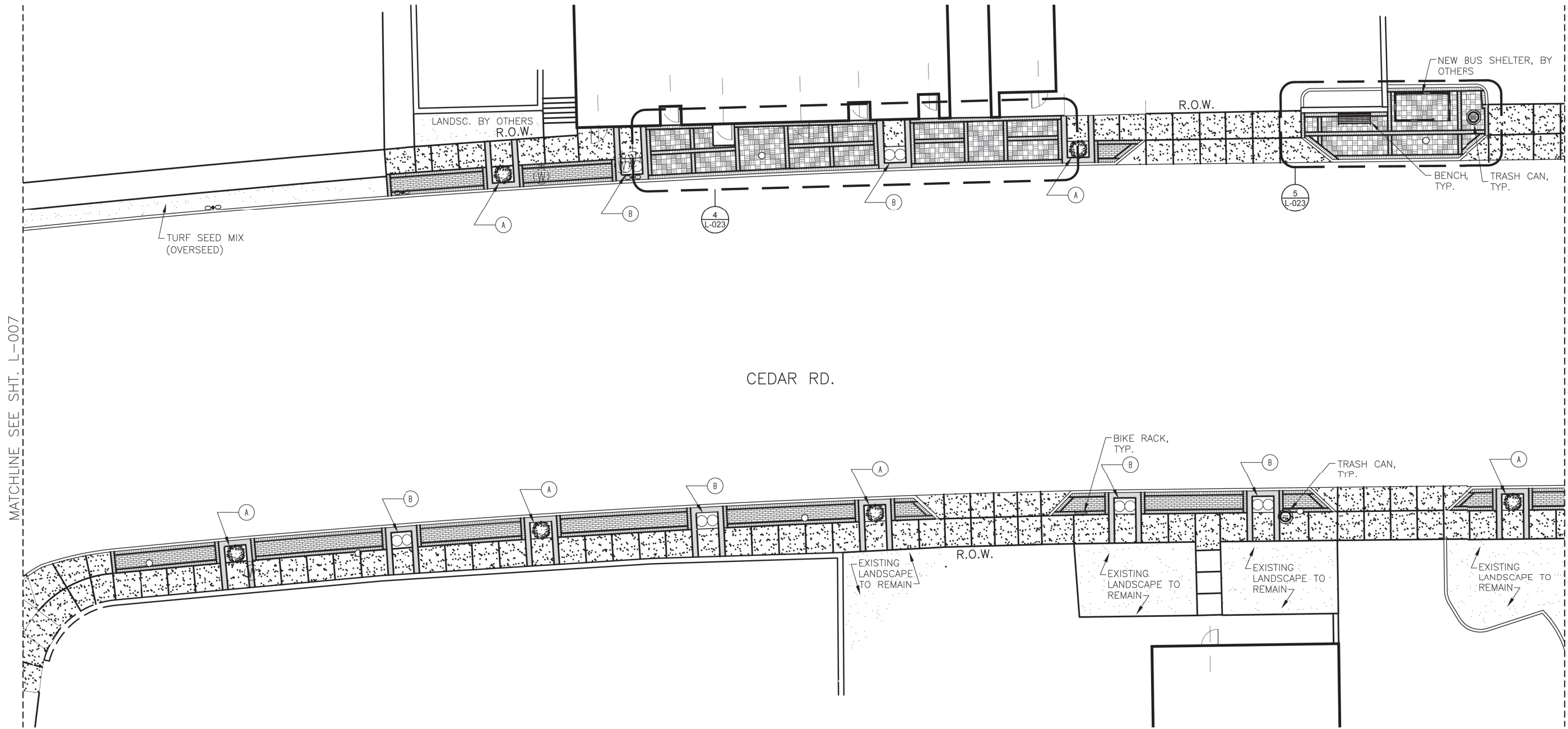
SYMBOL	DESCRIPTION	PRODUCT/MODEL OPTION 1*	PRODUCT / MODEL OPTION 2*	REMARKS	ITEM	EXT.	QTY.
Ⓢ	DISTRICT SIGN	EXISTING	N/A	REPAIR/RESTORE SIGN	SPECIAL	6909800	1

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOEPISTER' - REED GRASS	No. 2	CONT.	0
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	0
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	0
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	0
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	0
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	0
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B.	0

CUY - CEDAR - FAIRMOUNT

L-007



CEDAR ROAD - BLOCK 'C' - LANDSCAPE PLAN
 SCALE: 1" = 10'-0"

1
L-008

SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION	PRODUCT/MODEL OPTION 1*	PRODUCT / MODEL OPTION 2*	REMARKS	ITEM	EXT. QTY.
	TRASH RECEPTACLE, AS PER PLAN	KEYSTONE RIDGE LITTER RECEPTACLE 'READING SERIES'	VICTOR STANLEY: NSDC-36. BLACK POWDERCOAT.		SPECIAL	68014550 2
	BENCH, AS PER PLAN	CUSTOM BENCH (SEE L-022); VILLAGE BLACKSMITH	CUSTOM BENCH (SEE L-022); GARDA ARCHITECTURAL FABRICATION		SPECIAL	6909800 1
	BIKE RACK, AS PER PLAN	KEYSTONE RIDGE 'SONANCE' 3 CAPACITY BIKE RACK	VICTOR STANLEY: BRWS - 101 CAP. 2 BIKES,		SPECIAL	69050560 1
	TREE GRATE, AS PER PLAN	IRONSMITH 'OLYMPIAN' CAST IRON TREE GRATE 36"x48"	NEENAH FOUNDRY: BOULEVARD COLLECTION TREE GRATE. 36" X 48", R-8814-A		661	99900 0

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	CONC.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CONT.	12
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	0
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	0
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURN' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	0
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	0
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	6
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B.	0

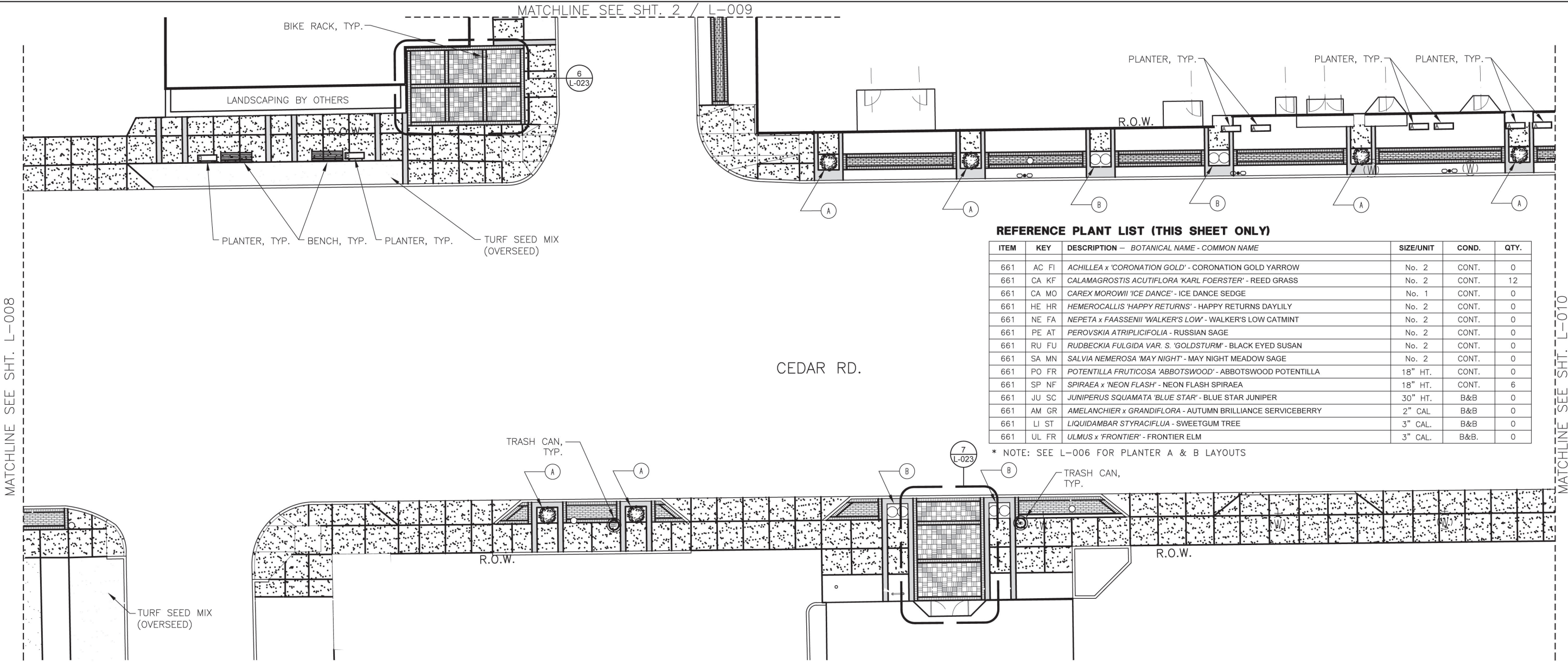
* NOTE: SEE L-006 FOR PLANTER A & B LAYOUTS

LANDSCAPE & AMENITIES
 CEDAR ROAD - BLOCK 'C'

CUY - CEDAR - FAIRMOUNT

L-008

MATCHLINE SEE SHT. L-008



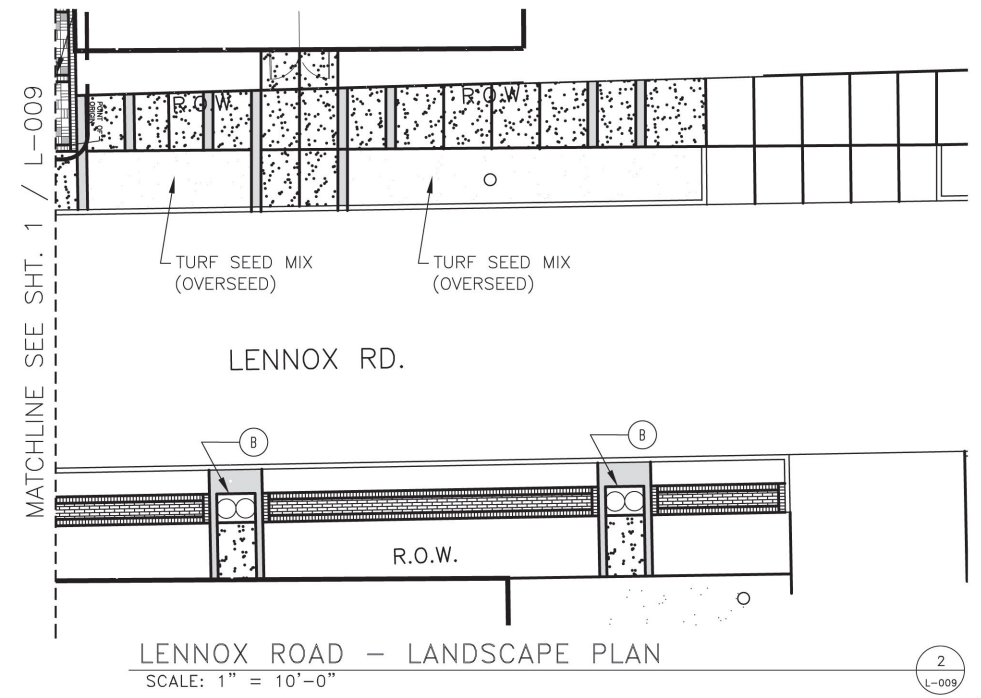
CEDAR ROAD - BLOCK 'D' - LANDSCAPE PLAN
SCALE: 1" = 10'-0"

SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)							
SYMBOL	DESCRIPTION	PRODUCT/MODEL OPTION 1*	PRODUCT / MODEL OPTION 2*	REMARKS	ITEM	EXT.	QTY.
	TRASH RECEPTACLE, AS PER PLAN	KEYSTONE RIDGE LITTER RECEPTACLE 'READING SERIES'	VICTOR STANLEY: NSDC-36. BLACK POWDERCOAT.		SPECIAL	68014550	2
	BENCH, AS PER PLAN	CUSTOM BENCH (SEE L-022); VILLAGE BLACKSMITH	CUSTOM BENCH (SEE L-022); GARDA ARCHITECTURAL FABRICATION		SPECIAL	6909800	2
	BIKE RACK, AS PER PLAN	KEYSTONE RIDGE 'SONANCE' 3 CAPACITY BIKE RACK	VICTOR STANLEY: BRWS - 101 CAP. 2 BIKES,		SPECIAL	69050560	0
	PLANTER (TYPE A), AS PER PLAN	LANDSCAPE FORMS 'SORELLA' 45"x15"x18"	OLD TOWN FIBERGLASS 'CARDIFF RECTANGLE' 36"x18"x18"		661	99900	6
	PLANTER (TYPE B), AS PER PLAN	LANDSCAPE FORMS 'SORELLA' 45"x15"x30"	OLD TOWN FIBERGLASS 'CARDIFF RECTANGLE' 48"x18"x24"		661	99900	2
	TREE GRATE, AS PER PLAN	IRONSMITH 'OLYMPIAN' CAST IRON TREE GRATE 36"x48"	NEENAH FOUNDRY: BOULEVARD COLLECTION TREE GRATE. 36" X 48", R-8814-A		661	99900	0

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CONT.	12
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	0
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	0
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	0
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	0
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	6
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B.	0

* NOTE: SEE L-006 FOR PLANTER A & B LAYOUTS



LENNOX ROAD - LANDSCAPE PLAN
SCALE: 1" = 10'-0"

