

EXHIBIT “A”

COMMUNITY COST-SHARE AGREEMENT BY AND BETWEEN THE NORTHEAST OHIO REGIONAL SEWER DISTRICT AND CITY OF BRECKSVILLE

This Agreement is made and entered into this _____ day of _____, 2023, by and between the Northeast Ohio Regional Sewer District (District) acting pursuant to Resolution No. 114-13, adopted by the Board of Trustees of the District on May 16, 2013 (Exhibit “A”), and City of Brecksville acting pursuant to Ordinance/Resolution No. _____, adopted on _____, 20____ (Exhibit “B”).

Recitals

WHEREAS, the District, as a component of implementing a regional stormwater management program, manages a financial account termed the “*Community Cost-Share Account*” that is for the aggregation and dissemination of funds derived from revenues collected from the Stormwater Fee; and

WHEREAS, the purpose of the Community Cost-Share Account is to provide funding to assist the City with District-approved projects through the Community Cost-Share Program; and

WHEREAS, the Community Cost-Share Program funds are used for construction, operation, and maintenance of the Local Stormwater System or Regional Stormwater System, including administrative costs directly associated with such projects as well as costs related to repair or upgrade; and

WHEREAS, the District supports the Community Cost-Share Chippewa Road Improvement project (the “Project”) as a Community Cost-Share project proposed by the City; and

NOW THEREFORE, in consideration of the foregoing, the payment and the mutual promises contained in this Agreement, the parties agree as follows:

Article 1.0 **City Obligations**

- 1.1 The City agrees to perform as follows:
 - 1.1.1 Complete work as detailed in the District approved Community Cost-Share application. (Exhibit “C”)
 - 1.1.2 Complete and submit Progress Reports when submitting Request for Payment as needed, or within 30 days of close of the Project, per Section 5.0 of the *Community Cost-Share Program Policy*.

- 1.1.3 Notify the City's Watershed Team Leader at least 7 business days prior to the start of the Project.
- 1.1.4 Meet with District staff when requested to review the Project status.
- 1.1.5 Obtain all necessary legal agreements with affected property owners to perform the Project and to bind any successor in title to maintain compliance as specified in this Agreement between the District and City for the Project.
- 1.1.6 Comply with all applicable local, state and federal requirements. This may include, but is not limited to, U.S. Army Corp of Engineers Section 404, Ohio EPA Section 401 water quality certification, and Ohio Department of Natural Resources Dam Safety Laws.
- 1.1.7 If the City fails to maintain the Project in accordance with this Agreement, the City shall be liable for the full amount of any Community Cost-Share Program funds paid for the Project. Such amount shall be offset against the City Community Cost-Share Account.
- 1.1.8 Submit requests for approval to modify the budget, deadline, deliverables, or other components of the Project to the City's Watershed Team Leader at least 30 business days prior to the desired date of execution of the modification.
- 1.1.9 Acknowledge the District on any public advertisement or outreach efforts including all publications and signage related to the Project which shall include the following disclaimer:

This project was funded in part or totally through the Northeast Ohio Regional Sewer District (NEORS D) Community Cost-Share Program in coordination with City, under the provisions of the NEORS D Regional Stormwater Management Program. The contents and views, including any opinions, findings, or conclusions or recommendations, contained in this publication are those of the authors and have not been subject to NEORS D review and may not necessarily reflect the views of NEORS D, and no official endorsement should be inferred.
- 1.1.10 Provide the District the opportunity to have design approval for any signage or public education and outreach efforts related to the Project.
- 1.1.11 Permit the District to photograph the Project and to incorporate the Project into the District's overall public education and outreach efforts for stormwater management.
- 1.2 Failure to meet any of the requirements listed in Article 1.1 may result in termination of this Agreement and reimbursement of disbursed funds to the District.

Article 2.0 **District's Obligations**

2.1 The District agrees to perform as follows:

- 2.1.1 Allocate \$300,000.00 to the City for the Project from the City's Community Cost-Share Account.
- 2.1.2 Provide reimbursement of funds up to \$300,000.00 to the City within 60 days of receipt of a complete Request for Payment from the City, detailing costs related to the Project.
- 2.1.3 Timely review and approval or disapproval of requests to modify the budget, deadline, deliverables, or other components of the Project.
- 2.1.4 Acknowledge the City in presentations or publications related to the Project.

Article 3.0 **Dispute Resolution**

- 3.1 The Parties shall continue the performance of their obligations under this Agreement notwithstanding the existence of a dispute.
- 3.2 The Parties shall first try to resolve the dispute at the level of the designated representatives as follows:

District Representative	City Representative
Watershed Team Leader	City Engineer

If the Parties are unable to resolve the dispute at that level within ten (10) working days, the Parties shall escalate the dispute to the following level to resolve the dispute:

District Representative	City Representative
Director of Watershed Programs	Mayor

- 3.3 If the Parties remain unable to resolve the dispute within an additional ten (10) working days, the Parties shall proceed to mediation upon request by either party. The mediator shall review all documents and written statements, in order to accurately and effectively resolve the dispute. The mediator shall call a meeting between the Parties within ten (10) working days after mediator appointment, which meeting shall be attended by at least the respective representatives listed in paragraph 3.02 above. The Parties shall attempt in good faith to resolve the dispute. The Parties agree to follow the Uniform Mediation Act,

Chapter 2710 of the Ohio Revised Code. The Parties shall share the cost of the mediator equally.

- 3.4 Such mediation shall be non-binding between the Parties and, to the extent permitted by law, shall be kept confidential. If the dispute is resolved and settled through the mediation process, the decision will be implemented by a written agreement signed by both Parties. If the dispute is unable to be resolved through mediation, the Parties agree to submit the dispute to the appropriate jurisdiction as per Article 4, Remedies, below.

Article 4 **Remedies**

- 4.1 The Parties agree that, after exhausting the dispute resolution process outlined above, all claims, counter-claims, disputes and other matters in question between the Parties arising out of or relating to this Agreement, or the breach thereof, will be decided at law. This Agreement shall be governed by and interpreted according to the laws of the State of Ohio.

Article 5 **Counterpart Signatures**

- 5.1 This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but which counterparts when taken together shall constitute one Agreement.

Article 6 **Governing Law**

- 6.1 The terms and provisions of this Agreement shall be construed under and governed by the laws of Ohio (to which all Parties hereto consent to venue and jurisdiction).

Article 7 **Disclaimer of Joint Venture**

- 7.1 This Agreement is not intended to create a joint venture, partnership or agency relationship between the Parties, and such joint venture, partnership, or agency relationship is specifically hereby disclaimed.

Article 8 **Authority to Execute**

- 8.1 Each person executing this Agreement represents and warrants that it is duly authorized to execute this Agreement by the party on whose behalf it is so executing.

Article 9 **Exhibits**

The following exhibits are attached hereto and incorporated herein:

Exhibit "A" – District Resolution

Exhibit "B" – City Ordinance/Resolution

Exhibit "C" – District-Approved Community Cost Share Application

The parties have executed this Agreement on the day and year first above written.

NORTHEAST OHIO REGIONAL SEWER DISTRICT

BY: _____
Kyle Dreyfuss-Wells
Chief Executive Officer

AND

BY: _____
Darnell Brown, President
Board of Trustees

CITY OF BRECKSVILLE

By: _____

Title: _____

The Legal Form and Correctness of this
Instrument is hereby Approved:

CITY OF BRECKSVILLE

Assistant/Director of Law

This Instrument Prepared By:

Katarina K. Waag
Assistant General Counsel
Northeast Ohio Regional Sewer District

Each party agrees that this Agreement may be executed and distributed for signatures via email, and that the emailed signatures affixed by both parties to this Agreement shall have the same legal effect as if such signatures were in their originally written format.

[FOR NEORSD USE]

AGREEMENT NO.

NORTHEAST OHIO REGIONAL SEWER
DISTRICT

WITH

CITY OF BRECKSVILLE

FOR

COMMUNITY COST-SHARE PROJECT:
CHIPPEWA ROAD IMPROVEMENT

Total Approximate Cost: \$300,000.00

The legal form and correctness of the within
instrument are hereby approved.

ERIC J. LUCKAGE
CHIEF LEGAL OFFICER

Date

CERTIFICATION

It is hereby certified that the amount required to
meet the contract, agreement, obligation, payment
or expenditure, for the above, has been lawfully
appropriated or authorized or directed for such
purpose and is in the Treasury or in process of
collection to the credit of the fund free from any
obligation or certification now outstanding.

KENNETH J. DUPLAY
CHIEF FINANCIAL OFFICER

Date

Budget Center 8100

EXHIBIT A

NORTHEAST OHIO REGIONAL SEWER DISTRICT
RESOLUTION NO. 114-13

Authorizing the Executive Director to enter into Regional Stormwater
Management Program Community Cost-Share Program Agreements
with Member Communities.

WHEREAS, the Code of Regulations of the Northeast Ohio Regional Sewer District, Title V – Stormwater Management Code Chapter 9 outlines the Community Cost-Share Program developed to provide funds to District Member Communities for construction, operation and maintenance activities of community-specific stormwater management projects; and

WHEREAS, under the Community Cost-Share Program, 25% of the annual collected stormwater revenue from each Member Community will be held by the District in a Community Cost-Share account, whereby Communities, with review and approval by the District, through specific applications outlining the community-specific stormwater work to be performed can access reimbursement of their funds; and

WHEREAS, the District is seeking authority to enter into Regional Stormwater Management Program Community Cost-Share Program Agreements with Member Communities for the purpose of detailing and memorializing responsibilities of the District and Member Communities under specific applications to the Community Cost-Share Program;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT:

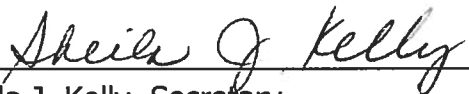
Section 1. That this Board finds that for the reasons stated in the preamble hereof it is in the best interests of the District to enter into Regional Stormwater Management Program Cost-Share Program Agreements with Member Communities to memorialize responsibilities of the District and Member Communities under specific applications to the Community Cost-Share Program.

Section 2. That this Board hereby authorizes the Executive Director to enter into Regional Stormwater Management Program Cost-Share Agreements with Member Communities to memorialize responsibilities of the District and Member Communities under specific applications to the Community Cost-Share Program under such terms and conditions that are satisfactory to the Director of Law and in the best interests of the District.

Section 3. That this Board authorizes the Executive Director to execute all documents and do all things necessary to effect the terms and conditions of the Stormwater Management Program Direct Billing Agreements with Member Communities.

Section 4. That this Board declares that all formal actions of the Board concerning and relating to the adoption of this resolution and that all deliberations of the Board and any of its committees that resulted in said formal action were conducted in meetings open to the public and in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

On motion of Mayor Starr seconded by Mr. O'Malley, the foregoing resolution was unanimously adopted on May 16, 2013.



Sheila J. Kelly, Secretary
Board of Trustees
Northeast Ohio Regional Sewer District

EXHIBIT B

(Insert Member Community
Ordinance/Resolution)

EXHIBIT C



Community Cost-Share Program APPLICATION

Member Community Information

Community: City of Brecksville

Primary Project Contact: Gerald M. Wise, P.E.
(Name & Title) City Engineer

Mailing Address: 7979 Hub Parkway
Valley View, OH 44125

Phone Number: (216) 642-1130

Email: gwise@dbohning.com

Project Information

Project Title: Chippewa Road Improvement

Address or Location of Project: Chippewa Rd. (b/w Weise & Riverview)
Brecksville, OH 44141

Project Start Date: 5/2/2022

Project End Date: 10/28/2022

Community Cost-Share Fund Request: 300,000

Submission Date: 4/5/2022

Project Narrative

1) Project Summary (1,000 word maximum)

Describe the Project and include the following information, as applicable:

- Describe the Project and deliverables; provide a map if applicable
- Submit a deliverable worksheet listing tasks and deliverables with start dates and end dates for the significant benchmarks.
- List permitting requirements necessary to initiate and complete project and how the requirements will be met.

The project entails installing approximately 5,500 feet of 8" diameter sanitary sewer as well as 5,800 feet of storm sewer varying diameters, manholes, connections and all other work necessary to install the sewer. The sewer mains will provide or replace house connection for all properties along the corridor of the project, will eliminate 75 septic systems and also eliminate the need for an existing pump station at the end of Calvin Drive.

Currently, there are many failing septic systems along Chippewa Road and Calvin Drive that are the source of illicit discharges into nearby streams that are tributary to the Cuyahoga River. The City decided that installing sanitary sewers and not requiring the home owners to upgrade/replace their septic systems was in the best interest of the home owners, the city, and the environment.

The existing storm sewer on Chippewa Road and Calvin Drive have multiple sections in disrepair and is undersized per current standards, originally installed in the early 1930s. The proposed project will install new storm sewer conduit appropriately sized to convey drainage per current standards, alleviating the risk of flooding.

The Cleveland Metroparks has a future project which will continue the storm conduit at the downstream end of this project and outlet it on park property, creating expanded wetlands. Attached is the most current draft plans for the future project.

2) Ability to Provide Long Term Maintenance (500 word maximum)

Describe the plans for long-term maintenance, addressing the following question:

- Who is responsible to provide on-going maintenance for the project and how will maintenance be ensured?
- Provide documentation of scheduled maintenance and operation for completed stormwater project(s).

All existing and proposed improvements are within City of Brecksville right-of-way or easements . All maintenance for the existing and proposed improvements are the responsibility of the City of Brecksville. No maintenance above and beyond other existing sewers is anticipated. On behalf of the City, inspection of the improvements will be provided by the City and follow up inspections will occur throughout the project maintenance bond period. After that point, the City will inspect on an annual basis.

Additionally, the City has a partnership with Cuyahoga County Department of Public Works for sewer maintenance. The County prepares and annual report of their services which is submitted to NEORSR on a yearly basis as a requirement of the discharge agreement with the City of Brecksville and NEORSR. If additional copies of this report outlining maintenance is required, please let me know and I'll submit the most current copy.

3) Visibility and Public Outreach: (500 word maximum)

Public outreach is required if appropriate for your project.

- What audiences will be exposed to this Project (neighbors, students, community groups, general public)?

The proposed project is an assessment project. Required public meetings have already taken place with residents along the project corridor. The City is required to provide certified notification to all residents who will be receiving a benefit from the proposed sanitary sewer.

In order to perform the proposed work additional easements will need to be obtained from the Glen Valley home owners association (pump station work). Conversation with representatives from the home owners association have already taken place and will continue.

The project has been and will continue to be discussed in Public meetings of the City. The City has prepared articles in the City Bulletin that have and will include details of this project and other project information will be posted on the City web site. All public meetings are covered by Cleveland.com / Plain Dealer, The Sun Courier, Gazette Newspaper will notified.

4) **Budget Summary** (500 words maximum)

The Budget Summary and Project Budget (*see page 3*) represent the Community Cost-Share Project components exclusively. Include details on the provider of all services such as design, engineering, construction management and materials including specific material cost, equipment, and hourly rate.

If an engineer's estimate is included with the application, indicate which line items are included in the Community Cost-Share Project application.

The City would like to request funding to be used toward the installation of storm sewer improvements. The City's preliminary estimate projects the installation of storm sewer and associated improvements (i.e. driveway apron replacement, restoration, etc.) to be \$2,257,825.00. The City request community cost share funding to cover 15% of these cost and/or a maximum of \$300,000.00. Final costing will be based on actual bid cost for various items. For the purpose of the preliminary estimate to establish a cost breakdown, a percentage was assumed.



Vendor Registration

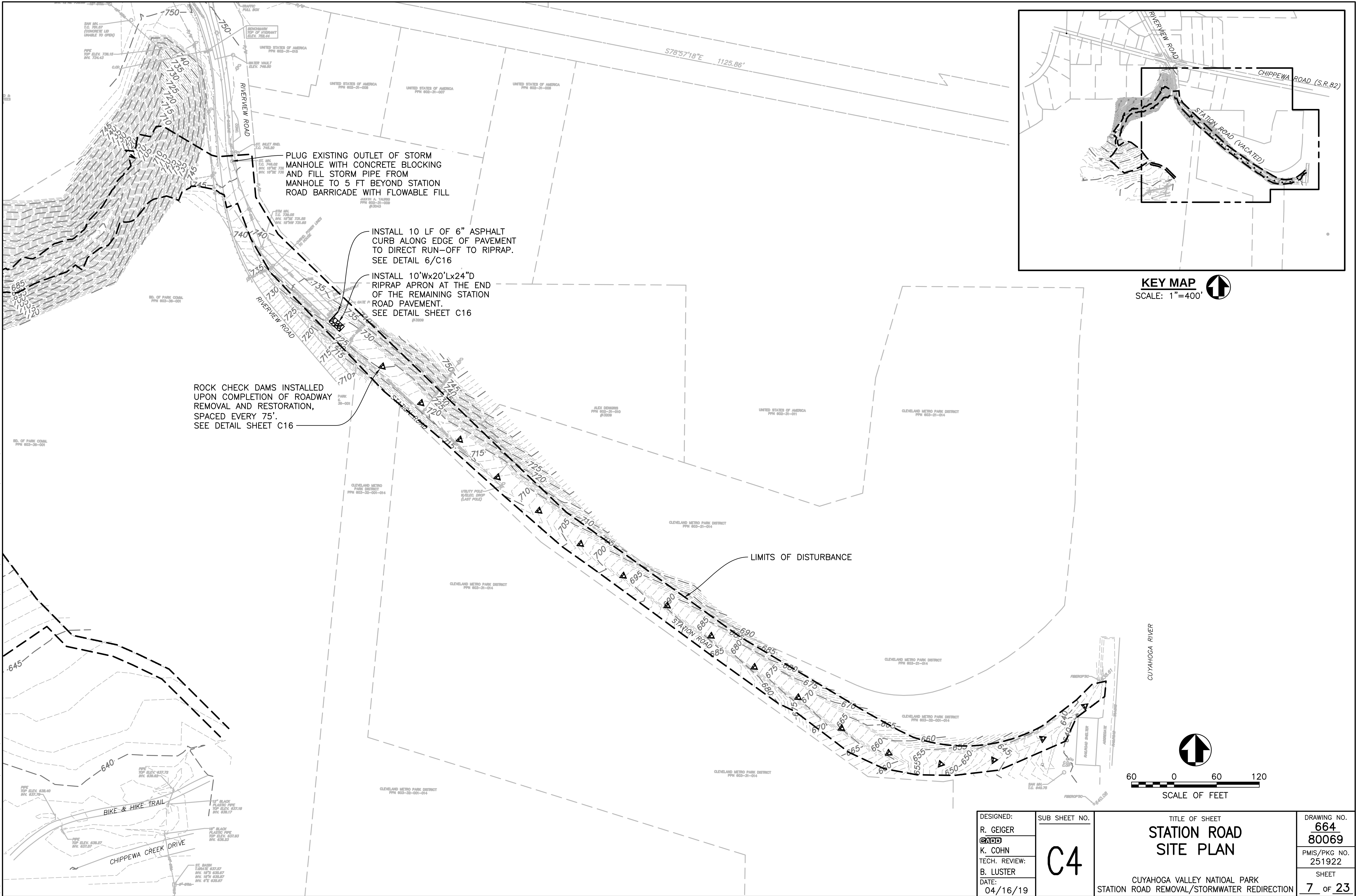
Prior to submission, ensure that the Member Community is a registered vendor with the District. Vendor Registration can be done by accessing http://www.neorsd.org/isupplier_homepage.php and completing the New Vendor Registration. If unsure of the Member Community vendor status, by initiating the New Vendor Registration a message of active registration will appear if currently registered as a vendor.

Project Budget

Project Expenses	Community Cost-Share Expense	Line Item Description
Professional Services		
Personnel <i>(Member Community staff only)</i>		
Subcontract		
Equipment		
Materials		
Other		
TOTAL	\$ 300,000	approx 15% of all storm sewer costs

C:\working\central01\0941596\C4 Station Road Site Plan.dwg, Plot, 4/16/2019 2:16:43 PM, GPETERS

1/2/19 09:21 KCOHN R22 C:\PWORKING\CENTRAL01\0941596\C3 STATION ROAD SITE PLAN.DWG XREFS: ..\0941594\XC-SURVEY.DWG; ..\0941594\XC-SITE PLAN MODEL.DWG; ..\0941594\XC-SURVEY.DWG;



1. ALL DISTURBED AREAS SHALL RECEIVE EROSION CONTROL USING STATE OF OHIO BEST MANAGEMENT PRACTICES, SEE STREAM DETAILS C14.
2. SECONDARY CONSTRUCTION ACCESS ROUTE, 15' MAXIMUM CLEARING WIDTH.
3. EXISTING RIPRAP CHANNEL TO BE INSPECTED UPON COMPLETION OF CLEARING OF PROJECT CORRIDOR. REPAIR OF RIPRAP SHALL BE AS DIRECTED BY THE CONTRACTING OFFICER.
4. REMOVE ALL TREES WITHIN THE LIMITS OF DISTURBANCE, UNLESS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.
5. CONTRACTOR TO COORDINATE WITH THE CITY OF BRECKSVILLE AND CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS FOR THE INSTALLATION AND INSPECTION OF THE 36" STORM SEWER.



