

AGENDA
Cascade Charter Township
Downtown Development Authority Board of Directors
March 19, 2019
5:30 p.m.
Cascade Library Wisner Center
2870 Jacksmith Ave. SE

- ARTICLE 1.** Call the Meeting to Order
Record the Attendance
- ARTICLE 2.** Approval of the Agenda
- ARTICLE 3.** Approval of the Minutes of February 19, 2019 Meeting
- ARTICLE 4.** Acknowledge visitors and those wishing to speak to non-agenda items *(Comments are limited to five minutes per speaker)*
- ARTICLE 5.** Discuss and Consider DDA recommendation for the Centennial Park Streetscape project
- ARTICLE 6.** Discuss and Consider DDA Sponsorship for the Sunday Afternoon Live Concert series
- ARTICLE 7.** Discuss and Consider DDA Sponsorship for the Family Nights at the Library series
- ARTICLE 8.** Discuss and Consider Golf Cart Rental for Family Nights series
- ARTICLE 9.** Discuss and Consider Special Event Permit application
- ARTICLE 10.** Any Other Business
- a. Planning Projects
 - b. Special Meeting – May 21, 2019
- ARTICLE 11.** Adjournment

MINUTES
Cascade Charter Township
Downtown Development Authority Board of Directors
Tuesday, February 19th, 2019
5:30 P.M.
Cascade Library – Wisner Center

ARTICLE 1. Chairman Puplava called the meeting to order at 5:30 P.M.
Members Present: Beahan, Kingsland, Stephan, Growney, Siegle, Puplava, Makkar
Members Absent: McNeil-Chapman, DeWitt
Others Present: DDA Director Sandra Korhorn, and those listed on the sign in sheet.

ARTICLE 2. Approve the current Agenda.

Motion was made by Member Stephan to approve the Agenda. Supported by Member Kingsland. Motion carried 6 to 0.

ARTICLE 3. Approve the Minutes of the January 15, 2019 Meeting.

Motion was made by Member Siegle to approve the Minutes as presented. Supported by Member Beahan. Motion carried 6 to 0.

ARTICLE 4. Acknowledge visitors and those wishing to speak to non-agenda items.

No one came forward.

ARTICLE 5. Discuss and Consider DDA Sponsorship for the Cascade Metro Cruise Warmup.

Director Korhorn stated this is the 10th anniversary of this event, and it continues to grow in popularity. The committee is requesting \$5,000 this year for sponsorship (a \$2,000 increase from last year) for a few extra things to celebrate the 10th anniversary. Chairman Puplava asked if the budget could accommodate the increase, Director Korhorn replied that it was budgeted for this year.

Member Makkar arrived at 5:35 during discussion.

Motion was made by Member Stephan to approve the \$5,000 Sponsorship. Supported by Member Kingsland. Motion carried 7 to 0.

ARTICLE 6. Discuss Future DDA Projects.

Director Korhorn stated there are 3 projects that have been discussed as priority from the January Meeting. They include the community gathering space, the path from Tassell Park to the library, and the mid-block crossing on 28th Street. Information included in the Members packet tonight includes the final presentation from 2017 for the community gathering space area with the plan, final plan, and phased approach with some approximate costs (from 2016/17), and a rough sketch of the path from the library

to Tassell Park. The mid-block crossing will need to be discussed further with the Road Commission if it is to be a future DDA project.

Director Korhorn introduced Mike Berrevoets, Cascade Township Engineer, to the Board, stating that she asked him to attend the meeting tonight to offer advice and timing restrictions for these future projects.

Mr. Berrevoets states that from a planning perspective, the proposed outdoor gathering space will need to be a 2020 project. The topographic survey should be completed in/near August of 2019, the design will need to be put together October-December 2019, then the job released for bids by the end of the year for work to begin in the spring of 2020 pending any setbacks.

Director Korhorn stated that there is a memo included in the packet that discusses the sidewalk extension that was part of the pathway millage vote that was passed in November 2018. This will be a 2019 project, and the Township will be responsible for their part of the sidewalk, including streetlights on both sides of Cascade Road. The cost for this project will likely be rolled into a Bond for the Centennial Park work.

The purchase of riverfront properties is being left on the list should the opportunity for purchase arise.

The Board directed Staff to have further discussion with the property owners in and near Overlook Summit regarding the path from the library to Tassell Park. Once that is done, a more detailed discussion can be held, and a decision can better be made about continuing plans for this project.

The Board directed Staff to leave the outdoor gathering space on the list of future projects, with more discussion being held after the Facilities & Services Study Community Meeting is held on Monday, February 25th, 2019.

ARTICLE 7. Discuss and Consider Holiday Decorations for the Cascade District

Director Korhorn stated that she put together a couple of options for purchasing new holiday decorations as requested. Option One has 20 new snowflakes, 6 wreaths for the windows of the museum building, an additional tree (14') for Tassel Park, and a wreath for the restroom at Tassel Park. Option Two has 26 new snowflakes, a wreath for Tassel Park, and the tree for Tassel Park.

Motion was made by Member Beahan to approve Option One for the Holiday Decoration purchase. Supported by Member Kingsland. Motion carried 7-0.

ARTICLE 8. Discuss Synthetic Ice Rink

Director Korhorn stated that she researched the synthetic ice rink for a new recreational option for residents during the winter months. Synthetic ice does not require a certain temperature, so it will not be weather reliant. It does require a hard surface to be set on

(asphalt, concrete, plywood platform), but only requires a couple of hours for setup/take down. It can also easily be added onto for an increase in size.

Director Korhorn stated that the overflow parking space on the property next to the library, or the property next to Noto's that was proposed for a skate park would be ideal locations for the rink. The Parks Committee suggested that a plywood platform be setup and the synthetic ice be rented for one season to measure usage before purchase.

The cost for a 30x50 sheet of ice, concrete slab, and 20 additional parking spaces would be approximately \$100,000. Member Siegle suggested the 30x50 size is too small, that it should be at least half the size of a full rink from the beginning. Further discussion will be held.

Member Stephan left the meeting at 6:40.

ARTICLE 9. Any Other Business

a. Update on Planning Activities

Director Korhorn stated that she'll be meeting with some business soon to plan a few events.

b. Pathway Update

2019 is the goal for the Cascade Rd. Pathway (from 28th St. to Burton St.) completion pending any design or easement issues.

ARTICLE 10. Adjournment.

Motion was made by Member Beahan to adjourn. Supported by Member Makkar. Motion carried 6 to 0. The meeting was adjourned at 6:48 p.m.

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss and Consider DDA Recommendation for the Centennial Park Streetscape project

Meeting Date: July 19, 2016

Included in the packet are the construction plans for the sidewalk, streetlights and median islands in Centennial Park. Nothing has changed in the plans since we last discussed this project.

There is a median at each entrance (Foremost, Charlevoix & Lucerne), 4 internal medians (2 on Foremost on each side of Orchard Vista, 2 on Charlevoix on each side of Tahoe). Please note the median on Foremost Dr. at 28th St. is a right out only.

We have been meeting with the property owners regarding a couple easements needed for the project.

In order to move forward, staff is looking for a positive recommendation to the Township Board on this project. Once approved, we will go out for bid.

Cascade Charter Township

Orchard Vista Drive SE Sidewalk, Lights, and Median Improvements

Orchard Vista Drive SE, Charlevoix Drive SE,
Foremost Drive SE, and Lucerne Drive SE
Kent County, Michigan

Preliminary - March 14, 2019
Project Number - 181644



Fishbeck, Thompson, Carr & Huber, Inc.

Engineers • Scientists • Architects • Constructors
1515 Arboretum Drive, Grand Rapids, Michigan 49546
(800) 456-3824 www.ftch.com

GENERAL

- G-1 TITLE SHEET
- G-2 GENERAL NOTES/LEGEND SHEET

CIVIL

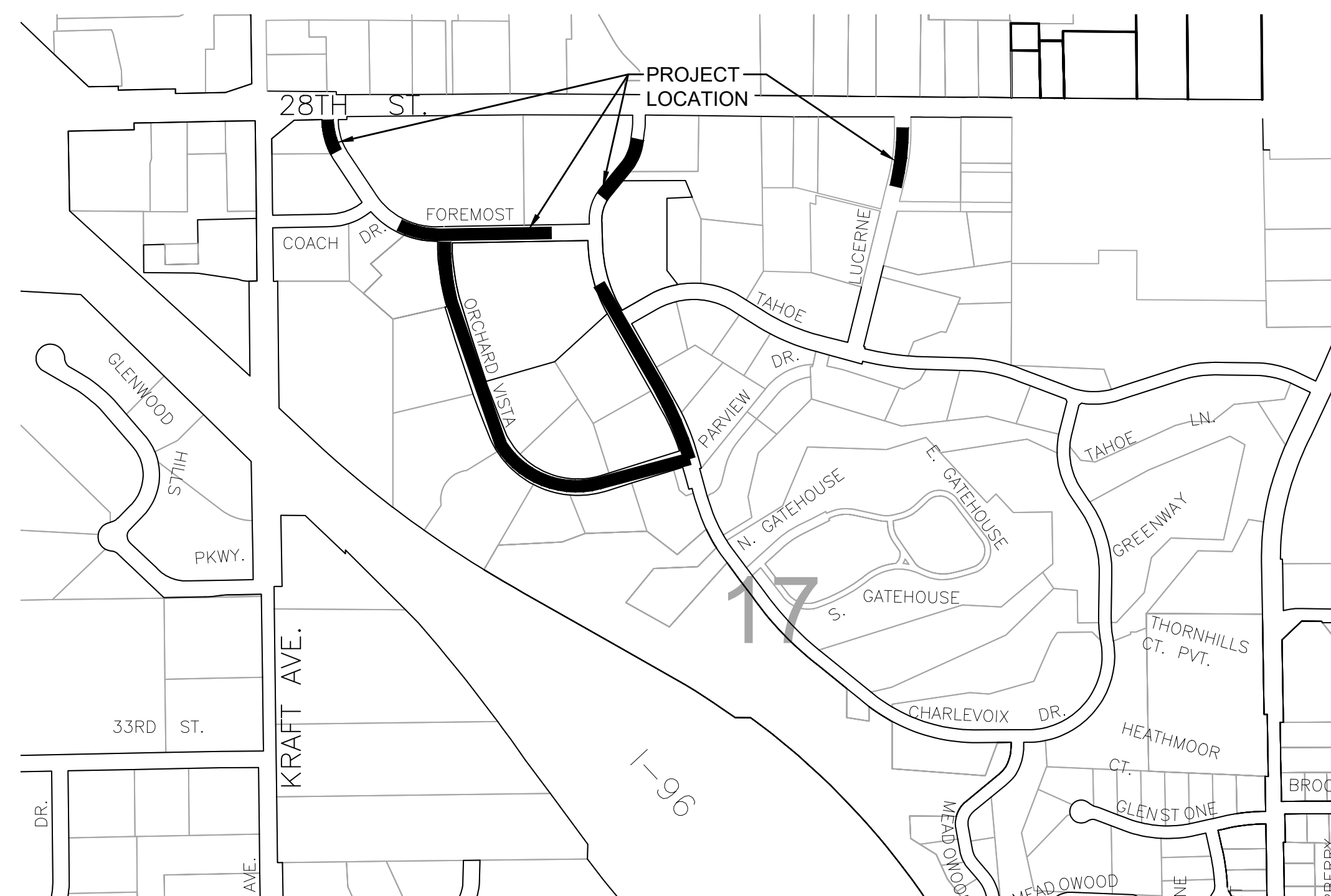
- C-1 SIDEWALK PLAN - STA 5+50 (P.O.B.) TO STA 15+10
- C-2 SIDEWALK PLAN - STA 15+10 TO STA 25+30
- C-3 SIDEWALK PLAN - STA 25+30 TO STA 35+20
- C-4 SIDEWALK PLAN - STA 35+20 TO STA 36+82 (P.O.E.)
- C-5 SIDEWALK DETAIL GRADES
- C-6 SIDEWALK DETAIL GRADES
- C-7 MEDIAN PLAN
- C-8 MEDIAN PLAN
- C-9 MEDIAN PLAN

LANDSCAPING

- L-1 LANDSCAPING PLAN

ELECTRICAL

- E-1 LIGHTING PLAN - STA 5+00 (P.O.B.) TO STA 15+10
- E-2 LIGHTING PLAN - STA 15+10 TO STA 25+30
- E-3 LIGHTING PLAN - STA 25+30 TO STA 35+20
- E-4 LIGHTING PLAN - STA 35+20 TO STA 36+82 (P.O.E.) AND LIGHTING DETAILS



SITE LOCATION MAP
NORTH NO SCALE

VICINITY MAP



UTILITY INFORMATION

THE EXISTING UTILITIES SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN LOCATED FROM UTILITY RECORD DRAWINGS. ACTUAL UTILITY LOCATIONS MAY VARY FROM WHAT IS SHOWN. ALL UTILITIES TO BE FIELD VERIFIED BY UTILITY OWNER PRIOR TO CONSTRUCTION.

TELEPHONE

AT&T
955 - 36th Street, SE
Grand Rapids, MI 49508
616-246-7233
Aaron Burnett

GAS

DTE Energy
444 Wealthy SW
P.O. Box 420
Grand Rapids, Michigan 49501
616-235-4131
Mr. Andre Diaz

ELECTRIC

Consumers Energy
4501 40th Street SE
Kentwood, Michigan 49512
616-954-6908
Mr. Mark Lyons

WATER SYSTEM

City of Grand Rapids Water System
1900 Oak Industrial Dr. NE
Grand Rapids, Michigan 49505
616-456-4096

SANITARY SEWER

City of Grand Rapids
Sanitary and Storm Sewer Maintenance
1900 Oak Industrial Dr. NE
Grand Rapids, Michigan 49505
616-456-3561

COUNTY ROADWAYS

Kent County Road Commission
1500 Scribner NW
Grand Rapids, Michigan 49504
616-242-6900
Mr. Wayne Harrall

CABLE TV

Comcast
3500 Patterson, SE
Grand Rapids, Michigan 49512
616-977-2229
Mr. Jim Zawacki

FIBER OPTIC

US Signals
201 Ionia Ave. 03
Grand Rapids, Michigan 49512
866-274-4625
Mr. Len Coyne

SEAL



engineers
scientists
architects
constructors

Cascade Charter Township

Cascade Charter Township, Kent County, Michigan

Orchard Vista Dr SE SW, Light, and Median Improvements

REVISIONS

Drawn By GPW
Designer GPW
Reviewer MLB
Manager MLB

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
181644

SHEET NO.

G-1

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GENERAL NOTES

- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES, RULES AND REGULATIONS. OBTAIN ALL NECESSARY LOCAL, STATE AND FEDERAL PERMITS AND PAY PERMIT FEES FOR THE WORK OR CONFIRM REQUIRED PERMITS HAVE BEEN OBTAINED BY OTHERS PRIOR TO COMMENCING CONSTRUCTION.
- BE RESPONSIBLE AT ALL TIMES FOR SITE SAFETY IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY HAVING JURISDICTION.
- CALL MISS DIG @ 1-800-482-7171 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO CONFIRM THE LOCATIONS OF EXISTING BURIED UTILITIES. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM. COORDINATE THE RELOCATION OF EXISTING UTILITIES WITH THE UTILITY OWNER. BE RESPONSIBLE FOR PROTECTING EXISTING UTILITIES AND REPAIRING DAMAGE TO EXISTING UTILITIES RESULTING FROM THE WORK. BE RESPONSIBLE FOR THE COSTS OF REPAIRING OR REPLACING ANY DAMAGED UTILITIES AT NO EXPENSE TO THE OWNER.
- COMPLY WITH THE CONDITIONS AND REQUIREMENTS OF THE SOIL EROSION AND SEDIMENTATION CONTROL PERMIT, INCLUDING BUT NOT LIMITED TO, CERTIFIED STORMWATER OPERATOR REQUIREMENTS. INSTALL ALL CONTROL MEASURES PRIOR TO COMMENCING CONSTRUCTION.
- PROVIDE TRAFFIC CONTROL BARRICADES, SIGNS, LIGHTS, ETC. IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. MAINTAIN THESE DEVICES AT ALL TIMES DURING CONSTRUCTION.
- MAINTAIN A CLEAN WORK AREA. THOROUGHLY CLEAN AND/OR SWEEP STREETS AND ROADWAYS AS REQUIRED BY THE GOVERNING AUTHORITY.
- MAINTAIN ACCESS TO EXISTING DRIVEWAYS AND MAIL BOXES DURING CONSTRUCTION. COORDINATE WITH THE AUTHORITIES HAVING JURISDICTION. CONDUCT OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. ANY CLOSURE REQUIRES PERMISSION FROM THE AUTHORITIES HAVING JURISDICTION.
- RESTORE ALL DISTURBED AREAS NOT COVERED BY OTHER SURFACE TREATMENT WITH 4" TOPSOIL, SEED, FERTILIZER, MULCH OR MULCH BLANKET.
- PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE. RESTORE/REPLACE DAMAGED IMPROVEMENTS TO ORIGINAL CONDITION ACCEPTABLE TO PARTIES HAVING JURISDICTION.
- KEEP THE APPROVED SET OF PROJECT DRAWINGS ON SITE AT ALL TIMES. REDLINE THE ACTUAL LOCATIONS AND DIMENSION (VERTICAL AND HORIZONTAL) OF CONSTRUCTED OR EXISTING ITEMS WHICH DIFFER FROM OR ARE NOT SHOWN ON THE ORIGINAL DRAWINGS. SUBMIT THESE RECORD DRAWINGS TO THE ENGINEER AT THE COMPLETION OF THE WORK.
- PROTECT TREES TO REMAIN FROM DAMAGE DURING CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- HIRE A LICENSED LAND SURVEYOR TO WITNESS AND REPLACE ALL PROPERTY IRONS/SURVEY MONUMENTS WHICH WILL BE ALTERED IN ANY WAY DURING CONSTRUCTION.
- DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS. REFER DISCREPANCIES TO THE ENGINEER FOR CLARIFICATION.
- THE INFORMATION CONTAINED ON THESE DRAWINGS PERTAINING TO EXISTING CONDITIONS, SUCH AS BUT NOT LIMITED TO, UTILITIES, TOPOGRAPHY, SUBSURFACE CONDITIONS, IS FURNISHED SOLELY AS THE BEST INFORMATION AVAILABLE AND ITS ACCURACY IS NOT GUARANTEED. THE USE OF THIS INFORMATION DOES NOT PROVIDE RELIEF FOR ANY RESPONSIBILITY FOR DAMAGES DUE TO ANY INACCURACIES.
- ALL REMOVED MATERIALS ARE THE PROPERTY OF THE CONTRACTOR. CLEANUP AND DISPOSE OF ALL EXCESS MATERIALS OFF SITE AT A LOCATION DESIGNATED FOR THIS USE AND IN ACCORDANCE WITH LOCAL REGULATIONS OR AT AN ON SITE LOCATION DESIGNATED BY THE OWNER.
- USE (2) TWO BENCH MARKS FOR VERIFICATION OF ALL CONSTRUCTION ELEVATIONS. SET ADDITIONAL BENCH MARKS TO COMPLY WITH THIS REQUIREMENT.
- RESTORE ALL STREET SURFACES, DRIVEWAYS, CULVERTS, ROADSIDE DRAINAGE DITCHES, AND OTHER PUBLIC OR PRIVATE STRUCTURES THAT ARE DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS AND TO THE SATISFACTION OF THOSE HAVING JURISDICTION, UNLESS NOTED OTHERWISE IN THE PLANS.

REMOVAL NOTES

- THE EXTENT OF REMOVALS AND DEMOLITION SHALL BE FIELD VERIFIED BY CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION. NOTIFY ENGINEER OF ANY DEVIATIONS FROM INFORMATION SHOWN.
- PRIOR TO CONSTRUCTION ALL FENCING, BARRICADES, ENCLOSURES, ETC., MUST BE INSTALLED AND APPROVED BY OWNER OR CONSTRUCTION MANAGER.
- DISPOSE OF DEMOLITION AND EXCAVATION MATERIALS IN ACCORDANCE WITH CONTRACT DOCUMENTS.
- SOIL EROSION AND SEDIMENTATION CONTROL MEASURES MUST BE IN PLACE PRIOR TO STARTING REMOVALS AND DEMOLITION.
- UNLESS SPECIFICALLY NOTED FOR REMOVAL ON THE PLANS, ALL SIDEWALKS, DRIVES, CULVERTS, DRAINAGE STRUCTURES, AND ABOVE AS WELL AS BELOW GRADE UTILITIES SHALL BE PROTECTED. ALL SUCH ITEMS DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH NEW AT NO ADDITIONAL COST TO THE OWNER.
- PROTECT EXISTING TREES TO REMAIN WITH TEMPORARY FENCING AT THE DRIP LINE. NO GROUND DISTURBANCE OR STORAGE OF MATERIAL/EQUIPMENT SHALL OCCUR WITHIN THE DRIP LINE LIMITS.
- ELECTRICAL, TELEPHONE, CABLE TV, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE CONSTRUCTION LIMITS. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
- PERFORM CLEARING, GRUBBING, TREE AND STUMP REMOVAL, TOPSOIL REMOVAL AND STOCKPILING IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- BEFORE REMOVING OR ABANDONING ANY UTILITY PIPES, VERIFY NEW UTILITY PIPE HAS BEEN INSTALLED, TESTED AND IS OPERATIONAL.
- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. VERIFY CRITICAL INVERT INFORMATION PRIOR TO BEGINNING CONSTRUCTION.
- DAMAGE CAUSED TO SURROUNDING AREA PAVEMENT OUTSIDE THE CONSTRUCTION LIMITS SHALL BE SAWCUT AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- COORDINATE SEQUENCING AND PHASING OF DEMOLITION WITH CONSTRUCTION MANAGER.
- SEE OTHER DRAWINGS FOR ADDITIONAL SITE DEMOLITION WORK.
- SAWCUT CURB AND GUTTER AND SIDEWALKS TO NEAREST JOINT.

GRADING NOTES

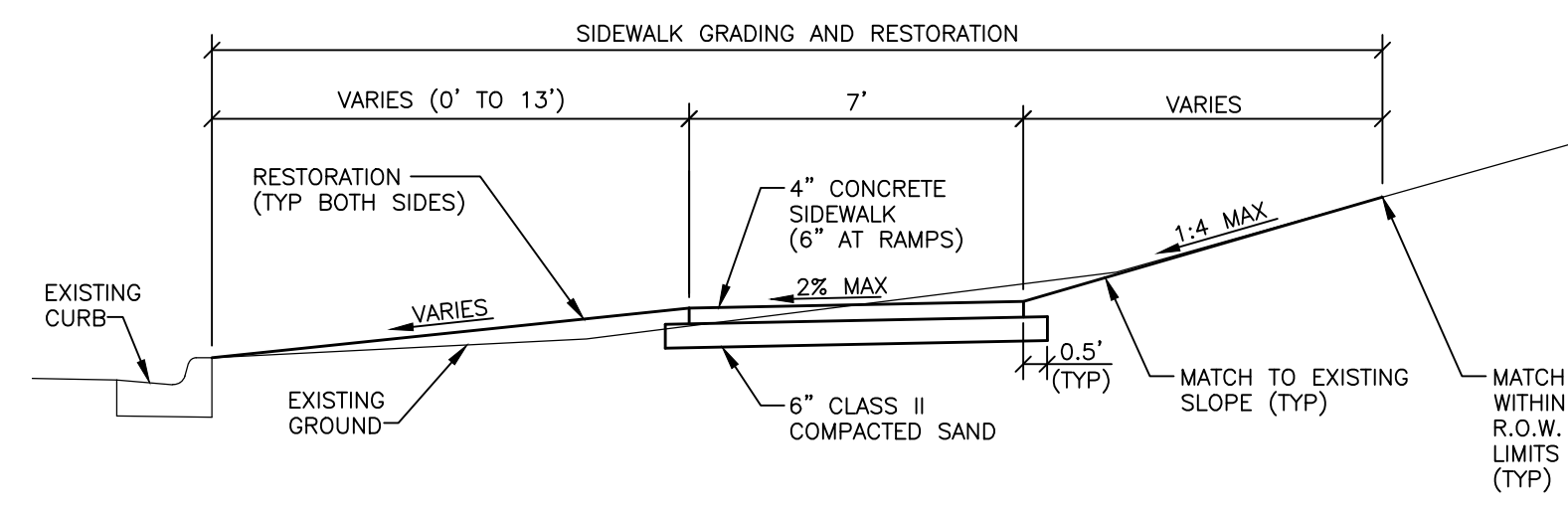
- FINISH GRADE OF SOIL EDGES ALONG PAVEMENT TO MATCH EDGE OF PAVEMENT.
- STRIP AND STOCKPILE TOPSOIL FROM GRADING AREAS. USE STOCKPILED TOPSOIL AND IMPORTED TOPSOIL AS NECESSARY FOR SURFACE RESTORATION.
- GRADES SHOWN ARE FINAL SURFACE GRADES AFTER COMPLETION OF SURFACE IMPROVEMENTS AND PLACEMENT OF TOPSOIL.
- GRADE AREAS AT SITE PERIMETER TO MATCH GRADES OF ADJACENT PARCELS.
- REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF PROPERLY IN ACCORDANCE WITH APPLICABLE REGULATIONS.
- PROVIDE TEMPORARY GRADING FEATURES SUCH AS BERMS, SWALES, SUMPS AND BASINS TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION PROCESS. STORM WATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL, STATE AND LOCAL QUALITY REQUIREMENTS.