20
10
0
HORIZONTAL SCALE IN FEET
CALCULATED
KJK
CHECKED
AJP

LANDSCAPE & AMENITIES
CEDAR ROAD - BLOCK 'D'

CUY - CEDAR-FAIRMOUNT

L-009
50
65

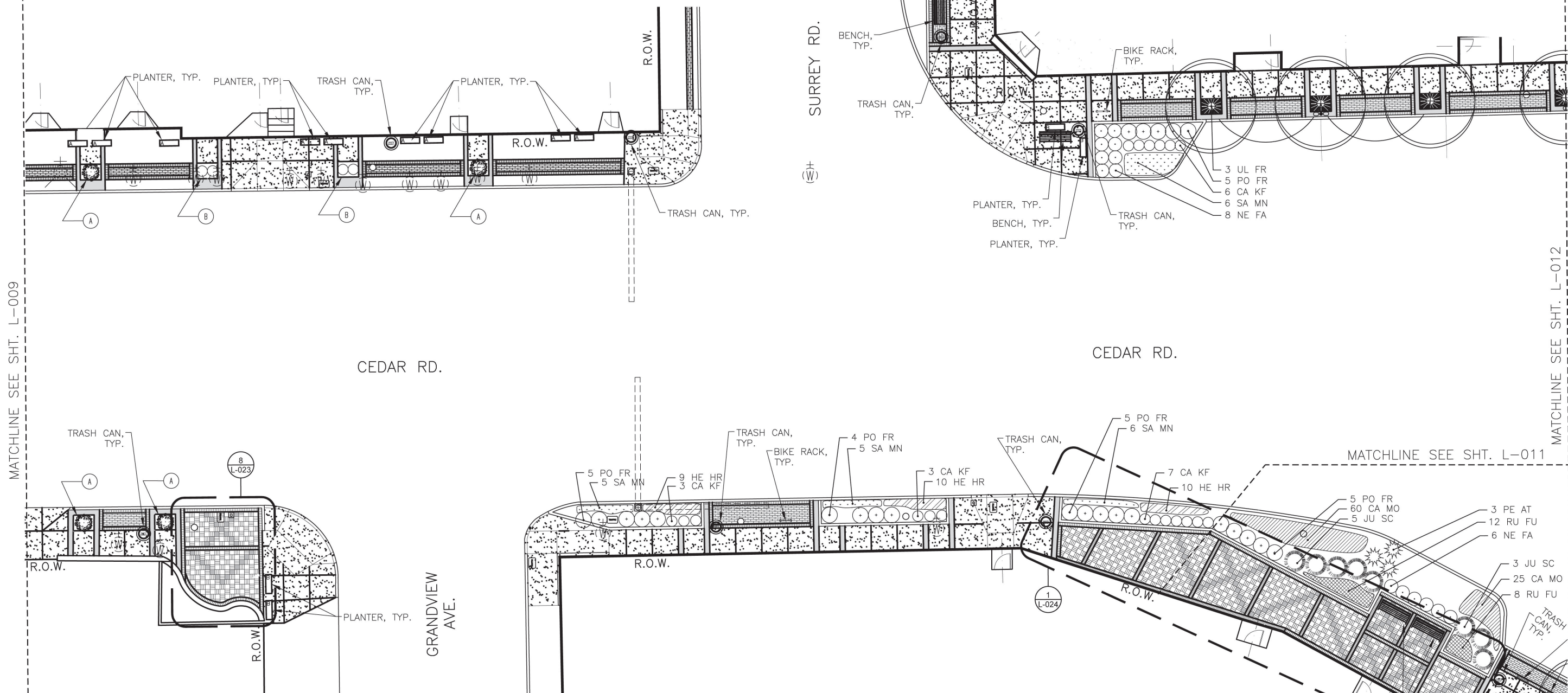
SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)

SYMBOL	DESCRIPTION	PRODUCT/MODEL OPTION 1*	PRODUCT / MODEL OPTION 2*	REMARKS	ITEM	EXT.	QTY.
	TRASH RECEPTACLE, AS PER PLAN	KEYSTONE RIDGE LITTER RECEPTACLE 'READING SERIES'	VICTOR STANLEY: NSDC-36. BLACK POWDERCOAT.		SPECIAL	68014550	7
	BENCH, AS PER PLAN	CUSTOM BENCH (SEE L-022); VILLAGE BLACKSMITH	CUSTOM BENCH (SEE L-022); GARDA ARCHITECTURAL FABRICATION		SPECIAL	6909800	2
	BIKE RACK, AS PER PLAN	KEYSTONE RIDGE 'SONANCE' 3 CAPACITY BIKE RACK	VICTOR STANLEY: BRWS - 101 CAP. 2 BIKES,		SPECIAL	69050560	2
	PLANTER, AS PER PLAN	LANDSCAPE FORMS 'SORELLA' 45"x15"x18"	OLD TOWN FIBERGLASS 'CARDIFF RECTANGLE' 36"x18"x18"		661	99900	9
	PLANTER (TYPE B), AS PER PLAN	LANDSCAPE FORMS 'SORELLA' 45"x15"x30"	OLD TOWN FIBERGLASS 'CARDIFF RECTANGLE' 48"x18"x24"		661	99900	4
	TREE GRATE, AS PER PLAN	IRONSMTIH 'OLYMPIAN' CAST IRON TREE GRATE 36"x48"	NEENAH FOUNDRY: BOULEVARD COLLECTION TREE GRATE. 36" X 48", R-8814-A		661	99900	3

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CONT.	27
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	29
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	8
661	PE AT	PEROVSKIA ATRIPPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	22
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	19
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	4
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B.	3

* NOTE: SEE L-006 FOR PLANTER A & B LAYOUTS

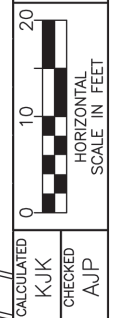
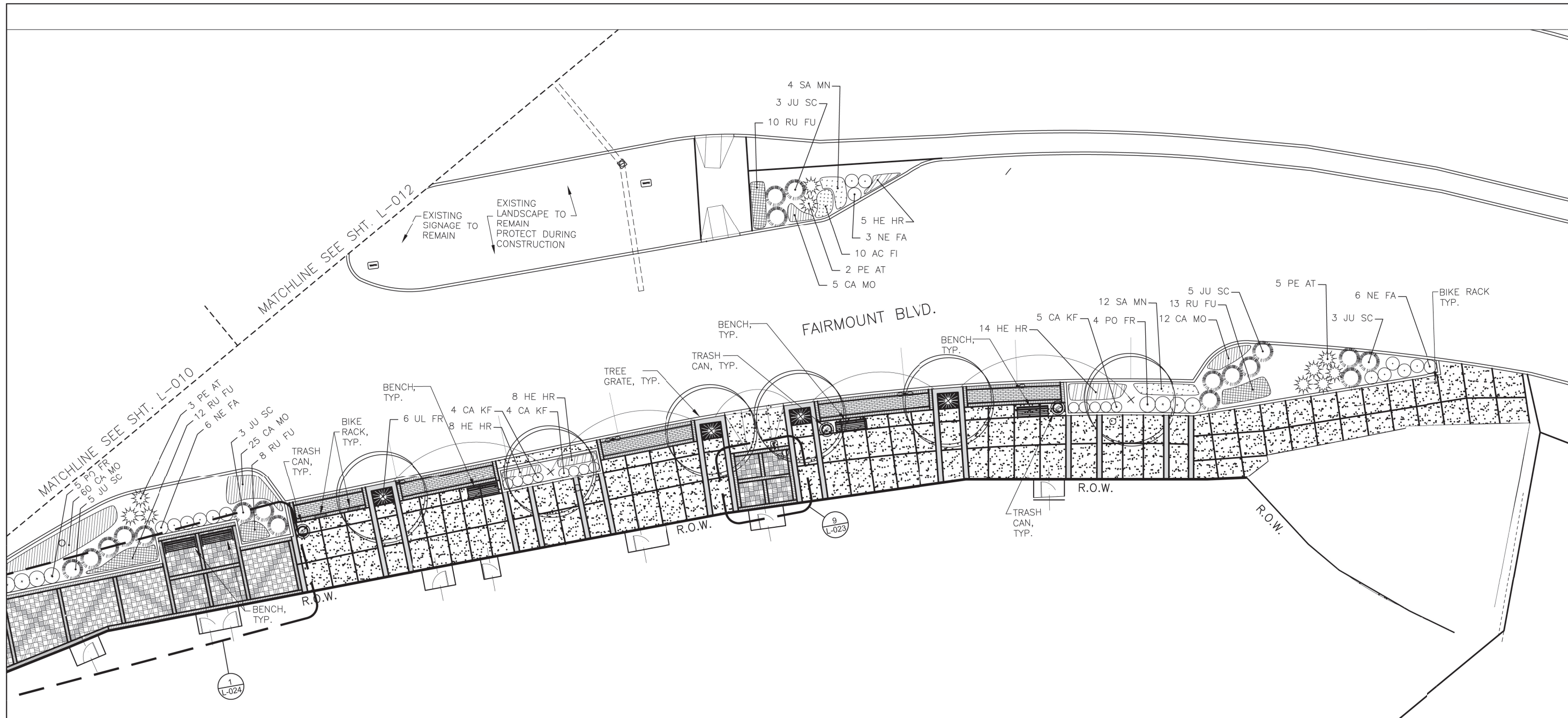


CEDAR ROAD - BLOCK 'E' - LANDSCAPE PLAN
SCALE: 1" = 10'-0"



LANDSCAPE & AMENITIES
CEDAR ROAD - BLOCK 'E'

CUY - CEDAR-FAIRMOUNT



LANDSCAPE & AMENITIES
FAIRMOUNT BLVD. WEST SIDEWALK

FAIRMOUNT BOULEVARD WEST SIDEWALK - LANDSCAPE PLAN

SCALE: 1" = 10'-0"

1
L-011

SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)				
SYMBOL	DESCRIPTION	PRODUCT/MODEL OPTION 1*	PRODUCT / MODEL OPTION 2*	REMARKS
	TRASH RECEPTACLE, AS PER PLAN	KEYSTONE RIDGE LITTER RECEPTACLE 'READING SERIES'	VICTOR STANLEY: NSDC-36. BLACK POWDERCOAT.	
	BENCH, AS PER PLAN	CUSTOM BENCH (SEE L-022); VILLAGE BLACKSMITH	CUSTOM BENCH (SEE L-022); GARDA ARCHITECTURAL FABRICATION	
	BIKE RACK, AS PER PLAN	KEYSTONE RIDGE 'SONANCE' 3 CAPACITY BIKE RACK	VICTOR STANLEY: BRWS - 101 CAP. 2 BIKES,	
	TREE GRATE, AS PER PLAN	IRONSMITH 'OLYMPIAN' CAST IRON TREE GRATE 36"x48"	NEENAH FOUNDRY: BOULEVARD COLLECTION TREE GRATE. 36" X 48", R-8814-A	

REFERENCE PLANT LIST (THIS SHEET ONLY)

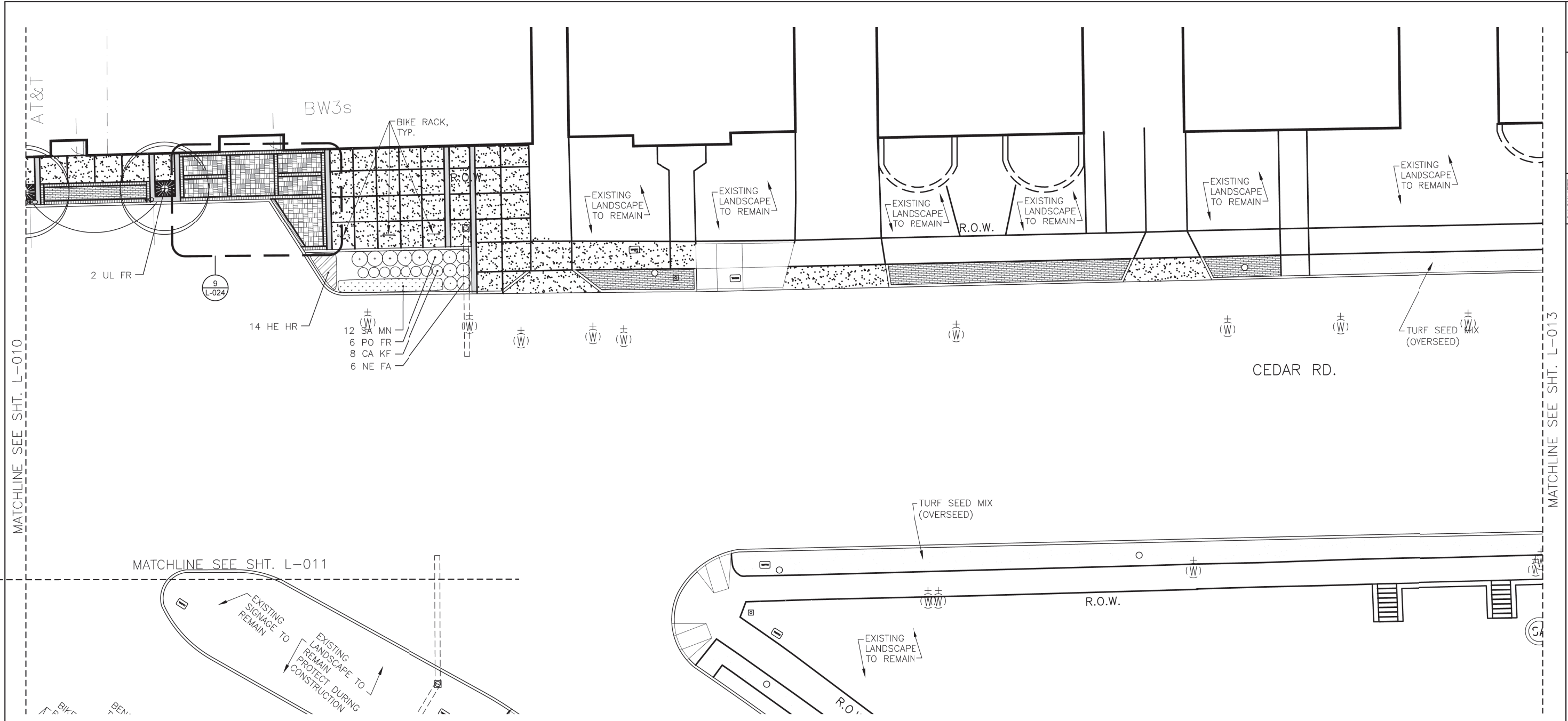
ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CCNT.	10
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CCNT.	13
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CCNT.	102
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CCNT.	35
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CCNT.	15
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CCNT.	10
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM' - BLACK EYED SUSAN	No. 2	CCNT.	43
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CCNT.	16
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CCNT.	9
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CCNT.	0
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	19
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B.	6

