VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CUYAHOGA COUNTY, OHIO

MAY 2025

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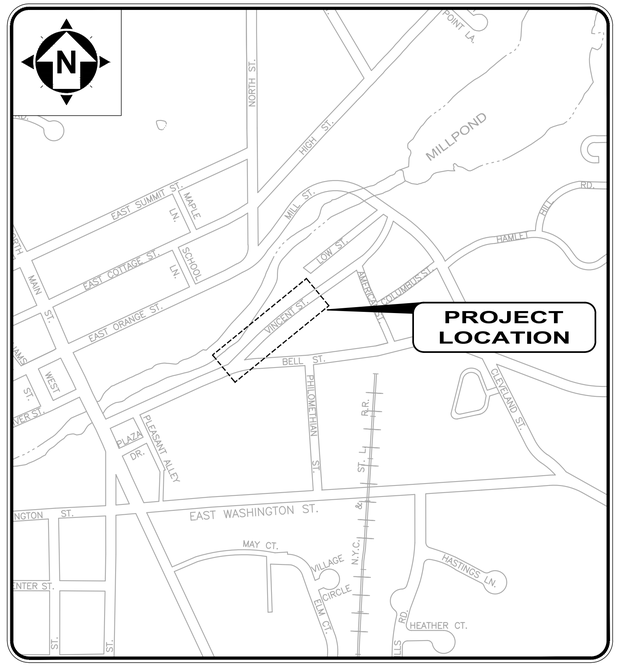
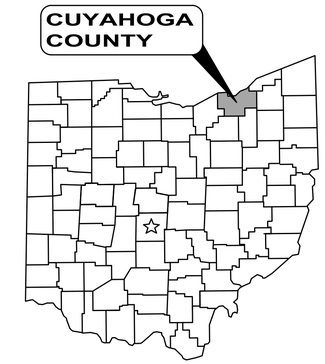


LOCATION MAP
NOT TO SCALE

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

1. AT&T
2. CHARTER COMMUNICATIONS (SPECTRUM / TIME WARNER CABLE)
3. CLEVELAND WATER
4. DOMINION ENERGY OHIO
5. EVERSTREAM SOLUTIONS
6. GEAUGA COUNTY WATER RESOURCES
7. THE ILLUMINATING CO.
8. VILLAGE OF CHAGRIN FALLS
9. VILLAGE OF MORELAND HILLS

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:

VERDANTAS
8150 STERLING COURT
MENTOR, OH 44060
(440) 951-9000
MICHAEL P. SASSO, P.E.

ENGINEER'S PROJECT No. 24025505

ENGINEER:

VERDANTAS
8150 STERLING COURT
MENTOR, OHIO 44060

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

PROJECT SITE:

THIS PROJECT CONSISTS OF VINCENT STREET FROM BELL STREET TO EAST 500'+/-, LOCATED IN THE VILLAGE OF CHAGRIN FALLS, CUYAHOGA COUNTY, OHIO.

Michael P. Sasso
Digitally signed by Michael P. Sasso
DN: C=US, E=michael.sasso@verdantas.com, O=Verdantas, OU=Land Services, CN=Michael P. Sasso
Date: 2025.05.28 12:45:48-04'00'

STATE OF OHIO
MICHAEL PATRICK SASSO
E-65605
REGISTERED
PROFESSIONAL ENGINEER

MICHAEL P. SASSO, P.E.

5-22-2025
DATE

verdantas
3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

NO	REVISION	DATE

ISSUED FOR:	FINAL
ISSUE DATE:	5/22/25
SCALE:	AS SHOWN
DESIGNED BY:	JDB
DRAWN BY:	BEK
CHECKED BY:	MPS

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

COVER SHEET

PROJECT NO.	
24025505	
DISCIPLINE	
STRUCTURAL	
SHEET NAME	
SHEET	OF
1	18

CONTRACT SPECIFICATIONS

THE JANUARY 1, 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS, AS PUBLISHED BY THE OHIO DEPARTMENT OF TRANSPORTATION, SHALL GOVERN ALL ASPECTS OF THE CONTRACT WORK. THE CONTRACTOR SHOULD BE FAMILIAR WITH THESE SPECIFICATIONS AND THEIR PROCEDURAL REQUIREMENTS.

STANDARD DRAWINGS

BP-3.1	DATED	1-19-24	CB-2-2A, 2B, 2C	DATED 7-19-24
BP-5.1	DATED	7-15-22	CB-3A	DATED 7-19-24
MGS-1.1	DATED	7-21-21	RM-5.2	DATED 7-21-23
MGS-2.1	DATED	1-19-18		
MGS-4.3	DATED	1-18-13		

O.U.P.S CALL:

THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE OHIO UTILITIES PROTECTION SERVICE AT LEAST TWO DAYS BEFORE DIGGING. THE TOLL-FREE NUMBER IS (800) 362-2764.

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

DESIGN DATA

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (RETAINING WALLS)
CONCRETE CLASS QC5 - COMPRESSIVE STRENTH 4.5 KSI (DRILLED SHAFTS)
EPOXY COATED STEEL REINFORCEMENT - MINIMUM YIELD STRENGTH 60 KSI (PLUG PILES AND RETAINING WALLS)
STEEL SOLDER PILES, W18x35 - ASTM A572, YIELD STRENGTH 50 KSI

UTILITY LINES

ALL EXPENSES INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY(IES). THE CONTRACTOR AND UTILITY ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OPERATIONS ON THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER, THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE, AND THE OWNERS OF ANY OTHER UTILITIES (PUBLIC AND/OR PRIVATE) THAT MAY HAVE UTILITY LINES OR FACILITIES WITHIN THE VICINITY OF THIS PROJECT BUT WHO ARE NOT MEMBERS OF THE REGISTERED UTILITY PROTECTION SERVICE. THE OWNERS OF ANY UNDERGROUND UTILITY FACILITY SHALL, WITHIN 48 HOURS AFTER NOTICE IS RECEIVED, EXCLUDING SATURDAYS, SUNDAYS AND OTHER LEGAL HOLIDAYS; STAKE, MARK OR OTHERWISE DESIGNATE THE EXISTENCE AND/OR LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING AND/OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION.

OHIO811: 1-800-382-2784 (CONTACT NON- MEMBERS DIRECTLY).

WORK LIMITS

ALL PHYSICAL WORK SHALL BE COMPLETED WITHIN THE TOWNSHIP RIGHT-OF-WAY ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

CONTINGENCY QUANTITIES

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

ROAD CLOSED/MAINTENANCE OF TRAFFIC

VINCENT STREET WILL BE CLOSED FOR A MAXIMUM OF 45 DAYS. LOCAL TRAFFIC WILL BE DETOURED. CONTRACTOR TO SUBMIT PLANS TO CITY ENGINEER FOR REVIEW.

ITEM 659 - SEEDING AND MULCHING

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE EASEMENT LINES. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 201 - CLEARING AND GRUBBING

CONTRACTORS SHOULD INSPECT THE AREAS WHERE THE RETAINING WALLS ARE TO BE CONSTRUCTED TO FIND THE BULK OF THIS WORK. SPECIFIC TREES TO BE REMOVED HAVE NOT BEEN NOTED ON THESE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE SCOPE OF WORK REQUIRED TO CLEAR THE AREAS NEEDED TO CONSTRUCT THE VARIOUS ELEMENTS OF THIS PROJECT.

ITEM 507 - STEEL PILES, MISC.: SOLDIER PILES W18X35
THIS WORK CONSISTS OF FURNISHING AND PLACING STEEL SOLDIER PILES INTO DRILLED HOLES. FURNISH SOLDIER PILES CONSISTING OF STRUCTURAL STEEL MEMBER THAT MEET THE PLAN REQUIREMENTS AND CONFORM TO ASTM A572, GRADE 50. DO NOT FIELD WELD OR SPLICE SOLDIER PILES; WITH PANEL SEATS BEING THE EXCEPTION.

MEASUREMENT FOR PAYMENT WILL BE LIMITED TO THE DISTANCE BETWEEN THE TOP OF WALL ELEVATION AND THE BOTTOM OF THE DRILLED SHAFT, AS DETERMINED BY THE ENGINEER. THE DEPARTMENT WILL PAY FOR SOLDIER PILES AT THE CONTRACT UNIT PRICE PER FOOT OF ITEM 507 - STEEL PILES, MISC,: SOLDIER PILES - W18x35.

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN

THESE SHAFTS ARE TO BE PLUG PILES WITH EPOXY COATED REINFORCEMENT. MINIMUM YIELD STRENGTH 60 KSI.

THIS WORK SHALL BE PER ITEM 524. EACH PLUG PILE SHALL BE CENTERED BETWEEN EACH REINFORCED 30" DIAMETER DRILLED SHAFT AND DRILLED TO THE TOP OF ROCK PER THE PLUG PILE DRILLED SHAFT DETAILS ON SHEET 16 AND SUMMARY ON SHEET 17, AND BACKFILLED WITH CLASS QC5 CONCRETE. UNLESS APPROVED IN ADVANCE BY THE ENGINEER, BACKFILLING SHALL BE PERFORMED SUCH THAT THERE ARE NO COLD JOINTS.

SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AND OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAT A 48 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THIS REQUIREMENT IS PERMISSIBLE.

ACCESS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS USED TO CONSTRUCT THE DRILLED SHAFTS. ANY TEMPORARY GRADING, AGGREGATE, DRAINAGE, SHEETING ETC. NEEDED FOR ACCESS TO THE WORK AREA SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. THE COST OF ANY EXCAVATION AND SUBSEQUENT REPLACEMENT OF EMBANKMENT (PER ITEM 203 EMBANKMENT) SHALL BE INCLUDED IN THE VARIOUS BID ITEMS FOR THE DRILLED SHAFT AND NO SEPARATE PAYMENT WILL BE MADE. PAYMENT IS FULL COMPENSATION FOR CONSTRUCTING THE DRILLED SHAFTS, INCLUDING FURNISHING AND PLACING CONCRETE AND ANY SONOTUBE REQUIRED FOR FORMING THE TOPS OF THE SHAFTS. PAYMENT FOR SOIL OVERBURDEN DRILLING, WHICH IS GROUND LEVEL TO THE TOP OF THE SHAFT, SHALL BE INCLUSIVE OF ITEM 524 DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN.

MEASUREMENT FOR PAYMENT FOR DRILLED SHAFTS, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE BOTTOM OF THE SHAFT, AS DETERMINED BY THE ENGINEER.

ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN
ITEM 524 - DRILLED SHAFTS, 30" DIAMETER, INTO BEDROCK, AS PER PLAN

THIS WORK CONSISTS OF FURNISHING AND INSTALLING DRILLED SHAFTS FOR SLOPE STABILITIZATION. THE 30" DRILLED SHAFTS ARE REINFORCED WITH SOLDIER PILES OR REINFORCING STEEL CAGES. FURNISH AND INSTALL DRILLED SHAFTS IN ACCORDANCE WITH CMS 524 EXCEPT AS MODIFIED AND SUPPLEMENTED BELOW.

EXCAVATE THE HOLE FOR THE SHAFTS WITHIN 3 INCHES OF THE PLAN LOCATION IN THE HORIZONTAL PLANE. IF FIELD CONDITIONS INDICATE GREATER DEPTHS, NOTIFY THE ENGINEER FOR FURTHER EVALUATION. PLACE THE SOLDIER PILE VERTICALLY WITHIN THE HOLE SO IT IS NOT INCLINED MORE THAN 1" BETWEEN THE TOP AND BOTTOM.

PLACE THE SOLDIER PILE SO THAT THE FLANGES ARE PARALLEL TO THE CENTERLINE OF CONSTRUCTION. DO NOT ALLOW THE ORIENTATION OF THE FLANGES TO VARY BY MORE THAN 10 DEGREES. SUPPORT THE SOLDIER PILE SO THAT IT DOES NOT MOVE DURING CONCRETE PLACEMENT.

USE CLASS QC5 CONCRETE ACCORDING TO CMS 511. THE CONTRACTOR MAY PLACE CONCRETE USING THE FREE FALL METHOD PROVIDED THE DEPTH OF GROUNDWATER IS LESS THAN 6 INCHES AND THE CONCRETE FALLS WITHOUT STRIKING THE SIDES OF THE HOLE. POURING CONCRETE ALONG THE WEB OF THE SOLDIER PILE IS ACCEPTABLE.

CHECK THE POSITION, THE VERTICAL ALIGNMENT, AND ORIENTATION OF THE SOLDIER PILE IMMEDIATELY AFTER CONCRETE PLACEMENT. MAKE CORRECTIONS AS NECESSARY TO MEET THE ABOVE TOLERANCES.

SEQUENCE OF INSTALLATION

THE INSTALLATION SEQUENCE SHALL BE SUCH THAT NO REINFORCED DRILLED SHAFT IS INSTALLED ADJACENT TO EITHER AN OPEN DRILLED SHAFT EXCAVATION OR A DRILLED SHAFT IN WHICH THE CONCRETE HAS LESS THAN 24 HOUR CURE. INSTALLING THE SHAFTS IN AN ALTERNATING SEQUENCE OR ANY OTHER SEQUENCE THAT MEETS THIS CRITERIA IS PERMISSIBLE. NO EXCAVATION SHALL BE PERFORMED IN FRONT OF THE WALL FOR 3 DAYS AFTER PLACING OF CONCRETE.

PROTECTION OF UNATTENDED OPEN SHAFTS

CARE SHALL BE EXERCISED AS TO COVER UNATTENDED OPEN SHAFTS. TEMPORARY COVERS SHALL BE OF ADEQUATE STRENGTH TO PREVENT A PERSON OR ANIMAL FROM FALLING IN. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF DRILLED SHAFT EXCAVATION IF LEFT UNPOURED OVER NIGHT.

ACCESS

ANY TEMPORARY GRADING, CRANE MATS, AGGREGATE, DRAINAGE, ETC. NEEDED FOR ACCESS TO THE WORK AREA SHALL BE INCLUDED IN THE BID PRICE FOR THE DRILLED SHAFTS. ANY FORM WORK REQUIRED TO CONSTRUCT THE TOPS OF THE DRILLED SHAFTS SHALL BE INCLUDED IN PAYMENT FOR THIS ITEM.

MEASUREMENT FOR PAYMENT OF DRILLED SHAFTS ABOVE BEDROCK, AS PER PLAN, WILL BE MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF THE SHAFT TO THE TOP OF BEDROCK, AS DETERMINED BY THE ENGINEER. MEASUREMENT FOR PAYMENT OF DRILLED SHAFTS INTO BEDROCK, AS PER PLAN, WILL ME MEASURED ALONG THE AXIS OF THE DRILLED SHAFT FROM THE TOP OF BEDROCK TO THE BOTTOM OF SHAFT, AS DETERMINED BY THE ENGINEER.

EROSION CONTROL

ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES AND OTHER AREAS AS SHOWN ON PLANS SHALL BE PROPERLY RESTORED WITH 4" OF TOPSOIL, SEEDING AND MULCHING PER THE SPECIFICATIONS.

