



LOCATION MAP

NOT TO SCALE

LATITUDE: 41°08'50" N LONGITUDE: 80°39'53" W

DESIGN DESIGNATIONS

DESIGN FUNCTIONAL CLASSIFICATION MINOR ARTERIAL

PORTION TO BE IMPROVED

NHS PROJECT NO

DESIGN EXCEPTIONS

DESIGN FEATURE APPROVAL DATE SHEET NUMBER

ADA DESIGN WAIVER REQUIRED

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
**BELMONT AVENUE
SIDEWALKS
PHASE 2
LIBERTY TOWNSHIP
TRU - 193 - 1.97 (BELMONT AVE.)
TRUMBULL COUNTY**



PLANS PREPARED BY:



GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

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PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF CONSTRUCTION OF APPROXIMATELY 5,446 SQUARE FEET OF 4" SIDEWALK ALONG BELMONT AVENUE (S.R. 193) FROM CHURCHILL ROAD TO THE CHURCHILL GIANT EAGLE IN LIBERTY TOWNSHIP.

THE FOLLOWING ITEMS ARE INCLUDED AS PART OF THE PROJECT:

- CLEARING AND GRUBBING
- CURB RAMP CONSTRUCTION
- LINEAR GRADING
- CROSSWALK STRIPING

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA: 0.14 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: 0.14 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA: N/A

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

APPROVALS

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED BY:

DAVID DeCHRISTOFARO, P.E., P.S.
TRUMBULL COUNTY ENGINEER

DATE

FEDERAL PROJECT NO.

PID NO.

CONSTRUCTION PROJECT NO.

None

RAILROAD INVOLVEMENT

None

ADMINISTRATION

TOWNSHIP ADMINISTRATOR
FISCAL OFFICER
MARTHA WEIRICK
MATTHEW CONNELLY

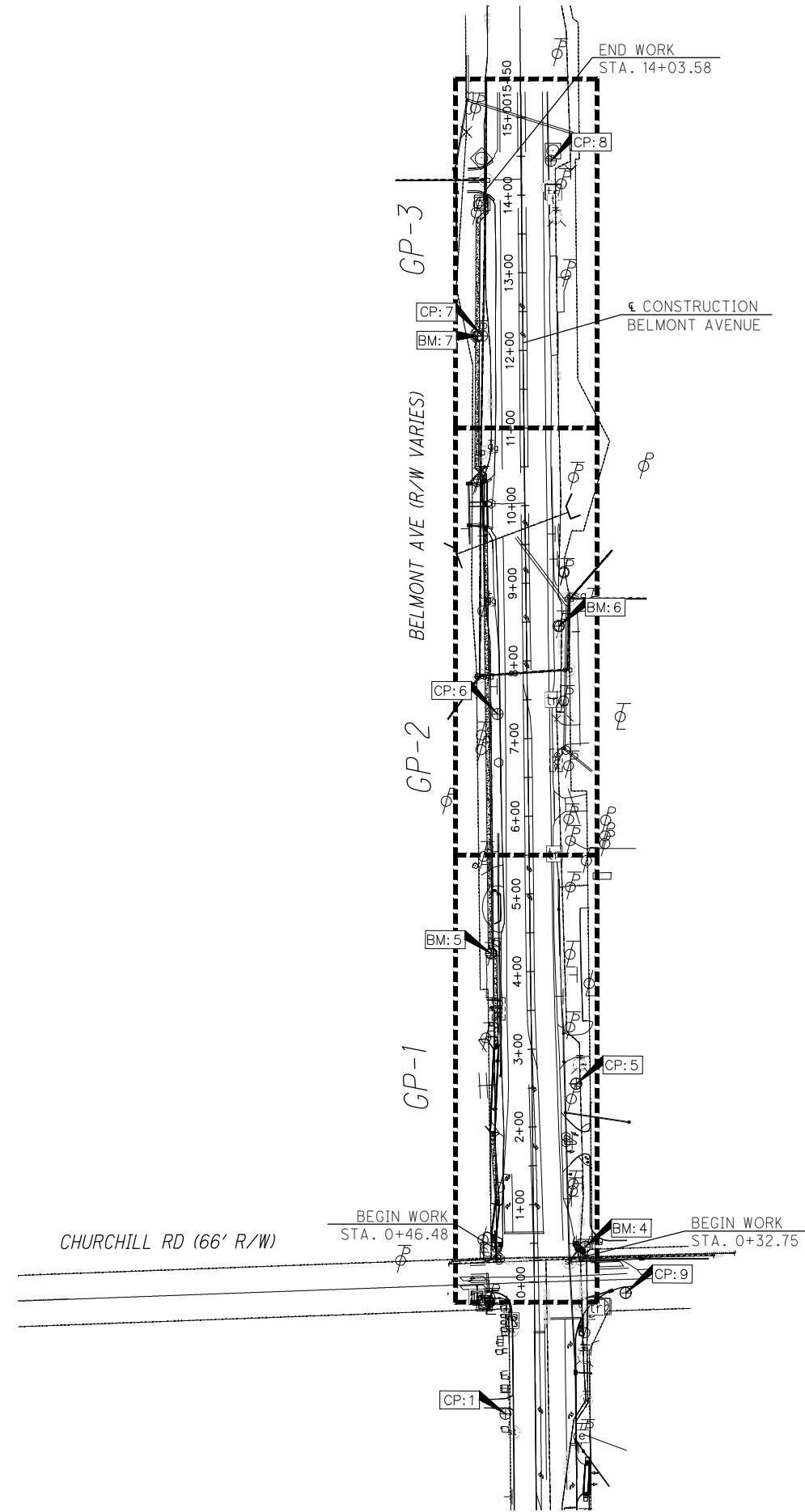
TRUSTEES

ARNIE CLEBONE
GREG CIZMAR
DEVON STANLEY
TRUSTEE
TRUSTEE
TRUSTEE

ENGINEERS SEAL	STANDARD CONSTRUCTION DRAWINGS			SUPPLEMENTAL SPECIFICATIONS																											
	BP-3.1	1-21-22	BP-4.1	7-19-13	BP-5.1	7-15-23	BP-7.1	7-21-23	MT-101.90	7-17-20	MT-105.10	1-17-20	MT-110.10	7-19-13	MGS-1.1	7-16-21	MGS-2.1	1-19-18	MGS-4.1	1-20-17	MGS-4.2	7-19-13	MGS-4.3	1-18-13	800-2023	10-20-23	832	7-21-23	SPECIAL PROVISIONS		NONE
SIGNED: _____																															
DATE: _____																															

Liberty Township
Belmont Avenue Sidewalks
Phase 2

GT-1



CONTROL DATA

TYPICAL CONTROL POINT DESCRIPTION:
5/8" x 30" REBAR GPD RED CAP

- CP:1
N: 550024.04
E: 2473714.56
- CP:5
N: 550448.88
E: 2473805.71
STA. 2+54.60
OFFSET: 54.07' RT. & CONST. BELMONT AVENUE
- CP:6
N: 550925.07
E: 2473704.40
STA. 7+31.61
OFFSET: 38.50' LT. & CONST. BELMONT AVENUE
- CP:7
N: 551412.29
E: 2473684.69
STA. 12+19.41
OFFSET: 52.32' LT. & CONST. BELMONT AVENUE
- CP:8
N: 551637.47
E: 2473773.18
STA. 14+43.68
OFFSET: 38.59' RT. & CONST. BELMONT AVENUE
- CP:9
N: 550179.62
E: 2473869.54

TYPICAL BENCH MARK DESCRIPTION:

- BM:4
ELEV = 1063.22
STA. 0+44.32
OFFSET: 65.73 RT. & CONST. BELMONT AVENUE
DESC: TOP NW BOLT ON SGPOLE
- BM:5
ELEV = 1048.56
STA. 4+23.84
OFFSET: 50.57 LT. & CONST. BELMONT AVENUE
DESC: NAIL IN TPP
- BM:6
ELEV = 1038.61
STA. 8+44.34
OFFSET: 41.73 RT. & CONST. BELMONT AVENUE
DESC: NAIL IN TPP
- BM:7
ELEV = 1044.65
STA. 12+18.86
OFFSET: 58.05 LT. & CONST. BELMONT AVENUE
DESC: NAIL IN TPP

NOTE: ADDITIONAL BENCH MARKS ARE LOCATED OUTSIDE OF PROJECT LIMITS.

NOTE: ADDITIONAL CONTROL POINTS ARE LOCATED OUTSIDE OF PROJECT LIMITS.

GENERAL NOTES

THE CONSTRUCTION ON THIS PROJECT SHALL BE GOVERNED BY THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT) CONSTRUCTION AND MATERIAL SPECIFICATIONS (2023), SUPPLEMENTED BY CONTRACT SPECIFICATION DOCUMENTS WHERE APPLICABLE.

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS CONCERNING THE EXISTING FACILITIES HAVE BEEN OBTAINED FROM DILIGENT FIELD DATA COLLECTION OF THE EXISTING FACILITIES AND DO NOT NECESSARILY REPRESENT AS-BUILT CONDITIONS. THE CONTRACT SHALL BE BASED ON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON AN EXAMINATION OF THE WORKSITE BY THE CONTRACTOR. ALL PROJECT WORK SHALL BE BASED UPON THE ACTUAL DETAILS AND DIMENSIONS PRESENTED ON THESE PLANS AND SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL APPLICABLE SECTIONS OF OSHA STANDARD 29 CFR 1910.146 AND OSHA STANDARD 29 CFR 1926. THE COST OF THIS WORK SHALL BE INCLUDED IN THE ITEM THAT REQUIRED THE WORK.

UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OHIO811.ORG), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

OHIO811.ORG
OGPUPS 1-800-925-0988
ODOT 330-786-3145 MICHELLE CHANEY

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

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

DOMINION ENERGY OHIO
320 SPRINGSIDE DR, STE. 320
AKRON, OHIO 44333
(330) 664-2409
ATTN: BRYAN DAYTON

OHIO EDISON
730 SOUTH AVENUE
YOUNGSTOWN, OHIO 44502
(330) 740-7704
ATTN: MICHAEL BECK

AT&T
50 W BOWERY ST., 6TH FLOOR
AKRON, OHIO 44308
(330) 384-2245
ATTN: RICH WILSON

ZAYO FIBER SOLUTIONS
6650 SOUTH AVENUE
BOARDMAN, OHIO 44512
(769) 216-8095
ATTN: JOHN P. BRUCE

LIBERTY TOWNSHIP
1315 CHURCHILL HUBBARD RD
YOUNGSTOWN, OHIO 44505
(330) 501-6623
ATTN: WAYNE HICKMAN

TRUMBULL COUNTY
SANITARY ENGINEER
842 YOUNGSTOWN-KINGSVILLE RD.
VIENNA, OHIO 44473
(330) 675-7753
ATTN: GARY NEWBROUGH

CITY OF GIRARD
100 W MAIN ST, SE #4
GIRARD, OHIO 44420
(216) 316-6847
ATTN: DENNIS MEEK

ODOT 4 TRAFFIC
2088 S ARLINGTON RD
AKRON, OHIO 44306
(330) 786-2267
ATTN: MICHELLE CHANEY

AT&T
50 W BOWERY ST., 6TH FLOOR
AKRON, OHIO 44308
(330) 384-2245
ATTN: RICH WILSON

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.

ODOT CMS SECTION 104.02

SECTION 104.02 OF THE ODOT CMS DOES NOT APPLY TO THIS PROJECT. THE QUANTITIES LISTED WITHIN THE PROPOSAL ARE FOR ESTIMATING PURPOSES ONLY. THE TOWNSHIP RESERVES THE RIGHT TO ELIMINATE, INCREASE OR DECREASE ANY INDIVIDUAL COMPONENT OF THE PROJECT WITHOUT INVALIDATING THE SUBMITTED PRICES FOR ANY ITEM. THE CONTRACT VALUE WILL BE BASED ON THE ACTUAL WORK PERFORMED AND THE UNIT PRICES SUBMITTED FOR THE INDIVIDUAL ITEMS SELECTED FOR COMPLETION BY THE TOWNSHIP.

ITEM SPECIAL - MISC.: PRECONSTRUCTION VIDEO TAPING

LIBERTY TOWNSHIP SHALL REQUIRE AN AUDIOVISUAL RECORDING OF THE PROJECT LIMITS AND ADJACENT AREAS, ESPECIALLY DRIVEWAY APRONS, MAILBOXES, LANDSCAPING AND APPROACHES PRIOR TO CONSTRUCTION. THE RECORDING SHALL BE DVD FORMAT AND A COPY SHALL BE RETAINED AT THE LIBERTY TOWNSHIP ADMINISTRATION OFFICE. THIS RECORDING SHALL BE MADE IN ACCORDANCE WITH TOWNSHIP SPECIFICATIONS AND SHALL BE PAID FOR AS A LUMP SUM, TO BE COMPLETED TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL, MISC.: PRECONSTRUCTION VIDEO TAPING, LS

PROFILE AND ALIGNMENT

PLACE THE PROPOSED SIDEWALK TO FOLLOW THE ALIGNMENT AND PROFILE AS INDICATED IN THE PLANS. THE HORIZONTAL ALIGNMENT OF THE PROPOSED WALK MUST BE FIELD MARKED PRIOR TO THE START OF CLEARING ON EACH SECTION. THE ENGINEER WILL REVIEW AND APPROVE THE PLACEMENT OF THE WALK PRIOR TO THE START OF CONSTRUCTION FOR THE INDIVIDUAL SEGMENT.

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN

ALL CONTROL POINTS SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE SURVEYOR SHALL RUN AN INDEPENDENT HORIZONTAL AND VERTICAL TRAVERSE THROUGH ALL BENCHMARKS PROVIDED AND PROVIDE A RECORD COPY OF THE FIELD BOOK TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES OR POSSIBLE OMISSIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.

ALL LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN.

TEMPORARY SUPPORT OF UTILITY POLES

THE CONTRACTOR SHALL CONTACT THE OWNER OF ANY UTILITY POLE THAT MAY BE AFFECTED BY THE PROPOSED WORK IN ORDER TO MAKE ARRANGEMENTS WITH THE UTILITY COMPANY TO PROVIDE A FIELD CREW FOR TEMPORARILY SUPPORTING UTILITY POLES DURING THE CONSTRUCTION OF THE PROPOSED WORK. PAYMENT FOR THE ABOVE STATED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 608, 609, OR 611 ITEM.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

THIS ITEM IS PROVIDED FOR ANY TREE OR STUMP REMOVAL WITHIN THE LIMITS OF THE PROJECT. A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING, AS PER PLAN. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN.

ITEM 209 - LINEAR GRADING, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF CMS 209, THE CONTRACTOR SHALL PERFORM THE GRADING, INCLUDING ALL PROJECT EXCAVATION AND EMBANKMENT CONSTRUCTION FOR SIDEWALK, CURB RAMPS, CURB AND DRIVE CONSTRUCTION REGARDLESS OF THE MATERIAL ENCOUNTERED IN ACCORDANCE WITH THE TYPICAL SECTIONS AND DETAILS. THE CONTRACTOR SHALL PROVIDE FOR POSITIVE DRAINAGE TO CATCH BASINS AND OPEN CONDUIT.

THIS ITEM INCLUDES GRADING THE AREAS TO BE SEADED MADE NECESSARY BY THE REMOVAL OF EXISTING WALK, CONSTRUCTION OF THE NEW WALK, DRIVE ADJUSTMENTS, CURB AND NEW CURB RAMPS.

ALSO INCLUDED IN THIS PAY ITEM IS SEEDING AND MULCHING, COMMERCIAL FERTILIZER, LIME, 4" TOPSOIL AND WATER PER ODOT CMS 659, EXCAVATION AND EMBANKMENT PER ODOT CMS 203, AND ANY NECESSARY ADDITIONAL EMBANKMENT NEEDED TO BE USED IN ORDER TO MEET SURROUNDING EXISTING GRADE. ALL MATERIAL USED FOR EMBANKMENT PURPOSES SHALL CONFORM TO 703.16-C OF THE 2023 ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS.

EXACT LIMITS OF GRADING SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 209 LINEAR GRADING, AS PER PLAN. PAYMENT SHALL BE MADE BASED ON LENGTH (STATION = 100 FEET) AS MEASURED ALONG THE LENGTH OF THE PROPOSED WALK WHICH INCLUDES WORK ON BOTH SIDES (FRONT/CURB AND BACK/RW) OF THE WALK ALONG THE LENGTH OF THE WALK. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 209 - LINEAR GRADING, AS PER PLAN

15 STATION

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE B, AS PER PLAN

ALL GUARDRAIL AND ASSEMBLY PARTS MUST BE APPROVED BY THE ENGINEER AND SHALL MEET ODOT CMS REQUIREMENTS. ALL OTHER REQUIREMENTS OF SECTION 606 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS AND APPLICABLE STANDARD DRAWINGS SHALL STILL APPLY.

ADDITIONALLY, ALL NECESSARY WORK FOR GUARDRAIL AND POST REMOVAL, AND INSTALLATION OF THE PROPOSED ANCHOR ASSEMBLY AND ROUNDED END SECTION SHALL BE INCLUDED IN THE COST OF THE ANCHOR ASSEMBLY.

ALL WORK DESCRIBED ABOVE, INCLUDING LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 606 - ANCHOR ASSEMBLY, TYPE B, AS PER PLAN.

ITEM 608 - CURB RAMP, AS PER PLAN

ALL TRUNCATED DOME INSERTS MUST BE APPROVED BY THE ENGINEER AND SHALL MEET ODOT CMS REQUIREMENTS. ALL OTHER REQUIREMENTS OF SECTION 608 OF THE CONSTRUCTION AND MATERIALS SPECIFICATIONS AND APPLICABLE STANDARD DRAWINGS SHALL STILL APPLY.

ADDITIONALLY, ALL NECESSARY SAWCUTTING, EXCAVATION, AGGREGATE/CONCRETE BASE, CURB REMOVAL, ASPHALT PAVEMENT, CONCRETE CURB, STAKING, CONCRETE WALK, AND BACKFILL SHALL BE INCLUDED IN THE COST OF THE CURB RAMP. PAVEMENT AND CURB REPLACED SHALL BE PER ODOT CMS 2023 SPECIFICATIONS AND TO A COMPOSITION EQUAL TO OR BETTER THAN THE REMOVED PAVEMENT AND CURB.

ALL WORK DESCRIBED ABOVE, INCLUDING LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 608 - CURB RAMP, AS PER PLAN.

ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND REERCTION, AS PER PLAN

THE CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING GROUND MOUNTED SIGNS AND POST SUPPORTS INDICATED IN THE PLANS WITHOUT DAMAGE TO THE SIGNS OR POST SUPPORTS. THE SIGNS AND POST SUPPORTS SHALL BE REERECTED AT A LOCATION AS DIRECTED BY THE ENGINEER.

ALL WORK DESCRIBED ABOVE, INCLUDING LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 608 - REMOVAL OF GROUND MOUNTED SIGN AND REERCTION, AS PER PLAN.

ADA WAIVERS

AN APPROVED ADA DESIGN WAIVER IS REQUIRED ON THIS PROJECT. THE FOLLOWING FEATURES CANNOT FEASIBLY BE CONSTRUCTED TO MEET ADA GUIDELINES.

ADA DESIGN WAIVER

ADA FEATURE	APPROVAL DATE	SHEET NUMBERS
CR-6	MM/DD/YYYY	CR-2

ENVIRONMENTAL PLAN NOTES:

BEST MANAGEMENT PRACTICES - SOIL EROSION AND SEDIMENTATION CONTROL

WATER COLUMN AND SEDIMENTATION IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BEST MANAGEMENT PRACTICES FOR SOIL EROSION AND SEDIMENTATION CONTROL. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE AREA IS STABILIZED AS ACCEPTED BY THE ENGINEER. THESE SHALL COMPLY WITH ODOT'S HANDBOOK FOR SEDIMENT AND EROSION CONTROL, WHICH MAY BE FOUND AT: [HTTP://WWW.DOT.STATE.OH.US/DRRC](http://WWW.DOT.STATE.OH.US/DRRC)

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY BE PARKED IN AREAS ALONG THE HIGHWAY WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY. OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG THE HIGHWAY, THE EQUIPMENT SHALL BE PLACED AND DELINEATED AS PER 614.03. NO EQUIPMENT SHALL BE PARKED IN THE MEDIAN OF THE HIGHWAY. ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORED AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER / SUPERVISOR HAS BEEN GRANTED.

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, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00 P.M. AND 7:00 A.M. IN ADDITION, 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.

EXISTING SERVICE NOTE

THE CONTRACTOR SHALL CONSIDER THAT EACH HOUSE/BUSINESS ALONG THE PROPOSED SIDEWALK ALIGNMENT WILL HAVE UNDERGROUND UTILITY SERVICES INCLUDING GAS, WATER, SANITARY, ROOF DRAINS, SUMP DRAINS, STORM INLETS, ELECTRIC, TELEPHONE AND CABLE. ANY ADDITIONAL WORK REQUIRED TO EXPOSE THESE UTILITIES AND INSTALL THE SIDEWALK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPLICABLE ITEMS.

ADVANCED NOTICE TO PROCEED

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE TOWNSHIP A DETAILED SCHEDULE 15 DAYS PRIOR TO THE START OF CONSTRUCTION, ON HOW THEY PROPOSE TO PROSECUTE THE CONSTRUCTION OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OR PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

COMMERCIAL/RESIDENTIAL NOTIFICATION

THE CONTRACTOR SHALL SUBMIT A WRITTEN NOTIFICATION TO BE REVIEWED BY THE ENGINEER PRIOR TO DELIVERY TO ANY RESIDENTS/BUSINESSES THAT WILL BE AFFECTED BY THE CONSTRUCTION ACTIVITY. COORDINATION WITH OWNER WILL BE REQUIRED DURING CONSTRUCTION IN ORDER TO MAINTAIN ACCESS TO DRIVES.

NOTIFICATION AND CONTACTS

THE CONTRACTOR SHALL NOTIFY 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.

1. LIBERTY TOWNSHIP
1315 CHURCHILL HUBBARD ROAD
YOUNGSTOWN, OHIO 44505
PHONE: (330) 501-6623
ATTENTION: WAYNE HICKMAN

5. LIBERTY BOARD OF EDUCATION OFFICE
4115 SHADY ROAD
YOUNGSTOWN, OHIO 44505
PHONE: (330) 759-0807

2. LIBERTY TOWNSHIP POLICE DEPARTMENT
1315 CHURCHILL HUBBARD ROAD
YOUNGSTOWN, OHIO 44505
PHONE: (330) 759-1315

6. OHIO STATE HIGHWAY PATROL
CANFIELD PATROL POST
500 SOUTH BROAD STREET
CANFIELD, OHIO 44406

3. TRUMBULL COUNTY SHERIFF'S OFFICE
150 HIGH STREET
WARREN, OHIO 44481
PHONE: (330) 675-2508
PHONE: (330) 533-6866

7. OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT 4
2088 S. ARLINGTON ROAD
AKRON, OHIO 44306
PHONE: (330) 786-2267
ATTENTION: MICHELLE CHANEY

4. LIBERTY TOWNSHIP FIRE DEPARTMENT
4001 LOGAN WAY
YOUNGSTOWN, OHIO 44505
PHONE: (330) 759-1315

8. TRUMBULL COUNTY ENGINEERS OFFICE
650 NORTH RIVER ROAD
WARREN, OHIO 44483
PHONE: (330) 675-2640

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

ITEM 614 - MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF THE WEEK	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00PM FRIDAY THROUGH 6:00AM MONDAY
MONDAY	12:00PM FRIDAY THROUGH 6:00AM TUESDAY
TUESDAY	12:00PM MONDAY THROUGH 6:00AM WEDNESDAY
WEDNESDAY	12:00PM TUESDAY THROUGH 6:00AM THURSDAY
THURSDAY	12:00PM WEDNESDAY THROUGH 6:00AM MONDAY
FRIDAY	12:00PM THURSDAY THROUGH 6:00AM MONDAY
SATURDAY	12:00PM FRIDAY THROUGH 6:00AM MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY-WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA-WIDE.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN ACCORDANCE WITH CMS 108.07 FOR EACH CALENDAR DAY THE ABOVE RESTRICTION IS VIOLATED.

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 TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING WORK HOURS. THE CONTRACTOR SHALL PROVIDE BARRIERS AND FLAGGERS TO MAINTAIN A MINIMUM OF ONE-LANE, TWO DIRECTION TRAFFIC DURING WORK HOURS. A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE OPENED TO TRAFFIC UPON THE COMPLETION OF WORK EACH DAY.
2. 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.
3. 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.
4. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS ONE (1) MILE URBAN.

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, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

WEIGHTED CHANNELIZERS

THE WEIGHTED CHANNELIZER SHALL BE PREDOMINATELY ORANGE IN COLOR AND SHALL BE MADE OF A LIGHTWEIGHT, FLEXIBLE AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A "HANDLE" OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42 INCH MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 6 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NON-RETROREFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

ON FREEWAYS AND MULTILANE HIGHWAYS:

USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION, GENERALLY TWELVE HOURS OR LESS, FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK WITHIN THE ABOVE NOTED TIME PERIOD, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE "TANGENT AREA." THE "TANGENT AREA" IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS.

ON OTHER HIGHWAYS:

THERE ARE NO DURATIONS OF WORK RESTRICTIONS FOR USE OF WEIGHTED CHANNELIZERS ON ALL OTHER TYPES OF HIGHWAYS, DAY OR NIGHT. ON THESE ROADWAYS THE WEIGHTED CHANNELIZER MAY BE USED IN THE TRANSITION TAPERS AS WELL AS IN THE TANGENT AREAS, DAY OR NIGHT.

MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FEET.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

LEGEND

EXISTING

— — — PROPERTY LINE

— — — CENTER LINE

— EX R/W — RIGHT-OF-WAY LINE

□ EXISTING CATCH BASIN

□ EXISTING CURB INLET

○ EXISTING FIRE HYDRANT

○ EXISTING WATER GATE VALVE

○ EXISTING POWER POLE

○ EXISTING LIGHT POLE

○ EXISTING TELEPHONE POLE

○ EXISTING GUY ANCHOR

○ EXISTING GAS VALVE

○ EXISTING GAS METER

===== EXISTING STORM SEWER

==SAN== EXISTING SANITARY SEWER

—W— EXISTING WATER SERVICE

—G— EXISTING GAS SERVICE

—T— EXISTING TELEPHONE SERVICE

(SA) EXISTING SANITARY MANHOLE

— EXISTING SIGNAGE

○ EXISTING POST

□ EXISTING MAILBOX

○ EXISTING TREE/STUMP

----00---- EXISTING CONTOUR

⊕ X:# CONTROL POINT/BENCHMARK

PROPOSED

✗ STUMP REMOVAL

✗ TREE REMOVAL

BALLOON ABBREVIATION LEGEND

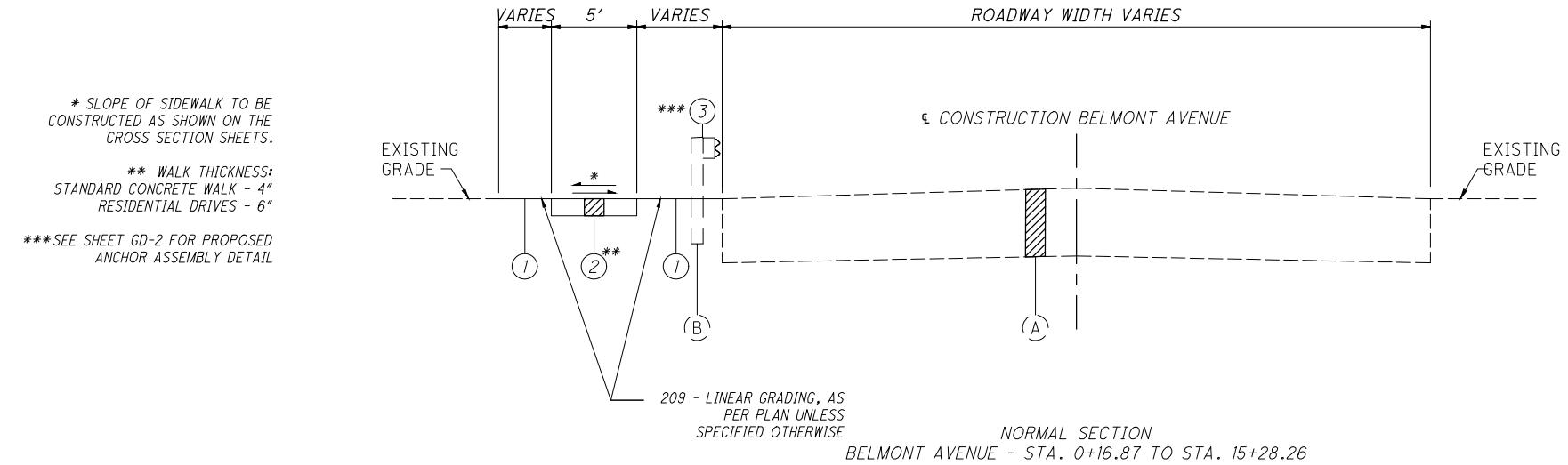
D-# STRUCTURE

CW-# CROSSWALK

SW-# SIDEWALK

CR-# CURB RAMP

S-# SIGNAGE



PROPOSED LEGEND (BASE BID)

- (1) ITEM 209 - LINEAR GRADING, AS PER PLAN
- (2) ITEM 608 - 4" OR 6" CONCRETE WALK
- (3) ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE B, AS PER PLAN

EXISTING LEGEND

- (A) EXISTING ASPHALT CONCRETE ROADWAY
- (B) EXISTING GUARDRAIL

SHEET NUMBERS							ITEM	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	GN-1		GN-2		GD-2		GS-1				
										ROADWAY	
LS								201	LS	CLEARING AND GRUBBING, AS PER PLAN	GN-1
					61			203	61	CY	EXCAVATION
					152			203	152	CY	EMBANKMENT
15								209	15	STA	LINEAR GRADING, AS PER PLAN
				2				606	2	EACH	ANCHOR ASSEMBLY, MCS TYPE B, AS PER PLAN
					5,140			608	5,140	SF	4" CONCRETE WALK
					325			608	325	SF	6" CONCRETE WALK
					629			608	629	SF	CURB RAMP, AS PER PLAN
											GN-1
										EROSION CONTROL	
								832	1,000	EACH	EROSION CONTROL
					2			630	2	EACH	TRAFFIC CONTROL
					392			644	392	FT	REMOVAL OF GROUND MOUNTED SIGN AND REERCTION, AS PER PLAN
											GN-1
										CROSSWALK LINE	
										INCIDENTALS	
LS								SPEC	LS		PREMIUMS ON INSURANCE, PERMITS AND BONDS
		LS						SPEC	LS		PRECONSTRUCTION VIDEO TAPING, AS PER PLAN
								614	LS		MAINTAINING TRAFFIC
LS								623	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN
								624	LS		MOBILIZATION
											GN-1

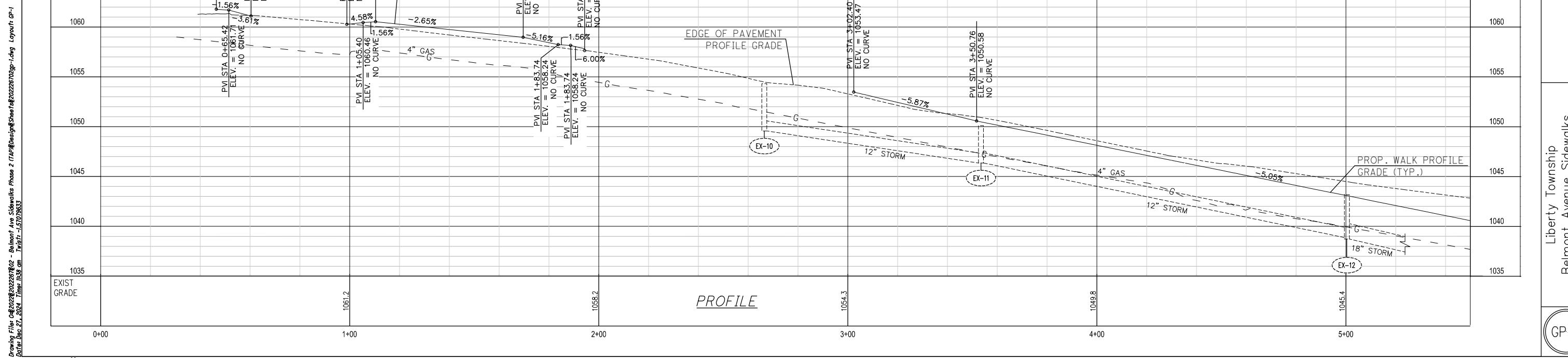
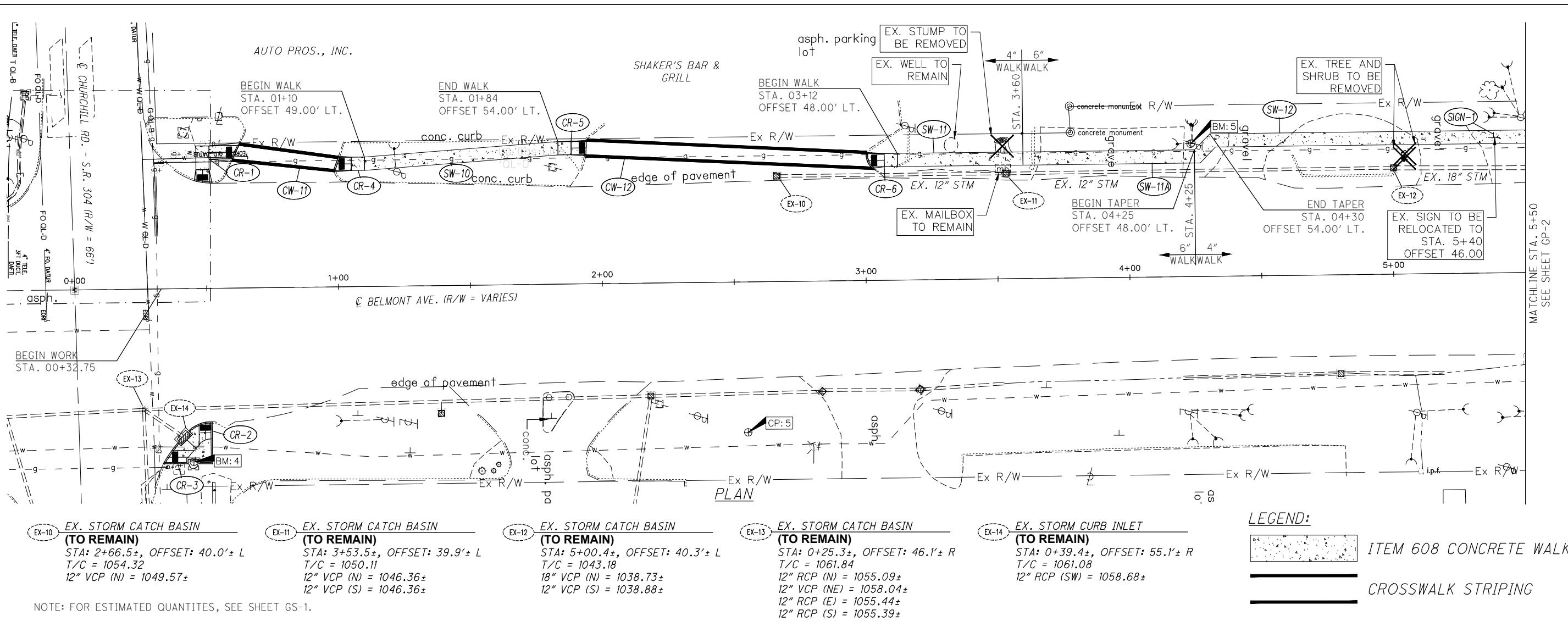
REF. NO.	SHT. NO.	MAIN ROUTE	INTERSECTION	STATION	SIDE	LENGTH	AVG. WIDTH	AUTOCAD AREA	608	608	608	630	644	CROSSWALK LINE
									FT	FT	SF	SF	SF	
CR-2	GP-1	BELMONT AVE.	CHURCHILL RD.	00+46.48	RT.				64			64		
CR-3	GP-1	BELMONT AVE.	CHURCHILL RD.	00+41.77	RT.				64			64		
CR-1	GP-1	BELMONT AVE.	CHURCHILL RD.	00+46.48	LT.	24.0	5.6	134			134.3			
CW-11	GP-1	BELMONT AVE.	AUTO PROS., INC.	00+59.95	01+00.58	LT.							77	
CR-4	GP-1	BELMONT AVE.	AUTO PROS., INC.	00+98.95	LT.	10.9	5.3	58			58			
SW-10	GP-1	BELMONT AVE.		01+10.00	01+84.00	LT.	74	5	368	368				
CR-5	GP-1	BELMONT AVE.	SHAKER'S BAR & GRILL	1+83.78	LT.	10.7	5.3	57			57			
CW-12	GP-1	BELMONT AVE.	SHAKER'S BAR & GRILL	01+94.28	03+03.77	LT.						215		
CR-6	GP-1	BELMONT AVE.	SHAKER'S BAR & GRILL	03+00.61	LT.	11.5	5.2	60			60			
SW-11	GP-1	BELMONT AVE.		03+12.00	03+60.00	LT.	48.0	5	240	240				
SW-11A	GP-1	BELMONT AVE.		03+60.00	04+25.00	LT.	65.0	5	325	325				
SW-12	GP-1/GP-2	BELMONT AVE.		04+25.00	09+63.00	LT.	540.0	5	2700	2700				
SIGN 1	GP-1	BELMONT AVE.		05+38.44	LT.						1			
SIGN 2	GP-2	BELMONT AVE.	CHURCHILL GIANT EAGLE	09+61.57	LT.						1			
CR-7	GP-2	BELMONT AVE.	CHURCHILL GIANT EAGLE	09+62.99	LT.	10.8	5.3	57			57			
CW-20	GP-2	BELMONT AVE.	CHURCHILL GIANT EAGLE	09+72.63	09+99.64	LT.						52		
CR-8	GP-2	BELMONT AVE.	CHURCHILL GIANT EAGLE	09+99.64	LT.	6.1	5	31			31			
CW-21	GP-2	BELMONT AVE.	CHURCHILL GIANT EAGLE	10+05.67	10+30.92	LT.						48		
CR-9	GP-2	BELMONT AVE.	CHURCHILL GIANT EAGLE	10+28.95	LT.	10.2	5	51			51			
SW-20	GP-2/GP-3	BELMONT AVE.		10+39.00	13+96.37	LT.	366.4	5	1832	1832				
CR-10	GP-3	BELMONT AVE.	CHURCHILL GIANT EAGLE	13+96.37	LT.	9.9	5.3	53			53			
SUBTOTALS CARRIED TO GENERAL SUMMARY									5140	325	629	2	392	

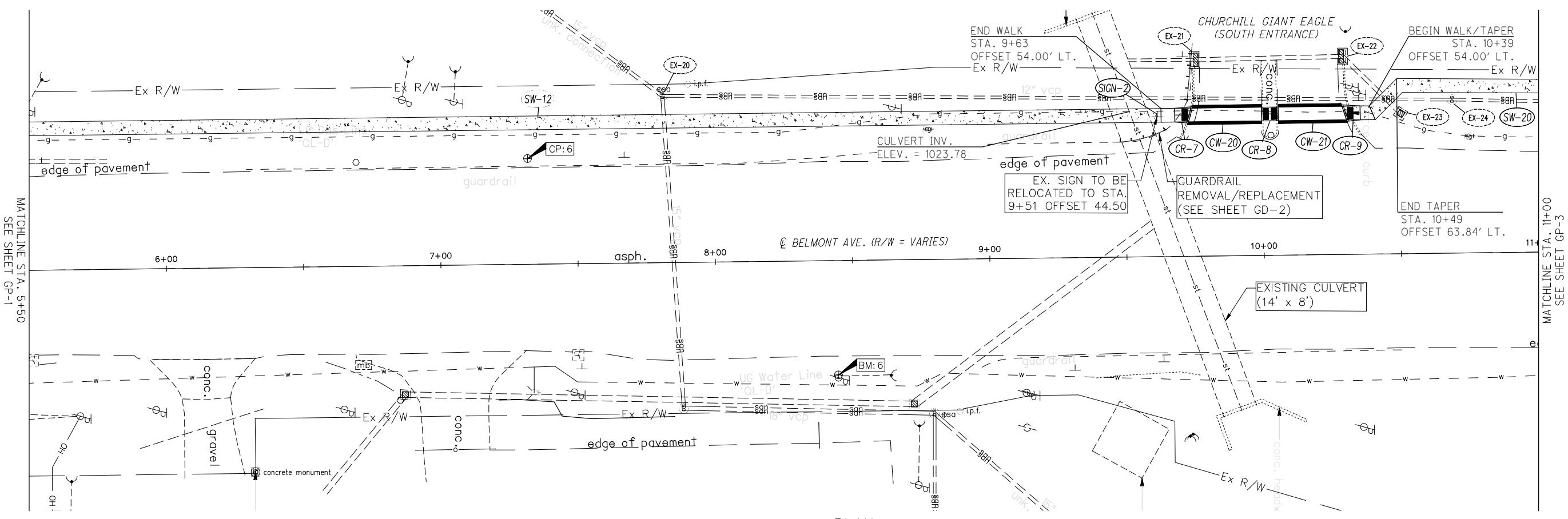
SEE SHEETS CR-1 THRU CR-10 FOR CURB RAMP DIMENSIONS AND DETAILS

SHT. NO.

	203	203	203	203
	EXCAVATION (CROSS SECTION SHEET LEFT COLUMN)	EXCAVATION (CROSS SECTION SHEET RIGHT COLUMN)	EMBANKMENT (CROSS SECTION SHEET LEFT COLUMN)	EMBANKMENT (CROSS SECTION SHEET RIGHT COLUMN)
	CY	CY	CY	CY
XS-1	4	3	2	2
XS-2	5	7	3	9
XS-3	8	4	44	13
XS-4	12	18	58	21
SUBTOTALS		29	32	107
TOTALS CARRIED TO GENERAL SUMMARY		61		152

GS-1	Liberty Township Belmont Avenue Sidewalks Phase 2	Calculated NDS Checked CJT





PLAN

EX. SANITARY MANHOLE
(TO REMAIN)
STA: 7+81.4±, OFFSET: 60.7'± L
T/C = 1030.50
12" VCP (N) = 1015.90±
15" VCP (E) = 1017.70±
15" VCP (SW) = 1014.90±

EX. STORM CURB INLET
(TO REMAIN)
STA: 10+29.4±, OFFSET: 72.1'± L
T/C = 1036.08
18" CPP (NE) = 1032.48±
18" CPP (S) = 1032.48±

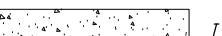
EX. SANITARY MANHOLE
(TO REMAIN)
STA: 10+69.1±, OFFSET: 55.9'± L
T/C = 1037.99
12" VPP (N) = 1023.69±
12" VPP (S) = 1021.64±

EX. STORM CURB INLET
(TO REMAIN)
STA: 9+75.3±, OFFSET: 71.6'± L
T/C = 1036.02
18" CPP (N) = 1032.12±
18" CPP (SW) = 1032.02±

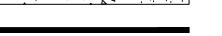
EX. STORM CATCH BASIN
(TO REMAIN)
STA: 10+50.0±, OFFSET: 51.3'± L
T/C = 1033.40
18" CPP (SW) = 1033.40±

NOTE: FOR ESTIMATED QUANTITIES, SEE SHEET GS-1.

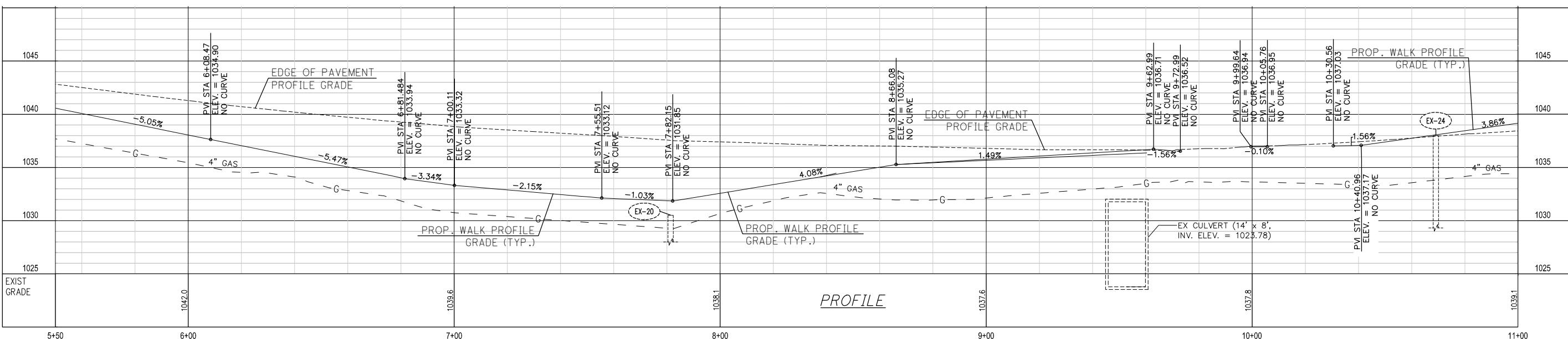
LEGEND:



ITEM 608 CONCRETE WALK



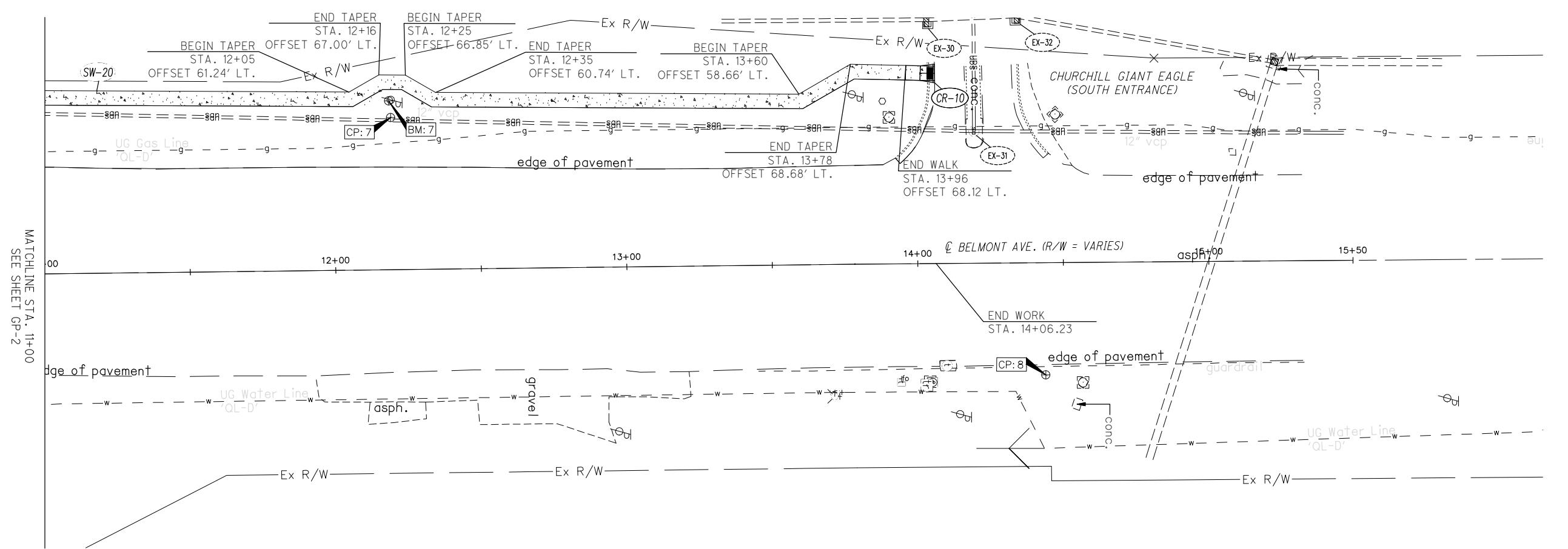
CROSSWALK STRIPING



PROFILE



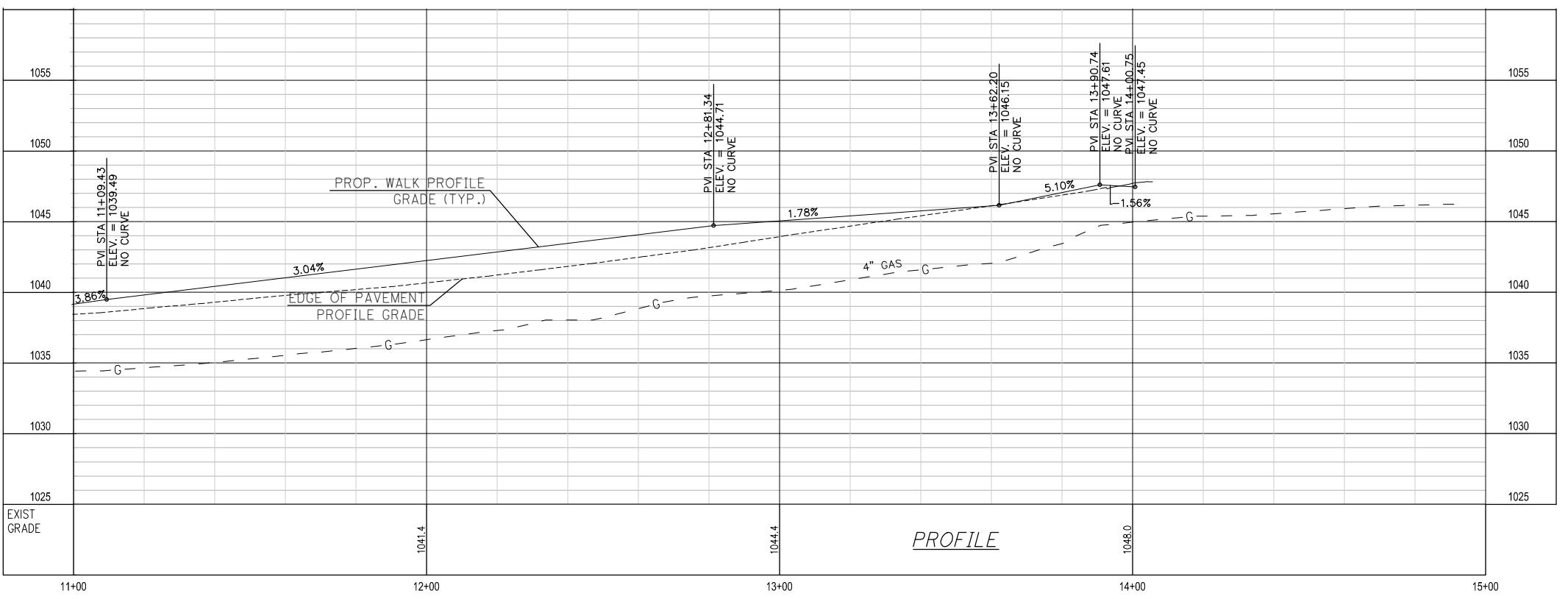
Horizontal Scale in feet
0 20 40
Calculated NDS Checked Cut



EX. STORM CATCH BASIN (TO REMAIN)	EX. SANITARY MANHOLE (TO REMAIN)	EX. STORM CATCH BASIN (TO REMAIN)
STA: 14+04.1 \pm , OFFSET: 83.8' \pm L	STA: 14+19.6 \pm , OFFSET: 45.4' \pm L	STA: 14+34.1 \pm , OFFSET: 84.8' \pm L
T/C = 1047.22	T/C = 1048.89	T/C = 1047.22
15" CPP (N) = 1042.92 \pm	12" VCP (N) = 1038.89 \pm	15" CPP (N) = 1042.37 \pm
15" CPP (S) = 1042.92 \pm	12" VCP (S) = 1037.69 \pm	15" CPP (S) = 1042.72 \pm
	12" VCP (W) = 1037.74 \pm	

PLAN

NOTE: FOR ESTIMATED QUANTITIES, SEE SHEET GS-1.



PROFIL

ITEM 608 CONCRETE WALK

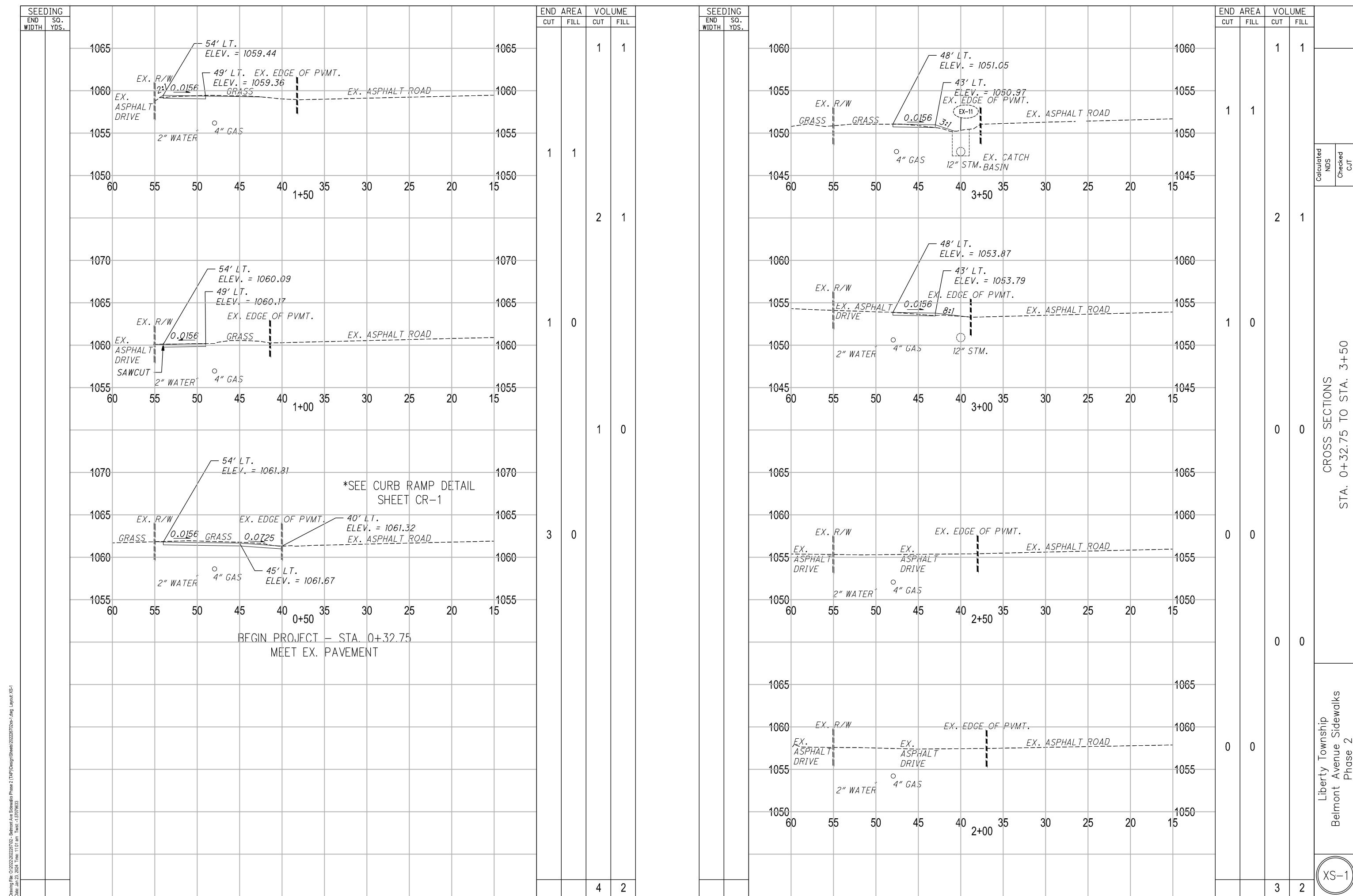
ROSSWALK STRIPING

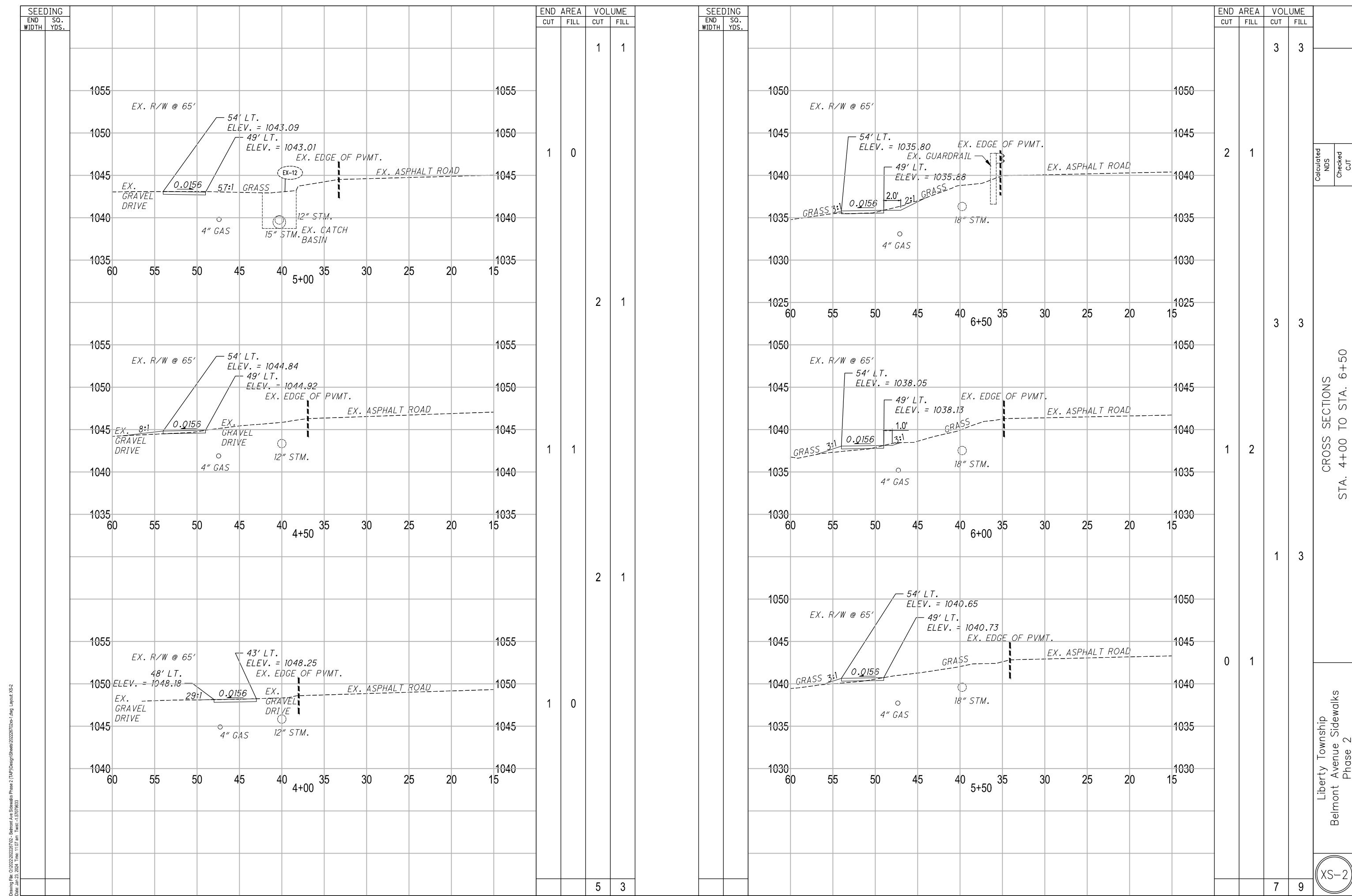
Liberty Township Belmont Avenue Sidewalks Phase 2

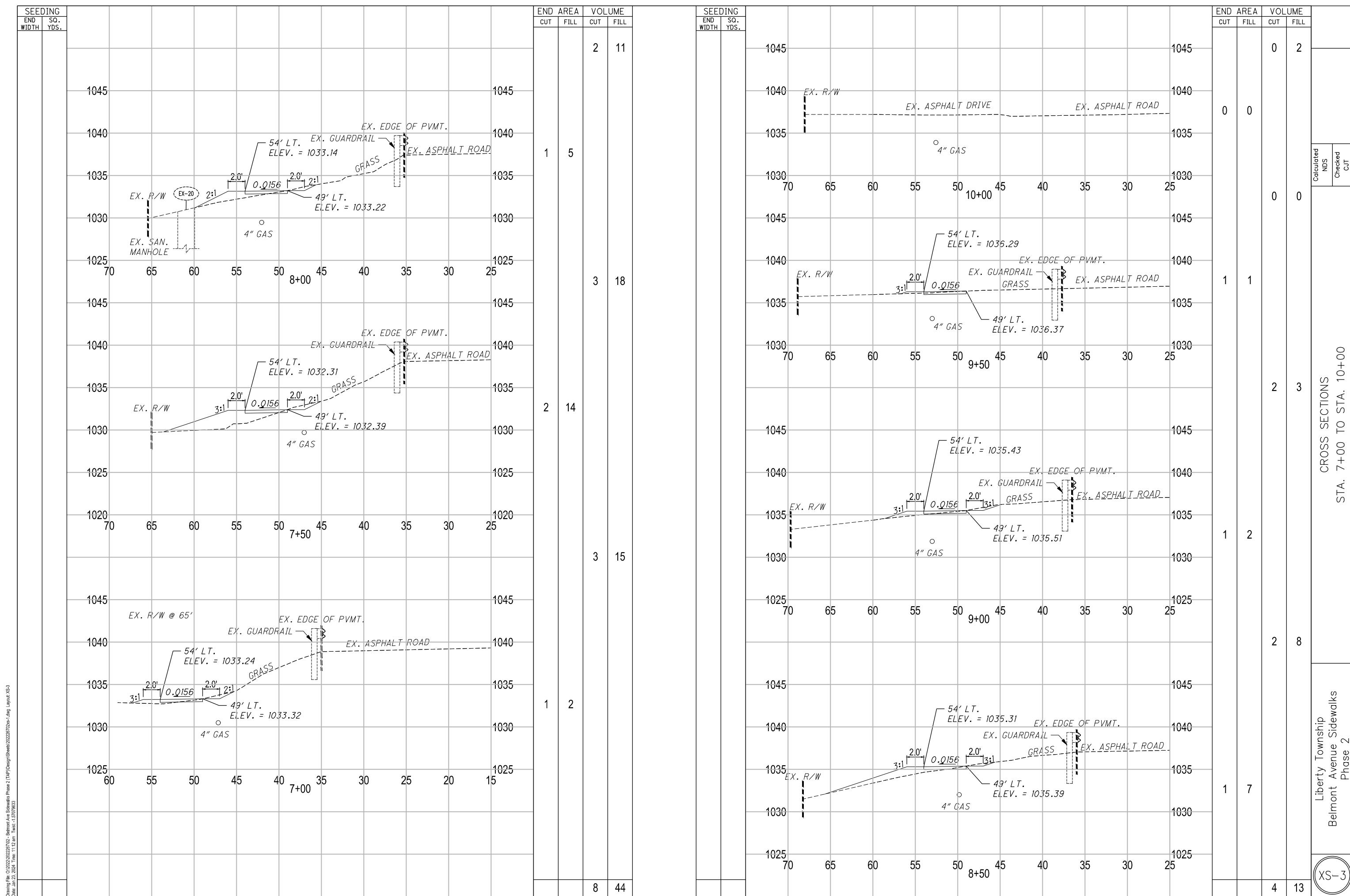
Plan and Profile

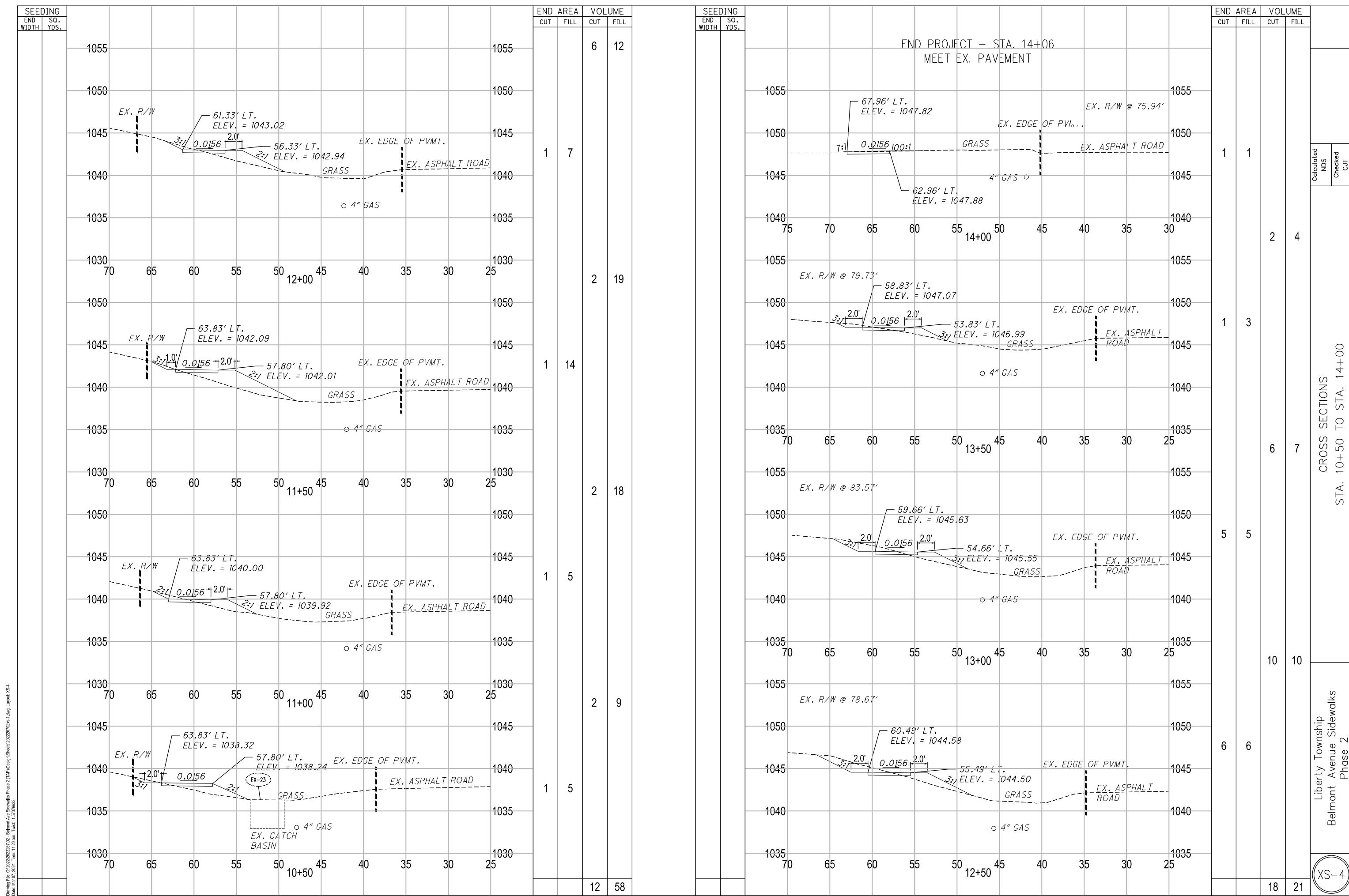
Plan and Profile

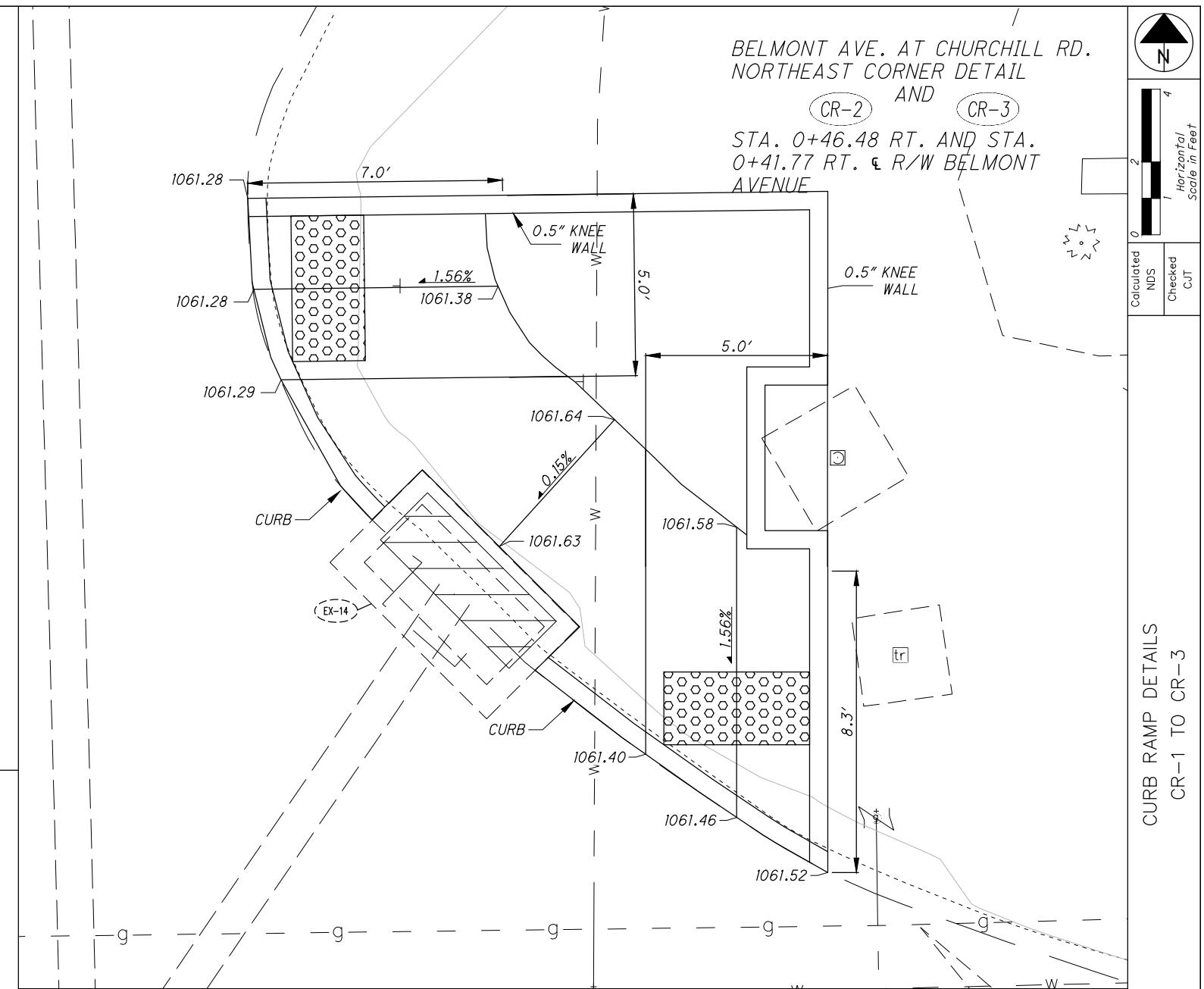
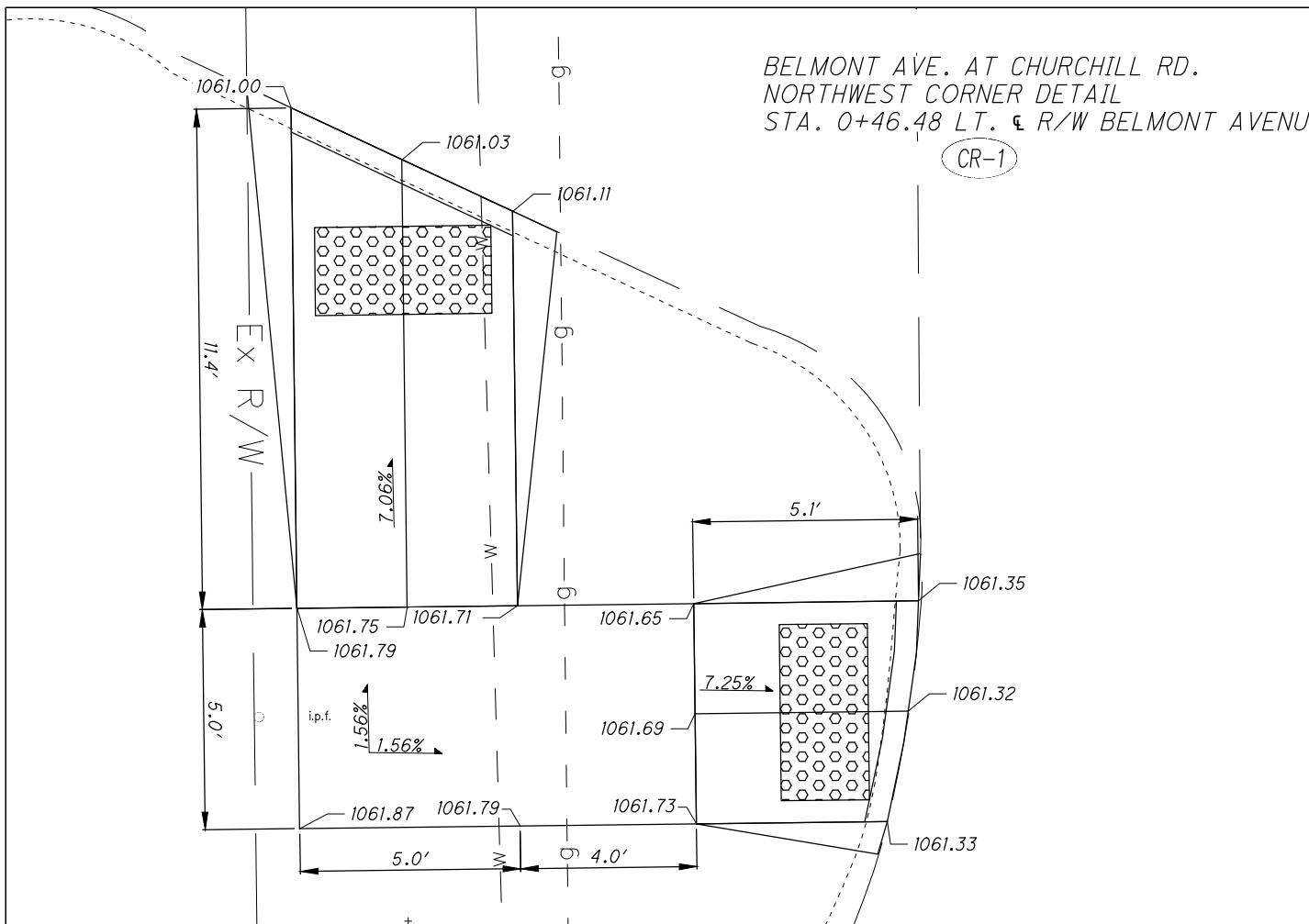
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Date: Dec 27, 2024 Times: 11:39 am Twifit: 1-57079633









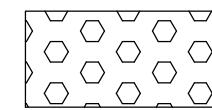


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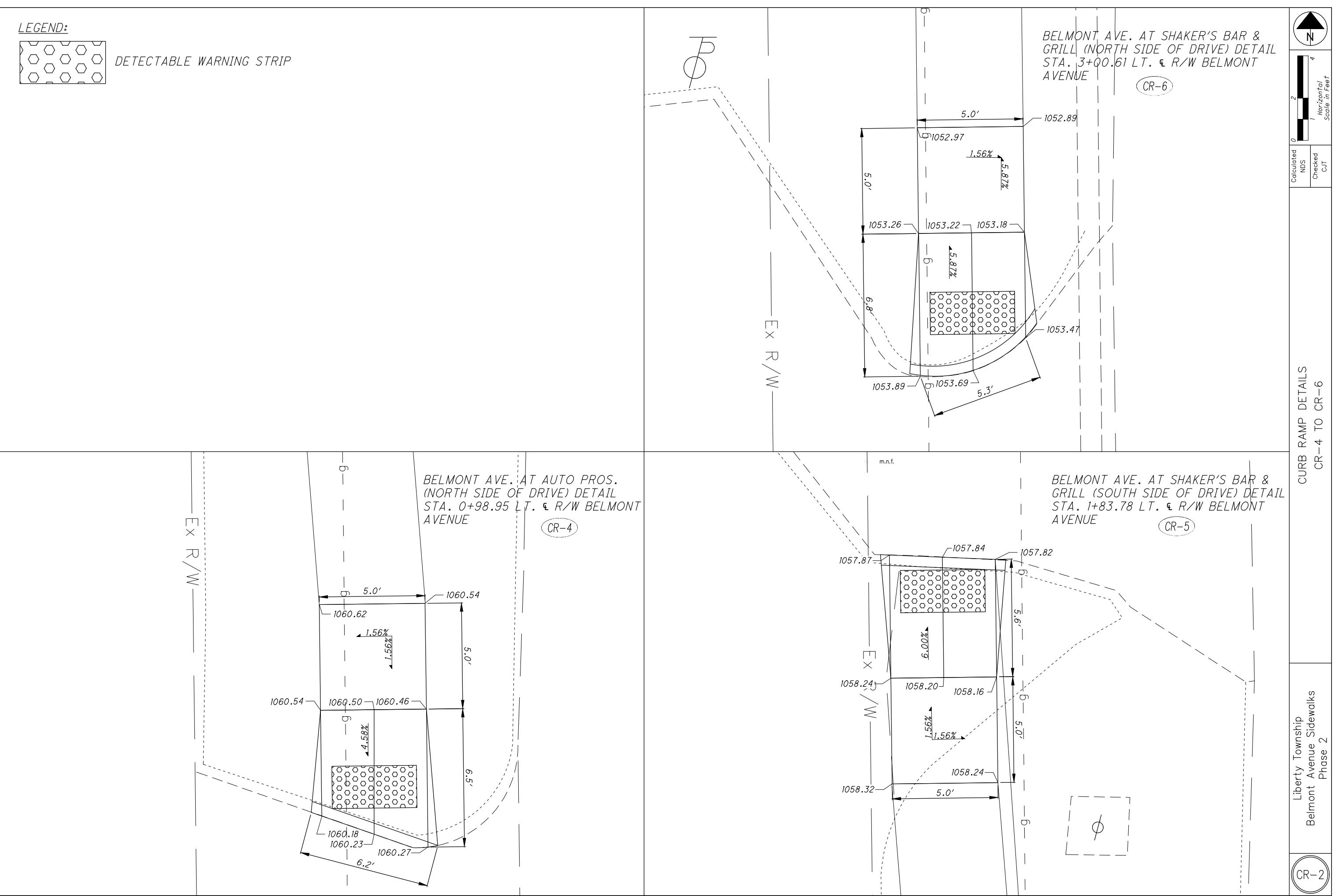
Technician: *nshaffer*

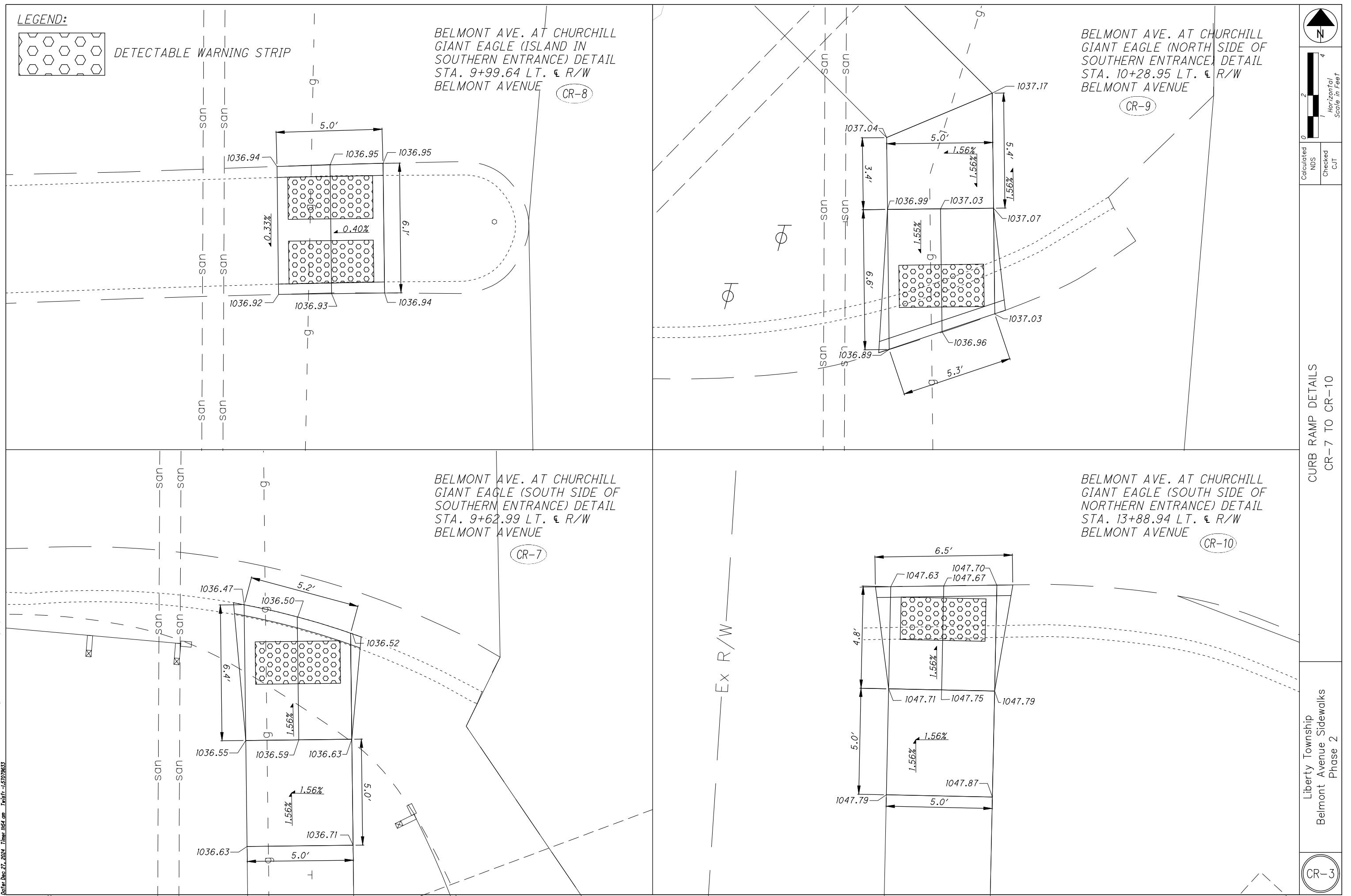
www.wwf.org

LEGEND:



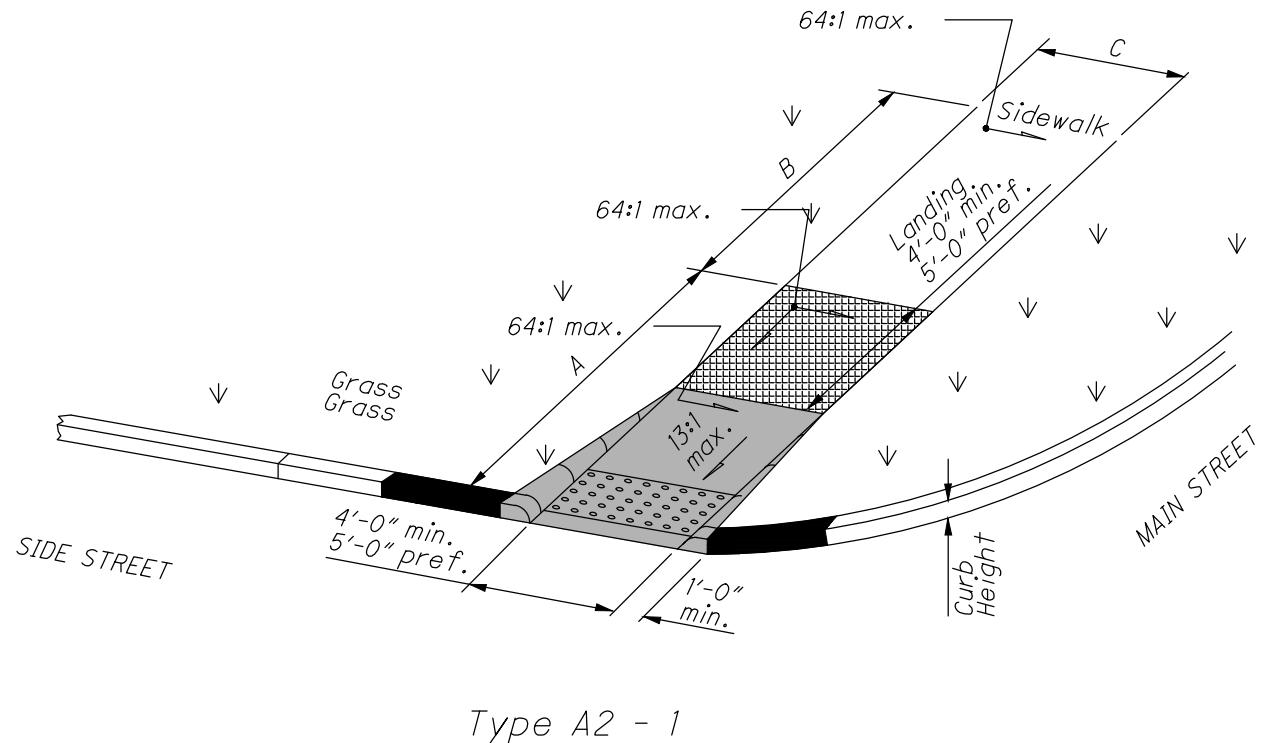
DETECTABLE WARNING STRIP





CURB RAMP REF. NO.	MAIN ROUTE	INTERSECTION ROUTE	SHEET NO.	CURB RAMP TYPE
CR-1	BELMONT AVENUE - STA. 0+46.48 LT.	CHURCHILL ROAD	CR-1	A2/C2
CR-2	BELMONT AVENUE - STA. 0+46.48 RT.	CHURCHILL ROAD	CR-1	A1/C1
CR-3	BELMONT AVENUE - STA. 0+41.77 RT.	CHURCHILL ROAD	CR-1	A1/C1
CR-4	BELMONT AVENUE - STA. 0+98.95 LT.	AUTO PROS. DRIVE	CR-2	A2-1
CR-5	BELMONT AVENUE - STA. 1+83.78 LT.	SHAKER'S BAR & GRILL DRIVE	CR-2	A2-1
CR-6	BELMONT AVENUE - STA. 3+00.61 LT.	SHAKER'S BAR & GRILL DRIVE	CR-2	A2-1
CR-7	BELMONT AVENUE - STA. 9+62.99 LT.	CHURCHILL GIANT EAGLE DRIVE	CR-3	A2-1
CR-8	BELMONT AVENUE - STA. 9+99.64 LT.	CHURCHILL GIANT EAGLE DRIVE	CR-3	A2-1
CR-9	BELMONT AVENUE - STA. 10+28.95 LT.	CHURCHILL GIANT EAGLE DRIVE	CR-3	A2-1
CR-10	BELMONT AVENUE - STA. 13+88.94 LT.	CHURCHILL GIANT EAGLE DRIVE	CR-3	A2-1

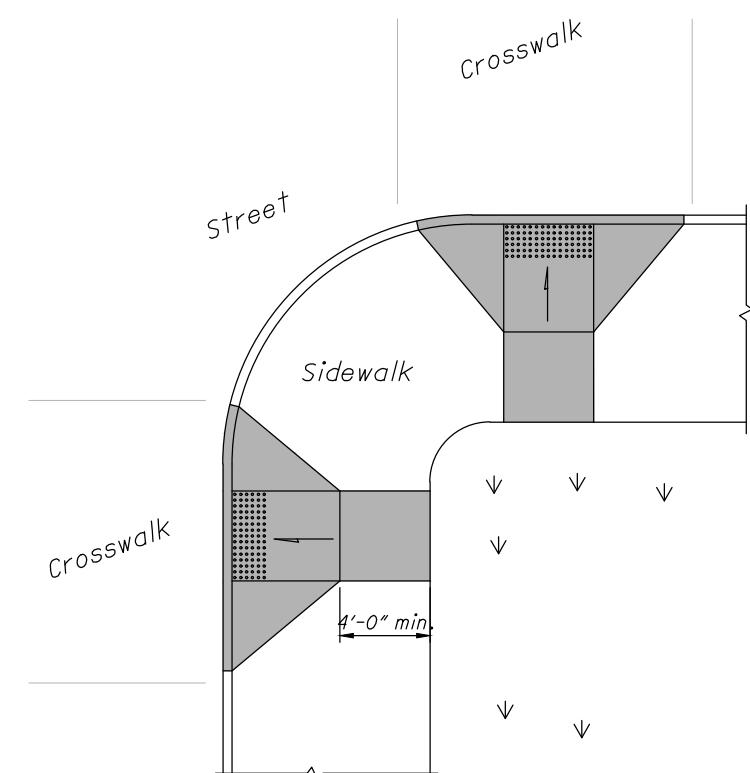
* ALIGN TRUNCATED DOMES WITH THE PRIMARY DIRECTION OF THE RAMP FOR SKEWED CONDITIONS



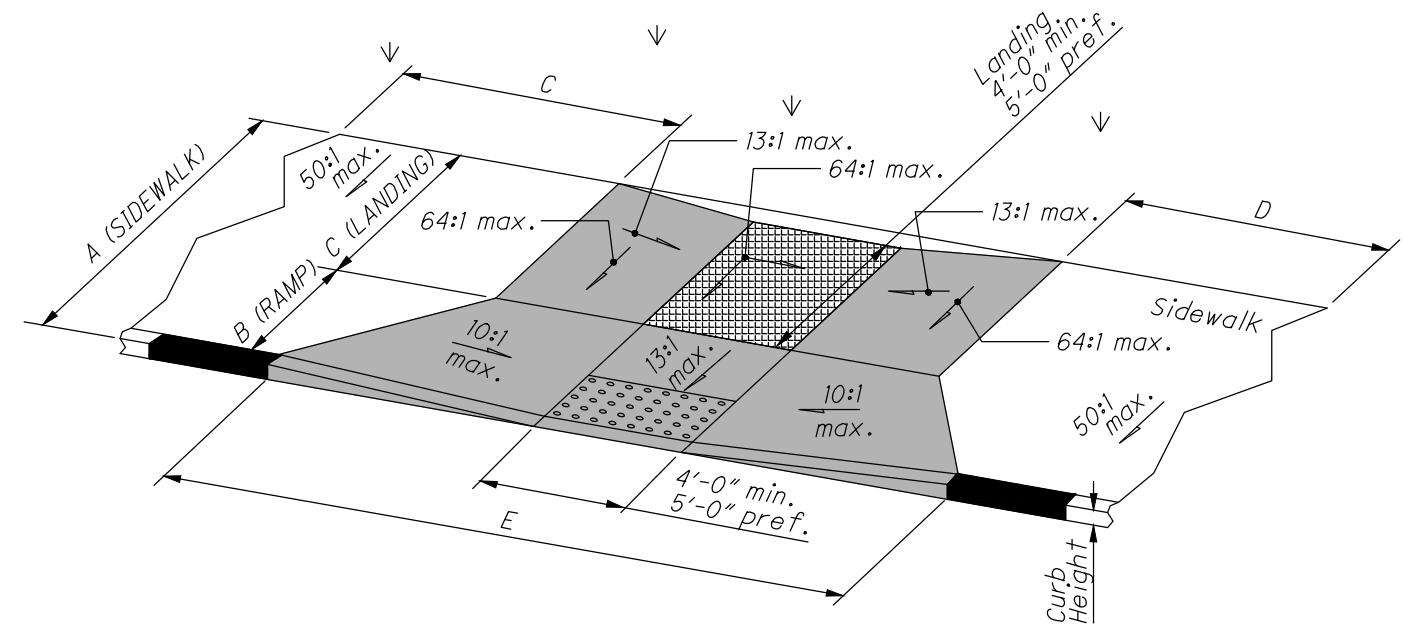
Type A2 - 1

- TRUNCATED DOMES (DETECTABLE WARNING STRIP)
- CONCRETE WALK
- ▨ LANDING PAD
- ▨ CURB RAMP
- CURB

* SEE SCD BP-7.1 FOR ALL OTHER DETAILS



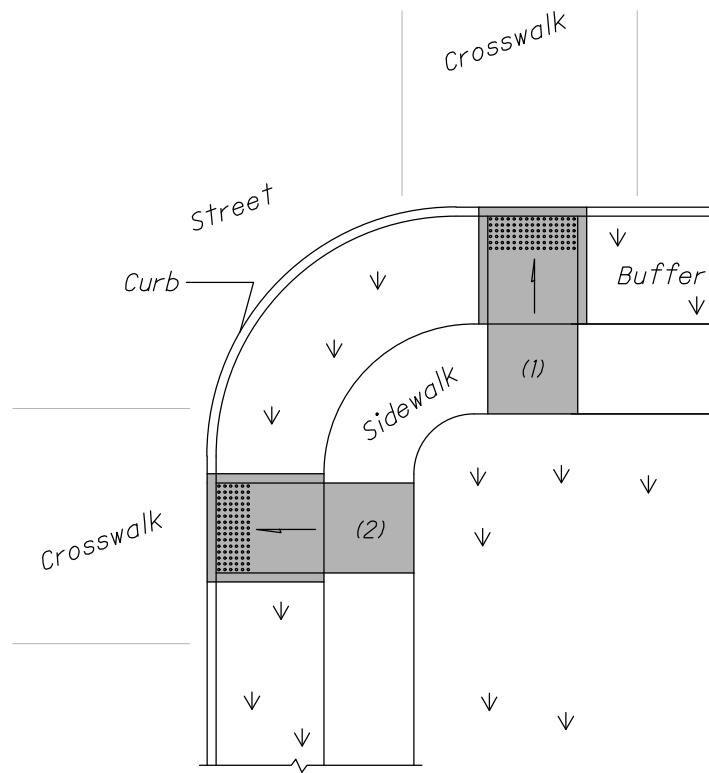
TYPE A1/C1 - PERPENDICULAR CURB RAMPS



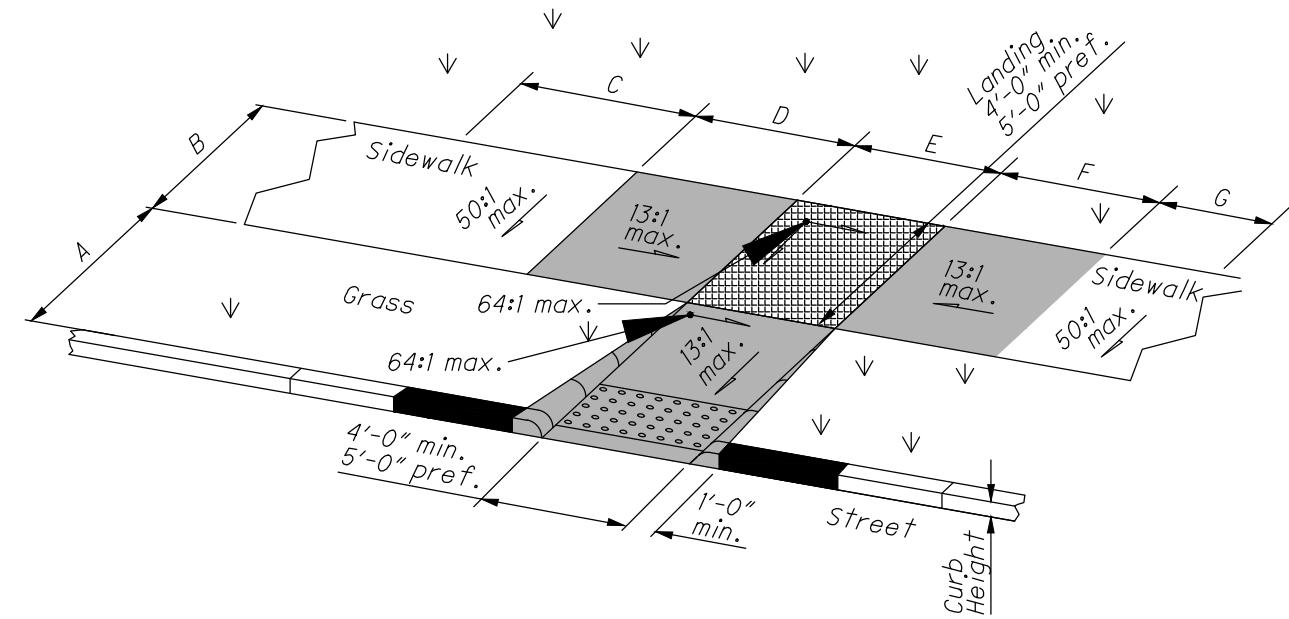
Type A1/C1

CURB RAMP DETAILS
Liberty Township
Belmont Avenue Sidewalks
Phase 2

CR-4



TYPE A2/C2 - PERPENDICULAR CURB RAMPS



- TRUNCATED DOMES (DETECTABLE WARNING STRIP)
- CONCRETE WALK
- LANDING PAD
- CURB RAMP
- CURB

* SEE SCD BP-7.1 FOR ALL OTHER DETAILS

CURB RAMP DETAILS	Liberty Township Belmont Avenue Sidewalks Phase 2	
	Calculated NDS	Checked C.J.T
CR-5		