* NOTE: SEE L-006 FOR PLANTER A & B LAYOUTS

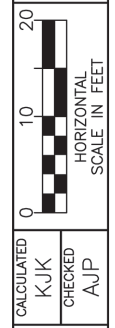
CUY - CEDAR - FAIRMOUNT

L-011

52
65



CEDAR ROAD - BLOCK 'F' - LANDSCAPE PLAN
 SCALE: 1" = 10'-0"



LANDSCAPE & AMENITIES
 CEDAR ROAD - BLOCK 'F'

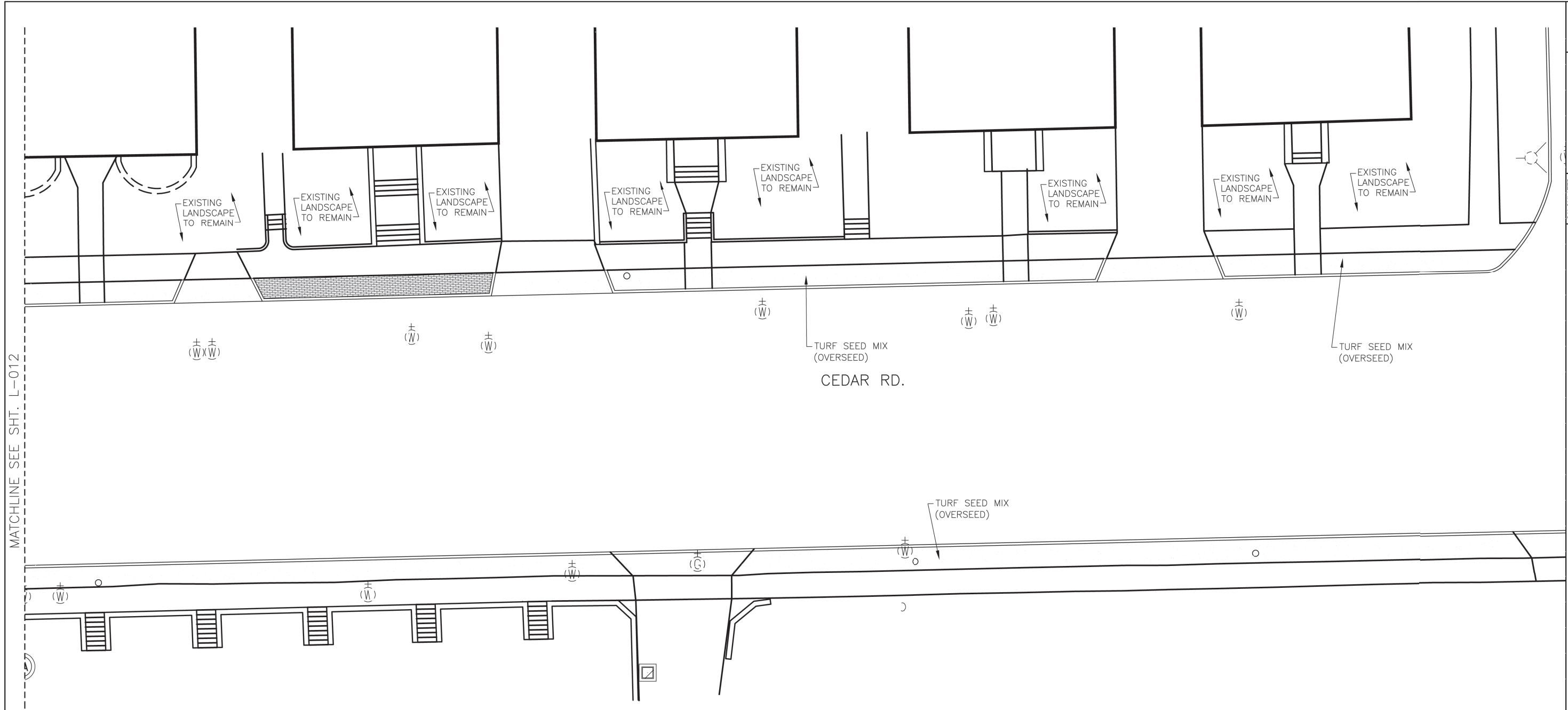
CUY - CEDAR-FAIRMOUNT

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CONT.	8
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	14
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	6
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURM' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	12
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	6
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	0
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&B.	2

* NOTE: SEE L-006 FOR PLANTER A & B LAYOUTS

SITE AMENITIES AND QUANTITIES (THIS SHEET ONLY)					ITEM	EXT.	QTY.
SYMBOL	DESCRIPTION	PRODUCT/MODEL OPTION 1*	PRODUCT / MODEL OPTION 2*	REMARKS			
	BIKE RACK, AS PER PLAN	KEYSTONE RIDGE 'SONANCE' 3 CAPACITY BIKE RACK	VICTOR STANLEY: BRWS - 101 CAP. 2 BIKES,		SPECIAL	69050560	3
	TREE GRATE, AS PER PLAN	IRONSMITH 'OLYMPIAN' CAST IRON TREE GRATE 36"x48"	NEENAH FOUNDRY: BOULEVARD COLLECTION TREE GRATE. 36" X 48", R-8814-A		661	99900	2



CALCULATED
 KJK
 CHECKED
 AJP
 HORIZONTAL
 SCALE IN FEET
 0 10 20

MATCHLINE SEE SHT. L-012

LANDSCAPE & AMENITIES
 CEDAR ROAD - BLOCK 'G'

CEDAR ROAD - BLOCK 'G' - LANDSCAPE PLAN
 SCALE: 1" = 10'-0"

1
L-013

REFERENCE PLANT LIST (THIS SHEET ONLY)

ITEM	KEY	DESCRIPTION - BOTANICAL NAME - COMMON NAME	SIZE/UNIT	COND.	QTY.
661	AC FI	ACHILLEA x 'CORONATION GOLD' - CORONATION GOLD YARROW	No. 2	CONT.	0
661	CA KF	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' - REED GRASS	No. 2	CONT.	0
661	CA MO	CAREX MOROWII 'ICE DANCE' - ICE DANCE SEDGE	No. 1	CONT.	0
661	HE HR	HEMEROCALLIS 'HAPPY RETURNS' - HAPPY RETURNS DAYLILY	No. 2	CONT.	0
661	NE FA	NEPETA x FAASSENII 'WALKER'S LOW' - WALKER'S LOW CATMINT	No. 2	CONT.	0
661	PE AT	PEROVSKIA ATRIPLICIFOLIA - RUSSIAN SAGE	No. 2	CONT.	0
661	RU FU	RUDBECKIA FULGIDA VAR. S. 'GOLDSTURV' - BLACK EYED SUSAN	No. 2	CONT.	0
661	SA MN	SALVIA NEMEROSA 'MAY NIGHT' - MAY NIGHT MEADOW SAGE	No. 2	CONT.	0
661	PO FR	POTENTILLA FRUTICOSA 'ABBOTSWOOD' - ABBOTSWOOD POTENTILLA	18" HT.	CONT.	0
661	SP NF	SPIRAEA x 'NEON FLASH' - NEON FLASH SPIRAEA	18" HT.	CONT.	0
661	JU SC	JUNIPERUS SQUAMATA 'BLUE STAR' - BLUE STAR JUNIPER	30" HT.	B&B	0
661	AM GR	AMELANCHIER x GRANDIFLORA - AUTUMN BRILLIANCE SERVICEBERRY	2" CAL.	B&B	0
661	LI ST	LIQUIDAMBAR STYRACIFLUA - SWEETGUM TREE	3" CAL.	B&B	0
661	UL FR	ULMUS x 'FRONTIER' - FRONTIER ELM	3" CAL.	B&E.	0

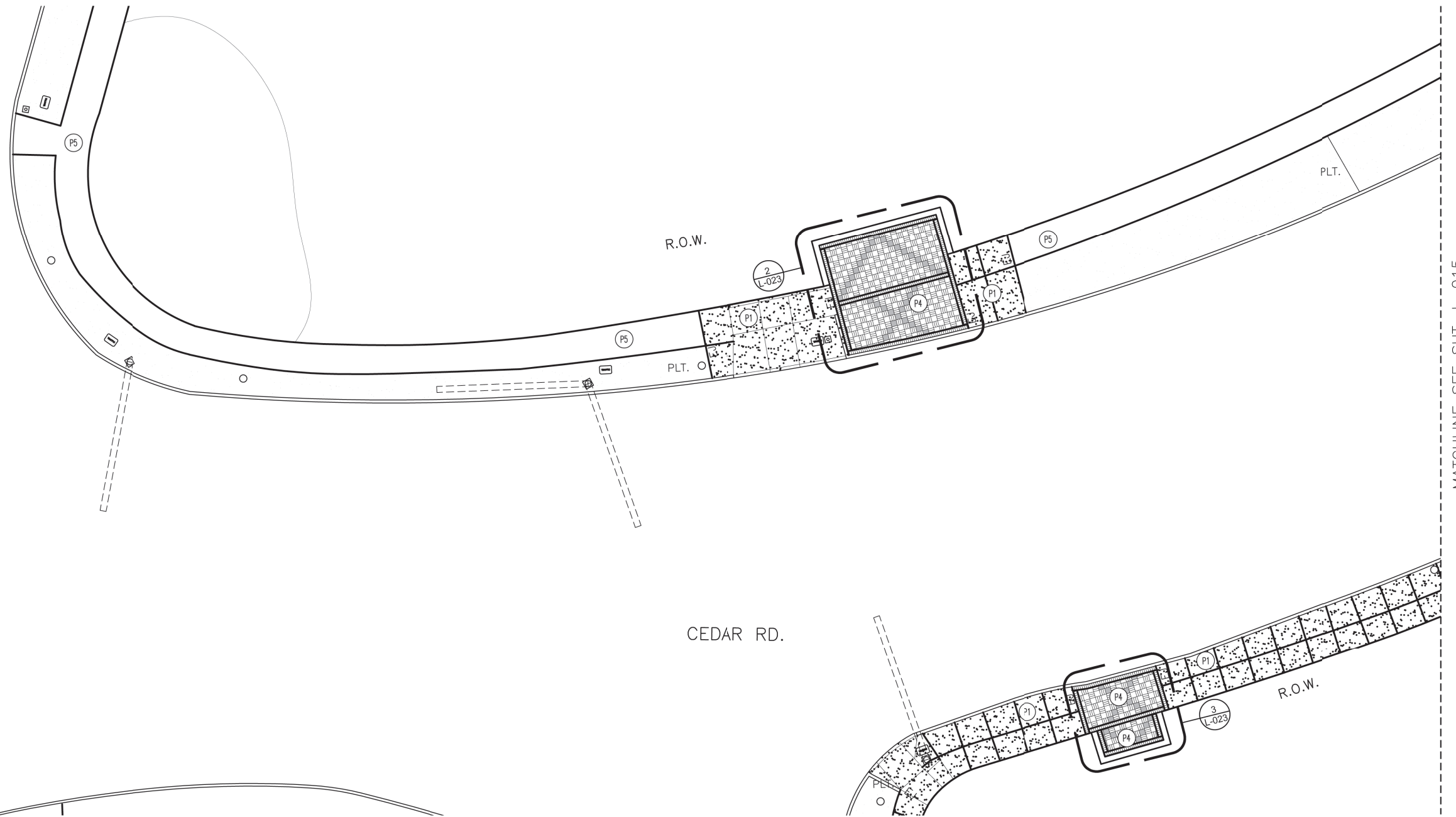
* NCTE: SEE L-006 FOR PLANTER A & B LAYOUTS

CUY - CEDAR - FAIRMOUNT

L-013

54
65

EUCLID HEIGHT



MATCHLINE SEE SHT. L-015



CALCULATED
KJK
CHECKED
AJP

HARDSCAPE PLAN
CEDAR ROAD - BLOCK 'A'

