

ERIE COUNTY WATER AUTHORITY
AUTHORIZATION FORM
For Approval/Execution of Documents
(check which apply)

Contract: _____ **Project No.:** 202100007

Project Description: Distribution Main Design Projects 2020-2021

Item Description:



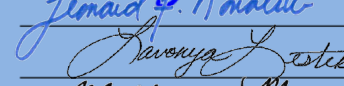

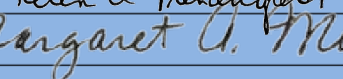

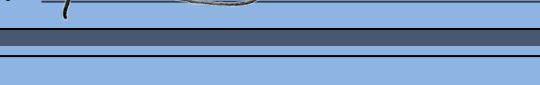
- | | | | |
|---|--|---|---------------------------------------|
| <input type="checkbox"/> Agreement | <input type="checkbox"/> Professional Service Contract | <input type="checkbox"/> Amendment | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> BCD | <input type="checkbox"/> NYSDOT Agreement | <input type="checkbox"/> Contract Documents | <input type="checkbox"/> Addendum |
| <input type="checkbox"/> Recommendation for Award of Contract | <input type="checkbox"/> Recommendation to Reject Bids | | |
| <input checked="" type="checkbox"/> Request for Proposals | | | |
| <input type="checkbox"/> Other _____ | | | |

Action Requested:

- | | |
|--|--|
| <input type="checkbox"/> Board Authorization to Execute | <input checked="" type="checkbox"/> Legal Approval |
| <input type="checkbox"/> Board Authorization to Award | <input type="checkbox"/> Execution by the Chairman |
| <input type="checkbox"/> Board Authorization to Advertise for Bids | <input type="checkbox"/> Execution by the Secretary to the Authority |
| <input checked="" type="checkbox"/> Board Authorization to Solicit Request for Proposals | |
| <input type="checkbox"/> Other _____ | |

Approvals Needed:

APPROVED AS TO CONTENT:

<input checked="" type="checkbox"/> Sr. Distribution Engineer		Date: 10/19/2020
<input checked="" type="checkbox"/> Chief Operating Officer		Date: 10/19/2020
<input checked="" type="checkbox"/> Executive Engineer		Date: 10/19/2020
<input checked="" type="checkbox"/> Director of Administration		Date: 10/19/2020
<input checked="" type="checkbox"/> Risk Manager		Date: 10/19/2020
<input checked="" type="checkbox"/> Chief Financial Officer		Date: 10/19/2020
<input checked="" type="checkbox"/> Legal		Date: 10/19/2020

APPROVED FOR BOARD RESOLUTION:

<input checked="" type="checkbox"/> Secretary to the Authority		Date: 10/19/2020
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Remarks: _____

Resolution Date: _____

Item No: _____



ERIE COUNTY WATER AUTHORITY

INTEROFFICE MEMORANDUM

October 16, 2020

To: Terrence D. McCracken, Secretary to the Authority

From: Michael J. Quinn, Senior Distribution Engineer

A handwritten signature in dark ink, appearing to be "MJQ", is written next to the name Michael J. Quinn.

Subject: Request for Proposals
Distribution Main Design Projects 2021-2022
ECWA Project No. 202100007

The year 2021 Capital Budget includes funds for the design of waterline replacement projects. The design work is scheduled for 2021 and the construction work is scheduled for 2022. Attached is a copy of the Request for Proposals (RFP). The RFP includes six projects (Contract A, Contract B, Contract C, Contract D, Contract E, and Contract F) and the detailed description of each of those projects is included in the attached RFP. I recommend that the Request for Proposals be issued to the following consulting engineers:

Barton & Loguidice, PC
CHA Consulting, Inc.
Clark Patterson Lee
DiDonato Associates
DuBois & King, Inc.
Erdman Anthony
Greenman-Pedersen, Inc.
Labella Associates, DPC
Nussbaumer & Clarke, Inc.
Wendel
Wm. Schutt and Associates

In addition, the RFP will also be posted to the ECWA website.

The Engineering Department is requesting a Resolution to Solicit the Request for Proposals. The contact person for the Restricted Period for this RFP will be Michael J. Quinn, Senior Distribution Engineer.

The Request for Proposals and Authorization Form will need prior approval by the Legal Department, Chief Financial Officer, and Risk Manager prior to being sent to the Board for consideration.

MJQ:jmf

Attachments

cc: R.Stoll

L.Kowalski

L.Lester

S.Denzler

ECWA-928-2101-X-16

**REQUEST FOR PROPOSALS
FOR CONSULTING ENGINEERING SERVICES**

DISTRIBUTION MAIN DESIGN PROJECTS

ECWA Project No. 202100007

General

The Erie County Water Authority (Authority) is seeking Professional Services Proposals for consulting engineering services for the 2021-2022 distribution main design projects.

The Authority reserves the right to modify or cancel this Request for Proposals and/or the projects; to reject any or all proposals; and to waive any or all irregularities. This Request for Proposals does not obligate the Authority to award a contract for any of the projects or to reimburse any costs associated with the preparation of any proposal.

The Request for Proposal (RFP) is being conducted pursuant to the New York State Finance Law §§139-j and 139-k and the Erie County Water Authority's Procurement Disclosure Policy. The Procurement Disclosure Policy is available by accessing the Erie County Water Authority's web site – <http://www.ecwa.org>, under the caption "Doing Business with ECWA".

Project Description

The Authority is planning to replace several distribution mains in 2021 and 2022. The projects will be in Direct Service areas owned and operated by the Authority. The projects are scheduled for design in 2021 with construction in 2022.

The project will entail the following six (6) contracts:

Contract A will consist of the installation of approximately 9,500 linear feet of new distribution waterline on multiple streets in the City of Tonawanda. The project will consist of the replacement of existing waterlines on Niagara Street (from the city line to 783 Niagara), on Two Mile Creek Road (from Niagara Street to the reducer at 877 Two Mile Creek Road), on Maldiner Avenue (from 119 Maldiner Avenue to Cranbrook Road), on Cranbrook Road (from Maldiner Avenue to 73 Cranbrook Road), on Crestwood Court (from Maldiner Avenue to the dead end), on Cornell Court (from Maldiner Avenue to the dead end), on Morgan Street (from Wheeler Street to Kohler Street), on Steiner Avenue (from Highland Avenue to Grove Street), on Highland Avenue (from Fuller Avenue to Park Avenue), on Queen Street (from Highland Avenue to the reducer at 64 Queen), and on Fillmore Avenue (from the reducer at 365 Fillmore Avenue to Wales Avenue). The existing waterlines will be abandoned in place. The sizes and types of the new waterlines will be determined as a part of the design project but will be a minimum 8-inch diameter. The project also includes service transfers on East Niagara Street (from East Avenue to Wales Avenue), transferring all service connections from the existing 8-inch to the existing 16-inch waterline, with abandonment of the 8-inch waterline.

Contract B will consist of the installation of approximately 12,400 linear feet of new distribution waterline on multiple streets in the Town of Hamburg. The project will consist of the replacement of existing waterlines or installation of new waterline on Oakwood Avenue (from Blasdell line to Glenwood), on 7th Street (from Woodlawn Avenue to Lakeshore Road), on Bay View Road (from South Park Avenue to Southwestern Boulevard), on Pleasant Avenue (from 3179 Pleasant Avenue to Amsdell Road), on Southwestern Boulevard (from Pleasant Avenue to Amsdell Road), on Buffalo Street (from West Avenue to Bristol Road), on Bryant Street (from Buffalo Road to Big Tree Road), on Hudson Street (from Buffalo Road to Big Tree Road), and on Big Tree Road (from West Avenue to Bristol Road). The existing waterlines will be abandoned in place. The size and type of the new waterline will be determined as a part of the design project but will be a minimum 8-inch diameter.

Contract C will consist of the replacement of approximately 16,200 linear feet of new distribution waterline on multiple streets in the Town of Amherst. The project will consist of the replacement of existing waterlines on Maynard Avenue (from Lamont Drive to Stevenson Boulevard), on Stevenson Boulevard (from Longmeadow Road to Bailey Avenue), on Bailey Avenue (from Oxford Avenue to Park Circle), on Springville Avenue (from Brant Street to Longmeadow Road), and on Burroughs Drive (from Harlem Road to Northledge Drive) in the Town of Amherst. The existing waterlines will be abandoned in place. The sizes and types of the new waterlines will be determined as a part of the design project but will be a minimum 8-inch diameter.

Contract D will consist of the installation of approximately 8,200 linear feet of new distribution waterline on multiple streets in the Town of Amherst and Village of Lancaster. The project will consist of the replacement of existing waterlines on Hendricks Boulevard (from Rosedale Boulevard to Eggert Road), on Fairchild Drive (from Eggert Road to Hendricks Boulevard), on Reist Street (from North Union Road to North Long Street), on Kingsgate Road and Kings Highway North (from Kings Highway to 550 Kings Highway North), and on Capen Boulevard (from Oxford Avenue to Longmeadow Road) in the Town of Amherst, and on South Irwinwood Road (from 99 to 167 South Irwinwood Road), on Pac Way (from 5406 to existing bend approximately 110 feet south of West Main Street), on Linden Avenue (from Madison Street to Como Park Boulevard), and on East Payne Street (from Linden Avenue to Lake Avenue) in the Village of Lancaster. The existing waterlines will be abandoned in place. The size and type of the new waterline will be determined as a part of the design project but will be minimum 8-inch diameter.

Contract E will consist of the installation of approximately 8,400 linear feet of new distribution waterline on various streets in the Town of Cheektowaga. The project will consist of the replacement of existing waterline on Maryvale Drive (from Union Road to Cayuga Road), on Union Road (from William Street to existing end of waterline at 2669 Union Road), on Raymond Avenue (from Dowmer Place to dead-end), on Huxley Drive (from Cleveland Drive to Wehrle Drive), and on Aris Avenue (from Dingens Street to William Street) in the Town of Cheektowaga. The existing waterlines will be abandoned in place. The size and type of the new waterlines will be determined as a part of the design project, but will be a minimum 8-inch diameter.

Contract F will consist of the installation of approximately 7,000 linear feet of new distribution waterline on multiple streets in the Village of Depew and City of Lackawanna. The project will consist of the replacement of existing waterlines on Columbia Avenue (from Marrano Drive to

Leonard Drive), on Broadway (from Chateau Court to dead-end), on Beech Street (from Lincoln Avenue to Jackson Avenue), on Pine Street (from Lincoln Avenue to Madison Avenue), and on Spruce Street (from Madison Avenue to Jackson Avenue) in the City of Lackawanna. The existing waterlines will be abandoned in place. The size and type of the new waterline will be determined as a part of the design project but will be minimum 8-inch diameter. The project also includes service transfers from 90 to 104 Spruce Street to the existing 8-inch waterline with abandonment of the existing 4-inch waterline from Lincoln Avenue to Madison Avenue, and service transfers from 61 to 82 Madison Avenue to the existing 12-inch line with abandonment of the existing 4-inch and 6-inch waterlines from Beech Street to Spruce Street.

Scope of Work

The general scope of work is described in the example Professional Services Contract included as Attachment 1. The methods of payment shall be per the Professional Services Contract.

Information Requests

All questions and requests for information are to be directed to the designated ECWA Contact Person, Michael J. Quinn, PE at 716-685-8203, in accordance with New York State Finance Law §§139-j and 139-k.

Proposal Requirements

Proposals are to be concise, specific and straightforward. All pertinent information is to be contained in the proposal. The use of artwork, special covers, and extraneous information in the proposals is discouraged. Proposals are to remain valid for a minimum of 60 days. Each proposal is to include the following:

- Item 1 - Qualifications and related experience, particularly on the type of projects outlined above. Include a minimum of three references for similar work including project name, location, contact person, budget, date of completion and state the relevance to this project.
- Item 2 - Project understanding, technical approach and detailed scope of services. Identify any suggested revisions to and expand upon the detail of the general scope of work as outlined herein.
- Item 3 - Project staffing for all key personnel and subcontractors. Identify the proposed role of all staff proposed for this project. Provide a table of the current and projected workload of each proposed project staff member as it relates to availability to perform the proposed work. Provide the office of each proposed project staff member and the location(s) where work will be performed. Provide resumes of the proposed personnel with listed experience applicable to this project. Indicate personnel role on the projects listed under Item 1 above.
- Item 4 - Qualifications of resident inspector(s) including applicable education, training, experience, and certification.

- Item 5 - Work performed for the Water Authority in 2018, 2019, and 2020.
- Item 6 - Current remaining workload with the Water Authority.
- Item 7 - Completed Section 139 of State Finance Law per Attachment 1, Appendix D (pp. 40-48).
- Item 8 - Proof of insurance in accordance with Erie County Water Authority Insurance Requirements for Professional Services per Attachment 1, Appendix B.
- Item 9 - Proposed project schedule, showing duration of all tasks from preliminary design through construction completion.
- Item 10 - Fee proposal which is to include a breakdown of engineering fees for each task showing personnel, hours, hourly rates (billing and direct labor), overhead rates, and subcontractor costs for each task. Provide information on direct costs including estimated total direct cost for non-lump sum tasks. Note that the direct labor multiplier for resident inspection shall be limited to 2.80. All consultants shall include Special Services lump sum cost of \$50,000 for the purposes of this proposal.

Proposals shall include the following form for comparison purposes:

Project 202100007 – RFP for Distribution Main Design Projects	
Survey	\$
Design	\$
Construction and General Services	\$
Resident Inspections	\$
Record Drawings	\$
Special Services	\$ 50,000.00
TOTAL:	\$

Proposals will be accepted until 4:00 p.m. on ?????????? ??, 2020. Five hard copies of the proposal and one digital .pdf file (on a USB flash drive) are to be delivered to Erie County Water Authority, 3030 Union Road, Cheektowaga, New York 14227 to the attention of Mr. Leonard F. Kowalski, PE, Executive Engineer. Proposals received after this time will not be considered and will be returned unopened. All proposals being mailed (including Federal Express, UPS, Priority Mail, etc.) or hand delivered shall be directed to the attention of Mr. Kowalski in a sealed envelope and be clearly marked on the outside of the mailing or hand delivered envelope as follows: “PROPOSAL – DISTRIBUTION MAIN DESIGN PROJECTS 2021-2022.”

Evaluation and Selection

All proposals will be evaluated by a small in-house committee made up of Water Authority personnel familiar with the proposed project. Interviews and/or presentations of the proposals will be requested if needed. The proposals will be evaluated based on the criteria listed above.

The final scope of work and fee for the engineering services for the project will be negotiated with the selected firm(s). Professional Service Contracts will then be executed pending successful negotiation and authorization by the Water Authority Board of Commissioners. All firms submitting proposals will be notified of the selection results. It is anticipated that the selection process will be completed in ?????????????? 2020, and that the agreement will be executed in ?????????????? 202?.

ATTACHMENT 1

This is a sample Agreement. All shaded provisions are examples for illustration purposes only and will be changed to reflect the appropriate agreement between the Authority and the Engineer awarded the contract. The agreements for each project will include specific project descriptions as stated in Section Project Description of the RFP.

Project No. XXXXXXXX
Contract XX-XX

PROFESSIONAL SERVICES AGREEMENT FOR ENGINEERING SERVICES

This is an Agreement effective as of DATE OF BOARD APPROVAL (“Effective Date”) by and between

ERIE COUNTY WATER AUTHORITY
295 Main Street, Room 350
Buffalo, New York 14203

hereinafter referred to as the “Authority,” and

XYZ ENGINEERING FIRM
0000 Street, Suite 000
City, State, ZIP

hereinafter referred to as “Engineer.”

The Authority project, for which engineering services are to be provided under this Agreement, relates to the installation of new distribution mains and replacement of distribution mains in direct service areas, specifically, the City of Tonawanda, (the “Project”).

In consideration of the mutual promises set forth in this Agreement, the Authority and Engineer agrees as follows:

ARTICLE 1 – SERVICES OF ENGINEER

1.01 The Project

- A. The Project will consist of the installation of approximately 8,000 linear feet of new distribution waterline on multiple streets in the City of Tonawanda.
- B. The Project will consist of the replacement of existing waterline on the following streets:

1. Niagara Street from the city line to 783 Niagara;
2. Two Mile Creek Road from Niagara to the reducer at 877 Two Mile Creek Road;
3. Maldiner Avenue from 119 Maldiner to Cranbrook;
4. Cranbrook Road from Maldiner to 73 Cranbrook;
5. Crestwood Court from Maldiner to the dead end;
6. Cornell Court from Maldiner to the dead end;
7. Morgan Street from Wheeler to Kohler;
8. Steiner Avenue from Highland to Grove;
9. Highland Avenue from Fuller to Park;
10. Queen Street from Highland to the reducer at 64 Queen; and
11. Fillmore Avenue from the reducer at 365 Fillmore to Wales.

C. The Project also includes service transfers on East Niagara Street from East Avenue to Wales, transferring all service connections from the existing 8-inch to the existing 16-inch waterline, with abandonment of the 8-inch waterline.

D. The following conditions apply to all work performed for the Project:

1. The existing waterlines will be abandoned in place. The sizes and types of the new waterlines will be determined as a part of the design project but will be a minimum 8-inch diameter.
2. All valving, hydrants, abandonments, interconnections, and appurtenances shall be included in the design.
3. The Project includes a hydraulic analysis to demonstrate functionality and redundancy of existing and proposed waterlines in case of a waterline failure in the area.
4. Pipe materials to use, sizes, and interconnection details to various existing pipes will be necessary during the design.
5. Incorporation of all Authority standard details to be included in the drawing set along with completion of all necessary tables and other design information as required.

1.02 **Standard of Performance**

- A. **Standard of Care:** The standard of care for all professional engineering and related services performed or furnished by the Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality.
- B. **Technical Accuracy:** The Authority shall not be responsible for discovering deficiencies in the technical accuracy of the Engineer's services. The Engineer shall correct deficiencies in technical accuracy without additional compensation, unless such corrective action is directly attributable to deficiencies in Authority-furnished information.
- C. **Special Services:** The Engineer may employ one or more of the following special services in carrying out the Project, subject to the Authority's approval:
 - A. Soils investigations including test borings, pavement cores, and the related analysis;
 - B. Detailed mill, shop and/or laboratory inspection of materials and equipment;
 - C. Land surveys, maps, plates, descriptions and title investigations which may be required to acquire lands, easements, and rights-of-way for the proposed facilities;
 - D. Air, water, and/or soil sampling, testing, and/or analysis;
 - E. Hazardous material testing and assessment;
 - F. Wetlands investigations, delineation, and mitigation;
 - G. Technical assistance with preparing the necessary documents required by the New York State Environmental Quality Review Act (SEQRA) for Type I or Unlisted actions;
 - H. Technical assistance with operation and maintenance manuals;
 - I. Start-up services relating to equipment to be installed by contractor;

- J. Legal services, as deemed necessary and approved by the Authority's General Counsel, for acquiring lands, easements and rights-of-ways or other Project-related services; or
- K. Other services, as deemed necessary by the Authority's Chief Operating Officer and Chief Financial Officers.
- D. ***Reliance on Others:*** Subject to the standard of care set forth in § 1.02, paragraph (A) of this Agreement, the Engineer and its special services consultants may use or rely upon design elements and information ordinarily or customarily furnished by others including, but not limited to, specialty contractors, manufacturers, suppliers and the publishers of technical standards.
- E. ***Expert Witness Assistance:*** The Engineer agrees to assist the Authority as an expert witness in litigation arising from the project development and construction, even if such assistance is requested by the Authority after the expiration or termination of this Agreement.
- F. ***Compliance with Laws and Regulations, and Policies and Procedures:***
 - A. The Authority and the Engineer shall comply with all applicable federal, state or local laws and regulations and all applicable Authority policies and procedures.
 - B. The Engineer shall comply with the provisions set forth in Public Authorities Law §§ 2875, 2876, and 2878 of the laws of the State of New York. In response to the Authority's Request for Proposals, the Engineer submitted and signed Forms A, B, and C, a copy of which is attached to, and incorporated in, this Agreement as Appendix D.
 - C. By executing this Agreement, the Engineer affirms under the penalties of perjury that there was no collusion in the proposal submitted to the Authority, upon which forms the basis of this Agreement.
 - D. The Engineer shall comply with the provisions of State Finance Law § 139-L of the laws of the State of New York. In response to the Authority's Request for Proposals, the Engineer submitted and signed the Sexual Harassment Bidding Certification, a copy of which is attached to, and incorporated in, this Agreement, as Appendix D.
 - E. The Engineer shall comply with the provisions of the Shield Act, codified at General Business Law § 899-aa of the laws of the State of New York.
 - F. The Authority shall provide the Engineer in writing any and all Authority policies and procedures applicable to the Engineer's performance of services under this Agreement. The Engineer agrees to comply with such

policies and procedures to the extent compliance is not inconsistent with professional practice requirements; and

- G. If the Engineer, its employees, agents and/or subcontractors, wish to access any Authority property, they must notify the Authority's Security Officer and provide the following information: (a) government-issued photo identification for all site visitors; (b) a detailed statement indicating the purpose for the site visit; (c) the proposed date and time for the site visit; (d) the estimated start and finish time for the site visit; and (e) any additional information reasonably requested by the Authority's Security Officer. No person may visit any Authority Property without the authorization of the Authority and/or its Security Officer. While on Authority property, the Engineer's employees, representatives and engineers shall comply with the specific applicable security and access rules established by the Authority's Security Officer.
- G. ***Health Screening Questionnaire:*** The State of New York (the "State") has declared a state of emergency due to the COVID-19 pandemic. The Authority is currently operating under a Declaration of Emergency. While the Authority continues to operate under the Declaration of Emergency, the Engineer, its employees, and agents shall comply with all health safety rules and regulations adopted by the State or the Authority including, but not limited to, completing an online health screening questionnaire before entering any Authority worksite.
- H. ***Unknown Conditions:*** The Engineer shall not be required to sign any documents, no matter by whom requested, that would result in the Engineer having to certify, guarantee, or warrant the existence of conditions whose existence the Engineer cannot ascertain. The Authority agrees not to make resolution of any dispute with the Engineer for payment on any amount due to the Engineer in any way contingent upon the Engineer signing any such documents.
- I. ***General Conditions:*** The general conditions for any construction contract document prepared here under are to be the "Standard General Conditions of the Construction Contract" as prepared by the Engineers Joint Contract Documents Committee (EJCDC C-700, latest Edition) unless both parties mutually agree to use other general conditions.

1.03 Scope of Service

The Engineer shall provide all engineering services necessary to design and install the Project improvements including, but not limited to, the following:

- A. ***Survey:*** Upon authorization from the Authority, the Engineer shall obtain field topographic survey data for the preparation of construction plans required for final design of the project. Survey data is to be according to NAD83 and NAVD88 standards.

B. ***Design:*** Upon authorization from the Authority, the Engineer shall complete the following services:

1. Prepare detailed design drawings, specifications and contract documents. Tasks include, but are not limited to:
 - a. Attend meetings with the Authority and other related Project entities, as necessary and as required;
 - b. Report to the Authority bi-weekly on the progress of the design work via email, with the following information:
 - i. Design work performed during the previous two weeks;
 - ii. Design work scheduled for the next two weeks;
 - iii. Schedule status/deliverable status, attaching an updated project schedule (in Microsoft Project format) identifying all project milestones and current project status;
 - iv. Budget status/percent completed;
 - v. Input needed from the Authority or others;
 - vi. Requests for scope changes; and
 - vii. Other issues or concerns.
 - c. Review of available drawings and records furnished by the Authority;
 - d. Solicitation of all required cost quotations and coordination of subconsultants and/or contractors required to provide any necessary Special Services.
 - e. Prepare base drawings in AutoCAD version 2017 from the survey data obtained in the survey phase and the available records furnished by the Authority and other agencies;
 - f. Complete a hydraulic analysis to determine the size(s) of the proposed watermains, and recommend waterline sizes to the Authority for review;
 - g. Evaluate the use of temporary waterlines to facilitate the installation of the proposed waterlines in areas where extensive rock excavation is anticipated;

- h. Evaluate the use of trenchless technologies such as re-lining and pipe bursting;
 - i. Prepare engineering calculations to support the design of the improvements, including related civil, hydraulic, mechanical, electrical, structural, and architectural features of the project;
 - j. Submit plans to various utility companies and regulatory agencies to incorporate all existing utilities within the project limits;
 - k. Prepare final plans, profiles, and job specific detail drawings that include editing of the Authority's standard detail drawings where appropriate;
 - l. Prepare a "Project Manual", including contract specifications that include editing of the Authority's standard "front end" specifications and standard technical specifications where appropriate, preparation of additional technical specifications as required, and inclusion of necessary appendices providing supporting information;
 - m. Obtain New York State Prevailing Wage Rates and inserting them into the specifications;
 - n. Prepare a quantity take-off and a construction cost estimate;
 - o. Prepare an engineering report meeting the Authority's format and including all design parameters, summary of hydrants added, standards utilized, and hydraulic calculations performed for the design. Once approved, submit with contract specifications, drawings, application forms and fees to Erie County Health Department as necessary to obtain Health Department approval;
 - p. Preparing stamped site-specific Maintenance and Protection of Traffic (MPT) plans meeting all New York State Department of Transportation (NYSDOT) standards for inclusion in the bid set,
 - q. Provide project drawings/specifications/construction cost estimate to the Authority at 30%, 70%, 95%, and 100% design, with incorporation of comments received into following submissions, and
 - r. Attend a final design meeting with the Authority;
2. Prepare engineering data, where necessary, for regulatory permit applications as required to obtain local, state, federal and public utility approval for the initiation and construction of the work;

3. Furnish to the Authority five (5) sets of drawings, specifications and other contract documents, for final review by the Authority and other approving agencies. Supply electronic (.pdf) versions of drawings and the Project Manual to the Authority;
4. Prepare appropriate documentation for SEQRA and any Stormwater Pollution Prevention Plan (SWPPP) reports including calculations; and
5. Prepare a schedule for the Project utilizing the Authority's standard format. The Project schedule shall be updated as needed.

C. **General Services:** Upon authorization from the Authority, the Engineer shall complete the following services:

1. Furnish twenty (20) sets of stamped and signed contract drawings, final specifications, and other documents required for bidding and construction purposes for each contract;
2. Conduct a pre-bid meeting when appropriate;
3. Prepare and distribute addenda;
4. Provide assistance to the Authority in securing bids, tabulating bid results, analyzing bid results, and making recommendations on the award of each construction contract;
5. Provide a pre-construction meeting notice to all municipalities, utility companies, fire districts, and all other interested parties, conduct a pre-construction meeting and distribute minutes;
6. Supply an approved contractor's schedule for construction of the project;
7. Provide detailed initial stakeout (once only), including benchmarks, reference and axis lines along the routes of the construction or where necessary;
8. Give consultation and advice to the Authority during construction;
9. Prepare elementary sketches and supplementary sketches, if required, to resolve actual field conditions encountered;
10. Interpret contract documents and resolve problems as to amount, quality, acceptability, and fitness;
11. Review the contractor's submittals of material and/or equipment for compliance with the Engineer's design concept and take appropriate action

such as, but not limited to: “approved,” “approved as corrected,” “revise and resubmit,” or “not approved”;

12. Furnish general construction inspection as to quality and quantity of the contractor’s work as the construction progresses in order to recommend partial payment;
13. Coordinate with all Authority’s customers within the Project area regarding the construction work;
14. Schedule and attend progress meetings;
15. Report via email to the Authority bi-weekly on the progress of the construction work with the following information:
 - a. Summary of the construction work performed in the previous two-week period;
 - b. Updated project schedule (in Microsoft Project format) identifying all project milestones and current project status;
 - c. Forecast of all upcoming work and project costs expected for the project, including identification of any contract items which may exceed bid quantities; and
 - d. Copies of final inspection reports (in .pdf format) for reports in the previous two-week period;
16. Notify the Authority when a change in the work is proposed which will cause an adjustment in the contract cost. Evaluate whether the proposed change is justified and reasonable, and if necessary, prepare change orders, field directives, and make recommendations for approval. Discuss changes in the plans or procedures authorized by the Engineer with the Authority prior to implementation. Obtain approval for all change orders from the Authority’s Board of Commissioners prior to implementation;
17. When new waterlines are placed into service, notify the appropriate fire districts in writing, identifying addresses of new hydrants placed into service and existing hydrants soon to be removed from service. A copy of this letter shall also be sent to the Authority;
18. Check line and grade for preparation of record drawings;
19. Make a final inspection, furnish a report on project completion, and make recommendations for final payments to contractors and for the release of retained amounts, if any;

20. Assist the Authority as an expert witness in litigation arising from Project design, development or construction.

D. ***Resident Inspections:*** Upon authorization from the Authority, the Engineer shall furnish a full-time Resident Project Engineer (RPE) who will conduct technical inspection of the construction work relating to the Project;

1. ***Engineer's duties and responsibilities:*** The Engineer, through the RPE's observations, shall protect the Authority against defects and deficiencies in the construction work.

2. ***RPE's duties and responsibilities:***

a. The RPE shall not:

- i. Authorize any deviation from the contract documents or substitution of materials or equipment (including "or-equal" items), without written approval by the Authority and the Engineer;
- ii. Exceed limitations of Engineer's authority as set forth in this Agreement;
- iii. Undertake any of the responsibilities of the construction contractors, subcontractors, or suppliers;
- iv. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the contractor's work;
- v. Advise on, issue relating, or assume control over security or safety practices, precautions, and programs in connection with the activities of the Authority or its contractors;
- vi. Participate in specialized field or laboratory tests or inspections conducted off-site by others; or
- vii. Accept shop drawings or sample submittals from anyone other than the contractor.

b. The RPE shall:

- a. Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values prepared by the

contractor and consult with the Engineer concerning acceptability;

- b. Attend meetings with contractor and subcontractors, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings;
- c. Provide email updates to the Engineer and the Authority regarding meetings with contractor and subcontractors;
- d. Conduct daily on-site inspections of all construction work in progress;
- e. Prepare daily inspection reports to determine if the construction work is progressing in accordance with contract documents;
- f. Report to the Authority and the Engineer whenever the RPE believes any portion of the construction work will not produced a completed Project, conforming with the contract documents or will imperil the integrity of the Project design as a functioning whole as indicated in the contract documents, or has been damages, or does not meet the requirements of any inspection, test or approval required to be made;
- g. Advise the Authority and the Engineer whether any part of the construction work in progress should be corrected or rejected or should be uncovered for observations, or requires special testing, inspection, or approval;
- h. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Authority personnel, and that the contractor maintains adequate records relating to the same;
- i. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups;
- j. Report to the Engineer and the Authority when clarifications and interpretations of the contract documents are needed and transmit to the contractor clarifications and interpretations as issued by Engineer;
- k. Advise the Engineer and the contractor of the commencement of any portion of the construction work requiring a Shop Drawing or Sample submittal for which RPE believes that the submittal has not been approved by the Engineer;

1. Shall conduct all necessary Stormwater Pollution Prevention Plan (SWPPP) field inspections as directed by codes and as authorized by the Authority. Inspector shall also provide and maintain all record documentation on site for review using a construction mailbox or other approved method, and
- m. Submit via email bi-weekly updates to the Authority summarizing the resident inspection costs and projecting further resident inspection costs for the duration of the construction work.

E. ***Record Drawings:*** Upon authorization from the Authority, the Engineer shall complete the following services:

1. Provide record drawings, including the base mapping, (on AutoCAD Version 2017) of all completed work according to the latest ECWA As-Built Standards. Update the existing Authority valve and hydrant details to reflect the completed work. Furnish one set of mylar transparencies and all AutoCAD files on CD of these drawings to the Authority.
2. Provide horizontal and vertical coordinates using survey grade Real Time Kinematic (RTK) GPS with horizontal centimeter level accuracy and best possible vertical precision given the environmental conditions during collection for all mainline valves, hydrants, hydrant valves, permanent blow-offs, and meter pits. Coordinates shall be presented as points within an ESRI geodatabase feature class, or provided in Microsoft Excel, Microsoft Access, or .dbf format. At a minimum, the coordinate file shall contain a Northing, Easting, Elevation, horizontal precision, vertical precision, and Description for each feature.
3. Record Drawings and coordinates to be based on the NY State Plane Coordinate System – West Zone. Data is to be according to NAD83 and NAVD88 datums. Coordinates shall be provided in Microsoft Excel, Microsoft Access, or .dbf format. At a minimum, the coordinate file shall contain a Northing, Easting, Elevation, and Description for each feature.
4. Submit two stamped/signed full size sets, AutoCAD files, .pdf version of the drawings (with stamp and seal) and Project Manual (with addenda) and GPS coordinates no later than one month after final payment of the Construction Contract is recommended for approval and in accordance with Authority Standards.

F. ***Contractor's Request for Payment:*** As a general service to the Authority, the Engineer will review applications for payment with contractor for compliance with the established procedure for their submission and forward recommendation to the

Authority, noting particularly the relationship of the payment requested to the schedule of values, work completed, and materials and equipment delivered to the Project site but not incorporated in the work.

- G. ***Certificates, Operation and Maintenance Materials:*** During the course of construction, as a general service, the Engineer will verify that materials and equipment certificates, operation and maintenance manuals and other data required by the contract documents to be assembled and furnish by the contractor are applicable to the items actually installed and in accordance with the contract documents, and have these documents delivered to the authority prior to the payment for such work.
- H. ***Completion:*** Upon authorization from the Authority, as general services, the Engineer shall:
1. Participate in visits to the project to determine substantial completion, assist in the determination of substantial completion and the preparation of lists to be completed or corrected;
 2. Participate in a final visit to the Project with Authority personnel; and prepare a final list of items to be completed and deficiencies to be remedied;
 3. Observe whether all items on the final list have been completed or corrected and make recommendations to the Authority concerning acceptance of the Project and final payment.

1.04 Start of Construction

Unless otherwise extended by mutual agreement of the parties, the professional services to be rendered in this Project shall be performed within the following timeframe:

- A. All survey services should be completed by May 1, 2021;
- B. All design services should be completed by October 1, 2021; and
- C. All other services should be completed by the end of construction with an estimated completion date of December 1, 2022.

ARTICLE 2 – PAYMENT OF PROFESSIONAL SERVICES

2.01 Lump Sum Payments: The Engineer agrees to accept a lump sum payment for following services:

- A. ***Survey:*** For services described under § 1.03, paragraph A of this Agreement, the Authority shall pay the Engineer a lump sum which will include all expense, labor

and cost associated with this task. Payment will be made monthly based on the percentage of completion up to 100% of the total lump sum amount.

- B. ***Design:*** For services described under § 1.03, paragraph B of this Agreement, the Authority shall pay the Engineer a lump sum which will include all expense, labor, and cost associated with this task. Payment will be made monthly based on the percentage of completion up to 70% of the total lump sum amount. After submission by the Engineer to the Authority of a draft set of contract documents, payment will be made monthly based on the percentage of completion up to 90% of the total lump sum amount. The balance will be paid when the final contract documents are submitted to the Authority.
- C. ***General Services:*** For services described under § 1.03, paragraphs C, F, G and H of this Agreement, the Authority shall pay the Engineer a lump sum which will include all expense, labor and cost associated with this task. Payment will be made monthly based on the percentage of completion up to 100% of the total lump sum amount.
- D. ***Record Drawings:*** For services described under § 1.03, paragraph E of this Agreement, the Authority shall pay the Engineer a lump sum which will include all expense, labor and cost associated with this task. Payment will be made monthly based on the percentage of completion up to 70% of the total lump sum amount. After submission by the Engineer to the Authority of draft record drawings, payment will be made monthly based on the percentage of completion up to 90% of the total lump sum amount. The balance will be paid when the final record drawings are submitted to the Authority.

2.02 Resident Inspection: For services described under § 1.03, paragraph D of this Agreement, the Authority shall pay the Engineer the direct cost of labor, times a multiplier based on the hours worked at straight time (without overtime premium), direct non-salary expenses, and a fixed fee.

- A. Payment for Resident Inspection labor and expenses will be made monthly based on actual costs.
- B. Payment for the fixed fee will be made monthly based on the proportion of construction completed. Fixed fee shall be billed separately from the Resident Inspection costs.

2.03 Special Services: For services described under § 1.02, paragraph C of this Agreement, the Authority shall pay the Engineer for special services pre-approved by the Authority's Chief Operating Officer in an amount approved by the Authority's Chief Financial Officer.

- A. When the Engineer is performing the special services described in § 1.02, paragraph C of this Agreement, such services will be billed at the fixed rates included in Appendix A of this Agreement.

- B. When the Engineer obtains special services from a third party, the Engineer will be reimbursed based on the actual invoice cost paid by the Engineer, plus 5%.

2.04 Engineering Cost Schedule:

A. *Engineering Costs:*

- | | |
|----------------------------------|------------|
| 1. Lump Sum Survey Cost | [Insert\$] |
| 2. Lump Sum Design Cost | [Insert\$] |
| 3. Lump Sum General Service Cost | [Insert\$] |
| 4. Lump Sum Record Drawings Cost | [Insert\$] |

TOTAL LUMP SUM COST: [Insert\$]

B. *Resident Inspection Costs:*

	Payable	Employee Direct
	Hourly Rate	Hourly Rate
Resident Project Engineer	[Insert\$]	[Insert\$]

The Dollar amount for Estimated Resident Inspection is based on a fixed hour estimate of 0000 hours of Project Engineer Payable Hourly Rate during the duration of the Project. Payment will be made for actual hours worked during the duration of construction. Actual hours will vary based on production rates of the Contractor during construction, unforeseen circumstances that develop during construction, and weather conditions.

- | | |
|---|------------|
| 1. Estimated Resident Inspection | [Insert\$] |
| 2. TOTAL NOT TO EXCEED RESIDENT INSPECTION: | [Insert\$] |

C. *Special Services (not to exceed)* \$ 50,000.00

D. *Other Costs:*

- | | |
|--|----------------------|
| 1. Estimated Mileage (IRS rate) | [Insert\$] |
| 2. Estimated Copy Costs (per copy) | [Insert\$] |
| 3. Prints (per print) | [Insert\$] |
| 4. Subcontractor Expenses, invoiced
as special services | Cost plus 5% maximum |
| 5. Other Direct Non-Salary Costs | At cost |

2.05 Audit: The Authority reserves the right to audit the Engineer's records to verify bills submitted and representations made. For this purpose, the Engineer agrees to make company records available for inspection upon written notice by the Authority. The Authority shall have two years from the date of the Engineer's final bill to complete its audit. If the audit establishes an overcharge, Engineer agrees to refund the excess.

ARTICLE 3 – GENERAL PROVISIONS

3.01 Subcontract and Assignments: The Engineer may not subcontract or delegate any of the work, services, and/or other obligations of the Engineer without the express written consent of the Authority. The Authority and the Engineer bind themselves and their successors, administrators and assigns to the terms of this Agreement. The Engineer shall not assign, sublet or transfer its interest in the Agreement without the written consent of the Authority.

3.02 Amendments: No modification or variation from the terms of this Agreement shall be effective unless it is in writing and authorized by a resolution of the Board of Commissioners of the Authority and signed by all parties.

3.03 Right to Terminate: The Authority reserves the right to terminate the Engineer's services at any time, without cause, based on seven (7) days' written notice. Engineer shall not be entitled to lost profit and shall perform only such services, after notification of termination, as the Authority directs.

3.04 Indemnification:

- A. To the fullest extent permitted by law, the Engineer agrees to indemnify and hold the Authority harmless from all third party claims, liabilities, damages and costs (including all reasonable attorney's fees, and cost of defense) to which the Authority, its officers, directors and employees may be subject to, arising out of the death or bodily injury to any person or the destruction or damage to any property to the extent caused by the negligent acts, errors or omissions, or willful misconduct of the Engineer's performance of professional services provided under this Agreement and those of its subcontractors or anyone for whom the Engineer is legally liable.
- B. To the fullest extent permitted by law, the Authority agrees to indemnify and hold the Engineer harmless from all third party claims, liabilities, damages and costs (including all reasonable attorney's fees and cost of defense) to the extent caused by the negligent acts, errors or omissions of the Authority, its contractors, engineers, or anyone for whom the Authority is legally liable.

3.05 Confidential Information:

- A. In order to assist the Engineer in the performance of this Agreement, the Authority may provide the Engineer with confidential information including, but not limited to information relative to the services to be performed. All information received by the Engineer in any fashion and under any conditions resulting from the rendering of the services in consideration of this agreement, are considered confidential. The Engineer shall hold in confidence and not disclose to any person

or any entity, any information regarding information learned during the performing of services including but not limited to information relative to the services to be performed.

- B. The Engineer shall use at least the same degree of care to protect and prevent unauthorized disclosure of any confidential information as it would use to protect and prevent unauthorized disclosure of its own proprietary information. The Engineer shall use confidential information only in the performance of this Agreement. No other use of the confidential information whether for the Engineer's benefit or for the benefit of others shall be permitted.
- C. In no event is the Engineer authorized to disclose confidential information without the prior written approval of the Authority. Engineer may provide such information to its subcontractors for the purpose of performing the services; or disclose such information, with notice to the Authority, if such information is required to be disclosed by law or court order. The terms of this paragraph shall be binding during and subsequent to the termination of this Agreement.

3.06 Insurance:

- A. The Engineer shall secure and maintain such insurance as will protect itself from claims under the Workers' Compensation Act; claims for damages because of bodily injury, including personal injury, sickness or disease, or death of any of its employees or of any person other than its employees; and from claims for damages because of injury to or destruction of property including loss of use resulting therefrom in the amounts indicated on Appendix B.
- B. The Engineer shall provide and maintain insurance that will provide coverage for claims arising out of the negligent performance of its services.
- C. The Engineer shall provide Certificates of Insurance certifying the coverage required by this provision.
- D. The Engineer shall provide the name of an employee who will be responsible for providing the Authority with current and updated Certificates of Insurance. The Authority will require the name of the employee, the employee's phone number and email addresses.

3.07 Copyrights, Trademarks and Licensing:

- A. All materials produced under this Agreement, whether produced by the Engineer alone or with others, and regardless of whether produced during regular working hours, shall be considered work made for hire and the property of the Authority. The Engineer shall, during and subsequent to the terms of this Agreement, assign to the Authority, without further consideration, all right, title and interest in all material produced under this Agreement. All material produced under this

Agreement shall be and remain the property of the Authority whether registered or not.

- B. In performing work under this agreement, the Engineer may be granted access to the Authority's GIS data, documents, and other information. The Engineer understands and agrees that the use of such data, documentation and information shall be treated as confidential information and the Engineer shall abide by the terms and conditions of the Confidentiality and Copyright Licensing Agreement, attached and incorporated in this Agreement as Appendix C.

3.08 New York Law and Jurisdiction: Notwithstanding any other provision of this Agreement, any dispute concerning any question of fact or law arising under this Agreement which is not disposed of by agreement between the Engineer and the Authority shall be governed, interpreted and decided by a court of competent jurisdiction of the State of New York in accordance with the laws of the State of New York.

3.09 Conflicts of Interest: The Engineer represents that it has advised the Authority in writing prior to the date of signing this Agreement of any relationships with third parties, including competitors of the Authority, which would present a conflict of interest with the rendering of the services, or which would prevent the Engineer from carrying out the terms of this Agreement or which would present a significant opportunity for the disclosure of confidential information. The Engineer will advise the Authority of any such relationships that arise during the term of this Agreement. The Authority shall then have the option to terminate the Agreement without further liability of the Engineer, except to pay for services rendered.

3.10 Additional Conditions: The Engineer and the Authority acknowledge that there may be additional conditions, terms and provisions which shall apply specifically to the services to be performed. The parties agree to negotiate in good faith to agree upon such additional terms.

3.11 Entire Agreement: This Agreement constitutes the entire understanding of the parties and no representations or agreements, oral or written, made prior to its execution shall vary or modify the terms herein. This Agreement supersedes all prior contemporaneous communications, representations, or agreements, whether oral or written with respect to the subject matter hereof and has been induced by no representations, statements or agreements other than those herein expressed. No subsequent agreement made between the parties shall be binding on either party unless reduced to writing and signed by an authorized officer of the party sought to be bound by such agreement.

3.12 Independent Status:

- A. Nothing contained in the Agreement shall be construed to render either the Authority or the Engineer, an owner, member, officer, partner, employee or agent of the other, nor shall either party have authority to bind the other in any manner, other than as set forth in this Agreement, it being intended that the Engineer shall remain an independent contractor responsible for its own actions. The Engineer is

retained by the Authority only for the purpose and to the extent set forth in this Agreement.

- B. The Engineer is free to choose the aggregate number of hours worked and the scheduling of such hours as it shall see fit at its discretion within the limitations set forth in Article 2.
- C. Neither the Engineer nor its employees shall be considered under the provisions of this Agreement or otherwise as having an employee, servant or agency status or as being entitled to participate in any plans, arrangements or distributions of the Authority.
- D. In providing the services under this Agreement, the Engineer represents and warrants that it has complied with all applicable federal, state and local laws particularly with respect to licenses, withholdings, reporting and payment of taxes. The Engineer agrees to furnish copies of documentation to the Authority evidencing its compliance with such laws. The Engineer further represents and warrants that any income accruing to the Engineer and its employees from the Agreement shall be reported as such to the appropriate taxation authorities.

3.13 Doing Business Status: The Engineer represents it is qualified to do business in State of New York and has registered with the New York Secretary of State.

3.14 Force Majeure: The Engineer shall not be liable to the Authority for any failure to perform the Services if any such failure is caused by forces beyond the Engineer's reasonable control, including without limitation, actions or inactions of any governmental agencies, changes in law, strikes, lockouts, or other industrial disturbances, acts or omissions of third-parties, civil disturbances, fires, floods, earthquakes, acts of God, acts of a public enemy or terrorism, epidemics or pandemics, including issues arising out of the COVID-19 pandemic, which may include without limitation, workforce shortages, lack of necessary supplies or Personal Protective Equipment, travel restrictions, and other restrictions resulting from public guidance and emergency orders.

3.15 Gratuities: The Engineer shall prohibit its agents, employees and consultants from using their positions for personal financial gain, or from accepting any personal advantage from anyone under circumstance which might reasonably be interpreted as an attempt to influence the recipients in the conduct of their official duties. The Engineer or its employees shall not, under circumstances which might be reasonably interpreted as an attempt to influence the recipients in the conduct of their duties, extend any gratuity or special favor to employees of the Authority.

3.16 Notice: Any notices required by this Agreement or otherwise shall be delivered by United States Postal mail or personal delivery upon the addresses hereinbefore stated. Any change in such addresses shall be required to be in writing to the other party and acknowledged as such.

ARTICLE 4 – SEVERABILITY

4.01 Any provision or part of the Agreement held to be void or unenforceable by a court of competent jurisdiction shall be deemed stricken, and all remaining provisions shall continue to be

valid and binding upon the parties, which agrees that the Agreement shall be reformed to replace such stricken provisions or part thereof with a valid enforceable provision that comes as close as possible to expressing the intent of the stricken provision. The validity and enforceability of all other provisions of this Agreement shall not otherwise be affected.

ARTICLE 5 – TERMINATION

5.01 The Authority reserves the right to terminate this Agreement in the event it is found that the Certification filed by the Engineer in accordance with New York State Finance Law §139-k was intentionally false or intentionally incomplete. Upon such finding, the Authority may exercise its termination right by providing written notification to the Engineer in accordance with the written notification terms of this Agreement.

ERIE COUNTY WATER AUTHORITY

By _____
Jerome D. Schad, Chair

XYZ ENGINEERS

By _____
Full Name, President

STATE OF NEW YORK)
COUNTY OF ERIE) ss:

On the _____ day of _____, in the year 20____, before me personally came Jerome D. Schad, to me known, who, being by me duly sworn, did depose and say that he resides in Amherst, New York, that he is the Chairman of the Corporation described in the above instrument; and that he signed his name thereto by order of the Board of Directors of said Corporation.

Notary Public

STATE OF NEW YORK)
COUNTY OF ERIE) ss:

On the _____ day of _____, in the year 20____, before me personally came Full Name, to me known, who, being by me duly sworn, did depose and say that he/she resides in _____, New York, that he/she is the President of the Corporation described in the above instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said Corporation.

Notary Public

APPENDIX A

FIXED RATES FOR SPECIAL SERVICES

Grade	Hourly Billing Rate

APPENDIX B

INSURANCE

Insurance specs:

The following minimum insurance requirements shall apply to vendors providing services to the Erie County Water Authority (the Authority). If a service or project, in the opinion of the Authority, represents an unusual or exceptional risk, the Authority may establish additional insurance requirements for that service or project. All insurance required herein shall be obtained at the sole cost and expense of the contractor, including deductibles and self-insured retentions, and shall be in full force and effect on the contract commencement date and for the duration of the contract. These requirements include but are not limited to the minimum insurance requirements.

Insurance Requirements:

a. Workers Compensation:

Part 1: Workers Compensation: Statutory

Part 2: Employers Liability: \$1,000,000.

Note: If New York State domiciled employees are used, coverage to be New York Statutory for both Parts 1 and 2

b. New York Disability Benefits Liability: Statutory coverage if New York State domiciled employees are used.

c. Commercial General Liability:

- \$2,000,000. General Aggregate
- \$2,000,000. Products/Completed Operations Aggregate
- \$1,000,000. Each Occurrence
- \$1,000,000. Personal Injury/Advertising Liability
- Erie County Water Authority to be scheduled as an Additional Insured for both on-going and completed operations (attach Additional Insured endorsement to Certificate of Insurance)
- Insurance to be primary and non-contributory

d. Automobile Liability:

- \$1,000,000. Each Accident
- Erie County Water Authority to be scheduled as an Additional Insured.

e. Umbrella Liability:

- \$1,000,000. Each Occurrence
- \$1,000,000. Aggregate

f. Professional Liability:

- \$2,000,000. Each Claim
- \$2,000,000. Aggregate

Certificates of Insurance to be provided to the Authority prior to start of work as follows:

ACORD 25 including copy of Additional Insured Endorsement Note: If coverage provided for NYS domiciled employees require Forms C 105.2 and DB 120.1 for Workers Compensation and NYS DBL.

Certificates of Insurance, on forms approved by the New York State Department of Insurance, must be submitted to the Authority prior to the award of contract. Renewals of Certificates of Insurance, on forms approved by the New York State Department of Insurance, must be received by the Authority 30 days prior to the expiration of the insurance policy period.

Certificates of Insurance and renewals, on forms approved by the New York State Department of Insurance, must be submitted to the Authority prior to the award of contract. Each insurance carrier issuing a Certificate of Insurance shall be rated by A. M. Best no lower than "A-" with a Financial Strength Code (FSC) of at least VII. The professional service provider shall name the Authority, its officers, agents and employees as additional insured on a Primary and Non-Contributory Basis, including a Waiver of Subrogation endorsement (form CG 20 26 11 85 or equivalent), on all applicable liability policies. Any liability coverage on a "claims made" basis should be designated as such on the Certificate of Insurance. Such insurance shall continue through the term of this Agreement and vendor shall purchase at his sole expense either 1) an Extended Reporting Endorsement (also, known as Tail Coverage); or 2) Prior Acts Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) demonstrate through Certificates of Insurance that vendor has Maintained continuous coverage with the same or original insurer. Coverage provided under items; 1), 2), or 3) will continue as long as the law allows.

To avoid confusion with similar insurance company names and to properly identify the insurance company, please make sure that the insurer's National Association of Insurance Commissioners (N.A.I.C.) identifying number or A. M. Best identifying number appears on the Certificate of Insurance. Also, at the top of the Certificate of Insurance, please list the project number.

Acceptance of a Certificate of Insurance and/or approval by the Authority shall not be construed to relieve the outside vendor of any obligations, responsibilities or liabilities.

Certificates of Insurance should be e-mailed to mmusarra@ecwa.org or mailed to Ms. Molly Jo Musarra, Claim Representative/Risk Manager Erie County Water Authority, 295 Main Street – Room 350, Buffalo, New York 14203-2494, or If you have any questions you can contact Ms. Musarra by e-mail or phone (716) 849-8465.

APPENDIX C

ERIE COUNTY WATER AUTHORITY CONFIDENTIALITY AND COPYRIGHT LICENSING AGREEMENT

LICENSE:

Upon execution of this Agreement, the Engineer acquires from the Authority a license to use the proprietary and intellectual property of the Authority for the purpose of completing the work under this Agreement.

The Authority reserves the right to incorporate any Engineer-created data into the Authority's database.

OWNERSHIP:

This License Agreement does not constitute a transfer of title or interest in the data. Any portion of the data that is modified or merged into another computer file or program by the Engineer or is integrated with other programs or data to form derivative products, shall continue to be subject to the provisions of this License Agreement. The Authority retains ownership of the data and all such portions.

CONFIDENTIALITY CLAUSE:

The Engineer agrees that all digital data and hard copy from the ECWA GIS Basemap Features provided to the Engineer are copyrighted by the Authority, are protected by the copyright laws of the United States and are furnished to the Engineer with all rights reserved. Therefore, the Engineer is hereby permitted to use the digital data and hard copies thereof only for the purposes allowed under this Agreement. The Engineer agrees not to otherwise copy, reproduce or use the digital data, hard copy, or the information contained therein for any other purpose whatsoever.

COPYRIGHT NOTICE:

The copyright notice included in each of the files is not only to be retained in those files but is also to be included in any copies made of those files. No part of the files may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photographing and recording, or by any information storage or retrieval system, except as expressly permitted in writing by the Erie County Water Authority.

Upon notification by the Authority of any changes in copyright requirements, the Engineer will make said changes to all subsequent maps or reports, as required.

LIMITATION OF LIABILITY:

ECWA GIS Basemap Features are compiled to National Map Accuracy Standards for 1"=100' scale mapping by Woolpert, Dayton, Ohio, using Stereo photogrammetric methods from aerial photography dated April, May, and/or November, 1990. The control grid is based on New York State Plane Coordinates and North American Datum 1983. The parcels are from Erie County Tax Maps which were available in the County Finance office in June of 1993.

The Authority makes no claims as to the accuracy of the ECWA GIS Basemap Features and assumes no responsibility for their positional or content accuracy. The Authority makes no claims as to the ability of the ECWA GIS Basemap Features to fulfill Engineer application requirements. In providing data, the Authority assumes no obligation to assist the Engineer in the use of the data, or in the development, use, or maintenance of any applications applied to the data.

Engineer recognizes and agrees that the Authority makes NO REPRESENTATIONS OF ANY KIND INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, NOR ARE ANY SUCH WARRANTIES TO BE IMPLIED, WITH RESPECT TO THE DATA OR INFORMATION FURNISHED.

TERMINATION:

The License to use data terminates upon completion of the work under this Agreement.

LIQUIDATION OF DAMAGES FOR BREACH OF AGREEMENT:

The parties agree that if Engineer breaches the Agreement and uses or discloses any of the copyrighted information in any way other than that allowed, during or subsequent to the terms of this Agreement for any purpose whatsoever, the damages of the Authority shall be deemed liquidated at three times the amount of the total value of the data as determined by the Erie County Water Authority.

In addition to treble damages for breach of Agreement, Engineer will additionally forfeit the license acquired to use copyrighted property of the Authority.

SPECIFIC TERMS OF ACCEPTANCE:

This Agreement constitutes the entire agreement between the parties.

APPENDIX D

RESPONSE TO RFP

STATE FINANCE LAW REQUIRED FORMS

< Consultant's RFP response including the following required forms to be inserted here >

FORMS A, B, and C

STATE FINANCE LAW REQUIREMENTS

The Erie County Water Authority (the “Authority”) is a government entity, as that term is defined in State Finance Law §§ 139-j(1)(a) and 139-k(1)(a). When the Authority seeks to procure goods or services by means of an Invitation or Notice to Bid, or a Request for Proposals, the State Finance Law imposes certain restrictions on anyone who may wish to offer goods or services to the Authority as an Offerer, as that term is defined in §§ 139-j(1)(h) and 139-k(1)(h).

During the Restricted Period, as defined in §§ 139-j(1)(f) and 139-k(1)(f), when bids or proposals are being solicited, the Authority will designate a contact person with whom the Offerer may contact for information and other authorized purposes as set forth in §139-j of the State Finance Law. The designated contact is identified in the Notice to Bidders, or in the Request for Proposal. An Offerer is authorized to contact the Authority’s designated contact for such purposes as set forth in § 139-j(3).

Pursuant to the State Finance Law, the Authority is also required to make certain findings before making any determinations as to the qualifications and eligibility of those seeking a procurement contract, as that term is defined in State Finance Law §§ 139-j(1)(g) and 139-k(1)(g). Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings of non-responsibility occurring within a 4-year period, the Offerer will be debarred from obtaining procurement contracts with the Authority. Further information about these requirements can be found in §§139–j and 139–k of the New York State Finance Law and the Erie County Water Authority’s Procurement Disclosure Policy.

The following forms will be used by the Authority to make such findings:

Form A - Offerer’s Affirmation of Understanding of, and Agreement to Comply with, the Authority’s Permissible Contact Requirements During the Restricted Period.

Form B - Offerer’s Certification of Compliance with State Finance Law.

Form C - Offerer’s Disclosure of Prior Non-Responsibility Determinations.

FORM A

**Offerer's Affirmation of Understanding of, and Agreement to Comply
with, the Permissible Contact Requirements During the Restricted Period**

Instructions:

The Erie County Water Authority (the "Authority") is a government entity, as that term is defined in State Finance Law §§ 139-j(1)(a) and 139-k(1)(a). The Authority must obtain a written affirmation of understanding and agreement to comply with procedures regarding permissible contacts with the Authority in the restricted period for a procurement contract in accordance with State Finance Law §139-j and §139-k. It is required that this affirmation be obtained as early as possible in the procurement process, but no later than when the Offerer submits its proposal.

Offerer affirms that it understands and agrees to comply with the procedures of the Authority relative to permissible contacts as required by State Finance Law §139-j(3) and §139-j(6)(b).

By: _____ Date: _____

Name: _____

Title: _____

Contractor Name: _____

Contractor Address: _____

FORM B

**Offerer's Certification of Compliance
With State Finance Law §139-k(5)**

Instructions:

The Erie County Water Authority (the "Authority") is a government entity, as that term is defined in State Finance Law §§ 139-j(1)(a) and 139-k(1)(a). The Authority must obtain a Certification that the information submitted for a procurement contract is complete, true, and accurate regarding any prior findings of non-responsibility, such as non-responsibility pursuant to State Finance Law §139-j. The Offerer must agree to sign the Certification, under penalty of perjury, and to provide the Certification to the Authority. The Certification should be obtained as early as possible in the process, but no later than when an Offerer submits its proposal.

Offerer Certification:

I certify that all information provided to the Authority relating to the awarding of a procurement contract is complete, true, and accurate.

By: _____ Date: _____

Name: _____

Title: _____

Contractor Name: _____

Contractor Address: _____

FORM C**Offerer's Disclosure of Prior
Non-Responsibility Determinations****Background:**

The Erie County Water Authority (the "Authority") is a government entity, as that term is defined in State Finance Law §§ 139-j(1)(a) and 139-k(1)(a). New York State Finance Law §139-k(2) obligates the Authority to obtain specific information regarding prior non-responsibility determinations with respect to State Finance Law §139-j. In accordance with State Finance Law §139-k, an Offerer must be asked to disclose whether there has been a finding of non-responsibility made within the previous four (4) years by any Governmental Entity due to: (a) a violation of State Finance Law §139-j; or (b) the intentional provision of false or incomplete information to a Government Entity.

The terms "Offerer" and "Governmental Entity" are defined in State Finance Law §§139-j(1) and §139-k(1). These sections also set forth detailed requirements about the restrictions on contacts during the procurement process. A violation of State Finance Law §139-j includes, but is not limited to, an impermissible contact during the restricted period (for example, contacting a person or entity other than the designated contact person, when such contact does not fall within one of the exemptions).

As part of its responsibility determination, State Finance Law §139-k(3) mandates consideration of whether an Offerer fails to timely disclose accurate or complete information regarding the above non-responsibility determination. In accordance with law, no Procurement Contract shall be awarded to any Offerer that fails to timely disclose accurate or complete information under this section, unless a finding is made that the award of the Procurement Contract to the Offerer is necessary to protect public property or public health safety, and the Offerer is the only source capable of supplying the required Article of Procurement, as that term is defined in State Finance Law §§ 139-j(1)(b) and 139-k(1)(b), within the necessary timeframe. See State Finance Law §139-j(10)(b) and §139-k(3).

Instructions:

The Authority must include a disclosure request regarding prior non-responsibility determinations in accordance with State Finance Law §139-k in its solicitation of proposals or bid documents or specifications or contract documents, as applicable, for procurement contracts. The attached form is to be completed and submitted by the individual or entity seeking to enter into a Procurement Contract. It shall be submitted to the Authority conducting the Governmental Procurement no later than when the Offerer submits its proposal.

FORM C (Continued)**Offerer's Disclosure of Prior Non-Responsibility Determinations**

Name of Individual or Entity Seeking to Enter into the Procurement Contract:

Address: _____

Name and Title of Person Submitting this Form: _____

Contract Procurement Number: _____

Date: _____

1. Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years? (Please circle):
- No Yes

If yes, please answer the next questions:

2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law §139-j (Please circle):
- No Yes
3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity? (Please circle)
- No Yes
4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.

Governmental Entity: _____

Date of Finding of Non-Responsibility: _____

Basis of Finding of Non-Responsibility: _____

(Add additional pages as necessary)

FORM C (Continued)

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named individual or entity due to the intentional provision of false or incomplete information? (Please circle): No Yes

6. If yes, please provide details below.

Governmental Entity: _____

Date of Termination or Withholding of Contract: _____

Basis of Termination or Withholding:

(Add additional pages as necessary)

Offerer certifies that all information provided to the Erie County Water Authority with respect to State Finance Law §139-k is complete, true, and accurate.

By: _____ Date: _____
Signature

Name: _____

Title: _____

CONTRACT TERMINATION PROVISION

Instructions:

A Contract Termination Provision will be included in each procurement contract governed by State Finance Law §139-k. New York State Finance Law §139-k(5) provides that every procurement contract award subject to the provisions of State Finance Law §§139-k and 139-j shall contain a provision authorizing the governmental entity to terminate the contract in the event that the certification is found to be intentionally false or intentionally incomplete. This statutory contract language authorizes, but does not mandate, termination. “Government Entity” and “procurement contract” are defined in State Finance Law §§ 139 j(1) and 139-k(l).

This required clause will be included in a covered procurement contract.

A sample of the Termination Provision is included below. If a contract is terminated in accordance with State Finance Law §139-k(5), the Erie County Water Authority, as a governmental entity, is required to include a statement in the procurement record describing the basis for any action taken under the termination provision.

Sample Contract Termination Provision

The Erie County Water Authority, as a governmental entity, reserves the right to terminate this contract in the event it is found that the certification filed by the Offerer in accordance with New York State Finance Law §139-k was intentionally false or intentionally incomplete. Upon such finding, the Authority may exercise its termination right by providing written notification to the Offerer in accordance with the written notification terms of this contract.

SECTION 139-L OF THE STATE FINANCE LAW
STATEMENT RELATING TO SEXUAL HARASSMENT POLICY

1. "Bidder" has the same meaning as the term, "Offerer," as that term is defined in State Finance Law § 139-k(1)(h), and includes anyone who submits a bid or proposal.
2. Every proposal or bid hereafter made and submitted to the Erie County Water Authority, where competitive bidding or a sealed proposal is required by statute, rule or regulation, for work or services performed or to be performed or goods sold or to be sold, shall contain the following statement subscribed by the Bidder and affirmed by such Bidder as true under penalty of perjury:

SEXUAL HARASSMENT BIDDING CERTIFICATION

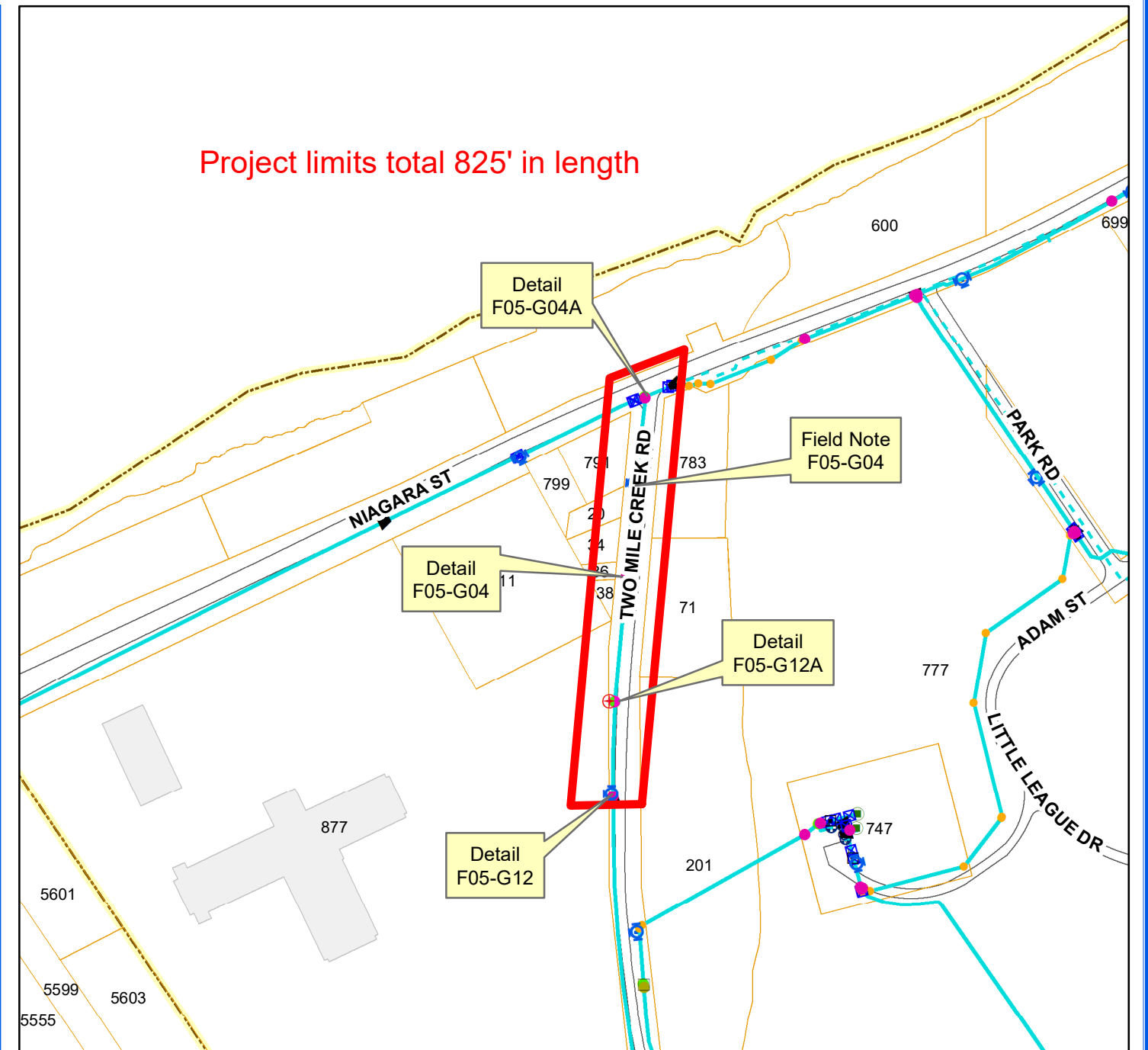
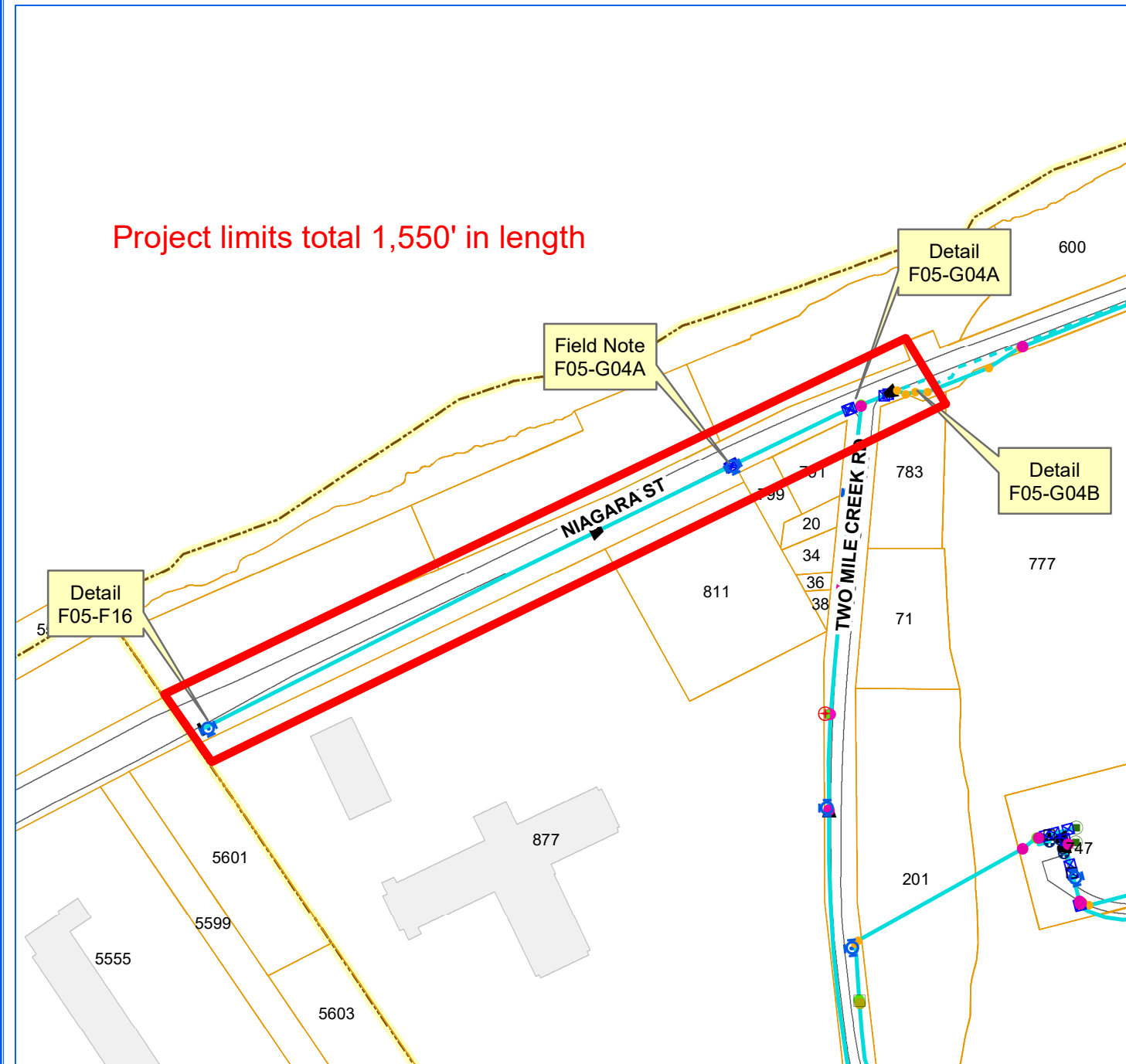
- (a) "By submission of this bid/proposal, EACH BIDDER AND EACH PERSON SIGNING ON BEHALF OF ANY BIDDER CERTIFIES, AND IN THE CASE OF A JOINT BID EACH PARTY THERETO CERTIFIES AS TO ITS OWN ORGANIZATION, under penalty of perjury, that the Bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all its employees. Such policy shall, at a minimum, meet the requirements of Section two hundred one-g of the Labor Law."
3. A bid/proposal shall not be considered for award nor shall any award be made to a Bidder who has not complied with subdivision one of this section; provided, however, that if in any case the Bidder cannot make the foregoing certification, the Bidder shall so state and shall furnish with the bid/proposal a signed statement which sets forth in detail the reasons therefore.