BENCH MARK

- BENCH MARK A** ELEVATION: 783.29
CHISELED RECTANGLE ON SW CORNER OF CONCRETE PAD FOR ELECTRIC METER 30' 10" 860, AT SOUTHEAST QUADRANT OF FOREMOST DRIVE AND ORCHARD VISTA DRIVE
- BENCH MARK B** ELEVATION: 753.34
CHISELED RECTANGLE ON NORTH CORNER OF CONCRETE LIGHT POLE BASE IN LIGHT FOR 3033 ORCHARD VISTA DRIVE, 65 FEET SOUTHEAST CENTER OF FLAG POLE
- BENCH MARK C** ELEVATION: 769.13
CHISELED X ON WEST CORNER OF CATCH BASIN, IN WEST ENTRANCE TO SUNRISE SENIOR LIVING CENTER
- BENCH MARK D** ELEVATION: 773.23
CHISELED RECTANGLE ON SOUTH SIDE OF CONCRETE LIGHT POLE BASE, NORTHEAST QUADRANT OF CHARLEVOIX DRIVE AND TAOHE DRIVE
- BENCH MARK E** ELEVATION: 768.33
CHISELED X ON SOUTH SIDE OF LIGHT POLE BASE, SE CORNER OF 28TH STREET AND FOREMOST DRIVE
- BENCH MARK F** ELEVATION: 779.20
SE CORNER OF CONCRETE PAD FOR GENERATOR, NW CORNER OF FOREMOST DRIVE AND COACH ROAD
- BENCH MARK G** ELEVATION: 782.99
SE BOLT ON LIGHT POLE BASE, EAST SIDE OF DRIVE TO CROWNE PLAZA, NORTH SIDE OF FOREMOST DRIVE, ACROSS FROM DRIVE TO KONICA MINOLTA
- BENCH MARK H** ELEVATION: 773.21
SE CORNER OF CONCRETE PAD FOR MAILBOXES, ON EAST SIDE OF CHARLEVOIX DRIVE, 50 FEET NORTH OF FOREMOST DRIVE
- BENCH MARK I** ELEVATION: 779.87
CHISELED SQUARE ON NW CORNER OF CONCRETE PAD FOR TRANSFORMER #119, EAST SIDE OF LUCERNE DRIVE, 200 FEET SOUTH OF 1ST DRIVEWAY SOUTH OF 28TH STREET

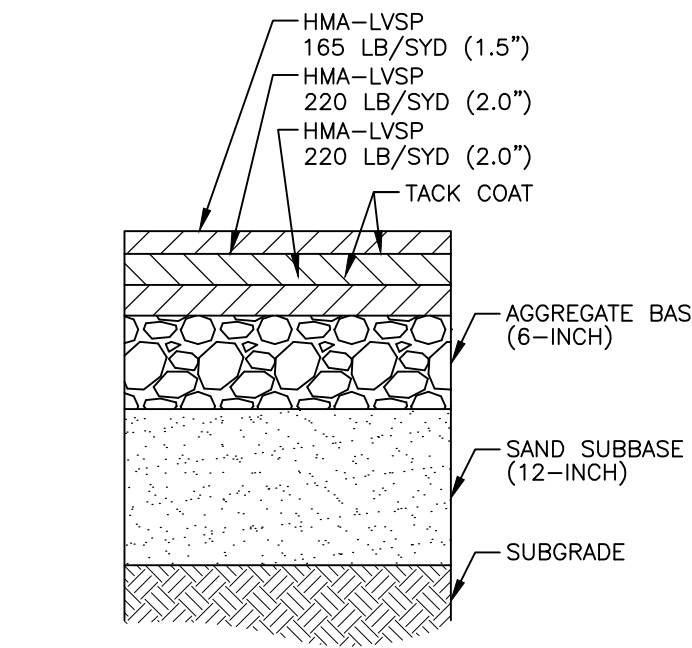
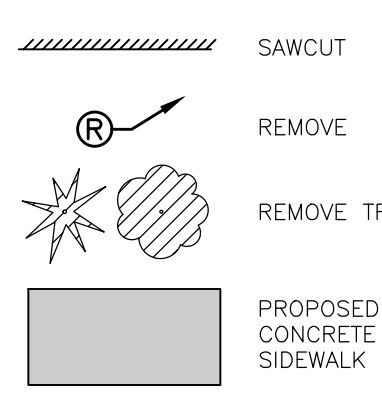
MDEQ SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
5	Seeding	Inexpensive & very effective Stabilizes soil, thus minimizing erosion Permits runoff to infiltrate soil, reducing runoff volume Should include prepared topsoil bed
54	Geotextile Silt Fence	Use geotextile and posts or poles May be constructed or prepackaged Easy to construct and locate as necessary
56	Catch Basin, Filter Bag	Manufactured filter bag inserted under casting. Collects sediment at catch basin inlet.

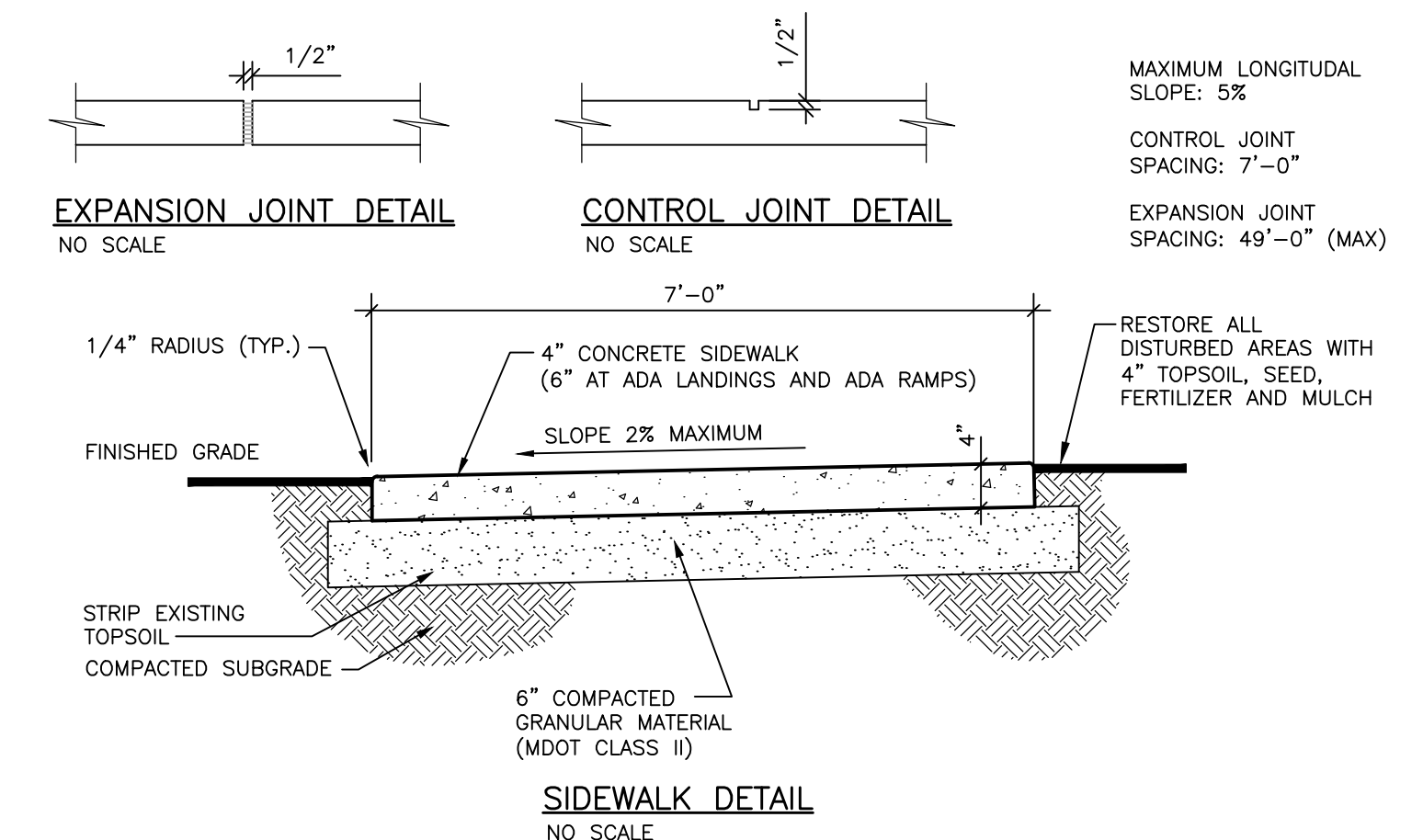


TYPICAL SIDEWALK CROSS SECTION

LEGEND



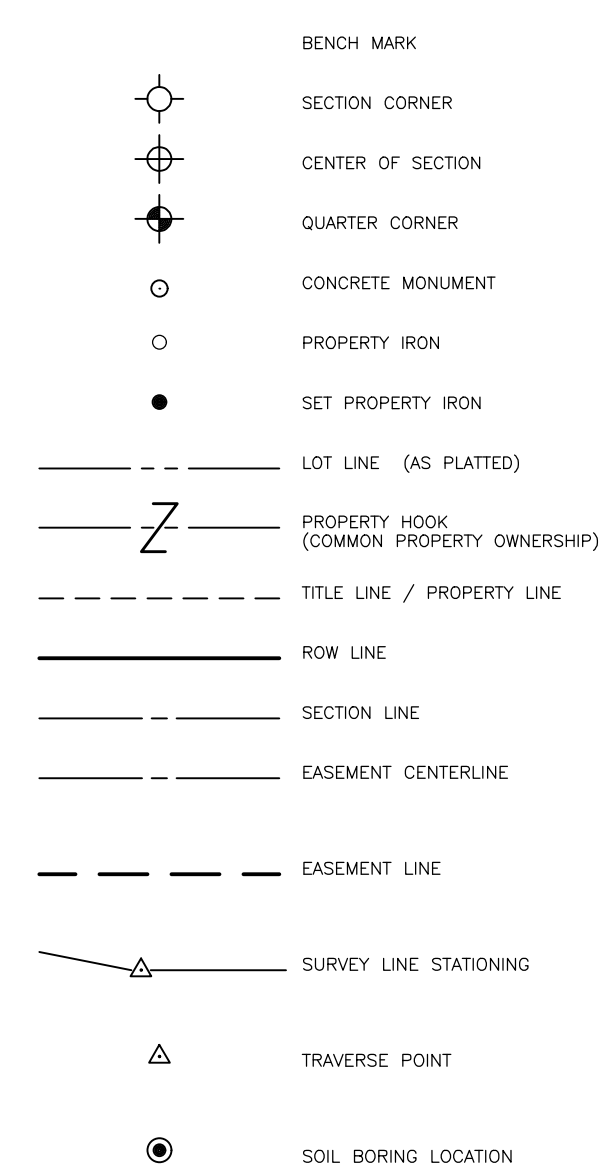
HMA DRIVEWAY PROPOSED CROSS SECTION NO SCALE



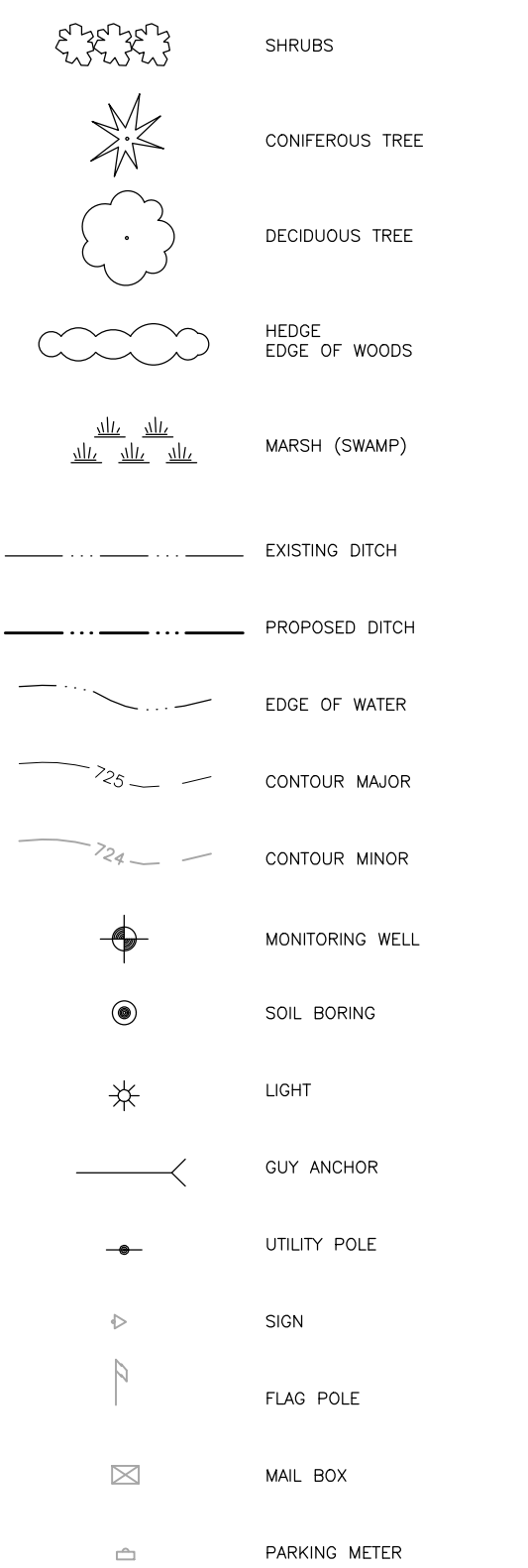
SITE PLAN ABBREVIATIONS

ABBREV.	MEANING	ABBREV.	MEANING
ABAN.	ABANDON	MDNR	MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
ADJ.	ADJACENT	MDOT	MICHIGAN DEPARTMENT OF TRANSPORTATION
AGG.	AGGREGATE	MDPH	MICHIGAN DEPARTMENT OF PUBLIC HEALTH
ALT.	ALTERNATE	MFG	MANUFACTURER
APPD.	APPROVED	MGD	MILLION GALLONS PER DAY
APPROX.	APPROXIMATE	MH.	MANHOLE
B/B	BACK TO BACK	MIN.	MINIMUM
BLDG.	BUILDING	MISC.	MISCELLANEOUS
BLVD.	BOULEVARD	MJ	MECHANICAL JOINT
BM	BENCH MARK	MON.	MONUMENT
BNDY.	BOUNDARY	NA	NOT APPLICABLE
BOT.	BOTTOM	NIC	NOT IN CONTRACT
BSMT.	BASEMENT	NRCP	NON-REINFORCED CONCRETE PIPE
C & G	CURB AND GUTTER	NTS	NOT TO SCALE
C/C	CENTER TO CENTER	OC	ON CENTER
CATV	CABLE TELEVISION	OD	OUTSIDE DIAMETER
CB	CATCH BASIN	OE	OVERHEAD ELECTRIC
CF	CUBIC FEET	OP	FIBER OPTICS
CFS	CUBIC FEET PER SECOND	ORIG.	ORIGINAL
CL	CENTERLINE	OT	OVERHEAD TELEPHONE
CMP	CORRUGATED METAL PIPE	PC	POINT OF CURVE
CO.	CLEAN OUT	PCC	POINT OF COMPOUND CURVATURE
CONC.	CONCRETE	PE	POLYETHYLENE
CONST.	CONSTRUCTION	PE PERF.	POLYETHYLENE PIPE PERFORATED
COORD.	COORDINATE	PI	POINT OF INTERSECTION
CP	COPPER PIPE	PV	POST INDICATOR VALVE
CSP	CORRUGATED STEEL PIPE	PL	PROPERTY LINE
CULV.	CULVERT	POB	POINT OF BEGINNING
CY	CUBIC YARD	POE	POINT OF ENDING
DEG (°)	DEGREE	PRC	POINT OF REVERSE CURVE
DEMO.	DEMOLISH	PROP.	PROPOSED
DIP	DUCTILE IRON	PSF	POUNDS PER SQUARE FOOT
DIA.	DIAMETER	PSI	POUNDS PER SQUARE INCH
DIM.	DIMENSION	PT	POINT OF TANGENCY
DIST.	DISTANCE	PVC	POLYVINYL CHLORIDE
ELEC	ELECTRIC CONDUIT	PVC	POINT OF VERTICAL CURVE
EL.	ELEVATION	PVI	POINT OF VERTICAL INTERSECTION
ENGR.	ENGINEER	PVMT.	PAVEMENT
EOM	EDGE OF METAL	PVT	POINT OF VERTICAL TANGENCY
EQUIP.	EQUIPMENT	QTY.	QUANTITY
ESMT.	EASEMENT	R.	RADIUS
EXIST. EX.	EXISTING	RCP	REINFORCED CONCRETE PIPE
EXT.	EXTERIOR	RED.	REDUCER
F/F	FACE TO FACE	REF.	REFERENCE
FDN.	FOUNDATION	REQD.	REQUIRED
FIG.	FIGURE	REV.	REVISION
FF	FINISH FLOOR	RJ	RESTRAINED JOINT
FIN. GR.	FINISH GRADE	ROW	RIGHT OF WAY
FM	FORCE MAIN	SAN	SANITARY SEWER
FTG.	FOOTING	SF	SQUARE FOOT
GEN.	GENERATOR	SPEC.	SPECIFICATION
GND.	GROUND	SS	SIDE SLOPE
GPD	GALLONS PER DAY	STA.	STATION
GPM	GALLONS PER MINUTE	STD.	STANDARD
HDPE	HIGH DENSITY POLYETHYLENE	STL.	STEEL
HDWL.	HEADWALL	STM	STORM SEWER
H.	HEIGHT	SYD	SQUARE YARD
HORIZ.	HORIZONTAL	TC	TOP OF CURB
HP	HIGH POINT	TAN.	TANGENT
HWL	HIGH WATER LEVEL	TEL	TELEPHONE LINE
HWR.	HIGHWAY	TEMP.	TEMPORARY
HYD.	HYDRANT	TOC	TOP OF CASTING
ID	INSIDE DIAMETER	T/W	TOP OF WALL
INV	INVERT ELEVATION	TRPT	TRAVERSE POINT
INCL.	INCLUDE	TYP.	TYPICAL
LAT.	LATERAL	UD	UNDER DRAIN
LF	LINIAL FEET	UTIL.	UTILITY
L.	LENGTH	VB	VALVE BOX
LP	LOW POINT	VCP	VITRIFIED CLAY PIPE
LS	LUMP SUM	VERT.	VERTICAL
LWL	LOW WATER LEVEL	W.	WITH
M/L	MORE OR LESS	W/O	WITHOUT
MAINT.	MAINTENANCE	WL	WATER LEVEL
MATL.	MATERIAL	WM.	WATER MAIN
MAX.	MAXIMUM	WWF	WELDED WIRE FABRIC
MB.	MAILBOX	XMR.	TRANSFORMER

SURVEY

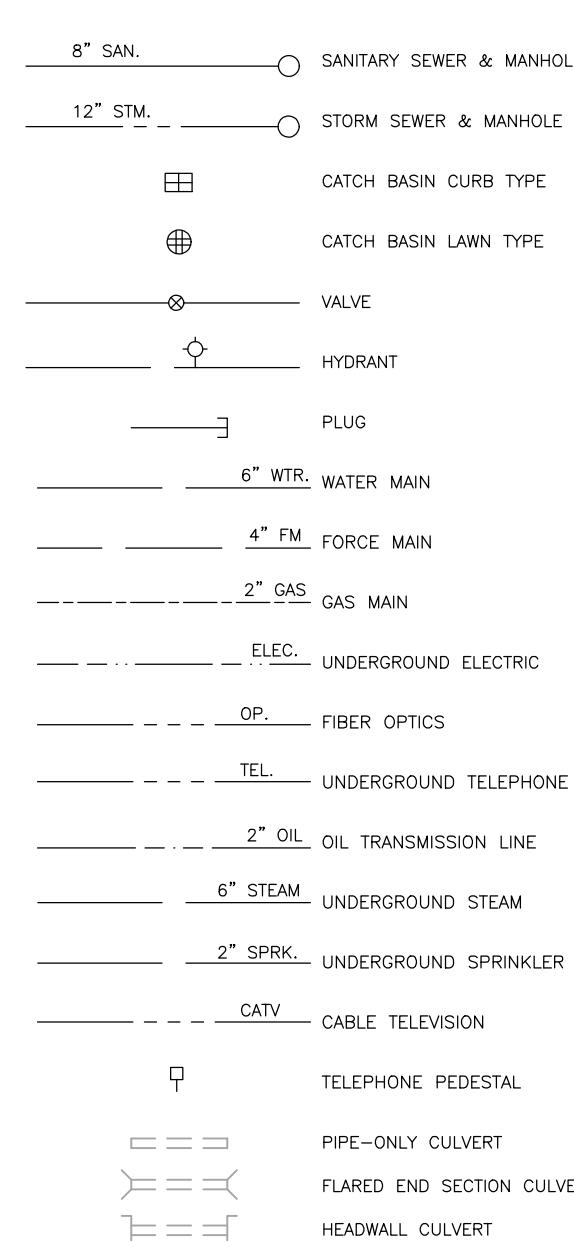


TOPOGRAPHY - PLAN

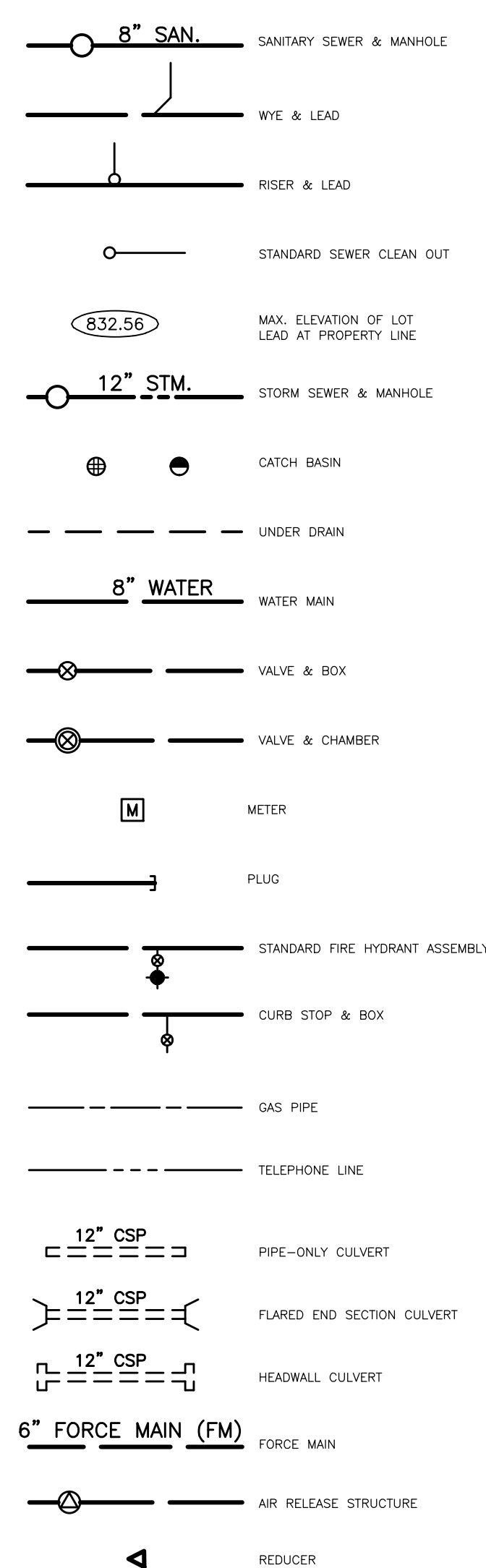


855.00 GR	PROPOSED GRADE ELEVATION
855.00 GP	PROPOSED GUTTER PAN ELEVATION
855.00 TC	PROPOSED TOP OF CURB ELEVATION
855.00 TP	PROPOSED TOP OF PAVEMENT ELEVATION
855.00 TW	PROPOSED TOP OF WALL ELEVATION
855.00 EW	PROPOSED EDGE OF WALK ELEVATION
855.00 FF	PROPOSED FINISHED FLOOR ELEVATION
855.00 EM	PROPOSED EDGE OF METAL ELEVATION
855.00 HP	PROPOSED HIGH POINT ELEVATION
855.00 LP	PROPOSED LOW POINT ELEVATION

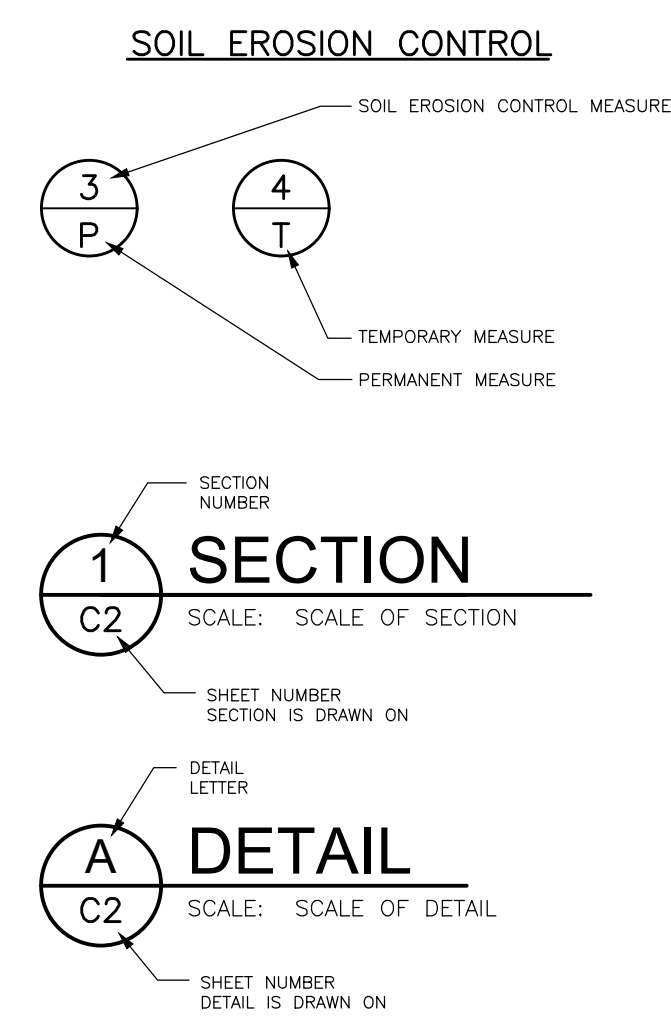
EXISTING UTILITIES



PROPOSED UTILITIES



MISCELLANEOUS



ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS

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Cascade Charter Township
Cascade Charter Township, Kent County, Michigan
Orchard Vista Dr SE SW, Light, and Median Improvements

REVISIONS

Drawn By	GPW
Designer	GPW
Reviewer	MLB
Manager	MLB

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
181644

SHEET NO.