CUY - CEDAR - FAIRMOUNT

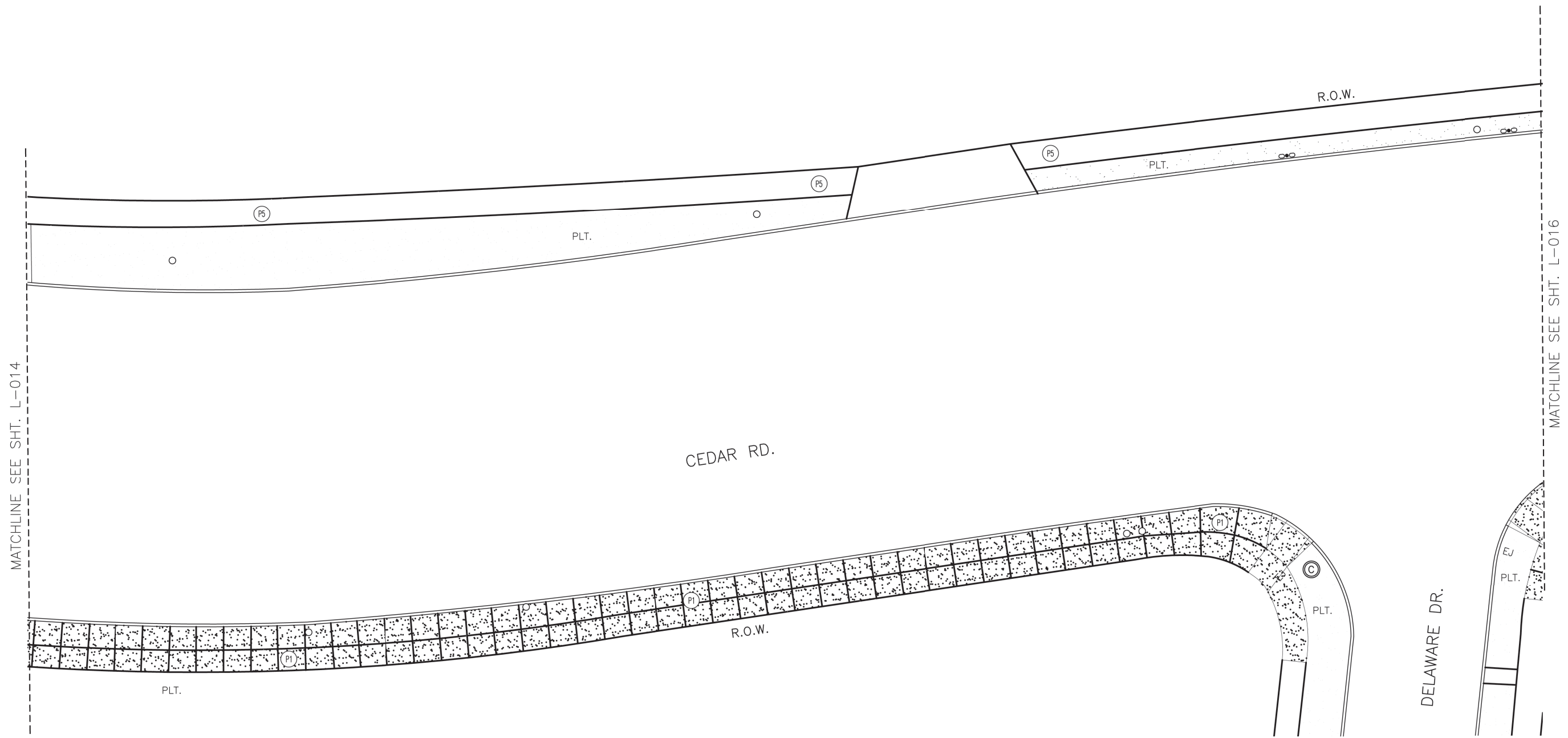
L-014

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65

CEDAR ROAD - BLOCK 'A' - HARDSCAPE PLAN
SCALE: 1" = 10'-0"

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.	
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	1,170 SF	
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000		
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000		
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	530 SF	
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	150 SF	
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100		

1
L-014



CEDAR ROAD - BLOCK 'B' - HARDSCAPE PLAN

SCALE: 1" = 10'-0"

1
L-015

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)				ITEM	EXT.	QTY.
P1	PLAIN GRAY CONCRETE		SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	2,285 SF
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN		SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000	
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN		SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	
P4	UNIT PAVER		PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED		ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	100 SF
	CURB EDGE RESTRAINT, AS PER PLAN			608	98100	



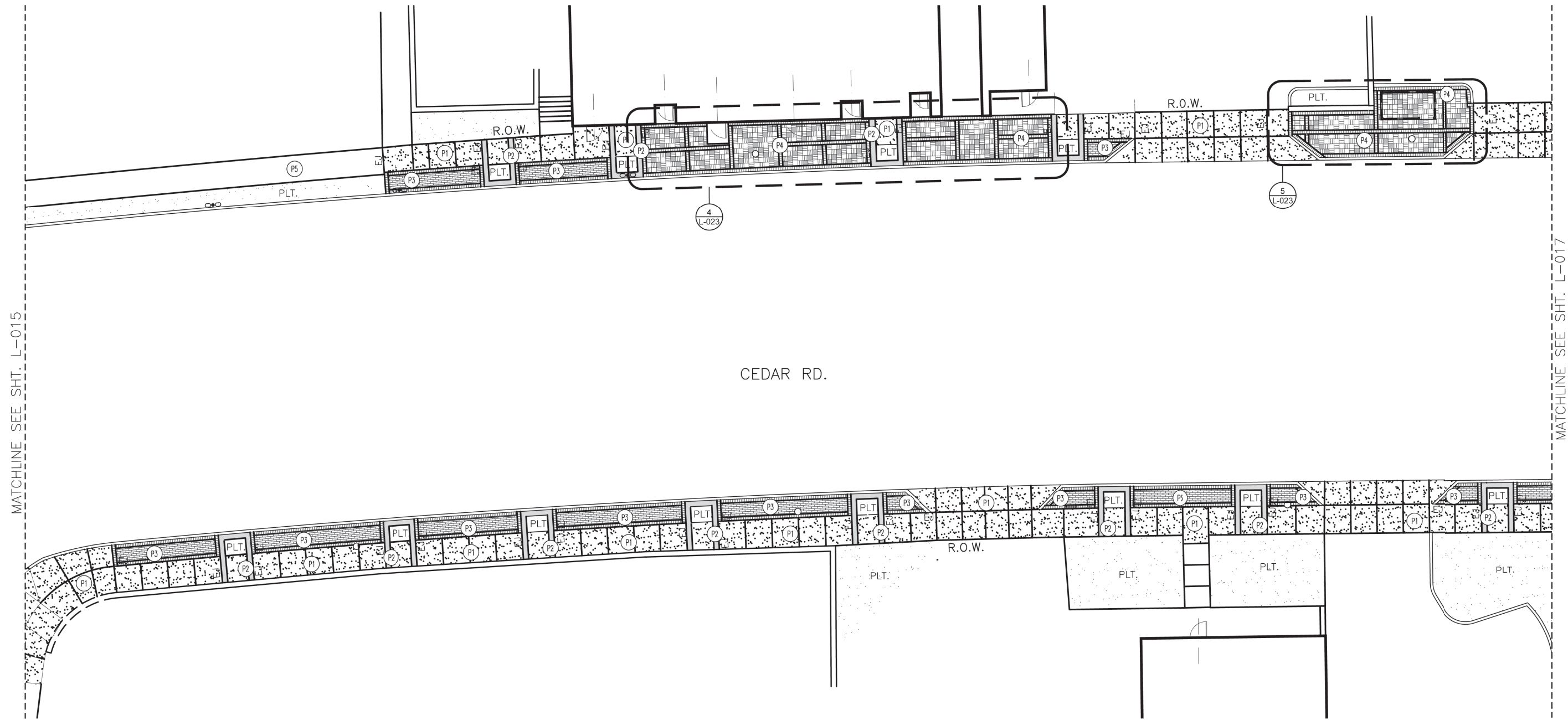
CALCULATED
KJK
CHECKED
AJP

HARDSCAPE PLAN
CEDAR ROAD - BLOCK 'B'

CUY - CEDAR-FAIRMOUNT

L-015

56
65



CEDAR ROAD - BLOCK 'C' - HARDSCAPE PLAN

SCALE: 1" = 10'-0"

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L-016

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.	
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	2,580 SF	
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000	290 SF	
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	880 SF	
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	1,016 SF	
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	40 SF	
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100		



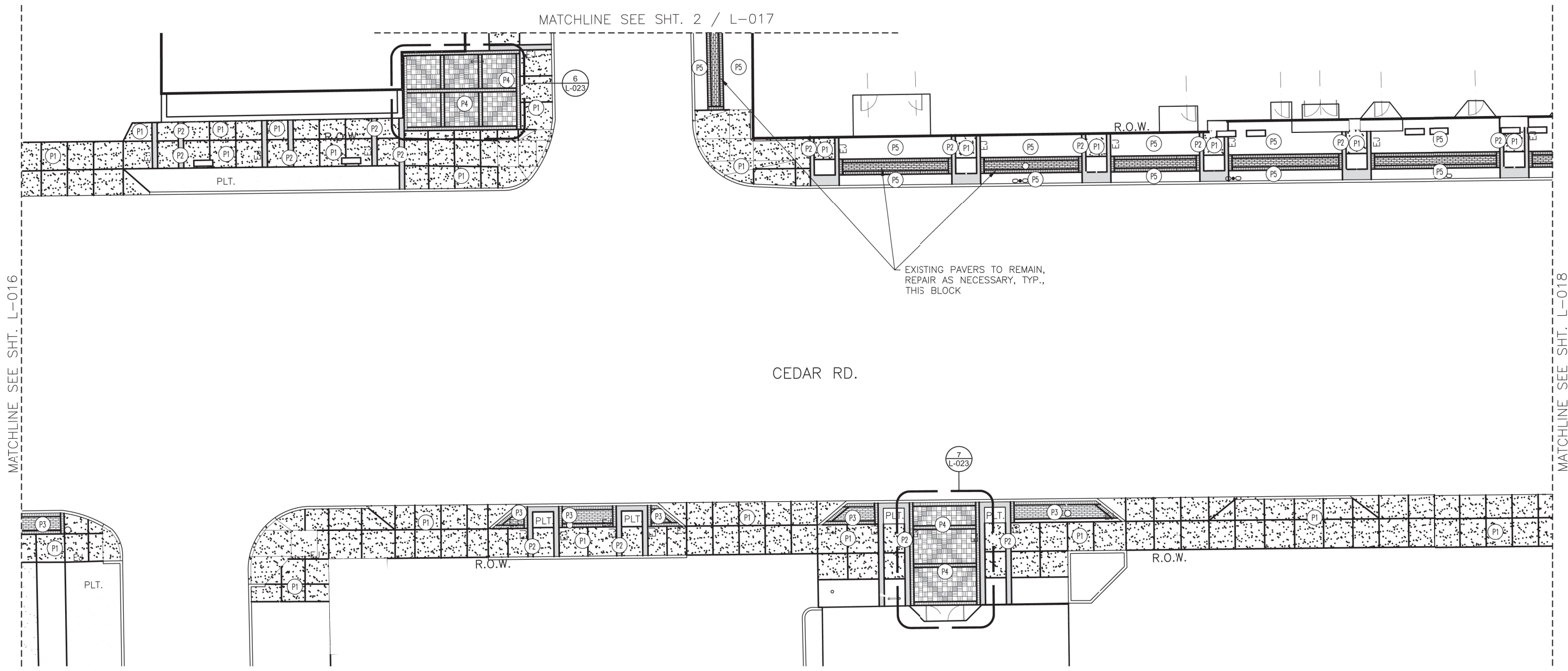
CALCULATED
KJK
CHECKED
AJP

HARDSCAPE PLAN
CEDAR ROAD - BLOCK 'C'

CUY - CEDAR-FAIRMOUNT

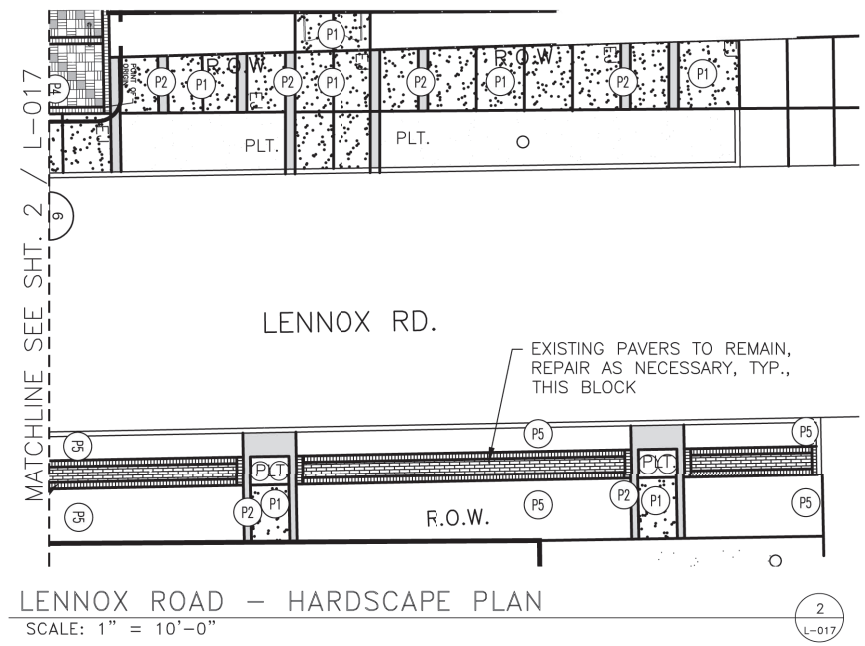
L-016

57
65



CEDAR ROAD - BLOCK 'D' - HARDSCAPE PLAN
SCALE: 1" = 10'-0"

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.	
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	4,350 SF	
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000	480 SF	
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	215 SF	
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	615 SF	
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	140 SF	
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100		



LENNOX ROAD - HARDSCAPE PLAN
SCALE: 1" = 10'-0"