The undersigned CERTIFIES, under penalty of perjury, that he is authorized to make this bid/proposal and execute this statement on sexual harassment; that he is familiar with the statements contained in ¶2(a) of this document, as well as the provisions of State Finance Law §139-L and Labor Law §201-g, and such statements are true and have been complied with by the Bidder.

(Name of Individual, Partnership or Corporation)

By _____
(Person authorized to sign)

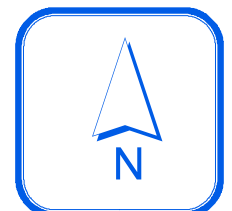
(SEAL)



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "A"**

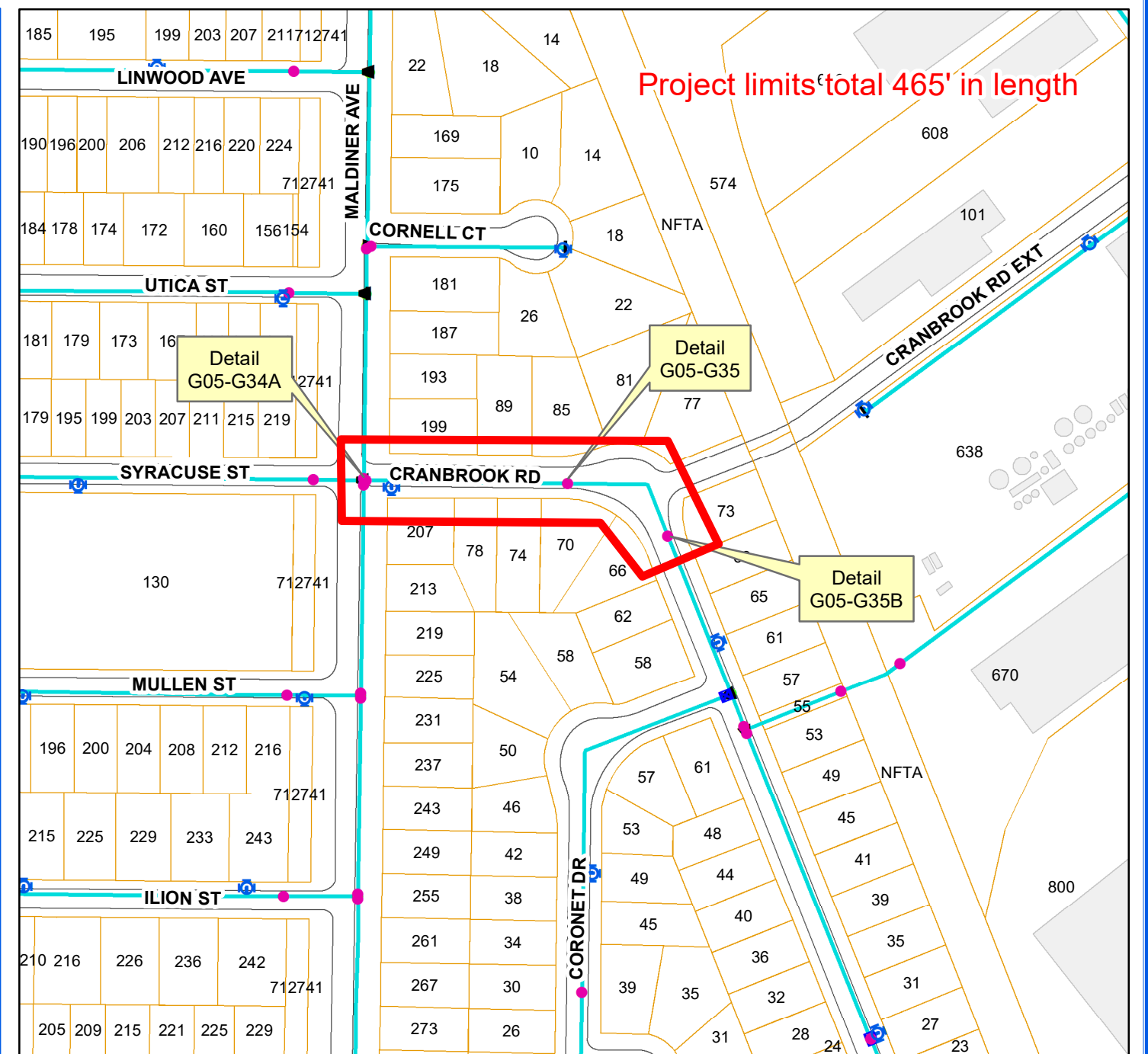
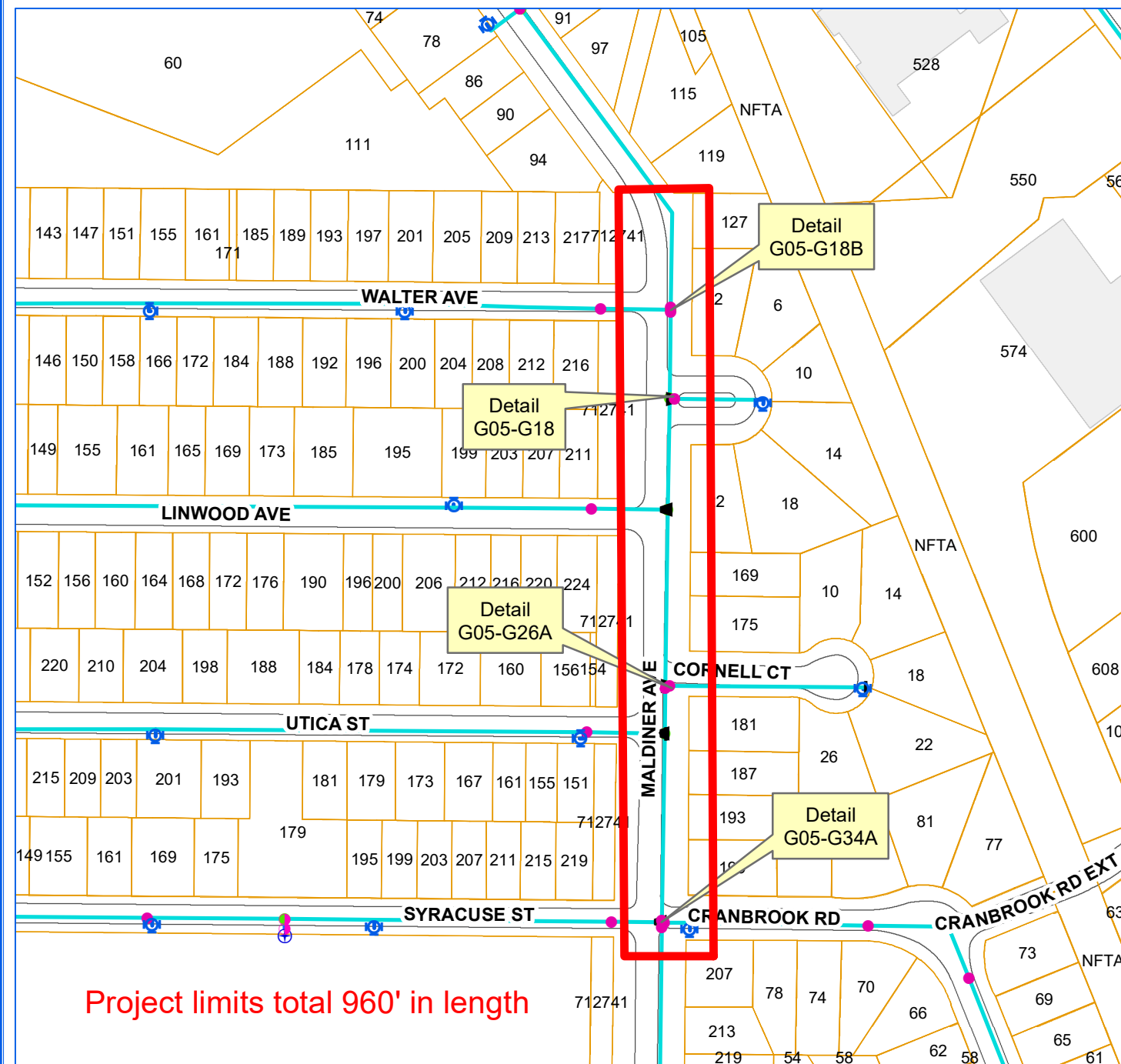
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MALDINER AVE. FROM #119 TO CRANBROOK RD. / CRANBROOK RD. FROM MALDINER AVE. TO #73 /
CRESTWOOD CT. FROM MALDINER AVE. TO DEAD END / CORNELL CT. FROM MALDINER AVE. TO DEAD END /
MORGAN ST. FROM WHEELER ST. TO KOHLER ST. / STEINER AVE. FROM HIGHLAND AVE. TO GROVE ST. /
HIGHLAND AVE. FROM FULLER AVE. TO PARK AVE. / QUEEN ST. FROM HIGHLAND AVE. TO #64 /
FILLMORE AVE. FROM #365 TO WALES AVE.
CITY OF TONAWANDA, NY**



0 180 360 540 Feet

1 inch = 300 feet

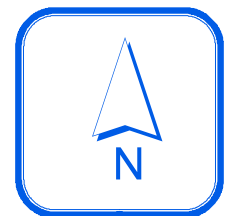
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ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "A"**

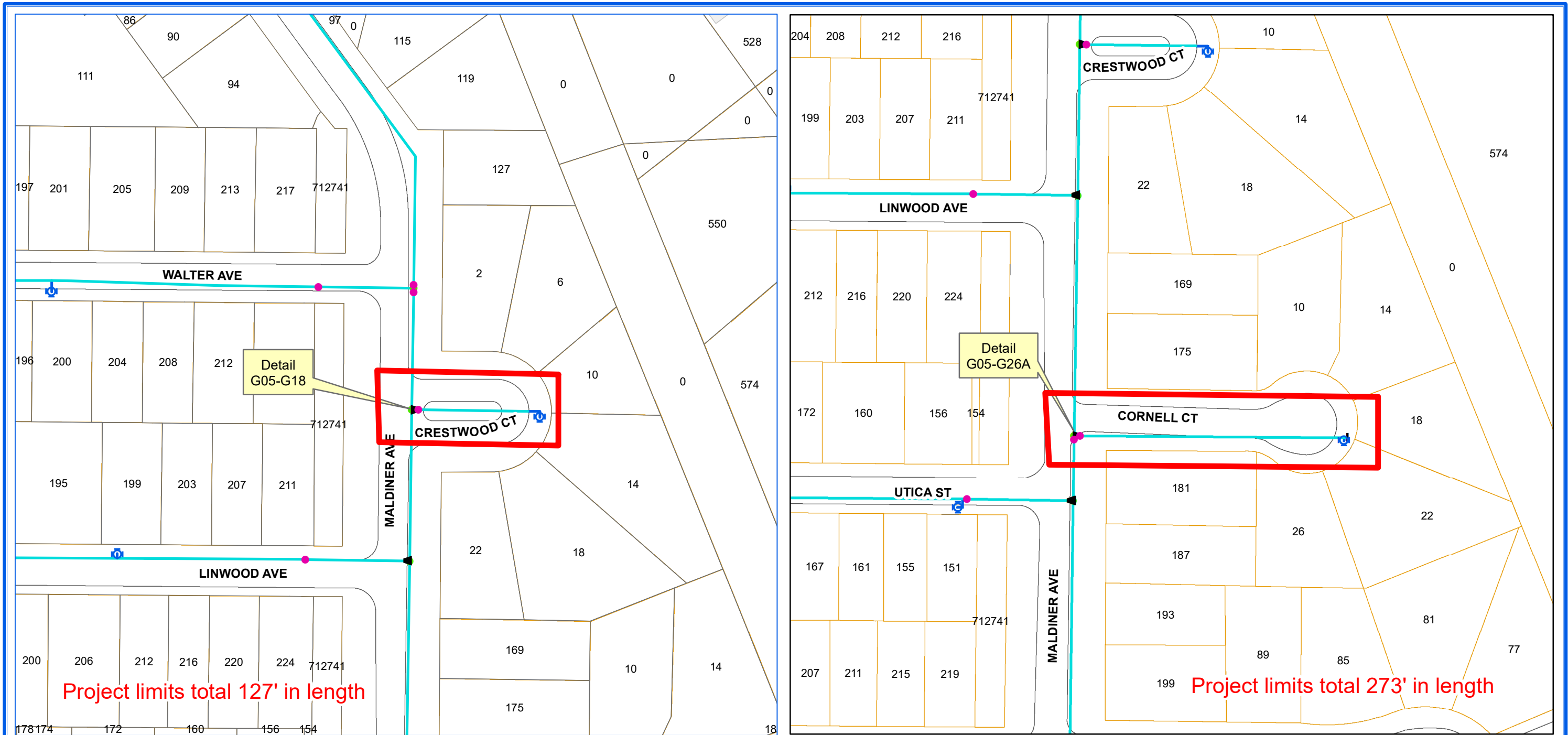
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FILLMORE AVE. FROM #365 TO WALES AVE.
CITY OF TONAWANDA, NY**



0 120 240 360
Feet

1 inch = 200 feet

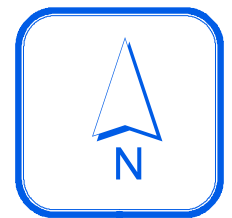
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ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "A"**

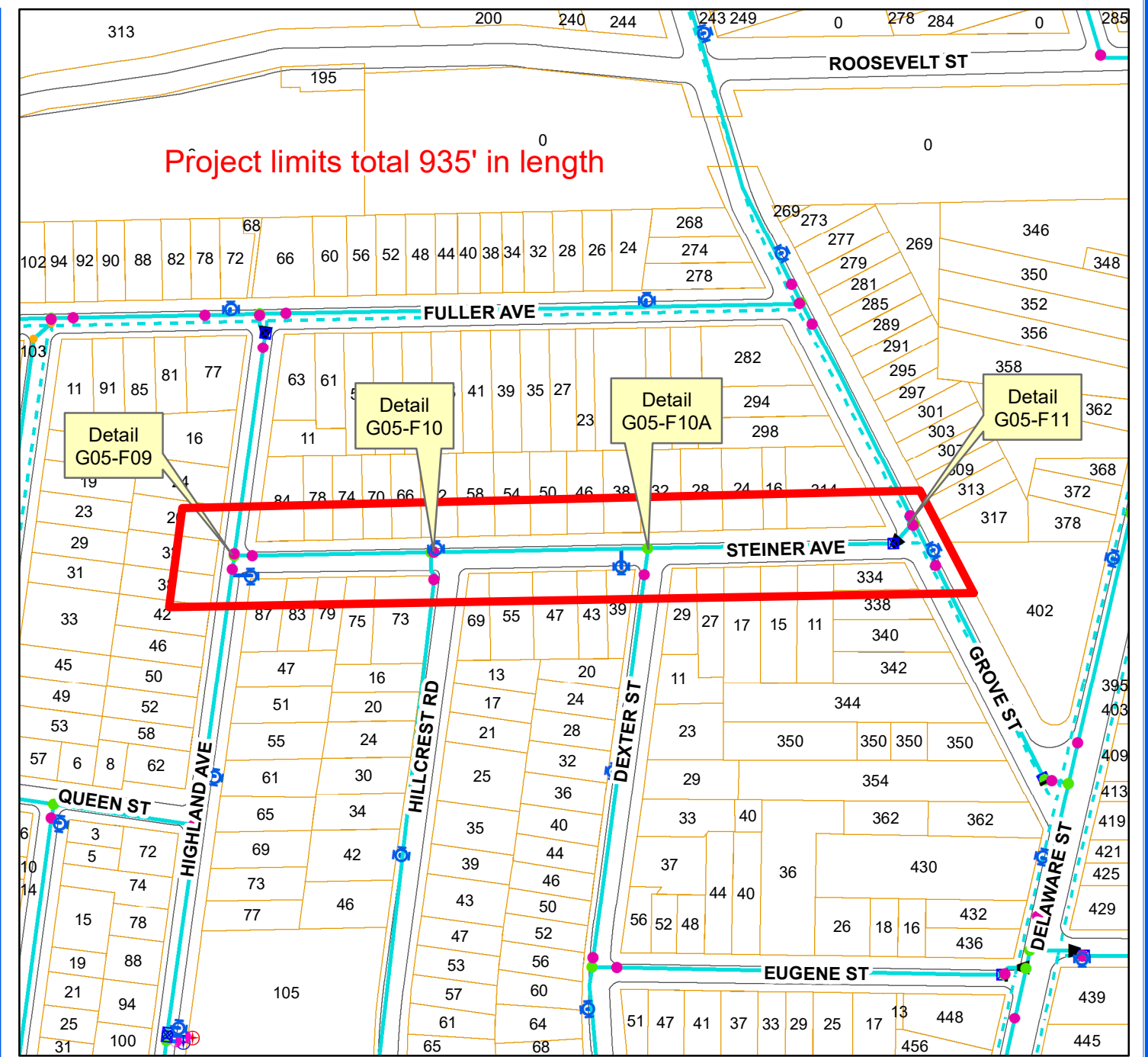
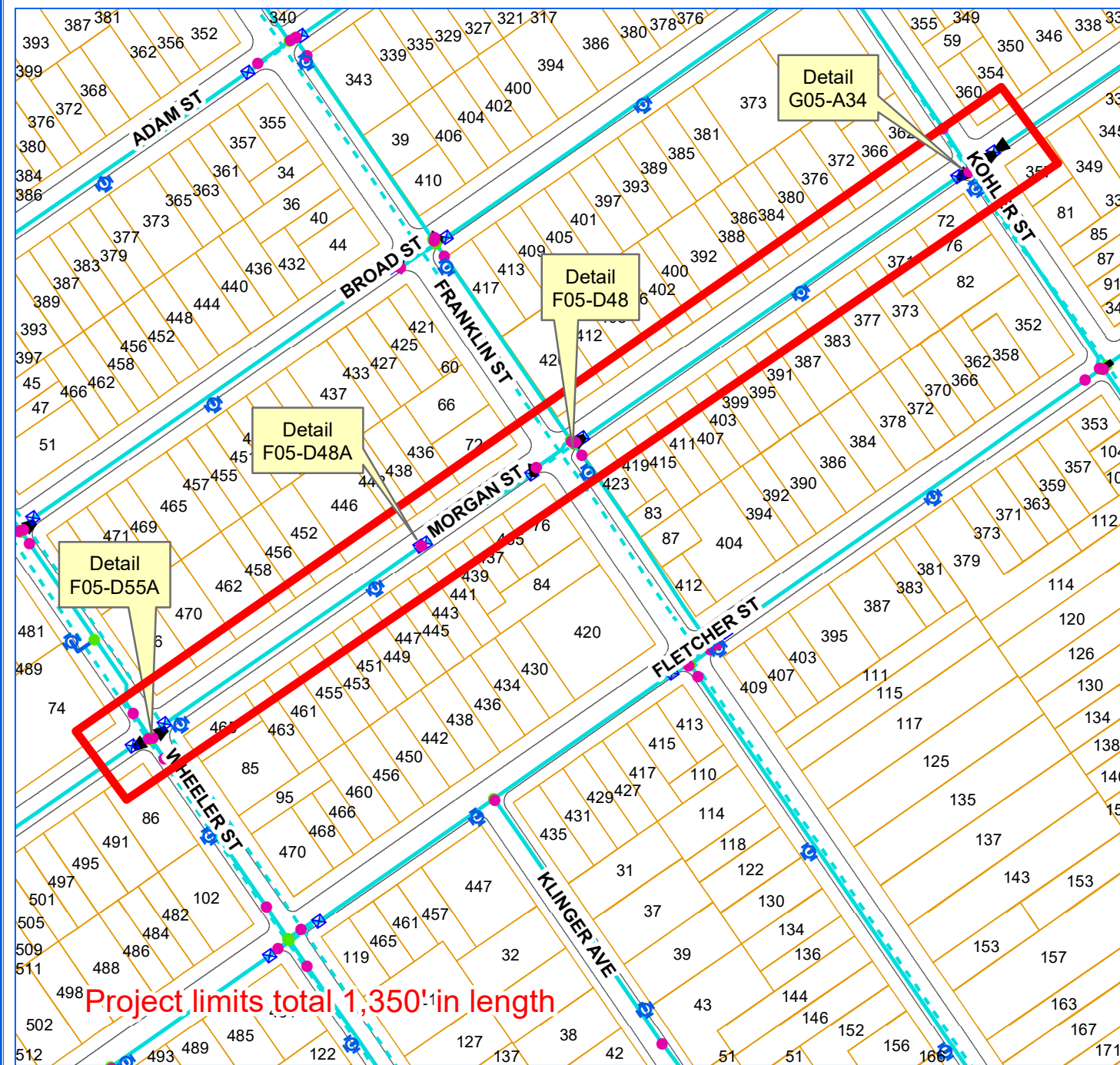
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FILLMORE AVE. FROM #365 TO WALES AVE.
CITY OF TONAWANDA, NY**



0 60 120 180 Feet

1 inch = 100 feet

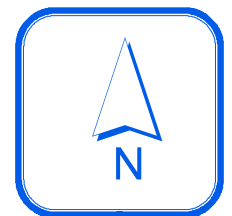
DMC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
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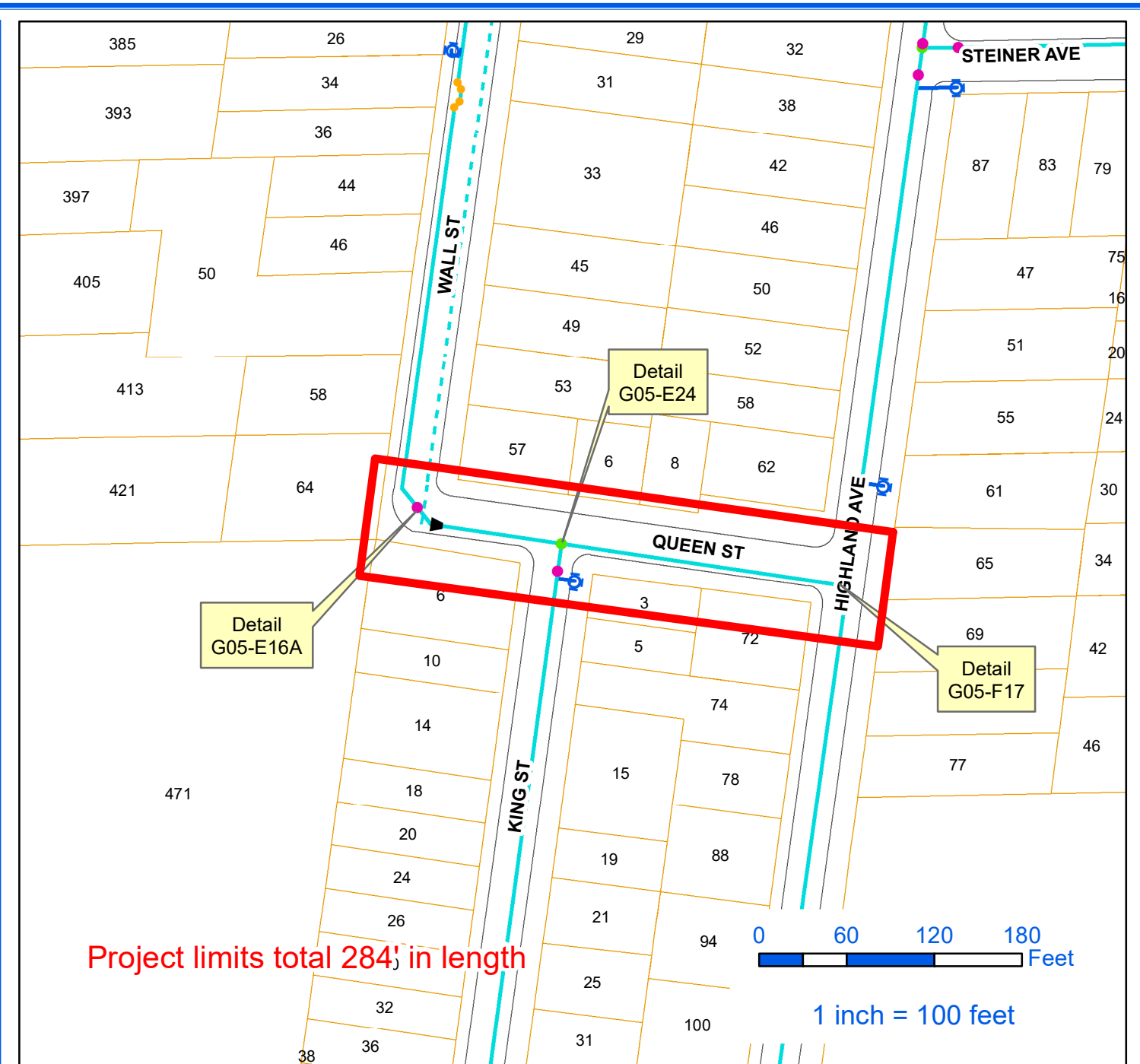
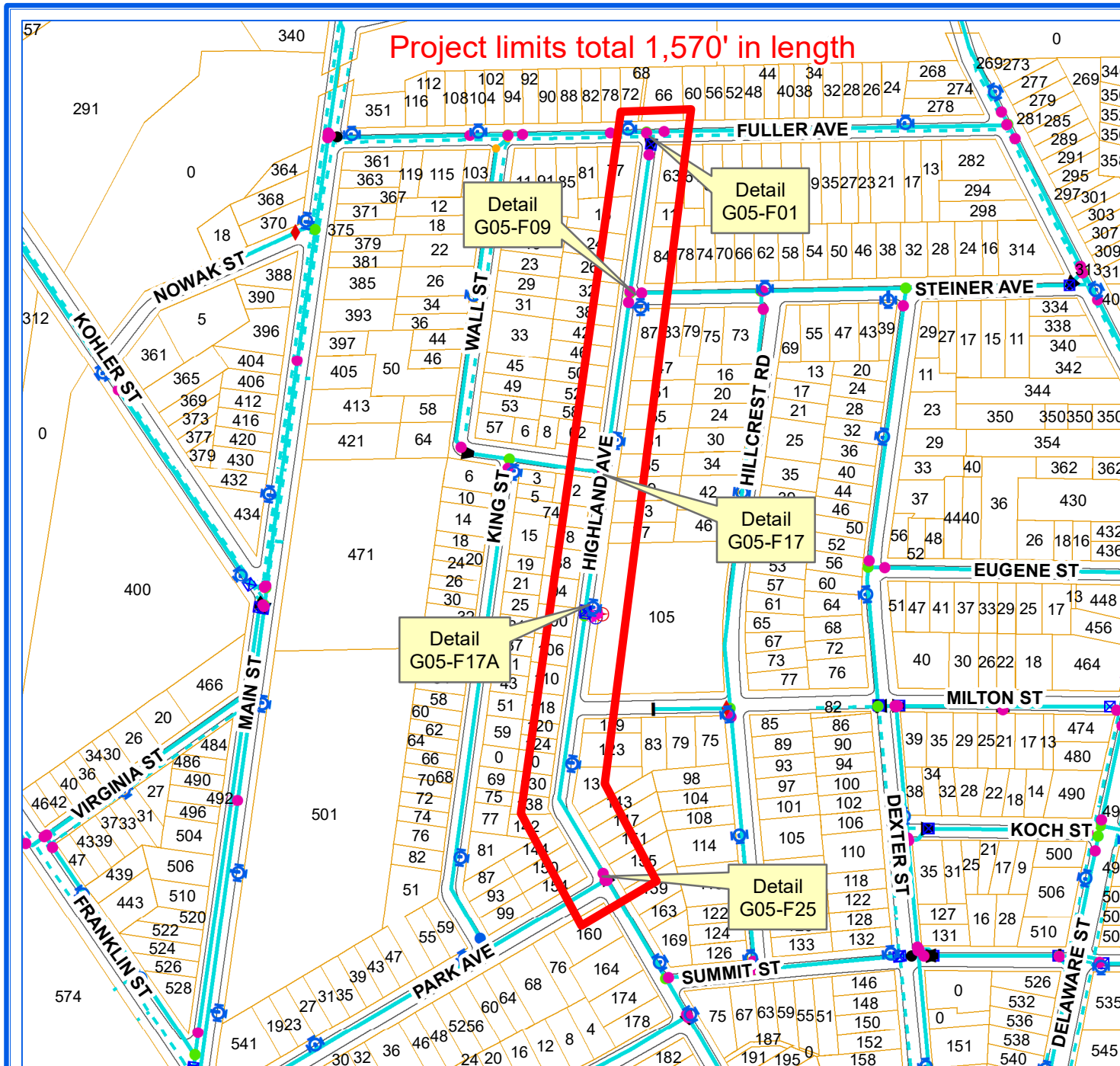
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FILLMORE AVE. FROM #365 TO WALES AVE.
CITY OF TONAWANDA, NY**



0 120 240 360
Feet

1 inch = 200 feet

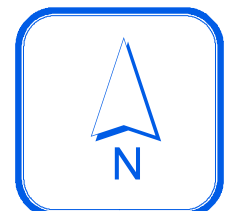
DMC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
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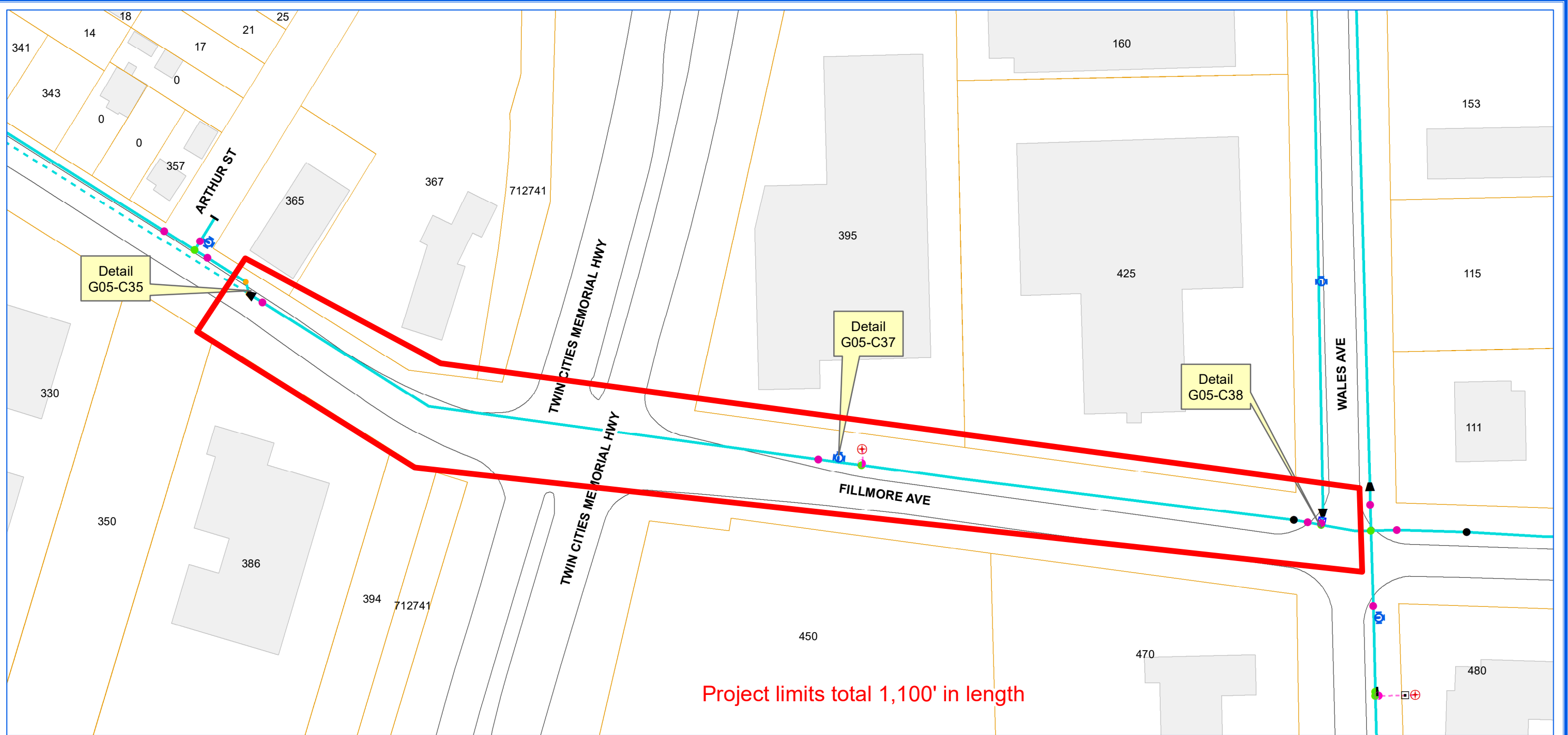
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FILLMORE AVE. FROM #365 TO WALES AVE.**
CITY OF TONAWANDA, NY



0 180 360 540 Feet

1 inch = 300 feet

DMC



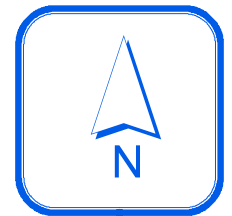
Project limits total 1,100' in length



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
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FILLMORE AVE. FROM #365 TO WALES AVE.
CITY OF TONAWANDA, NY**



0 60 120 180 Feet

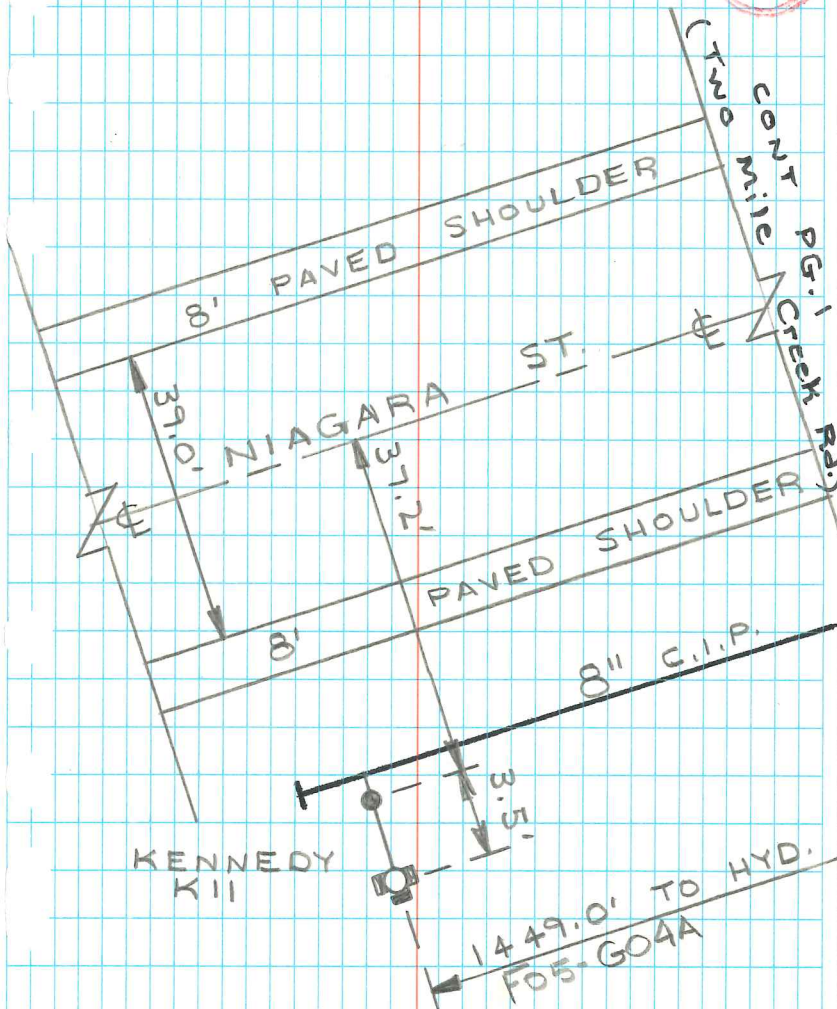
1 inch = 100 feet

DMC

Pg. 1
F05-F16

TOCY-928-0101

Niagara St,
City of Tonawanda
E.C.W.A.
D.K.C. 9.17.02





ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. D.K.C.

DATE: 8/1/2002

FIELD

REVISED
DR. R.D.C.

DATE: 3/28/2018

OFFICE

CITY OF TONAWANDA

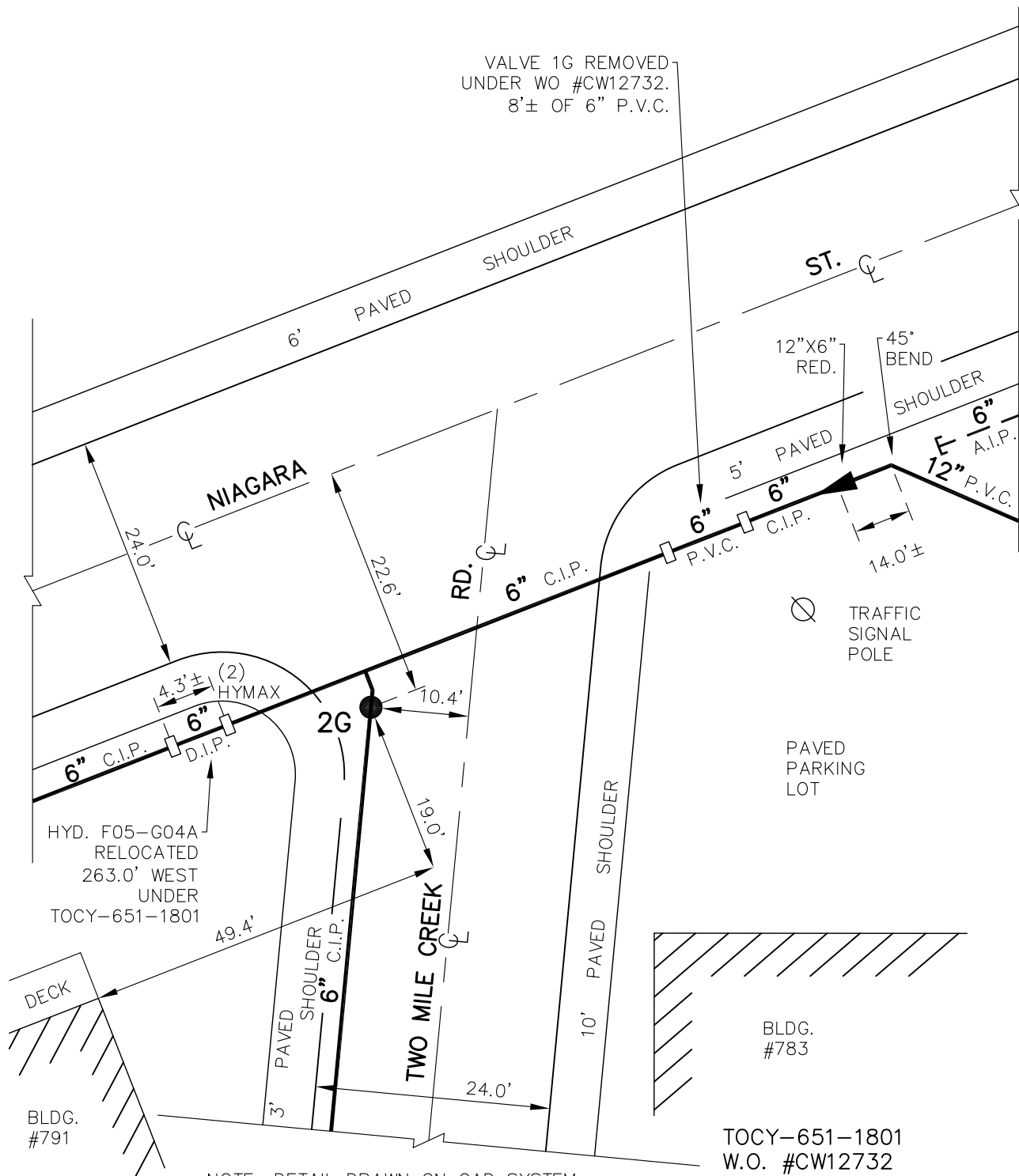
E.C.W.A.

F05-G04A

DETAIL SHT. NO.

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CURRENT PROJECT NO.



NOTE: DETAIL DRAWN ON CAD SYSTEM.
± DIMENSIONS FROM W.O. & INSP.
REPORT, NOT FIELD CHECKED.
LOCATION AND TYPE OF BEND FROM
INSP. REPORT, NOT FIELD CHECKED.

TOCY-651-1801
W.O. #CW12732
HWNY-651-1301
DWG.SET 17(40)
DWG.SET 15(45)
TOCY-928-0101

F05-G04A

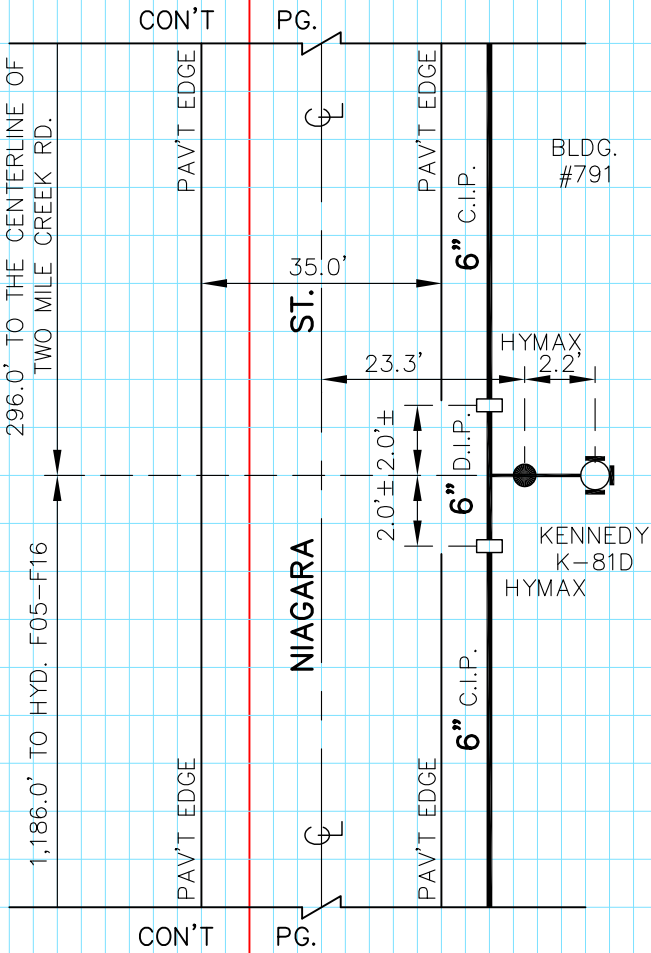
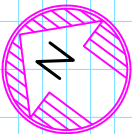
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F05-G04A
TOCY-651-1801
F.B. 471/10

NIAGARA ST.
CITY OF TONAWANDA
E.C.W.A.
R.D.C. 3/26/2018

NOTE: ± DIM.'S FROM INSP. FIELD
BOOK NOT FILED CHECKED.





ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR.

DATE:

FIELD

REVISED
DR.

DATE: 8/23/2016

OFFICE

CITY OF TONAWANDA

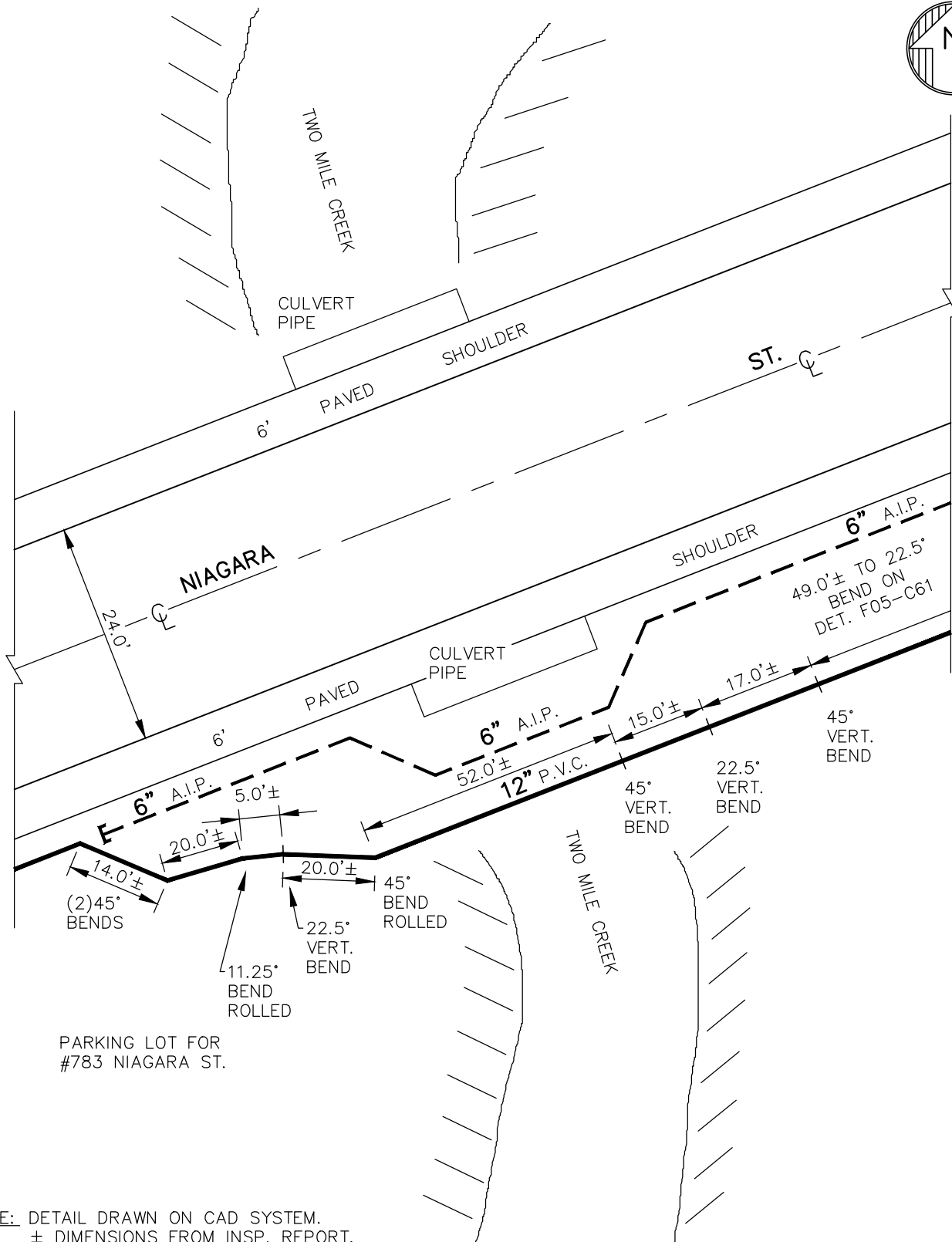
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F05-G04B

DETAIL SHT. NO.

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CURRENT PROJECT NO.



NOTE: DETAIL DRAWN ON CAD SYSTEM.
± DIMENSIONS FROM INSP. REPORT,
NOT FIELD CHECKED.
TYPE OF BENDS FROM INSP. REPORT,
NOT FIELD CHECKED.

HWNY-651-1301

F05-G04B

DETAIL SHT. NO.

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ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. DR. D.K.C. DR.

DATE: 4.3.06 DATE:

FIELD

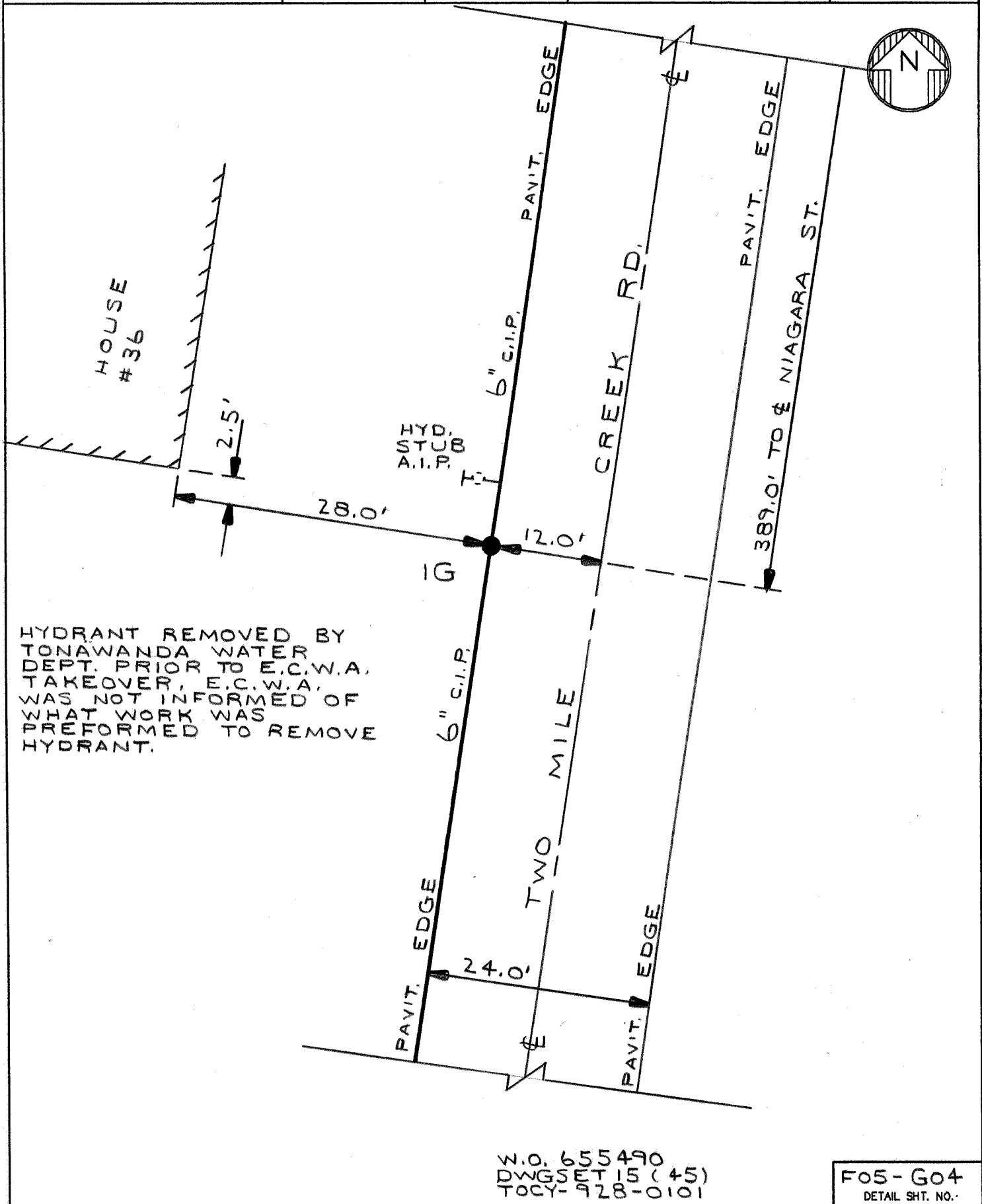
OFFICE

CITY OF TONAWANDA
E.C.W.A.

F05-G04
DETAIL SHT. NO.

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CURRENT PROJECT NO.



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DETAIL SHT. NO.

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PG.
F05-G04
TOCY-651-1801

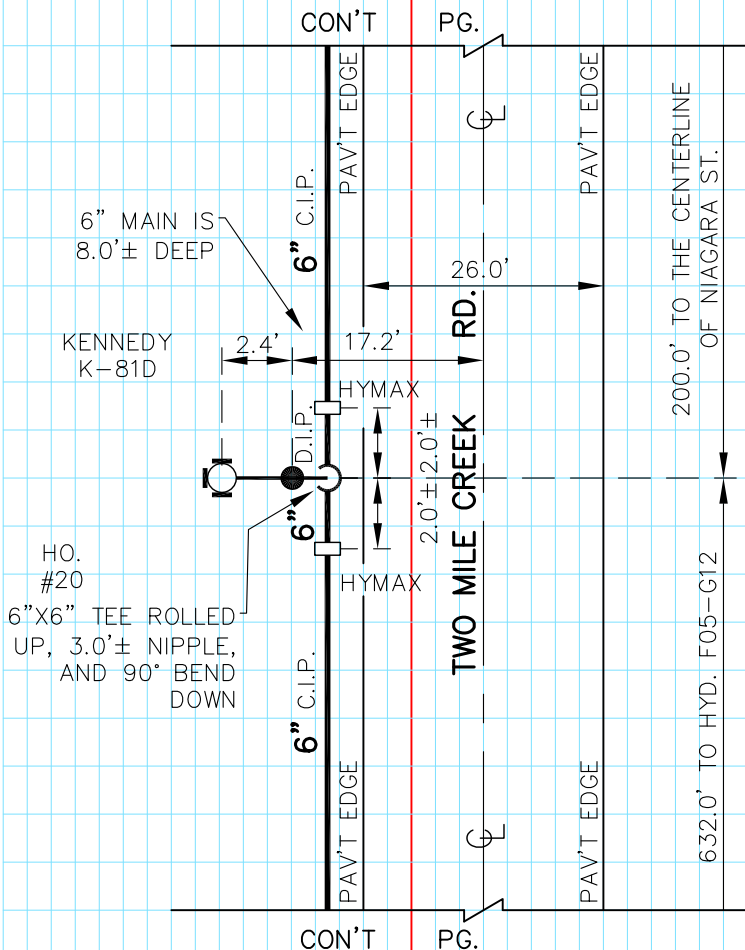
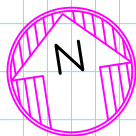
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TWO MILE CREEK RD.
CITY OF TONAWANDA
E.C.W.A.

R.D.C.

3/26/2018

NOTE: \pm DIM.'S FROM INSP. FIELD
BOOK NOT FILED CHECKED.





ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DATE: 8.1.02

FIELD

REV.

DR. D.K.C.

DATE: 1.24.05

OFFICE

CITY OF TONAWANDA

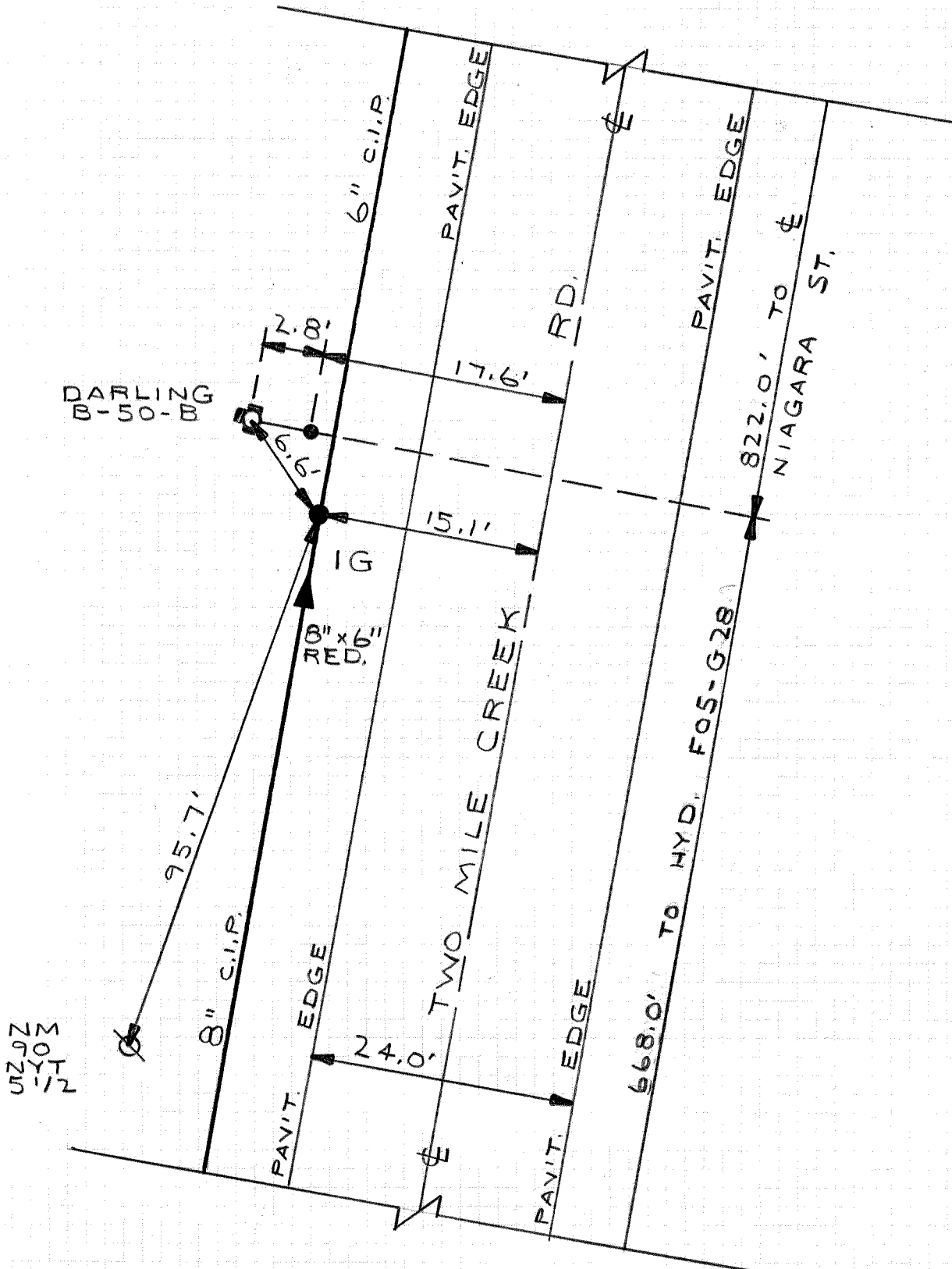
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F05-G12

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



DWGSET15 (45)
TOCY-928-0101

F05-G12
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

DATE: 5.31.05

DATE:

FIELD

OFFICE

CITY OF TONAWANDA

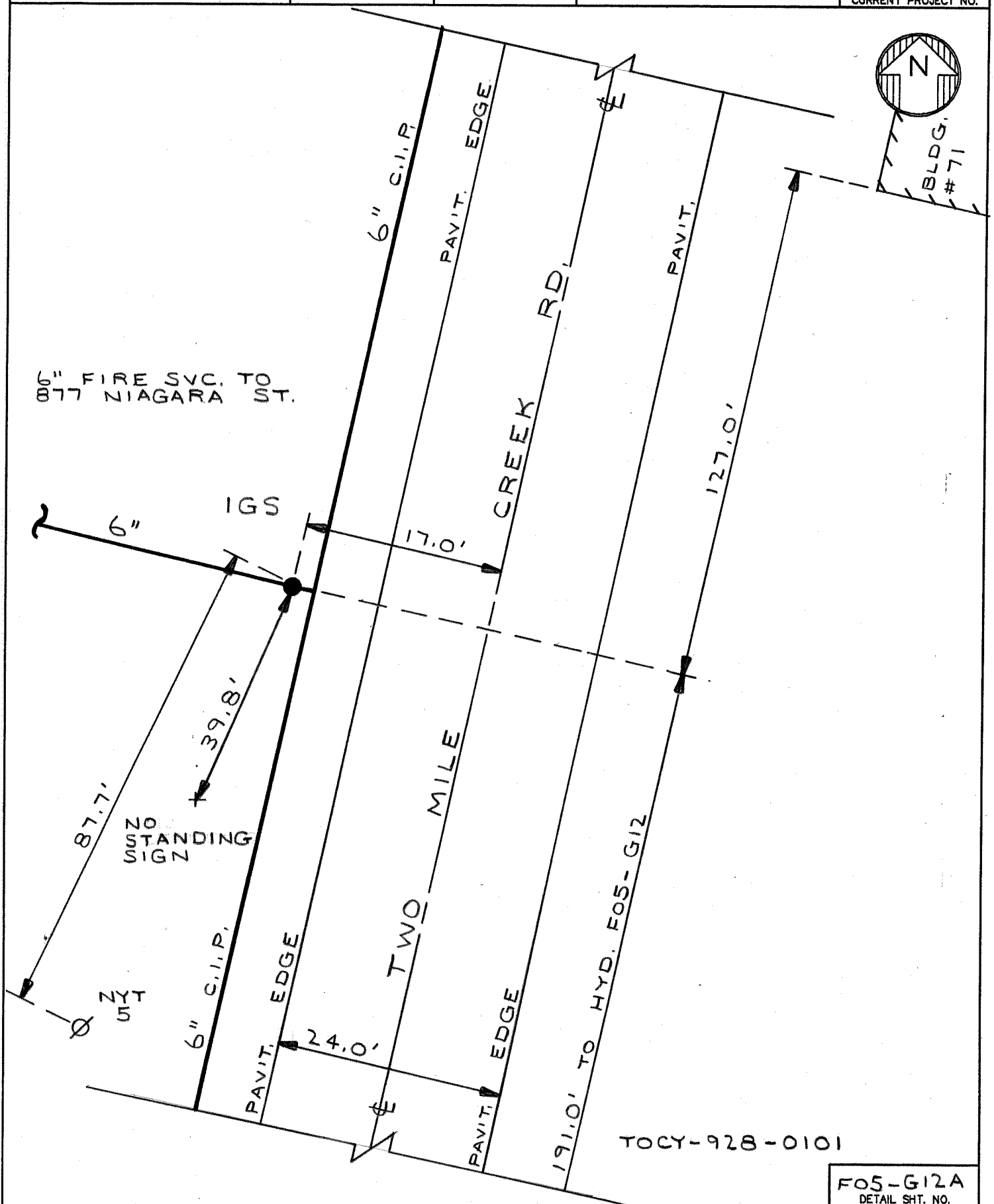
E.C.W.A.

F05-G12A

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



ASTEN-3012

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV.
DR. D.K.C.

DR. R.D.C.

CITY OF TONAWANDA

G05-G18

DETAIL SHT. NO.

DATE: 11.9.04

DATE: 7/2/2019

E.C.W.A.

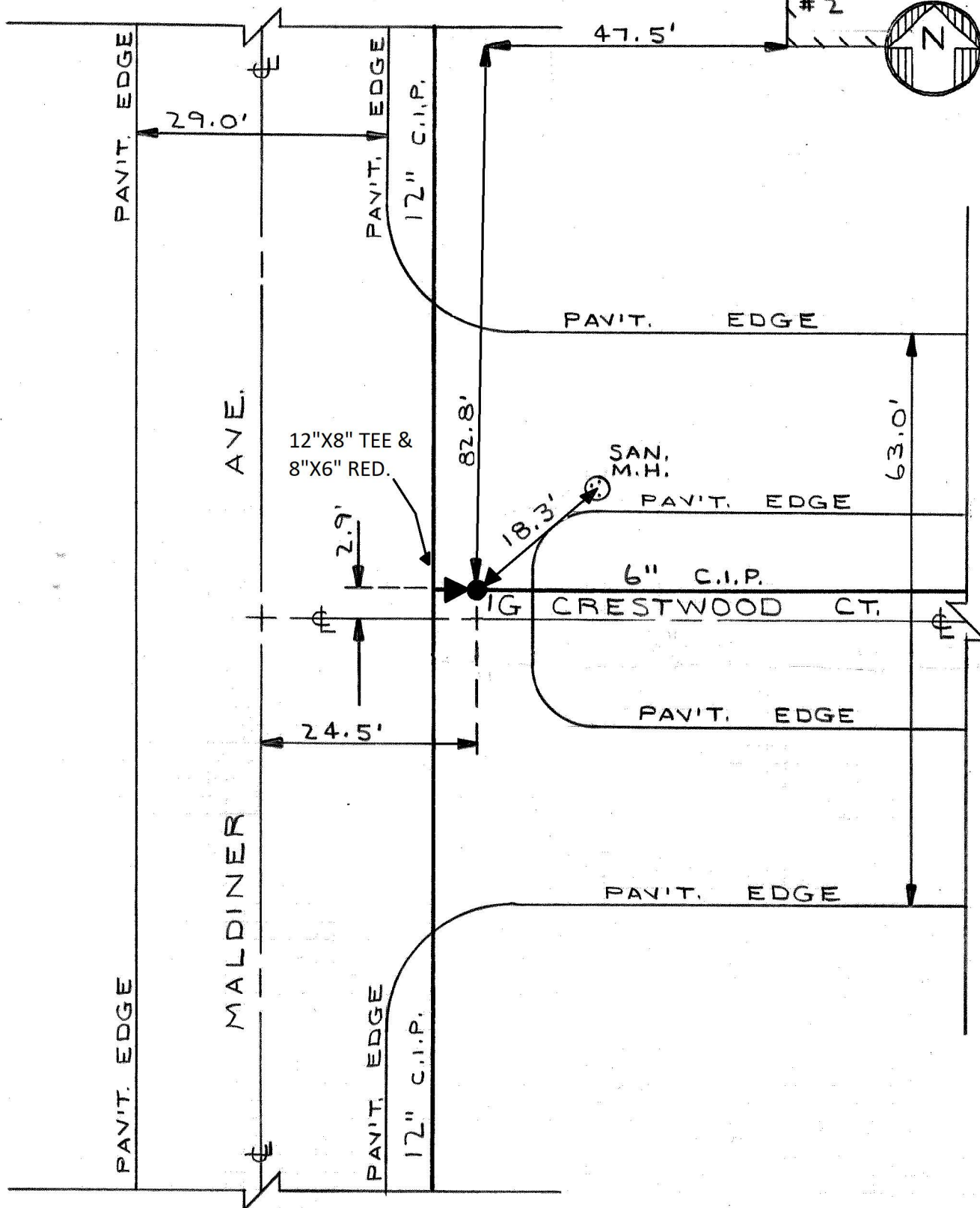
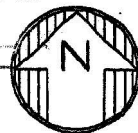
200100137

CURRENT PROJECT NO.

FIELD

OFFICE

HOUSE
#2



W.O. #466950

DWG SET 16 (11, 13 & 17)

TOCY-928-0101

G05-G18

DETAIL SHT. NO.

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

DATE: 10.18.02

DATE:

FIELD

OFFICE

CITY OF TONAWANDA

E.C.W.A.

605-G18B

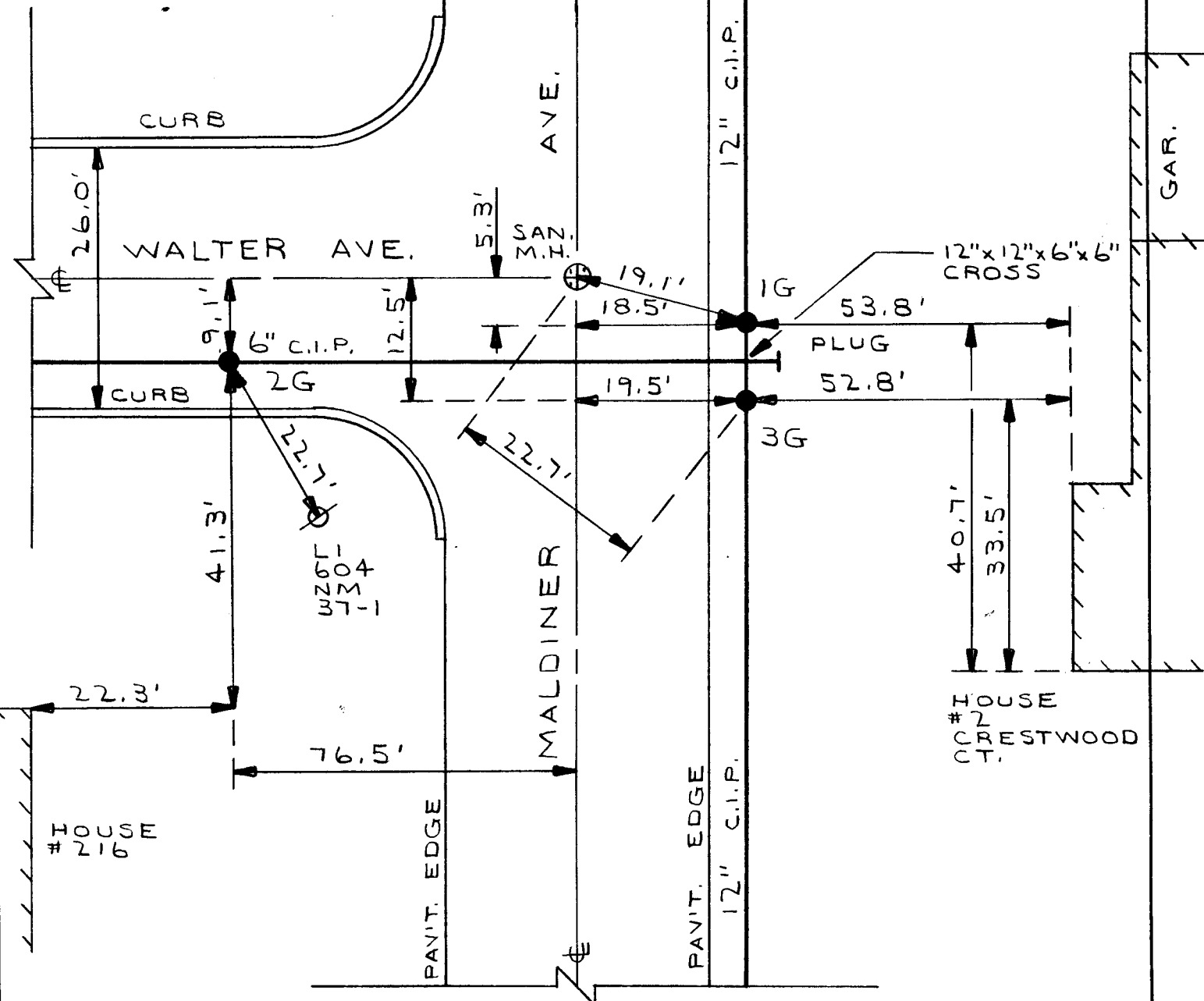
DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



1G TO 2G - 95.0'
1G TO 3G - 7.2'
2G TO 3G - 96.1'



DWG SET 16 (17)
DWG SET 17 (15)
TOCY-928-0101

605-G18B

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR. R.D.C.