KEY MAP
SCALE: 1"=400'

BOULDER WALL POINT TABLE				
POINT NO.	NORTHING	EASTING	HEIGHT (FT)	DESCRIPTION
1	604152.44	2217691.28	705.85	CL BOULDER WALL 18"—30" HEIGHT (TYP)
2	604113.63	2217668.21	705.35	CL BOULDER WALL 18"—30" HEIGHT (TYP)
3	604079.99	2217641.47	703.21	CL BOULDER WALL 18"—30" HEIGHT (TYP)
4	604165.64	2217675.86	706.10	CL BOULDER WALL 18"—30" HEIGHT (TYP)
5	604148.07	2217665.42	705.08	CL BOULDER WALL 18"—30" HEIGHT (TYP)
6	604123.00	2217650.28	704.98	CL BOULDER WALL 18"—30" HEIGHT (TYP)
7	604103.48	2217634.66	702.52	CL BOULDER WALL 18"—30" HEIGHT (TYP)
8	603940.43	2217460.07	686.19	CL BOULDER WALL 18"—30" HEIGHT (TYP)
9	603936.33	2217415.95	684.96	CL BOULDER WALL 18"—30" HEIGHT (TYP)
10	603959.96	2217453.45	685.05	CL BOULDER WALL 18"—30" HEIGHT (TYP)
11	603959.14	2217443.49	684.22	CL BOULDER WALL 18"—30" HEIGHT (TYP)
12	603933.81	2217396.11	683.26	CL BOULDER WALL 18"—30" HEIGHT (TYP)
13	603931.28	2217376.27	680.45	CL BOULDER WALL 18"—30" HEIGHT (TYP)
14	603877.04	2217313.30	675.12	CL BOULDER WALL 18"—30" HEIGHT (TYP)
15	603850.14	2217300.02	673.62	CL BOULDER WALL 18"—30" HEIGHT (TYP)
16	603827.82	2217284.36	674.25	CL BOULDER WALL 18"—30" HEIGHT (TYP)

DESIGNED:
R. GEIGER
CADD
S. WALZ
TECH. REVIEW:
B. LUSTER
DATE:
04/16/19

SUB SHEET NO.

C6

TITLE OF SHEET
**STREAM ENHANCEMENTS
PLAN VIEW**

CUYAHOGA VALLEY NATIOAL PARK
STATION ROAD REMOVAL/STORMWATER REDIRECTION

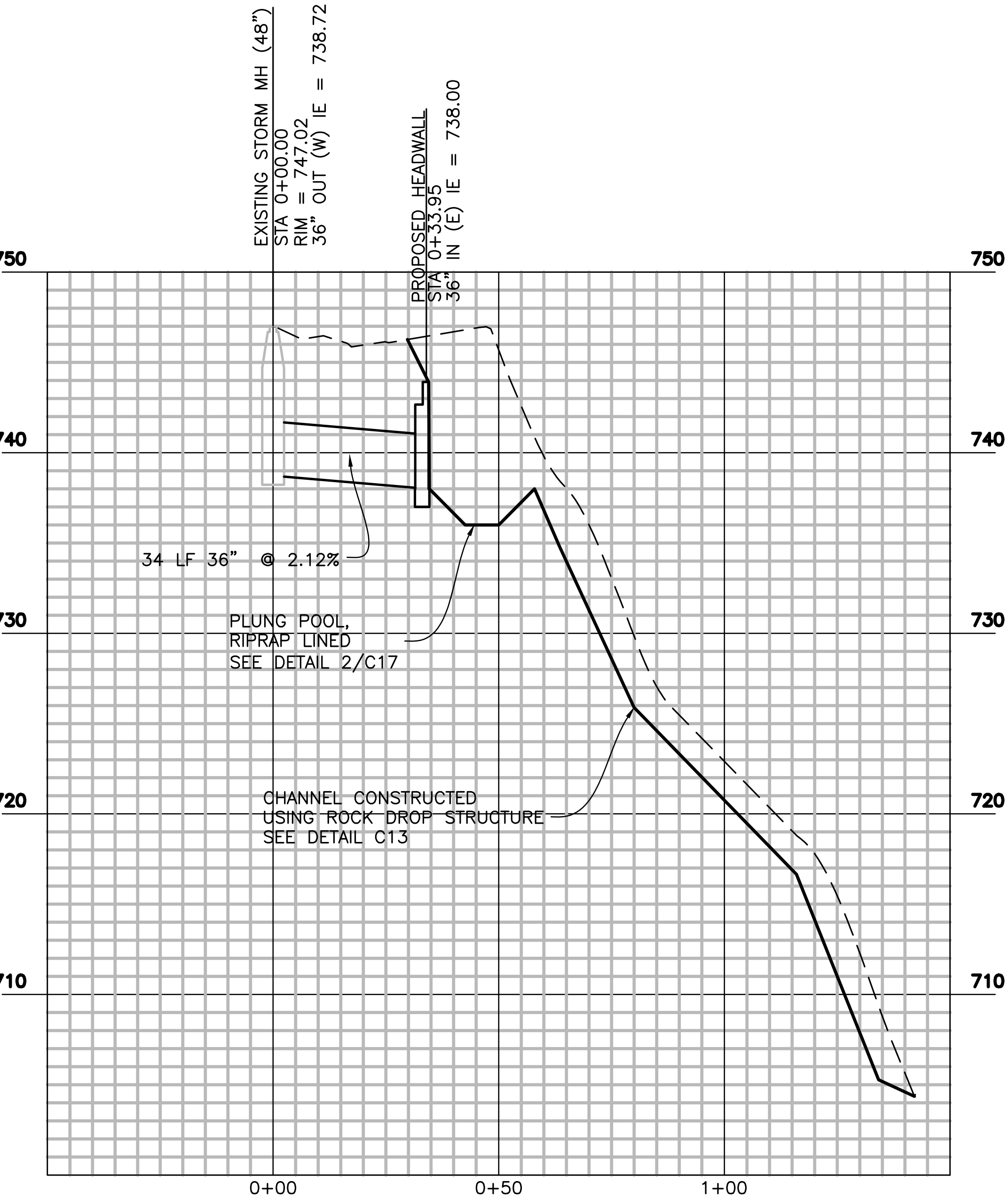
DRAWING NO.
664
 80069

PMIS/PKG NO.
 251922

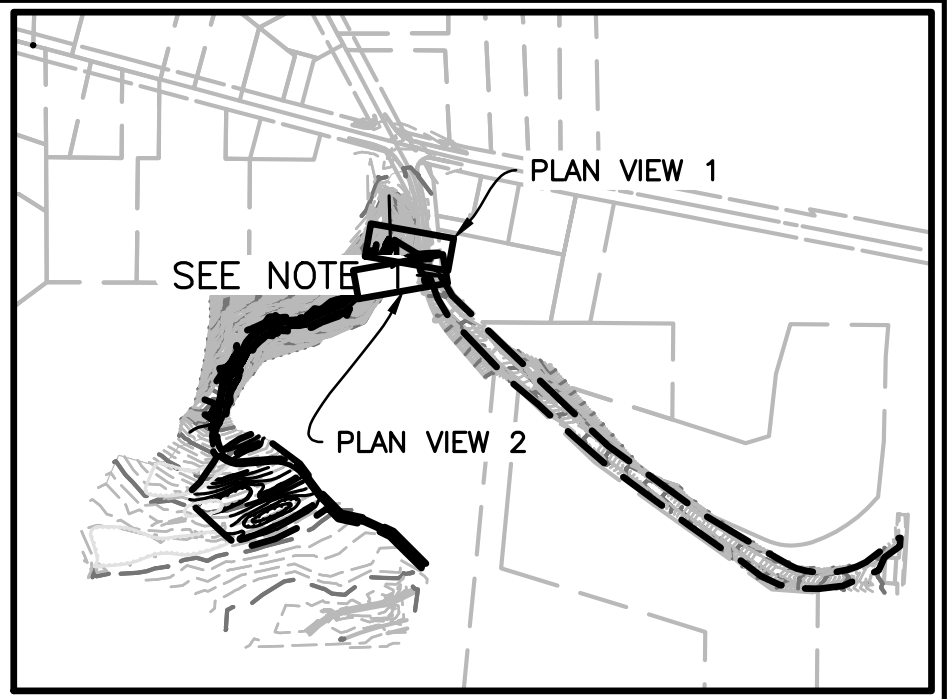
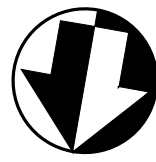
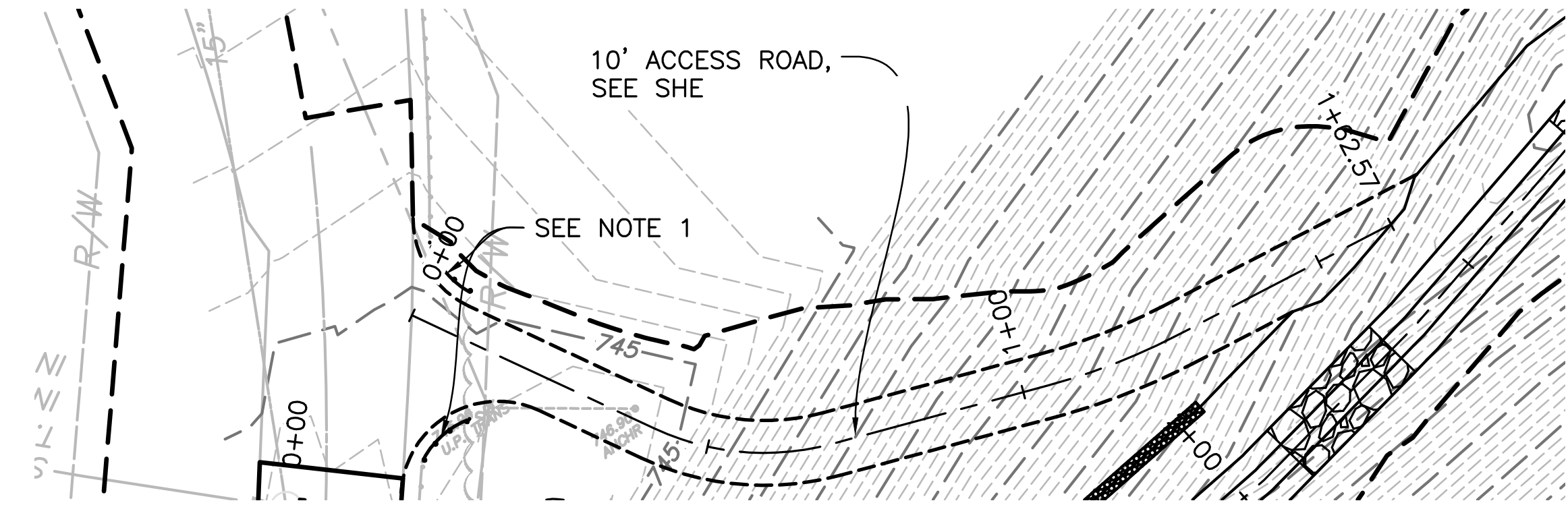
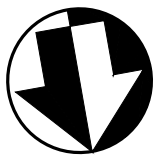
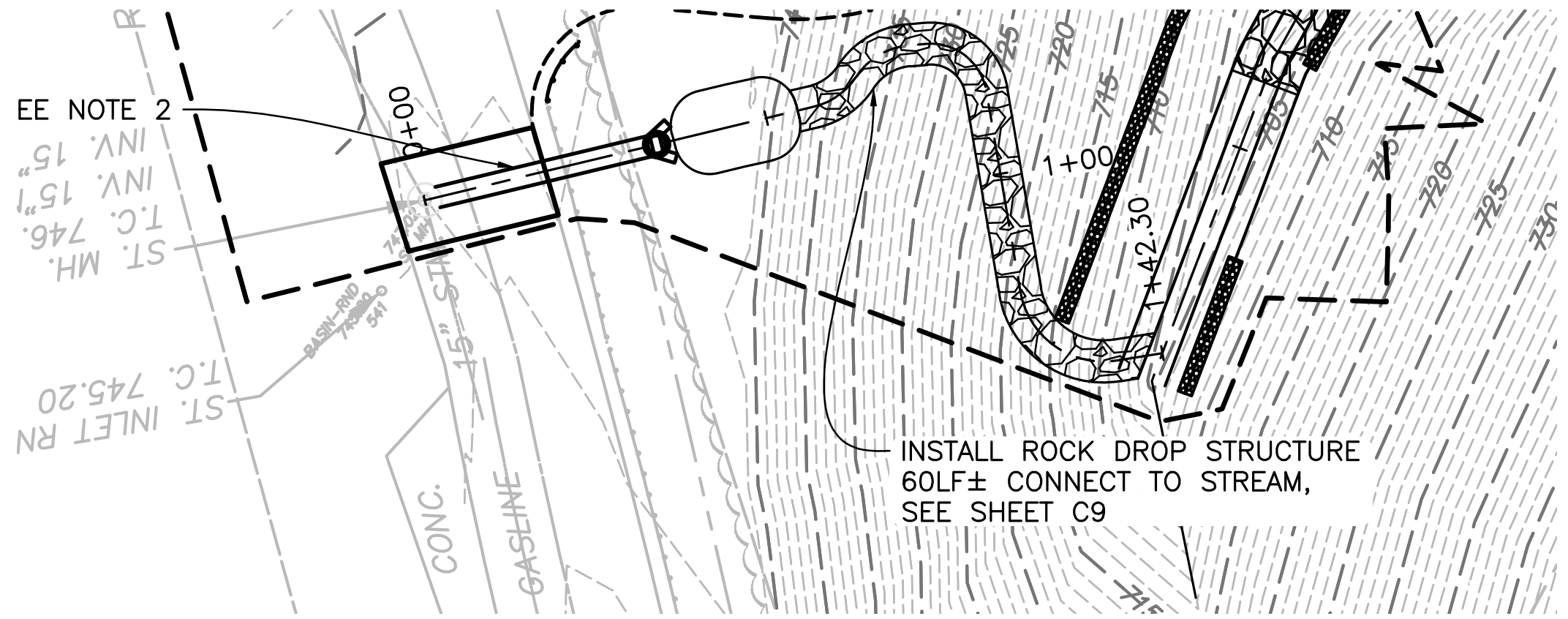
SHEET
9 OF 23

C:\working\central\00941596\C9 Stream Enhanc. Profile.dwg, Plot, 4/15/2019, 2:23:33 PM, GTEERS

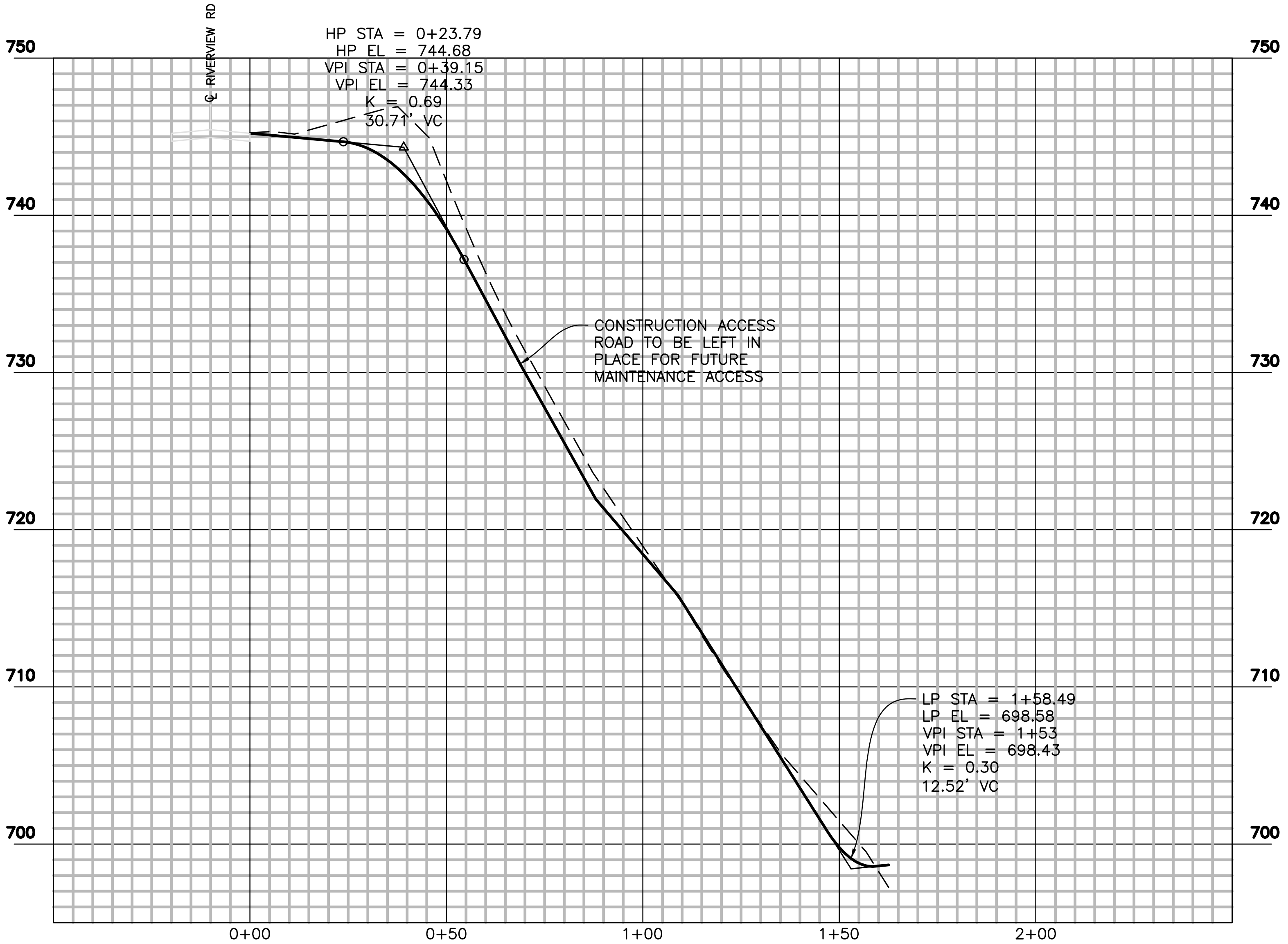
1/29/19 11:25 KCOHN R22 C:\PWORKING\CENTRAL\00941596\C9 STREAM ENHANC PROFILE.DWG XREFS: ..\00941594\XC-GRADING.DWG; ..\00941594\XC-SURVEY.DWG;



1 PLUNGE POOL AND ROCK DROP STRUCTURE PLAN AND PROFILE
C6/C9 SCALE: 1" = 20'



KEY MAP
SCALE: 1"=500'



2 ACCESS ROAD PLAN AND PROFILE
C6/C9 SCALE: 1" = 20'



GENERAL NOTES:

1. REMOVE 36 LF OF GUARDRAIL, INSTALL 10 LF OF NEW GUARDRAIL ON EACH SIDE OF ACCESS ROAD AS SHOWN.
2. SEE SHEET C16 FOR PAVEMENT REPLACEMENT DETAIL.