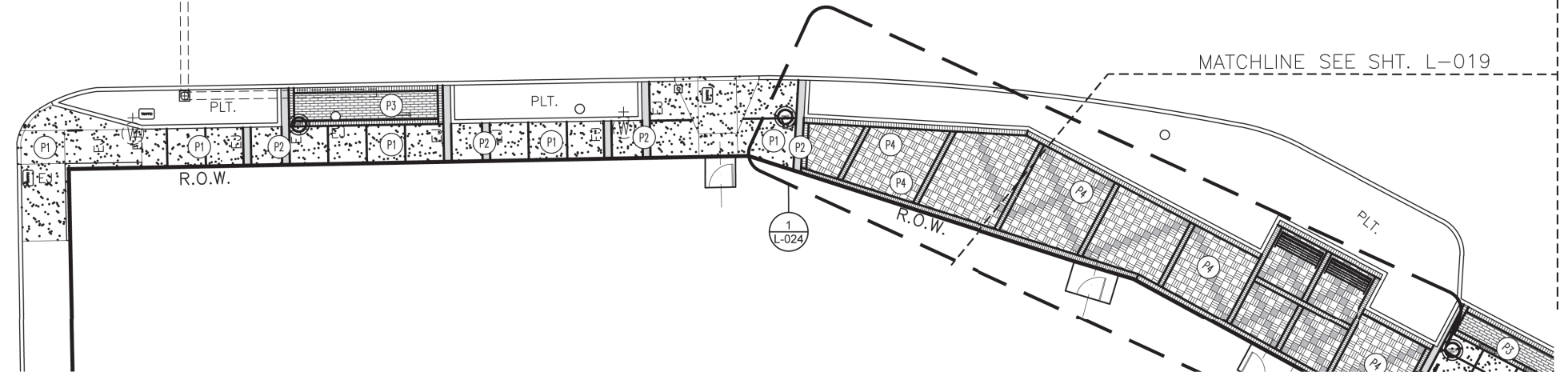
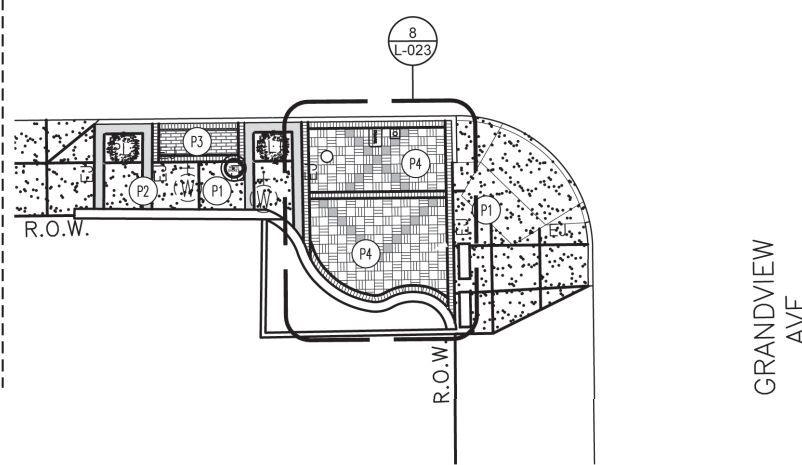
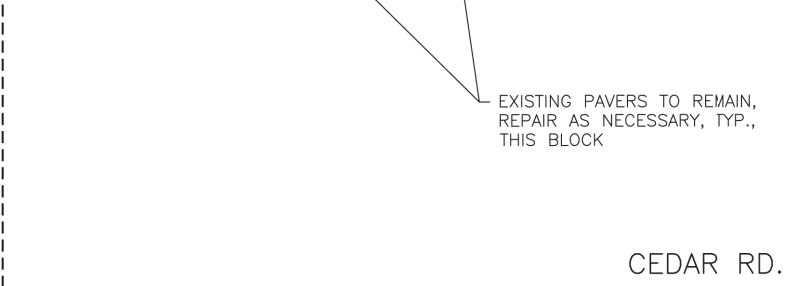
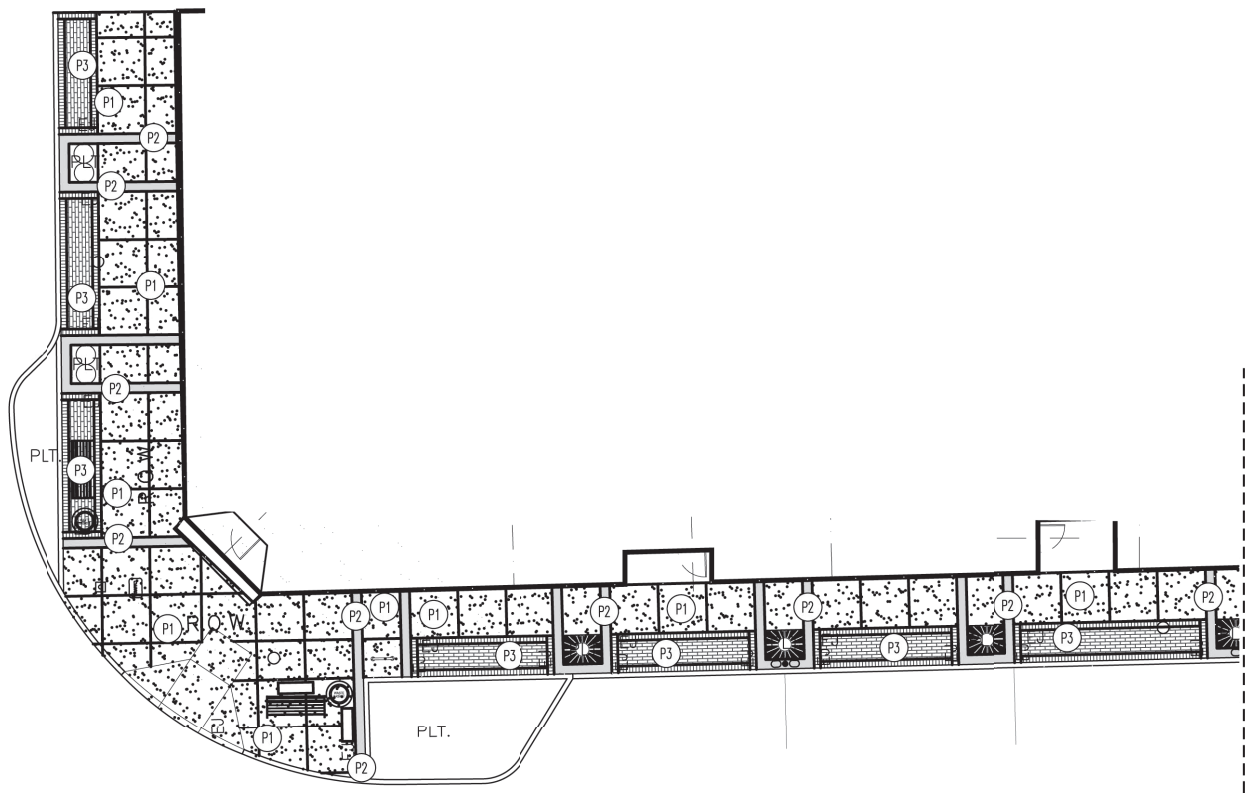
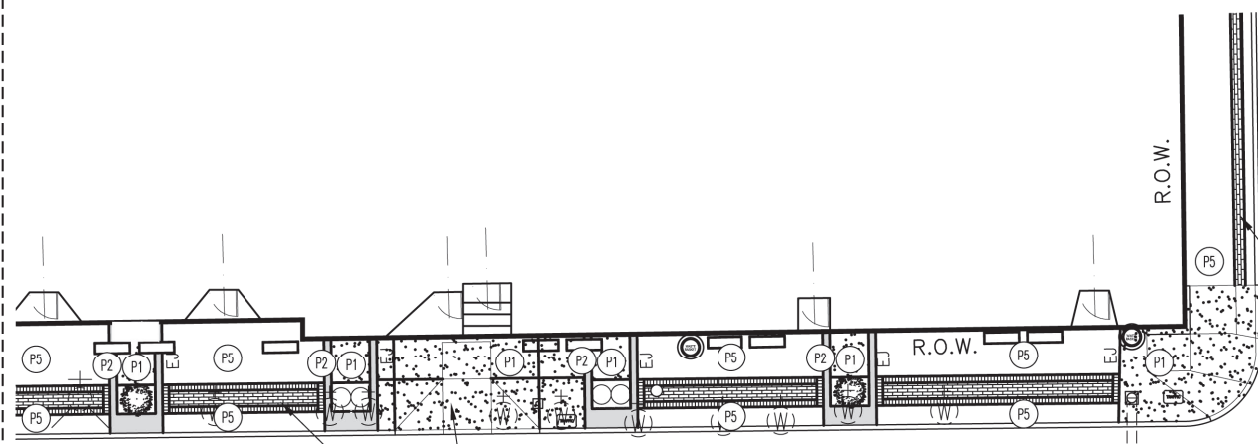


HARDSCAPE PLAN
CEDAR ROAD - BLOCK 'D'

CUY - CEDAR-FAIRMOUNT

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)

SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	2,527 SF
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000	297 SF
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	588 SF
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	581 SF
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	65 SF
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100	75 LF



CALCULATED
KJK
CHECKED
AJP

**HARDSCAPE PLAN
CEDAR ROAD - BLOCK 'E'**

CUY - CEDAR-FAIRMOUNT

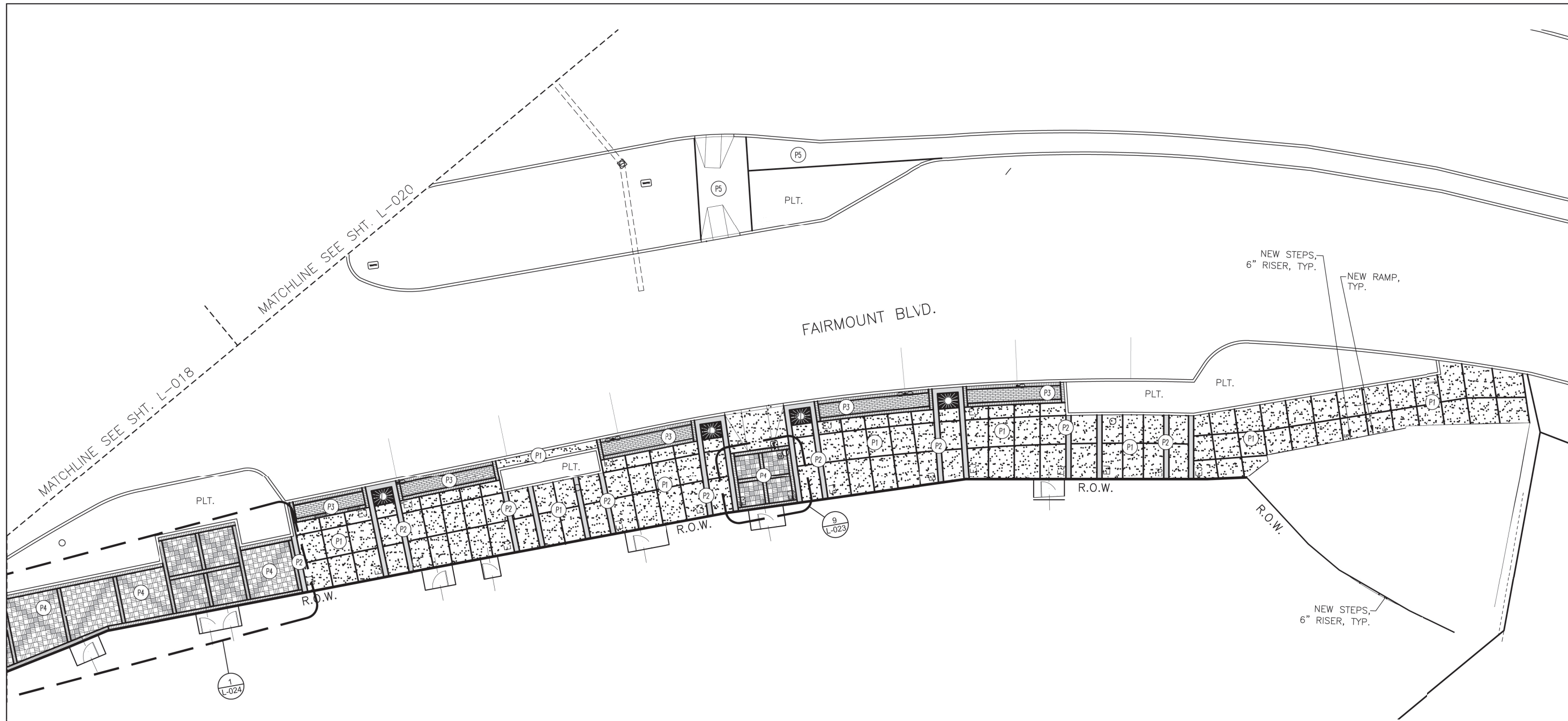
CEDAR ROAD - BLOCK 'E' - HARDSCAPE PLAN

SCALE: 1" = 10'-0"

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L-018

L-018

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65



0 10 20
 HORIZONTAL SCALE IN FEET
 CALCULATED KJK
 CHECKED AJP

HARDSCAPE PLAN
 FAIRMOUNT BLVD. WEST SIDEWALK

FAIRMOUNT BOULEVARD WEST SIDEWALK - HARDSCAPE PLAN

SCALE: 1" = 10'-0"