G-2

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BENCH MARK

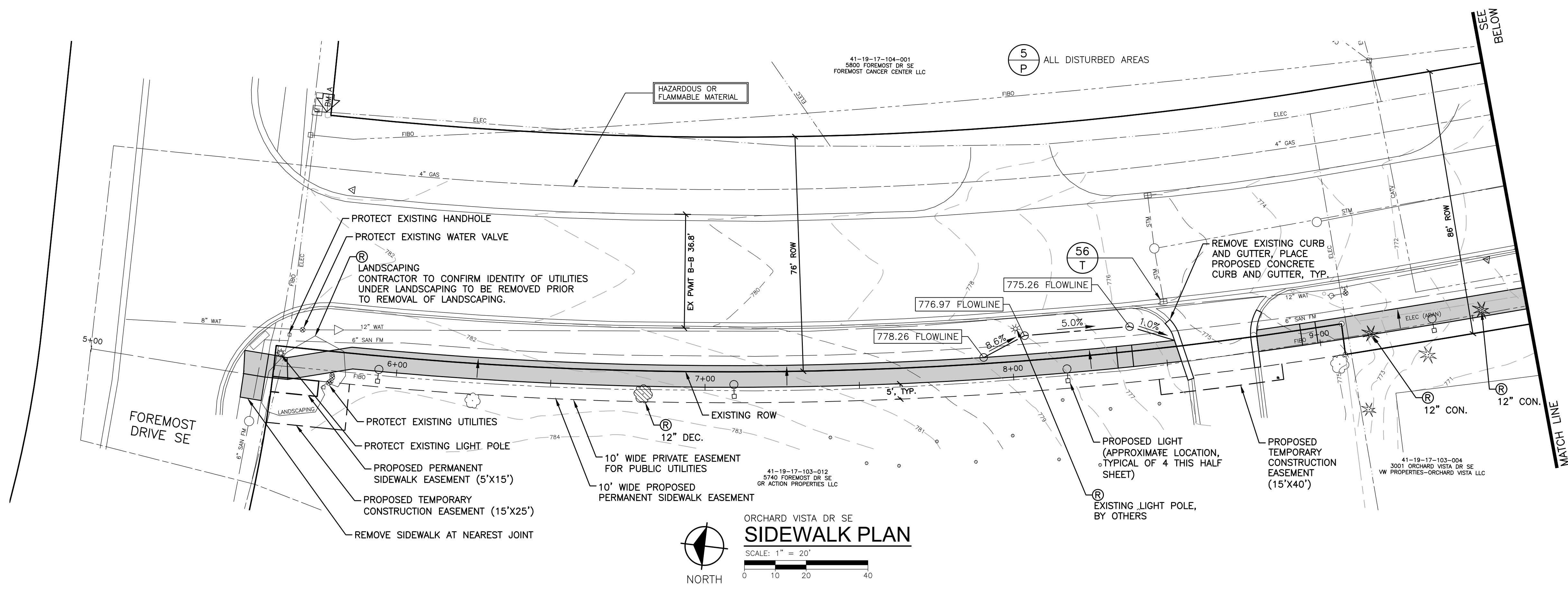
BENCH MARK A ELEVATION: 783.29
CHISELED RECTANGLE ON SW CORNER OF CONCRETE PAD FOR ELECTRIC METER 30 101 860, AT SOUTHEAST QUADRANT OF FOREMOST DRIVE AND ORCHARD VISTA DRIVE

NOTES

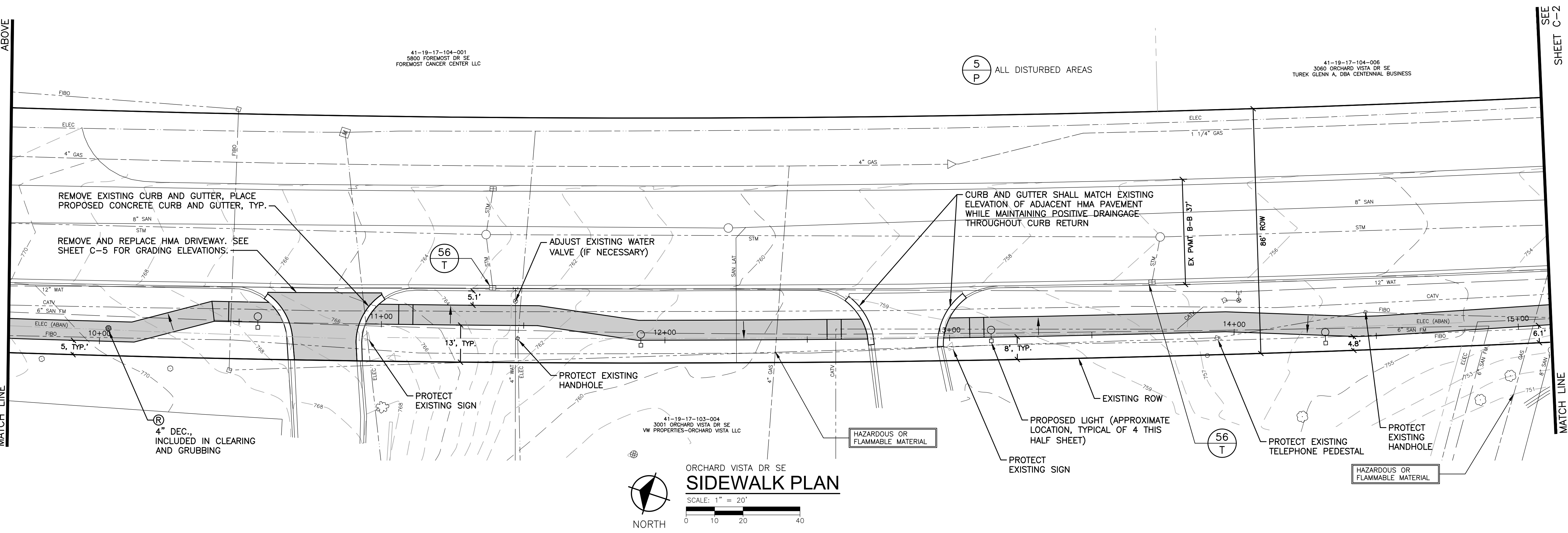
1. ADA RAMP AND LANDINGS SHALL BE 6" THICK CONCRETE.
2. CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT SHOWN TO REMOVAL LIMITS ON PLANS, PROTECTING EXISTING HMA GRADES.
3. CURB AND GUTTER SHALL MATCH EXISTING GUTTER GRADES UNLESS SPECIFIED OTHERWISE.
4. MEDIAN CURB AND GUTTER SHALL BE INVERTED D1 CURB AND GUTTER.
5. ALL NON-MEDIAN CURB AND GUTTER SHALL BE MDOT F4 CURB AND GUTTER.
6. SEE SHEETS C-5 AND C-6 FOR CURB RAMP GRADES.

GRADES (WEST BACK OF WALK)

STATION	EXISTING ELEVATION	PROPOSED ELEVATION
5+50	782.6	SEE DETAIL GRADES
6+00	782.8	782.55
6+50	782.3	782.23
7+00	781.9	781.58
7+50	780.7	780.20
8+00	778.8	777.90
8+50	776.0	SEE DETAIL GRADES
9+00	775.3	774.18
9+50	771.7	771.75
10+00	769.9	769.27
10+50	767.9	766.97
11+00	766.0	SEE DETAIL GRADES
11+50	762.8	762.56
12+00	760.7	760.74
12+50	759.8	759.82
13+00	759.6	SEE DETAIL GRADES
13+50	758.6	758.39
14+00	756.5	756.58
14+50	755.6	755.49
15+00	754.5	754.54

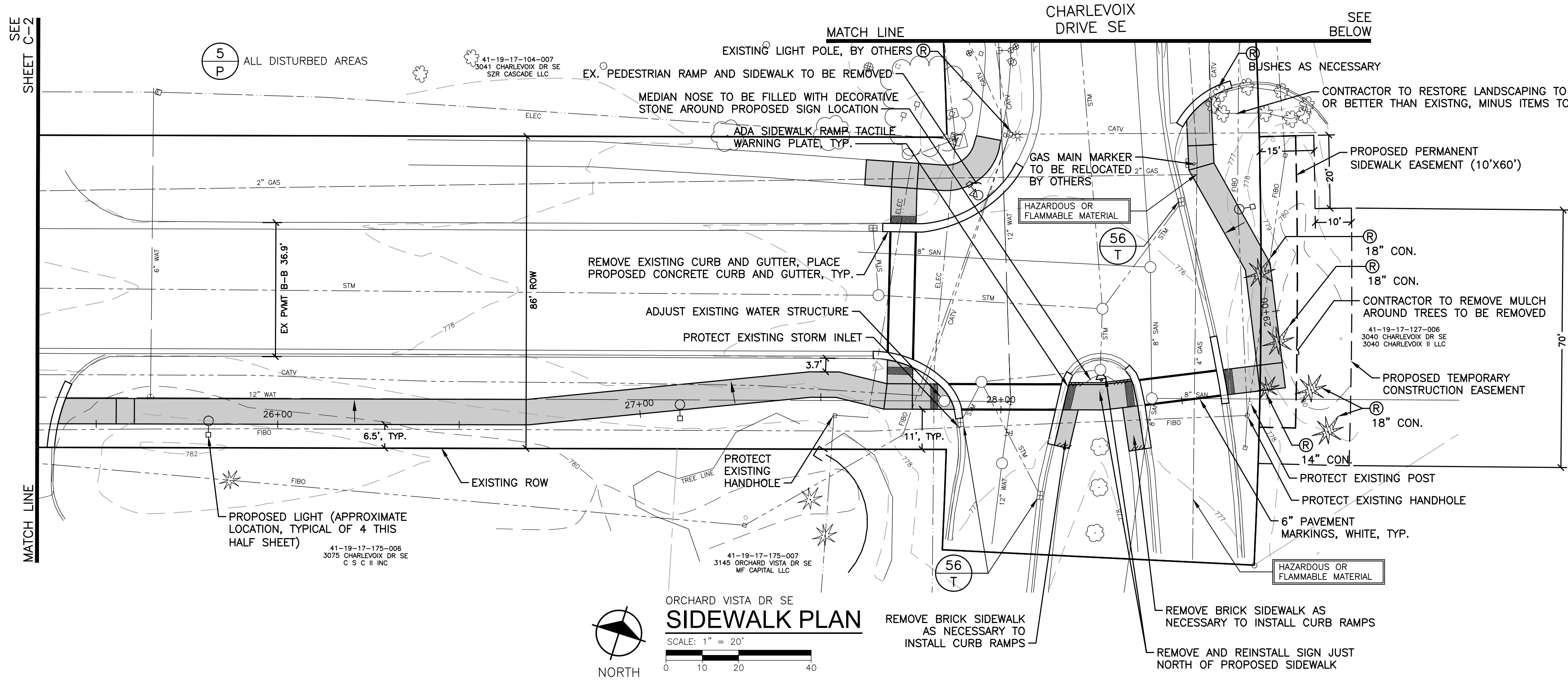


ORCHARD VISTA DR SE
SIDEWALK PLAN
SCALE: 1" = 20'
NORTH



ORCHARD VISTA DR SE
SIDEWALK PLAN
SCALE: 1" = 20'
NORTH

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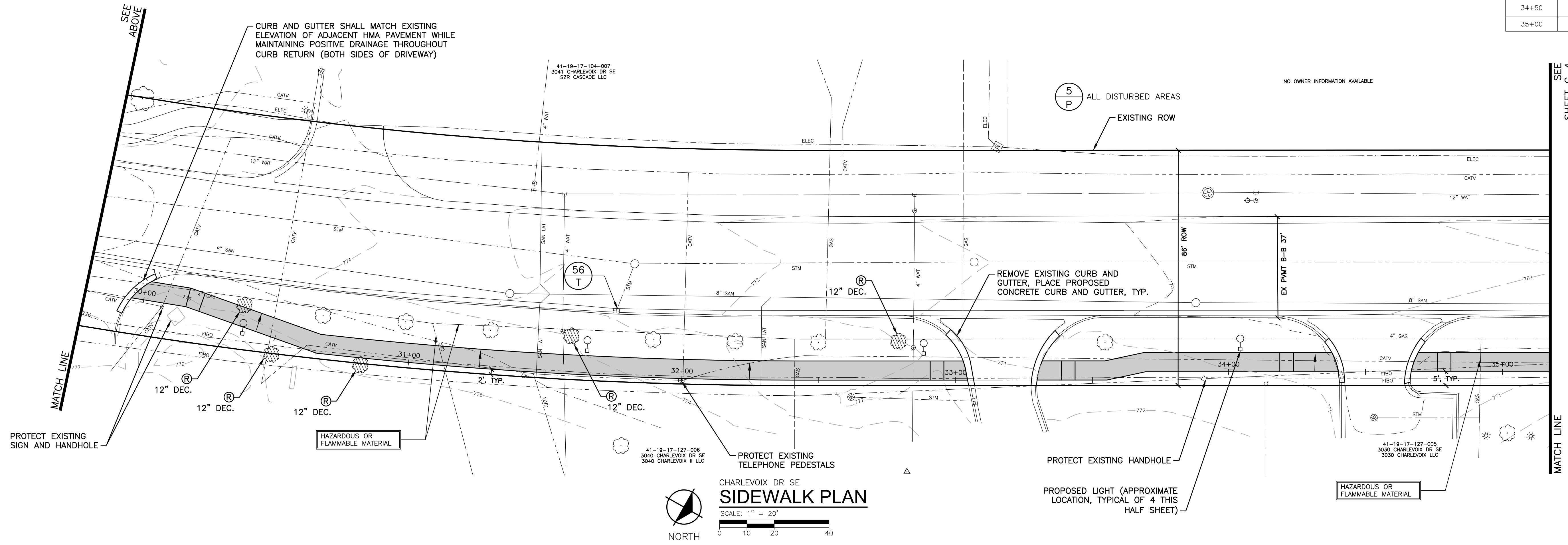
ORCHARD VISTA DR SE
SIDEWALK PLAN
SCALE: 1" = 20'
0 10 20 40

NOTES

1. ADA RAMPS AND LANDINGS SHALL BE 6" THICK CONCRETE.
2. CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT SHOWN TO REMOVAL LIMITS ON PLANS, PROTECTING EXISTING HMA GRADES.
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6. SEE SHEETS C-5 AND C-6 FOR CURB RAMP GRADES.

GRADES (SOUTH/EAST BACK OF WALK)

STATION	EXISTING ELEVATION	PROPOSED ELEVATION
25+50	780.5	SEE DETAIL GRADES
26+00	780.8	780.61
26+50	779.6	779.42
27+00	778.7	778.83
27+50	778.2	777.87
28+00	776.6	SEE DETAIL GRADES
28+50	776.7	SEE DETAIL GRADES
29+00	779.9	777.37
29+50	776.6	SEE DETAIL GRADES
30+00	776.0	SEE DETAIL GRADES
30+50	776.2	776.24
31+00	775.6	775.61
31+50	774.8	774.81
32+00	773.6	773.59
32+50	772.3	772.25
33+00	771.7	SEE DETAIL GRADES
33+50	771.6	771.61
34+00	771.1	771.06
34+50	679.8	SEE DETAIL GRADES
35+00	770.6	770.60