DESIGNED:
R. GEIGER
S. WALZ
TECH. REVIEW:
B. LUSTER
DATE:
04/16/19

SUB SHEET NO.
C9

TITLE OF SHEET
**STREAM ENHANCEMENTS
PROFILE VIEW**
CUYAHOGA VALLEY NATIOAL PARK
STATION ROAD REMOVAL/STORMWATER REDIRECTION

DRAWING NO.
**664
80069**
PMIS/PKG NO.
251922
SHEET
12 OF 23

CHIPPEWA ROAD & CALVIN DR. SANITARY SEWER (WIESE RD. TO RIVERVIEW RD.) IMPROVEMENT PLANS

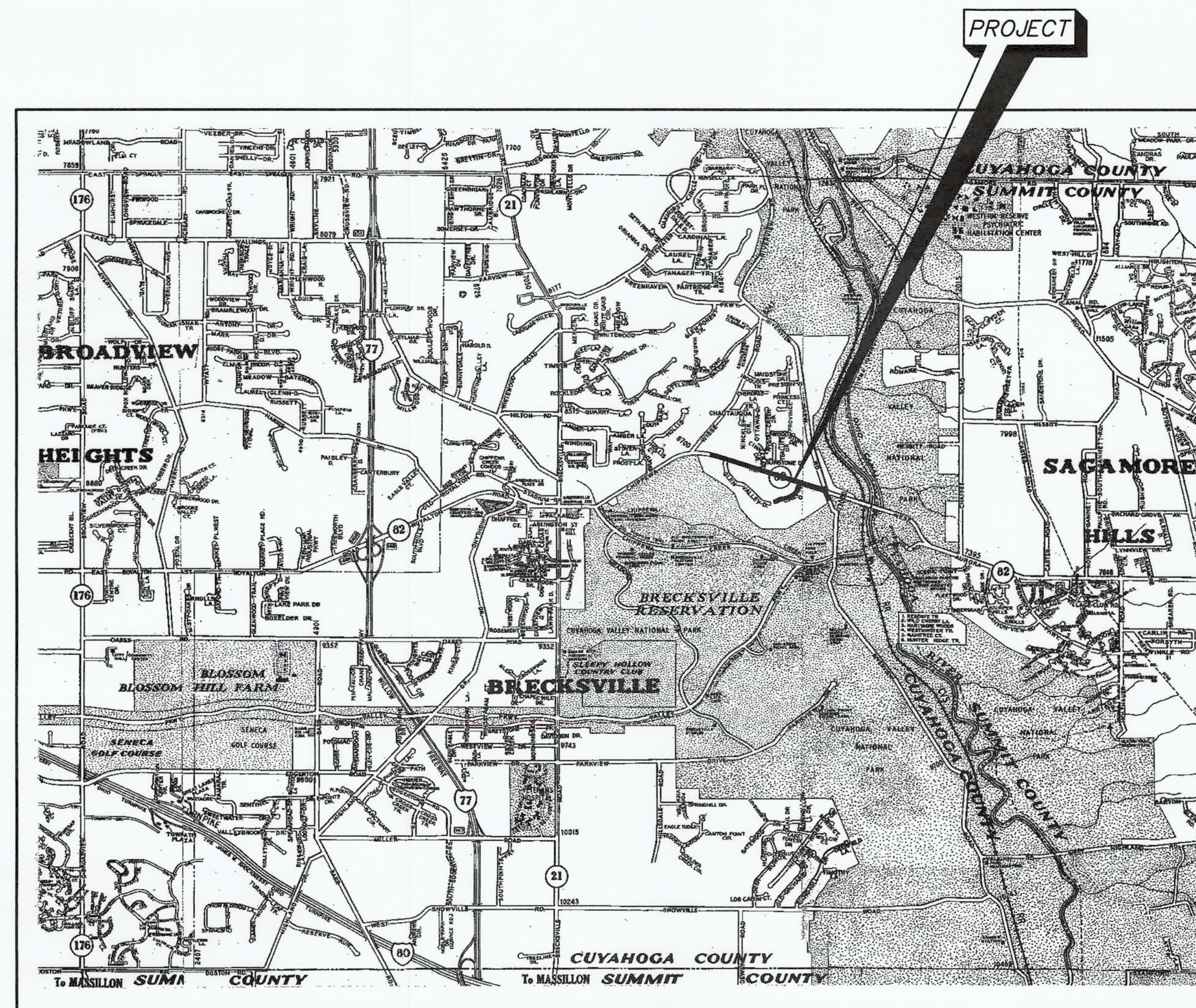
BASIS OF SURVEY

BEARINGS AND ELEVATIONS ARE REFERENCED TO GPS OBSERVATIONS
MADE WITH THE OHIO DEPARTMENT OF TRANSPORTATION REAL TIME
NETWORK SYSTEM TO THE OHIO STATE PLANE COORDINATE SYSTEM,
NORTH ZONE, NAD 83 (2011) HORIZONTAL DATUM, NAVD 88 VERTICAL
DATUM, IN JANUARY, 2019 AND ARE USED TO INDICATE ANGLES ONLY.

CITY OF BRECKSVILLE
CUYAHOGA COUNTY ~ STATE OF OHIO

CONVENTIONAL SIGNS:

ITEM	EXISTING	PROPOSED	RECONST'D
RIGHT OF WAY	---	---	
CENTERLINE	---	---	
PROPERTY LINE	---	---	
EASEMENT LINE	--- EL ---	--- EL ---	
TEMP. EASEMENT LINE	--- TEL ---	--- TEL ---	
GAS MAIN	---	---	
GAS CONNECTION	G.C.		
WATER MAIN	---	---	
HYDRANT & VALVE	HA	HA	
WATER CONNECTION	--- EXTG. W.C. ---	W.C.	
WATER MAIN VALVE	WV	WV	
SANITARY SEWER	--- SAN ---	--- SAN ---	
SANITARY CONNECTION	SAN.C.	SAN.C.	
STORM SEWER	--- ST ---	--- ST ---	
STORM CONNECTION	ST.C.	ST.C.	
UNDERGRD. TELE. DUCTS	--- T ---	--- T ---	
UNDERGRD. ELEC. CABLE	--- E ---	--- E ---	
UNDERGRD. TV CABLE	--- TV ---	--- TV ---	
FENCE	--- X ---	--- X ---	
GUARDRAIL	---	---	
UTILITY POLE	U		* - RELOCATED
LIGHT POLE	L		* - RELOCATED
MONUMENT ASSEMBLY	◇	◇	
MANHOLE	○	○	
BASIN	□	□	
SIGN POST	SP		
TREE BRUSH	⊗		
TREE/BRUSH TO BE REMOVED		⊗	
WELL	W		
SEPTIC TANK	S		
SWALE	---	---	
SPOT ELEVATION	100.0	100.0	
CONTOUR ELEVATION	100	100	



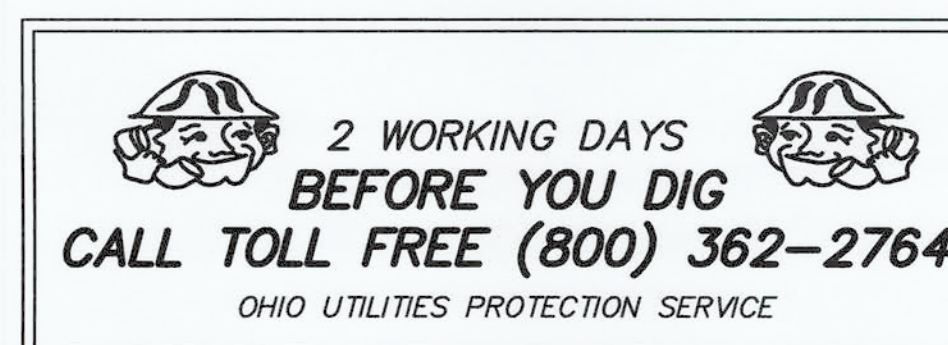
LOCATION MAP

NOT TO SCALE



INDEX OF SHEETS

- 1 TITLE SHEET
- 2-14 PLAN & PROFILES
- 15-16 GENERAL NOTES & DETAILS
- 17 MAINTENANCE OF TRAFFIC PLAN
- 18-20 DETAILS



Gerald M. Wise

GERALD M. WISE, P.E.
CITY OF BRECKSVILLE ENGINEER

3/30/22
DATE

OHIO ENVIRONMENTAL PROTECTION AGENCY (O.E.P.A.)

PTI (PERMIT TO INSTALL) SANITARY SEWER DATE:

NPDES PERMIT

NOI SUBMISSION DATE: 12/01/2021

APPROVAL DATE: 12/07/2021

PERMIT NO.: 3GC12676*AG



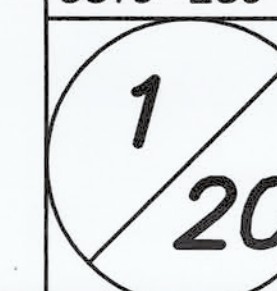
OWNER
CITY OF BRECKSVILLE
CITY ENGINEER
BRECKSVILLE, OHIO 44141
PHONE: (440) 526-4351

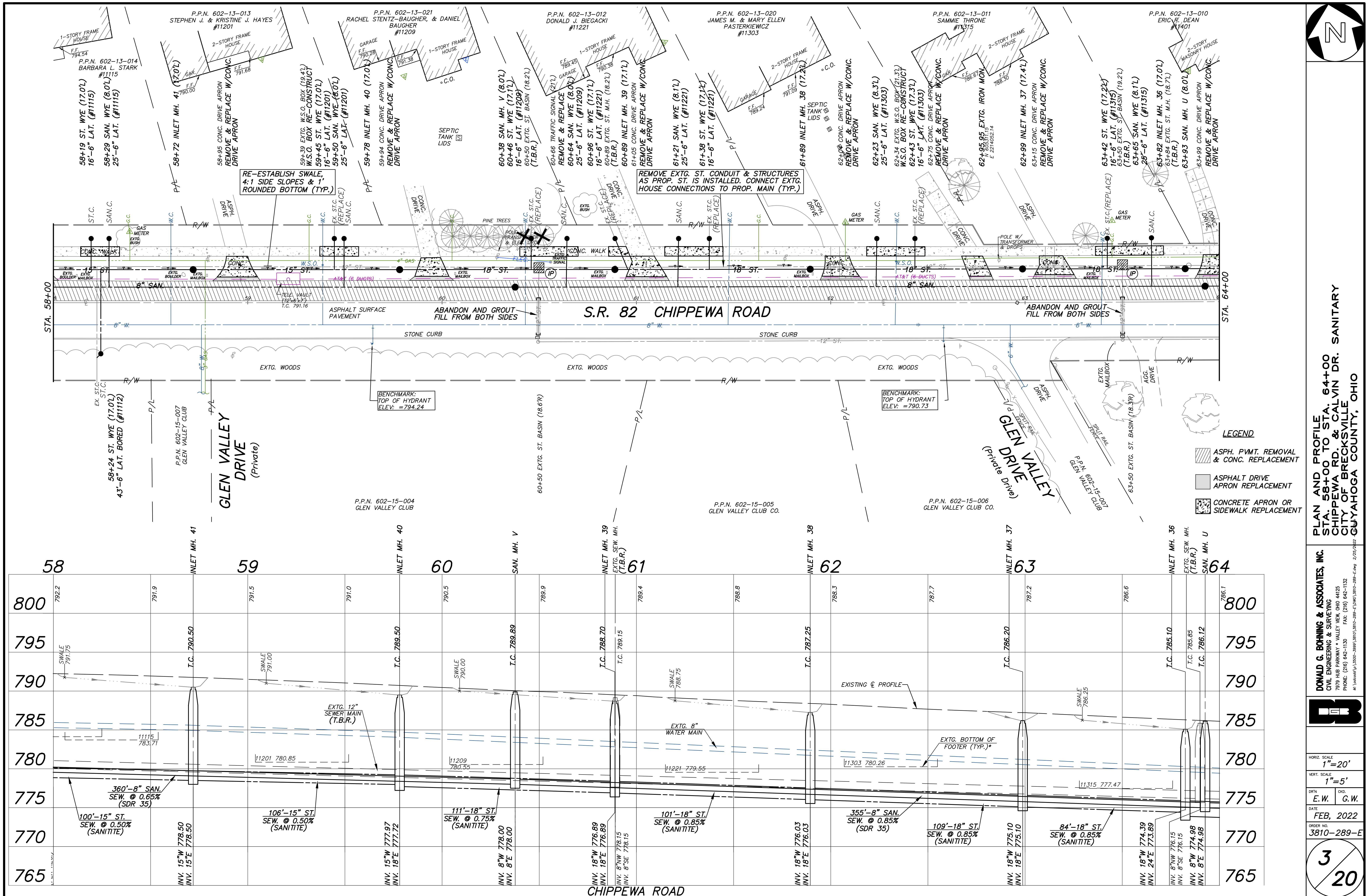
TITLE SHEET
CHIPPEWA RD. & CALVIN DR. SANITARY
(WIESE RD. TO RIVERVIEW RD.)
CITY OF BRECKSVILLE
CUYAHOGA COUNTY, OHIO

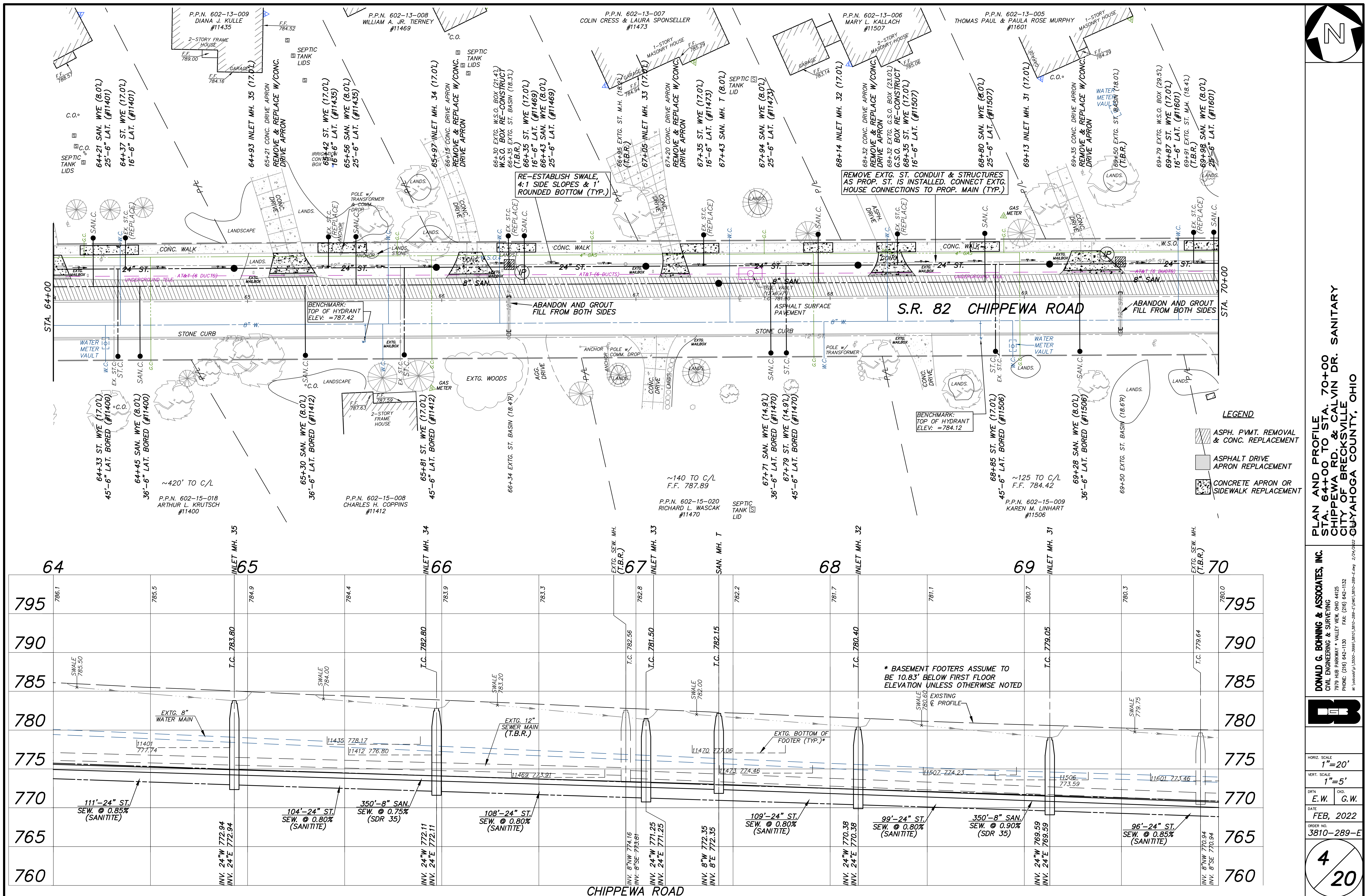
DONALD G. BOHNING & ASSOCIATES, INC.
CIVIL ENGINEERING & SURVEYING
7979 LUG PARKWAY • VALLEY VIEW, OHIO 44125
PHONE: (216) 842-1130 FAX: (216) 842-1132
An Equal Opportunity Employer M/F/V/H/Vet

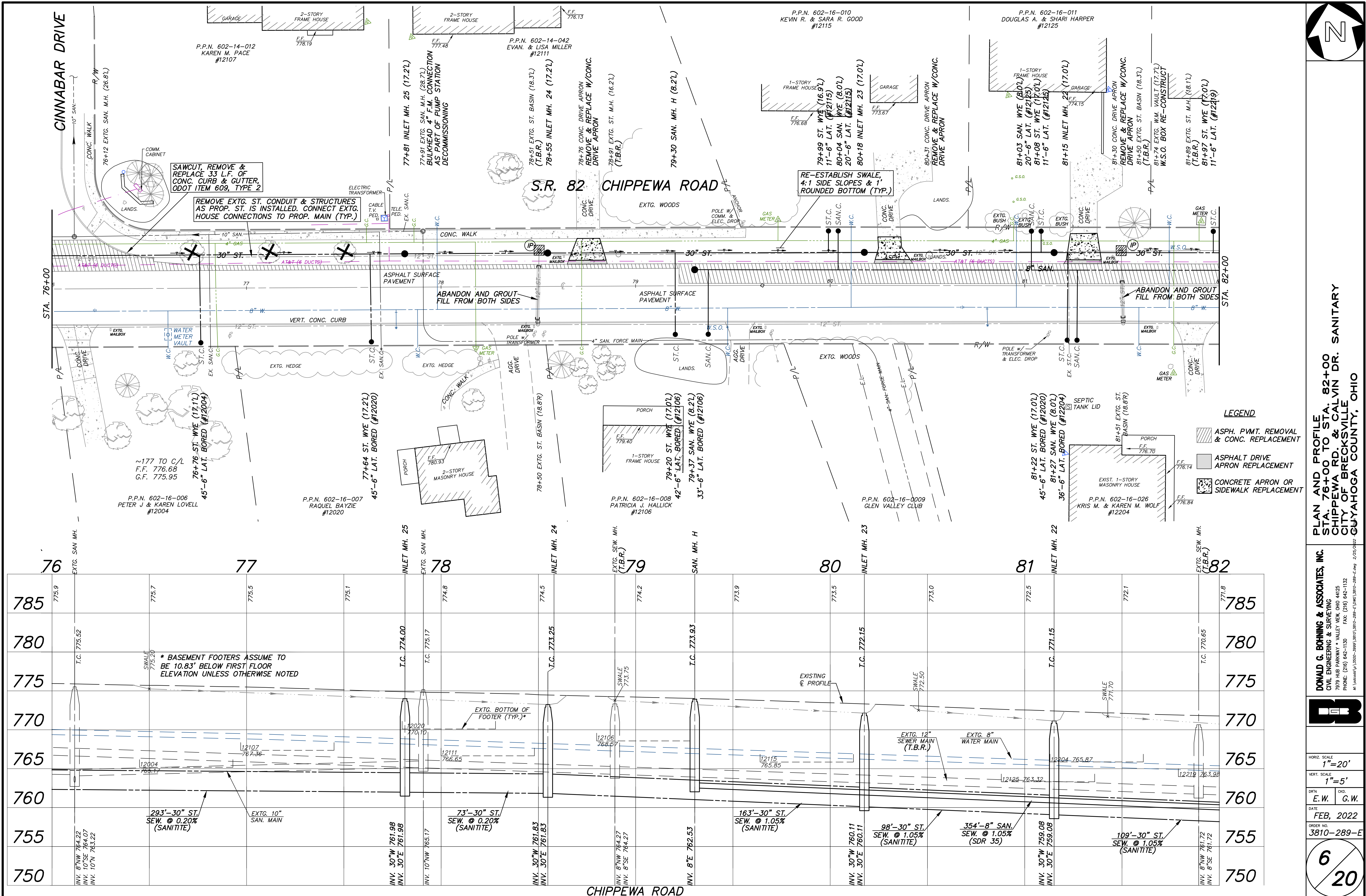


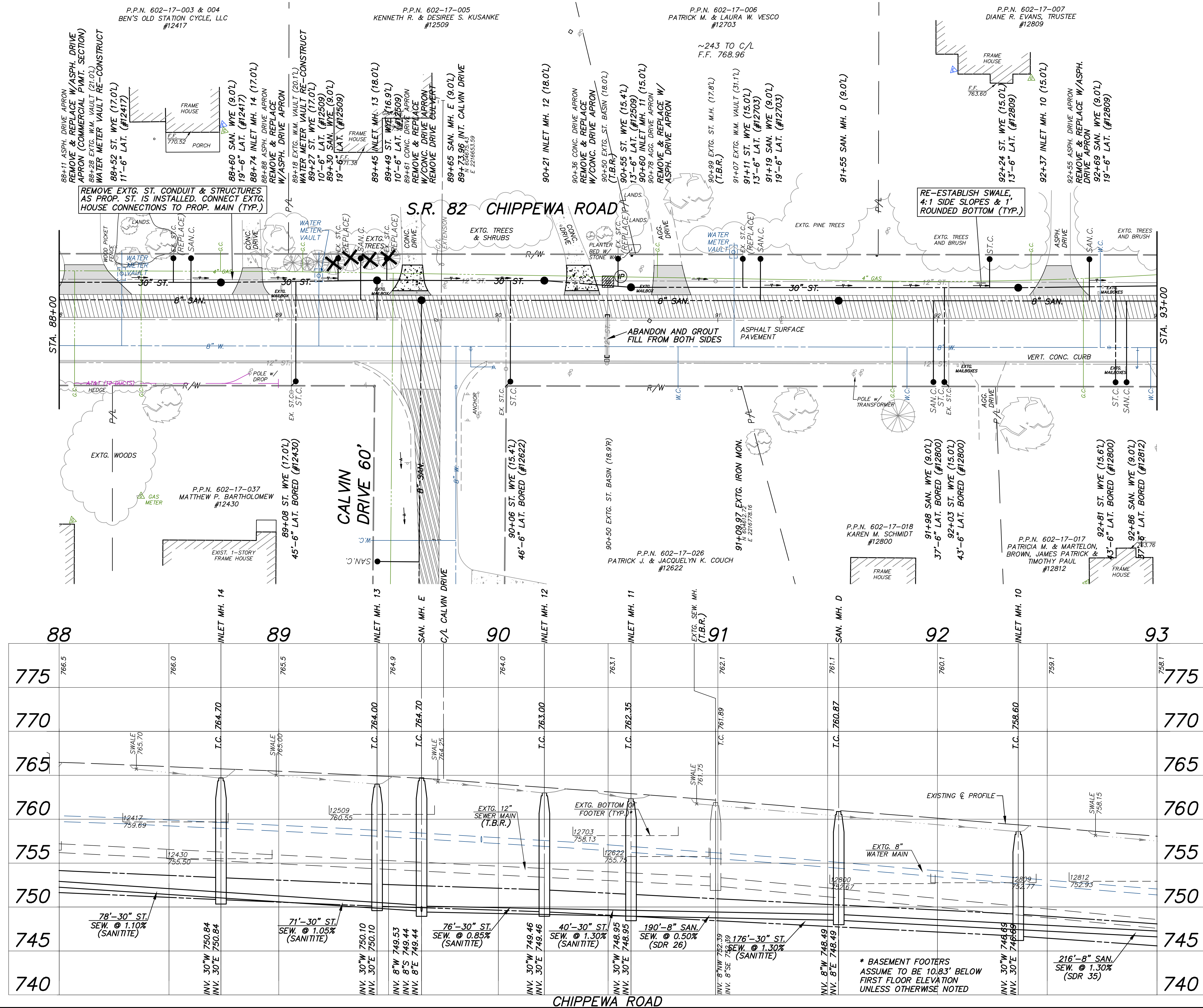
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VERT. SCALE	---
DRN.	CHK.
E. W.	G. W.
DATE	FEB, 2022
ORDER NO.	3810-289-E











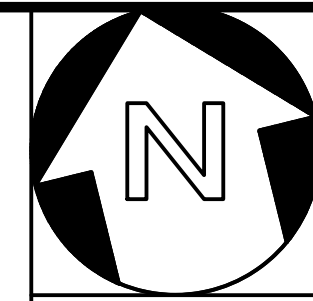
PLAN AND PROFILE
STA. 88+00 TO STA. 93+00
CHIPPEWA RD. & CALVIN DR. SANITARY
CITY OF BRECKSVILLE
CUYAHOGA COUNTY, OHIO



VERT. SCALE
 $1''=5'$

DATE	<i>FEB, 2022</i>
ORDER NO.	