CITY OF TONAWANDA

G05-G26A

DATE: 10.22.02

DATE: 7/2/2019

E.C.W.A.

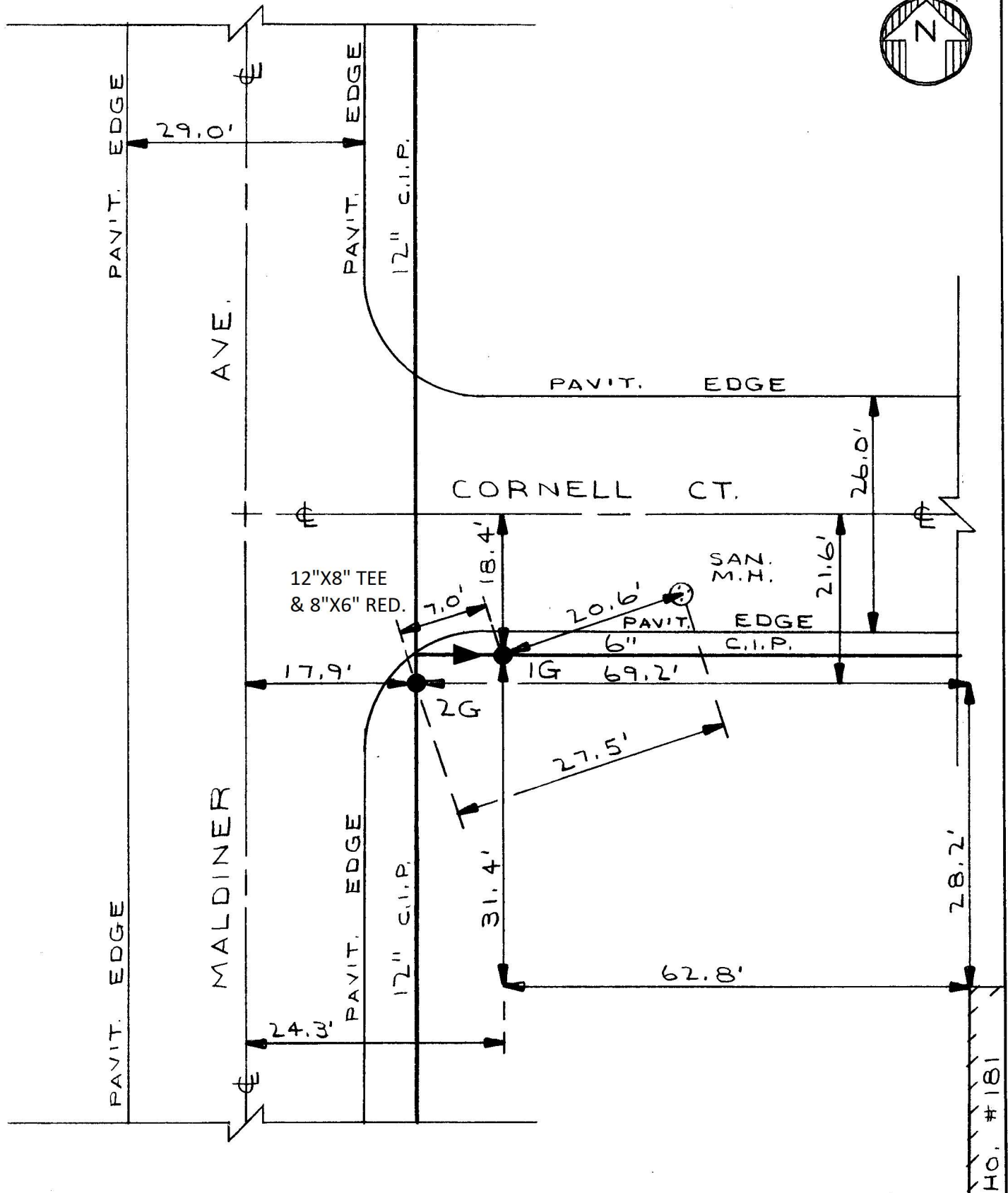
DETAIL SHT. NO.

FIELD

OFFICE

200100137

CURRENT PROJECT NO.



DWGSET 16 (11, 13 & 17)
TOCY-928-0101

G05-G26A

DETAIL SHT. NO.

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV.
DR. D.K.C. DR.

DATE: 2.28.05 DATE:

FIELD

OFFICE

CITY OF TONAWANDA

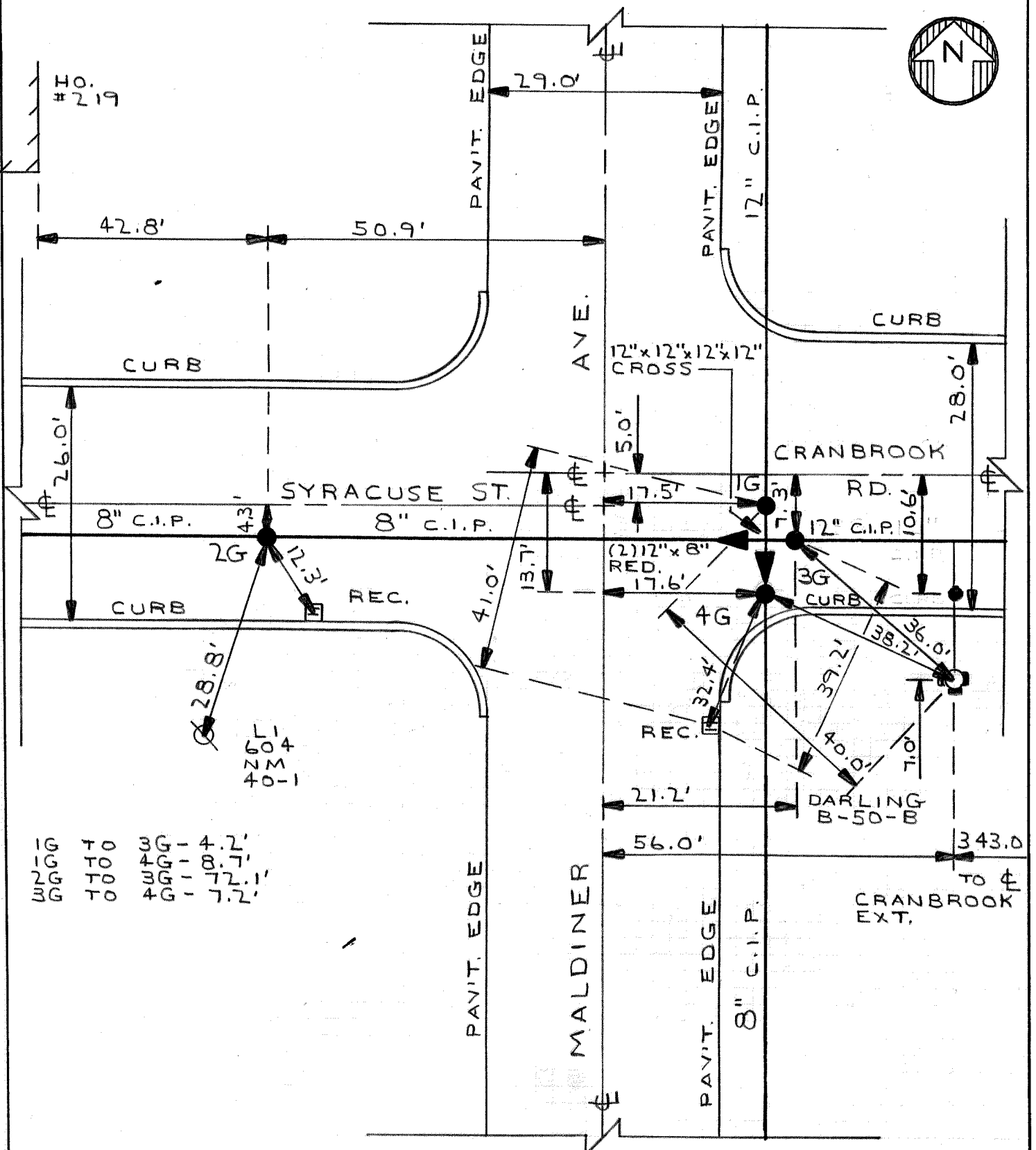
E.C.W.A.

G05-G34A

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



IG TO 3G - 4.2'
IG TO 4G - 8.7'
2G TO 3G - 72.1'
3G TO 4G - 7.2'

W.O. 468250
DWGSET 16 (5)
DWGSET 17 (1)
TOCY-928-0101

G05-G34A

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

DATE: 10.21.02

DATE:

FIELD

OFFICE

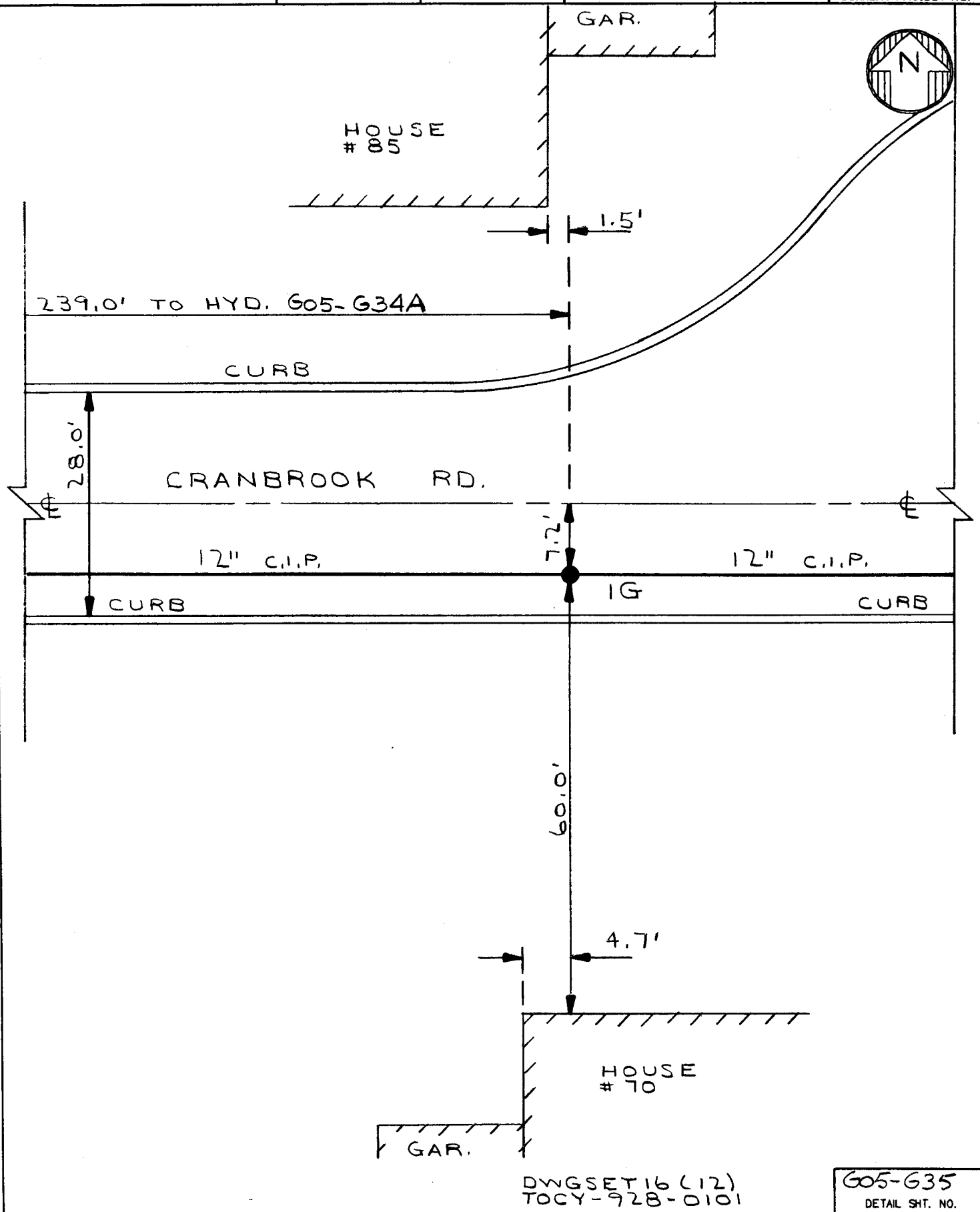
CITY OF TONAWANDA
E.C.W.A.

G05-G35

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



DWGSET 16 (12)
TOCY-928-0101

G05-G35

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

DATE: 10.21.02

DATE:

FIELD

OFFICE

CITY OF TONAWANDA
E.C.W.A.

G05-G35A

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



NOTE: LOCATION OF
BENDS UNKNOWN

CURB

CURB

45° & 22'12°
BENDS

12" C.I.P.

CURB

CRANBROOK RD. EXT.

CURB

CRANBROOK RD.

12" C.I.P.

CURB

7.7'

IG

CURB

28.0'

66.1'

70.0'

#1 HOUSE

PORCH

19.7'

DWGSET 16 (12)
TOCY-928-0101

G05-G35A

DETAIL SHT. NO.

MASTER COPY

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV.
DR. D.K.C.

DR. R.D.C.

CITY OF TONAWANDA

G05-G18

DETAIL SHT. NO.

DATE: 11.9.04

DATE: 7/2/2019

E.C.W.A.

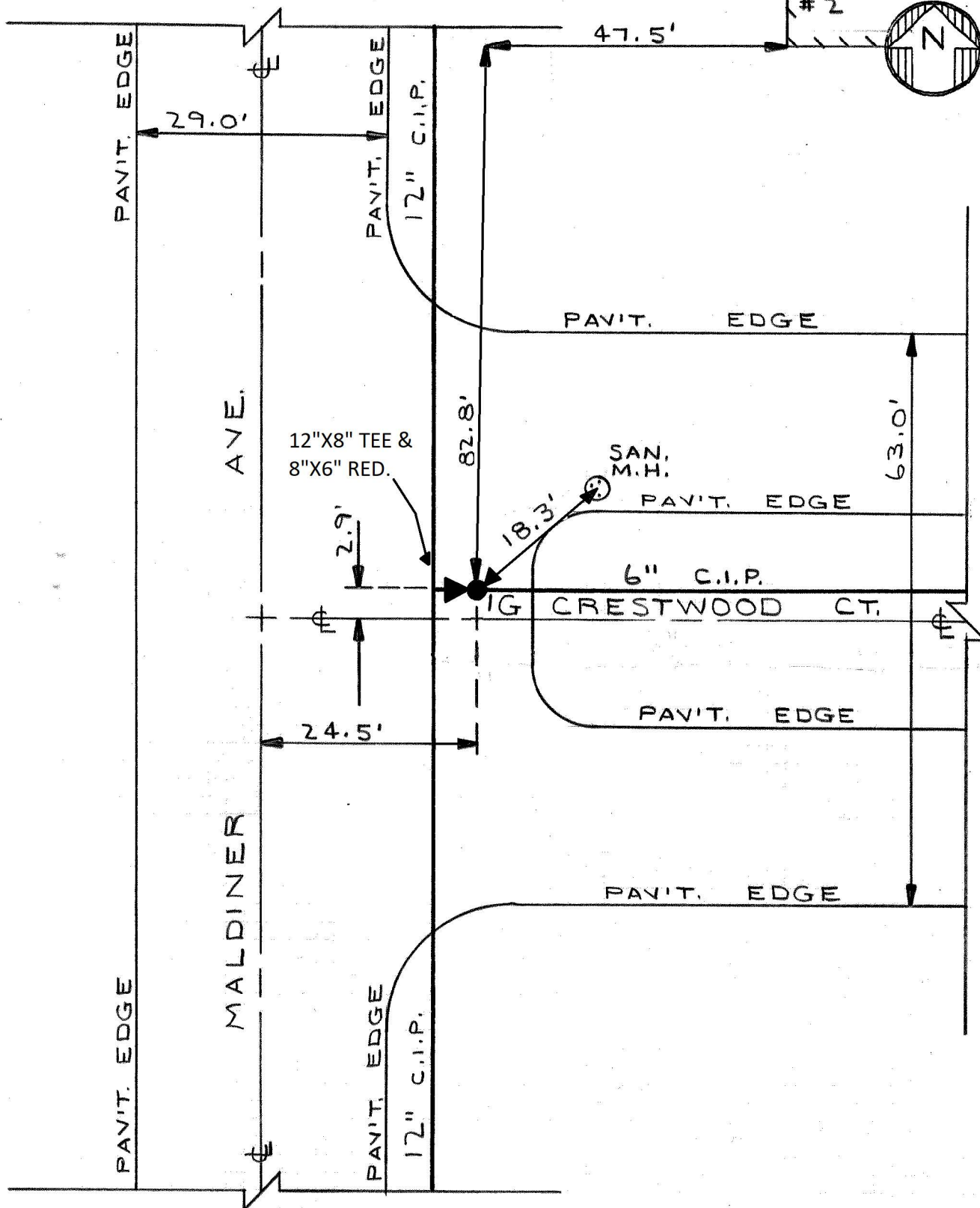
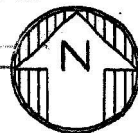
200100137

CURRENT PROJECT NO.

FIELD

OFFICE

HOUSE
#2



W.O. #466950

DWG SET 16 (11, 13 & 17)

TOCY-928-0101

G05-G18

DETAIL SHT. NO.



NOTE: DETAIL DRAWN ON CAD SYSTEM.
± DIMENSIONS FROM AS-BUILTS, NOT
FIELD CHECKED.

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. D.K.C.

DATE: 4/11/2005

FIELD

REVISED
DR. R.D.C.

DATE: 2/26/2019

OFFICE

CITY OF TONAWANDA

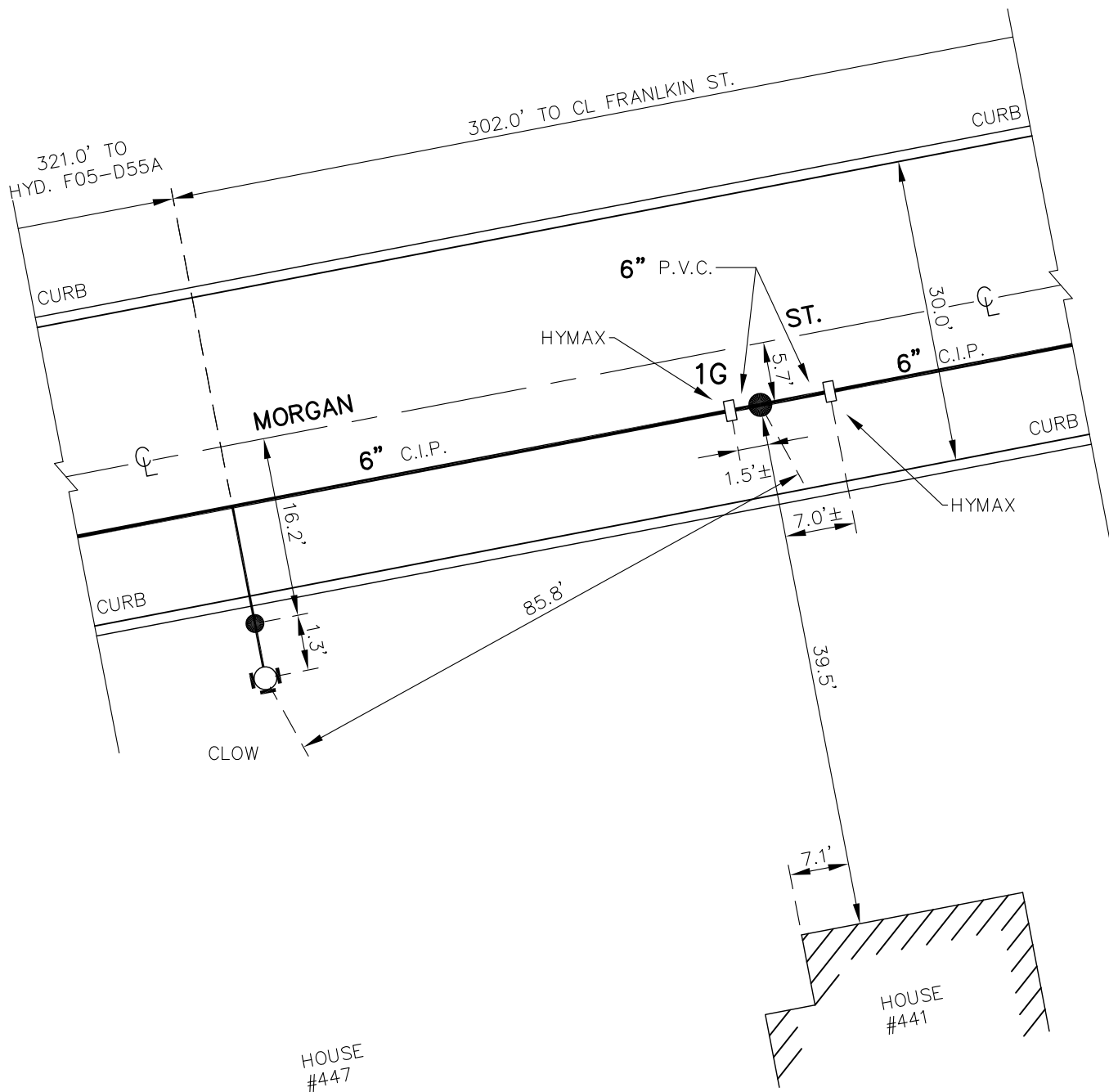
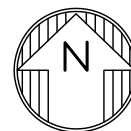
E.C.W.A.

F05-D48A

DETAIL SHT. NO.

201500183

CURRENT PROJECT NO.



NOTE: DETAIL DRAWN ON CAD
SYSTEM.
± DIMENSIONS ARE FROM
LINE MAINTENANCE, NOT
FIELD CHECKED.

TOCY-623-1501
TOCY-623-0501
TOCY-928-0101

F05-D48A

DETAIL SHT. NO.

MASTER COPY



MASTER COPY

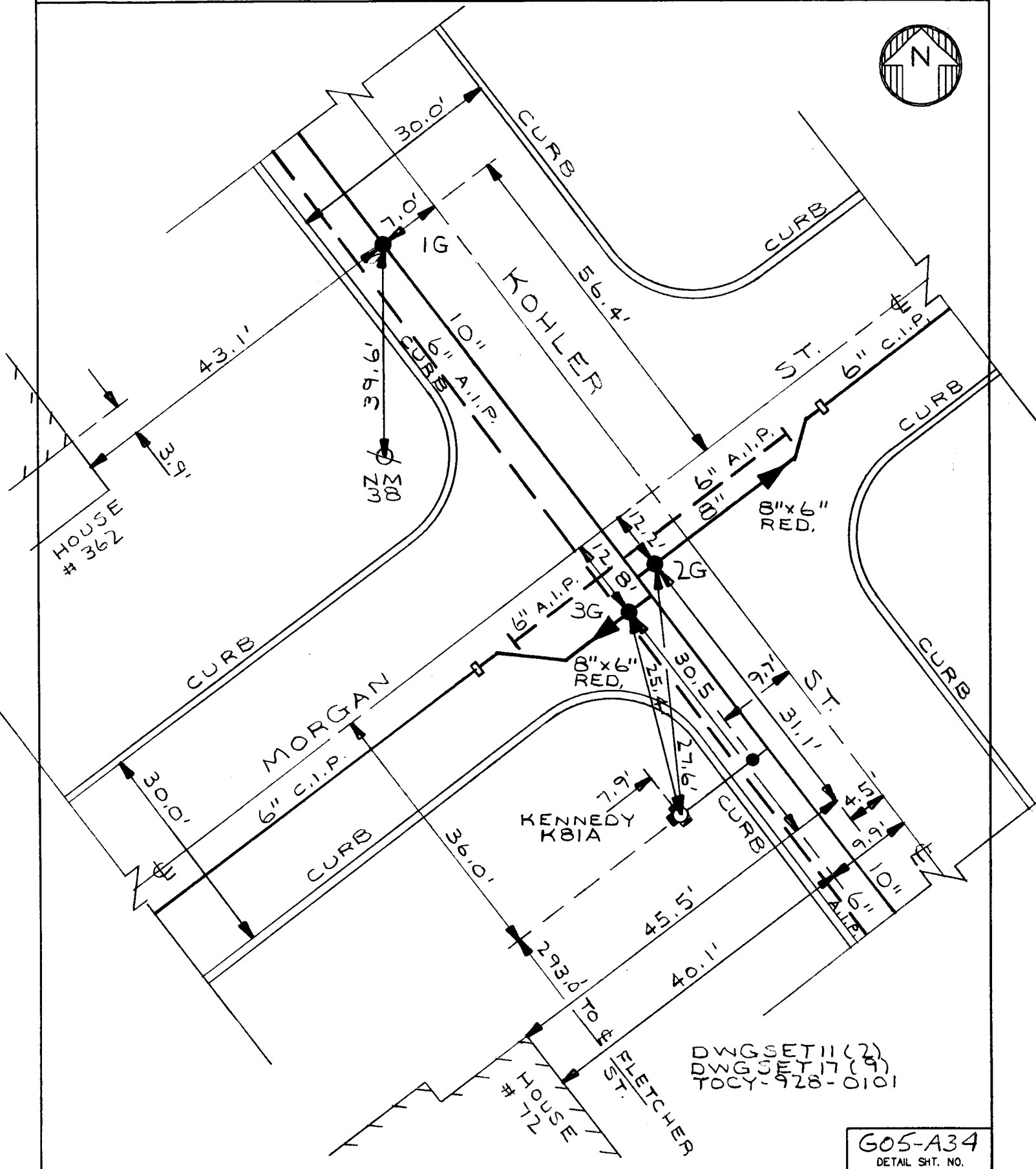
E	C
W	A

ERIE COUNTY 
WATER AUTHORITY
BUFFALO, NEW YORK

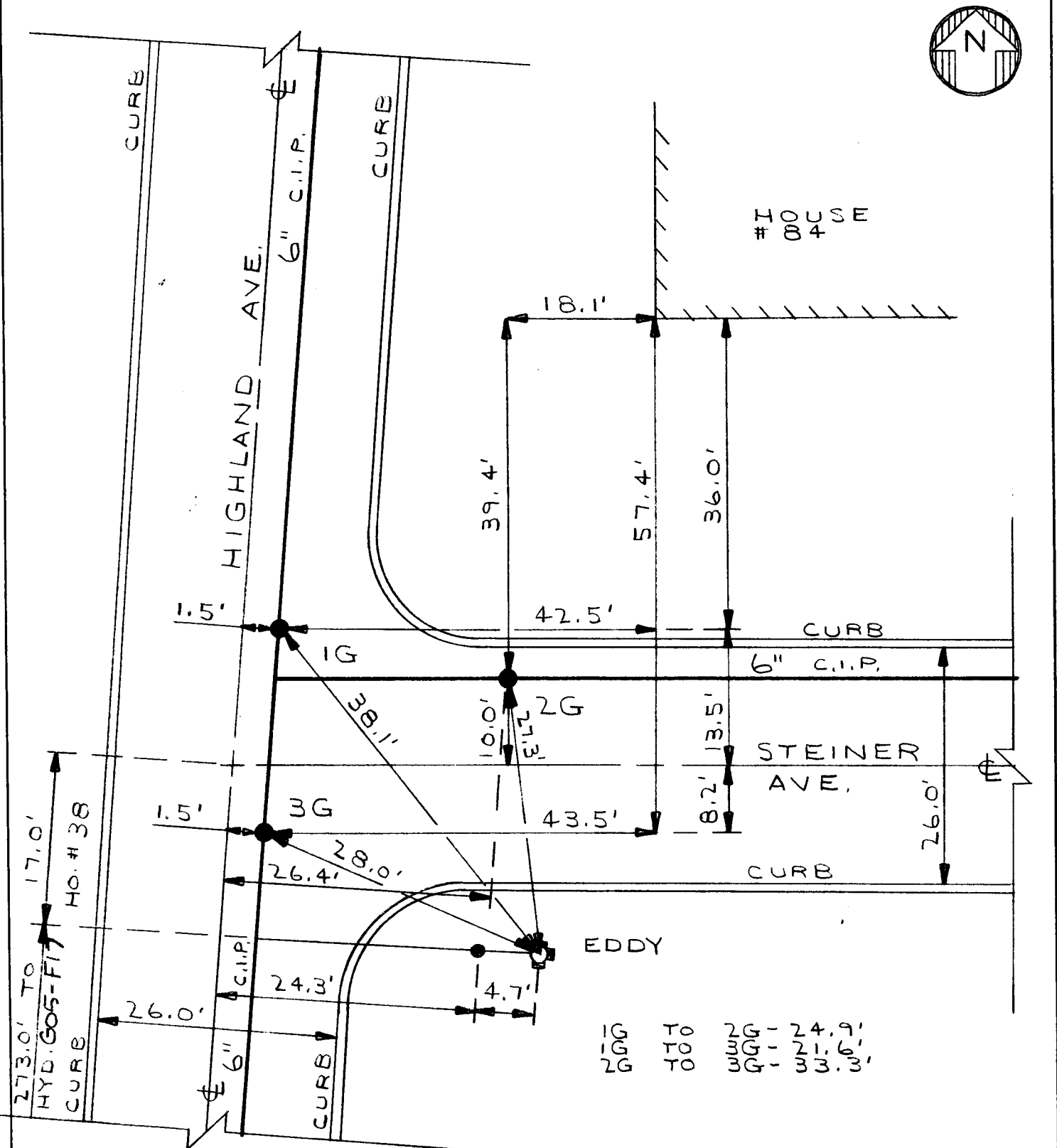
DR. D.K.C.	DR.
DATE: 7.30.07	DATE:
FIELD	OFFICE

CITY OF TONAWANDA
E.C.W.A.

605-A34
DETAIL SHT. NO.
200100137
CURRENT PROJECT NO.



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DWG SET 17 (29 & 44)
TOCY-928-0101

GO5-F09
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. D.K.C.

DATE: 9/26/2002

FIELD

REVISED
DR. D.M.C.

DATE: 6/14/2019

OFFICE

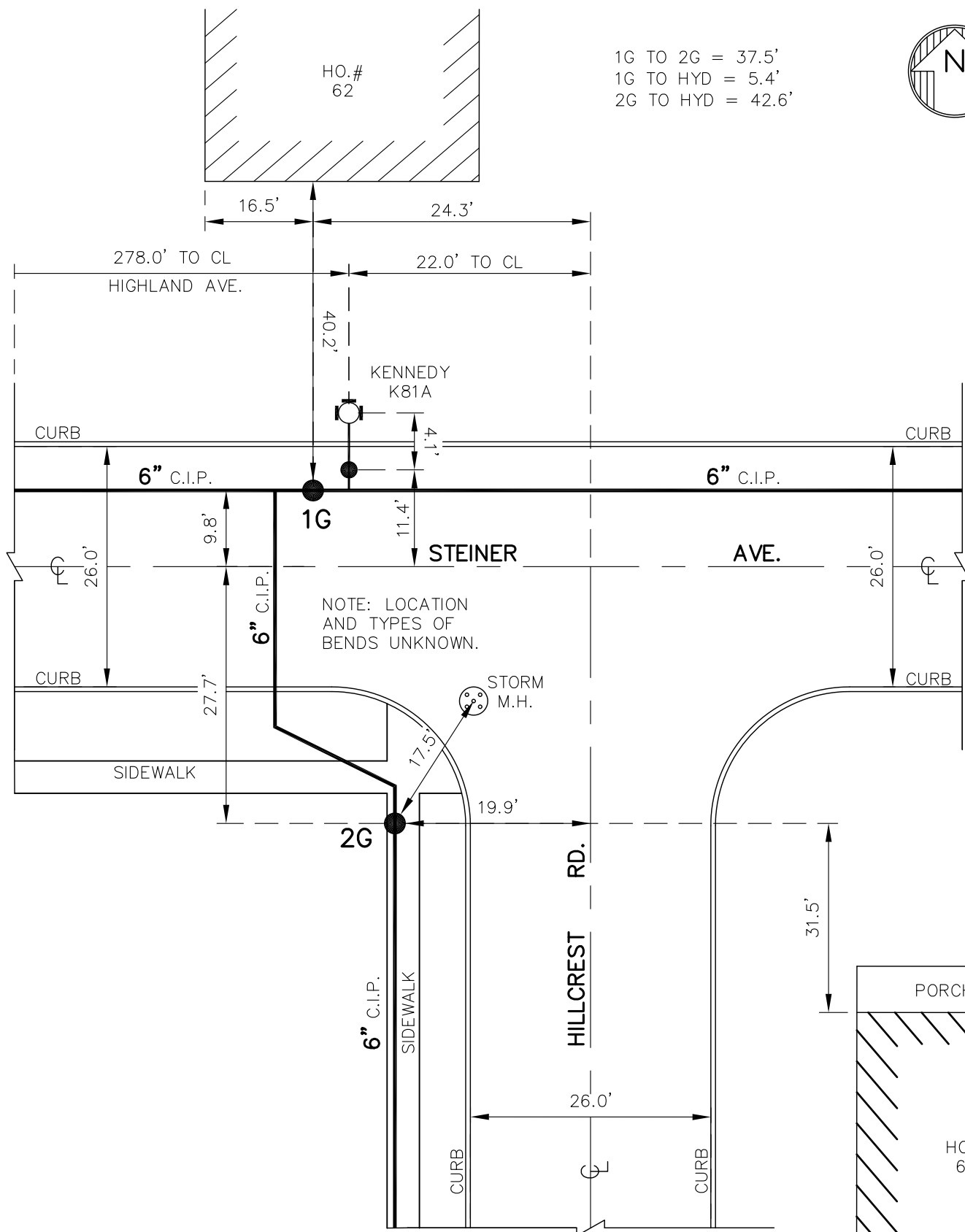
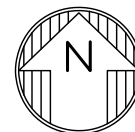
CITY OF TONAWANDA
E.C.W.A.

G05-F10

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



W.O.39277

DWG SET 17(29 & 41)

TOCY-928-0101

G05-F10

DETAIL SHT. NO.

MASTER COPY

EC
WAERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

CITY OF TONAWANDA

G05-F10A

DETAIL SHT. NO.

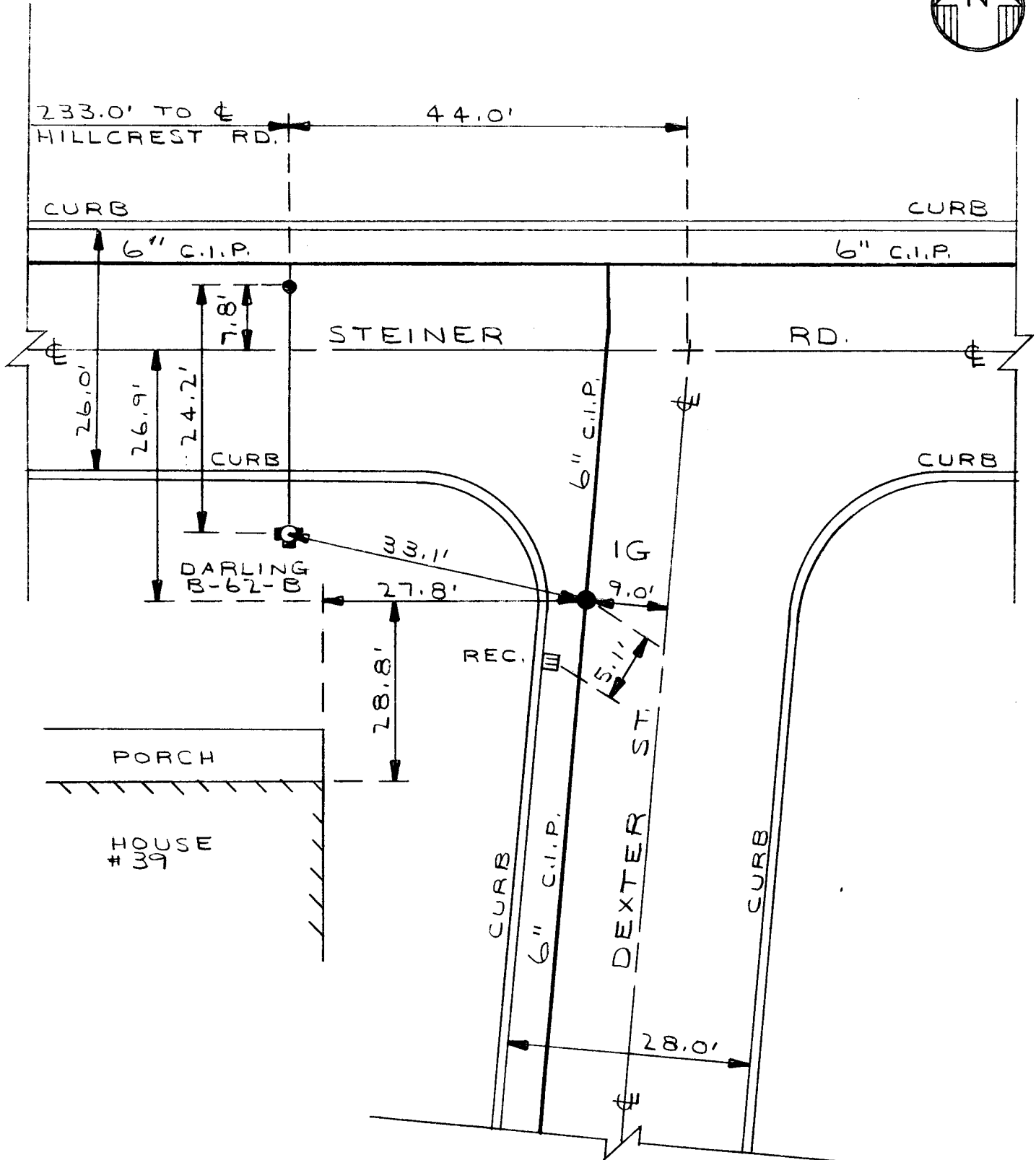
DATE: 9.26.02

DATE:

E.C.W.A.

FIELD

OFFICE

200100137
CURRENT PROJECT NO.DWGSET17 (29)
TOCY-928-0101

G05-F10A

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

DATE: 9.26.02

DATE:

FIELD

OFFICE

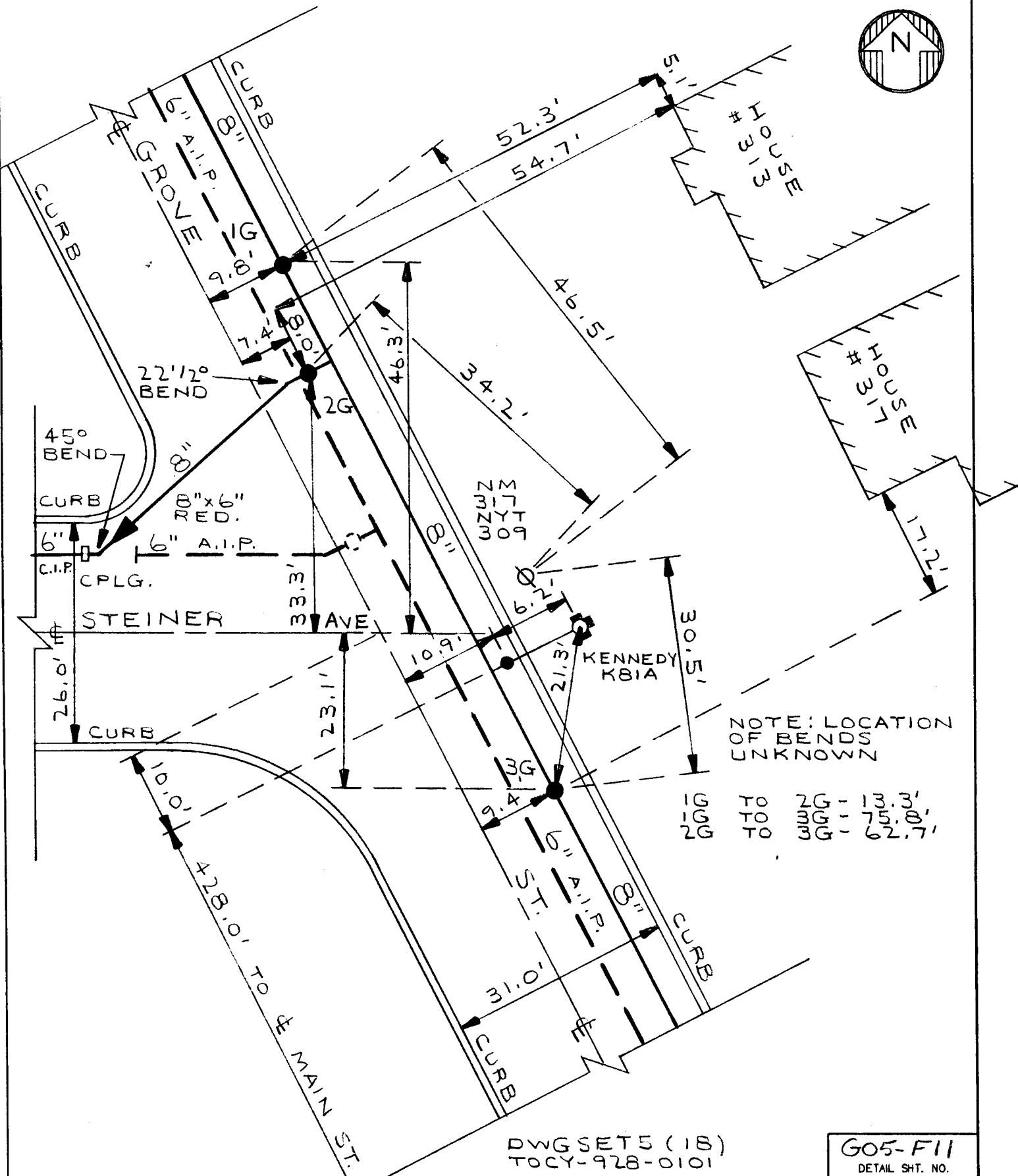
CITY OF TONAWANDA

E.C.W.A.

GO5-F11

DETAIL SHT. NO.

200100137
CURRENT PROJECT NO.

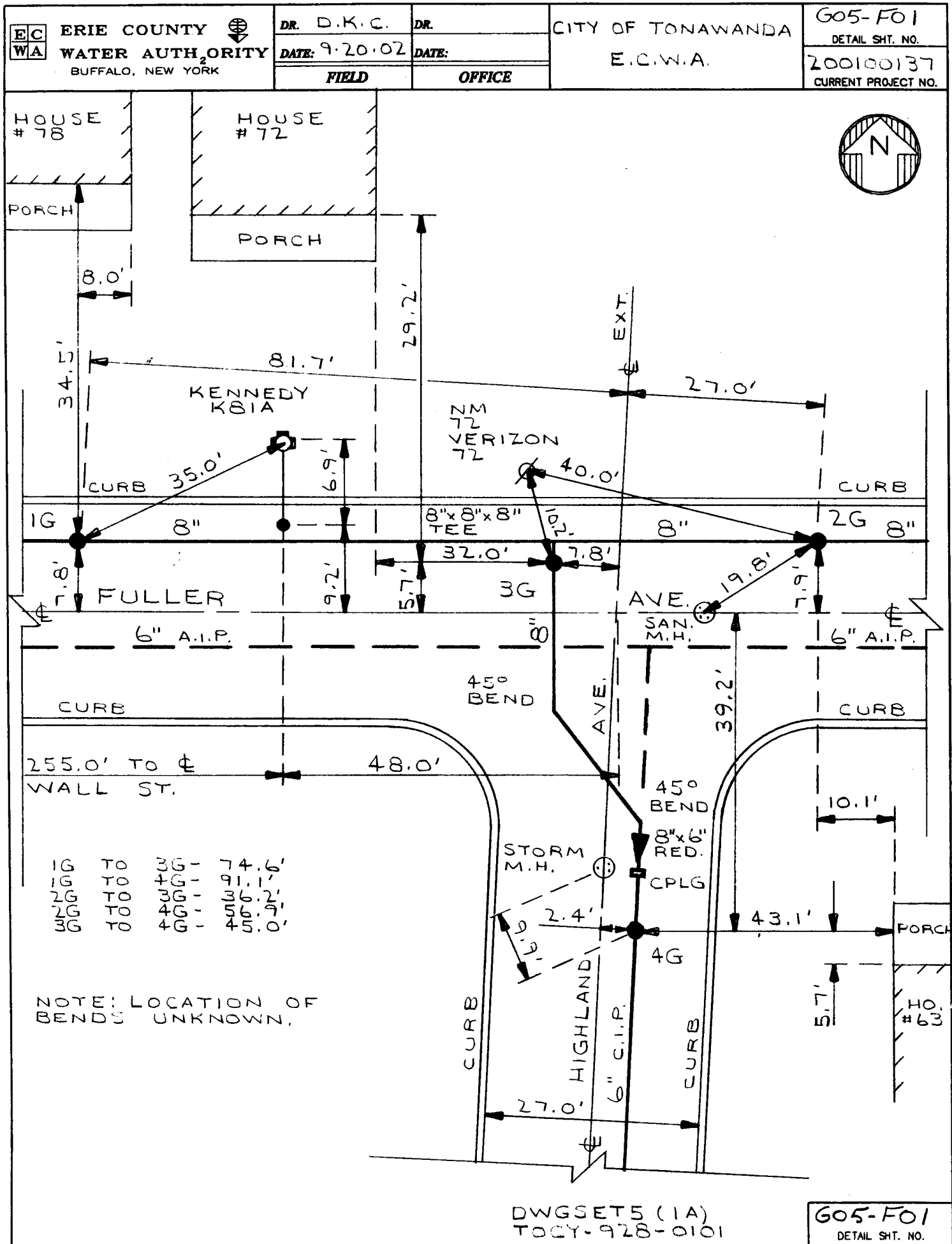


DWGSET5 (18)
TOCY-928-0101

GO5-F11

DETAIL SHT. NO.

MASTER COPY

**MASTER COPY**

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C

DR.

CITY OF TONAWANDA

G05-F09

DETAIL SHT. NO.

DATE: 9.24.02

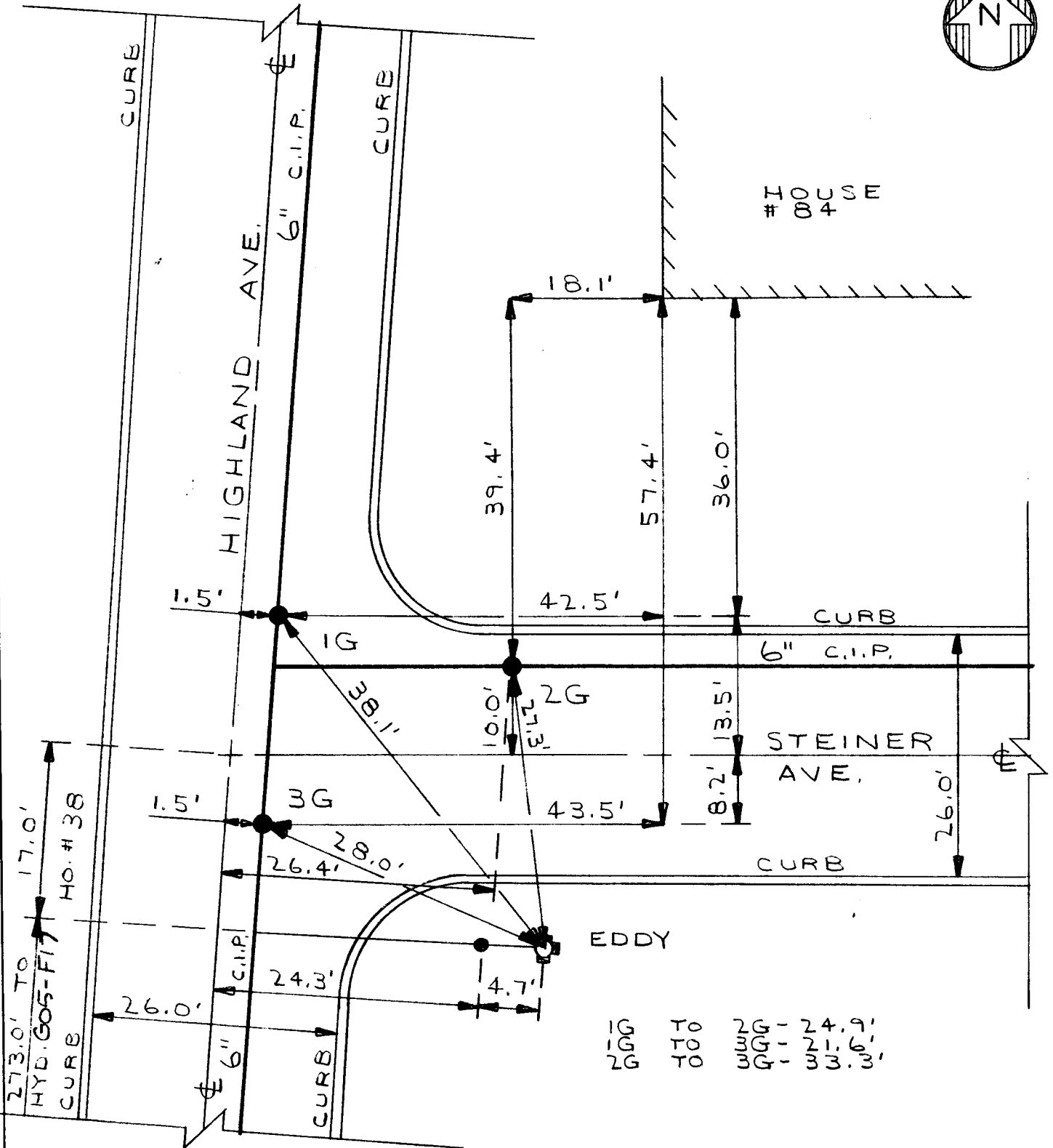
DATE:

E.C.W.A.

FIELD

OFFICE

200100137
CURRENT PROJECT NO.



IG TO 2G - 24.9'
IG TO 3G - 21.6'
2G TO 3G - 33.3'

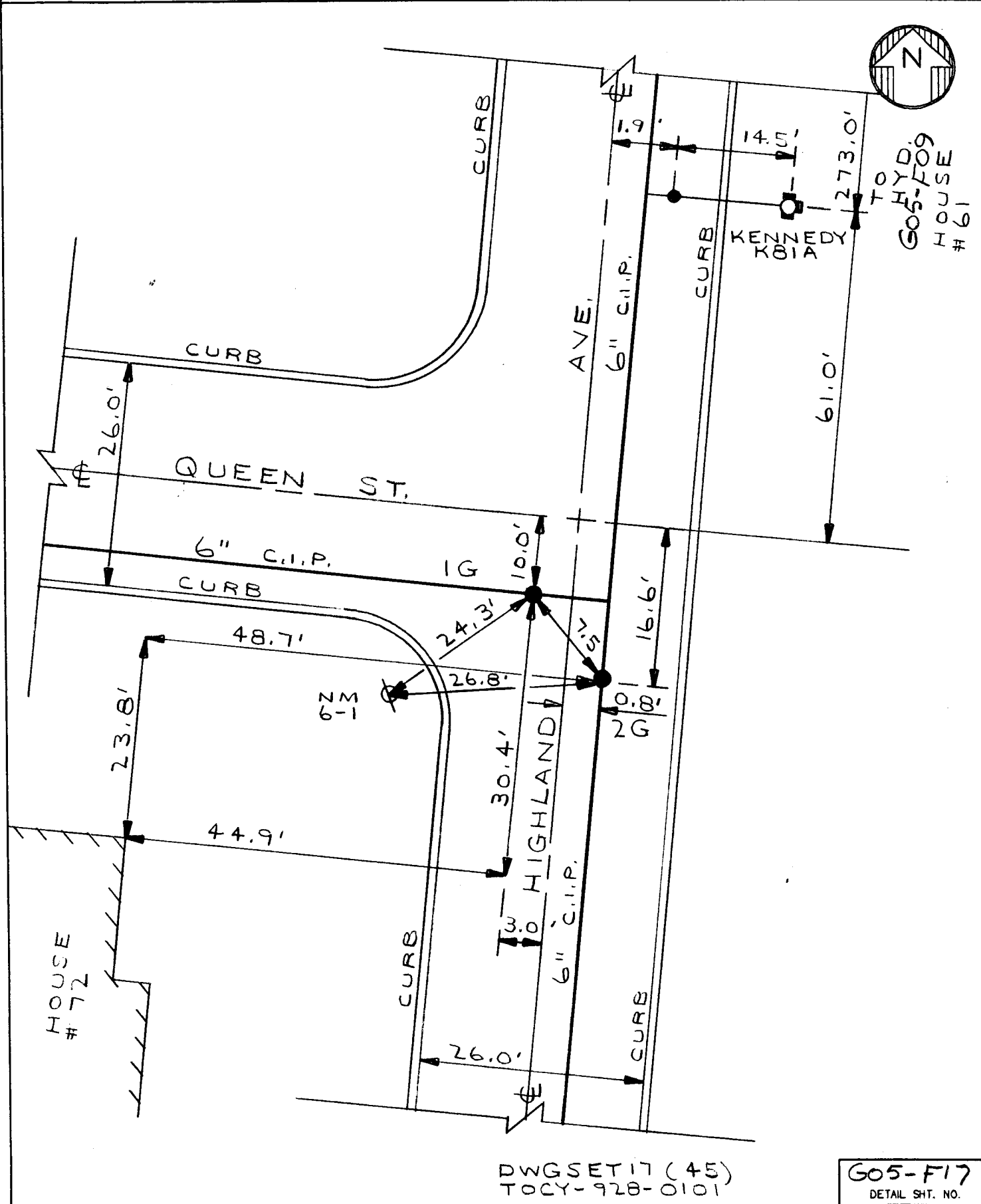
DWGSET17 (29 & 44)
TOCY-928-0101

G05-F09

DETAIL SHT. NO.

MASTER COPY

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	DATE: 9.24.02	DATE:		DETAIL SHT. NO.
	FIELD	OFFICE		200100137 CURRENT PROJECT NO.



DWGSET 17 (45)
TOCY-928-0101

G05-F17
DETAIL SHT. NO.

MASTER COPY



DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DR.

CITY OF TONAWANDA

G05-F25

DETAIL SHT. NO.

DATE: 9.24.02

DATE:

E.C.W.A.

200100137

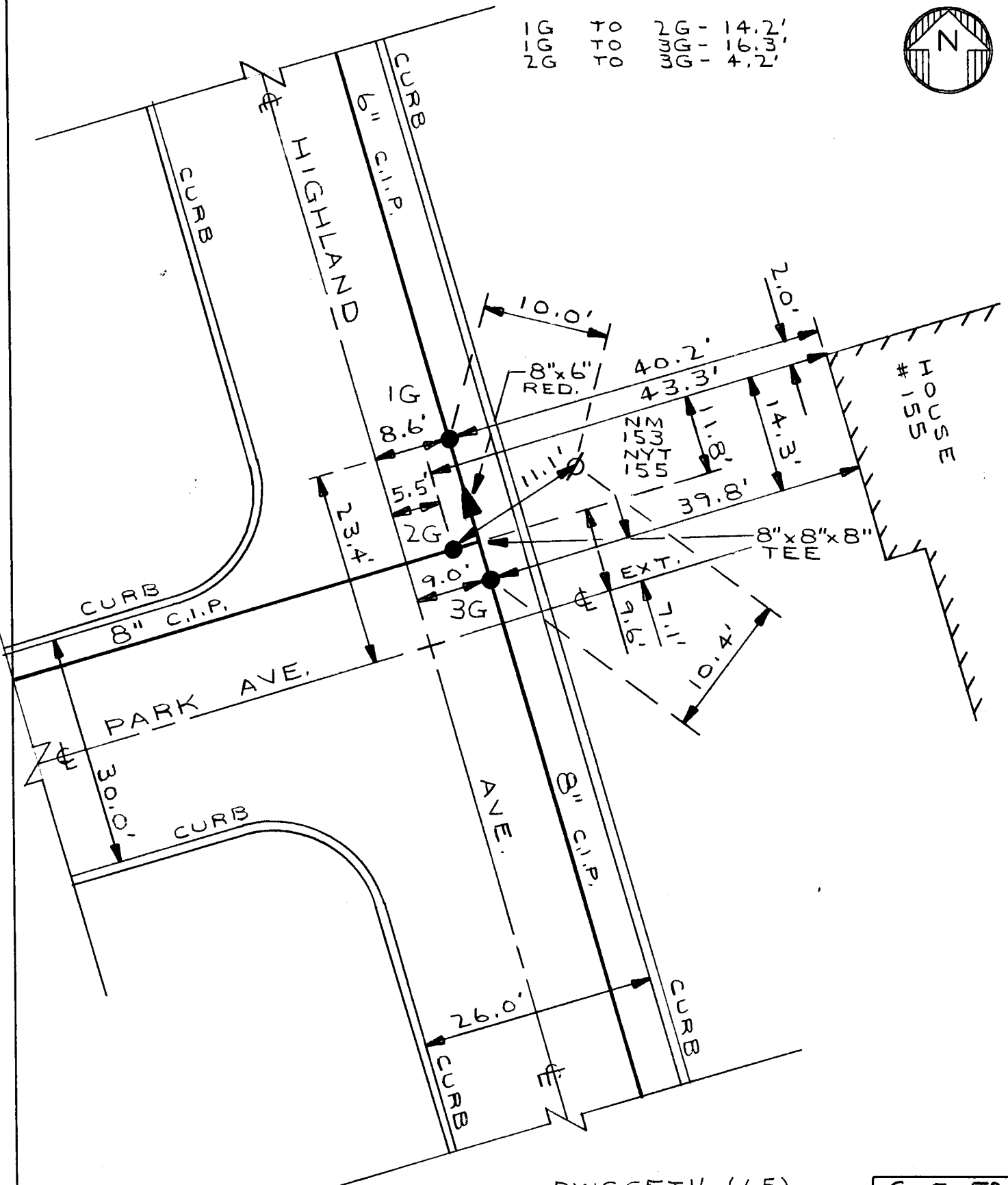
CURRENT PROJECT NO.

FIELD

OFFICE



1G TO 2G - 14.2'
1G TO 3G - 16.3'
2G TO 3G - 4.2'



DWGSET16 (65)
TOCY-928-0101

G05-F25

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. DR. D.K.C. DR.

DATE: 4.25.07 DATE:

FIELD

OFFICE

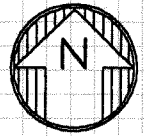
CITY OF TONAWANDA
E.C.W.A.

G05-E16A

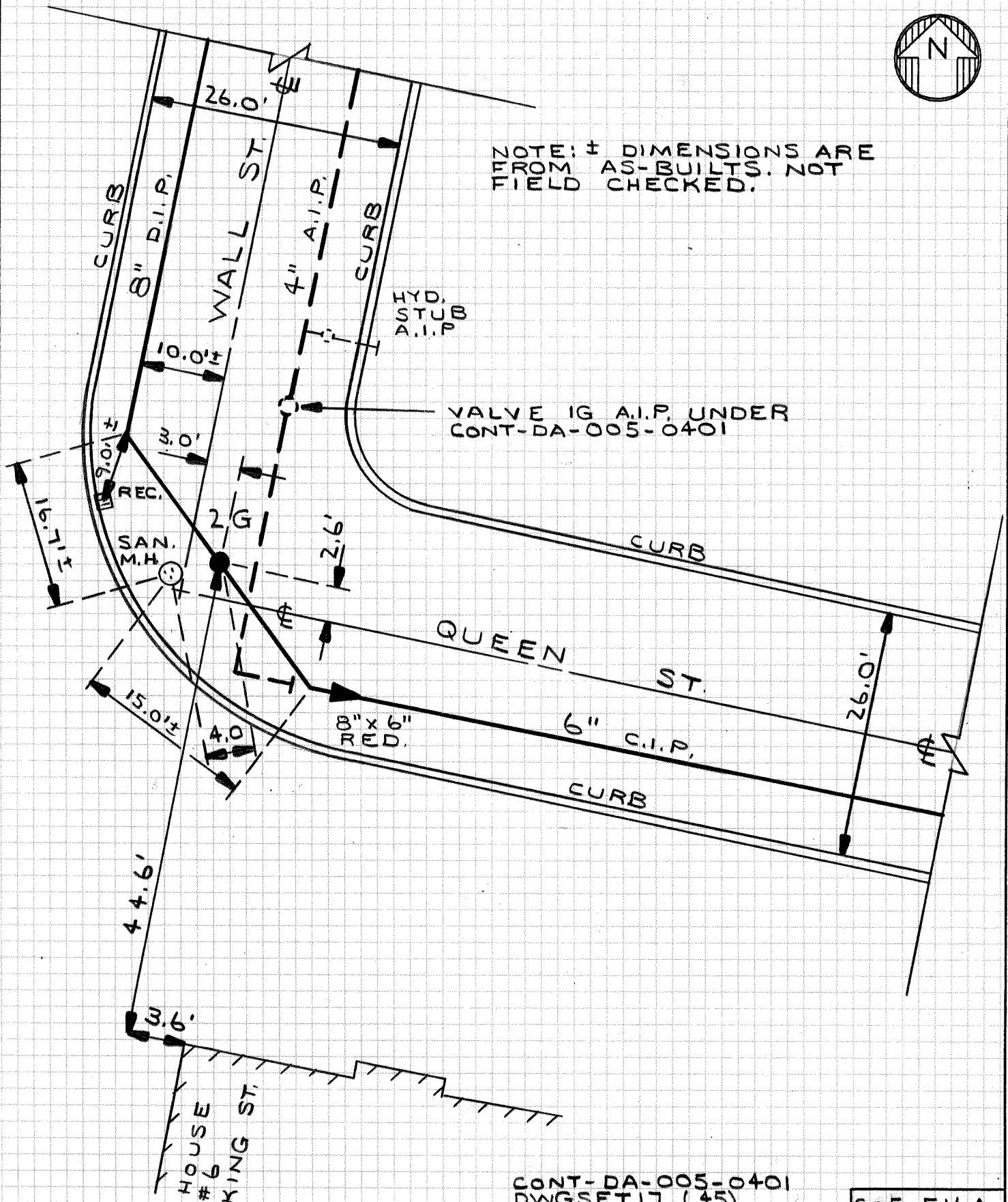
DETAIL SHT. NO.

200400490

CURRENT PROJECT NO.



NOTE: ± DIMENSIONS ARE
FROM AS-BUILTS. NOT
FIELD CHECKED.

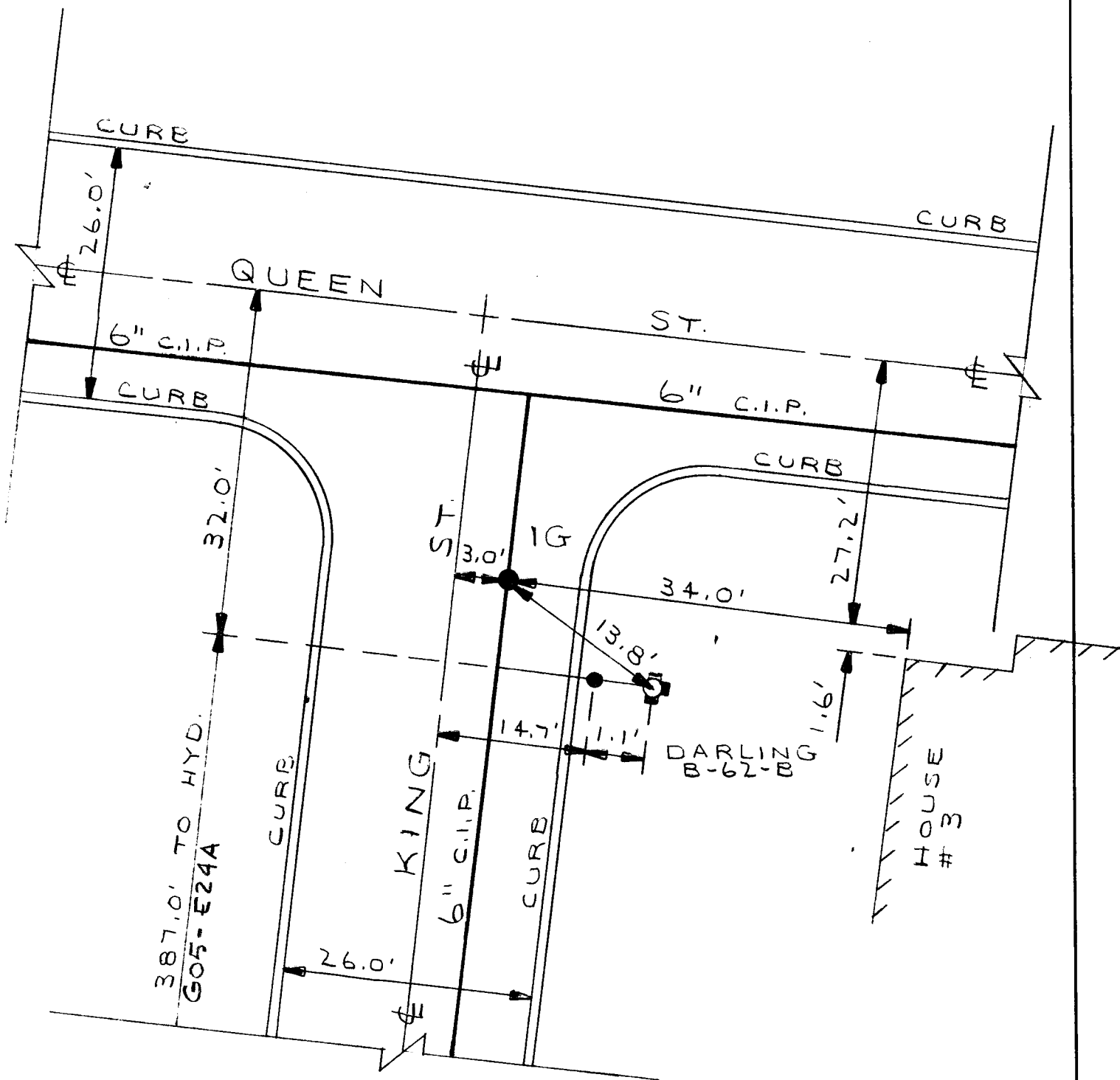


CONT-DA-005-0401
DWGSET 17 (45)
TOCY-928-0101

G05-E16A
DETAIL SHT. NO.