ORCHARD VISTA DR SE
SIDEWALK PLAN
SCALE: 1" = 20'
0 10 20 40

PLOT INFO: Z:\2018\18164\CADD\CADD03\181644.DWG LAYOUT: C-3 DATE: 3/13/2019 TIME: 4:18:01 PM USER: GPW

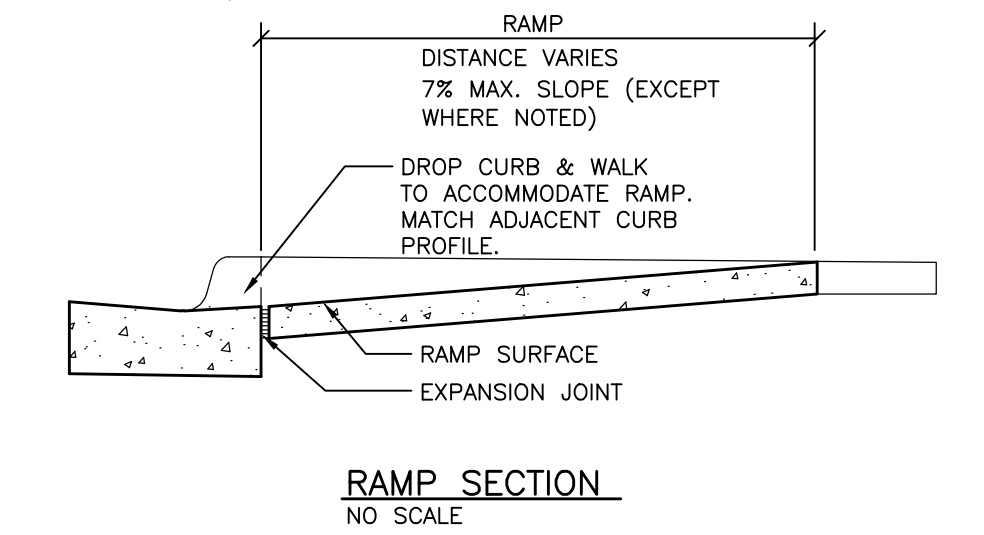
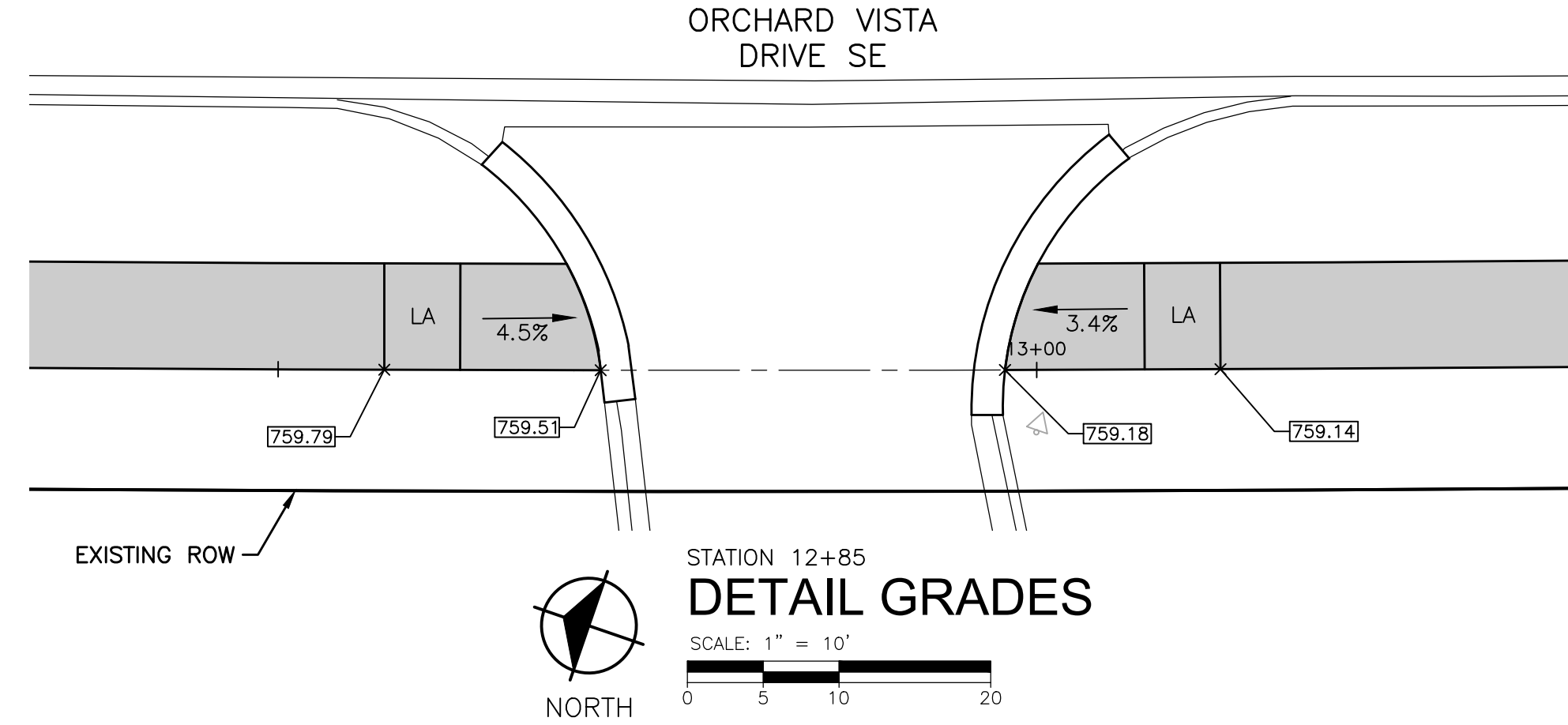
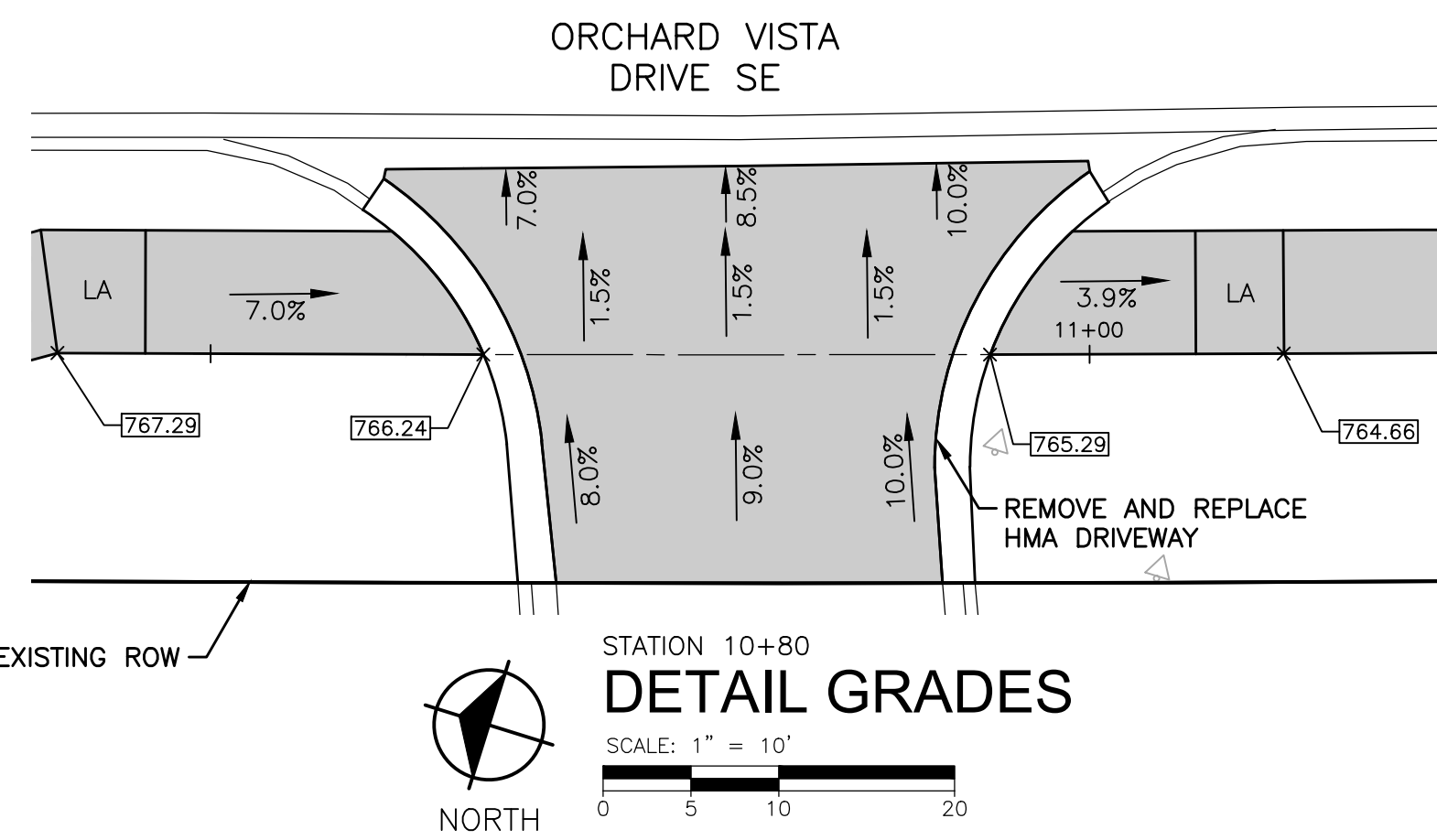
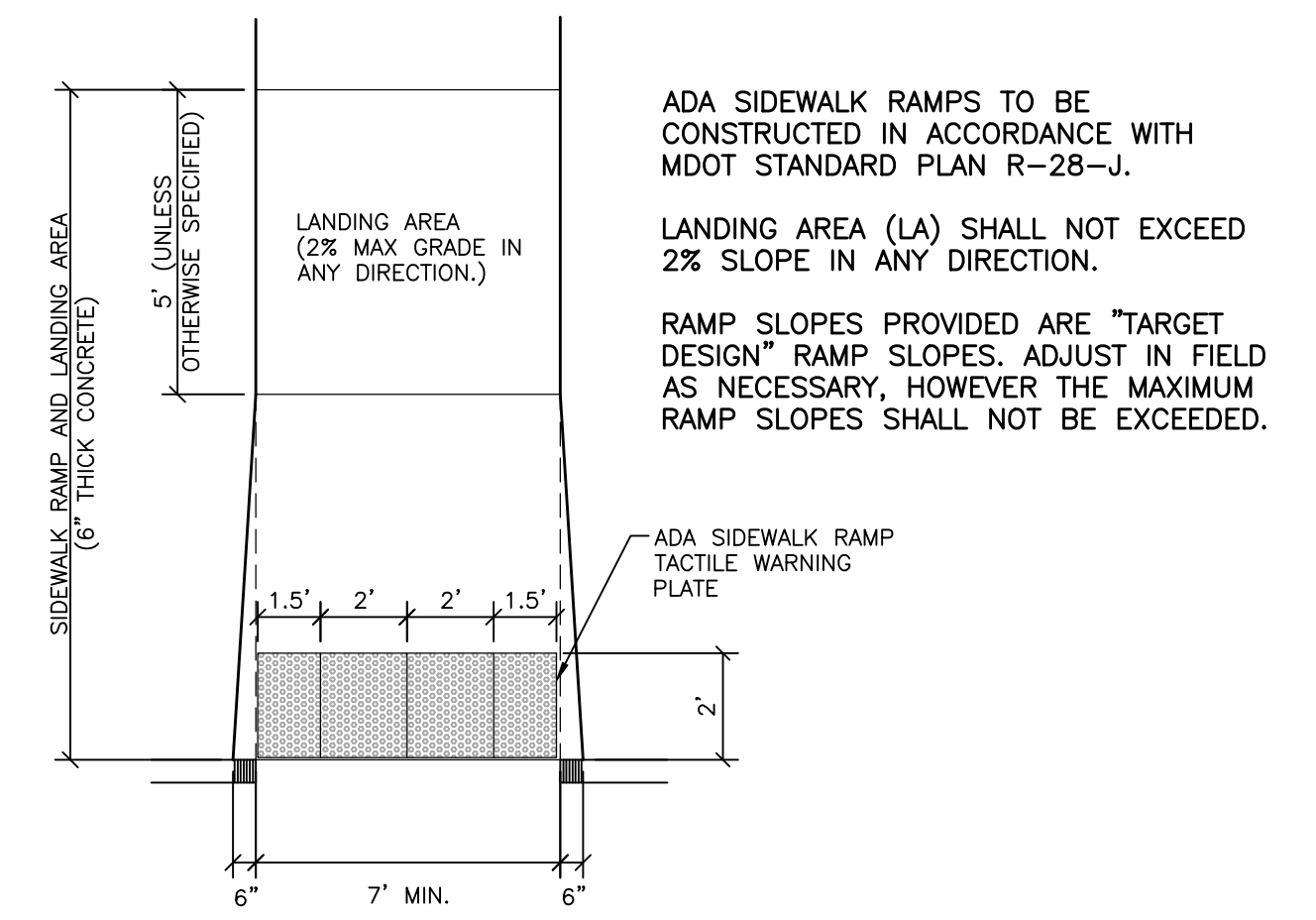
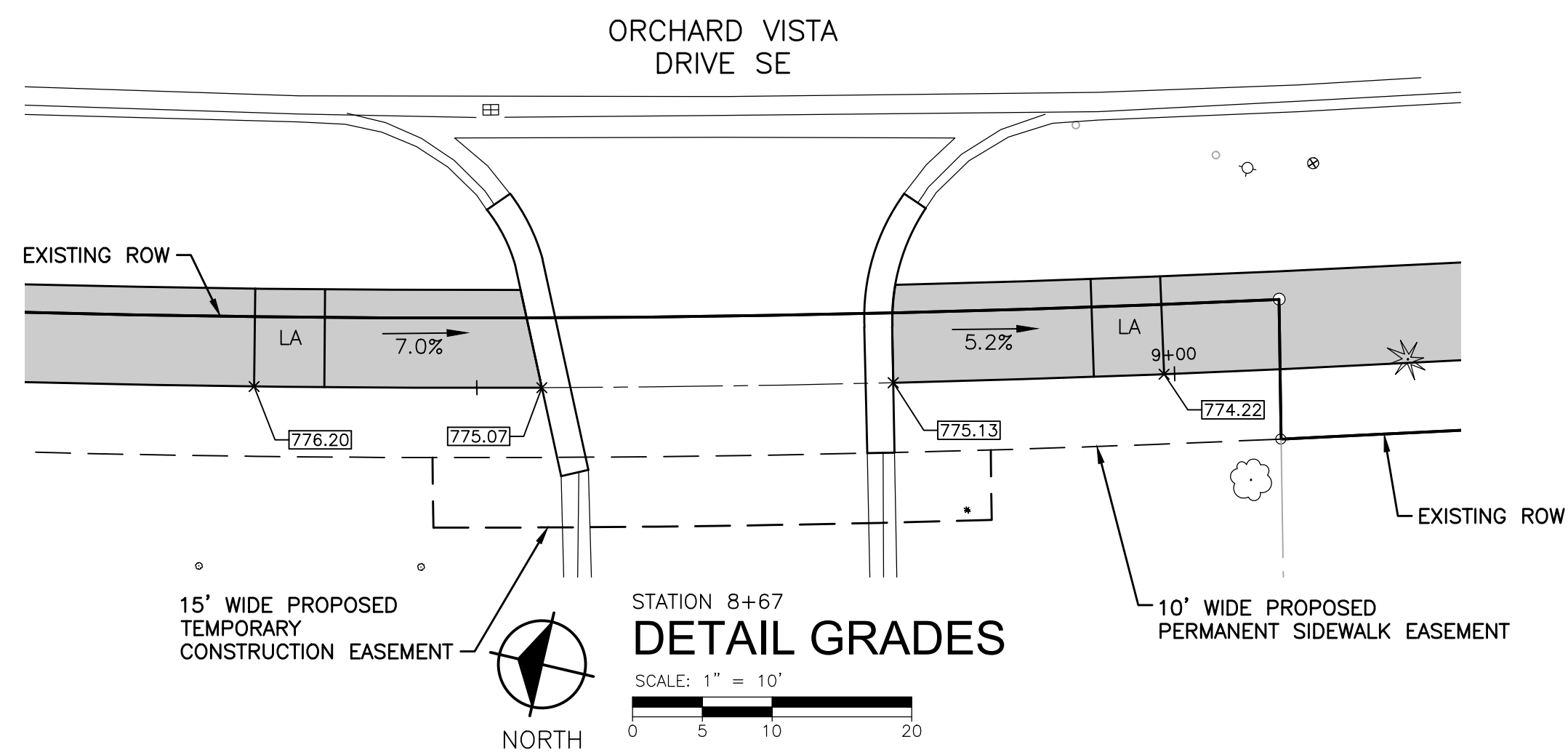
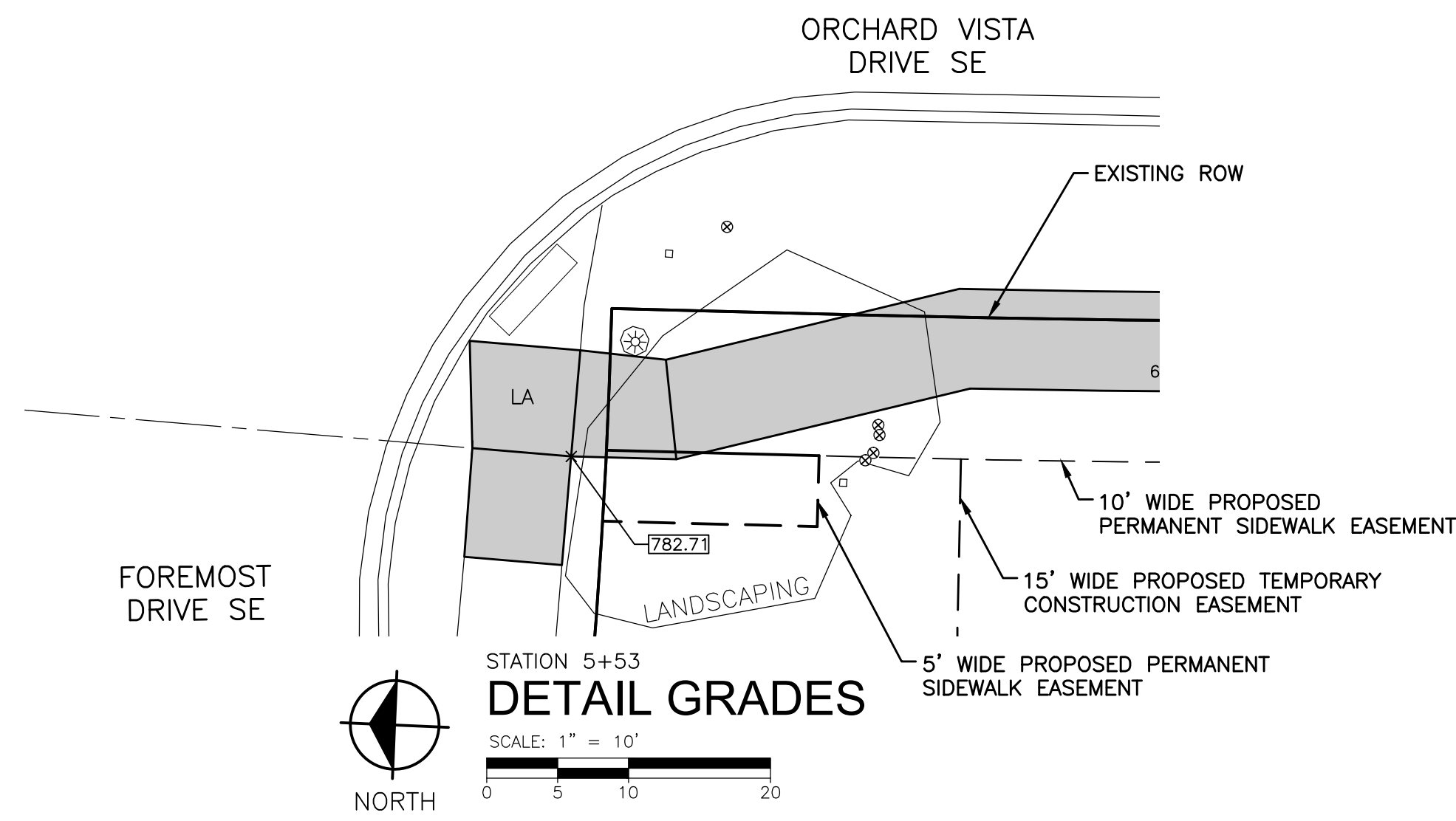
REVISIONS

Drawn By GPW
Designer GPW
Reviewer MLB
Manager MLB

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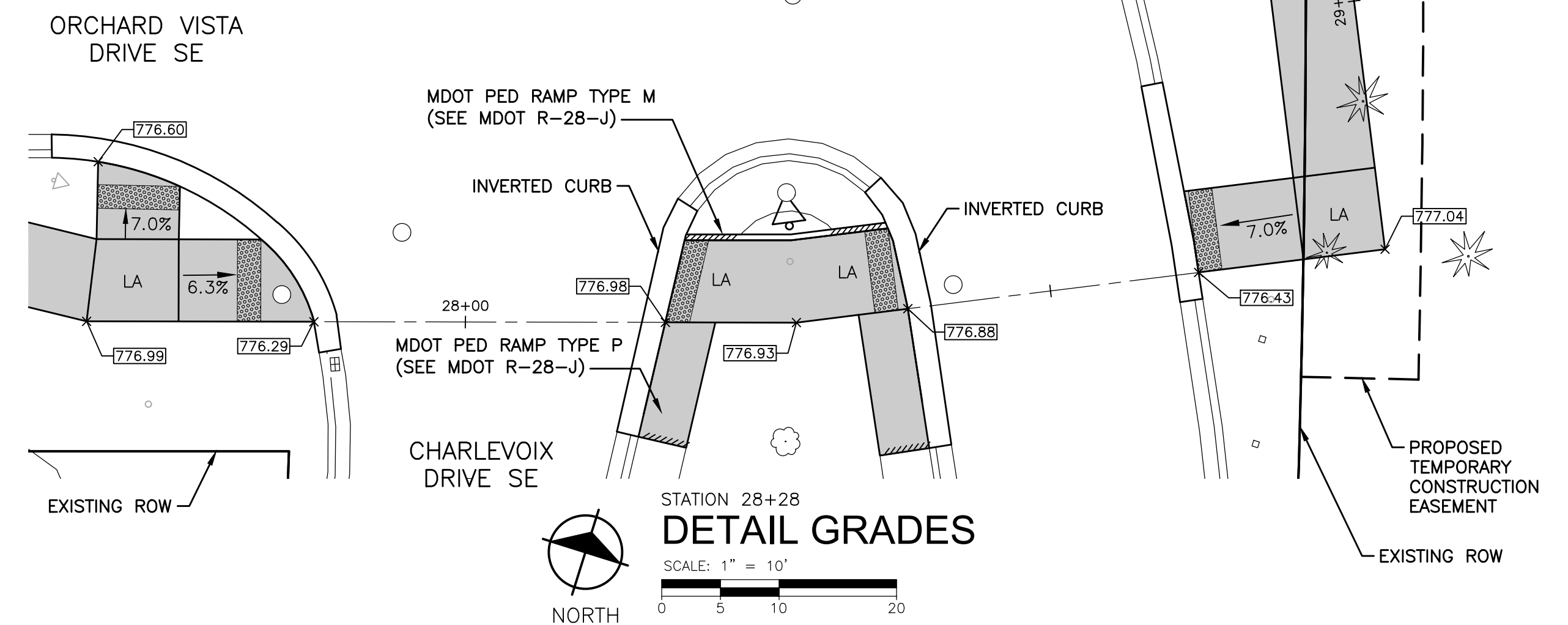
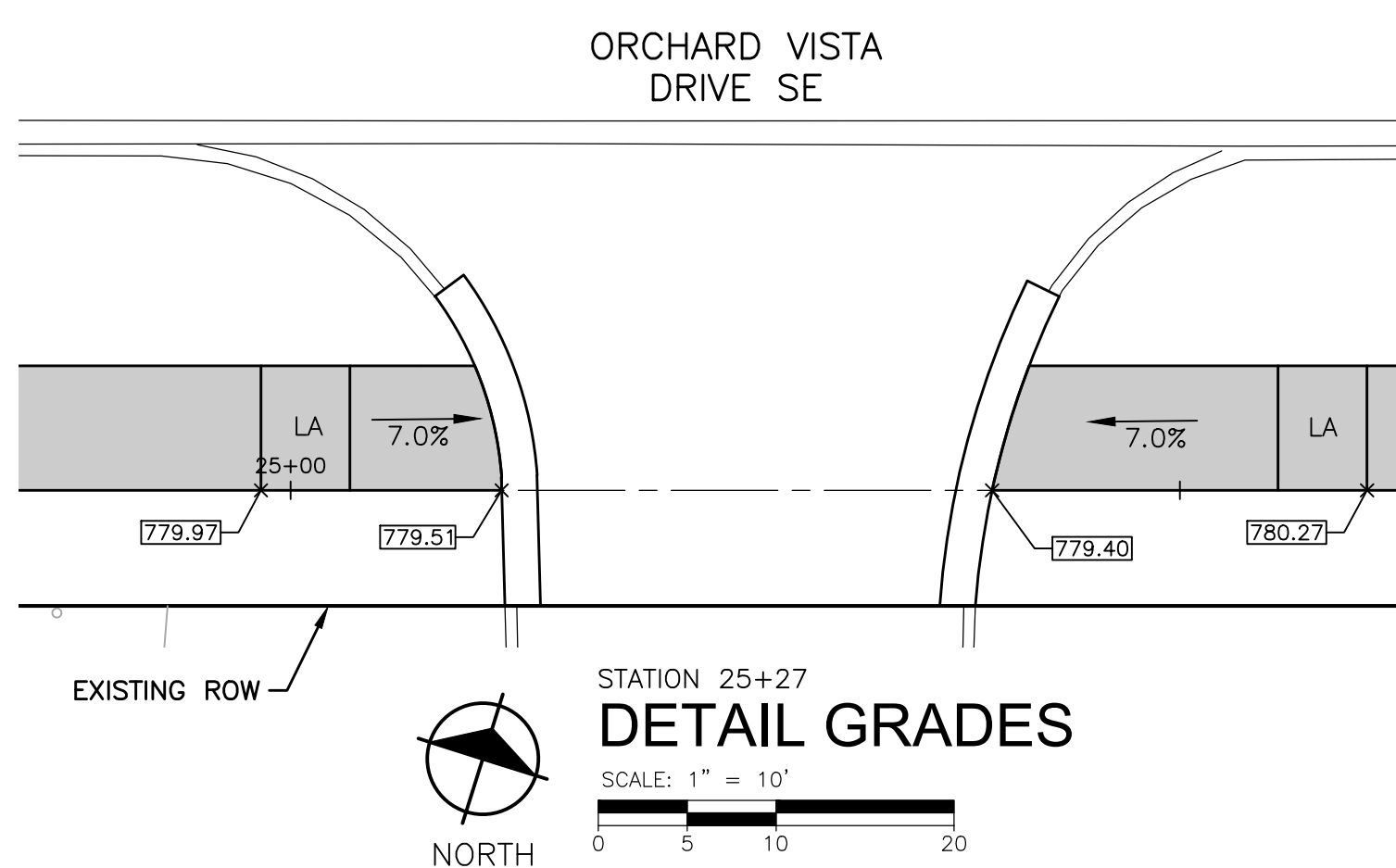
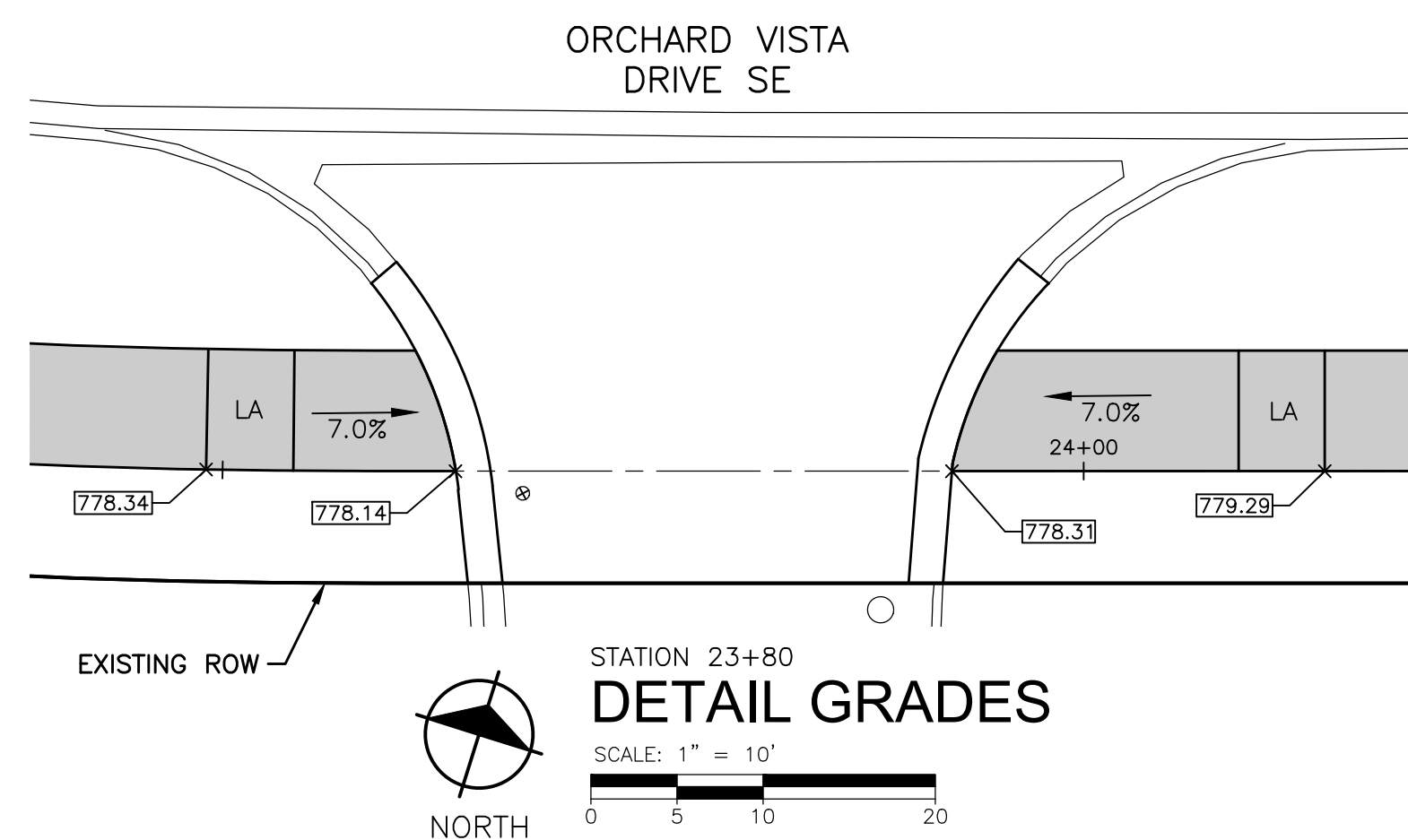
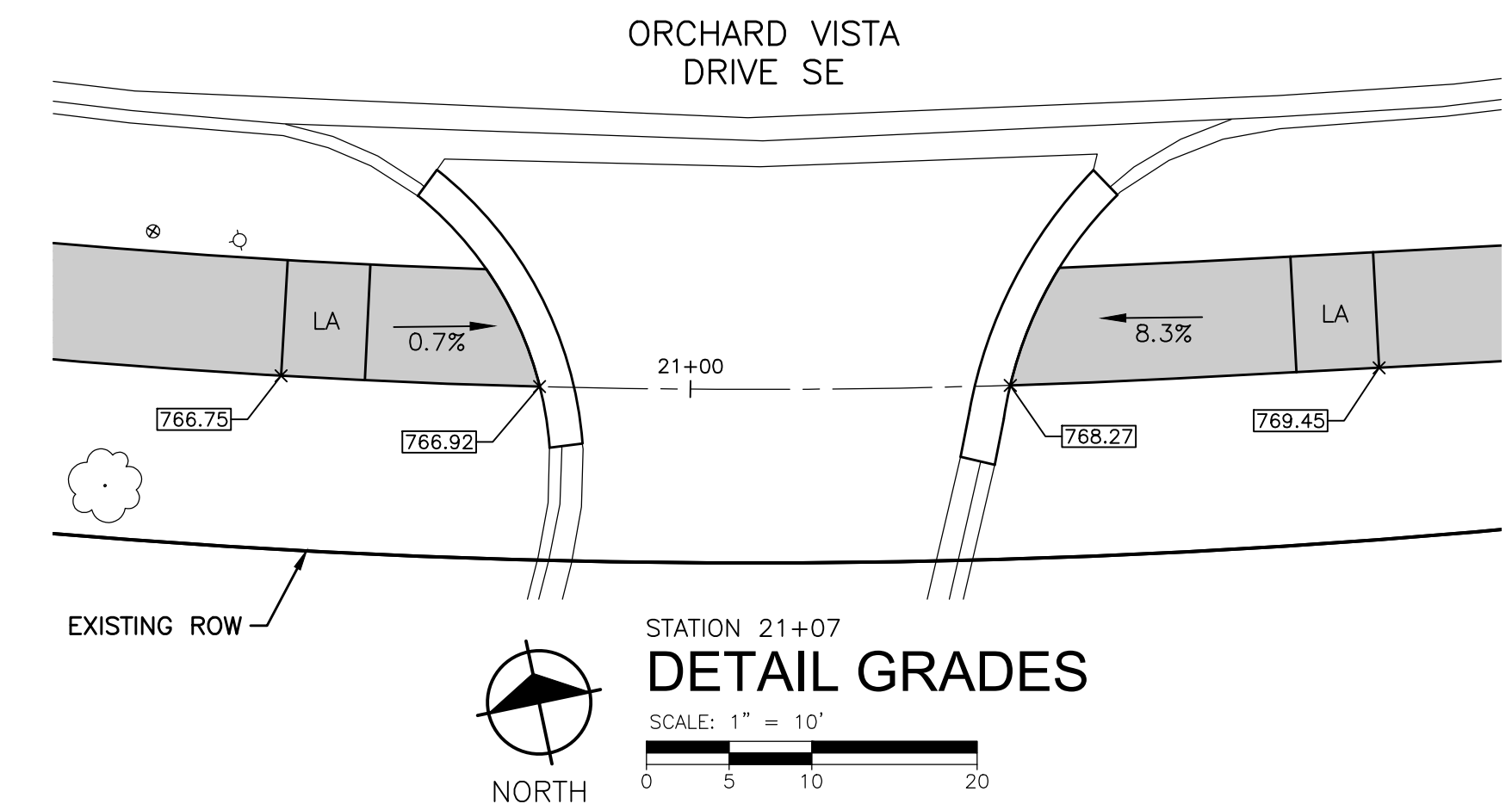
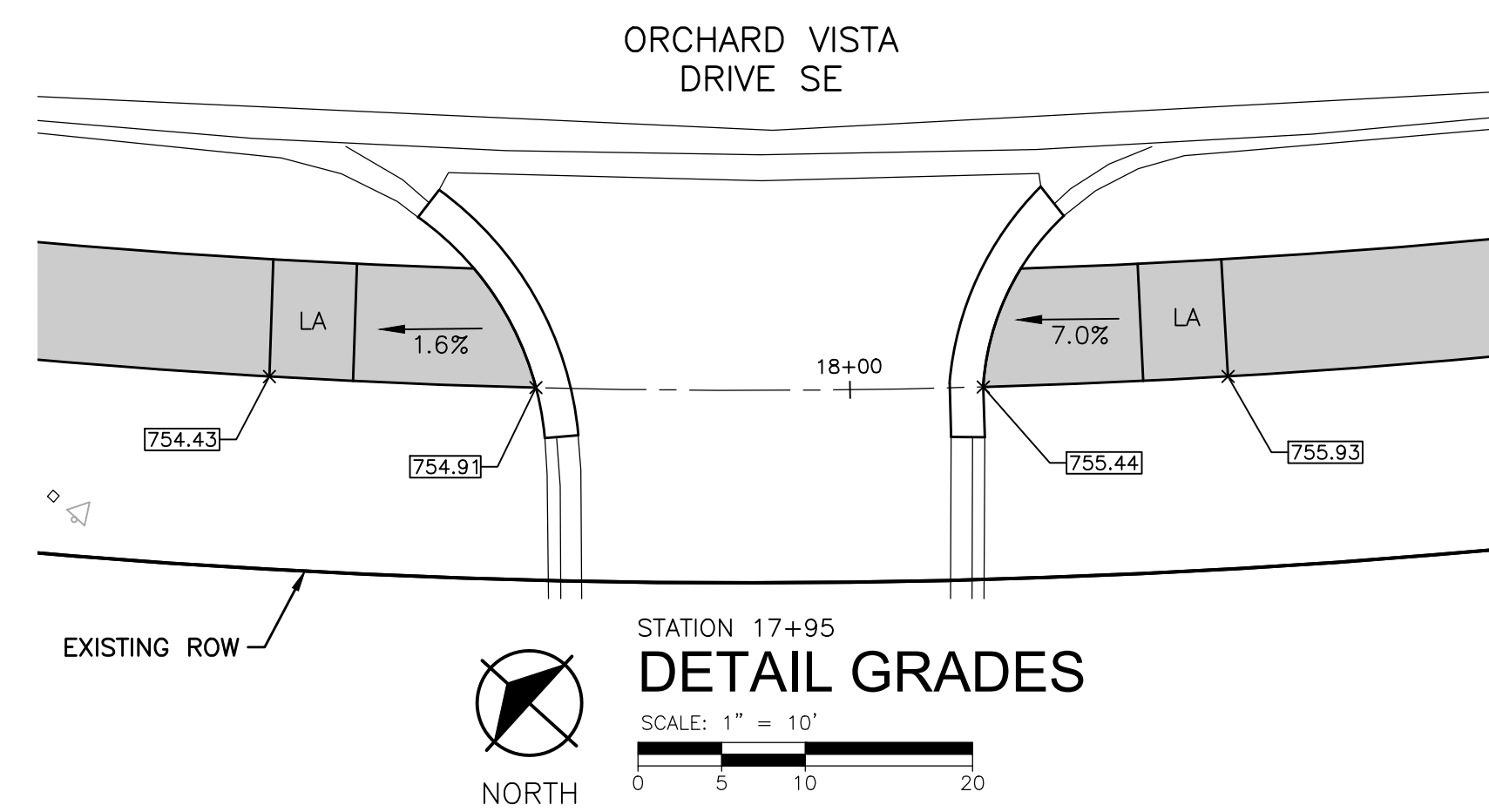
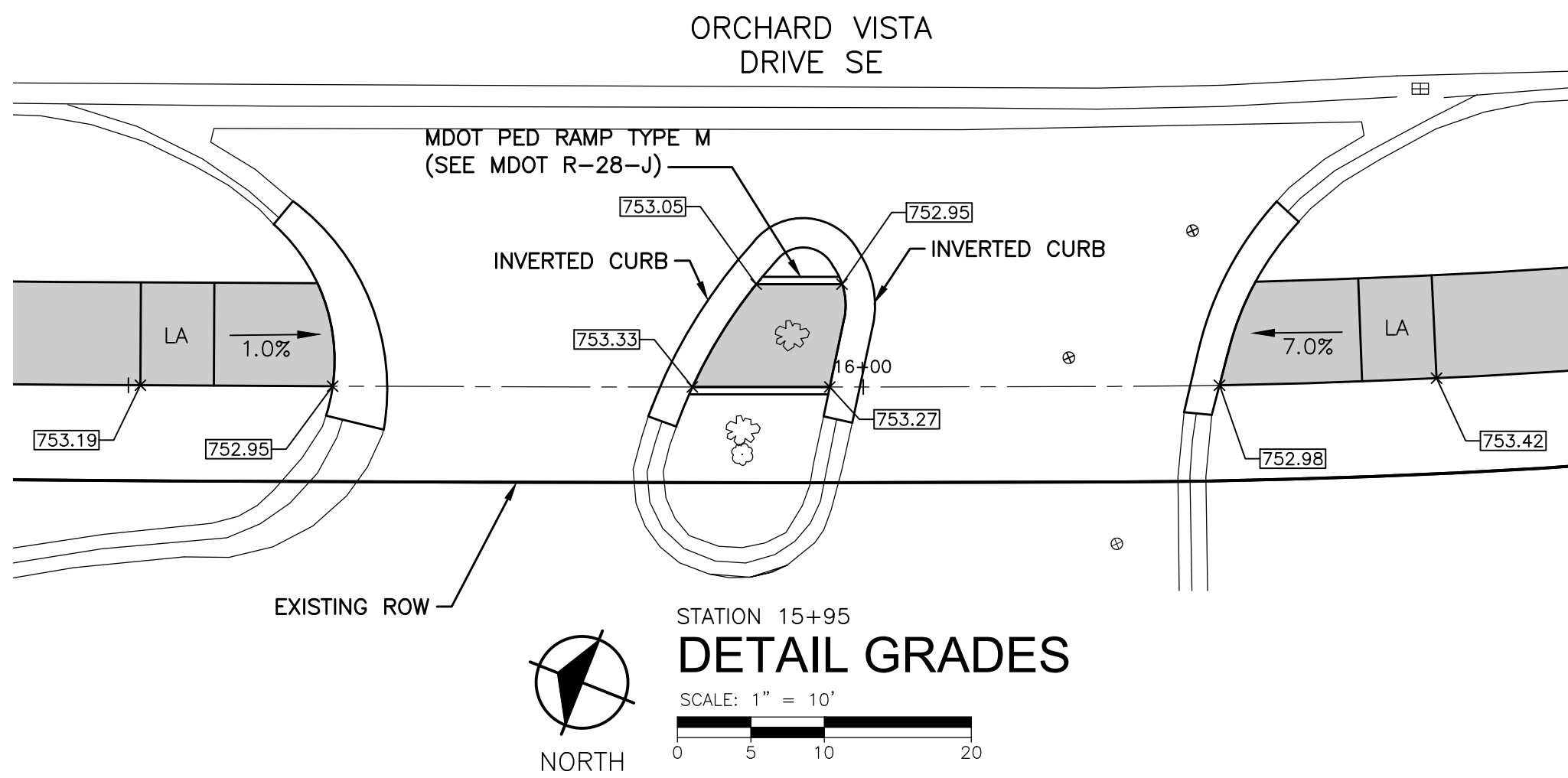
PROJECT NO.
181644
SHEET NO.