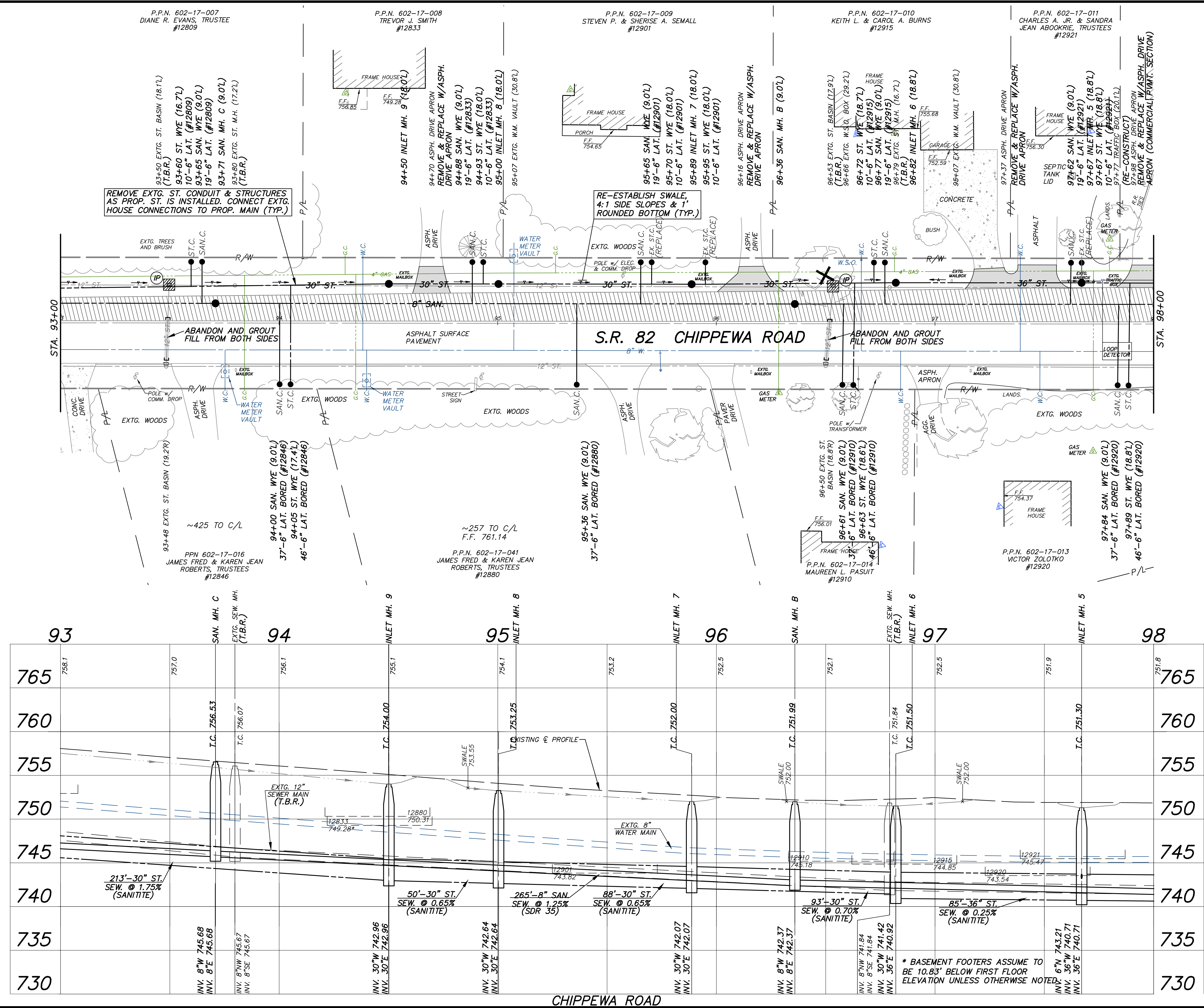
PLAN AND PROFILE
STA. 93+00 TO STA. 98+00
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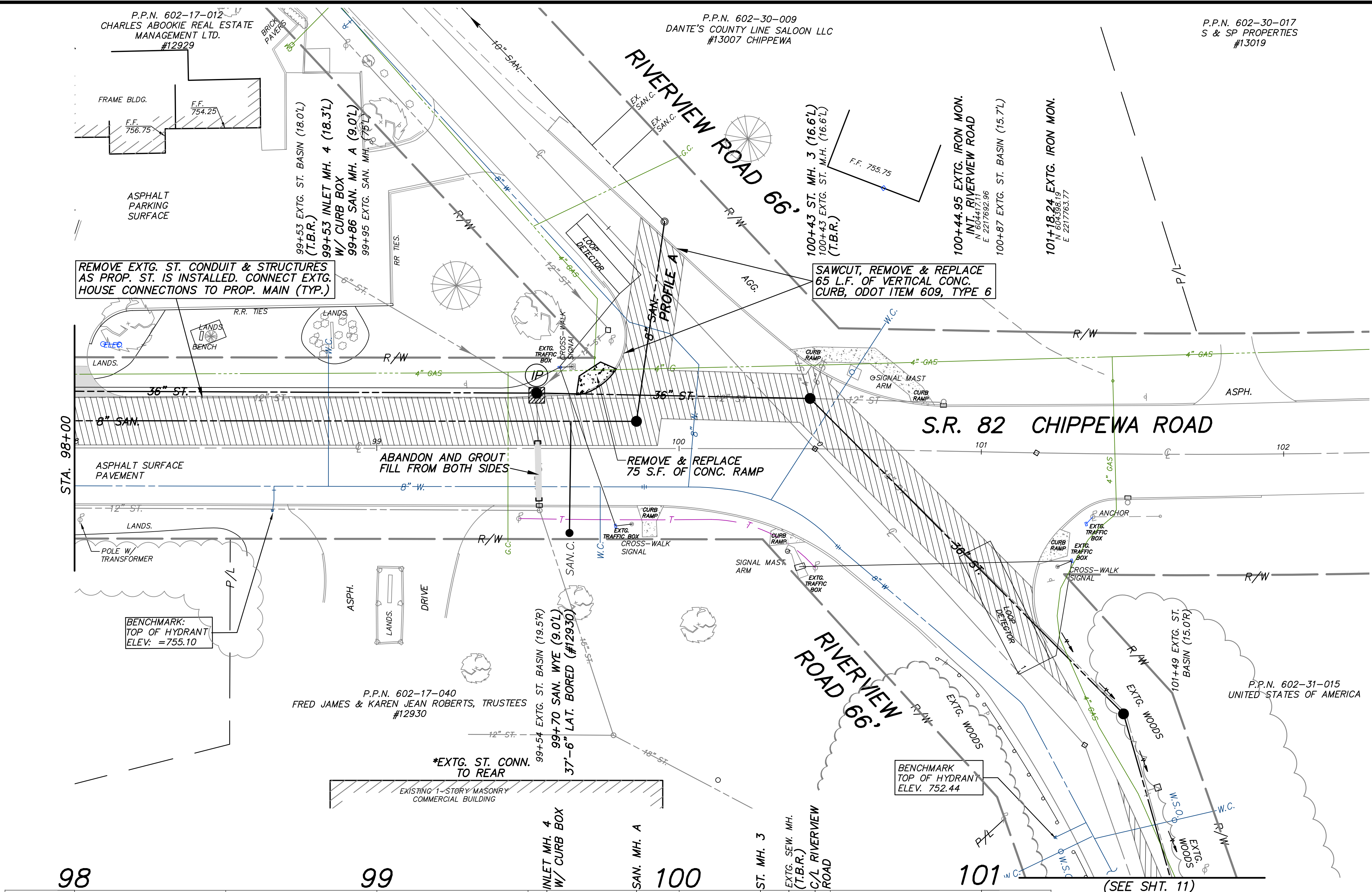
HORIZ. SCALE
1"=20'
VERT. SCALE
1"=5'
DRN. E.W. G.W.
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ORDER NO.
3810-289-E

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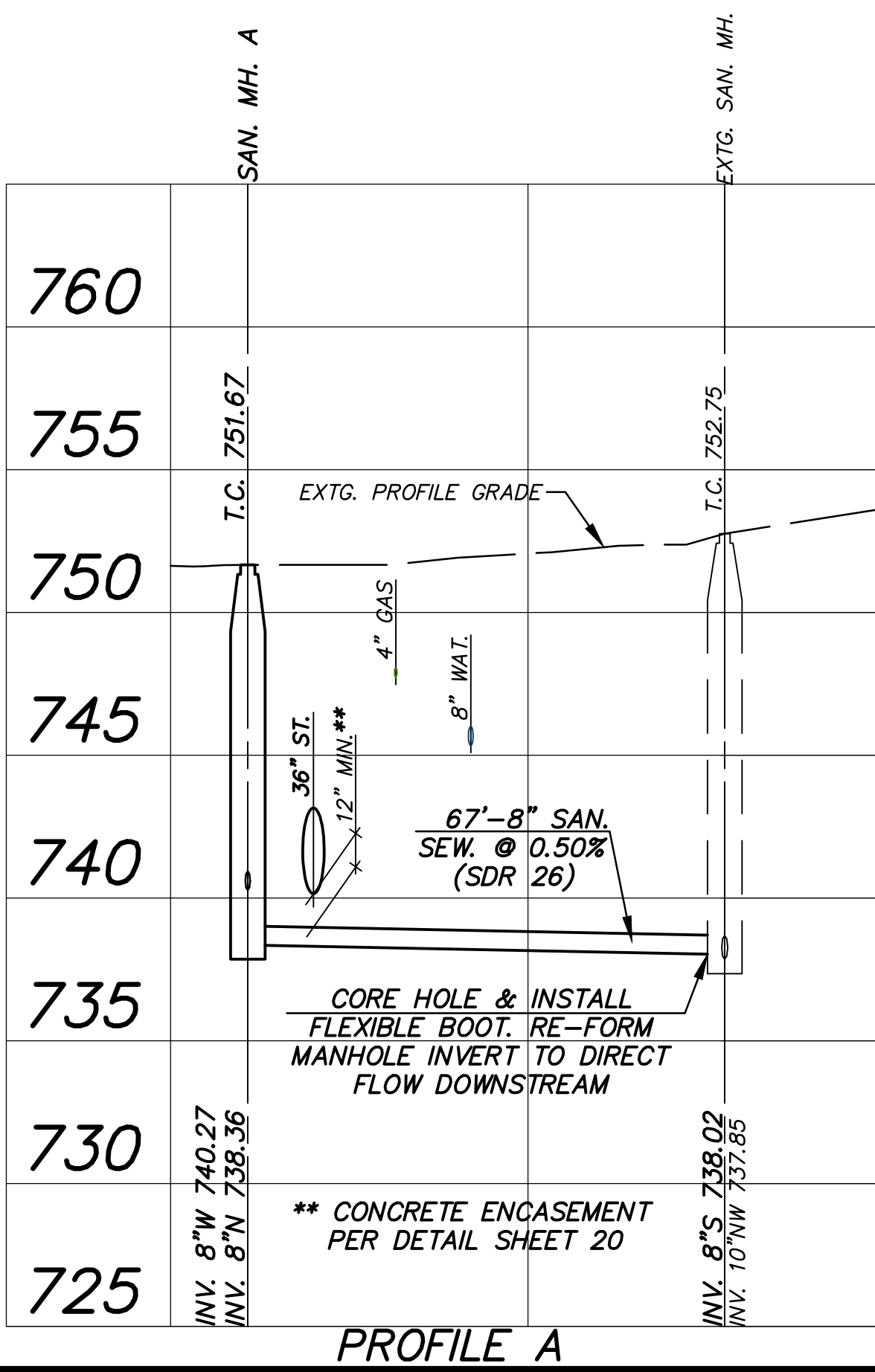
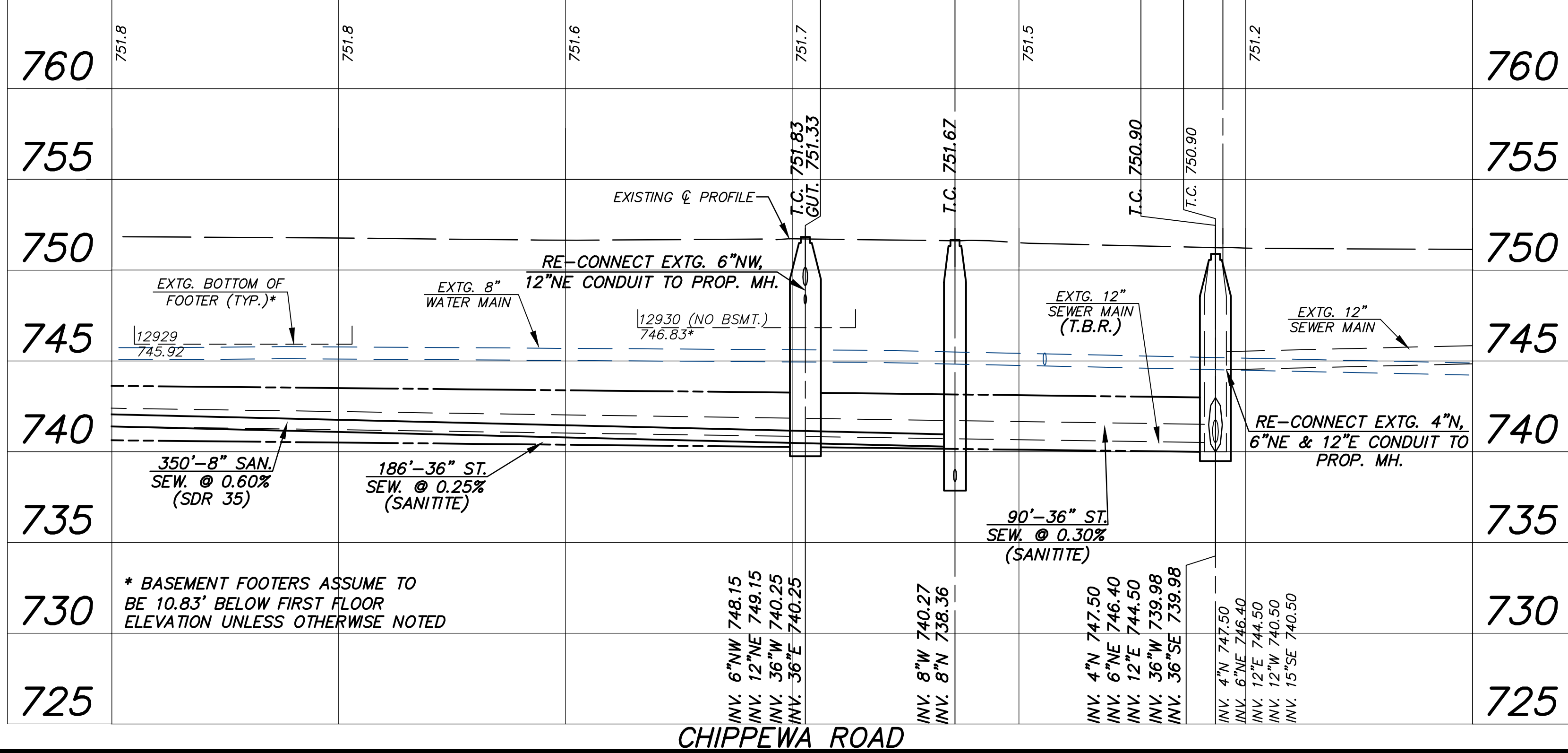
LEGEND
ASPH. P.V.M.T. REMOVAL & CONC. REPLACEMENT
ASPHALT DRIVE APRON REPLACEMENT
CONCRETE APRON OR SIDEWALK REPLACEMENT

* BASEMENT FOOTERS ASSUME TO BE 10.83' BELOW FIRST FLOOR ELEVATION UNLESS OTHERWISE NOTED



- NOTES: (APPLY TO ALL PLAN AND PROFILE SHEETS)
- 1.) STORM LATERALS ARE DEPICTED BASED ON BEST AVAILABLE RECORDS. BUT ARE SUBJECT TO CHANGE PENDING ACTUAL FIELD DETERMINED LOCATIONS. AS UNCOVERED, ALL STORM LATERALS ARE TO BE IMMEDIATELY CONNECTED TO THE NEW STORM SEWER SO THEY ARE OPERATIONAL. INTERIM REPAIRS MAY BE REQUIRED BASED ON THE CONTRACTORS METHODS. ALL INTERIM REPAIRS ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR VARIOUS OTHER ITEMS.
 - 2.) ALONG CHIPPEWA ROAD ALL LONG/SOUTH-SIDE CONNECTIONS ARE TO BE BORED UNDER THE EAST BOUND LANE NOT TO INTERFERE WITH TRAFFIC. ALL BORE PITS SHALL BE ON THE NORTH SIDE AND ONLY RECEIVING PITS CAN BE EXCAVATED ON SOUTH-SIDE. ALL BORING MATERIAL SHALL COMPLY WITH PLAN DETAILS.
 - 3.) EXISTING STORM SEWERS ARE BEING REPLACED AS PART OF THIS PROJECT. EXISTING SEWERS SHALL BE REMOVED AND/OR ABANDONED AS DESIGNATED. ALL REMOVAL AND ABANDONMENT SHALL BE DONE IN A MANNER THAT LEAVES THE SEWER INTACT AND FUNCTIONAL UNTIL ALL LATERALS HAVE BEEN RECONNECTED TO A NEW SEWER SYSTEM. ALL COST SHALL BE INCLUDED IN THE VARIOUS BID ITEMS.