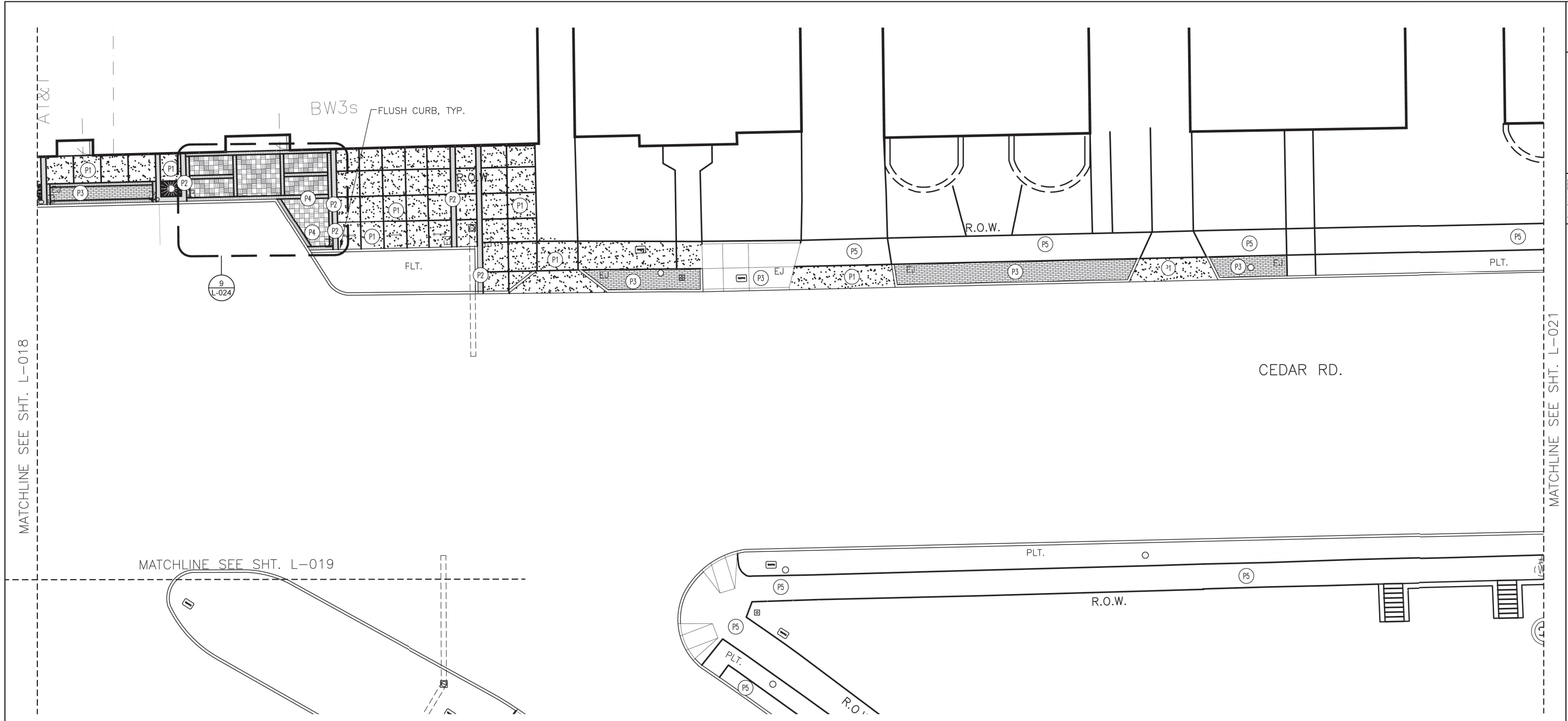
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L-019

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.	
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	2,950 SF	
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000	349 SF	
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	400 SF	
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	980 SF	
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	40 SF	
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100	120 LF	

CUY - CEDAR - FAIRMOUNT

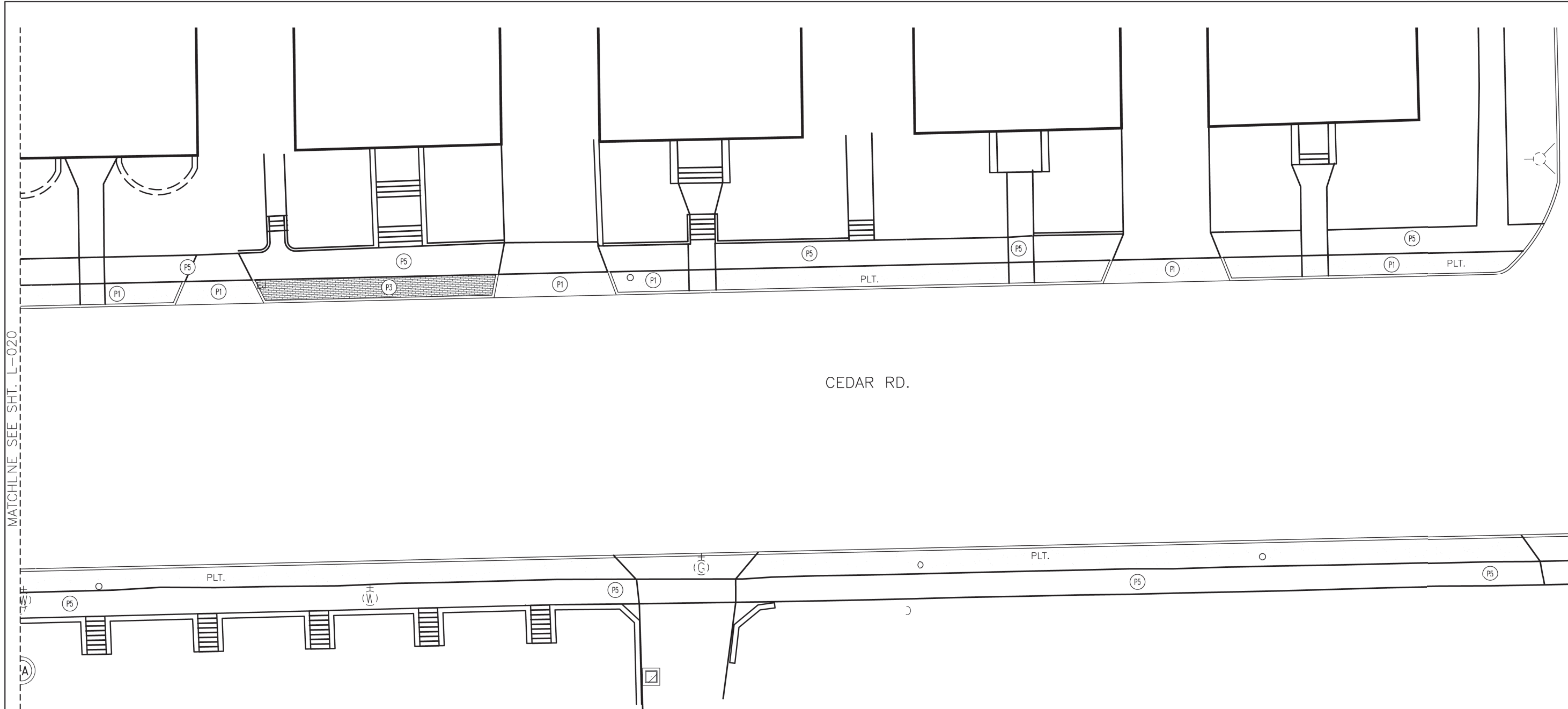
L-019

60
65



CEDAR ROAD - BLOCK 'F' - HARDSCAPE PLAN
 SCALE: 1" = 10'-0"

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.	
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	1,507 SF	
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000	115 SF	
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	420 SF	
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000	345 SF	
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	235 SF	
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100	25 LF	



MATCHLINE SEE SHT. L-020

CALCULATED	
KJK	AJP
CHECKED	

HORIZONTAL SCALE IN FEET
0 10 20

HARDSCAPE PLAN
CEDAR ROAD - BLOCK 'G'

CEDAR ROAD - BLOCK 'G' - HARDSCAPE PLAN
SCALE: 1" = 10'-0"

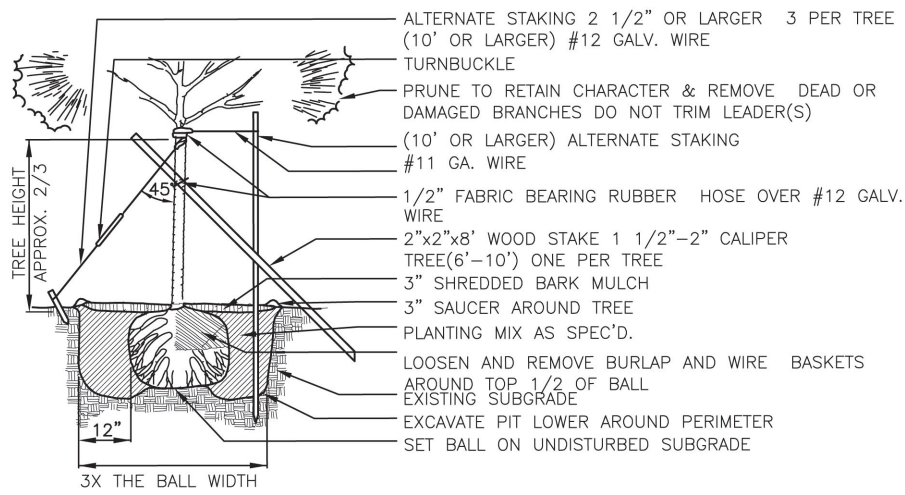
1
L-021

PAVING LEGEND AND QUANTITIES (THIS SHEET ONLY)						
SYMBOL	DESCRIPTION/MATERIAL	REMARKS	ITEM	EXT.	QTY.	
P1	PLAIN GRAY CONCRETE	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	10001	1,030 SF	
P2	INTEGRAL COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. LIGHT BROOM FINISH PERPENDICULAR TO DIRECTION OF TRAVEL.	608	98000		
P3	STAMPED & INTEGRALLY COLORED CONCRETE, AS PER PLAN	SAWCUT CONTROL JOINTS 5'-0" O.C. OR AS INDICATED ON PLAN; EXP. JOINTS 25'-0" O.C. OR AS INDICATED ON PLAN. STAMP PATTERN TO BE LAID PARALLEL TO CURB LINE.	608	98000	200 SF	
P4	UNIT PAVER	PROVIDE PAVERS PER DETAILS SHOWN. SEE SHEET L-023-L-024 FOR ENLARGED PLANS & LAYOUTS.	608	98000		
P5	PATCH & REPAIR EXISTING CONCRETE AS NEEDED	ASSUME 10% OF EXISTING CONCRETE SIDEWALK AND DRIVES TO BE PATCHED / REPAIRED.	608	98000	320 SF	
	CURB EDGE RESTRAINT, AS PER PLAN		608	98100		

CUY - CEDAR-FAIRMOUNT

L-021

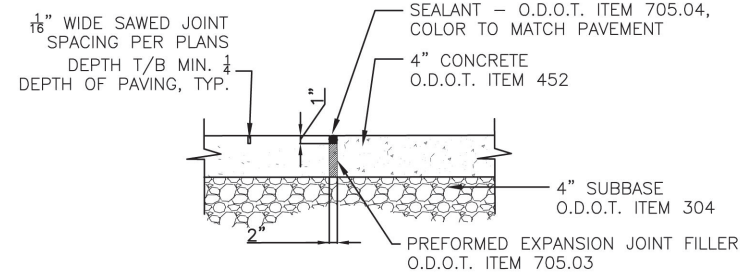
62
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TREE PLANTING DETAIL-AT-GRADE PLANTING AREAS