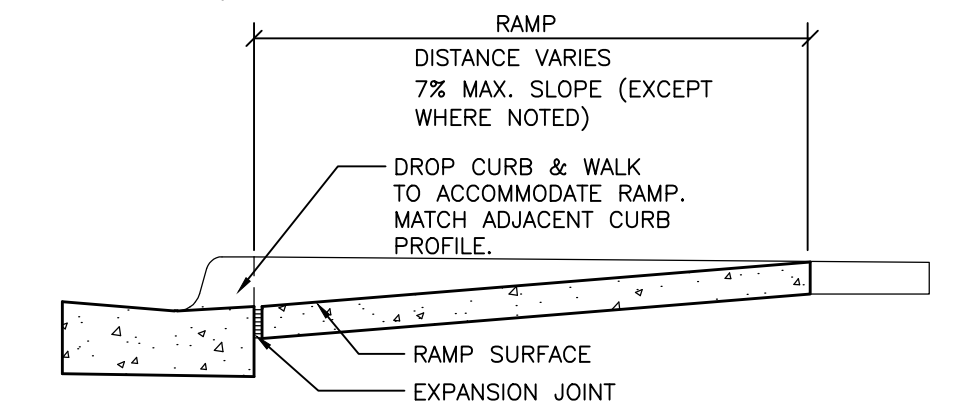
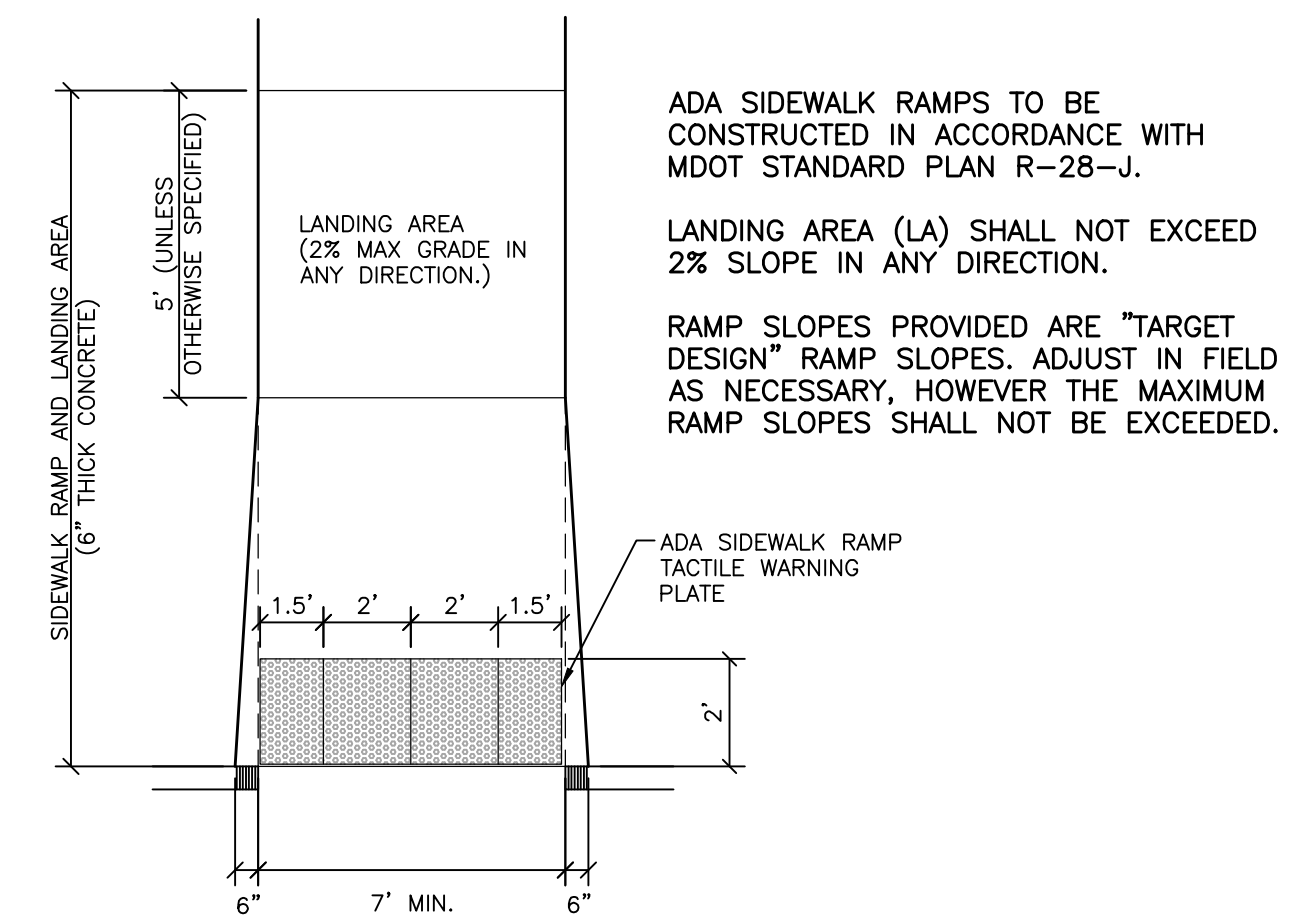
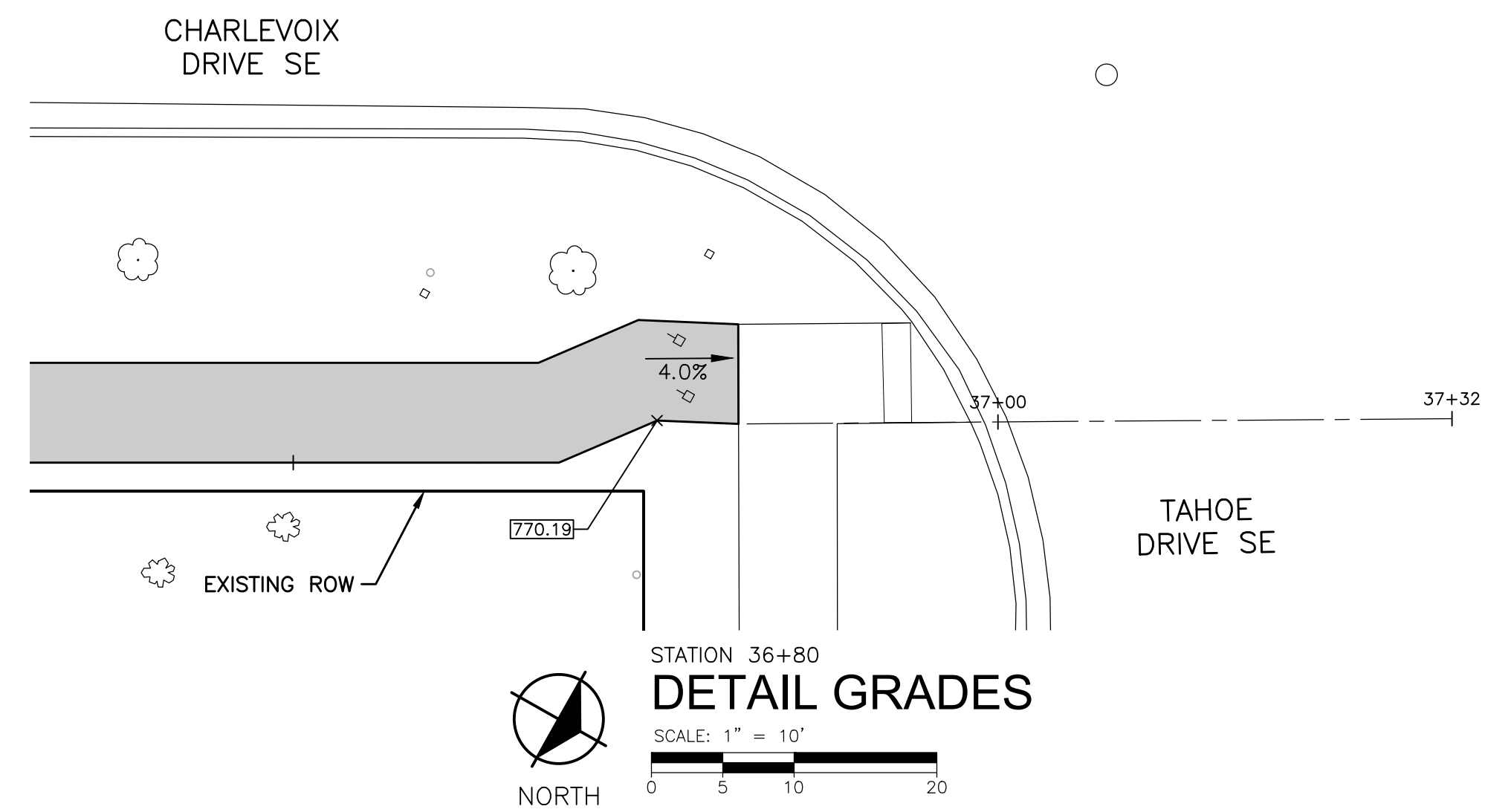
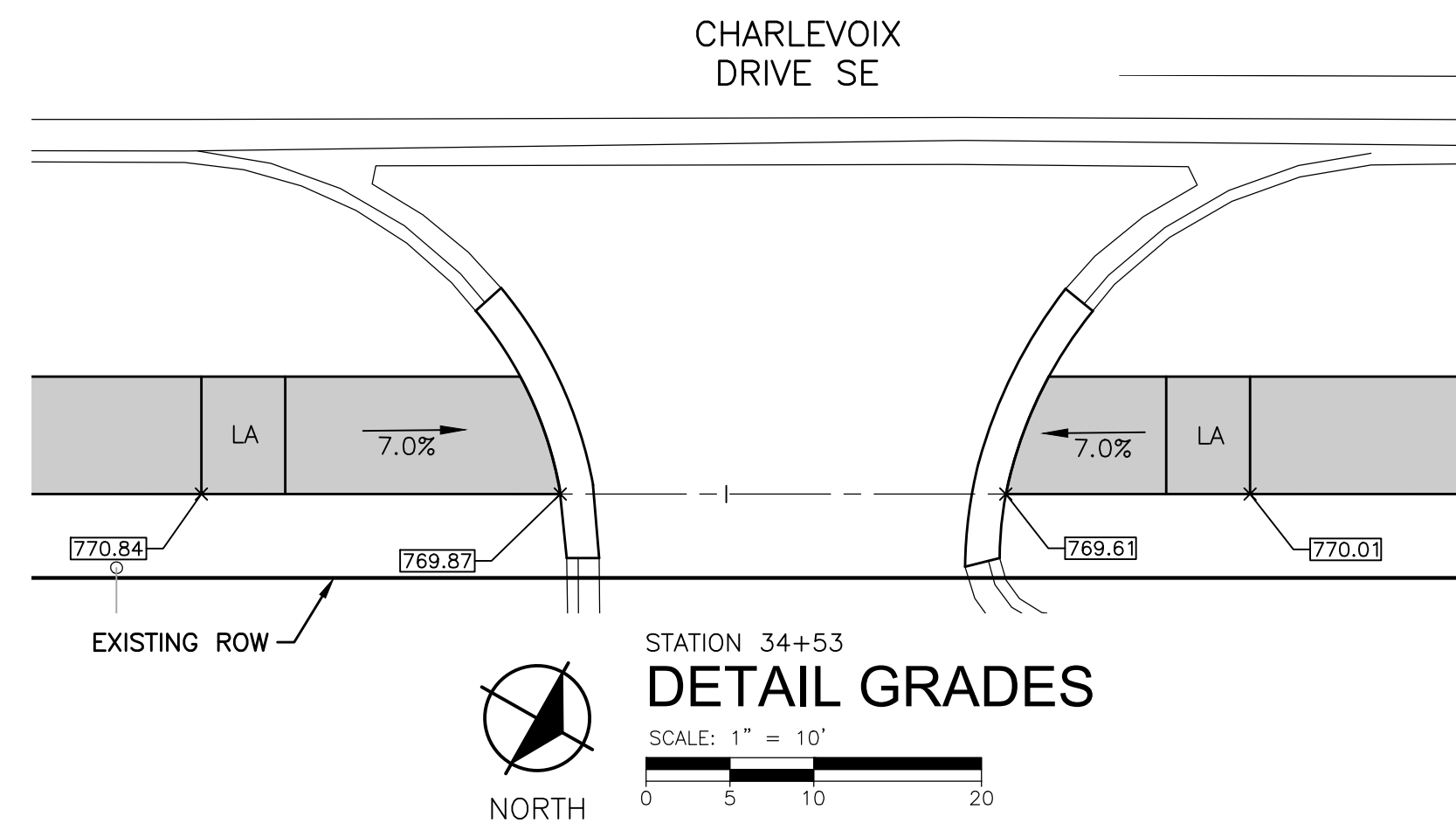
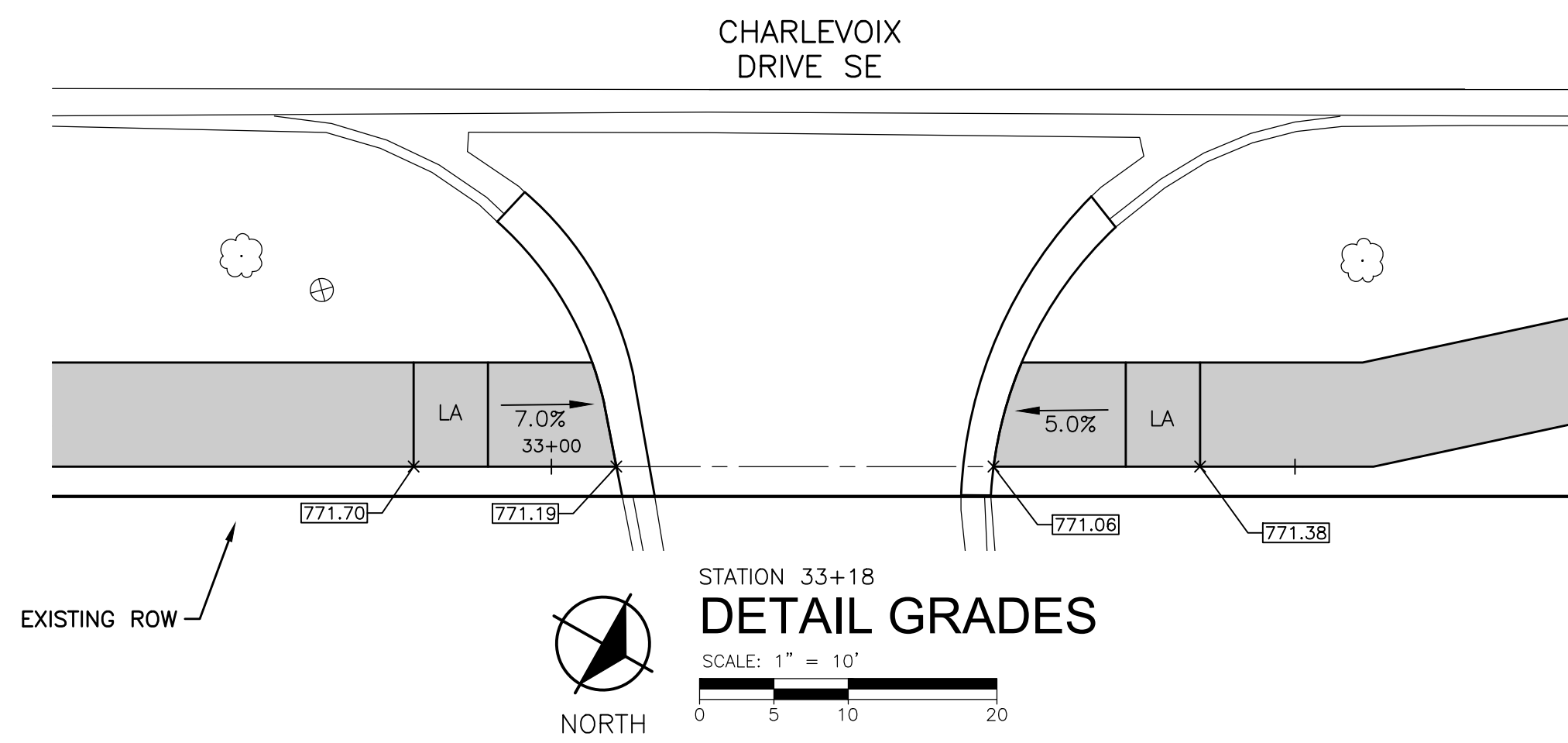
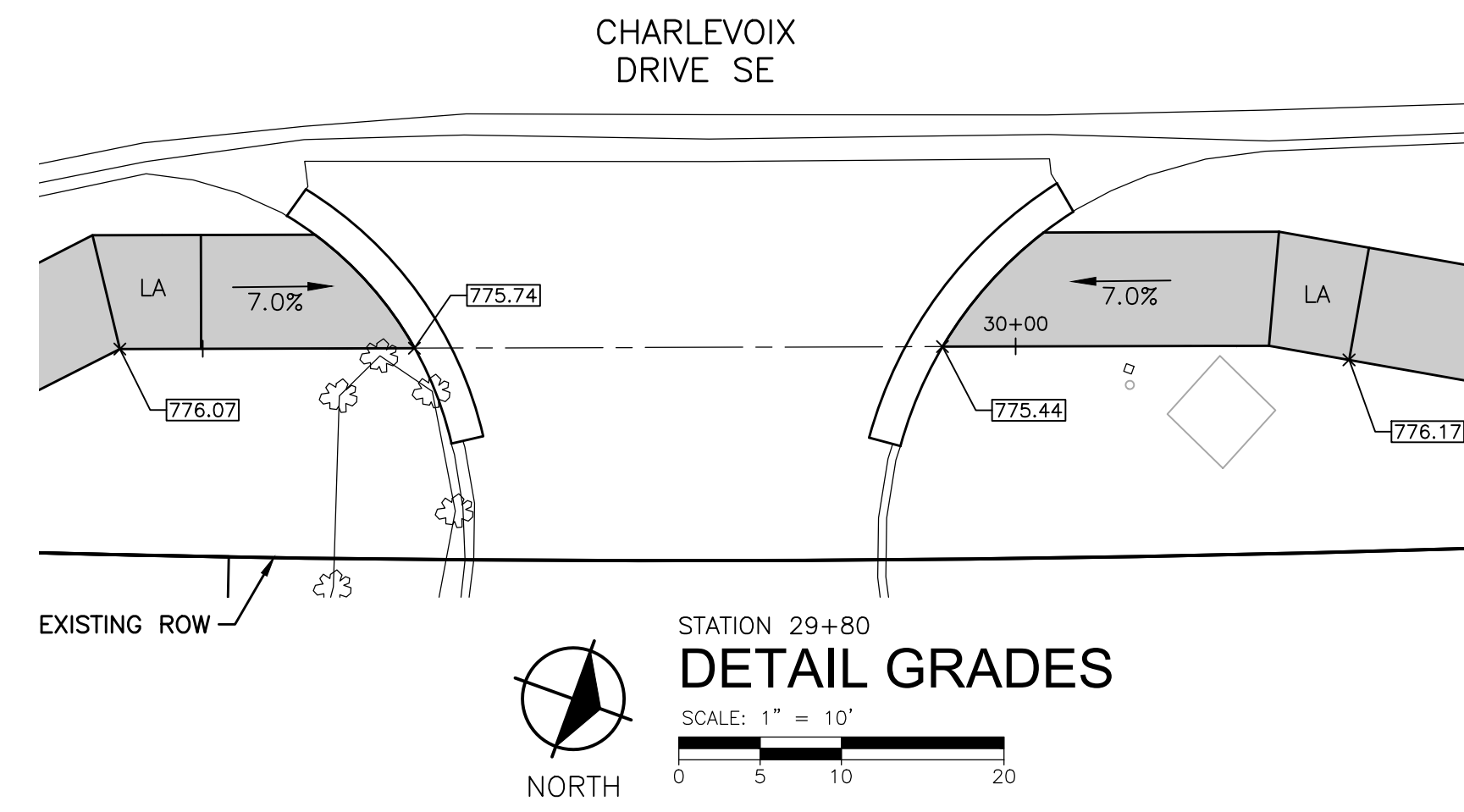
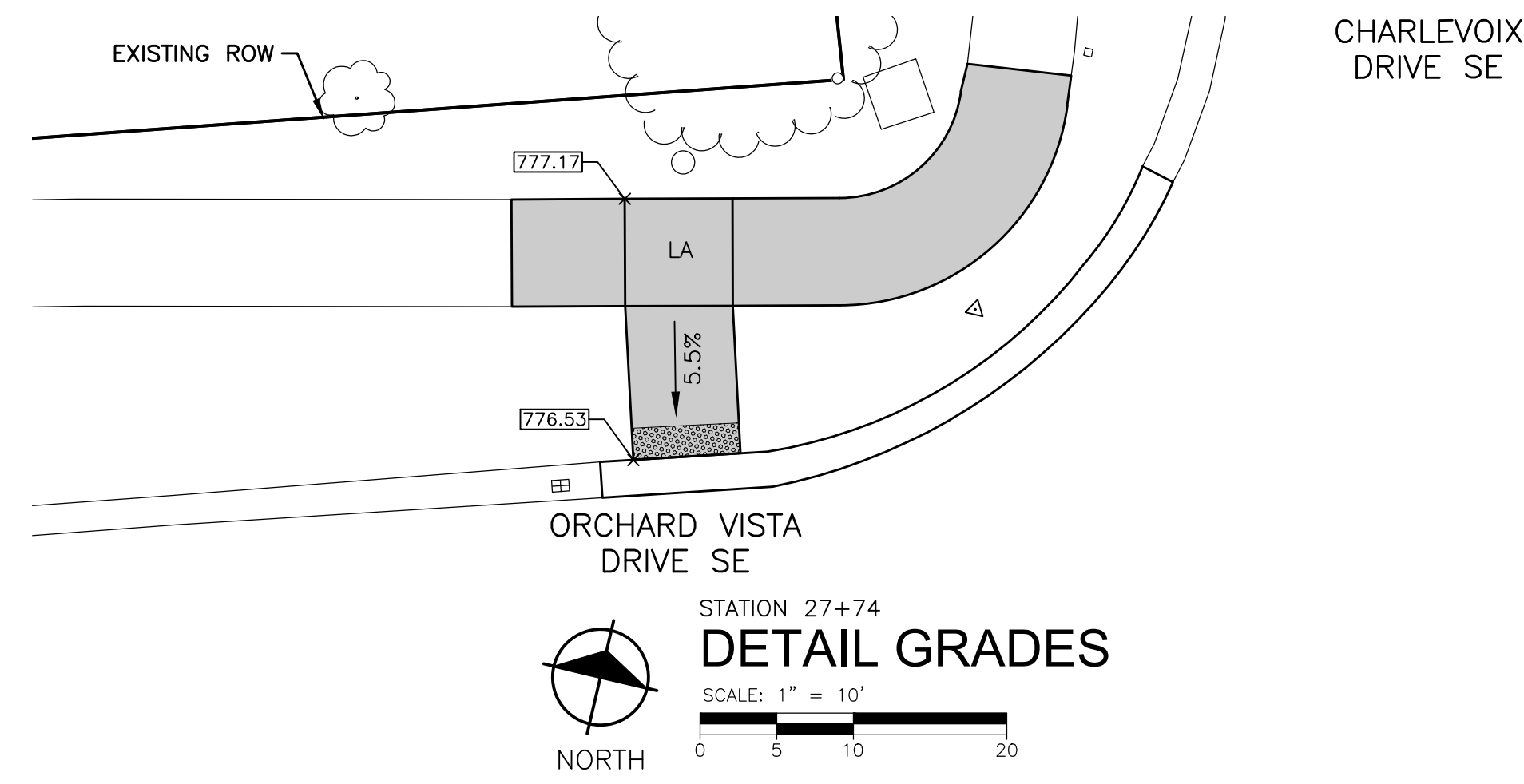
C-3