IN ALL DISTURBED AREAS, THE CONTOURS WILL BE RESTORED IN A MANNER THAT MAINTAINS EXISTING DRAINAGE PATTERNS. FOLLOWED BY SEEDING AND MULCHING. IF, DUE TO WEATHER, FINAL GRADING CANNOT BE ACCOMPLISHED IMMEDIATELY, TEMPORARY SEEDING, WITHIN THIRTY DAYS, WILL BE USED UNTIL FINAL RESTORATION CAN OCCUR.

SILT FENCING SHALL BE EXTRA STRENGTH SYNTHETIC FILTER FABRIC HAVING A MINIMUM FLOW RATE OF 0.3 GAL/SQ. FT/MINUTE AND SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0°F. TO 120°F. SEE DETAIL.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING INSPECTIONS OF ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER ALL STORMS THAT PRODUCE MORE THAN ONE-HALF (1/2") INCH TOTAL RAINFALL. ANY NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY. THE CONTRACTOR SHALL DOCUMENT ALL INSPECTIONS AND ANY REPAIRS THAT ARE DONE TO MAINTAIN EFFICIENCY.

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

THE INSTALLED EROSION CONTROL FEATURES MUST NOT ACT IN A MANNER THAT CAUSES THE AREA TO FLOOD.

THE CONTRACTOR IS TO PLUG ANY OPEN ENDS OF INSTALLED STORM SEWER AND ALL OTHER CONNECTING PIPES NOT PROTECTED BY EROSION CONTROLS, SUCH THAT AGGREGATES DO NOT CLOG THE NEW SEWER SYSTEM.

ITEM 832 - EROSION CONTROL

EROSION CONTROL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE OF LUMPS SUM.

ABBREVIATIONS:
@ - AT
℄ - CENTERLINE
CLR. - CLEAR, CLEARANCE
CY - CUBIC YARD
D.S. - DRILLED SHAFT
DIA. - DIAMETER
EOP - EDGE OF PAVEMENT
EQ. SPA. - EQUAL SPACES
EX. - EXISTING
F.F. - FAR FACE
FT. - FEET
GAL - GALLONS
LS - LUMP SUM
LT. - LEFT
MIN. - MINIMUM
MISC. - MISCELLANEOUS
N.F. - NEAR FACE
N.P.C.P.P. - NON-PERFORATED CORRUGATED PLASTIC PIPE
P.C.P.P. - PERFORATED CORRUGATED PLASTIC PIPE
RT. -RIGHT
SQ. - SQUARE
STA. - STATION
SY - SQUARE YARD
TR - TOWNSHIP ROAD
TYP. - TYPICAL

THE PRIMARY UTILITIES WITHIN THE VILLAGE OF CHAGRIN FALLS AREA:

STORM AND SANITARY SEWERS:
VILLAGE OF CHAGRIN FALLS
21 W. WASHINGTON STREET
CHAGRIN FALLS, OHIO 44022
(440) 247-5051

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

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

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

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

SPREAD FOOTING FOUNDATIONS

RETAINING WALL FOUNDATION BEARING RESISTANCE: 2 FOOTINGS AS DESIGNED PRODUCE A MAXIMUM SERVICE LOAD PRESSURE OF 1.50 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LOAD PRESSURE OF 2.20 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 2.20 KIPS PER SQUARE FOOT.

ESTIMATED QUANTITIES

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT	SHEET REFERENCE
201	CLEARING AND GRUBBING	1	LUMP	
202	PAVEMENT REMOVED	758	SY	
202	CURB REMOVED	64	FT	
202	PIPE REMOVED	400	FT	
202	GUARDRAIL REMOVED	394	FT	
203	EXCAVATION	178	CY	
203	EMBANKMENT	148	CY	
204	SUBGRADE COMPACTION	745	SY	
204	PROOF ROLLING	1	HOUR	
254	PAVEMENT PLANING, ASPHALT CONCRETE	359	SY	
301	ASPHALT CONCRETE BASE, PG64-22 (449)	125	CY	
304	AGGREGATE BASE	125	CY	
407	TACK COAT	112	GAL	
409	SAWING AND SEALING ASPHALT CONCRETE PAVEMENT	112	FT	
441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449)	40	CY	
441	ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2 (449)	55	CY	
503	UNCLASSIFIED EXCAVATION	91	CY	
507	STEEL PILES, MISC.: SOLDIER PILES W18X35	1,805	FT	2
509	EPOXY COATED REBAR	2,211	LB	
511	CLASS QC1 CONCRETE	33	CY	
524	DRILLED SHAFTS, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN	1,115	FT	2
524	DRILLED SHAFTS, 30" DIAMETER, INTO BEDROCK, AS PER PLAN	712	FT	2
524	DRILLED SHAFTS, 30" DIAMETER, PLUG PILES, AS PER PLAN	1,079	FT	2
602	MASONRY - NON-SHRINK MORTAR	1.0	CY	
606	GUARDRAIL TYPE MGS, AS PER PLAN	375	FT	16
606	MGS ANCHOR ASSEMBLY, TYPE T	1	EACH	
609	CURB, TYPE 6	375	FT	
611	MANHOLE ADJUSTED TO GRADE	1	EACH	
611	CATCH BASIN - NO. 3A	1	EACH	
611	CATCH BASIN - NO. 2-2C	1	EACH	
611	12" CONDUIT, TYPE B, 707.45	39	FT	
614	MAINTAINING TRAFFIC, AS PER PLAN	1	LUMP	2
623	CONSTRUCTION LAYOUT STAKES AND SURVEYING	1	LUMP	
624	MOBILIZATION	1	LUMP	
653	TOPSOIL FURNISHED & PLACED	26	CY	
659	SEEDING AND MULCHING, CLASS 1	230	SY	
832	EROSION CONTROL	1	LUMP	

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48" X 30" - "ROAD CLOSED" SIGNS, SIGN SUPPORTS, BARRICADES, GATES, GATES AND LIGHTS, AS DETAILED IN STANDARD CONSTRUCTION DRAWING MT-101.60 AT LOCATIONS NEAR THE SLIPS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

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

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN SAFE LOCAL ACCESS, VEHICULAR AND PEDESTRIAN, TO ALL PROPERTIES WITHIN THE PROJECT LIMITS. THE CONTRACTOR WILL FURNISH, MAINTAIN AND SUBSEQUENTLY REMOVE ALL NECESSARY SAFEGUARDS SUCH AS BARRICADES, BARRIERS, TEMPORARY PAVEMENT, LIGHTING, FLAGGERS, SIGNING AND OTHER TRAFFIC CONTROLS TO INSURE THE SAFETY OF PERSONS AND VEHICLES DURING CONSTRUCTION WITHIN THE PROJECT LIMITS.

ACCESS MUST BE MAINTAINED FOR RESIDENCES, EMERGENCY VEHICLES AND PEDESTRIANS INCLUDING PERSONS WITH DISABILITIES, AT ALL TIMES.

THE VILLAGE SHALL APPROVE ALL ROAD CLOSURES AND DETOURS PRIOR TO IMPLEMENTATION.

verdantas
3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0900

NO	REVISION	DATE

ISSUED FOR: FINAL
ISSUE DATE: 5/22/25
SCALE: AS SHOWN
DESIGNED BY: JDB
DRAWN BY: BEK
CHECKED BY: MPS

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

NOTES & QUANTITIES

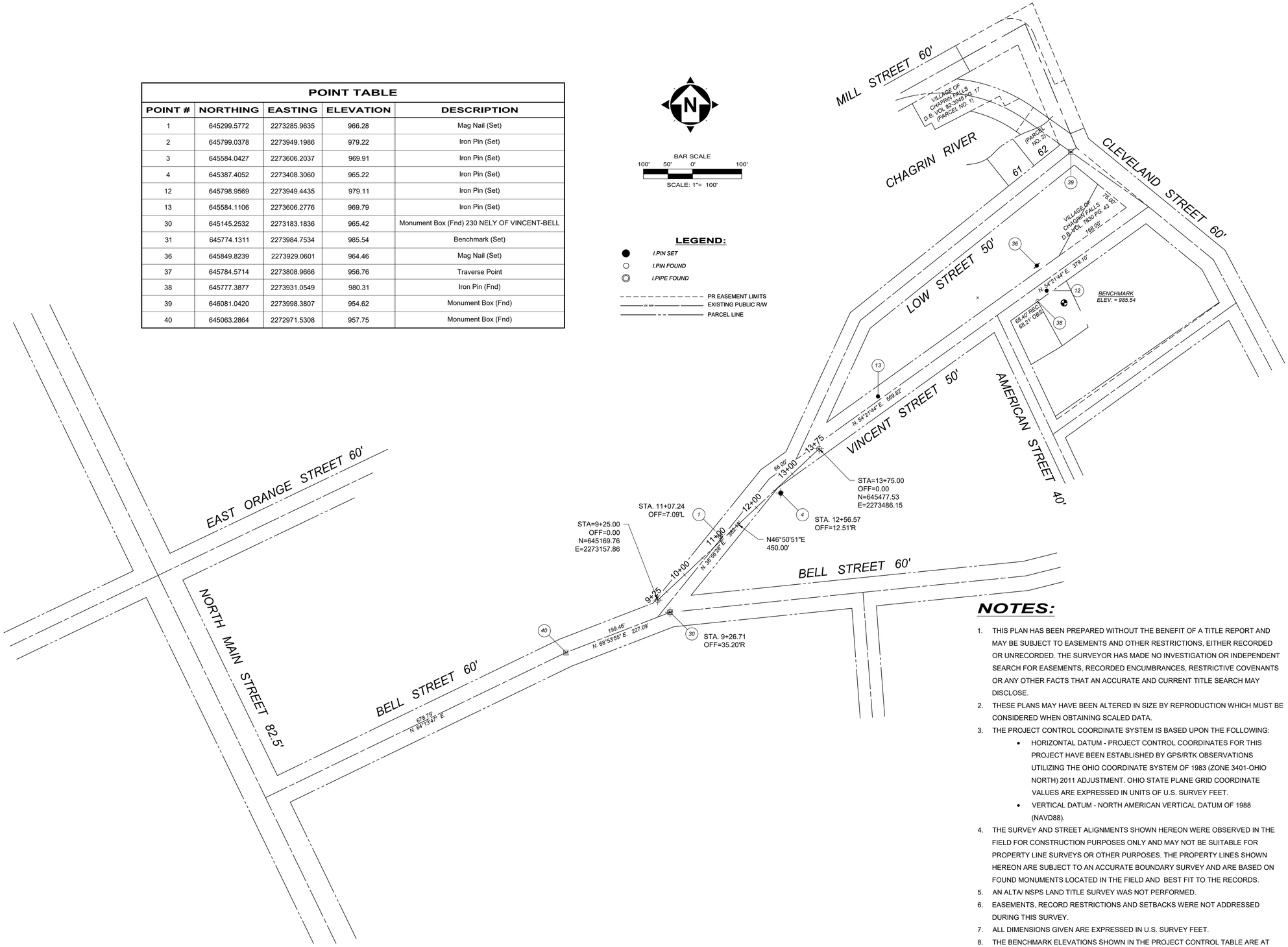
PROJECT NO. 24025505
DISCIPLINE STRUCTURAL
SHEET NAME GS
SHEET 2 OF 18

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



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"

verdantas
3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

NO	REVISION	DATE

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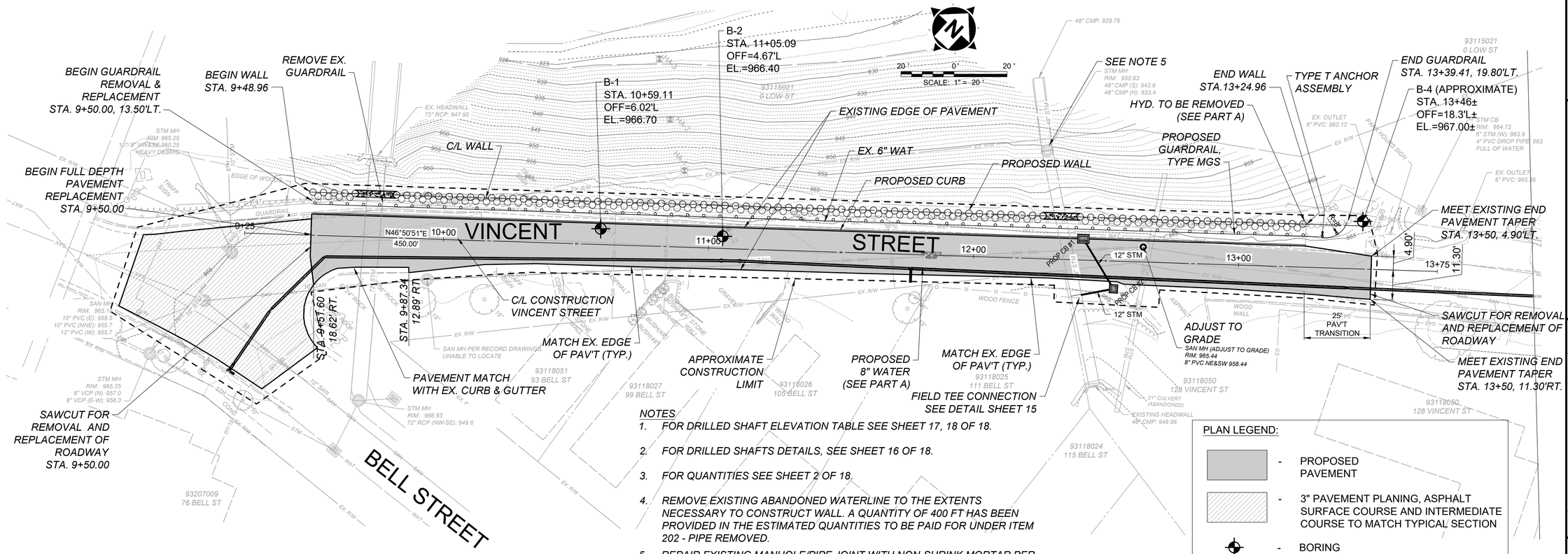
SCALE:	AS SHOWN
DESIGNED BY:	JDB
DRAWN BY:	BEK
CHECKED BY:	MPS