NTS

1
L-022

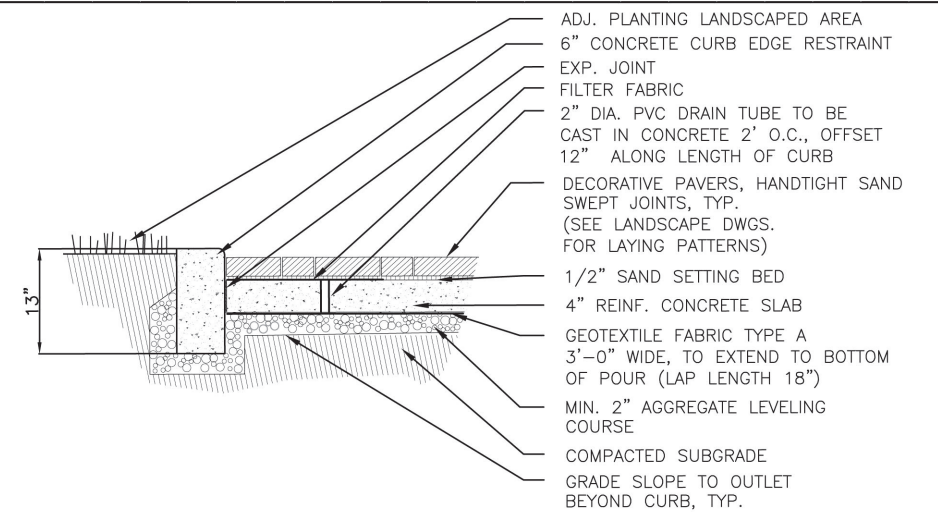


4" CONCRETE WALK, AS PER PLAN

NTS

SEE NOTES AND PAVING PLAN FOR ADDITIONAL DETAILS

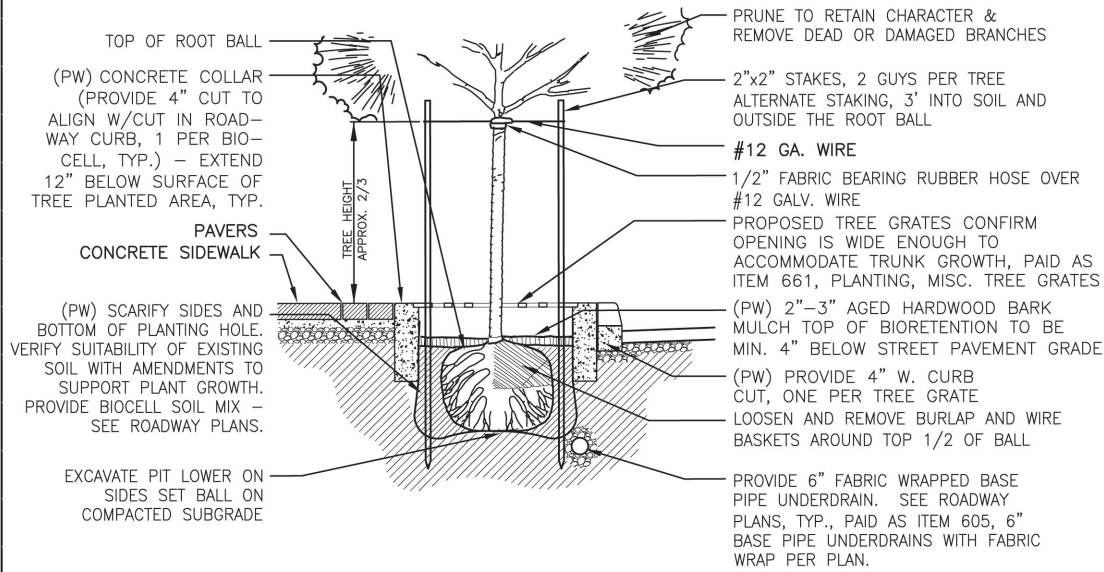
5
L-022



UNIT PAVERS & EDGE RESTRAINT DETAIL

NTS

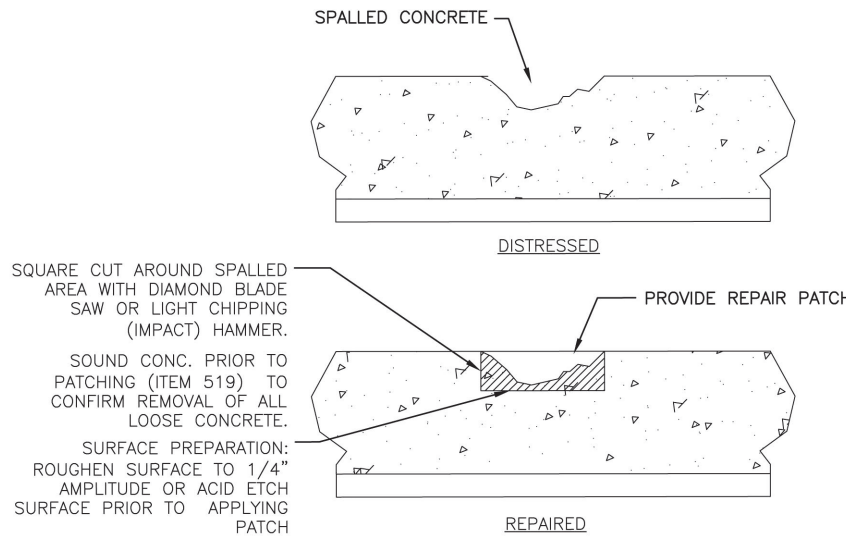
6
L-022



TREE GRATE PLANTING DETAIL

NTS

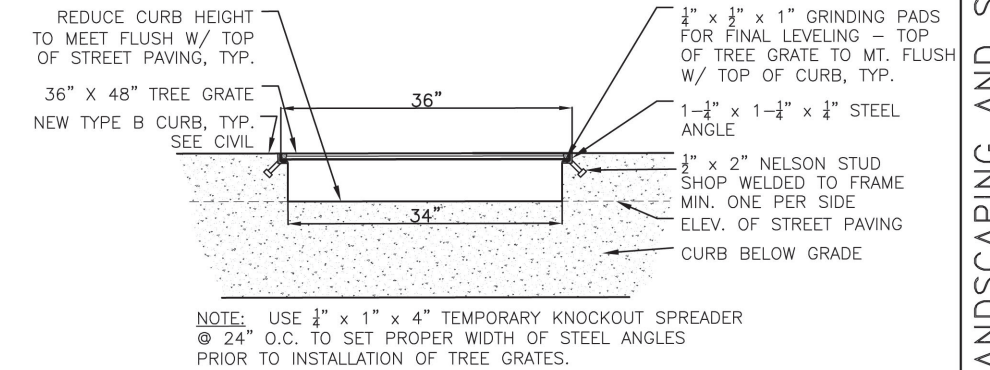
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L-022



TOP SURFACE PATCH DETAIL - SQUARE CUT

NTS

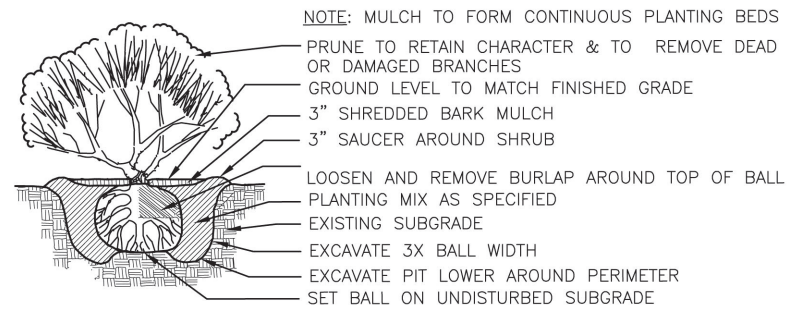
7
L-022



TREE GRATE DETAIL

SCALE: 1" = 1'-0"

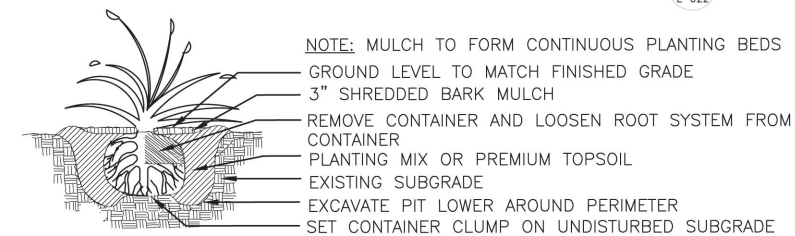
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L-022



SHRUB PLANTING DETAIL

NTS

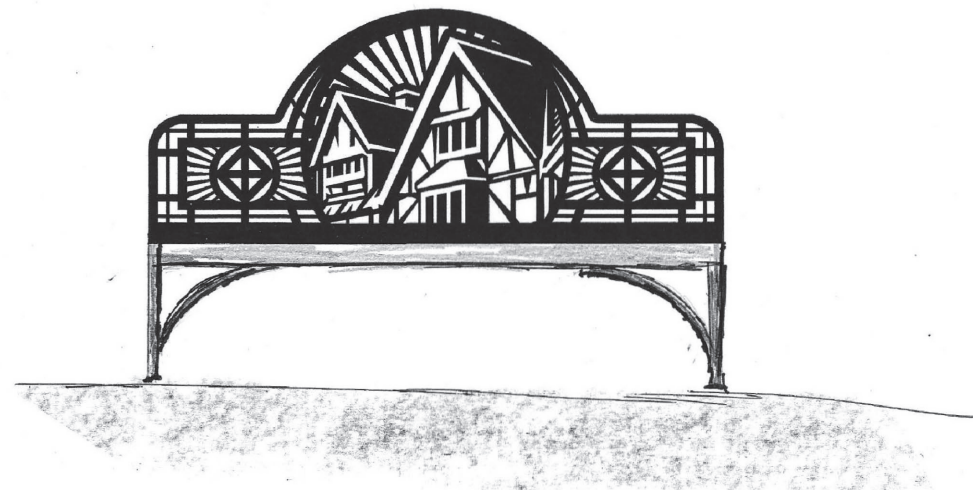
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L-022



PERENNIAL / GRASS PLANTING DETAIL

NTS

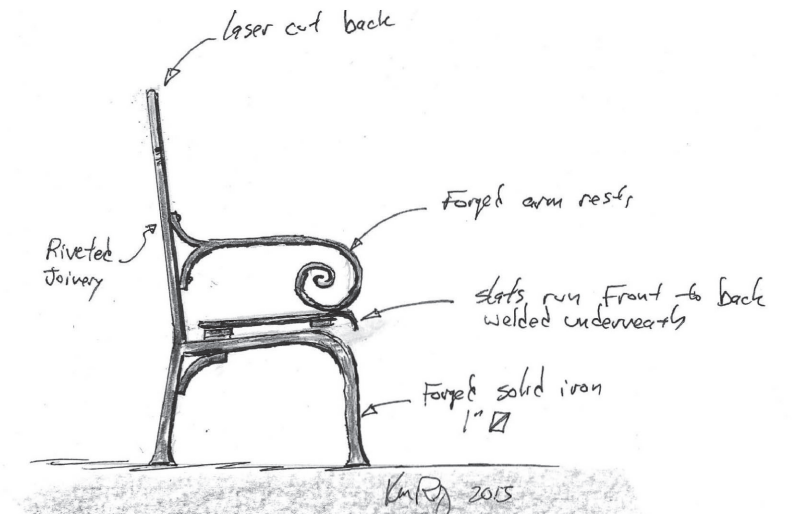
4
L-022



CUSTOM BENCH (FRONT VIEW)

SCALE: 1" = 1'-0"

9
L-022



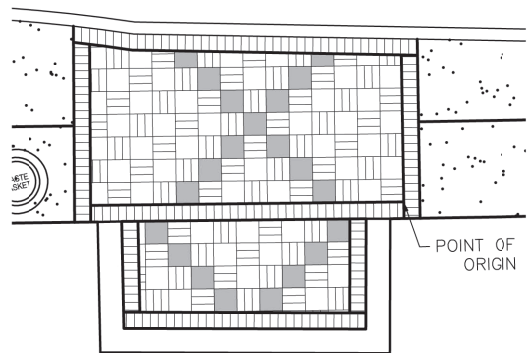
CUSTOM BENCH (SIDE VIEW)

SCALE: 1" = 1'-0"

10
L-022

GENERAL NOTES:

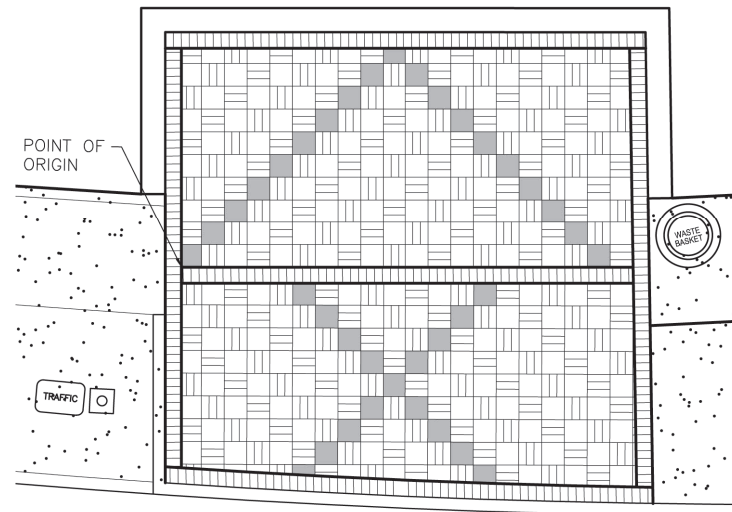
1. POINT OF ORIGIN REFERS TO POINT AT WHICH TO START FIELD PAVER LAYOUT.
2. LAYOUTS ARE INTENDED TO SHOW PATTERN, OVERALL SIZE, AND COLOR.
3. INSTALLER TO BEGIN PAVER LAYOUT AT IDENTIFIED POINT OF ORIGIN AND REFER TO DRAWINGS FOR OVERALL LAYOUT PATTERN