- NOTES:
1) SIDEWALK TYPICAL RAMP DETAIL PROVIDED AS GENERAL REFERENCE FOR ADA PLATE WIDTH AND RAMP WIDTH.
2) ALL RAMP TO BE CONSTRUCTED ACCORDING TO CURRENT MDOT STANDARD PLAN DETAIL R-28-J.

SIDEWALK RAMP TYPICAL DETAIL
NO SCALE





RAMP SECTION
NO SCALE

- NOTES:
- 1) SIDEWALK TYPICAL RAMP DETAIL PROVIDED AS GENERAL REFERENCE FOR ADA PLATE WIDTH AND RAMP WIDTH.
 - 2) ALL RAMP TO BE CONSTRUCTED ACCORDING TO CURRENT MDOT STANDARD PLAN DETAIL R-28-J.

SIDEWALK RAMP TYPICAL DETAIL
NO SCALE

REVISIONS

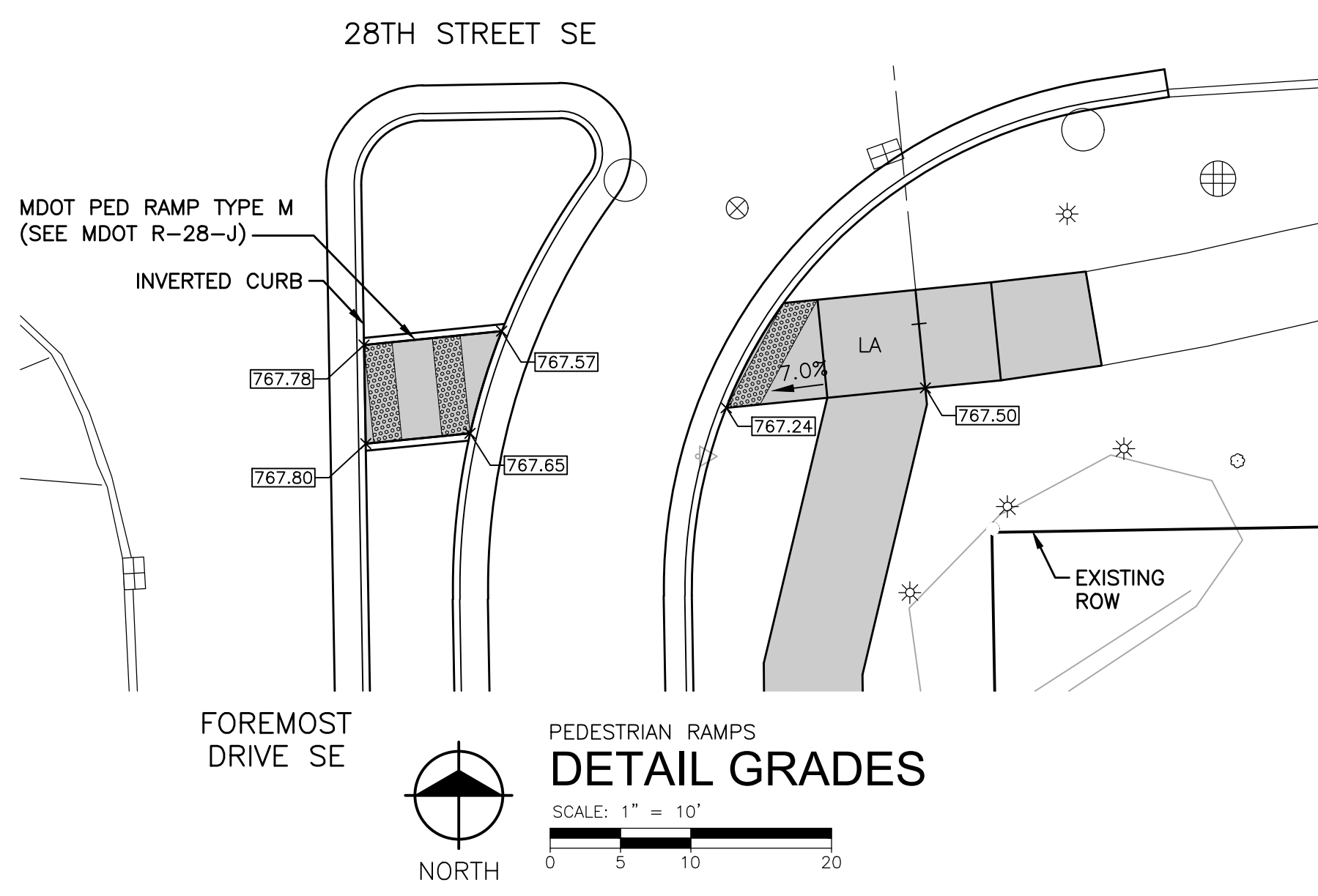
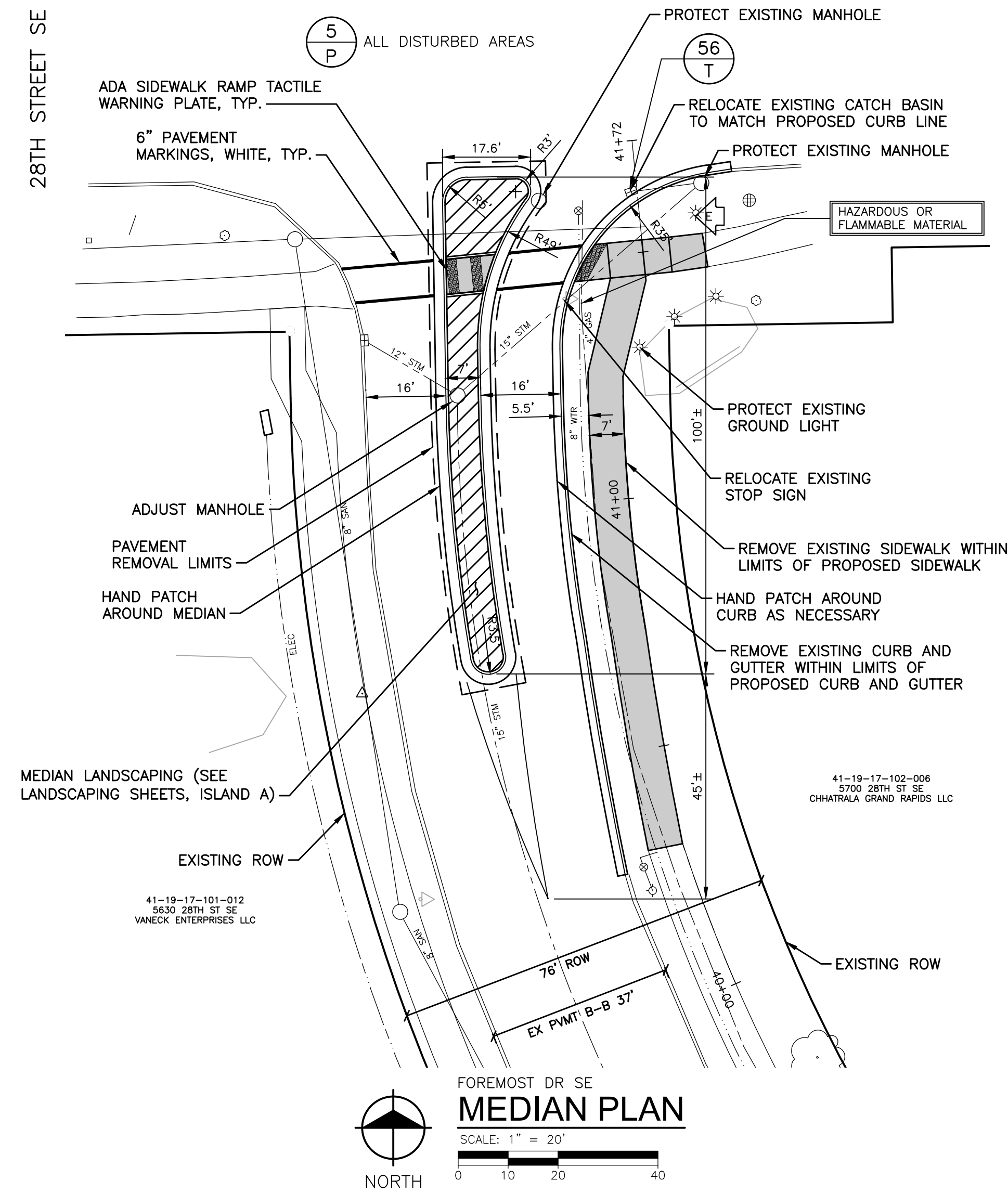
Drawn By GPW
Designer GPW
Reviewer MLB
Manager MLB

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PROJECT NO.
181644

SHEET NO.

C-6



BENCH MARK

BENCH MARK E ELEVATION: 768.33
CHISELED X ON SOUTH SIDE OF LIGHT POLE BASE, SE CORNER OF 28TH STREET AND FOREMOST DRIVE

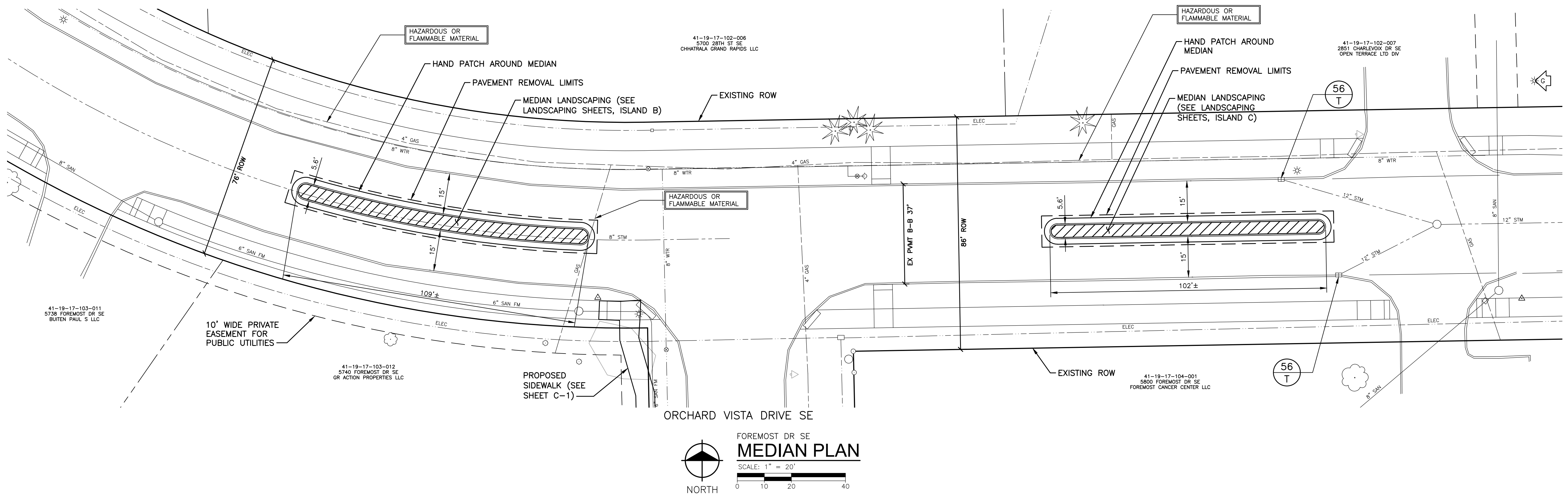
BENCH MARK G ELEVATION: 782.99
SE BOLT ON LIGHT POLE BASE, EAST SIDE OF DRIVE TO GROWNE PLAZA, NORTH SIDE OF FOREMOST DRIVE, ACROSS FROM DRIVE TO KONICA MINOLTA

NOTES

- ADA RAMPS AND LANDINGS SHALL BE 6" THICK CONCRETE.
- CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT SHOWN TO REMOVAL LIMITS ON PLANS, PROTECTING EXISTING HMA GRADES.
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- ALL NON-MEDIAN CURB AND GUTTER SHALL BE MDOT F4 CURB AND GUTTER.
- SEE SHEETS C-5 AND C-6 FOR CURB RAMP GRADES.

GRADES (EAST BACK OF WALK)

STATION	EXISTING ELEVATION (ESTIMATED)	PROPOSED ELEVATION
40+50	770.5	769.77
41+00	768.5	768.94
41+50	767.8	SEE DETAIL GRADES

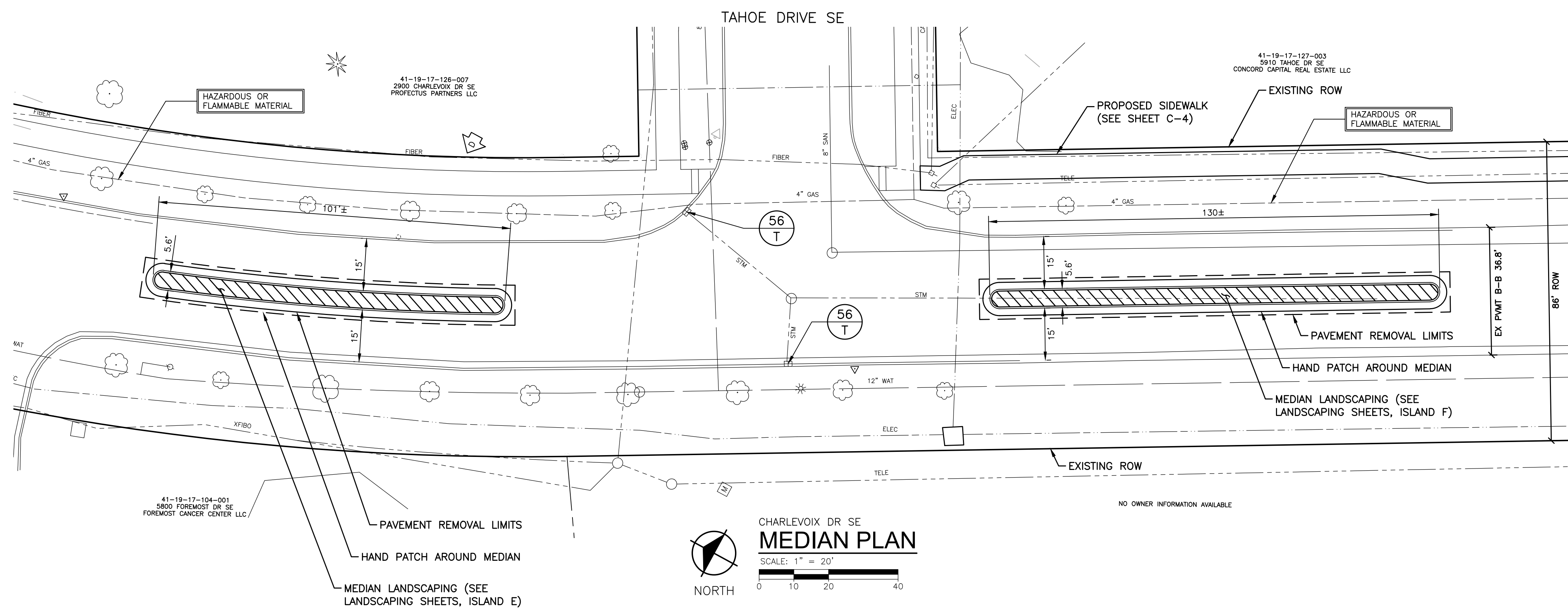
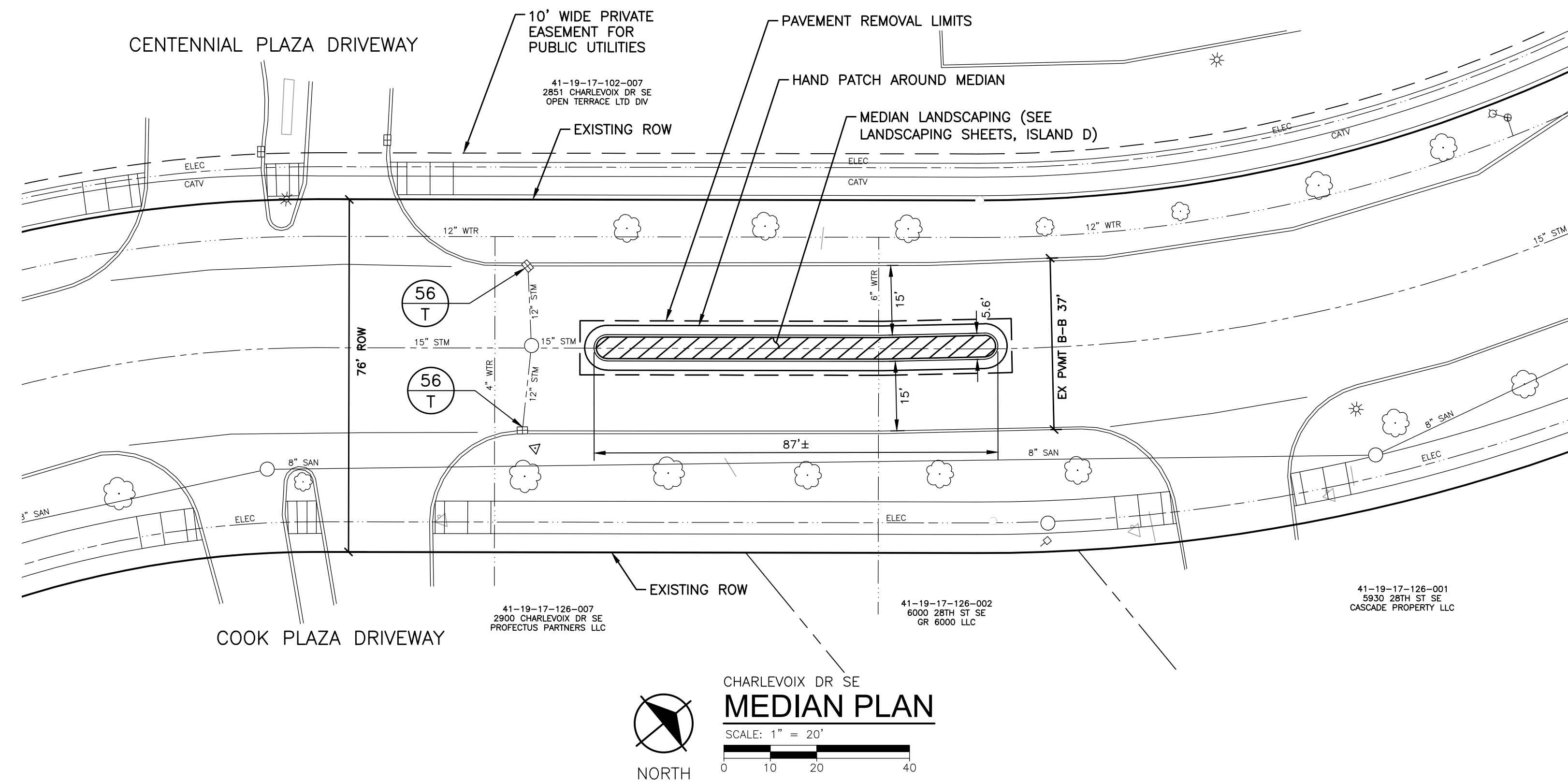


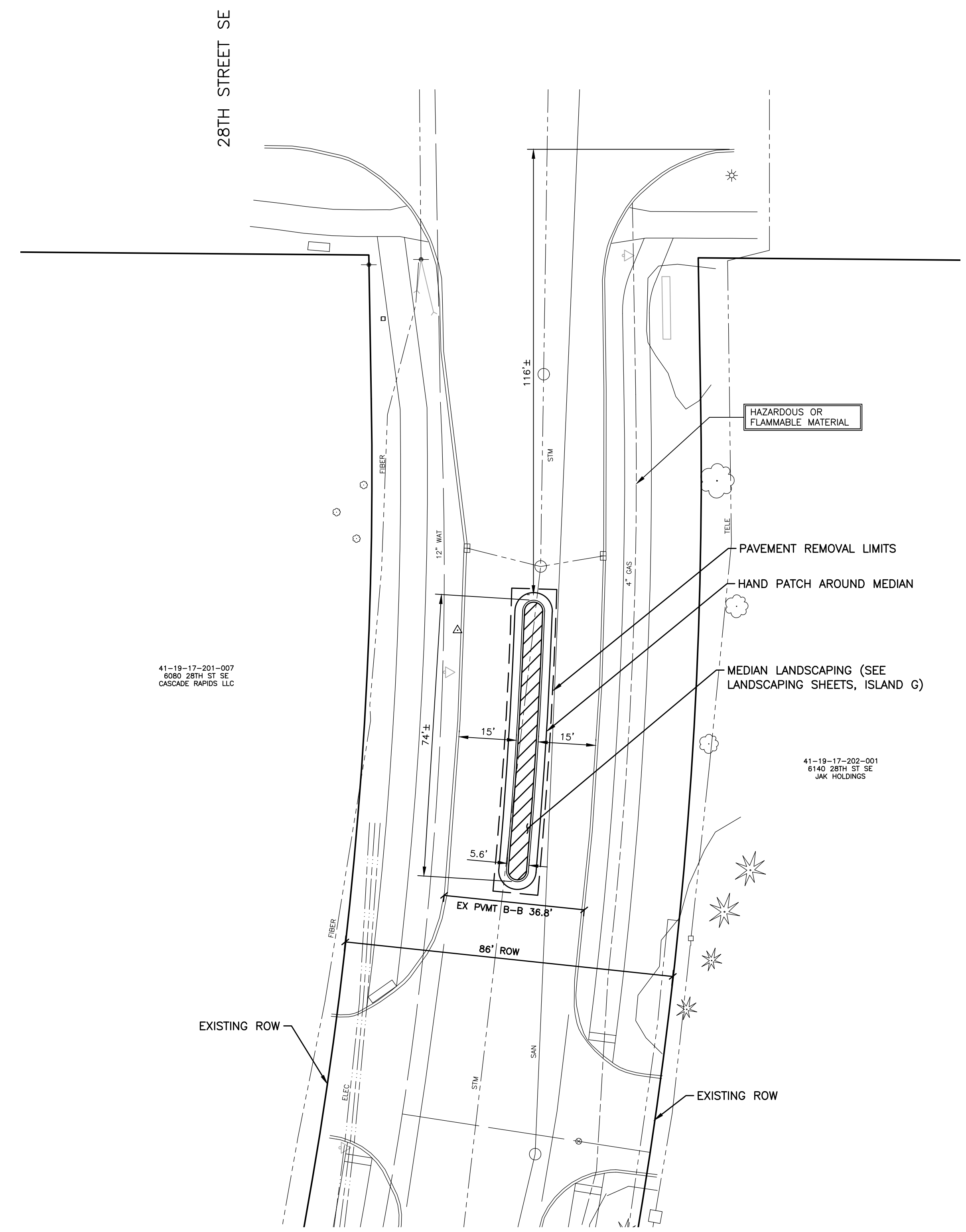
BENCH MARK

BENCH MARK D ELEVATION: 773.23
CHISELED RECTANGLE ON SOUTH SIDE OF
CONCRETE LIGHT POLE BASE, NORTHEAST QUADRANT
OF CHARLEVOIX DRIVE AND TAHOE DRIVE

NOTES

1. ADA RAMP AND LANDINGS SHALL BE 6" THICK CONCRETE.
2. CURB AND GUTTER SHALL BE REMOVED TO THE NEAREST JOINT SHOWN TO REMOVAL LIMITS ON PLANS, PROTECTING EXISTING HMA GRADES.
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6. SEE SHEETS C-5 AND C-6 FOR CURB RAMP GRADES.