MASTER COPY

<div data-bbox="68 109 126 163" data-label="Image"> </div> <div data-bbox="139 100 474 189" data-label="Text"> <p>ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK</p> </div>	<div data-bbox="483 94 665 121" data-label="Text"> <p>DR. D.K.C.</p> </div>	<div data-bbox="695 94 727 121" data-label="Text"> <p>DR.</p> </div>	<div data-bbox="909 94 1291 172" data-label="Text"> <p>CITY OF TONAWANDA E.C.W.A.</p> </div>	<div data-bbox="1307 73 1502 109" data-label="Text"> <p>G05-E24</p> </div>
	<div data-bbox="483 136 690 163" data-label="Text"> <p>DATE: 9.23.02</p> </div>	<div data-bbox="695 136 755 163" data-label="Text"> <p>DATE:</p> </div>		<div data-bbox="1339 115 1485 142" data-label="Text"> <p>DETAIL SHT. NO.</p> </div>
	<div data-bbox="555 172 630 199" data-label="Text"> <p>FIELD</p> </div>	<div data-bbox="760 172 852 199" data-label="Text"> <p>OFFICE</p> </div>		<div data-bbox="1299 157 1518 205" data-label="Text"> <p>200100137 CURRENT PROJECT NO.</p> </div>

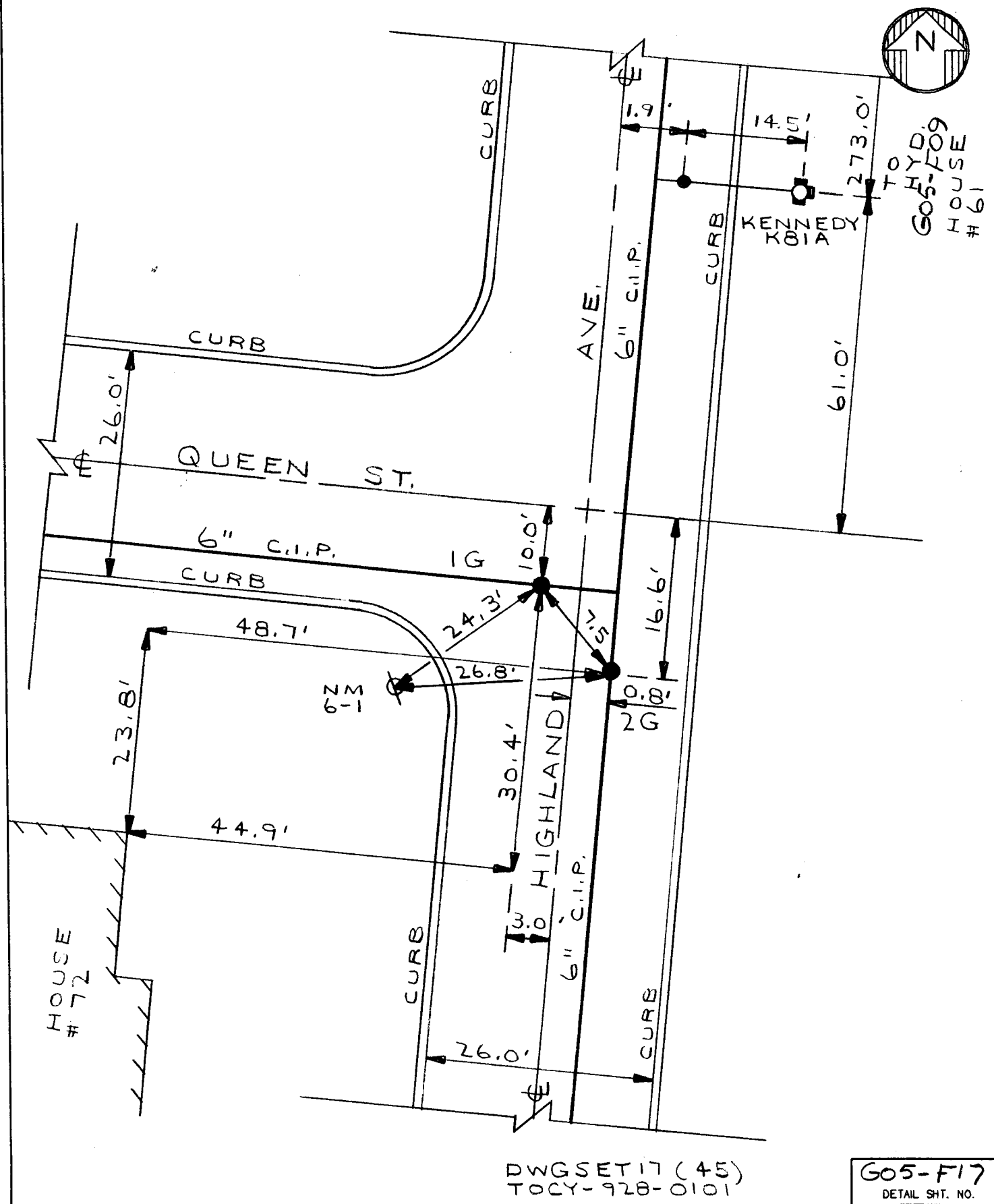


DWG SET 17 (45)
TO CY-928-0101

G05-E24
DETAIL SHT. NO.

MASTER COPY

<div data-bbox="68 109 133 168" data-label="Text"> <p>EC WA</p> </div> <div data-bbox="147 103 482 194" data-label="Text"> <p>ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK</p> </div>	<div data-bbox="492 97 654 122" data-label="Text"> <p>DR. D.K.C.</p> </div>	<div data-bbox="701 97 737 122" data-label="Text"> <p>DR.</p> </div>	<div data-bbox="919 97 1304 176" data-label="Text"> <p>CITY OF TONAWANDA E.C.W.A.</p> </div>	<div data-bbox="1317 75 1507 114" data-label="Text"> <p>G05-F17</p> </div>
	<div data-bbox="492 133 695 166" data-label="Text"> <p>DATE: 9.24.02</p> </div>	<div data-bbox="701 133 761 166" data-label="Text"> <p>DATE:</p> </div>		<div data-bbox="1346 118 1495 142" data-label="Text"> <p>DETAIL SHT. NO.</p> </div>
	<div data-bbox="561 176 638 204" data-label="Text"> <p>FIELD</p> </div>	<div data-bbox="769 176 862 204" data-label="Text"> <p>OFFICE</p> </div>		<div data-bbox="1310 157 1523 209" data-label="Text"> <p>200100137 CURRENT PROJECT NO.</p> </div>



DWGSET 17 (45)
TOCY-928-0101

G05-F17
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

DATE: 6.24.03

FIELD

REV. DR.

D.K.C.

DATE: 12.20.04

OFFICE

CITY OF TONAWANDA
E.C.W.A.

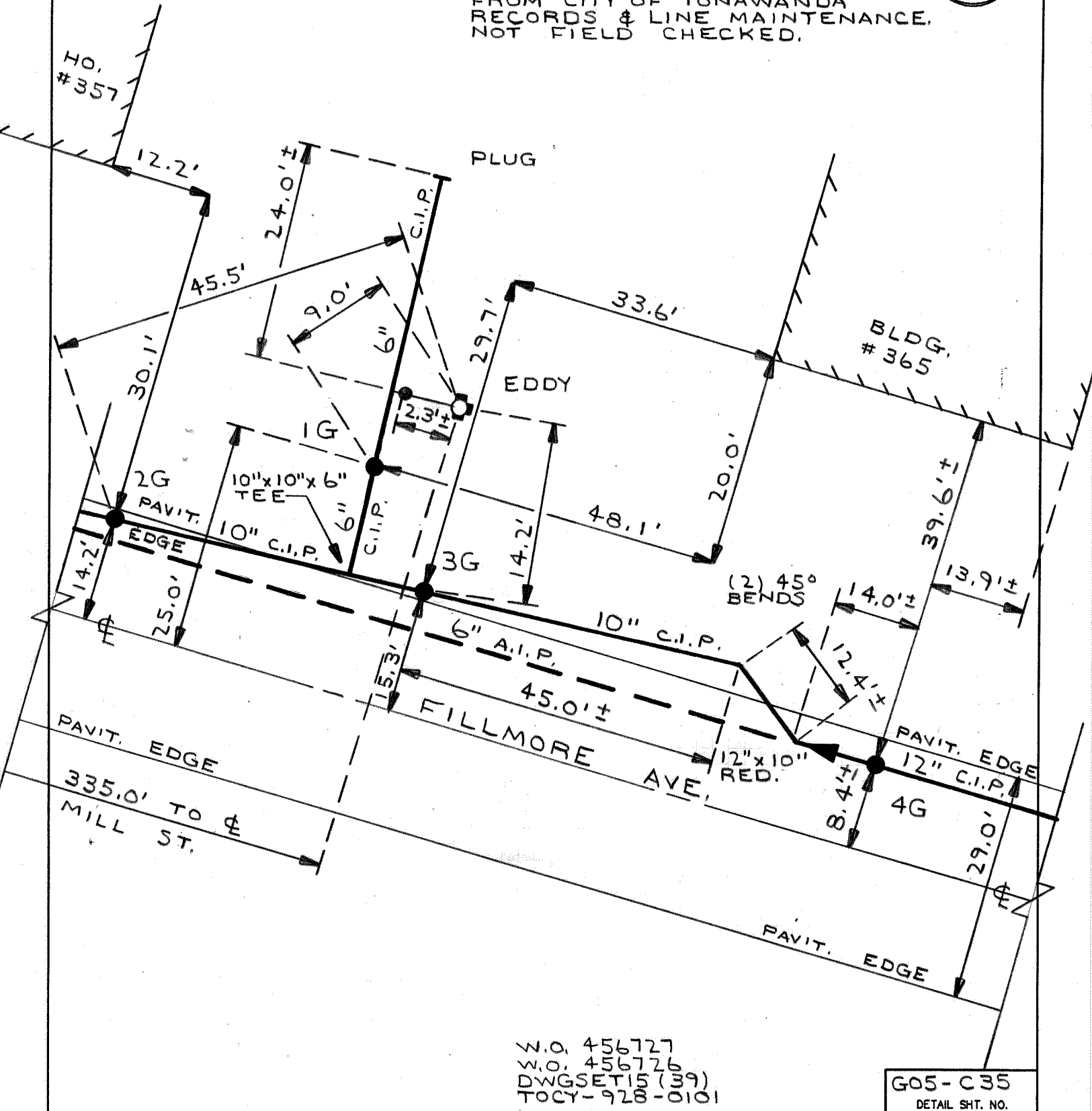
G05-C35
DETAIL SHT. NO.

200100137
CURRENT PROJECT NO.

1G TO 2G - 36.5'
1G TO 3G - 17.8'
2G TO 3G - 50.3'
3G TO 4G - 70.1'



NOTE: ± DIMENSIONS ARE
FROM CITY OF TONAWANDA
RECORDS & LINE MAINTENANCE.
NOT FIELD CHECKED.



W.O. 456727
W.O. 456726
DWGSET 15 (39)
TOCY-928-0101

G05-C35
DETAIL SHT. NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. R.D.C.

DATE: 10/5/2018

REVISED
DR.

DATE:

FIELD

OFFICE

CITY OF TONAWANDA

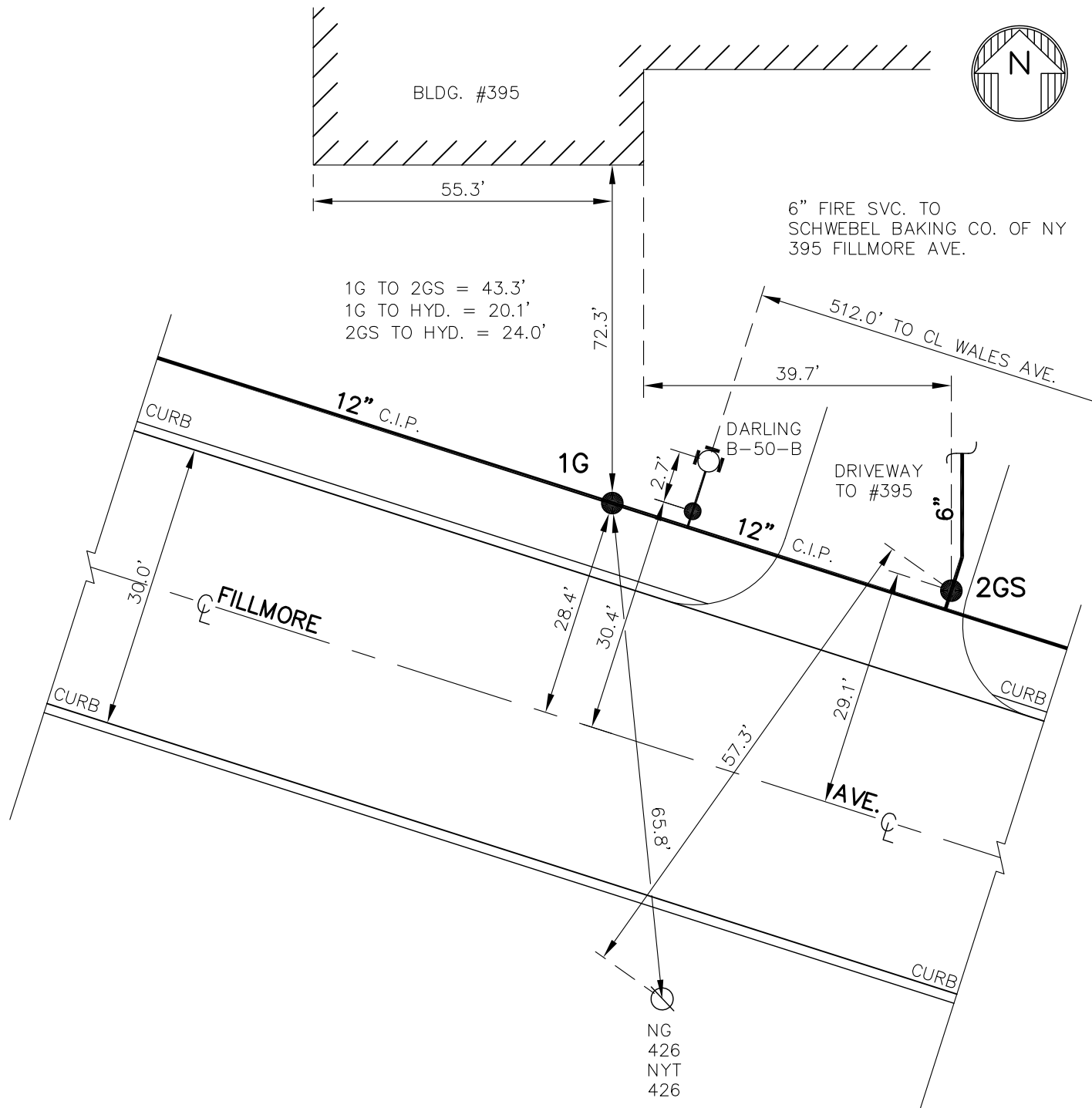
E.C.W.A.

G05-C37

DETAIL SHT. NO.

200100137

CURRENT PROJECT NO.



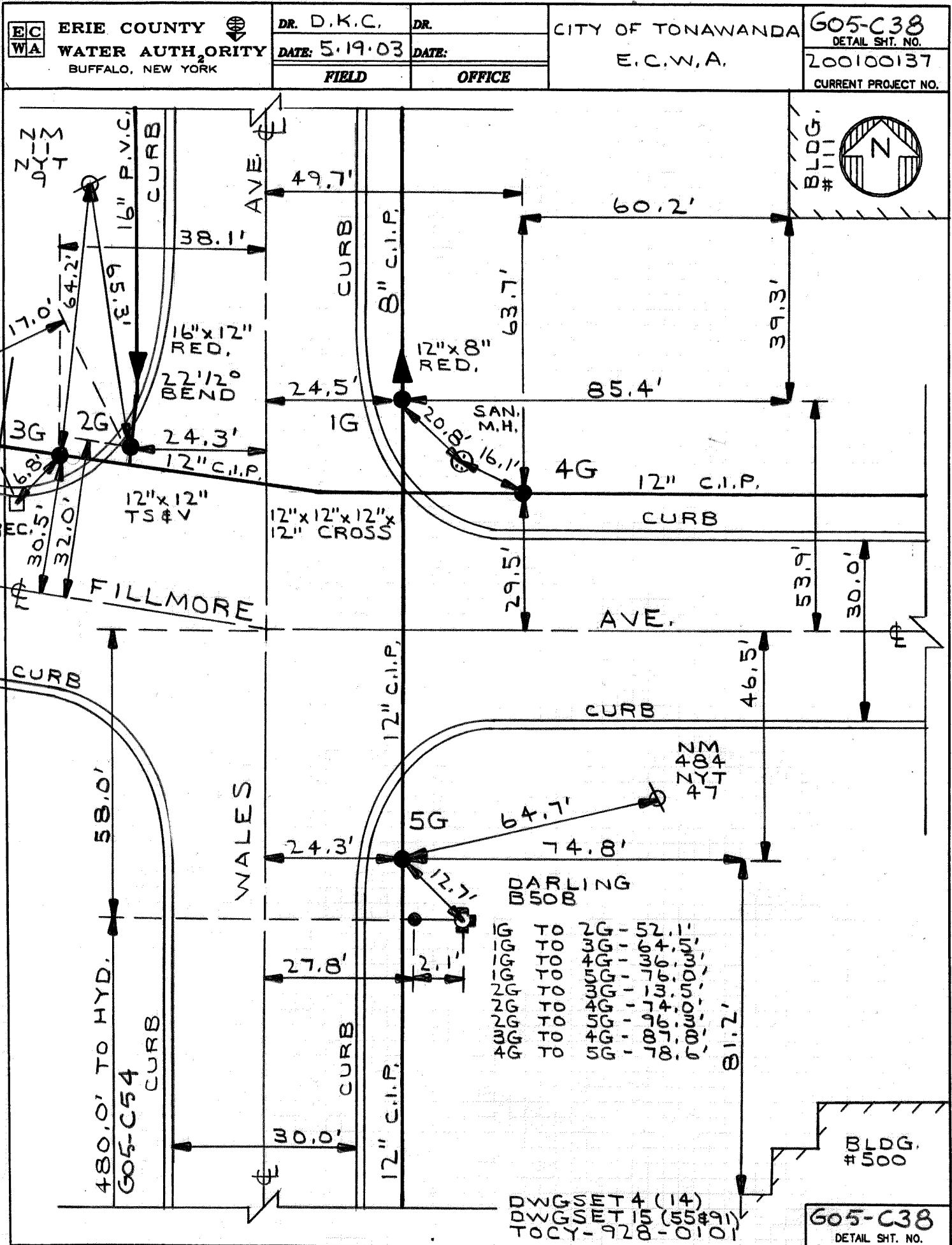
NOTE: DETAIL DRAWN ON CAD
SYSTEM.

TOCY-928-0101
DWG.SET 15(55)

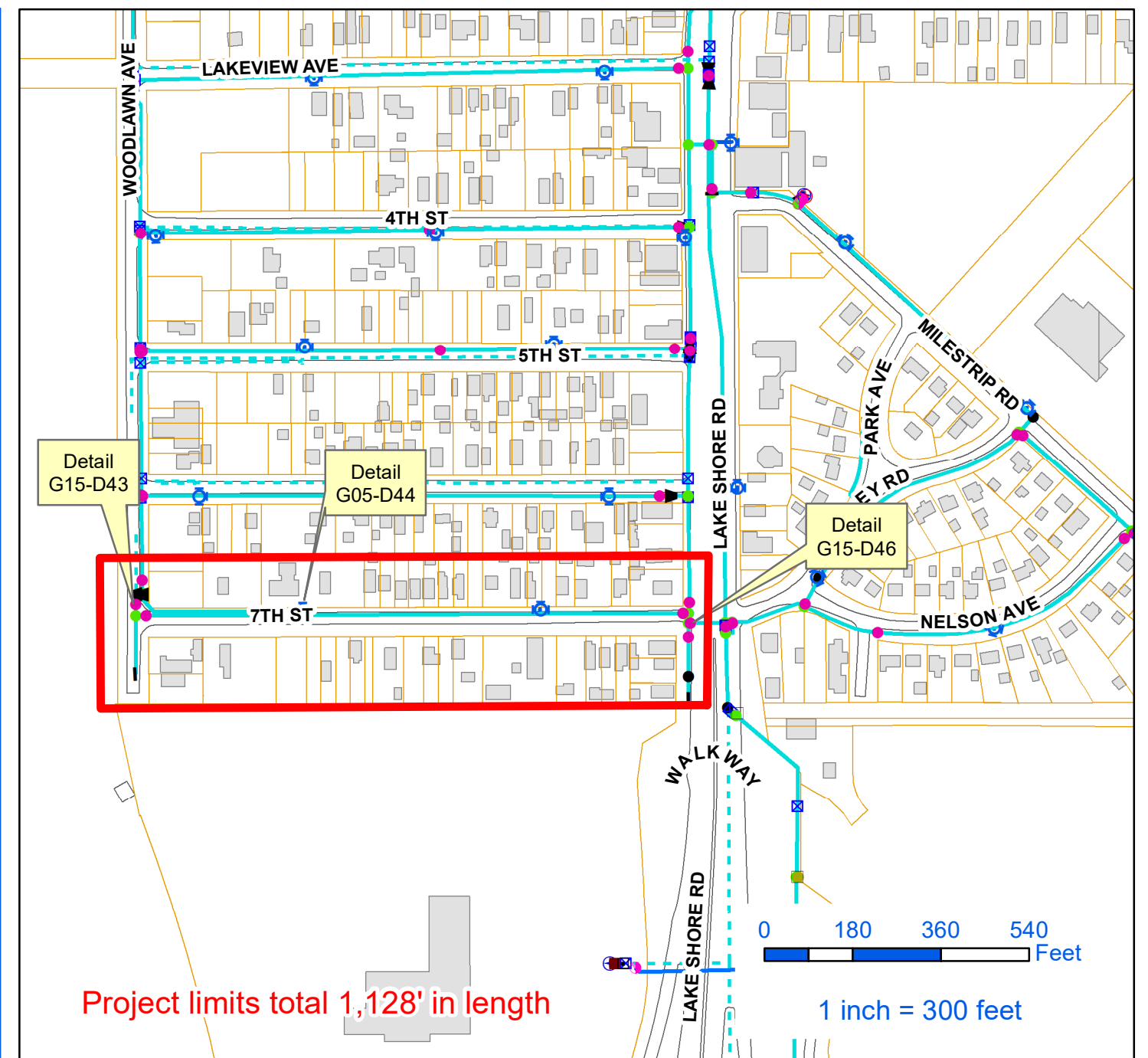
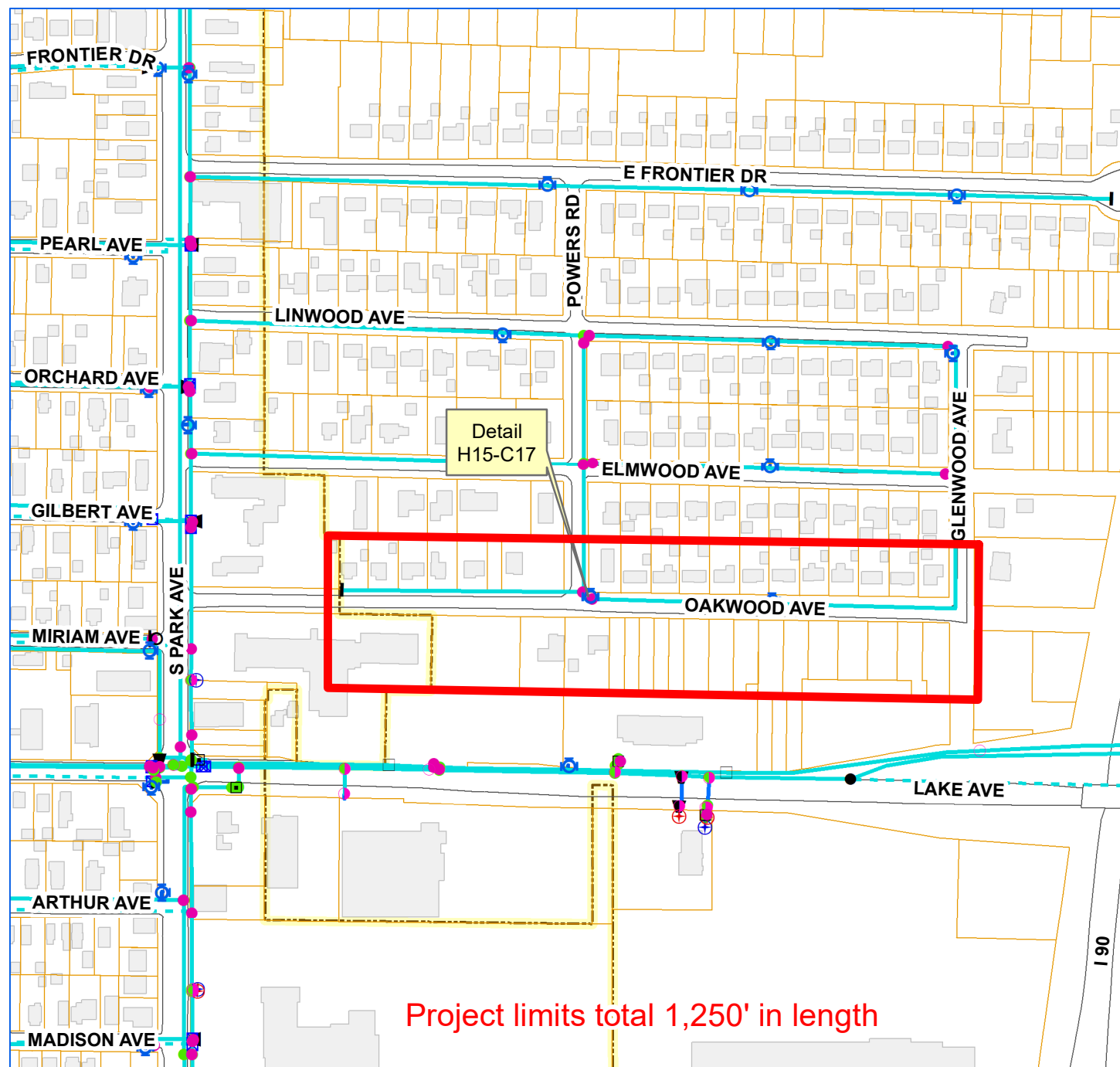
G05-C37

DETAIL SHT. NO.

MASTER COPY



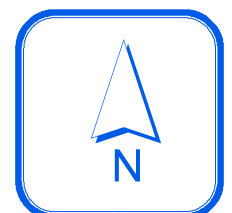
MASTER COPY



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

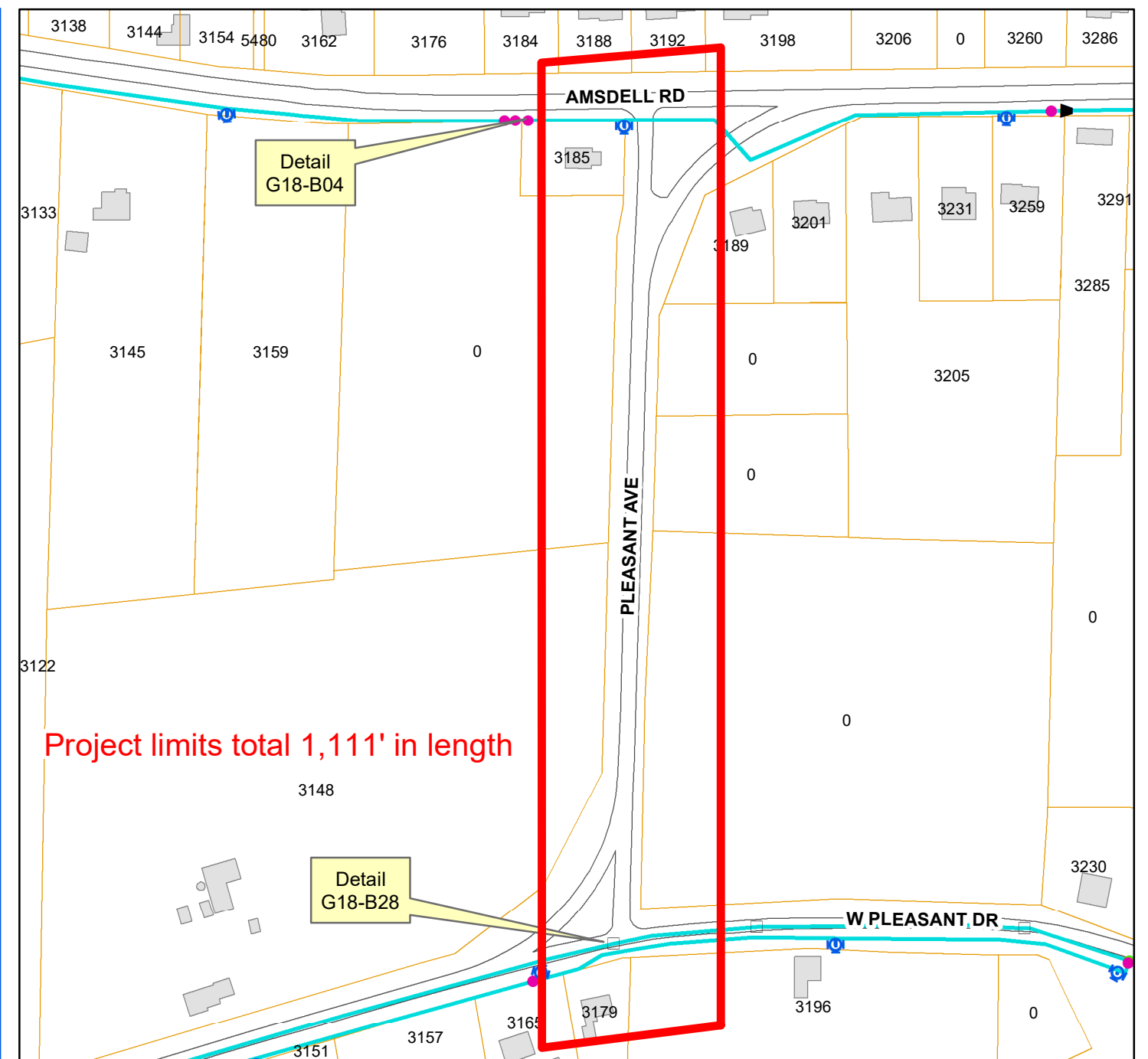
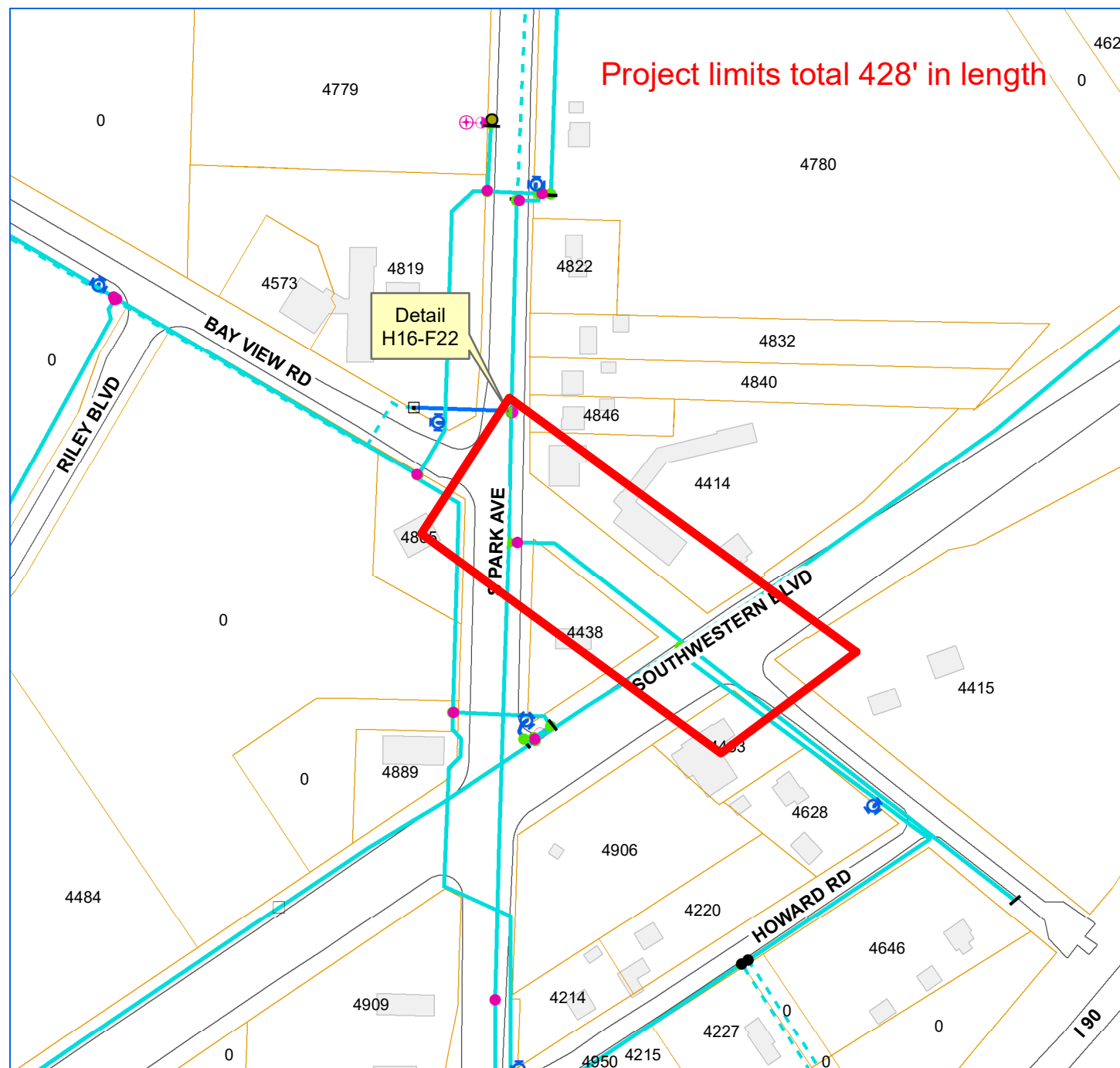
**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "B"**

**OAKWOOD AVE. FROM BLASDELL LINE TO GLENWOOD / 7TH ST. FROM WOODLAWN AVE. TO LAKESHORE RD. /
BAY VIEW RD. FROM SOUTH PARK AVE. TO SOUTHWESTERN BLVD. /
PLEASANT AVE. FROM #3179 TO AMSDELL RD. / SOUTHWESTERN BLVD. FROM PLEASANT AVE. TO AMSDELL RD. /
BUFFALO ST. FROM WEST AVE. TO BRISTOL RD. / BRYANT ST. FROM BUFFALO RD. TO BIG TREE RD. /
HUDSON ST. FROM BUFFALO RD. TO BIG TREE RD. / AND BIG TREE RD. FROM WEST AVE. TO BRISTOL RD.
TOWN OF HAMBURG, NY**



0 180 360 540 Feet
1 inch = 300 feet

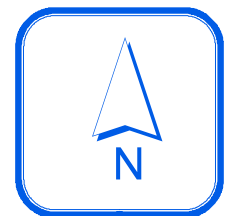
DMC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "B"**

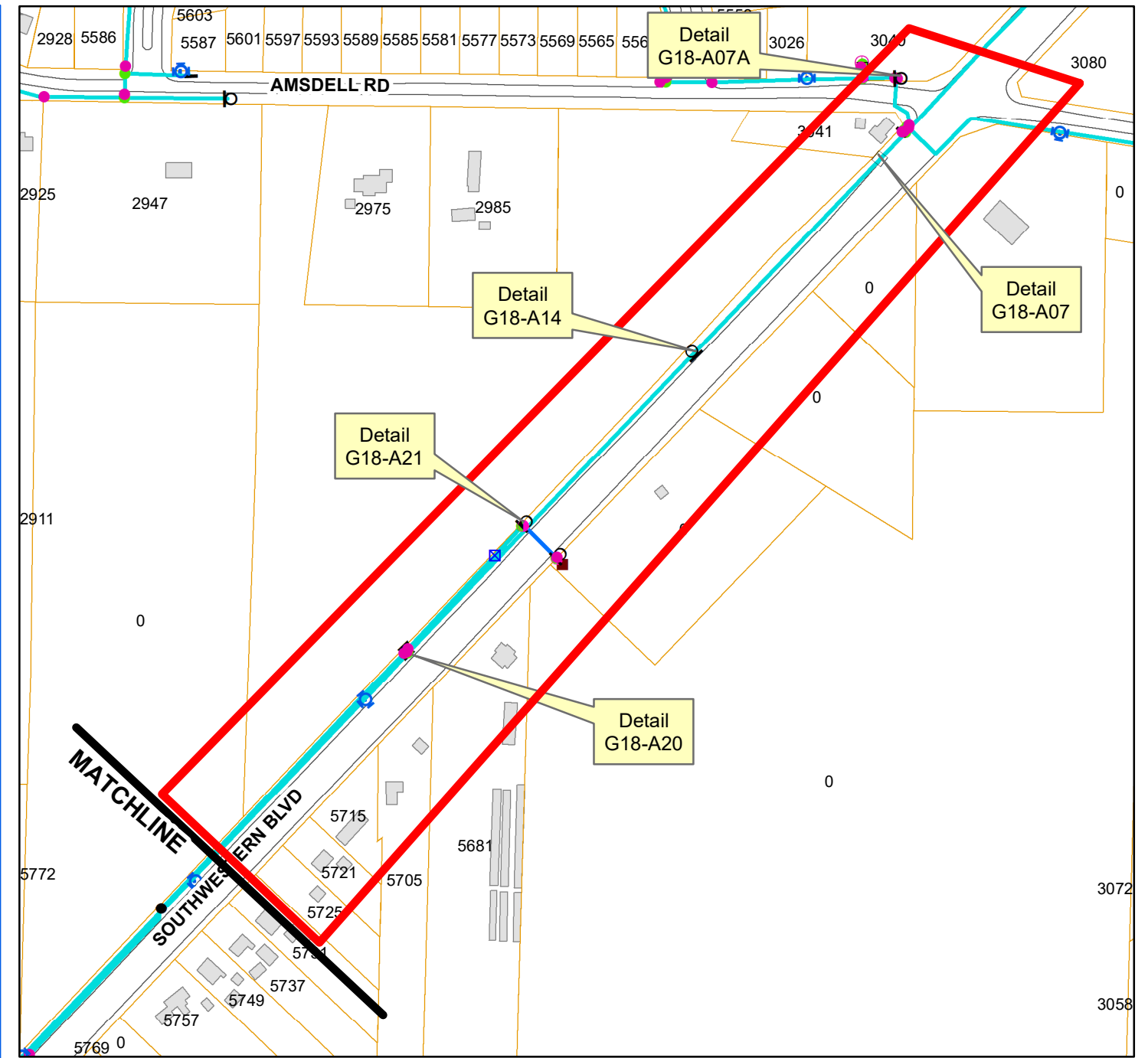
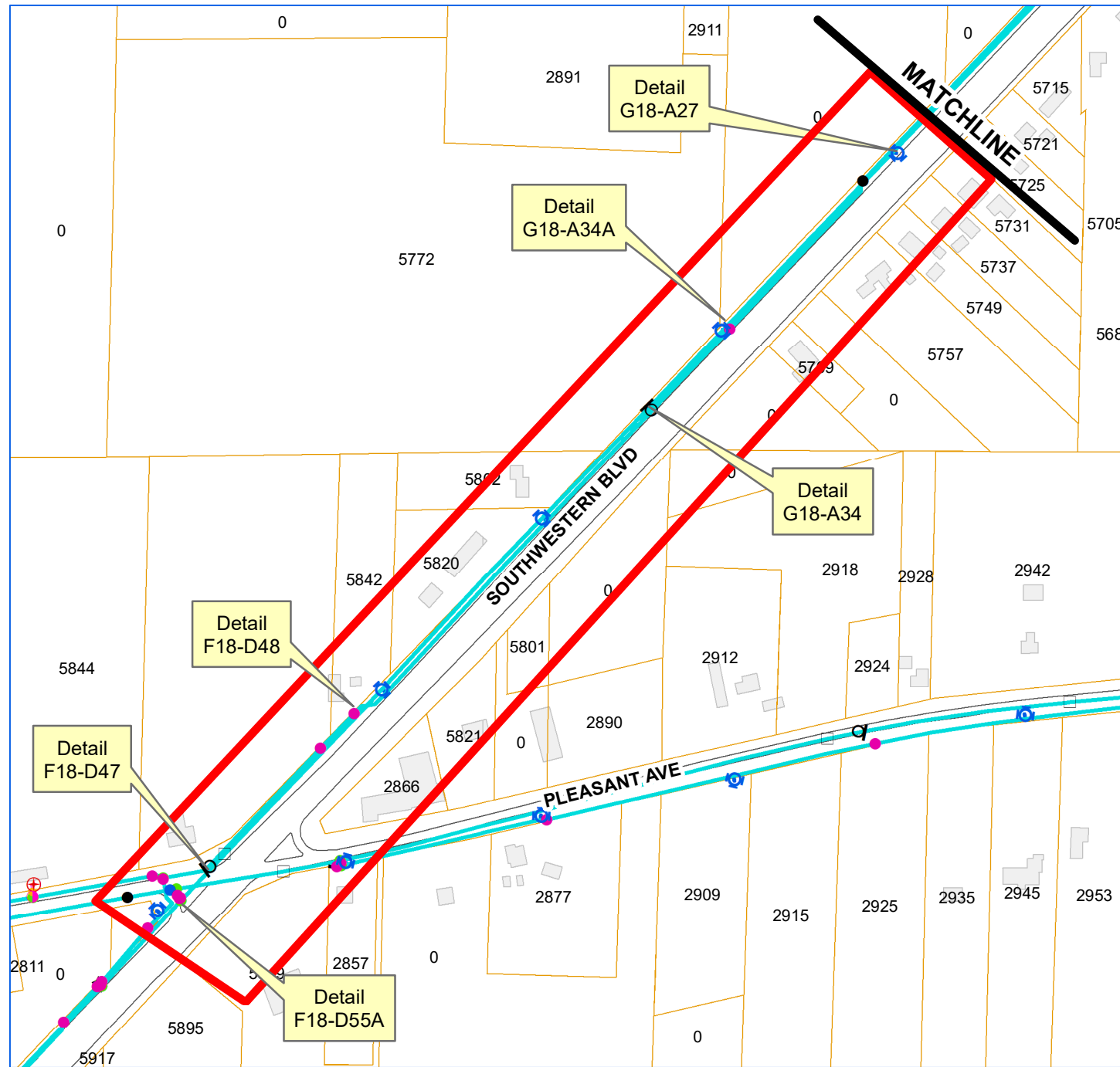
**OAKWOOD AVE. FROM BLASDELL LINE TO GLENWOOD / 7TH ST. FROM WOODLAWN AVE. TO LAKESHORE RD. /
BAY VIEW RD. FROM SOUTH PARK AVE. TO SOUTHWESTERN BLVD. /
PLEASANT AVE. FROM #3179 TO AMSDELL RD. / SOUTHWESTERN BLVD. FROM PLEASANT AVE. TO AMSDELL RD. /
BUFFALO ST. FROM WEST AVE. TO BRISTOL RD. / BRYANT ST. FROM BUFFALO RD. TO BIG TREE RD. /
HUDSON ST. FROM BUFFALO RD. TO BIG TREE RD. / AND BIG TREE RD. FROM WEST AVE. TO BRISTOL RD.
TOWN OF HAMBURG, NY**



0 120 240 360
Feet

1 inch = 200 feet

DMC



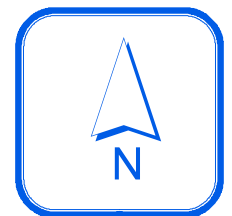
Project limits total 4,125' in length



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "B"**

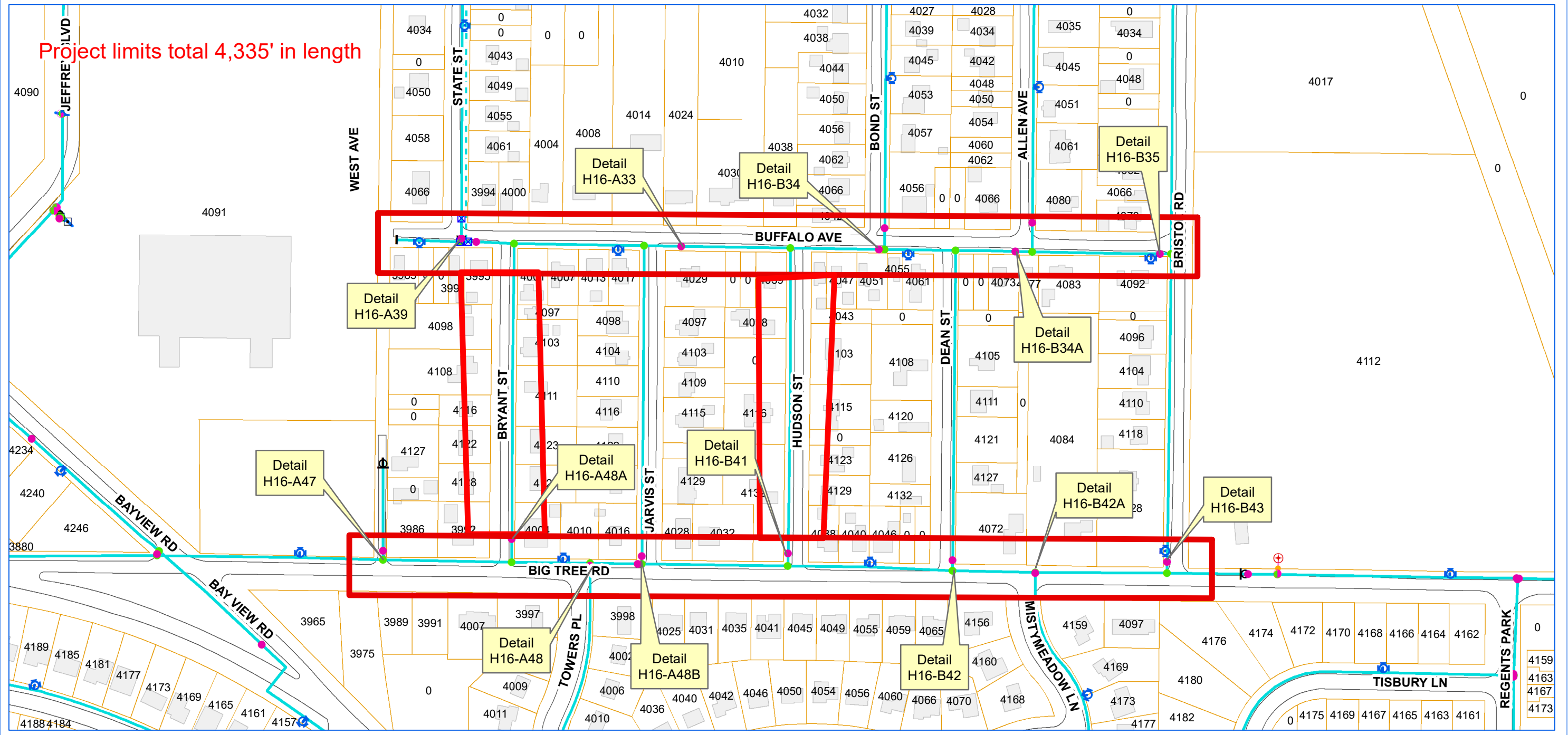
**OAKWOOD AVE. FROM BLASDELL LINE TO GLENWOOD / 7TH ST. FROM WOODLAWN AVE. TO LAKESHORE RD. /
BAY VIEW RD. FROM SOUTH PARK AVE. TO SOUTHWESTERN BLVD. /
PLEASANT AVE. FROM #3179 TO AMSDELL RD. / SOUTHWESTERN BLVD. FROM PLEASANT AVE. TO AMSDELL RD. /
BUFFALO ST. FROM WEST AVE. TO BRISTOL RD. / BRYANT ST. FROM BUFFALO RD. TO BIG TREE RD. /
HUDSON ST. FROM BUFFALO RD. TO BIG TREE RD. / AND BIG TREE RD. FROM WEST AVE. TO BRISTOL RD.
TOWN OF HAMBURG, NY**



0 180 360 540 Feet

1 inch = 300 feet

DMC



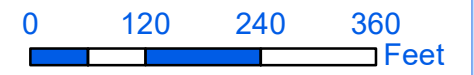
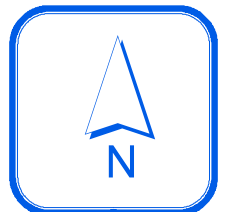
Project limits total 4,335' in length



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "B"**

**OAKWOOD AVE. FROM BLASDELL LINE TO GLENWOOD / 7TH ST. FROM WOODLAWN AVE. TO LAKESHORE RD. /
BAY VIEW RD. FROM SOUTH PARK AVE. TO SOUTHWESTERN BLVD. /
PLEASANT AVE. FROM #3179 TO AMSDELL RD. / SOUTHWESTERN BLVD. FROM PLEASANT AVE. TO AMSDELL RD. /
BUFFALO ST. FROM WEST AVE. TO BRISTOL RD. / BRYANT ST. FROM BUFFALO RD. TO BIG TREE RD. /
HUDSON ST. FROM BUFFALO RD. TO BIG TREE RD. / AND BIG TREE RD. FROM WEST AVE. TO BRISTOL RD.
TOWN OF HAMBURG, NY**



1 inch = 200 feet

DMC

MASTER COPY

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. J.C.W.

DATE: 6-29-71

FIELD

REV. D.K.C.

DATE: 1-15-02

OFFICE

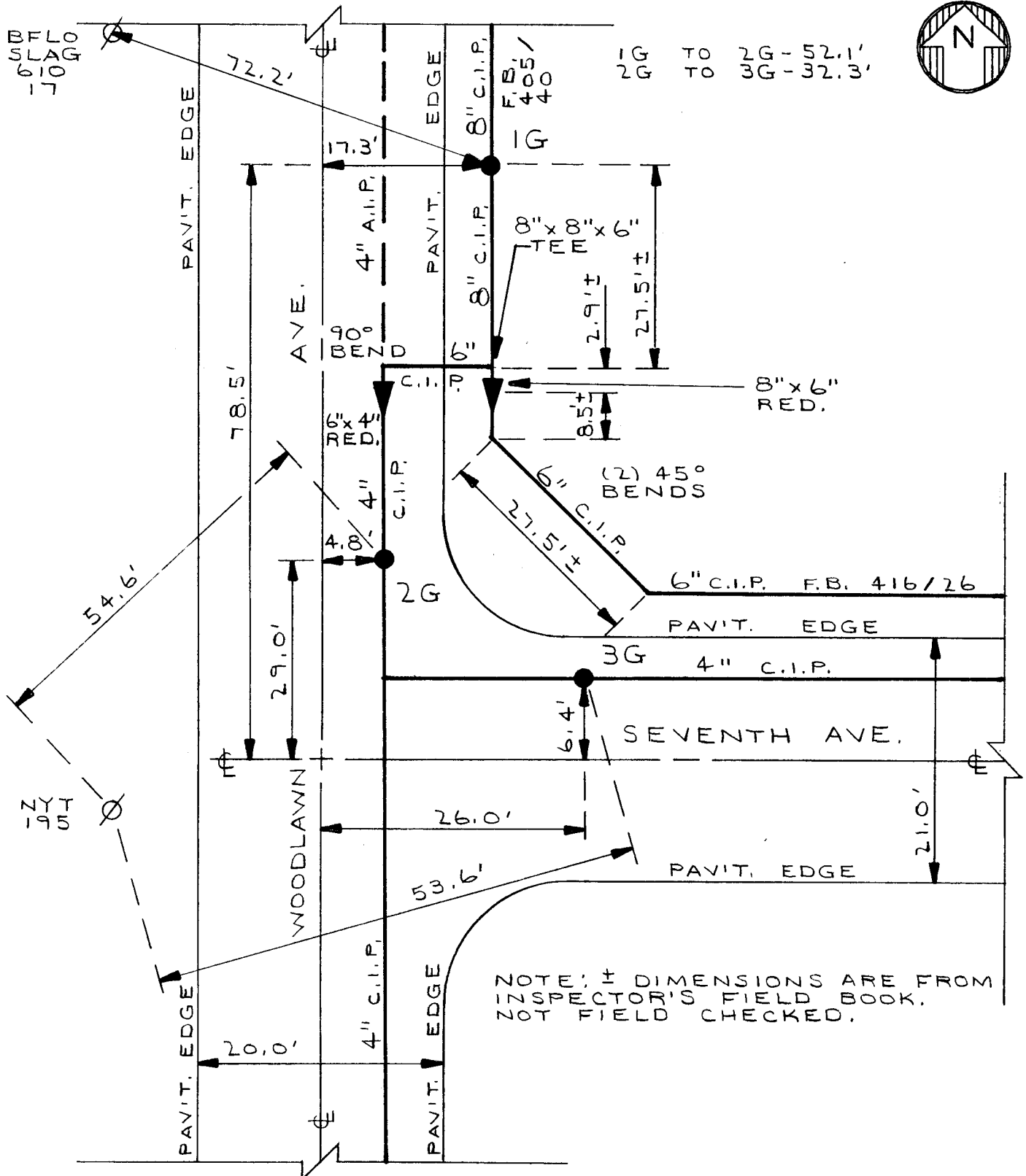
TN. OF HAMBURG

E.C.W.A.

G15-D43

DETAIL SHT. NO.

CURRENT PROJECT NO.



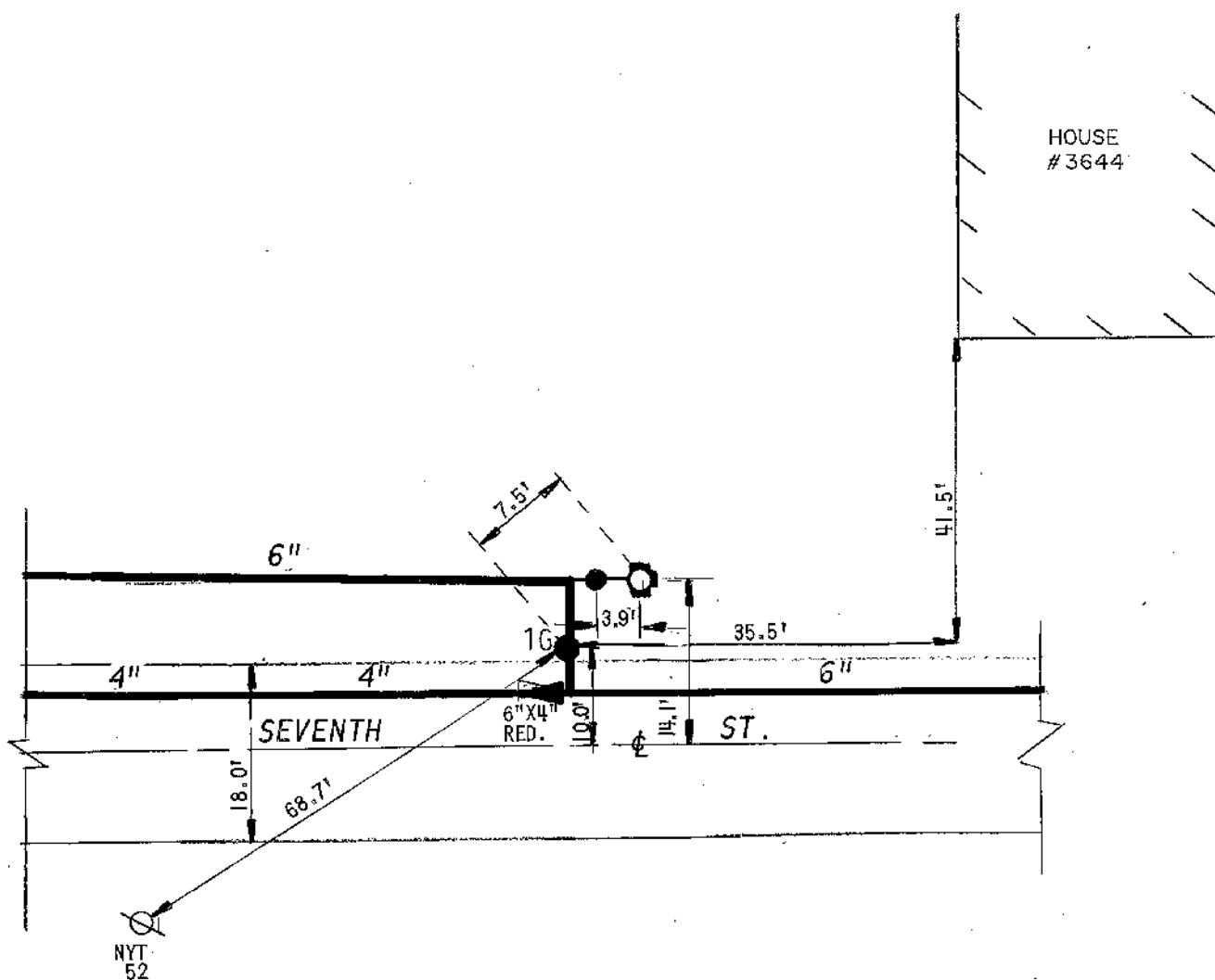
NOTE: ± DIMENSIONS ARE FROM
INSPECTOR'S FIELD BOOK.
NOT FIELD CHECKED.

F.B. 416/26
E.C. 1851
F.B. 405/40
OCP - 4201

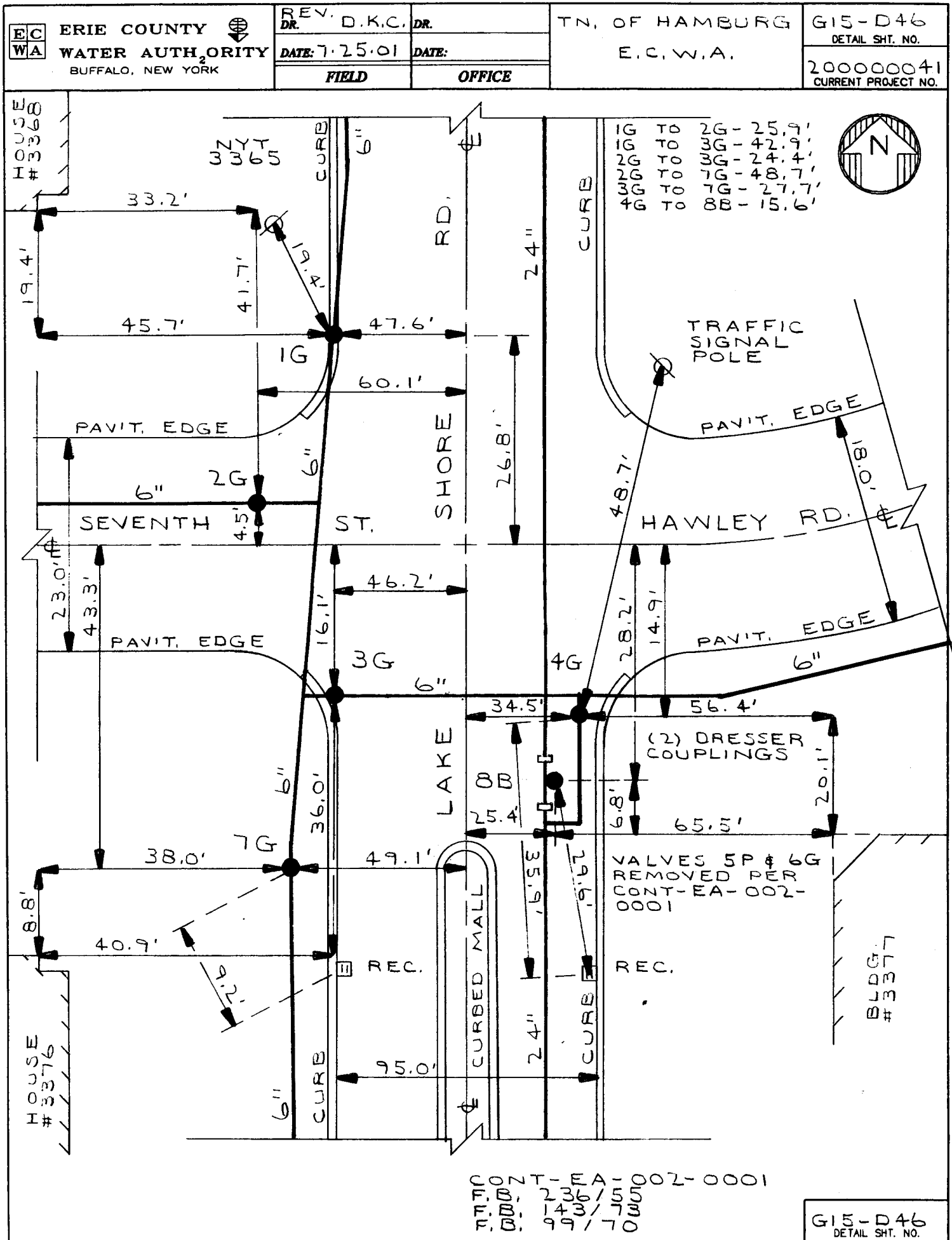
G15-D43

DETAIL SHT. NO.

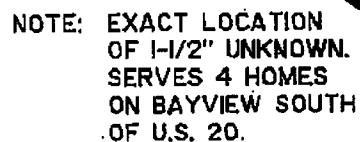
MASTER COPY



FB.416/26



MASTER COPY



DWG. 15-1-2
T13-B2

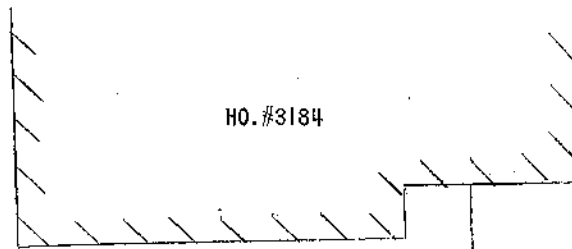
EC ERIE COUNTY
WA WATER AUTHORITY
BUFFALO, NEW YORK

REDRAW
DR. BY: D.C.C.
DATE: 7/1/87
NOT TO SCALE

TOWN OF HAMBURG
HAMBURG NORTH
CENTRAL W.D.

H16-F31A

DETAIL SHEET NO.



PAV'T

EDGE

AMSDELL

RD.

Ø

PAV'T

EDGE

12"

12" B.V.

4.6'

7.7'

23.4'

12" B.V. 12"

28.9'

35.2'

27.2'

28.3'

26.9'

12.5'

17.6'

7.5'

1B

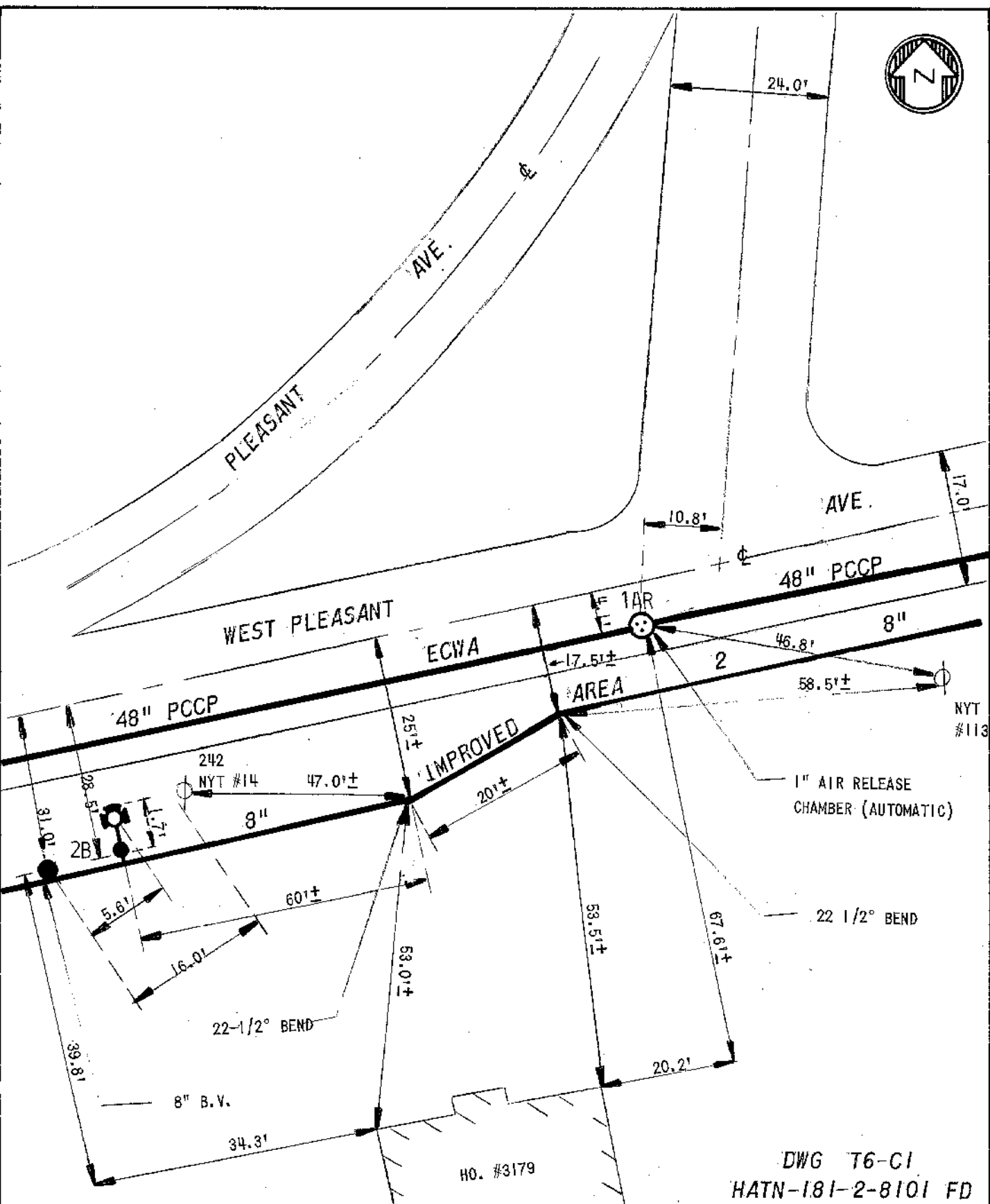
3B

2C

NYSE&G #57
NYT #102

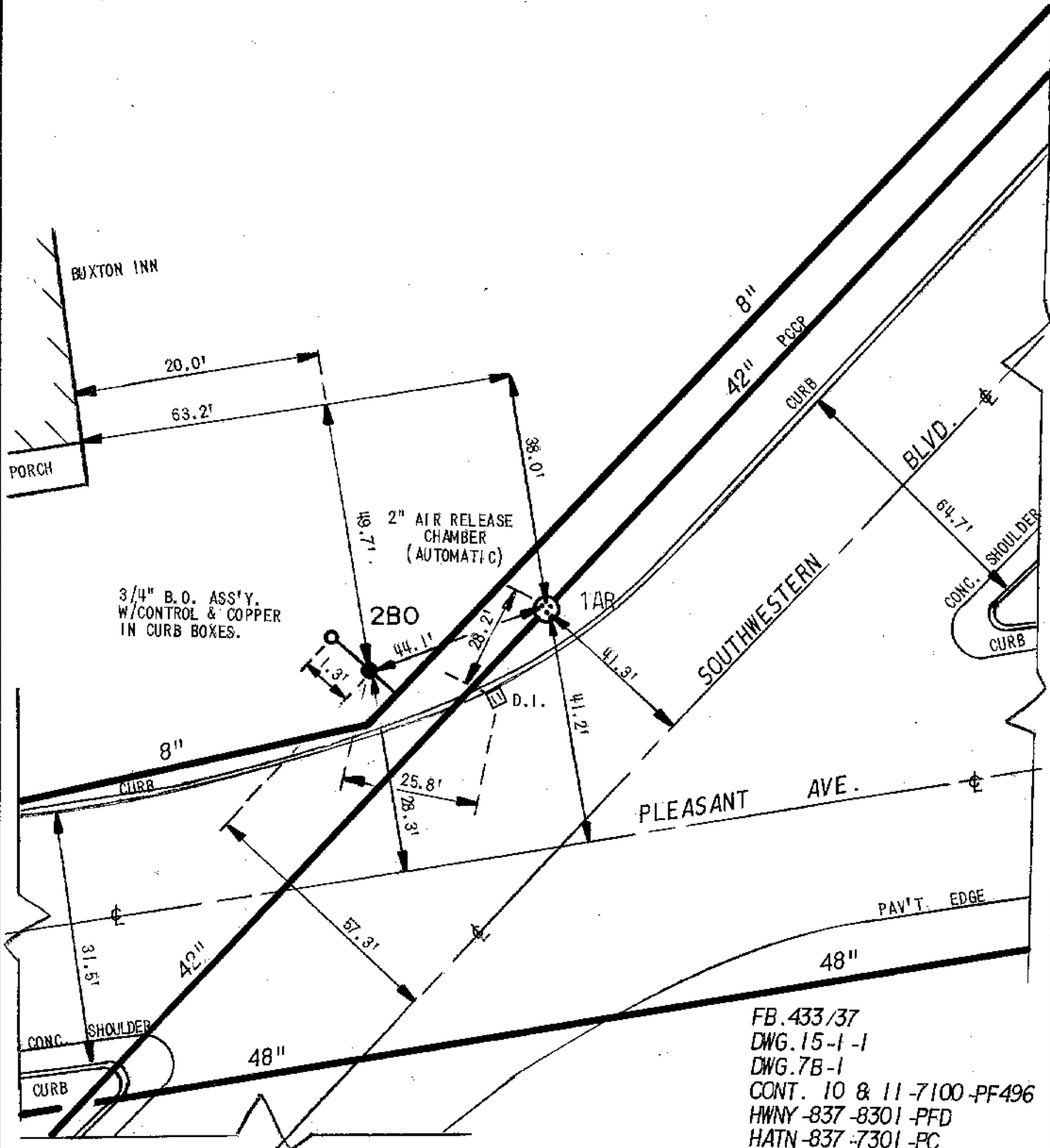
NOTE:
FLAPPER FOR CHECK VALVE
REMOVED. (PER R. GUGGEMOS
ON 10-18-89)

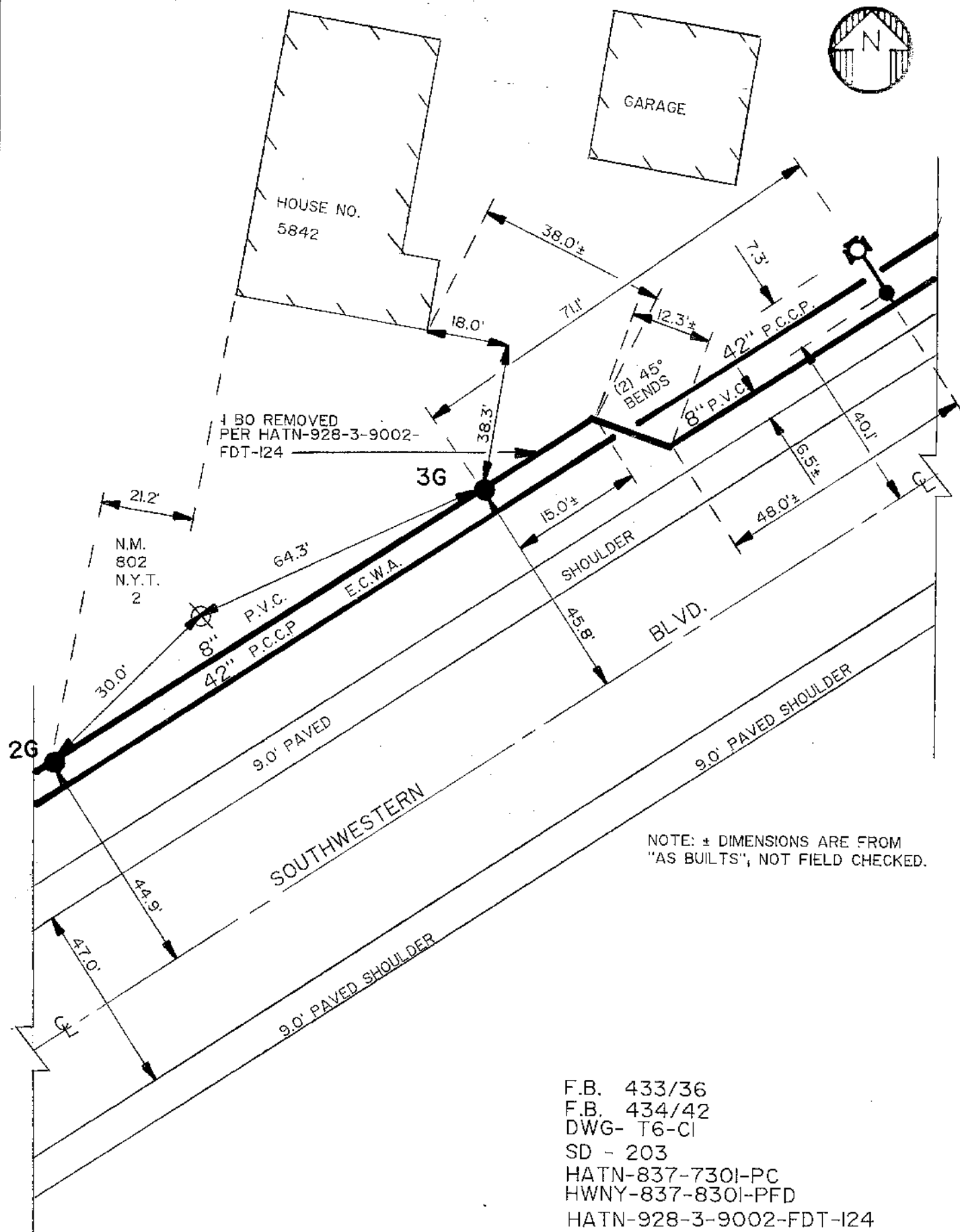
HATN-181-2-8101 FD



H.O. #3179

DWG T6-C1
HATN-181-2-8101 FD





NOTE: ± DIMENSIONS ARE FROM
"AS BUILTS", NOT FIELD CHECKED.