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

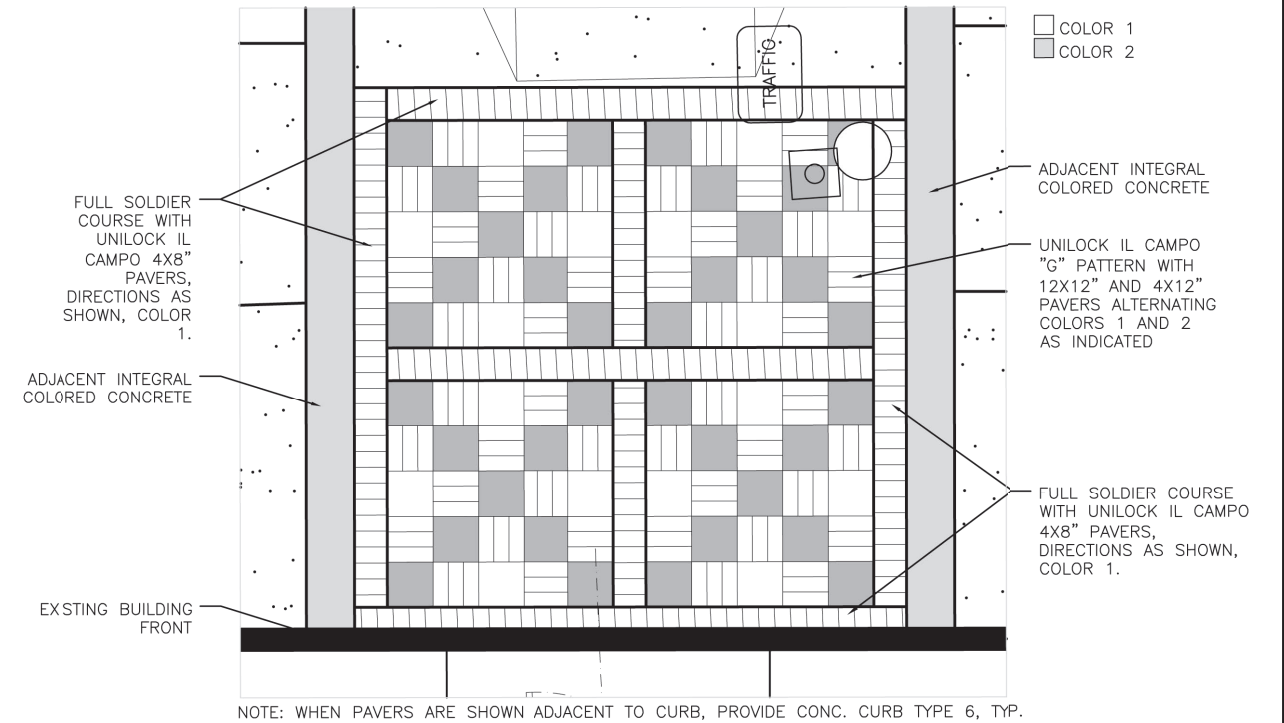
3
L-023



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

2
L-023

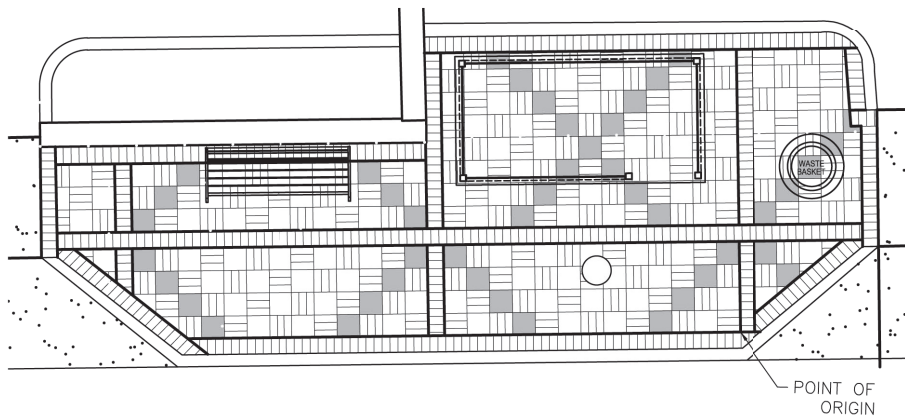


TYPICAL PAVING PATTERN ENLARGED PLAN

SCALE: 6" = 1'-0"

1
L-023

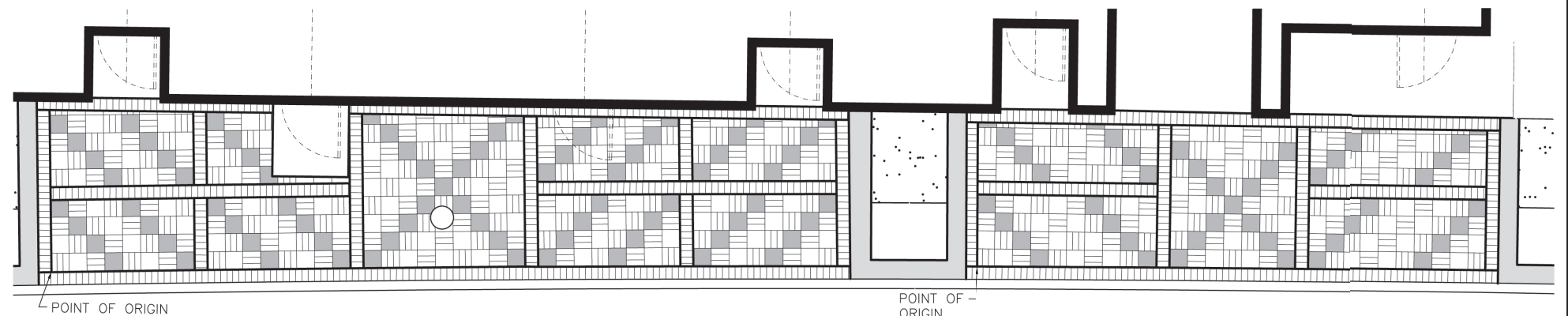
NOTE: WHEN PAVERS ARE SHOWN ADJACENT TO CURB, PROVIDE CONC. CURB TYPE 6, TYP.



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

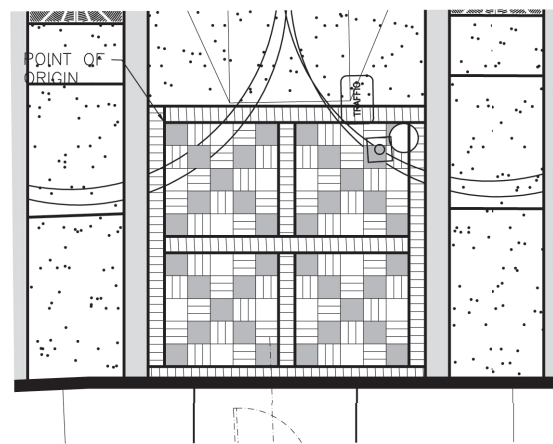
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L-023



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

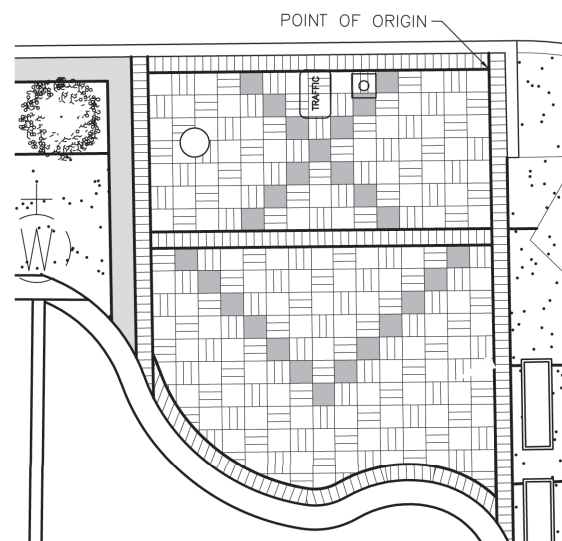
4
L-023



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

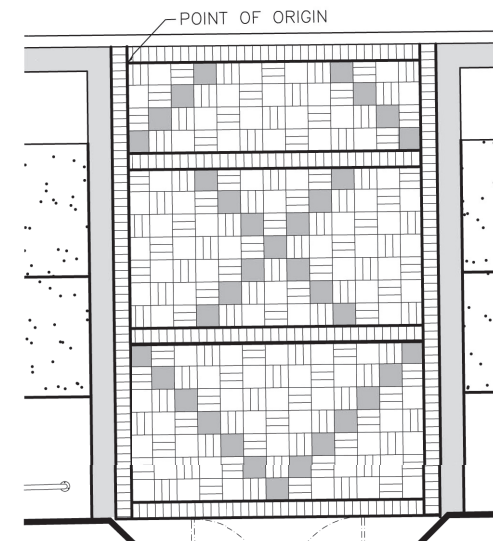
9
L-023



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

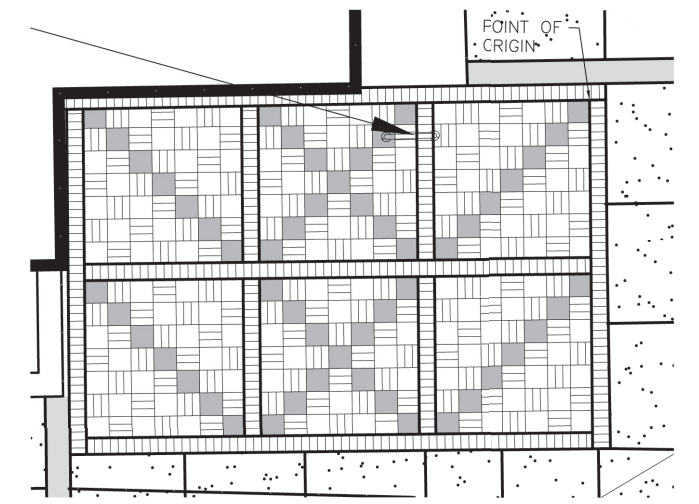
8
L-023



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

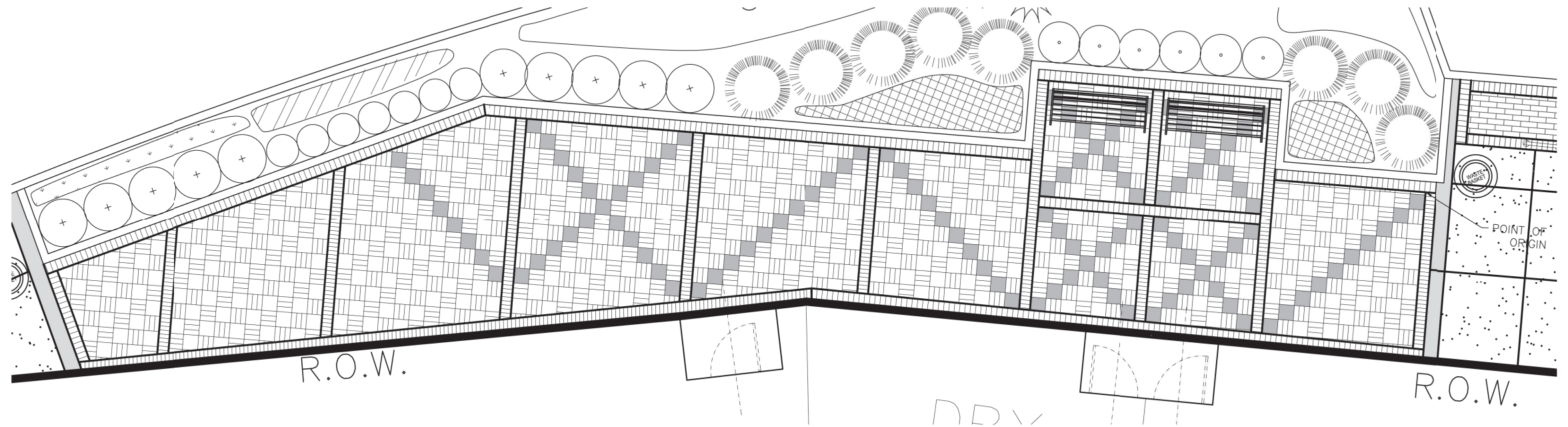
7
L-023



PAVING PATTERN DETAIL

SCALE: 3" = 1'-0"

6
L-023



PAVING PATTERN DETAIL
SCALE: 3" = 1'-0"

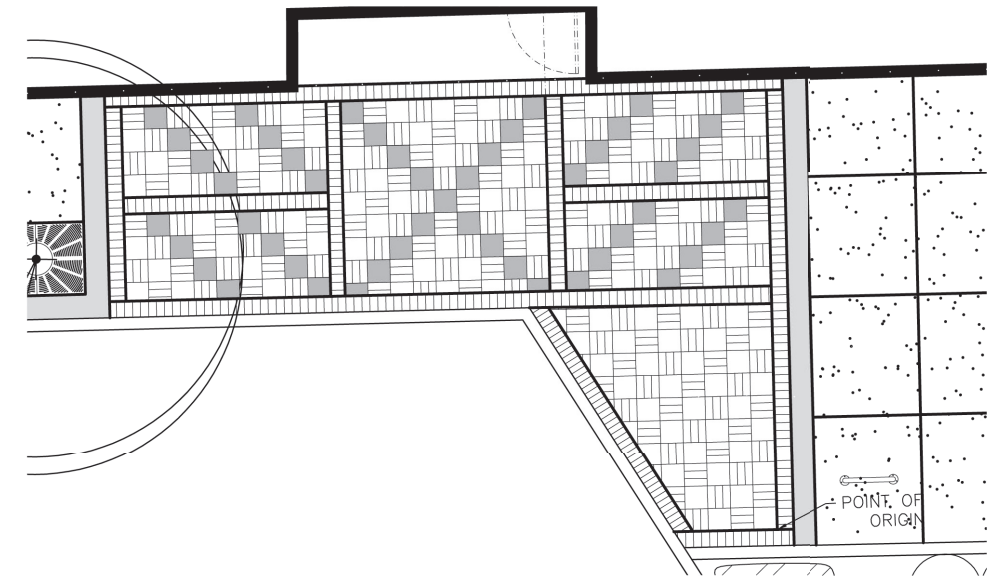
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L-024



- NOTES:
1. SAND, PREPARE WOOD SURFACE FOR STAIN AND RESTAIN WOOD SIGN (COLOR TO BE SELECTED BY OWNER)
 2. SCRAPE LOOSE PAINT, PRIME AND PAINT METAL SIGN PIECES (COLOR BY OWNER)
 3. SIGN POLE IS APPROX. 7' AND THE SIGN IS APPROX. 2'-6"

EXISTING DISTRICT SIGN
NTS

3
L-024



PAVING PATTERN DETAIL
SCALE: 3" = 1'-0"

2
L-024

- GENERAL NOTES:
1. POINT OF ORIGIN REFERS TO POINT AT WHICH TO START FIELD PAVER LAYOUT.
 2. LAYOUTS ARE INTENDED TO SHOW PATTERN, OVERALL SIZE, AND COLOR.
 3. INSTALLER TO BEGIN PAVER LAYOUT AT IDENTIFIED POINT OF ORIGIN AND REFER TO DRAWINGS FOR OVERALL LAYOUT PATTERN



CALCULATED
KJK
CHECKED
AJP

LANDSCAPING AND SITE
DETAILS

CUY - CEDAR - FAIRMOUNT

L-024