41-19-17-201-007
8089, 28TH ST SE
CASCADE RAPIDS, LLC

41-19-17-202-001
6140, 28TH ST SE
JKK HOLDINGS

LUCERNE DR SE
MEDIAN PLAN
SCALE: 1" = 20'
NORTH

NOTES

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6. SEE SHEETS C-5 AND C-6 FOR CURB RAMP GRADES.

Cascade Charter Township
Cascade Charter Township, Kent County, Michigan
Orchard Vista Dr SE SW, Light, and Median Improvements

REVISIONS

Drawn By	GPW
Designer	GPW
Reviewer	MLB
Manager	MLB

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PROJECT NO.
181644

SHEET NO.

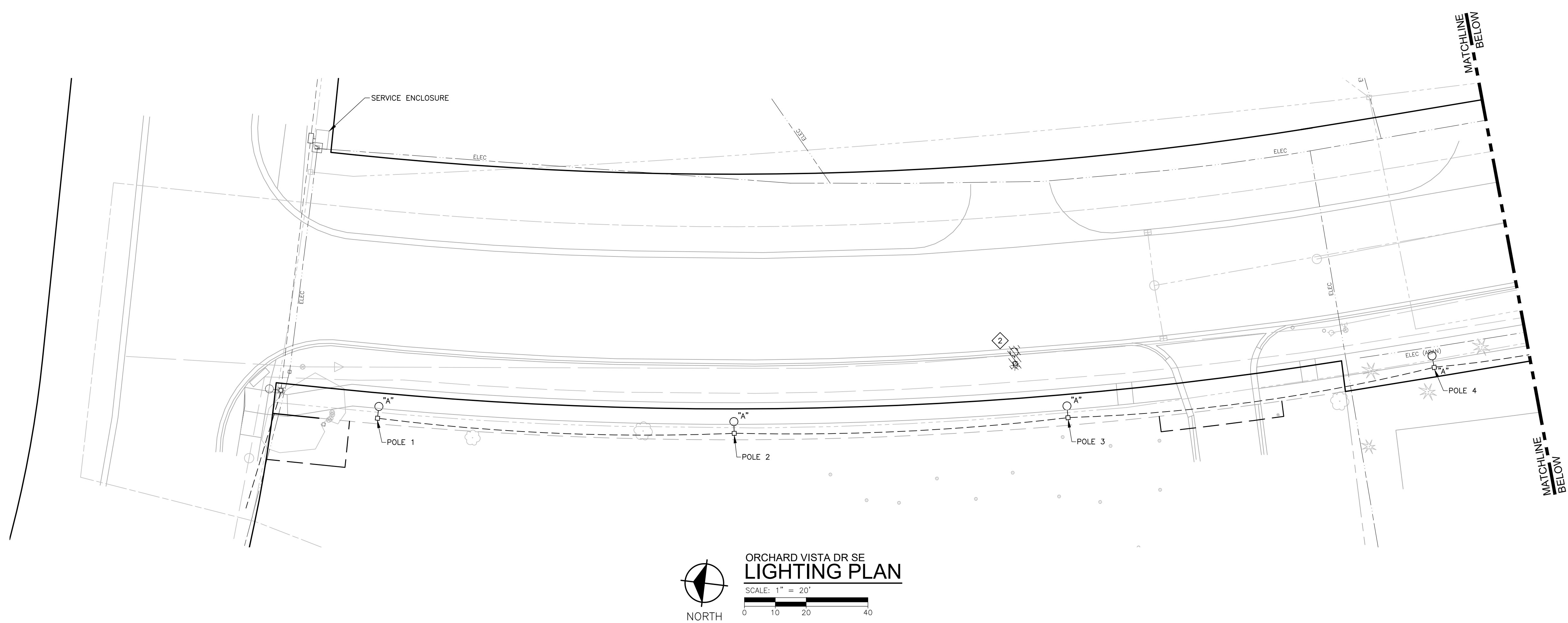
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NOTES

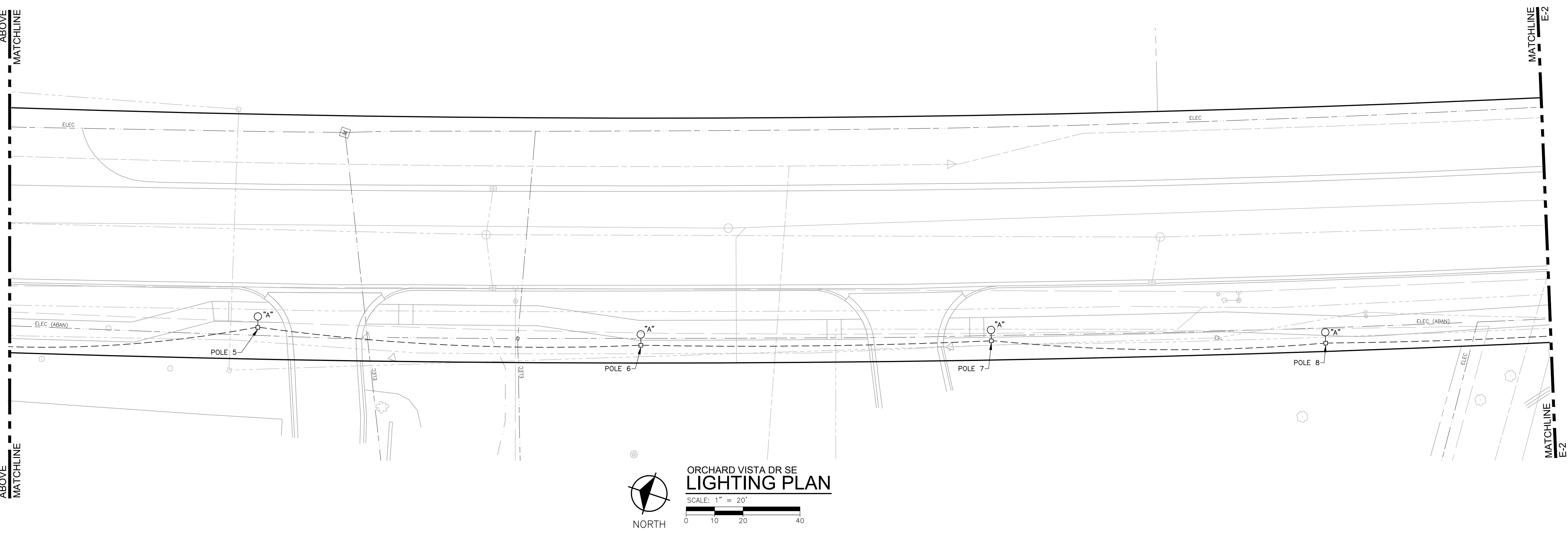
- CONTRACTOR SHALL REPAIR IRRIGATION SYSTEMS DAMAGED BY INSTALLATION OF HIS WORK.
- CONTRACTOR SHALL DIRECTIONAL DRILL UNDER ALL DRIVEWAYS, STREETS, AND WALKWAYS. DO NOT OPEN CUT DRIVEWAYS, STREETS, AND WALKWAYS.
- CONTRACTOR SHALL BE AWARE THAT THERE ARE EXISTING UTILITIES ALONG THE RIGHT-OF-WAY. UTILITIES ALONG BOTH SIDES OF ORCHARD VISTA AND CHARLEVOIX DRIVES INCLUDE WATER MAIN, SANITARY SEWER, STORM SEWER, GAS, CABLE, TELEPHONE, ELECTRICAL AND OTHER PRIVATE UTILITIES. CONTRACTOR SHALL CONTACT MISS DIG AND PERFORM FIELD VERIFICATION OF EXISTING UTILITY LOCATIONS PRIOR TO ANY WORK.
- ALL NEW POLES SHALL BE LOCATED A MINIMUM DISTANCE OF 5'-0" FROM THE BACK OF CURB.
- CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM KENT COUNTY ROAD COMMISSION TO WORK WITHIN THE RIGHT-OF-WAY OF ORCHARD VISTA AND CHARLEVOIX DRIVES.
- CONTRACTOR IS RESPONSIBLE FOR BACKFILL AND COMPACTION TO MATCH EXISTING CONDITIONS AT ALL TRENCHES.
- CONTRACTOR SHALL BE AWARE OF, LOCATE, AND PROTECT ALL CABLING, CONDUIT, MANHOLES, ETC.
- SEE DECORATIVE POLE WIRING DIAGRAM, SHEET E-4, FOR DECORATIVE POLE CONFIGURATION.

KEY NOTES

- CONDUIT SHALL BE INSTALLED IN TRENCH AT BACK OF SIDEWALK OR DEEP ENOUGH SO AS NOT TO INTERFERE WITH TREE PLANTING. COORDINATE WITH LANDSCAPE CONTRACTOR. CONDUIT ROUTING MAY NEED TO BE ALTERED BASED ON FIELD CONDITIONS.
- EXISTING CONSUMERS ENERGY STREET LIGHT TO BE REMOVED BY OTHERS.



ORCHARD VISTA DR SE
LIGHTING PLAN
SCALE: 1" = 20'
0 10 20 40



ORCHARD VISTA DR SE
LIGHTING PLAN
SCALE: 1" = 20'
0 10 20 40

REVISIONS

Drawn By ARK
Designer ARK
Reviewer
Manager MLB

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PROJECT NO.
181644

SHEET NO.

E-1

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Cascade Charter Township
Cascade Charter Township, Kent County, Michigan
Orchard Vista Dr SE SW, Light, and Median Improvements

REVISIONS

Drawn By ARK
Designer ARK
Reviewer
Manager MLB

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PROJECT NO.
181644

SHEET NO.

E-2

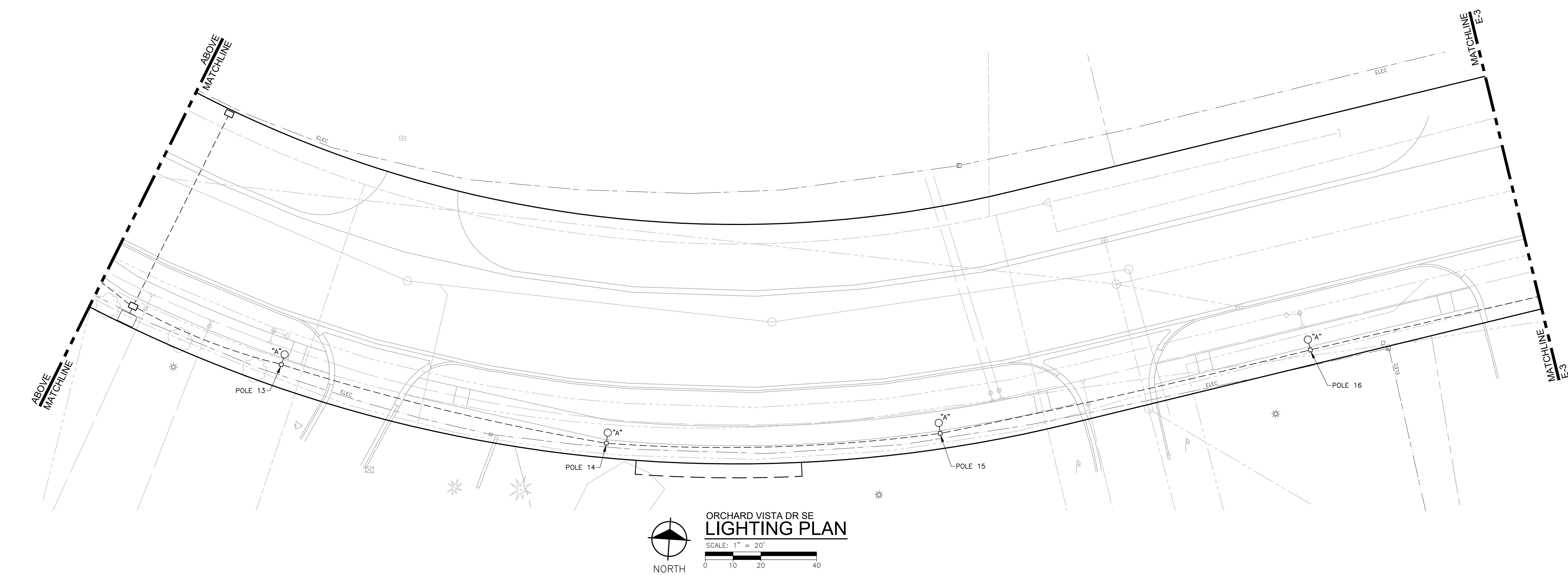
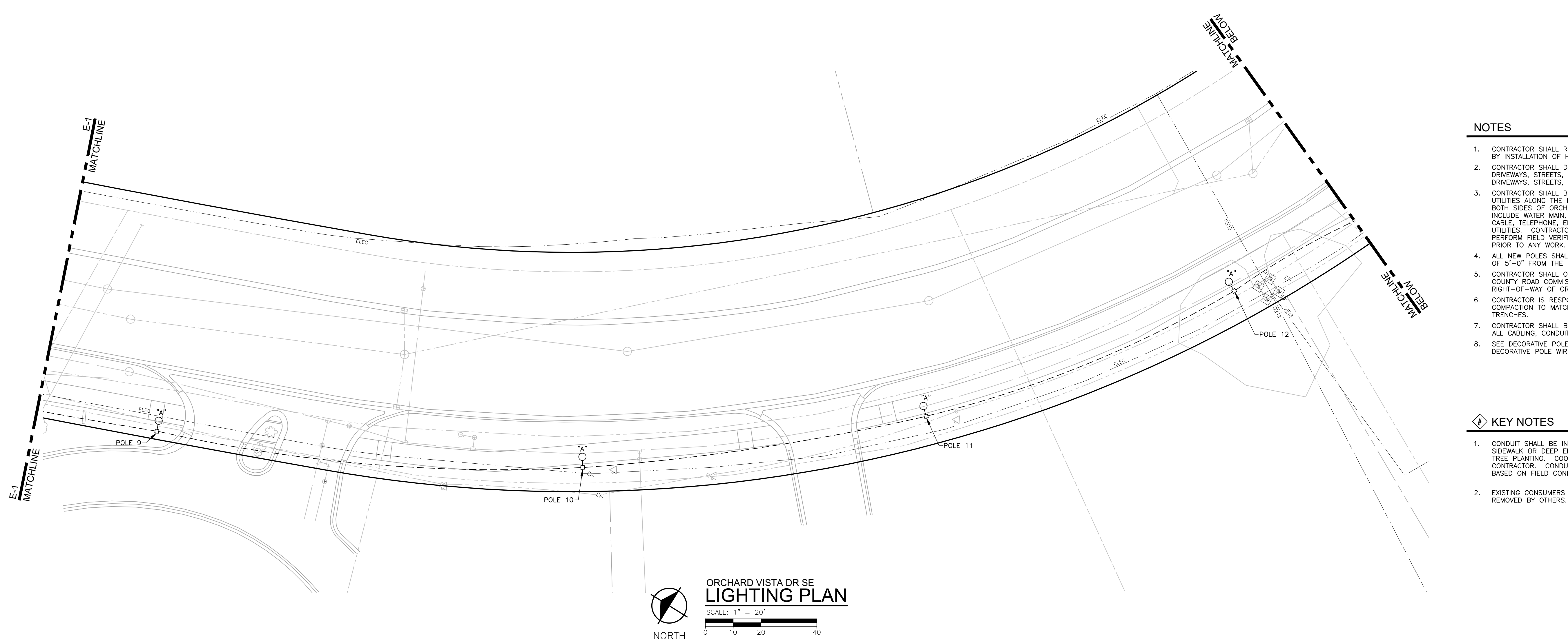
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NOTES

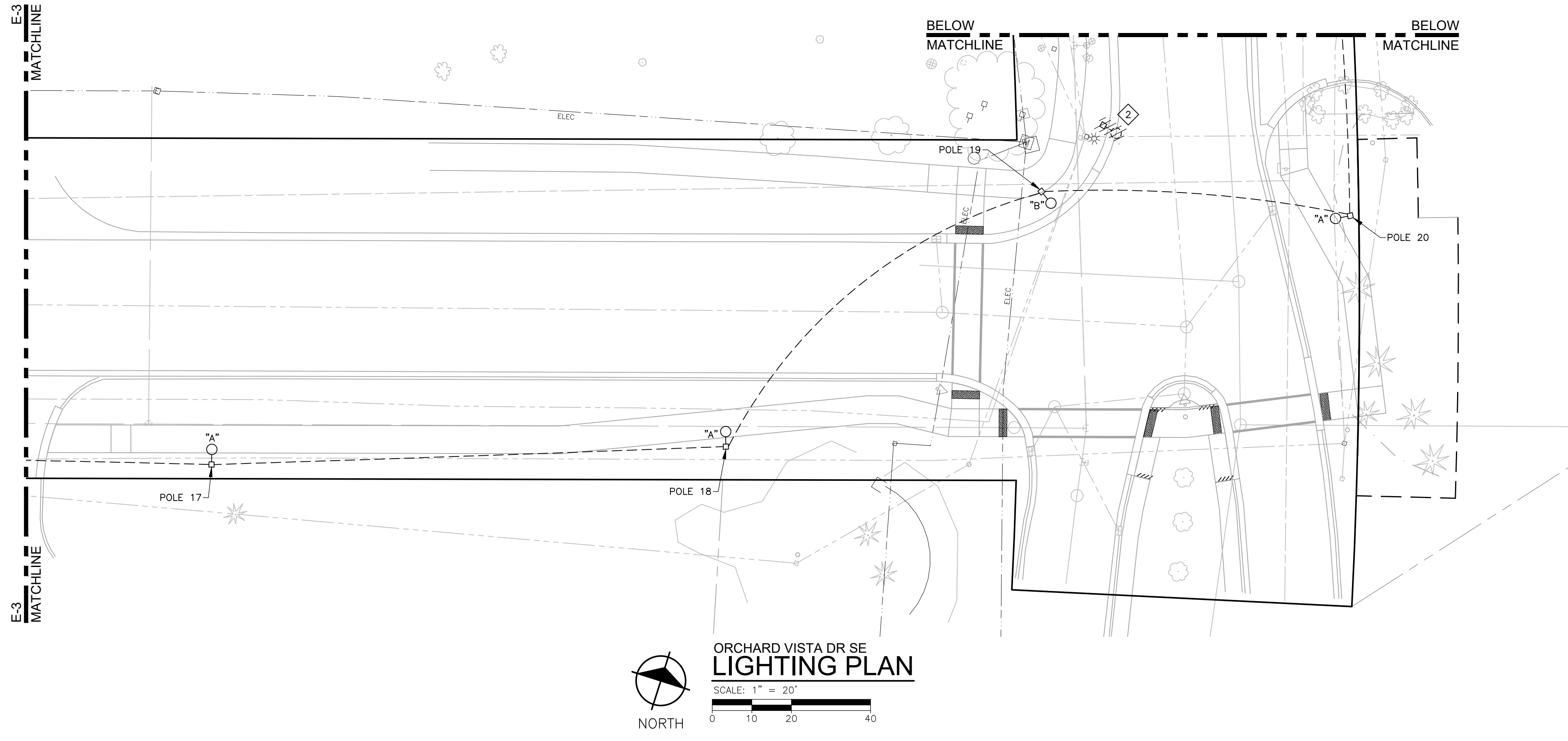
1. CONTRACTOR SHALL REPAIR IRRIGATION SYSTEMS DAMAGED BY INSTALLATION OF HIS WORK.
2. CONTRACTOR SHALL DIRECTIONAL DRILL UNDER ALL DRIVEWAYS, STREETS, AND WALKWAYS. DO NOT OPEN CUT DRIVEWAYS, STREETS, AND WALKWAYS.
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4. ALL NEW POLES SHALL BE LOCATED A MINIMUM DISTANCE OF 5'-0" FROM THE BACK OF CURB.
5. CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM KENT COUNTY ROAD COMMISSION TO WORK WITHIN THE RIGHT-OF-WAY OF ORCHARD VISTA AND CHARLEVOIX DRIVES.
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7. CONTRACTOR SHALL BE AWARE OF, LOCATE, AND PROTECT ALL CABLING, CONDUIT, MANHOLES, ETC.
8. SEE DECORATIVE POLE WIRING DIAGRAM, SHEET E-4, FOR DECORATIVE POLE WIRING CONFIGURATION.

KEY NOTES

1. CONDUIT SHALL BE INSTALLED IN TRENCH AT BACK OF SIDEWALK OR DEEP ENOUGH SO AS NOT TO INTERFERE WITH TREE PLANTING. COORDINATE WITH LANDSCAPE CONTRACTOR. CONDUIT ROUTING MAY NEED TO BE ALTERED BASED ON FIELD CONDITIONS.
2. EXISTING CONSUMERS ENERGY STREET LIGHT TO BE REMOVED BY OTHERS.



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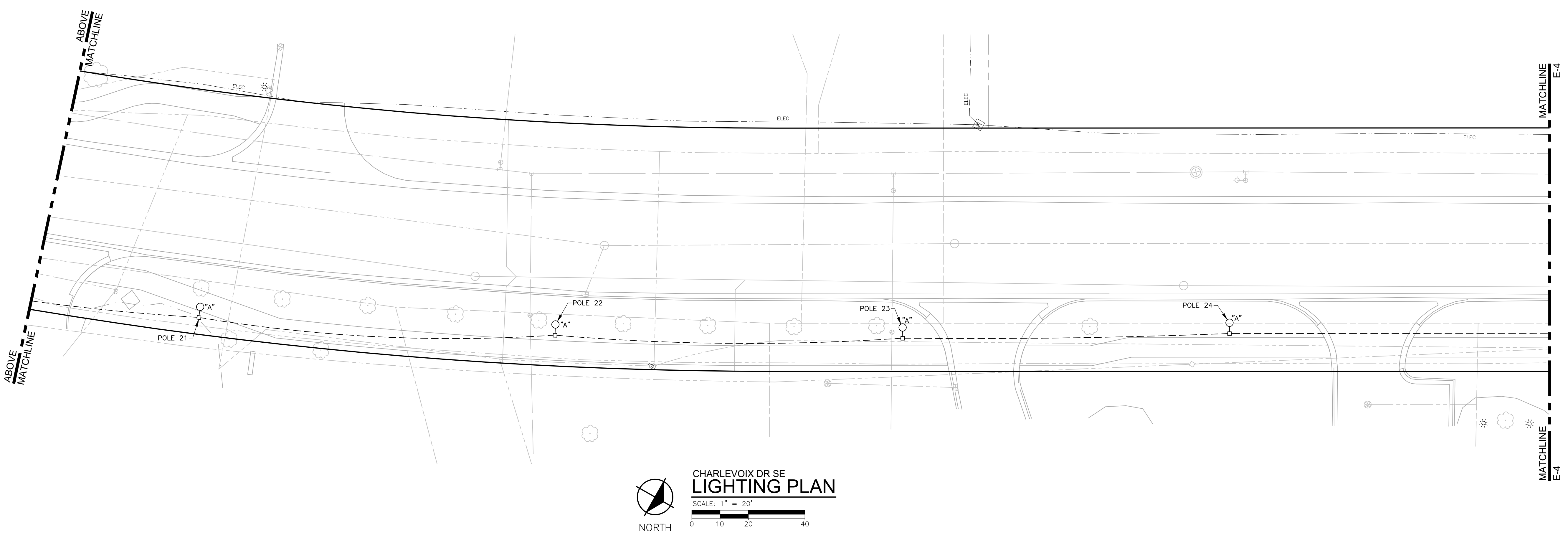


NOTES

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- CONTRACTOR SHALL DIRECTIONAL DRILL UNDER ALL DRIVEWAYS, STREETS, AND WALKWAYS. DO NOT OPEN CUT DRIVEWAYS, STREETS, AND WALKWAYS.
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- CONTRACTOR IS RESPONSIBLE FOR BACKFILL AND COMPACTION TO MATCH EXISTING CONDITIONS AT ALL TRENCHES.
- CONTRACTOR SHALL BE AWARE OF, LOCATE, AND PROTECT ALL CABLING, CONDUIT, MANHOLES, ETC.
- SEE DECORATIVE POLE WIRING DIAGRAM, SHEET E-4, FOR DECORATIVE POLE WIRING CONFIGURATION.