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CONTROL SHEET

PROJECT NO. 24025505
DISCIPLINE: STRUCTURAL
SHEET NAME: CONTROL SHEET
SHEET 3 OF 18

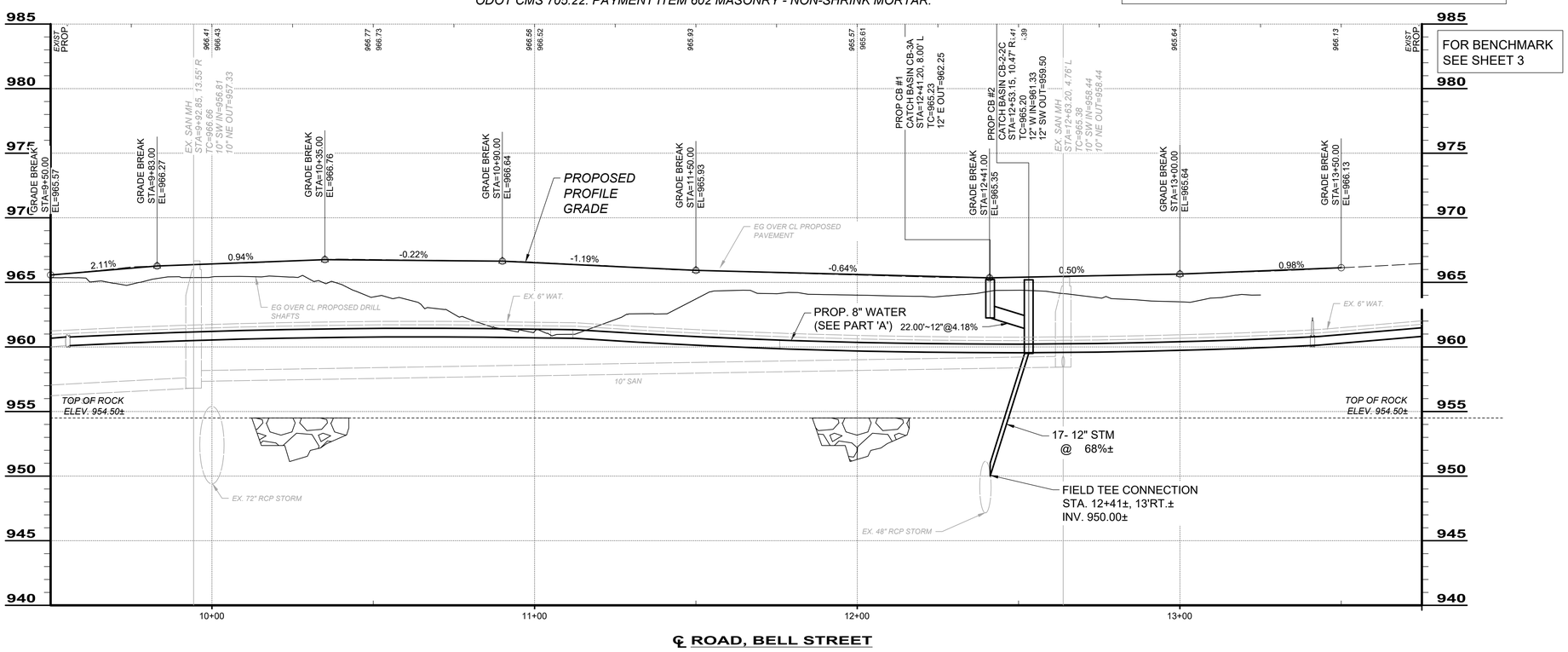


NOTES

1. FOR DRILLED SHAFT ELEVATION TABLE SEE SHEET 17, 18 OF 18.
2. FOR DRILLED SHAFTS DETAILS, SEE SHEET 16 OF 18.
3. FOR QUANTITIES SEE SHEET 2 OF 18.
4. REMOVE EXISTING ABANDONED WATERLINE TO THE EXTENTS NECESSARY TO CONSTRUCT WALL. A QUANTITY OF 400 FT HAS BEEN PROVIDED IN THE ESTIMATED QUANTITIES TO BE PAID FOR UNDER ITEM 202 - PIPE REMOVED.
5. REPAIR EXISTING MANHOLE/PIPE JOINT WITH NON-SHRINK MORTAR PER ODOT CMS 705.22. PAYMENT ITEM 602 MASONRY - NON-SHRINK MORTAR.

PLAN LEGEND:

- PROPOSED PAVEMENT
- 3" PAVEMENT PLANING, ASPHALT SURFACE COURSE AND INTERMEDIATE COURSE TO MATCH TYPICAL SECTION
- BORING LOCATION



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330-375-0800

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS
CUYAHOGA COUNTY, OHIO

PLAN AND PROFILE

PROJECT NO.	
24025505	
DISCIPLINE	
STRUCTURAL	
SHEET NAME	
PLAN	
SHEET	OF
4	18

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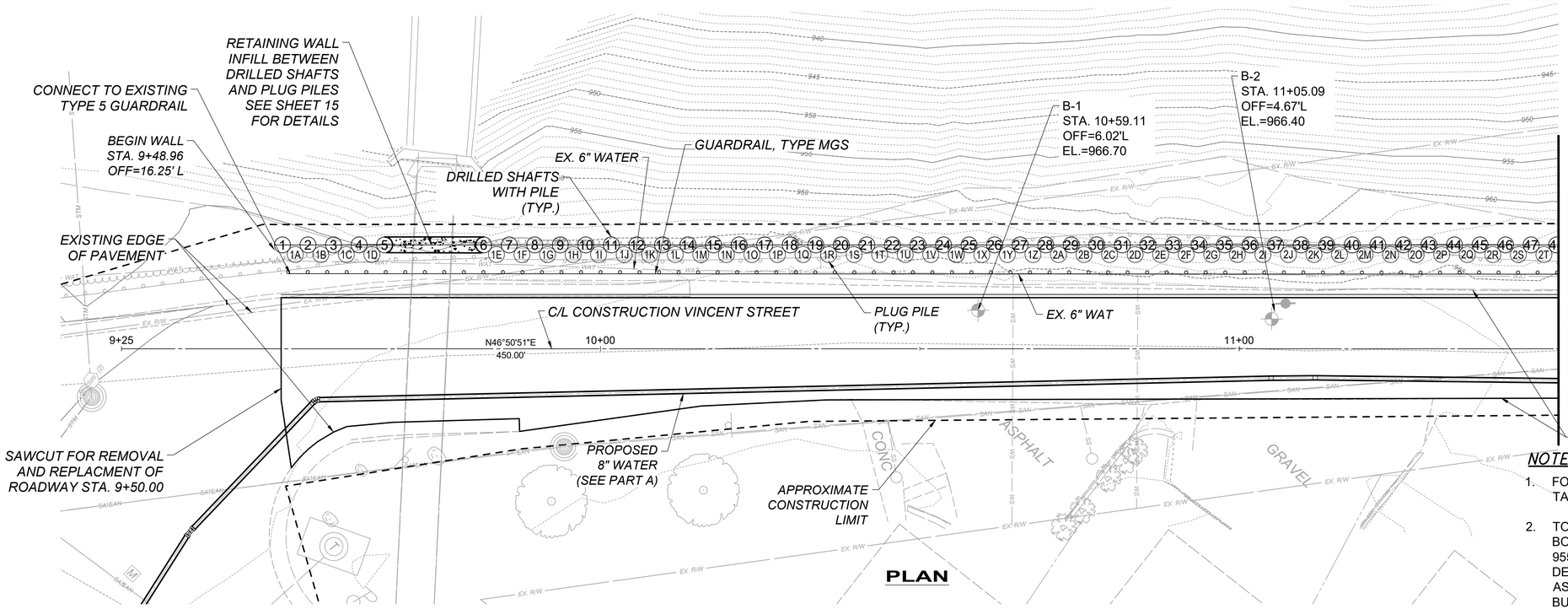


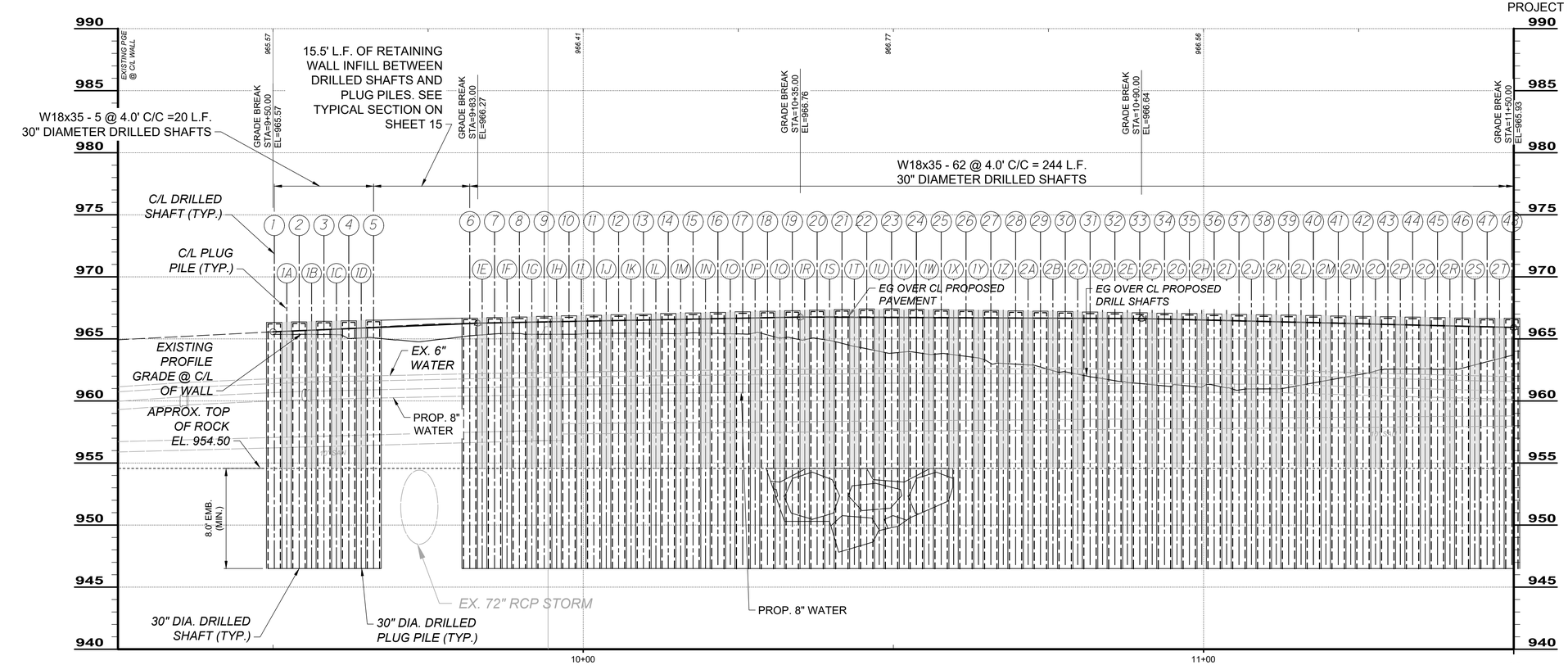
SCALE: 1" = 10 '

PLAN LEGEND:

- BORING LOCATION
- UNIQUE DRILLED SHAFT LABEL

NOTES:

1. FOR DRILLED SHAFT ELEVATIONS TABLE, SEE SHEET 17 & 18 OF 18
2. TOP OF ROCK ELEVATIONS AT BORINGS B1, B2 AND B4 WERE 954.7, 955.4 AND 955.4, RESPECTIVELY. FOR DESIGN PURPOSES TOP OF ROCK WAS ASSUMED TO BE AT ELEVATION 954.5, BUT ACTUAL ELEVATION WITHIN THE PROJECT LIMITS MAY VARY.



PROFILE ALONG C/L OF WALL - VINCENT STREET

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

PLAN AND PROFILE

PROJECT NO. 24025505
DISCIPLINE STRUCTURAL
SHEET NAME PLAN
SHEET 5 OF 18

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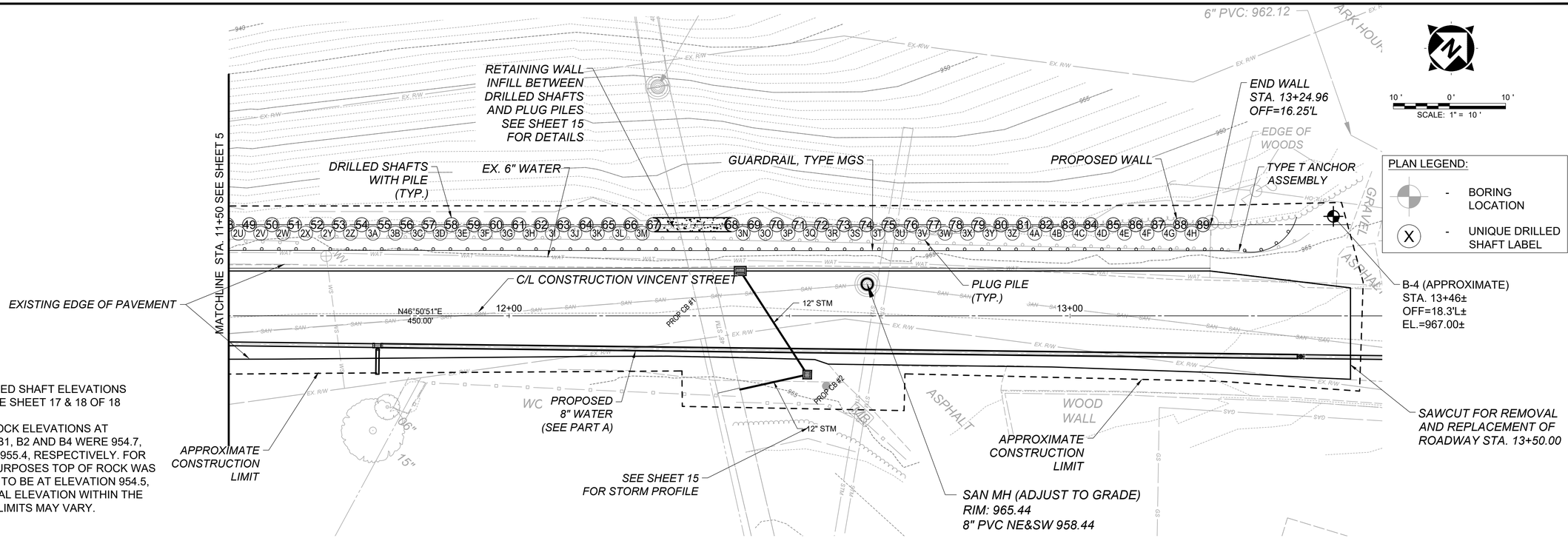

NOTES:

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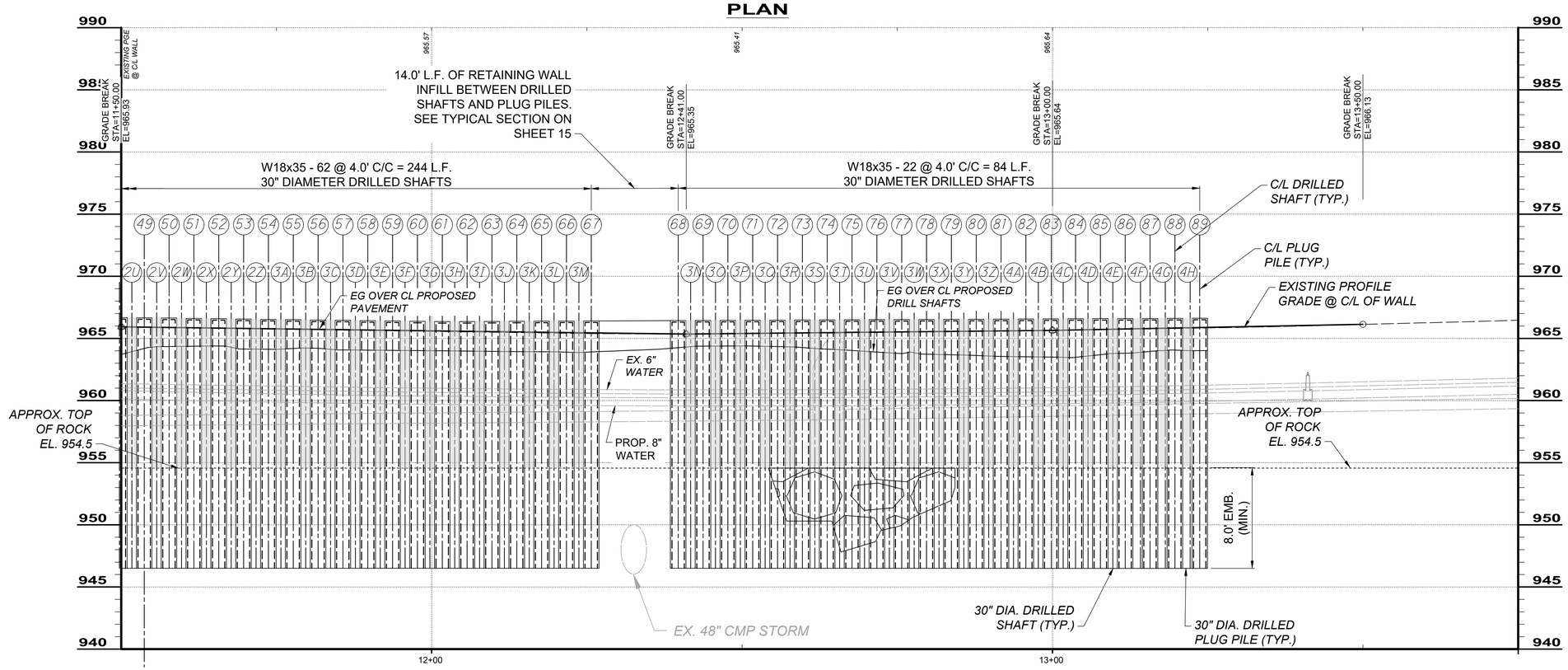
PLAN



PROFILE ALONG C/L OF WALL - VINCENT STREET

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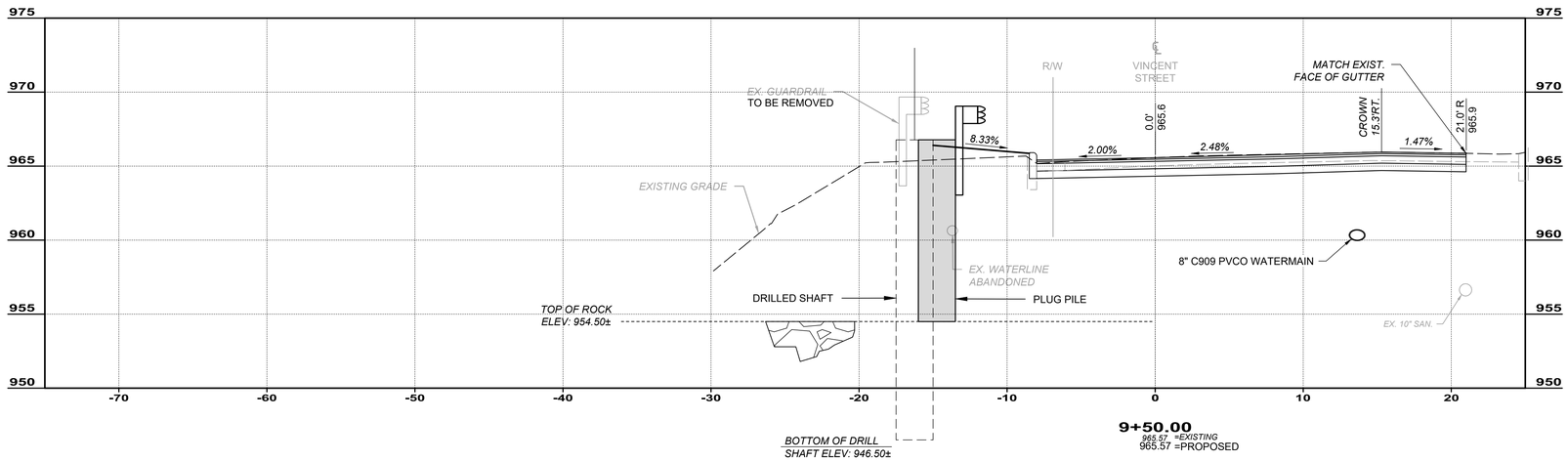
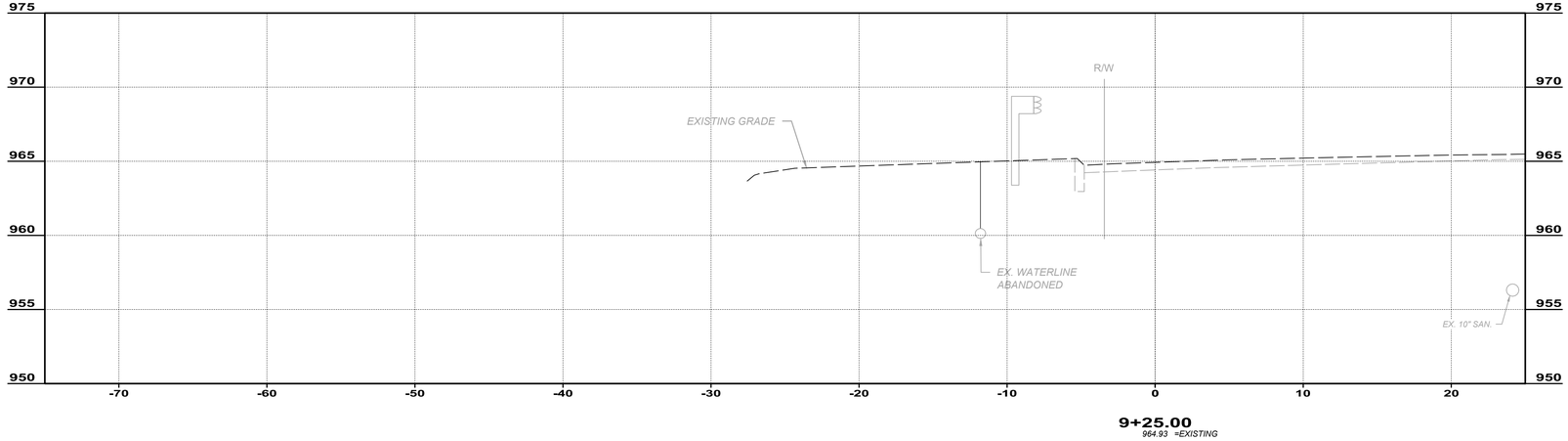
VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

PLAN AND PROFILE

PROJECT NO. 24025505
DISCIPLINE STRUCTURAL
SHEET NAME PLAN
SHEET 6 OF 18





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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
SECTIONS

SHEET 7 OF 18

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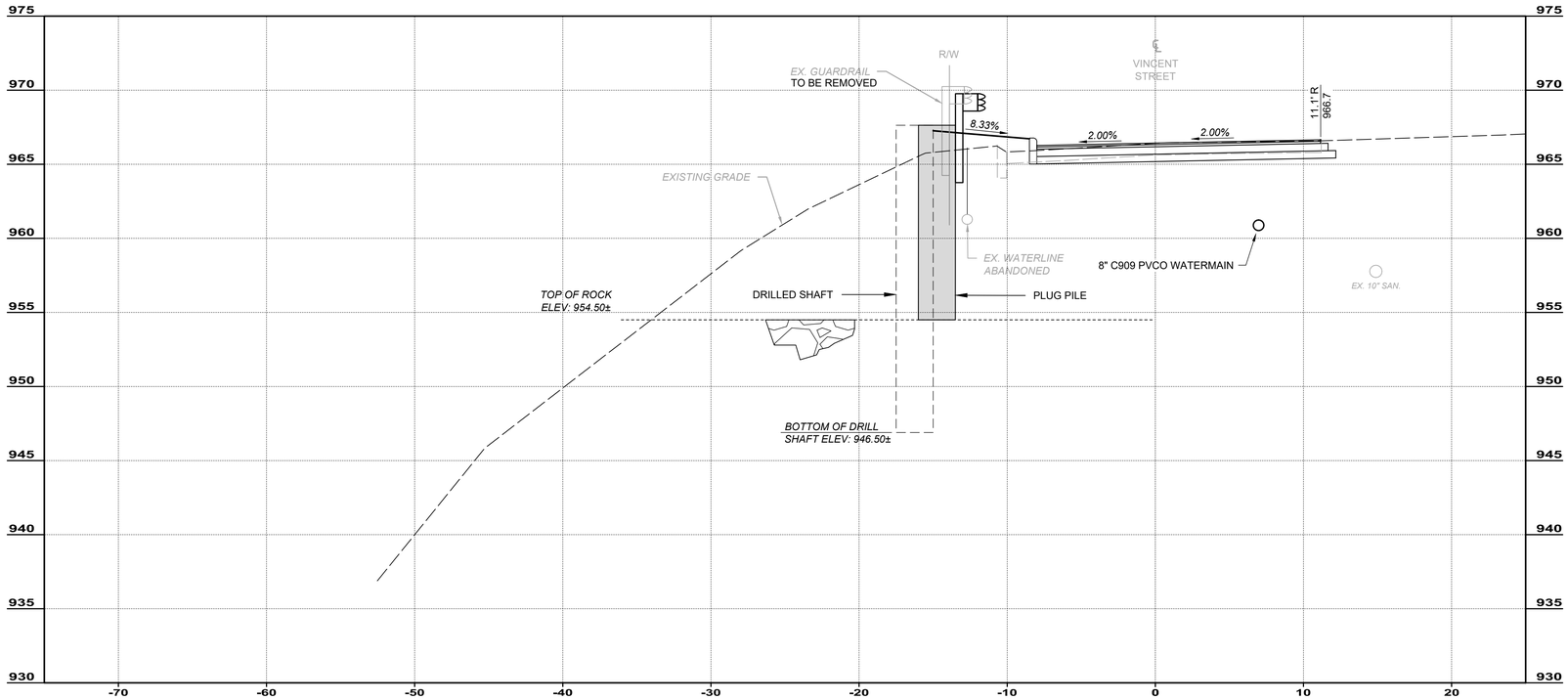

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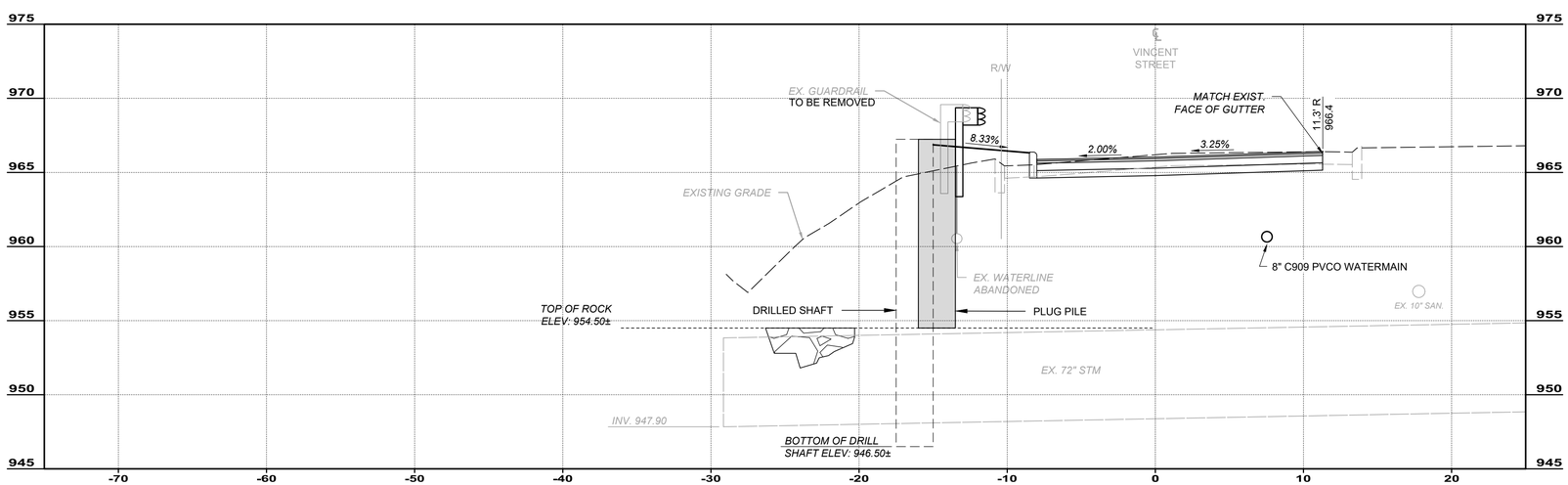
966.41 =EXISTING
966.43 =PROPOSED



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966.10 =PROPOSED

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DESIGNED BY:	JDB
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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
SECTIONS