F.B. 433/36
F.B. 434/42
DWG- T6-CI
SD - 203
HATN-837-730I-PC
HWN-837-830I-PFD
HATN-928-3-9002-FDT-I24



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. D.K.C.
DATE: 1/23/92
N.T.S.

TOWN OF HAMBURG
E.C.W.A. & H.M.I.A.

F18-D48

DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK



REVISED
DR. J.M.U.

DATE: 6/27/1989

FIELD

REVISED
DR. R.D.C.

DATE: 7/22/2016

OFFICE

TOWN OF HAMBURG

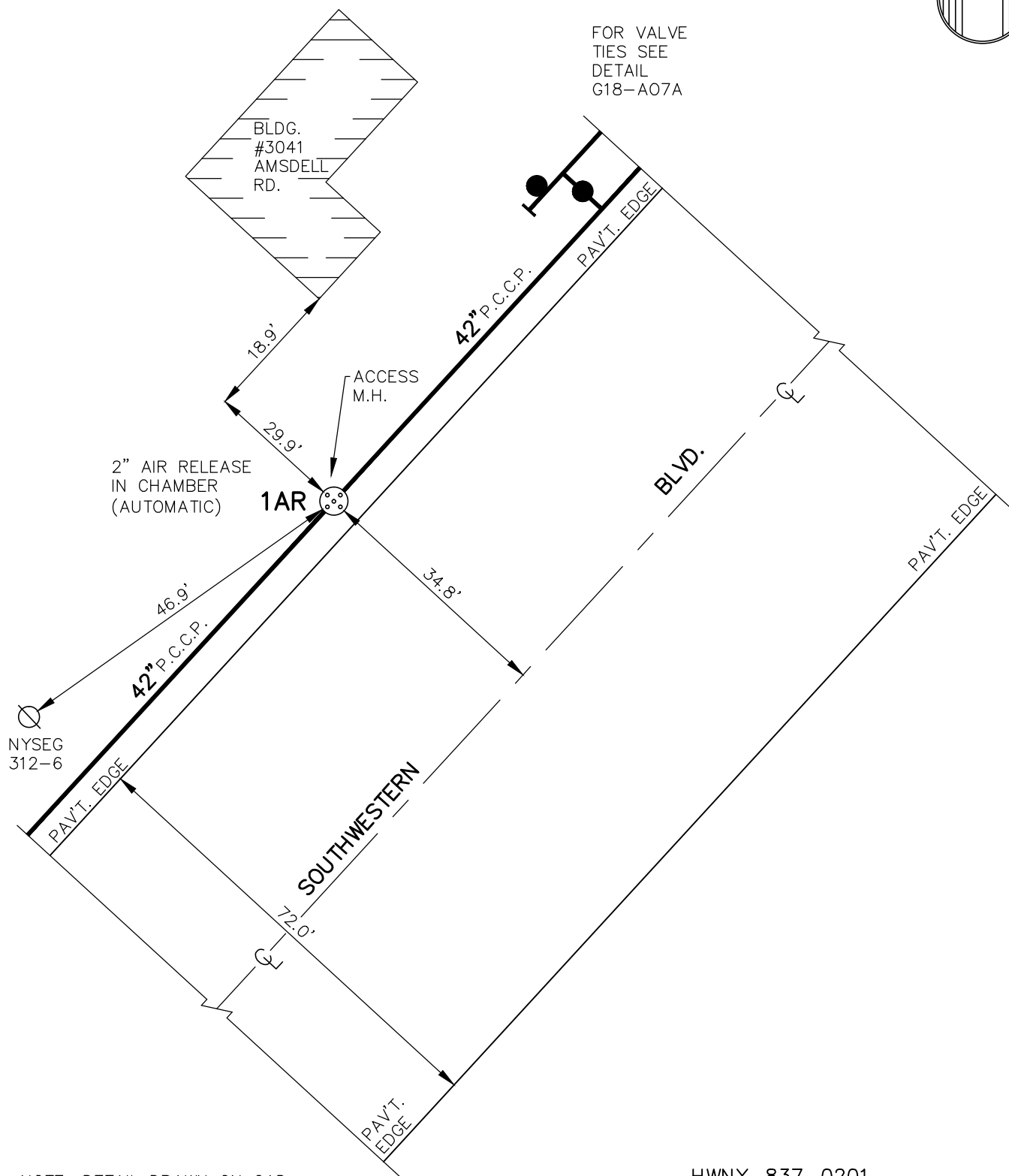
E.C.W.A.

G18-A07

DETAIL SHT. NO.

200200172

CURRENT PROJECT NO.

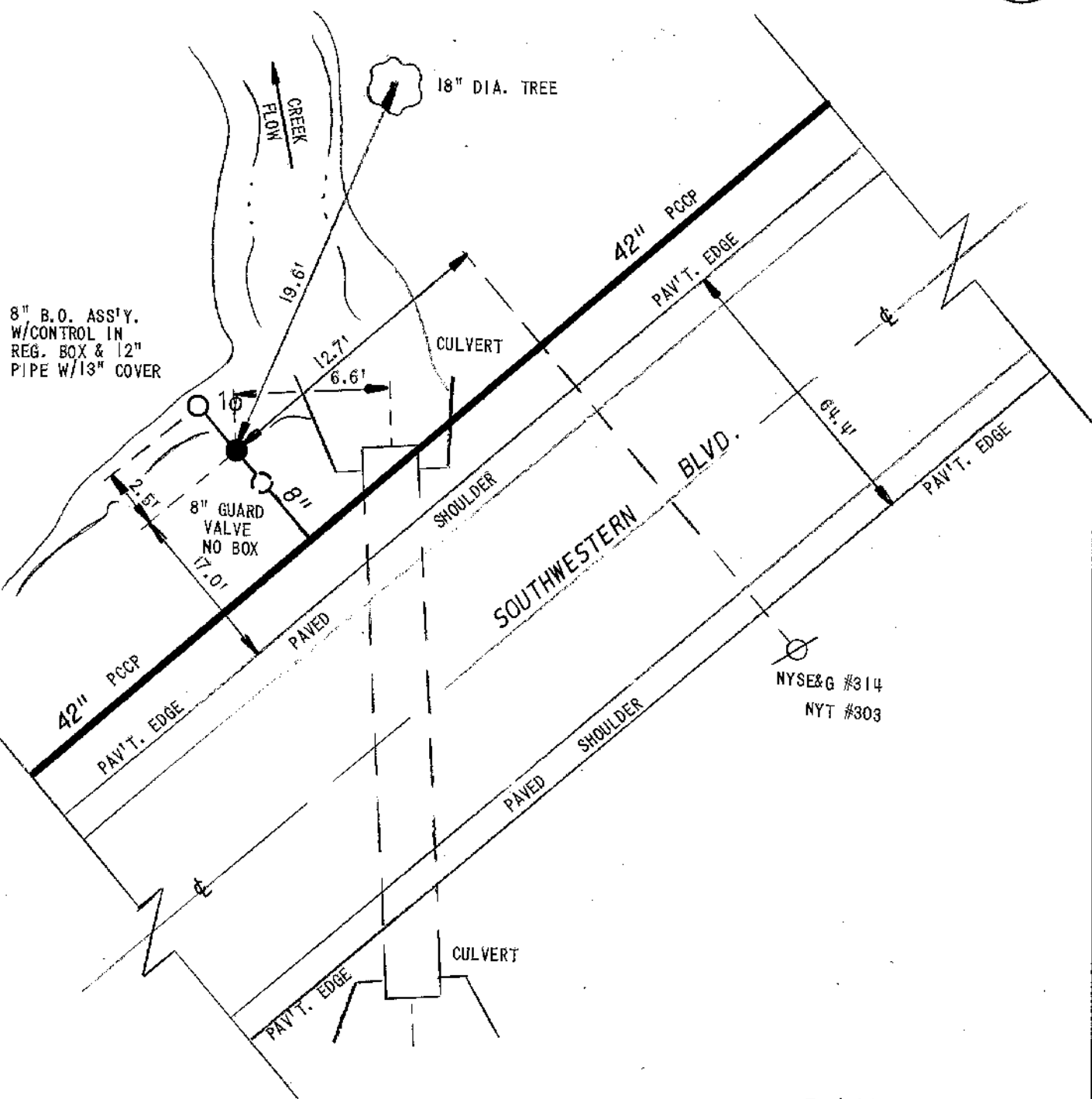


NOTE: DETAIL DRAWN ON CAD
SYSTEM.

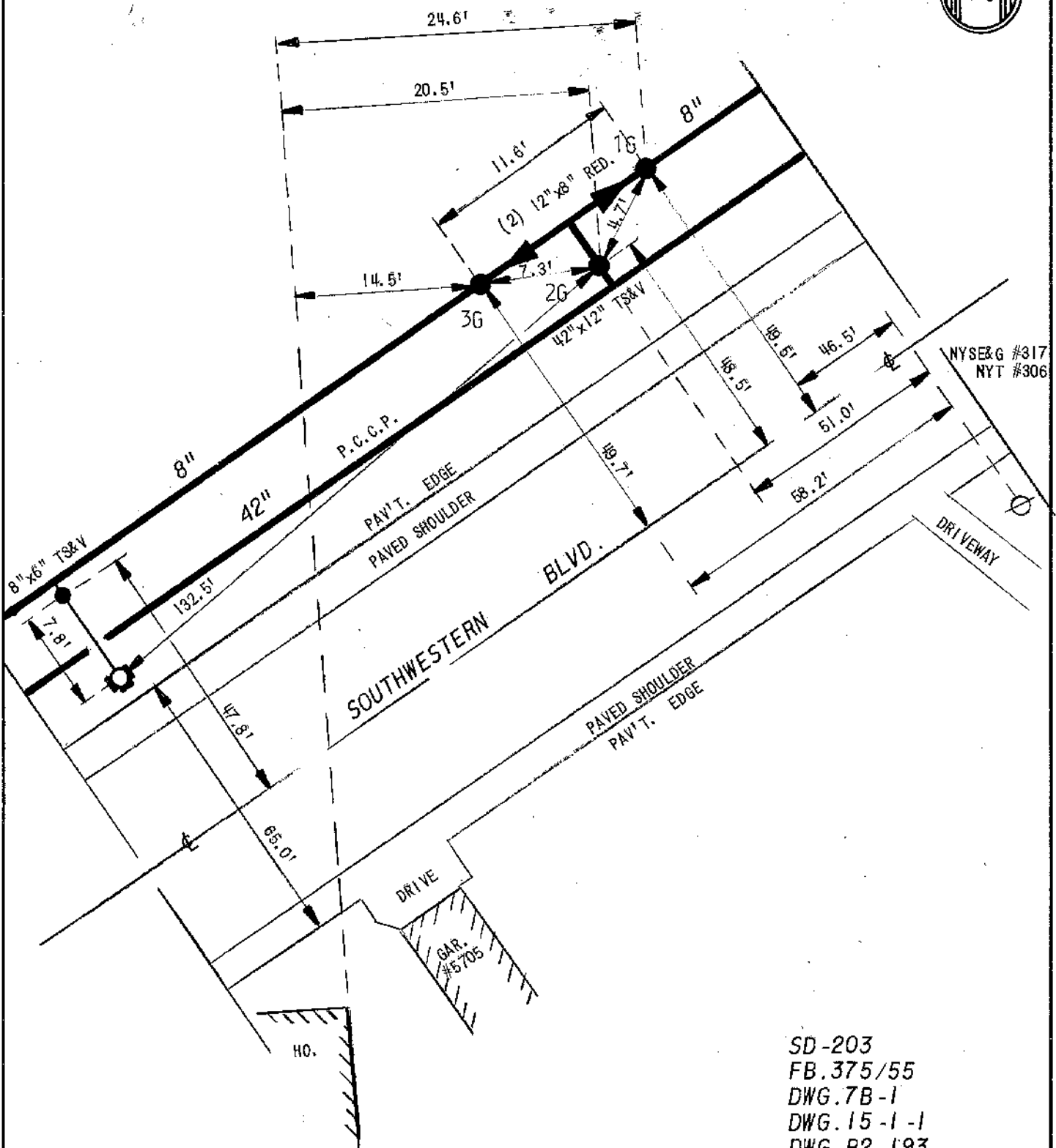
HWNY-837-0201
DWG. 7-B-1
DWG. 15-1-01

G18-A07
DETAIL SHT. NO.

MASTER COPY



F-1485
SD-203
DWG. 15-1-1
DWG. 7B-1
HWNY-837-8301-PFD



DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

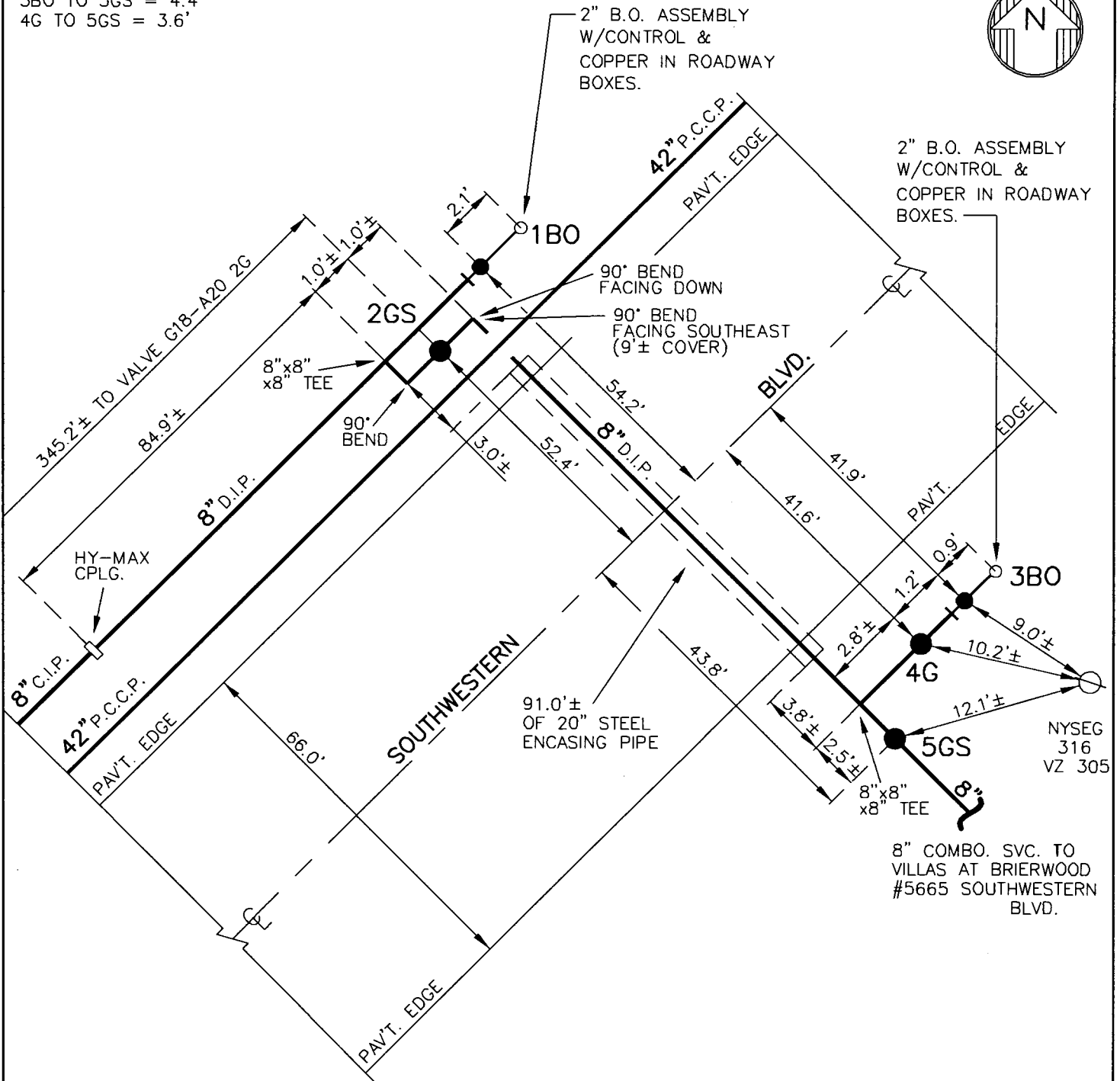
DR. M.T.F.
DATE: 3/30/11
FIELD

DR.
DATE:
OFFICE

TOWN OF HAMBURG
E.C.W.A.

G18-A21
DETAIL SHT. NO.
200800043
CURRENT PROJECT NO.

1B0 TO 2GS = 2.8'
3B0 TO 5GS = 4.4'
4G TO 5GS = 3.6'



NOTE: ± DIMENSIONS ARE FROM
INSPECTOR'S FIELD NOTES
NOT FIELD CHECKED

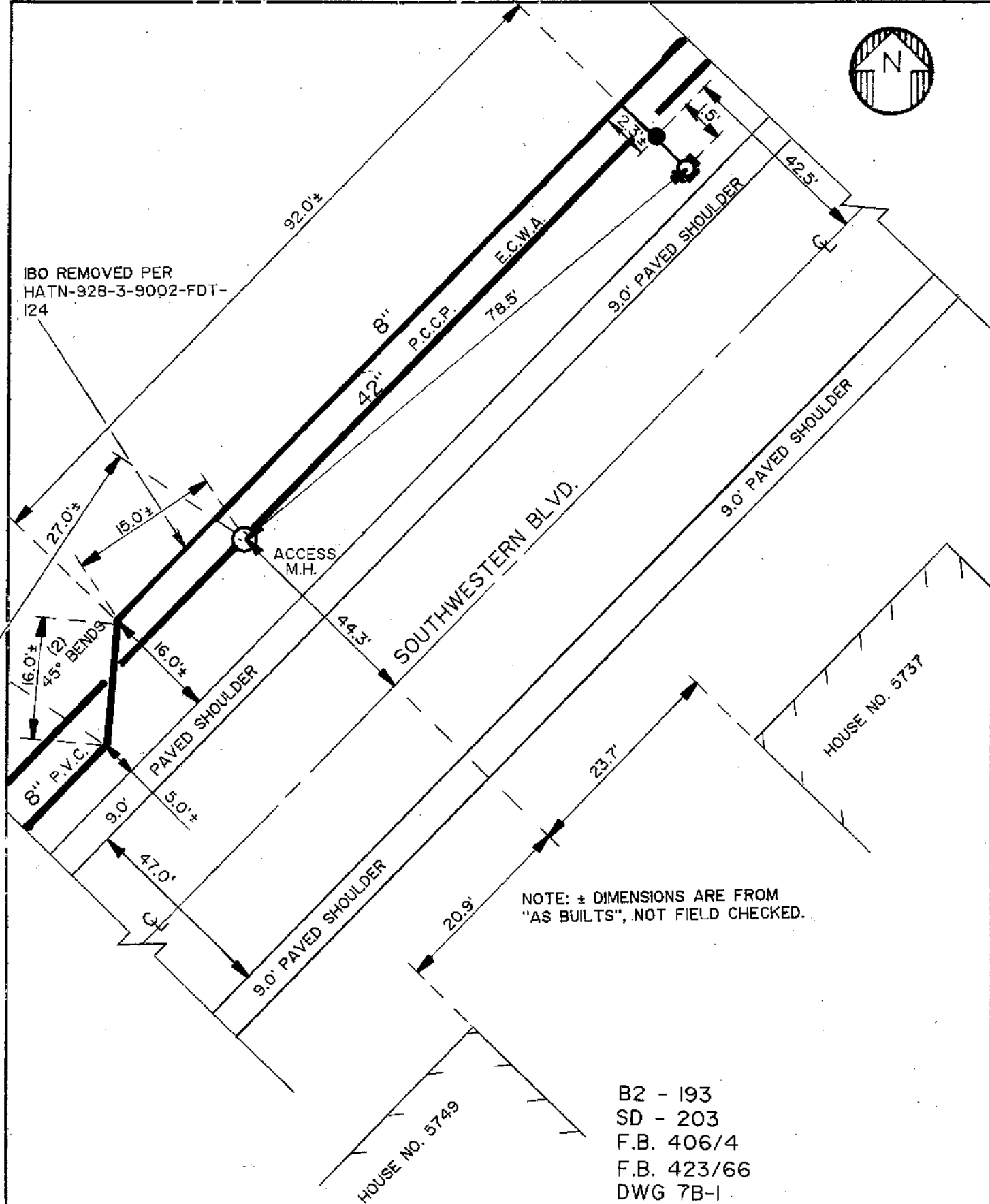
F.B. 467/54,55
HATN-837-0802
HATN-837-0710

G18-A21
DETAIL SHT. NO.

MASTER COPY



IBO REMOVED PER
HATN-928-3-9002-FDT-
124



NOTE: * DIMENSIONS ARE FROM
"AS BUILTS", NOT FIELD CHECKED.

B2 - 193
SD - 203
F.B. 406/4
F.B. 423/66
DWG 7B-I
DWG 15-I-I
HWNY-837-8301-PFD
HATN-928-3-9002-FDT-124



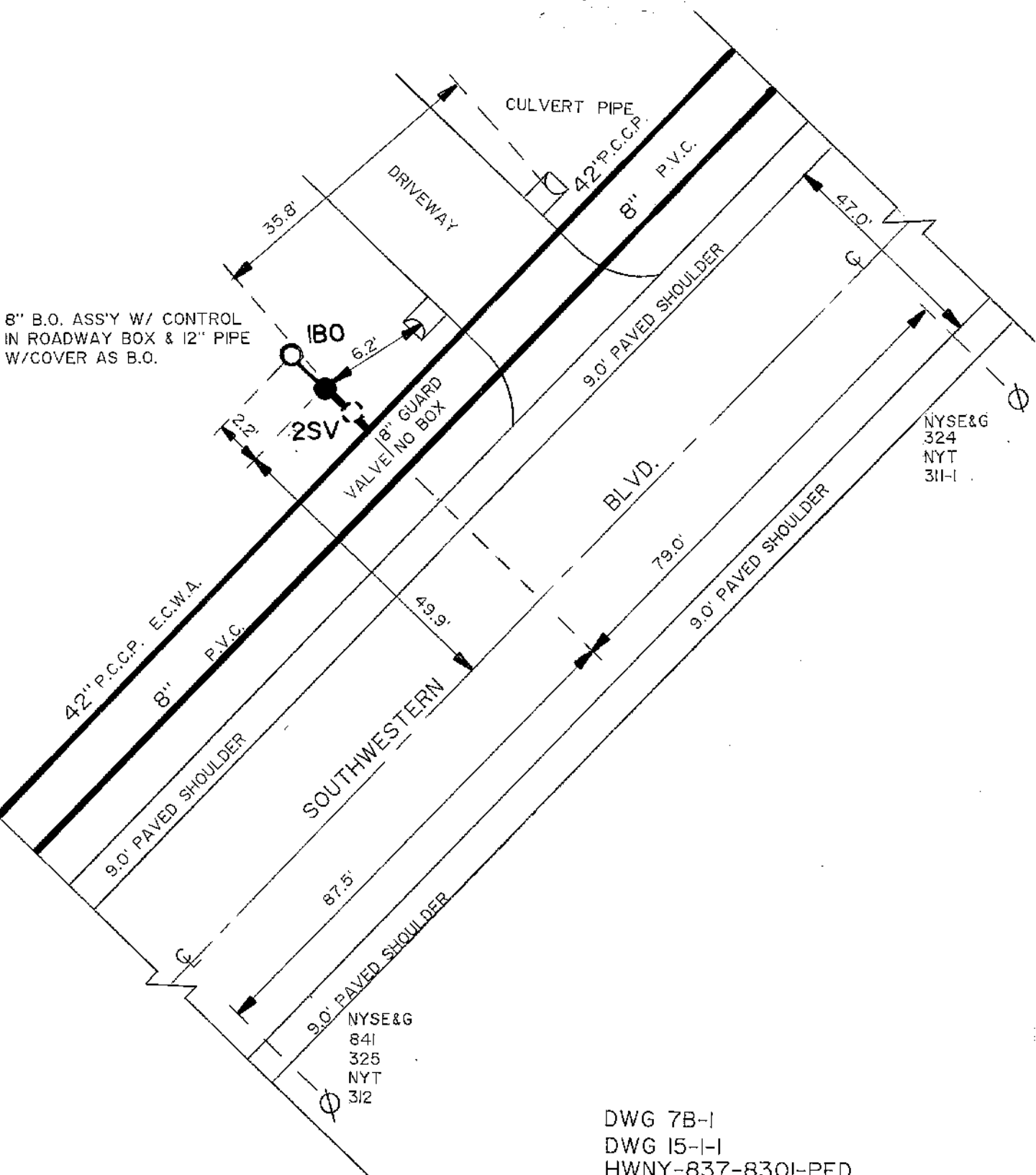
ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. J.M.S.
DATE: 6-30-95
N.T.S.

TOWN OF HAMBURG
E.C.W.A. & H.M.I.A.

G18-A27

DETAIL SHEET NO.



DWG 7B-1
DWG 15-1-1
HWNY-837-8301-PFD
HATN-928-3-9002-FDT-124



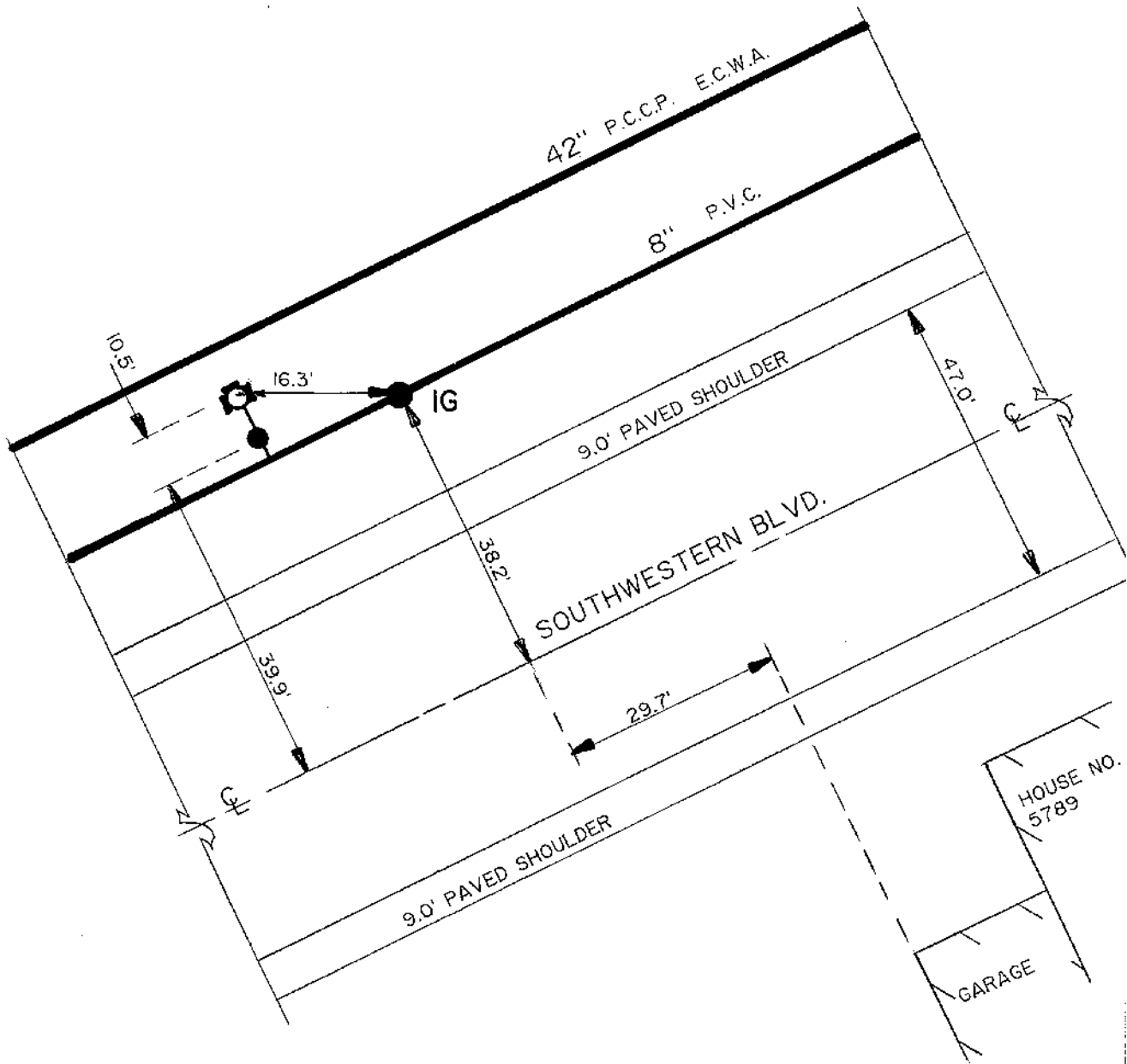
ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. D.K.C.
DATE: 1/22/92
N.T.S.

TOWN OF HAMBURG
E.C.W.A. & H.M.I.A.

GI8-A34

DETAIL SHEET NO.



DWG. 7B-1
DWG. 15-1-1
HWNY-837-8301-PFD
HATN-928-3-9002-FDT-124



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. L.A.B.
DATE: 1/21/92
N.T.S.

TOWN OF HAMBURG
E.C.W.A. & H.M.I.A.

GI8-A34A

DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. R.B.B.

DATE: 6/28/10

FIELD

REVISED
DR. M.J.M.

DATE: 4/20/12

OFFICE

TOWN OF HAMBURG

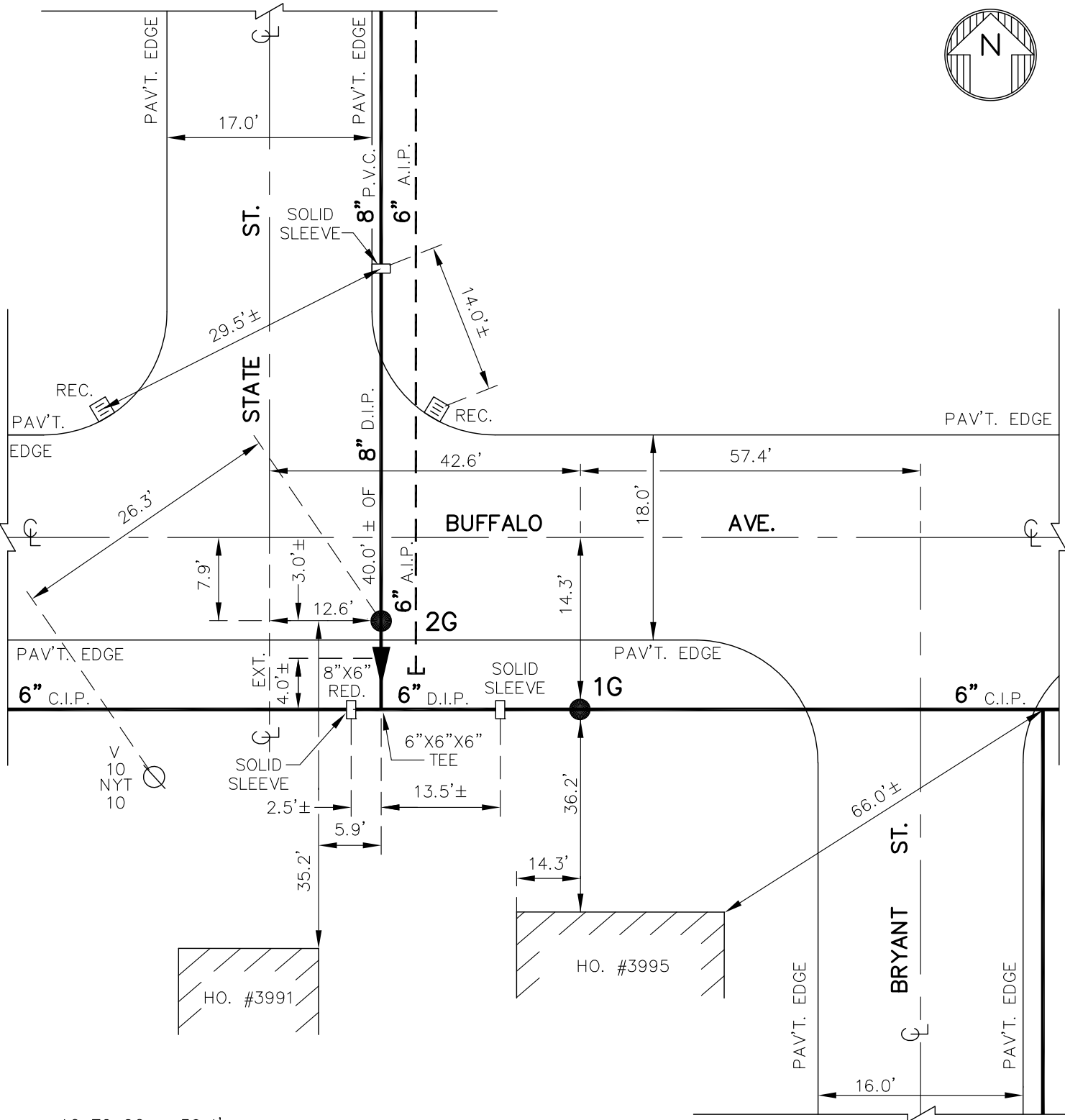
E.C.W.A.

H16-A39

DETAIL SHT. NO.

200900221

CURRENT PROJECT NO.



1G TO 2G = 30.4'

NOTE: ± DIMENSIONS ARE
FROM "AS-BUILTS"
NOT FIELD CHECKED
DETAIL DRAWN ON
CAD SYSTEM.

HATN-367-0902

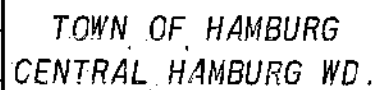
F-2780

DWG. D1-51B

H16-A39

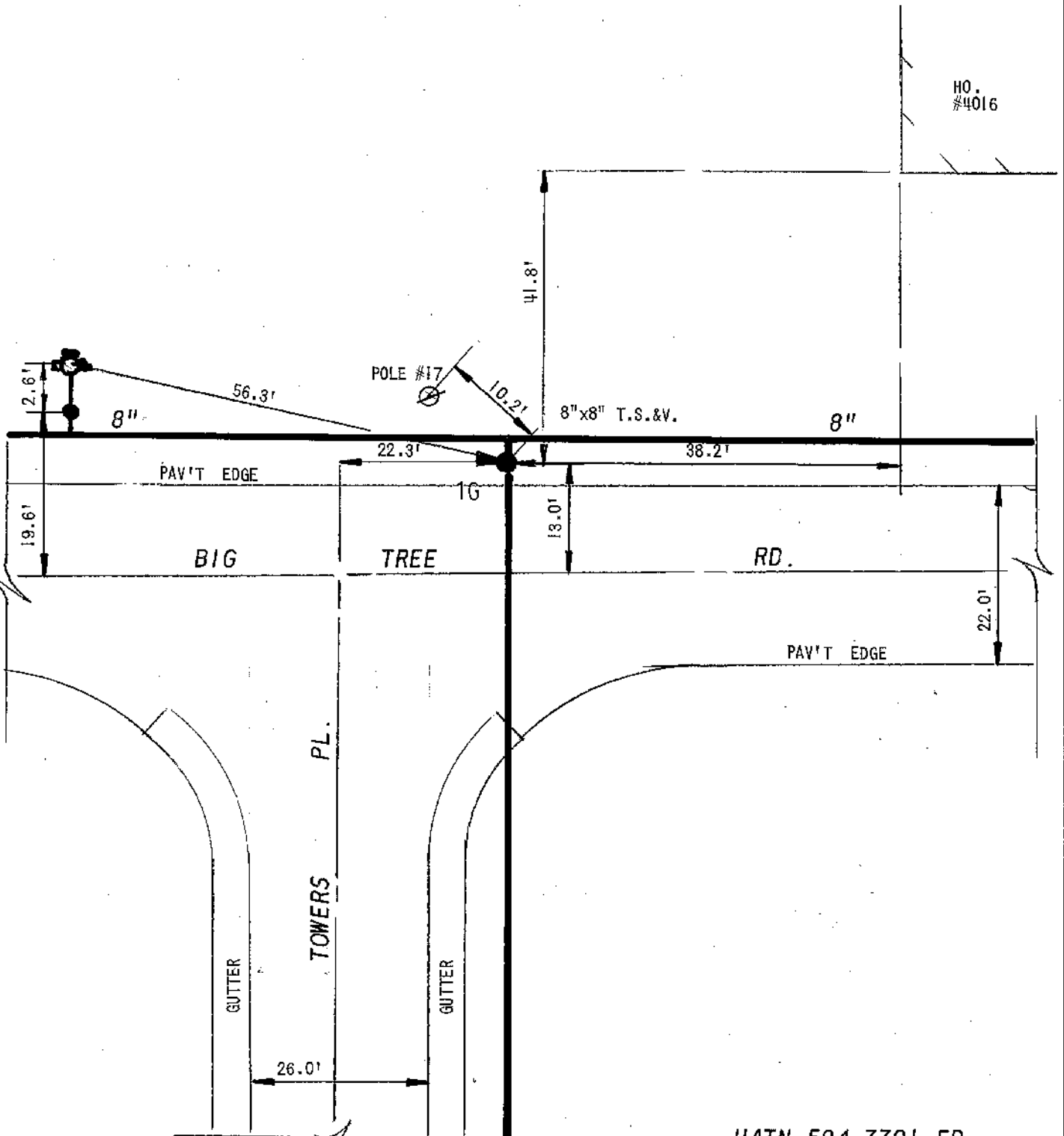
DETAIL SHT. NO.

MASTER COPY





HO.
#4016



HATN-594-7701-FD

EC **ERIE COUNTY**
WA **WATER AUTHORITY**
BUFFALO, NEW YORK

REDRAWN BY: R.L.C.

DATE: 4/25/79

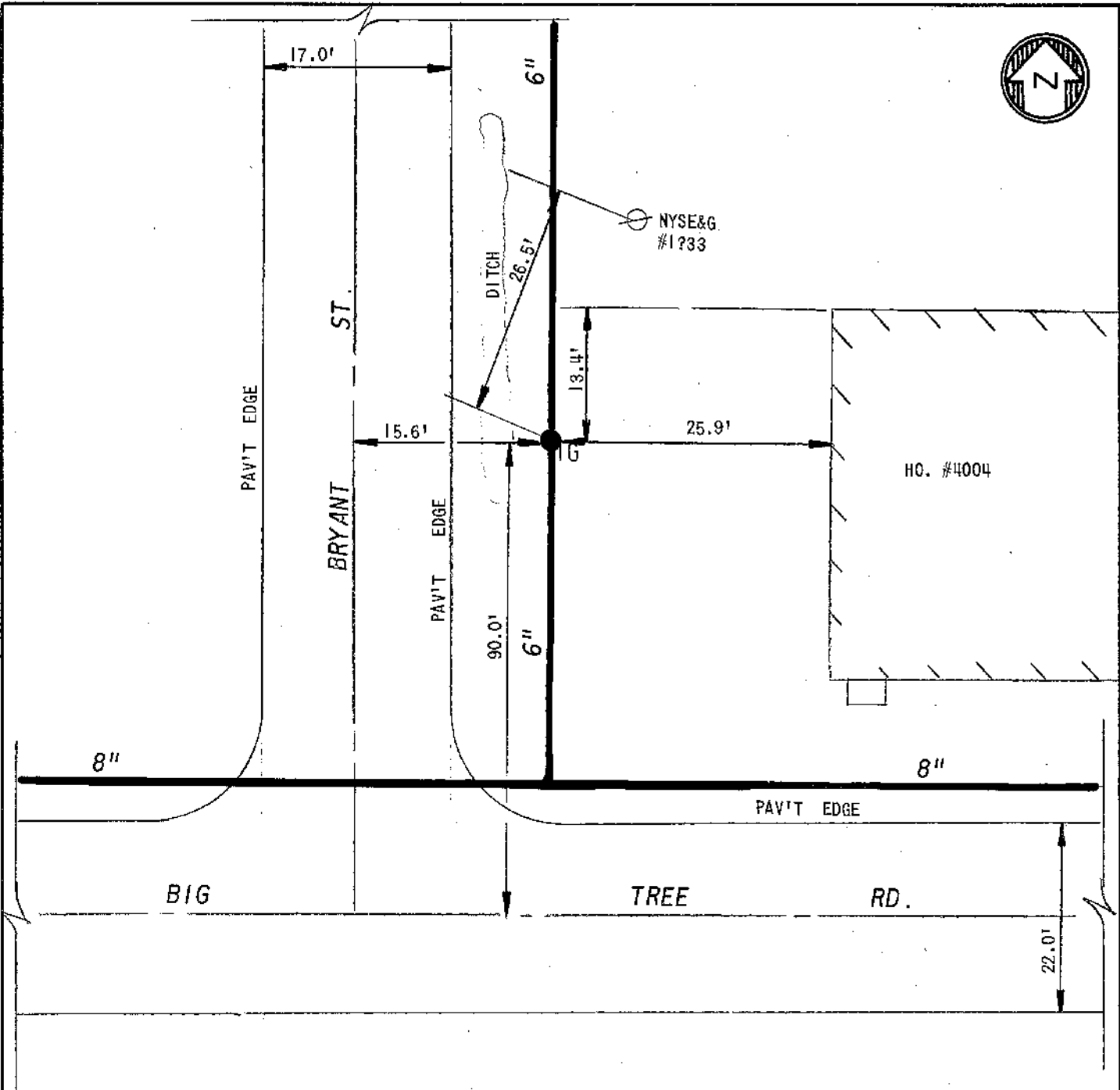
NOT TO SCALE

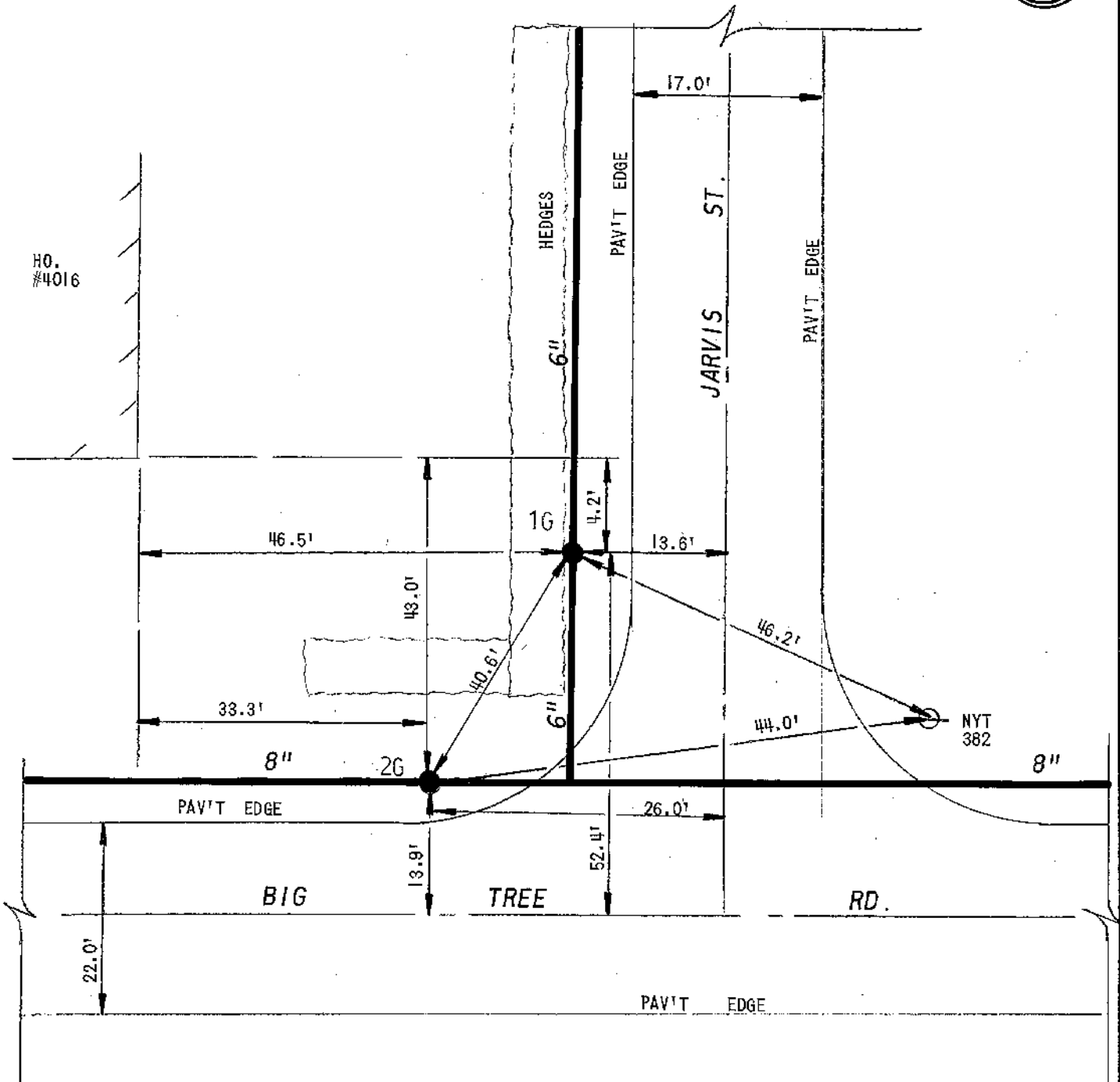
TOWN OF HAMBURG

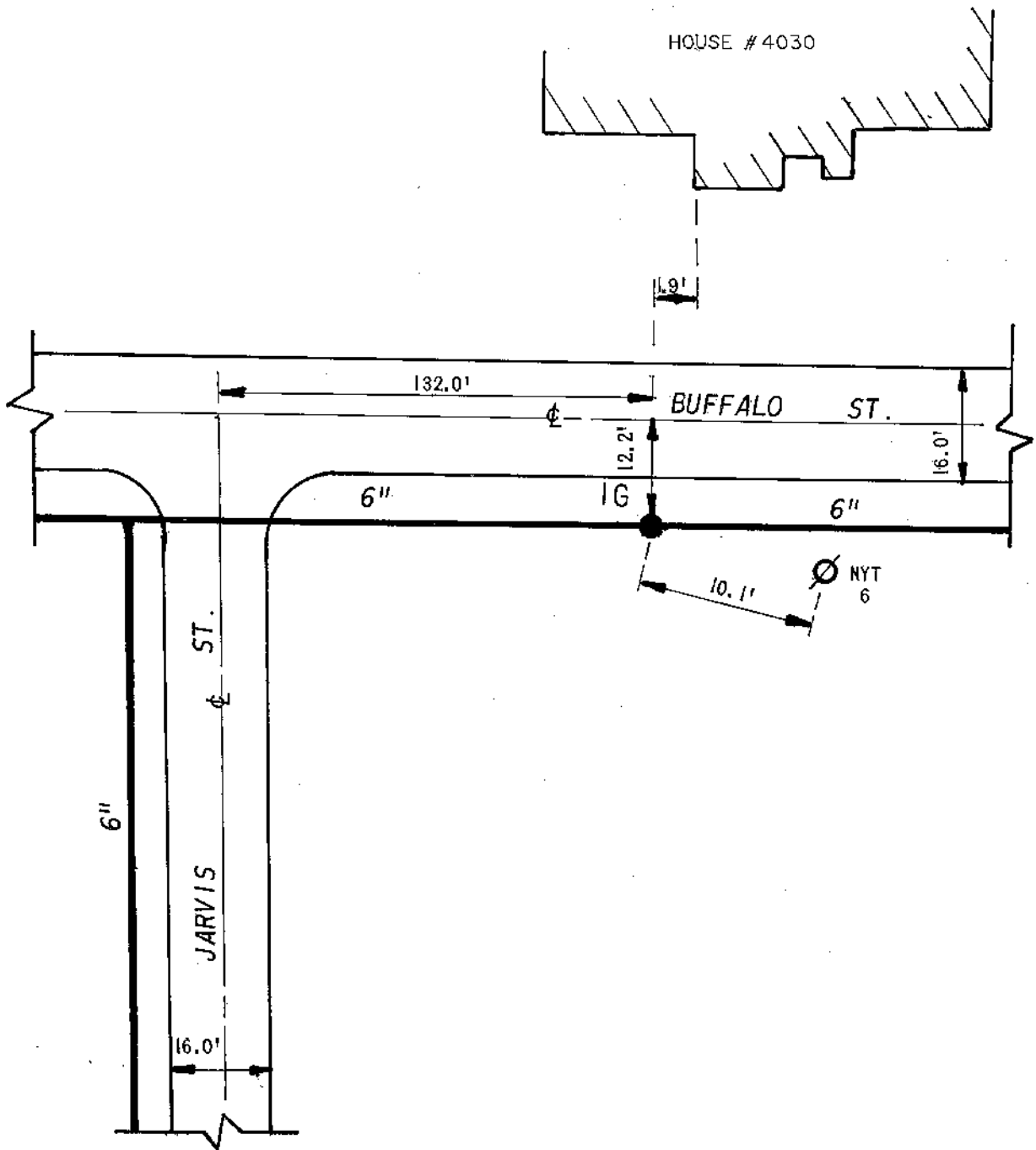
CENTRAL HAMBURG W.D.

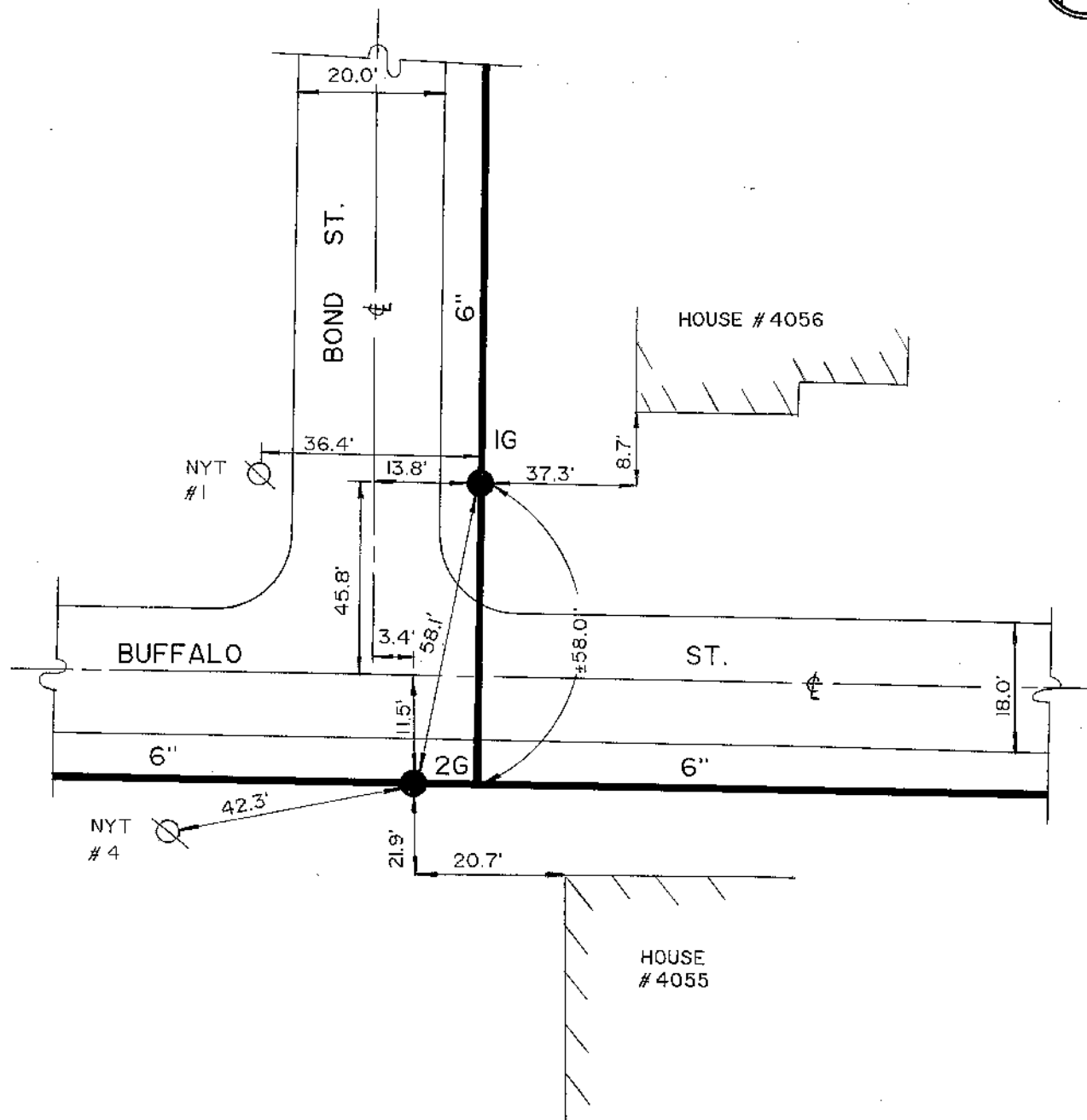
H16-A48

DETAIL SHEET NO.









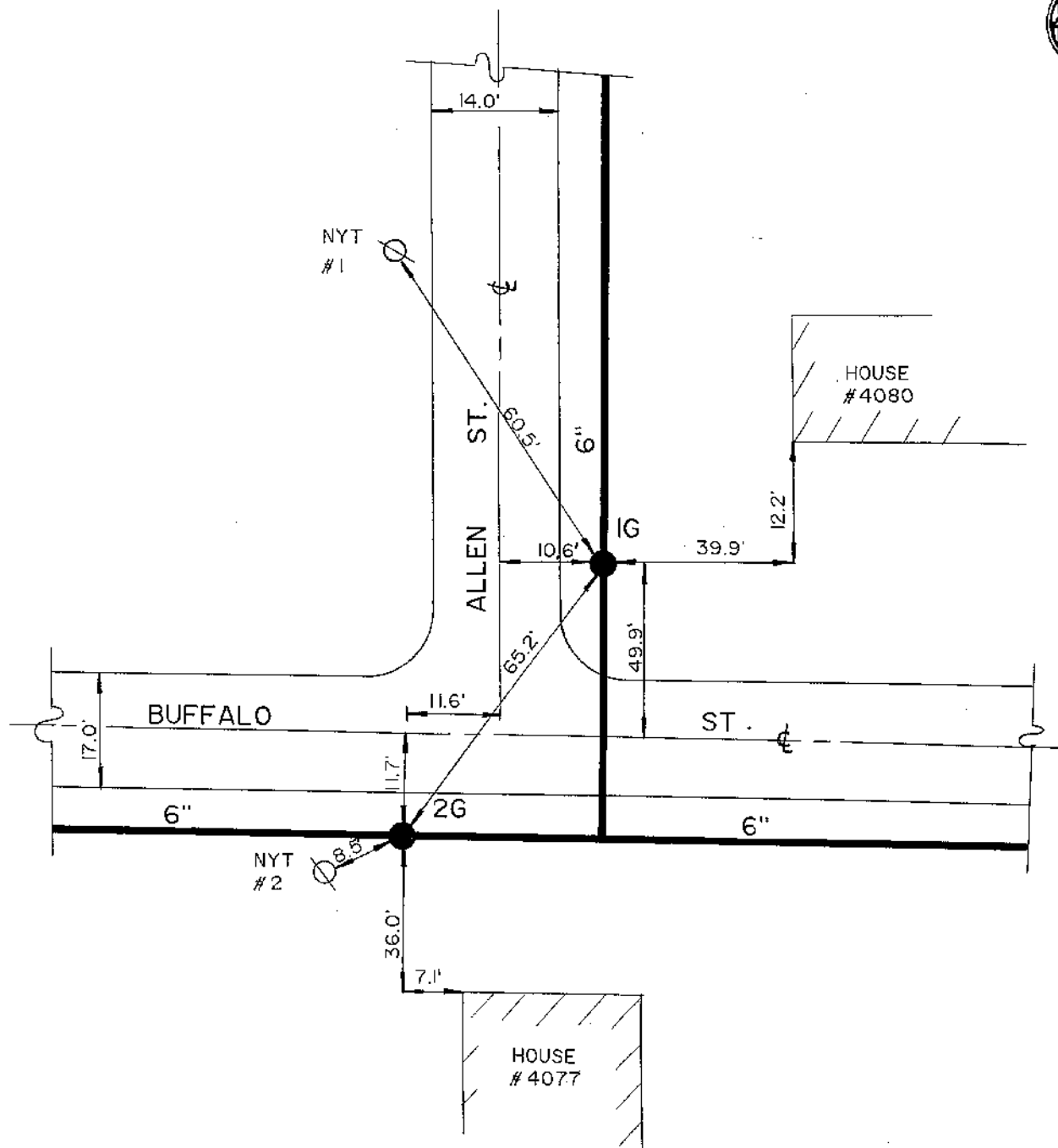
DWG.DI-5I
F-2780

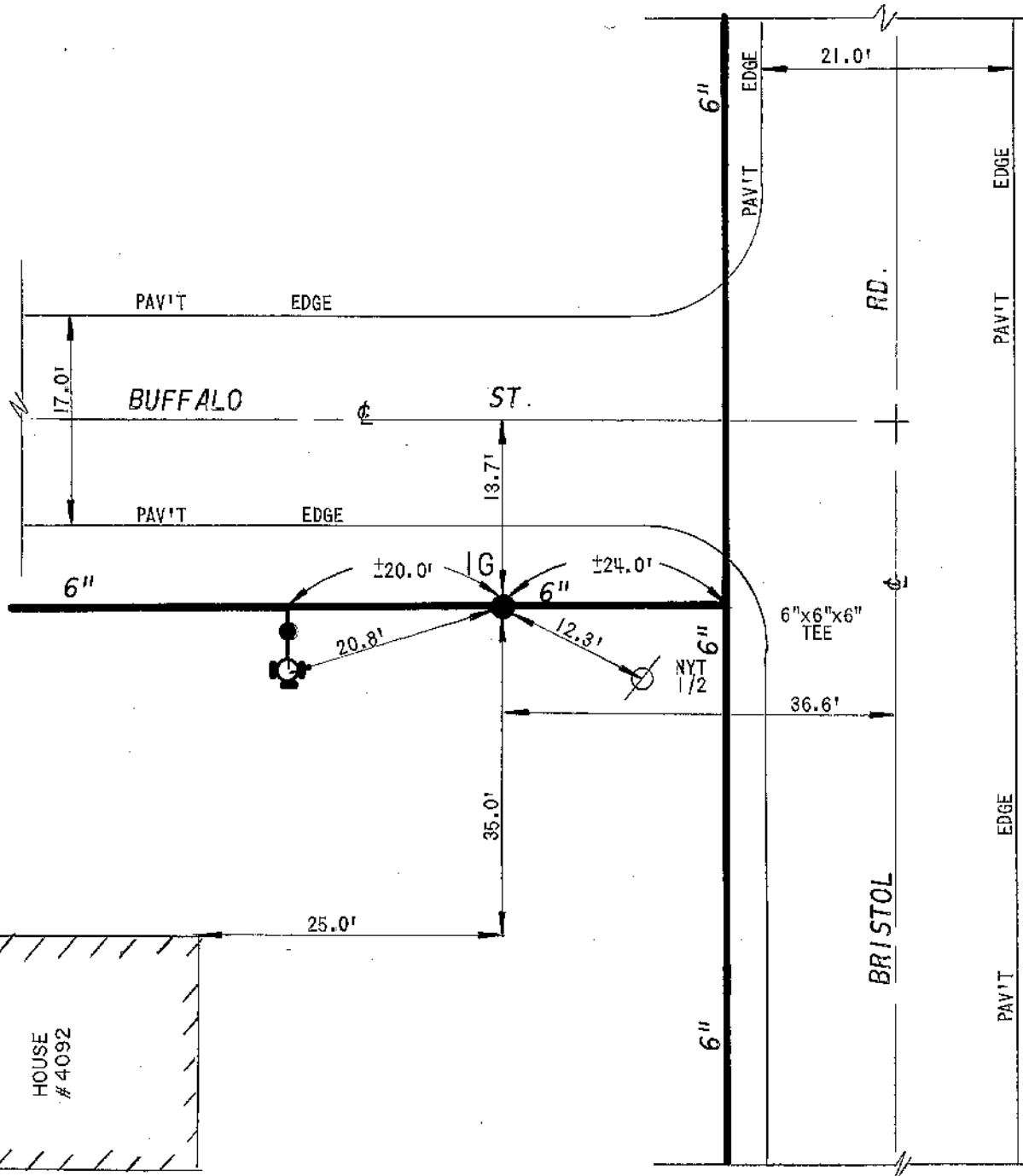
EC ERIE COUNTY
WA WATER AUTHORITY
BUFFALO, NEW YORK

REVISED DR. BY: B.M.
DATE: 3/2/92
NOT TO SCALE

TOWN OF HAMBURG
CENTRAL HAMBURG
W.D.

H16-B34
DETAIL SHEET NO.





DWG. DI-51
F-2780

DETAIL SHEET NO.



HOUSE
#4132

PORCH

91.6'

26.8'

6"

EDGE

PAV'T

17.0'

ST.

EDGE

PAV'T

IG

14.0'

HUDSON

34.3'

50.0'

6"

±39.0'

8"

8"

PAV'T EDGE

V174

8"x8"x6" TEE

PAV'T EDGE

BIG

TREE

RD.

22.0'

PAV'T EDGE

PAV'T EDGE

DWG. D1-51
F-2780

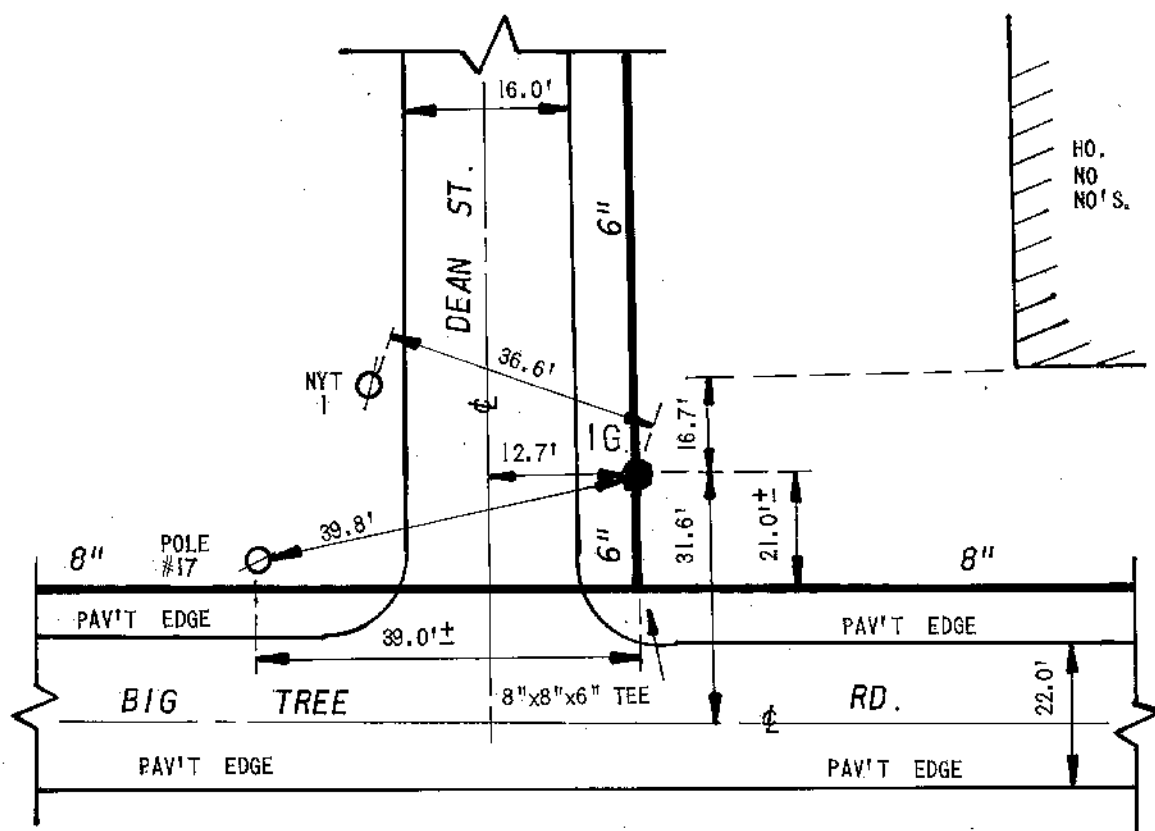
DETAIL SHEET NO.

EC **ERIE COUNTY**
WA **WATER AUTHORITY**
BUFFALO, NEW YORK

REVISED
DR. BY: B.M.
DATE: 3/2/92
SCALE: NONE

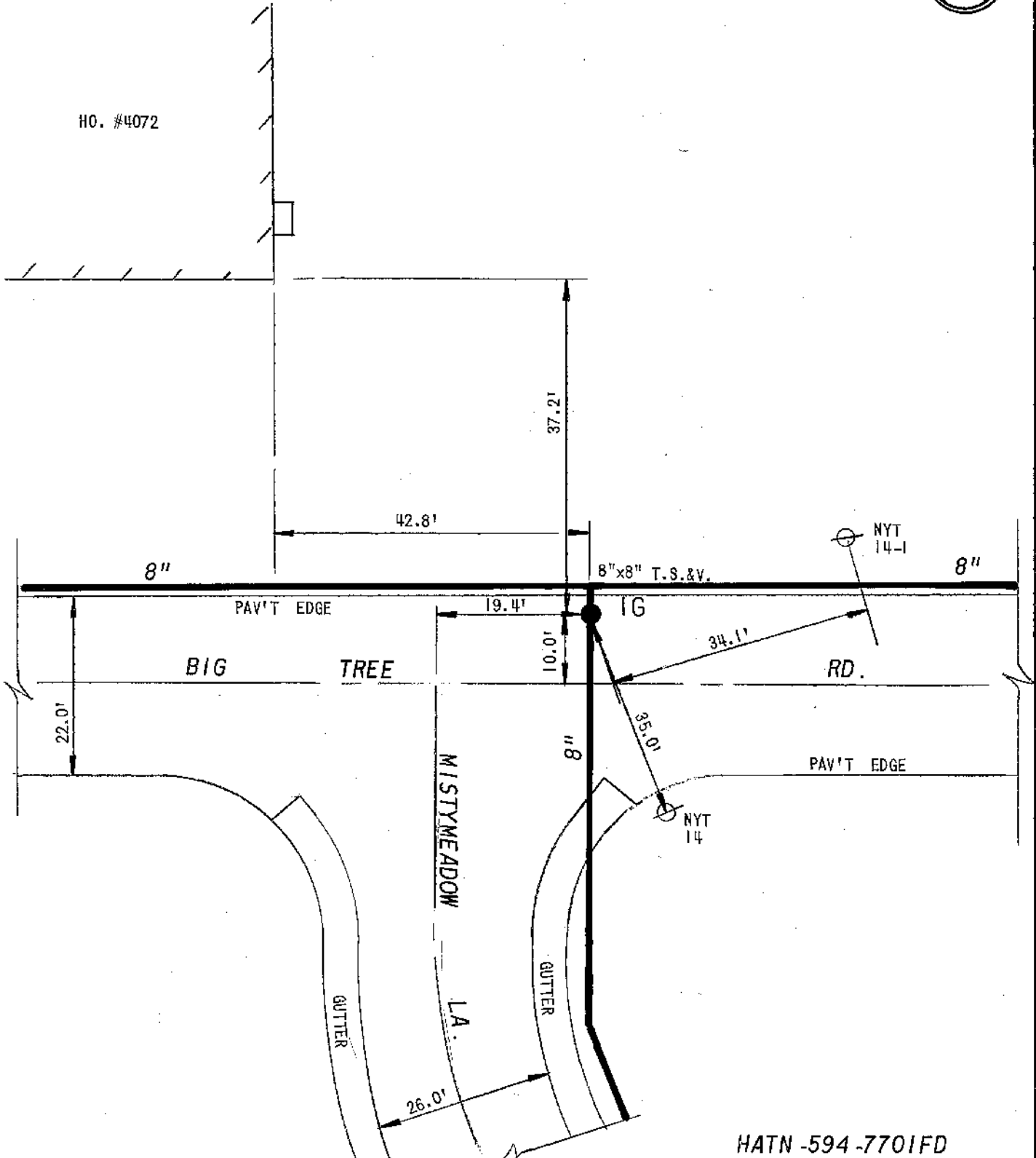
TOWN OF HAMBURG
CENTRAL HAMBURG WD.

H16-B41

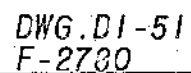
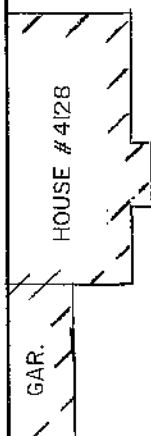




HO. #4072



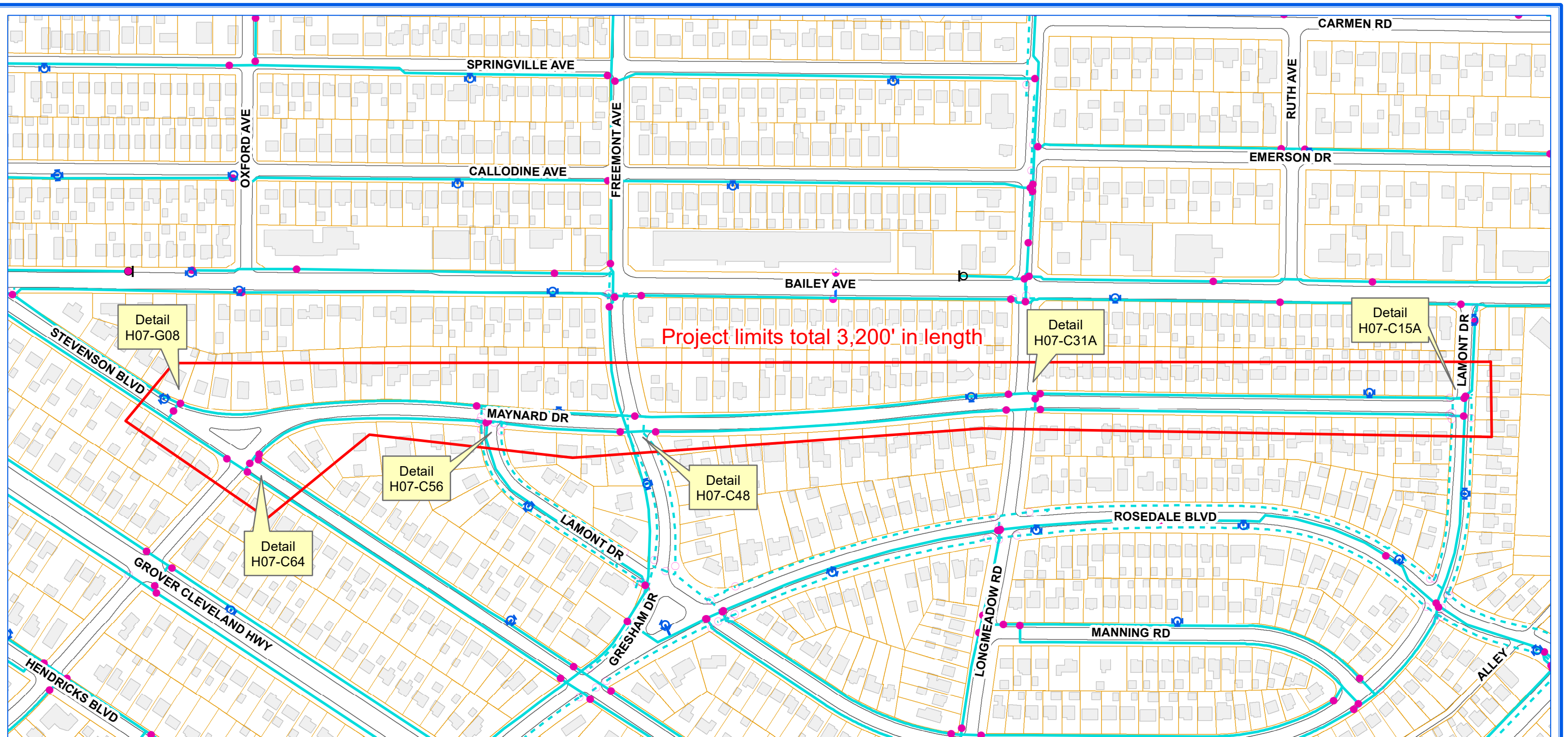
HATN -594 -7701FD



EC **ERIE COUNTY** 
WA **WATER AUTHORITY**
BUFFALO, NEW YORK

TOWN OF HAMBURG
CENTRAL HAMBURG WD

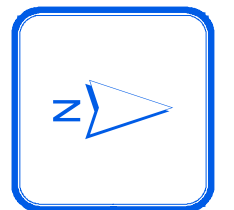
H16-B43



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECT 2021 & 2022
CONTRACT "C"**

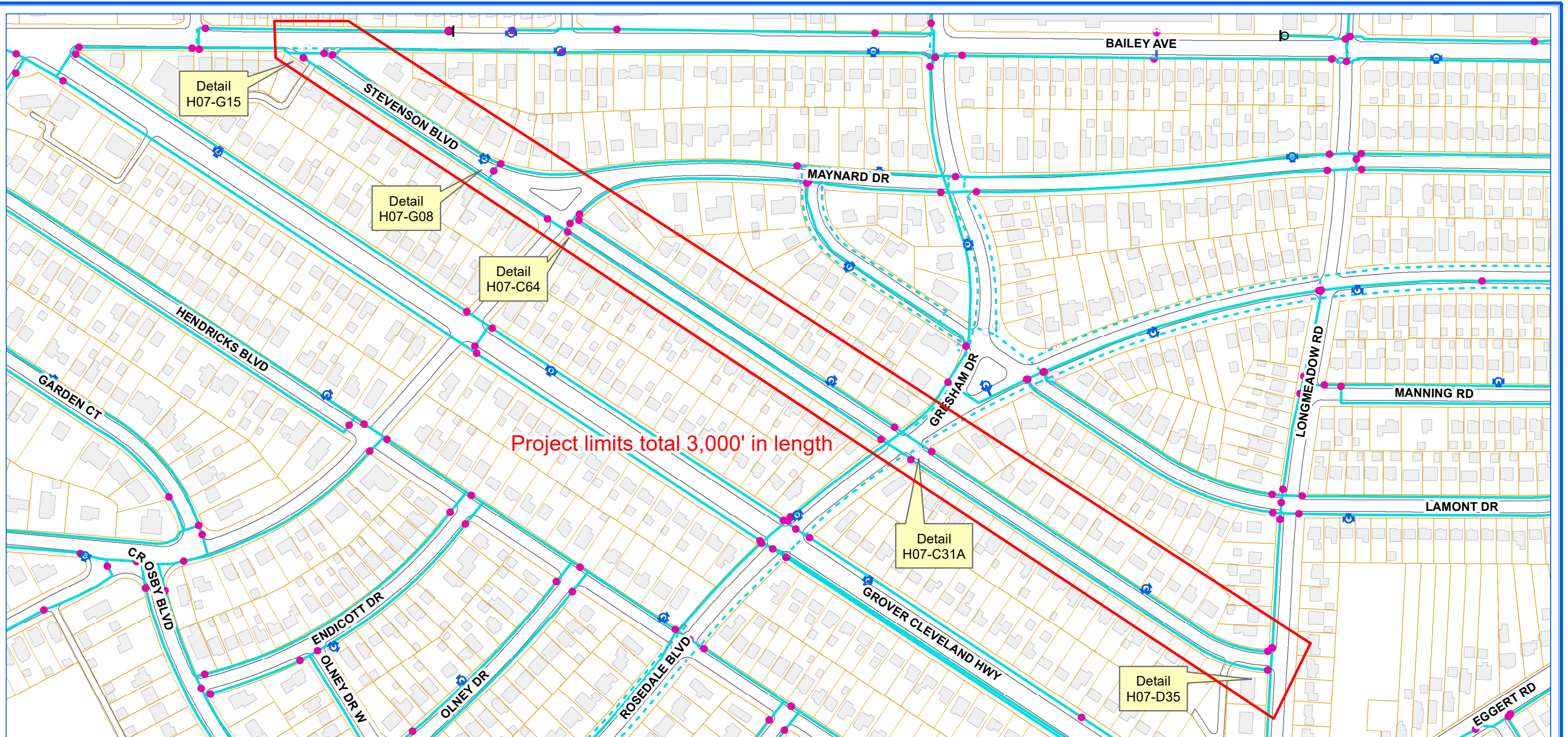
**MAYNARD AVENUE (FROM LAMONT DRIVE TO STEVENSON BOULEVARD),
STEVENSON BOULEVARD (FROM LONGMEADOW ROAD TO BAILEY AVENUE),
BAILEY AVENUE (FROM 4090 BAILEY AVENUE TO PARK CIRCLE),
SPRINGVILLE AVENUE (FROM BRANT STREET TO LONGMEADOW ROAD),
BURROUGHS DRIVE (FROM HARLEM ROAD TO NORTHLEDGE DRIVE)
TOWN OF AMHERST, NY**



0 150 300 450 Feet

1 inch = 250 feet

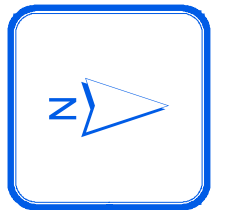
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECT 2021 & 2022
CONTRACT "C"

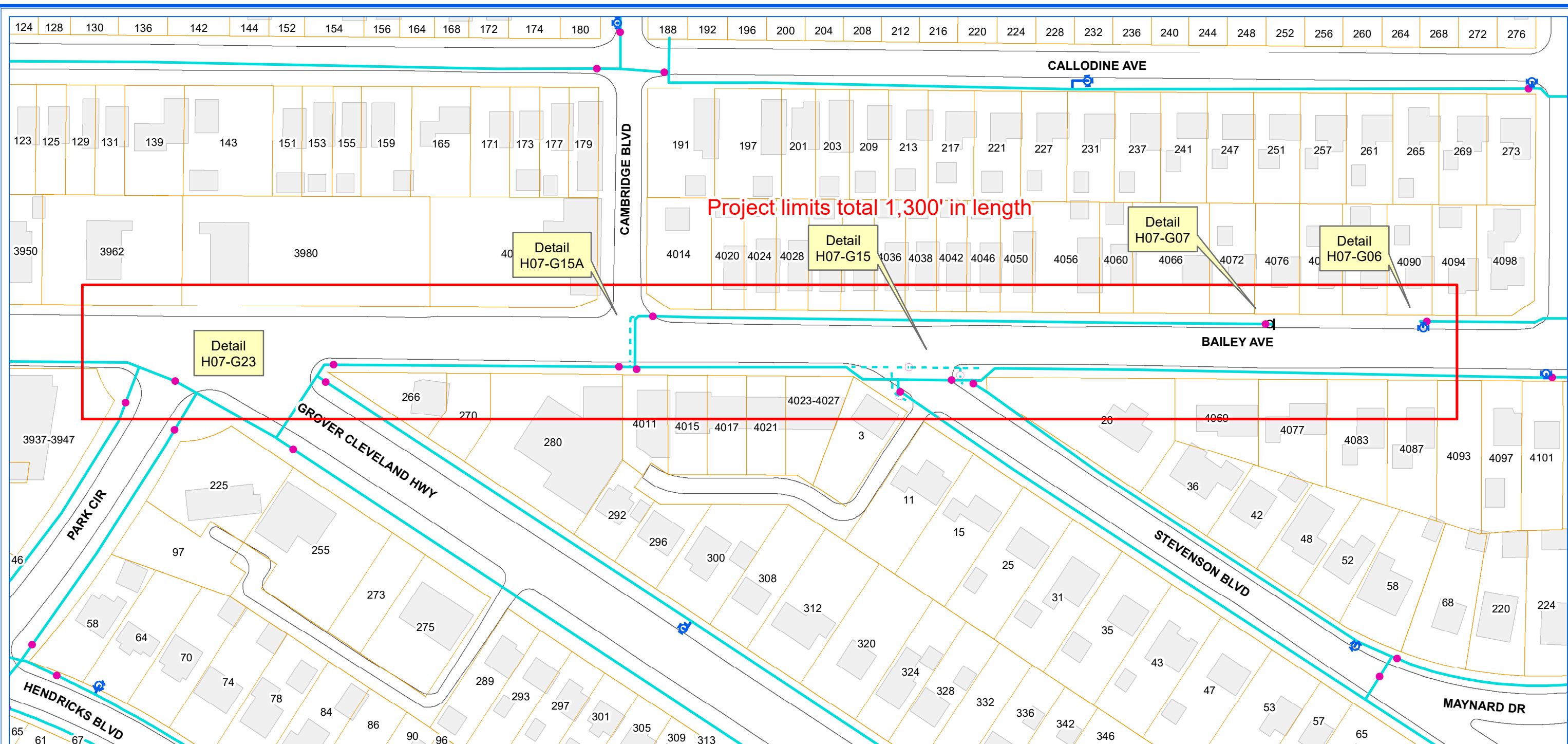
MAYNARD AVENUE (FROM LAMONT DRIVE TO STEVENSON BOULEVARD),
STEVENSON BOULEVARD (FROM LONGMEADOW ROAD TO BAILEY AVENUE),
BAILEY AVENUE (FROM 4090 BAILEY AVENUE TO PARK CIRCLE),
SPRINGVILLE AVENUE (FROM BRANT STREET TO LONGMEADOW ROAD),
BURROUGHS DRIVE (FROM HARLEM ROAD TO NORTHLEDGE DRIVE)
TOWN OF AMHERST, NY



0 150 300 450 Feet

1 inch = 250 feet

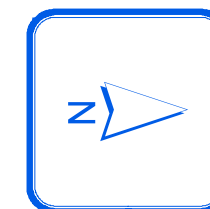
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECT 2021 & 2022
CONTRACT "C"**

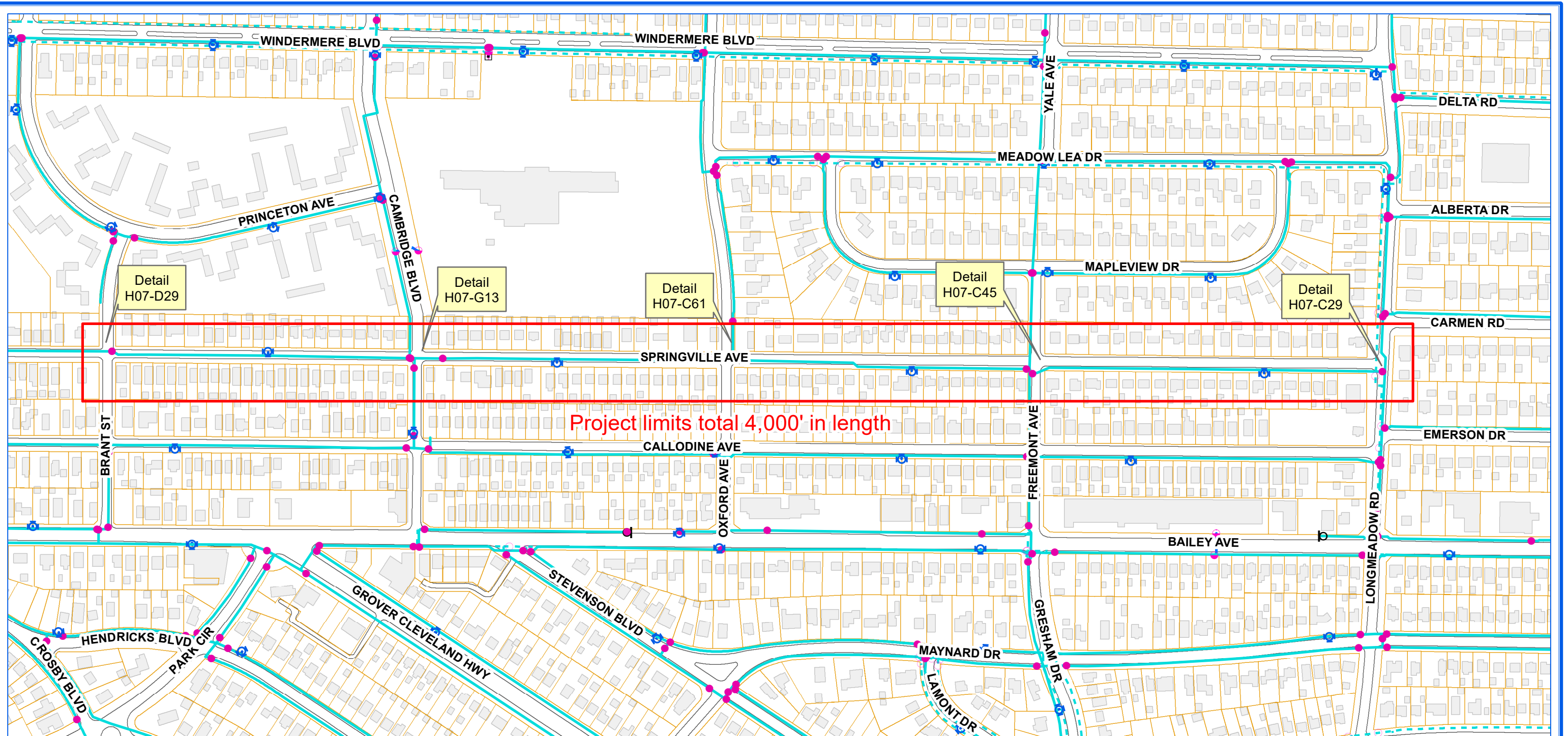
**MAYNARD AVENUE (FROM LAMONT DRIVE TO STEVENSON BOULEVARD),
STEVENSON BOULEVARD (FROM LONGMEADOW ROAD TO BAILEY AVENUE),
BAILEY AVENUE (FROM 4090 BAILEY AVENUE TO PARK CIRCLE),
SPRINGVILLE AVENUE (FROM BRANT STREET TO LONGMEADOW ROAD),
BURROUGHS DRIVE (FROM HARLEM ROAD TO NORTHLEDGE DRIVE)
TOWN OF AMHERST, NY**



0 60 120 180 Feet

1 inch = 100 feet

RDC

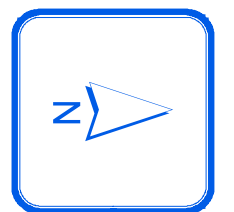


ECWA-223-2101 / ECWA P.N. 202100007
 DISTRIBUTION MAIN DESIGN PROJECT 2021 & 2022
 CONTRACT "C"

MAYNARD AVENUE (FROM LAMONT DRIVE TO STEVENSON BOULEVARD),
 STEVENSON BOULEVARD (FROM LONGMEADOW ROAD TO BAILEY AVENUE),
 BAILEY AVENUE (FROM 4090 BAILEY AVENUE TO PARK CIRCLE),
 SPRINGVILLE AVENUE (FROM BRANT STREET TO LONGMEADOW ROAD),
 BURROUGHS DRIVE (FROM HARLEM ROAD TO NORTHLEDGE DRIVE)
 TOWN OF AMHERST, NY



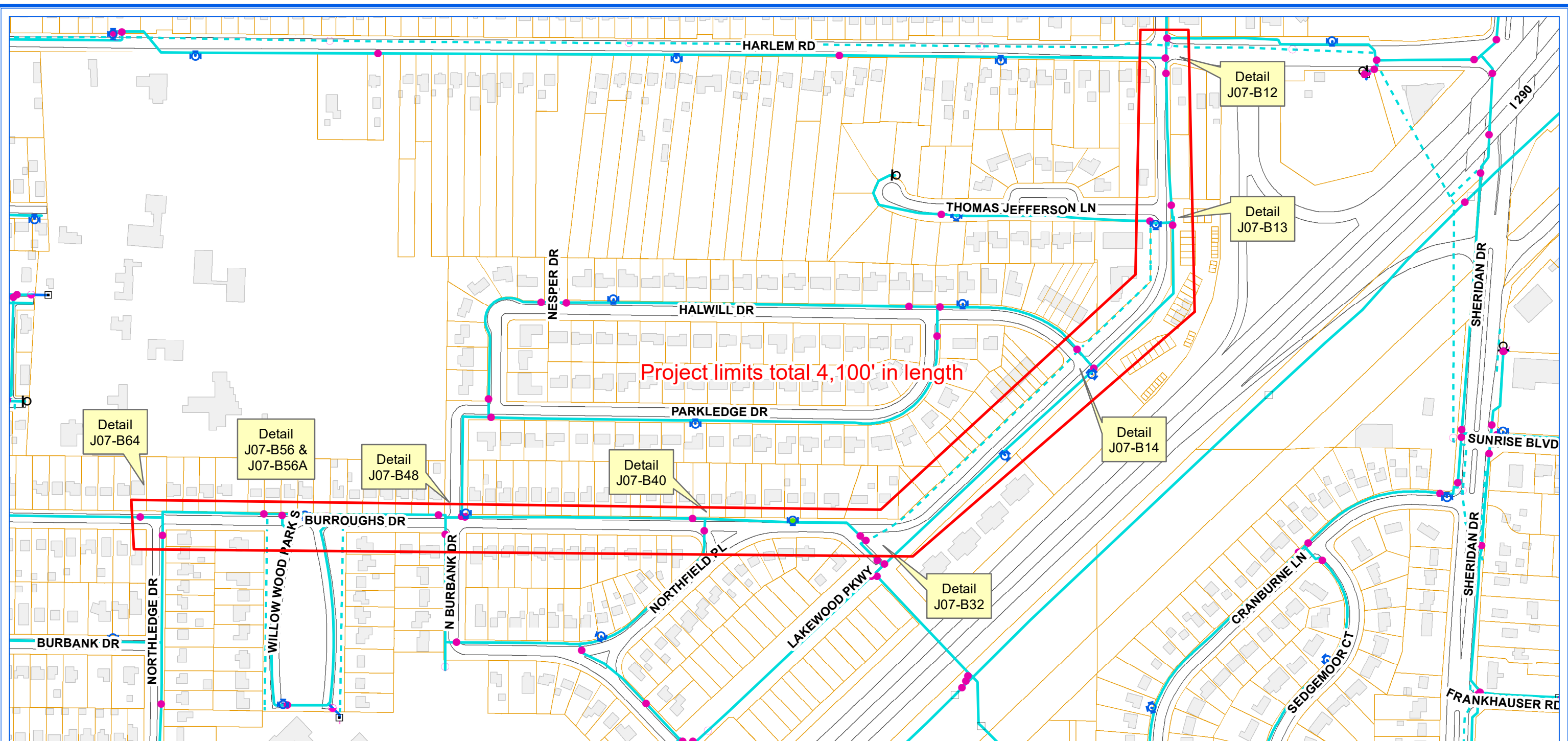
ERIE COUNTY WATER AUTHORITY
 BUFFALO, NY



0 190 380 570 Feet

1 inch = 300 feet

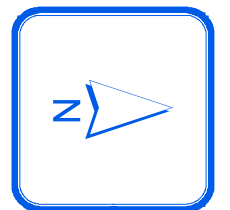
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECT 2021 & 2022
CONTRACT "C"

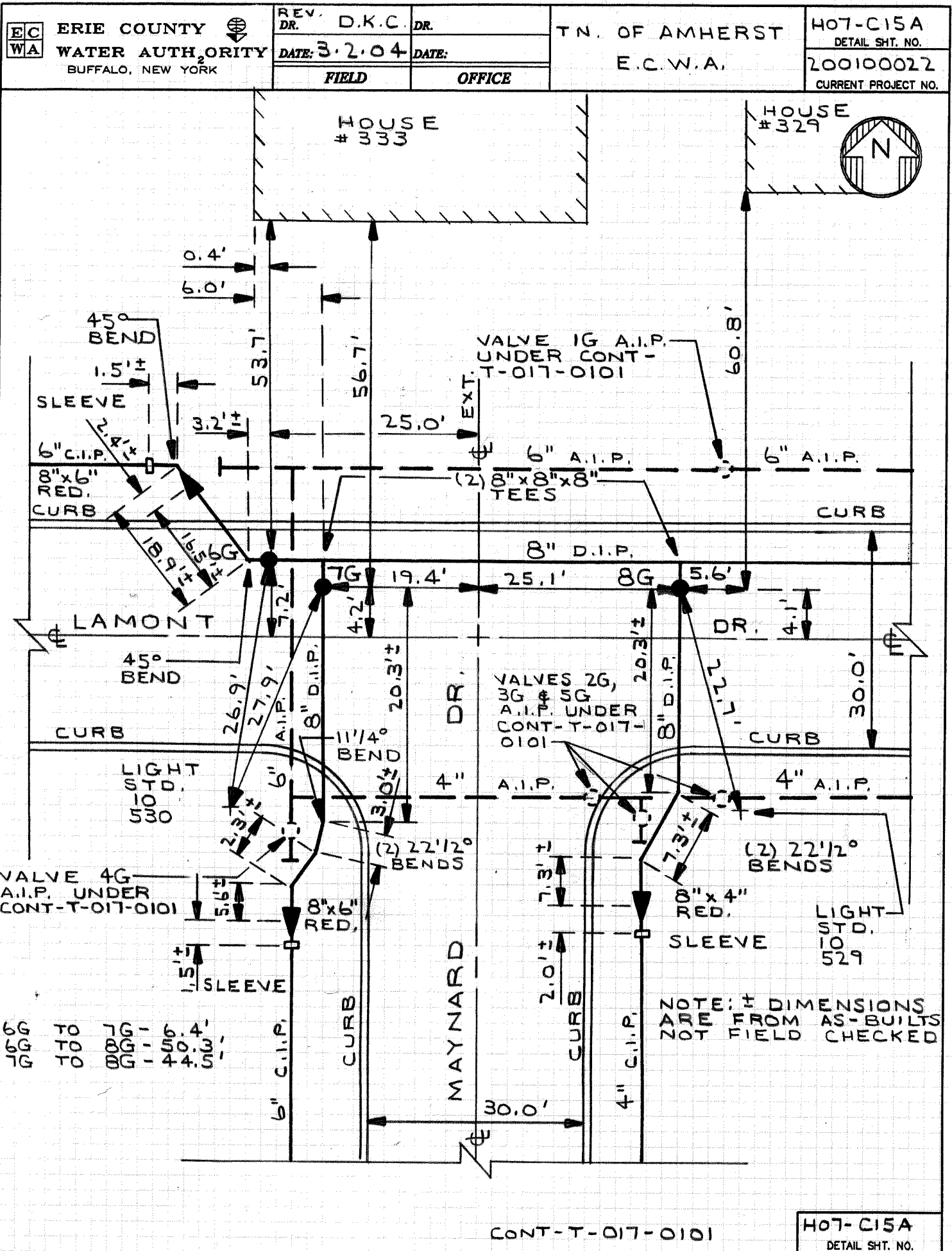
MAYNARD AVENUE (FROM LAMONT DRIVE TO STEVENSON BOULEVARD),
STEVENSON BOULEVARD (FROM LONGMEADOW ROAD TO BAILEY AVENUE),
BAILEY AVENUE (FROM 4090 BAILEY AVENUE TO PARK CIRCLE),
SPRINGVILLE AVENUE (FROM BRANT STREET TO LONGMEADOW ROAD),
BURROUGHS DRIVE (FROM HARLEM ROAD TO NORThLEDGE DRIVE)
TOWN OF AMHERST, NY



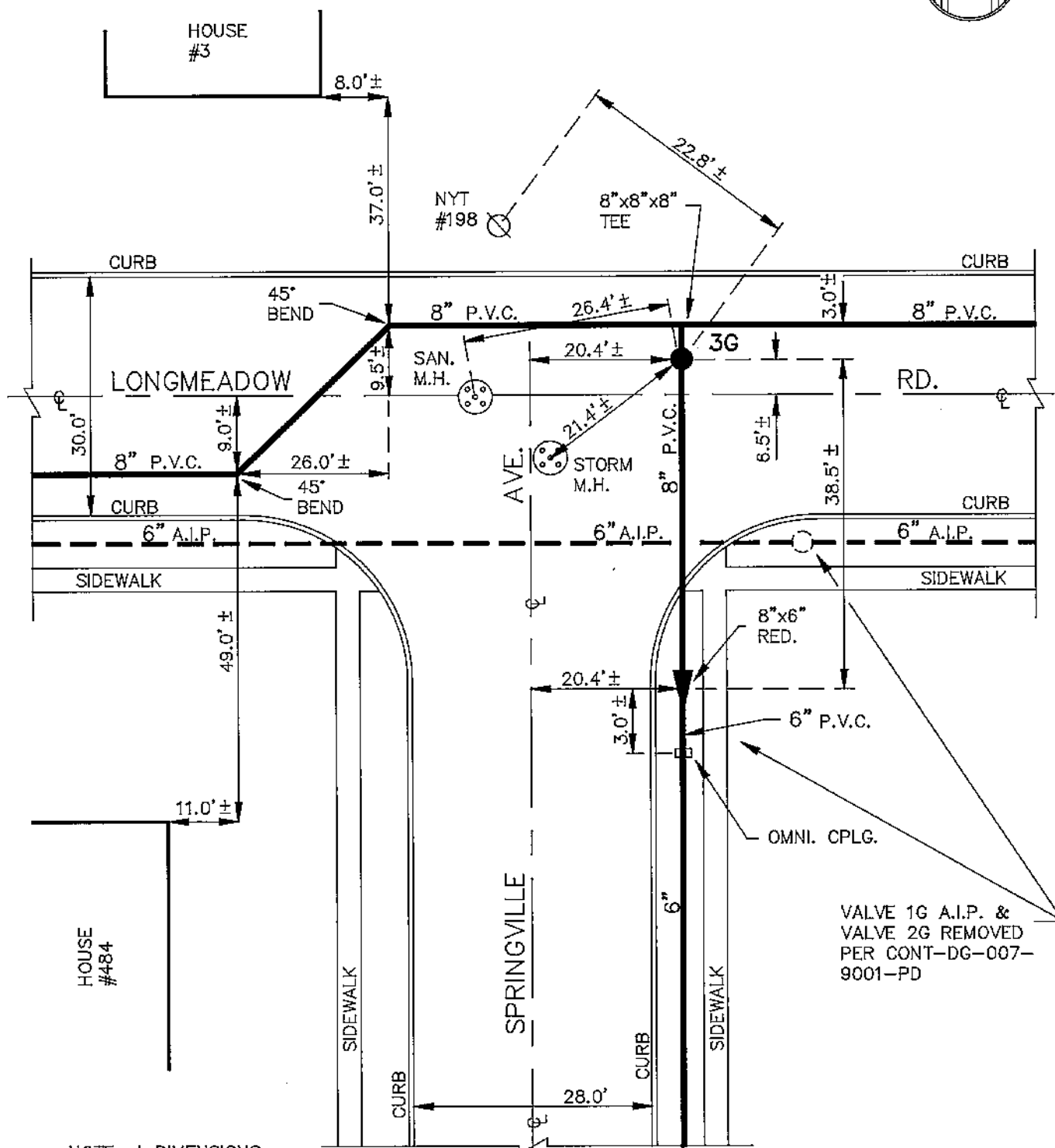
0 190 380 570 Feet

1 inch = 300 feet

RDC



MASTER COPY



NOTE: ± DIMENSIONS
FROM AS-BUILTS
NOT FIELD CHECKED
DETAILS DRAWN ON
CAD SYSTEM

F.B. 407/34
CONT-DG-007-9001-PD



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. FDB
DATE: 10-2-91
N.T.S.

TOWN OF AMHERST
E.C.W.A.

H07-C29
DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. R.D.C.

DATE: 8/28/2019

FIELD

REVISED
DR.

DATE:

OFFICE

TOWN OF AMHERST

E.C.W.A.

H07-C31A

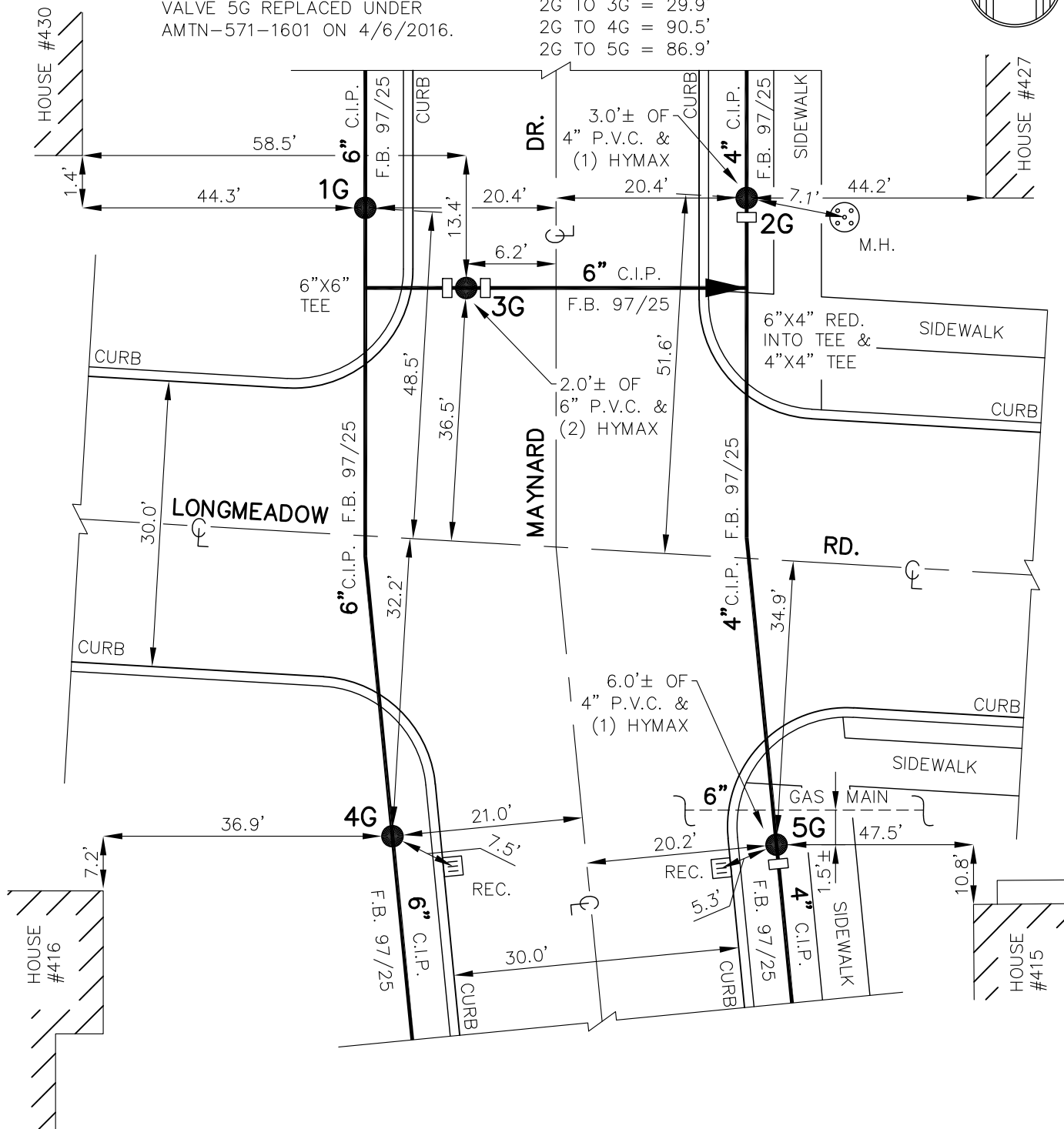
DETAIL SHT. NO.

201600097

CURRENT PROJECT NO.

NOTE: VALVE 3G REPLACED UNDER
AMTN-571-0801 ON 8/4/2008.
VALVE 2G REPLACED UNDER
AMTN-571-1602 ON 4/6/2016.
VALVE 5G REPLACED UNDER
AMTN-571-1601 ON 4/6/2016.

1G TO 2G = 40.8' 3G TO 4G = 69.4'
1G TO 3G = 18.9' 3G TO 5G = 79.1'
1G TO 4G = 81.0' 4G TO 5G = 41.6'
1G TO 5G = 96.4'
2G TO 3G = 29.9'
2G TO 4G = 90.5'
2G TO 5G = 86.9'



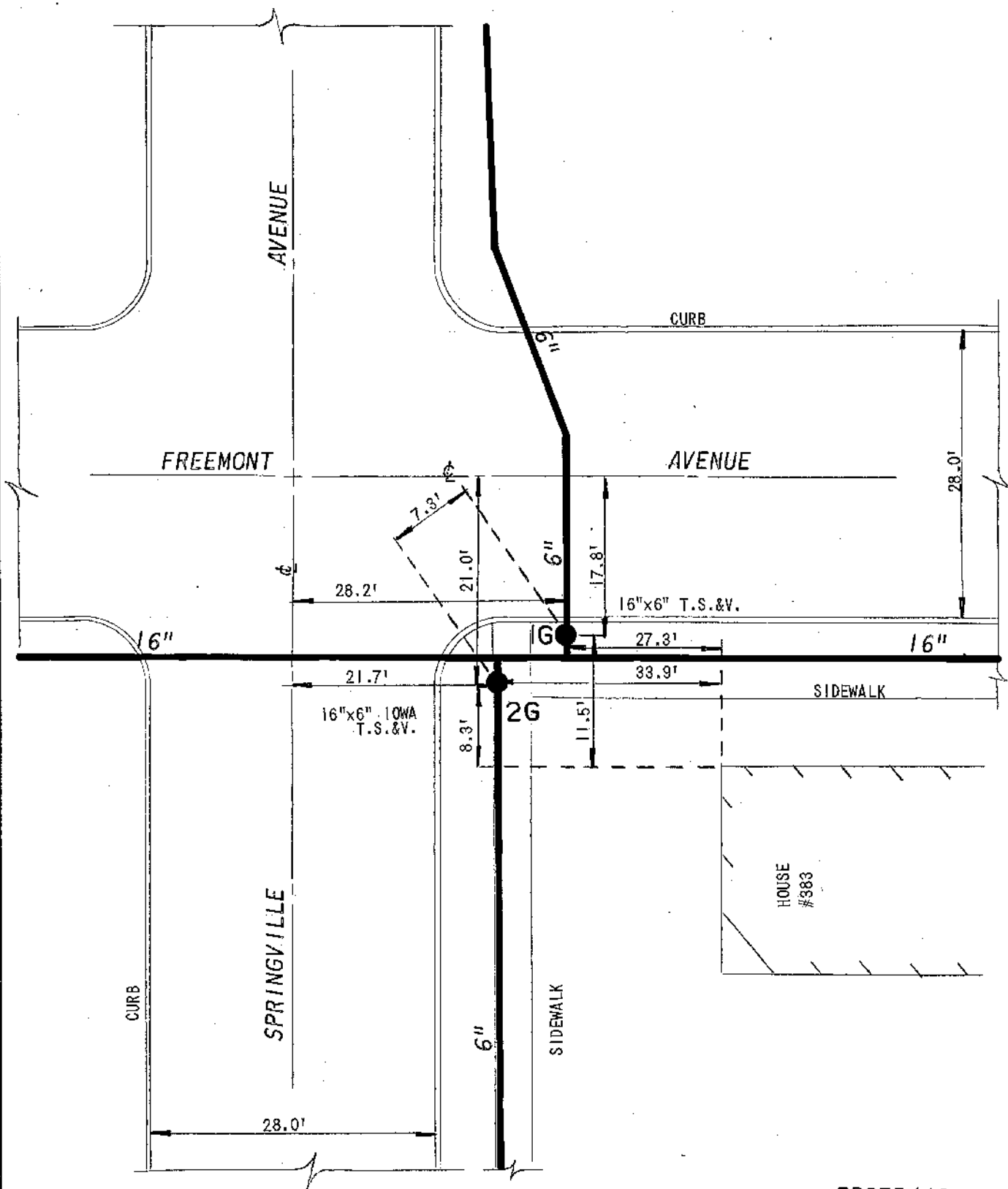
NOTE: DETAIL DRAWN ON CAD SYSTEM.
± DIMENSIONS FROM W.O., NOT
FIELD CHECKED.

AMTN-572-1602
AMTN-572-1601
AMTN-571-0801
F.B. 105/10
F.B. 97/25
PL.'S 224 & 236

H07-C31A

DETAIL SHT. NO.


MASTER COPY



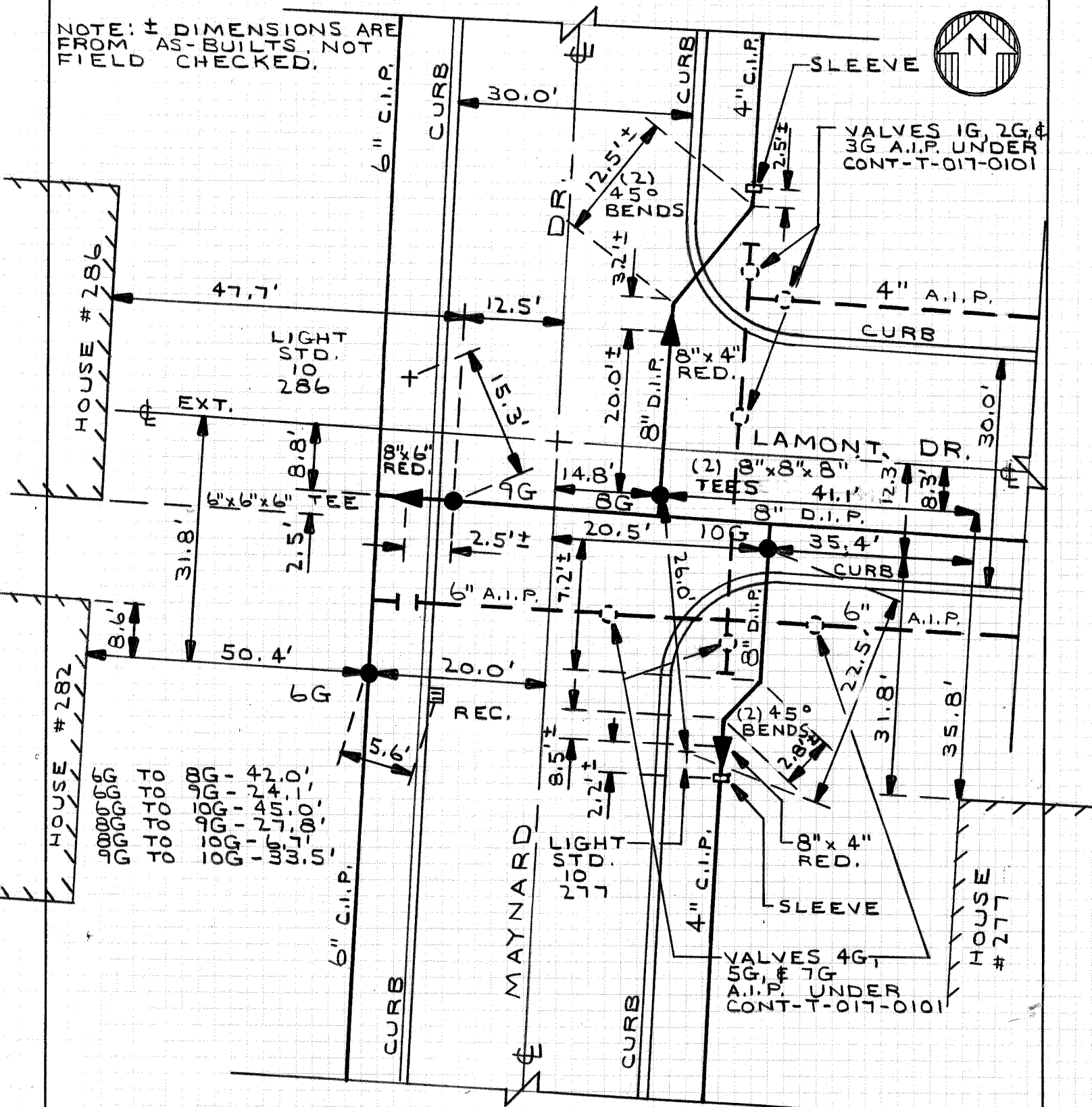
F8235/46

DETAIL SHT. NO.

MASTER COPY

<div style="border: 1px solid black; padding: 2px; display: inline-block;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">E</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">C</div> </div> <div style="border: 1px solid black; padding: 2px; display: inline-block;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">W</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">A</div> </div>	ERIE COUNTY  WATER AUTHORITY BUFFALO, NEW YORK	REV. DR. D.K.C. DR.	TN. OF AMHERST E.C.W.A.	H07-C56 DETAIL SHT. NO.
		DATE: 3.3.04 DATE:		200100022 CURRENT PROJECT NO.
		FIELD		OFFICE

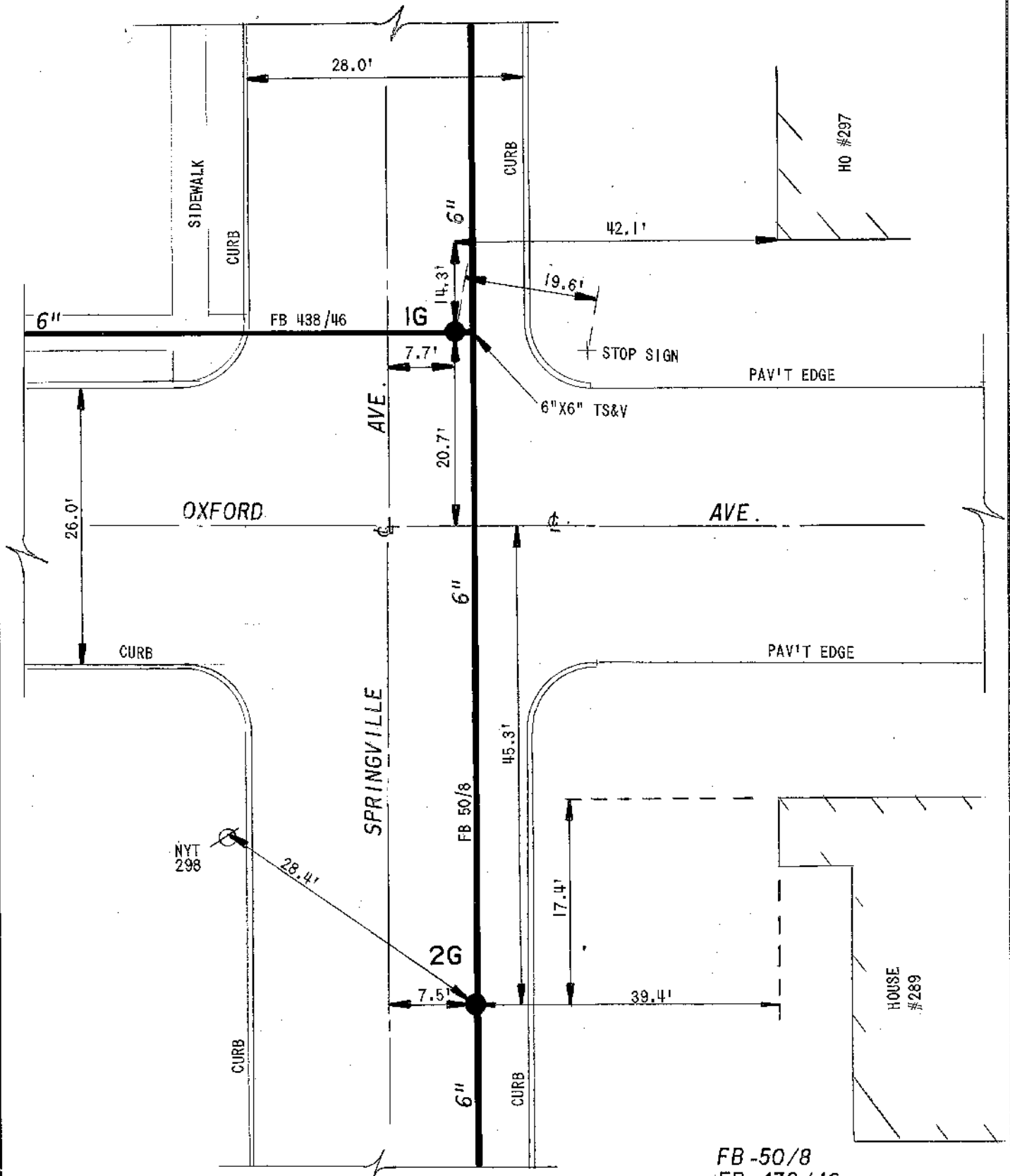
NOTE: \pm DIMENSIONS ARE FROM AS-BUILTS, NOT FIELD CHECKED.



CONT-T-017-0101
AMTN-572-9401-P
AMTN-488-9101-P

407-C56
DETAIL SHT. NO.

MASTER COPY





ERIE COUNTY
WATER AUTHORITY
 BUFFALO, NEW YORK

REVISED DR. R.D.C.

DATE: 7/12/2019

FIELD

REVISED DR.

DATE:

OFFICE

TOWN OF AMHERST

E.C.W.A.

H07-C64

DETAIL SHT. NO.

201100244

CURRENT PROJECT NO.



NOTE: VALVE 3G REPLACED UNDER
 AMTN-571-9101-P ON
 2/24/1991.
 VALVE 1G REPLACED UNDER
 AMTN-849-1101 ON
 7/8/2011.

1G TO 2G = 15.7'
 1G TO 3G = 33.4'
 1G TO 4G = 54.6'
 1G TO 5G = 82.8'
 2G TO 3G = 23.5'
 2G TO 4G = 41.3'
 2G TO 5G = 80.4'
 3G TO 4G = 23.2'
 3G TO 5G = 59.4'
 4G TO 5G = 62.4'

GRASS
MALL

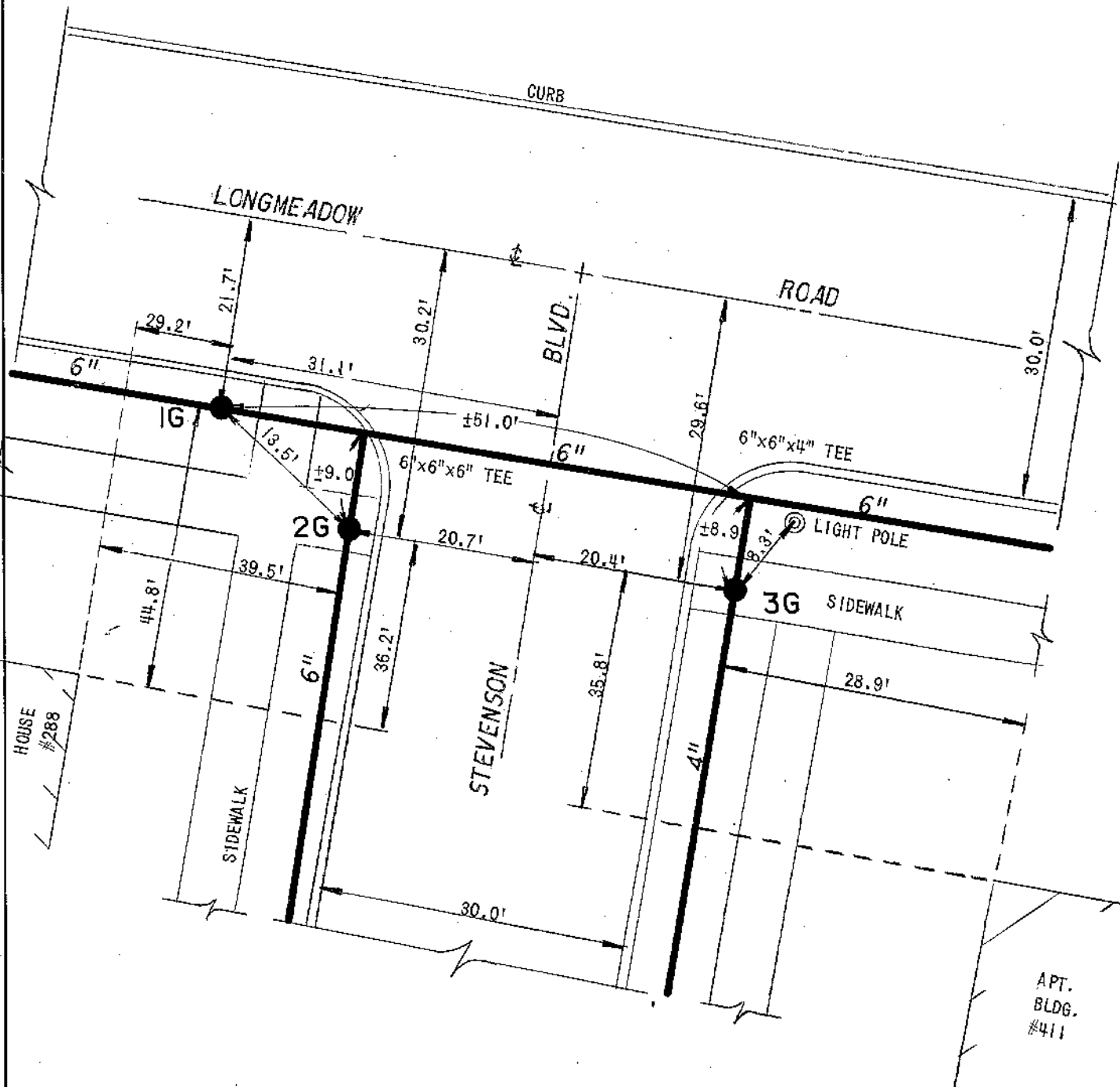
AMTN-849-1101
 AMTN-571-9101-P
 F.B. 97/52,64,70
 PL. 224

H07-C64

DETAIL SHT. NO.

MASTER COPY

MASTER COPY





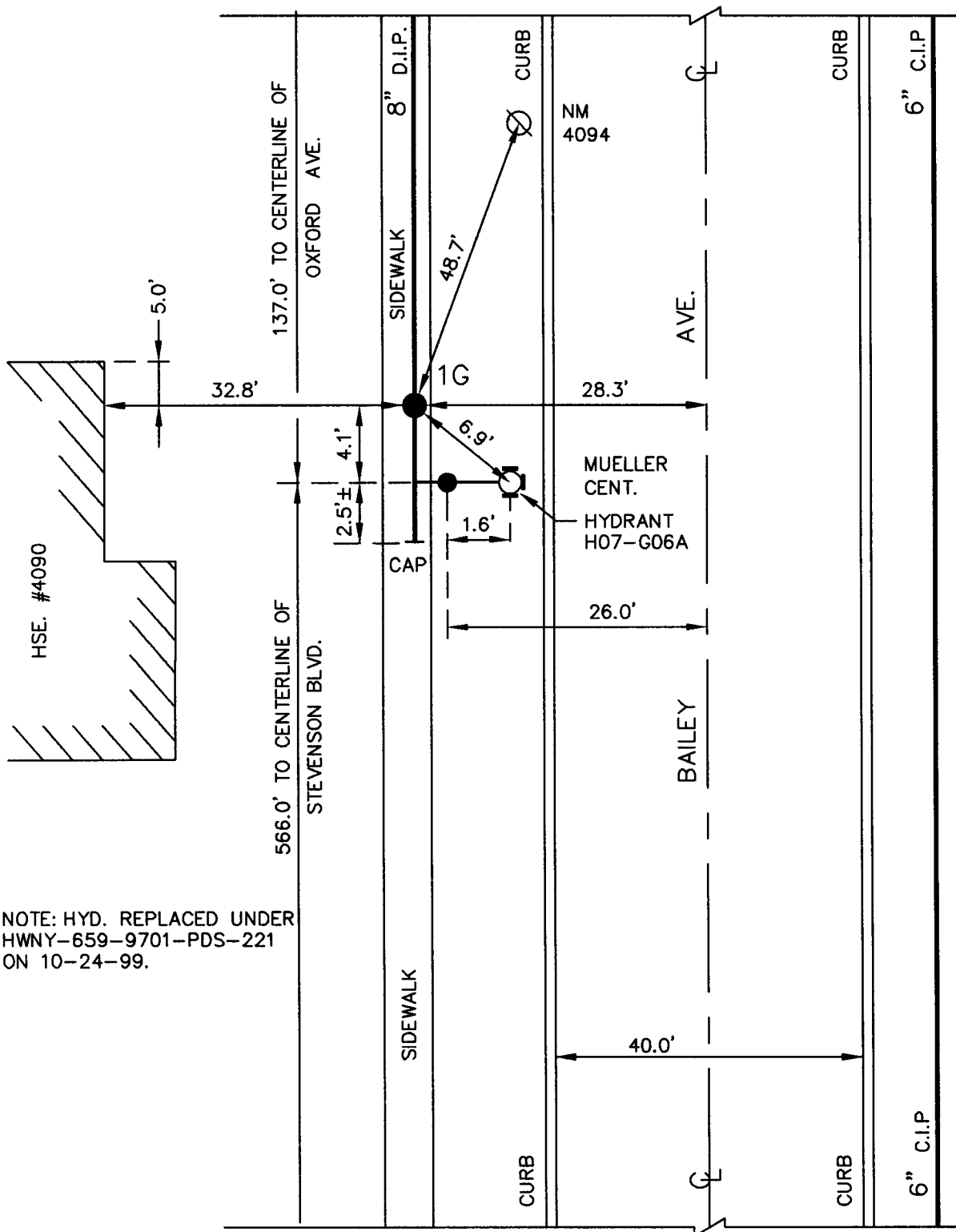
ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. N.G.S.
DATE: 01-03-02
FIELD

DR. N.G.S.
DATE: 01-03-02
OFFICE

TOWN OF AMHERST
E.C.W.A.

H07-G06
DETAIL SHT. NO.
199700121
CURRENT PROJECT NO.



NOTE: HYD. REPLACED UNDER
HWN-659-9701-PDS-221
ON 10-24-99.

NOTE: ± DIMENSIONS ARE
FROM INSPECTOR'S
FIELD BOOK. NOT
FIELD CHECKED.
DETAIL DRAWN ON
CAD SYSTEM.

HWN-659-9701-PDS-221

H07-G06
DETAIL SHT. NO.

MASTER COPY

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. N.G.S.

REVISED
DR. A.R.M.

TOWN OF AMHERST

H07-G07

DETAIL SHT. NO.

DATE: 01-03-02

DATE: 08-27-07

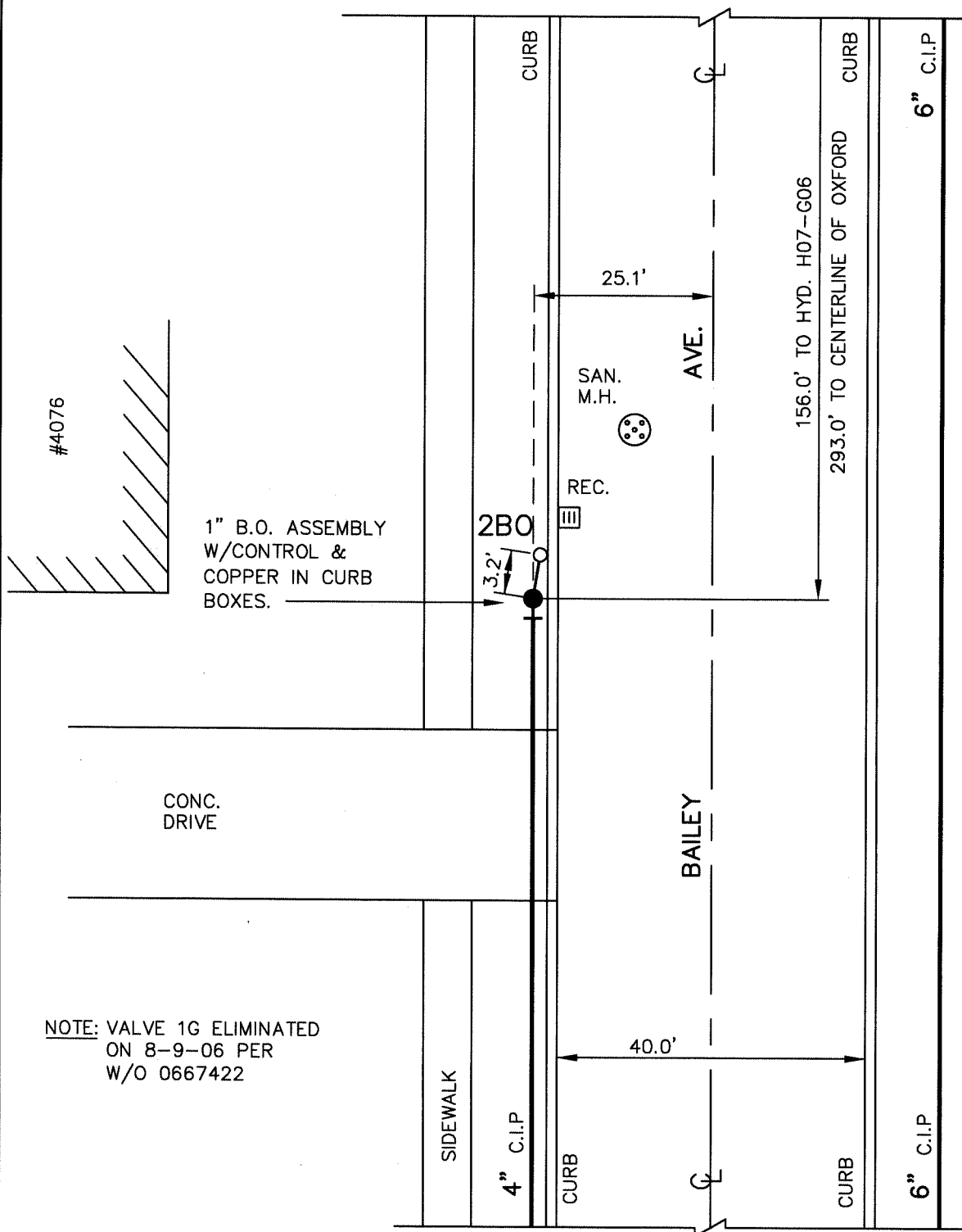
E.C.W.A.

199700121

CURRENT PROJECT NO.

FIELD

OFFICE



NOTE: VALVE 1G ELIMINATED
ON 8-9-06 PER
W/O 0667422

NOTE: DETAIL DRAWN ON
CAD SYSTEM.

HWNY-659-9701-PDS-221
FB 113/34

H07-G07
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. N.G.S.

REVISED
DR. N.G.S.

DATE: 04-07-03

DATE: 04-07-03

FIELD

OFFICE

TOWN OF AMHERST

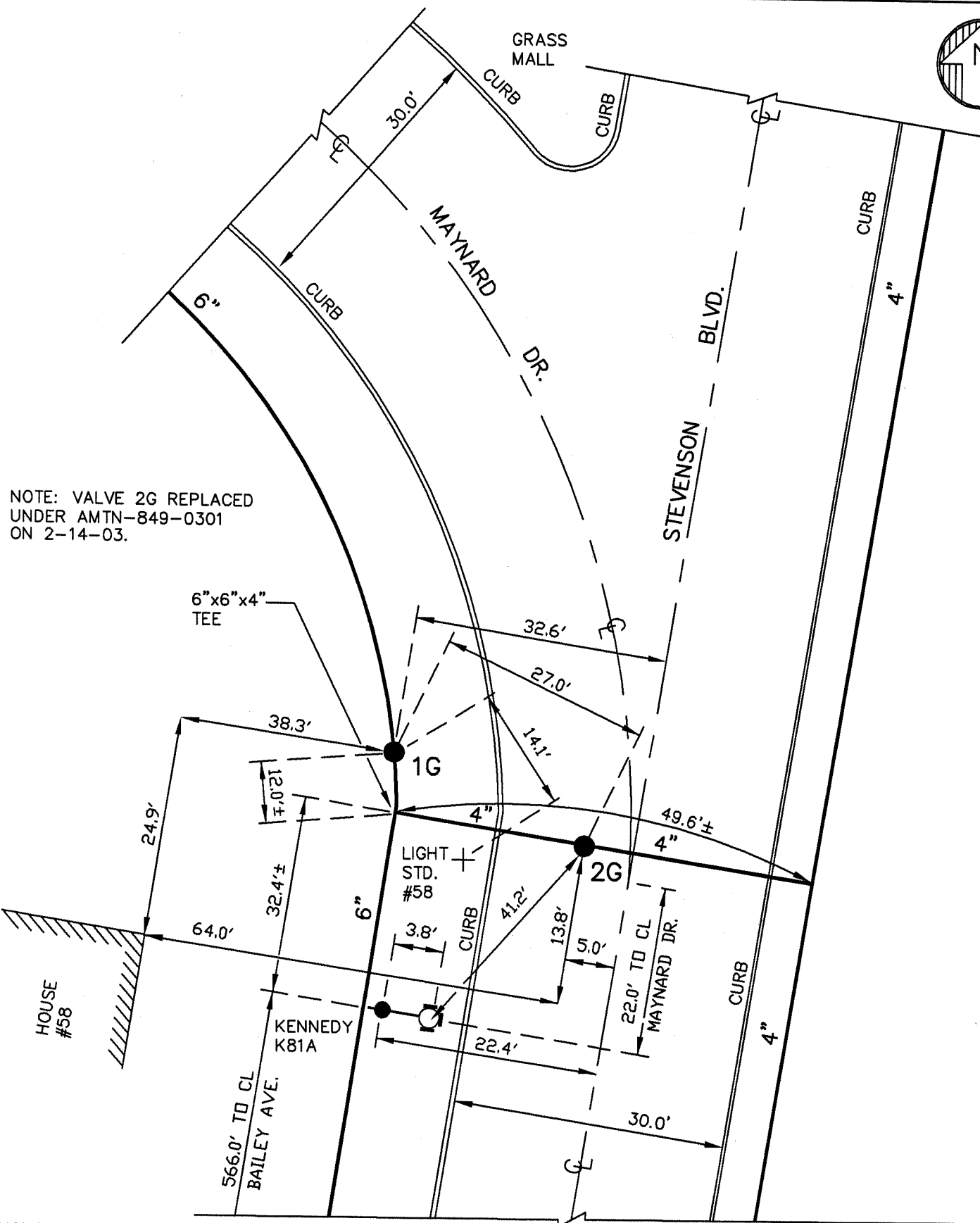
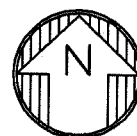
E.C.W.A.

H07-G08

DETAIL SHT. NO.

200300065

CURRENT PROJECT NO.



NOTE: ± DIMENSIONS ARE FROM
PREVIOUS DETAIL. NOT FIELD
CHECKED. DETAIL DRAWN ON
CAD SYSTEM.

AMTN-849-0301

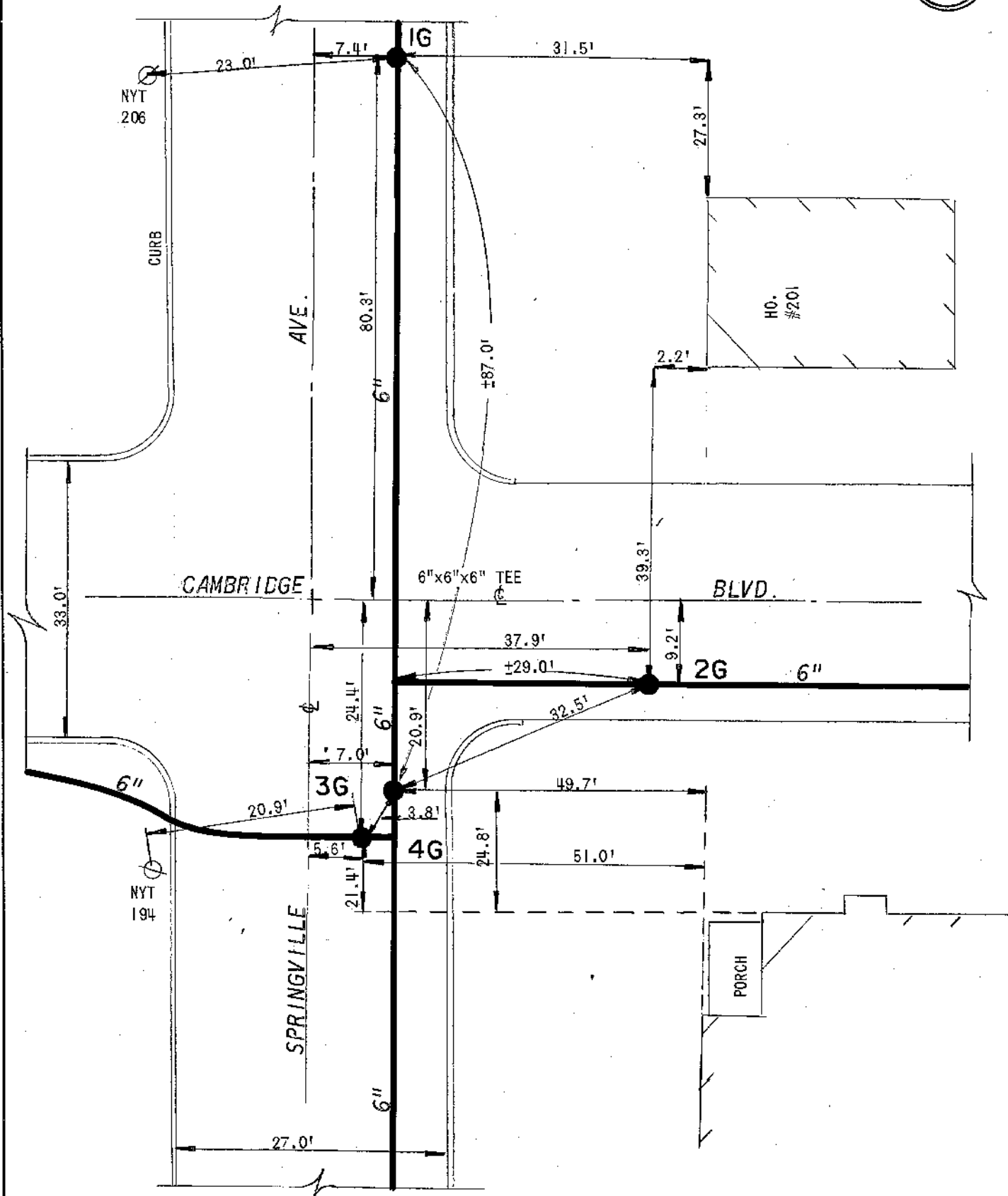
AMTN-849-9301-PA

AMTN-849-9001-PA

H07-G08

DETAIL SHT. NO.

WATER BODY



FB235/6



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. N.G.S.

DATE: 01-03-02

REVISED
DR. N.G.S.

DATE: 01-03-02

TOWN OF AMHERST

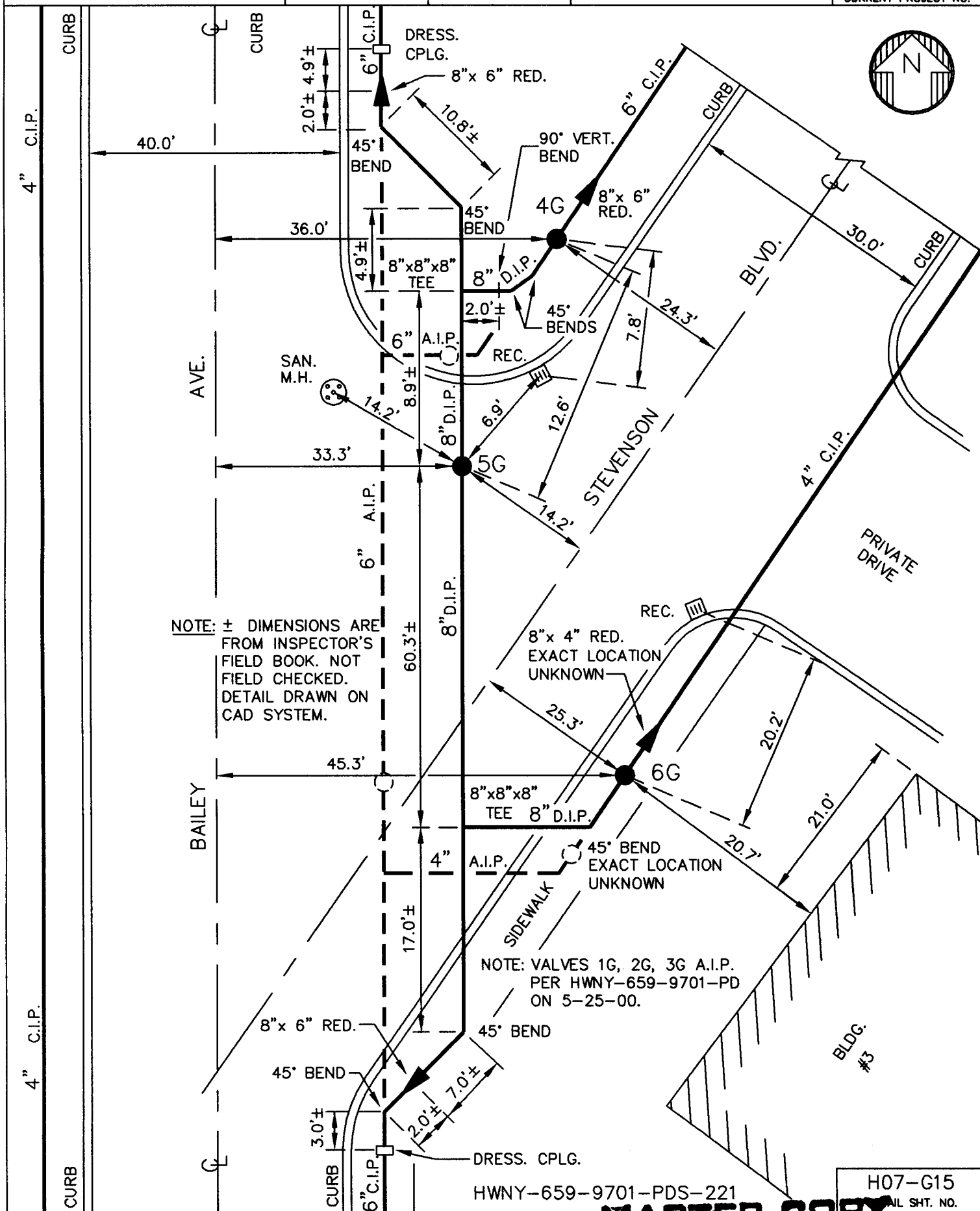
E.C.W.A.

H07-G15

DETAIL SHT. NO.

199700121

CURRENT PROJECT NO.



MASTER COPY



ERIE COUNTY
WATER AUTHORITY
 BUFFALO, NEW YORK

REVISED
 DR. CHM
 DATE: 4-24-12
 FIELD

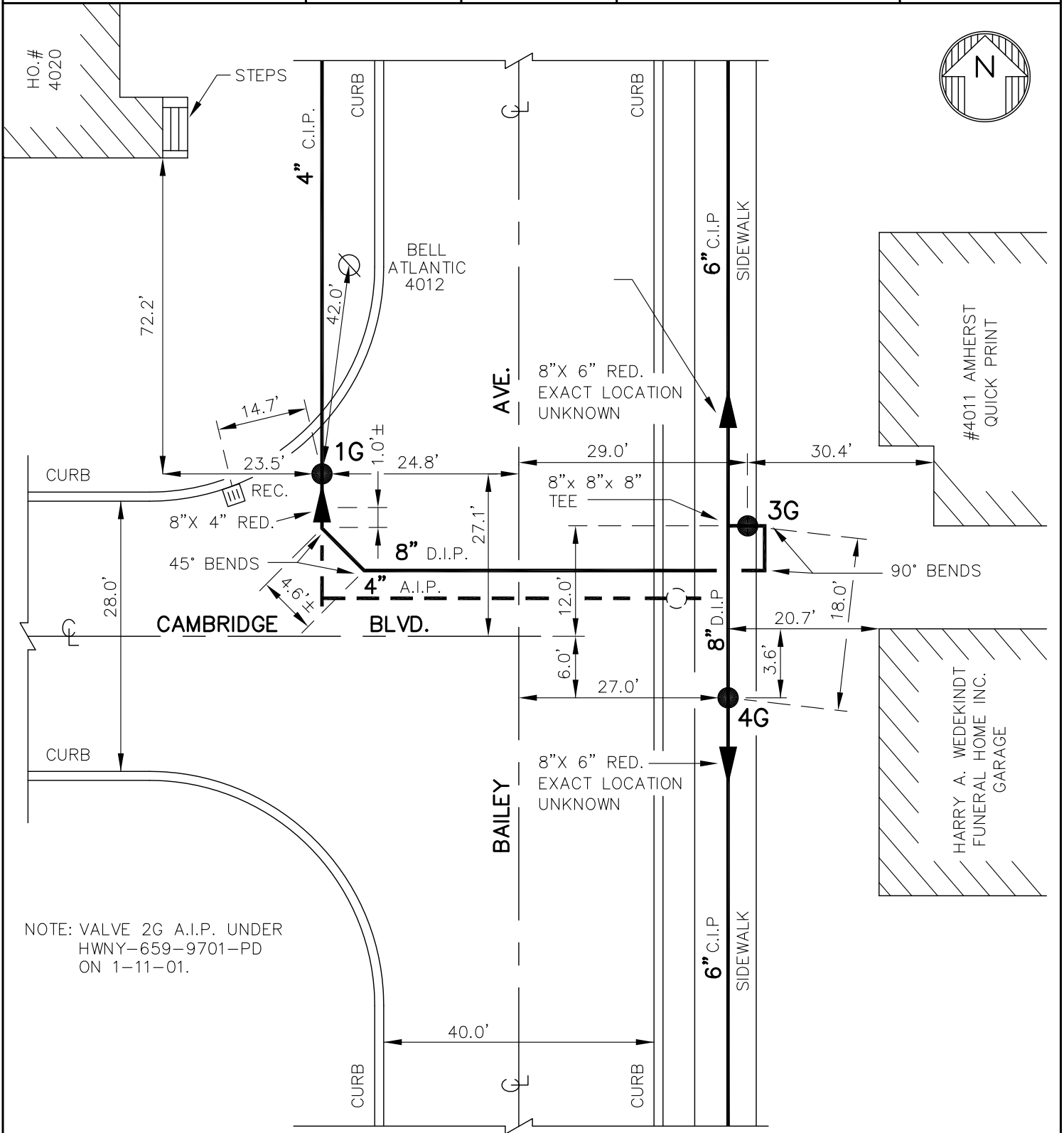
REVISED
 DR. N.G.S.
 DATE: 01-03-02
 OFFICE

TOWN OF AMHERST

E.C.W.A.

H07-G15A
 DETAIL SHT. NO.

199800277
 CURRENT PROJECT NO.



NOTE: VALVE 2G A.I.P. UNDER
 HWNY-659-9701-PD
 ON 1-11-01.

NOTE: ± DIMENSIONS ARE
 FROM INSPECTOR'S
 FIELD BOOK. NOT
 FIELD CHECKED.
 DETAIL DRAWN ON
 CAD SYSTEM.

HWNY-354-9801-P
 HWNY-659-9701-PDS-221
 FB 113/33

H07-G15A
 DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. CHM

DATE: 4-24-12

REVISED
DR. N.A.S.

DATE: 01-03-02

TOWN OF AMHERST

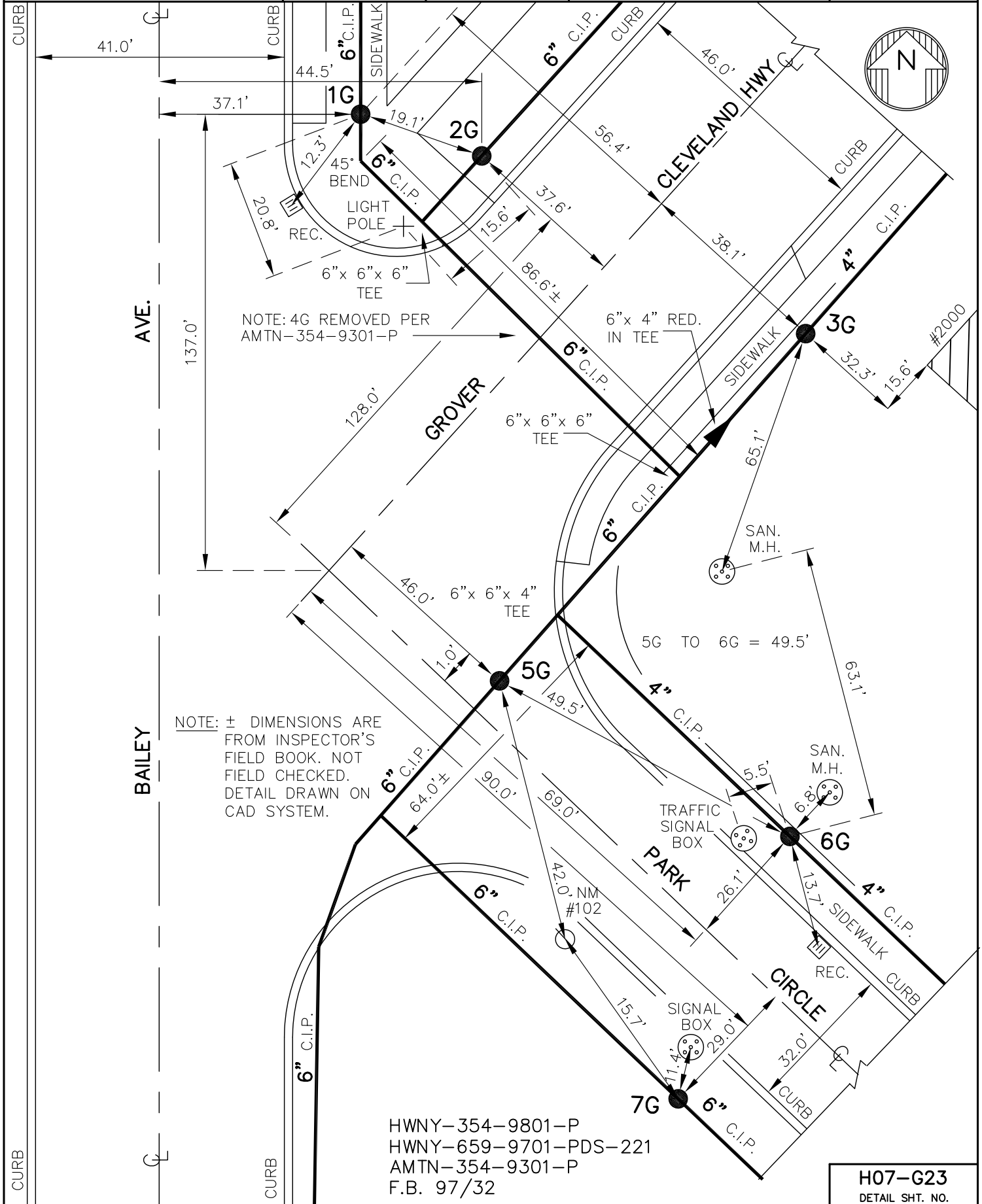
E.C.W.A.

H07-G23

DETAIL SHT. NO.

199800277

CURRENT PROJECT NO.



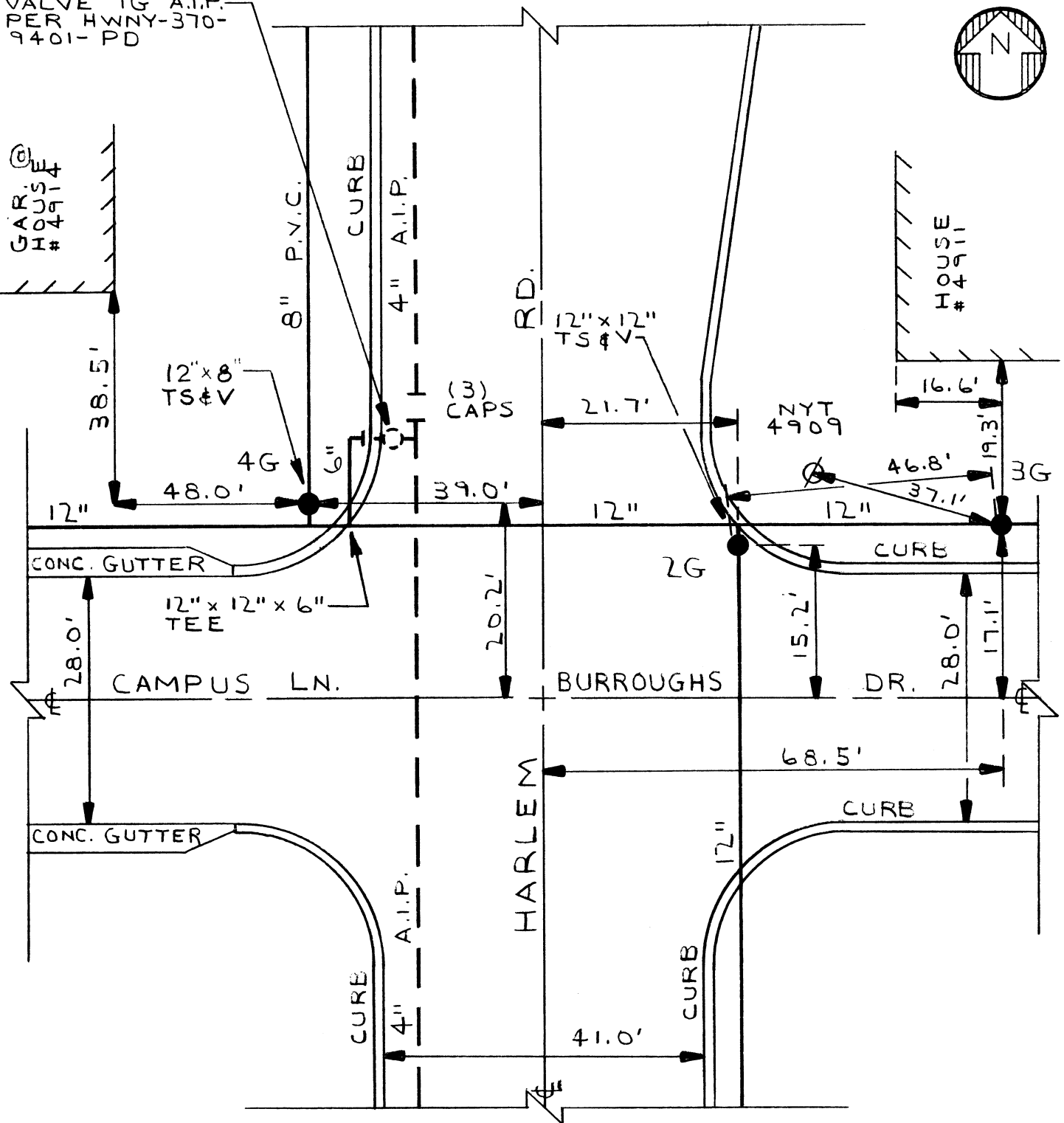
H07-G23

DETAIL SHT. NO.

MASTER COPY

EC ERIE COUNTY WIA WATER AUTHORITY BUFFALO, NEW YORK	REV. D.K.C. DR.	REVISED DR.	TOWN OF AMHERST E.C.W.A.	J07-B12 DETAIL NO.(NTS)
	DATE: 9.8.98	DATE:		9400128
	FIELD	OFFICE		CURRENT PROJECT NO

VALVE 1G A.I.P.
 PER HWNY-370-
 9401-PD



HWNY-370-9401-PD
 CONT-W-008-8901-PD
 CONT-042-8200-PD
 F.B. 414/40
 F.B. 409/53
 OCP-4100

J07-B12
 DETAIL SHT. NO.



ERIE COUNTY
WATER AUTHORITY
 BUFFALO, NEW YORK

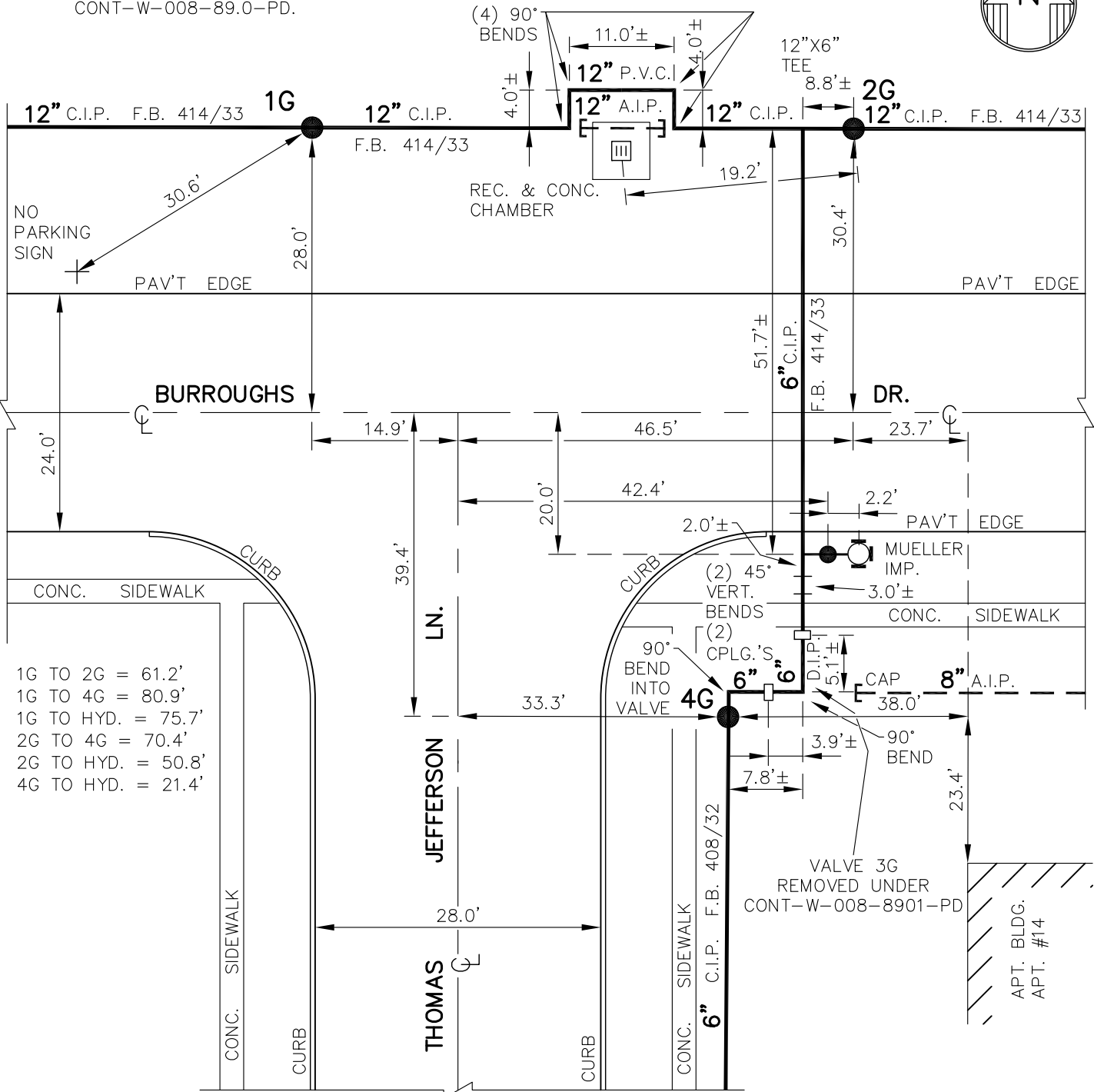
DR. P.C.I.	REVISED DR. R.D.C.
DATE: 1/11/1973	DATE: 3/19/2019
FIELD	OFFICE

TOWN OF AMHERST
E.C.W.A.

J07-B13
 DETAIL SHT. NO.

CURRENT PROJECT NO.

NOTE: HYD. RELOCATED UNDER
 9-3-45-1.
 VALVE 3G REMOVED UNDER
 CONT-W-008-89.0-PD.



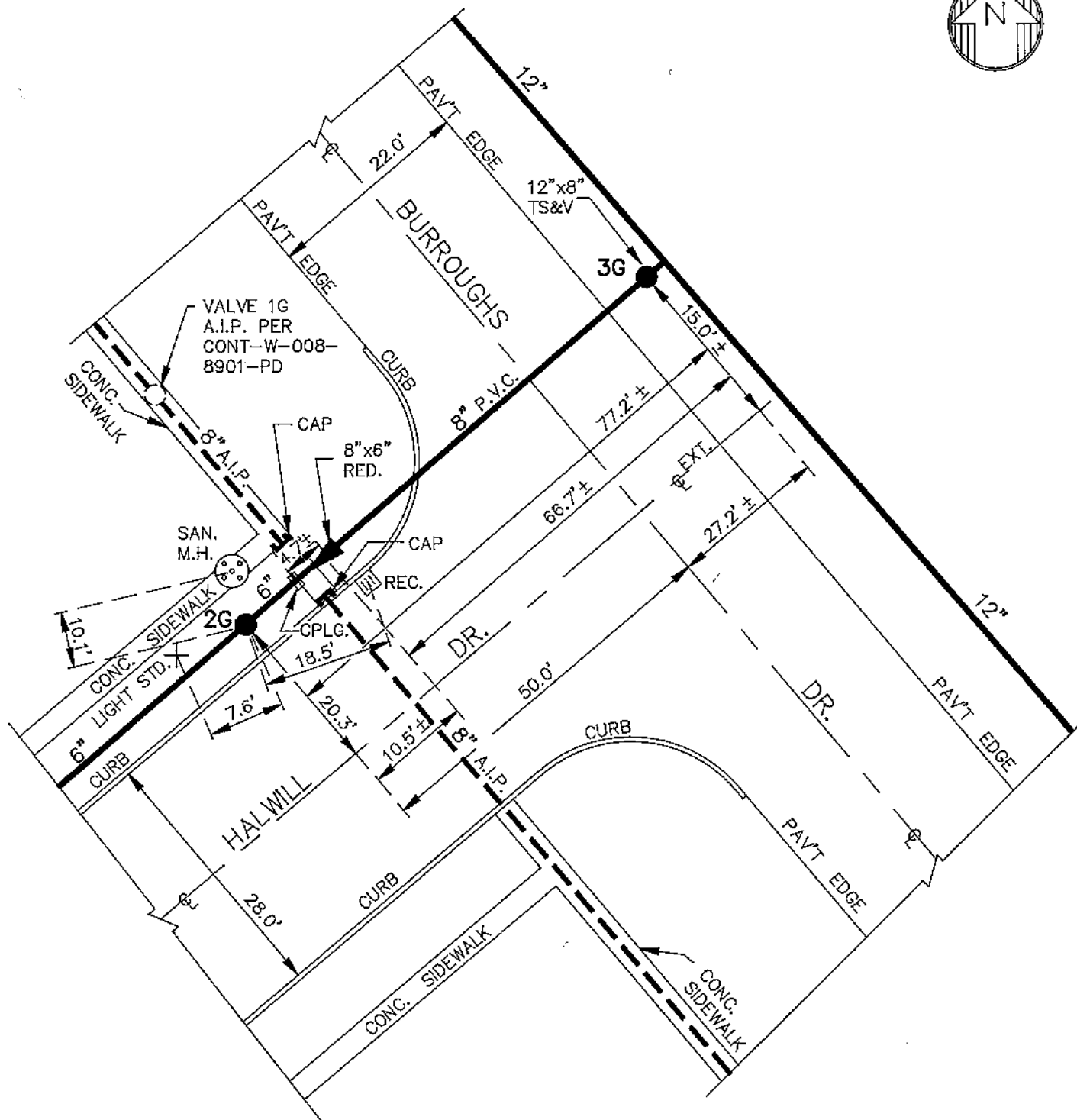
1G TO 2G = 61.2'
 1G TO 4G = 80.9'
 1G TO HYD. = 75.7'
 2G TO 4G = 70.4'
 2G TO HYD. = 50.8'
 4G TO HYD. = 21.4'

W.O. #CW37041
 CONT-W-008-8901-PD
 9-3-45-A
 F.B. 414/33
 9-3-21
 F.B. 408/32

NOTE: DETAIL DRAWN ON CAD SYSTEM.
 ± DIMENSIONS FROM AS-BUILTS
 AND W.O., NOT FIELD CHECKED.

J07-B13
 DETAIL SHT. NO.

MASTER COPY

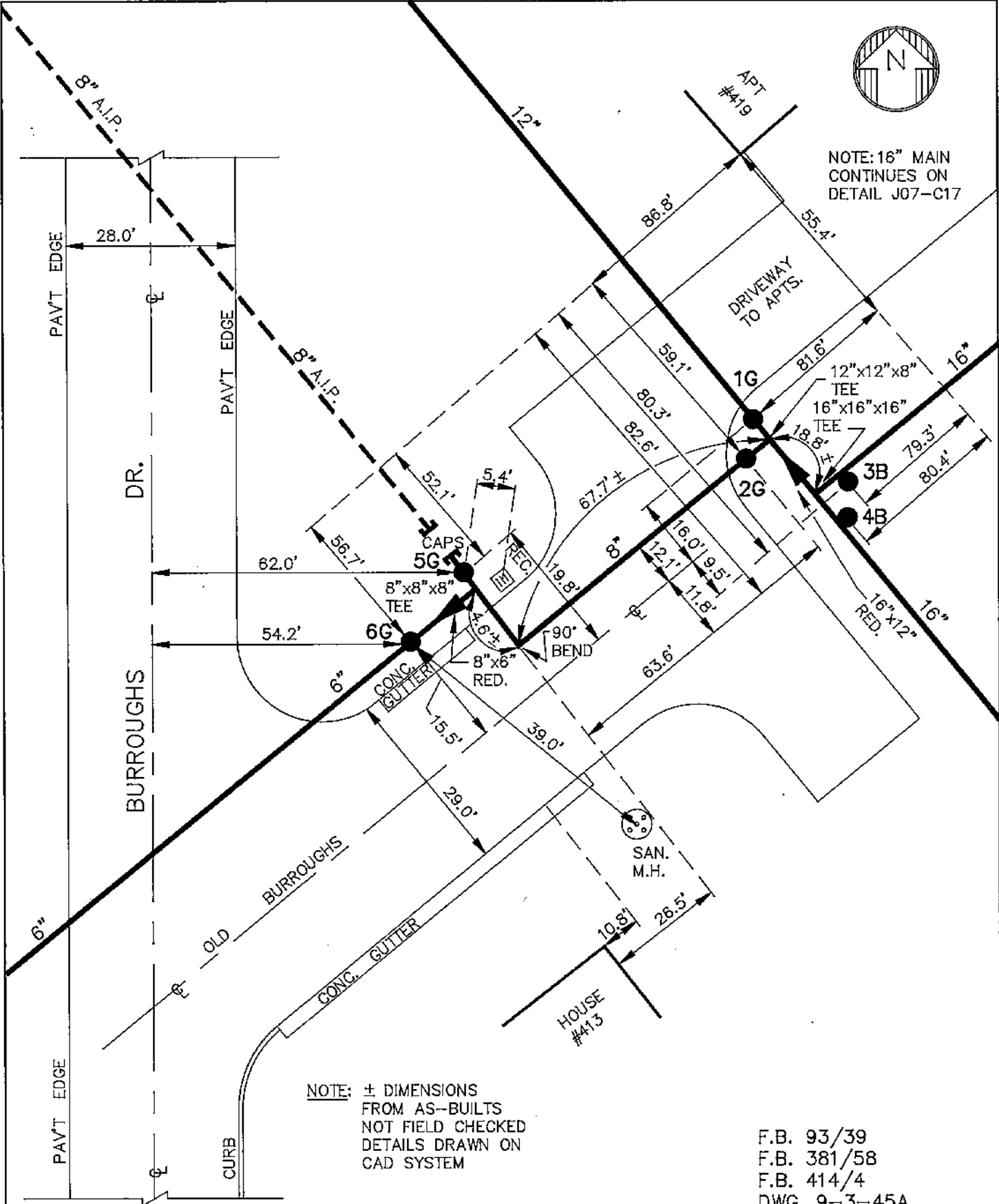


NOTE: ± DIMENSIONS
FROM AS-BUILTS
NOT FIELD CHECKED
DETAILS DRAWN ON
CAD SYSTEM

EC-710
EC-1568
F.B. 352/14
F.B. 401/44
DWG. 9-3-45A
CONT-W-008-8901-PD

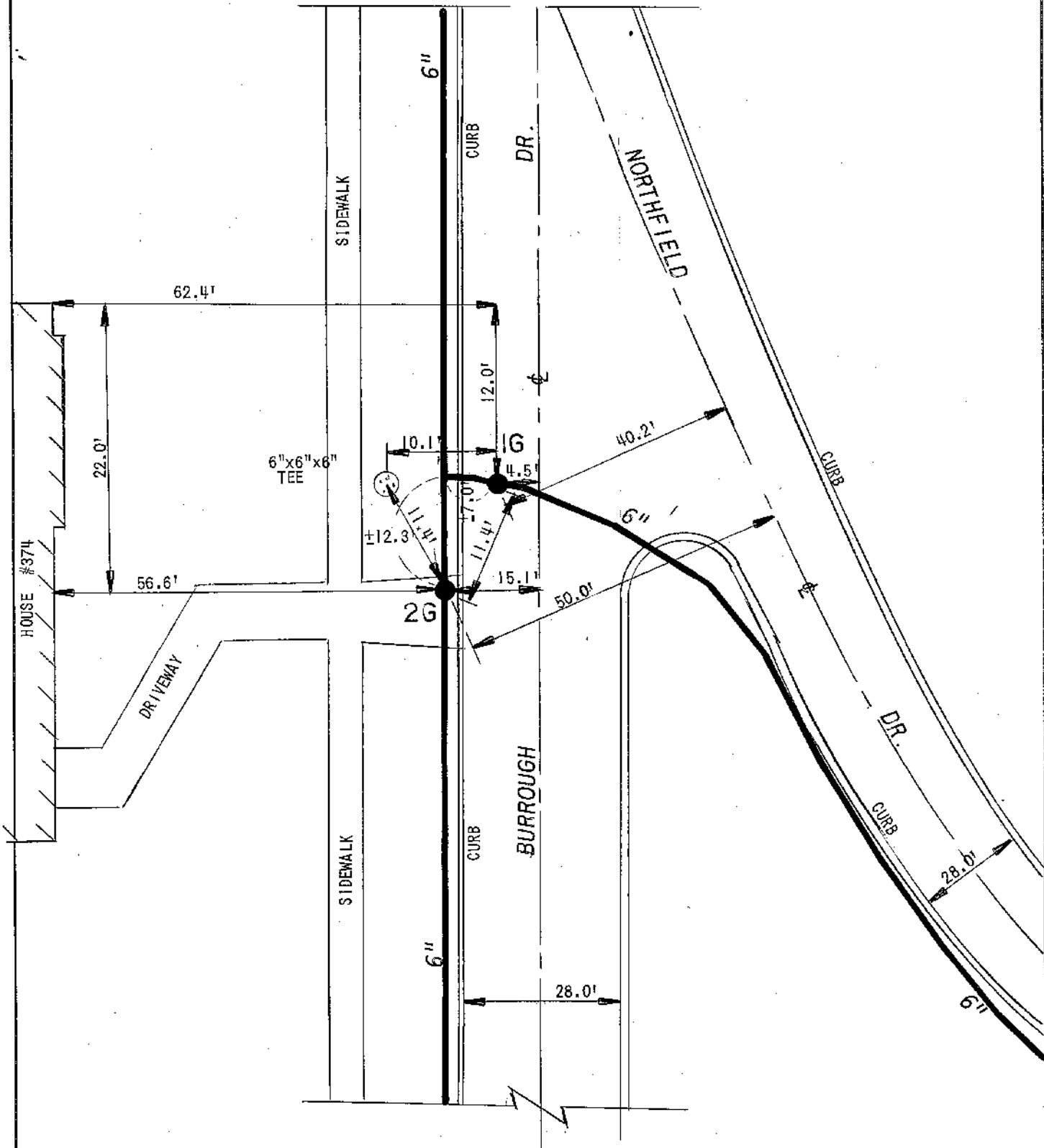


NOTE: 16" MAIN
CONTINUES ON
DETAIL J07-C17



NOTE: ± DIMENSIONS
FROM AS-BUILTS
NOT FIELD CHECKED
DETAILS DRAWN ON
CAD SYSTEM

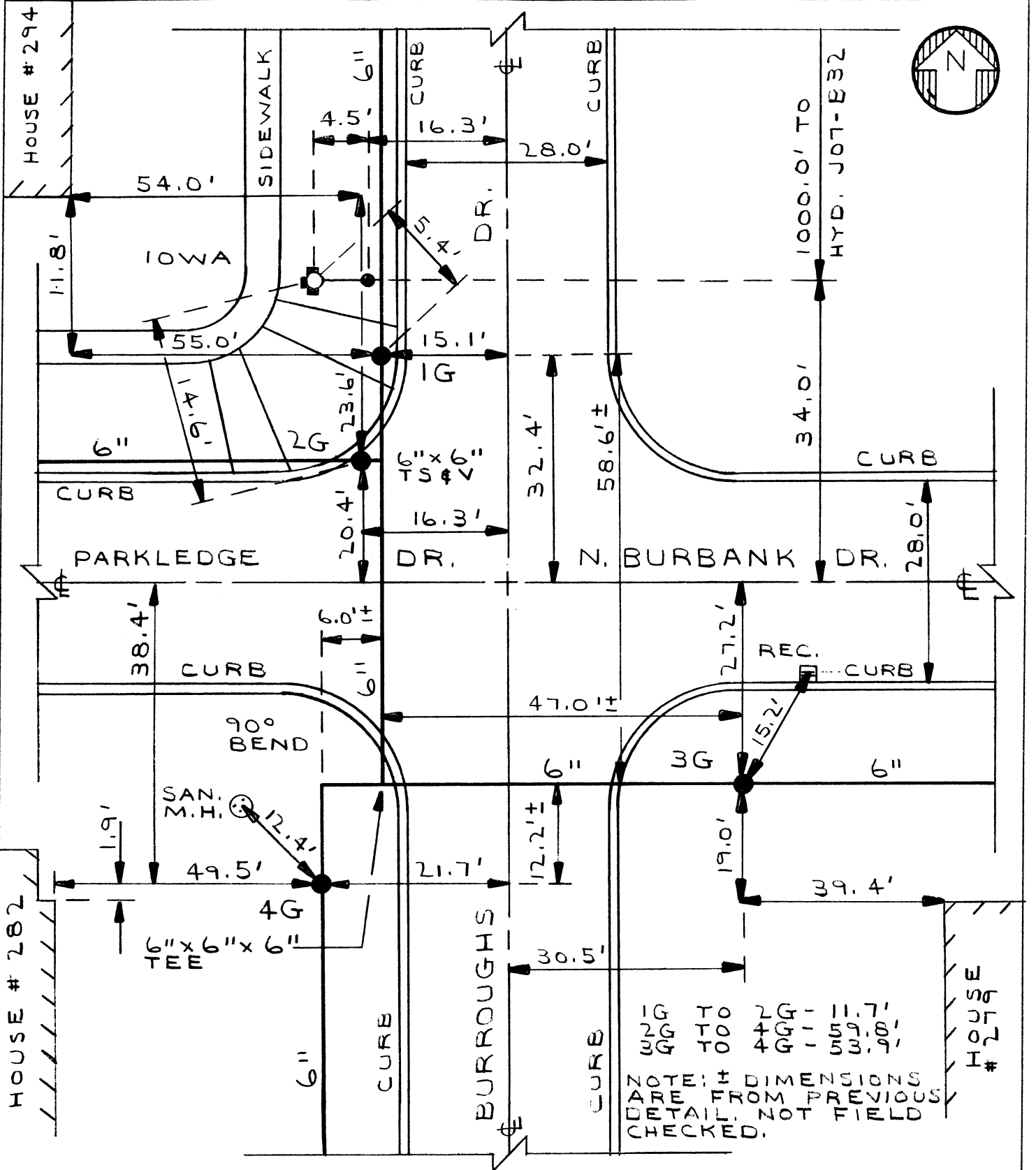
F.B. 93/39
F.B. 381/58
F.B. 414/4
DWG. 9-3-45A
CONT-W-008-8901-PD



PL. 233

DETAIL SHEET NO.

<div style="border: 1px solid black; padding: 2px; display: inline-block;"> EC WA </div>	ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	REV. D.K.C. DE.	REVISED DE.	TOWN OF AMHERST E.C.W.A.	J07-B48 DETAIL NO.(NTS)
		DATE: 11.19.98	DATE:		199800049
		FIELD	OFFICE		CURRENT PROJECT NO



AMTN-684-9801-P
F.B. 352/5
F.B. 229/16
F.B. 93/52
PL 221

J07-B48
DETAIL SHT. NO.

MASTER COPY

E	C
W	A

ERIE COUNTY 
WATER AUTHORITY
BUFFALO, NEW YORK

REV. D. K. C.

DR.

DATE: 9.1.09

DATE: _____

FIELD

OFFICE

TOWN OF AMHERST

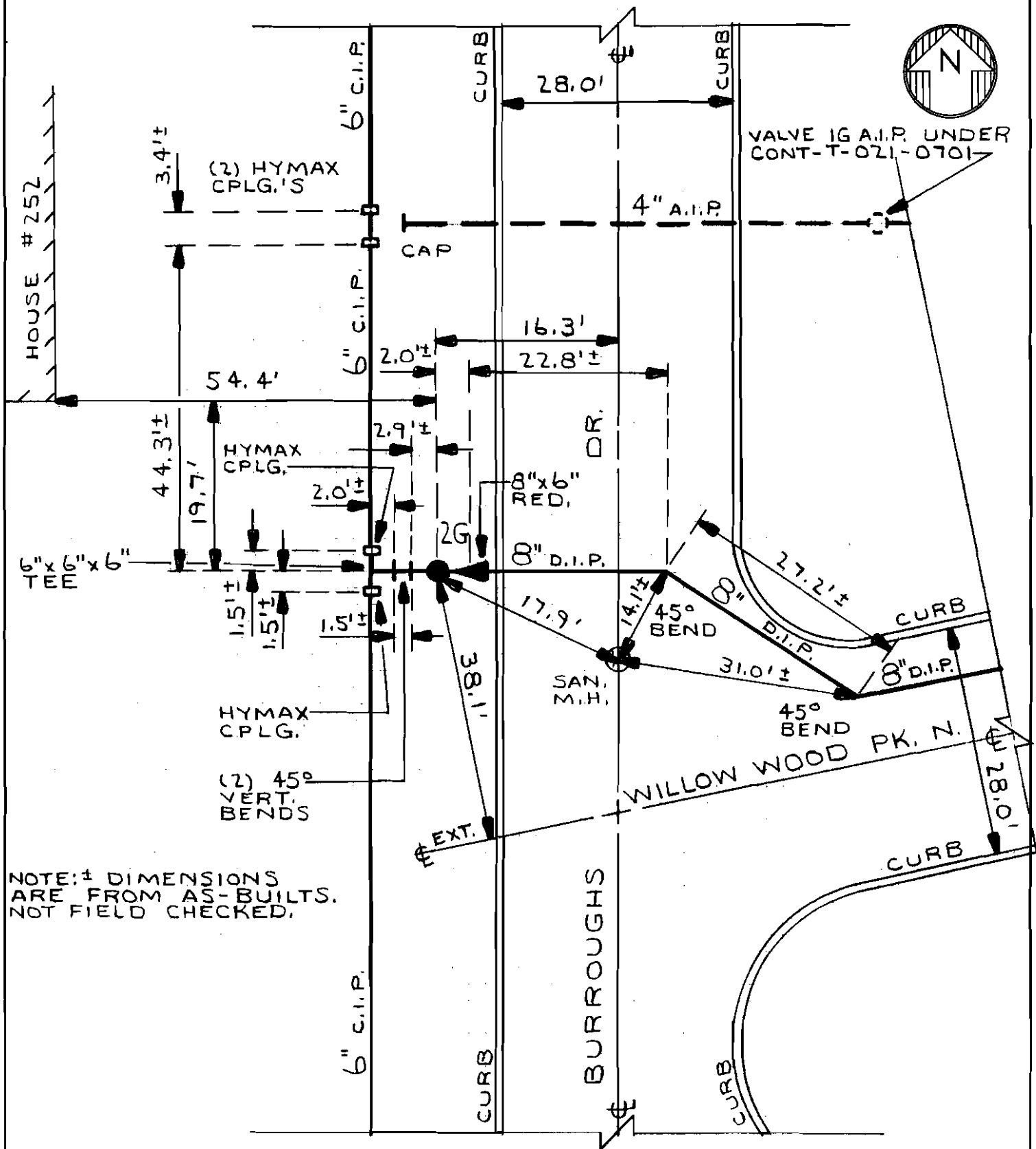
E. C. W. A.

J07-B56

DETAIL SHT. NO.

200700319

CURRENT PROJECT NO.

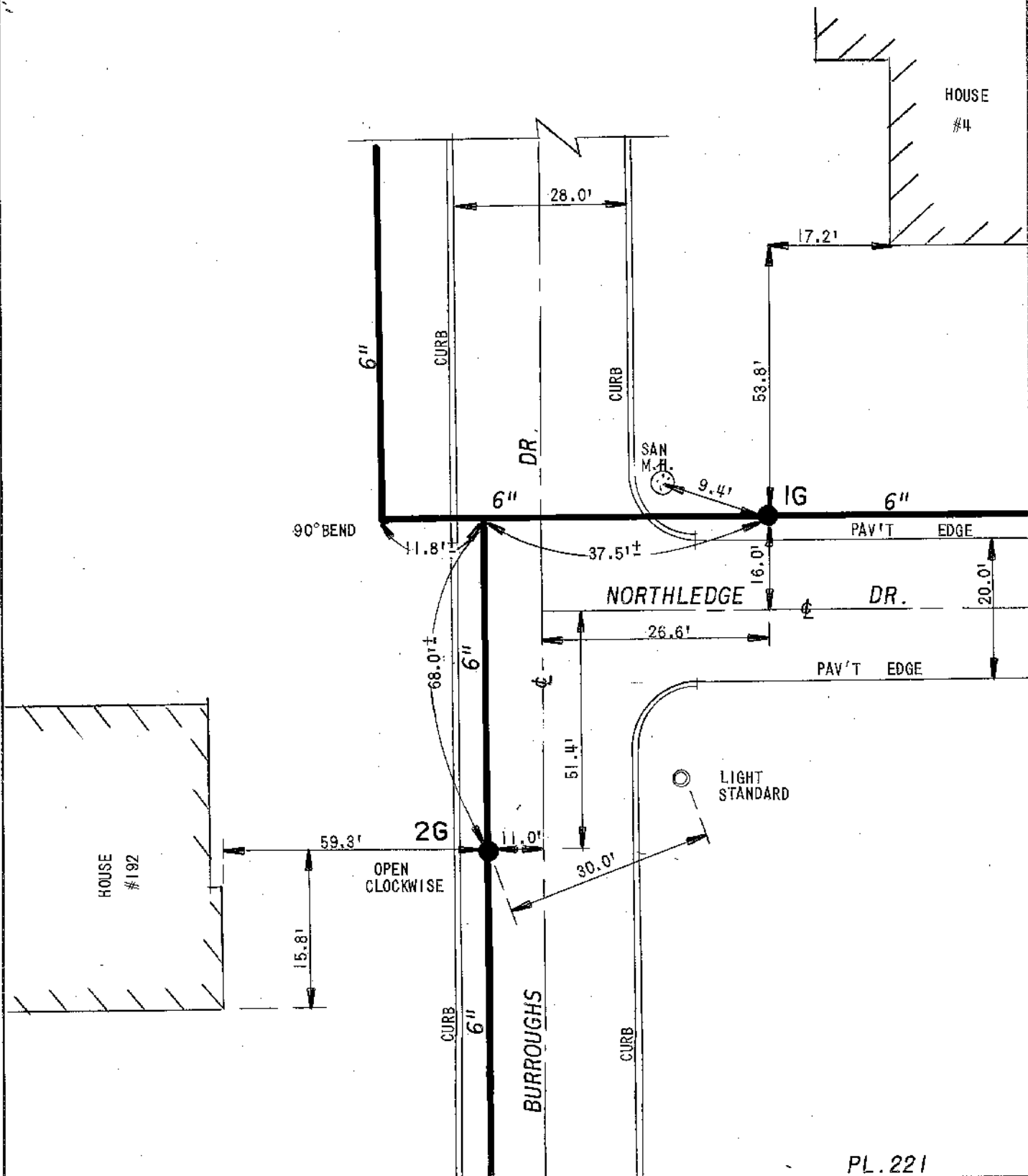


NOTE:± DIMENSIONS
ARE FROM AS-BUILTS.
NOT FIELD CHECKED.

CONT-T-021-0701
PL 221

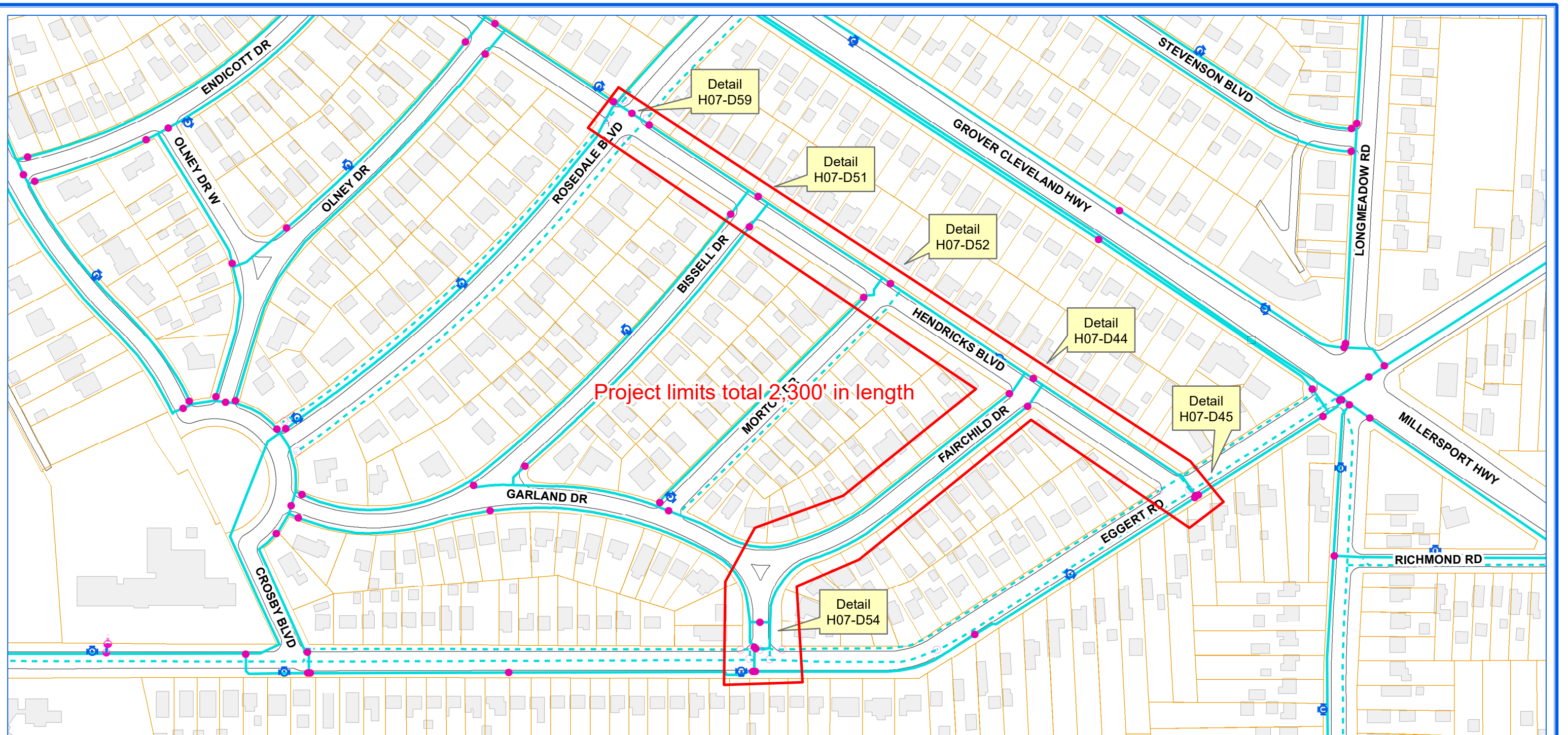
J07-B56
DETAIL SHY. NO.

MASTER COPY



PL. 221

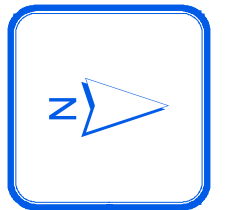
DETAIL SHEET NO.



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

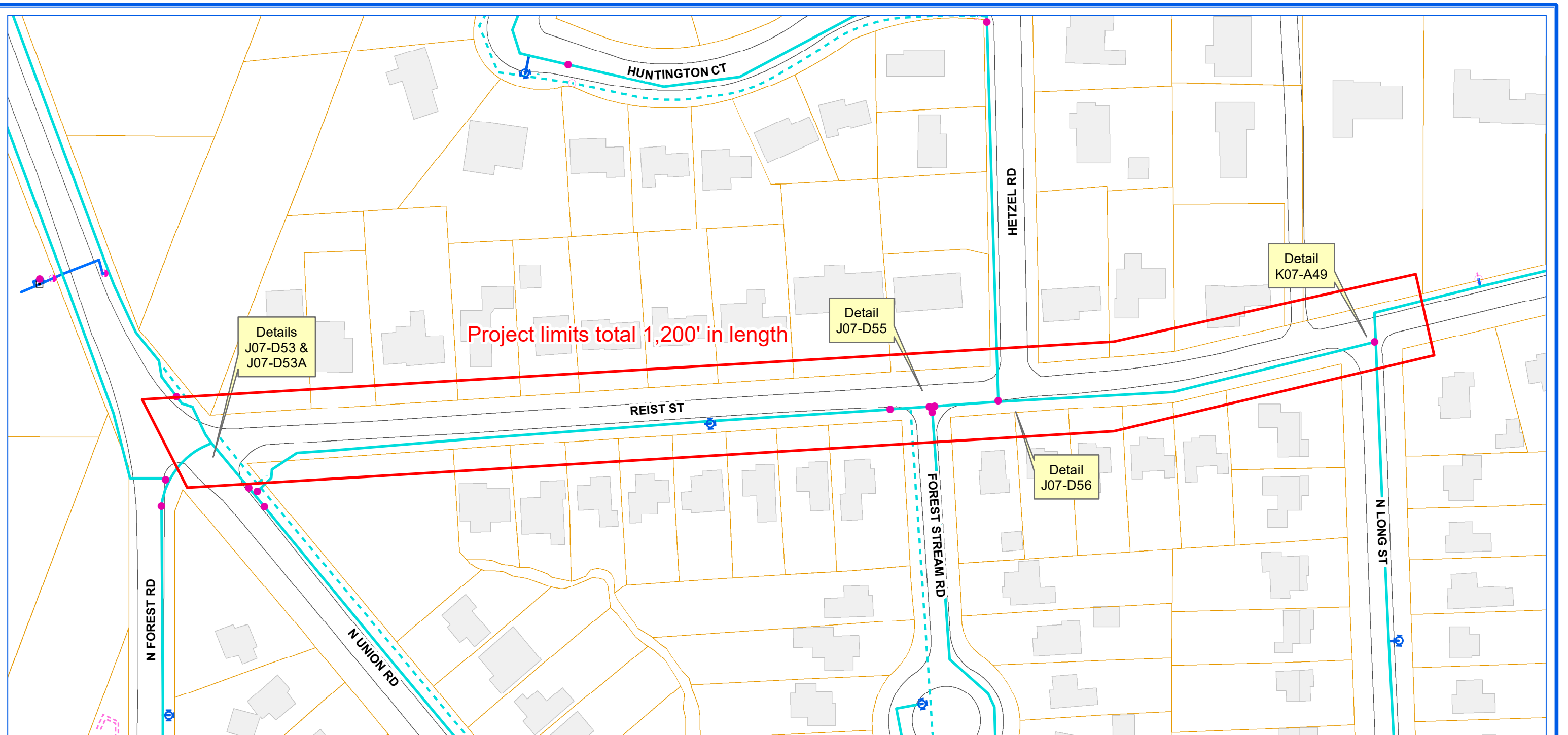
**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
KINGSGATE ROAD AND KINGS HIGHWAY NORTH
(FROM KINGS HIGHWAY TO 550 KINGS HIGHWAY NORTH),
CAPEN BOULEVARD (FROM OXFORD AVENUE TO LONGMEADOW ROAD)
TOWN OF AMHERST, NY
SOUTH IRWINWOOD ROAD (FROM 99 TO 167 SOUTH IRWINWOOD ROAD),
PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



0 125 250 375 Feet

1 inch = 200 feet

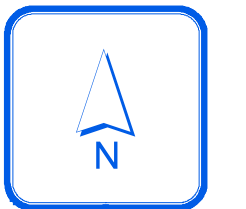
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

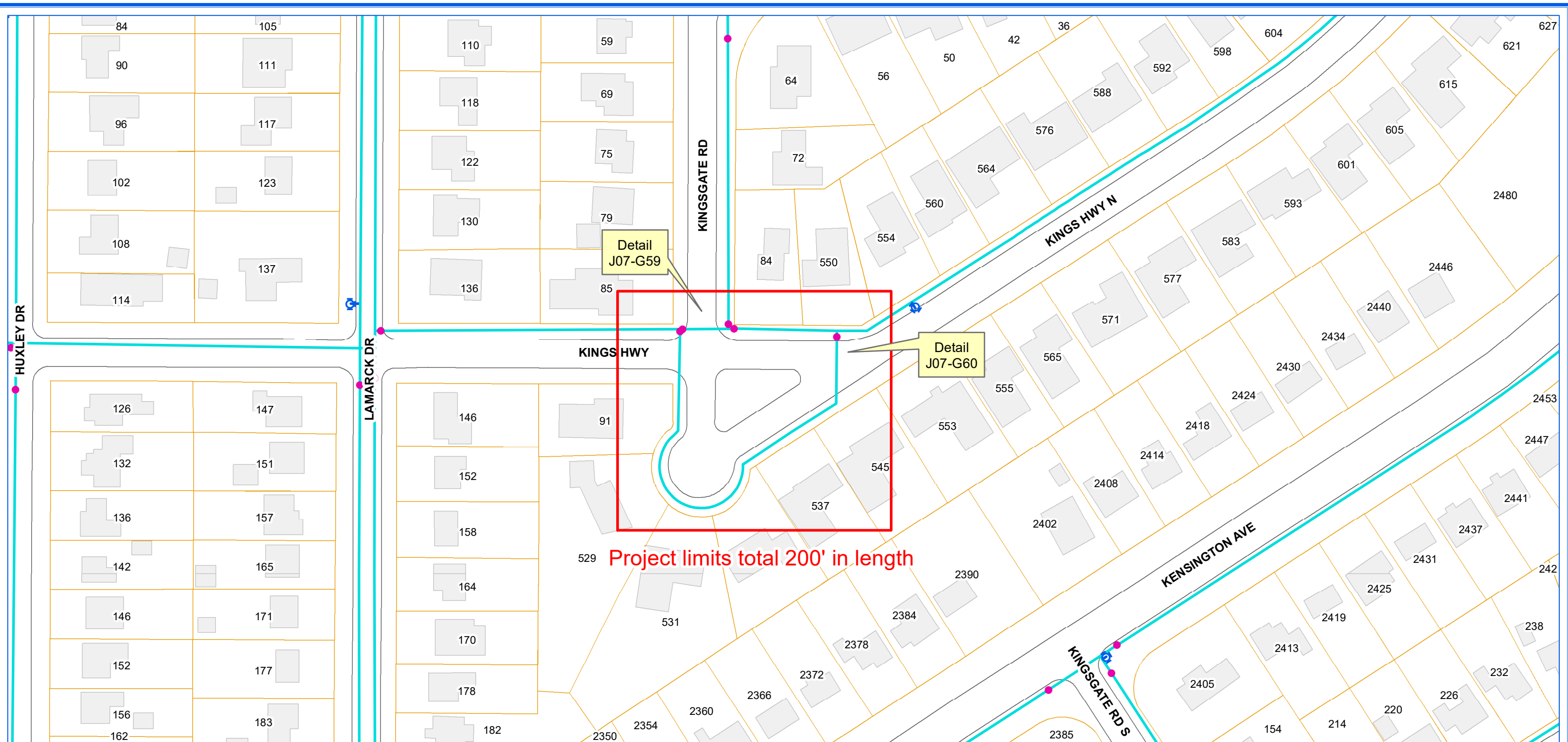
**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
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(FROM KINGS HIGHWAY TO 550 KINGS HIGHWAY NORTH),
CAPEN BOULEVARD (FROM OXFORD AVENUE TO LONGMEADOW ROAD)
TOWN OF AMHERST, NY
SOUTH IRWINWOOD ROAD (FROM 99 TO 167 SOUTH IRWINWOOD ROAD),
PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



0 60 120 180
Feet

1 inch = 100 feet

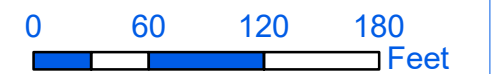
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

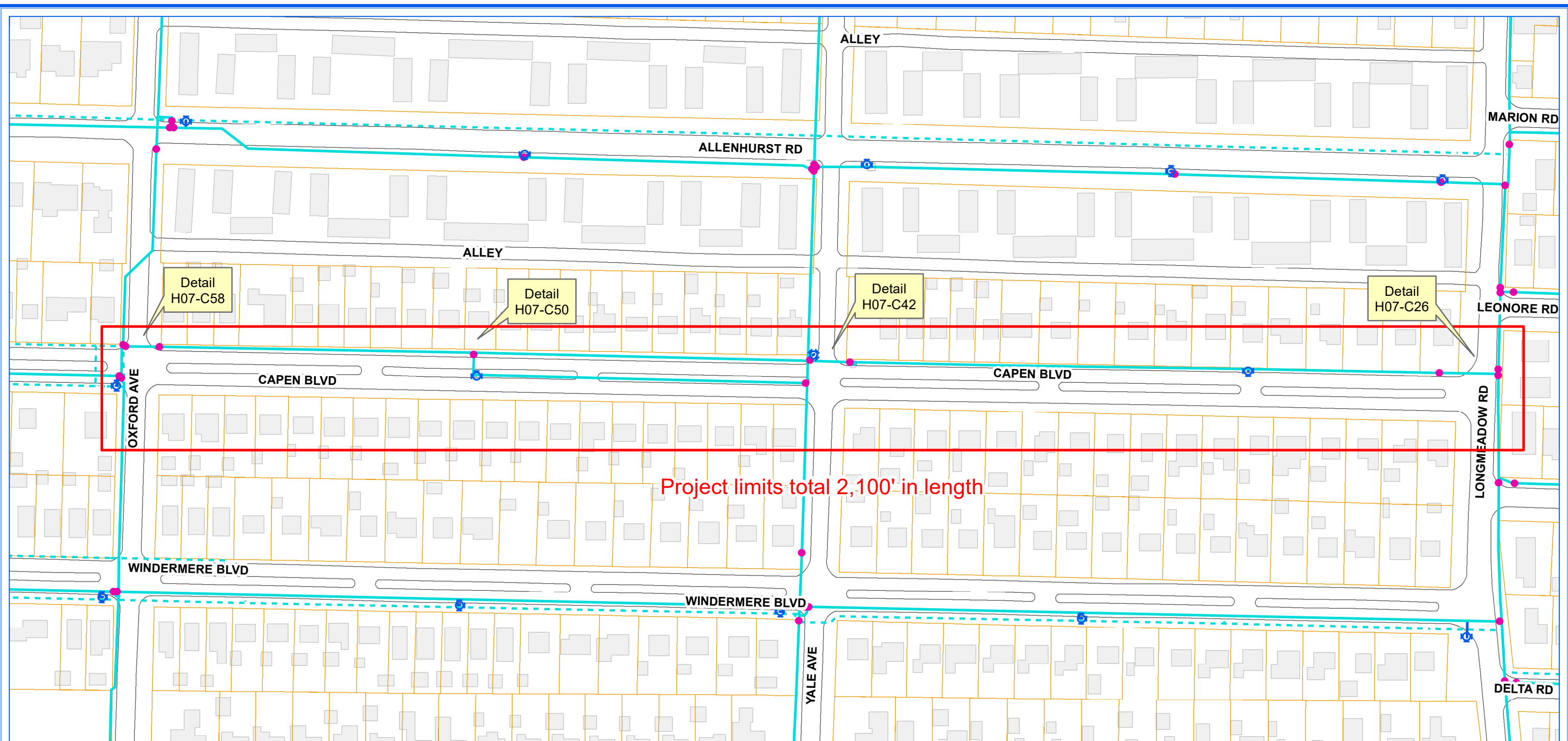
**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
KINGSGATE ROAD AND KINGS HIGHWAY NORTH
(FROM KINGS HIGHWAY TO 550 KINGS HIGHWAY NORTH),
CAPEN BOULEVARD (FROM OXFORD AVENUE TO LONGMEADOW ROAD)
TOWN OF AMHERST, NY
SOUTH IRWINWOOD ROAD (FROM 99 TO 167 SOUTH IRWINWOOD ROAD),
PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



1 inch = 100 feet

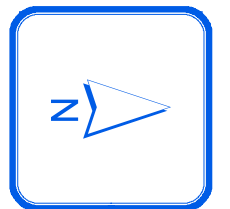
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

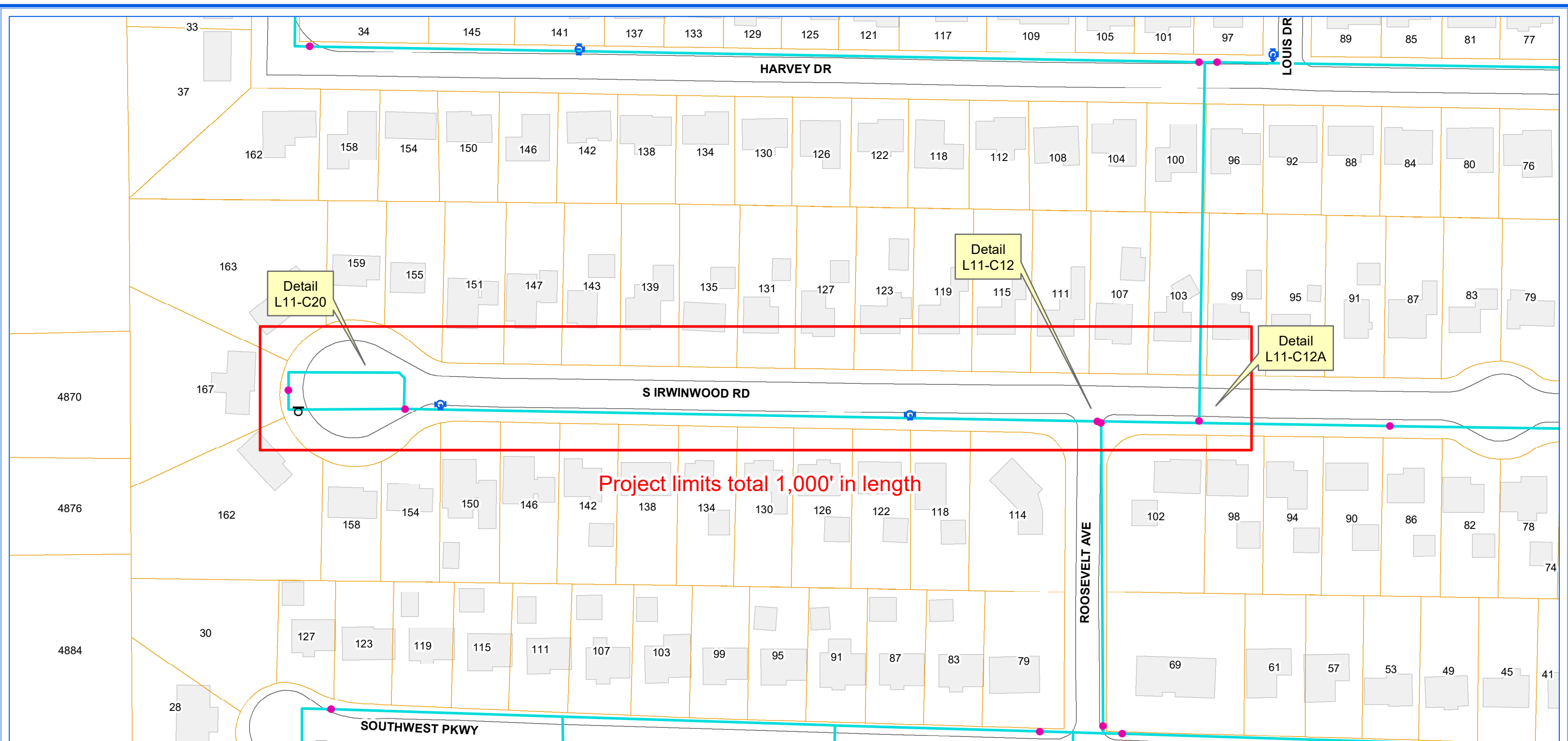
**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
KINGSGATE ROAD AND KINGS HIGHWAY NORTH
(FROM KINGS HIGHWAY TO 550 KINGS HIGHWAY NORTH),
CAPEN BOULEVARD (FROM OXFORD AVENUE TO LONGMEADOW ROAD)
TOWN OF AMHERST, NY
SOUTH IRWINWOOD ROAD (FROM 99 TO 167 SOUTH IRWINWOOD ROAD),
PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



0 90 180 270 Feet

1 inch = 150 feet

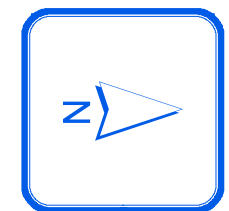
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