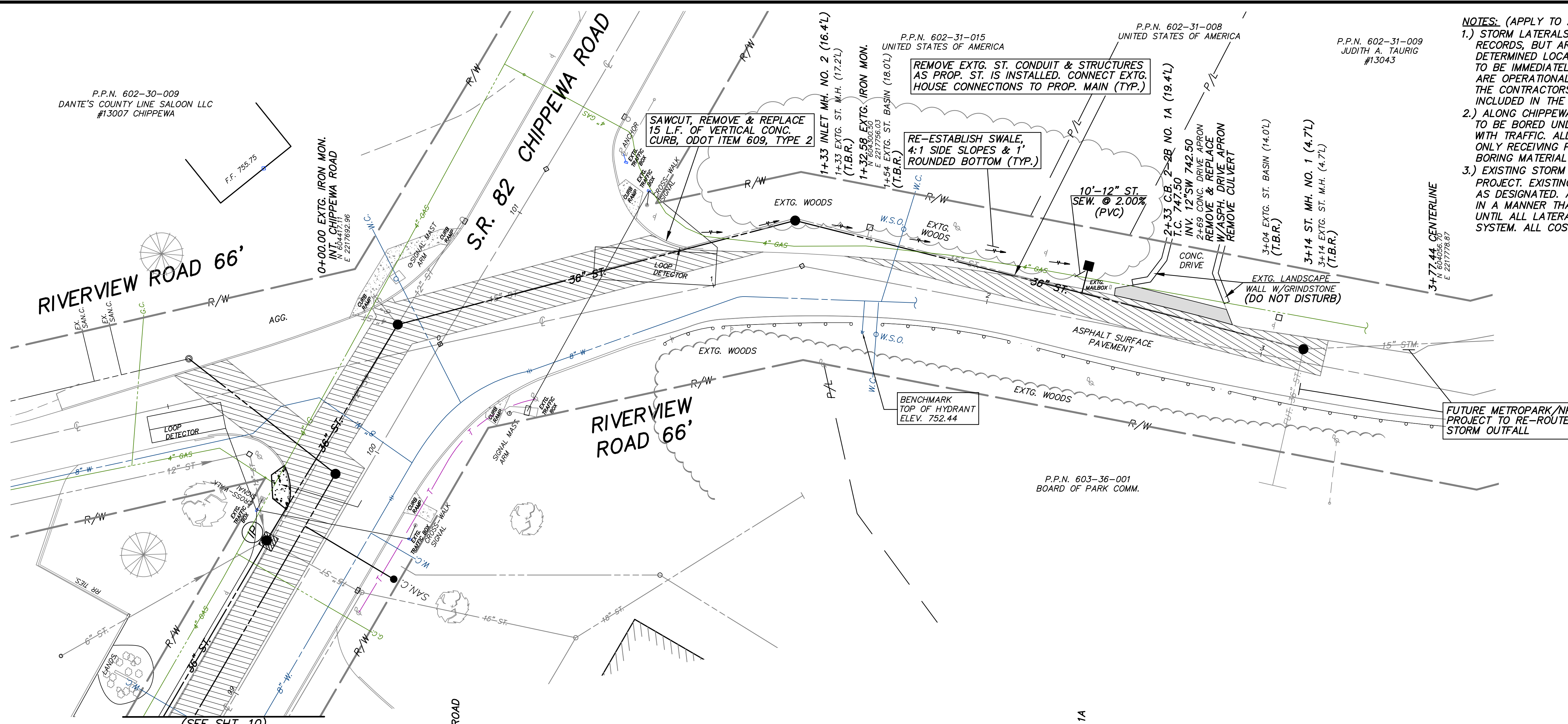
- LEGEND
- ASPH. P.V.M.T. REMOVAL & CONC. REPLACEMENT
 - ASPHALT DRIVE APRON REPLACEMENT
 - CONCRETE APRON OR SIDEWALK REPLACEMENT



PLAN AND PROFILE
STA. 98+00 TO STA. 103+00
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CITY OF BRECKSVILLE
CUYAHOGA COUNTY, OHIO

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HORIZ. SCALE	1"=20'	
VERT. SCALE	1"=5'	
DRN.	E.W.	G.W.
DATE	MAR, 2022	
ORDER NO.	3810-289-E	



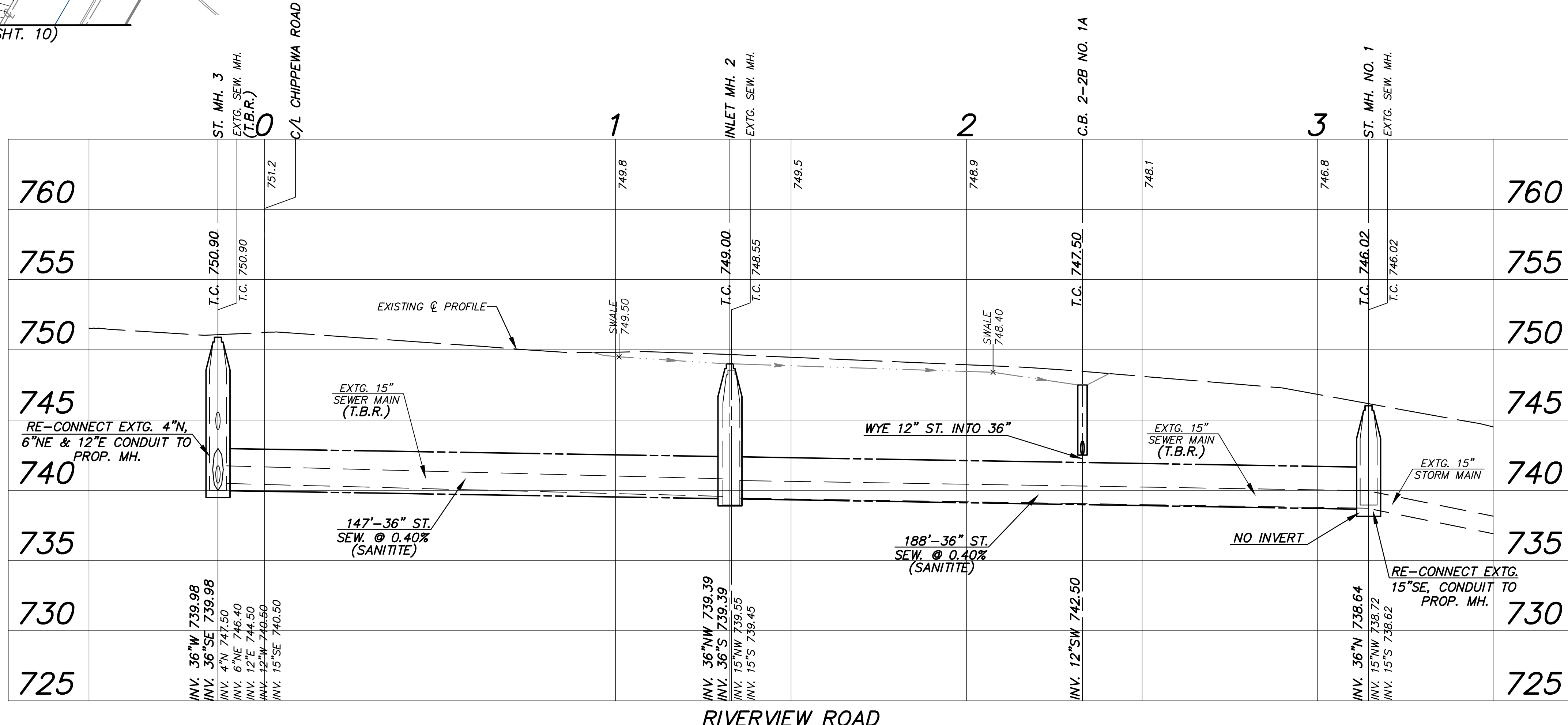
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- LEGEND
- ASPH. PVMT. REMOVAL & CONC. REPLACEMENT
 - ASPHALT DRIVE APRON REPLACEMENT
 - CONCRETE APRON OR SIDEWALK REPLACEMENT



PLAN AND PROFILE
STA. 98+00 TO STA. 103+00
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CITY OF BRECKSVILLE
CUYAHOGA COUNTY, OHIO

DONALD G. BOHNING & ASSOCIATES, INC.
CIVIL ENGINEERING & SURVEYING
7979 HUB PARKWAY • VALLEY VIEW, OHIO 44125
PHONE: (216) 642-1130 FAX: (216) 642-1132
M. Lohrstedt (A) 13500-3889-3893 (S) 1010-388-4106 (S) 1010-388-4106 E-Reg 2/75/2022

HORIZ. SCALE
1"=20'

VERT. SCALE
1"=5'

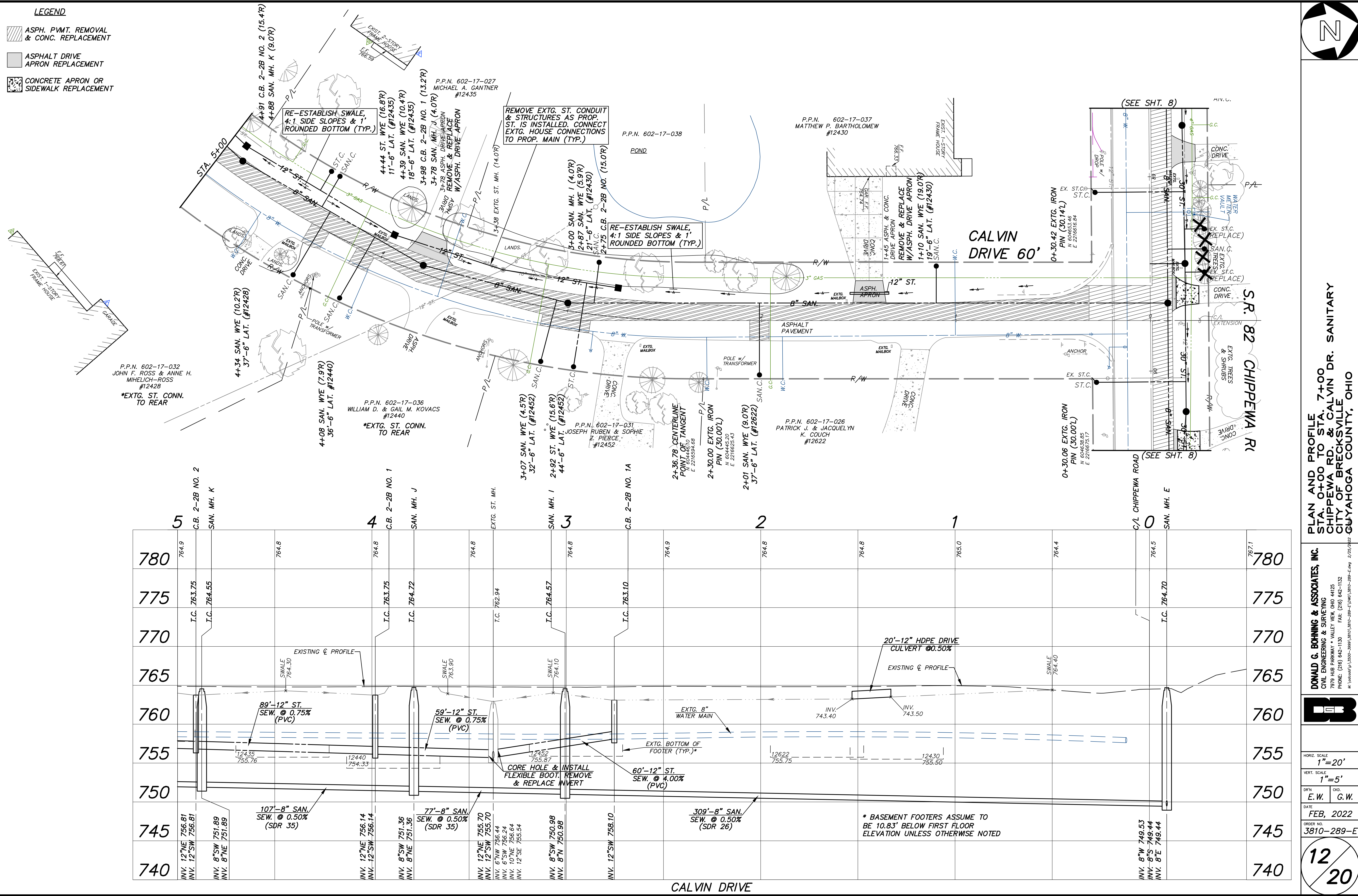
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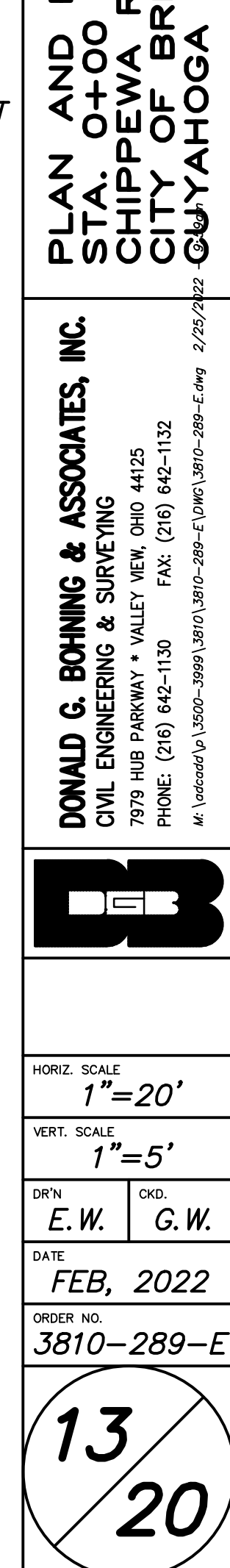
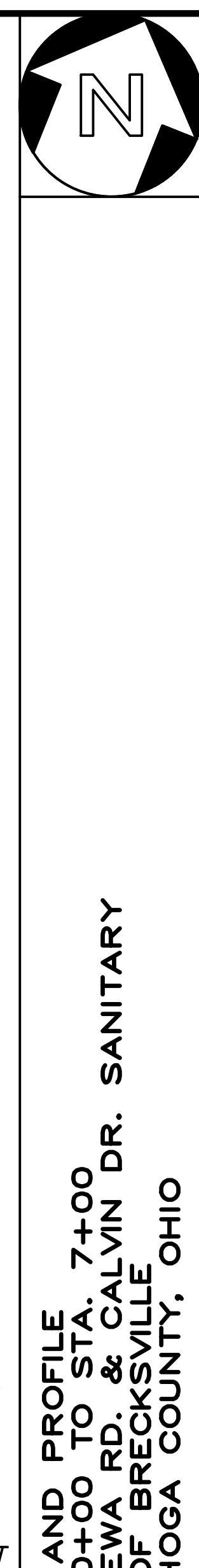
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ORDER NO.
3810-289-E

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- 4.) AS PART OF THE PROJECT, THE CONTRACTOR IS TO DECOMMISSION AND ABANDON THE GLEN VALLEY PUMP STATION. THIS WORK CAN NOT PROCEED UNTIL AFTER THE SANITARY SEWER IS TESTED AND ACCEPTED BY THE CITY AND COUNTY. ONCE THE SEWER IS ACCEPTED, THE CONTRACTOR WILL BE PERMITTED TO INSTALL THE MANHOLE ON THE GLEN VALLEY SANITARY SEWER INTERCEPTING ALL FLOW TO THE PUMP STATION.

- COORDINATE TO HAVE POWER TERMINATED TO THE PUMP STATION AT THE METER AND AT THE TRANSFORMER POWER-POLE FEEDING THE METER. ALL COORDINATION WILL BE BY THE CONTRACTOR AND THE CITY/COUNTY WILL ASSIST AS NEEDED IN PROVIDING AUTHORIZATION BY EITHER ENTITY AS NEEDED BY THE UTILITY COMPANY.

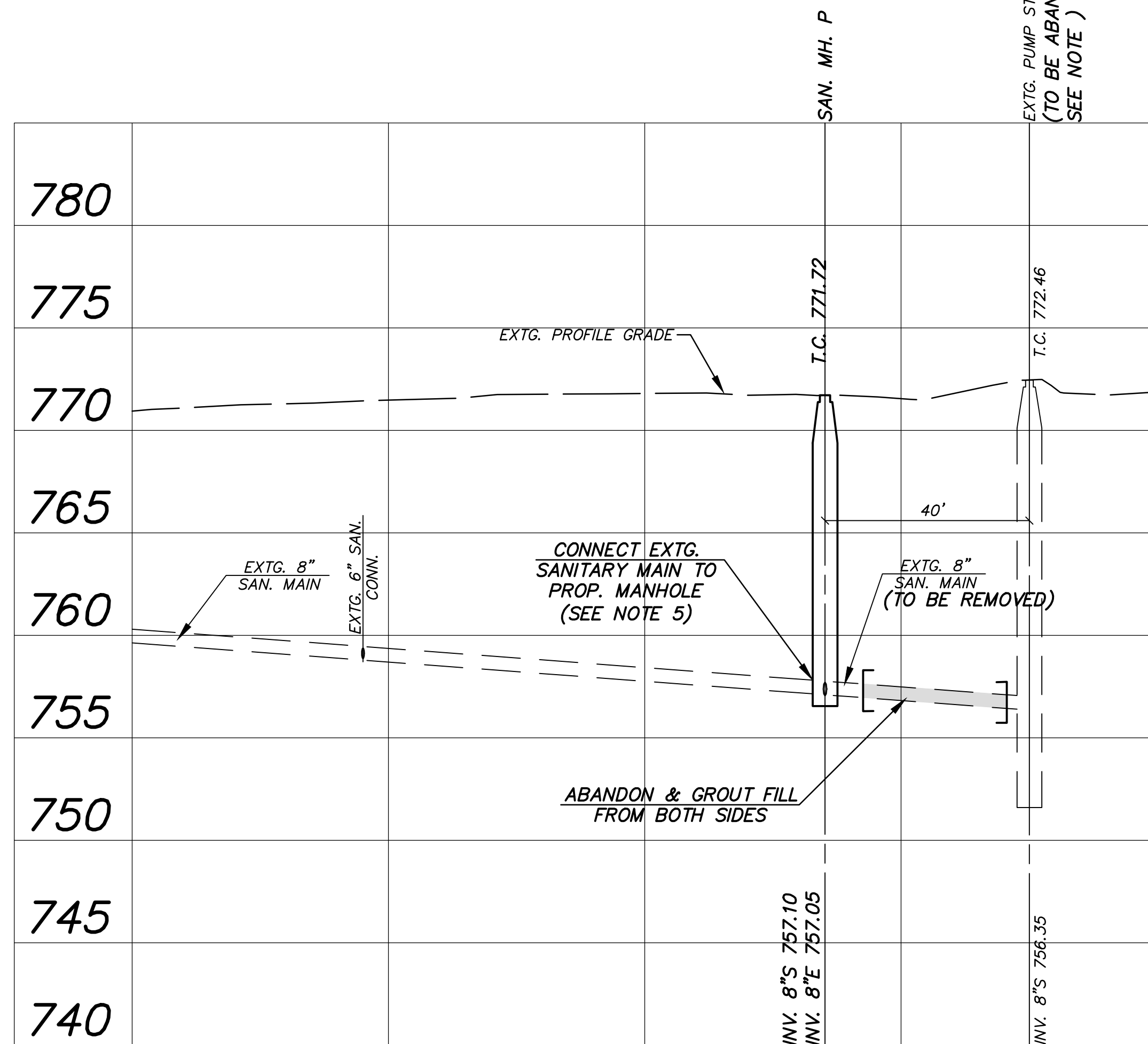
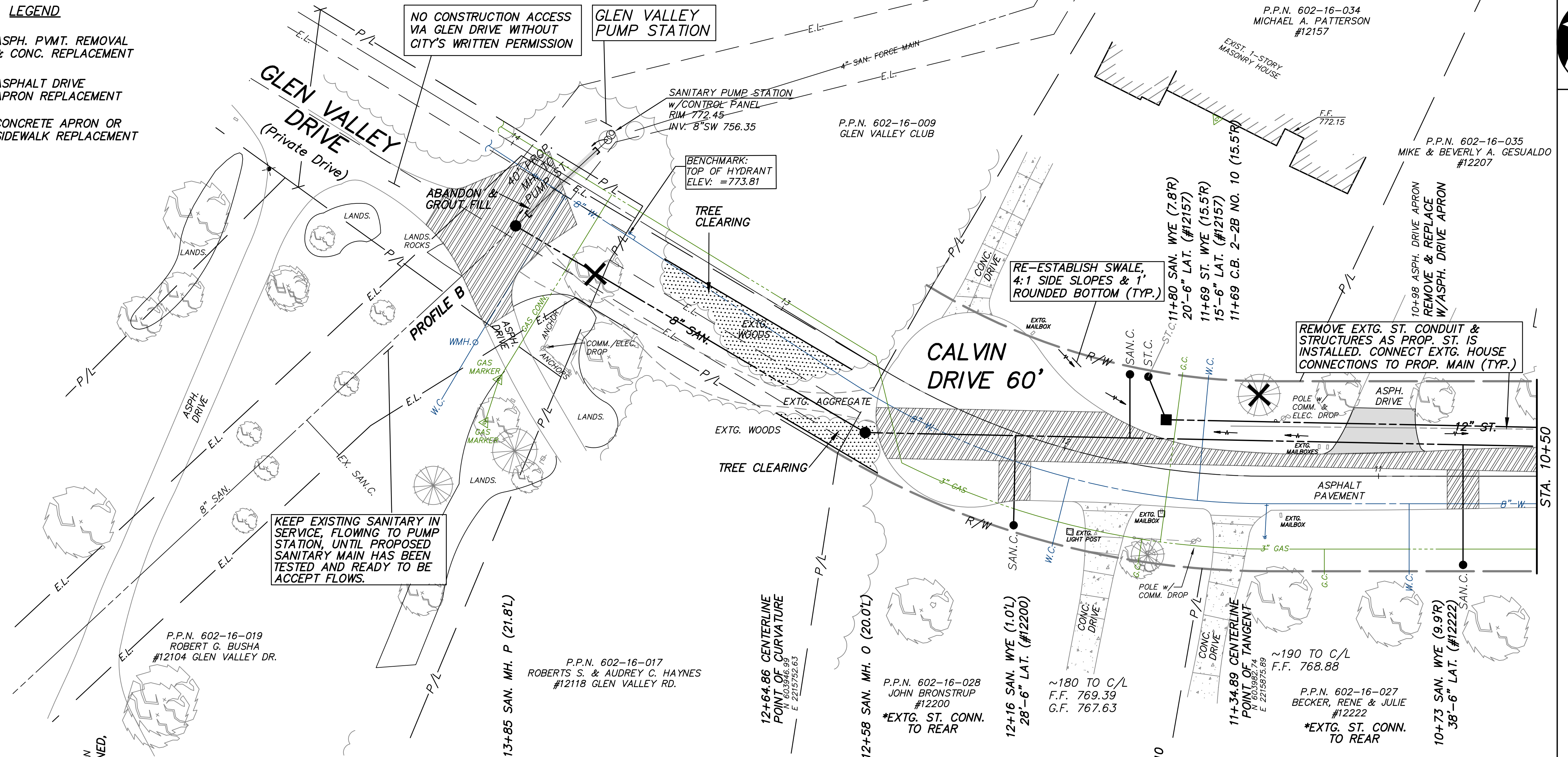
- THE EXISTING WET WELL SHALL HAVE ANY REMAINING WASTE MATERIAL AND/OR SLUDGE REMOVED AND DISPOSED OF IN AN APPROPRIATE AND LEGAL MANNER. DOCUMENTATION OF THE FACILITY RECEIVING THIS WASTE MATERIAL SHALL BE PROVIDED TO THE CITY FOR THEIR RECORDS.
 - COORDINATE WITH THE COUNTY TO DETERMINE WHAT EQUIPMENT IS TO BE SALVAGED. SUCH EQUIPMENT SHALL BE CAREFULLY REMOVED AND TURNED OVER TO THE COUNTY.
 - REMOVE ALL REMAINING ABOVE GRADE AND BELOW GRADE EQUIPMENT AND DISPOSE OF IT OFF SITE.
 - AS PER PLAN CALLS, ABANDON AND GROUT FILL THE 8" INLET LINE TO THE PUMP STATION
 - AS PER PLAN CALLS, ABANDON THE 3" FORCEMAIN.
 - REMOVE THE PRECAST TOP AND FIRST RISER SECTION TO AN ELEVATION 4' TO 5' BELOW GRADE.
 - BACKFILL THE WELL WITH LSM TO AN ELEVATION WITHIN 6" OF FINISHED GRADE.
 - RESTORE ALL AREAS DISTURBED BY CONSTRUCTION AS PER PLAN SPECIFICATION.
- ALL COST FOR THE DECOMMISSIONING/ABANDONMENT OF THE PUMP STATION SHALL BE INCLUDED IN THE UNIT PRICE BID.

