

CITY OF BROOK PARK, OHIO

P/C
CA 9/10/25, 9/16/25
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2nd R
3rd R

ORDINANCE NO. 11493-2025

INTRODUCED BY: MAYOR ORCUTT AND COUNCIL AS A WHOLE

AN ORDINANCE

AUTHORIZING THE MAYOR TO ENTER INTO A COOPERATION AGREEMENT BY AND BETWEEN CUYAHOGA COUNTY, OHIO, THE NORTHEAST OHIO REGIONAL SEWER DISTRICT, THE CITY OF BROOK PARK AND THE CITY OF MIDDLEBURG HEIGHTS, FOR THE CONSTRUCTION OF THE SHELDON ROAD PROFILE RAISING & BRIDGE REPLACEMENT PROJECT, AND DECLARING AN EMERGENCY

WHEREAS, Sheldon Road at the Abrams Creek crossing has a history of flooding; and

WHEREAS, Cuyahoga County is responsible for the maintenance and repair of the Sheldon Road bridge, and has agreed to contribute to the costs of construction, inspection and construction management for the bridge; and

WHEREAS, the cities of Brook Park and Middleburg Heights share responsibility for the maintenance of Sheldon Road, as the municipal jurisdictional boundary serves as the centerline of such Road, therefore the cities agree to contribute to a portion of the cost of the construction, inspection and construction management of the Sheldon Road Profile Raising and Bridge Replacement Project; and

WHEREAS, in compliance with the Brook Park Service Agreement and the Middleburg Heights Service Agreement, the Northeast Ohio Regional Sewer District has agreed to contribute a portion of the cost of the construction, inspection and construction management of the Project.

NOW, THEREFORE BE IT ORDAINED by the Council of the City of Brook Park, State of Ohio, that:

SECTION 1: The mayor is hereby authorized to enter into the agreement for the construction of the Sheldon Road Profile Raising & Bridge Replacement Project, which is attached hereto and incorporated herein as Exhibit "1".

SECTION 2: The money needed to complete the aforesaid project shall be paid from funds to be determined and theretofore appropriated or to be appropriated in the 2026 General Budget

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BROOK PARK CITY COUNCIL

and/or the Brook Park Community Cost-Share Funds (Regional Stormwater Management Program).

SECTION 3: It is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action, were in meetings open to the public, in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

SECTION 4: This Ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, health, safety of said City, and for the further reason that City Council deems it necessary to proceed with the construction of the Sheldon Road Profile Raising & Bridge Replacement Project, therefore, provided this Ordinance receives the affirmative vote of at least five (5) members elected to Council, it shall take effect and be in force immediately from and after its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

PASSED: September 16, 2025 Richard [Signature]
PRESIDENT OF COUNCIL

ATTEST: Carol Johnson APPROVED: [Signature]
CLERK OF COUNCIL MAYOR

9-17-25
DATE

CERTIFICATE
Carol Johnson, Clerk of Council, of the City of Brook Park, Ohio, do hereby certify that the foregoing is a true and accurate copy of Ordinance Resolution No. 11493-2025 passed on the 16 day of September 20 25 by said council.

Carol Johnson
Clerk of Council

	Yea	Nay
Troyer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mencini	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roberts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Scott	<input checked="" type="checkbox"/>	<input type="checkbox"/>
McCorkle	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Poindexter	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dufour	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Unanimous

I HEREBY APPROVE THE WITHIN INSTRUMENT AS TO LEGAL FORM AND CORRECTNESS.

[Signature]
DIRECTOR OF LAW

**COOPERATION AGREEMENT
BY AND BETWEEN
COUNTY OF CUYAHOGA, OHIO,
NORTHEAST OHIO REGIONAL SEWER DISTRICT,
CITY OF BROOK PARK
AND
CITY OF MIDDLEBURG HEIGHTS
FOR
THE CONSTRUCTION OF THE SHELDON ROAD PROFILE RAISING & BRIDGE
REPLACEMENT PROJECT
(ALSO KNOWN AS "ABRAMS CREEK FLOOD REDUCTION PROJECT")**



This Cooperation Agreement ("Agreement") is entered into as of this _____ day of _____, 2025 ("Effective Date"), by and between the County of Cuyahoga, a body corporate and politic and a political subdivision of the State of Ohio organized and existing under the Charter of Cuyahoga County effective January 1, 2010, as the same may have been amended, modified, and supplemented to the effective date hereof (the "County"), acting pursuant to Resolution No. _____, adopted by Cuyahoga County Council on _____, 202__ (attached as Exhibit "A"), the Northeast Ohio Regional Sewer District ("District"), a regional sewer district organized and existing as a political subdivision under Chapter 6119 of the Ohio Revised Code, pursuant to the authority of its Board of Trustees Resolution No. _____, adopted on _____ (attached as Exhibit "B"), the City of Brook Park ("Brook Park"), a Charter Municipality of the State of Ohio, acting pursuant to Ordinance No. ____, adopted by its City Council on _____, 202__ (attached hereto as Exhibit "C"), and the City of Middleburg Heights ("Middleburg Heights"), a Charter Municipality of the State of Ohio, acting pursuant to Ordinance No. ____, adopted by its City Council on _____, 202__ (attached hereto as Exhibit "D"). The County, the District, Brook Park, and Middleburg Heights are referenced in this Agreement individually as a "Party" and collectively as "Parties." Brook Park and Middleburg Heights are also referenced in this Agreement collectively as "Cities."

RECITALS

WHEREAS, the Parties desire to perform the Sheldon Road Profile Raising & Bridge Replacement Design Project, which includes the expansion of the Sheldon Road Bridge the "Bridge") opening to convey the 100-year storm event and raising the profile and replacement of Sheldon Road to allow for acceptable passable conditions ("the Project"); and

WHEREAS, pursuant to a Project Agreement between the District and Brook Park, Brook Park retained Euthenics, Inc. ("Euthenics") as a consultant to perform the engineering design for the Project, and the District has agreed to reimburse Brook Park for costs incurred for the engineering design of the Project: and

WHEREAS, as the County is responsible for the maintenance and repair of the Bridge, the County agreed to contribute to the cost of the construction, inspection and construction management of the Bridge and to provide construction management services, select the contractor and construct the entire Project, as further described below; and

WHEREAS, the Cities share responsibility for the maintenance of Sheldon Road, as the municipal jurisdictional boundary serves as the centerline of such Road, therefore the Cities agreed to contribute to a portion of the cost of the construction, inspection and construction management of Sheldon Road, as described below; and

WHEREAS, Brook Park and the District entered into a Service Agreement where the District provides maintenance to the Regional Stormwater System within the territorial boundaries of Brook Park (the "Brook Park Service Agreement"); and

WHEREAS, Middleburg Heights and the District entered into a Service Agreement where the District provides maintenance to the Regional Stormwater System within the territorial boundaries of Middleburg Heights; and WHEREAS, the Parties desire to enter into this Agreement to define their responsibilities for constructing the Project.

WHEREAS, in compliance with the Brook Park Service Agreement and Middleburg Heights Service Agreement, the District agreed to contribute to a portion of the cost of the construction, inspection and construction management of the Project, as described below.

NOW, THEREFORE, in consideration of the foregoing and the agreements set forth herein for the continued benefit of the Regional Stormwater System, the Parties agree as follows:

SECTION 1. OBLIGATIONS OF CUYAHOGA COUNTY

1.1. Performance of the Project. The County agrees to engage the necessary personnel, materials and equipment to supervise and administer the construction of the Project in accordance with the plans included in Exhibit "E," which include the replacement of the Bridge between approach slabs with a precast concrete box beam bridge (the "Bridge Project") and raising the profile and replacing Sheldon Road to improve stream function and mitigate flooding (the "Road Project"). The estimate of probable cost for the construction of the Project, including the construction administration and inspection, is \$7,219,559.00 ("Construction Cost").

1.1.1. Construction, Testing and Construction Inspection by the County. The County shall arrange for the construction, inspection, supervision, and administration of the construction of the Project, subject to contribution from the District and the Cities as provided herein.

1.1.2. Permits. Brook Park conducted title examinations and performed appraisals for the acquisition of all the properties and easements necessary for the construction and

maintenance of the Project and coordinated with all utility companies in finalizing the plans and specifications. Brook Park (through its consultant Euthenics) shall obtain all environmental permits necessary for the construction of the Project.

- 1.1.3. Construction Change Management. If there is a need for a construction change that results in an increase of the Construction Cost, the County will inform the other Parties via email before authorizing the work. The District agrees to review and approve such construction change within a reasonable time.
- 1.1.4. Prevailing Wages. For the labor used for constructing the Project, the County shall pay prevailing wages as set forth in Chapter 4115 of the Ohio Revised Code and shall ensure compliance with any prevailing wage requirements in said Chapter.
- 1.1.5. Copies of Contracts & Insurance. The County shall promptly, upon request of the other Parties to this Agreement, provide an exact copy of the Construction Contract (defined below in Section 4.1) and the certificate of insurance of any contractors performing the Project.
- 1.2. County Funds. The County agrees to contribute an amount not to exceed \$1,500,000 for the construction of the Bridge Project and the construction administration and inspection of the Project (the "County Funds"). The amount of the County Funds may be revised as provided in Section 1.3 below.
- 1.3. OPWC Funding. The County will prepare a grant application for funding from the Ohio Public Works Commission ("OPWC"). If the application is accepted, any funds received from the OPWC for the Project will be applied first to reduce the County's funding obligations under section 1.2. In the event the OPWC award is in excess of the County Funds, the remaining funds will then be applied to reduce the amount of funding due from the District and Cities for both the Road Project and the Bridge Project as described below.
- 1.4. Competitive Bidding Requirements. County agrees to comply with the applicable competitive bidding requirements, including but not limited to the applicable contract provisions included in the Procurement Standards of 2 CFR Part 200, Appendix II to Part 200, and the EPA's Subaward Policy pursuant to the terms of the Subaward Agreement between the District and the County for the Federal Award (defined below in Section 2.2)
- 1.5. Reimbursement requests. The County shall provide to the District reimbursement requests no more than monthly and the District shall remit payment after receipt of documentation to the District's reasonable satisfaction and submitted in a form sufficient to allow the District to review, inspect and approve the County's invoices. Furthermore, all reimbursement requests shall comply with the terms of the Subaward Agreement between the District and the County for the Federal Award (defined below in Section

2.2) and the applicable EPA General Terms and Conditions, including but not limited to the certifications described in 2 CFR 200.415 for submitting financial and performance reports.

- 1.6. Record drawings. Upon the completion of the Project, the County will provide the other Parties with record drawings for the Project.
- 1.7. Compliance with laws. The County shall comply with any applicable state, federal and local statutes, policies, and regulations relating to equal opportunities, non-discrimination, prevailing wages, environmental, historic preservation, and all applicable floodplain management codes.
- 1.8. Project Schedule. The County agrees to solicit bids and award the construction contract for the Project no later than December 31, 2026. The Parties shall work together to develop a Project start and anticipated completion date. County shall keep the Parties informed of the progress of the Project and any anticipated changes to the schedule.
- 1.9. Public Participation, Outreach, and Signage. The Parties shall acknowledge the other Parties in presentations or publications related to the Project. The Parties shall work together to develop a public notification plan to inform the public of the Project. The Parties shall acknowledge the other Parties on Project-related public outreach communications and in County public meetings that discuss the Project.
- 1.10. Maintenance. Upon completion of the construction of the Project, the County will be responsible for the inspection and major maintenance of the Sheldon Road Bridge.

SECTION 2. OBLIGATIONS OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT

- 2.1. District Funds. The District agrees to contribute 90% of the actual costs of constructing the Road Project, including the County's costs to manage and inspect the construction. The District also agrees to contribute 100% of the actual cost to construct the Bridge Project that is in excess of the County Funds and the OPWC Funds. The total amount of the District's funding obligations shall not exceed \$5,00,422.50 (the "District Funds").
- 2.2. Federal Funding (the "Federal Award").
 - 2.2.1. Award. The U.S. Environmental Protection Agency ("EPA") awarded to the District a Community Grant for the Project (also known as the "Abrams Creek Flood Reduction Project" for the Federal Award purposes) in the amount of \$2,724,800.00 (the "Grant"). The District desires to pass through the Grant funds to the County as a subrecipient of the Grant for the purpose of bidding, supervising and administering the construction of the Project

2.2.2. Subaward Agreement. For the purposes of the Federal Award, the District will be considered a pass-through entity and the County will be considered a subrecipient of the Federal Award. To that end, the District and the County shall enter into a Subaward Agreement addressing the responsibilities of the parties to comply with the terms of the Grant, including the current EPA General Terms and Conditions effective October 1, 2024 or later.

2.2.3. Any funds received by the District from the Federal Award will be applied first to reduce the amount of the District Funds.

2.3. Meeting Participation. The District shall have the right to attend all Project progress meetings, for which the District will receive at least two (2) working days' advance notice. The District shall receive the meeting minutes from each meeting from the County within ten (10) working days of the meeting for review and comment.

2.4. Project Presentations. The District shall acknowledge the County in presentations or publications related to the Project.

2.5. Maintenance. The District will maintain the regional storm sewer assets in accordance with the Brook Park Service Agreement and the Middleburg Heights Service Agreement.

SECTION 3. OBLIGATIONS OF THE CITIES

3.1. City Funds. The Cities agree to contribute 10% of the actual costs of constructing the Road Project, including the County's costs to manage and inspect the construction, for a total not-to-exceed amount from the Cities combined of \$555,826.00 (the "City Funds"), as described below. If the actual cost of the Road Project exceeds the Cities' share of the Construction Cost, the Cities shall seek additional authority from their respective City Councils to amend the Community Cost Share Transfer Agreements described below to reimburse the District their proportional share of such additional costs.

3.2. Brook Park.

3.2.1 Brook Park and Euthenics shall prepare the Project bid documents that comply with the flow-down¹ requirements imposed on the District under the Federal Award to ensure that the EPA Grant is used in accordance with all applicable Federal statutes, regulations, and the terms of the Federal Award. These requirements include,

¹ "Flow-down" requirements include those statutory, regulatory, and Executive Order requirements that the District, as a "pass-through entity" of the EPA Grant to the County as a "subrecipient," is required to identify as potentially applying to subrecipients on EPA funded projects under 2 CFR 200.332 (a)(2).

but are not limited to, the Procurement Standards in 2 CFR Part 200, including competitive bidding and Domestic preferences for procurement at 2 CFR 200.322.

3.2.2 The District and Brook Park agree to enter into a Community Cost-Share Transfer Agreement where the City shall transfer to the District from the City's Community Cost-Share Account 5% of the cost of the Road Project in the amount estimated at \$277,913.00 ("Brook Park Community Cost-Share Funds"). Brook Park shall submit to the District an application for the Community Cost-Share Funds and execute a Community Cost-Share Transfer Agreement before July 1, 2026. After the execution of the Community Cost-Share Transfer Agreement but no later than December 31, 2026, Brook Park shall submit to the District a Fund Transfer Request form (Exhibit "F") for the entire amount of the Brook Park Community Cost-Share Funds.

3.2.3 In addition to the amount described in Section 3.2.2 above, Brook Park agrees to contribute \$161,310.50 ("Brook Park Sewer Funds") for the construction of the sanitary sewer described in the plans and specifications attached to the Agreement as Exhibit "E." Brook Park shall deposit the Brook Park Sewer Funds with the Treasurer of Cuyahoga County prior to an award of a construction contract for the Project, but no earlier than 30 days prior to such contract award.

- 3.3. Middleburg Heights. The District and Middleburg agree to enter into a Community Cost-Share Transfer Agreement where the City shall transfer to the District from the City's Community Cost-Share Account 5% of the cost of the Road Project in the amount estimated at \$277,913.00 ("Middleburg Heights Community Cost-Share Funds"). Middleburg Heights shall submit to the District an application for the Community Cost-Share Funds and execute a Community Cost-Share Transfer Agreement before July 1, 2026. After the execution of the Community Cost-Share Transfer Agreement but no later than December 31, 2026, Middleburg Heights will submit to the District a Fund Transfer Request form (Exhibit "F") for the entire amount of Middleburg Heights Community Cost-Share Funds.
- 3.4. In the event that the amount of the OPWC Funds and the Federal Award are sufficient to pay for more than 90% of the actual cost of the Road Project, such excess shall be applied to decrease the City Funds by proportionally reducing the Brook Park Community Cost-Share Funds and the Middleburg Heights Community Cost-Share Funds.
- 3.5. Required documents. The County shall provide the Cities with documentation to the Cities' reasonable satisfaction and submitted in a form sufficient to allow the Cities to review, inspect and approve the County's invoices.
- 3.6. Permits. Brook Park (through its consultant Euthenics) shall obtain all required federal, state, and local permits or other approvals necessary to commence and complete the construction of the Project.

- 3.7. Access. The Cities hereby grant the County all rights of access necessary for the construction of the Project and waive all City permitting or other fees related to the performance of all aspects of the Project. The County may enter upon and use all access roads in and around the Project area.
- 3.8. Meeting Participation. The Cities shall have the right to attend all Project progress meetings, for which the Cities will receive at least two (2) working days' advance notice. The Cities shall receive the meeting minutes from each meeting from the County within ten (10) working days of the meeting for review and comment.
- 3.9. Project Presentations. The Cities shall acknowledge the County and the District in presentations or publications related to the Project.
- 3.10. Maintenance. Upon the completion of the construction of the Project, the Cities will be responsible for the routine maintenance of the Bridge and the major and routine maintenance of Sheldon Road.

SECTION 4. SPECIAL PROVISIONS

- 4.1. Real Property. The County and the Cities agree to hold title of all the necessary rights of entry, temporary and permanent easements necessary for the Project.
- 4.2. Construction Contract. The contractor selected by the County ("County Contractor") shall be awarded the public improvement contract to construct the Project (the "Construction Contract") following the Procurement Standards of 2 CFR Part 200, Appendix II to Part 200, and the EPA's Subaward Policy. The contract between the County and the County Contractor shall include all applicable clauses stipulated at 2 CFR Part 200.327 and Appendix II. Once the County Contractor is selected and before the Construction Contract is approved by the Cuyahoga County Council, the County shall inform the District and the Cities of the amount of the Construction Contract and the identity of the County Contractor; and the District and the Cities shall acknowledge their approval in writing.

The County agrees to submit to NEORSD, within ten calendar days after a bid opening, or as soon as practicable, the bid package of the lowest and best bidder for review prior to the award of a contract, or as soon as practicable thereafter if a contract has been executed. The bid package will include the bid tabulation, a copy of the proof of advertising, the bid bond of the low bidder, the Minority Business Enterprise (MBE) / Women's Business Enterprise (WBE) proposed utilization by the low bidder with a statement from the County that the efforts taken by the low bidder meet the statutory/regulatory requirements, if applicable, and the recommendation to award a contract to the low bidder.

- 4.3. Reconciliation of Funds. Within 60 days from the final completion of the Project, the County shall reconcile the actual cost expended under the Construction Contract against

the estimated Construction Cost and the total payments received from the District. The County shall calculate each Party's share of the actual construction cost of the Project, including the costs of inspection and construction management, and reconcile the actual costs of the Project with the County Funds, the District Funds and the City Funds, and shall provide each Party a report of such reconciliation.

- 4.4. Liabilities; No Indemnification. The Parties acknowledge that, as political subdivisions of the State of Ohio, they are unable to indemnify any person or entity. The Parties agree that no provision of this Agreement or any other contract or agreement between them may be interpreted to obligate the one Party to indemnify or defend any other Party.

Each Party shall be responsible for all damages, suits, actions or claims of any character brought on account of claims arising from its activities or its consultant or contractor activities related to the Project, whether in contract or in tort for any injuries or damages sustained by any person or property resulting from negligence or on account of any wrongful act or omission of that party or its consultant or contractor.

No Party shall incur any liability or be responsible for any claim arising from the other Parties' activities related to the Project.

- 4.5. Change Requests. If any one or more of the Cities or the District formally requests that the County include the construction of sanitary sewers, waterlines, area sewers (drainage of area surrounding the improvement), sidewalks, alternate bid items, or other items in the Project that are in addition to those now existing and not provided for elsewhere in this Agreement, the County will do so, provided that this construction meets with the approval of the County and the Party requesting the addition; and that the Party requesting the County complete the addition agrees to pay, or make arrangements for the payment of, the cost of said additional construction, the cost of preliminary and design engineering, and construction supervision.

- 4.6. Additional Funds. In the event the Construction Cost discussed in Section 1.1 is insufficient to cover the amount of the Construction Contract, the District and the Cities agree to seek additional authority from their respective Councils and Board of Trustees to enter into an amendment to this Agreement to the Project for their proportional share of such additional cost.

SECTION 5. TERM

- 5.1. The Term of this Agreement shall commence on the Effective Date and shall expire upon successful completion of the obligations contained herein by all Parties.

SECTION 6. MISCELLANEOUS

- 6.1. Authority to Execute. Each person executing this Agreement represents and warrants that he is duly authorized to execute this Agreement by the Party on whose behalf he is so executing.

- 6.2. Binding on Successors. This Agreement is binding upon, and inures to the benefit of, the Parties and their respective permitted successors and assigns.
- 6.3. Counterpart Signatures. 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. The Parties agree that this Agreement may be executed and distributed for signatures via email, and that the emailed signatures affixed by the Parties to this Agreement shall have the same legal effect as if such signatures were in their originally written format.
- 6.4. Disclaimer of Joint Venture. 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.
- 6.5. Governing Law. 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).
- 6.6. Modification of Agreement. This Agreement may only be modified by written instrument executed by each Party.
- 6.7. Merger Clause. This Agreement, along with any exhibits and amendments hereto, encompasses the entire agreement of the Parties, and supersedes all previous understandings and agreements between the Parties, whether oral or written.
- 6.8. No Third-Party Beneficiaries. Nothing in this Agreement, express or implied, is intended to or shall confer upon any person other than the parties hereto, any legal or equitable right, benefit, or remedy of any nature under or by reason of this Agreement.
- 6.9. Remedies. The Parties agree that, after exhausting the dispute resolution process outlined above, all claims, counterclaims, 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.
- 6.10. Severability. If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid, in whole or in part for any reason, such provision shall be stricken from this Agreement and such provision shall not affect the validity of the remainder of this Agreement.

NOTICES

- 6.11. All notices delivered hereunder shall be made by email or regular U.S. mail to the following:

COUNTY

Thomas Sotak
Deputy Chief Engineering
Cuyahoga County Department of Public Works
2789 East 9th Street
Cleveland, Ohio 44115
tsotak@cuyahogacounty.us

DISTRICT

Kimberly Colich, P.E.
Stormwater Program Manager
NEORS
3900 Euclid Avenue
Cleveland, OH 44115
colichk@neorsd.org

CITY OF BROOK PARK

Edward R. Piatak, P.E.
City Engineer
Euthenics, Inc.
8235 Mohawk Drive
Cleveland, OH 44136
Phone no. (440) 260-1555
erpiatak@euthenics-inc.com.

CITY OF MIDDLEBURG HEIGHTS

Kim Kerber, P.E.
City Engineer
Wallace Pancher Group
7017 Pearl Rd.
Cleveland, OH 44130
phone no: (440) 886-4500
kkerber@mamiksmithgroup.com

SECTION 7. EXHIBITS

7.1. The Exhibits attached to this Agreement are incorporated into and made part of this Agreement as though expressly rewritten herein. In the event of a conflict between the provisions of this Agreement and the Exhibits, these documents shall be given priority in the following order: 1) the District's Resolution; 2) the County's Resolution; 3) the Cities Resolutions; 4) the main body of this Agreement; 5) the Project plans and specifications; and 6) District's Fund Transfer Request form.

- Exhibit "A" - County's Resolution
- Exhibit "B" - District's Resolution
- Exhibit "C" - Brook Park's Resolution
- Exhibit "D" - Middleburg Heights Resolution
- Exhibit "E" - Project plans
- Exhibit "F" - District Fund Transfer Request form

[signatures on the following pages]

The Parties hereto have executed and delivered this Agreement as of the date first above written.

CUYAHOGA COUNTY, OHIO

By: _____
Christopher Ronayne, County Executive

The legal form and correctness
of this instrument is approved.

Rick Manoloff
Law Director

By: _____

Date: _____

NORTHEAST OHIO REGIONAL SEWER DISTRICT

By: _____
Kyle Dreyfuss-Wells
Chief Executive Officer

and: _____
Darnell Brown, President
Board of Trustees

The legal form and correctness
of this instrument is approved.

Eric Luckage
Chief Legal Officer

By: _____

Date: _____

This Instrument Prepared By:

Anka M. Davis
Assistant General Counsel
Northeast Ohio Regional Sewer District

CITY OF BROOK PARK

By: _____
Edward Orcutt, Mayor

The legal form and correctness
of this instrument is approved.

Carol Dillon Horvath
Law Director

By: 

Date: 9/4/25

CITY OF MIDDLEBURG HEIGHTS

By: _____
Matthew Caselli, Mayor

The legal form and correctness
of this instrument is approved.

Santo T. Incorvaia
Law Director

By: _____

Date: _____

AGREEMENT NO.

NORTHEAST OHIO REGIONAL
SEWER DISTRICT

WITH

CUYAHOGA COUNTY, OHIO,
CITY OF BROOK PARK
AND
CITY OF MIDDLEBURG HEIGHTS

FOR

THE CONSTRUCTION OF SHELDON
ROAD PROFILE RAISING & BRIDGE
REPLACEMENT DESIGN PROJECT
(ALSO KNOWN AS "ABRAMS
CREEK FLOOD REDUCTION
PROJECT")

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

Total Approximate Cost:	\$7,219,559.00
County Funds:	\$1,500,000.00
District Funds:	\$5,002,422.50
Brook Park Funds:	\$439,223.50
Middleburg Heights Funds:	\$277,913.00

Date

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

ERIC J. LUCKAGE
CHIEF LEGAL OFFICER

Date

EXHIBIT A

EXHIBIT B

EXHIBIT C

EXHIBIT D

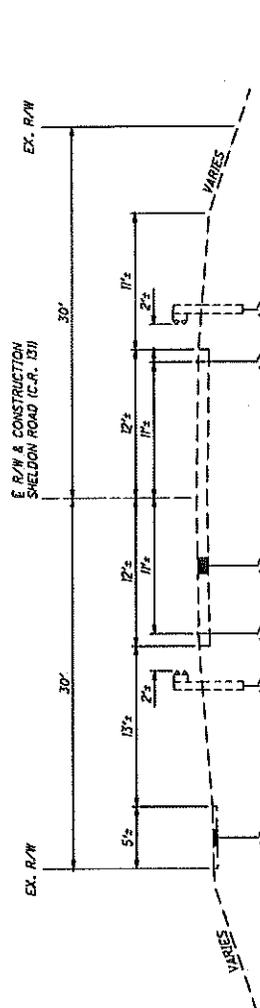
EXHIBIT E

TYPICAL SECTIONS

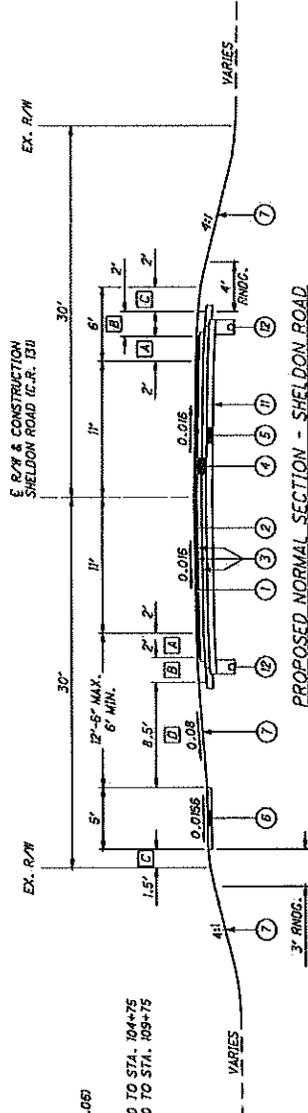
CUY-SHELDON RD.

EXISTING LEGEND

- (A) 10" ASPHALT PAVEMENT
 - (B) 4" CONCRETE WALK
 - (C) EXISTING GUARDRAIL
 - (D) EXISTING EDGE LINE
- PROPOSED LEGEND
- (1) ITEM 441 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (M48), P10-22, AS PER PLAN
 - (2) ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (M48), AS PER PLAN
 - (3) ITEM 407 - NON-TRACKING TACK COAT 10.055 GAL/5YD
 - (4) ITEM 302 - 8" ASPHALT-CONCRETE BASE, P664-22, (M48), AS PER PLAN (TWO EQUAL LIFTS)
 - (5) ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
 - (6) ITEM 508 - 4" CONCRETE WALK, AS PER PLAN
 - (7) ITEM 559 - SEEDING AND MULCHING, AS PER PLAN
 - (8) ITEM 304 - 8" AGGREGATE BASE, AS PER PLAN
 - (9) ITEM 422 - AGGREGATE, SINGLE CHIP SEAL, TYPE A
 - (10) ITEM 422 - EMULSION, CHIP SEAL
 - (11) ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T = 12" DEEP)
 - (12) ITEM 204 - SUBGRADE COMPACTION
 - (13) ITEM 605 - 6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC
 - (14) ITEM 606 - GUARDRAIL, TYPE MGS
 - (15) ITEM 606 - GUARDRAIL, TYPE MGS WITH LONG POSTS
 - (16) ITEM 608 - CURB, TYPE 4-C
 - (18) ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1



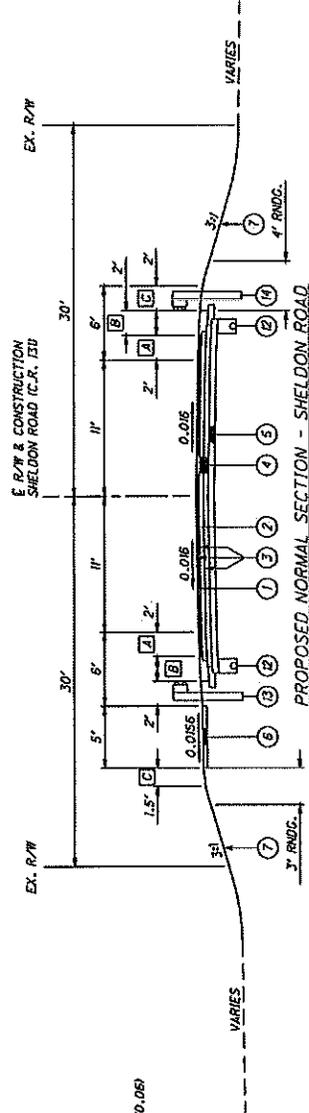
EXISTING NORMAL SECTION - SHELDON ROAD
STA. 100+80 TO STA. 104+40



PROPOSED NORMAL SECTION - SHELDON ROAD
STA. 104+50 TO STA. 109+50.00

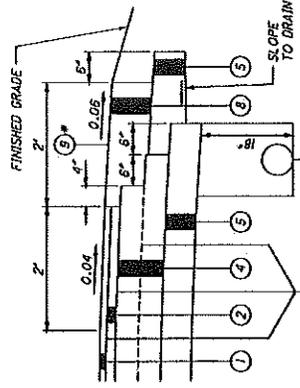
- (A) PAVED SHOULDER (10.04)
- (B) ASPHALT SURFACE TREATED SHOULDER (10.06)
- (C) SEEDING (10.08)
- (D) TRANSITION 2.5' TO 2' FROM STA. 104+50 TO STA. 104+75
- (E) TRANSITION 2' TO 8.5' FROM STA. 109+50 TO STA. 109+75

NOTES:
1. SUBGRADE COMPACTION DOES NOT APPLY OVER LIGHTWEIGHT FILL FROM STA. 104+00.00 TO STA. 104+50.00



PROPOSED NORMAL SECTION - SHELDON ROAD
STA. 106+30 TO STA. 106+30.25

- (A) PAVED SHOULDER (10.04)
- (B) ASPHALT SURFACE TREATED SHOULDER (10.06)
- (C) SEEDING (10.08)



EDGE COURSE DETAIL - SHELDON ROAD
ONLY PLACE ITEM 422 - CHIP SEAL ON ASPHALT SURFACE TREATED SHOULDER

GENERAL

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSS-SECTIONS, EVEN THOUGH OTHERWISE SHOWN.

UTILITIES

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

CITY OF BROOK PARK
 8995 HOLLAND ROAD
 BROOK PARK, OHIO 44142
 CONTACT: BRIAN BEYER,
 SERVICE DIRECTOR
 PHONE: (216) 433-7182
 bbeyer@cityofbrookpark.com

AT&T OHIO
 13630 LORAIN AVENUE, 2ND FLOOR
 CLEVELAND, OHIO 44111
 CONTACT: DENISE PLANT
 PHONE: (216) 302-5183
 dp729@att.com

CEL FIRST ENERGY
 6806 MILLER ROAD
 BUCKSVILLE, OHIO 44141
 CONTACT: JOHN M. ZASSICK
 PHONE: (440) 548-8706
 jzassick@firstenergycorp.com

CITY OF CLEVELAND
 DIVISION OF WATER
 1201 LAKESIDE AVENUE
 CLEVELAND, OHIO 44114
 CONTACT: FRED ROBERTS
 PHONE: (216) 694-2444 EXT. 745890
 fred.roberts@cityofclevelandohio.com

TC ENERGY (COLUMBIA GAS)
 7090 FRY ROAD
 MIDDLEBURG HEIGHTS, OH 44130
 ATTN: DAN SUREN
 PHONE: (440) 891-2428
 dsuren@source.com

WINDSTREAM
 2185 STATE ROUTE 103
 SOUTH BLANCHESTER, OHIO 45107
 ATTN: LEON TAYLOR,
 PHONE: (937) 725-5358
 leon.taylor@windstream.com

NORTHEAST OHIO REGIONAL SENIOR DISTRICT (NEORSD)
 3800 EUCLID AVE.
 CLEVELAND, OH 44115
 ATTN:
 email address

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM OWNERS AS REQUIRED BY SECTION 853.64 O.R.C.

ENBRIDGE GAS OHIO

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF ENBRIDGE'S PIPELINES, IN COMPLIANCE TO 29 C.F.R. PART 1926. SUBPART P, (SAFE EXCAVATION & SHORING). EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY ENBRIDGE FACILITY PIPELINES, ETCL OR APPURTENANCE (PIES, VALVES, BOXES, ETC.). CATRIDGE PROTECTORS MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL ENBRIDGE EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF ENBRIDGE'S PIPELINES WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING ENBRIDGE FACILITY. PLEASE CONTACT ENBRIDGE'S CORROSION DEPARTMENT AT LEAST TWO WORKING DAYS BEFORE CONSTRUCTION AT: CORROSION@ENBRIDGE.COM

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 SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON THIS PROJECT. SEE SHEET 814.02 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
 POSITIONING METHOD: ODOT IRS
 MONUMENT TYPE: TYPE B

VERTICAL POSITIONING
 ORTHOMETRIC HEIGHT DATUM: NAVD88
 GEOID: 18

HORIZONTAL POSITIONING
 REFERENCE FRAME: NAD 83 (2011 ADJ. 2010.0 EPICHI)
 ELLIPSOID: GRS 80
 COORDINATE SYSTEM: CUYAHOGA COUNTY (CCCS)
 MAP PROJECTION: TRANSVERSE MERCATOR
 CENTRAL LATITUDE: N 40° 08' 00"
 CENTRAL LONGITUDE: W 81° 45' 00"
 FALSE NORTHING: 0 (METERS)
 FALSE EASTING: 50000 (METERS)
 PROJECTION SCALE FACTOR: 1.0000029

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 823.

UNITS ARE IN U.S. SURVEY FEET.

PRIMARY PROJECT CONTROL INFORMATION

POINT NUMBER	GROUND COORDINATES U.S. SURVEY FEET		ORTHOMETRIC HEIGHT (ELEVATION)	DESCRIPTION
	NORTHING	EASTING		
100	451546.052	139963.368	771.10	IPIN W/TRVERSE CAP
101	451496.23	140288.939	765.11	IPIN W/TRVERSE CAP
102	451469.864	140873.097	761.27	IPIN W/TRVERSE CAP
103	451451.507	141317.378	779.28	IPIN W/TRVERSE CAP

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. IN ADDITION TO THE REQUIREMENTS OF SECTION 814.05, THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES, INCLUDING SUCH ADDITIONAL TRAFFIC CONTROL DEVICES LOCATED OUTSIDE THE LIMITS OF CONSTRUCTION AS ARE REQUIRED ON HIGHWAYS WHICH ARE USED AS DETOURS, INCLUDING THE ROAD CLOSED SIGNED UPON THE BARRICADES AT THE POINT WHERE THE HIGHWAY IS CLOSED TO THROUGH TRAFFIC.

STATIONING AND LOCATIONS

STATIONING AND LOCATIONS INDICATED ON THESE PLANS ARE APPROXIMATE. ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD AS DIRECTED BY THE ENGINEER.

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM SITE MEASUREMENTS, PAVEMENT CORES, AND RECORD PLANS, AND ARE BELIEVED TO BE CORRECT. THE CONTRACTOR SHALL VERIFY THE EXISTING TYPICAL SECTIONS BY FIELD MEASUREMENTS AND SHALL FURNISH A COPY OF THE TYPICAL SECTIONS TO THE COUNTY ENGINEER. THE ROAD IS INCLUDED UNDER SECTION 500 OF THE "CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET" CONTAINED IN THE BID PACKAGE.

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN

THE FIELD OFFICE SHALL, IN ADDITION TO THE ITEMS LISTED IN ITEM 619, BE FURNISHED WITH TWO CELLULAR TELEPHONES.

THE CONTRACTOR'S INSURANCE SHALL INCLUDE A RIDER FOR COVERAGE OVER ANY CUYAHOGA COUNTY PROPERTY INSIDE THE FIELD OFFICE WHICH MAY BECOME DAMAGED OR STOLEN.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR THIS ITEM:
 ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN --- MONTHS

LOCAL LAWS, ORDINANCES AND REGULATIONS

IN ACCORDANCE WITH SECTION 107.01 OF THE GENERAL PROVISIONS, THE CONTRACTOR SHALL STAY FULLY INFORMED OF ALL LOCAL LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES THAT AFFECT THE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBSERVE AND COMPLY WITH ALL SUCH LAWS, ORDINANCES, REGULATIONS, ORDERS AND DECREES AT NO ADDITIONAL COST TO THE PROJECT/COUNTY.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM UNLESS OTHERWISE APPROVED BY THE MUNICIPALITIES. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

GENERAL PROVISIONS

ALL REFERENCES TO THE GENERAL PROVISIONS (SECTION 100) OF THE OHIO DEPARTMENT OF TRANSPORTATION'S CONSTRUCTION AND MATERIAL SPECIFICATIONS (ODOT CMS) THAT ARE CITED IN THE ITEMIZED SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, PROPOSAL NOTES, PLANS OR ELSEWHERE IN THE CONTRACT DOCUMENTS SHALL, FOR THE PURPOSE OF THIS CONTRACT, BE CONSIDERED AND TAKEN AS MEANING THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS AS CONTAINED IN THE SUPPLEMENTAL SPECIFICATIONS (SECTION 100) AND THE COUNTY'S GENERAL PROVISIONS CORRESPOND TO THOSE CONTAINED IN THE ODOT CMS.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 606 - WATER	XX M GAL
ITEM 606 - CALCIUM CHLORIDE	XX TON

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

REMOVE ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED.

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	9	1	10

TREE REMOVAL AND ENDANGERED SPECIES RESTRICTIONS

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, NORTHERN LONG-EARED BAT, LITTLE BROWN BAT, AND TRICOLORED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS RECESSARIED TO SPECIES AND ANIMALS THAT ARE TO BE PROTECTED BY THIS PROJECT. TREE REMOVAL SHALL BE LIMITED TO THE BIRDS OF THIS NOTE. TREES IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT WITH A TRUNK THREE INCHES (3") OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE AND HAVING A MINIMUM HEIGHT OF 13 FEET.

ADDITIONALLY, ALL EXISTING BRIDGES OR CULVERT STRUCTURES WITHIN THE LIMITS OF THIS PROJECT SHALL BE CAREFULLY EXAMINED FOR THE PRESENCE OF THE INDIANA BAT, NORTHERN LONG-EARED BAT, LITTLE BROWN BAT, AND TRICOLORED BAT. IF ANY OF THESE BATS ARE FOUND ROOSTING ON THE UNDERSIDE OF AN EXISTING STRUCTURE, THEN THE OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR) AND THE UNITED STATES FISH & WILDLIFE SERVICE (USFWS) MUST BE NOTIFIED OF THEIR PRESENCE.

CUYAHOGA COUNTY IS ALSO POTENTIAL HABITAT FOR THE PIPING PLOVER, A FEDERALLY ENDANGERED SHOREBIRD THAT NESTS ON WIDE, FLAT, OPEN, SANDY STREAM BANKS AND BEACHES ALONG THE SHORELINES OF LAKE ERIE. PRESENCE OF THE PIPING PLOVER IS NOT EXPECTED WITHIN THE LIMITS OF THE PROJECT; HOWEVER, EFFORTS SHALL BE MADE TO PROTECT ANY IDENTIFIABLE HABITAT DISCOVERED AT THE PROJECT SITE.

PER SECTION 853.324 OF THE OHIO REVISED CODE, ALL MUSSELS NATIVE TO THE STATE OF OHIO, INCLUDING CUYAHOGA COUNTY, ARE PROTECTED, INCLUDING TEN SPECIES THAT ARE FEDERALLY PROTECTED BY THE ENDANGERED SPECIES ACT (87 STAT. 884, AS AMENDED) 16 U.S.C. 831 ET SEQ.). THE PRESENCE OF MUSSELS IN ANY BODY OF WATER WITHIN THE LIMITS OF THE PROJECT IS NOT EXPECTED; HOWEVER, IMPACTS TO STATE AND FEDERALLY PROTECTED MUSSELS AND THEIR HABITATS SHOULD BE AVOIDED OR MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE.

ADDITIONAL INFORMATION FOR ANY OF THE ABOVE PROTECTED AND ENDANGERED SPECIES CAN BE FOUND ON THE WEBSITES FOR THE OHIO DEPARTMENT OF NATURAL RESOURCES (WWW.OHIO.DNR.GOV), THE OHIO ECOLOGICAL SERVICES OFFICE (WWW.FWS.GOV/MI01W016/016), AND THE UNITED STATES FISH AND WILDLIFE SERVICE (WWW.FWS.GOV).

ADJUSTMENTS IN CONTRACT TIME

THE EXTENSIONS WILL ONLY BE CONSIDERED WHEN CONTROLLING ITEMS OF WORK ON THE APPROVED PROGRESS SCHEDULE ARE AFFECTED DUE TO NO FAULT OF THE CONTRACTOR.

WHEN ADDITIONAL WORK IS REQUIRED, TIME EXTENSIONS WILL ONLY BE GRANTED FOR CONTROLLING ITEMS ON THE PROGRESS SCHEDULE (SEE SECTION 108.06 OF THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS).

PROJECT PROGRESS MEETINGS

PROGRESS MEETINGS WILL BE HELD EVERY FOUR (4) WEEKS AT THE PROJECT OFFICE OR OTHER LOCATION DESIGNATED BY THE COUNTY ENGINEER. THE COUNTY ENGINEER AND WILL BE ATTENDED BY COUNTY AND CONTRACTOR DECISION-MAKING PERSONNEL.

THE PURPOSE OF THESE MEETINGS IS TO DISCUSS CRITICAL OPERATIONS AND POTENTIAL PROBLEMS. ALSO, THE CONTRACTOR WILL CONDUCT THE MEETINGS AND WORK TO BE PERFORMED DURING THE FOLLOWING WEEKS.

THESE MEETINGS CAN ONLY BE WAIVED BY THE AREA CONSTRUCTION ENGINEER.

DEFINITIONS AND TERMS

WHenever there appears in the standard specifications (ODOT ITEMIZED CMS), SUPPLEMENTAL SPECIFICATIONS, OR PROPOSAL NOTES, THE TERM "THE STATE, DIRECTOR OF TRANSPORTATION," "DEPARTMENT," "DISTRICT CONSTRUCTION ENGINEER/DISTRICT CONSTRUCTION ADMINISTRATOR (CCA)," "ENGINEER," OR ANY OTHER TERM DESIGNATING ANY REPRESENTATIVE OR EMPLOYEE OF THE STATE OR ITS DEPARTMENT OF TRANSPORTATION, SUCH TERM SHALL, FOR THE PURPOSE OF THIS CONTRACT, BE CONSIDERED AND TAKEN AS MEANING AND DESIGNATING THE RESPECTIVE OFFICER OR EMPLOYEE OF CUYAHOGA COUNTY WHOSE DUTY OR FUNCTION IT IS TO DEAL WITH THE SUBJECT MATTER IN CONNECTION WITH WHICH SUCH TERM IS USED AND SPECIFICALLY:

- THE STATE - MEANS CUYAHOGA COUNTY.
- DEPARTMENT - MEANS THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS.
- DIRECTOR - MEANS THE CUYAHOGA COUNTY DIRECTOR OF PUBLIC WORKS, HIS/HER DEPUTIES, OR ANY ENGINEER DESIGNATED AS THE DIRECTOR'S REPRESENTATIVE.
- DISTRICT CONSTRUCTION ENGINEER/DISTRICT CONSTRUCTION ADMINISTRATOR (CCA) OR ENGINEER - MEANS THE AREA CONSTRUCTION ENGINEER, OR THE DUTY AUTHORIZED AGENT OR REPRESENTATIVE OF THE CUYAHOGA COUNTY DIRECTOR OF PUBLIC WORKS, ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY FOR THE PURPOSES OF CONSTRUCTION ENGINEERING AND ADMINISTRATION OF THE CONTRACT.
- LABORATORY - MEANS ANY LABORATORY DESIGNATED BY THE COUNTY.

GENERAL (CONT.)

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

623.08 CONSTRUCTION LAYOUT STAKING.
1. ALL HORIZONTAL CONTROL AND, IF NECESSARY, VERTICAL CONTROL, REQUIRED FOR THE COMPLETE LAYOUT AND PERFORMANCE OF THE WORK UNDER THIS CONTRACT SHALL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE AND MAY BE PERIODICALLY REVIEWED BY THE ENGINEER. ANY INSPECTION OR REVIEWING OF THE CONTRACTOR'S LAYOUT BY THE ENGINEER AND THE ACCEPTANCE OF ALL OR ANY PART OF IT SHALL NOT RELIEVE THE CONTRACTOR OF HIS/HER RESPONSIBILITY TO PRODUCE THE PROPER WORK DIMENSIONS, GRADES AND ELEVATIONS. THE REQUIREMENTS OF SECTION 107.10 OF THE GENERAL PROVISIONS ALSO APPLY.

2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND, IF APPLICABLE, ALL GRADES, LINES AND LEVELS AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS, AND HE/SHE SHALL REPORT ANY ERRORS OR INCONSISTENCIES IN THE ABOVE TO THE ENGINEER BEFORE COMMENCING WORK OR ORDERING ANY MATERIAL.

3. THE CONTRACTOR SHALL MARK (PAINT) OR STAKE THE PROJECT STATION NUMBERS AT INTERVALS OF 50 FEET (OR LESS AS DIRECTED OR APPROVED BY THE ENGINEER) BEFORE COMMENCING THE WORK.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL STAKES AND MARKS AND SHALL REPLACE THEM AT HIS/HER EXPENSE IF THEY ARE DAMAGED, LOST, DISPLACED OR REMOVED. THE CONTRACTOR SHALL USE COMPETENT PERSONNEL AND SUITABLE EQUIPMENT FOR THE LAYOUT WORK REQUIRED AND SHALL PROVIDE THAT IT IS DONE UNDER THE SUPERVISION OF A REGISTERED SURVEYOR. THE REQUIREMENTS OF SECTION 107.10 OF THE GENERAL PROVISIONS ALSO APPLY.

623.11 BASIS OF PAYMENT.
PAYMENT WILL BE MADE UNDER:

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

UNSUITABLE SUBGRADE MATERIAL

WHERE UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, IT SHALL BE REMOVED TO THE DEPTH DETERMINED BY THE ENGINEER AND REPLACED IN EIGHT (8) INCH MAXIMUM COARSE DEPTH MECHANICALLY COMPACTED LAYERS. SUITABLE EMBANKMENT MATERIAL (204.02) REQUIRED TO REPLACE THE UNSUITABLE SUBGRADE SHALL, TO THE EXTENT POSSIBLE, EXHIBIT THE SAME PHYSICAL PROPERTIES AS THE ADJACENT SOUND SUBGRADE MATERIALS. HOWEVER, USE OF SLAG, IN ANY FORM, IS NOT PERMITTED. IN CONJUNCTION WITH THE ABOVE WORK, AN ESTIMATED QUANTITY OF GEOTEXTILE FABRIC IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER.

REMOVAL OF UNSUITABLE SUBGRADE SHALL BE PAID UNDER ITEM 204 - EXCAVATION OF SUBGRADE. THE COST OF FURNISHING AND COMPACTING SUITABLE EMBANKMENT MATERIAL IN PLACE SHALL BE PAID FOR UNDER ITEM 204 EMBANKMENT, AS PER PLAN AND/OR ITEM 204 - GRANULAR EMBANKMENT, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER, ARE CARRIED TO THE USUAL SUMMARY FOR THIS WORK AND PAYMENT IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR:

- ITEM 204 - EXCAVATION OF SUBGRADE XX CY
- ITEM 204 - EMBANKMENT, AS PER PLAN XX CY
- ITEM 204 - GRANULAR EMBANKMENT, AS PER PLAN XX CY
- ITEM 204 - GEOTEXTILE FABRIC XX SY

ITEM 203 - EMBANKMENT, AS PER PLAN
ITEM 204 - EMBANKMENT, AS PER PLAN
ITEM 204 - GRANULAR EMBANKMENT, AS PER PLAN

USE OF SLAG, IN ANY FORM, IS NOT PERMITTED.

ITEM 608 - 4" CONCRETE WALK, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF 608, THE FOLLOWING SHALL APPLY:

THE CLASS OF MIXTURE OR CLASS OF CONCRETE USED FOR SIDEWALK (608) SHALL CONFORM TO THE REQUIREMENTS TO ITEM 608 CONCRETE GENERAL AS CONTAINED IN THE SECTION 400 PROPOSAL NOTES OF THE CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET.

ALL CONCRETE WALK SHALL BE A MINIMUM OF 4" THICK AND HAVE A 2" COMPACTED SCHEDULES BED WHICH MEETS THE REQUIREMENTS OF 705.10 DELIVERY THICKNESS SHALL BE INCREASED PER CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING BP-4.C. COST FOR FURNISHING AND PLACING THE 2" COMPACTED SCHEDULES BED AND FOR THICKENING AT FLEXIBLE DRIVES PER THE BP-4.C CONSTRUCTION DRAWING SHALL BE CONSIDERED INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK.

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND THE BACK OF CURB OR ANY OTHER FIXED OBJECT. IN ADDITION TO THE LOCATIONS SPECIFIED UNDER 608.03(C), TRANSVERSE EXPANSION JOINTS SHALL BE CONSTRUCTED AT INTERVALS OF NOT MORE THAN 25 TO 30 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXPANSION JOINT FILLER (705.03) SHALL BE PLACED AT THE TRANSVERSE EXPANSION JOINTS FOR THE FULL DEPTH WIDTH OF THE CONCRETE WALK AND SHALL BE TIGHT NORMAL TO GRADE. THE TOP 1/2 INCH OF THE EXPANSION JOINT FILLER SHALL BE NEAR THE WALK AND BACK OF CURB SHALL BE SEALED WITH 705.04 JOINT SEALER.

UNLESS OTHERWISE REQUIRED BY MUNICIPAL STANDARDS/ORDINANCES, THE FINAL SURFACE SHALL BE TEXTURED BY USE OF AN ACCEPTED BROOM SO AS TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE FINISH. AFTER WHICH, THE CONTRACTOR IS REQUIRED TO RETRACE THE PREVIOUSLY FORMED JOINTS AND OUTSIDE EDGES OF THE WALK.

FINAL FINISH SHALL BE IN ACCORDANCE WITH THE APPLICABLE MUNICIPAL STANDARDS/ORDINANCES.

THE COST OF THE MATERIAL AND LABOR ASSOCIATED WITH THE ABOVE WORK IS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN.

ITEM SPECIAL - MAILBOX SUPPORT SYSTEM

PRIOR TO THE COMMENCEMENT OF THE WORK, THE ENGINEER SHALL DETERMINE WHICH EXISTING MAILBOX AND SUPPORT SYSTEMS WILL REQUIRE TEMPORARY RELOCATION AS A RESULT OF THE WORK.

WHEN THE ENGINEER DETERMINES THAT AN EXISTING MAILBOX AND/OR SUPPORT SYSTEM REQUIRING TEMPORARY RELOCATION PER 107.10 IS A POTENTIAL SAFETY HAZARD OR CANNOT REASONABLY BE TEMPORARILY RELOCATED, THE ENGINEER SHALL DIRECT THE CONTRACTOR TO REMOVE THE MAILBOX AND/OR SUPPORT SYSTEM FROM THE EXISTING MAILBOX AND/OR SUPPORT SYSTEM AT LEAST TWO (2) WEEKS IN ADVANCE OF THE REMOVAL. THE ENGINEER SHALL GIVE WRITTEN NOTICE TO THE OWNER OF THE OPTION TO REMOVE THE EXISTING MAILBOX AND/OR SUPPORT SYSTEM FOR SALVAGE OR TO PROVIDE A NEW MAILBOX IF HE/SHE SO CHOOSES.

THE FOLLOWING CONTINGENCY QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

- ITEM SPECIAL - MAILBOX SUPPORT SYSTEM, SINGLE -- EACH
- ITEM SPECIAL - MAILBOX -- EACH

PAYMENT FOR A MAILBOX SUPPORT SYSTEM SHALL INCLUDE ALL WORK AND MATERIALS NECESSARY TO ATTACH THE CONTRACTOR OR OWNER SUPPLIED MAILBOX AND FOR ERECTING THE MAILBOX SUPPORT SYSTEM IN ITS TEMPORARY LOCATION AND SUBSEQUENTLY RE-ERECTING THE MAILBOX AND SUPPORT SYSTEM IN ITS PERMANENT LOCATION; ALL TO THE SATISFACTION OF THE ENGINEER.

CONTRACTOR SUPPLIED MAILBOXES AND MAILBOX SUPPORT SYSTEMS SHALL BE IN ACCORDANCE WITH THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MD-7C.

PRIOR TO THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL CONTACT THE LOCAL POSTMASTER REGARDING THE SPECIFIC MAIL DELIVERY/MAILBOX RELOCATION REQUIREMENTS FOR THE PROJECT AND BE PREPARED TO DISCUSS THEIR IMPLEMENTATION AT THE PRECONSTRUCTION MEETING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POSTMASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PER 107.10, NO SEPARATE PAYMENT WILL BE MADE TO THE CONTRACTOR FOR REMOVING, TEMPORARILY RELOCATING OR PERMANENTLY RE-ERECTING EXISTING MAILBOXES AND MAILBOX SUPPORT SYSTEMS.

LOCATION OF GUARDRAIL

THE LOCATION OF GUARDRAIL RUNS, AS SHOWN IN THESE PLANS, IS SUBJECT TO ADJUSTMENT BY THE ENGINEER TO ASSURE THAT ALL INSTALLATIONS WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC.

ROADWAY (CONT.)

ITEM 203 - ROADWAY MISC.: EPS GEOFOAM FILL

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND PLACING EPS GEOFOAM CONFORMING TO ASTM D6158 TYPE IX, THE MATERIAL SHALL HAVE A MINIMUM DENSITY OF 1.80 POUNDS PER CUBIC FEET, AND A COMPRESSIVE RESISTANCE OF 10.9 PSI AT 12 STRAIN DEFORMATION.

ALL EPS GEOFOAM BLOCKS SHALL BE TREATED BY THE MANUFACTURER WITH A TESTED AND PROVEN TERMITTE TREATMENT FOR BELOW GRADE APPLICATIONS. THE TREATMENT SHALL BE EPA REGISTERED, MEET REQUIREMENTS OF ICC ES AC209, AND BE RECOGNIZED IN AN ICC ES REPORT.

PRIOR TO ORDERING THE MATERIAL FOR THIS ITEM OF WORK, THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH THE FOLLOWING ITEMS:

-EPS GEOFOAM MANUFACTURERS PRODUCT LITERATURE AND TECH DATA INCLUDING PHYSICAL PROPERTIES IN COMPLIANCE WITH ASTM D 6017 TYPE SPECIFIED AND ASTM C 578 TYPE SPECIFIED.

-SUMMARY OF TEST COMPLIANCE WITH SPECIFIED PERFORMANCE CHARACTERISTICS AND PHYSICAL PROPERTIES.

-PRODUCT CERTIFICATE SHOWING EVIDENCE OF THIRD PARTY QUALITY CONTROL.

A SIGNED/NOTARIZED CERTIFICATION FROM THE MANUFACTURER THAT THEIR EPS GEOFOAM MATERIAL MEETS THE PLAN REQUIREMENTS, SHOP DRAWINGS SHOWING BLOCK THICKNESS, WIDTH, LENGTH, AND LAYING PATTERN OR SCHEDULE.

A GEOMEMBRANE SHALL BE PLACED ON THE TOP AND SIDES OF THE GEOFOAM FILL. THE MATERIAL SHALL BE TRI-POLYMER CONSISTENT WITH POLYVINYL CHLORIDE, ETHYLENE INTERPOLYMER ALLOY, AND A POLYURETHANE OR A COMPARABLE POLYMER COMBINATION. THE MATERIAL SHALL MEET THE FOLLOWING PHYSICAL AND CHEMICAL REQUIREMENTS.

-THICKNESS: MIN. 28 MILS (ASTM D 751)

-UNLEADED GASOLINE VAPOR MAXIMUM 0.40 TRANSMISSION RATE, OZ. PER SQUARE PER 24 HOURS (ASTM D 814)

-GRAB TENSILE STRENGTH: MIN. 600 LBS. BOTH MACHINE AND CROSS DIRECTION (7" GRIP 4" x 8" SAMPLE ASTM D 571)

-ELONGATION AT BREAK: 20% MIN. (ASTM D 571)-TOUGHNESS: 14,000 MIN. (GRAB TENSILE x PERCENT ELONGATION)

-PUNCTURE RESISTANCE: 800 LB. MIN. (ASTM D 751 BALL TIP)

-COLD CRACKER PASS -30° FAHRENHEIT (ASTM D 2106 1" MANDEREL, 4 HR)

-FACTORY SEAMS: 2 INCH MIN. BONDED WIDTH

-SHEAR: 320 LBS. MIN. (ASTM D 751)

A SIGNED/NOTARIZED CERTIFICATION OF COMPLIANCE SHALL BE FURNISHED BY THE MANUFACTURER STATING THE SELECTED GEOMEMBRANE HAS BEEN TESTED AND MEETS THE ABOVE REQUIREMENTS. JOINTS IN THE GEOMEMBRANE WRAP SHALL BE LAPPED A MINIMUM OF 18 INCHES.

THE GEOFOAM FILL SHALL BE PLACED ON A GRANULAR BASE OF GRANULAR MATERIAL CONFORMING TO SIZE NO. 9 OF TABLE 703.04 OF THE OHS. THE GRANULAR BASE SHALL ALSO BE PLACED ALONG THE SIDES OF THE GEOFOAM FILL THAT ARE IN CONTACT WITH SOIL.

CARE SHALL BE TAKEN TO PROTECT THE GEOFOAM BLOCKS FROM EXPOSURE TO GASOLINE, SOLVENT NAPHTHA, FUEL OIL, MINERAL OIL, TURPENTINE, OR ANY OTHER SOLVENT. THE BLOCKS SHALL ALSO BE PROTECTED FROM EXPOSURE TO ANY HEAT SOURCE WHICH WOULD REACH ITS DEGREE (F). GEOFOAM SHALL BE STORED ABOVE GROUND, AND PROTECTED FROM MOISTURE AND SUNLIGHT PRIOR TO INSTALLATION.

DAMAGE TO GEOFOAM SHALL BE CORRECTED AS FOLLOWS:

SLIGHT DAMAGE (K 0.12 CU FT) WITH NO LINEAR DIMENSION GREATER THAN 1 FOOT MAY BE LEFT IN PLACE AS IS.

MODERATE DAMAGE (K 0.35 CU FEET) WITH NO LINEAR DIMENSION GREATER THAN 1 FOOT SHALL BE FILLED IN WITH SMOG.

GEOFOAM BLOCKS WITH EXCESSIVE DAMAGE (I.E. EXCEEDING THE MODERATE CATEGORY) SHALL BE REPLACED WITH GEOFOAM BLOCKS WHICH MEET THE DAMAGE CRITERIA. GEOFOAM BLOCKS NOT MEETING THE CRITERIA MAY BE CUT TO ELIMINATE THE EXCESSIVE DAMAGE AND THE REMAINING UNDAMAGED PORTION OF THE BLOCK MAY BE USED WITHIN THE FILL, PROVIDED THE UNDAMAGED PORTION OF THE BLOCK MEETS ALL OTHER REQUIREMENTS.

PLACEMENT:

THE SURFACE OF A LAYER OF GEOFOAM BLOCKS TO RECEIVE ADDITIONAL GEOFOAM BLOCKS SHALL BE CONSTRUCTED WITH A VARIATION IN SURFACE TOLERANCE OF NO MORE THAN 1/2" IN ANY 10 FOOT INTERVAL. ALL BLOCKS SHALL BE ACCURATELY FIT RELATIVE TO ADJACENT BLOCKS. NO GAPS GREATER THAN 1" WILL BE ALLOWED ON VERTICAL JOINTS. THE FINISHED SURFACE OF THE GEOFOAM FILL BENEATH PAVEMENT SECTIONS SHALL BE CONSTRUCTED TO WITHIN THE TOLERANCE OF ZERO MINUS 2.5" OF THE INDICATED GRADE.

BLOCKS PLACED IN A ROW IN A PARTICULAR LAYER SHALL BE OFFSET 2 FEET RELATIVE TO BLOCKS PLACED IN ADJACENT ROWS OF THE SAME LAYER. IN ORDER TO AVOID CONTIGUOUS JOINTS, EACH SUBSEQUENT LAYER OF BLOCKS SHALL BE ROTATED ON THE HORIZONTAL PLANE 90 DEGREES FROM THE DIRECTION OF PLACEMENT OF THE PREVIOUS LAYER.

THE LONGITUDINAL AXES OF THE UPPERMOST LAYER OF BLOCKS MUST BE PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE ROAD ALIGNMENT.

CONNECTOR PLATES SHALL BE PLACED BETWEEN HORIZONTAL LAYERS OF BLOCKS. A MINIMUM OF TWO CONNECTOR PLATES SHALL BE USED BETWEEN BLOCKS.

CONNECTORS SHALL BE GALVANIZED STEEL OR STAINLESS STEEL TWO SIDED MULTI-BARBED CONNECTORS. EACH CONNECTOR SHALL HAVE A LATERAL HOLDING STRENGTH OF AT LEAST 80 LBS. PROVIDE A SIGNED/NOTARIZED CERTIFICATION FROM THE MANUFACTURER THAT THE CONNECTOR PLATES MEET MATERIAL, DESIGN AND STRENGTH REQUIREMENTS OF THESE PLANS.

BLOCKS SHALL BE CUT USING A SAW OR HOT WIRE.

NO VEHICLE OR CONSTRUCTION EQUIPMENT SHALL TRAVERSE DIRECTLY ON THE EPS BLOCKS OR ON ANY SEPARATION MATERIAL PLACED BETWEEN THE EPS BLOCKS AND THE PAVEMENT SYSTEM. SOIL FOR THE PAVEMENT SYSTEM SHALL BE PUSHED ONTO THE EPS BLOCKS OR SEPARATION LAYER USING APPROPRIATE EQUIPMENT. A MINIMUM OF 12 INCHES OF FILL SHALL COVER THE TOP OF THE GEOFOAM BLOCK OR SEPARATION LAYER BEFORE COMPACTON COMMENCES. THE CONTRACTORS EQUIPMENT USED DURING COMPACTON SHALL NOT PLACE A PRESSURE GREATER THAN 18 PSI ON THE GEOFOAM BLOCKS AT ANY TIME DURING CONSTRUCTION. ANY DAMAGE TO THE GEOFOAM BLOCKS RESULTING FROM THE CONTRACTORS VEHICLES, EQUIPMENT, OR OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR.

PAVEMENT

PAYMENT FOR THIS ITEM OF WORK SHALL BE PAID FOR BY THE UNIT PRICE BID PER CUBIC YARD OF ITEM SPECIAL - ROADWAY MISC.: EPS GEOFOAM FILL, WHICH PRICE AND PAYMENT INCLUDE ALL MATERIALS, SITE PREPARATION (EXCLUDING EXCAVATION), GRANULAR BASE, GEOMEMBRANE WRAP, TOOLS, EQUIPMENT, AND LABOR TO COMPLETE THIS ITEM OF WORK IN PLACE.

ITEM 606 - ANCHOR ASSEMBLY, MGS TYPE E

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE GUARDRAIL END TERMINALS FOR TYPE MGS GUARDRAIL AS LISTED ON ROADWAY ENGINEERING'S WEB PAGE UNDER ROADSIDE SAFETY DEVICES FOR APPROVED GUARDRAIL END TREATMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE FACE OF THE TYPE E IMPACT HEAD SHALL BE COVERED WITH REBOUNDABLE RETROREFLECTIVE SHEETING, PER CMS 730.181.

REFER TO THE MANUFACTURER'S INSTRUCTIONS REGARDING THE INSTALLATION OF, AND THE GRADING AROUND THE FOUNDATION TUBES AND GROUND STRUT. THE TOP OF ANY FOUNDATION TUBE SHOULD BE LESS THAN 4 INCHES ABOVE THE GROUND. THE PLACEMENT OF THE FOUNDATION TUBES SHOULD BE AN APPROPRIATE DEPTH BELOW THE LEVEL LINE IN ORDER TO MAINTAIN THE FINISHED GUARDRAIL HEIGHT OF 31 INCHES FROM THE EDGE OF THE SHOULDER.

ON-SITE GRADING IS REQUIRED IF THE TOP OF THE FOUNDATION TUBES OR TOP OF THE GROUND STRUT DOES PROJECT MORE THAN 4 INCHES ABOVE THE GROUND LINE.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, MGS TYPE E, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ALL EXISTING CASTINGS FOR STRUCTURES TO BE ADJUSTED OR RECONSTRUCTED TO GRADE SHALL BE FIELD CHECKED AT THE TIME OF CONSTRUCTION AND MARKED SUITABLE FOR SALVAGE AND REUSE OR REPLACED AS DIRECTED BY THE ENGINEER. UNLESS OTHERWISE INDICATED ON THE PLAN, REPLACEMENT CASTINGS ARE PAID UNDER ITEM SPECIAL - MISCELLANEOUS METAL.

THE FOLLOWING GUIDELINES WERE USED TO DETERMINE THE SPECIFIC PLAN LOCATIONS/QUANTITIES OF THE ITEM 611 ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK:

ADJUST TO GRADE, AS PER PLAN INCLUDES ALL WORK SPECIFIED IN 611.10 (D) AS NECESSARY TO RAISE THE EXISTING/NEW CASTING NO MORE THAN ONE (1) FOOT FROM ITS EXISTING ELEVATION OR TO LOWER THE EXISTING/NEW CASTING NO MORE THAN SIX (6) INCHES FROM ITS EXISTING ELEVATION. IN ADDITION, THIS ITEM INCLUDES ANY SUPPORTING WALL, REPAIR WORK NECESSARY, UP TO SIX (6) INCHES BELOW THE TOP OF THE EXISTING SUPPORTING WALL.

PAYMENT WILL BE MADE UNDER THE APPROPRIATE STRUCTURE ITEM 611 ADJUSTED TO GRADE, AS PER PLAN.

RECONSTRUCT TO GRADE, AS PER PLAN INCLUDES ALL WORK SPECIFIED IN 611.10 (D) AND ALSO INCLUDES EXISTING/NEW CASTINGS RAISED MORE THAN ONE (1) FOOT FROM THEIR EXISTING ELEVATION OR LOWERED MORE THAN SIX (6) INCHES FROM THEIR EXISTING ELEVATION.

THE WORK LIMIT SHALL BE SPECIFIED BY THE ENGINEER AND PAYMENT WILL BE MADE UNDER THE APPROPRIATE STRUCTURE ITEM 611 RECONSTRUCTED TO GRADE, AS PER PLAN.

BASED ON THE ABOVE GUIDELINES, THE ENGINEER WILL EXAMINE EACH STRUCTURE TO ASSURE THAT THE APPROPRIATE ITEM 611 ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK IS PERFORMED.

RECONSTRUCT TO GRADE, AS PER PLAN WORK SHALL NOT BE PERFORMED UNLESS SPECIFICALLY INDICATED IN THE PLANS OR OTHERWISE ORDERED BY THE ENGINEER. ANY SUCH WORK MADE NECESSARY DUE TO THE CONTRACTOR'S NEGLIGENT OPERATIONS, AS DETERMINED BY THE ENGINEER, SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

WATER QUALITY
POST CONSTRUCTION STORM WATER TREATMENT

THIS PLAN UTILIZES STRUCTURAL BEST MANAGEMENT PRACTICES (BMP'S) FOR POST CONSTRUCTION STORM WATER TREATMENT.

VEGETATED FILTER STRIP

THIS PLAN UTILIZES VEGETATED FILTER STRIPS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 665 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AND ITEM 670 SP-10E EROSION PROTECTION TO ALL DISTURBED AREAS DESIGNATED AS VEGETATED FILTER STRIPS, THE EDGE OF SHOULDER, AND THE FORESLOPE AS SPECIFIED IN THE PLANS.

VEGETATED BIOFILTER

THIS PLAN UTILIZES VEGETATED BIOFILTERS FOR POST CONSTRUCTION STORM WATER TREATMENT. PLACE EITHER ITEM 660 SODDING OR ITEM 665 SEEDING AND MULCHING WITH A 4-INCH LIFT OF TOPSOIL AS SHOWN IN THE PLANS TO ANY DISTURBED AREA ON THE SHOULDER AND FORESLOPE DRAINING TO A VEGETATED BIOFILTER. THE DITCH FOR EACH VEGETATED BIOFILTER IS TRAPEZOIDAL, AS SHOWN IN THE PLAN CROSS SECTIONS. PROVIDE ITEM 670 AS SPECIFIED IN THE PLANS.

DRAINAGE

ITEM 671 - STRUCTURES ADJUSTED/RECONSTRUCTED TO GRADE, AS PER PLAN

611.0 DRAINAGE STRUCTURE CONSTRUCTION, EXCEPT AS NOTED BELOW FOR EXISTING PRECAST SANITARY SEWER MANHOLES, STRUCTURES SHALL BE ADJUSTED OR RECONSTRUCTED TO GRADE USING CLAY BRICKS (104.0), CLASS CC 1 CONCRETE 611 AND/OR CONCRETE MORTAR (602), AS NECESSARY, AND BY RESETTING THE EXISTING FRAME IN A BED OF CONCRETE MORTAR OR CLASS CC 1 CONCRETE. EXCEPT FOR EXISTING PRECAST SANITARY SEWER MANHOLES, NO CLASS RINGS OR METAL ADJUSTING RINGS (CASTINGS) ARE PERMITTED. MAXIMUM CONCRETE MORTAR THICKNESS IS 1-1/2".

EXISTING SANITARY SEWER MANHOLES SHALL BE RECONSTRUCTED TO GRADE USING A FOUR (4) INCH MINIMUM TO TWELVE (12) INCH MAXIMUM DEPTH OF EXISTING AND/OR PROPOSED GRADE RINGS (106.13) IN LIEU OF BRICK OR CLASS CC 1 CONCRETE. GROUT BETWEEN GRADE RINGS AND ON THE OUTSIDE OF THE RINGS. SET THE MANHOLE PRESSURE REGULATOR WITHIN THE MANHOLE. THE PRESSURE REGULATOR SHALL BE ACCOMPLISHED BY THE REMOVAL AND/OR ADDITION OF FOUR (4) FOOT DIAMETER PRECAST MANHOLE RISER SECTIONS (108.13). IN ADDITION, APPROVED CHIMNEY SEALS (PER SECTION 5.209E OF THE CUYAHOGA COUNTY UNIFORM STANDARDS FOR SEWERAGE) SHALL BE INSTALLED AFTER THE EXISTING PRECAST SANITARY SEWER MANHOLES HAVE BEEN RECONSTRUCTED TO GRADE.

ITEM 611 - STRUCTURE ADJUST TO GRADE OR RECONSTRUCT TO GRADE WORK SHALL, WHERE REQUIRED, INCLUDE THE REMOVAL AND REPLACEMENT OF ANY EXISTING CONCRETE BLOCCOUT CURB AND/OR PAVEMENT USING MEDIUM SET (CLASS CC 1) CONCRETE OR, IF APPROVED/DIRECTED BY THE ENGINEER, FAST SET (CLASS CC F) CONCRETE PER 489.03 OF THE SPECIFICATIONS AND THE MODIFICATIONS TO ITEM 489 CONCRETE - GENERAL - AS CONTAINED IN THE "SECTION 400 PROPOSAL NOTES" OF THE CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET TO FACILITATE REMOVAL OF THE BLOCCOUT CURB. THE BLOCCOUT CURB SHALL BE REMOVED TO THE TOP OF THE BLOCCOUT CURB. THEIR REMOVAL SHALL BE OTHERWISE DESIGNATED/DIRECTED BY THE ENGINEER UNLESS OTHERWISE APPROVED/DIRECTED BY THE ENGINEER. PAVEMENT AND LOAD TRANSFER DEVICES SHALL BE REPLACED/INSTALLED IN ACCORDANCE WITH THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWINGS (BP-2-7C MANHOLES AND CB-3C OR OTHER APPROPRIATE CATCH BASIN DRAWINGS). UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, REPLACE EXCAVATED SUBBASE AND SUBGRADE MATERIALS BELOW THE PROPOSED BLOCCOUT PAVEMENT WITH ITEM 615-LOW STRENGTH MORTAR BACKFILL MATERIAL, TYPE 1 EXCEPT WHERE SHOWN OTHERWISE. THE REMOVAL/SPECIAL MEASUREMENTS SHALL BE CONSIDERED INCIDENTAL TO THE PER EACH BID ITEMS.

EROSION CONTROL
ITEM 659 - SEEDING AND MULCHING, AS PER PLAN

WHEN THE ABOVE ITEM IS CALLED FOR ON THE PLANS OR IN THE PROPOSAL, ALL APPLICABLE PROVISIONS OF ITEM 659, AS SET FORTH IN THE UNLESS CONSTRUCTION AND MATERIAL SPECIFICATIONS, SHALL APPLY UNLESS MODIFIED HEREIN.

659.01 DESCRIPTION
THE COST FOR ANY INCIDENTAL GRADING REQUIRED TO PROPERLY PLACE THE TOPSOIL, SEEDING AND MULCHING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 659 - SEEDING AND MULCHING, AS PER PLAN.

659.02 SEEDS
UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, HIGH QUALITY GERMINATION RATES ARE REQUIRED.

659.03 NATIVE GRASSES AND BILDOGLASSES
UNLESS OTHERWISE DIRECTED/APPROVED BY THE ENGINEER, THE FOLLOWING SEED MIXTURE CLASS(S) SHALL BE USED: CLASS 1

659.04 SITE PREPARATION
IN ADDITION TO AREAS IN FRONT OF RESIDENCES, COMMERCIAL PROPERTIES, ETC., REFERRED TO IN 659.01(A), THE SPECIAL PREPARATION SHALL BE EXTENDED TO ENCOMPASS ALL LAWNS AND/OR LAWN-LIKE AREAS AS DETERMINED BY THE ENGINEER. REMOVE ALL STONES 7-INCH OR GREATER BY APPROVED METHODS/EQUIPMENT SUCH AS ROCK HOULDRING, BAKING, ETC.

659.05 PLACING TOPSOIL
TOPSOIL SHALL BE PLACED AND SPREAD TO A MINIMUM COMPACTED DEPTH OF TWO (2) INCHES. THE FINISHED TOPSOIL SURFACES SHALL BE SEEDED AND MULCHED WITHIN SEVENTY-TWO (72) HOURS OF THEIR ACCEPTED COMPLETION.

659.06 MULCHING OPERATIONAL
UNLESS OTHERWISE DIRECTED OR APPROVED BY THE ENGINEER, STRAW MULCH (PER 659.14) OR COMPOST MULCH (PER 659.16) SHALL BE USED.

659.07 WATERING
IN ADDITION TO THE REQUIREMENTS OF 659.17, THE SEED BED SHALL BE KEPT ACCEPTABLY MOIST UNTIL THE SEED HAS GERMINATED; ALL AT THE DIRECTION OR APPROVAL OF THE ENGINEER.

659.21 PERFORMANCE
THE COUNTY WILL INSPECT ALL SEEDED AREAS NO EARLIER THAN ONE (1) MONTH AND NO LATER THAN NINE (9) MONTHS AFTER FINAL/COMPLETED SEEDING; ALL AT THE DISCRETION/TERMINATION OF THE ENGINEER.

659.24 METHOD OF MEASUREMENT
SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BEYOND THE RIGHT-OF-WAY AND WITHIN THE CONSTRUCTION LIMITS FOR THE AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR ITEM 659 - SEEDING AND MULCHING ARE BASED ON THESE LIMITS.

659.25 BASIS OF PAYMENT
PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT UNIT PRICE BID FOR THE ACTUAL COMPLETED AND ACCEPTED QUANTITIES OF:

THE QUANTITY FOR ITEM 659 - SEEDING AND MULCHING, AS PER PLAN IS CALCULATED ON THE CROSS SECTION SHEETS AND ELSEWHERE ON THE PLANS AND CARRIED TO THE GENERAL SUMMARY.

ITEM 622 - EROSION CONTROL

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR TEMPORARY SCUMMING AND EROSION CONTROL (TSEC) IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 832:

ITEM 832 - EROSION CONTROL

UNLESS OTHERWISE APPROVED BY THE ENGINEER, DAMAGED FILTER FABRIC FENCE SHALL BE REPLACED IN LIEU OF ANY/FULL METHODS OF REPAIR.

----- EACH

ITEM 614 - MAINTAINING TRAFFIC

THE MAKING OF THIS IMPROVEMENT REQUIRES THAT THE ROAD BE CLOSED TO THROUGH TRAFFIC. DETOURS SHALL BE AS SHOWN ON SHEET NO. 13.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ADJACENT PROPERTY. THE CONTRACTOR SHALL MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS, INCLUDING ASPHALT CONCRETE WALKS, WHERE DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY PLASTIC DRUMS, FLASHING ARROW BOARDS COMPLYING WITH 558B-1 AND TRAFFIC SIGNS AND WORK ZONE PAVEMENT MARKINGS, AS SHOWN ON SHEET 13.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES USED FOR THIS PROJECT SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR, EXCEPT AS NOTED BELOW.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY SAFEGUARDS, SUCH AS TYPE III BARRICADES, LIGHTING, FLAGGERS, AND SUCH OTHER TRAFFIC CONTROL DEVICES AS PROVIDED IN ITEM 614, MAINTAINING TRAFFIC, SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA, WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED, IN COMPLIANCE WITH THE MANUAL, AT ALL TIMES WHILE TRAFFIC IS MAINTAINED. THE COST OF RELOCATION, IF REQUIRED, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

THE LENGTH AND DURATION OF LANE CLOSURES AND/OR TRAFFIC RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. THE INTENT IS TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

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, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

DETOUR LIMITATIONS:

TWO-WAY TRAFFIC WITH A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 210 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET 13. LIQUIDATED DAMAGES SHALL BE ASSESSED IN ACCORDANCE WITH SECTION 104.07 OF THE CUYAHOGA COUNTY ENGINEER'S GENERAL PROVISIONS (IN THE AMOUNT OF \$900 PER DAY FOR EACH CALENDAR DAY THAT THE ROADWAY REMAINS CLOSED TO TRAFFIC BEYOND THE SPECIFIED LIMIT, WHICH LIMIT SHALL BE CONSIDERED TO CONSTITUTE AN INTERIM COMPLETION DATE FOR THE PURPOSE OF THIS NOTE.

NOTIFICATION:

THE CONTRACTOR SHALL NOTIFY IN WRITING THE FOLLOWING AGENCIES AT LEAST TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION, AND AT LEAST 72 HOURS BEFORE IMPLEMENTING ANY SUBSTANTIAL CHANGE IN TRAFFIC PATTERN OR CLOSING ANY STREET TO TRAFFIC:

- THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS - PUBLIC INFORMATION OFFICER
- THE CUYAHOGA COUNTY BOARD OF DEVELOPMENTAL DISABILITIES
- THE UNITED STATES POSTAL SERVICE, MIDPARK BRANCH
- THE BEREA CITY SCHOOL DISTRICT BOARD OF EDUCATION
- THE CITY OF BROOK PARK AND CITY OF MIDDLEBURG HEIGHTS POLICE, FIRE AND SERVICE DEPARTMENTS

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

ITEM 614 - DETOUR SIGNING, AS PER PLAN

ADVANCE TRAFFIC SIGNING AND SUPPORTS, INCLUDING DETOUR SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES AND SIGNS SHOWN ON THE PLANS BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR, AND ALL ASSOCIATED COSTS SHALL BE INCLUDED IN THE LUMP SUM BID ITEM 614 - DETOUR SIGNING, AS PER PLAN.

ITEM 614 - LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE UNWANTED INTENSITIES THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF CSMS 614 AND THE OMITTED, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN EMERGENCY TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G. DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF CSMS 614 AND THE OMITTED, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) MAY BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

• FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS, HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGREES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH CSMS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE - 24 HOURS.

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

PORTABLE CHANGEABLE MESSAGE SIGNS

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, TWO (2) CHANGEABLE MESSAGE SIGNS (PCMS), ON SITE, WITH A MINIMUM LEGIBILITY DISTANCE OF 475 FEET, FOR 1 MONTH.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONING DIMMING MECHANISM TO DIM THE SIGN DURING DARKNESS AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. PCMS TRAILERS SHALL BE DELIMITED ON A PERMANENT BASIS BY AFFIXING CONSPICUITY TAPE CONFORMING TO ODOT 64.03, IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER AS SEEN BY ONCOMING ROAD USERS. THE PCMS SHALL BE LOCATED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED, FACING AWAY FROM TRAFFIC.

ALL MESSAGES TO BE DISPLAYED ON THE PCMS WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE PCMS SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD.

THE PCMS SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF ODOT 64.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND/OR THE CITY TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC.

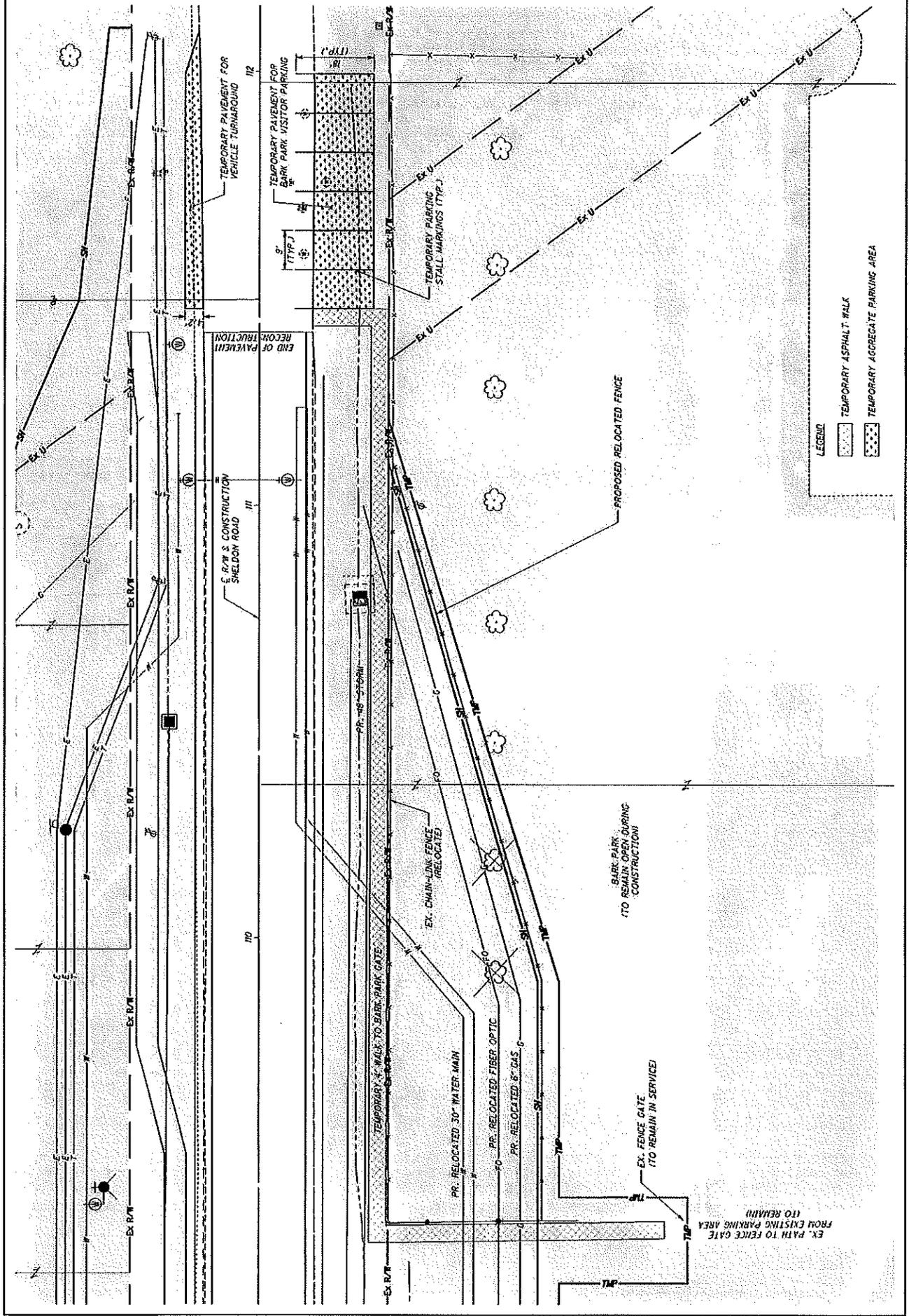
THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THE PCMS FOR THE DURATION OF PROJECT SITE SERVICE.

THE FOLLOWING QUANTITY IS PROVIDED:
ITEM B14, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 2 SMMT
ASSUMING 2 PCMS SIGNS FOR 1 MONTH

PAYMENT FOR THIS ITEM, INCLUDING, BUT NOT LIMITED TO ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE, AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM B14 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN.

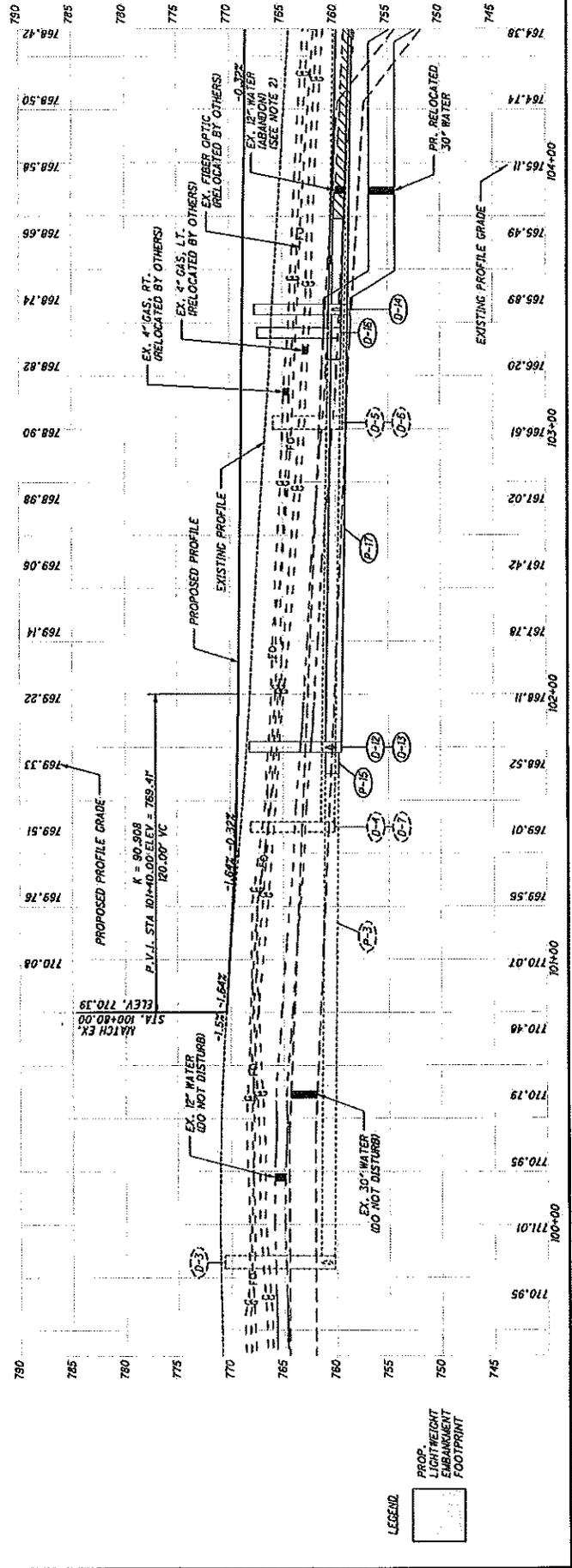
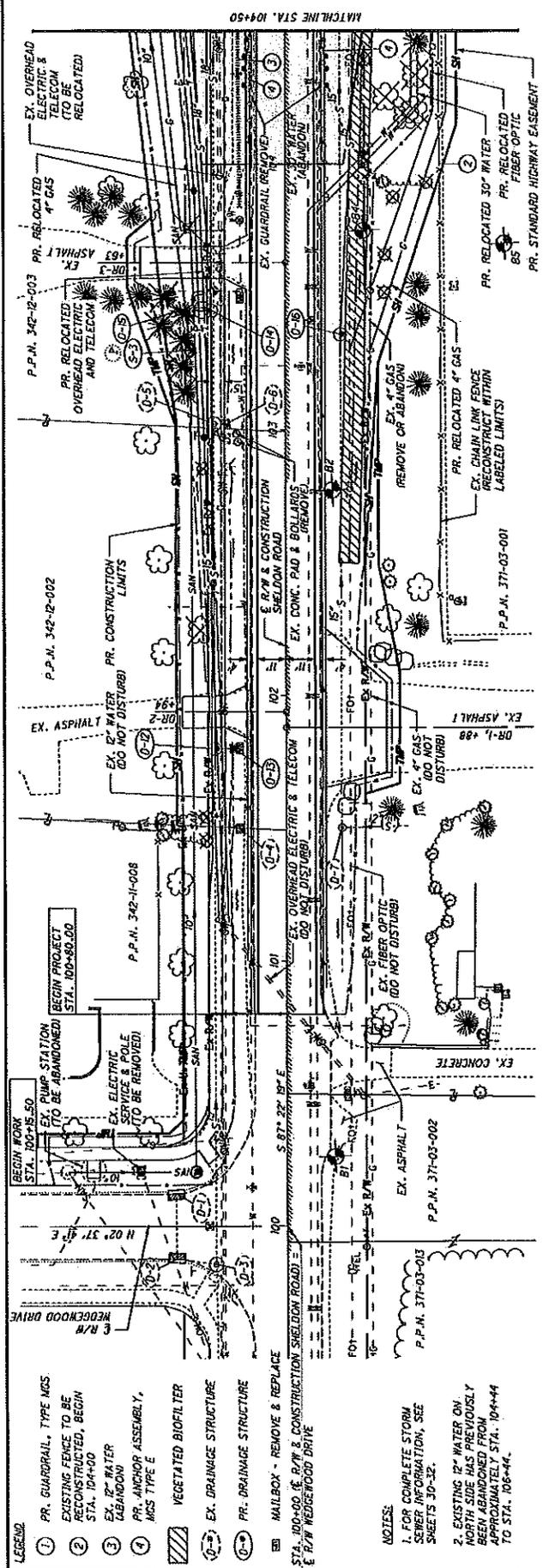
MAINTENANCE OF TRAFFIC - BARK PARK
TEMPORARY PARKING & ACCESS

DATE: 11/10
 DRAWN: [unintelligible]
 CHECKED: [unintelligible]
 COM: [unintelligible]
 SCALE: 1" = 20'
 HORIZONTAL



LEGEND

- TEMPORARY ASPHALT WALK
- TEMPORARY AGGREGATE PARKING AREA

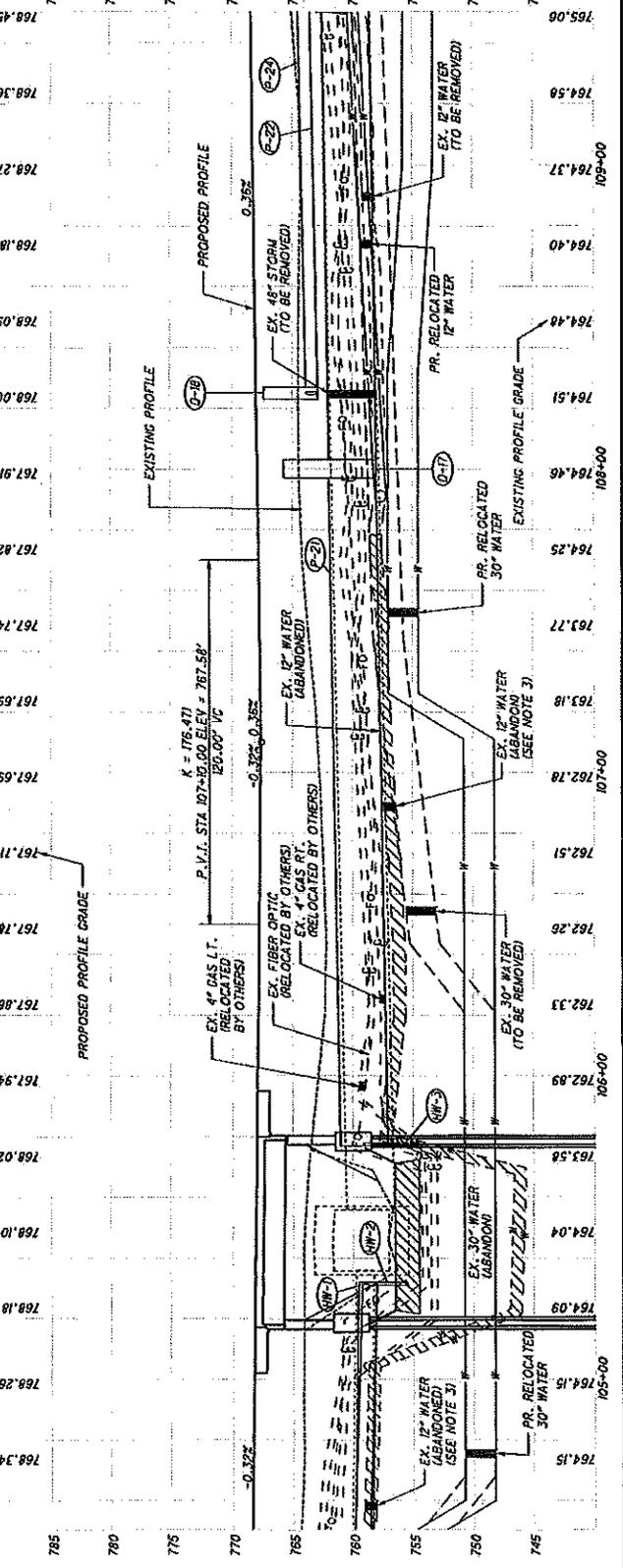
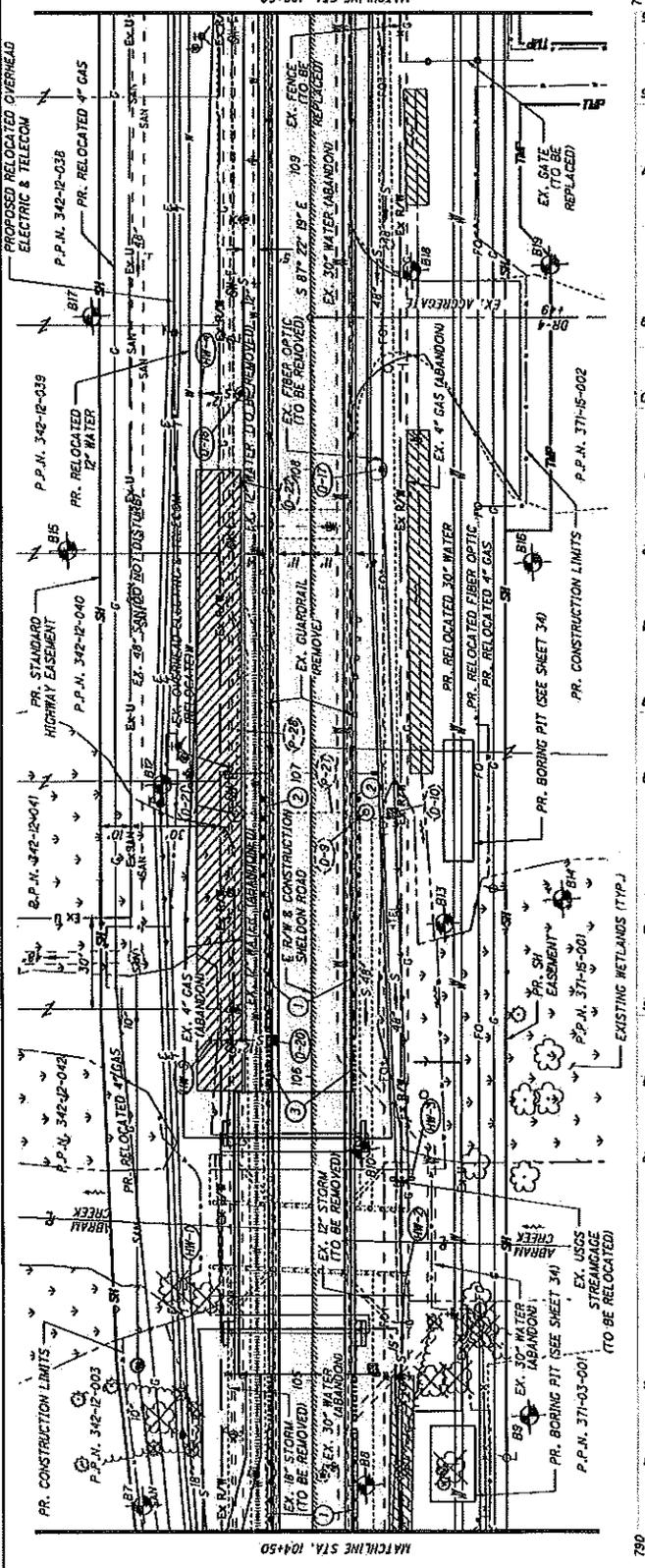


- LEGEND**
- ① PR. GUARDRAIL, TYPE MCS
 - ② EXISTING FENCE TO BE RECONSTRUCTED, BEGIN STA. 104+00
 - ③ EX. 12" WATER (ABANDON)
 - ④ PR. ANCHOR ASSEMBLY, MCS TYPE E
 - VEGETATED BIOFILTER
 - ⑤ EX. DRAINAGE STRUCTURE
 - ⑥ PR. DRAINAGE STRUCTURE
 - MAILBOX - REMOVE & REPLACE STA. 100+00 (E. P/W & CONSTRUCTION SHELDON ROAD) = E. P/W WEDGEWOOD DRIVE
- NOTES:**
1. FOR COMPLETE STORM SEWER INFORMATION, SEE SHEETS 30-32.
 2. EXISTING 12" WATER ON EX. CHAIN LINK FENCE BEING ABANDONED FROM APPROXIMATELY STA. 104+44 TO STA. 105+44.



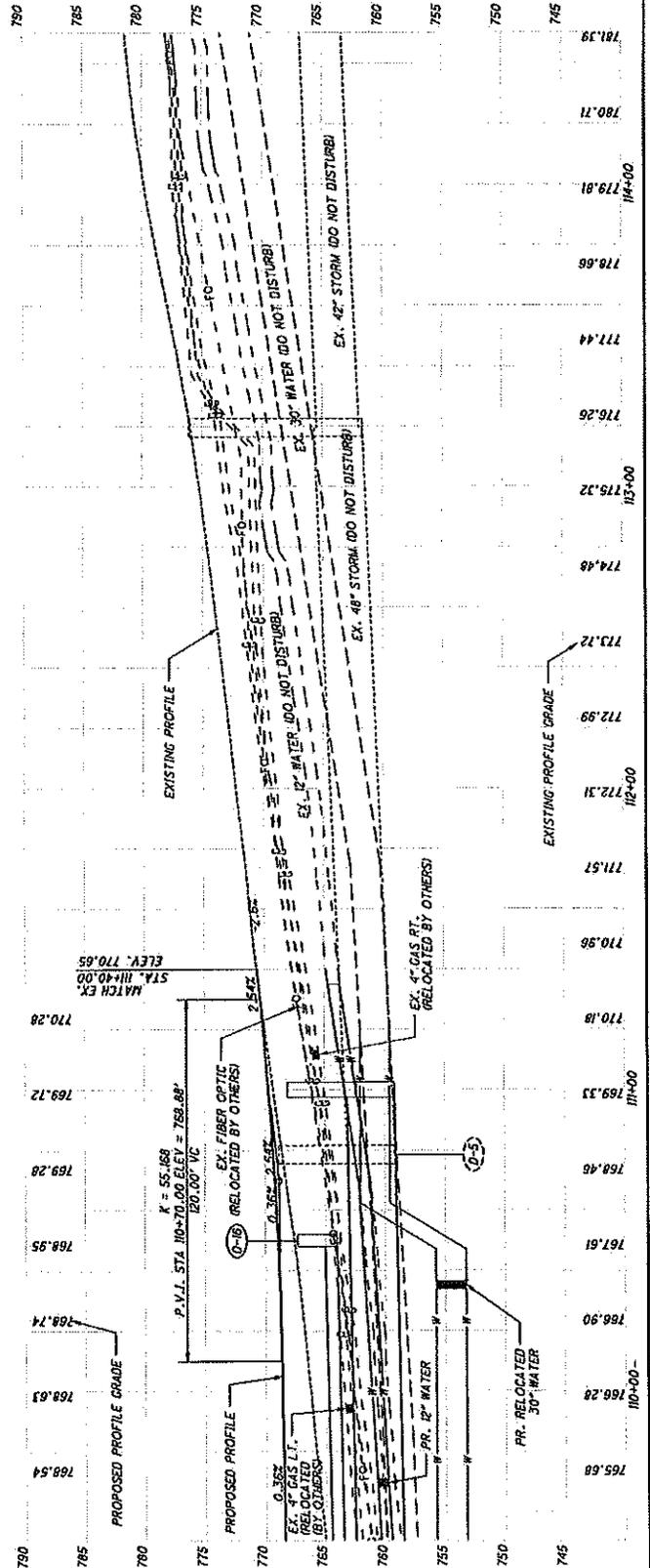
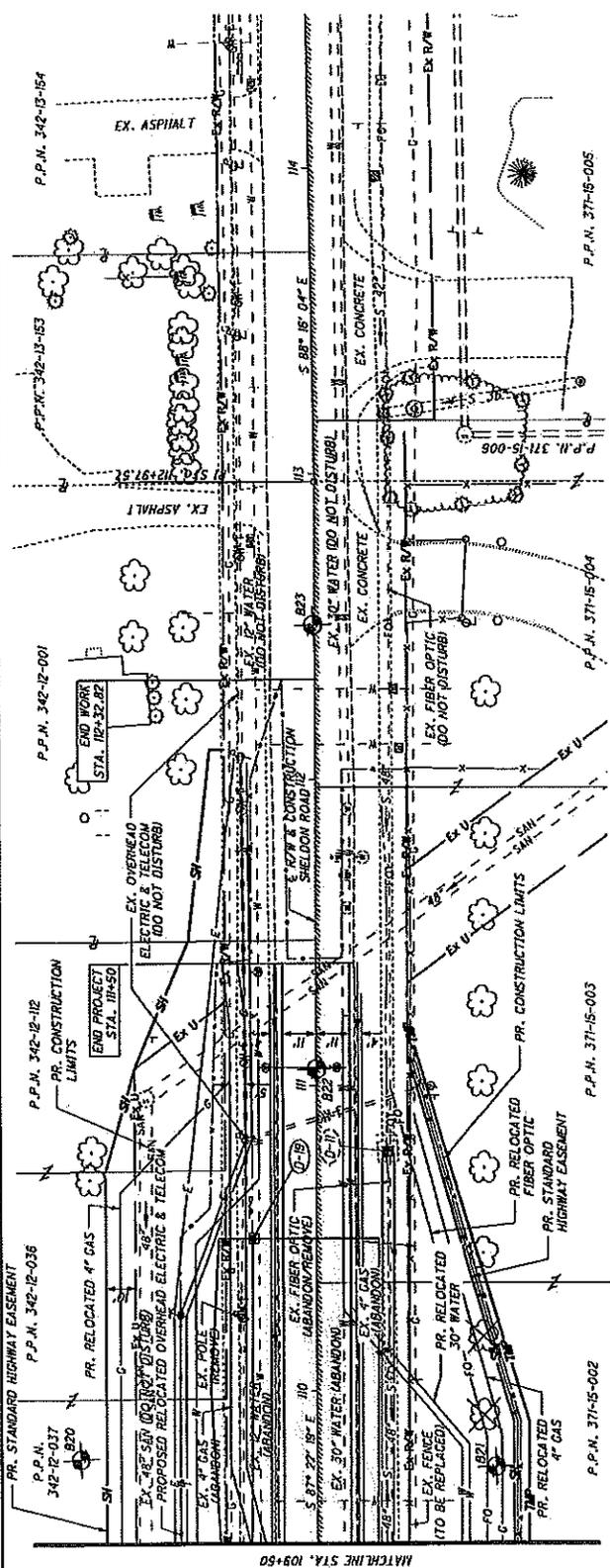
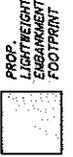
NOTES:
1. ALL UNDERGROUND RELOCATED CONSTRUCTION WITHIN ABRAM CREEK AND WETLAND LIMITS.
2. FOR COMPLETE STORM SEWER INFORMATION, SEE SHEETS 30-32.
3. EXISTING 12" WATER ON NORTH SIDE HAS PREVIOUSLY BEEN ABANDONED FROM APPROXIMATELY STA. 104+44 TO STA. 106+44.

- LEGEND
- 1. PR. GUARDRAIL, TYPE MGS
 - 2. PR. ASPHALT ASSEMBLY, AGS TYPE E
 - 3. PR. BRIDGE TERMINAL ASSEMBLY, TYPE I
- VEGETATED BIOFILTER STRIP
 - VEGETATED FILTER STRIP
 - WETLANDS
 - PROP. LIGHTWEIGHT FOOTPRINT





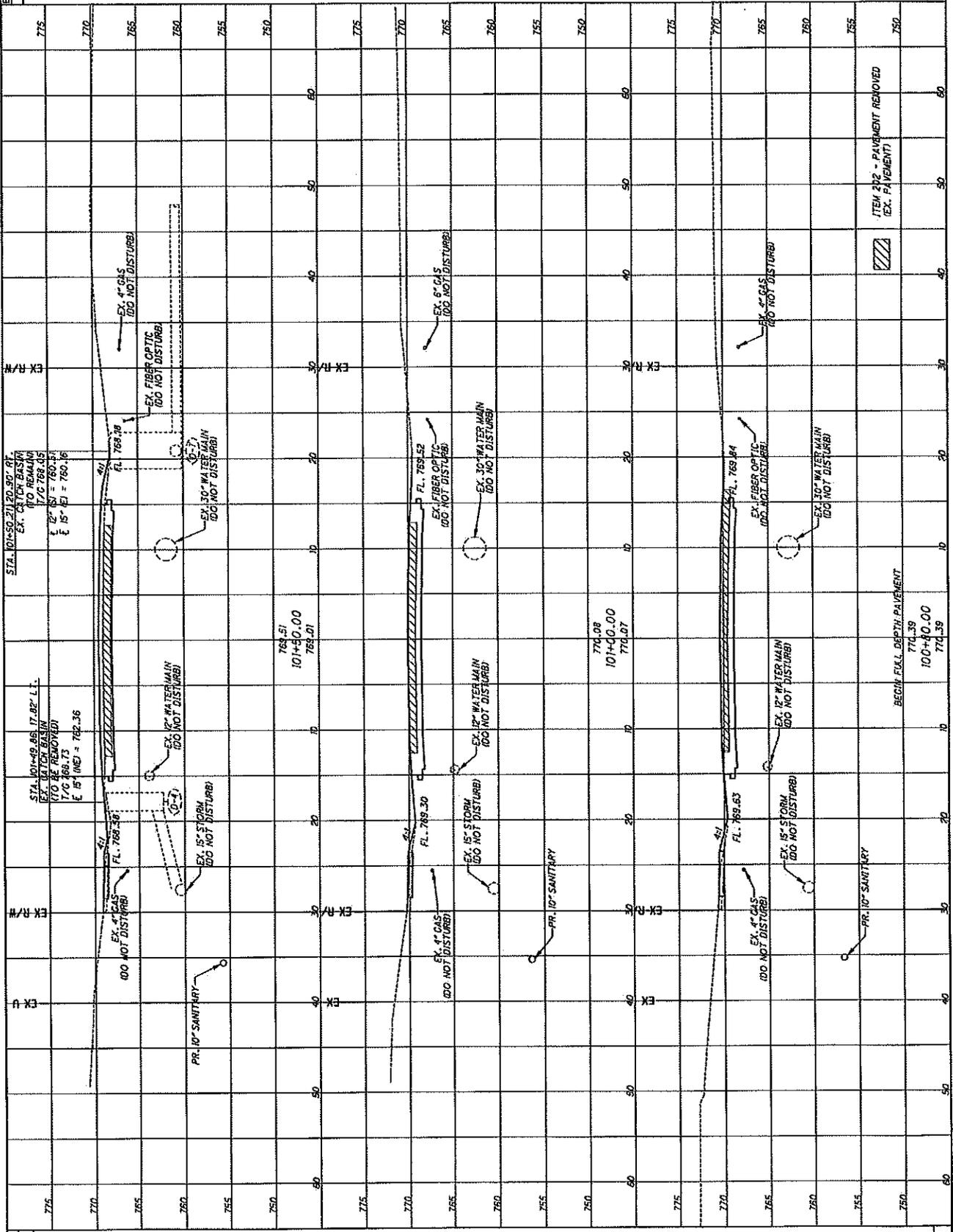
NOTES:
1. FOR COMPLETE STORY
SEESELECTION, SEE
SHEETS 30-32.



CY-SHELDON RD.

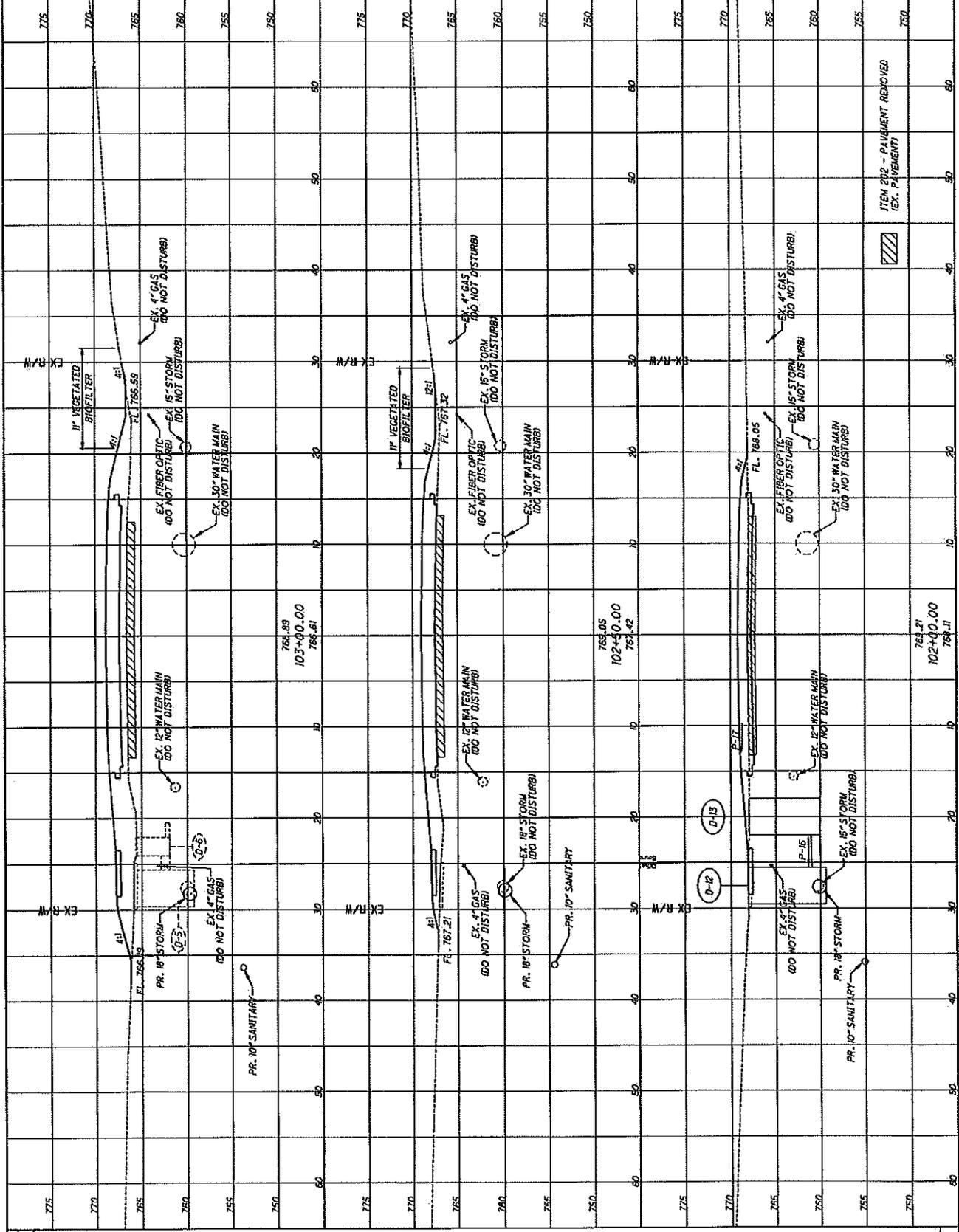
CROSS SECTIONS
STATION 100+80.00 TO 101+50.00

CAT. NO.	VOLUME	
	EST.	ACT.
111		
112		
113		
114		

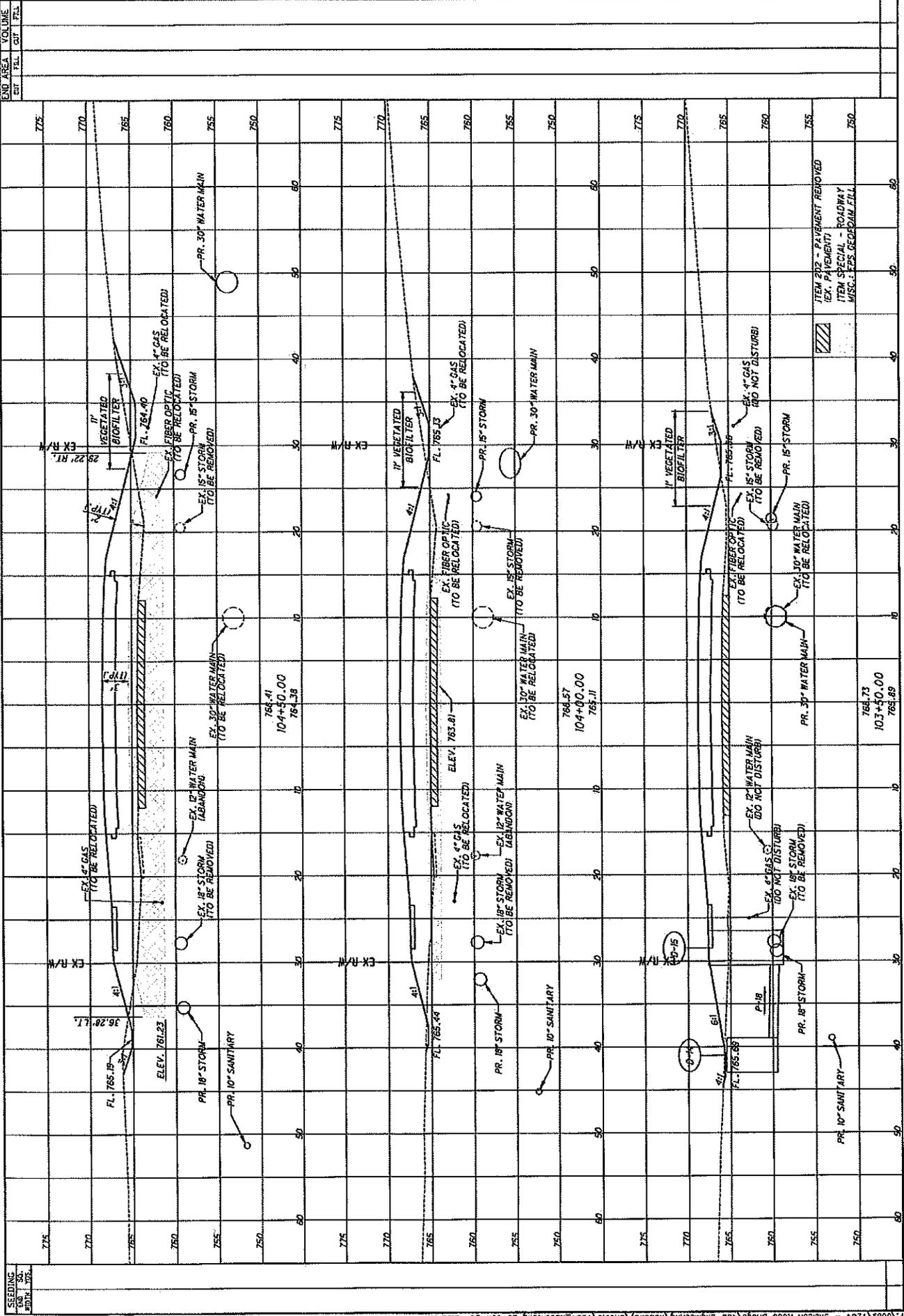


SEEDING	SO.
100	100
101	101
102	102

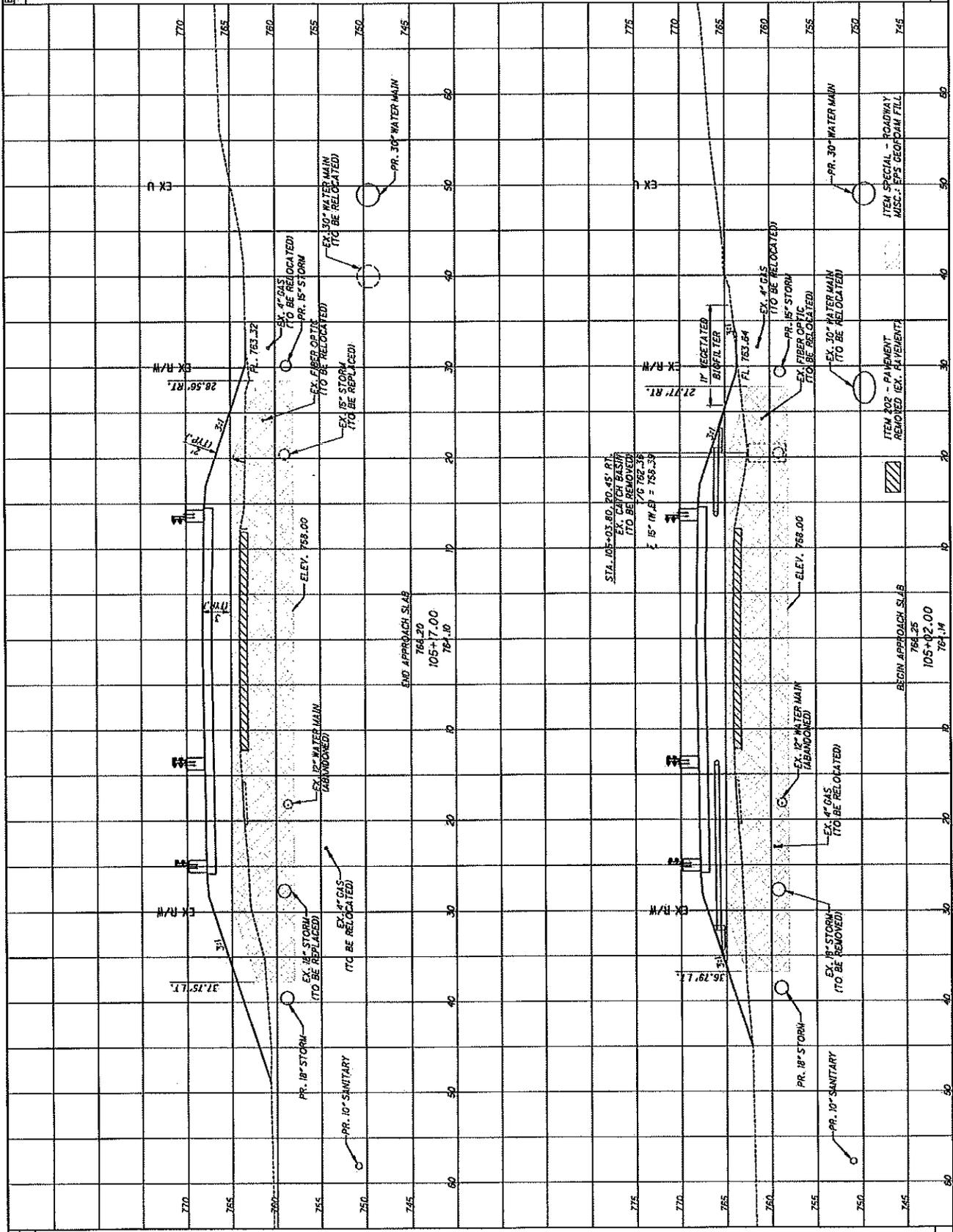
END AREA	VOLUME
CU FT	CU YD
FILL	FILL
CUT	CUT



SEEDING	100
GRAVEL	100
GRAVEL	100

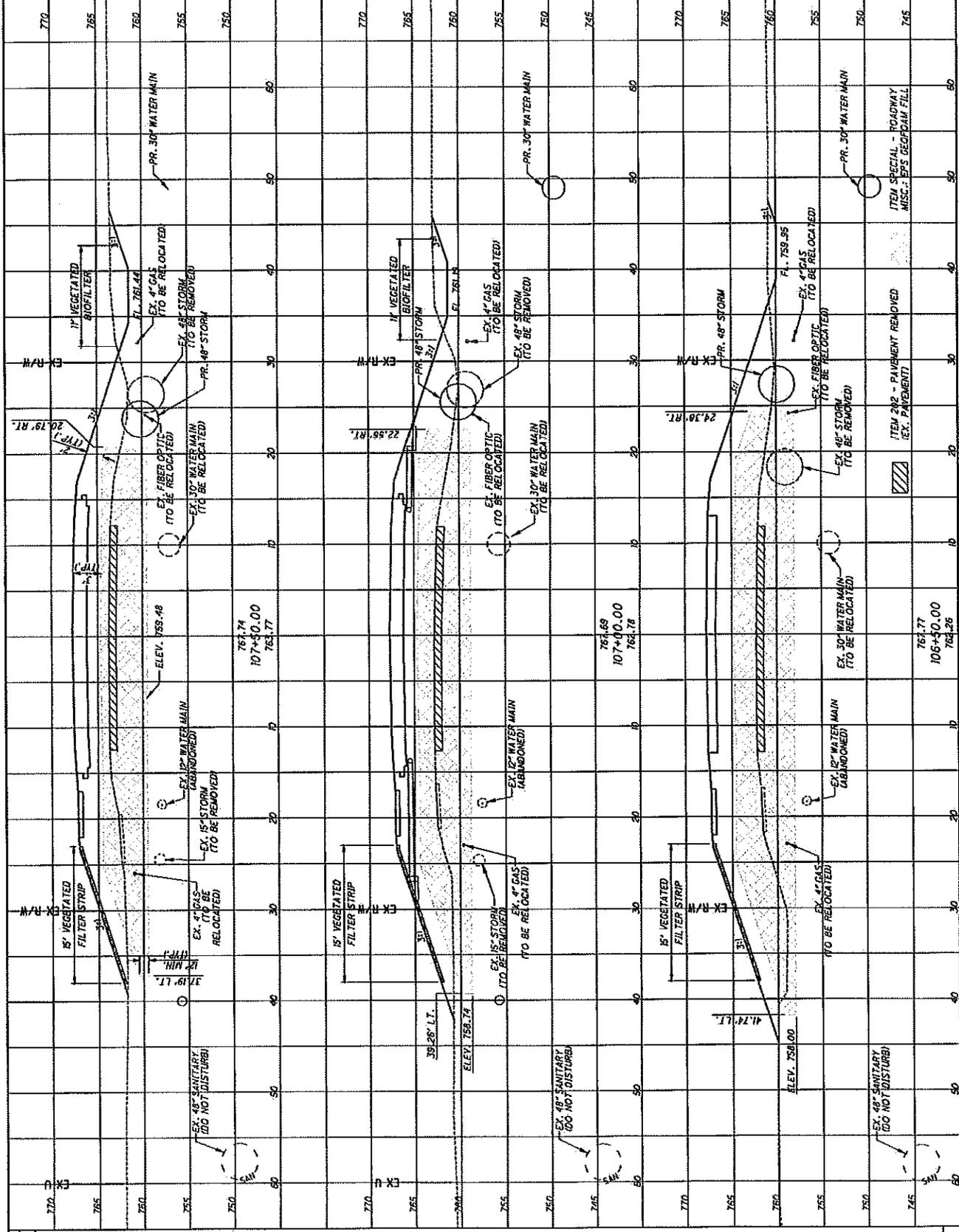


END AREA	VOLUME		CHECKED	DATE
	CUT	FILL		



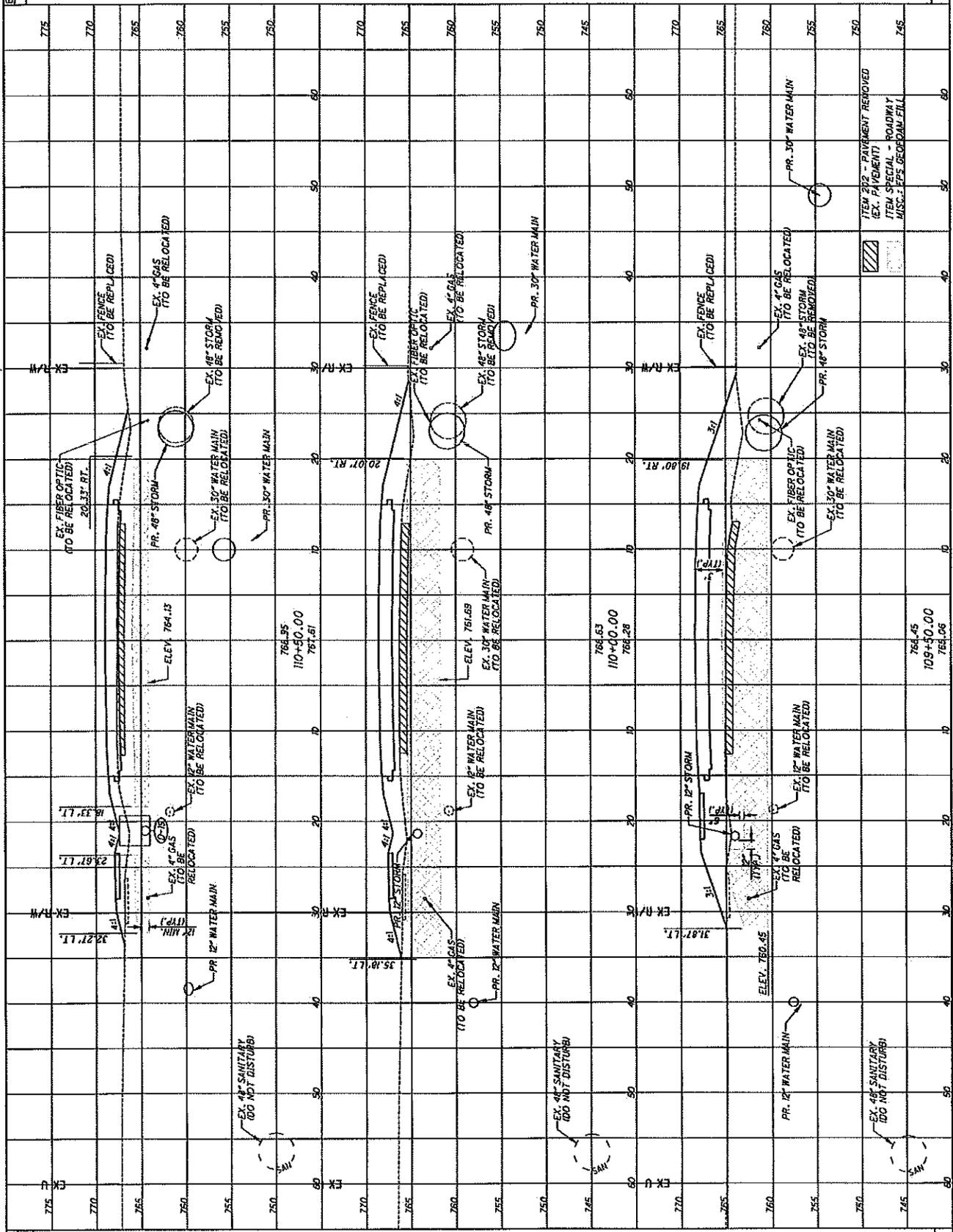
SEEDING	NO.	AMOUNT

END AREA	VOLUME		
	FILL	CUT	FLL



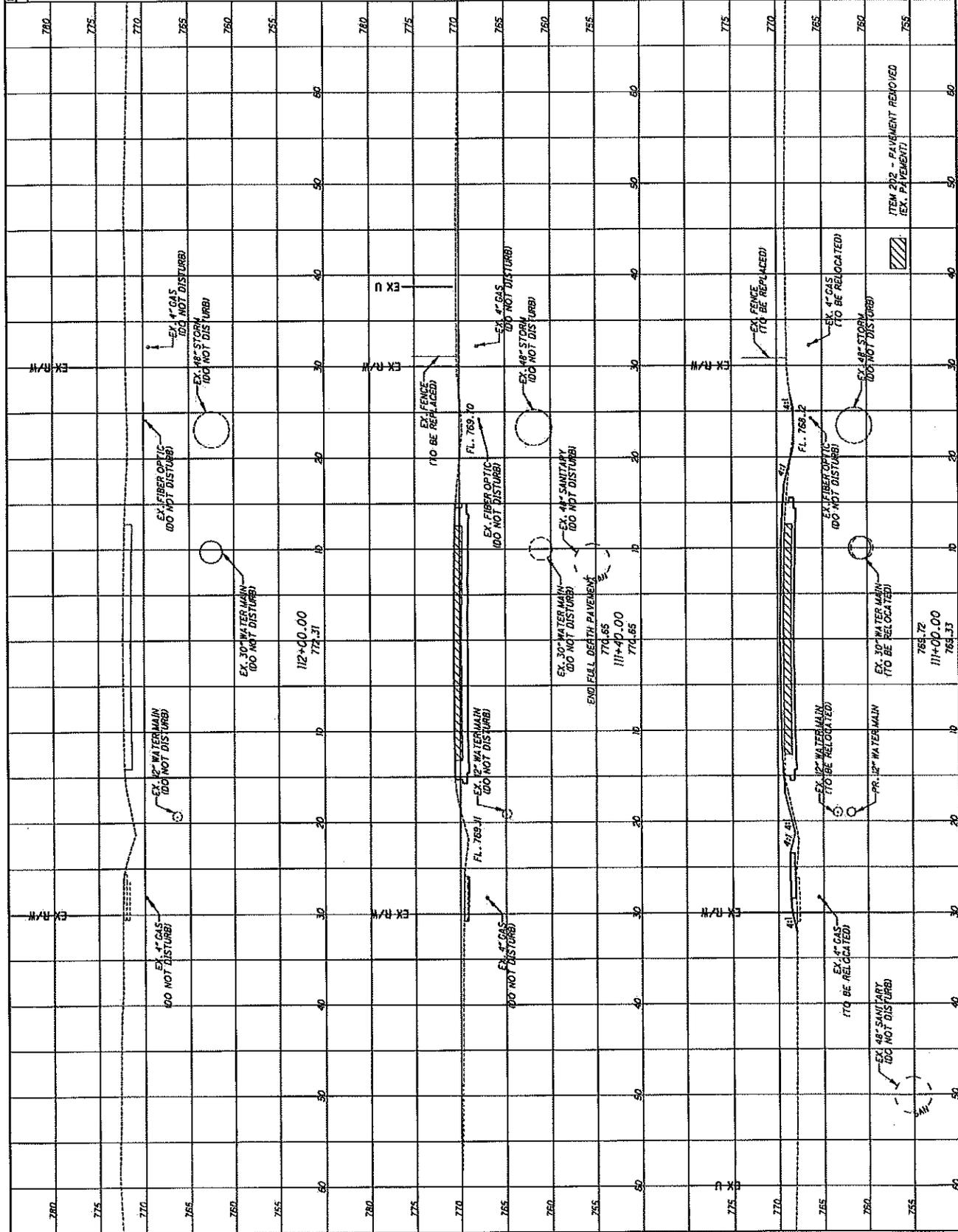
SEERING	
END	
DATE	
BY	

END AREA	VOLUME	CROSS SECTIONS		
		FT	YD	CU
775				
770				
765				
760				
755				
750				
770				
765				
760				
755				
750				
745				
770				
765				
760				
755				
750				
745				



SEEDING	SOIL	NO.
775		
770		
765		
760		
755		
750		
770		
765		
760		
755		
750		
745		

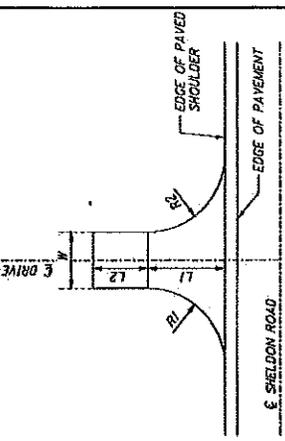
SECTIONS	260	275	270	265	260	255	280	275	270	265	260	255	280	275	270	265	260	255
END AREA																		
CUT																		
FILL																		
VOLUME																		
PERCENT																		
REMARKS																		



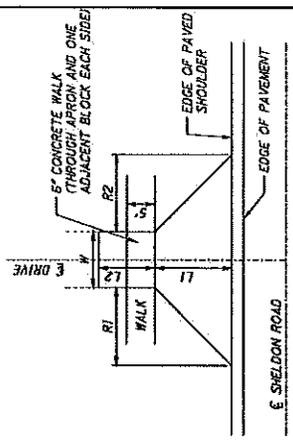
SECTIONS	260	275	270	265	260	255	280	275	270	265	260	255	280	275	270	265	260	255
END AREA																		
CUT																		
FILL																		
VOLUME																		
PERCENT																		
REMARKS																		

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TYPE 1 DRIVEWAY PLAN VIEW (TYPICAL)



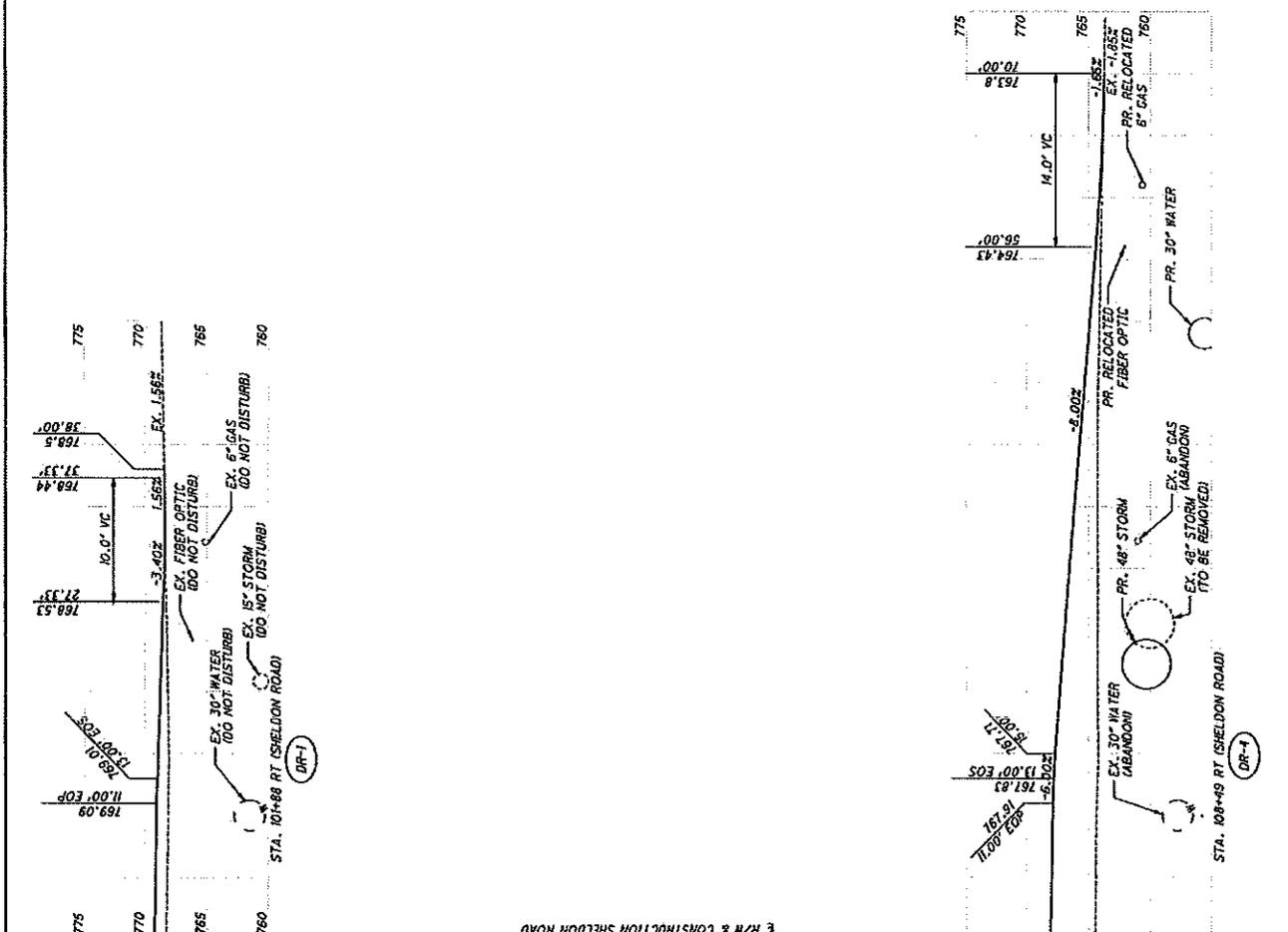
TYPE 2 DRIVEWAY PLAN VIEW (TYPICAL)



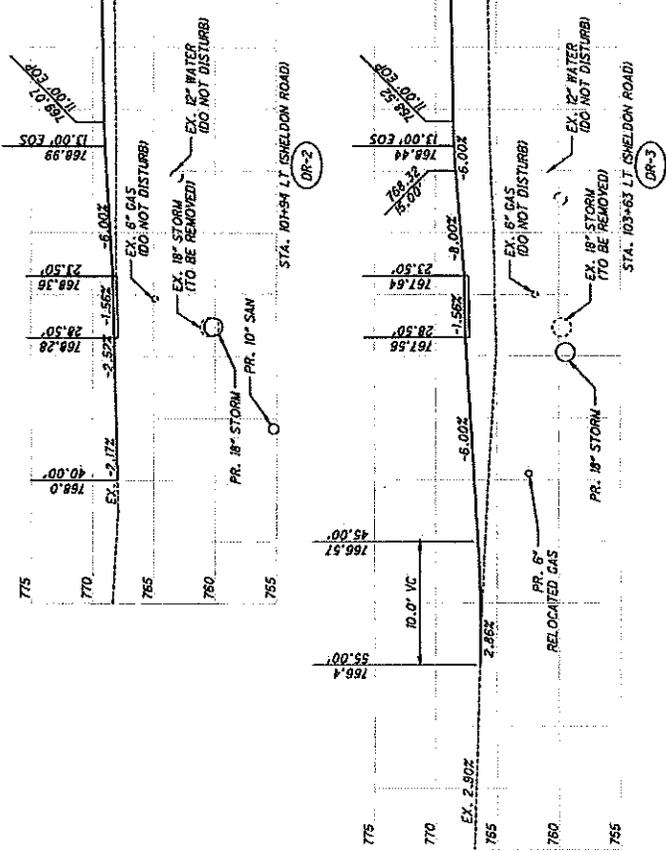
SHEET NO.	REFERENCE NO.	STATION	SIDE	DRIVE TYPE	DRIVE MATERIAL	DRIVE ANGLE	APRON LENGTH 'L1'	DRIVE LENGTH 'L2'	WIDTH 'W'	R1 LEFT SIDE RADIUS OR APRON FLARE OF DRIVE LOOKING FROM E1	R2 RIGHT SIDE RADIUS OR APRON FLARE OF DRIVE LOOKING FROM E1	CADD GENERATED SURFACE AREA	PAVEMENT REMOVED	EXCAVATION	EEMBANKMENT	SUBGRADE COMPACTION	AGGREGATE BASE	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)	6" NON-REINFORCED CONCRETE PAVEMENT	
												SF	SY	CY	CY	SY	CY	CY	SY	SY	
15	DR-1	10+08	RT	COMM.	ASPH.	90°	25.0	0.0	34.0	22.1	5.9	1200									452
15	DR-2	10+84	LT	RES.	ASPH.	90°	10.5	16.5	12.0	5.0	5.0	376									441
15	DR-3	103+83	LT	RES.	ASPH.	90°	10.5	31.5	12.0	5.0	5.0	556									441
16	DR-4	108+49	RT	FIELD	AGG.	90°	25.0	32.0	24.0	25.0	25.0	2404									441

TOTALS CARRIED TO GENERAL SUMMARY

- FIELD DRIVES:
 - ITEM 304 - 6" AGGREGATE BASE
 - ITEM 204 - SUBGRADE COMPACTION
- RESIDENTIAL DRIVES:
 - ASPHALT
 - ITEM 441 - 2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)
 - ITEM 304 - 6" AGGREGATE BASE
 - ITEM 204 - SUBGRADE COMPACTION
- COMMERCIAL DRIVES:
 - ASPHALT
 - ITEM 441 - 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)
 - ITEM 407 - TACK COAT
 - ITEM 441 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (449), (DRIVEWAYS)
 - ITEM 304 - 6" AGGREGATE BASE
 - ITEM 204 - SUBGRADE COMPACTION
 - BLUE APRON MATERIAL TYPE
 - ASPHALT - FOR ASPHALT AND GRAVEL DRIVES

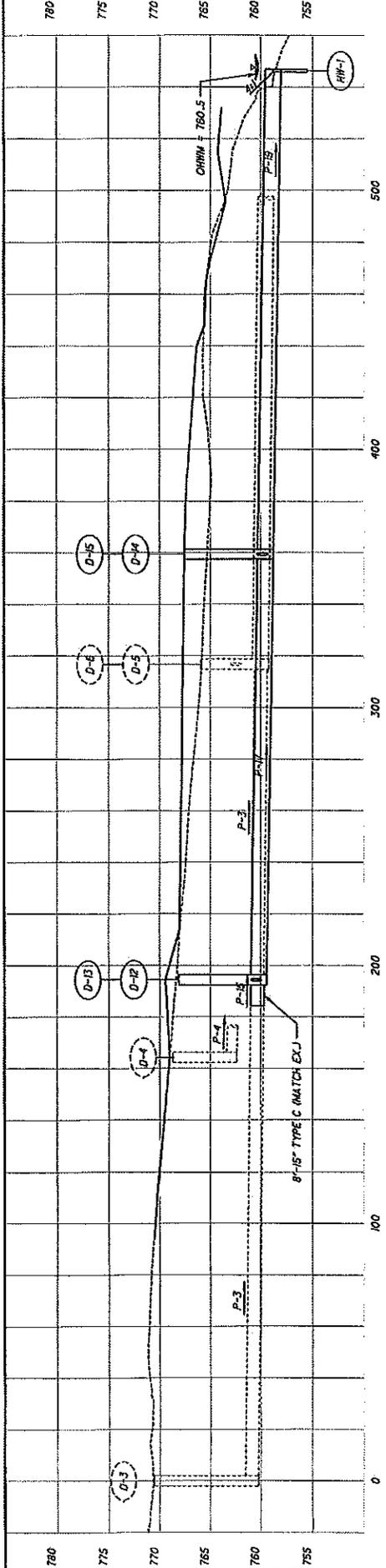


E R/W & CONSTRUCTION SHELDON ROAD



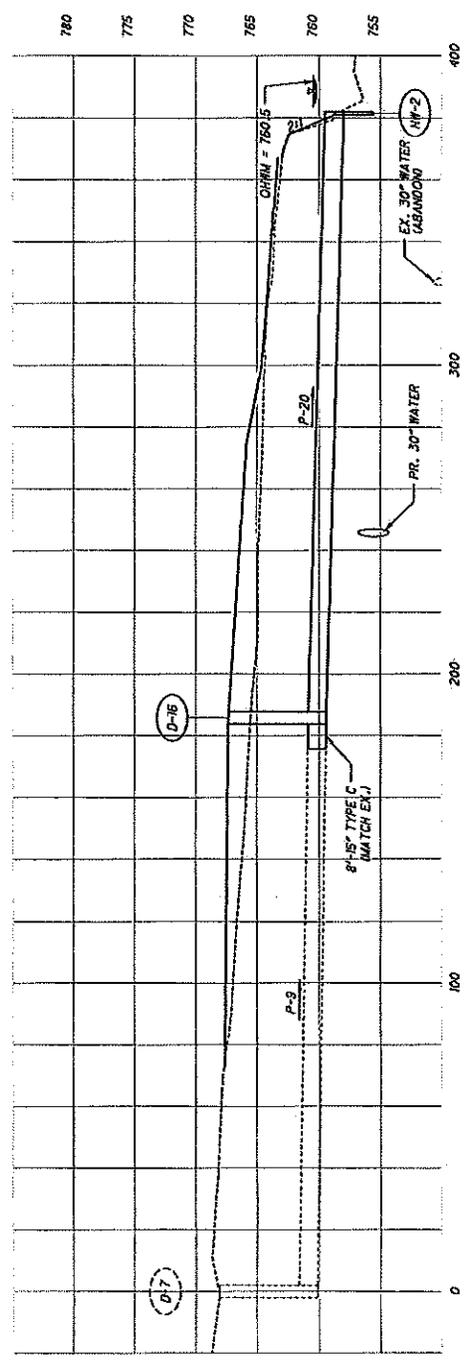
DATE	1.11.11
COM	COM
BY	LN

HORIZONTAL SCALE IN FEET

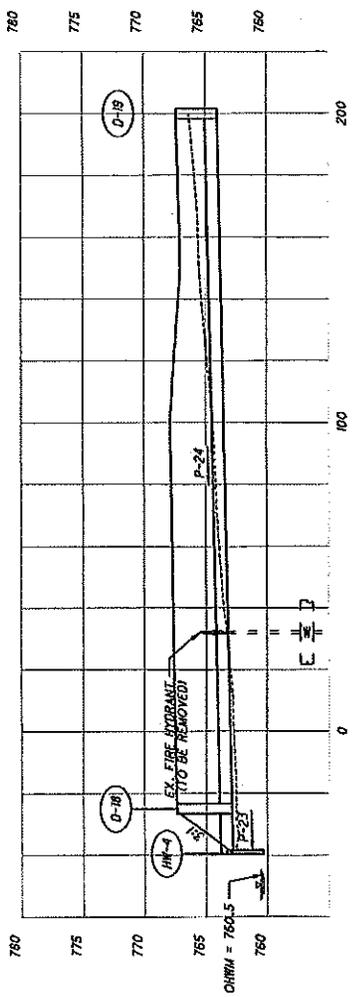


NORTHWEST STORM SEWER

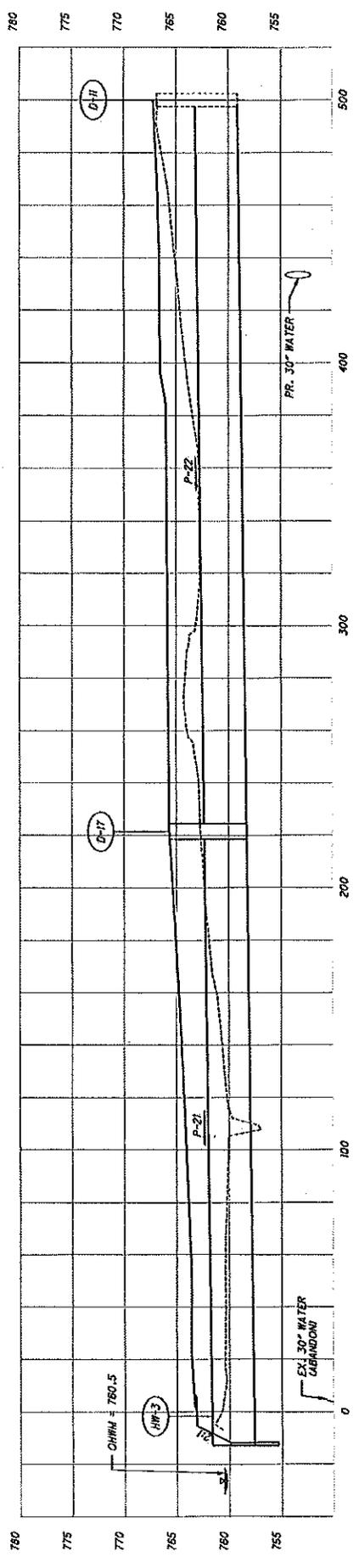
NOTES:
1. SEE SHEET 30 FOR COMPLETE DRAINAGE INFORMATION.



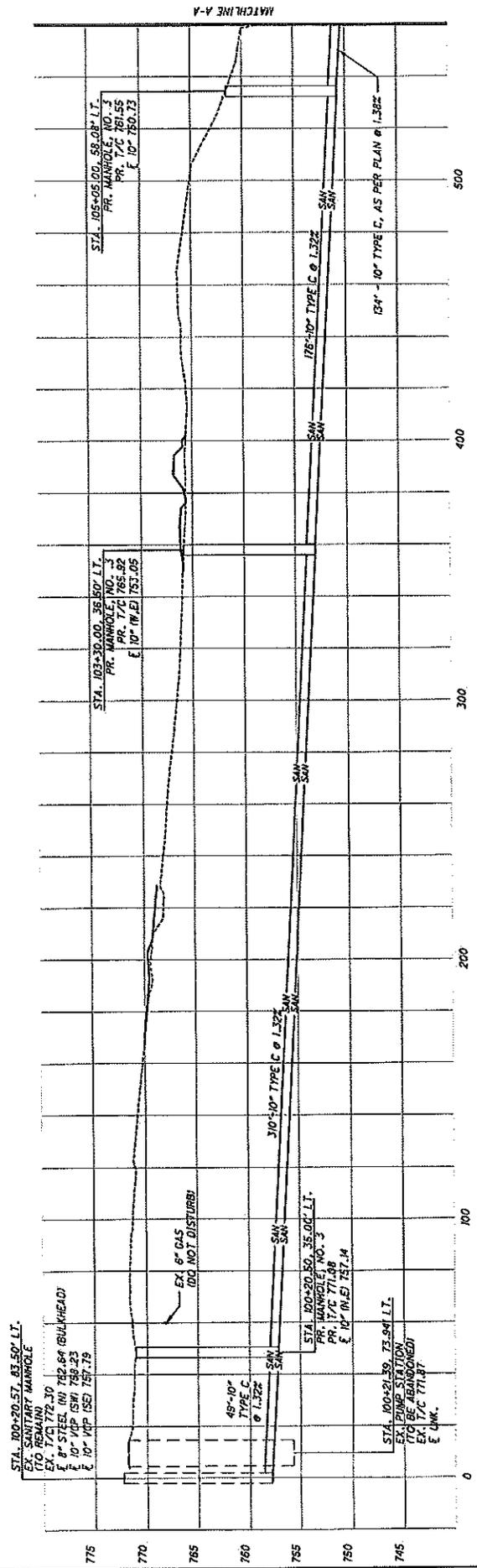
SOUTHWEST STORM SEWER



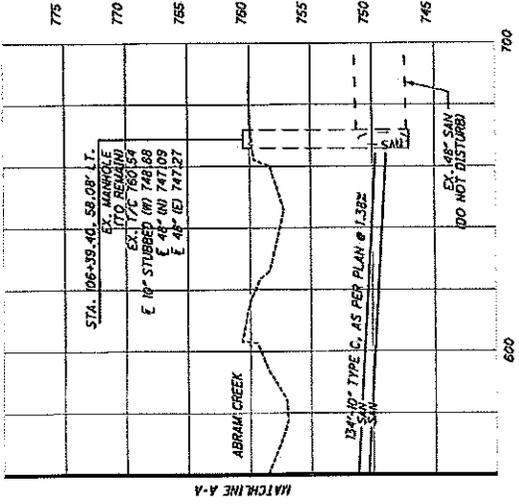
NOTES:
1. SEE SHEET 30 FOR COMPLETE DRAINAGE INFORMATION. NORTHEAST STORM SEWER



SOUTHEAST STORM SEWER



PROPOSED SANITARY SEWER



PROPOSED SANITARY SEWER

REFERENCE STANDARDS

- ASTM A276- STAINLESS STEEL BARS AND SHAPES
- ASTM A193/A194- ALLOY-STEEL AND STAINLESS-STEEL BOLTING FOR HIGH TEMPERATURE OR HIGH-PRESSURE SERVICE AND OTHER SPECIAL PURPOSE APPLICATIONS
- ASTM A536- DUCTILE IRON CASTINGS
- ASTM A1097- STEEL CASING PIPE, CARBON, ELECTRIC-FUSION (ARCI-WELDED (NPS 10 AND LARGER))
- ASTM D2774- STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING
- ASTM F1668- STANDARD GUIDE FOR CONSTRUCTION PROCEDURES FOR BURIED PLASTIC
- ANSI/AWWA C111- RUBBER-GASKET JOINTS FOR DUCTILE IRON PRESSURE PIPE AND FITTINGS
- ANSI/AWWA C151- DUCTILE-IRON PIPE, CENTRIFUGALLY CAST
- ANSI/AWWA C153- DUCTILE IRON COMPACT FITTINGS
- ANSI/AWWA C110- DUCTILE IRON FLANGED FITTINGS
- AWWA C219- BOLTED SLEEVE-TYPE COUPLINGS FOR PLAIN-END PIPE
- AWWA C509- RESILIENT-SEATED GATE VALVES FOR WATER SUPPLY SERVICE
- AWWA C515- REDUCED-WALL, RESILIENT-SEATED GATE VALVES FOR WATER SUPPLY SERVICE
- AWWA C900- POLYVINYL CHLORIDE PVC PRESSURE PIPE AND FABRICATED FITTINGS
- AWWA C909- MOLECULARLY ORIENTED POLYVINYL CHLORIDE
- ODOT 499- CONCRETE

CLAMPS AS DIRECTED BY CLEVELAND WATER.

- HYDRANT BRANCHES TO BE FULLY RESTRAINED. IF BRANCH IS SHORTENED, USE ONLY 1 SLEEVE OR COUPLING WITH NO NEW PIPE REQUIRED.
- MIDDLE RING AND FOLLOWER GLANDS TO BE EITHER STEEL OR DUCTILE IRON ASTM A536.
- FLUSHING HYDRANTS SHALL CONSIST OF 2" RIP VERTICAL INLET, 2" RIP OUTLET AND BE SELF-DRAINING. FLUSHING HYDRANT SHALL BE FULLY OPERABLE AND SERVICEABLE FROM ABOVE GROUND. EQUAL TO KUPERFERLE TRUFLO MODEL NO. TF500.

COMPRESSION COUPLINGS--VALVES AND HYDRANTS

- CLASS 250 AWWA C219 GASKETED, SLEEVE TYPE WITH DIAMETERS TO PROPERLY FIT PLAIN END PIPE
- MINIMUM WORKING PRESSURE: 250 PSI
- EQUAL TO DRESSER STYLE NO. 38, 138, OR 162 (TRANSITION TYPE) OR ROMAC 501/ SMITH-BLAIR 441 STRAIGHT AND TRANSITION COUPLINGS.
- EACH COUPLING TO CONSIST OF 1 DUCTILE IRON MIDDLE RING WITHOUT STOPS (ASTM-A536), 2 DUCTILE IRON FOLLOWER GLANDS (ASTM A536), 2 RUBBER COMPOUND BUNA-N BLEND, WEDGE SECTION GASKETS, AND SUFFICIENT TRACKHEAD STAINLESS STEEL BOLTS AND NUTS OF ASTM A276/A193/A194 TYPE 304 EXTRA HEAVY HEX TO PROPERLY COMPRESS THE GASKETS.

FITTINGS/JOINTS

- ALL FITTINGS/JOINTS TO BE APPROVED DUCTILE IRON, CLASS 350, CEMENT LINED, OR FUSION BONDED EPOXY COATED (UNLESS OTHERWISE CALLED FOR ON PLANS).
- ALL FITTINGS TO BE RESTRAINED USING A "RETAINED" MECHANICAL JOINT CONFORMING TO THE MATERIAL AND PERFORMANCE REQUIREMENTS OF ANSI/AWWA C110/A21.10 AND ANSI/AWWA C111/A21.11, OR "COMPACT" FITTINGS IN ACCORDANCE WITH ANSI/AWWA C153/A21.53.
- MUST HAVE APPROVED "TYPE I" OR "TYPE II" BOLTS/LESS RESTRAINED PUSH-ON JOINTS TO THE LIMITS SHOWN ON THE DRAWINGS.
- ALL FITTINGS ARE TO HAVE BELL ENDS.

GASKETS AND LUBRICANTS

- ELASTOMERIC GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477 FOR HIGH-HEAD APPLICATIONS.
- GASKETS AND LUBRICANTS INTENDED FOR USE WITH POTABLE WATER SHALL BE CERTIFIED BY AN ACCREDITED TESTING AGENCY FOR COMPLIANCE WITH NSF/ANSI 61.

ANODE PROTECTION

- MAGNESIUM ALLOY ANODES SHALL MEET ASTM B843 AND ASTM G97.
- THERMITE WELDS ARE TO BE COATED WITH A PREFABRICATED ONE-PIECE PLASTIC CAP.
- COPPER SLEEVES ARE REQUIRED FOR THERMITE WELD WIRE CONNECTIONS USING #10 AWG WIRE OR SMALLER.

WATER MAIN TRENCH

- BEDDING, INITIAL, AND PREMIUM BACKFILL, MATERIAL: # 57 OR #67 COARSE LIMESTONE AGGREGATE COMPLYING WITH ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 703.11; WRITTEN APPROVAL REQUIRED BY CWD FOR SAND BEDDING FOR DUCTILE IRON PIPE.
- SUITABLE BACKFILL: EXCAVATED MATERIAL FREE OF ROCK LARGER THAN 1.5", FROZEN MATERIALS, ORGANIC MATERIAL, AND DEBRIS.
- TYPE 2 CONTROLLED LOW-STRENGTH MORTAR (CLSM)

SHALL CONFORM TO ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS SECTION 613.03. CLSM MAY BE USED AS DIRECTED BY CLEVELAND WATER.

CASING

- CASING SPACER: 8" WIDE STAINLESS STEEL WITH EPDM LINER AND REINFORCED PLASTIC RUNNERS
- CASING PIPE: ASTM A1097 COATED OR UNCOATED STEEL WITH A MIN. 35,000 PSI SMYS.
- FOR 8" WATER MAIN USE 16" CASING
- FOR 12" WATER MAIN USE 20" CASING

TRACER WIRE

- MUST BE INSTALLED WITH A CONTINUOUS RUN OF 12-GAUGE COPPER-CLAD STEEL WIRE.
- BREAKING LOAD: MIN. 450 POUNDS
- MIN. 30 MILS OF BLUE HOPE INSULATION CERTIFIED FOR DIRECT BURIAL
- GROUND ROD: MIN 1.5 LB MAGNESIUM DRIVE-IN ANODE ROD WITH CONNECTED GROUND WIRE.
- CONNECTORS: WATERPROOF, CONTAIN DIELECTRIC SILICONE AND RATED FOR DIRECT BURIAL.
- NON-LOCKING FRICTION FIT, TWIST-ON, AND TAPED CONNECTIONS ARE NOT PERMITTED.

SERVICE CONNECTIONS

- ALL SERVICE CONNECTIONS SHALL BE A MINIMUM OF 1"
- FOR CONNECTIONS 2" AND SMALLER: USE TYPE K COPPER
- FOR CONNECTIONS 3" AND LARGER: USE CLASS 52 DUCTILE IRON WRAPPED IN V-BIO® ENHANCED POLYETHYLENE ENCASEMENT.

BOLTS AND NUTS

- ALL BOLTS AND NUTS ON ALL RETAINED MECHANICAL JOINTS SHALL HAVE FIELD APPLIED ONE 1 COAT OF BITUMASTIC PAINTING FOLLOWED BY AN ENCASEMENT OF V-BIO® POLYETHYLENE WRAP OR APPROVED EQUAL WRAPPING IN ACCORDANCE WITH ANSI/AWWA C105/A21.5 MODIFIED METHOD "A".

CONCRETE

- FOR BULKHEAD: CLASS QC 1 OR 4,000 PSI HIGH STRENGTH BAGGED CONCRETE MIX
- FOR THRUST BLOCK: CLASS QC 1 WITH 4,000 PSI 28 DAY COMPRESSIVE STRENGTH (ODOT 499)

FROST PROOFING

- USE PRE-FORMED CELLULAR CONCRETE FOAM "GILSULATE 500 XR" AS EQUAL
- MANUFACTURED BY GILSULATE INTERNATIONAL, INC. OR APPROVED EQUAL

LOWERING

- PIPE USED SHALL BE 8" (MIN.) AND 12" (MAX.) IN DIAMETER.
- MAXIMUM BEND ALLOWED TO BE 22.5 DEGREES.

TEE

- PIPE TO BE USED ON TEES: 8" (MIN.) AND 12" (MAX)
- AWWA C110 OR C153 DI CLASS 350 MJ FITTINGS WITH FBE COATING, CEMENT LINING, POLYETHYLENE ENCASEMENT
- AWWA C219 PIPE COUPLINGS- ROMAC 501 OR SMITH BLAIR 441 DI ONLY
- AWWA C509 DUCTILE IRON RESILIENT WEDGE GATE VALVE (MJ X MJ)
- MECHANICAL JOINT RETAINER GLAND FOR PVC PIPE-TYLER UNION OR APPROVED EQUAL

NO.	DATE	BY	REVISIONS



CITY OF CLEVELAND
 DEPARTMENT OF PUBLIC UTILITIES
 DIVISION OF WATER (CWD)

MATERIAL CRITERIA FOR WATER MAIN
 INSTALLATION AND REPLACEMENT
 DETAIL NO.: GEN-000A
 SCALE: N.T.S. DATE: 7/12/2024

DEVELOPERS, ENGINEERS, AND CONTRACTORS ARE TO ABIDE BY THE MOST CURRENT VERSION OF THE CLEVELAND WATER NOTES AND DETAILS. THE MOST UP-TO-DATE VERSION CAN BE FOUND AT WWW.CLEVELANDWATER.COM/CONSTRUCTION/ OR AS PROVIDED BY CLEVELAND WATER STAFF.

REFERENCE STANDARDS

- AWWA C600 - INSTALLATION OF DUCTILE-IRON MAINS AND THEIR APPURTENANCES
- AWWA C605- UNDERGROUND INSTALLATION OF POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FITTINGS
- AWWA C651- DISINFECTING WATER MAINS
- ASTM D2774- STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING
- ASTM F1668- STANDARD GUIDE FOR CONSTRUCTION PROCEDURES FOR BURIED PLASTIC PIPE

OVERALL PIPE PREPARATION AND EXECUTION

- ALL DUCTILE IRON PIPE SHALL BE INSTALLED PER THE MOST CURRENT REVISION OF AWWA C600, AWWA MANUAL M41, DIPRA'S "INSTALLATION GUIDE FOR DUCTILE IRON PIPE" (ISBN 0-9642194-0-9) AND "DIRECT TAPPING OF DUCTILE IRON PIPING ENCASED IN POLYETHYLENE", AS WELL AS THE MANUFACTURER'S INSTRUCTIONS.
- ALL DUCTILE IRON BURIED WATER MAINS, FITTINGS, VALVES, FIRE HYDRANT BRANCH PIPING AND APPURTENANCES SHALL BE ENCASED WITH V-BIO® ENHANCED POLYETHYLENE ENCASEMENT INSTALLED IN ACCORDANCE WITH THE MOST CURRENT REVISION OF ANS/AWWA C-105/A21.5 MODIFIED METHOD "A" AND ASTM A674.
- PIPE AND ACCESSORIES SHOULD BE INSPECTED FOR DEFECTS AND CLEANLINESS BEFORE THEY ARE LOWERED INTO THE TRENCH. ANY DEFECTIVE OR DAMAGED MATERIAL SHOULD BE REPAIRED OR REPLACED, AND ALL FOREIGN MATTER OR DIRT REMOVED FROM THE INTERIOR OF THE PIPE AND ACCESSORIES BEFORE LOWERING INTO TRENCH.
- ALL PVC PIPE SHALL BE INSTALLED PER AWWA, C605, ASTM D2774, ASTM F1668, AND MANUFACTURER'S INSTRUCTIONS.
- ONCE DELIVERED, ALL PVC PIPE MUST BE PROTECTED FROM DIRECT SUN EXPOSURE UNTIL THE PIPE IS INSTALLED AND BACKFILLED.
- ANY PIPE JOINT THAT HAS BEEN OVER-INSERTED SHALL HAVE BOTH THE BELL PIPE AND THE SPIGOT PIPE REMOVED AND DISCARDED.
- IN NO CASE SHALL MAINS BE LAID WITH LESS THAN 3'-6" OF COVER IN UNPAVED AREAS AND 3'-0" TO BOTTOM OF SLAB IN PAVED AREAS. MAINS SHALL BE LAID AT A BURY DEPTH OF 6 FT. MIN. UNLESS WRITTEN PERMISSION IS PROVIDED BY CLEVELAND WATER.
- ALL MATERIALS, INCLUDING BUT NOT LIMITED TO WATER MAINS, FIRE HYDRANTS, VALVES, CONNECTION MATERIALS, AND OTHER WATER APPURTENANCES, SHALL BE NEW AND UNUSED AND SHALL CONFORM TO THE MOST CURRENT CLEVELAND WATER SPECIFICATIONS. ALL MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH CLEVELAND DIVISION OF WATER STANDARDS.
- TWO FEET ABOVE THE MAIN, DETECTABLE TRACER TAPE NOTING THE PRESENCE OF A WATER MAIN SHALL BE INSTALLED FOR THE ENTIRE LENGTH OF THE MAIN, INCLUDING HYDRANT LATERALS AND OPEN CUT INSTALLED SERVICE CONNECTIONS.
- ALL MATERIALS USED SHALL ABIDE BY REQUIREMENTS LISTED ON MATERIAL SPECIFICATION LIST (GEN-000A).

TRACER WIRE FOR PVC PIPE

- ALL NEW TRACER WIRE INSTALLATIONS SHALL HAVE THEIR FUNCTION

VERIFIED BY BEING LOCATED USING TYPICAL LOW FREQUENCY (512HZ) LINE TRACING EQUIPMENT. THE LOCATING FIRM SHALL PROVIDE WRITTEN CERTIFICATIONS THAT THE SYSTEM IS COMPLETELY FUNCTIONAL AT TEST COMPLETION.

- MAGNESIUM GROUND ANODE RODS ARE TO BE INSTALLED AT EACH DEAD END PER THE MANUFACTURER'S INSTRUCTIONS.
- TRACER LINES SHALL TERMINATE AT A DEDICATED AT-GRADE ACCESS POINT/TEST STATION IDENTIFIED WITH "WATER" ON THE CAP. AT LEAST 2 FEET OF SLACK WIRE SHALL BE PROVIDED AT EACH TERMINATION POINT.
- LATERAL TRACER LINES ON HYDRANTS, TEES, AND CROSSES ARE NOT TO CUT THE MAIN TRACER WIRE.

HYDROSTATIC PRESSURE TESTING

- CLEAN PIPE PRIOR TO CONDUCTING HYDROSTATIC PRESSURE TESTING. CLEANING MAY BE COMPLETED VIA FLUSHING OR SWABBING EXCEPT IF DISINFECTION IS CONDUCTED USING THE TABLET METHOD.
- FILL WATER MAIN AT A CONTINUOUS RATE. 1 FT/SEC MAXIMUM. ONCE FULL, FLUSH THE LINE NOT LESS THAN 3 FT/SEC UNLESS DIRECTED BY CLEVELAND WATER THAT CONDITIONS DO NOT PERMIT THE REQUIRED FLOW RATE TO BE ACHIEVED. FLUSHING SHALL CONTINUE UNTIL THE VOLUME OF WATER IN THE NEWLY INSTALLED MAIN HAS TURNED OVER AT LEAST ONE TIME.
- THE HYDROSTATIC TEST PRESSURE SHALL BE 75 PSI ABOVE THE STATIC PRESSURE PREVAILING AT THE SITE, BUT IN NO CASE LESS THAN 150 PSI. DURATION: 2 HOURS (WITH PRESSURE MAINTAINED WITHIN 5 PSI OF THE REQUIRED TEST PRESSURE).
- SHOULD THE PRESSURE TEST FAIL, THE CONTRACTOR SHALL IDENTIFY THE SOURCE(S) AND CORRECT THE DEFICIENCY. THE HYDROSTATIC PRESSURE TEST SHALL BE REPEATED FOR THE PRESCRIBED DURATION TO VERIFY THAT THE NEW WATER MAIN MEETS THE TEST CRITERIA. WORK PERMITTED TO IDENTIFY AND CORRECT FAILURE SOURCE(S) AND THEIR REMEDIATION MUST BE COMPLETED TO THE SATISFACTION OF CLEVELAND WATER AT NO ADDITIONAL COST.

DISINFECTION

- DISINFECTION FOR WATER MAINS SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN THE MOST CURRENT REVISION OF AWWA C651.

SERVICE CONNECTIONS

- SADDLE TAPPING SHALL BE PERFORMED FOR PIPES OF ANY NOMINAL SIZE AND PRESSURE CLASS. TAP SIZE IS LIMITED TO 2-INCHES MAXIMUM.
- TAPPING SLEEVE AND VALVE IS REQUIRED FOR SERVICE CONNECTIONS LARGER THAN 2-INCHES. THRUST RESTRAINT IS REQUIRED.
- SERVICE CLAMPS OF SADDLES SHALL PROVIDE FULL SUPPORT AROUND THE CIRCUMFERENCE OF THE PIPE AND PROVIDE A BEARING AREA OF SUFFICIENT WIDTH ALONG THE AXIS OF THE PIPE TO PREVENT DISTORTION WHEN THE SADDLE IS TIGHTENED. NARROW U-BOLT-TYPE STRAPS AND SADDLES HAVING LUGS ARE PROHIBITED.

PIPE JOINTS

- PIPE JOINTS SHALL ADHERE TO ANS/AWWA C110/A21.10, C111/A21.11, C153/A21.53, C900, C905, C907 AND C909 REQUIREMENTS AND PROCEDURES FOR JOINT METHODS AND MATERIALS.

- RESTRAINED JOINTS, AS INDICATED ON THE PLANS, SHALL COMPLY WITH ANS/AWWA C111/A21.11.

FITTINGS AND APPURTENANCES

- ALL FITTINGS SHALL BE APPROVED DUCTILE IRON CLASS 350, CEMENT LINED AND FUSION BOND EPOXY COATED CONFORMING TO THE REQUIREMENTS OF ANS/AWWA C110/A21.10 OR ANS/AWWA C153/A21.53.
- ALL FITTINGS AND PIPES CONNECTED TO FITTINGS SHALL BE RESTRAINED USING A "RETAINED" MECHANICAL JOINT. JOINTS SHALL COMPLY WITH ANS/AWWA C111/A21.11.
- ALL FITTINGS MUST HAVE BELL ENDS UNLESS APPROVED BY CLEVELAND WATER.
- PROVIDE PROPER SUPPORT FOR VALVES, HYDRANTS, AND FITTINGS SUCH THAT THE WEIGHT IS NOT APPLIED TO THE PIPE.

FIELD QUALITY CONTROL

- PIPE SPIGOT END, BELL END, COUPLER OR FITTING, AND ELASTOMERIC GASKET SHALL BE CLEANED IMMEDIATELY BEFORE ASSEMBLY. DO NOT REMOVE FACTORY INSTALLED GASKETS. APPROVED LUBRICANTS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- PIPE CUTTING SHALL BE CONDUCTED IN ACCORDANCE WITH AWWA C600, C900, AND MANUFACTURER REQUIREMENTS. PIPE SHALL BE MARKED AROUND ITS ENTIRE CIRCUMFERENCE TO ENSURE A SQUARE CUT.
- CUT ENDS OF PIPE SHALL BE BEVELED TO ENSURE PROPER JOINT ASSEMBLY. USE FACTORY-FINISHED PIPE END AS A GUIDE TO DETERMINE THE ANGLE AND LENGTH OF THE BEVEL. DEBURR AND CLEAN CUT PIPE END PRIOR TO BELL INSERTION.
- AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL PLUG ALL OPEN PIPE ENDS WITH WATERTIGHT PLUGS AS PER THE "PREVENTATIVE AND CORRECTIVE MEASURES DURING CONSTRUCTION" SECTION OF THE MOST CURRENT REVISION OF AWWA C-651 AS TO PREVENT THE INFILTRATION OR INTRUSION OF ANY FOREIGN OBJECTS OR MATERIALS. DATE STAMPED DIGITAL PHOTOS SHALL BE PROVIDED FOR EACH WORKDAY DEMONSTRATING THAT PROPER AWWA C-651 METHODS WERE USED TO PLUG ALL OPEN WATER MAIN ENDS. EACH PHOTO SHALL CLEARLY IDENTIFY THE STATION AT WHICH THE PIPE IS PLUGGED BY USE OF A STATION MARKER PLACED AT THE PLUGGED PIPE END. PHOTOS SHALL BE SUBMITTED ON A DAILY BASIS UNLESS OTHERWISE DEFINED BY THE CLEVELAND WATER INSPECTOR OR ENGINEER. ALL PHOTOS TAKEN OVER THE COURSE OF THE PROJECT SHALL BE SUBMITTED BY THE CONTRACTOR AS PART OF THE AS-BUILT SUBMITTAL PHOTOS ARE TO INCLUDE STATIONING MARKERS. AS-BUILTS SHALL BE DEEMED INCOMPLETE WITHOUT SAID COLLECTION OF DIGITAL PHOTOS.
- CLEVELAND WATER INSPECTORS SHALL BE INVITED TO WITNESS TRACER WIRE VERIFICATION FOR PVC PIPE INSTALLATIONS. THIS VERIFICATION SHALL BE PERFORMED UPON COMPLETION OF ROUGH GRADING AND AGAIN PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT. CONTINUITY TESTING IN LIEU OF ACTUAL LINE TRACING SHALL NOT BE ACCEPTED. CLEVELAND WATER WILL REQUIRE COMPLETION OF THE FIRST VERIFICATION PRIOR TO CHLORINATION. WITH CERTIFICATION SUBMITTED ALONG WITH RED LINE DRAWINGS, CERTIFICATION OF THE SECOND VERIFICATION SHALL BE PROVIDED WITH AS-BUILT DRAWINGS.

CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)		REVISIONS	GUIDELINES FOR WATER MAIN INSTALLATION AND REPLACEMENT
NO.	DATE	BY	DETAIL NO.:
			GEN-000B
			SCALE: N.T.S.
			DATE: 5/23/2024



WATER WORK

ITEM SPECIAL - MISCELLANEOUS METAL

THE ENGINEER SHALL INSPECT THE EXISTING CASTINGS ON ALL STRUCTURES WITHIN THE WORK LIMITS, EXCEPTING CASTINGS ON STRUCTURES OWNED BY PRIVATE COMPANIES AND CASTINGS ON STRUCTURES TO BE REMOVED AND/OR REPLACED. THOSE CASTINGS THAT THE ENGINEER DETERMINES ARE UNSUITABLE SHALL BE REPLACED. TO PROVIDE FOR THIS CONTINGENCY, AN ESTIMATED QUANTITY OF ITEM SPECIAL - MISCELLANEOUS METAL HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL CASTING MATERIALS SHALL CONFORM TO ITEM 611 OR ITEM 618, IF APPLICABLE, AND HAVE THE PRIOR APPROVAL OF THE ENGINEER.

WHERE IT IS NECESSARY TO REPLACE UNSUITABLE WATER MANHOLE CASTINGS (FRAMES AND COVERS), THEY SHALL BE REPLACED USING CUYAHOGA COUNTY NO. 9 FRAMES AND EITHER NO. 28 COVERS (OR NO. 28 SANITARY COVERS FOR SANITARY OR COMBINED SEWERS) OR NO. 37 COVERS, AS DETAILED ON THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWINGS MH-10C AND MH-11C.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, CLEANING, STORAGE AND RESETTING OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE CONTRACTOR'S EXPENSE.

EXCEPT WHERE/IF SPECIFICALLY REQUIRED AND SO SPECIFIED ELSEWHERE IN THE PLANS, THE CONTRACTOR SHALL NOT ORDER ANY OF THE ABOVE CASTINGS UNTIL DIRECTED BY THE ENGINEER, AND IN THE EVENT NO REPLACEMENT CASTINGS ARE REQUIRED, THE ITEM SHALL BE NONPERFORMED.

ALL COST ASSOCIATED WITH FURNISHING ACCEPTABLE NEW CASTING MATERIALS SHALL BE INCLUDED UNDER THIS ITEM. IN ADDITION, THE COST FOR SIMPLY INSTALLING NEW GRATES/COVERS ONLY SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. ALL COST ASSOCIATED WITH SETTING NEW CASTINGS (FRAMES AND COVERS/GRATES) TO GRADE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT STRUCTURE (611), ADJUSTED TO GRADE, AS PER PLAN OR RECONSTRUCTED TO GRADE, AS PER PLAN.

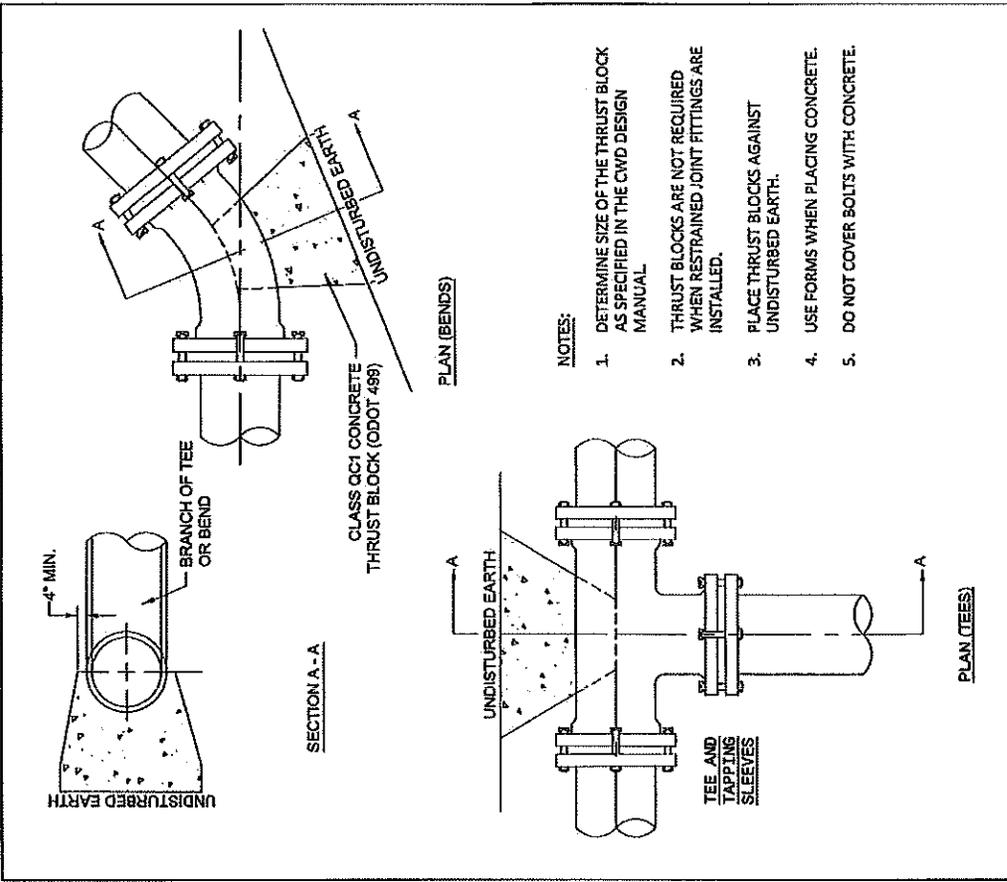
THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL - MISCELLANEOUS METAL _____ LB

WATERWORK

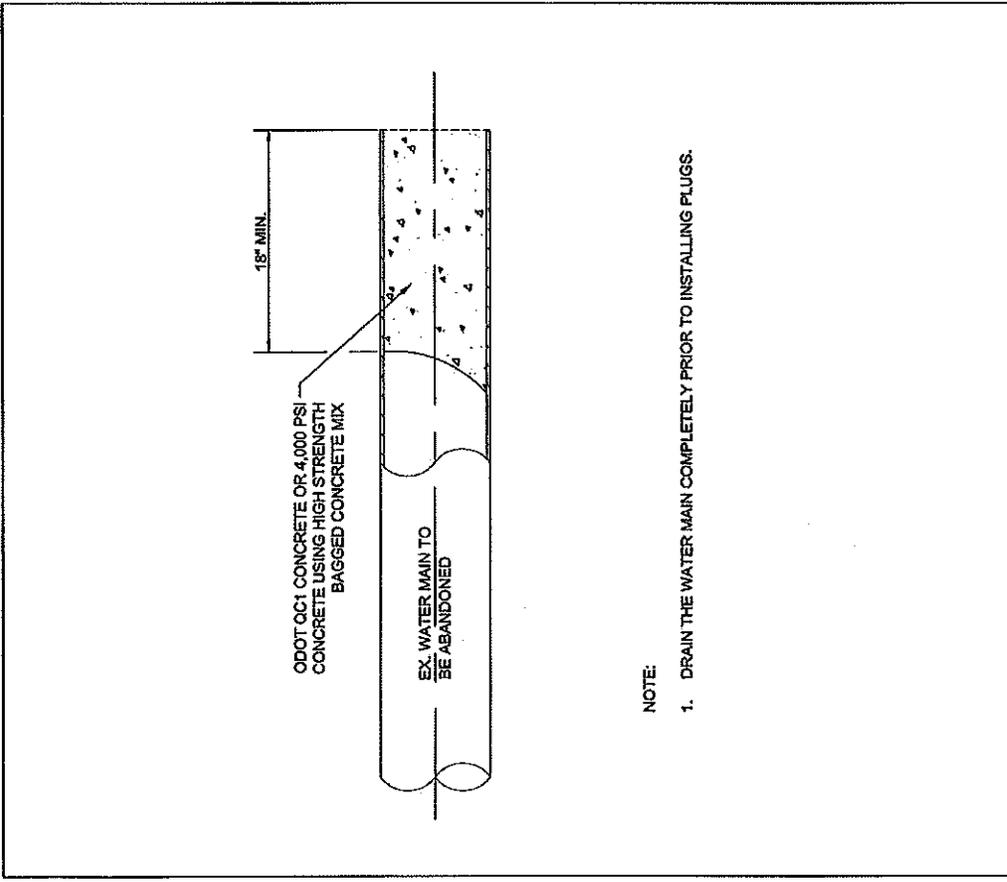
ALL WATERWORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DRAWINGS OF THE CITY OF CLEVELAND, DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER (CWD), 1201 LAKESIDE AVENUE, CLEVELAND, OHIO (AND THE NOTES & DETAILS SHOWN ON SHEETS 37-45). THE COST OF ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, EXCAVATION, BEDDING AND BACKFILL FOR THE WATERWORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR EACH WATER WORK ITEM. THE REPLACEMENT OF PAVEMENT, WALKS, DRIVES, LANDSCAPING AND ALL OTHER WORK EXCEPTING THE "WATERWORK" ITSELF, SHALL BE AS STIPULATED IN THE CONTRACT SPECIFICATIONS.

ALL PERMITS, FEES AND CWD CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE PERTINENT WATERWORK ITEMS. FOR BIDDING PURPOSES, THE CLEVELAND DIVISION OF WATER CHARGES AND FEES MAY BE FOUND IN SECTION 200 OF THE CUYAHOGA COUNTY ENGINEER SPECIFICATION BOOKLET OR OBTAINED FROM CWD'S WEBSITE AT: <http://www.clevelandwater.com/construction/construction-fees>



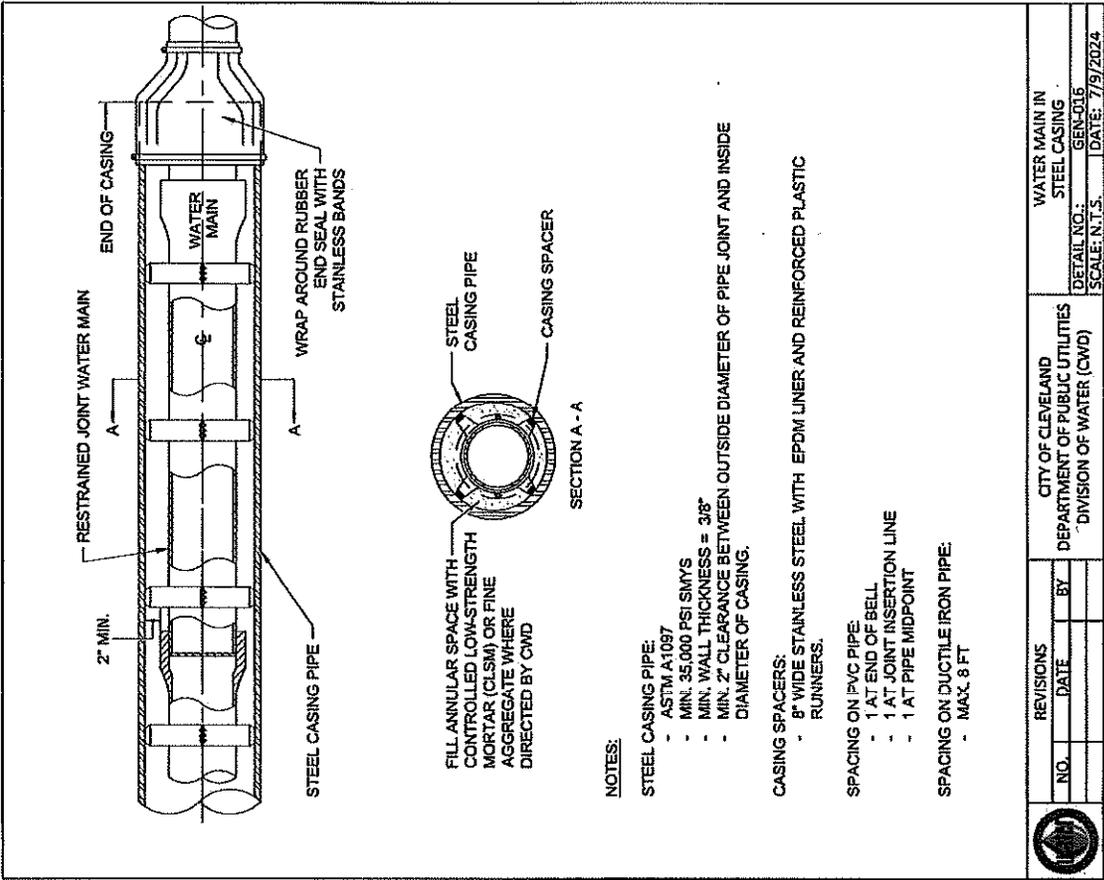
- NOTES:**
1. DETERMINE SIZE OF THE THRUST BLOCK AS SPECIFIED IN THE CWD DESIGN MANUAL.
 2. THRUST BLOCKS ARE NOT REQUIRED WHEN RESTRAINED JOINT FITTINGS ARE INSTALLED.
 3. PLACE THRUST BLOCKS AGAINST UNDISTURBED EARTH.
 4. USE FORMS WHEN PLACING CONCRETE.
 5. DO NOT COVER BOLTS WITH CONCRETE.

		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)		CONCRETE THRUST BLOCKS FOR TEES AND HORIZONTAL BENDS DETAIL NO.: GEN-006 SCALE: N.T.S. DATE: 5/31/2024	
REVISIONS	NO.	DATE	BY		

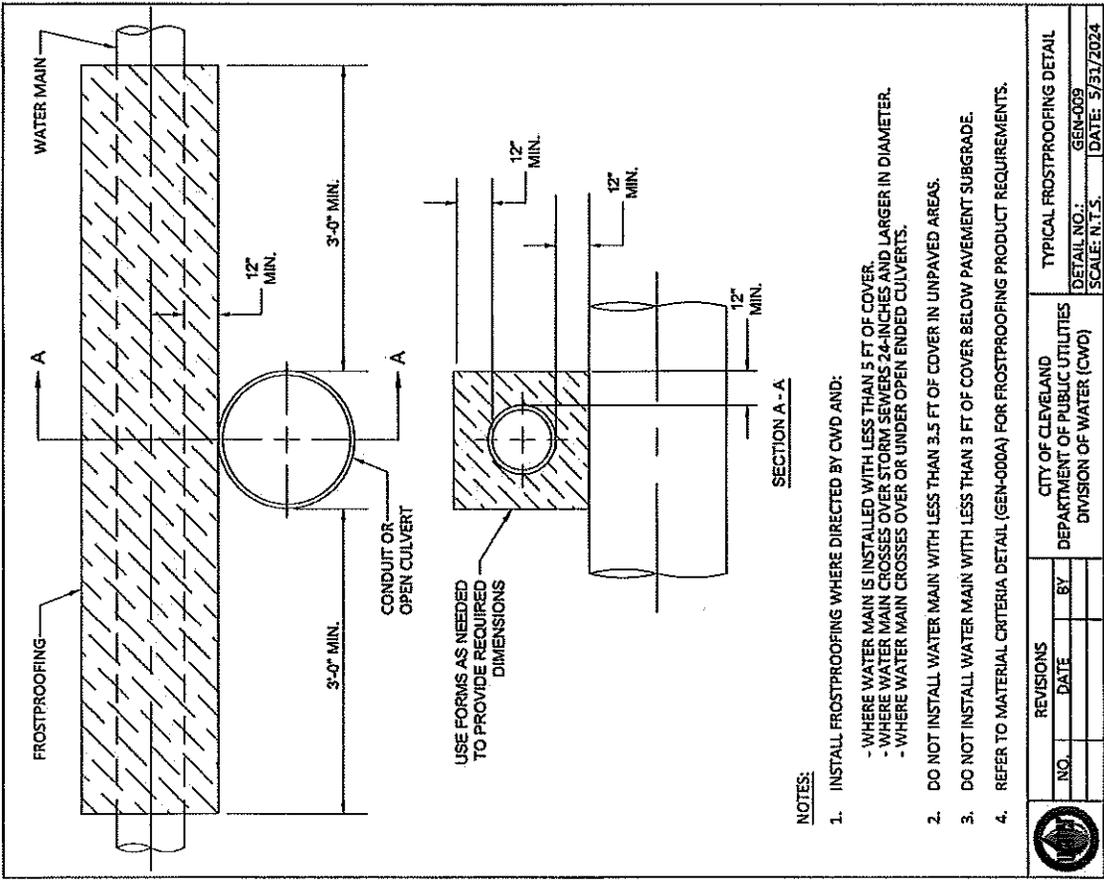


- NOTE:**
1. DRAIN THE WATER MAIN COMPLETELY PRIOR TO INSTALLING PLUGS.

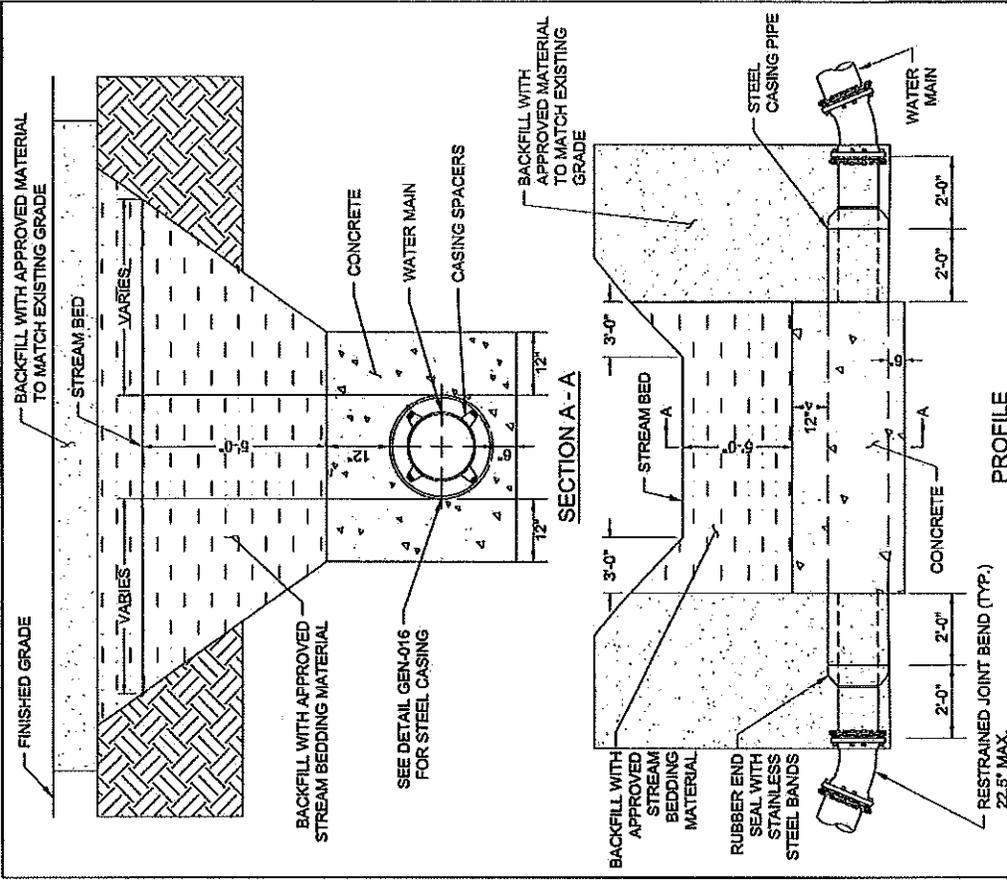
		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)		PLUGGING ABANDONED WATER MAIN ENDS DETAIL NO.: GEN-004 SCALE: N.T.S. DATE: 10/31/2023	
REVISIONS	NO.	DATE	BY		



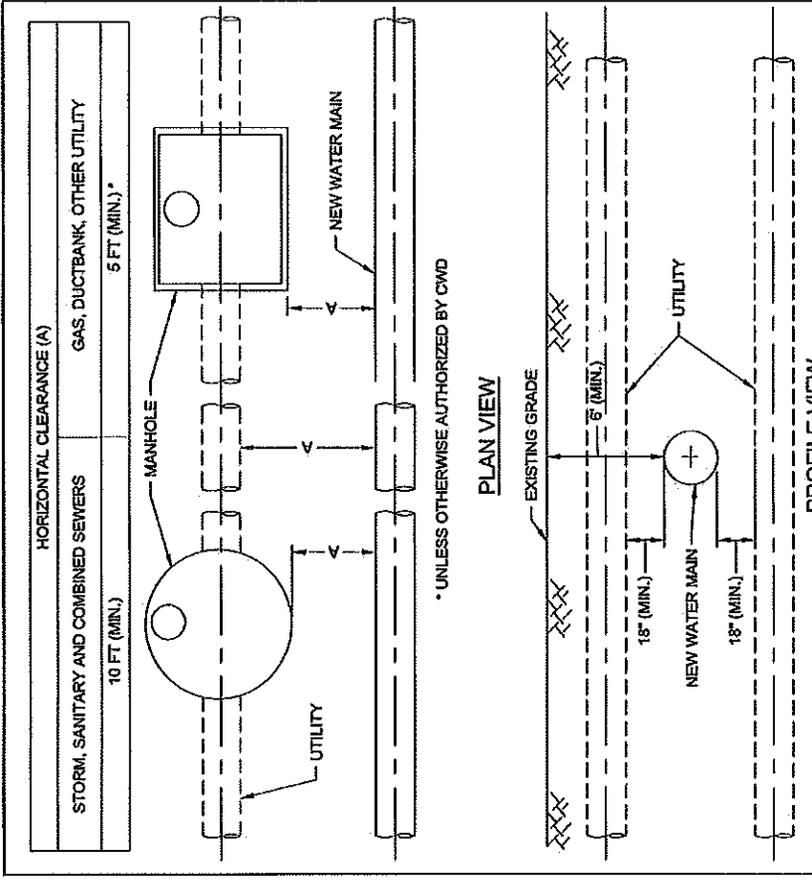
REVISIONS		CITY OF CLEVELAND	WATER MAIN IN
NO.	DATE	DEPARTMENT OF PUBLIC UTILITIES	STEEL CASING
		DIVISION OF WATER (CWD)	DETAIL NO.: GEN-016
			SCALE: N.T.S. DATE: 7/9/2024



REVISIONS		CITY OF CLEVELAND	TYPICAL FROSTPROOFING DETAIL
NO.	DATE	DEPARTMENT OF PUBLIC UTILITIES	DETAIL NO.: GEN-009
		DIVISION OF WATER (CWD)	SCALE: N.T.S. DATE: 5/31/2024



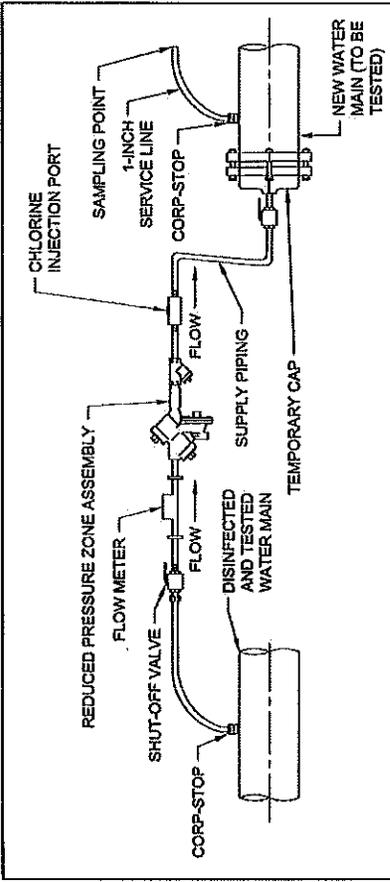
REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	CROSSING LARGE DITCHES OR SMALL STREAMS OPEN CUT METHOD
NO.	DATE		
			SCALE: N.T.S. DATE: 5/31/2024



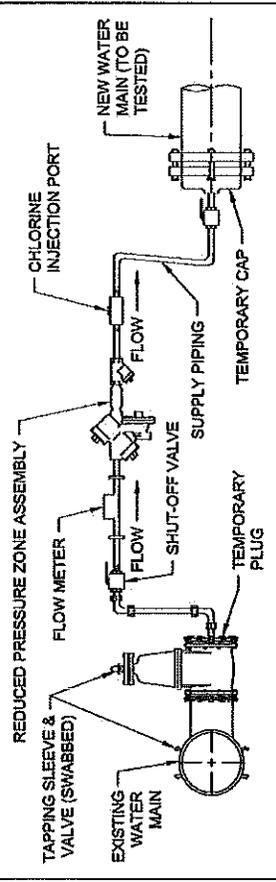
- NOTES:**
1. ADJUST HORIZONTAL OR VERTICAL ALIGNMENT AS NEEDED TO ACHIEVE REQUIRED SEPARATION. SEE DETAILS GEN-101 AND GEN-102 FOR VERTICAL BEND RESTRAINT AND LOWERING REQUIREMENTS.
 2. IF EXISTING SEPARATION IS LESS THAN REQUIRED, SEPARATION MUST BE IMPROVED OR MAINTAINED.
 3. SEE SECTION 8.8 OF THE MOST CURRENT VERSION OF '10 STATES STANDARDS - RECOMMENDED STANDARDS FOR WATER WORKS' FOR SEPARATION FROM SEWERS AND SOURCES OF CONTAMINATION.

REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	HORIZONTAL AND VERTICAL CLEARANCE FOR UTILITIES
NO.	DATE		
			SCALE: N.T.S. DATE: 5/31/2024

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DATE

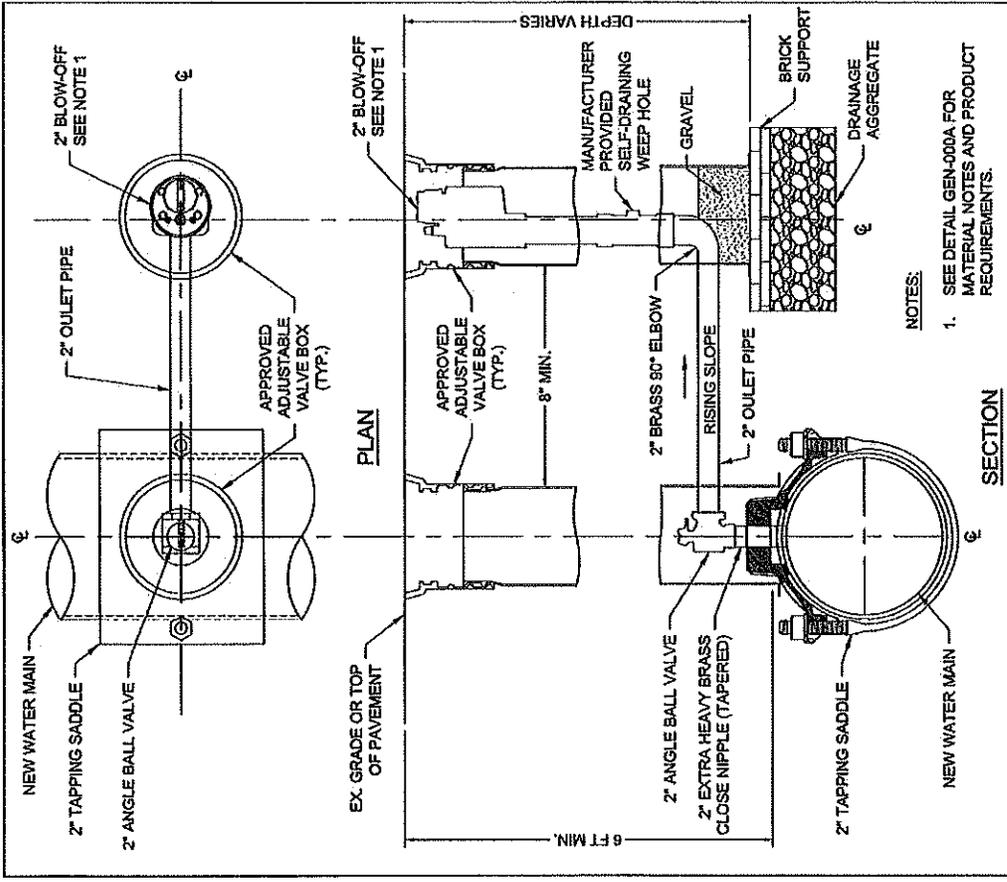


OPTION A - FILLING FROM EXISTING MAIN



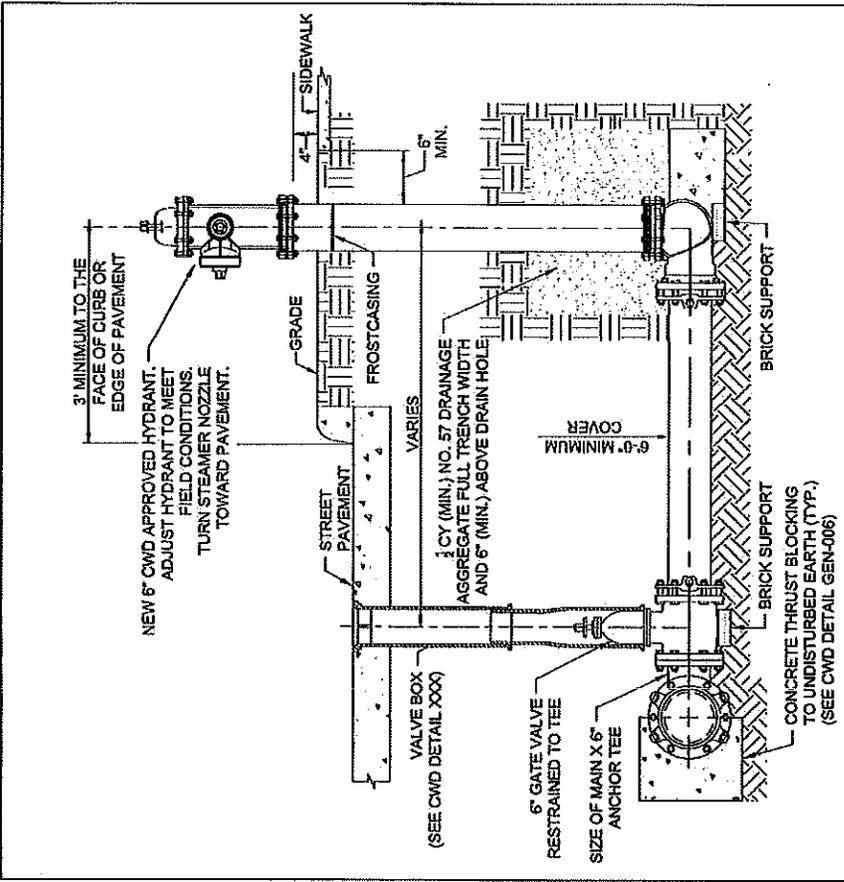
OPTION B - FILLING FROM MJ X MJ GATE VALVE OR TAPPING SLEEVE & VALVE

REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	CHLORINATION PORT FOR DISINFECTION	
NO.	DATE		DETAIL NO.: GEN-004	DATE: 5/29/2024



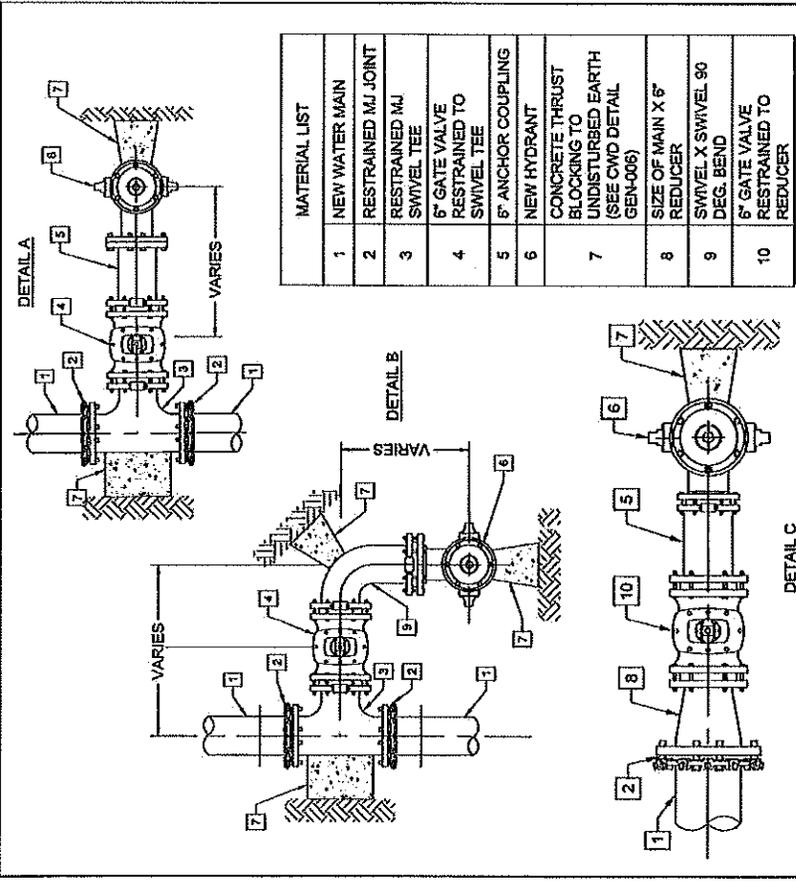
NOTES:
1. SEE DETAIL GEN-004 FOR MATERIAL NOTES AND PRODUCT REQUIREMENTS.

REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	2" AIR RELIEF/FLUSHING OUTLET VALVE ASSEMBLY	
NO.	DATE		DETAIL NO.: GEN-003	DATE: 5/31/2024



- NOTES:
- SEE DETAILS GEN-H02, GEN-H03, GEN-H08 AND GEN-H09 FOR HYDRANT INSTALLATIONS.

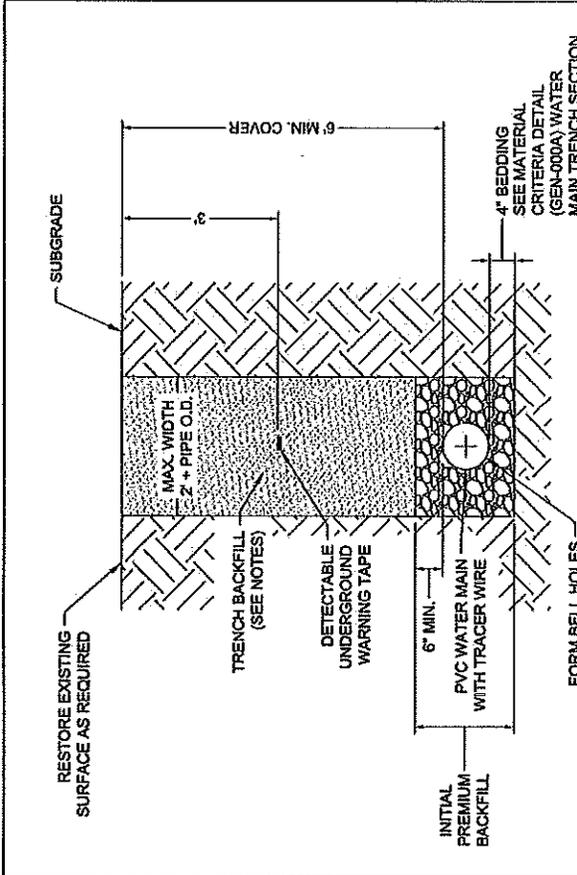
REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	6" HYDRANT ELEVATION DETAIL
NO.	DATE		
		SCALE: N.T.S.	DATE: 5/28/2024



MATERIAL LIST	
1	NEW WATER MAIN
2	RESTRAINED MJ JOINT
3	RESTRAINED MJ SWIVEL TEE
4	6" GATE VALVE RESTRAINED TO SWIVEL TEE
5	6" ANCHOR COUPLING
6	NEW HYDRANT
7	CONCRETE THRUST BLOCKING TO UNDISTURBED EARTH (SEE CWD DETAIL GEN-006)
8	SIZE OF MAIN X 6" REDUCER
9	SWIVEL X SWIVEL 90 DEG. BEND
10	6" GATE VALVE RESTRAINED TO REDUCER

- NOTES:
- INSTALL RESTRAINED JOINTS ON ALL PIPE AND FITTINGS.
 - ADJUST NEW HYDRANT TO MEET FIELD CONDITIONS. TURN STEAMER NOZZLE TOWARD PAVEMENT.
 - INSTALL NEW 8" PIPE WITH 96 LF (MIN.) FULLY RESTRAINED JOINTS OR NEW 12" PIPE WITH 54 LF (MIN.) RESTRAINED JOINTS.

REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	TYPICAL NEW HYDRANT INSTALLATION DETAILS
NO.	DATE		
		SCALE: N.T.S.	DATE: 5/31/2024



IN EARTH

NOTES:

1. PLACE AND COMPACT INITIAL PREMIUM BACKFILL USING HAND-HELD OR WALK BEHIND EQUIPMENT. DO NOT ALLOW BACKFILL MATERIAL TO FREE-FALL INTO TRENCH.
2. UNDER EXISTING AND FUTURE PAVEMENT, SIDEWALKS, AND DRIVEWAYS WITHIN THE CITY OF CLEVELAND CORPORATION LIMITS, PLACE AND COMPACT CONTROLLED LOW STRENGTH MORTAR - CONTROLLED DENSITY FILL (CLSM-CDF) TRENCH BACKFILL TO PAVEMENT SUBGRADE. PLACE CLSM-CDF IN OTHER MUNICIPALITIES WHERE PERMITTED OR DIRECTED.
3. UNDER EXISTING AND FUTURE PAVEMENT, SIDEWALKS, AND DRIVEWAYS IN OTHER MUNICIPALITIES WHERE PERMITTED, PLACE AND COMPACT PREMIUM TRENCH BACKFILL MATERIAL IN MAXIMUM 6" LIFTS TO 95% OF STANDARD PROCTOR AT +72% OF OPTIMUM MOISTURE CONTENT TO PAVEMENT SUBGRADE. IF NOT PERMITTED, FOLLOW LOCAL REQUIREMENTS.
4. IN LAWNS AND STREETScape AREAS, PLACE AND COMPACT SUITABLE TRENCH BACKFILL MATERIAL IN MAXIMUM 6" LIFTS TO 85% OF STANDARD PROCTOR AT +7-8% OF OPTIMUM MOISTURE CONTENT TO FINAL RESTORATION SUBGRADE.

REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	WATER MAIN TRENCH DETAILS	
NO.	DATE		DETAIL NO.:	PVC-001
			SCALE: N.T.S.	DATE: 7/9/2024

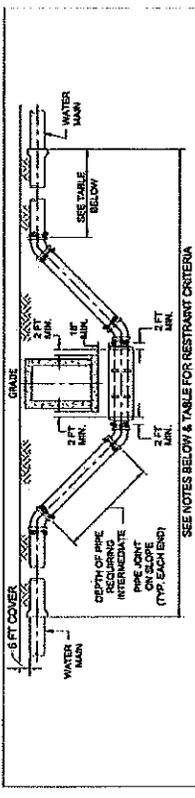
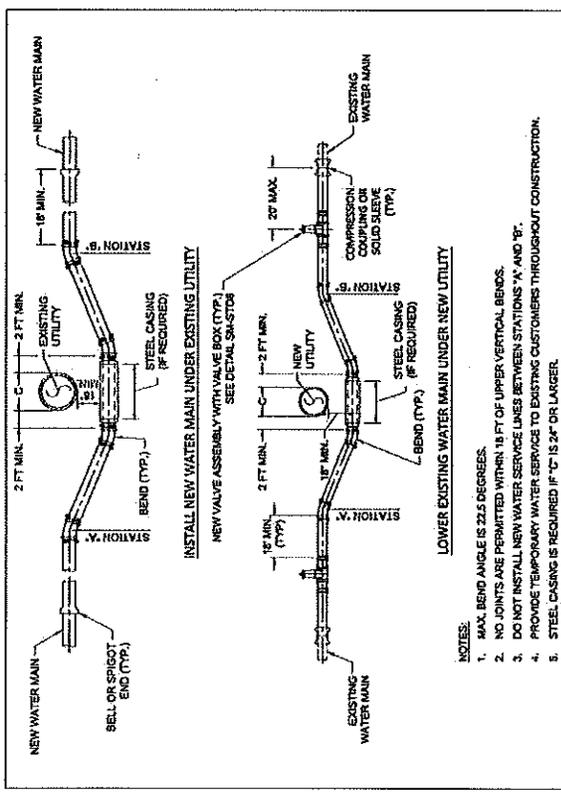


TABLE 1 - RESTRAINED BEND CRITERIA FOR PIPE

DIAMETER	BEND ANGLE	STATIC PRESSURE	RESTRAINED LENGTHS
8"	11.25°	0-573 PSI	1
	22.5°	0-350 PSI	2
	45° (1)	0-252 PSI	3
12"	11.25°	0-273 PSI	1
	22.5°	0-180 PSI	2
	45° (1)	0-128 PSI	3
16"	11.25°	0-215 PSI	1
	22.5°	116-275 PSI	2
	45° (1)	0-166 PSI	3

- NOTES:
1. TO LOWER WATER MAIN TO CLEAR OBSTACLE WHERE DEPTH OF PIPE LOWERING REQUIRES AN INTERMEDIATE JOINT ON SLOPE, THE ENTIRE OFFSET SHALL HAVE D.I. CLASS 52 BOLTLESS RESTRAINED PUSH-ON JOINT PIPE AND FITTINGS, OR ANWA C-500 RESTRAINED PUSH-ON JOINT PIPE AND FITTINGS AS APPROVED BY CWD. JOINT RESTRAINTS SHALL EXTEND BEYOND TOP VERTICAL BEND TO THE LIMITS SHOWN IN TABLE 1.
 2. STATIC PRESSURE CALCULATIONS FOR RESTRAINED LENGTHS INCLUDE 75 PSI FOR TESTING.
 3. 45° BENDS REQUIRE CWD AUTHORIZATION.
 4. SEE DETAIL GEN-102 FOR ADDITIONAL REQUIREMENTS.

REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	WATER MAINS UNDER EXISTING UTILITY	
NO.	DATE		DETAIL NO.:	GEN-102
			SCALE: N.T.S.	DATE: 5/21/2024

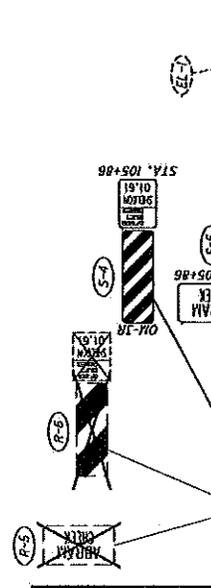
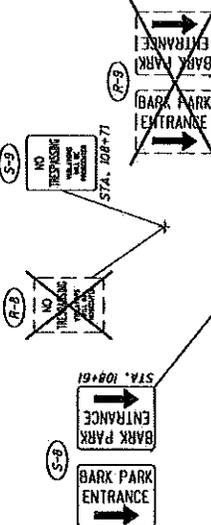
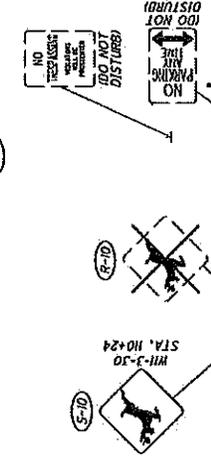
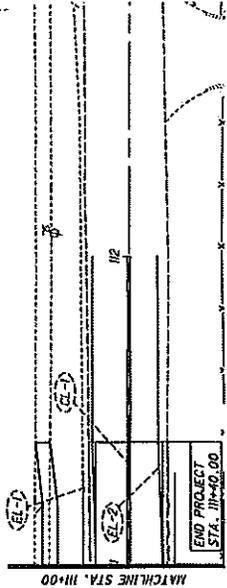
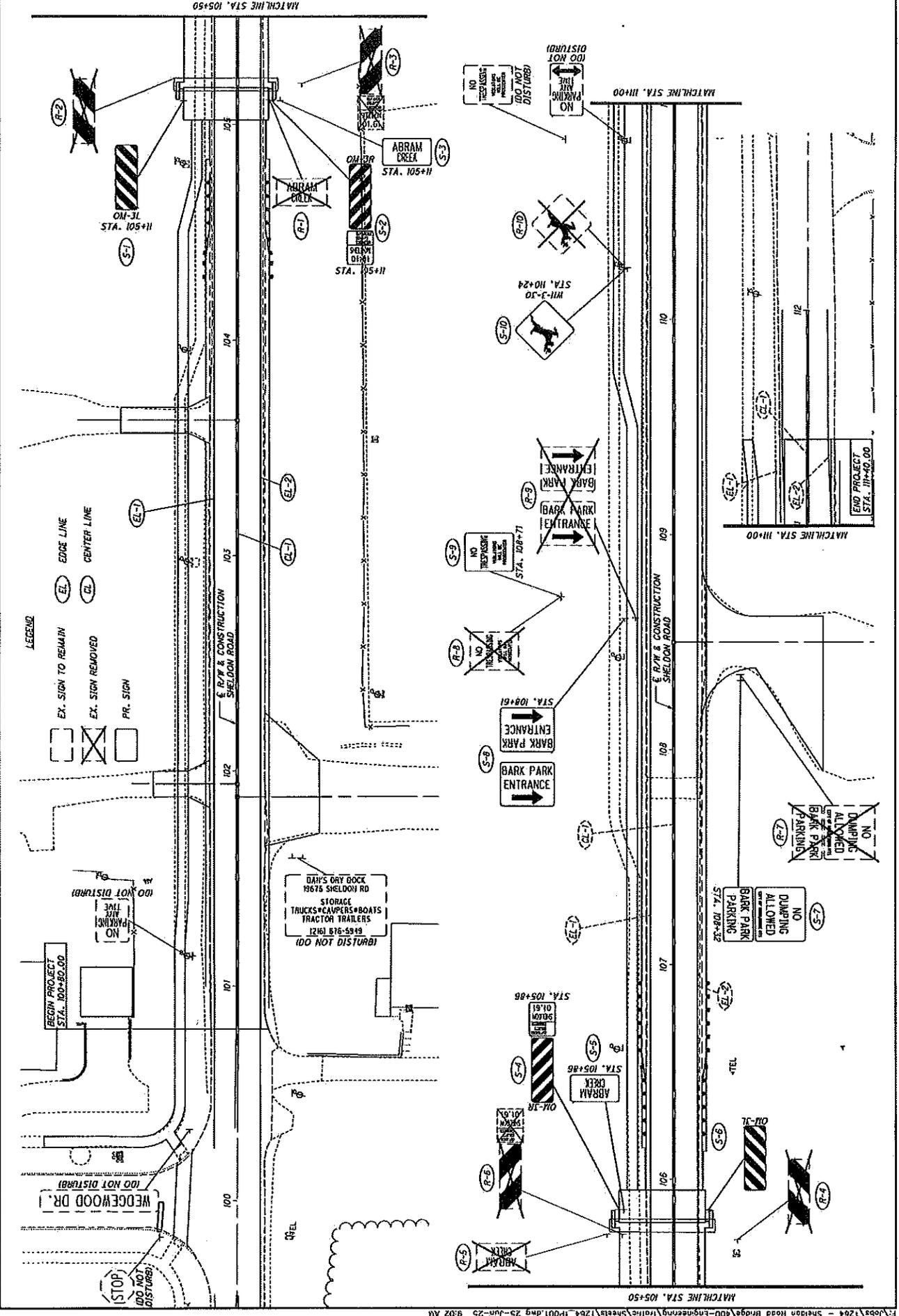


- NOTES:
1. MAX. BEND ANGLE IS 22.5 DEGREES.
 2. NO JOINTS ARE PERMITTED WITHIN 18 FT OF UPPER VERTICAL BENDS.
 3. DO NOT INSTALL NEW WATER SERVICE LINES BETWEEN STATIONS 'A' AND 'B'.
 4. PROVIDE TEMPORARY WATER SERVICE TO EXISTING CUSTOMERS THROUGHOUT CONSTRUCTION.
 5. STEEL CASING IS REQUIRED IF "C" IS 24" OR LARGER.

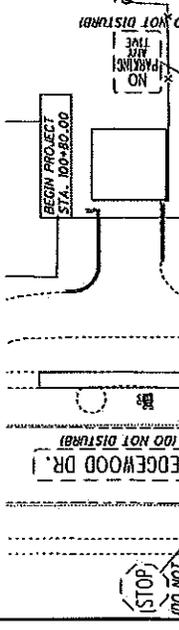
REVISIONS		CITY OF CLEVELAND DEPARTMENT OF PUBLIC UTILITIES DIVISION OF WATER (CWD)	WATER MAINS UNDER UTILITIES	
NO.	DATE		DETAIL NO.:	GEN-102
			SCALE: N.T.S.	DATE: 5/21/2024

MARKING AND PAVEMENT SIGNING AND PAVEMENT

PREPARED BY
 COIA
 CHECKED
 ALH
 SCALE IN FEET
 HORIZONTAL
 1" = 40'



- LEGEND
- EX. SIGN TO REMAIN
 - EX. SIGN REMOVED
 - PR. SIGN
 - EDGE LINE
 - CENTER LINE



BARK'S DRY DOCK
 19675 SHELTON RD
 STORAGE
 TRUCKS+CAVVERS+BOATS
 TRACTOR TRAILERS
 12161 876-5518
 100 NOT DISTURB!

PROJECT DESCRIPTION

THE LIGHTING ACTIVITIES OF THIS PROJECT INCLUDE THE INSTALLATION OF POST TOP STREET LIGHTS, CONVENTIONAL STREET LIGHTS, FOUNDATIONS, POLES, RELATED WIRING, CONDUIT, PULL BOXES, AND CONTROL CENTERS.

- 1. ON EXISTING UTILITY POLES ALONG SHELDON ROAD: BRACKETS AND CABLE WIRING.
- 2. INSTALL NEW DECORATIVE POST TOP LIGHTING ON SHELDON BRIDGE.
- 3. INSTALL NEW CONVENTIONAL STREET LIGHTING ALONG SHELDON ROAD.
- 4. CONNECT NEW POST TOP AND CONVENTIONAL STREET LIGHTING SYSTEMS TO EXISTING OVERHEAD ELECTRIC CIRCUIT AS SHOWN IN PLANS.

CEI FIRST ENERGY IS RESPONSIBLE FOR THE ERECTION AND INSTALLATION OF THE RELOCATED UTILITY POLES. CONTRACTOR SHALL COORDINATE CLOSELY WITH CEI FIRST ENERGY FOR THE REMOVAL OF EXISTING LUMINAIRES AND POWER SERVICE TIE-IN.

SPECIFICATION

THESE NOTES ARE SUPPLEMENTAL TO ITEMS 625 AND 725 OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION OF MATERIAL SPECIFICATIONS.

PROPOSED LIGHTING CIRCUITS

ALL NEW LIGHTING AND MODIFIED EXISTING LIGHTING CIRCUITS WILL BE SERVICED FROM 120 / 240 VOLT, SINGLE PHASE POWER SUPPLIES. ALL PROPOSED LIGHTING CIRCUITS WILL BE 120 VOLT, 2 WIRE, SINGLE PHASE, WITH A GROUND CONDUCTOR, WHERE AVAILABLE NOTED AS 3 WIRE OR 3 WIRE W/ GND OR THE METROTEST. A SEPARATE GROUNDING CONDUCTOR WILL NOT BE ADDED TO ANY EXISTING CIRCUIT SEGMENT.

ITEM 625. POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

POWER COMPANY: CEI FIRST ENERGY
 ADDRESS: 6886 MILLER ROAD, SUITE 101, BRECKSVILLE, OHIO 41141
 PHONE NUMBER: 440-548-9706
 CONTACT NAME: JOHN ZASSICK

POWER SERVICE SHALL BE AS PER SPECIFICATION 625 AND STANDARD CONSTRUCTION DRAWING TC-85.10 WITH THE FOLLOWING CONDITIONS:

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE POWER COMPANY FOR THE ELECTRICAL SERVICE CONNECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REQUESTING AND SCHEDULING ANY INSPECTIONS THE POWER COMPANY MAY REQUIRE FOR THE POWER SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHARGES INCURRED BY THE COMPANY FOR WORK BY THE COMPANY IN CONNECTION WITH THE ESTABLISHMENT OF THE REQUIRED SERVICE.

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE TAKEN BY THE CONTRACTOR, BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

THE VOLTAGE SUPPLIED SHALL BE, NOMINALLY, 120 VOLTS.

DISCONNECT SWITCHES AND ELECTRIC METERS ARE NOT TO BE USED ON PROPOSED CIRCUITS SERVICING STREET LIGHTS. UNMETERED CIRCUITS WILL TRANSFER TO CEI FIRST ENERGY. METERED CIRCUITS WILL TRANSFER TO THE RESPECTIVE MUNICIPALITY IN WHICH IT RESIDES.

ELECTRICAL ENERGY FROM EXISTING POWER SERVICES SHALL CONTINUE TO BE CHARGED TO THE MAINTAINING AGENCY. THE CONTRACTOR SHALL PAY ELECTRICAL ENERGY CHARGES FOR THE NEW POWER SERVICES ESTABLISHED BY THIS PROJECT. AFTER ACCEPTANCE OF THE LIGHTING, THE POWER SERVICE ELECTRICAL ENERGY ACCOUNT WILL BE FORWARDED TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL INCLUDE NEW POWER SERVICE ESTABLISHED BY THIS PROJECT. THERE SHALL BE NO REASSIGNMENT OF EXISTING SERVICE DUE TO WORK PERFORMED BY THIS PROJECT.

SUBMIT SHOP DRAWINGS (CATALOG CUTS) TO THE ENGINEER / CEI FIRST ENERGY FOR THEIR APPROVAL.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH CMS ITEM 625, POWER SERVICE, AS PER PLAN, WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

CONFLICTS WITH EXISTING UTILITIES

PRIOR TO INSTALLING ANY OF THE PROPOSED STREET LIGHTING EQUIPMENT, PULL BOXES, CONDUIT, AND POWER SUPPLIES, THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF ALL UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID ANY DAMAGE. ALL REPAIRS TO ANY DAMAGE TO EXISTING OR PROPOSED UTILITIES CAUSED BY THE FAILURE TO COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES AND DRILL APPROPRIATE UTILITY TEST HOLES, WILL BE PAID FOR BY THE CONTRACTOR.

THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND PIPES, DRAINAGE, ELECTRICAL CONDUIT, DUCT BANKS, WATERLINES, COMMUNICATION DUCTS, AND OTHER STRUCTURES BY CONTACTING OWNERS OF UNDERGROUND UTILITIES AND BY DRILLING APPROPRIATE UTILITY TEST HOLES. REFER TO ITEM 625, LIGHTING, MISC.; FOUNDATION TEST HOLE.

COORDINATE THE LIGHTING PLANS WITH THE ROADWAY CONSTRUCTION PLANS AND CROSS-SECTIONS. ALL LIGHTING EQUIPMENT SYMBOLS SHOWN ON THE LIGHTING PLANS ARE NOT DRAWN TO SCALE, ARE SHOWN DIAGRAMMATICALLY, AND MAY NOT BE IN THE EXACT LOCATION REQUIRED.

THE CONTRACTOR SHALL MAINTAIN PROPER CLEARANCE FROM ALL OVERHEAD AND UNDERGROUND UTILITIES AND SHALL CONTACT EACH UTILITY FOR SPECIFIC REQUIREMENTS.

ITEM 625. LIGHTING, MISC.; FOUNDATION TEST HOLE

IF UNDERGROUND OBSTRUCTIONS ARE ENCOUNTERED THAT PRECLUDE THE USE OF THE STANDARD OR ALTERNATE FOUNDATION DESIGNS, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH COMPLETE INFORMATION REGARDING THE OBSTRUCTION, INCLUDING THE (I.E. UTILITY), SIZE, DEPTH, AND LATERAL CLEARANCES TO THE SIDES OF THE FOUNDATION EXCAVATION. THE FOUNDATION HOLE SHALL BE COVERED WITH A STEEL PLATE UNTIL THE ENGINEER DETERMINES IF A NEW FOUNDATION LOCATION WILL BE REQUIRED.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER CMS ITEM 625, LIGHTING, MISC.; FOUNDATION TEST HOLE FOR EACH TEST HOLE PERFORMED WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM.

THE FOLLOWING ESTIMATED QUANTITY IS INCLUDED IN THE SUBSUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 625 - LIGHTING, MISC.; FOUNDATION TEST HOLE 4 EACH

ITEM 625. LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), LES-III, 14K LUMEN, 3000K, 220V

THIS ITEM CONSISTS OF SUPPLYING CONVENTIONAL STREET LIGHTING FOR ROADWAY ILLUMINATION AND INSTALLATION AT LOCATIONS INDICATED IN THE PLANS. THIS ITEM SHALL COMPLY WITH THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS 625 AND 725.

LUMINAIRE FOR CONVENTIONAL LIGHTING WITH AN LES III DISTRIBUTION AND 122 WATT LED LAMPS SHALL BE COOPER LIGHTING ARCHON ARCH-M-A-14B-120-0-U-13-7030. GENERAL ELECTRIC "EVOLVE ERL" ERL-H-1-15-23-30-X-GRAY-LR, OR EQUAL AS APPROVED BY THE ENGINEER. LUMINAIRE SHALL BE INSTALLED WITH SHIELDING TO PREVENT LIGHT TRESPASS ONTO ADJACENT PROPERTIES.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER CMS FOR ITEM 625, LUMINAIRE, CONVENTIONAL, SOLID STATE (LED), LES-III, 14K LUMEN, 3000K, 220V FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, HOUSE SIZES, SHIELDS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

ITEM 625. LUMINAIRE, POST TOP, SOLID STATE (LED), LES-II, 2K LUMEN, 3000K, 120V

THIS ITEM CONSISTS OF SUPPLYING DECORATIVE, POST-TOP, LANTERN STYLE LIGHTING FOR ROADWAY ILLUMINATION AND INSTALLATION AT LOCATIONS INDICATED IN THE PLANS. THIS ITEM SHALL COMPLY WITH THE REQUIREMENTS OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS 625 AND 725.

THE DECORATIVE, POST-TOP, LANTERN LUMINAIRE SHALL HAVE A NOMINAL HEIGHT OF 16 FEET ABOVE THE BRIDGE DECK.

PROVIDE A LUMINAIRE WITH A B-U-G UP-LIGHTING RATING OF U4 OR LESS.

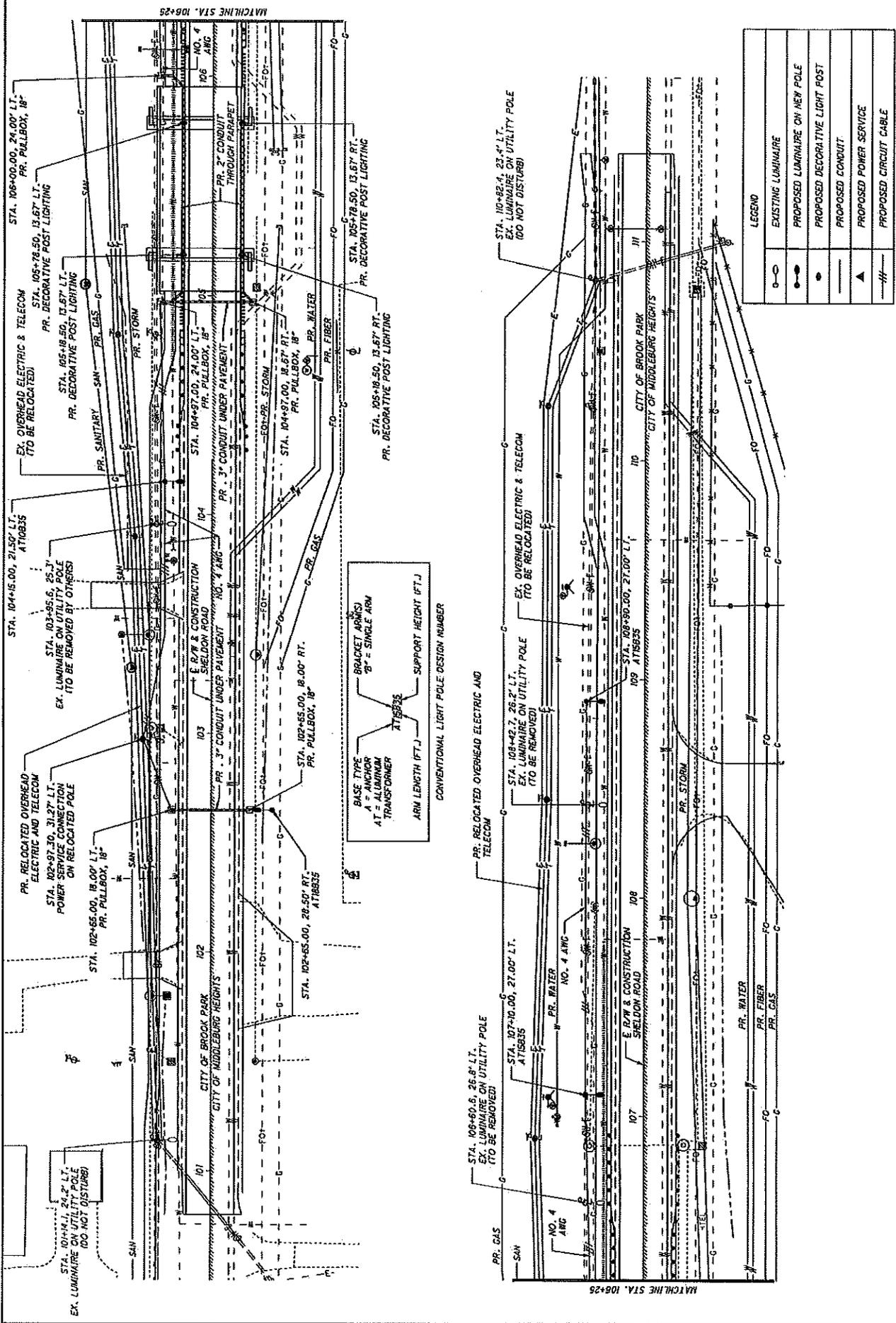
LUMINAIRE FOR DECORATIVE, POST-TOP, LANTERN LIGHTING WITH AN LES II DISTRIBUTION AND 28 WATT LED LAMPS SHALL BE PROVIDENCE SMALL PROS-YE-2030, OR EQUAL AS APPROVED BY THE ENGINEER. LUMINAIRE SHALL BE INSTALLED WITH SHIELDING TO PREVENT LIGHT TRESPASS ONTO ADJACENT PROPERTIES.

PROVIDE A LUMINAIRE COMPATIBLE WITH THE LIGHTING BRANCH CIRCUIT SHOWN IN THE PLANS. ASSURE THE LUMINAIRE POST-FITTER HAS A HINGED OR CAPTIVE DOOR. ASSURE THE LUMINAIRE CAN ADJUST A PHOTOCELL OR WIRELESS CONTROL THAT USES A NEW STANDARD PHOTOCELL RECEPTACLE.

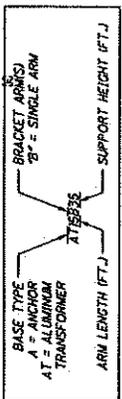
PROVIDE A LUMINAIRE WITH 3G VIBRATION RATING. PROTECT EACH LUMINAIRE USING A SWAGE PROTECTIVE DEVICE ISPD CONFORMING TO ODOT SUPPLEMENTAL SPEC 913.

PROVIDE A LUMINAIRE WITH FACTORY-APPLIED BLACK FINISH MEETING SUPPLEMENTAL SPECIFICATION 916.

PAYMENT WILL BE MADE AT THE UNIT PRICE BID UNDER CMS FOR ITEM 625, LUMINAIRE, POST TOP, SOLID STATE (LED), LES-II, 2K LUMEN, 3000K, 120V FOR EACH LUMINAIRE WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, HOUSE SIZES, SHIELDS, AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.



LEGEND	
	EXISTING LUMINAIRE
	PROPOSED LUMINAIRE ON NEW POLE
	PROPOSED DECORATIVE LIGHT POST
	PROPOSED CONDUIT
	PROPOSED POWER SERVICE
	PROPOSED CIRCUIT CABLE



CONVENTIONAL LIGHT POLE DESIGN NUMBER

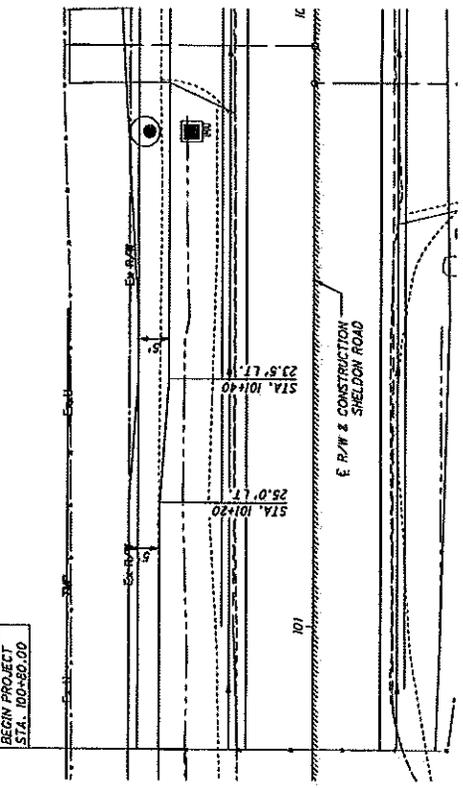
51

CUY-SHELDON RD.

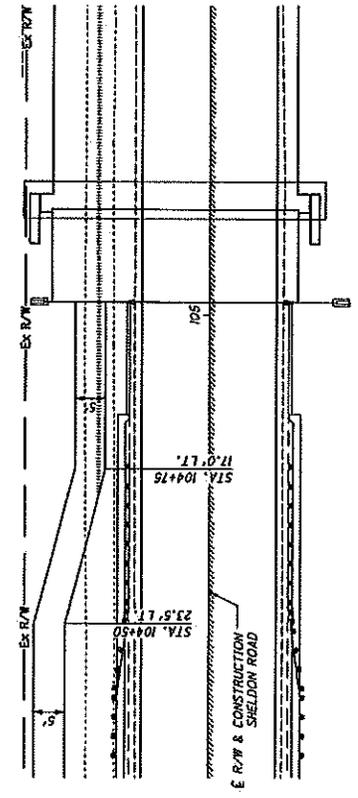
SIDEWALK
DETAILS

DATE	BY	CHKD	APP'D

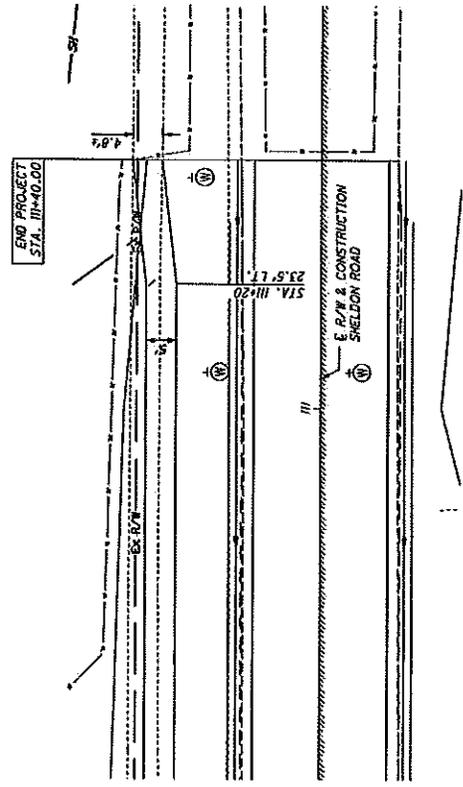
COM
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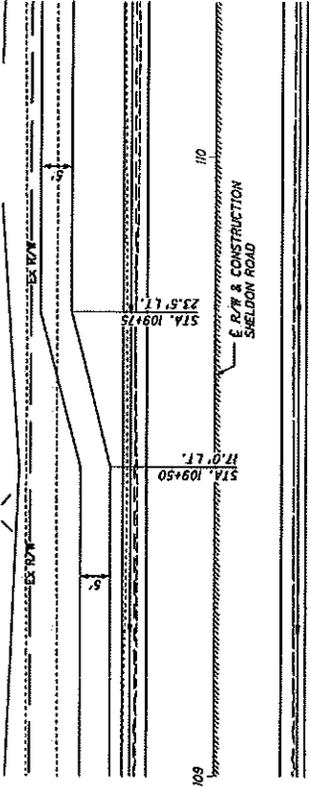
SIDEWALK SHIFT DETAILS
WEST END OF PROJECT



SIDEWALK SHIFT DETAILS
WEST SIDE OF BRIDGE



SIDEWALK SHIFT DETAILS
EAST END OF PROJECT



SIDEWALK SHIFT DETAILS
EAST SIDE OF BRIDGE

BENCHMARK DATA

BM #100 STA. 100+44.00	ELEV. 771.90	OFFSET 18.84' LT.
BM #101 STA. 103+71.52	ELEV. 765.11	OFFSET 16.10' RT.
BM #102 STA. 109+56.31	ELEV. 764.27	OFFSET 15.55' RT.
BM #103 STA. 114+00.59	ELEV. 779.20	OFFSET 14.73' RT.

NOTES

- EARTHWORK LIMITS SHOWN APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO THE CROSS SECTION FOR THE PROPOSED STRUCTURE.
- SEE LIGHTING PLANS (SHEETS 41-50) FOR BRIDGE LIGHTING.

LEGEND

- BORING LOCATION

TRAFFIC DATA

CURRENT ADT (2024) = 7400 DESIGN ADT (2044) = 7420
 CURRENT ADT (2024) = 536 DESIGN ADT (2044) = 536
 DIRECTIONAL DISTRIBUTION = 50%

HYDRAULIC DATA

DRAINAGE AREA = 4.51 SQUARE MILES
 (0.25) = 740.12 CFS V(25) = 1.88 FPS
 (0.100) = 1060.54 CFS V(100) = 2.66 FPS
 PROPOSED STRUCTURE LOW CHORD IS SUBMERGED IN 25-YEAR FLOW BY 0.02'
 PROPOSED STRUCTURE LOW CHORD IS SUBMERGED IN 100-YEAR FLOW BY 1.79'

EXISTING STRUCTURE

TYPE: CAST-IN-PLACE REINFORCED CONCRETE RIGID FRAME
 (BOX) STRUCTURE (20' W X 7' H)

SPAN: 20'(N)

ROADWAY: 34'-4"(N) OUT/OUT

SKEW: NONE

WEARING SURFACE: ASPHALT CONCRETE

ALIGNMENT: TANGENT

CROWN: 0.0183 FT/FT

STRUCTURE FILE NUMBER: 1830996

DATE BUILT: 1934 MAJOR REHAB: NONE

DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: SINGLE SPAN COMPOSITE PRESTRESSED CONCRETE BOX BEAMS WITH REINFORCED CONCRETE ABUTMENTS

SPANS: 60'-0" C/G BEARINGS

ROADWAY: 26'-0" FACE/FACE PARAPET, 10'-0" SIDEWALK

LOADING: HL93, FWS = 0.080 KSF

SKEW: NONE

WEARING SURFACES: 1.25" MONOLITHIC CONCRETE

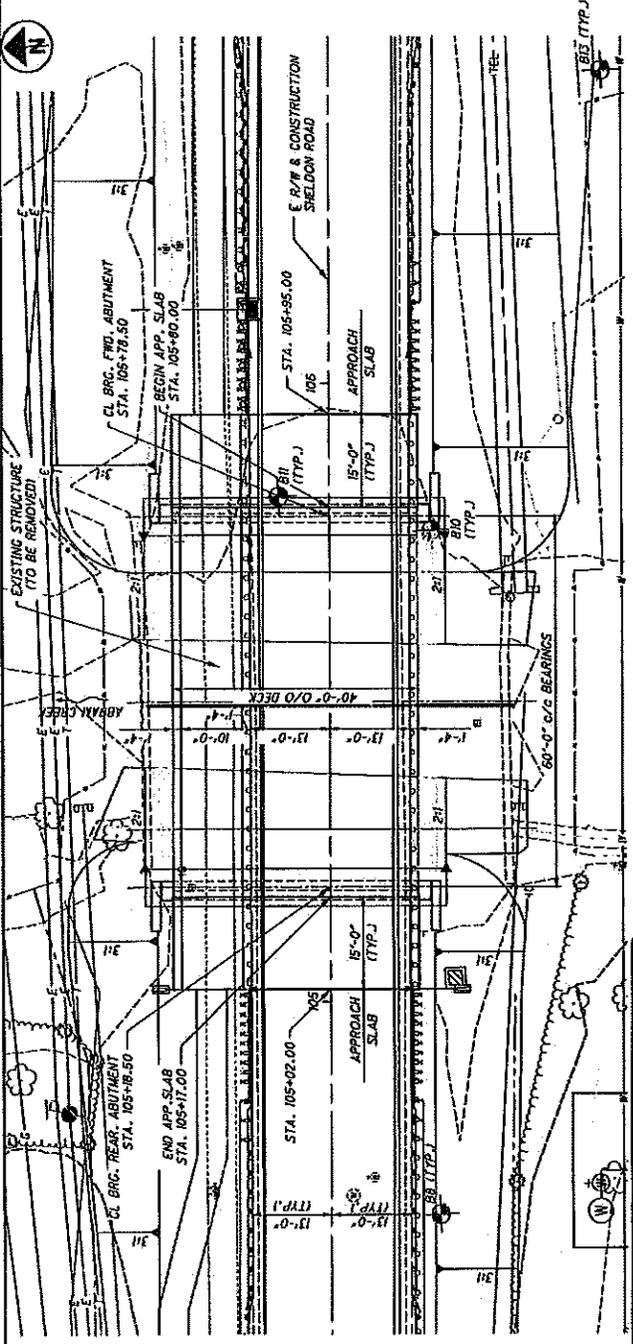
APPROACH SLABS: AS-1-S (15'-0" LONG)

ALIGNMENT: TANGENT

CROWN: 0.0180 FT/FT

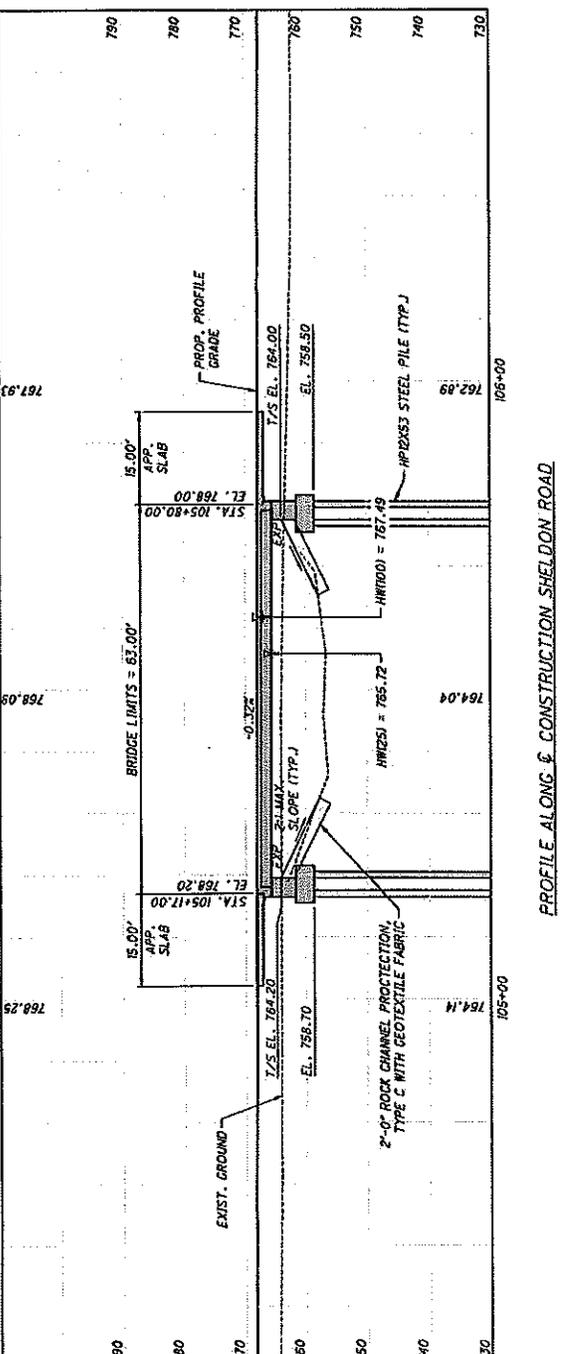
COORDINATES: LATITUDE 41° 23' 19" N
 LONGITUDE 81° 48' 51" W

DECK AREA: 2,520 SQUARE FEET

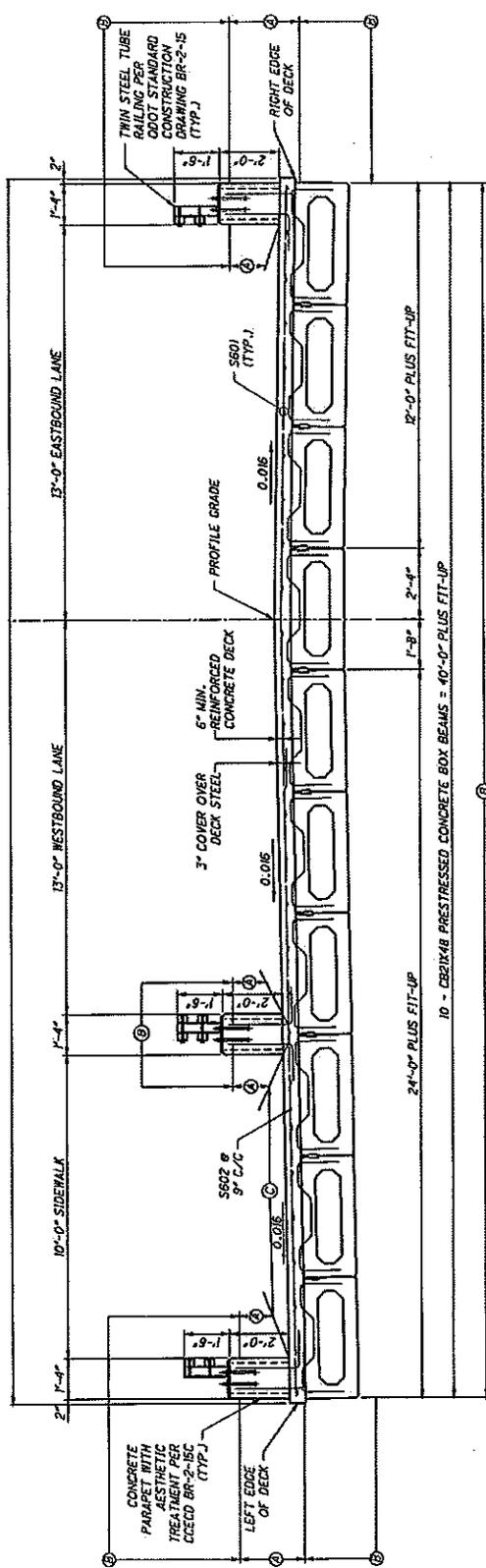


ESTIMATED PILE LENGTHS

LOCATION	PILE TYPE	LENGTH
REAR ABUTMENT	HP 12X53	76.7'
FORWARD ABUTMENT	HP 12X53	76.0'



PROFILE ALONG E CONSTRUCTION SHELDON ROAD



TRANSVERSE SECTION

LEGEND

- ① ITEM 511 - CONCRETE, MISC.; ARCHITECTURAL TREATMENT, SUPERSTRUCTURE
- ② ITEM SPECIAL - SEALING MISC.; ELASTOMERIC PROTECTIVE AND DECORATIVE CONCRETE COATING, SEE SHEET 55/53 FOR ADDITIONAL DETAILS.
- ③ ITEM 512 - SEALING OF CONCRETE SURFACES NON - EPOXY (CLAR COATING).

NOTES

1. PRESTRESSED CONCRETE BOX BEAMS DETAILS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING PS8D-2-07.
2. FOR ADDITIONAL PARAPET AND RAILING DETAILS, SEE CUYAROGA COUNTY ENGINEER CONSTRUCTION DRAWING (CECD) BR-2-15C (PARAPET AESTHETIC DETAILS) AND TWIN STEEL TUBE RAILING PER ODOT STD. BRIDGE DING. BR-2-15.

EXHIBIT F



**Community Cost-Share Program
REQUEST FUND TRANSFER
TO NORTHEAST OHIO REGIONAL SEWER DISTRICT**

Project Information

Member Community: _____

Project Title: _____

Amount to be Transferred to NEORS: _____

Authorized Signature

I certify that the costs outlined in this reimbursement request have been incurred in accordance with the approved project proposal as set forth in the Community Cost-Share agreement document(s). Furthermore, I affirm that the information contained herein is, to the best of my knowledge and belief, accurate and complete.

Name (print or type): _____

Title: _____

Telephone Number: _____

Email Address: _____

Signature: _____

Date: _____