SHEET **8** OF **18**

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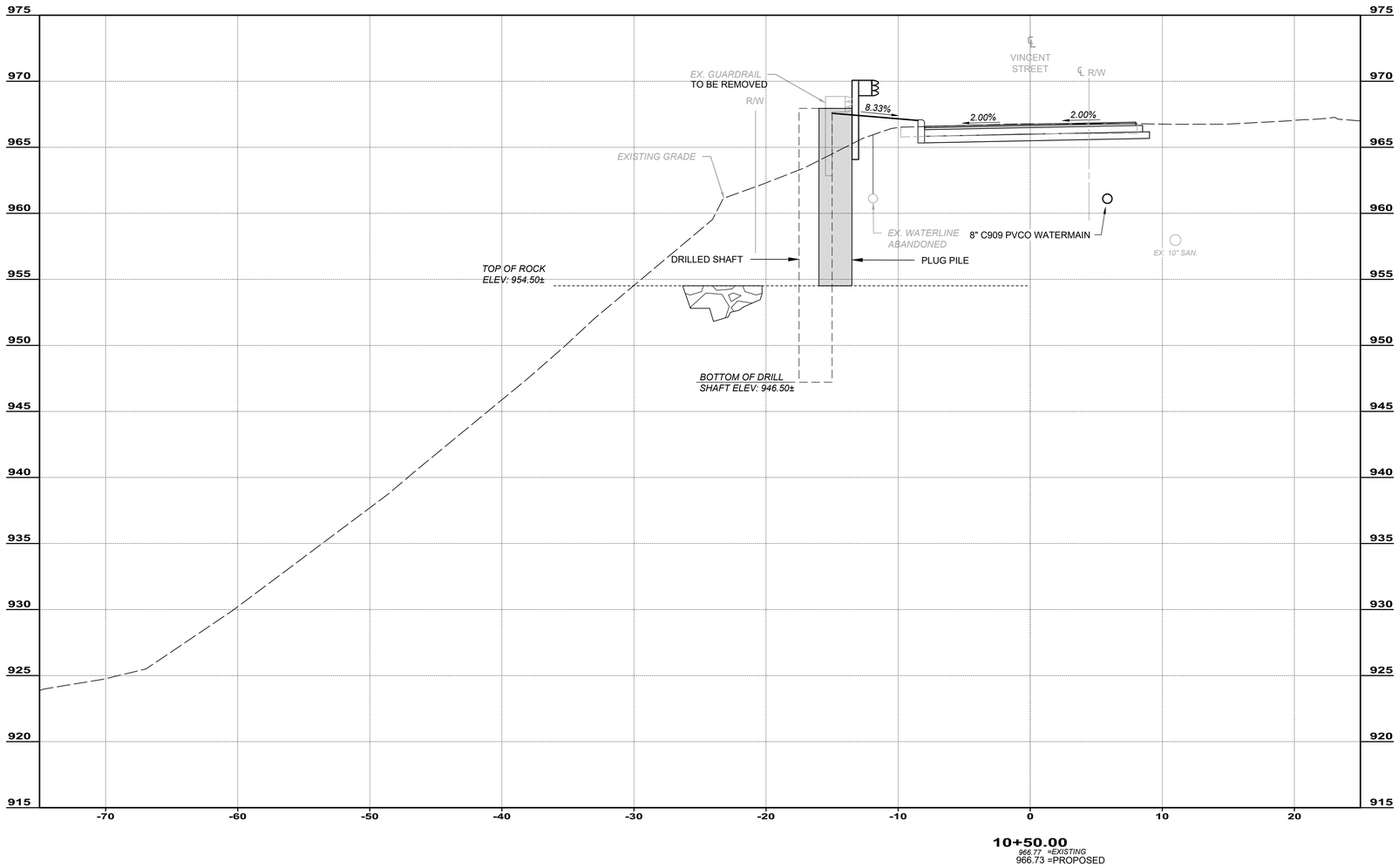

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ISSUED FOR:	FINAL
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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
SECTIONS

SHEET 9 OF 18

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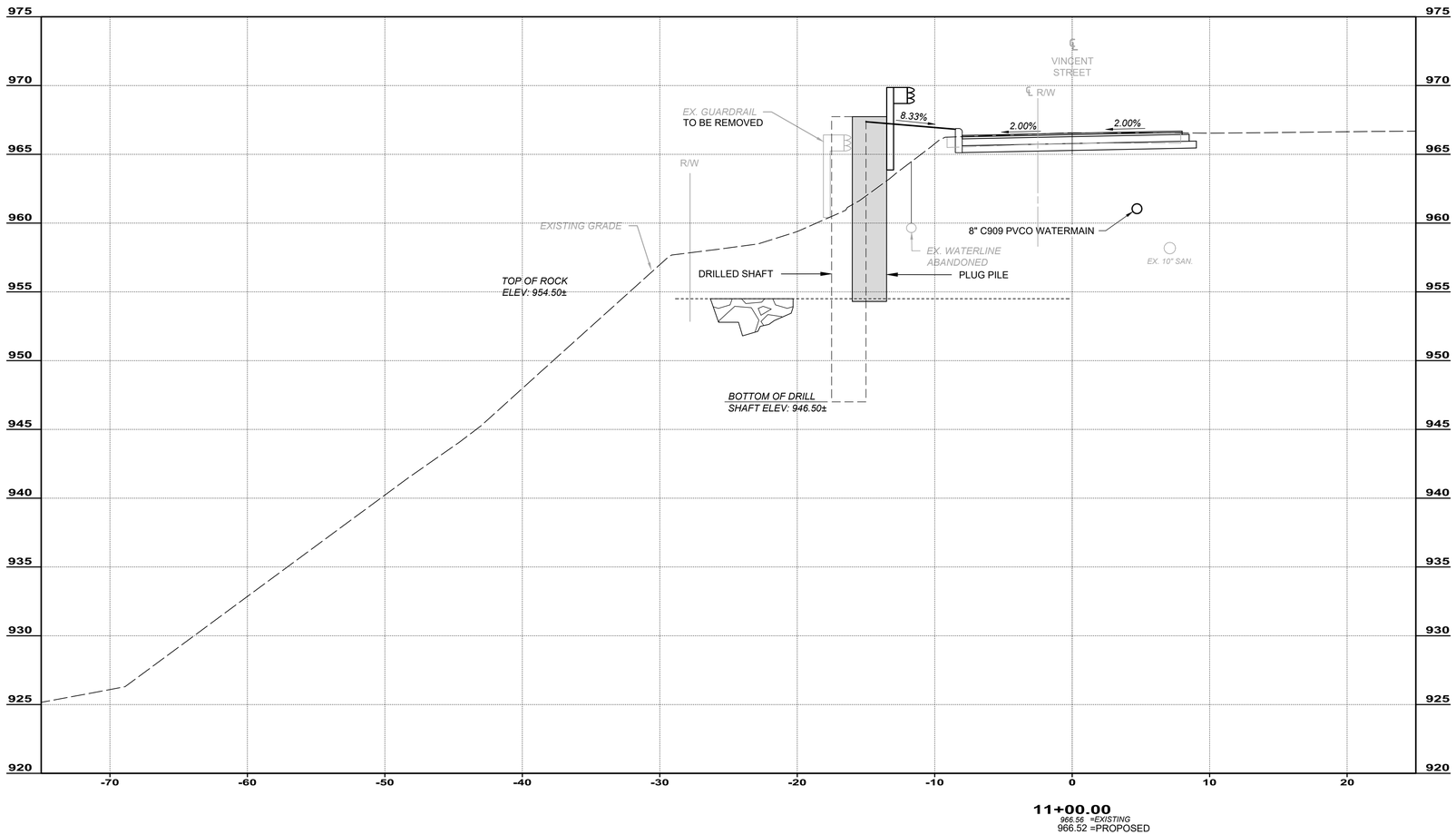

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330-375-0800

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
SECTIONS

SHEET 10 OF 18

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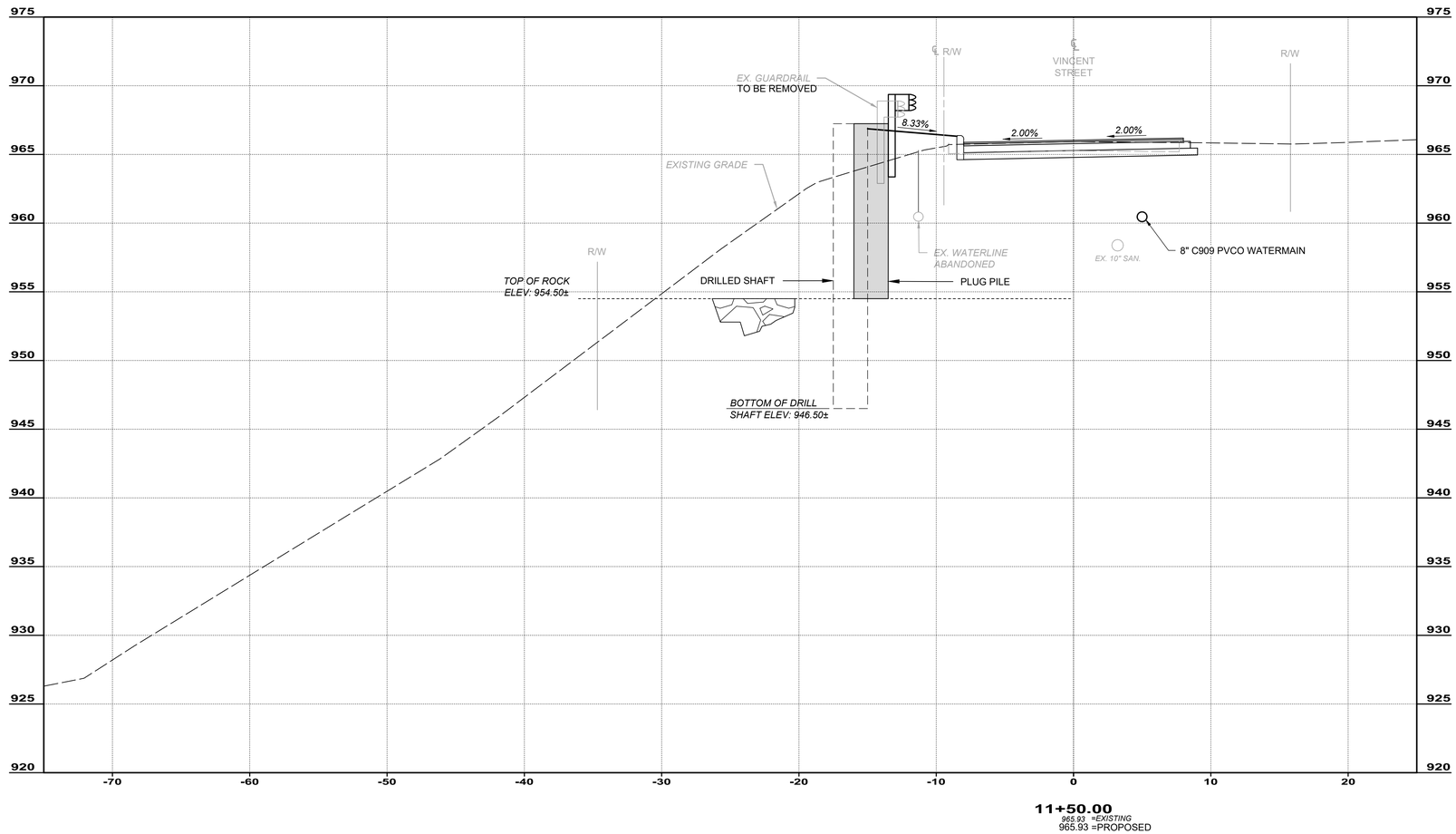

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3875 EMBASSY PARKWAY, SUITE 200
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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
SECTIONS

SHEET **11** OF **18**

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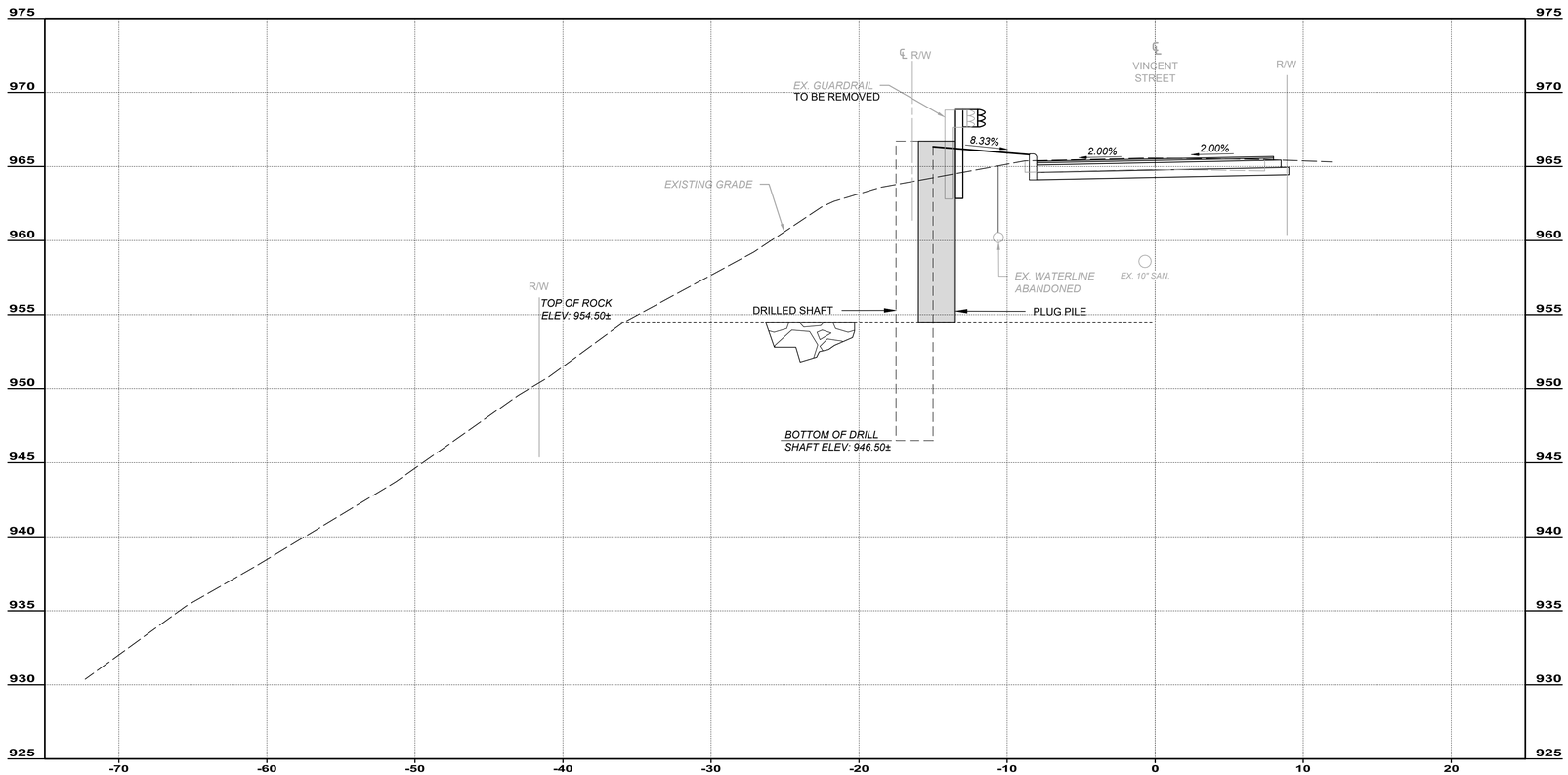

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3875 EMBASSY PARKWAY, SUITE 200
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330-375-0800

NO	REVISION	DATE

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
SECTIONS

SHEET 12 OF 18

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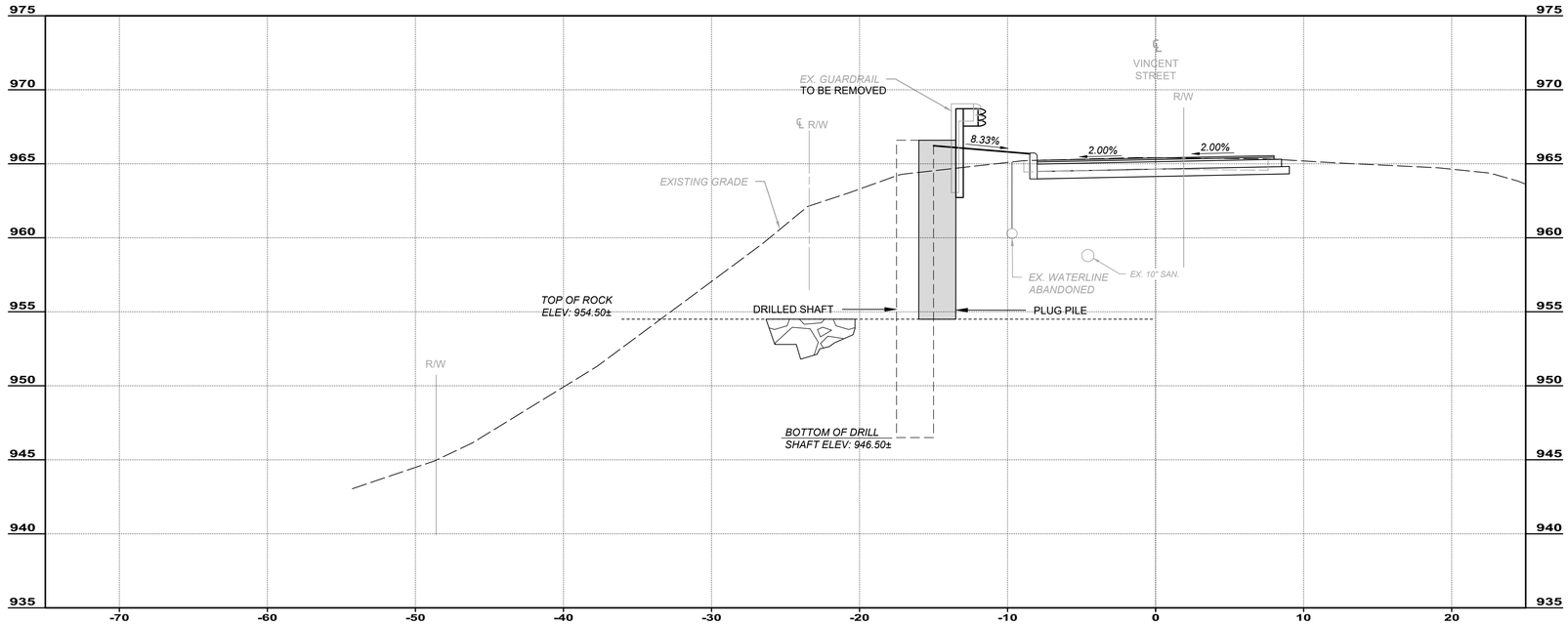

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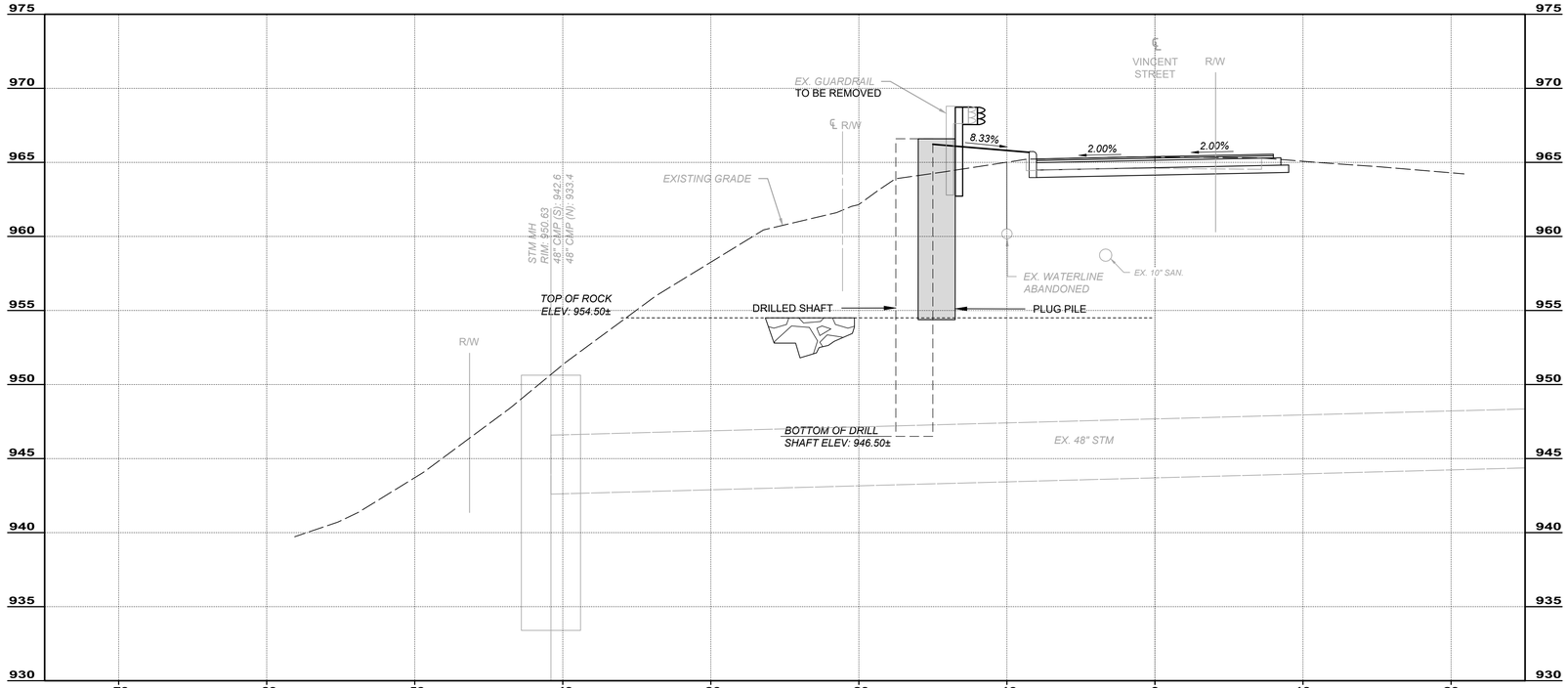
965.39 =PROPOSED



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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505
DISCIPLINE
STRUCTURAL
SHEET NAME
SECTIONS
SHEET **13** OF **18**

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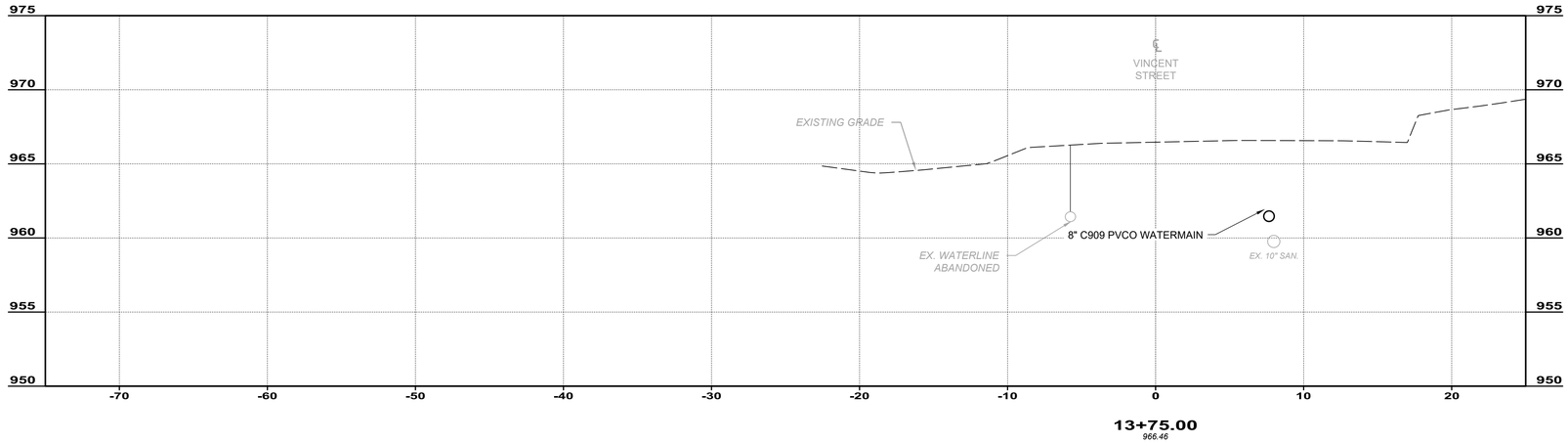

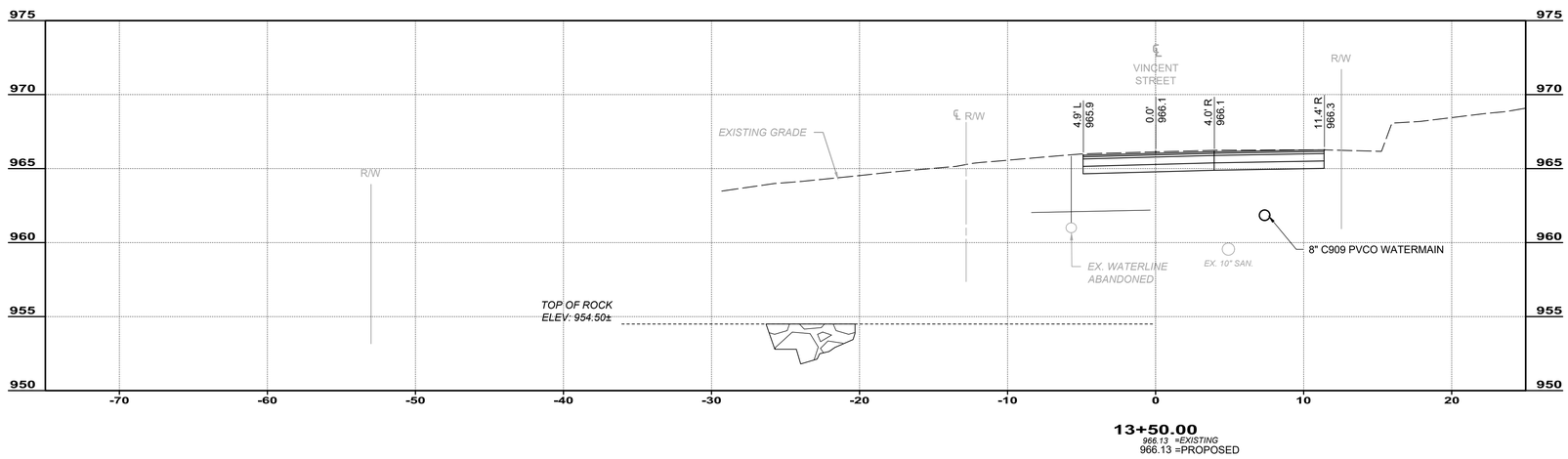

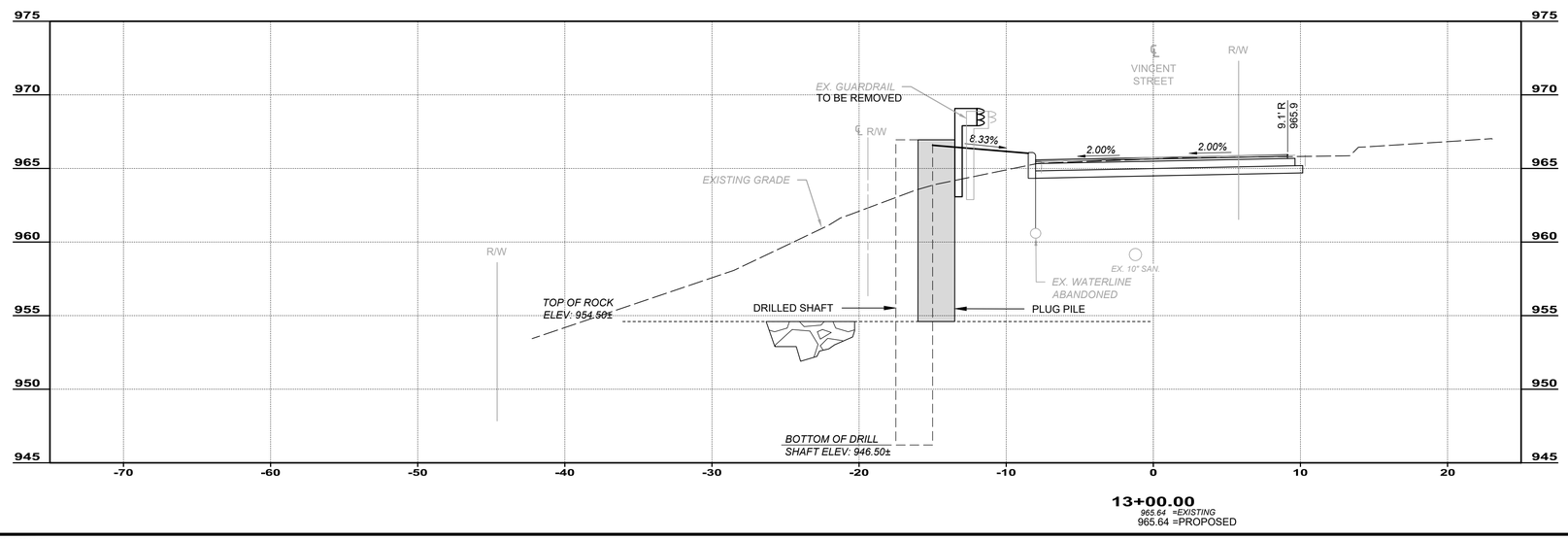

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3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

CROSS SECTION

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

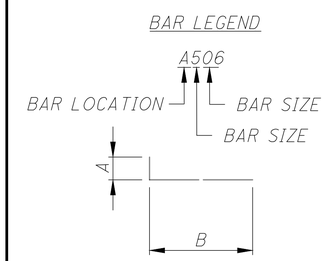
SHEET NAME
SECTIONS

SHEET 14 OF 18

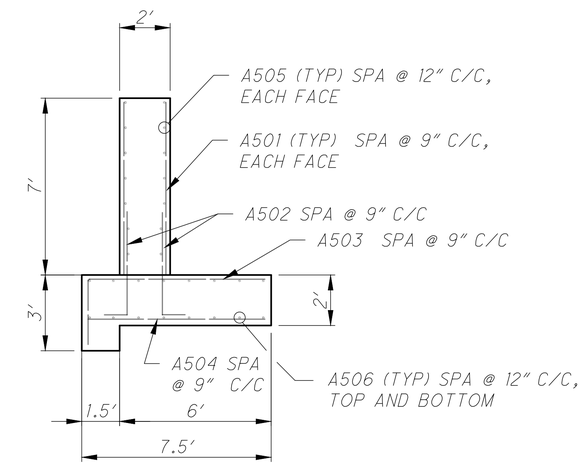
LENGTHS SHOWN IN FEET AND INCHES

REINFORCING STEEL LIST										
MARK	QTY	LENGTH	WEIGHT (POUNDS)	TYPE	A	B	C	D	E	INCR
ABUTMENTS										
Wall 1:										
A501	36	6-10	257	S	6-10					
A502	36	4-11	185	1	0-10	4-2				
A503	18	9-6	178	1	2-7	7-0				
A504	18	6-6	122	S	6-6					
A505	16	13-3	221	S	13-3					
A506	16	12-6	209	S	12-6					
Wall 2:										
A501	32	6-10	228	S	6-10					
A502	32	4-11	164	1	0-10	4-2				
A503	16	9-6	159	1	2-7	7-0				
A504	16	6-6	108	S	6-6					
A505	16	11-9	196	S	11-9					
A506	16	11-0	184	S	11-0					
			2,211	ABUTMENT TOTAL						

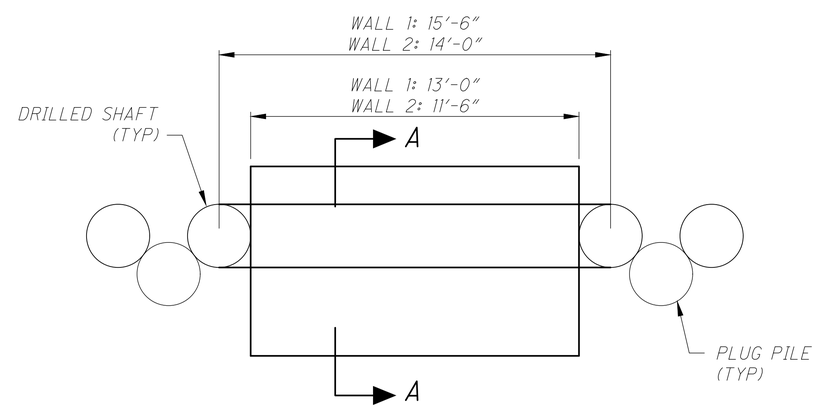
NOTE:
BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE INDICATED. TYPE S INDICATES A STRAIGHT BAR.



TYPE 1

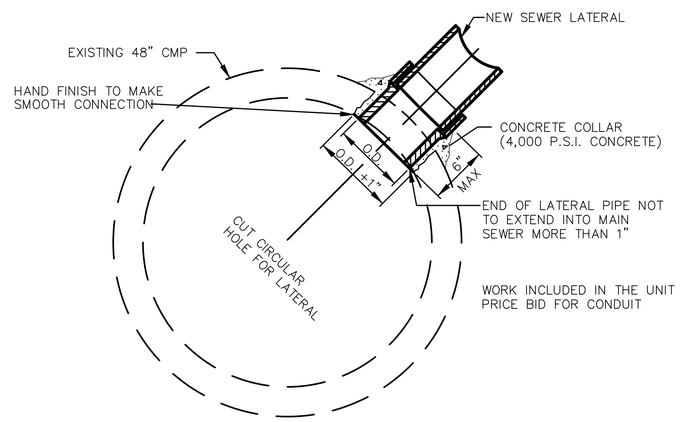


SECTION A-A



PLAN VIEW

CONCRETE RETAINING WALL



FIELD TEE CONNECTION

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3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

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VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

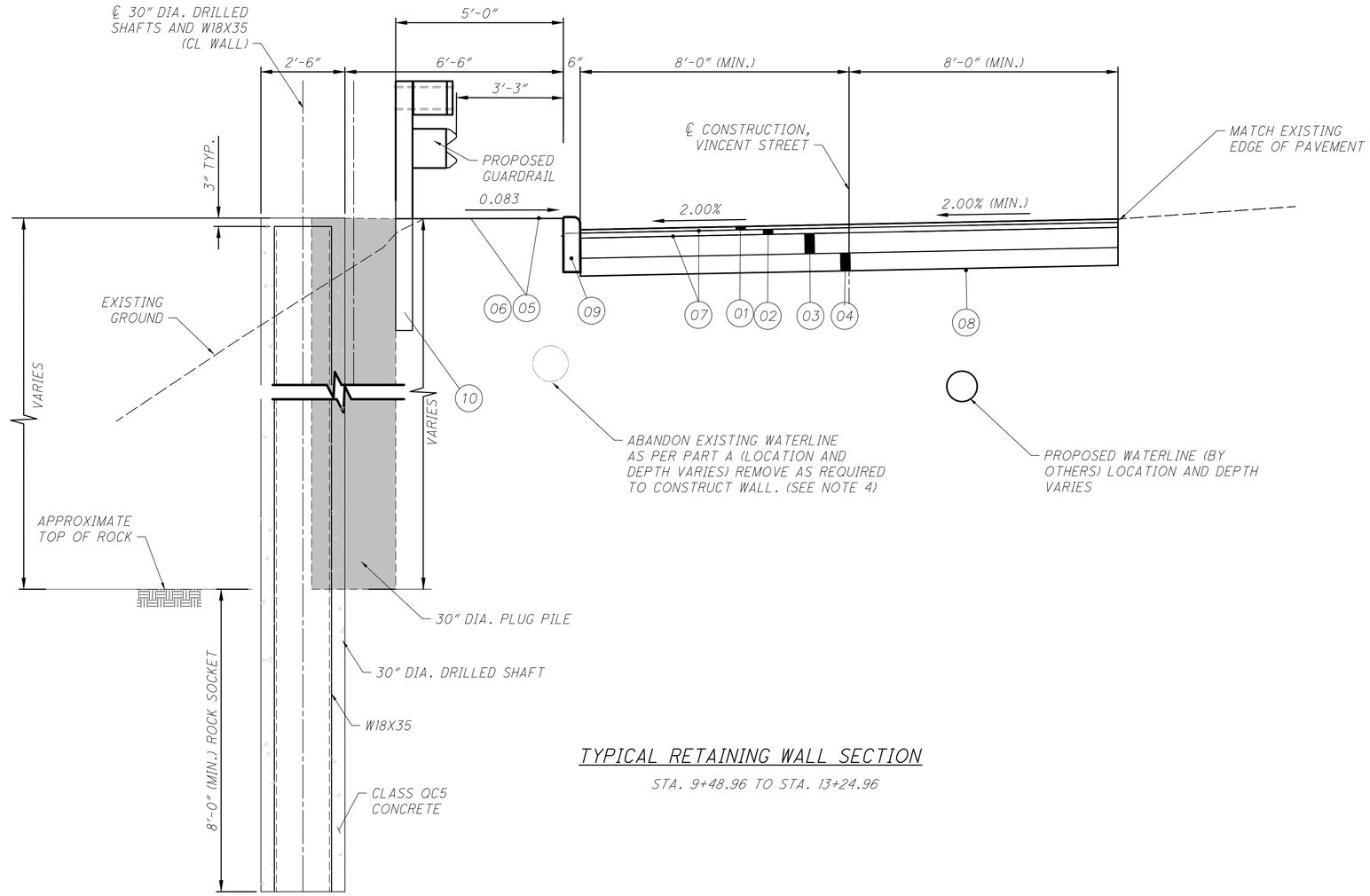
STORM SEWER DETAILS
CONCRETE RETAINING WALL

PROJECT NO.
24025505

DISCIPLINE
STRUCTURAL

SHEET NAME
PLAN

SHEET **15** OF **18**



TYPICAL RETAINING WALL SECTION

STA. 9+48.96 TO STA. 13+24.96

LEGEND:

(01) ITEM 441 - 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG 64-22

(02) ITEM 441 - 1.75" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG 64-22

(03) ITEM 301 - 6" ASPHALT CONCRETE BASE, PG 64-22

(04) ITEM 304 - 6" AGGREGATE BASE

(05) ITEM 659 - TOPSOIL, FURNISHED AND PLACED, 4" DEPTH

(06) ITEM 659 - SEEDING AND MULCHING, TYPE 1

(07) ITEM 407 - TACK COAT

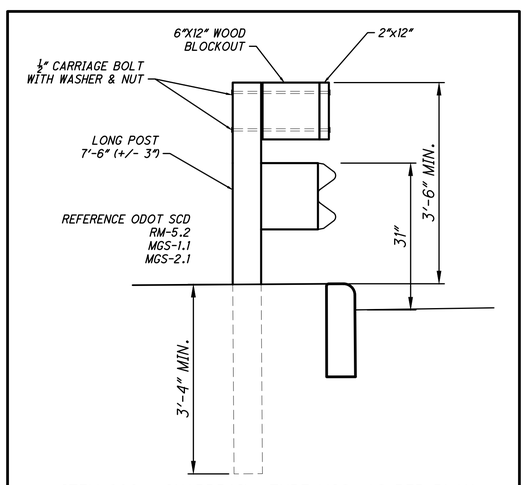
(08) ITEM 204 - SUBGRADE COMPACTION

(09) ITEM 609 - CURB, TYPE 6 (TYP.)

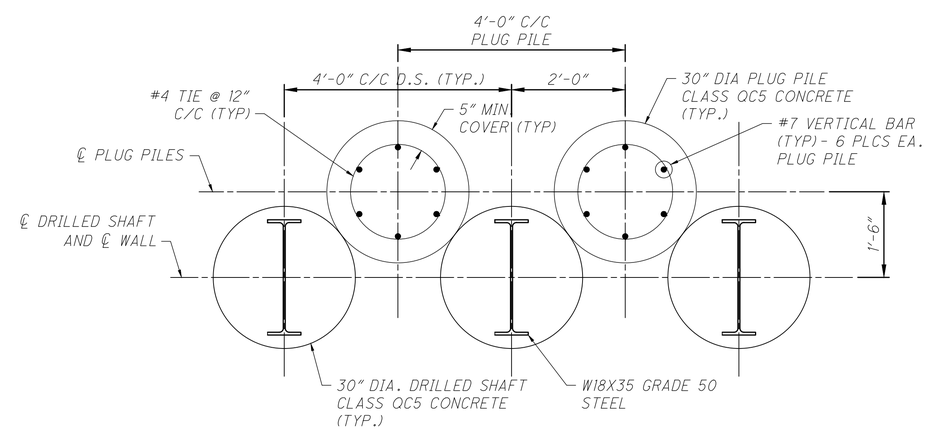
(10) ITEM 606 - GUARDRAIL, TYPE MGS, AS PER PLAN

NOTES

1. FOR DRILLED SHAFT ELEVATION TABLE SEE SHEET 17, 18 OF 18.
2. FOR DRILLED SHAFTS DETAILS, SEE SHEET 16 OF 18.
3. FOR GENERAL NOTES & QUANTITIES SEE SHEET 2 OF 18.
4. REMOVE EXISTING ABANDONED WATERLINE TO THE EXTENTS NECESSARY TO CONSTRUCT WALL. A QUANTITY OF 400 FT HAS BEEN PROVIDED IN THE ESTIMATED QUANTITIES TO BE PAID FOR UNDER ITEM 202 - PIPE REMOVED. ONLY REMOVE PIPE IN CONFLICT WITH WALL CONSTRUCTION.



ITEM 606 - GUARDRAIL, TYPE MGS, AS PER PLAN



PARTIAL RETAINING WALL PLAN

verdantas
3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

NO	REVISION	DATE

ISSUED FOR: FINAL
ISSUE DATE: 5/22/25
SCALE: AS SHOWN
DESIGNED BY: JDB
DRAWN BY: BEK
CHECKED BY: MPS

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

TYPICAL SECTION AND RETAINING WALL DETAILS

PROJECT NO. 24025505
DISCIPLINE STRUCTURAL
SHEET NAME DETAILS
SHEET 16 OF 18

DRILLED SHAFT (PLUG PILE) SUMMARY TABLE

DRILLED SHAFT NO.	CL DRILLED SHAFT STATION	VINCENT STREET PGE	OFFSET* (FT)	BOTTOM OF PLUG SHAFT (ELEV.)	TOP OF SHAFT (ELEV.)	TOTAL SHAFT LENGTH
	9+50.00	965.57	Grade Break			
1A	9+52.21	965.62	14.75	954.50	966.60	12.10
1B	9+56.21	965.70	14.75	954.50	966.68	12.18
1C	9+60.21	965.79	14.75	954.50	966.77	12.27
1D	9+64.21	965.87	14.75	954.50	966.85	12.35
	9+83.00	966.27	Grade Break			
1E	9+83.71	966.28	14.75	954.50	967.26	12.76
1F	9+87.71	966.31	14.75	954.50	967.30	12.80
1G	9+91.71	966.35	14.75	954.50	967.34	12.84
1H	9+95.71	966.39	14.75	954.50	967.37	12.87
1I	9+99.71	966.43	14.75	954.50	967.41	12.91
1J	10+03.71	966.47	14.75	954.50	967.45	12.95
1K	10+07.71	966.50	14.75	954.50	967.49	12.99
1L	10+11.71	966.54	14.75	954.50	967.52	13.02
1M	10+15.71	966.58	14.75	954.50	967.56	13.06
1N	10+19.71	966.62	14.75	954.50	967.60	13.10
1O	10+23.71	966.65	14.75	954.50	967.64	13.14
1P	10+27.71	966.69	14.75	954.50	967.67	13.17
1Q	10+31.71	966.73	14.75	954.50	967.71	13.21
	10+35.00	966.76	Grade Break			
1R	10+35.71	966.76	14.75	954.50	967.74	13.24
1S	10+39.71	966.75	14.75	954.50	967.73	13.23
1T	10+43.71	966.74	14.75	954.50	967.72	13.22
1U	10+47.71	966.73	14.75	954.50	967.72	13.22
1V	10+51.71	966.72	14.75	954.50	967.71	13.21
1W	10+55.71	966.71	14.75	954.50	967.70	13.20
1X	10+59.71	966.71	14.75	954.50	967.69	13.19
1Y	10+63.71	966.70	14.75	954.50	967.68	13.18
1Z	10+67.71	966.69	14.75	954.50	967.67	13.17
2A	10+71.71	966.68	14.75	954.50	967.66	13.16
2B	10+75.71	966.67	14.75	954.50	967.65	13.15
2C	10+79.71	966.66	14.75	954.50	967.65	13.15
2D	10+83.71	966.65	14.75	954.50	967.64	13.14
2E	10+87.71	966.64	14.75	954.50	967.63	13.13
	10+90.00	966.64	Grade Break			
2F	10+91.71	966.62	14.75	954.50	967.60	13.10
2G	10+95.71	966.57	14.75	954.50	967.56	13.06
2H	10+99.71	966.53	14.75	954.50	967.51	13.01
2J	11+03.71	966.48	14.75	954.50	967.46	12.96
2J	11+07.71	966.43	15.75	954.50	967.41	12.91
2K	11+11.71	966.38	14.75	954.50	967.37	12.87
2L	11+15.71	966.34	14.75	954.50	967.32	12.82
2M	11+19.71	966.29	14.75	954.50	967.27	12.77
2N	11+23.71	966.24	14.75	954.50	967.22	12.72
2O	11+27.71	966.19	14.75	954.50	967.18	12.68
2P	11+31.71	966.15	14.75	954.50	967.13	12.63
2Q	11+35.71	966.10	14.75	954.50	967.08	12.58
2R	11+39.71	966.05	14.75	954.50	967.04	12.54
2S	11+43.71	966.00	14.75	954.50	966.99	12.49
2T	11+47.71	965.96	14.75	954.50	966.94	12.44
	11+50.00	965.93	Grade Break			
2U	11+51.71	965.92	14.75	954.50	966.90	12.40

DRILLED SHAFT (PLUG PILE) SUMMARY TABLE

DRILLED SHAFT NO.	CL DRILLED SHAFT STATION	VINCENT STREET PGE	OFFSET* (FT)	BOTTOM OF PLUG SHAFT (ELEV.)	TOP OF SHAFT (ELEV.)	TOTAL SHAFT LENGTH
2V	11+55.71	965.89	14.75	954.50	966.88	12.38
2W	11+59.71	965.87	14.75	954.50	966.85	12.35
2X	11+63.71	965.84	14.75	954.50	966.83	12.33
2Y	11+67.71	965.82	14.75	954.50	966.80	12.30
2Z	11+71.71	965.79	14.75	954.50	966.77	12.27
3A	11+75.71	965.77	14.75	954.50	966.75	12.25
3B	11+79.71	965.74	14.75	954.50	966.72	12.22
3C	11+83.71	965.72	14.75	954.50	966.70	12.20
3D	11+87.71	965.69	14.75	954.50	966.67	12.17
3E	11+91.71	965.66	14.75	954.50	966.65	12.15
3F	11+95.71	965.64	14.75	954.50	966.62	12.12
3G	11+99.71	965.61	14.75	954.50	966.60	12.10
3H	12+03.71	965.59	14.75	954.50	966.57	12.07
3I	12+07.71	965.56	14.75	954.50	966.55	12.05
3J	12+11.71	965.54	14.75	954.50	966.52	12.02
3K	12+15.71	965.51	14.75	954.50	966.49	11.99
3L	12+19.71	965.49	14.75	954.50	966.47	11.97
3M	12+23.71	965.46	14.75	954.50	966.44	11.94
	12+41.00	965.35	Grade Break			
3N	12+41.71	965.35	14.75	954.50	966.34	11.84
3O	12+45.71	965.37	14.75	954.50	966.36	11.86
3P	12+49.71	965.39	14.75	954.50	966.38	11.88
3Q	12+53.71	965.41	14.75	954.50	966.40	11.90
3R	12+57.71	965.43	14.75	954.50	966.42	11.92
3S	12+61.71	965.45	14.75	954.50	966.44	11.94
3T	12+65.71	965.47	14.75	954.50	966.45	11.95
3U	12+69.71	965.49	14.75	954.50	966.47	11.97
3V	12+73.71	965.51	14.75	954.50	966.49	11.99
3W	12+77.71	965.53	14.75	954.50	966.51	12.01
3X	12+81.71	965.55	14.75	954.50	966.53	12.03
3Y	12+85.71	965.57	14.75	954.50	966.55	12.05
3Z	12+89.71	965.59	14.75	954.50	966.57	12.07
4A	12+93.71	965.61	14.75	954.50	966.59	12.09
4B	12+97.71	965.63	14.75	954.50	966.61	12.11
	13+00.00	965.64	Grade Break			
4C	13+01.71	965.66	14.75	954.50	966.64	12.14
4D	13+05.71	965.70	14.75	954.50	966.68	12.18
4E	13+09.71	965.74	14.75	954.50	966.72	12.22
4F	13+13.71	965.77	14.75	954.50	966.76	12.26
4G	13+17.71	965.81	14.75	954.50	966.80	12.30
4H	13+21.71	965.85	14.75	954.50	966.84	12.34
	13+50.00	966.13	Grade Break			
						1079.00

NOTES:

*1. *OFFSET IS FROM CENTERLINE OF VINCENT STREET TO CENTERLINE OF WALL*

2. QUANTITIES AND ELEVATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO EXACT LOCATIONS OF TOP OF ROCK FOUND ON SITE.

verdantas
3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

NO	REVISION	DATE

ISSUED FOR: FINAL
ISSUE DATE: 5/22/25
SCALE: AS SHOWN
DESIGNED BY: JDB
DRAWN BY: BEK
CHECKED BY: MPS

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CUYAHOGA COUNTY, OHIO

SHAFT TABLES

PROJECT NO. 24025505
DISCIPLINE: STRUCTURAL
SHEET NAME: TABLE
SHEET 17 OF 18

DRILLED SHAFT SUMMARY TABLE

DRILLED SHAFT NO.	CL WALL STATION	VINCENT STREET PGE	OFFSET* (FT)	ITEM 524 DRILLED SHAFT, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN (FT.)	ITEM 524 DRILLED SHAFT, 30" DIAMETER, INTO BEDROCK, AS PER PLAN (FT.)	TOP OF STEEL PILE (ELEV.)	BOTTOM OF PILE (ELEV.)	TOP OF SHAFT (ELEV.)	TOTAL STEEL PILE LENGTH
	9+50.00	965.57	GRADE BREAK						
1	9+50.21	965.57	16.25	12.06	8.00	966.31	946.50	966.56	19.81
2	9+54.21	965.66	16.25	12.14	8.00	966.39	946.50	966.64	19.89
3	9+58.21	965.74	16.25	12.23	8.00	966.48	946.50	966.73	19.98
4	9+62.21	965.83	16.25	12.31	8.00	966.56	946.50	966.81	20.06
5	9+66.21	965.91	16.25	12.40	8.00	966.65	946.50	966.90	20.15
6	9+81.71	966.24	16.25	12.73	8.00	966.98	946.50	967.23	20.48
	9+83.00	966.27	GRADE BREAK						
7	9+85.71	966.30	16.25	12.78	8.00	967.03	946.50	967.28	20.53
8	9+89.71	966.33	16.25	12.82	8.00	967.07	946.50	967.32	20.57
9	9+93.71	966.37	16.25	12.85	8.00	967.10	946.50	967.35	20.60
10	9+97.71	966.41	16.25	12.89	8.00	967.14	946.50	967.39	20.64
11	10+01.71	966.45	16.25	12.93	8.00	967.18	946.50	967.43	20.68
12	10+05.71	966.48	16.25	12.97	8.00	967.22	946.50	967.47	20.72
13	10+09.71	966.52	16.25	13.00	8.00	967.25	946.50	967.50	20.75
14	10+13.71	966.56	16.25	13.04	8.00	967.29	946.50	967.54	20.79
15	10+17.71	966.60	16.25	13.08	8.00	967.33	946.50	967.58	20.83
16	10+21.71	966.63	16.25	13.12	8.00	967.37	946.50	967.62	20.87
17	10+25.71	966.67	16.25	13.16	8.00	967.41	946.50	967.66	20.91
18	10+29.71	966.71	16.25	13.19	8.00	967.44	946.50	967.69	20.94
19	10+33.71	966.75	16.25	13.23	8.00	967.48	946.50	967.73	20.98
	10+35.00	966.76	GRADE BREAK						
20	10+37.71	966.75	16.25	13.24	8.00	967.49	946.50	967.74	20.99
21	10+41.71	966.75	16.25	13.23	8.00	967.48	946.50	967.73	20.98
22	10+45.71	966.74	16.25	13.22	8.00	967.47	946.50	967.72	20.97
23	10+49.71	966.73	16.25	13.21	8.00	967.46	946.50	967.71	20.96
24	10+53.71	966.72	16.25	13.20	8.00	967.45	946.50	967.70	20.95
25	10+57.71	966.71	16.25	13.19	8.00	967.44	946.50	967.69	20.94
26	10+61.71	966.70	16.25	13.18	8.00	967.43	946.50	967.68	20.93
27	10+65.71	966.69	16.25	13.18	8.00	967.43	946.50	967.68	20.93
28	10+69.71	966.68	16.25	13.17	8.00	967.42	946.50	967.67	20.92
29	10+73.71	966.68	16.25	13.16	8.00	967.41	946.50	967.66	20.91
30	10+77.71	966.67	16.25	13.15	8.00	967.40	946.50	967.65	20.90
31	10+81.71	966.66	16.25	13.14	8.00	967.39	946.50	967.64	20.89
32	10+85.71	966.65	16.25	13.13	8.00	967.38	946.50	967.63	20.88
33	10+89.71	966.64	16.25	13.12	8.00	967.37	946.50	967.62	20.87
	10+90.00	966.64	GRADE BREAK						
34	10+93.71	966.60	16.25	13.08	8.00	967.33	946.50	967.58	20.83
35	10+97.71	966.55	16.25	13.03	8.00	967.28	946.50	967.53	20.78
36	11+01.71	966.50	16.25	12.98	8.00	967.23	946.50	967.48	20.73
37	11+05.71	966.45	16.25	12.94	8.00	967.19	946.50	967.44	20.69
38	11+09.71	966.41	16.25	12.89	8.00	967.14	946.50	967.39	20.64
39	11+13.71	966.36	16.25	12.84	8.00	967.09	946.50	967.34	20.59
40	11+17.71	966.31	16.25	12.80	8.00	967.05	946.50	967.30	20.55
41	11+21.71	966.26	16.25	12.75	8.00	967.00	946.50	967.25	20.50
42	11+25.71	966.22	16.25	12.70	8.00	966.95	946.50	967.20	20.45
43	11+29.71	966.17	16.25	12.65	8.00	966.90	946.50	967.15	20.40
44	11+33.71	966.12	16.25	12.61	8.00	966.86	946.50	967.11	20.36
45	11+37.71	966.08	16.25	12.56	8.00	966.81	946.50	967.06	20.31
46	11+41.71	966.03	16.25	12.51	8.00	966.76	946.50	967.01	20.26
47	11+45.71	965.98	16.25	12.46	8.00	966.71	946.50	966.96	20.21

DRILLED SHAFT SUMMARY TABLE

DRILLED SHAFT NO.	CL WALL STATION	VINCENT STREET PGE	OFFSET* (FT)	ITEM 524 DRILLED SHAFT, 30" DIAMETER, ABOVE BEDROCK, AS PER PLAN (FT.)	ITEM 524 DRILLED SHAFT, 30" DIAMETER, INTO BEDROCK, AS PER PLAN (FT.)	TOP OF STEEL PILE (ELEV.)	BOTTOM OF PILE (ELEV.)	TOP OF SHAFT (ELEV.)	TOTAL STEEL PILE LENGTH
48	11+49.71	965.93	16.25	12.42	8.00	966.67	946.50	966.92	20.17
	11+50.00	965.93	GRADE BREAK						
49	11+53.71	965.91	16.25	12.39	8.00	966.64	946.50	966.89	20.14
50	11+57.71	965.88	16.25	12.36	8.00	966.61	946.50	966.86	20.11
51	11+61.71	965.86	16.25	12.34	8.00	966.59	946.50	966.84	20.09
52	11+65.71	965.83	16.25	12.31	8.00	966.56	946.50	966.81	20.06
53	11+69.71	965.80	16.25	12.29	8.00	966.54	946.50	966.79	20.04
54	11+73.71	965.78	16.25	12.26	8.00	966.51	946.50	966.76	20.01
55	11+77.71	965.75	16.25	12.24	8.00	966.49	946.50	966.74	19.99
56	11+81.71	965.73	16.25	12.21	8.00	966.46	946.50	966.71	19.96
57	11+85.71	965.70	16.25	12.19	8.00	966.44	946.50	966.69	19.94
58	11+89.71	965.68	16.25	12.16	8.00	966.41	946.50	966.66	19.91
59	11+93.71	965.65	16.25	12.13	8.00	966.38	946.50	966.63	19.88
60	11+97.71	965.63	16.25	12.11	8.00	966.36	946.50	966.61	19.86
61	12+01.71	965.60	16.25	12.08	8.00	966.33	946.50	966.58	19.83
62	12+05.71	965.57	16.25	12.06	8.00	966.31	946.50	966.56	19.81
63	12+09.71	965.55	16.25	12.03	8.00	966.28	946.50	966.53	19.78
64	12+13.71	965.52	16.25	12.01	8.00	966.26	946.50	966.51	19.76
65	12+17.71	965.50	16.25	11.98	8.00	966.23	946.50	966.48	19.73
66	12+21.71	965.47	16.25	11.96	8.00	966.21	946.50	966.46	19.71
67	12+25.71	965.45	16.25	11.93	8.00	966.18	946.50	966.43	19.68
68	12+39.71	965.36	16.25	11.84	8.00	966.09	946.50	966.34	19.59
	12+41.00	965.35	GRADE BREAK						
69	12+43.71	965.36	16.25	11.85	8.00	966.10	946.50	966.35	19.60
70	12+47.71	965.38	16.25	11.87	8.00	966.12	946.50	966.37	19.62
71	12+51.71	965.40	16.25	11.89	8.00	966.14	946.50	966.39	19.64
72	12+55.71	965.42	16.25	11.91	8.00	966.16	946.50	966.41	19.66
73	12+59.71	965.44	16.25	11.93	8.00	966.18	946.50	966.43	19.68
74	12+63.71	965.46	16.25	11.94	8.00	966.19	946.50	966.44	19.69
75	12+67.71	965.48	16.25	11.96	8.00	966.21	946.50	966.46	19.71
76	12+71.71	965.50	16.25	11.98	8.00	966.23	946.50	966.48	19.73
77	12+75.71	965.52	16.25	12.00	8.00	966.25	946.50	966.50	19.75
78	12+79.71	965.54	16.25	12.02	8.00	966.27	946.50	966.52	19.77
79	12+83.71	965.56	16.25	12.04	8.00	966.29	946.50	966.54	19.79
80	12+87.71	965.58	16.25	12.06	8.00	966.31	946.50	966.56	19.81
81	12+91.71	965.60	16.25	12.08	8.00	966.33	946.50	966.58	19.83
82	12+95.71	965.62	16.25	12.10	8.00	966.35	946.50	966.60	19.85
83	12+99.71	965.64	16.25	12.12	8.00	966.37	946.50	966.62	19.87
	13+00.00	965.64	GRADE BREAK						
84	13+03.71	965.68	16.25	12.16	8.00	966.41	946.50	966.66	19.91
85	13+07.71	965.72	16.25	12.20	8.00	966.45	946.50	966.70	19.95
86	13+11.71	965.75	16.25	12.24	8.00	966.49	946.50	966.74	19.99
87	13+15.71	965.79	16.25	12.28	8.00	966.53	946.50	966.78	20.03
88	13+19.71	965.83	16.25	12.32	8.00	966.57	946.50	966.82	20.07
89	13+23.71	965.87	16.25	12.36	8.00	966.61	946.50	966.86	20.11
	13+50.00	966.13	GRADE BREAK						
				1115.00	**712.00**				**1805.00**

NOTES:

*1. *OFFSET IS FROM CENTERLINE OF VINCENT STREET TO CENTERLINE OF WALL*

2. QUANTITIES AND ELEVATIONS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO EXACT LOCATIONS OF TOP OF ROCK FOUND ON SITE.

verdantas
3875 EMBASSY PARKWAY, SUITE 200
AKRON, OHIO
330-375-0800

NO	REVISION	DATE

ISSUED FOR: FINAL
ISSUE DATE: 5/22/25
SCALE: AS SHOWN
DESIGNED BY: JDB
DRAWN BY: BEK
CHECKED BY: MPS

VILLAGE OF CHAGRIN FALLS
VINCENT STREET IMPROVEMENTS
PART B - SOIL STABILIZATION
CHAGRIN FALLS CUYAHOGA COUNTY, OHIO

SHAFT TABLES

PROJECT NO. 24025505
DISCIPLINE STRUCTURAL
SHEET NAME TABLE
SHEET 18 OF 18