5.) PER NOTE 4, CONNECTION OF GLEN VALLEY SANITARY SYSTEM CANNOT OCCUR UNTIL AFTER CALVIN DRIVE AND CHIPPEWA ROAD SEWERS HAVE BEEN TESTED AND ACCEPTED BY THE CITY AND COUNTY.

 ASPH. PVMT. REMOVAL
& CONC. REPLACEMENT

 ASPHALT DRIVE
APRON REPLACEMENT

 CONCRETE APRON OR
SIDEWALK REPLACEMENT



Sanitary Sewerage and Water Main Profile View

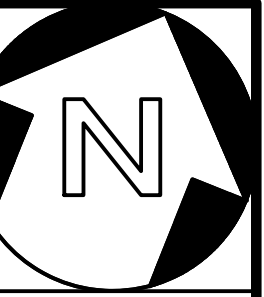
Profile Data:

Station	Existing G. Profile (ft)	128'-8" SAN. SEW. @ 1.00% (SDR 26) (ft)	8" WATER MAIN (ft)	155'-12" ST. SEW. @ 0.75% (PVC) (ft)	373'-8" SAN. SEW. @ 0.50% (SDR 35) (ft)
11+00	768.3	-	-	-	-
11+22	768.7	-	-	-	-
11+50	769.0	-	-	-	-
11+75	769.7	-	-	-	-
12+00	770.8	760.22**	761.32	-	-
12+22	772.2	-	761.32	759.96**	-
12+50	773.8	-	-	-	-
12+75	777.0	-	-	-	-
13+00	777.3	-	-	-	-

Notes:

- * BASEMENT FOOTERS ASSUME TO BE 10.83' BELOW FIRST FLOOR ELEVATION UNLESS OTHERWISE NOTED
- ** FOOTER INFORMATION KNOWN

CALVIN DRIVE



PLAN AND PROFILE
STA. 0+00 TO STA. 7+00
CHIPPEWA RD. & CALVIN DR. SANITARY
CITY OF BRECKSVILLE
CUYAHOGA COUNTY, OHIO

RODONALD G. BOHNING & ASSOCIATES, INC.
CIVIL ENGINEERING & SURVEYING
797979 HUB PARKWAY • VALLEY VIEW, OHIO 44125
PHONE: (216) 642-1130 FAX: (216) 642-1132
Mr. Rodonald G. Bohning (35000-39999) (35101) (35101)-289-E (DNC) (35101)-289-E-0mg 2/25/95



Z. SCALE
 $1''=20'$

7. SCALE
 $1''=5'$

E. W.	CKD. G. W.
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FEB, 2022

310-289-E

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SANITARY SEWERS

CLEAN WATER CONNECTIONS PROHIBITED

ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER.

SANITARY SEWER CONDUIT

ALL SANITARY SEWER PIPE SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- 8" POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS CONFORMING TO ASTM D-3034, SDR-35 OR SDR 26 (AS SPECIFIED ON THE PLAN) WITH GASKET MATERIAL CONFORMING TO ASTM F-477, AND JOINTS MEETING THE PERFORMANCE REQUIREMENTS OF ASTM D-3212.

WYE BRANCHES, RISERS, AND CONNECTIONS (6" DIAMETER)

THE MATERIAL FOR ALL WYE BRANCHES, RISERS, AND CONNECTIONS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- 6" POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS CONFORMING TO ASTM D-3034, SDR-26 FOR DEPTHS GREATER THAN 13 FEET, WITH GASKET MATERIAL COMFORMING TO ASTM F-477 AND JOINTS PER ASTM D-3212.
- 6" POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS CONFORMING TO ASTM D-3034, SDR-35 FOR DEPTHS LESS THAN 13 FEET, WITH GASKET MATERIAL CONFORMING TO ASTM F-477 AND JOINTS PER ASTM D-3212.

- 6" BORED CONNECTIONS SHALL BE FUSIBLE PVC CONFORMING TO AWWA C900 OR C905; MINIMUM SDR 21 PRESSURE CLASS 200 PSI

DVD VIDEO INSPECTION AND TESTING OF SANITARY SEWERS

FOLLOW TESTING PROCEDURES PER CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS REQUIREMENT.

PIPE ABANDONED

SEWERS TO BE ABANDONED SHALL BE BULKHEADED/PLUGGED AT THE END POINTS OF TERMINATION AND SHALL BE GROUT FILLED WITH FLOWABLE CONCRETE. ALL SERVICE CONNECTIONS WITHIN SUCH ABANDONED LIMITS SHALL TO CAPPED/PLUGGED AT THE POINT OF RECONNECTION INTO THE NEW LINE. ALL LABOR, EXCAVATION, MATERIALS, ETC. NEEDED TO COMPLETE SUCH WORK SHALL BE INCLUDE IN THE UNIT PRICE BID.

PIPE REMOVED

PIPE TO BE REMOVED SHALL COMPLY WITH ODOT SPECIFICATION 202.04 AND SHALL INCLUDE THE FOLLOWING:

- FULL REMOVAL OF PIPE WITHIN LIMITS SPECIFIED.
- BULKHEAD/CAP OPENINGS IN PIPE THAT IS TO REMAIN.
- BACKFILLING OF TRENCH CREATED (COMPACTED BACKFILL).

STORM SEWER AND STRUCTURES REMOVED

THE EXISTING STORM SEWER PIPE, STRUCTURES, AND APPURTENANCES SHALL BE REMOVED TO THE LIMITS DEPICTED IN THE PLANS. THE UNIT PRICE BID SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND ANY OTHER INCIDENTAL ITEM INCLUDING OFF-SITE DISPOSAL NECESSARY TO COMPLETE SUCH WORK.

STORM CONDUIT

ALL STORM SEWER CONDUIT SHALL CONFORM TO THE FOLLOWING REQUIREMENT:

- SANITITE HP SEWER PIPE MEETING ASTM F2736 OR F2764 WITH GASKET JOINTS MEETING ASTM F2736 BEING WATERTIGHT PER ASTM D3212.
- 12" DIAMETER: POLYVINYL CHLORIDE (PVC) ASTM D-3034 WITH GASKET MATERIAL CONFORMING TO ASTM F-477 AND JOINTS PER ASTM D-3212. STORM SEWER CONDUIT WITH LESS THAN THIRTEEN (13) FEET OF COVER SHALL BE SDR 35.
- 6" UNDERDRAIN, POLYVINYL CHLORIDE (PVC) PLASTIC PIPE, SMOOTH WALL PERFORATED IN ACCORDANCE WITH ASTM F-758, TYPE PS 46 MINIMUM, WITH A MINIMUM OF FOUR ROWS OF PERFORATIONS (O.D.O.T. 707.41).

PREMIUM JOINT PIPE IS REQUIRED FOR ALL SANITARY, STORM AND LATERAL SEWER PIPING. ALL JOINTS TO BE WATERTIGHT; SOIL-TIGHT JOINTS, ETC. ARE NOT ACCEPTABLE. RESILIENT CONNECTORS ARE REQUIRED FOR ALL PIPINGS AT THE CONNECTIONS TO SANITARY AND STORM SEWER STRUCTURES.

DVD VIDEO INSPECTION AND TESTING OF SANITARY SEWERS

FOLLOW TESTING PROCEDURES PER CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS REQUIREMENT.

STORM DRAINS AND CONNECTIONS

ANY EXISTING STORM DRAINS, SEPTIC TANK DRAINS, ROOF DRAINS, YARD DRAINS, OR OTHER STORM CONNECTIONS DISTURBED BY THE PROPOSED WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING INTO THE PERTINENT EXISTING OUTLET OR NEW STORM CONDUIT. THE LOCATION, TYPE, SIZE, AND GRADE OF REQUIRED REPLACEMENTS SHALL BE COMPATIBLE WITH THE EXISTING AND WILL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION. CONNECTION MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) SOLID WALL PIPE WITH GASKET JOINTS, CONFORMING TO THE REQUIREMENTS OF ASTM D-3034 (SDR 35 OR SDR 26, AS REQUIRED BY DEPTH). EACH LATERAL WHICH IS CONNECTED INTO A STORM CONDUIT SHALL INCLUDE A TEST TEE TO BE LOCATED APPROXIMATELY FIVE FEET FROM THE POINT OF CONNECTION INTO THE CONDUIT, OR AS DIRECTED BY THE ENGINEER. THE CONTRACT UNIT PRICE SHALL INCLUDE ALL LABOR, MATERIALS, CORING, CONNECTION, EQUIPMENT, COMPACTED BACKFILL, BEDDING, BRACING, AND INCIDENTALS TO COMPLETE THIS WORK IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS AND DETAILS. NONE OF THE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE SCHEDULE OF QUANTITIES FOR USE "AS DIRECTED BY THE ENGINEER".

ITEM 603	4" THRU 12" STORM RE-CONNECTION INCL. TEST TEE	25 EA.
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PAVEMENT

PAVEMENT AND DRIVE REMOVAL, MAINTENANCE DURING CONSTRUCTION, REPAIR AND/OR REPLACEMENT

THE EXTENT OF ANY PAVEMENT OR DRIVE THAT IS DAMAGED OR HAS TO BE REMOVED SHALL BE IN RELATION TO THE CONTRACTOR'S METHOD OF CONSTRUCTION AND THE PLAN DETAILS. ALL EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE SITE AT HIS SOLE RESPONSIBILITY AND EXPENSE. ALL OF THE COST OF ANY PAVEMENT OR DRIVE REMOVAL, MAINTENANCE DURING CONSTRUCTION, REPAIR, OR REPLACEMENT, INCLUDING ALL WORK CONSTRUCTED IN ACCORDANCE WITH PLAN DETAILS AND SPECIFICATIONS, PREMIUM TRENCH BACKFILL, SUBBASE REPLACEMENT AND COMPACTION, CONNECTION TO EXISTING PAVEMENT OR DRIVE, AND ALL OTHER INCIDENTAL ITEMS, SHALL BE INCLUDED IN THE PRICE FOR THE VARIOUS CONTRACT ITEMS.

ANY ADDITIONAL AREAS OF CONCRETE AND/OR ASPHALT WHICH ARE DAMAGED BY CONSTRUCTION OR HAVE TO BE REMOVED SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.

NO ASPHALTIC PAVEMENT COURSE AND/OR CONCRETE PAVEMENT OR CURBING SHALL BE LAID ON FROZEN PAVEMENT OR SUBBASE.

PRIOR TO FINAL STABILIZATION, IF DUE TO NO FAULT OF THE CONTRACTOR, THE PAVEMENT EDGE MAY REQUIRE RE-ESTABLISHMENT. QUANTITIES OF ASPHALT PAVEMENT AND AGGREGATE BASE HAVE BEEN INCLUDED FOR USE "AS DIRECTED BY THE ENGINEER".

LAYOUT OF PAVEMENT MARKINGS

THE CONTRACTOR SHALL BE RESPONSIBLE, WITH THE ASSISTANCE OF THE ENGINEER, FOR ALL THE LAYOUT AND LOCATIONS OF THE VARIOUS PAVEMENT MARKINGS. THE PRICE BID FOR THE VARIOUS PAVEMENT MARKINGS SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, AND ANY OTHER INCIDENTAL ITEMS FOR THE LAYOUT OF PAVEMENT MARKINGS.

OHIO E.P.A. GENERAL NOTES

- THE SANITARY SEWERS MUST PASS A LEAKAGE TEST WHICH SHALL BE A LOW PRESSURE AIR TEST IN ACCORDANCE WITH THE "TEN STATES STANDARDS" SECTION 33.95, PER ASTM F-1417 FOR PLASTIC PIPE.
- ALL SANITARY MANHOLES SHALL BE AIR TESTED PER ASTM SPECIFICATION C 1244-93 TO VERIFY WATER TIGHTNESS AND PROPER CONSTRUCTION PER PLAN DETAILS.
- ALL FLEXIBLE SANITARY SEWERS MUST PASS A DEFLECTION TEST (5% MAX.)

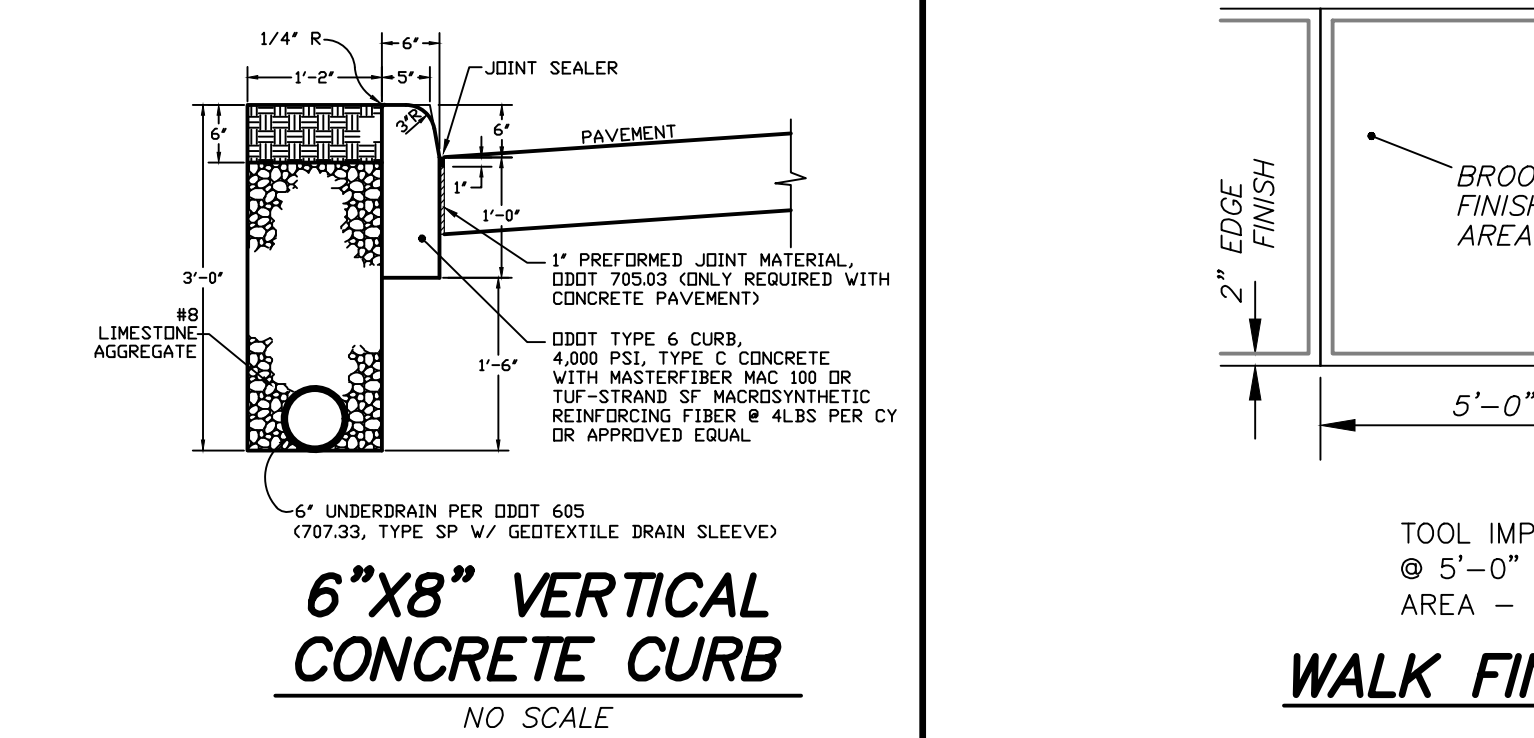
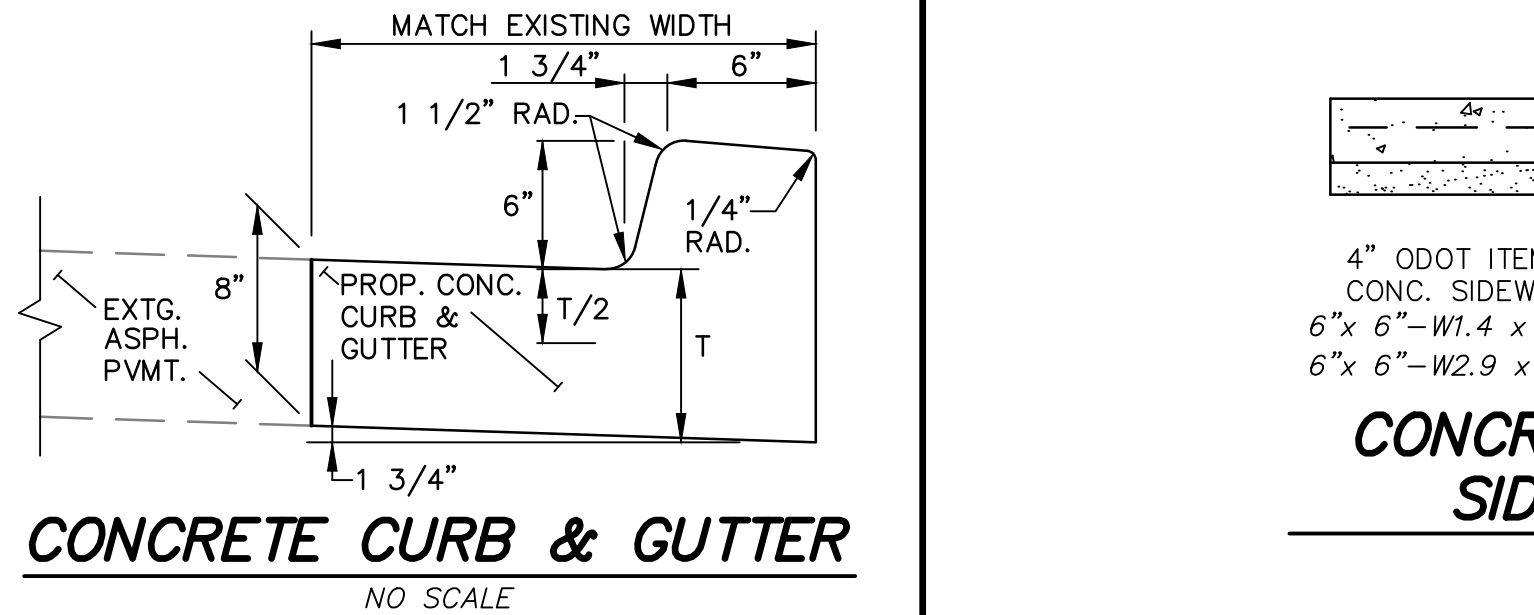
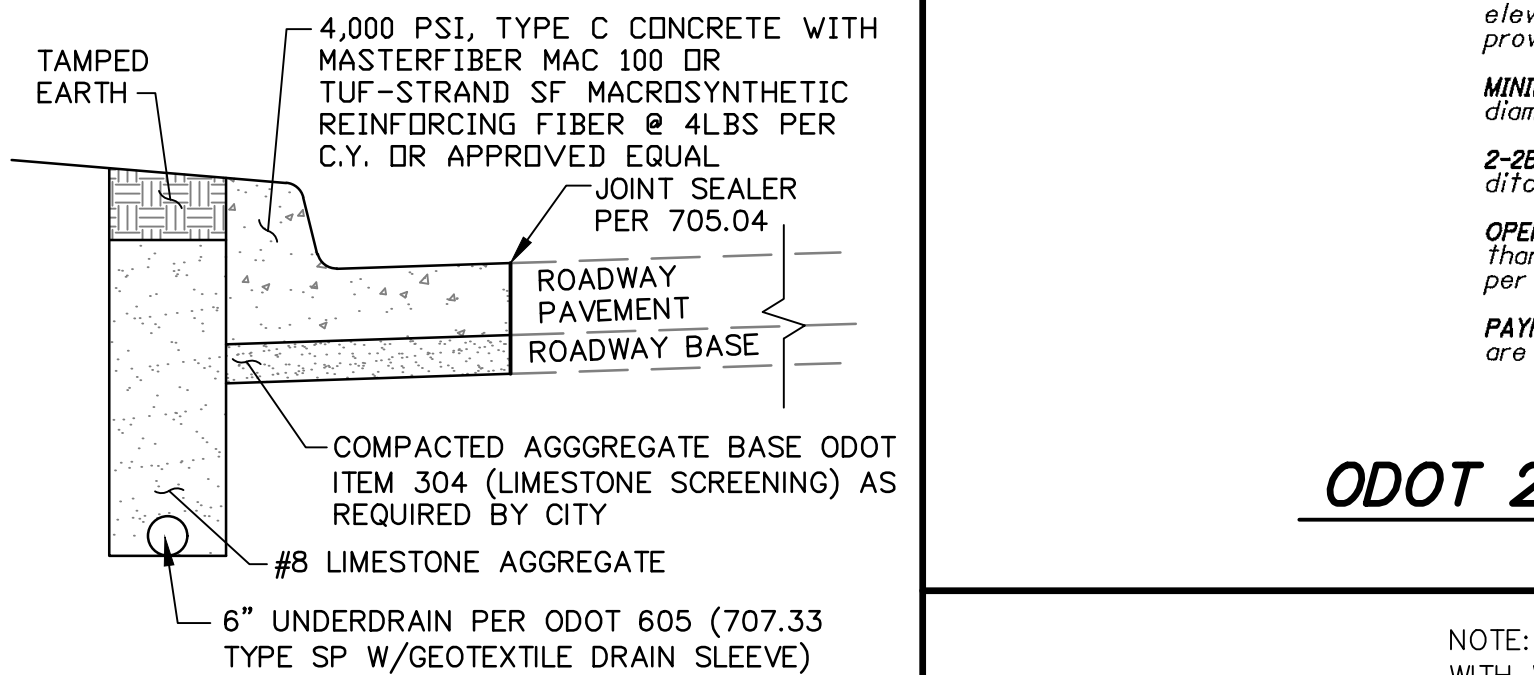
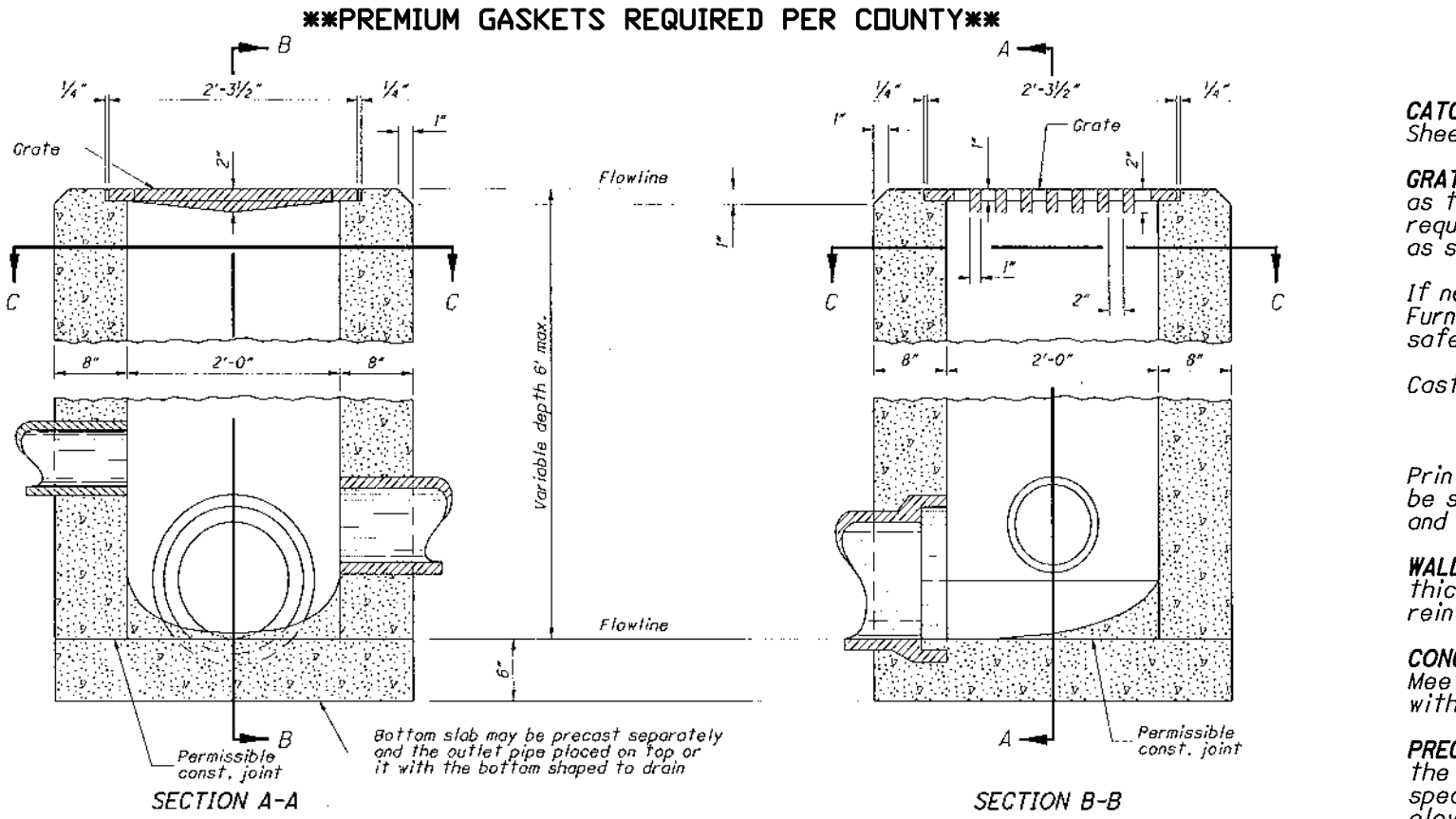
DEFLECTION TESTS SHALL BE PERFORMED NO SOONER THAN 60 DAYS FOLLOWING COMPLETION OF BACKFILL. MAXIMUM RING DEFLECTION OF THE PIPE UNDER LOAD SHALL BE LIMITED TO 5% OF THE AVERAGE INSIDE DIAMETER LISTED IN ASTM D-2751 FOR ABS SOLID WALL PIPE AND ASTM D-2680 FOR ABS COMPOSITE WALL PIPE. ASTM D-3034 FOR POLYVINYL CHLORIDE (PVC) PIPE LISTS OUTSIDE DIMENSIONS AND MINIMUM WALL THICKNESSES WHICH MAY BE USED TO CALCULATE APPLICABLE BASE DIAMETERS. THE PROPER SIZED MANDRELS SHALL BE PULLED THROUGH THE PIPE.