KEY NOTES

- CONDUIT SHALL BE INSTALLED IN TRENCH AT BACK OF SIDEWALK OR DEEP ENOUGH SO AS NOT TO INTERFERE WITH TREE PLANTING. COORDINATE WITH LANDSCAPE CONTRACTOR. CONDUIT ROUTING MAY NEED TO BE ALTERED BASED ON FIELD CONDITIONS.
- EXISTING CONSUMERS ENERGY STREET LIGHT TO BE REMOVED BY OTHERS.



REVISIONS

NO.	DATE	DESCRIPTION

Drawn By
Designer ARK
Reviewer
Manager MLB

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

PROJECT NO.
181644

SHEET NO.

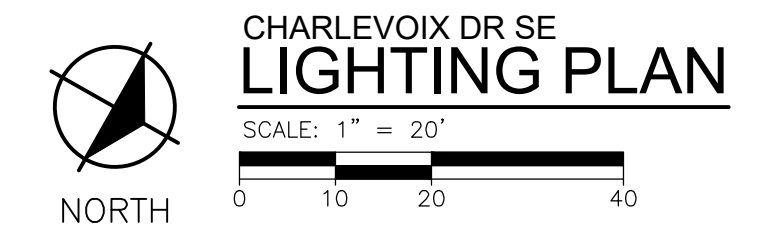
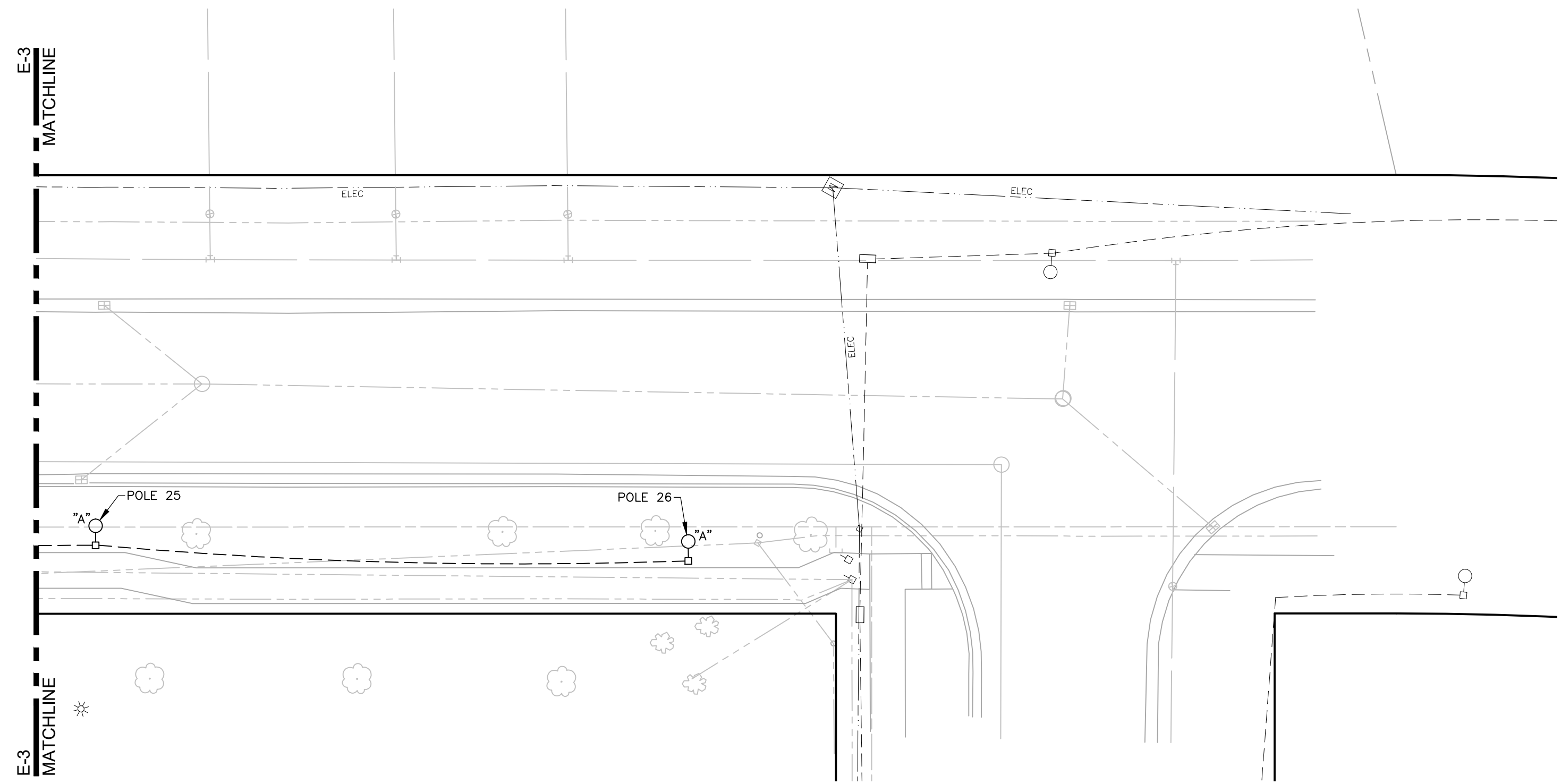
E-3

NOTES

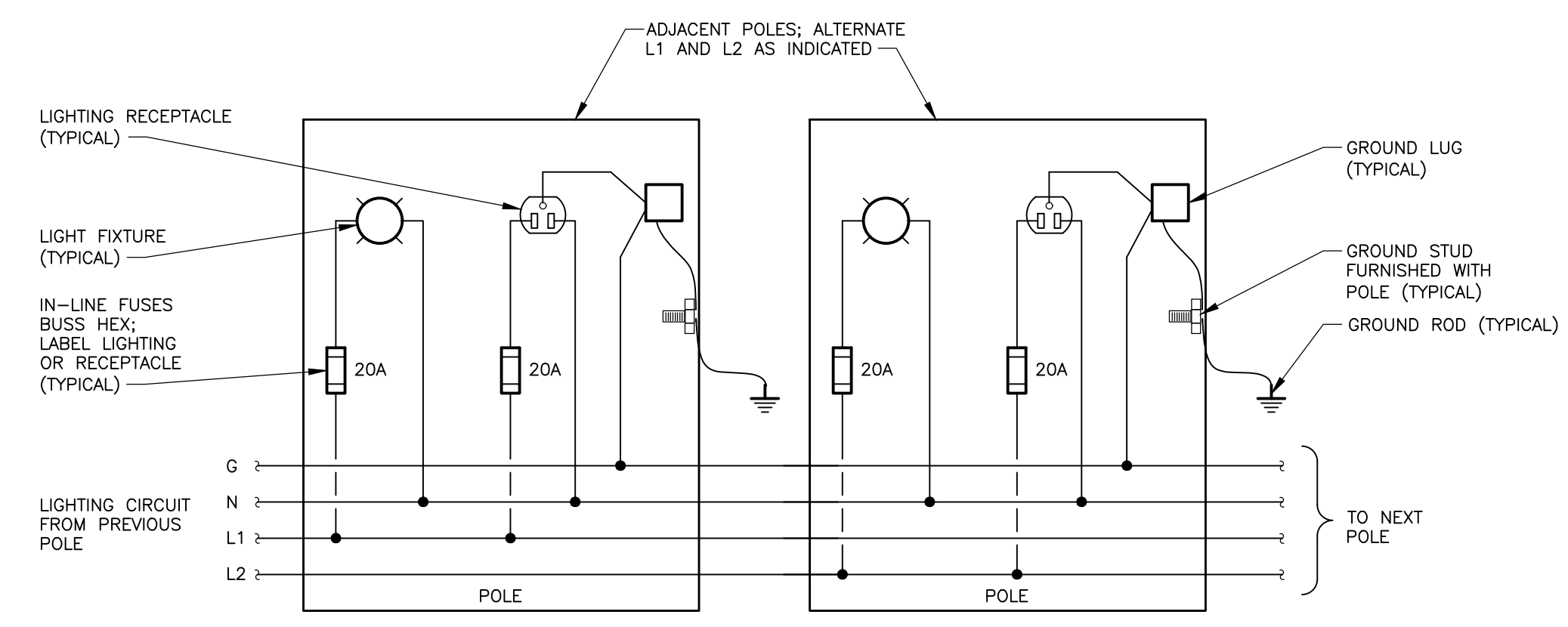
- CONTRACTOR SHALL REPAIR IRRIGATION SYSTEMS DAMAGED BY INSTALLATION OF HIS WORK.
- CONTRACTOR SHALL DIRECTIONAL DRILL UNDER ALL DRIVEWAYS, STREETS, AND WALKWAYS. DO NOT OPEN CUT DRIVEWAYS, STREETS, AND WALKWAYS.
- CONTRACTOR SHALL BE AWARE THAT THERE ARE EXISTING UTILITIES ALONG THE RIGHT-OF-WAY. UTILITIES ALONG BOTH SIDES OF ORCHARD VISTA AND CHARLEVOIX DRIVES INCLUDE WATER MAIN, SANITARY SEWER, STORM SEWER, GAS, CABLE, TELEPHONE, ELECTRICAL AND OTHER PRIVATE UTILITIES. CONTRACTOR SHALL CONTACT MISS DIG AND PERFORM FIELD VERIFICATION OF EXISTING UTILITY LOCATIONS PRIOR TO ANY WORK.
- ALL NEW POLES SHALL BE LOCATED A MINIMUM DISTANCE OF 5'-0" FROM THE BACK OF CURB.
- CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FROM KENT COUNTY ROAD COMMISSION TO WORK WITHIN THE RIGHT-OF-WAY OF ORCHARD VISTA AND CHARLEVOIX DRIVES.
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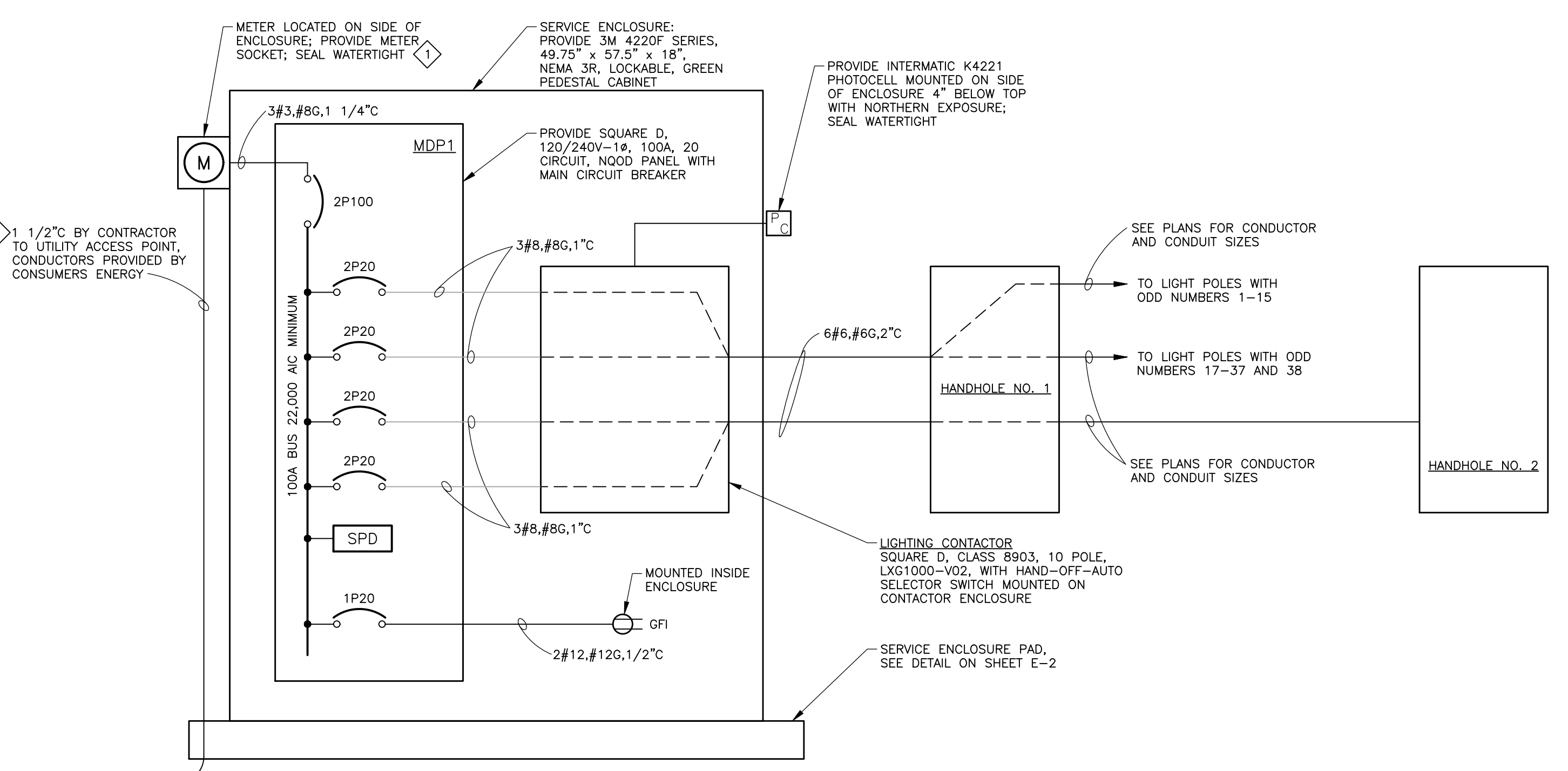
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MARK	DESCRIPTION	MANUFACTURER	CATALOG NO.	OR EQUAL BY	LUMINAIRE DATA						REMARKS
					VOLTAGE	LOAD	LUMENS	CCT	CRI	DIMMING	
A	LED MEDIUM SCALE, DECORATIVE SINGLE HEAD PEDESTRIAN AREA FIXTURE, ASYMMETRIC DISTRIBUTION ON 16'-0" POLE WITH WEATHERPROOF WHILE-IN-USE RECEPTACLE AND BANNER ARMS	ARCHITECTURAL AREA LIGHTING	FIXTURE: UCM-SR-ANG-T2-32LED-4K-450-BL-FTG-120-277-SLA17(5) POLE: PR5-5R16-250-BC5-5	NO EQUAL	120	49W	4649	4000	70	-	PROVIDE WEATHERPROOF WHILE-IN-USE RECEPTACLE AND BANNER ARMS
B	LED LARGE SCALE, DECORATIVE SINGLE HEAD PEDESTRIAN AREA FIXTURE, ASYMMETRIC DISTRIBUTION ON 20'-0" POLE WITH WEATHERPROOF WHILE-IN-USE RECEPTACLE AND BANNER ARMS	ARCHITECTURAL AREA LIGHTING	FIXTURE: UCM-SR-ANG-T2-32LED-4K-700-BL-FTG-120-277-SLA17(5) POLE: PR5-5R20-250-BC5-5	NO EQUAL	120	74W	5803	4000	70	-	PROVIDE WEATHERPROOF WHILE-IN-USE RECEPTACLE AND BANNER ARMS
NOTES											
1.	-										
2.	-										



DECORATIVE POLE WIRING DIAGRAM
NO SCALE



SERVICE ONE LINE DIAGRAM
240/120V-1Ø-3W

PANELBOARD ID		PANELBOARD DESCRIPTION														
MDP		SINGLE PHASE PANELBOARD														
TUB	1 OF 1	FILE NO.	181644													
		PROJECT:	ORCHARD VISTA DR LIGHTING													
		DATE:	January 25, 2019													
CKT NO	REV NO	VOLT AMPS				DESCRIPTION	CKT BKR	F	CKT BKR	DESCRIPTION	VOLT AMPS				REV NO	CKT NO
		LTG	MTRS	REC	OTHER						LTG	MTRS	REC	OTHER		
1		294		1080		POLES 1-12	2P20	A	2P20	POLES 13-26	368		1260		2	
3		294		1080				B			343		1260		4	
5						SPARE	2P20	A	2P20	SPARE					6	
7								B							8	
9				180		ENCLOSURE RECEPTACLE	1P20	A							10	
11								B							12	
13								A							14	
15								B							16	
17								A							18	
19								A							20	
21								A							22	
23								B							24	
25								A							26	
27								B							28	
29								A							30	
31								B							32	
33								A							34	
35								B							36	
37								A							38	
39								B							40	
41								A							42	
SUBT		588	0	2,340	0						711	0	2,520	0		
		LTG	MTRS	REC	OTHER											
		662	0	2,520	0	PHASE A	A	3,182			VOLTAGE:	240	VOLTS			
		637	0	2,340	0	PHASE B	B	2,977			CIRCUIT CAPACITY:	30	POLES			
		1,299	0	4,860	0	LOAD (VA)		6,159	TOT LOAD (VA)		MAIN LUGS ONLY:	100	AMPERES			
		100%	100%	Note 1	100%	DEMAND FACTOR		6,159	TOT DEMAND LOAD (VA)		MOUNTING:	SURFACE				
		1,299	0	4,860	0	DEMAND LOAD (VA)		25.7	TOT DEMAND AMPS		AIC RATING:	100	AMPERES			
								32.1	TOT DEMAND AMPS X 1.25		NEUTRAL (IN):	100				
											LOCATION:	SERVICE ENCLOSURE				

- NOTES:
- DEMAND FACTOR BASED ON NEC TABLE 220.44 - DEMAND FACTORS FOR NON-DWELLING RECEPTACLES
 - SEE ONE LINE DIAGRAM FOR OVERCURRENT DEVICE SIZE AND FEEDER SIZE
 -
 -
 -

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss and Consider DDA Sponsorship for the Sunday Afternoon
Live concert series

Meeting Date: March 19, 2019

Similar to last year, Vanessa Walstra is putting together a winter concert series at the Cascade Township Branch of the Kent District Library. They are proposing a seven-month series of free concerts which will take place one Sunday afternoon each month from October to April.

The library is again requesting financial support from the DDA in the amount of \$1,500 for this event.

These concerts are very popular with residents and non-residents. Staff recommends the DDA provide financial support for the concert series. Vanessa will be at the meeting for questions.



Sunday Afternoon LIVE! Season 5

Proposal for the Cascade DDA

Season 4 of Sunday Afternoon LIVE! continued the trend of great music and great crowds. This series showcased country, bluegrass, jazz, blues, Latin, and Celtic sounds and the concerts averaged 110 attendees. Our lowest attended concert took place during a blizzard and still attracted nearly 50 people who risked life and limb to attend.

The Cascade Township Library remains an attractive venue for local musicians who continue to approach the Sunday Afternoon LIVE! staff eager to perform. Our Wisner Center lends itself to a very interactive concert feel, and the coffee and snacks we offer add to the entertainment value. Concert goers often thank the staff for continuing the series and offering them the chance to experience a wide array of local (as well as international) bands.

We want to continue this popular and quality series with a Fifth Season in 2019-20. The concerts continue to:

- Create excitement for the library and its sponsors
- Highlight the library as a destination for quality activities
- Bring attention to Cascade Township as a supporter of quality events
- Draw potential patrons for local businesses

As in previous years, Sunday Afternoon LIVE! is proposed to be a partnership between Kent District Library, Cascade Charter Township, Cascade Township DDA, Cascade Community Foundation and the Friends of the Cascade Library.

Dates of project: October 2019 through April 2020

Amount Requested: \$1500

Total project cost: \$24,390

Sunday Afternoon LIVE
Season 5
Proposed Budget

Revenues

Cascade Charter Township	\$ 3,500.00
Cascade Community Foundation	\$ 3,500.00
Friends of the Cascade Library	\$ 3,540.00
Cascade DDA	\$ 1,500.00
Kent District Library (in kind)	\$ 12,250.00
Kingsland Ace Hardware (in kind)	\$ 100.00
Total	\$ 24,390.00

Expenditures

Bands	\$ 11,250.00
Promotion: Fliers, posters, bookmarks (in kind from KDL)	\$ 7,500.00
Staffing (in kind from KDL)	\$ 4,750.00
Refreshments and paper supplies	\$ 750.00
Popcorn (in kind from Kingsland)	\$ 100.00
Facebook paid advertising (paid by Friends)	\$ 40.00
Total	\$ 24,390.00

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss and Consider DDA Sponsorship for the Family Nights at the Library series

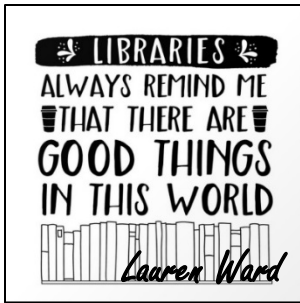
Meeting Date: March 19, 2019

Last summer the library held 5 outdoor summer programs at the Cascade Township Branch of the Kent District Library. The programs were family friendly for all ages and very popular.

This year, in addition to the 5 outdoor summer programs, the library will be holding 3 concerts on the property. This is in response to comments received from the attendees of the summer programs.

The total cost for the acts is \$3000.00 and the library is requesting financial support from the DDA in the amount of \$1,550 for this event.

Staff recommends the DDA provide financial support for the family nights series. Vanessa will be at the meeting for questions.



Family Nights at the Library

Proposal for Cascade DDA

Program: A series of eight outdoor summer programs at the Cascade Township Branch of the Kent District Library.

Purpose: To provide family entertainment for all ages in an enjoyable outdoor venue.

Lineup:

Tap Your Toes with the Porters, Thursday, June 13, at 6:30pm

Come swing and dance to the sounds of The Porters, a four-piece band that will captivate and entertain even the youngest audience.

Cost: \$350

Voices of Freedom, Thursday, June 20, at 6:30pm

An 8-part, a cappella, vocal ensemble composed of men and women from the greater Grand Rapids, Michigan area. This group sings songs from the patriotic and Americana genres.

Cost: \$500

Bangarang Circus, Thursday, June 27, at 6:30pm

A collective of performance artists who share a passion for all things circus.

Cost: \$450

Bucket o' Maybes, Thursday, July 11, at 6:30pm

A five-piece band devoted to classic rock tunes that will have you tapping your toes and singing along.

Cost: \$500

A Magic Show with Tom Plunkard, Thursday, July 18, at 6:30pm

Tom Plunkard's entertaining and hilarious show includes animals, audience involvement and tons of amazing magic.

Cost: \$300

Audacious Hoops, Thursday, July 25, at 6:30pm

A lively, interactive hula hoop show.

Cost: \$350

Pint size Polkas, Thursday, August 1, at 6:30pm

Education and entertainment through the happy sounds of polka music.

Cost: \$550

126 Army Band, Thursday, August 8, at 6:30pm

The Michigan National Guard's military musical ensemble.

Cost: Free

Total cost: \$3,000

Requested amount from Cascade DDA: \$1550

Cost to KDL: \$750 plus staffing and promotions

Cost to Cascade Friends of the Library: \$700

DDA MEMORANDUM

To: Cascade Township DDA Board

From: Sandra Korhorn, DDA/Economic Development Director *SKK*

Subject: Discuss and Consider Golf Cart Rental for Family Night series

Meeting Date: March 19, 2019

The Family Night series at the library is held on the property that borders Jacksmith Dr. and 28th St. As you know, this property is undeveloped so there is no ADA access to the property. Last year someone was kind enough to let us borrow a golf cart for a couple of the shows to access the seating area and we did have attendees use the cart.

This year I checked into renting a golf cart for the summer to use at the shows, including the concerts we are adding to the series. US Golf Cart, out of Caledonia, is willing to work with us on a rental unit. We will have to provide a storage location for the cart when not in use. They recommended a gas cart so there would be no issues if it did not get plugged in and charged.

The charge for a 3-month rental, plus delivery and pickup, would be \$1,625. Until that property develops, I believe this is the best option. This would be a 4-person cart.

Staff is recommending we move forward with the golf cart rental for June, July and August.

DDA MEMORANDUM

To: Cascade Township DDA Board
From: Sandra Korhorn, DDA/Economic Development Director *SKK*
Subject: Discuss and Consider Special Event Permit Application
Meeting Date: March 19, 2019

In response to a few businesses in the District inquiring about holding events and requesting sponsorships, I drafted a Special Event Permit application that must be submitted for events and/or requests for sponsorships.

The event/sponsorship will have to be submitted and approved by the DDA prior to the event and any funds released.

Please review and we will discuss at the meeting.



Special Event Permit Application

We support activities that encourage economic growth for our area businesses. If you have an event or idea you would like the DDA to review for support, please fill in the form below. We review all requests at our monthly Board meeting and will contact you within a week after the meeting.

Contact Name: _____

Business/Organization: _____

Address: _____ City: _____

State: _____ Zip: _____ Phone: _____

Email Address: _____

EVENT INFORMATION

Event Name: _____

Event Date: _____ Event Time (start - stop AM/PM): _____

Event Location: _____

Event Description: _____

Approximate Number of Attendees: _____ Amount of Funds Requested: _____

Benefits for DDA: _____

- Please submit a layout or map of the event area.

Applicant Signature

Date: