VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART A: WATERMAIN AND STREET IMPROVEMENTS
CUYAHOGA COUNTY, OHIO

MAY 2025

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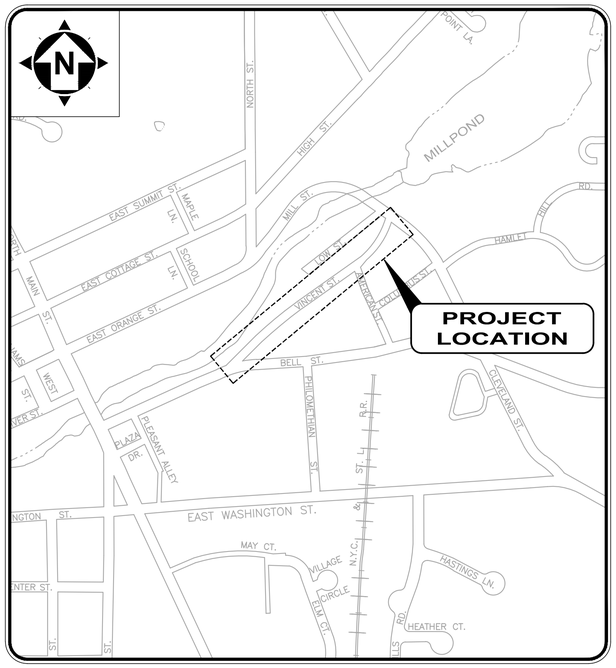


LOCATION MAP
NOT TO SCALE

MEMBERS OF COUNCIL:

ANGELA DeBERNARDO, COUNCIL PRESIDENT

NANCY ROGOFF, PRESIDENT PRO-TEM

MICHAEL CORKRAN, COUNCIL REPRESENTATIVE

BRIAN DRUM, COUNCIL REPRESENTATIVE

ANDREW ROCKEY, COUNCIL REPRESENTATIVE

ERINN GRUBE, COUNCIL REPRESENTATIVE

DON GUTIERREZ, COUNCIL REPRESENTATIVE

VILLAGE OFFICIALS:

WILLIAM TOMKO, MAYOR

ROB JAMIESON, CHIEF ADMINISTRATIVE OFFICER

ANGELA GERGYE, DIRECTOR OF FINANCE / CLERK OF COUNCIL

DALE MARKOWITZ, LAW DIRECTOR

GLENN ELLIOTT, UTILITIES SUPERINTENDENT

JOHN BROCKWAY, SUPERINTENDENT OF STREETS

TIM LANNON, VILLAGE ENGINEER

UTILITIES:

1. AT&T
2. CHARTER COMMUNICATIONS (SPECTRUM / TIME WARNER CABLE)
3. DOMINION ENERGY OHIO
4. THE ILLUMINATING CO.
5. VILLAGE OF CHAGRIN FALLS

OHIO 811 DESIGN SERIAL NUMBERS & UTILITY MEMBER LIST:
VINCENT ST. #A434102291 & #B421501136

1. UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
2. THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

ENGINEER'S PROJECT No. 24025505

ENGINEER:

VERDANTAS
8150 STERLING COURT
MENTOR, OHIO 44060

(440) 951-9000 PHONE
(440) 951-7487 FAX

STATE OF OHIO · TIMOTHY R. LANNON 58885 · REGISTERED PROFESSIONAL ENGINEER

5-27-25

TIMOTHY R. LANNON, P.E. 58885

5-27-2025
DATE

PROJECT SITE:

THIS PROJECT CONSISTS OF VINCENT STREET FROM BELL STREET TO CLEVELAND STREET, LOCATED IN THE VILLAGE OF CHAGRIN FALLS, CUYAHOGA COUNTY, OHIO.

STATE OF OHIO · TIMOTHY R. LANNON 58885 · REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

COVER

PROJECT NO.	
24025505	
DISCIPLINE	
CIVIL	
SHEET NAME	
G-01	
SHEET	OF
1	24

GENERAL

1. A PRE-CONSTRUCTION CONFERENCE SCHEDULED BY THE ENGINEER SHALL BE HELD PRIOR TO ANY WORK STARTING. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE TO THE ENGINEER, WATER SUPERINTENDENT, THE SANITARY SEWER DEPARTMENT AND THE VILLAGE ENGINEER PRIOR TO BEGINNING WORK TO ARRANGE FOR INSPECTION.

2. THE STANDARD SPECIFICATIONS OF THE OHIO DEPARTMENT OF TRANSPORTATION, LATEST EDITION, INCLUDING ALL SUPPLEMENTAL SPECIFICATIONS AND STANDARD DRAWINGS, SHALL GOVERN ALL WORK NOT COVERED BY THE SPECIFICATIONS. ALL WORK CONTEMPLATED SHALL BE GOVERNED BY THE RULES, REGULATIONS AND SPECIFICATIONS OF THE VILLAGE OF CHAGRIN FALLS.

3. ALL WORK COMPLETED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

4. ANY DEFECT IN MATERIAL OR WORKMANSHIP REVEALED BY INSPECTION MUST BE CORRECTED BY THE CONTRACTOR AT NO COST TO THE VILLAGE AND TO THE FULL SATISFACTION OF THE VILLAGE AND ENGINEER BEFORE ACCEPTANCE OF THE WORK AND RELEASE OF FINAL ESTIMATE AND PAYMENT THEREOF.

5. THE CONTRACTOR SHALL PROVIDE A PRE-CONSTRUCTION VIDEO SURVEY OF THE ENTIRE PROJECT AREA. ANY DAMAGE DEEMED TO BE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT HIS OWN EXPENSE.

6. MANHOLES, CATCH BASINS, MONUMENT BOXES, WATER VALVE BOXES AND OTHER CASTINGS WILL BE RAISED OR LOWERED FLUSH WITH THE NEW SURFACE. ANY METER OR VALVE BOX ENCOUNTERED WITHIN THE WORK SITE SHALL BE EXPOSED. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK EXCEPT WHEN BID AS A SEPARATE ITEM.

7. BEFORE THE VILLAGE WILL APPROVE AND ACCEPT THE WORK AND RELEASE THE GUARANTY RETAINER, THE CONTRACTOR SHALL FURNISH THE VILLAGE A WRITTEN REPORT INDICATING THE RESOLUTION OF ANY AND ALL PROPERTY DAMAGE CLAIMS FILED WITH THE CONTRACTOR BY ANY PARTY DURING THE CONSTRUCTION PERIOD. THE INFORMATION TO BE SUPPLIED SHALL INCLUDE, BUT NOT BE LIMITED TO, NAME OF CLAIMANT, DATE FILED WITH CONTRACTOR, NAME OF INSURANCE COMPANY AND/OR ADJUSTER HANDLING CLAIM, HOW CLAIM WAS RESOLVED AND IF CLAIM WAS NOT RESOLVED FOR THE FULL AMOUNT, A STATEMENT INDICATING THE REASON FOR SUCH ACTION.

8. MATERIAL SPECIFICATIONS CALLED FOR ON THE PLANS REPRESENT THE MINIMUM REQUIRED FOR EACH APPLICATION. THE OWNER MAY REQUEST OR THE CONTRACTOR MAY DESIRE TO SUBSTITUTE ALTERNATE MATERIALS. ANY SUCH SUBSTITUTIONS MUST BE EQUIVALENT IN QUALITY TO THE MATERIAL CALLED FOR AND MUST BE APPROVED IN WRITING BY THE ENGINEER.

9. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL MAILBOXES, TRAFFIC SIGNS, ETC. AS REQUIRED FOR CONSTRUCTION. ALL COSTS ASSOCIATED FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES STIPULATED FOR THE VARIOUS ITEMS IN THE BID PROPOSAL.

TRAFFIC CONTROL

1. THE CONTRACTOR SHALL PHASE CONSTRUCTION SUCH THAT AT A MINIMUM, ONE ACCESS LANE IS AVAILABLE FOR LOCAL VEHICULAR TRAFFIC. THE PAVEMENT SURFACE SHALL HAVE A UNIFORM SURFACE TO THE SATISFACTION OF THE VILLAGE ROADS SUPERINTENDENT. THE SAME ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS. THE SURFACES SHALL CONSIST OF THE FOLLOWING MATERIALS:

   1.1. EXISTING PAVEMENT SURFACE.
   1.2. ODOT 304 LIMESTONE TEMPORARY TRENCH TOPPING. THE MAXIMUM TIME THAT THE TEMPORARY SURFACE SHALL BE IN PLACE SHALL BE 19 CALENDAR DAYS.
   1.3. PAVEMENT TRENCH REPAIR SECTION OF CLASS MS 301 ASPHALT BASE OR 305 CONCRETE BASE.

2. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES".

3. THE CONTRACTOR SHALL SUBMIT A PROPOSED TRAFFIC CONTROL PLAN FOR REVIEW AND ACCEPTANCE BY THE VILLAGE PRIOR TO BEGINNING WORK AND SHALL NOTIFY SAFETY SERVICES OF ANY TRAFFIC DISRUPTIONS.

4. NO CHANGE IN TRAFFIC PATTERN SHALL BE MADE WITHOUT PRIOR NOTIFICATIONS TO THE TRAFFIC CONTROL OFFICER TWENTY-FOUR (24) HOUR ADVANCE SHALL BE GIVEN TO THE CHAGRIN FALLS POLICE DEPARTMENT AND MR. ROB JAMIESON AT (440) 247-5053.

5. PROVIDE DETOUR PLAN FOR ALL CLOSURES OR PARTIAL CLOSURES.

WATERMAIN CONSTRUCTION

1. THE CONTRACTOR SHALL REMOVE ALL ABANDONED WATERMAIN CASTINGS FOR METERS, MANHOLES AND VALVES TO A MINIMUM OF ONE FOOT BELOW GRADE AND FILL THE REMAINING OPENING WITH COMPACTED SAND. THE CONTRACTOR SHALL REMOVE EXISTING HYDRANT AND HYDRANT VALVE ASSEMBLIES IN ONE PIECE AND DELIVER TO THE VILLAGE'S WATER DISTRIBUTION STORAGE AREA FOR DISASSEMBLY BY VILLAGE WORKERS.

2. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 1" SERVICE CONNECTION TO ALL PROPERTIES. UNDER NO CONDITIONS SHALL THE NEW SERVICE CONNECTION BE SMALLER THAN THE EXISTING LINE SIZE. THE ENTIRE SERVICE CONNECTION FROM THE CURB STOP TO THE NEW WATERLINE SHALL BE REPLACED, INCLUDING A NEW CURB BOX. ONLY CONTINUOUS PIPING FROM THE CORPORATION STOP TO THE CURB STOP WILL BE ALLOWED.

   SERVICE CONNECTIONS MATERIAL SPECIFICATIONS:

   2.1. 1 INCH (MIN.) TYPE K COPPER (ALL FLARED FITTINGS)

   2.2. SADDLE (FOR PVC TAPS) MUELLER B2RB.

   2.3. CORPORATION STOP: MUELLER H15000.

   2.4. CURB STOP: MUELLER H15204 W/ 2-PIECE 2½ INCH CAST IRON BOX, SIZE 94-E WITH OLD STYLE TOP AND COVER. FOR 1½ AND 2 INCH SERVICES THE BOX SIZE IS 144-R.

3. NEW WATER CONNECTIONS FOR BUILDINGS WITH A METER WITHIN THE RIGHT-OF-WAY SHALL HAVE THE CURB STOP PLACED ON THE WATERLINE SIDE OF THE METER, IF THE METER IS NOT DISTURBED BY THE WATERLINE CONSTRUCTION. IF THE METER MUST BE MOVED, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE VILLAGE'S WATER DEPARTMENT, AND PLACE THE CURB STOP ON THE WATERLINE SIDE OF THE METER.

4. SIDE STREET WATERMAIN VALVES MAY BE CLOSED IF THEY CAN BE SUPPLIED FROM THE OTHER DIRECTION. CONTRACTOR SHALL COORDINATE WITH THE VILLAGE'S WATER DEPARTMENT AND PROVIDE 24 HOURS NOTICE FOR ANY PLANNED SERVICE DISRUPTION TO WATER CUSTOMERS WITH AN APPROVED FORM LETTER/DOOR HANGER. CONTRACTOR SHALL PROVIDE TEMPORARY SERVICE FOR STREETS AS REQUIRED.

5. A MINIMUM OF 35 PSI SHALL BE MAINTAINED TO THE CURB STOP DURING NORMAL OPERATING CONDITIONS.

6. BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.

SEWER CONSTRUCTION

1. SANITARY & STORM SEWER (LESS THAN 12 INCHES IN DIA.) SHALL BE PVC SDR 26 - ASTM 3034 WITH ASTM D3212, F477 WATER-TIGHT, FLEXIBLE GASKET JOINTS. SEWER PIPE BEDDING SHALL BE AS PER THE TRENCHING, EMBEDMENT, AND BACKFILL DETAIL. PVC SEWER DEFLECTION TESTING SHALL NOT EXCEED 5% ACCORDING TO PLAN SPECIFICATIONS.

2. STORM SEWER 12 INCHES AND GREATER SHALL BE HIGH PERFORMANCE POLYPROPYLENE (HPPP) DUAL WALL, SMOOTH INTERIOR, WT PIPE WITH BELL AND SPIGOT JOINTS THAT MEET ASTM D3212 FOR WATER TIGHT INSTALLATION OR UNLESS OTHERWISE NOTED.

3. SEWER MAIN CONNECTIONS TO EXISTING SEWERS SHALL BE MADE WITH FERNCO COUPLINGS WITH SS SHEAR BANDS TO MATCH PROPOSED/EXISTING PIPE SIZES AND TYPE OR AN APPROVED EQUAL.

4. MANHOLE SECTION JOINTS MUST MEET ASTM C-443.

5. BACKFILL SHALL BE AS PER SPECIFICATIONS AND AS PER THE TRENCHING, EMBEDMENT, AND BACKFILL DETAIL.

6. WHEN A SEWER AND WATERLINE CROSS AND IT IS NOT POSSIBLE TO MAINTAIN AN 18 INCH VERTICAL CLEARANCE BY WATERMAIN LOWERING, EITHER THE WATERMAIN OR THE SEWER SHALL BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATERMAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE O.E.P.A. FOR USE IN WATER MAIN CONSTRUCITON.

7. PVC SDR 26 PIPE SHALL BE USED FOR REPLACEMENT OF SANITARY & STORM LATERAL CROSSING SEWER TRENCH, WITH PREMIUM 3 BAND ADAPTOR COUPLINGS.

8. THE COST FOR FURNISHING ALL MATERIAL AND LABOR TO PERFORM ALL WORK STATED IN PARAGRAPHS 4.01 TO 4.05 SHALL BE INCLUDED IN THE BID PRICES STIPULATED FOR VARIOUS ITEMS IN THE BID PROPOSAL.

9. EXISTING PIPE REMOVED WITHIN TRENCH LIMITS FOR PLACEMENT OF PROPOSED PIPE SHALL BE INCLUDED IN THE PRICE FOR CONDUIT ITEM AND WILL NOT BE PAID FOR SEPARATELY.

10. THE FOLLOWING NOTES APPLY TO SANITARY LATERAL RECONNECTIONS:

    10.1. LOCATIONS OF EXISTING SANITARY LATERALS ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING SANITARY LATERALS AT NO ADDITIONAL COST TO THE VILLAGE.

    10.2. CERTAIN HOUSES AND/OR PROPERTIES ARE KNOWN TO HAVE ONE OR MORE LATERALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE (VIA TELEVISING, DYE TESTING, ELECTRONIC LOCATING DEVICE OR OTHER APPROPRIATE METHODS) WHICH LATERAL OR LATERALS ARE ACTIVE, AND TO RECONNECT THE ACTIVE LATERALS. THE COST FOR THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR LATERAL RECONNECTION. NO ADDITIONAL PAYMENT FOR DETERMINING WHICH LATERALS ARE ACTIVE REGARDLESS OF THE METHOD(S) UTILIZED.

    10.3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND TESTING EACH LATERAL TO ASSURE PROPER CONNECTIONS TO THE SANITARY SEWER.

    10.4. NO INACTIVE LATERALS SHALL BE RECONNECTED TO THE NEW SEWER.

    10.5. LOCATOR TAPE SHALL BE INSTALLED ON ALL SANITARY SERVICE LATERALS.

    10.6. FINAL TELEVISION INSPECTION OF CONDUIT SHALL BE PERFORMED BY AN EXPERIENCED COMPANY AND IN A FORMAT SATISFACTORY TO THE OWNER. THE ENGINEER SHALL BE PROVIDED WITH UNEDITED VIDEO AND TWO (2) COPIES OF THE VIDEO LOG.

    10.7. ELIMINATE ANY DISCONNECTED WYE'S TO LOTS THAT HAVE AN EXISTING HOUSE.

    10.8. IF A VACANT LOT IS WITHIN THE SECTION OF THE SEWER THAT IS BEING LINED, A NEW LATERAL SHALL BE PROVIDED WITH A WYE POLE.

    10.9. ALL SANITARY LINING SHALL BE DONE STRICTLY WITHIN MANUFACTURERS SPECIFICATIONS.

EXCAVATION, BACKFILL, AND SEWER REPLACEMENT

1. BACKFILL FOR ALL UNDERGROUND UTILITIES INSTALLED UNDER PAVEMENT, SIDEWALK, AND STRUCTURES OR WITHIN A 1:1 ZONE OF INFLUENCE PARALLEL OR TRANSVERSE TO PAVEMENT, SIDEWALK OR STRUCTURES SHALL BE " COMPACTED BACKFILL" OR "COMPACTED GRANULAR BACKFILL" AS DESCRIBED IN SPECIFICATIONS, IF DIRECTED BY THE ENGINEER. ON-SITE SOILS MAY BE USED FOR "COMPACTED BACKFILL" MATERIALS, IF APPROVED BY THE ENGINEER. NO SLAG OR RECYCLED CONCRETE PRODUCTS WILL BE PERMITTED FOR BEDDING OR BACKFILL MATERIAL.

2. BACKFILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 9" IN DEPTH. BACKFILL MATERIAL SHALL BE PLACED WITH 2% OF THE OPTIMUM MOISTURE. THE ENGINEER MAY ORDER THE REMOVAL, REFILLING, RE-COMPACTION AND RETESTING OF ALL BACKFILL NOT MEETING THE REQUIREMENTS OF THE CONTRACT.

3. BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED USING MACHINE MOUNTED COMPACTION EQUIPMENT IN LAYERS SUFFICIENT TO MEET THE COMPACTION REQUIREMENT ODOT 203.

4. NO BACKFILLING OF ANY TRENCHES OR EXCAVATIONS WILL BE PERMITTED WITHOUT TAMPING EQUIPMENT BEING USED. FLOODING, JETTING OR PUDDLING OF BACKFILL WILL NOT BE PERMITTED.

5. ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ROCK OR SHALE EXCAVATION.

6. THE OWNER AND THE ENGINEER DO NOT GUARANTEE THE SUITABILITY OR SUGGEST THAT THE EXISTING EXCAVATED MATERIAL IN ITS PRESENT STATE WILL CONSIST OF THE PROPER MOISTURE CONTENT TO ACHIEVE THE REQUIRED COMPACTION WITHOUT DRYING OR ADDING WATER TO THE MATERIAL. UPON REQUEST, THE OWNER WILL PROVIDE ACCESS TO THE SITE FOR THE CONTRACTOR TO CONDUCT SUCH INVESTIGATIONS AND TESTS DEEMED NECESSARY TO MAKE HIS DETERMINATION.

7. THE CONTRACTOR SHALL REPLACE ANY PAVEMENT MARKINGS, SUCH AS CROSS WALKS, STOP LINES, EDGE LINES, CENTER LINES, ETC. ANY PAVEMENT REMOVED CONTAINING BRICKS SHALL BE TRUCKED TO THE VILLAGE SERVICE DEPARTMENT.

VEGETATION/TREE PROTECTION

1. ANY EXTENSIVE LANDSCAPING DISTURBED BY CONSTRUCTION WORK SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE VILLAGE.

2. TREE REMOVAL SHALL BE LIMITED TO THAT NECESSARY FOR CONSTRUCTION AND WILL BE LIMITED TO THE ROAD RIGHT-OF-WAY AND EASEMENTS.

3. NO TREE REMOVAL WILL BE PERMITTED WITHOUT PERMISSION OF THE ENGINEER AND THE PROPERTY OWNER.

4. TREES WHICH ARE NOT REMOVED WILL BE PROTECTED BY ENSURING THAT TREES TO BE REMOVED ARE FELLED SO AS NOT TO INJURE THE REMAINING TREES.

5. AT NO TIME SHALL SOIL, CONSTRUCTION EQUIPMENT OR OTHER MATERIAL BE STORED NEXT TO OR WITHIN THE DRIP-LINE OF TREES.

6. TREES SHOULD BE CUT SEASONALLY, BETWEEN OCTOBER 1 TO MARCH 30 TO AVOID IMPACTING BAT SPECIES USING TREE HABITAT.

SERVICE CONNECTIONS

ALL SANITARY AND WATER SERVICE CONNECTIONS SHOWN ON THE PLAN WERE DERIVED FROM VILLAGE RECORDS. THE CONTRACTOR SHALL LOCATE AND VERIFY ALL CONNECTIONS PRIOR TO REPLACEMENT. SANITARY LATERAL REPLACEMENT AND WATER SERVICE CONNECTION REPLACEMENT SHALL DISTURB NO MORE THAN 50 S.F. OF SIDEWALK AND 10 LF OF CURB PER LATERAL OR CONNECTION REPLACED. ALL ACTIVE CONNECTIONS AND HOUSE LATERALS ENCOUNTERED SHALL BE RECONNECTED TO EXISTING FACILITIES OR CONNECTED TO THE NEW FACILITIES, EVEN IF NOT SHOWN ON THE PLANS. UNLESS OTHERWISE DIRECTED BY THE VILLAGE ENGINEER.

ALL EXISTING UTILITY SERVICE CONNECTIONS (SANITARY, STORM, WATER, GAS, ELECTRIC, TELEPHONE, ETC.) WHICH ARE DAMAGED DURING THE INSTALLATION OF PIPE SHALL BE REPAIRED WITH LIKE MATERIALS OR REPLACED, AS REQUIRED. THE COST OF UTILITY SERVICE CONNECTION REPAIR/REPLACEMENT SHALL BE INCLUDED IN THE UNIT PRICES FOR ALL ITEMS IN THE PROPOSAL.

ALL UTILITY LINES CROSSING THE NEW TRENCH SHALL BE PROTECTED AND SUPPORTED WITH HARDWOOD PLANKS; OR REMOVED, REPLACED, RECONNECTED AND SUPPORTED ACROSS THE ENTIRE WIDTH OF THE TRENCH. IF ANY OF THESE LINES ARE DAMAGED DURING CONSTRUCTION, THEY SHALL BE REPLACED IN-KIND.

THE CONTRACTOR SHALL BE REQUIRED TO BYPASS AND MAINTAIN THE FLOW TO/FROM ALL HOUSE UTILITY CONNECTIONS DURING CONSTRUCTION.

THE CONTRACTOR SHALL EXPECT ONE UNDERGROUND GAS AND WATER CONNECTION FOR EACH LOT (INCLUDING VACANT LOTS) ON BOTH SIDES OF THE STREET FOR THE ENTIRE PROJECT LENGTH.

THE CONTRACTOR SHALL SUPPLY ALL PIPE AND ADAPTERS TO CONNECT TO EXISTING PIPING. THE ADAPTERS MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

THE COST OF UTILITY RELOCATION, REPLACEMENT, AND/OR SUPPORT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR OTHER ITEMS OF WORK EXPECT WHEN BID AS A SEPARATE ITEM.

UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE BEEN OBTAINED BY DILIGENT FIELD CHECKS AND SEARCHES OF AVAILABLE RECORDS IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. IT IS BELIEVED THAT THEY ARE ESSENTIALLY CORRECT, BUT THE VILLAGE OF CHAGRIN FALLS DOES NOT GUARANTEE THEIR ACCURACY OR COMPLETENESS.

BEFORE ANY WORK IS STARTED THAT WILL INTERFERE WITH THE EXISTING UTILITIES, THE CONTRACTOR SHALL CALL THE "OHIO UTILITIES PROTECTION SERVICE" AT 1-800-362-2764, FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS, AT NO ADDITIONAL EXPENSE TO THE VILLAGE OF CHAGRIN FALLS, TO AVOID DAMAGE TO EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING THE ENTIRE PROJECT. IN THE EVENT OF DAMAGE TO EXISTING PUBLIC AND/OR PRIVATE UTILITIES, THE AGENCY CONCERNED SHALL BE NOTIFIED IMMEDIATELY AND ALL REPAIR WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE AGENCY AT NO ADDITIONAL COST TO THE VILLAGE, INCLUDING ANY INSPECTION OR MAINTENANCE FEES.

WHERE EXISTING POWER OR TELEPHONE POLES ARE IN CLOSE PROXIMITY TO WORK, THE CONTRACTOR SHALL COORDINATE HIS WORK EFFORTS WITH THOSE OF THE UTILITY COMPANIES SUCH THAT THEIR EXISTING FACILITIES CAN BE MAINTAINED AND PROTECTED DURING THE TIME THAT WORK IS GOING ON ADJACENT TO THE POLE(S).

THE COST AND COORDINATION FOR ANY REQUIRED PROTECTION, SUPPORT OR RELOCATION OF EXISTING POWER OR TELEPHONE POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

DELAYS TO THE CONTRACTOR AS A RESULT OF TIMING OF POLE RELOCATION, SUPPORT OR PROTECTION SHALL NOT BE CONSIDERED COMPENSABLE DELAYS, AS IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK IN CONFORMANCE TO THE UTILITY COMPANY'S SCHEDULE.

THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES AFFECTED BY THE PROPOSED CONSTRUCTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS LISTED BELOW AND THE UTILITY PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE AND OUTLINED IN PROJECT SPECIFICATIONS. THE UTILITY OWNERSHIPS ARE AS FOLLOWS:

VILLAGE OF CHAGRIN FALLS
301 MEADOW STREET
CHAGRIN FALLS, OHIO 44022
(440) 247-5051

DOMINION EAST OHIO
320 SPRINGSIDE DRIVE, STE. 320
AKRON, OH 44333
ATTN.: WILLIAM SNYDER
(330) 664-2409

AT&T
13630 LORAIN AVE., 2ND FLOOR
CLEVELAND, OH 44111
ATTN.: JAMES JANIS
(216) 476-6142

THE ILLUMINATING COMPANY
7755 AUBURN RD.
PAINESVILLE, OH 44077
ATTN.:FRED RANDOLPH
(440) 358-4991

CHARTER COMMUNICATIONS
14300 S. INDUSTRIAL AVENUE
MAPLE HEIGHTS, OH 44137
ATTN.: LOUIE RUBERTINO
(216) 581-3262

PROPERTY PINS AND MONUMENTS

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EMPLOY A REGISTERED SURVEYOR TO LOCATE, RECORD, AND MARK ALL EXISTING MONUMENTS AND PROPERTY CORNERS WITHIN THE CONSTRUCTION LIMITS OF THE PROPOSED WORK AREA. A LISTING OF THE PINS AND MONUMENTS SHALL BE SUPPLIED TO THE VILLAGE ENGINEER PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL PINS AND MONUMENTS DURING CONSTRUCTION. IF PINS AND MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL HAVE THEM REPLACED BY THE REGISTERED SURVEYOR AT NO ADDITIONAL COST TO THE VILLAGE.

EXCESS EXCAVATION

1. ALL EXCESS EXCAVATION SHALL BE DISPOSED OF IN A LOCATION TO BE SELECTED BY THE CONTRACTOR. THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE VILLAGE OF CHAGRIN FALLS IF THE MATERIAL IS TO BE DISPOSED OF WITHIN THE VILLAGE LIMITS.

AIR/NOISE CONTROL

1. CONSTRUCTION ACTIVITIES WILL BE LIMITED FROM 7 AM TO 7 PM, UNLESS APPROVED IN ADVANCE BY THE VILLAGE.

SPECIAL

1. ALL APRONS AND CURB SHALL BE CLASS MS QC-1 CONCRETE.

2. ALL PAVEMENT GRINDINGS SHALL BE DELIVERED TO THE STREETS AND SERVICE DEPARTMENT AT 240 SOLON ROAD. A MINIMUM OF 48 HOUR ADVANCE COORDINATION WITH THE STREETS SUPERINTENDENT AT 440-247-1169 IS REQUIRED.

EROSION AND DUST CONTROL

1. SEDIMENT CONTROL SHALL BE ACCOMPLISHED BY SODDING AND MULCHING IMMEDIATELY UPON COMPLETION OF EXCAVATION OR FILL AND FINISH GRADING IN ACCORDANCE WITH ODOT ITEM 659 OR AS DIRECTED BY THE ENGINEER.

2. THE CONTRACTOR SHALL BEGIN THE RESTORATION PROCESS AS SOON AS CONSTRUCTION IS COMPLETED, PERMANENTLY STABILIZING EACH DISTURBED AREA WITH PERENNIAL VEGETATION INSTALLED ACCORDING TO SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS.

3. THE CONTRACTOR SHALL REMOVE DAILY ALL MUD, SOIL AND DEBRIS THAT MAY BE TRACKED ONTO EXISTING STREETS OR DRIVES BY HIS EQUIPMENT OR THAT OF SUBCONTRACTORS OR SUPPLIERS.

4. ALL MATERIALS TO BE DISPOSED OF OFF-SITE MUST BE DISPOSED OF IN AN ENVIRONMENTALLY SOUND MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. NO EXCESS MATERIALS ARE TO BE DISPOSED OF IN ANY WETLAND, FLOOD PLAIN OR OTHER ENVIRONMENTALLY SENSITIVE AREA.

5. EROSION CONTROL MEASURES AT THE DISPOSAL SITE MUST BE INSTALLED AND MAINTAINED UNTIL DISPOSAL IS COMPLETE AND THE DISPOSAL SITE IS PERMANENTLY STABILIZED.

6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY, WHEN ORDERED BY THE ENGINEER, WATER OR CALCIUM CHLORIDE FOR THE REDUCTION OF DUST NUISANCE ORIGINATING FROM HIS CONSTRUCTION ACTIVITIES. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE OR WATER SHALL BE STORED ON THE JOBSITE AT ALL TIMES TO BE USED FOR DUST CONTROL UNTIL THE AREA IS SEEDED. THE COST OF WATER OR CALCIUM CHLORIDE DUST CONTROL SHALL BE INCLUDED IN THE APPROPRIATE UNIT BID PRICE.

PROHIBITED CONSTRUCTION ACTIVITIES

1. DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER.

2. LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS.

3. DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA.

4. DISPOSING OF TREES, BRUSH AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS OR AT UNSPECIFIED LOCATIONS.

5. CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE OR BOULEVARD WITHOUT THE PRIOR CONSENT OF MUNICIPAL OFFICIALS AND THE ENGINEER, AND CLOSING CLEAR ACCESS:

   5.1. BY FIRE PROTECTION AND EMERGENCY VEHICLES;

   5.2. BY THE PUBLIC TO ANY COMMERCIAL OR PROFESSIONAL PLACE OF BUSINESS, QUASI-PUBLIC OR PUBLIC ESTABLISHMENT, OR PLACE OF RESIDENCE; OR

   5.3. BY VEHICLES TO DRIVEWAYS WITHOUT THE PROVISION OF ALTERNATIVE MEANS OF BUILDING INGRESS AND EGRESS.

   5.4. CONSTRUCTION STAGING OF VEHICLES, SOIL, OR CONSTRUCTION MATERIALS SHOULD NOT BE ON OR NEAR THE RIVERBANK AS WELL

CONTINGENCY ITEMS

1. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED OVER TO THE BID PROPOSAL ITEMS AND ARE TO BE USED ONLY AS DIRECTED BY THE ENGINEER:

   1.1. THE FOLLOWING QUANTITY IS IN THE BID FOR ADDITIONAL PAVEMENT REPLACEMENT THAT MAY BE NECESSARY DUE TO THE WORK ASSOCIATE WITH THE PROJECT:
   1.1.1. TYPE C PAVEMENT REPLACEMENT - 20 SY

   1.2. THE FOLLOWING QUANTITY IS IN THE BID FOR CURB INLET ADJUSTED TO GRADE :
   1.2.1. (611) CURB INLET ADJUSTED TO GRADE - 1 EACH

   1.3. THE FOLLOWING QUANTITY IS IN THE BID FOR 12 INCH STORM SEWER RECONNECTED :
   1.3.1. 6 INCH STORM SEWER CONNECTION TO MAIN, AS PER PLAN - 2 EA

   1.4. TEMPORARY WATER MAIN IS NOT REQUIRED IF THE CONTRACTOR CAN CONSTRUCT THE PROPOSED IMPROVEMENTS WITHOUT INTERRUPTIONS TO THE WATER SUPPLY. THE CONTRACTOR IS REQUIRED TO MAINTAIN THE REQUIRED SYSTEM WATER PRESSURE AND SERVICES TO ALL RESIDENTS THROUGHOUT THE ENTIRE DURATION OF CONSTRUCTION.

WORK NEAR EXISTING GAS LINES

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF ENBRIDGE'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION & SHORING). EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY ENBRIDGE FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES & DEVICES, VALVE BOXES, ETC.). ENBRIDGE FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL ENBRIDGE EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF ENBRIDGE'S PIPELINE(S) WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING ENBRIDGE FACILITY. PLEASE CONTACT ENBRIDGE'S CORROSION DEPARTMENT AT LEAST TWO (2) WORKING DAYS BEFORE CONSTRUCTION AT: CORROSIONGIS@DOMINIONENERGY.COM

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 5/27/25
SCALE: AS SHOWN
DESIGNED BY: PTV
DRAWN BY: PTV
CHECKED BY: TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

NOTES

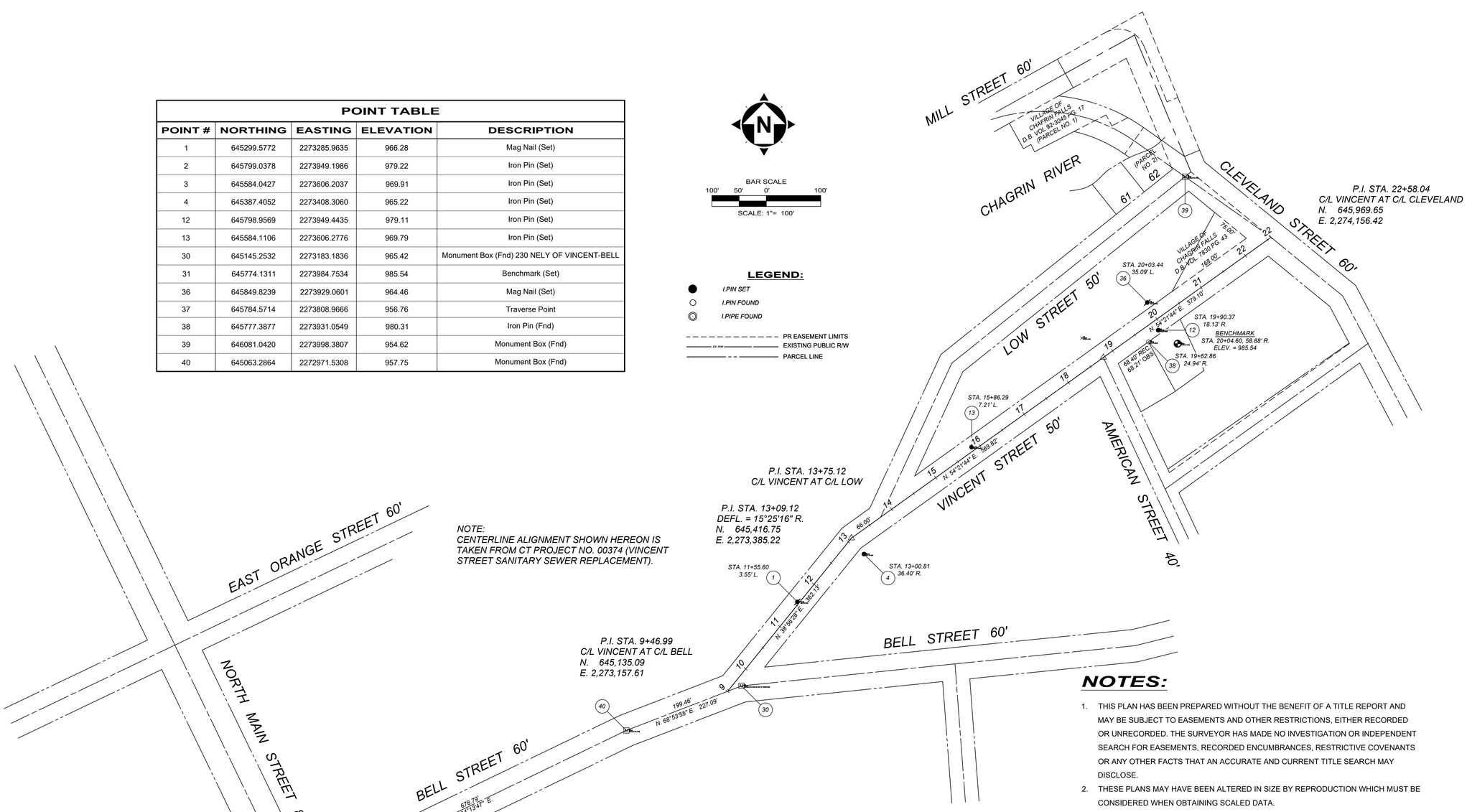
PROJECT NO. 24025505
DISCIPLINE: CIVIL
SHEET NAME: G-02
SHEET 2 OF 24

POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	645299.5772	2273285.9635	966.28	Mag Nail (Set)
2	645799.0378	2273949.1986	979.22	Iron Pin (Set)
3	645584.0427	2273606.2037	969.91	Iron Pin (Set)
4	645387.4052	2273408.3060	965.22	Iron Pin (Set)
12	645798.9569	2273949.4435	979.11	Iron Pin (Set)
13	645584.1106	2273606.2776	969.79	Iron Pin (Set)
30	645145.2532	2273183.1836	965.42	Monument Box (Fnd) 230 NELY OF VINCENT-BELL
31	645774.1311	2273984.7534	985.54	Benchmark (Set)
36	645849.8239	2273929.0601	964.46	Mag Nail (Set)
37	645784.5714	2273808.9666	956.76	Traverse Point
38	645777.3877	2273931.0549	980.31	Iron Pin (Fnd)
39	646081.0420	2273998.3807	954.62	Monument Box (Fnd)
40	645063.2864	2272971.5308	957.75	Monument Box (Fnd)

BAR SCALE
100' 50' 0' 100'
SCALE: 1"= 100'

LEGEND:

- I.PIN SET
- I.PIN FOUND
- I.PIPE FOUND
- PR EASEMENT LIMITS
- EXISTING PUBLIC R/W
- PARCEL LINE



NOTE:
CENTERLINE ALIGNMENT SHOWN HEREON IS TAKEN FROM CT PROJECT NO. 00374 (VINCENT STREET SANITARY SEWER REPLACEMENT).

NOTES:

1. THIS PLAN HAS BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY BE SUBJECT TO EASEMENTS AND OTHER RESTRICTIONS, EITHER RECORDED OR UNRECORDED. THE SURVEYOR HAS MADE NO INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS, RECORDED ENCUMBRANCES, RESTRICTIVE COVENANTS OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.
2. THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION WHICH MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.
3. THE PROJECT CONTROL COORDINATE SYSTEM IS BASED UPON THE FOLLOWING:
   - HORIZONTAL DATUM - PROJECT CONTROL COORDINATES FOR THIS PROJECT HAVE BEEN ESTABLISHED BY GPS/RTK OBSERVATIONS UTILIZING THE OHIO COORDINATE SYSTEM OF 1983 (ZONE 3401-OHIO NORTH) 2011 ADJUSTMENT. OHIO STATE PLANE GRID COORDINATE VALUES ARE EXPRESSED IN UNITS OF U.S. SURVEY FEET.
   - VERTICAL DATUM - NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
4. THE SURVEY AND STREET ALIGNMENTS SHOWN HEREON WERE OBSERVED IN THE FIELD FOR CONSTRUCTION PURPOSES ONLY AND MAY NOT BE SUITABLE FOR PROPERTY LINE SURVEYS OR OTHER PURPOSES. THE PROPERTY LINES SHOWN HEREON ARE SUBJECT TO AN ACCURATE BOUNDARY SURVEY AND ARE BASED ON FOUND MONUMENTS LOCATED IN THE FIELD AND BEST FIT TO THE RECORDS.
5. AN ALTA/ NSPS LAND TITLE SURVEY WAS NOT PERFORMED.
6. EASEMENTS, RECORD RESTRICTIONS AND SETBACKS WERE NOT ADDRESSED DURING THIS SURVEY.
7. ALL DIMENSIONS GIVEN ARE EXPRESSED IN U.S. SURVEY FEET.
8. THE BENCHMARK ELEVATIONS SHOWN IN THE PROJECT CONTROL TABLE ARE AT THE TOP OF THE RED CAP OF THE IRON PIN SET.
9. IRON PINS SET ARE 5/8" DIAM. BY 30" LONG STEEL REINFORCING BARS WITH A RED CAP INSCRIBED WITH "CT REFERENCE"

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

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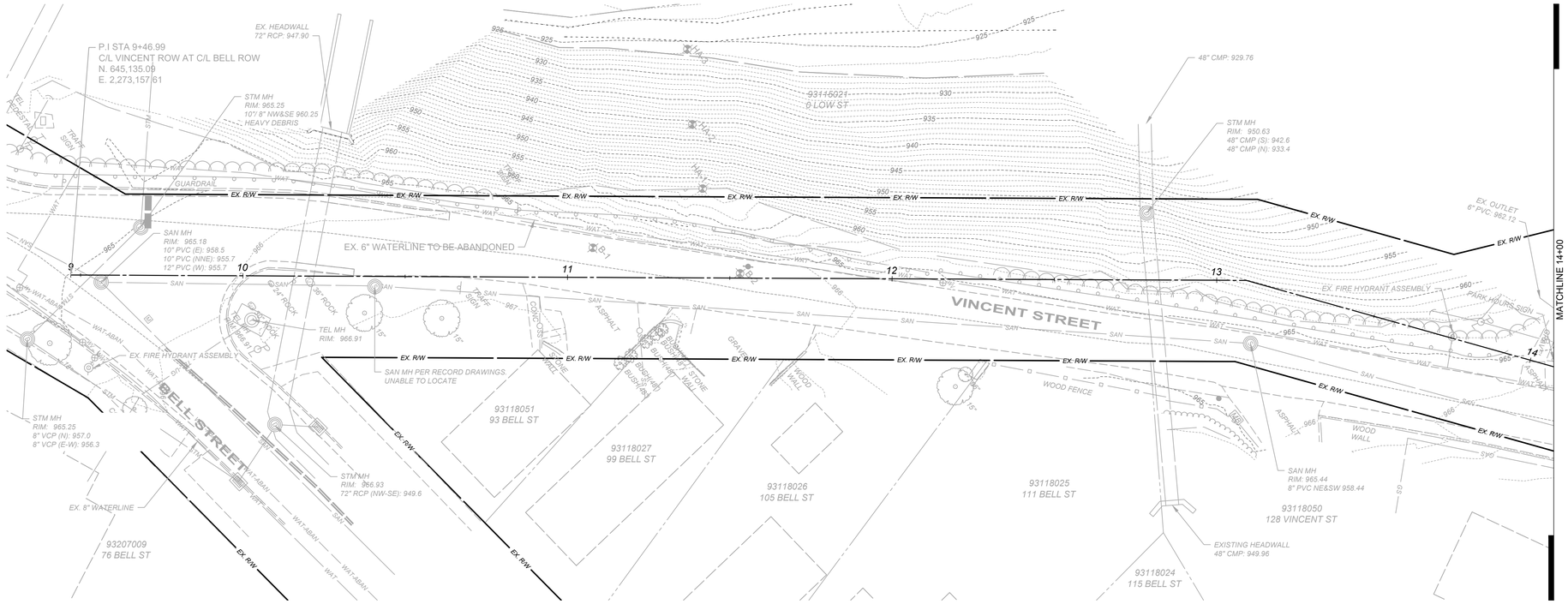
VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

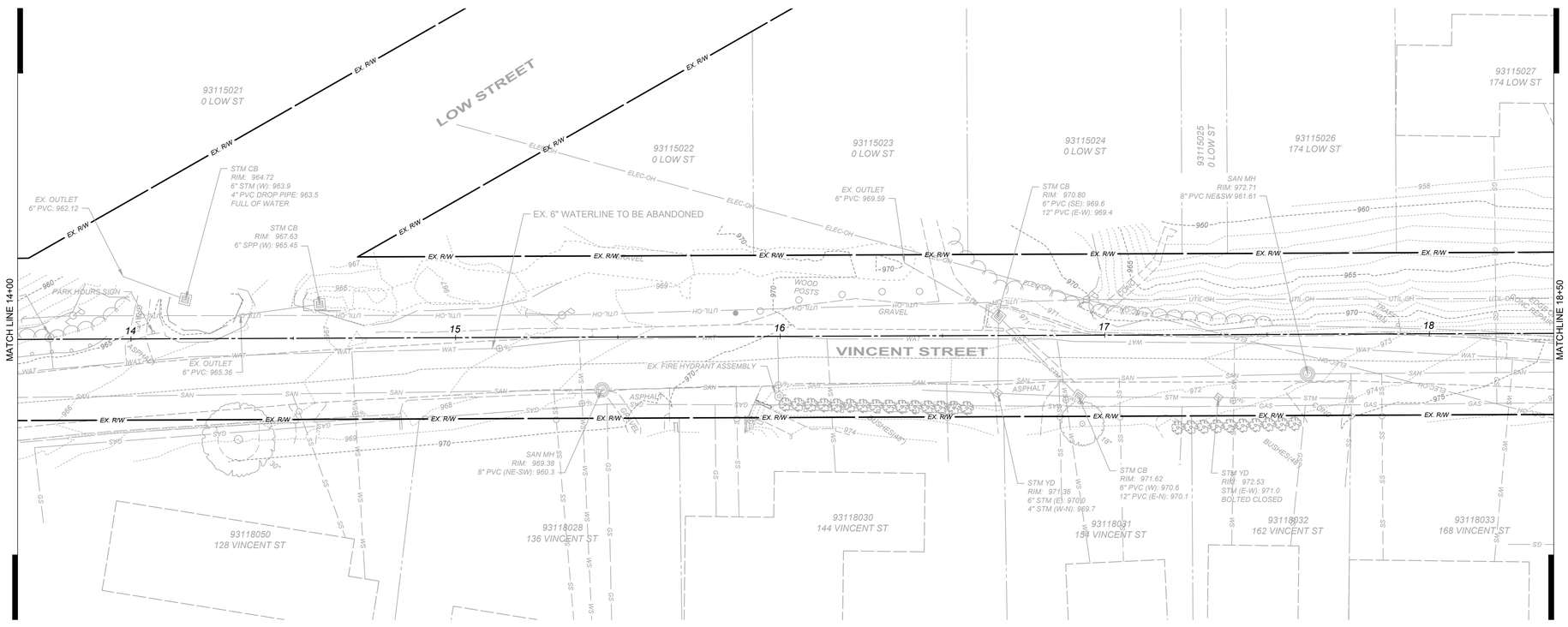
SURVEY CONTROL

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
SC-01
SHEET 3 OF 24



VINCENT STREET - PLAN VIEW
STA 9+47 TO STA 14+00
SCALE: 1" = 20'

20 ' 0 ' 20 '
SCALE: 1" = 20 '



VINCENT STREET - PLAN VIEW
STA 14+00 TO STA 18+50
SCALE: 1" = 20'

20 ' 0 ' 20 '
SCALE: 1" = 20 '

NOTE:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING CT FIELD SURVEY DATA OBTAINED IN APRIL 2023 AND NOVEMBER 2024 AS WELL AS RECORD INFORMATION AND IS SHOWN FOR REFERENCE ONLY.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

EXISTING CONDITIONS - 1

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
EX-01
SHEET 4 OF 24

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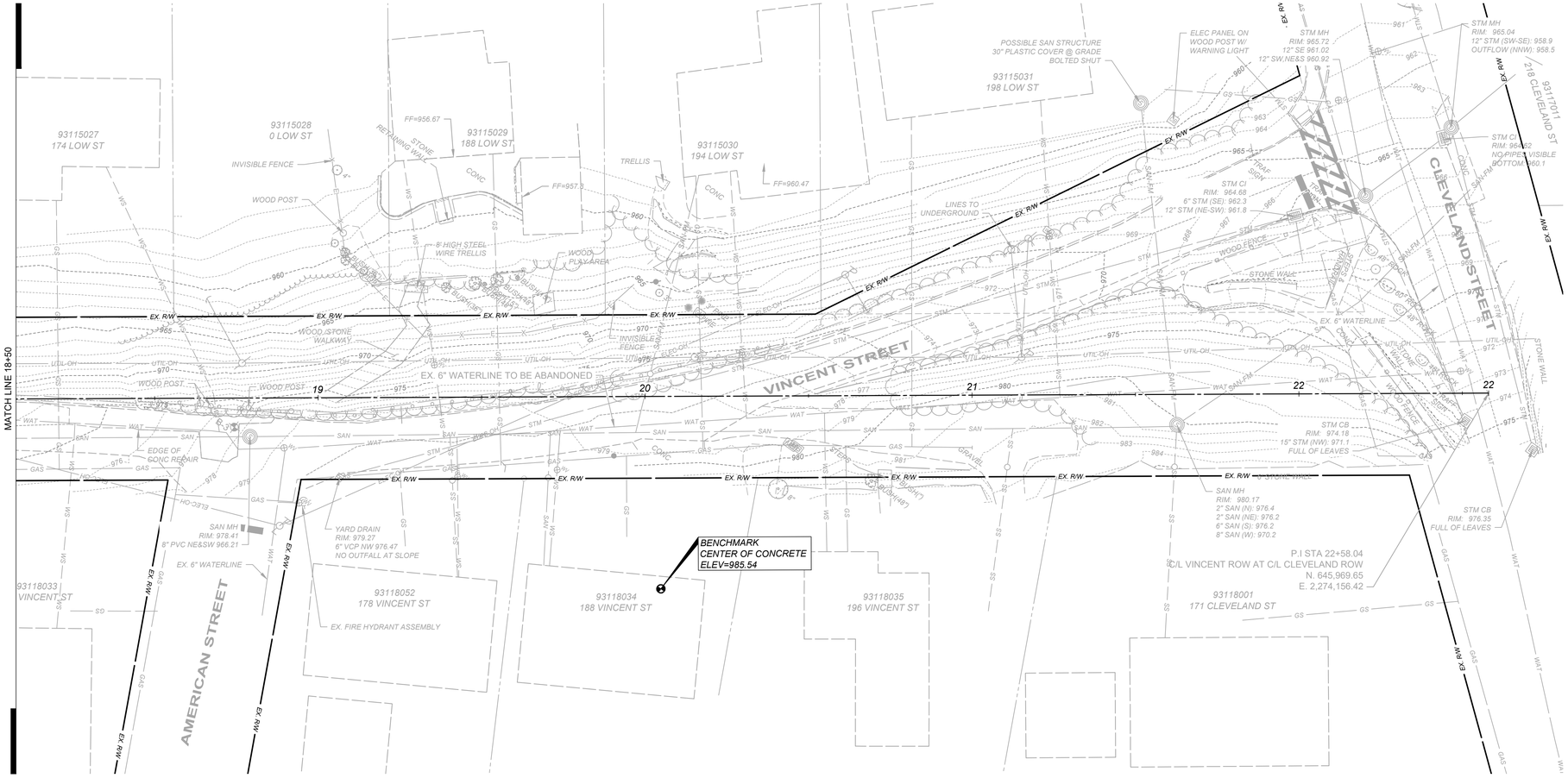

VINCENT STREET - PLAN VIEW
STA 18+50 TO STA 23+00

SCALE: 1" = 20'

NOTE:

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STATE OF OHIO
TIMOTHY R. LANNON
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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

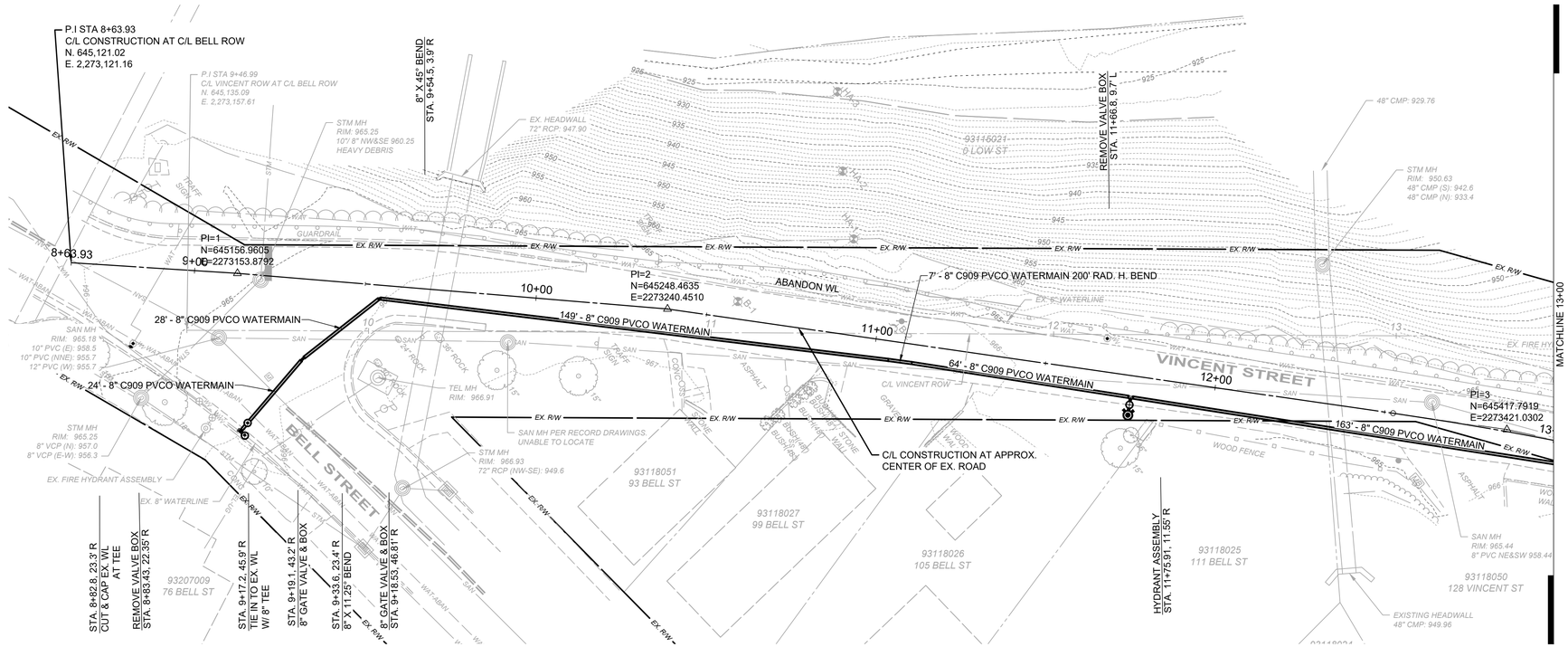
EXISTING CONDITIONS - 2

PROJECT NO.
24025505

DISCIPLINE
CIVIL

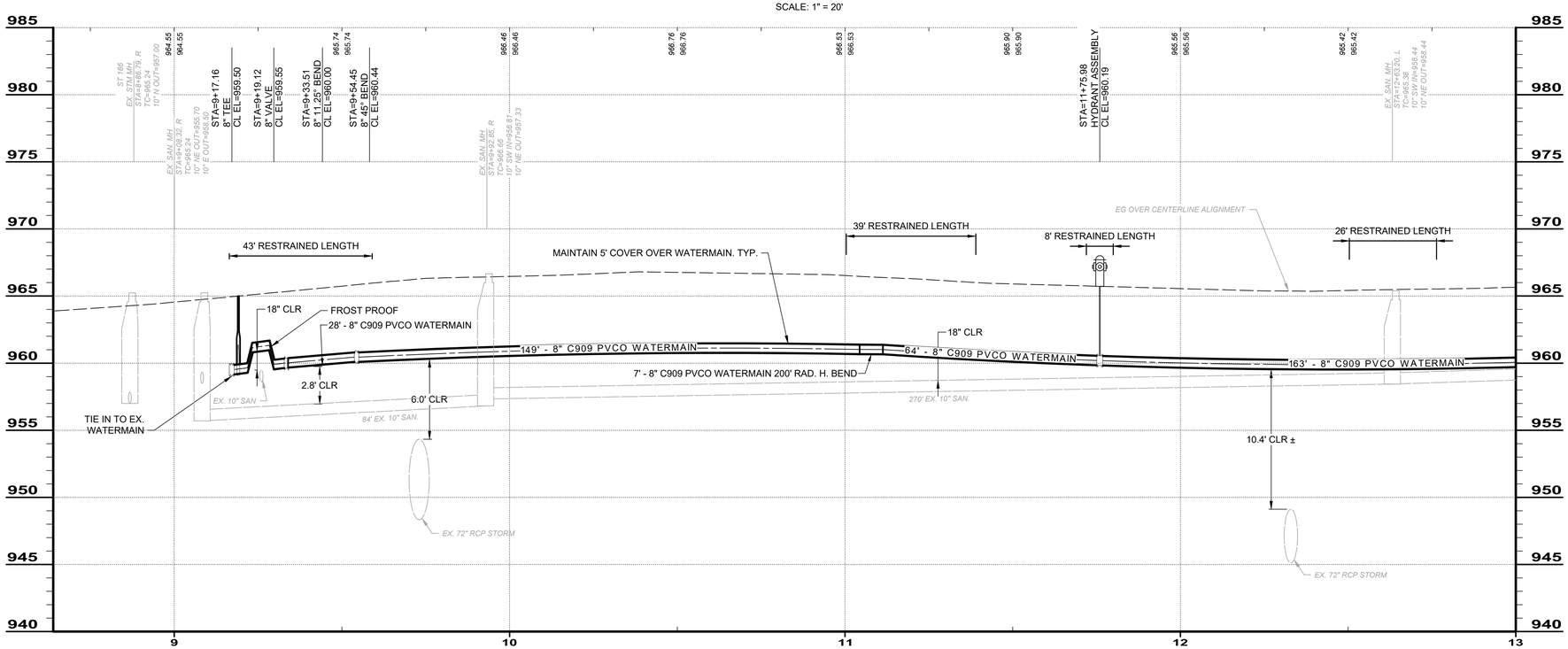
SHEET NAME
EX-02

SHEET **5** OF **24**



VINCENT STREET - PLAN VIEW
STA 8+64 TO STA 13+00

SCALE: 1" = 20'



VINCENT STREET - PROFILE VIEW
STA 8+64 TO STA 13+00

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 5'

IMPROVEMENTS NOTES:

1. PROPOSED WATER LINE IMPROVEMENT LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED PER FIELD CONDITIONS, AS APPROVED BY THE ENGINEER. WATERMAINS SHALL BE INSTALLED A MINIMUM DEPTH OF 5' BELOW GRADE AND MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION FROM THE NEAREST SANITARY SEWER.
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FIRE HYDRANT ASSEMBLY (MATCH EX. LOCATION)

VALVE BOX

WS — WATER SERVICE LINE REPLACEMENT AND APPROX. POSITION OF CORP. STOP

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

PLAN & PROFILE - 1

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
C-01
SHEET 6 OF 24

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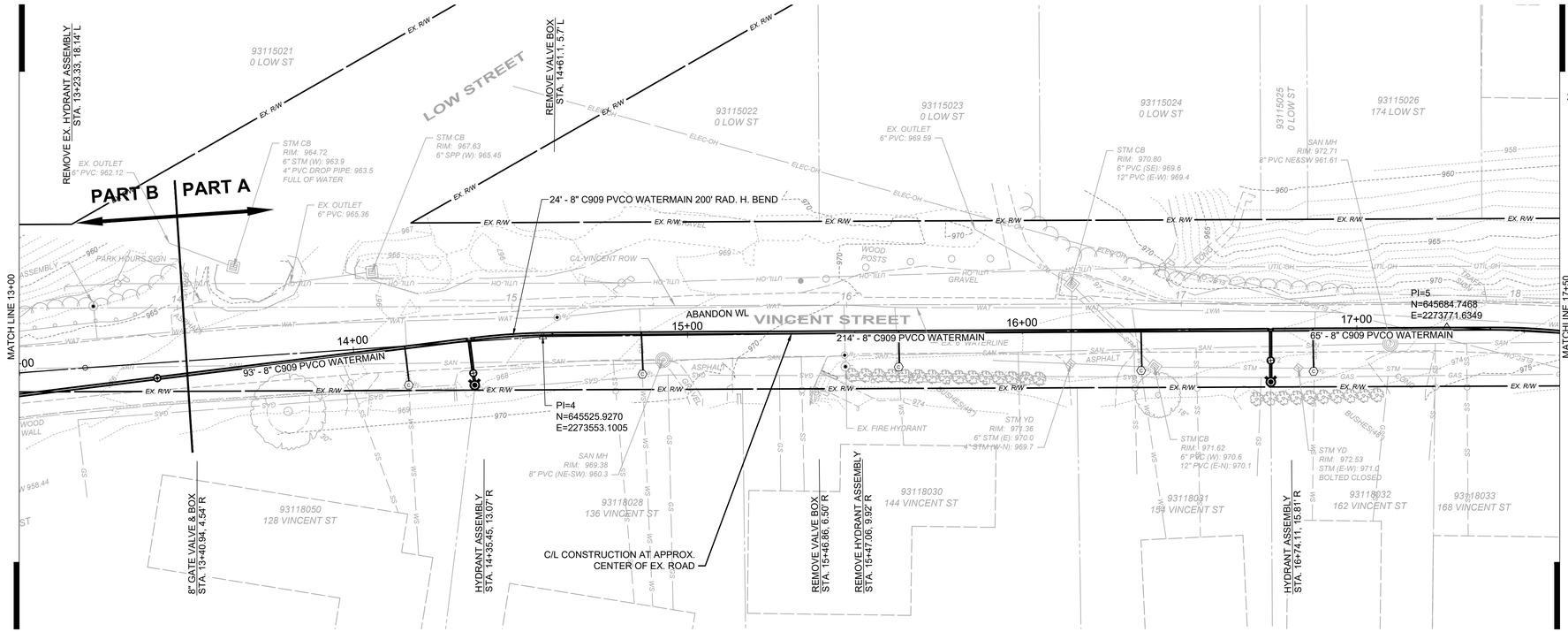
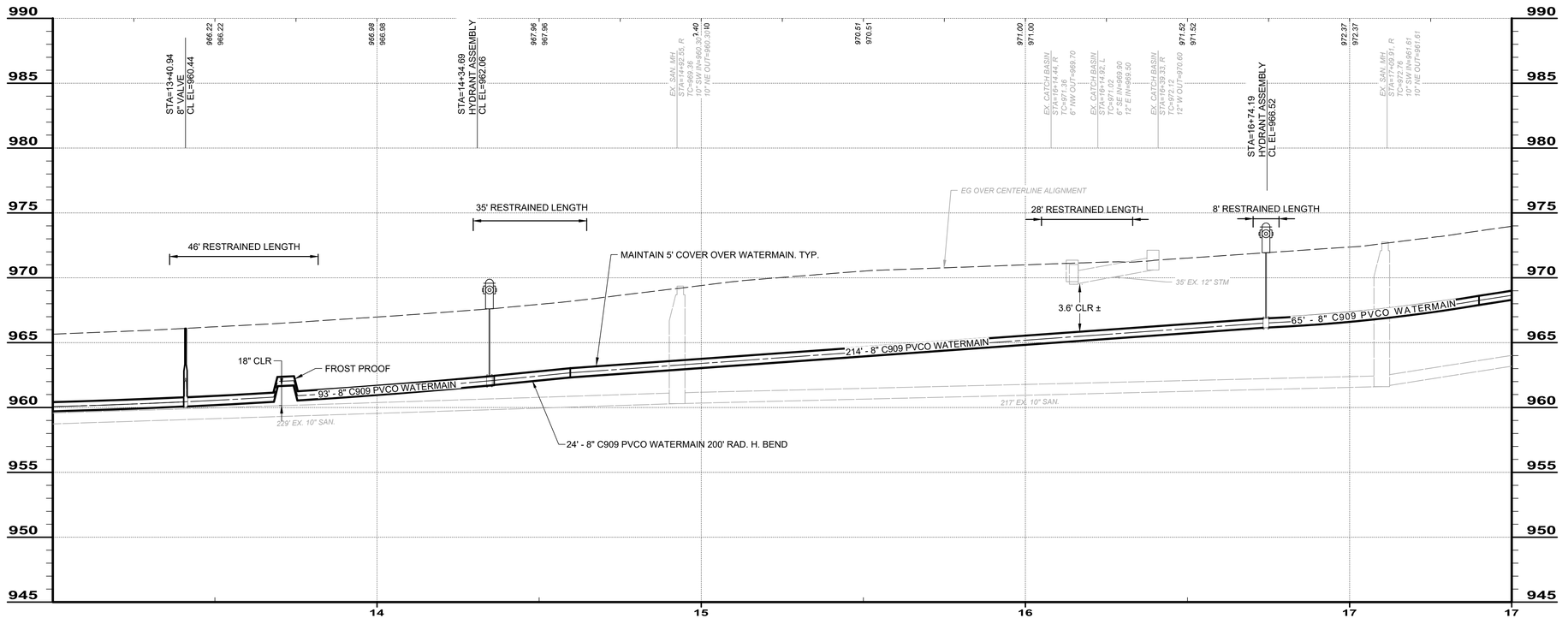


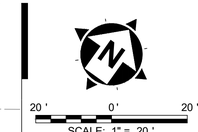
VINCENT STREET - PLAN VIEW
STA 13+00 TO STA 17+50

SCALE: 1" = 20'



VINCENT STREET - PROFILE VIEW
STA 13+00 TO STA 17+50

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 5'



IMPROVEMENTS NOTES:

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5. AT LOCATIONS WHERE THE PROPOSED 8" WATERMAIN CONNECTS TO THE EXISTING WATERMAIN, CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS TO EXPOSE/INVESTIGATE THE TIE-IN LOCATIONS TO BE INCLUDED IN THE COST OF THE WATERMAIN ITEMS. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY POSSIBLE CONFLICTS. AT THIS TIME THE ENGINEER SHALL ADJUST THE LOCATION OF THE TIE-IN AND NO ADDITIONAL COST OR DEDUCTION SHALL BE ADDED TO THE CONTRACT.
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FIRE HYDRANT ASSEMBLY (MATCH EX. LOCATION)

VALVE BOX

WS — WATER SERVICE LINE REPLACEMENT AND APPROX. POSITION OF CORP. STOP

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

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DRAWN BY:	PTV
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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

PLAN & PROFILE - 2

PROJECT NO.	24025505
DISCIPLINE	CIVIL
SHEET NAME	C-02
SHEET	7
OF	24

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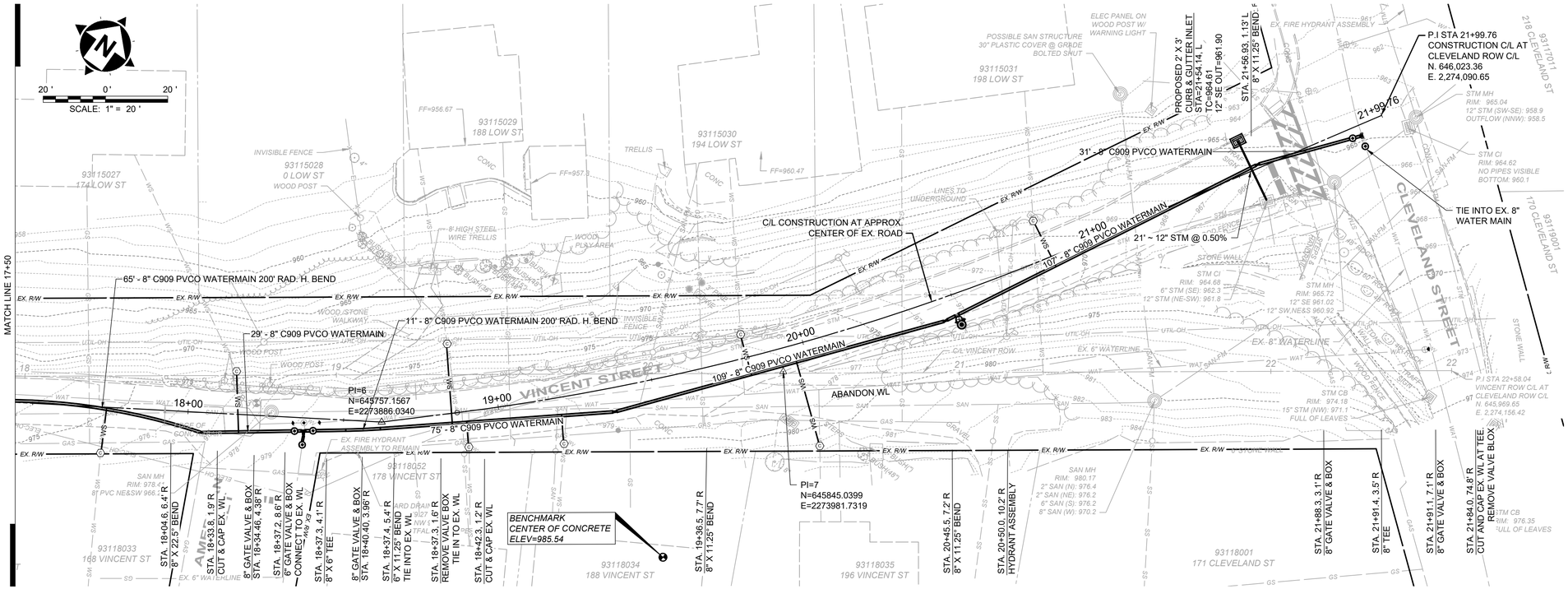
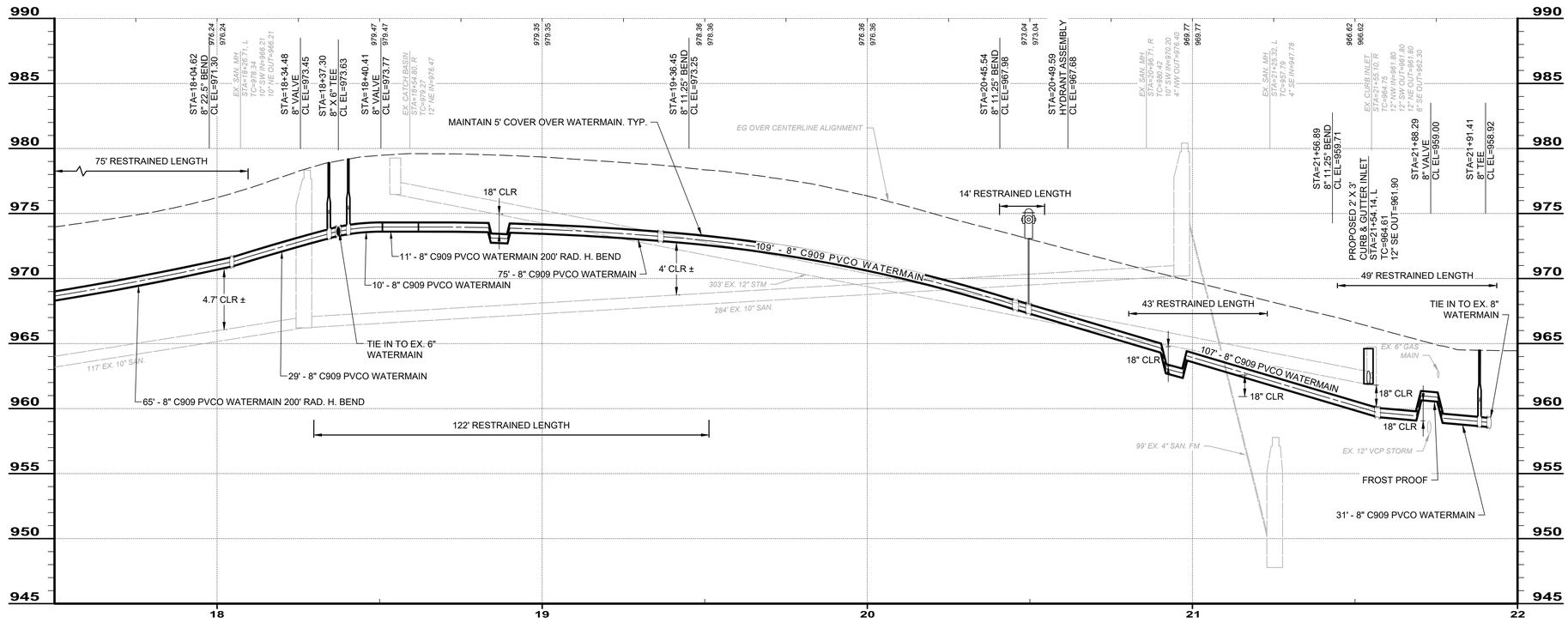


VINCENT STREET - PLAN VIEW
STA 17+50 TO STA 22+00

SCALE: 1" = 20'



VINCENT STREET - PROFILE VIEW
STA 17+50 TO STA 22+00

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 5'

IMPROVEMENTS NOTES:

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FIRE HYDRANT ASSEMBLY (MATCH EX. LOCATION)

VALVE BOX

WS WATER SERVICE LINE REPLACEMENT AND APPROX. POSITION OF CORP. STOP

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

PLAN & PROFILE - 3

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
C-03
SHEET 8 OF 24

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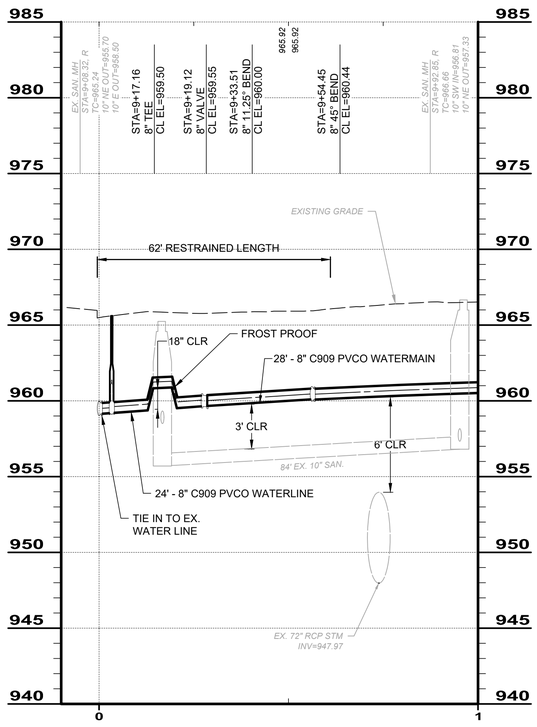
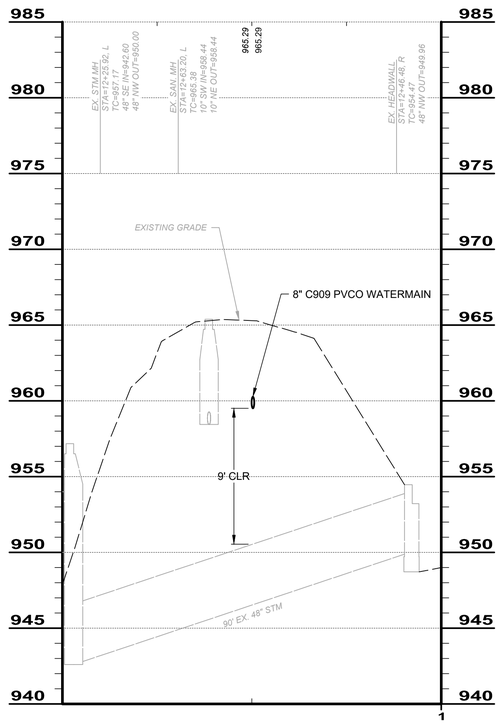
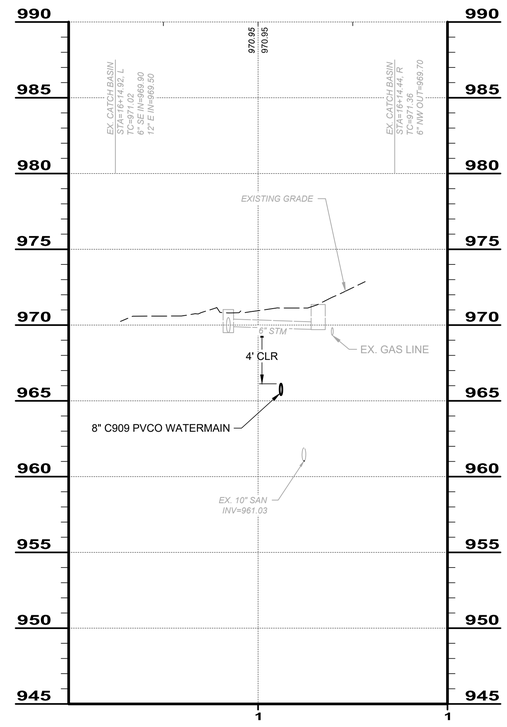


BELL STREET CROSSING



12+36.78



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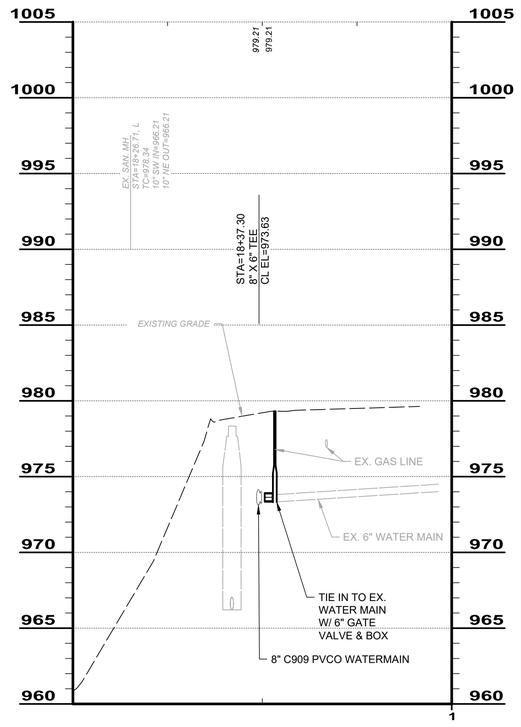

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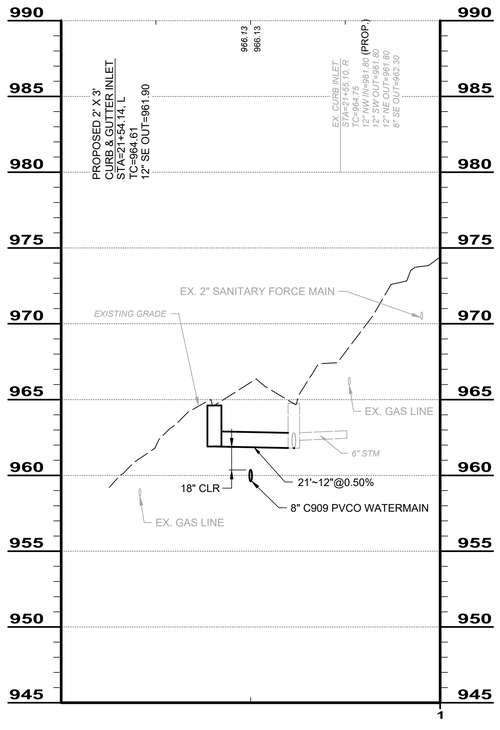


21+54.63

HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 5'

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

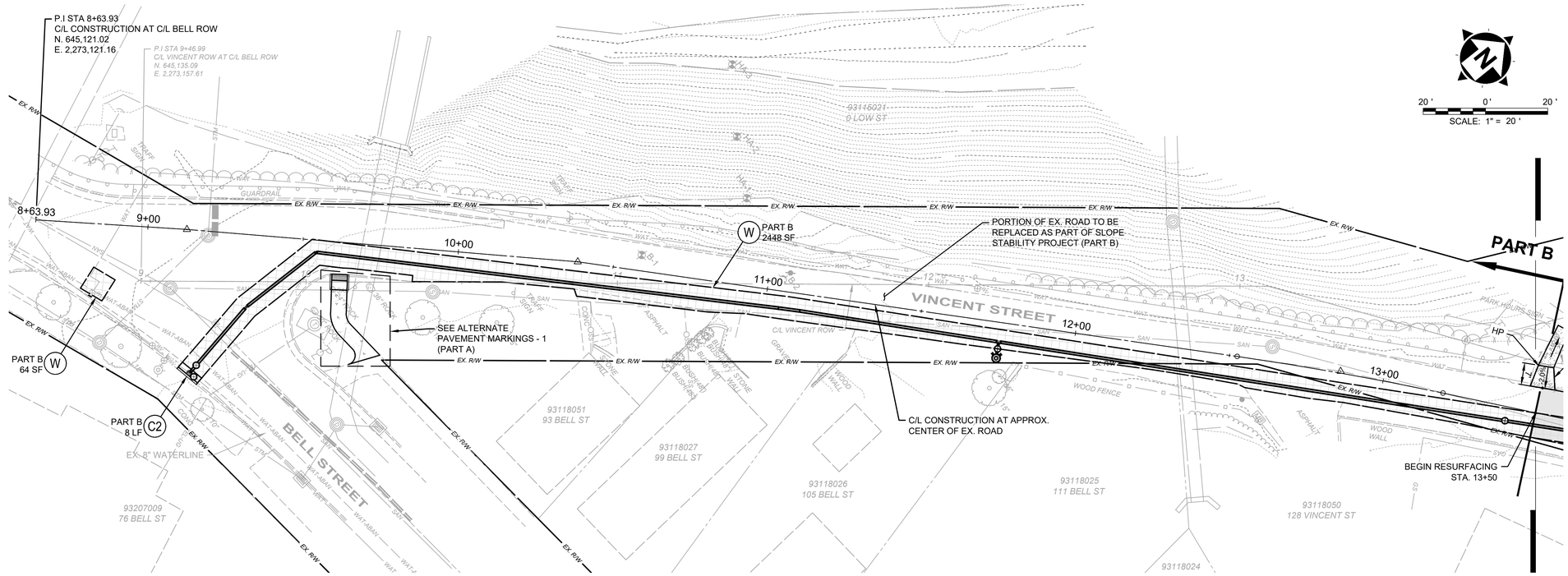
NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

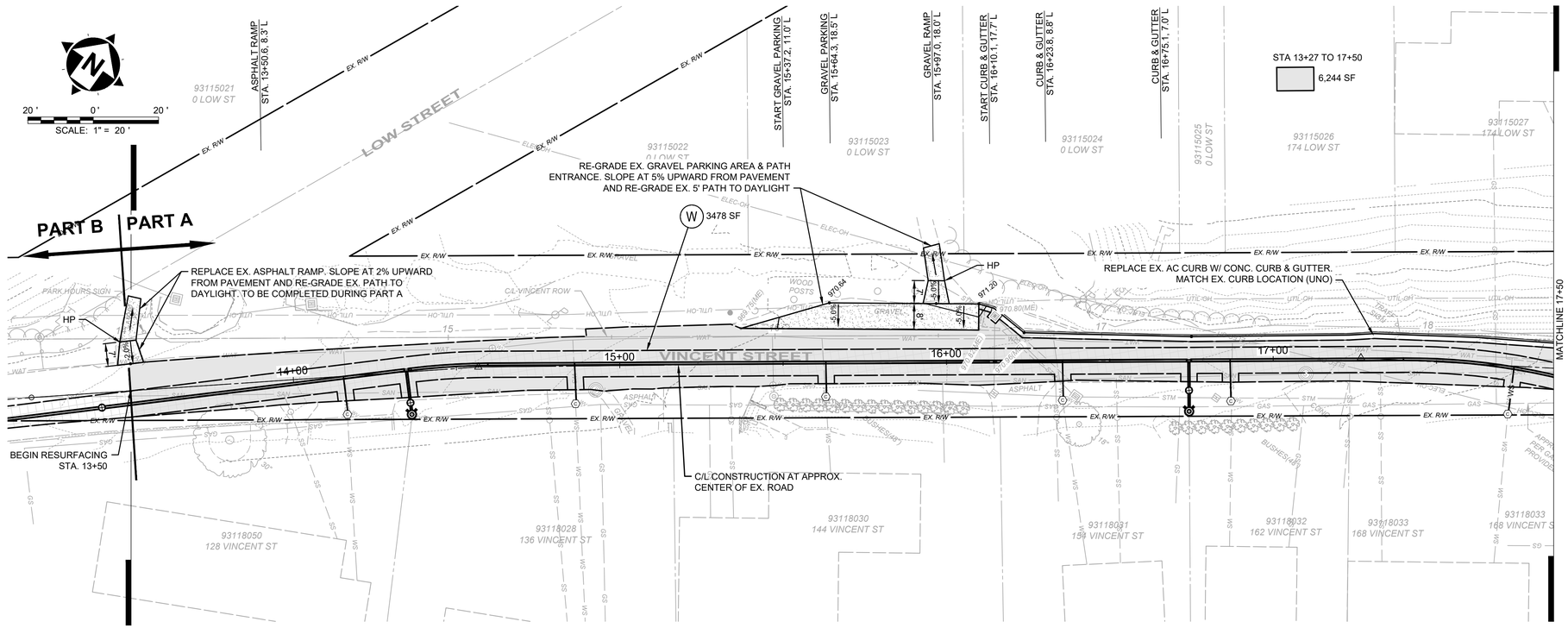
PROFILES

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
C-04
SHEET **9** OF **24**



VINCENT STREET - PLAN VIEW
STA 8+64 TO STA 13+50

SCALE: 1" = 20'



VINCENT STREET - PLAN VIEW
STA 13+50 TO STA 17+50

SCALE: 1" = 20'

NOTES:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING FIELD SURVEY DATA AND RECORD INFORMATION OBTAINED IN APRIL 2023 AND NOVEMBER 2024.
2. CURB REPLACEMENT COSTS SHALL BE INCLUDED IN THE COST FOR PAVEMENT REPAIR AT THE WS INSTALLATION LOCATIONS AND CURB INLET REPLACEMENT OR UNLESS OTHERWISE NOTED ON PLAN SHEET.

LEGEND

- (W) - PAVEMENT REPLACEMENT TYPE C
- (C2) - TYPE 2 CONCRETE CURB & GUTTER
- (CW) - CONCRETE SIDEWALK REPLACEMENT
- PAVEMENT PLANING, TACK COAT, CHIP SEAL & SURFACE COURSE
- GRAVEL PARKING/WALK REPLACEMENT

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

BID	
ISSUED FOR:	
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

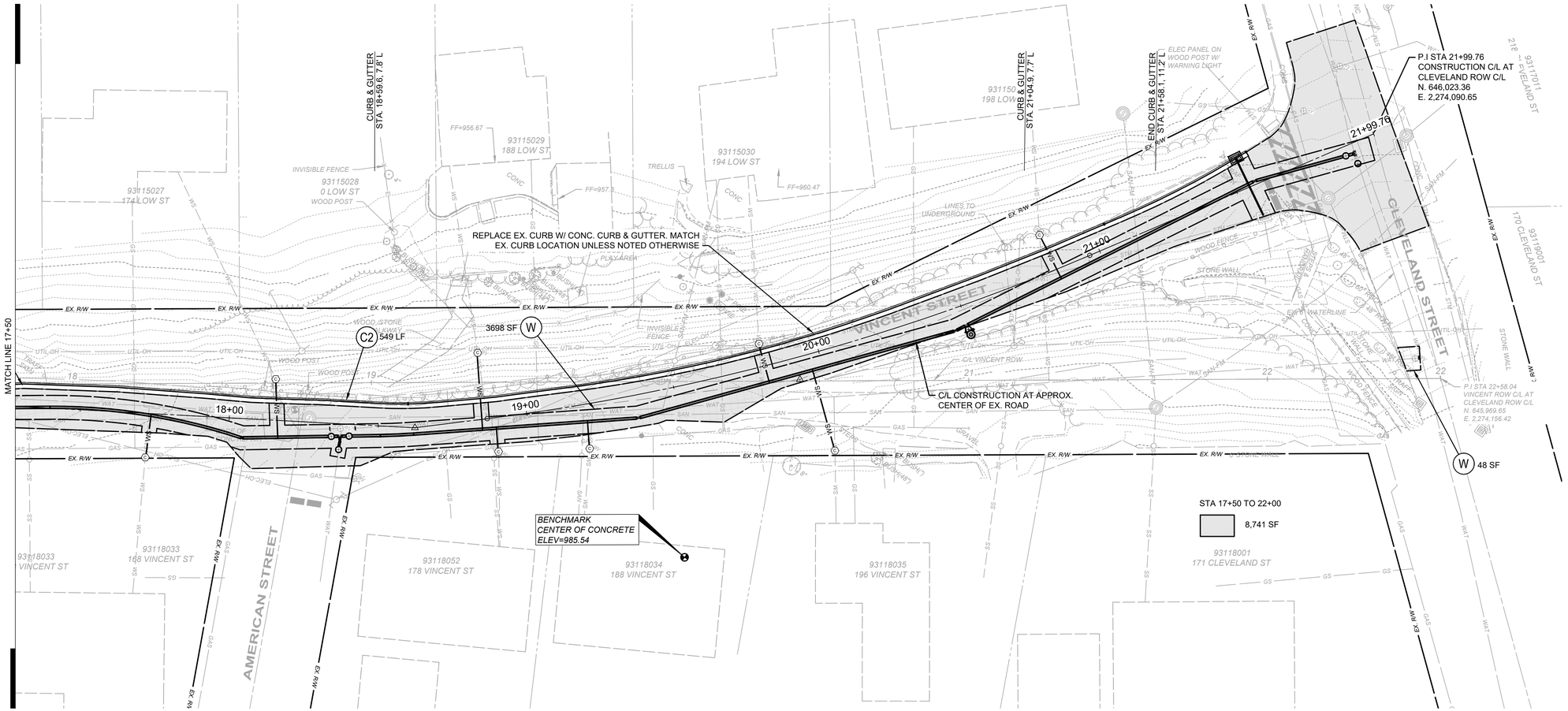
PAVEMENT REPLACEMENT - 1

PROJECT NO.
24025505

DISCIPLINE
CIVIL

SHEET NAME
PR-01

SHEET 10 OF 24



VINCENT STREET - PLAN VIEW
STA 17+50 TO STA 22+00

SCALE: 1" = 20'

NOTES:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING FIELD SURVEY DATA AND RECORD INFORMATION OBTAINED IN APRIL 2023 AND NOVEMBER 2024.
2. CURB REPLACEMENT COSTS SHALL BE INCLUDED IN THE COST FOR PAVEMENT REPAIR AT THE WS INSTALLATION LOCATIONS AND CURB INLET REPLACEMENT OR UNLESS OTHERWISE NOTED ON PLAN SHEET.

LEGEND

- W - PAVEMENT REPLACEMENT TYPE C
- C2 - TYPE 2 CONCRETE CURB & GUTTER
- CW - CONCRETE SIDEWALK REPLACEMENT
- PAVEMENT PLANING, TACK COAT, CHIP SEAL & SURFACE COURSE
- GRAVEL PARKING/WALK REPLACEMENT

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CUYAHOGA COUNTY, OHIO
CHAGRIN FALLS

PAVEMENT REPLACEMENT - 2

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
PR-02
SHEET **11** OF **24**

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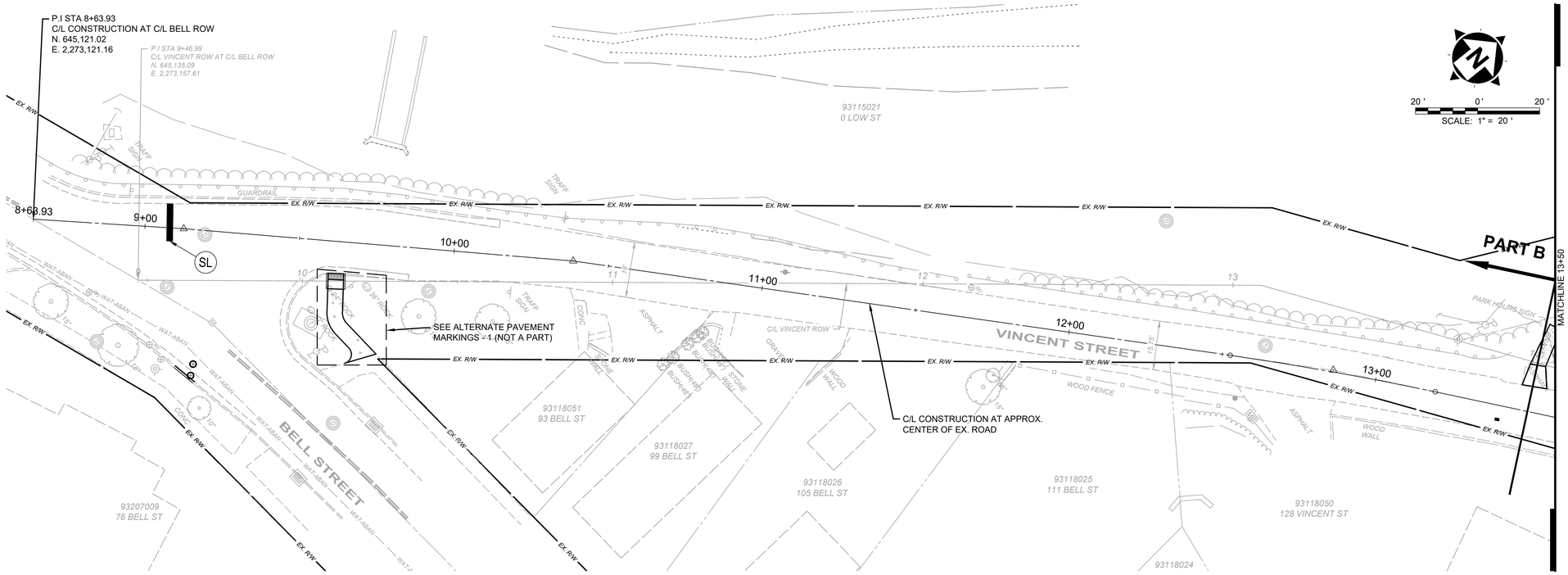
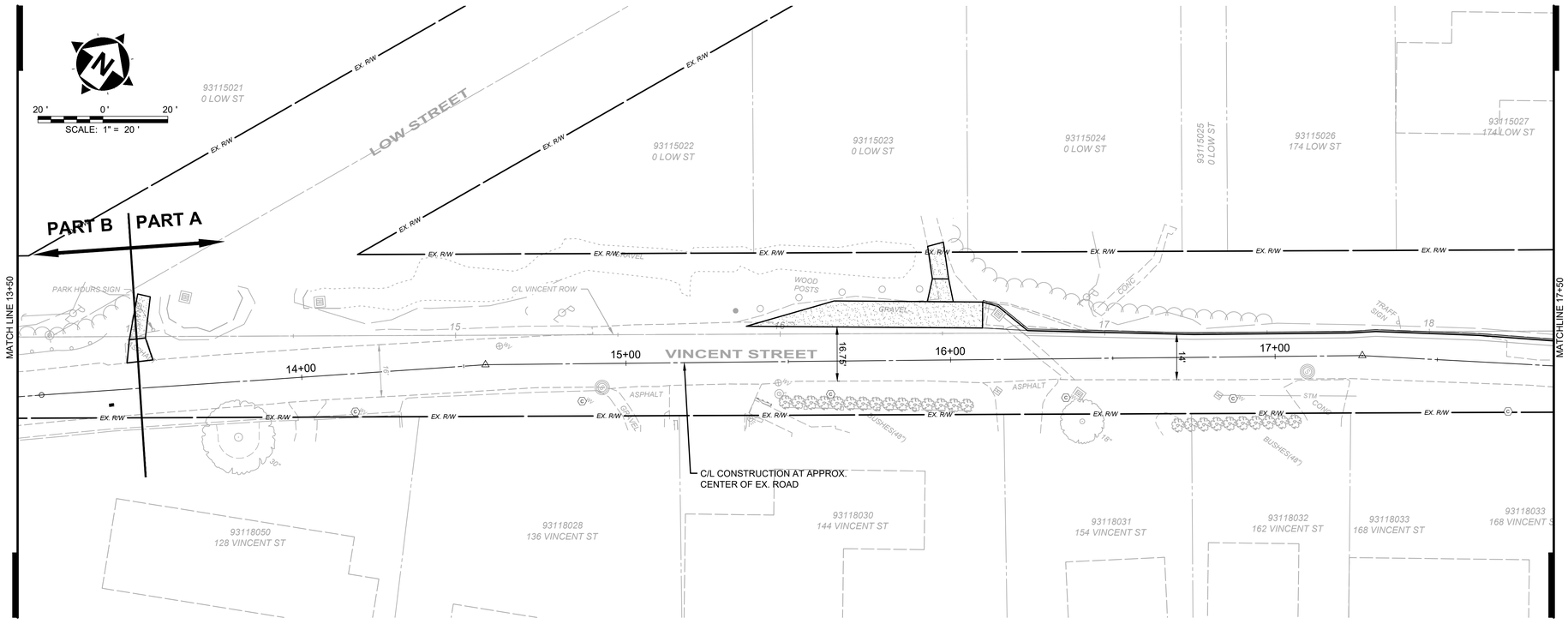


VINCENT STREET - PLAN VIEW
STA 8+64 TO STA 13+50

SCALE: 1" = 20'



VINCENT STREET - PLAN VIEW
STA 13+50 TO STA 17+50

SCALE: 1" = 20'

NOTES:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING FIELD SURVEY DATA AND RECORD INFORMATION OBTAINED IN APRIL 2023 AND NOVEMBER 2024.

LEGEND

TL	-	TRANSVERSE LINE, 8" WHITE
SH	-	DOUBLE WHITE SHOULDER
PO	-	PEDESTRIAN SYMBOL, WHITE
SL	-	STOP BAR, 24" WHITE
TLY	-	TRANSVERSE LINE, 12" YELLOW
CW	-	CROSSWALK LINE, 8"
BO	-	BIKE SYMBOL, WHITE
LA	-	LANE ARROW
LLY	-	LANE LINE, YELLOW

STATE OF OHIO
TIMOTHY R. LANNON 58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

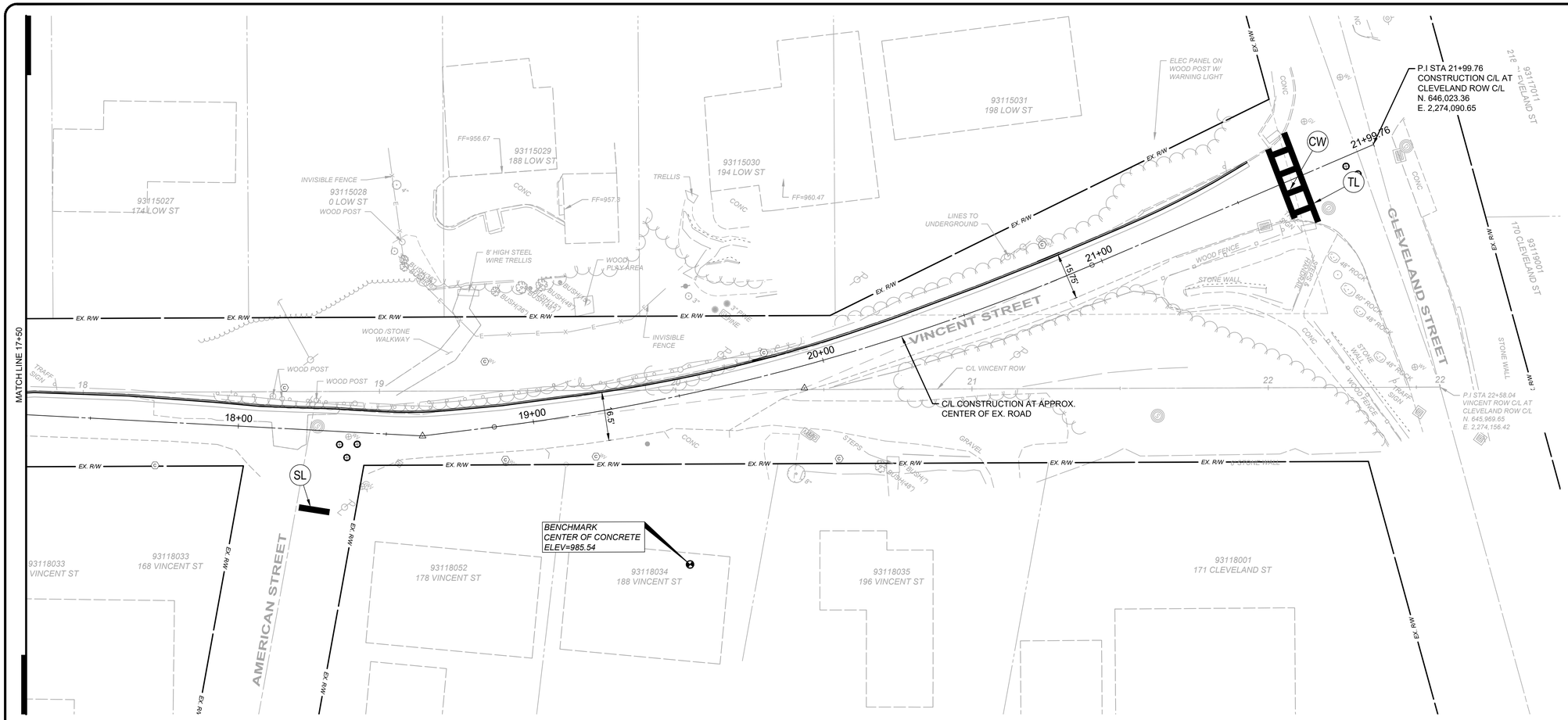
ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

PAVEMENT MARKINGS - 1

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
PM-01
SHEET 12 OF 24

C:\CTICAD_DRIVES_H\24025506\DWG\SHEETS\C_24025506 - MARKING PLAN.DWG - PM-01 - 5/27/2025 10:35:04 AM - PETE VRETTAS



VINCENT STREET - PLAN VIEW
STA 17+50 TO STA 22+00

SCALE: 1" = 20'

NOTES:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING FIELD SURVEY DATA AND RECORD INFORMATION OBTAINED IN APRIL 2023 AND NOVEMBER 2024.

LEGEND

- (TL) - TRANSVERSE LINE, 8" WHITE
- (SH) - DOUBLE WHITE SHOULDER
- (PO) - PEDESTRIAN SYMBOL, WHITE
- (SL) - STOP BAR, 24" WHITE
- (TLY) - TRANSVERSE LINE, 12" YELLOW
- (CW) - CROSSWALK LINE, 8"
- (BO) - BIKE SYMBOL, WHITE
- (LA) - LANE ARROW
- (LLY) - LANE LINE, YELLOW

20 ' 0 ' 20 '
SCALE: 1" = 20 '

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

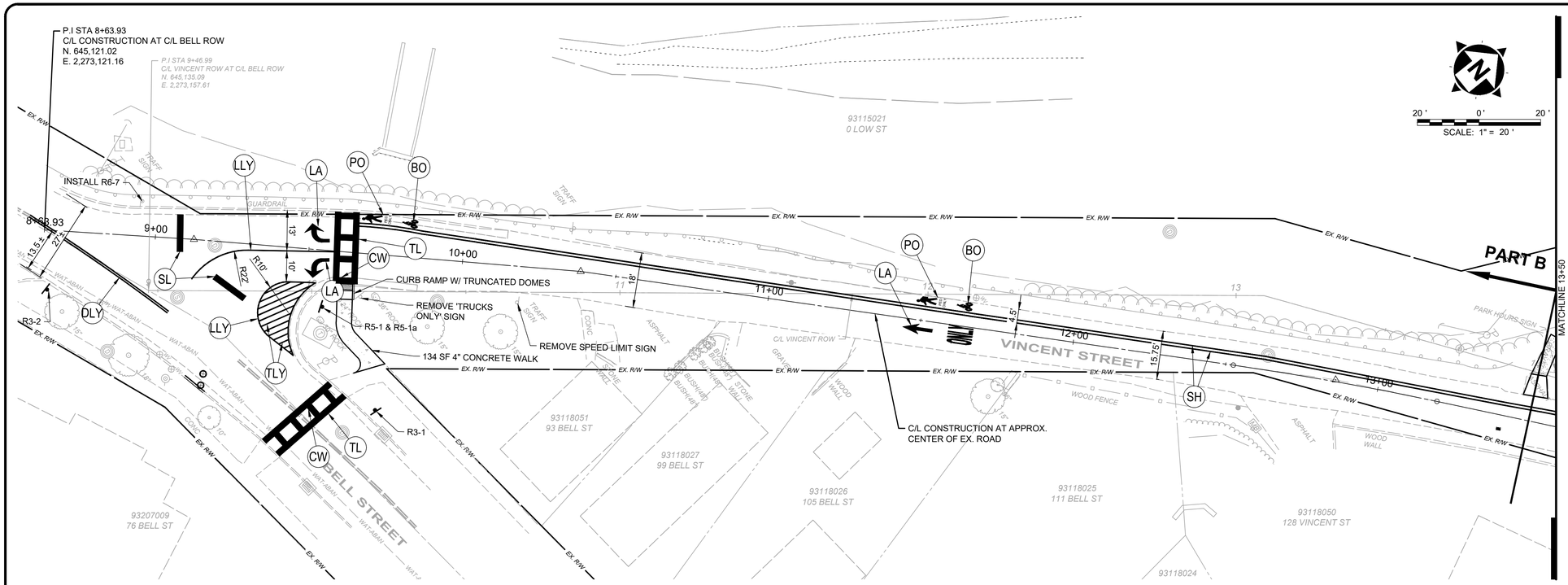
NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

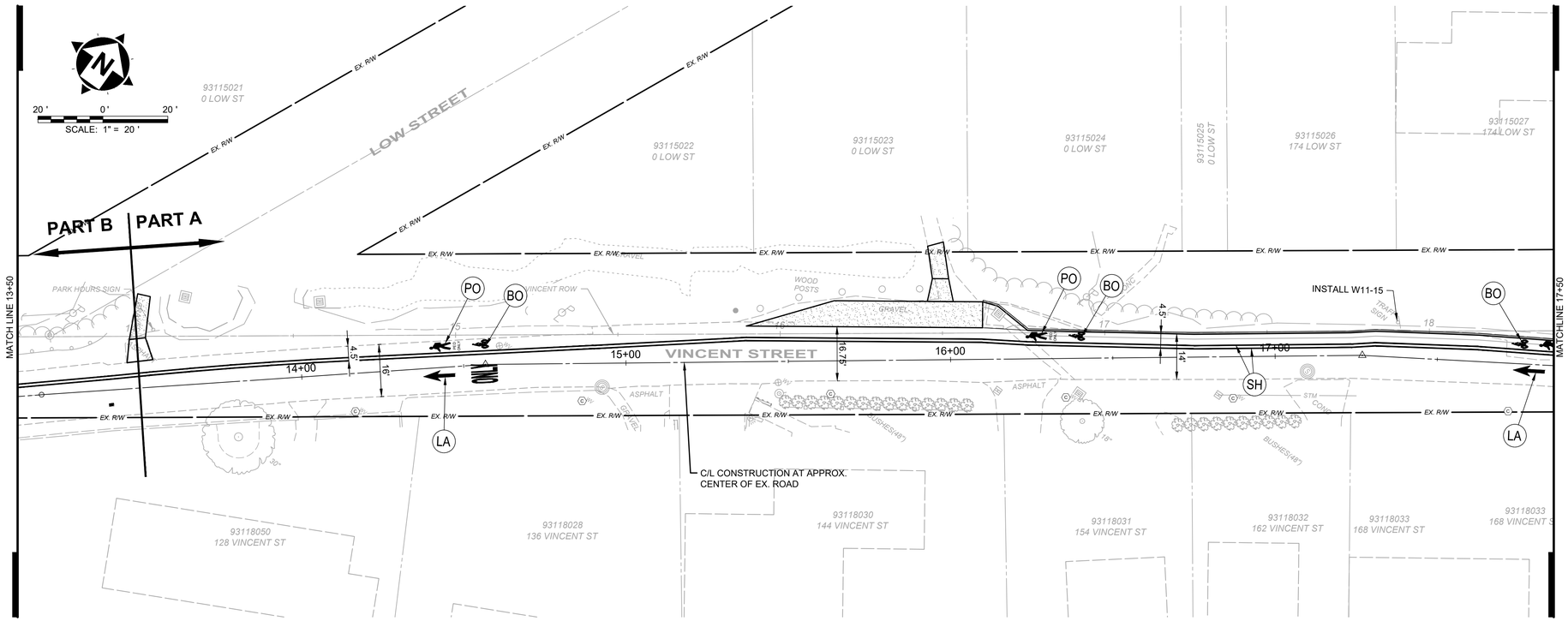
PAVEMENT MARKINGS - 2

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
PM-02
SHEET **13** OF **24**



VINCENT STREET - PLAN VIEW
STA 8+64 TO STA 13+50

SCALE: 1" = 20'



VINCENT STREET - PLAN VIEW
STA 13+50 TO STA 17+50

SCALE: 1" = 20'

NOTES:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING FIELD SURVEY DATA AND RECORD INFORMATION OBTAINED IN APRIL 2023 AND NOVEMBER 2024.

LEGEND

TL	-	TRANSVERSE LINE, 24" WHITE
SH	-	DOUBLE WHITE SHOULDER
PO	-	PEDESTRIAN SYMBOL, WHITE
SL	-	STOP BAR, 24" WHITE
TLY	-	TRANSVERSE LINE, 12" YELLOW
CW	-	CROSSWALK LINE, 24" WHITE
BO	-	BIKE SYMBOL, WHITE
LA	-	LANE ARROW
LLY	-	LANE LINE, YELLOW
DLY	-	DOUBLE LANE LINE, YELLOW

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

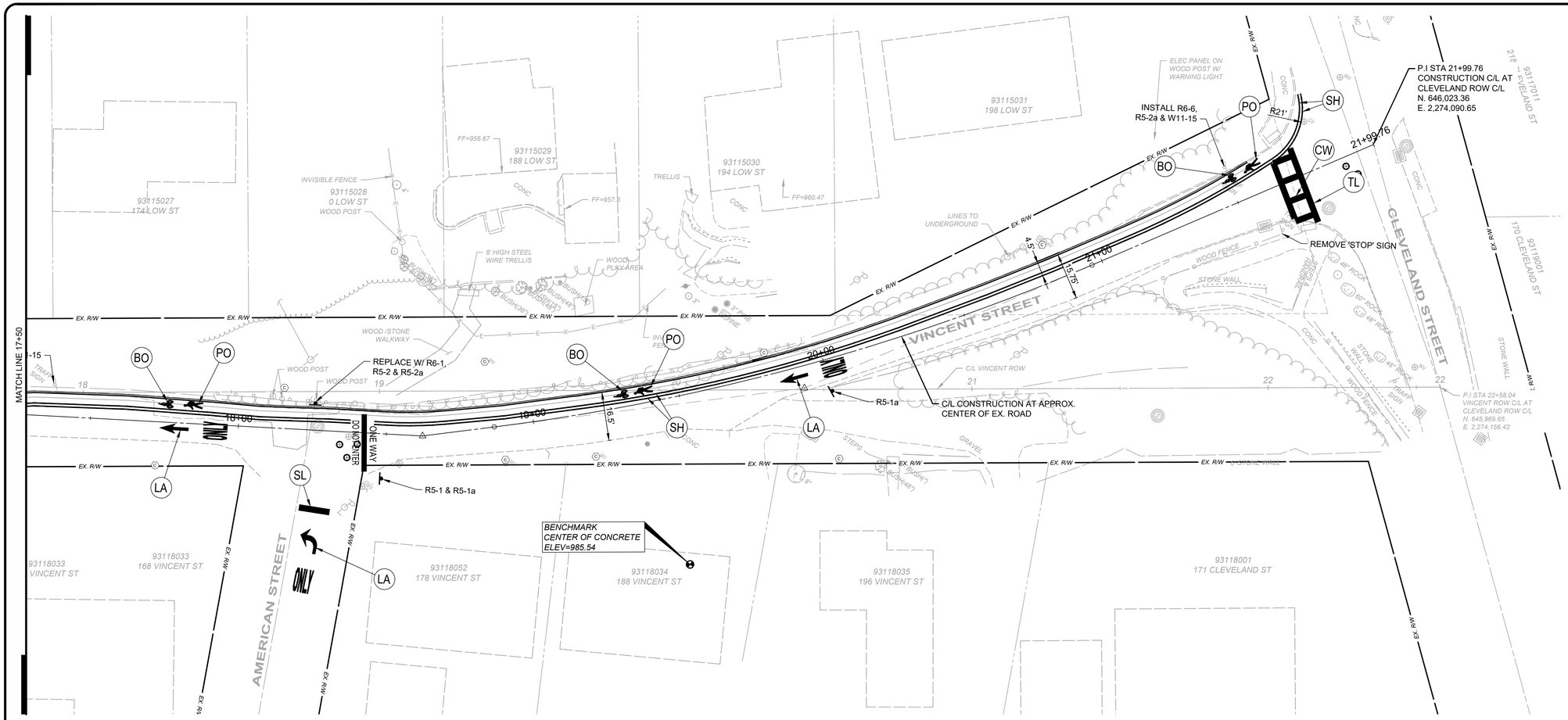
ALTERNATE PAVEMENT MARKINGS - 1

PROJECT NO.
24025505

DISCIPLINE
CIVIL

SHEET NAME
ALT-01

SHEET **14** OF **24**



VINCENT STREET - PLAN VIEW
STA 17+50 TO STA 22+00
SCALE: 1" = 20'

NOTES:

1. EXISTING INFORMATION IS ILLUSTRATED UTILIZING FIELD SURVEY DATA AND RECORD INFORMATION OBTAINED IN APRIL 2023 AND NOVEMBER 2024.

LEGEND

- (TL) - TRANSVERSE LINE, 24" WHITE
- (SH) - DOUBLE WHITE SHOULDER
- (PO) - PEDESTRIAN SYMBOL, WHITE
- (SL) - STOP BAR, 24" WHITE
- (TLY) - TRANSVERSE LINE, 12" YELLOW
- (CW) - CROSSWALK LINE, 24" WHITE
- (BO) - BIKE SYMBOL, WHITE
- (LA) - LANE ARROW
- (LLY) - LANE LINE, YELLOW
- (DLY) - DOUBLE LANE LINE, YELLOW

20 ' 0 ' 20 '
SCALE: 1" = 20 '

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

ALTERNATE PAVEMENT MARKINGS - 2

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
ALT-02
SHEET **15** OF **24**

NOTES:

FLAGGERS

1. Flaggers, one for each direction, shall be used to control traffic continuously for as long as a one lane operation is in effect. The flaggers shall be able to communicate with each other at all times.

LENGTH OF CLOSURE

2. Several small work areas close together should be combined into one work zone. However, the closure shall not be more than 2000′ long unless approved by the Engineer. The minimum length between closures shall be 2000′. Only one side of the road shall be closed in any one work zone.

SIGN LOCATION AND SPACING

3A. The minimum spacing between work zone signs is shown in Table I. Maximum spacing should not be greater than 1.5 times the distances shown in Table I.

3B. Sign spacing should be adjusted to avoid conflict with existing signs. Minimum spacing to existing signs shall be 200′ for speeds of 45 mph or less and a minimum of 400′ for speeds of 50 mph or greater.

3C. The location of the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment.

ADJUSTMENTS FOR SIGHT DISTANCE

4. The location of the flagger station and the advance warning signs should be adjusted to provide for adequate sight distance for the existing vertical and horizontal roadway alignment.

BASIC SIGNING

5A. ROAD WORK AHEAD (W20-1) signs shall be provided on entrance ramps or roadways entering the work limits.

5B. END ROAD WORK (G20-2) signs are only required for lane closures of more than 1 day. It is intended that these signs be placed on the mainline, on all exit ramps, and on roadways exiting the work limits.

5C. Overlapping of signing for adjacent projects should be avoided where the messages could be confusing. Any ROAD WORK AHEAD (W20-1) or END ROAD WORK (G20-2) sign which falls within the limits of another traffic control zone shall be omitted or covered during the period when both projects are active.

SIGNING DETAILS

6A. The Advisory Speed (W13-1P) plaque shall be used when specified in the plan.

6B. 36″ warning signs may be used when the approach speed limit is 40 mph or less.

FLASHING WARNING LIGHTS

7. Type A flashing warning lights shown on the ROAD WORK AHEAD (W20-1) signs and on the LANE CLOSED AHEAD (W20-5) signs are required whenever a night lane closure is necessary.

DRUMS / CONES

8A. Drum spacing shall be as follows:

a) Spacing along the closure shall be 40′ center-to-center.
b) Spacing along the approach taper shall be 10′ center-to-center.

8B. Cones may be substituted for drums as follows:

a) Cones used for daytime traffic control shall have a minimum height of 28″.
b) Cones used for nighttime traffic control shall have a minimum height of 42″.
c) Use of cones at night shall be prohibited along tapers.

8C. Provisions shall be made to stabilize the cones and drums to prevent them from blowing over.

8D. A minimum of two drums shall be used to close the paved shoulder.

(RESERVED FOR FUTURE USE)

9A. (intentionally blank)

AREA ILLUMINATION

10A. Adequate area illumination of each flagger station shall be provided at night. Use of portable flood lighting is acceptable. Luminaires shall be located adjacent to each flagger station.

10B. To ensure the adequacy of floodlight placement and the elimination of glare, the Contractor and the Engineer shall drive through the worksite each night when the lighting is in place. Light placement and shielding shall be adjusted to the satisfaction of the Engineer.

INTERSECTION / DRIVEWAY ACCESS

11. Within the length of closure, provision shall be made to control traffic entering from intersecting streets and major drives as necessary to prevent wrong-way movements and to keep vehicles off of new pavement not ready for traffic. The Contractor shall:

a) Place across the closed lane, either three drums (cones) or barricades, and/or
b) Provide an additional flagger at every public street intersection and major driveway.

Drums (cones) placed across the closed lane shall be located 25′ beyond the projected pavement edges of the driveway or cross highway, as shown in Standard Construction Drawings (SCDs MT-97.11 or MT-97.12. For barricades, see SCD MT-101.60.

Existing STOP signs shall be relocated as necessary to assure proper location for the traffic conditions.

The method of control shall be subject to the approval of the Engineer.

SHADOW VEHICLE

12A. The shadow vehicle shall be in place and unoccupied whenever workers are in the work area. This vehicle shall be removed from the pavement whenver workers are not in the work area.

12B. The shadow vehicle shall be equipped with a high-intensity yellow rotating, flashing, oscillating, or strobe light(s).

12C. The shadow vehicle shall be equipped with a truck-mounted or trailer attenuator (TMA) in accordance with CMS 614.03 when called for in the plans.

CHIP SEAL OPERATIONS

13. For chip seal operations, additional signing shall be incorporated in the advanced warning area.

a) The LOOSE GRAVEL (W8-7) and FRESH TAR (W21-2) signs shall both be used in advance of the chip seal operation.
b) Repeat the LOOSE GRAVEL sign with a 35 mph Advisory Speed (W13-1) plaque every half mile per CMS 422.09.
c) The FRESH TAR and the LOOSE GRAVEL signs shall both be used for signing of side roads intersecting the work area.

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED
PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

MAINTENANCE OF TRAFFIC - 1

PROJECT NO.
24025505

DISCIPLINE
CIVIL

SHEET NAME
MOT-01

SHEET 16 OF 24

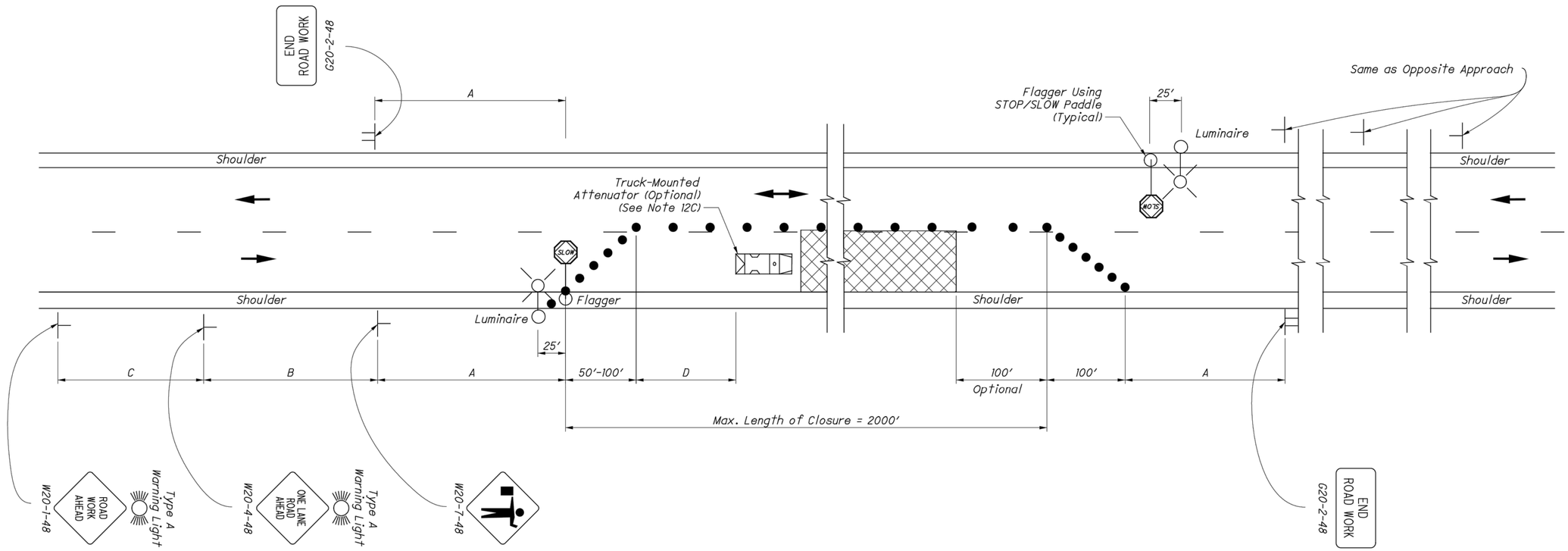


TABLE I (SIGN SPACING)

ROAD TYPE	DISTANCE BETWEEN SIGNS (FT)		
	A	B	C
Two-Lane (≤ 40 MPH)	100	100	100
Two-Lane (45-50 MPH)	350	350	350
Two-Lane (55-60 MPH)	500	500	500

TABLE II

SPEED LIMIT (MPH)	BUFFER (D) (FT) MIN.
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570

LEGEND

- WORK AREA
- DRUMS/CONES
- DIRECTION OF TRAVEL
- SHADOW VEHICLE WITH TMA

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR: BID
ISSUE DATE: 5/27/25
SCALE: AS SHOWN
DESIGNED BY: PVV
DRAWN BY: PVV
CHECKED BY: TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CUYAHOGA COUNTY, OHIO
CHAGRIN FALLS

MAINTENANCE OF TRAFFIC - 2

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
MOT-02
SHEET 17 OF 24

W20-3-36
36"x36"

B

W20-2-36
36"x36"

C

R11-2-48
48"x30"

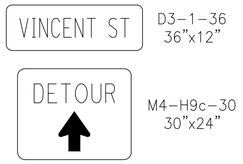
D

R11-2-48
48"x30"

E

M4-8a-24
24"x18"

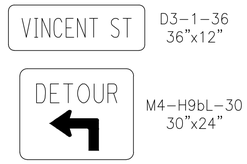
F



D3-1-36
36"x12"

M4-H9c-30
30"x24"

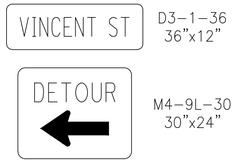
G



D3-1-36
36"x12"

M4-H9bL-30
30"x24"

H



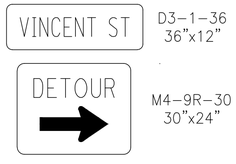
D3-1-36
36"x12"

M4-9L-30
30"x24"

I

SIGNS MOUNTED ON
TYPE III PORTABLE
BARRICADE

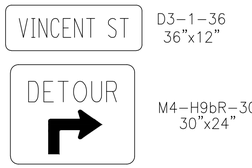
S



D3-1-36
36"x12"

M4-9R-30
30"x24"

J



D3-1-36
36"x12"

M4-H9bR-30
30"x24"

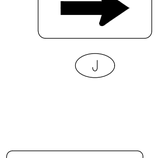
K

M4-10R-48
48"x18"

L

M4-10L-48
48"x18"

M



D3-1-36
36"x12"

M4-9R-30
30"x24"

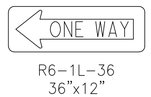
O

R5-1-30
30"x30"

P

R6-1R-36
36"x12"

Q

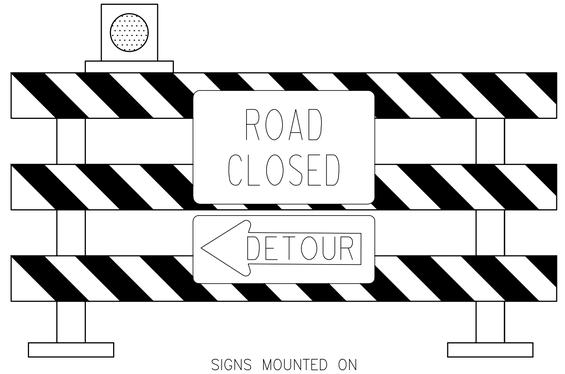


R6-1L-36
36"x12"

R

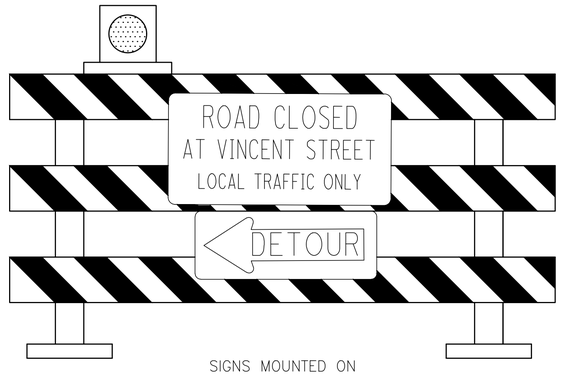
R11-2-48
48"x30"

S



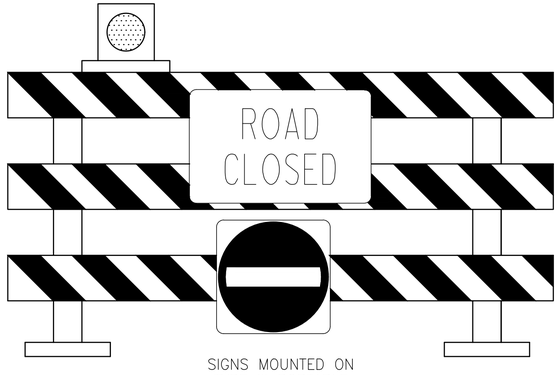
SIGNS MOUNTED ON
TYPE III PORTABLE
BARRICADE

D
M



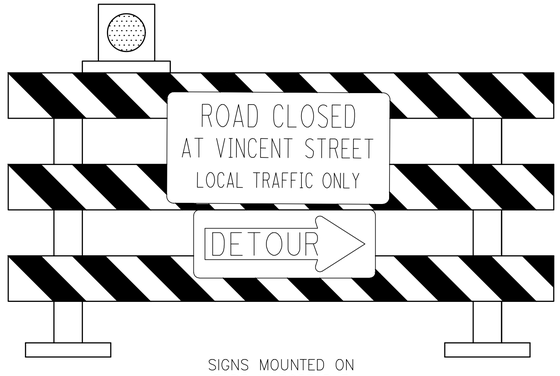
SIGNS MOUNTED ON
TYPE III PORTABLE
BARRICADE

S
M



SIGNS MOUNTED ON
TYPE III PORTABLE
BARRICADE

D
P



SIGNS MOUNTED ON
TYPE III PORTABLE
BARRICADE

E
L

SIGNS MOUNTED ON
TYPE III PORTABLE
BARRICADE

E

STATE OF OHIO
TIMOTHY
R.
LANNON
58885
REGISTERED
PROFESSIONAL ENGINEER

verdantas

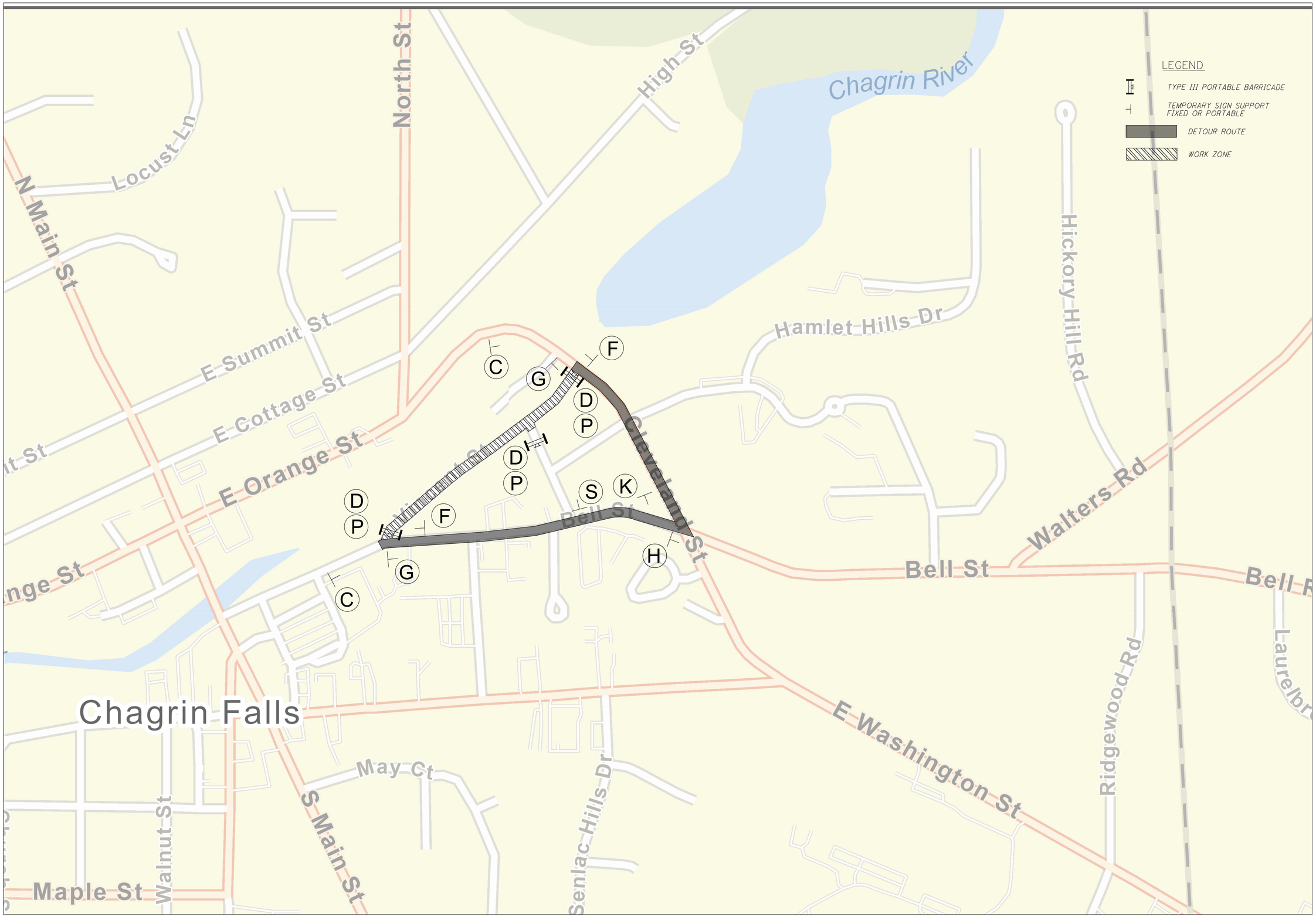
NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

MAINTENANCE OF TRAFFIC - 3

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
MOT-03
SHEET **18** OF **24**



STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

MAINTENANCE OF TRAFFIC - 4

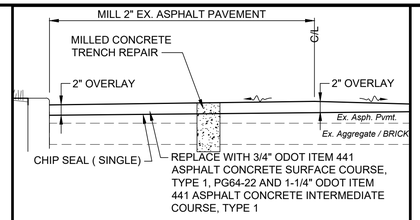
PROJECT NO.
24025505

DISCIPLINE
CIVIL

SHEET NAME
MOT-04

SHEET **19** OF **24**

C:\CT\CAD_DRIVES_H\24025506\DWG\SHEETS\C_24025506 - MOT.DWG - MOT-04 - 5/27/2025 10:35:59 AM - PETE VRETTAS

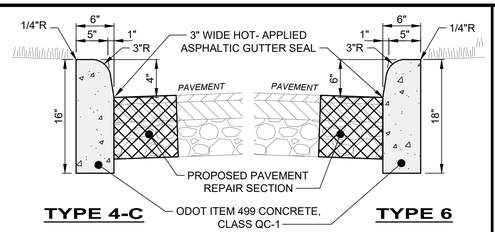


NOTES:

1. THE MILLED PAVEMENT SURFACE SHALL BE CLEANED TO A BROOM-CLEAN CONDITION.
2. A SEALANT SHALL BE APPLIED AROUND THE EDGE PAVEMENT, ALONG CURB, MANHOLE CASTINGS AND STRUCTURES

ASPHALT PAVEMENT MILL AND OVERLAY DETAIL

SCALE: NONE

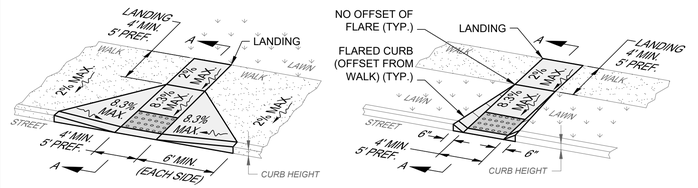


NOTES:

1. INSTALL 1/2" PREFORMED JOINT MATERIAL AND USE DOWELS INTO COLD JOINTS TOP AND BOTTOM WHERE NEW CURB MEETS EXISTING CURB.
2. APPLY LIQUID-MEMBRANE CURING COMPOUND.

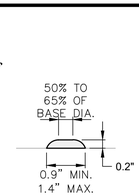
ODOT TYPE 4-C AND TYPE 6 VERTICAL CURB DETAIL

NOT TO SCALE

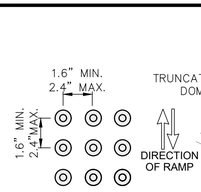


TYPE A1
(PERPENDICULAR W/FLARED SIDES)

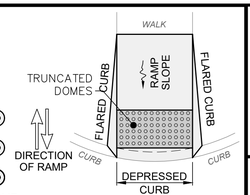
TYPE A2
(PERPENDICULAR W/RETURNED CURB)



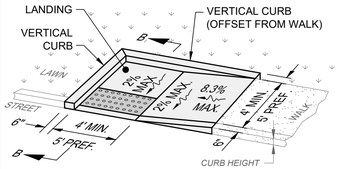
TRUNCATED DOME HEIGHT AND DIAMETER



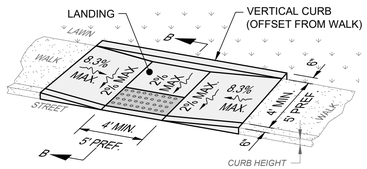
TRUNCATED DOME SQUARE PATTERN, PARALLEL ALIGNMENT



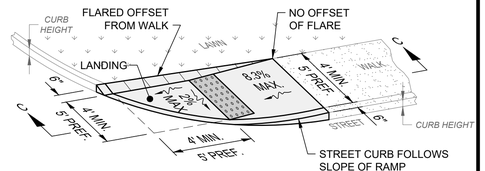
TRUNCATED DOME ALIGNMENT ON RADIUSED CURB



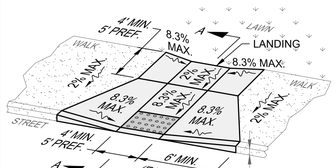
TYPE B1
(SINGLE SIDED PARALLEL)



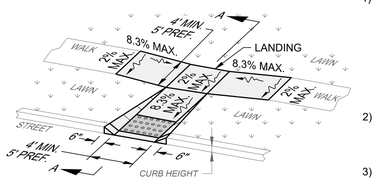
TYPE B2
(DOUBLE SIDED PARALLEL)



TYPE B3
(SINGLE SIDED PARALLEL)



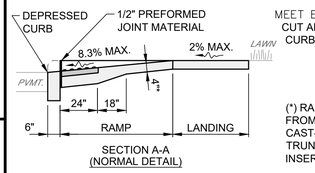
TYPE C1
(COMBINED W/FLARED SIDES)

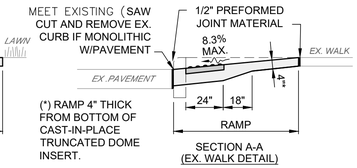


TYPE C2
(COMBINED W/RETURNED CURB)

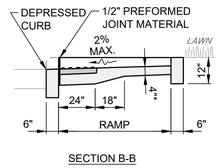
NOTES:

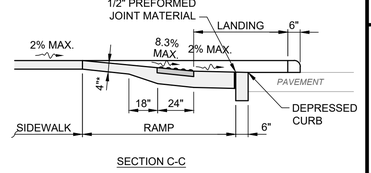
1) THIS DETAIL IS FOR REFERENCE ONLY. SEE THE LAYOUT PLAN FOR RAMP TYPE, CONFIGURATION, DIMENSIONS AND DEPRESSED CURB LOCATIONS. THE GRADING PLAN FOR SPECIFIC ELEVATIONS AND SLOPES; AND THE DETAIL SHEETS FOR APPLICABLE WALK AND CURB DETAILS.
2) LINES SHOWN IN THIS DETAIL INDICATE RAMP EDGES AND CHANGES IN SLOPE, AND NOT NECESSARILY JOINT LINES.
3) TEXTURE CONCRETE SURFACE BY COARSE BROOMING TRANSVERSE TO RAMP SLOPE.
4) ALL RAMPS SHALL BE POURED INTEGRAL WITH NEW CURBS WITH CURB EDGE FLUSH TO PAVEMENT.
5) TRUNCATED DOMES SHALL BE ALIGNED WITH THE PRIMARY DIRECTION OF THE RAMP.
6) TRUNCATED DOMES SHALL BE ALONG THE FULL RAMP WIDTH.
7) TRUNCATED DOMES SHALL BE INSTALLED FLUSH WITH BACK OF CURB. IN SKEWED CONDITION, ONE CORNER OF THE STRIP MUST BE ADJACENT TO BACK OF CURB. TRUNCATED DOME MATERIALS SHALL BE MITERED AND PLACED SEGMENTALLY FOR NON-STANDARD LAYOUTS.
8) ONLY CAST-IN-PLACE TRUNCATED DOMES ARE ALLOWED.
9) TRUNCATED DOME COLOR SHALL BE RED AND MUST CONTRAST WITH CONCRETE. BLACK OR GRAY ARE NOT ACCEPTABLE COLORS.





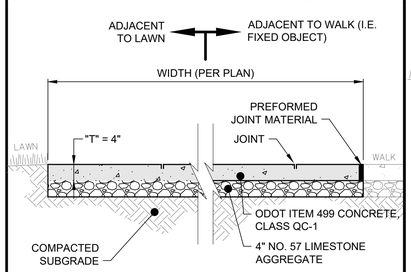
(*) RAMP 4" THICK FROM BOTTOM OF CAST-IN-PLACE TRUNCATED DOME INSERT.





CURB RAMP WITH DETECTABLE WARNING DETAILS

SCALE: NONE



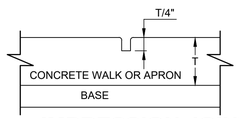
NOTES:

1. SEE LAYOUT PLAN FOR JOINT LOCATIONS. IF JOINTS ARE NOT PROVIDED, THEN THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL JOINTS. DIVIDE JOINTS INTO EQUALLY SPACED RECTANGULAR BLOCKS.
2. SAW CUT OR HAND TOOL JOINT 1/8" WIDE BY 1/4 OF "T" DEEP.
3. ROUND ALL EDGES AND JOINTS WITH A 1/4" RADIUS.
4. INSTALL 1/2" PREFORMED JOINT MATERIAL EVERY 30', OR BETWEEN SIDEWALK AND ANY FIXED OBJECT (I.E. MANHOLE, WALK, BUILDING). WALK SHOWN FOR REFERENCE ONLY.
5. LIGHTLY BROOM THE FINISH PERPENDICULAR TO THE WALKING PATH OR PER PLAN. IF HAND TOOLED JOINTS AND EDGES ARE SPECIFIED, FINISH AFTER PANEL INTERIOR TEXTURE HAS BEEN APPLIED (I.E WINDOW PANE EFFECT).
6. APPLY LIQUID-MEMBRANE CURING COMPOUND (200 S.F./GAL.)
7. FOR WALK THROUGH DRIVEWAY.WALK WITHIN DRIVE APRON LIMITS SHALL BE THE SAME THICKNESS AS THE DRIVE APRON (SEE MINIMUM THICKNESS BELOW).

8" MIN. FOR COMMERCIAL DRIVES
6" MIN. FOR RESIDENTIAL DRIVES

CONCRETE WALK DETAIL

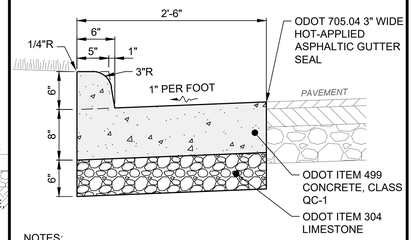
SCALE: NONE



NOTE: ALL DRIVE AND SIDEWALK JOINTS SHALL BE FORMED, NOT SAW-CUT. EACH AND EVERY SLAB PERIMETER SHALL BE EDGED TOOLED (2") AFTER TEXTURING SURFACE.

IMPRESSION JOINT FORMED

NOT TO SCALE



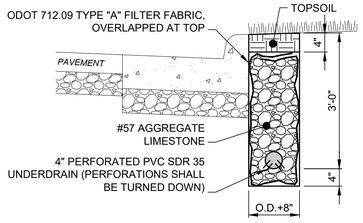
NOTES:

1. EXTEND 1" EXPANSION JOINTS TO TOP OF CURB.
2. JOINT SEAL TO EXTEND THE FULL GUTTER WIDTH AND CURB FACE.
3. USE DOWEL BARS AT EXPANSION JOINTS.
4. PROVIDE BUTT JOINTS BETWEEN COMBINED CURB AND GUTTER AND NEW OR EXISTING RIGID PAVEMENTS WITH TIE BARS OR HOOK BOLTS PROVIDED AT 5' INTERVALS.
5. PROVIDE CONTRACTION JOINTS AT 15' O.C.
6. APPLY LIQUID-MEMBRANE CURING COMPOUND.

(ODOT TYPE 2) 6" VERTICAL CURB AND GUTTER DETAIL

SCALE: NONE

FOR ALTERNATE C BID

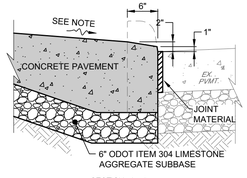


NOTES:

1. REMOVE OR COMPACT ALL LOOSE EXCAVATION AT BOTTOM OF TRENCH BEFORE INSTALLING AGGREGATE.
2. MAINTAIN POSITIVE DRAINAGE OF PIPE INVERTS WITH NO DIPS OR HUMPS IN FLOWLINE.

UNDERDRAIN DETAIL

SCALE: NONE



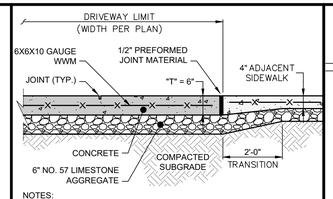
SECTION A-A

NOTES:

1) THE DROP CURB SHALL BE HAND FORMED AT THE TIME THE CONCRETE APRON IS POURED.
2) CONCRETE SHALL BE ODOT ITEM 499 CONCRETE, CLASS QC MS.
3) SEE SEPARATE DETAILS FOR ADDITIONAL REQUIREMENTS AND LAYOUT PLAN FOR ACTUAL DIMENSIONS.

CONCRETE DRIVE APRON AT EX. PAVEMENT DETAIL

SCALE: NONE

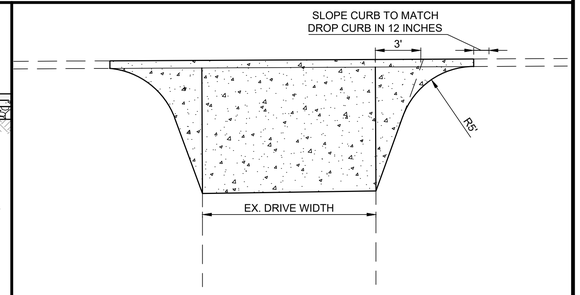


NOTES:

1) CONCRETE SHALL BE ODOT ITEM 499 CONCRETE, CLASS QC MS.
2) THIS DETAIL SHOWS A 4" SIDEWALK AND 6" DRIVEWAY FOR REFERENCE ONLY, .

CONCRETE WALK THROUGH DRIVEWAY DETAIL

SCALE: NONE



TYPICAL DRIVEWAY LAYOUT

SCALE: NONE

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

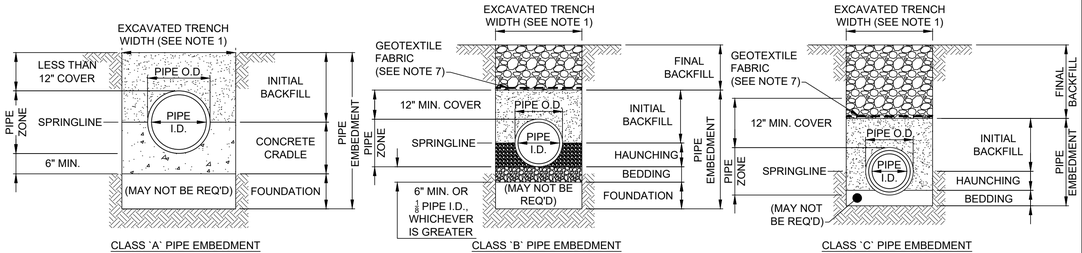
NO	REVISION	DATE

ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
BID	5/27/25	AS SHOWN	PTV	PTV	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

CONSTRUCTION DETAILS - 1

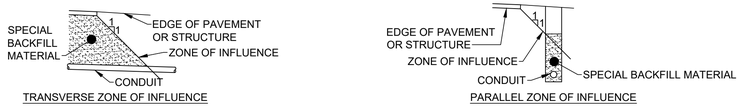
PROJECT NO. 24025505
DISCIPLINE: CIVIL
SHEET NAME: CD-01
SHEET 20 OF 24



CLASS 'A' PIPE EMBEDMENT

CLASS 'B' PIPE EMBEDMENT

CLASS 'C' PIPE EMBEDMENT



TRANSVERSE ZONE OF INFLUENCE

PARALLEL ZONE OF INFLUENCE

NOTES:

1. MAXIMUM EXCAVATED TRENCH WIDTH: THE MAXIMUM EXCAVATED TRENCH WIDTH FROM THE BOTTOM OF THE TRENCH TO 12" OVER THE TOP OF THE PIPE (WITHIN PIPE EMBEDMENT) SHALL BE O.D. + 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D. + 30" FOR PIPE FROM 24" I.D. TO 54" I.D. AND O.D. + 48" FOR PIPES SIZES 60" I.D. AND OVER.

2. FOUNDATION: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH MATERIAL AS DIRECTED BY THE ENGINEER.

3. PIPE EMBEDMENT:

   CLASS A: CLASS A PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12 INCHES OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE IN ACCORDANCE WITH ODOT ITEM 499, CLASS "C". THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 CRUSHED GRANULAR PIPE EMBEDMENT.

   CLASS B: CLASS B PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. THE BEDDING AND HAUNCHING SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 CRUSHED GRANULAR PIPE EMBEDMENT. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER FOR ONLY REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE. THE INITIAL BACKFILL FOR ALL OTHER PIPES SHALL BE AASHTO NO. 57 OR NO. 67 CRUSHED GRANULAR PIPE EMBEDMENT.

   CLASS C: CLASS C PIPE EMBEDMENT SHALL ONLY BE USED FOR DUCTILE IRON WATER MAIN, DUCTILE IRON FORCE MAINS OR AS AUTHORIZED BY THE ENGINEER. THE PIPE BEDDING SHALL BE A MIX OF SAND & CRUSHED GRAVEL IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, HAUNCHING AND INITIAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER. THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE. WHERE ROCK OR SHALE IS ENCOUNTERED, A MINIMUM 6-INCHES OF AASHTO NO. 57 OR NO. 67 CRUSHED GRANULAR PIPE BEDDING OR SAND BEDDING SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

4. FINAL BACKFILL: IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER OR IMPORTED PREMIUM FILL.

5. SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS.

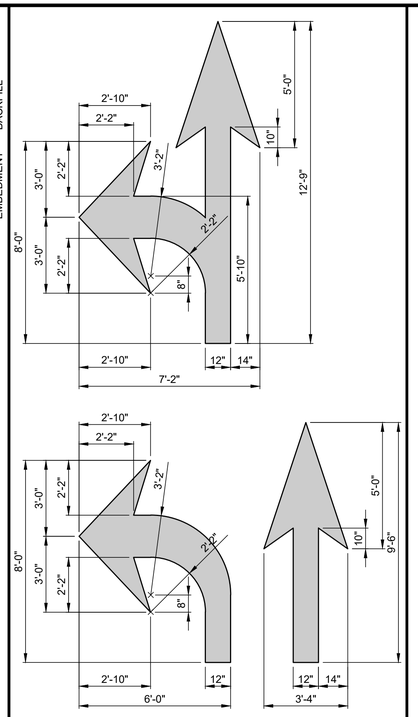
6. CLAY TRENCH DAMS: CLAY TRENCH DAMS SHALL BE REQUIRED FOR EACH LATERAL, UPSTREAM OF EVERY MANHOLE, AS SHOWN ON THE DRAWINGS, AND AS DIRECTED BY THE ENGINEER.

7. GEOTEXTILE FABRIC: INSTALL A GEOTEXTILE FABRIC IN ACCORDANCE WITH ODOT 712.09, TYPE A, AFTER ALL INITIAL BACKFILL CONSISTING OF AASHTO NO. 57 OR NO. 67 CRUSHED GRANULAR PIPE EMBEDMENT.

8. DETECTOR TAPE: IF REQUIRED IN THE SPECIFICATIONS, OR OTHERWISE DEEMED NECESSARY BY THE ENGINEER, INSTALL DETECTABLE WARNING TAPE ABOVE UTILITIES, 12" BELOW FINISHED GRADE, EXCEPT 6 INCHES BELOW SUBGRADE UNDER PAVEMENT AND SLABS.

TRENCHING, EMBEDMENT AND BACKFILL DETAIL

NOT TO SCALE

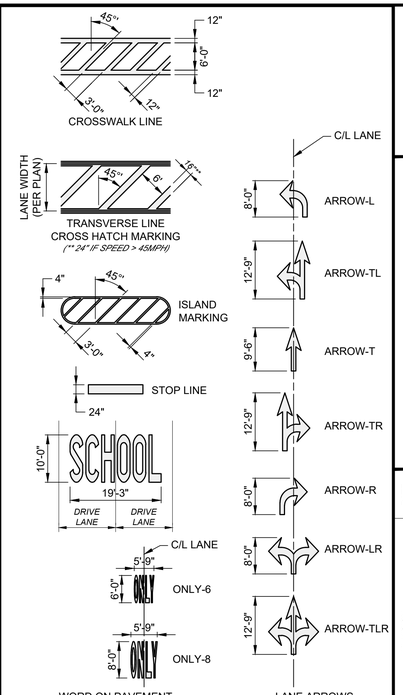


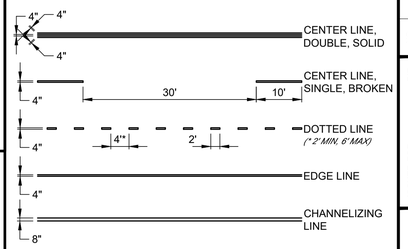
NOTES:

1. ALL PAINTED AREAS TO RECEIVE (2) 15 MIL COATS OF PAINT WITH 4 WEEK MIN. BETWEEN COATS.
2. SEE PAVEMENT MARKING DETAIL FOR ARROW PLACEMENT DIMENSIONS RELATIVE TO LANE LINES.

TURN AND STRAIGHT ARROW (8 FT) DETAIL

SCALE: NONE



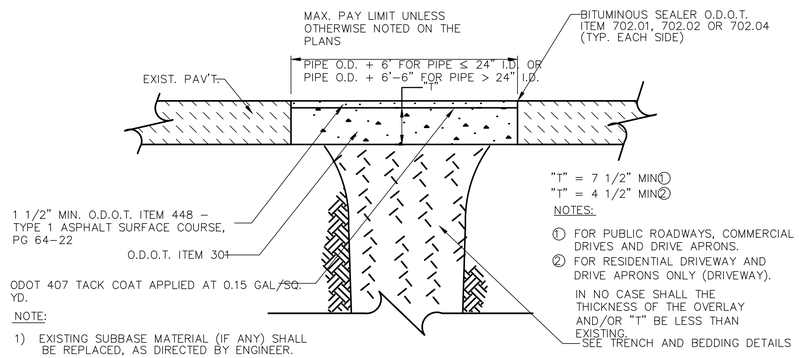


NOTES:

1. CENTER LINES TO BE YELLOW. EDGE, DOTTED, TRANSVERSE AND CHANNELIZING LINES, PARKING STALL LINES, AND ISLAND MARKINGS MAY BE YELLOW OR WHITE (SEE PLAN). ALL OTHER PAVEMENT MARKINGS TO BE WHITE UNLESS SPECIFIED OTHERWISE.
2. ALL PAINTED AREAS TO RECEIVE (2) 15 MIL COATS OF PAINT WITH 4 WEEKS MIN. BETWEEN COATS.
3. 8' SIZED LANE ARROWS ARE SHOWN; SEE SEPARATE DETAIL FOR SMALLER 6' SIZED LANE ARROWS.

PAVEMENT MARKING DETAIL

SCALE: NONE



TYPE C PAVEMENT REPLACEMENT

(ASPHALT)

10/10 SD-5-3

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

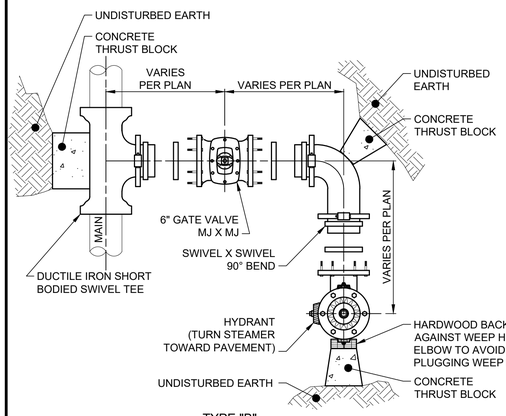
ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

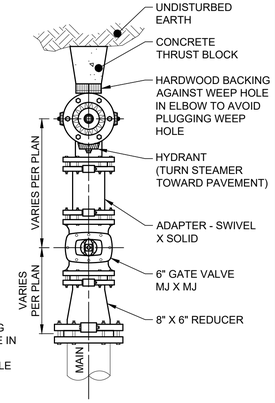
CONSTRUCTION DETAILS - 2

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
CD-02
SHEET 21 OF 24

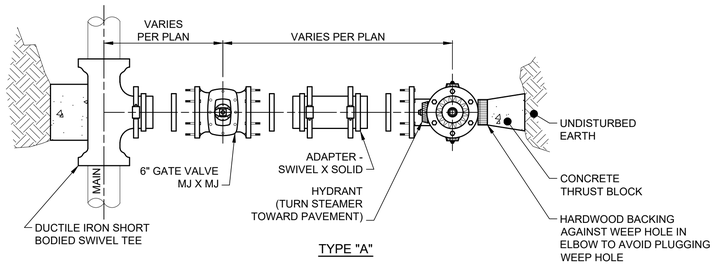
C:\CT\CAD_DRIVES_H\24025506\DWG\SHEETS\C_24025506 - CONSTRUCTION DETAILS.DWG - CD-02 - 5/27/2025 3:27:39 PM - PETE VRETTAS



TYPE "B"



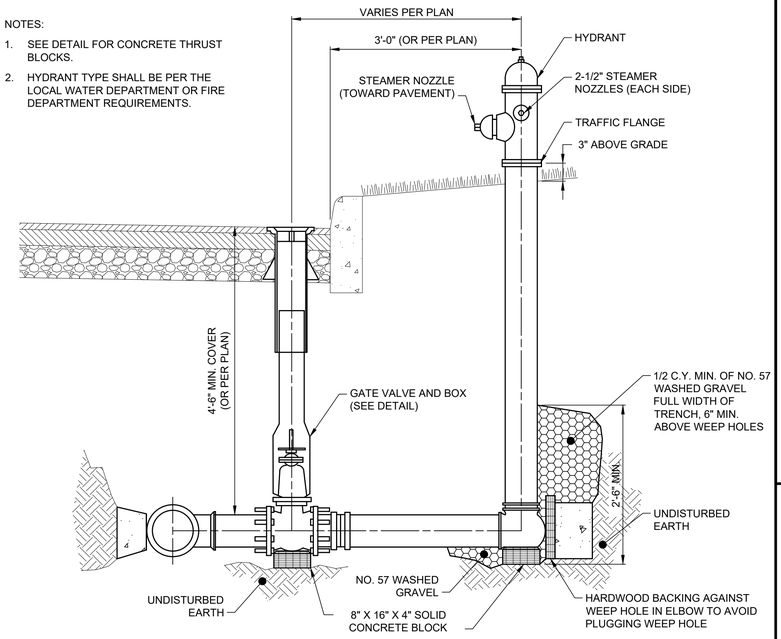
TYPE "C"



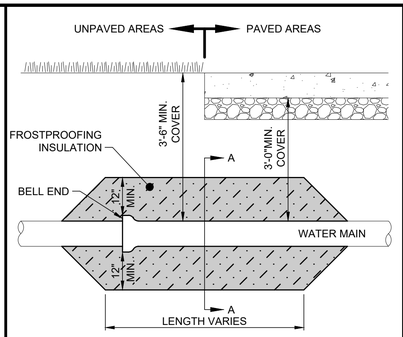
TYPE "A"

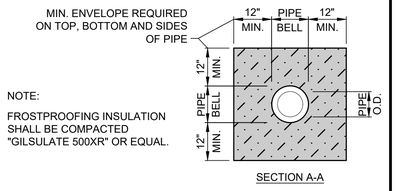
NOTES:

1. SEE DETAIL FOR CONCRETE THRUST BLOCKS.
2. HYDRANT TYPE SHALL BE PER THE LOCAL WATER DEPARTMENT OR FIRE DEPARTMENT REQUIREMENTS.



HYDRANT ASSEMBLY
SCALE: NONE

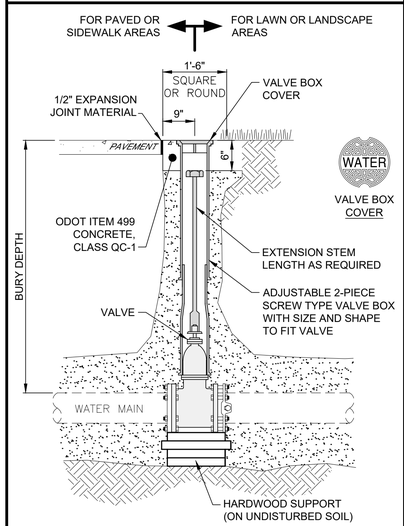




NOTE:

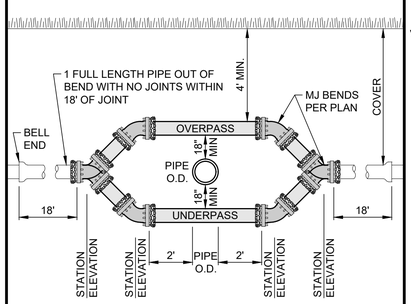
FROSTPROOFING INSULATION SHALL BE COMPACTED "GILSULATE 500XR" OR EQUAL.

FROSTPROOFING DETAIL
SCALE: NONE



VALVE AND VALVE BOX SETTING DETAIL
SCALE: NONE

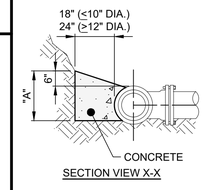
VALVES SHALL BE RESILIENT WEDGE GATE VALVE, MJxMJ, MUELLER A2360 SERIES, OPEN CCW. VALVE BOX IS 2 PIECE 5.25-INCH SCREW STYLE CAST IRON BOX. STAINLESS STEEL BODY BOLTS.



NOTES:

1. ENTIRE OFFSET INCLUDING BENDS SHALL BE BUILT WITH DUCTILE IRON RESTRAINED MECHANICAL JOINTS, CLASS 52 CEMENT LINED PIPE. IF AN INTERMEDIATE JOINT IS REQUIRED BETWEEN BENDS, THE ENTIRE UNDERPASS/ OVERPASS SHALL BE BUILT WITH BOLTLESS RESTRAINED PIPE AND FITTINGS.

WATER MAIN UNDERPASS/ OVERPASS DETAIL FOR OBSTRUCTIONS LESS THAN 24" IN DIAMETER OR WIDTH
SCALE: NONE

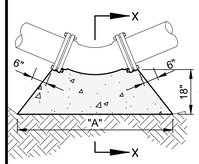


SECTION VIEW X-X

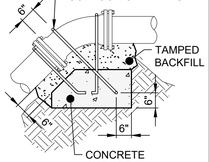
NOTES:

1. ALL DIMENSIONS SHOWN ARE MINIMUMS.
2. THRUST BLOCKS SHALL BE POURED TO UNDISTURBED EARTH.
3. ALL CONCRETE SHALL BE ODOT ITEM 499 CONCRETE CLASS QC-1.

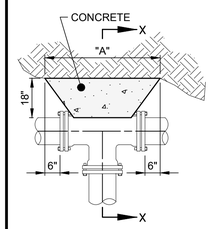
DETERMINE DIA. PER PROJECT. PRE-FORM BARS IN THE SHOP TO CONTOUR OF FITTING



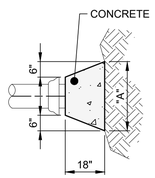
HORIZONTAL BEND OR VERTICAL BEND (UPWARD)



VERTICAL BEND (DOWNWARD)



PLAN VIEW OF TEE



PLUG OR CAP

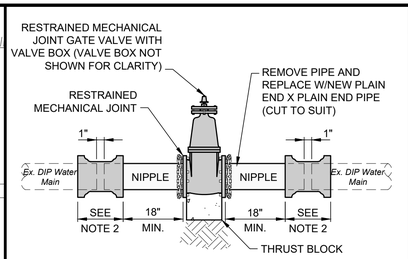
MIN. CONCRETE VOLUME FOR VERTICAL BENDS

DIA.	VOLUME
6"	4 C.F.
8"	11 C.F.
10"	22 C.F.
12"	37 C.F.
16"	71 C.F.

"A" DIMENSIONS

	HORIZONTAL BENDS				
DIA.	90°	45°	22.5°	TEE	PLUG
6"	17"	13"	9"	13"	14"
8"	23"	17"	12"	17"	19"
10"	28"	21"	15"	21"	24"
12"	34"	25"	18"	25"	29"
16"	45"	33"	24"	28"	38"

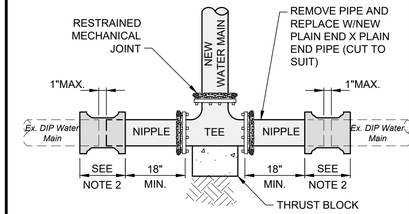
CONCRETE THRUST BLOCK DETAIL
SCALE: NONE



NOTES:

1. BEFORE CUTTING EX. WATER MAIN, BOTH NIPPLES SHALL BE CONNECTED TO THE GATE VALVE.
2. CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES OF D.I. CLASS 350 OR COMPRESSION COUPLINGS. COMPRESSION COUPLINGS SHALL BE GASKET, SLEEVE TYPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; (2) RUBBER COMPOUND WEDGE SECTION GASKETS; AND STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/194, TYPE 304). THE MIDDLE RING AND FOLLOWER GLANDS SHALL BE EITHER STEEL OR DUCTILE IRON (ASTM-A536).
3. THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE SIZE.
4. NO CAST IRON FITTINGS SHALL BE PERMITTED.
5. CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350.

CUT-IN-VALVE DETAIL
SCALE: NONE



NOTES:

1. BEFORE CUTTING EX. WATER MAIN, BOTH NIPPLES SHALL BE CONNECTED TO THE TEE.
2. CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES OF D.I. CLASS 350 OR COMPRESSION COUPLINGS. COMPRESSION COUPLINGS SHALL BE GASKET, SLEEVE TYPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; (2) RUBBER COMPOUND WEDGE SECTION GASKETS; AND STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/194, TYPE 304). THE MIDDLE RING AND FOLLOWER GLANDS SHALL BE EITHER STEEL OR DUCTILE IRON (ASTM-A536).
3. THE SIZE AND TYPE OF THE EXISTING WATER MAIN SHALL BE FIELD VERIFIED PRIOR TO CUTTING INTO THE EXISTING MAIN TO ENSURE CORRECT SOLID SLEEVE SIZE.
4. NO CAST IRON FITTINGS SHALL BE PERMITTED.
- * CONNECTION SHALL BE MADE WITH RESTRAINED MECHANICAL JOINT SOLID SLEEVES (LONG PATTERN) DUCTILE IRON CLASS 350.

CUT-IN TEE DETAIL (DIP WATER MAIN)
SCALE: NONE

STATE OF OHIO
TIMOTHY R. LANNON 58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

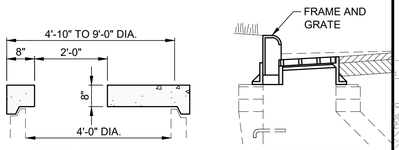
NO	REVISION	DATE

ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CUYAHOGA COUNTY, OHIO
CHAGRIN FALLS

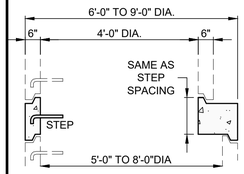
CONSTRUCTION DETAILS - 3

PROJECT NO.
24025505
DISCIPLINE
CIVIL
SHEET NAME
CD-03
SHEET 22 OF 24



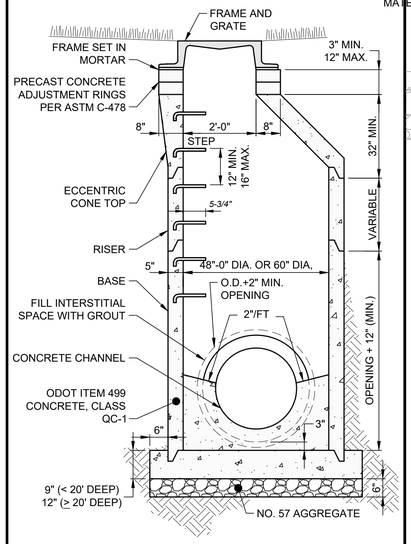
FLAT SLAB TOP

ADJACENT TO CURB



FLAT SLAB TRANSITION

BASE I.D.	MIN "t"
5'-0"	5"
6'-0"	6"
7'-0"	7"
8'-0"	8"

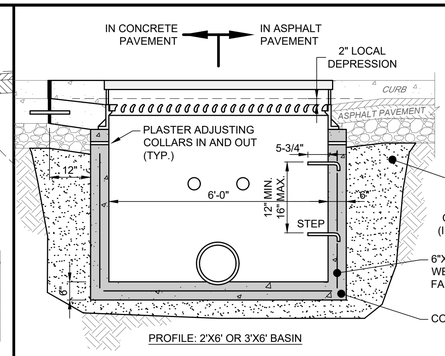


NOTES:

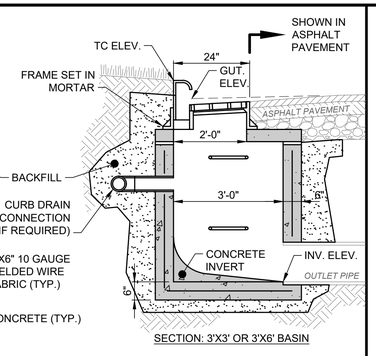
1. STRUCTURE TO MEET H-20 LOADING.
2. PRE-CAST CONCRETE SECTIONS SHALL BE MANUFACTURED AND FURNISHED WITH LIFT HOLES.
3. TOP, TRANSITION AND REDUCER SECTIONS MAY BE ECCENTRIC CONE, CONCENTRIC CONE OR FLAT SLAB.
4. BASE FOR MANHOLE IS SHOWN WITH MONOLITHIC FLOOR AND RISER WHICH MAY BE CAST IN ONE OR TWO OPERATIONS. AN ALTERNATE IS TO CAST AND SHIP THE FLOOR AND BARREL SEPARATELY. PROVIDE OPENINGS FOR PIPES WHEN THE UNIT IS CAST. BOTTOM CHANNEL MAY BE PRE-CAST IN THE BASE OR FORMED DURING FIELD CONSTRUCTION.
5. OPENINGS IN RISER SECTIONS FOR 18" AND SMALLER PIPES TO BE PREFABRICATED. PROVIDE FLEXIBLE CONNECTIONS ("Z" LOCK, INSERT A-TEE, OR APPROVED EQUAL) FOR ALL PIPES.
6. JOINT SEAL BETWEEN PRE-CAST MANHOLE SECTIONS TO BE RESILIENT AND FLEXIBLE GASKET JOINTS PER ODOT ITEM 706.11.
7. PRE-CAST CONCRETE SHALL BE REINFORCED PER ASTM C-478.
8. USE REINFORCED PLASTIC MANHOLE STEPS.
9. FIRST STEP SHALL NOT BE THAN 2'-0" BELOW TOP OF FRAME. MAKE PROJECTION 3-1/2" IF IN 24" DIA. SECTION.
10. USE FRAME AND GRATE EJ 1040 W/TYPE B VENTED COVER IN PAVEMENT, EJ 1040 W/TYPE N OVAL GRATE IN GRASS, EJ 7000 W/TYPE M2 SINUSOIDAL GRATE AND T1 BACK IN PAVEMENT ADJACENT TO CURB, OR PER PLAN.

PRE-CAST CONCRETE MANHOLE (STORM) DETAIL

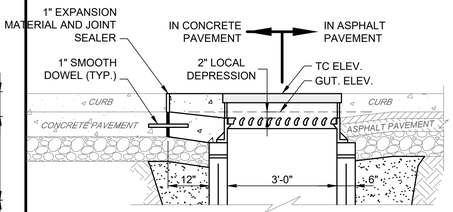
SCALE: NONE



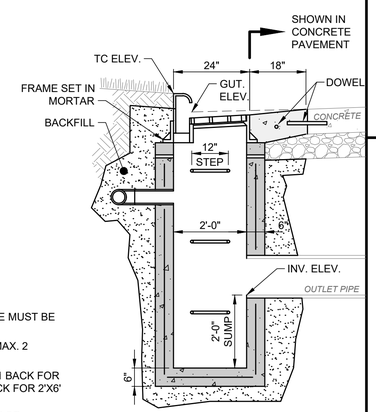
PROFILE: 2'X6' OR 3'X6' BASIN



SECTION: 3'X3' OR 3'X6' BASIN



PROFILE: 2'X3' OR 3'X3' BASIN



2'X3' OR 2'X6' INLET BASIN (SHOWN WITH SUMP)

SECTION

SUMPS SHALL BE INCLUDED WITH ALL NEW INLETS.

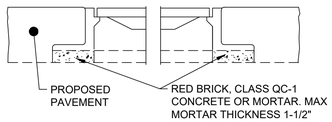
PROJECT SPECIFIC SHALL INCLUDE ODOT TYPE 3A INLETS WITH SUMPS

NOTES:

1) ALL CONCRETE SHALL BE ODOT ITEM 499 CONCRETE, CLASS QC-1
2) STRUCTURE SHALL MEET H-20 LOADING.
3) INSTALL STEPS IF STRUCTURE IS MORE THAN 4' DEEP.
4) PIPE OPENINGS SHALL BE O.D. OF PIPE PLUS 2", AND INTERSTITIAL SPACE MUST BE FILLED WITH GROUT.
5) GRADE ADJUSTMENT BY PRE-CAST CONCRETE ADJUSTING COLLAR OR MAX. 2 COURSES ASTM C-32 BRICK MASONRY SET IN MORTAR.
6) FRAME AND GRATE SHALL BE EJ 7030 WITH TYPE M6 VANE GRATE AND T1 BACK FOR 2'X3' OR 3'X3' BASIN, AND EJ 7031 WITH TYPE M6 VANE GRATE AND T1 BACK FOR 2'X6' OR 3'X6' BASIN; OR PER PLAN.
7) ALL GRATES SHALL INCLUDE LETTERING "DUMP NO WASTE" AND FISH IMAGE.
8) BASIN SHALL INCLUDE SUMP IF REQUIRED PER PLAN.
9) THIS DETAIL IS FOR REFERENCE AND DIMENSION CONTROL ONLY; SEE UTILITY PLAN FOR ACTUAL SIZES.
10) CONTRACTOR SHALL INVENTORY EXISTING INLETS AND VERIFY PIPE OPENING SIZES AND ELEVATIONS PRIOR TO ORDERING STRUCTURES.
11) THE CONTRACTOR SHALL INCLUDE MATERIAL & LABOR TO FIT UP AND CONNECT EXISTING CONDUITS. USE OF PIPE BENDS AND COUPLINGS SHALL ALSO BE INCLUDED UNDER THE INLET PAY ITEM.
12) EXISTING STORM SEWER LINING SHALL OCCUR AFTER NEW INLET BASIN INSTALLATIONS ARE COMPLETE.

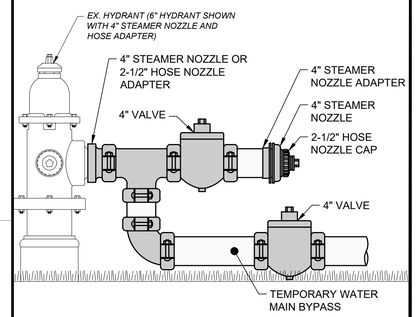
(CONCRETE 2'X3', 3'X3', 2'X6' AND 3'X6') CURB INLET BASIN DETAIL

SCALE: NONE



MH/IB ADJUSTED TO GRADE

NOT TO SCALE

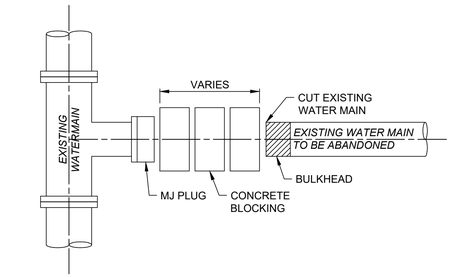


NOTES:

1. THREAD PATTERN AND OPERATING NUTS FOR STEAMER AND HOSE NOZZLES SHALL BE EITHER MUNICIPALITY'S STANDARD OR NATION STANDARD THREAD (NTS).
2. TEMPORARY WATER MAIN BYPASS SHALL BE: 4" FOR COMBINED DOMESTIC AND TEMPORARY SUPPLY; OR 2" FOR DOMESTIC ONLY SUPPLY.
3. 4" VALVE FOR FIRE HYDRANT CONTROL SHALL HAVE 1/4 TURN 'ON-OFF' STOPS.

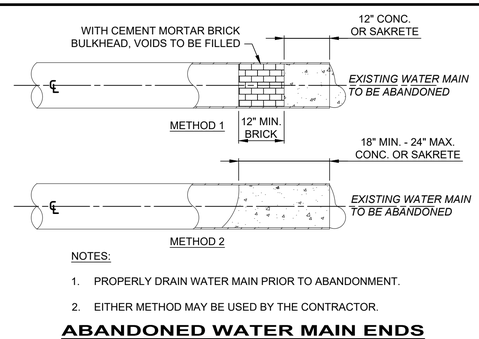
TEMPORARY WATER MAIN AND HYDRANT CONNECTION ASSEMBLY DETAIL

SCALE: NONE



WATER MAIN ABANDONMENT DETAIL

NOT TO SCALE

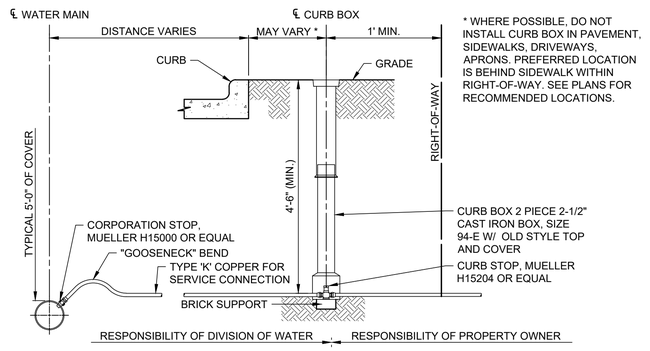


NOTES:

1. PROPERLY DRAIN WATER MAIN PRIOR TO ABANDONMENT.
2. EITHER METHOD MAY BE USED BY THE CONTRACTOR.

ABANDONED WATER MAIN ENDS

NOT TO SCALE



* WHERE POSSIBLE, DO NOT INSTALL CURB BOX IN PAVEMENT, SIDEWALKS, DRIVEWAYS, APRONS. PREFERRED LOCATION IS BEHIND SIDEWALK WITHIN RIGHT-OF-WAY. SEE PLANS FOR RECOMMENDED LOCATIONS.

NOTES:

1. CONNECTION SHALL BE MADE WITH RETAINED MECHANICAL JOINT SOLID SLEEVES (SHORT OR LONG PATTERN) DUCTILE IRON CLASS 350 OR CAST IRON CLASS 250 OR COMPRESSION COUPLINGS.
2. COMPRESSION COUPLINGS SHALL BE OF A GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END IRON PIPE. EACH COUPLING SHALL CONSIST OF ONE (1) MIDDLE RING, WITHOUT STOPS; TWO (2) FOLLOWER GLANDS; TWO (2) RUBBER-COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS; AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS (ASTM A276/A193/194, TYPE 304, EXTRA HEAVY HEX) TO PROPERLY COMPRESS THE GASKETS.
3. MIDDLE RING AND FOLLOWER GLANDS SHALL BE OF EITHER STEEL OR DUCTILE IRON (ASTM-A536).
4. THE COMPRESSION COUPLING SHALL BE WITHOUT STOPS AND BE RATED FOR A MINIMUM WORKING PRESSURE OF 250 PSI AND SHALL BE EQUAL TO THE DRESSER STYLE No's 38, 138 OR 162 (TRANSITION TYPE), OR SMITH-BLAIR 441 STRAIGHT AND TRANSITION COUPLINGS.
5. ALL BOLTS AND NUTS ON ALL MECHANICAL JOINTS, INCLUDING THOSE ON THE "RETAINED" TYPE, SHALL HAVE FIELD APPLIED ONE (1) COAT OF BITUMASTIC PAINTING FOLLOWED BY AN ENCASEMENT OF POLYETHYLENE WRAPPING IN ACCORDANCE WITH ANSI/AWWA C-105/A21.5-88, CLASS "C", METHOD "B".

NEW 1" SERVICE CONNECTION DETAIL IN PUBLIC RIGHT-OF-WAY

NOT TO SCALE

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

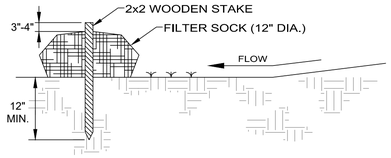
ISSUED FOR:	BID
ISSUE DATE:	5/27/25
SCALE:	AS SHOWN
DESIGNED BY:	PTV
DRAWN BY:	PTV
CHECKED BY:	TRL

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS — CUYAHOGA COUNTY, OHIO

CONSTRUCTION DETAILS - 4

PROJECT NO. 24025505
DISCIPLINE: CIVIL
SHEET NAME: CD-04
SHEET 23 OF 24

C:\CTICAD_DRIVE5_H\24025506\DWG\SHEETS\C_24025506 - CONSTRUCTION DETAILS.DWG - CD-04 - 5/27/2025 10:36:24 AM - PETE VRETTAS



MATERIALS - COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".

INSTALLATION:

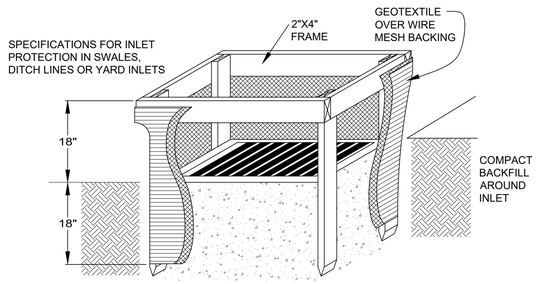
1. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES; GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1; ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MID-SLOPE.
2. FILTER SOCKS INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, SHALL BE SEEDED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.
3. FILTER SOCKS ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.

MAINTENANCE:

1. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
2. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.
3. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
4. REMOVAL - FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH A WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDINGS.

FILTER SOCK
(SILT FENCE ALTERNATE)

NOT TO SCALE

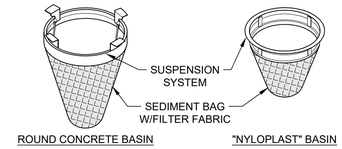


SPECIFICATIONS FOR INLET PROTECTION IN SWALES, DITCH LINES OR YARD INLETS:

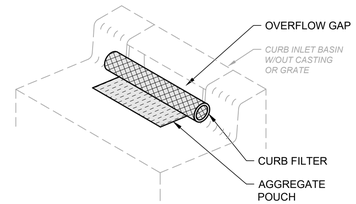
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-BY-4-INCH CONSTRUCTION-GRADE LUMBER. THE 2-BY-4-INCH POSTS SHALL BE DRIVEN 1 FOOT INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-BY-4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.

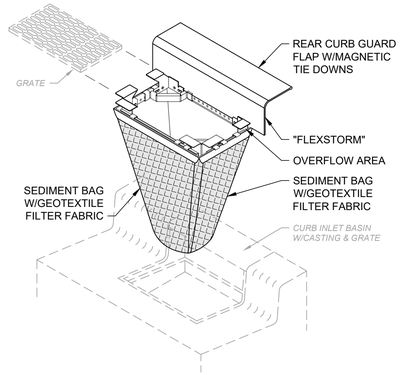
INLET PROTECTION

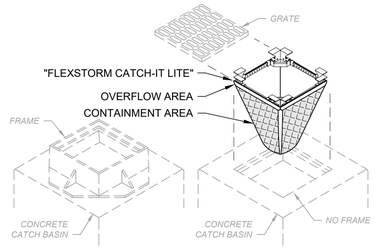
NOT TO SCALE

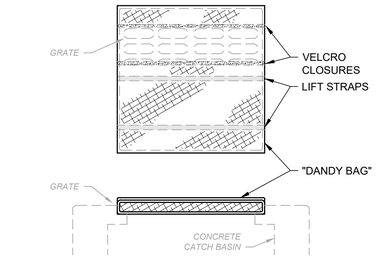


ROUND CONCRETE BASIN "NYLOPLAST" BASIN









NOTES:

1. ALL NEW AND EXISTING STORM INLET BASINS WITHIN THE WORK LIMITS SHALL HAVE INLET PROTECTION INSTALLED.
2. INLET PROTECTION SHALL BE INSTALLED AS EACH STORM INLET IS CONSTRUCTED.
3. NOT ALL ITEMS SHOWN MAY APPLY OR DIFFERENT TYPES OR CONFIGURATIONS MAY BE REQUIRED. THE CONTRACTOR SHALL MEASURE EACH INLET TO CONFIGURE AND ASSEMBLE CUSTOMIZED INLET FILTERS.

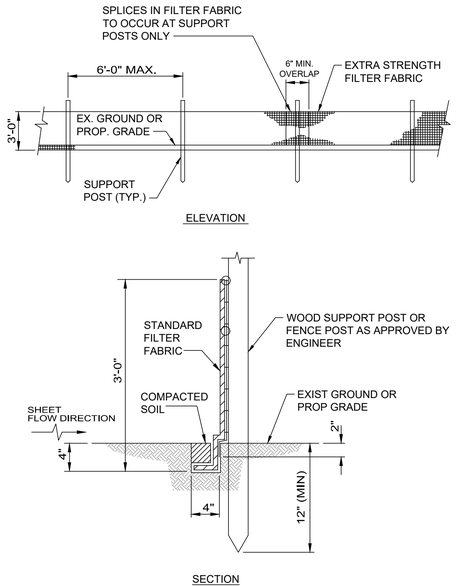
INLET PROTECTION DETAIL

NOT TO SCALE

SILT FENCE NOTES:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
5. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
7. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT 8 INCHES OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH-DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
8. SEAMS BETWEEN SECTION OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
9. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONE OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
   - 9.1. THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED,
   - 9.2. ACCUMULATED SEDIMENT SHALL BE REMOVED, OR
   - 9.3. OTHER PRACTICES SHALL BE INSTALLED.
10. SILT FENCE MATERIALS
    - 10.1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL BE 2 X 2 INCH HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FEET.
    - 10.2. SILT FENCE FABRIC (SEE CHART BELOW):

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1682
MULLEN BURST STRENGTH	190 PSI MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL./MIN./F2 MAXIMUM	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26



SILT FENCE DETAIL

NOT TO SCALE

STATE OF OHIO
TIMOTHY R. LANNON
58885
REGISTERED PROFESSIONAL ENGINEER

verdantas

NO	REVISION	DATE

BID	
ISSUED FOR:	5/27/25
ISSUE DATE:	AS SHOWN
SCALE:	PTV
DESIGNED BY:	PTV
DRAWN BY:	TRL
CHECKED BY:	

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

EROSION & SEDIMENT CONTROL DETAILS

PROJECT NO.
24025505

DISCIPLINE
CIVIL

SHEET NAME
E&SC

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