MANDRELS MUST BE APPROVED BY THE RESPONSIBLE AGENCY PRIOR TO TESTING. IF MANDREL TESTING CANNOT BE USED FOR ANY REASON, OR AS AN ALTERNATE TO MANDREL TESTING, LASER PROFILING SHALL BE USED. LASER PROFILING SHALL BE PER REQUIREMENTS OF ODOT 611.13, ODOT 92.02, AND THE FIVE PERCENT (5%) MAXIMUM DEFLECTION DIAMETER FOR THE APPLICABLE TYPE OF PIPE. THE RESPONSIBLE AGENCY MAY REQUIRE AIR TESTING OR WEIR TESTING ON STORM SEWERS.

ALL PIPE FAILING TO MAINTAIN THE MINIMUM DEFLECTION DIAMETER OR LARGER FOR THE APPLICABLE TYPE OF PIPE SHALL BE CONSIDERED TO HAVE BEEN IMPROPERLY INSTALLED AND SHALL BE RELAYED OR REPLACED BY THE CONTRACTOR.

- THE FOLLOWING MINIMUM HORIZONTAL SEPARATIONS (MEASURED OUT-TO-OUT CLEAR) BETWEEN THE PROPOSED SANITARY SEWER AND THE WATER MAIN SHALL BE MAINTAINED:
a.) 10 FOOT SEPARATION FROM THE WATER MAIN.

- THE FOLLOWING MINIMUM VERTICAL CLEARANCES (MEASURED OUT-TO-OUT CLEAR) BETWEEN THE PROPOSED SANITARY SEWER AND THE WATER MAIN SHALL BE MAINTAINED:
a.) 18 INCH CLEARANCE FROM TOP OF THE SEWER TO THE BOTTOM OF THE WATER MAIN.



CONCRETE - ROADWAYS

- 12" ITEM 451 FIBER REINFORCED PORTLAND CEMENT CONCRETE (MASTERFIBER MAC 100 OR TUF-STRAND SF MACROSYNTHETIC REINFORCING FIBER @ 4LB5 PER C.Y. OR APPROVED EQUAL
- FOR CONNECTING NEW PAVEMENT TO THE EXISTING PAVEMENT USE #6 x 24" DEFORMED BARS GROUTED IN PLACE OR 5/8" EXPANSION ANCHORS CONFORMING TO FEDERAL SPECIFICATION No. FF-S-325, GROUP XIII, TYPE 1 OR GROUP II, TYPE 4, CLASS 1, DRILLED INTO THE EXISTING PAVEMENT AND COUPLED WITH 5/8" DIA. HOOK BOLTS AT 1'-6" C/C SPACING TO COMPLETE THE ASSEMBLY.
- BASE: 4" AGGREGATE BASE ITEM 304

ASPHALT - ROADWAYS

- 1-1/2" ASPHALT CONCRETE ITEM 448 SURFACE COURSE TYPE 1
- 1-1/2" ASPHALT CONCRETE ITEM 448 INTERMEDIATE COURSE TYPE 2
- TACK COAT ITEM 407 - 0.1 GAL./S.Y.
- BASE MATERIALS:
(A) 9" BITUMINOUS AGGREGATE BASE ITEM 301
(B) 4" AGGREGATE BASE ITEM 304
(C) SUBBASE COMPACTION ITEM 204

CONCRETE - DRIVE APRONS

- 6" REINFORCED PORTLAND CEMENT CONCRETE PER ODOT 451 WITH 6"x6" - W2.9xW2.9 WWF
- BASE: 3" AGGREGATE BASE ITEM 304
- 24" WIDE ASPHALT CONCRETE STRIP (ITEM 448) BETWEEN CONCRETE DRIVE AND ROADWAY EDGE OF PAVEMENT PER ASPHALT DRIVE SPEC.

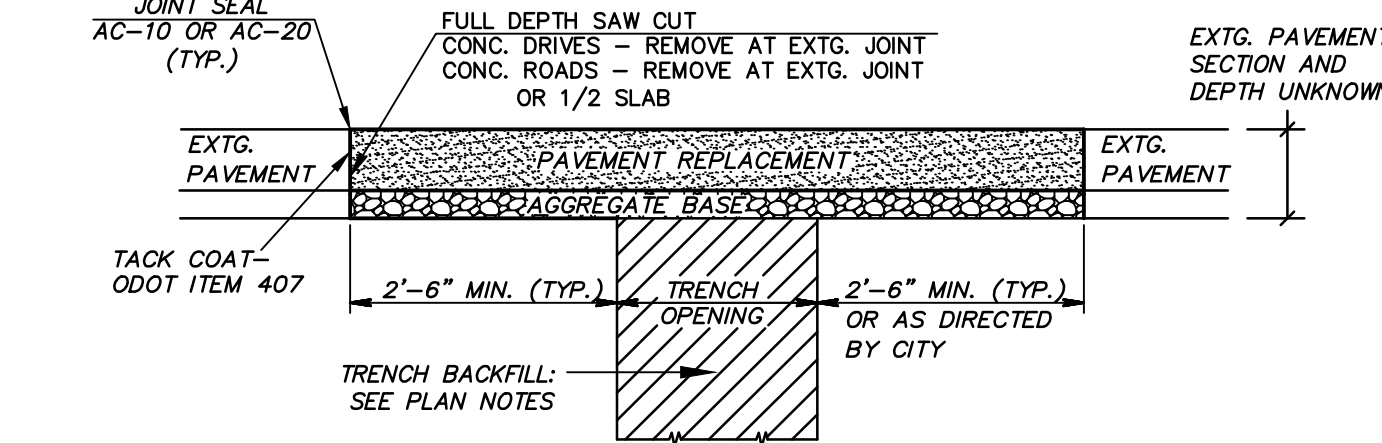
CONCRETE - DRIVEWAYS

- 1-1/2" ASPHALT CONCRETE ITEM 448 SURFACE COURSE TYPE 1
- 5" ASPHALT CONCRETE ITEM 301 INTERMEDIATE COURSE TYPE 2
- TACK COAT ITEM 407 - 0.1 GAL./S.Y.
- BASE MATERIALS:
(A) 2" AGGREGATE BASE ITEM 304

ASPHALT - DRIVEWAYS

- 1-1/2" ASPHALT CONCRETE ITEM 448 SURFACE COURSE TYPE 1
- 5" ASPHALT CONCRETE ITEM 301 INTERMEDIATE COURSE TYPE 2
- TACK COAT ITEM 407 - 0.1 GAL./S.Y.
- BASE MATERIALS:
(A) 2" AGGREGATE BASE ITEM 304

EXISTING MATERIAL IF SUPERIOR TO MINIMUM REPLACEMENT REQUIREMENTS - MATCH EXISTING MATERIALS.



PAVEMENT OPENING, REMOVAL & REPLACEMENT DETAIL
NO SCALE

NOTES

CATCH BASINS 2-2A & B: This sheet depicts Catch Basin 2-2B. See Sheet 1 of 2 for Catch Basin 2-2A.

GRATES: Furnish a design essentially the same and equally as strong as the one shown (see Construction Information table), or meet the requirements of CMS 711.14. Provide grate openings and dimensions as shown here unless otherwise shown in the plans.

If necessary, bicycle safe grates will be specified in the plans. Furnish Mearns No. R-4859-C or East Jordan No. 5110 Type M3 bicycle safe grates or approved equals.

Cast the following text into the top of the grate:

"DRAINS TO WATERWAY" and "DUMP NO WASTE"

Print text in bold, capital letters of least 1/2" high. "WATERWAY" may be substituted with "STREAM", "RIVER", "LAKE", etc. Actual placement and logo may vary per manufacturer.

WALLS: Construct brick or cast-in-place walls with a nominal 8" thickness. Provide precast walls of least 6" thick with sufficient reinforcing to permit shipping and handling without damage.

CONCRETE: Use 4000 psi compressive strength for cast-in-place concrete. Meet the requirements of CMS 706.13 for all precast concrete and mark with the catch basin number.

PRECAST BASE: If a precast base is used, set it deep enough so that the top can be placed on the base to provide the grate elevation specified in the plans. Do not use brick layers to adjust the top elevation.

LOCATION AND ELEVATION: When given on the plans, location and elevation are of the top center of the grate. When side openings are provided, the elevation is of the flow line of the side inlet.

MINIMUM DEPTH: The minimum depth of CB No. 2-2B is the outside diameter (O.D.) of the outlet pipe plus 4".

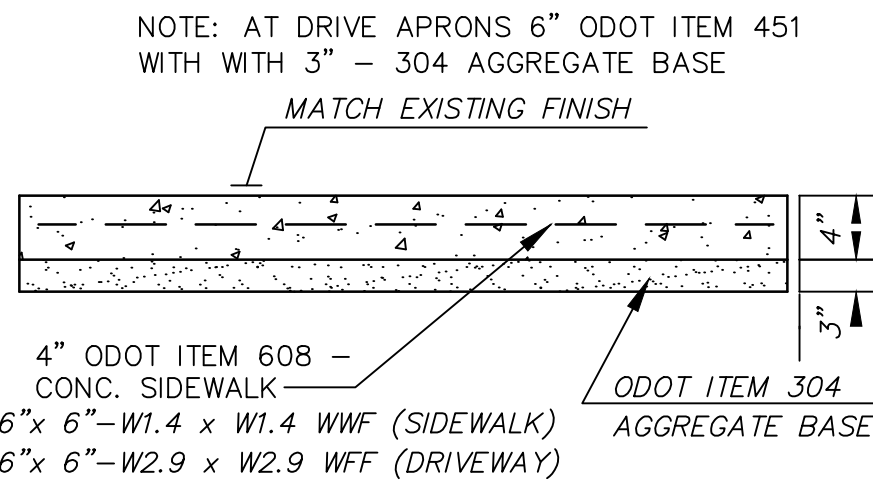
2-2B GRATE ELEVATION: Place grate elevation 4" to 6" below normal ditch and return to normal 10' to 15' each side of inlet.

OPENINGS: Obtain the Engineer's approval for any pipe openings greater than 4" from the outside of the pipe to the structure. Fill all voids per CMS 611

PAYMENT: All materials and labor, including excavation and backfilling, are paid for under Item 611 - Catch Basin, No. 2-2B.

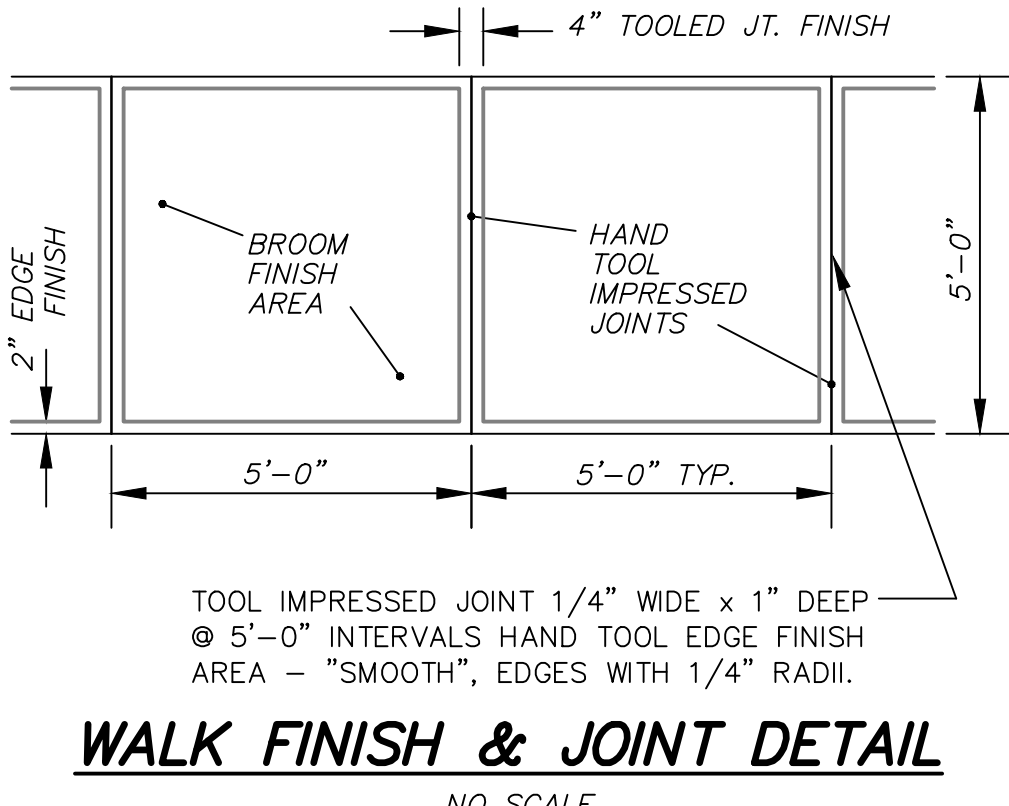
ODOT 2-2B CATCH BASIN

NO SCALE



CONCRETE DRIVEWAY & SIDEWALK DETAIL

NO SCALE



NO SCALE

PAVEMENT QUANTITIES

DRIVEWAY APRONS		CONCRETE	ASPHALT
HOUSE NO.	STA.	SURFACE AREA (S.Y.)	SURFACE AREA (S.Y.)
CHIPPEWA ROAD			
#11055	56+16	14.9	4.0
#11107	57+16	18.3	5.4
#11115	57+90	17.4	5.0
#11201	58+95	17.4	5.0
#11209	59+94	14.7	4.8
#11221	61+05	18.6	4.9
#11303	62+04	17.2	4.6
#11303	62+75	13.0	2.7
#11315	63+15	16.7	4.9
#11401	63+99	17.8	4.6
#11435	65+21	22.1	5.4
#11469	66+15	21.0	5.6
#11473	67+20	13.9	3.4
#11507	68+32	17.4	5.0
#11601	69+35	24.4	7.7
#11651	70+28	22.1	6.0
#11651	71+04	22.2	7.1
#11703	71+35	18.0**	
#11703	71+98	15.7**	
#11802	73+36		19.8
#11805	73+81	40.1	6.4
#9000	74+36	38.8*	8.6*
#12111	78+76	19.1	4.4
#12115	80+31	17.4	4.2
#12125	81+30	23.9	4.2
#12219	82+39		20.6
#12265	83+31		28.2
#12315	83+74	20.9	4.1
#12325	84+67		25.7
#12333	85+56		22.2
#12407	86+95	18.1	2.8
#12417	87+51		34.9*
#12417	88+11		38.1*
#12417	88+88		15.8
#12509	89+61	15.0	4.0
#12509	90+38	16.4	3.6
#12703	90+78		22.4
#12809	92+55		26.8
#12833	94+70		18.9
#12901	96+16		23.9
#12915	97+37		43.1
#12929	97+98		23.3*

CALVIN DRIVE			
#12430	1+45		18.9
#12435	3+78		22.2
#12421	5+36		22.6
#12407	6+74	16.2	3.4
#12305	8+02		24.6
#12257	9+17	41.4	6.8
#12207	10+98		37.0

RIVERVIEW ROAD			
#13043	2+69		21.1
TOTAL		610.3	648.6
ROADWAY PAVEMENT			
CHIPPEWA ROAD		5216	
RIVERVIEW ROAD		443	
CALVIN DRIVE			1437
GLEN VALLEY			149
TOTAL		5659	1586
SIDEWALK		TOTAL AREA (S.F.)	2980

** COMMERCIAL DRIVEWAY PAVEMENT SECTION

** PAVEMENT REMOVAL ONLY

NOTE: CONCRETE APRONS SHALL HAVE A 2' WIDE ASPHALT DRIVE APRON BETWEEN THE STREET PAVEMENT & CONCRETE APRON

GENERAL NOTES

- CONSTRUCTION MUST COMPLY WITH ALL LOCAL EROSION AND SEDIMENT CONTROL REGULATIONS.
- THE CONTRACTOR MUST IMPLEMENT ALL NECESSARY PRACTICES TO PREVENT THE DISCHARGE OF NON-SEDIMENT POLLUTANTS INTO STORM WATER RUNOFF. UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE CHANNEL, STORM SEWER OR SURFACE WATERS OF THE STATE. NO EXPOSURE OF STORM WATER TO WASTE MATERIALS IS RECOMMENDED.
- OFF-SITE TRACKING OF SEDIMENTS AND DUST GENERATION SHALL BE MINIMIZED.
- CONTRACTOR MUST COMPLY WITH LOCAL WASTE DISPOSAL, SANITARY, AND HEALTH REGULATIONS (E.G. PROVISION OF PORTABLE SANITARY FACILITIES, TEMPORARY FUEL TANK REGULATIONS, ETC.)
- THERE SHALL BE NO TURBID DISCHARGES RESULTING FROM DEWATERING ACTIVITIES. IF TRENCH OR GROUND WATER CONTAINS SEDIMENT, IT MUST PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE, PRIOR TO BEING DISCHARGED FROM THE CONSTRUCTION SITE.

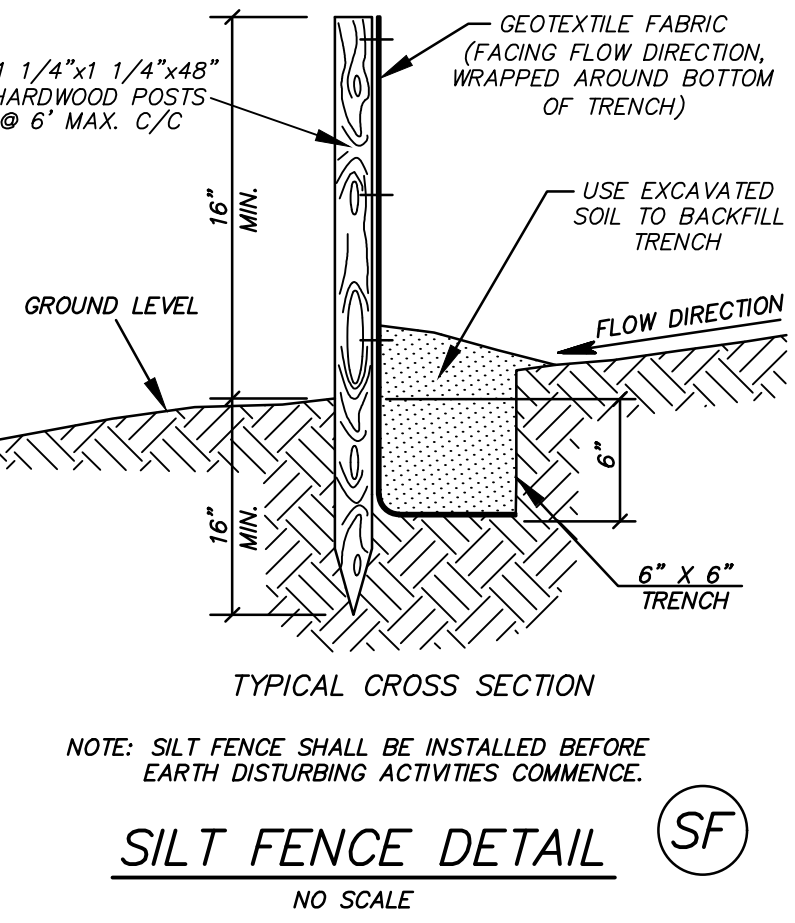
STORM WATER POLLUTION PREVENTION PLAN NOTES

MAINTENANCE OF EROSION CONTROL

AFTER INSTALLATION, ALL EROSION CONTROL ITEMS SHALL BE MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLAN NOTES AND AS DIRECTED BY THE ENGINEER. ALL DISTURBED AREAS, INCLUDING THOSE ZONES THAT HAVE HAD SEWER INSTALLATION AND THAT ARE NOT ACTIVELY BEING CONSTRUCTED UPON, SHALL HAVE TEMPORARY SEEDING & MULCHING INSTALLED PER ODOT 207. ALL SUCH WORK AND MATERIALS NECESSARY SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF EROSION CONTROL.

RESTORATION OF DISTURBED AREAS (GRASS SEEDING & MULCHING)

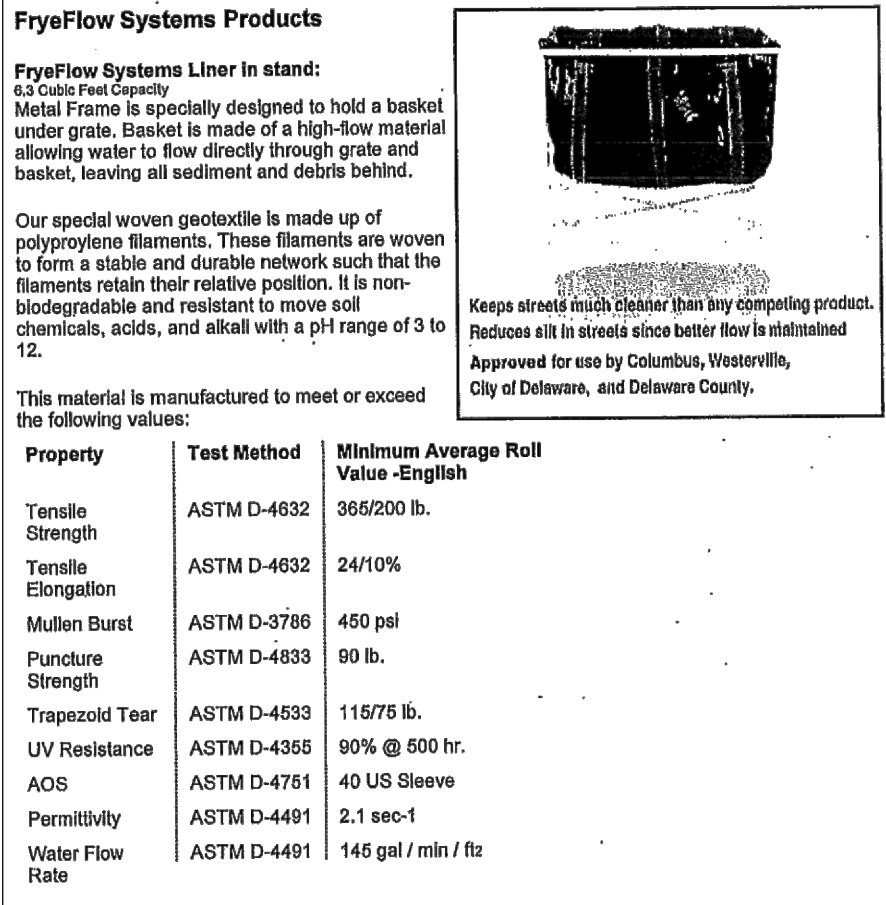
TEMPORARY SEEDING AND/OR PERMANENT SEEDING PER NOTES ON SHEET 15



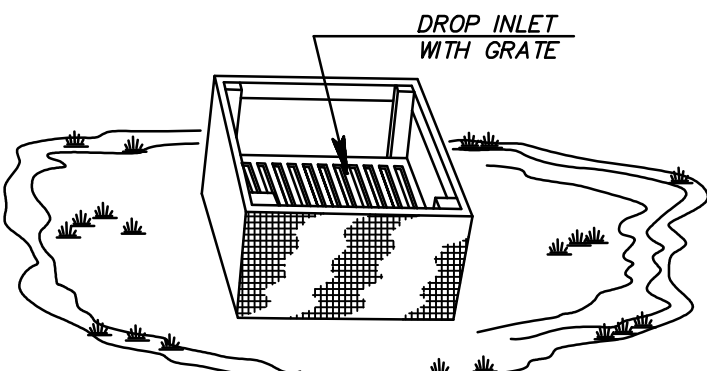
NOTE: SILT FENCE SHALL BE INSTALLED BEFORE EARTH DISTURBING ACTIVITIES COMMENCE.

SILT FENCE DETAIL

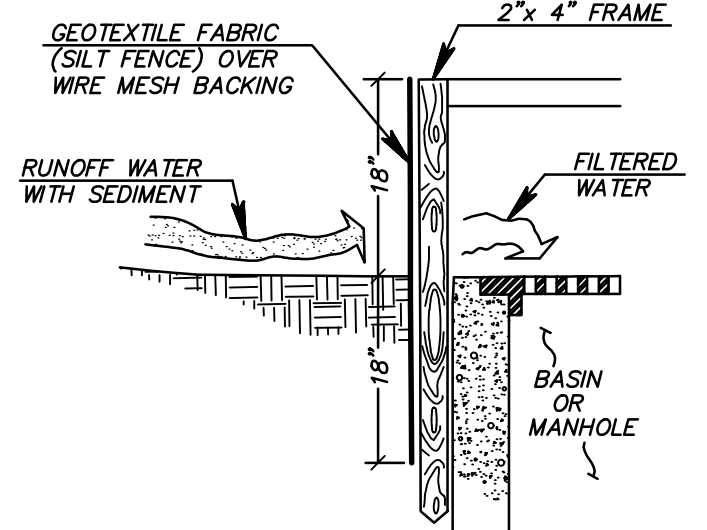
NO SCALE



INLET PROTECTION FOR STREET INLETS



SILT FENCE BOX FORMED WITH 2"x 4" POSTS, CROSSBRACING, AND WIRE MESH WITH FILTER FABRIC STAPLED TO OUTSIDE.



INLET PROTECTION FOR YARD INLETS

INLET PROTECTION DETAIL

NO SCALE

IP

REVISIONS

GENERAL NOTES & DETAILS
CHIPPEWA RD. & CALVIN RD. SANITARY
(WISE RD. TO RIVERVIEW RD.)
CITY OF BRECKSVILLE
CUYAHOGA COUNTY, OHIO

DONALD G. BOHNING & ASSOCIATES, INC.
CIVIL ENGINEERING & SURVEYING
7979 HUB PARKWAY • VALLEY NEW, OHIO 44125
PHONE: (216) 642-1130 FAX: (216) 642-1132
E-MAIL: d.g.bohning@dhginc.com 5/12/2011 11:36:07 PM EDT

16
20

HORIZ. SCALE

VERT. SCALE

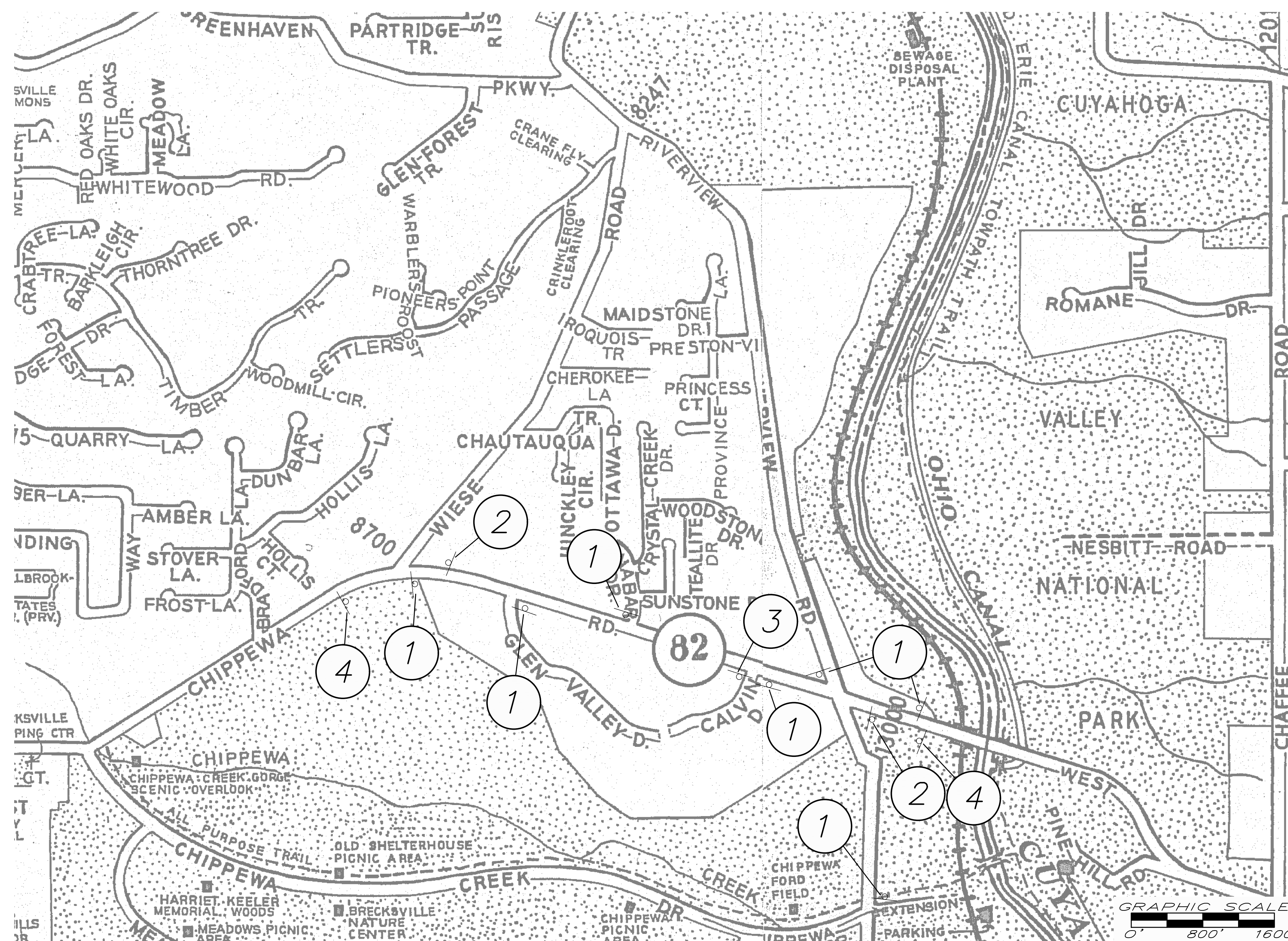
DRN. E.W. C.D. G.W.

DATE

MAR, 2022

ORDER NO.

3810-289-E



TRAFFIC CONTROL SIGN LEGEND

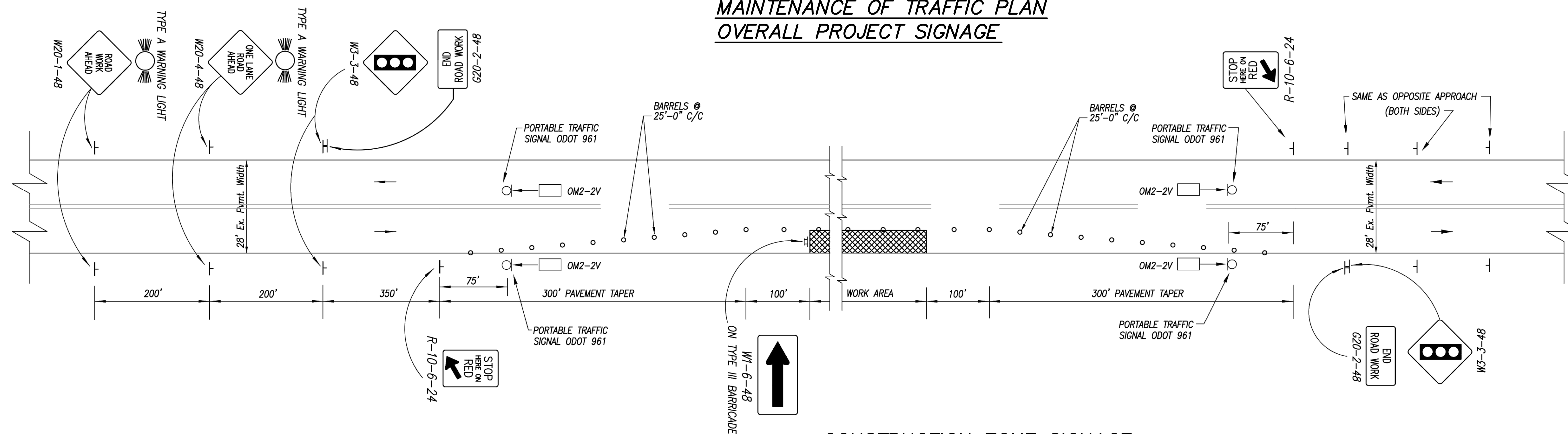
- The diagram illustrates four types of traffic signs used in road construction or maintenance:

 - 1** **Advance Roadwork Warning** (D3-1): A rectangular sign with a black border and the text "CHIPPEWA ROAD" at the top. Below it is a diamond-shaped sign with a black border and the text "ROAD WORK AHEAD".
 - 2** **End Road Work** (G20-2): A rectangular sign with a black border and the text "END ROAD WORK".
 - 3** **Road Closed to Through Traffic** (R5-1): A rectangular sign with a black border and the text "ROAD CLOSED TO THROUGH TRAFFIC". To its right is a circular sign with a black border, a black background, and white text that reads "DO NOT ENTER".
 - 4** **Electronic Messaging Boards**: A rectangular sign with a black border and the text "ELECTRONIC MESSAGING BOARDS".

NOTES:

- 1.) ALL WORK SHALL BE PER THE MAINTAINING TRAFFIC NOTE PAGE 15
- 2.) MOT SHALL BE DEVELOPED BY THE CONTRACTOR BASED ON THEIR METHOD OF OPERATION AND SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL
 - A.) MAXIMUM 1000-FEET ZONE BETWEEN SIGNALS
 - B.) FLAGGER REQUIRED FOR VEHICLES ENTERING ZONE BETWEEN SIGNALS
 - C.) ZONE SHALL REMAIN IN PLACE UNTIL PAVEMENT ALONG CHIPPEWA ROAD RESTORED
 - D.) FLAGGERS REQUIRED TO DIRECT TRAFFIC FOR WORK ON RIVERVIEW ROAD. ROADWAY SHALL BE BROUGHT BACK TO NORMAL TWO-TRAFFIC DURING NON-WORK HOURS.
- 3.) CONTRACTOR REQUIRED TO PROVIDE 2 ELECTRONIC MESSAGING BOARDS FOR 2-MONTHS EACH. THE INTENT WOULD BE TO POST ADVANCED NOTIFICATION PRIOR TO CONSTRUCTION AND PROVIDE NOTIFICATION AT THE ONSET OF CONSTRUCTION. NOTIFICATIONS MUST BE APPROVED BY THE CITY PRIOR TO POSTING.

MAINTENANCE OF TRAFFIC PLAN
OVERALL PROJECT SIGNAGE



CONSTRUCTION ZONE SIGNAGE
ODOT STANDARD PARTIAL CLOSING OF 1 LANE OF A 2 LANE HIGHWAY
AND MAINTENANCE OF TWO-WAY TRAFFIC

	REVISIONS	
MAINTENANCE OF TRAFFIC PLAN CHIPPEWA RD. & CALVIN DRIVE SANITARY (WEISE RD. TO RIVERVIEW RD.) CITY OF BRECKSVILLE CUYAHOGA COUNTY, OHIO		
DONALD G. BOHNING & ASSOCIATES, INC. CIVIL ENGINEERING & SURVEYING 7979 HUB PARKWAY • VALLEY VIEW, OHIO 44125 PHONE: (216) 642-1130 FAX: (216) 642-1132 E: donald@dgbohn.com valley@dgbohn.com info@dgbohn.com		
		
HORIZ. SCALE: AS NOTED VERT. SCALE: AS NOTED DRN: E. W. C&D: G. W. DATE: FEB, 2022 ORDER NO.: 3810-289-		
17 20		