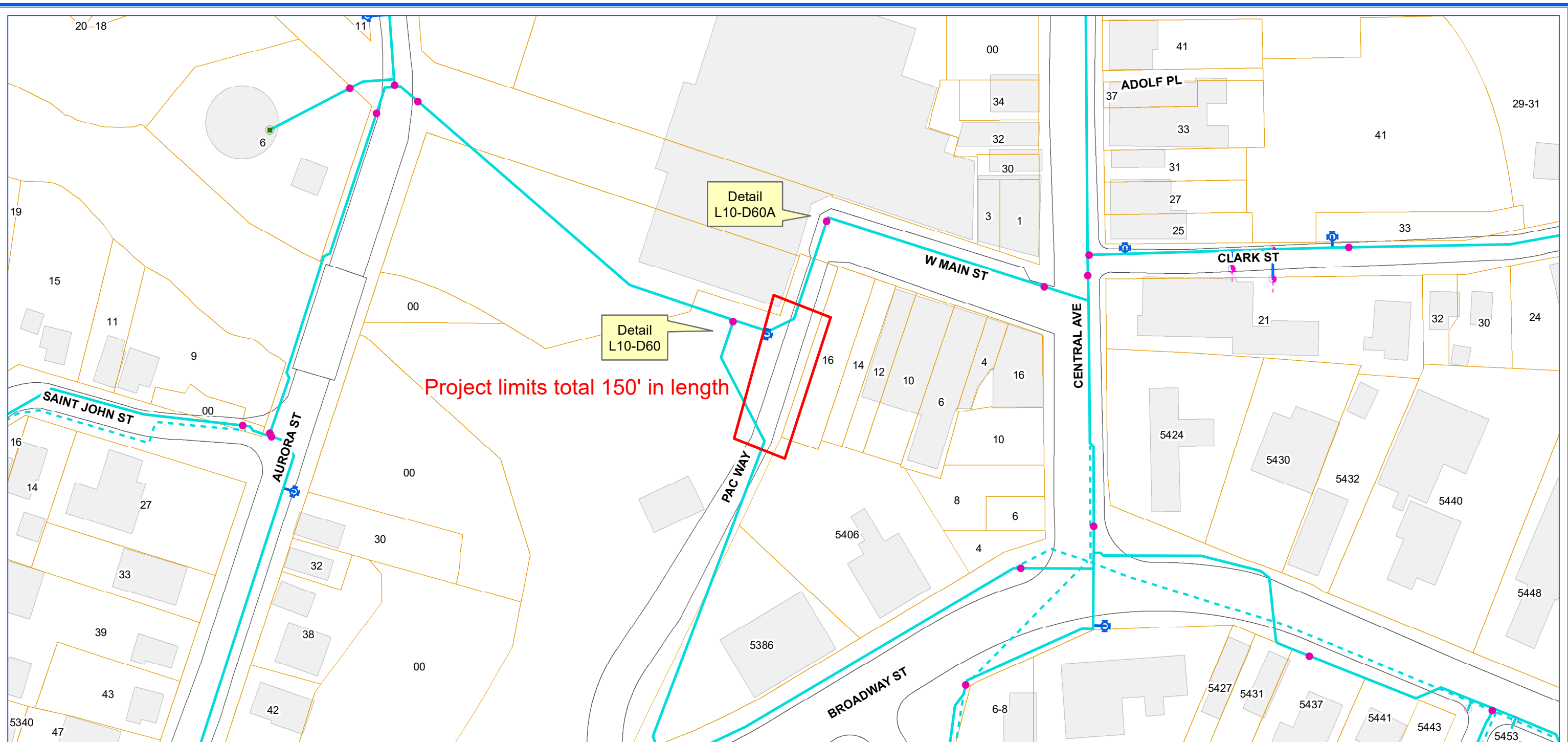
**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
KINGSGATE ROAD AND KINGS HIGHWAY NORTH
(FROM KINGS HIGHWAY TO 550 KINGS HIGHWAY NORTH),
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TOWN OF AMHERST, NY
SOUTH IRWINWOOD ROAD (FROM 99 TO 167 SOUTH IRWINWOOD ROAD),
PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



0 60 120 180 Feet

1 inch = 100 feet

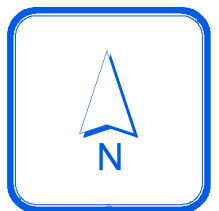
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

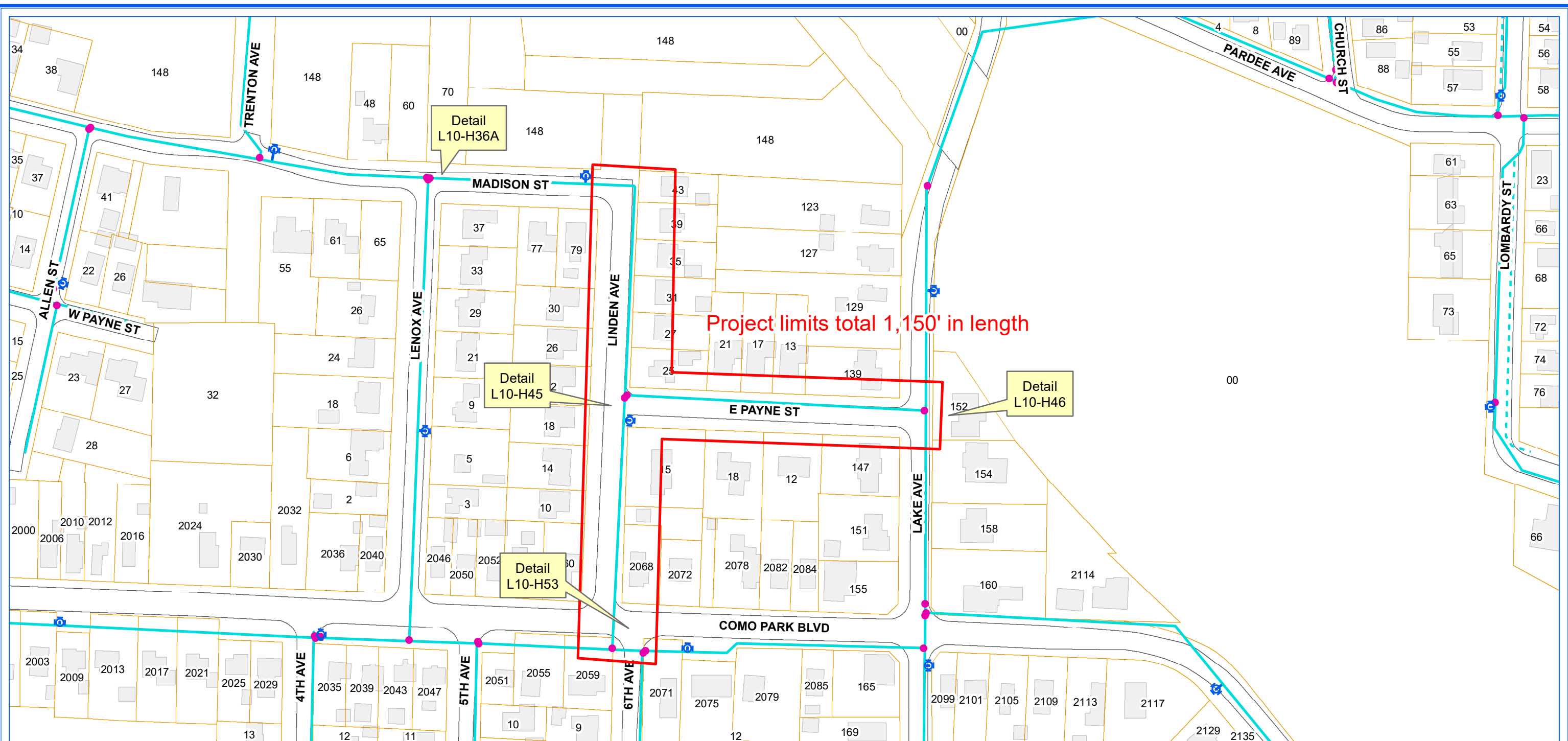
**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
KINGSGATE ROAD AND KINGS HIGHWAY NORTH
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PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



0 60 120 180
Feet

1 inch = 100 feet

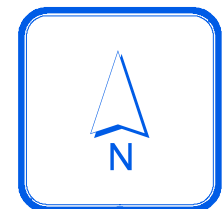
RDC



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN
DESIGN PROJECT 2021 & 2022
CONTRACT "D"**

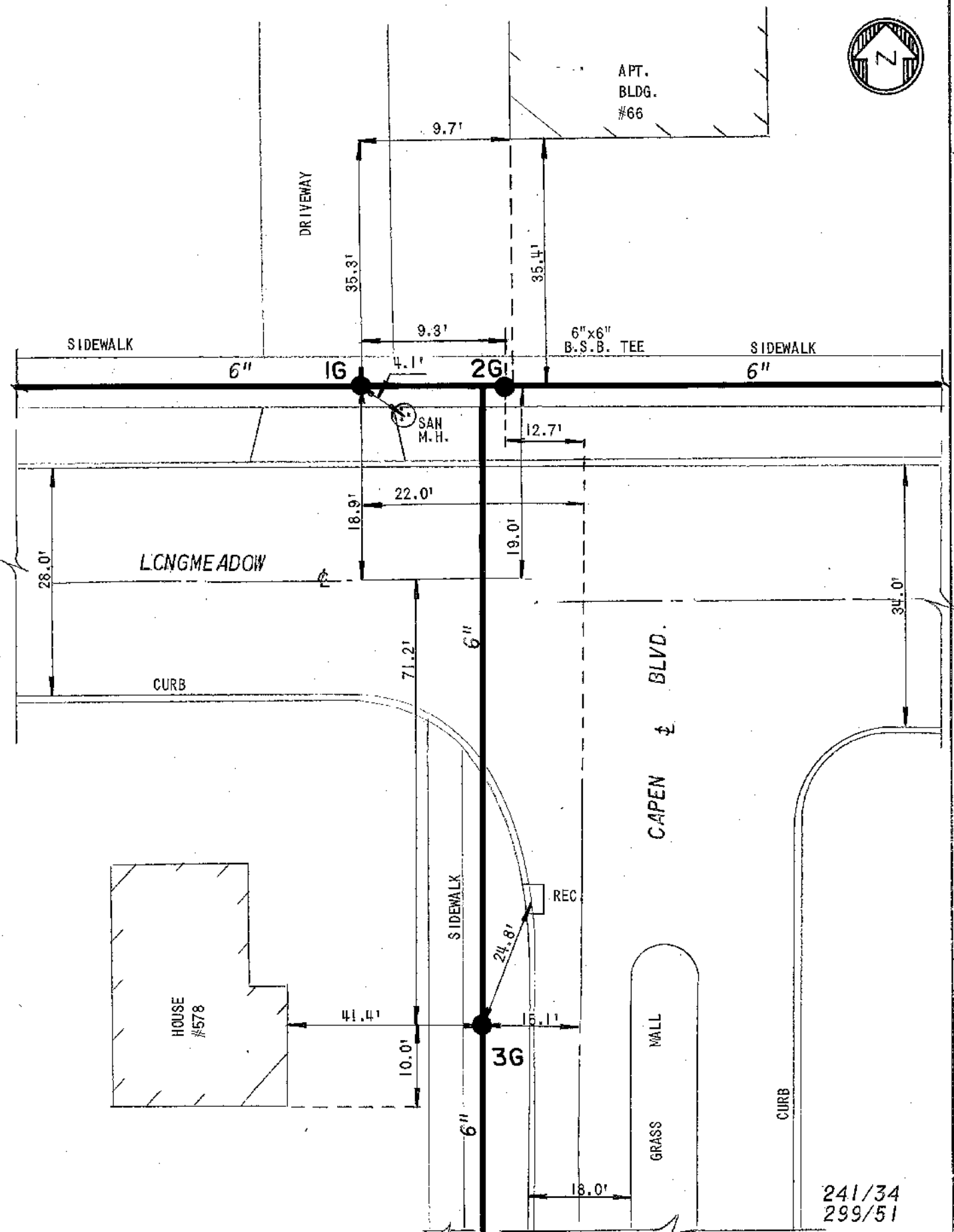
**HENDRICKS BOULEVARD (FROM ROSEDALE BOULEVARD TO EGGERT ROAD),
FAIRCHILD DRIVE (FROM EGGERT ROAD TO HENDRICKS BOULEVARD),
REIST STREET (FROM NORTH UNION ROAD TO NORTH LONG STREET),
KINGSGATE ROAD AND KINGS HIGHWAY NORTH
(FROM KINGS HIGHWAY TO 550 KINGS HIGHWAY NORTH),
CAPEN BOULEVARD (FROM OXFORD AVENUE TO LONGMEADOW ROAD)
TOWN OF AMHERST, NY
SOUTH IRWINWOOD ROAD (FROM 99 TO 167 SOUTH IRWINWOOD ROAD),
PAC WAY (FROM 5406 TO EXISTING BEND),
LINDEN AVENUE (FROM MADISON STREET TO COMO PARK BOULEVARD),
EAST PAYNE STREET (FROM LINDEN AVENUE TO LAKE AVENUE)
VILLAGE OF LANCASTER, NY**



0 90 180 270
Feet

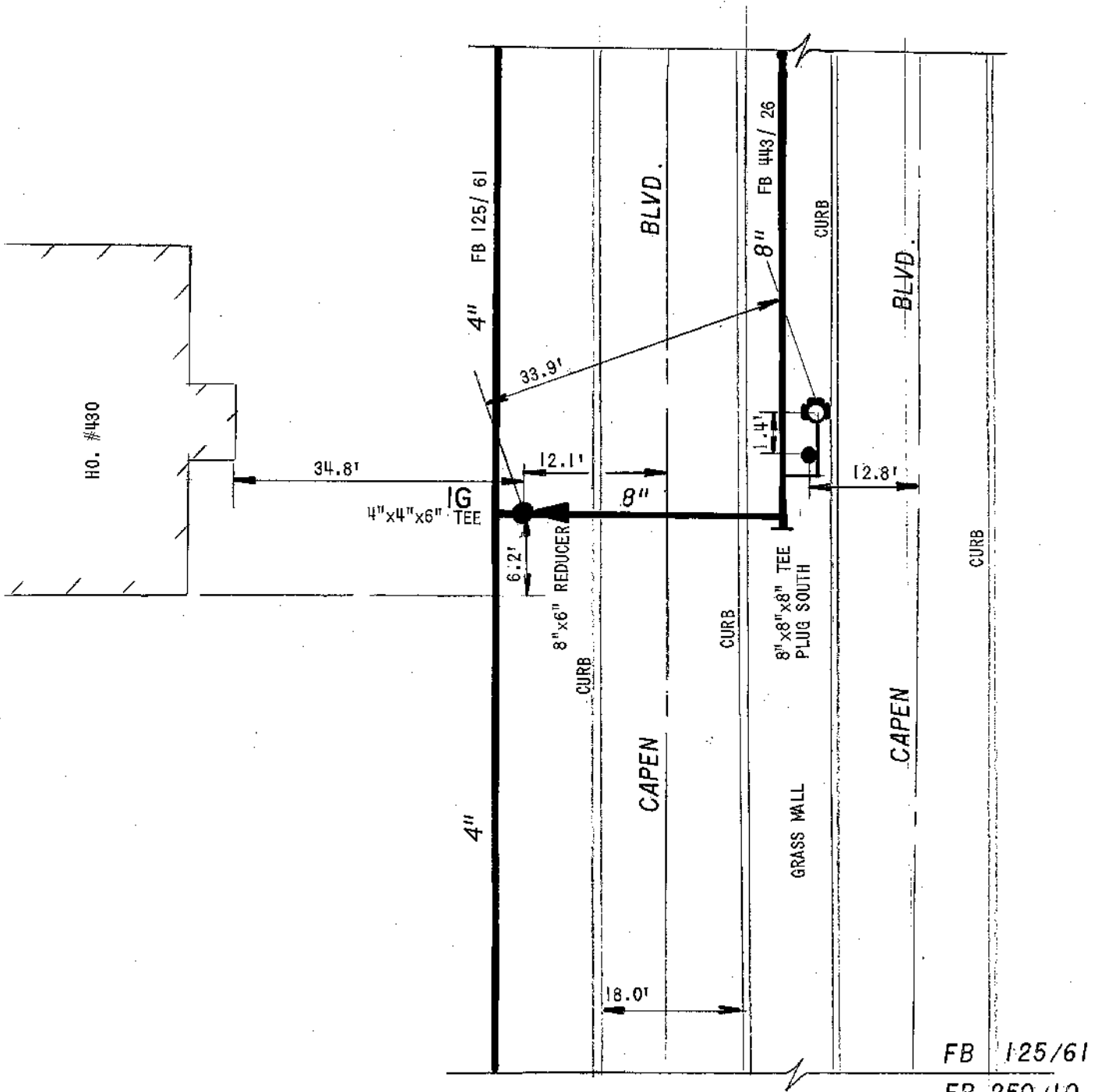
1 inch = 150 feet

RDC



241/34
299/51

MASTER COPY



FB 250/10
FB 443/26



DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
 BUFFALO, NEW YORK

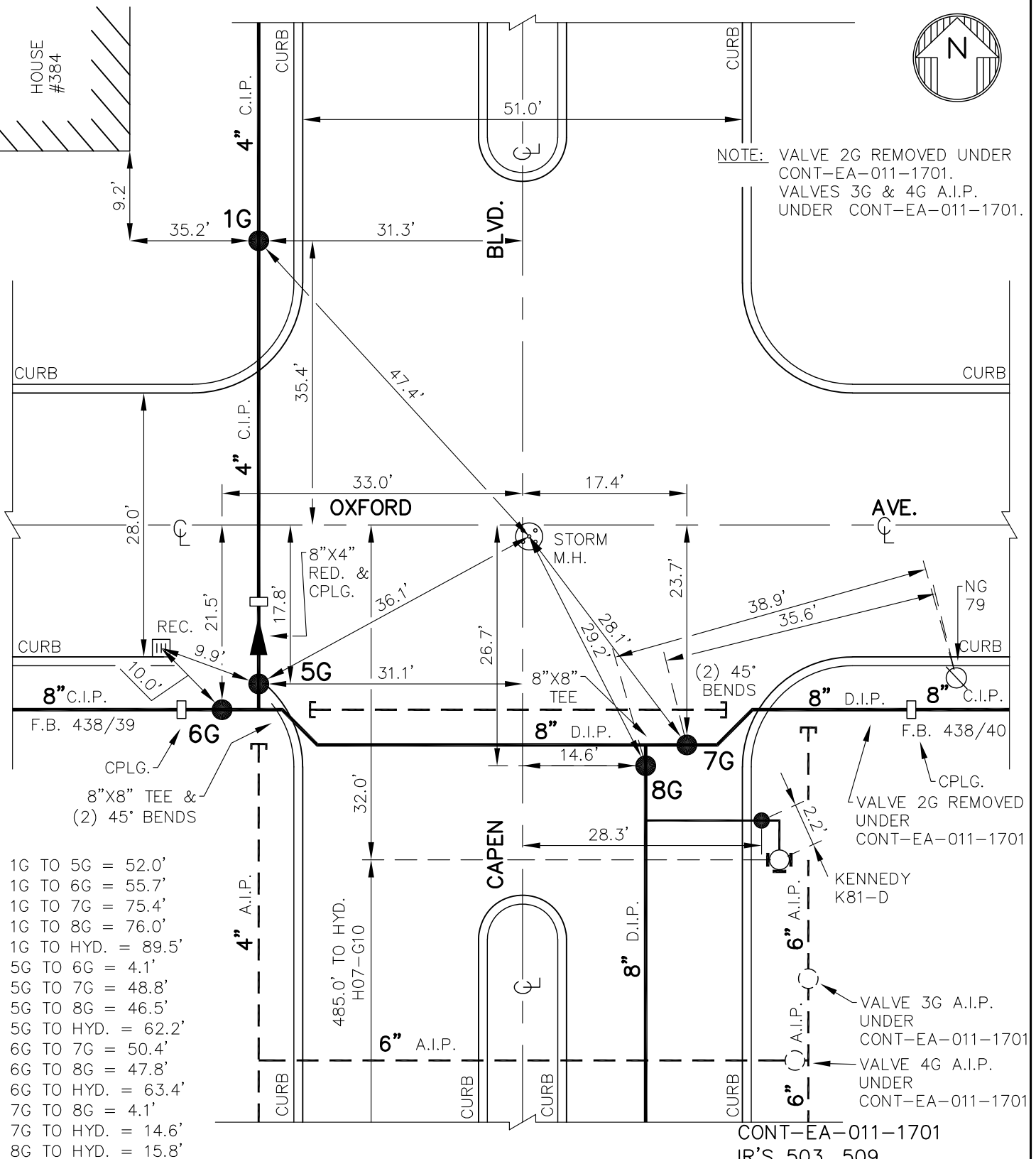
REVISED DR. R.D.C.
 DATE: 11/26/2018
 FIELD

REVISED DR. R.D.C.
 DATE: 4/1/2020
 OFFICE

TOWN OF AMHERST
E.C.W.A.

H07-C58
 DETAIL SHT. NO.

201700087
 CURRENT PROJECT NO.



MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. R.D.C.

DATE: 7/12/2019

FIELD

REVISED
DR.

DATE:

OFFICE

TOWN OF AMHERST

E.C.W.A.

H07-D44

DETAIL SHT. NO.

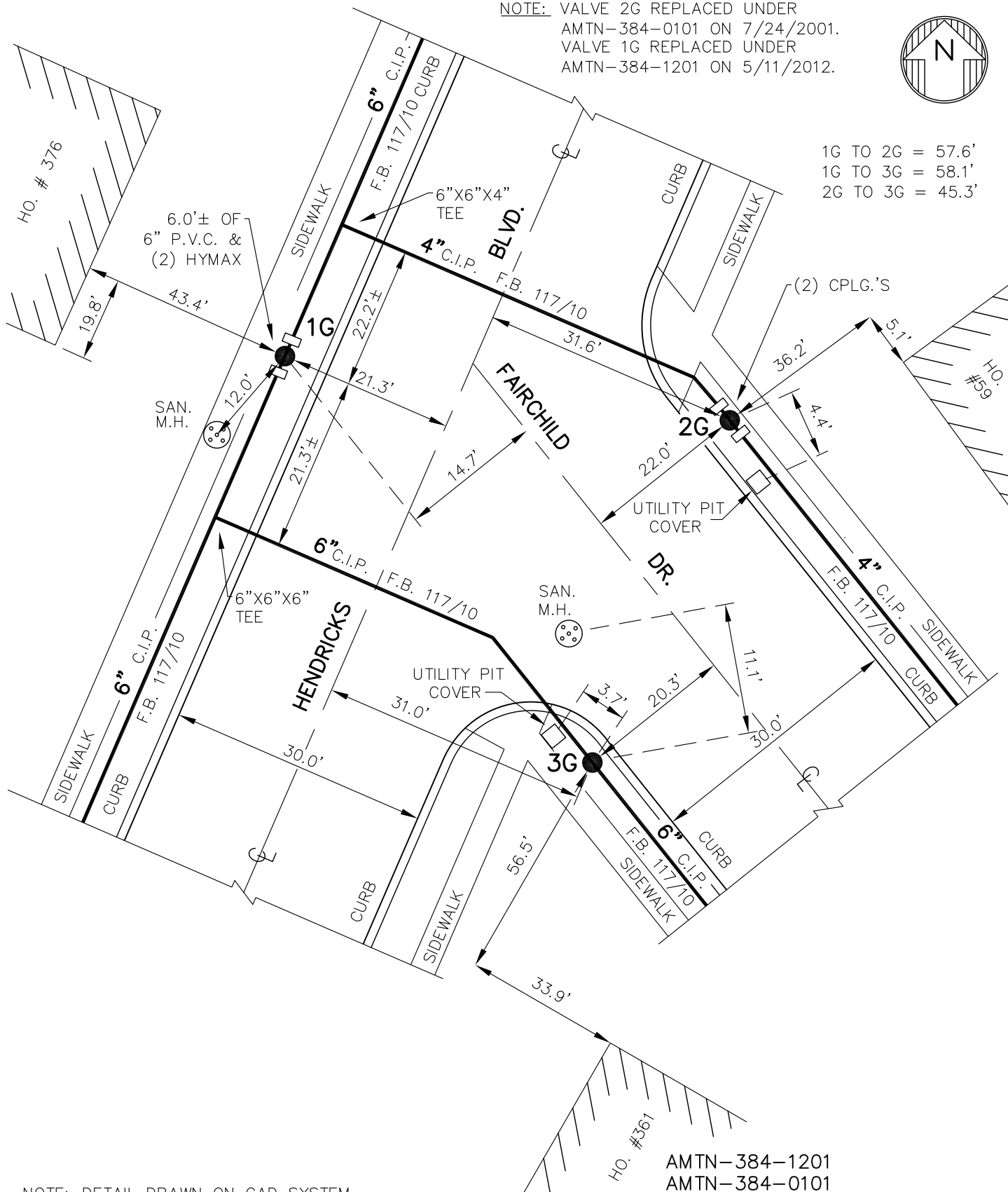
201200169

CURRENT PROJECT NO.

NOTE: VALVE 2G REPLACED UNDER
AMTN-384-0101 ON 7/24/2001.
VALVE 1G REPLACED UNDER
AMTN-384-1201 ON 5/11/2012.



1G TO 2G = 57.6'
1G TO 3G = 58.1'
2G TO 3G = 45.3'



NOTE: DETAIL DRAWN ON CAD SYSTEM.
± DIMENSIONS FROM INSPECTORS FILED
BOOK & W.O., NOT FIELD CHECKED.

AMTN-384-1201
AMTN-384-0101
F.B. 117/10
PL. 223

H07-D44

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR.

REVISED
DR.

BM

TOWN OF AMHERST

H07-D45

DETAIL SHT. NO.

DATE:

DATE: 2/26/02

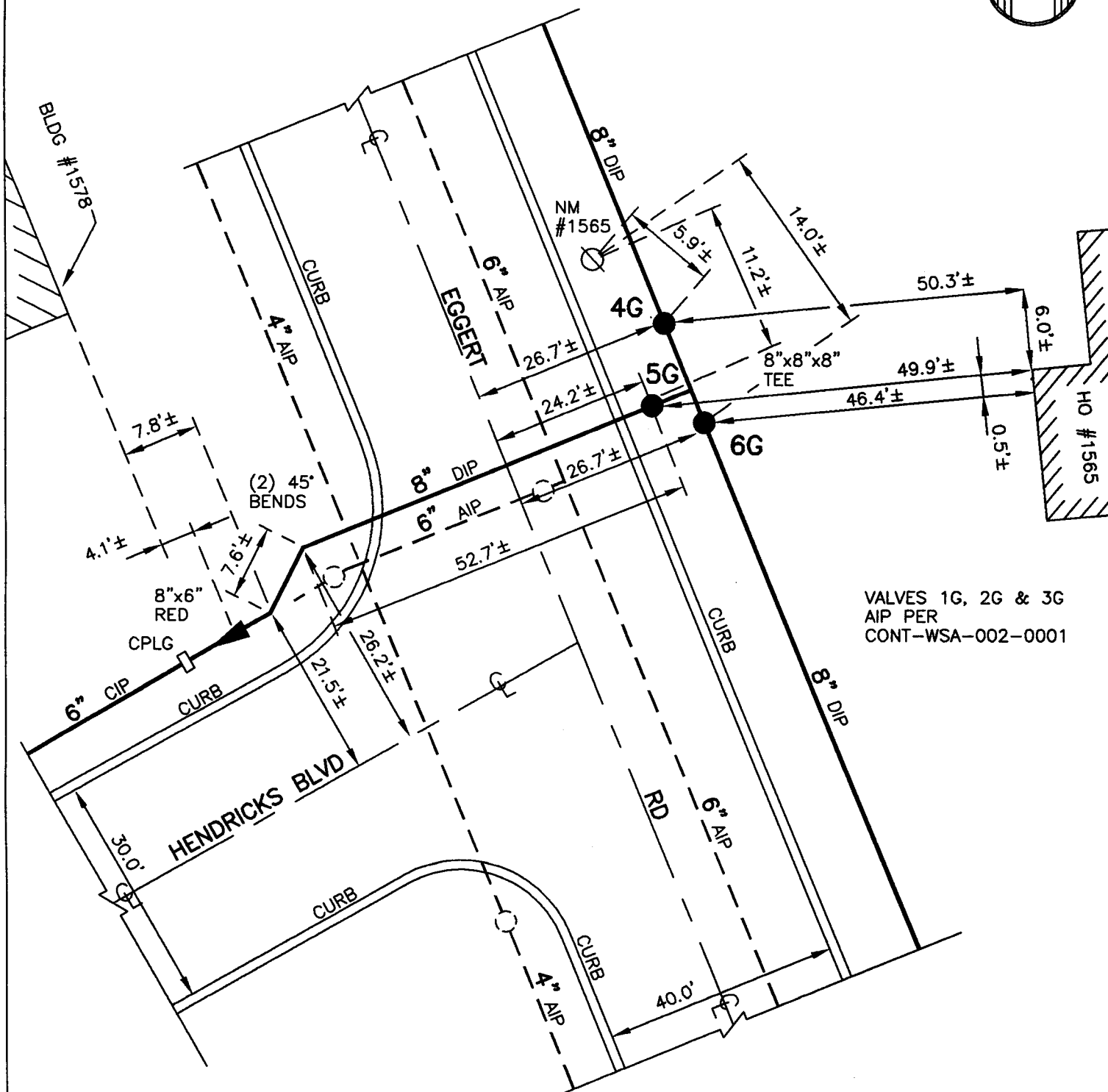
E.C.W.A.

200000040

CURRENT PROJECT NO.

FIELD

OFFICE



VALVES 1G, 2G & 3G
AIP PER
CONT-WSA-002-0001

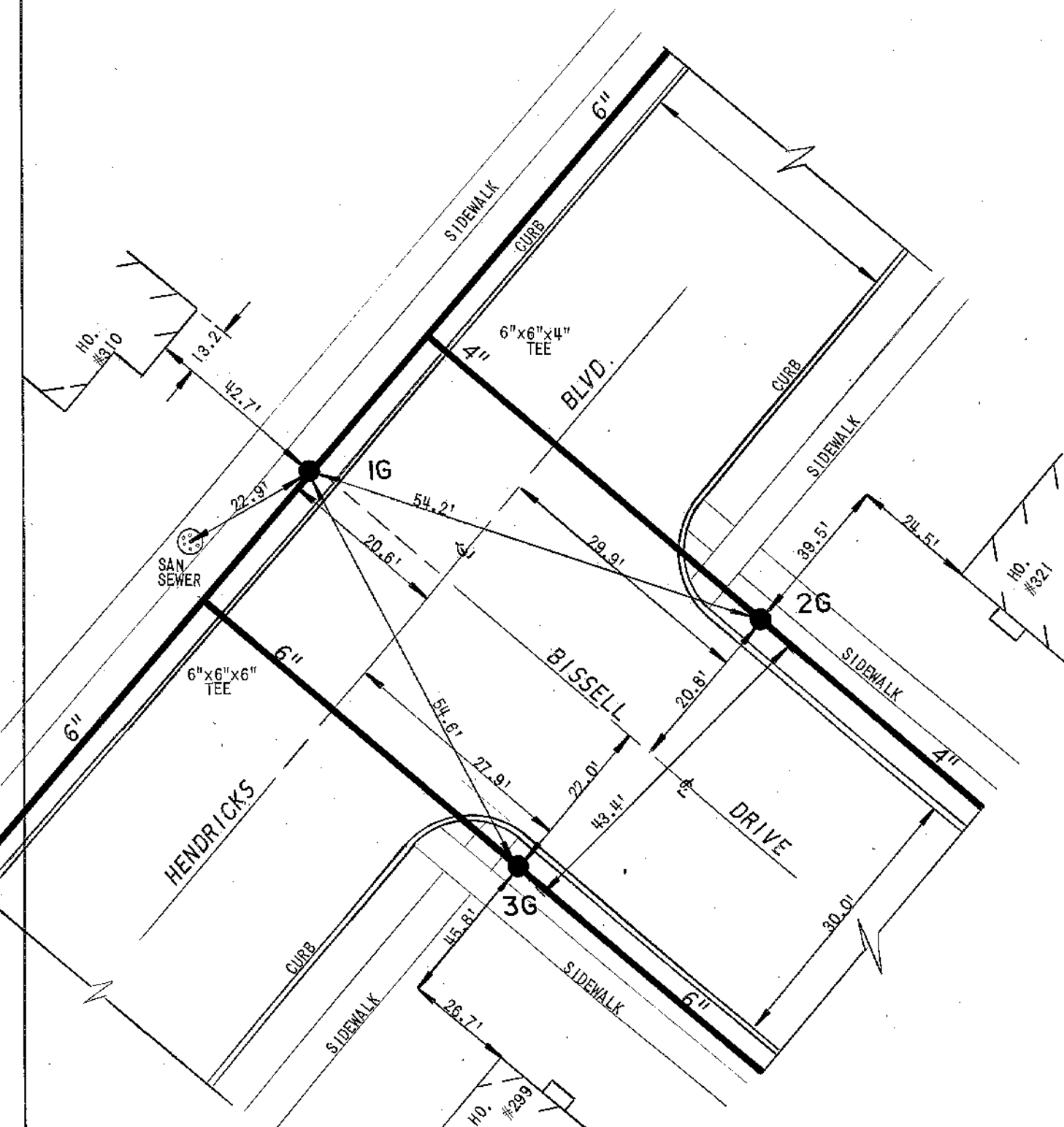
NOTE: ± DIMENSIONS ARE
FROM "AS-BUILTS"
NOT FIELD CHECKED
DETAIL DRAWN ON
CAD SYSTEM.

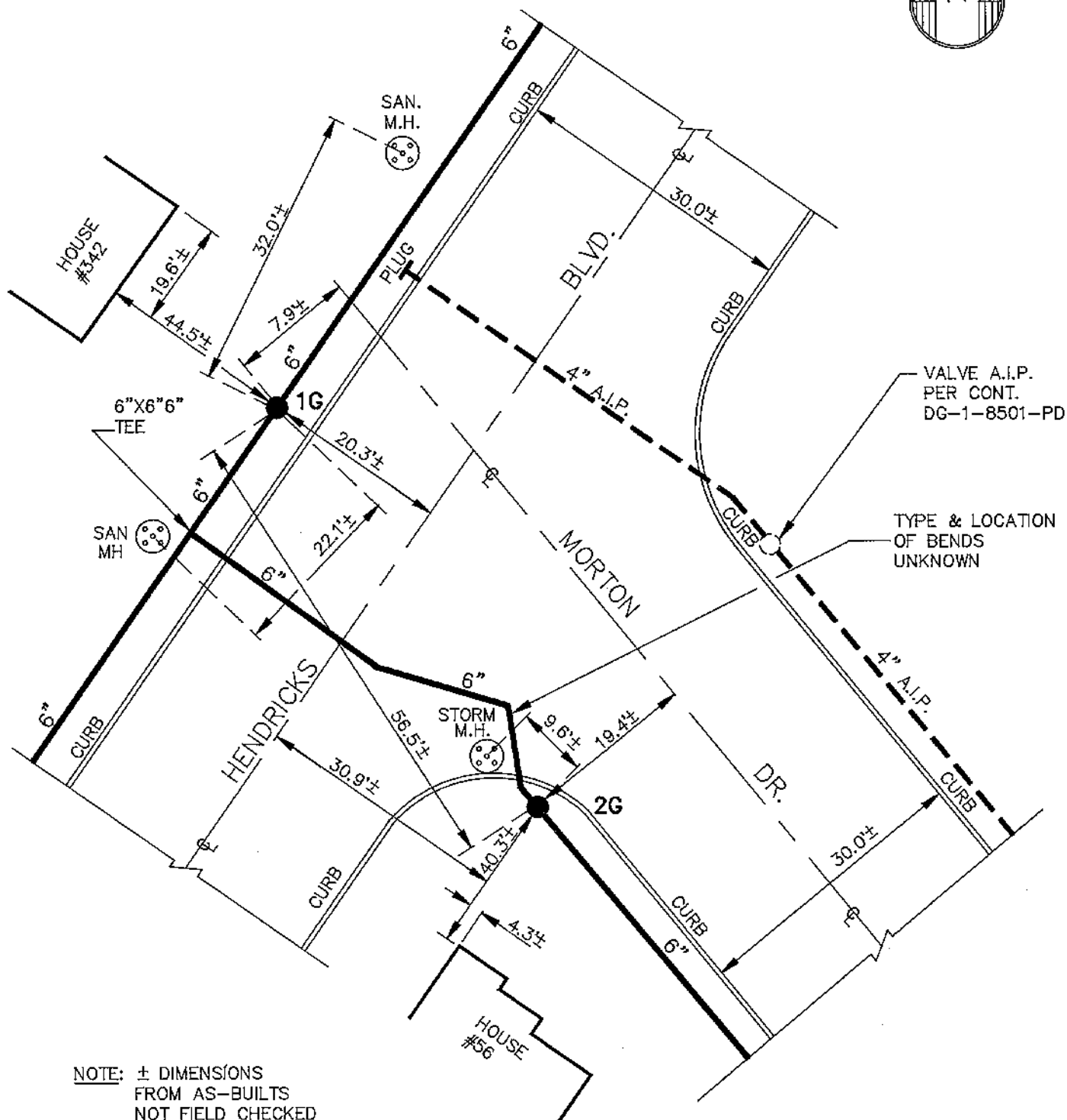
CONT-WSA-002-0001
FB 117/16

H07-D45

DETAIL SHT. NO.

MASTER COPY





NOTE: ± DIMENSIONS
FROM AS-BUILTS
NOT FIELD CHECKED
DETAILS DRAWN ON
CAD SYSTEM

CONT. DG-1-8501-PD



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR.

NGS

REVISED
DR.

BM

DATE: 3/15/01

DATE: 2/25/02

FIELD

OFFICE

TOWN OF AMHERST

E.C.W.A.

H07-D54

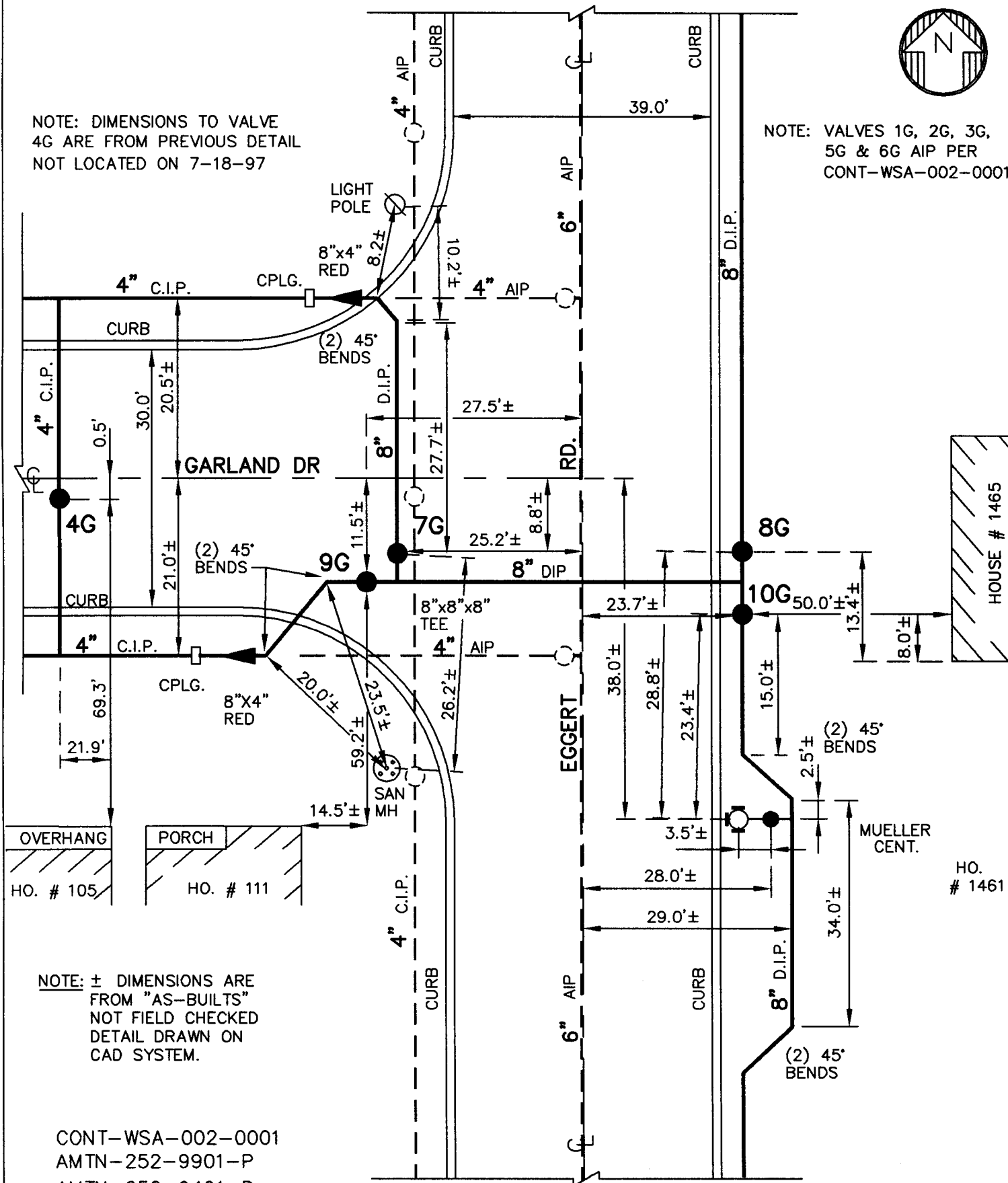
DETAIL SHT. NO.

200000040

CURRENT PROJECT NO.

NOTE: DIMENSIONS TO VALVE
4G ARE FROM PREVIOUS DETAIL
NOT LOCATED ON 7-18-97

NOTE: VALVES 1G, 2G, 3G,
5G & 6G AIP PER
CONT-WSA-002-0001



NOTE: ± DIMENSIONS ARE
FROM "AS-BUILTS"
NOT FIELD CHECKED
DETAIL DRAWN ON
CAD SYSTEM.

CONT-WSA-002-0001
AMTN-252-9901-P
AMTN-252-9401-P
VALR-023-8601-PA

H07-D54
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. D.K.C. DR.

DATE: 3.1.04 DATE:

FIELD

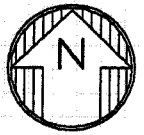
OFFICE

TN. OF AMHERST

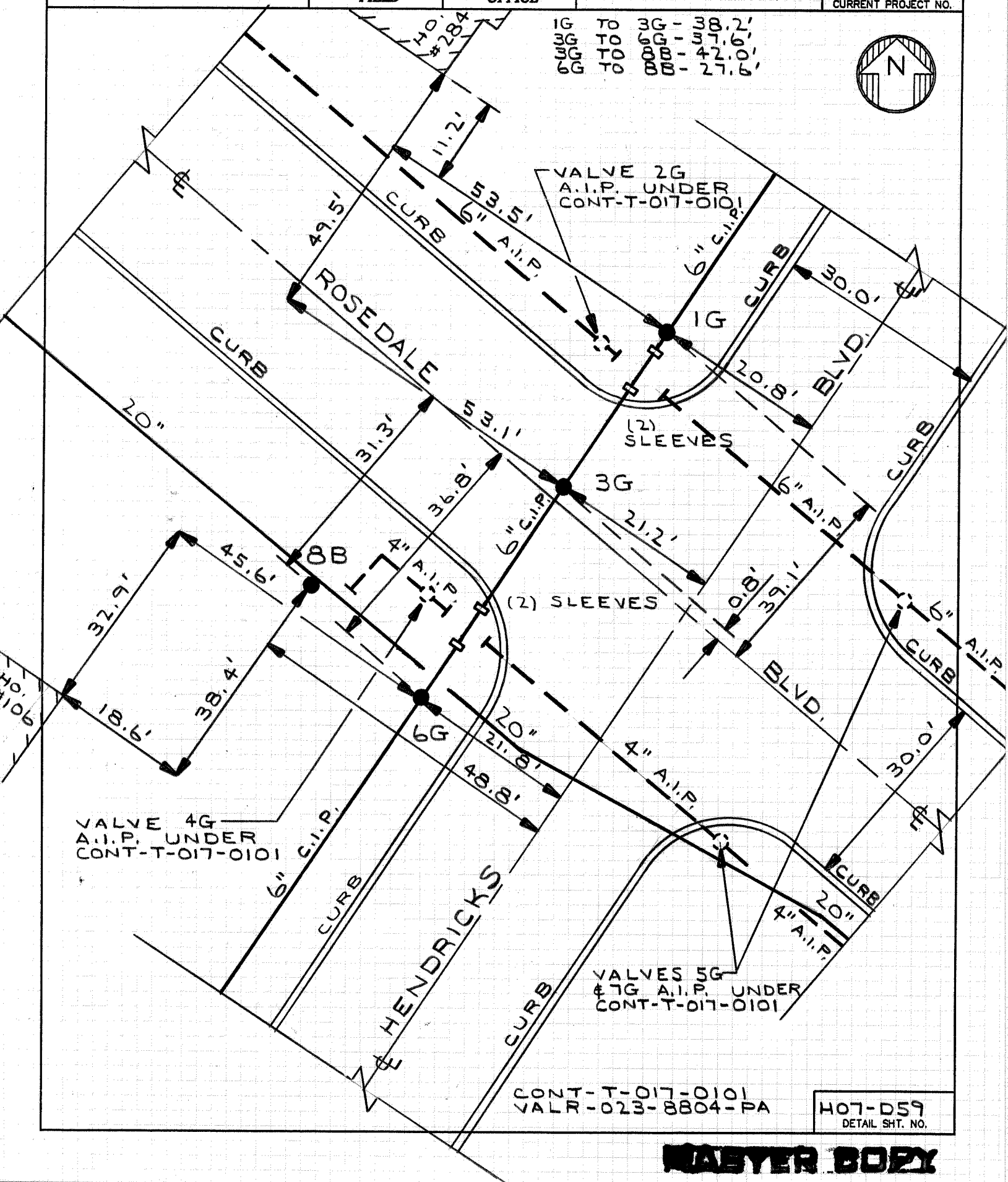
E.C.W.A.

H07-D59
DETAIL SHT. NO.

200100022
CURRENT PROJECT NO.



1G TO 3G - 38.2'
3G TO 6G - 37.6'
3G TO 8B - 42.0'
6G TO 8B - 27.6'



CONT-T-017-0101
VALR-023-8804-PA

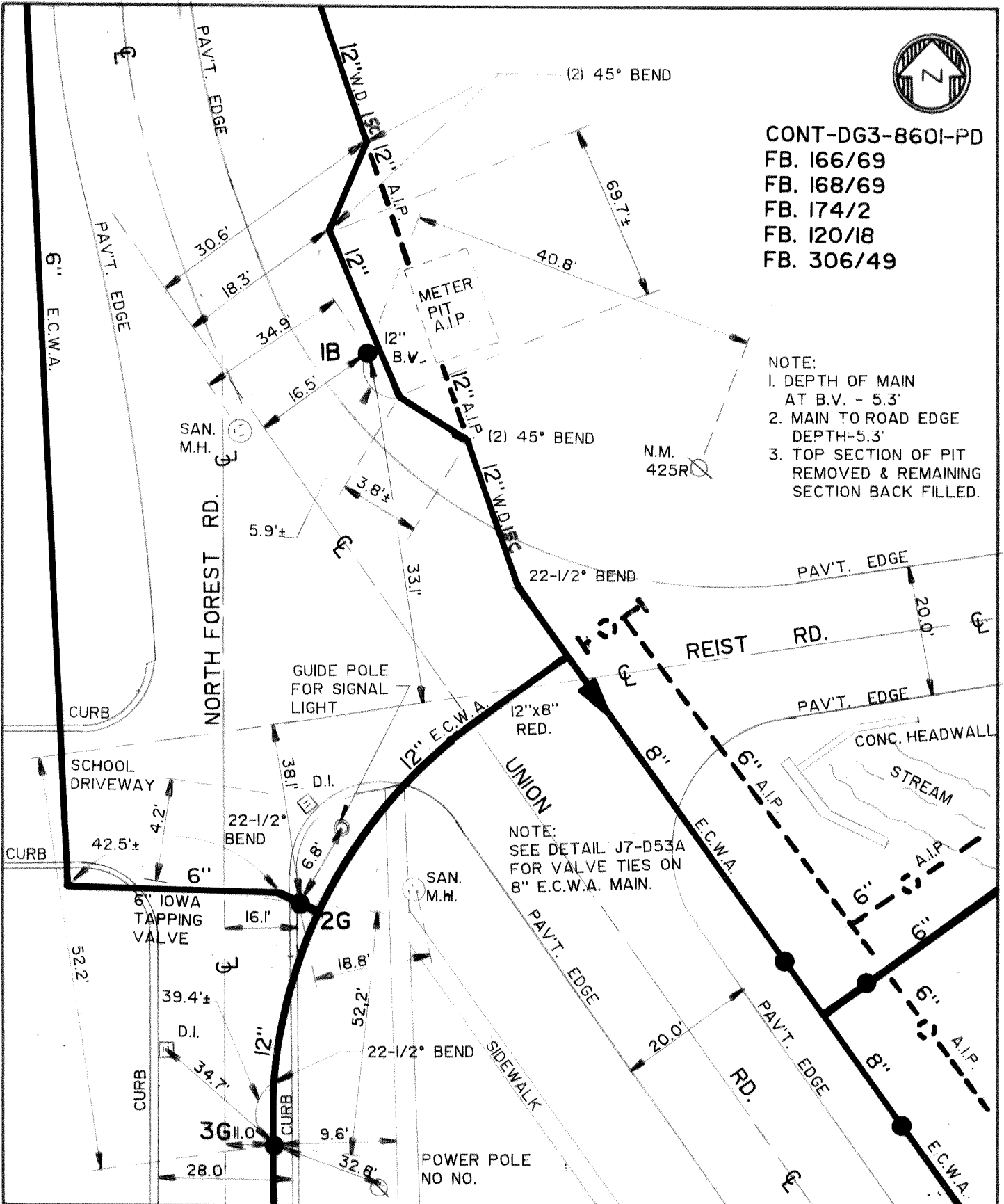
H07-D59
DETAIL SHT. NO.

MASTER COPY



CONT-DG3-860I-PD
FB. 166/69
FB. 168/69
FB. 174/2
FB. 120/18
FB. 306/49

NOTE:
1. DEPTH OF MAIN
AT B.V. - 5.3'
2. MAIN TO ROAD EDGE
DEPTH-5.3'
3. TOP SECTION OF PIT
REMOVED & REMAINING
SECTION BACK FILLED.



EC **ERIE COUNTY**
WA **WATER AUTHORITY**
BUFFALO, NEW YORK

REVISED
DR. BY: **RLS**
DATE: **6-30-06**
NOT TO SCALE

TOWN OF AMHERST
E.C.W.A. &
W.D. 15C

J07-D53
DETAIL SHEET NO.

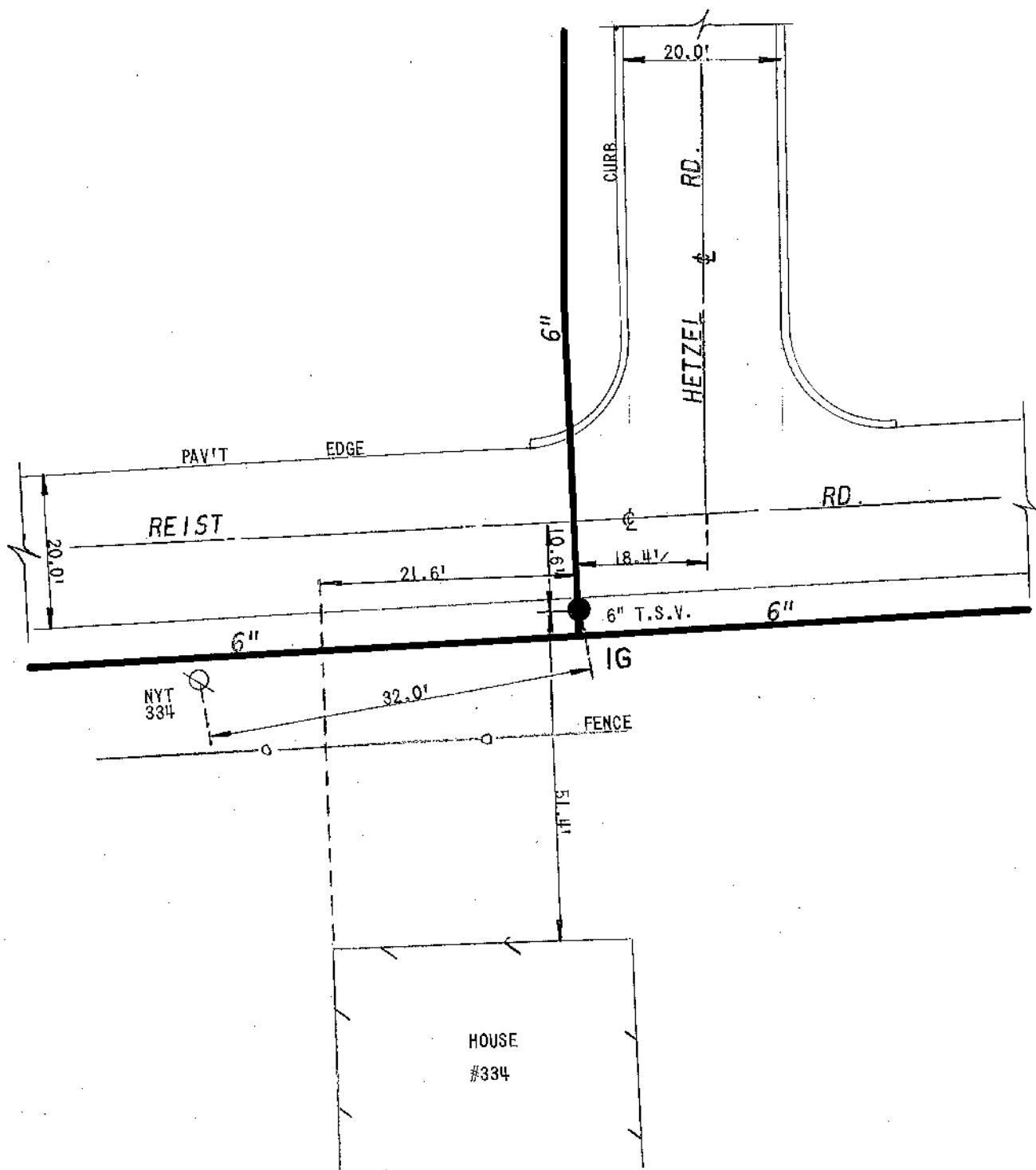


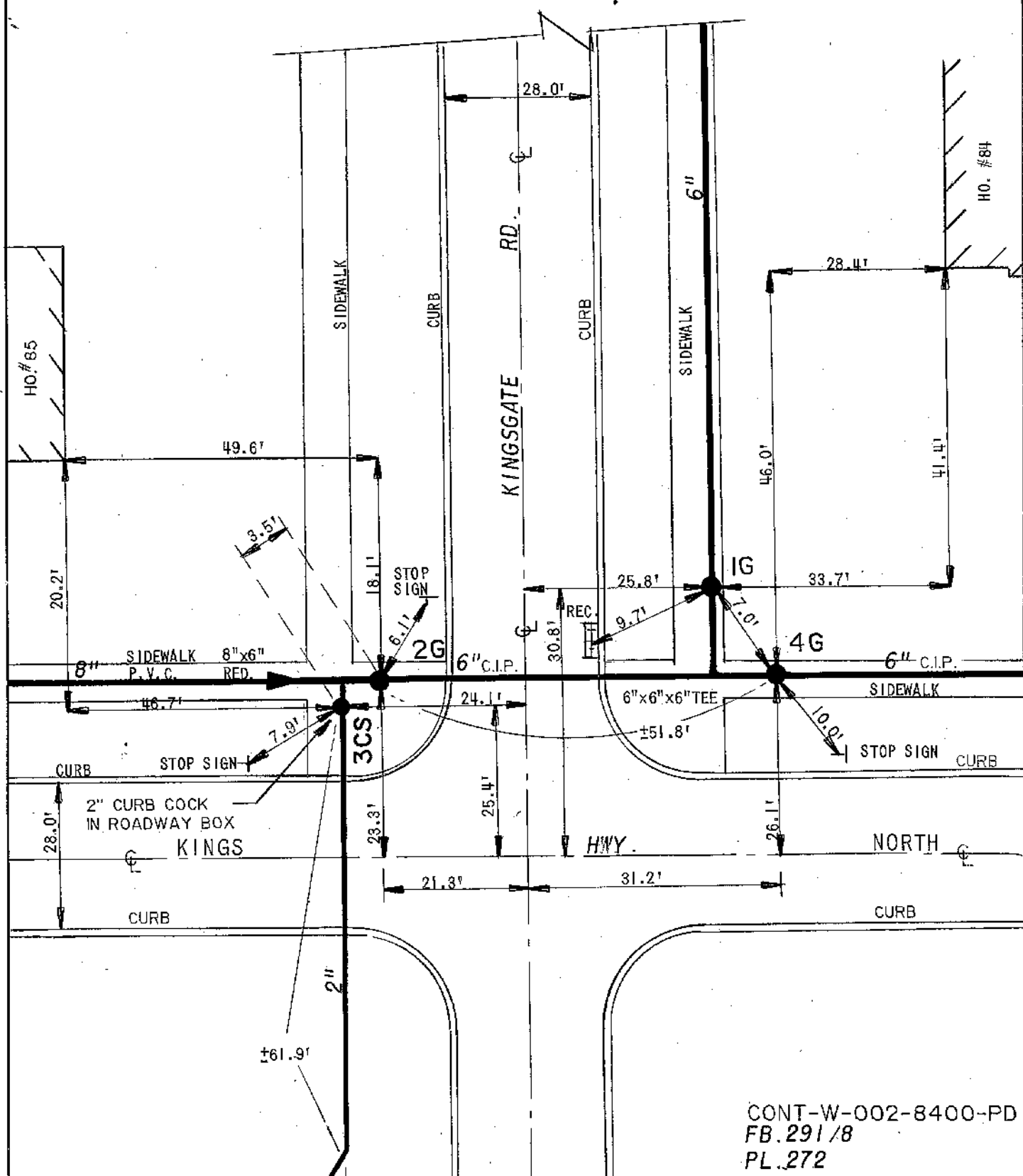
NOTE: \pm DIMENSION FROM
AS-BUILT. NOT
FIELD CHECKED.

J07-D53A

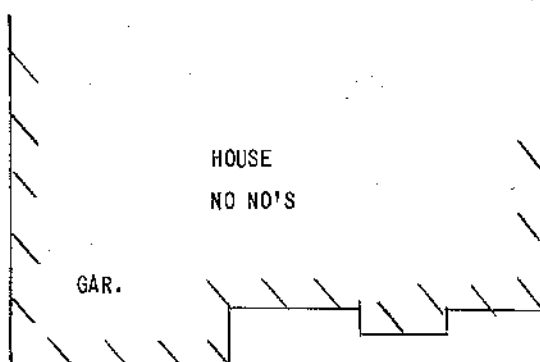
DETAIL SHEET NO.

MASTER COPY

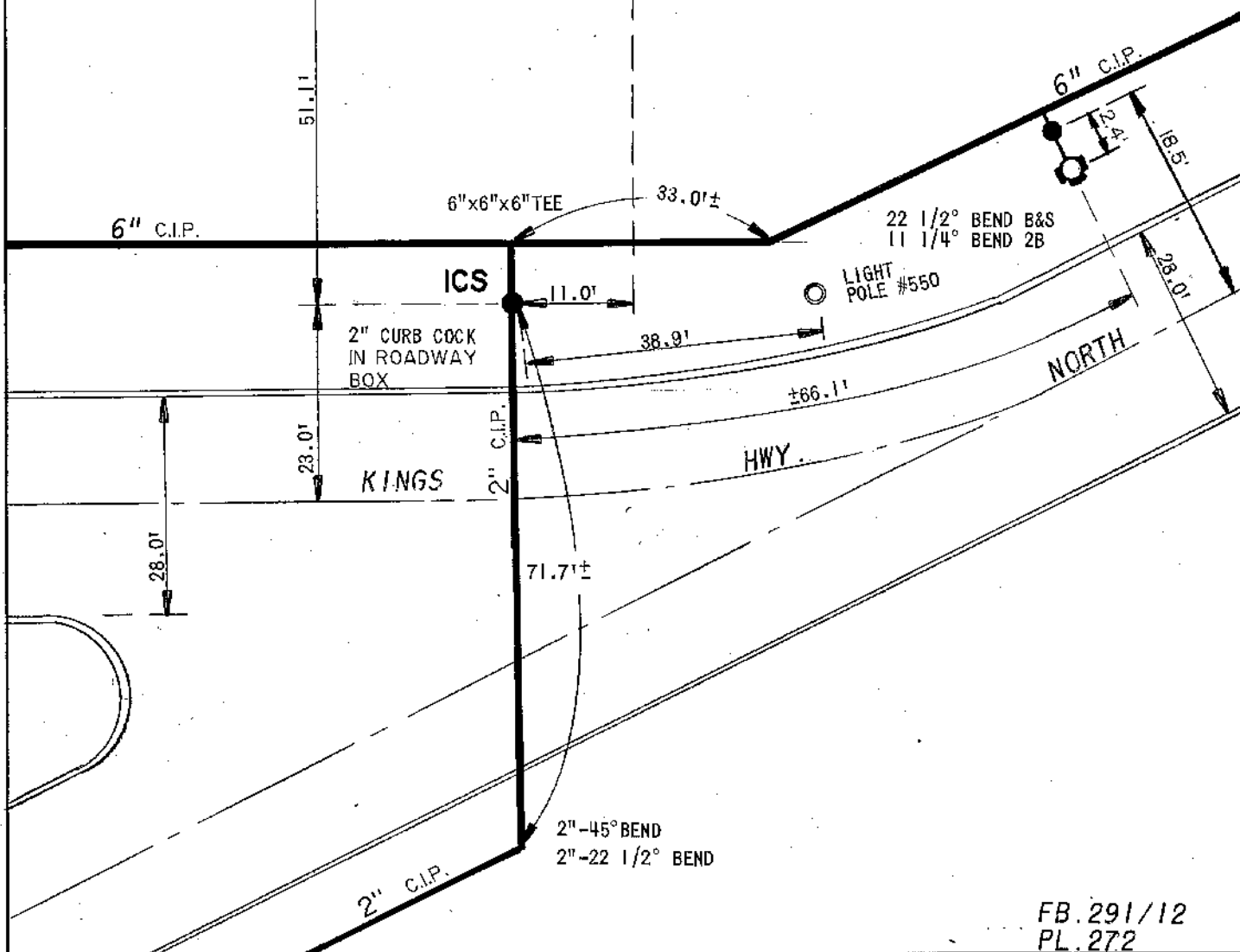




CONT-W-002-8400-PD
FB.291/8
PL.272

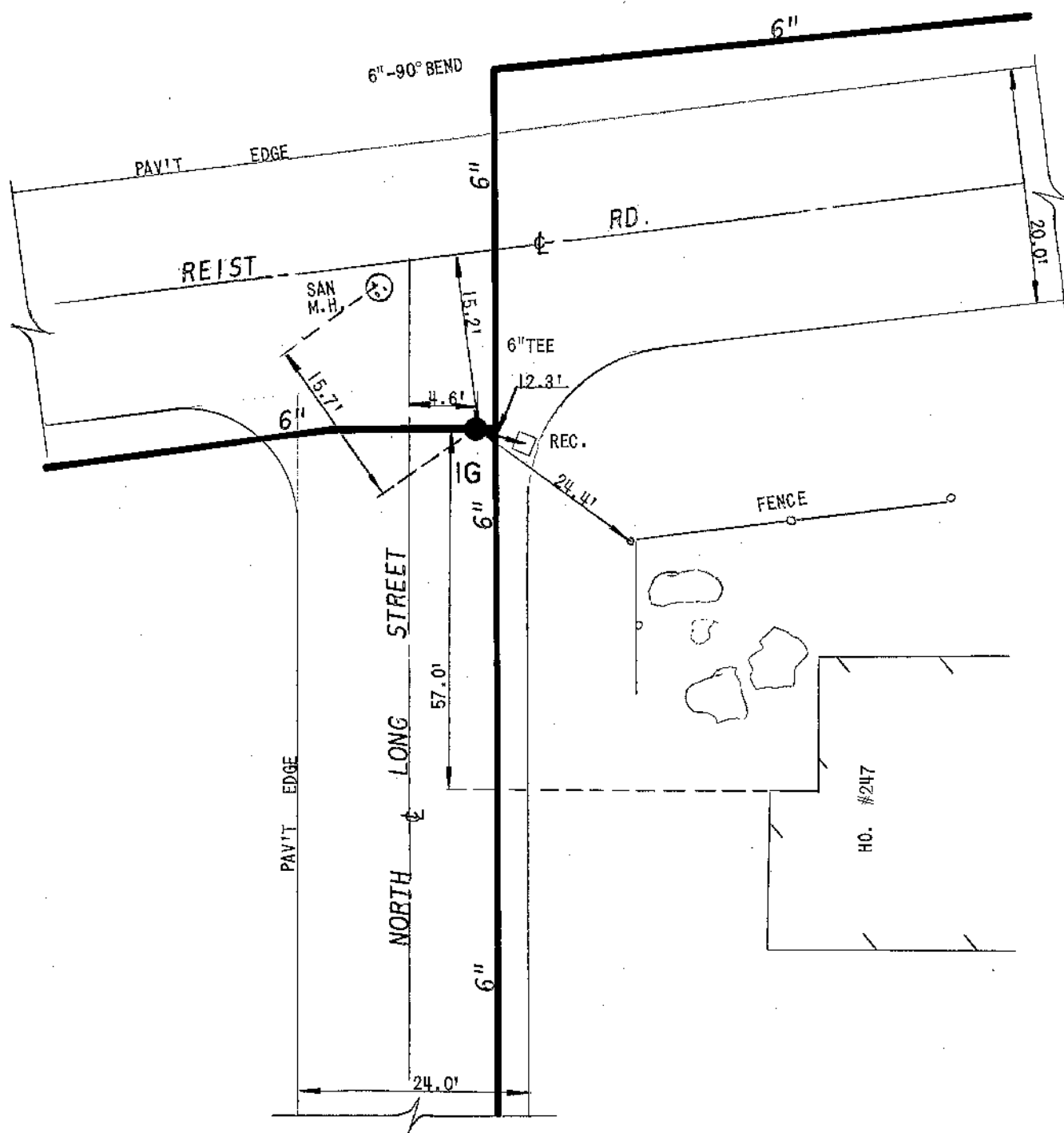


NOTE: \pm DIM'S. ARE FROM
INSPECTOR'S FIELD BOOK.
NOT FIELD CHECKED.



FB.291/12
PL.272

DETAIL SHEET NO.



FB 174/20
FB 184/7

DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV.
DR. CHM

DATE: 6/7/11

FIELD

REV.
DR.

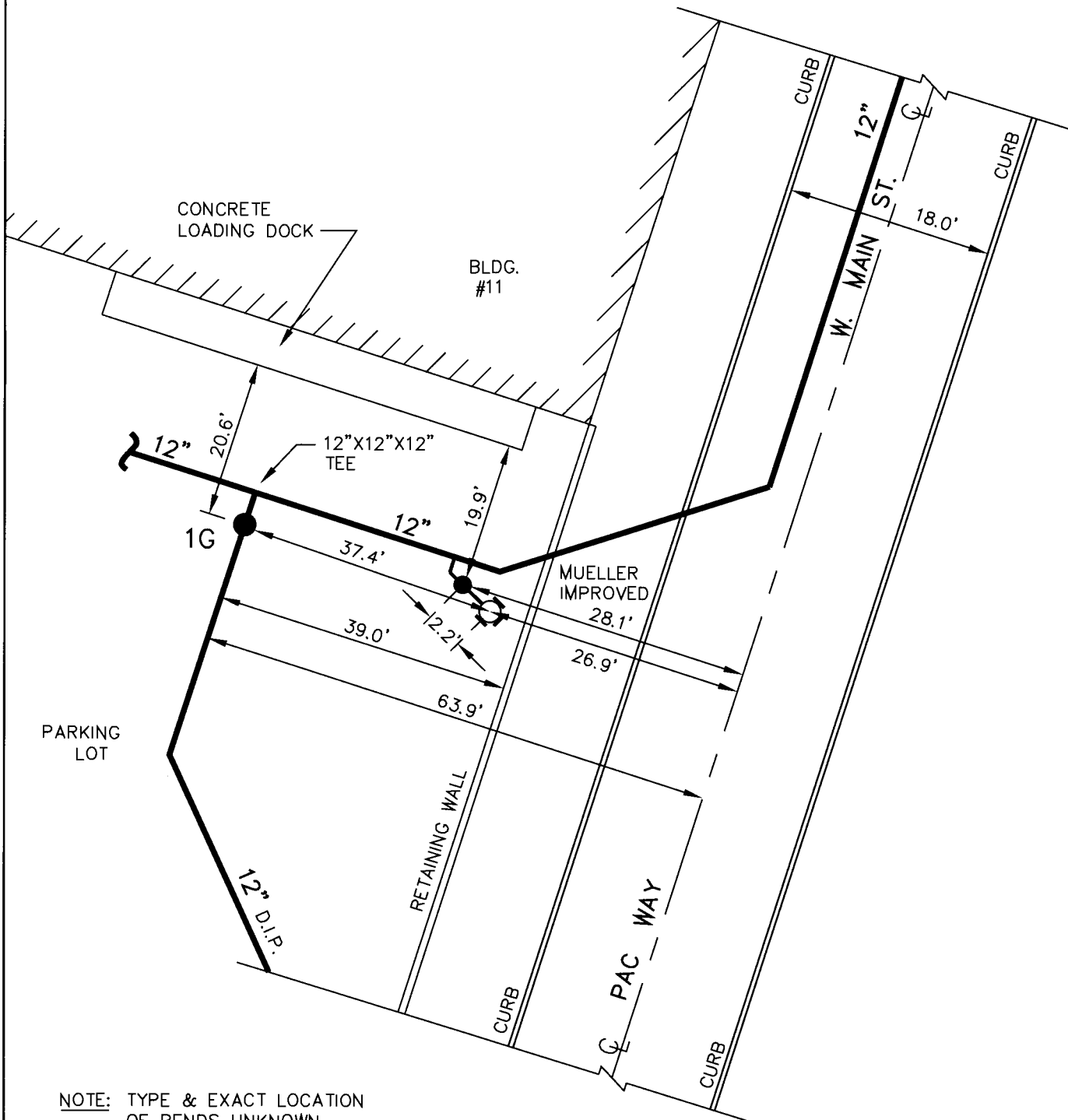
DATE:

OFFICE

VILLAGE OF LANCASTER
E.C.W.A.

L10-D60
DETAIL SHT. NO.

200100183
CURRENT PROJECT NO.



NOTE: TYPE & EXACT LOCATION
OF BENDS UNKNOWN.

NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101
DWG. SET B

L10-D60
DETAIL SHT. ND.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK



REV.
DR. CHM

DATE: 6/7/11

FIELD

REV.
DR.

DATE:

OFFICE

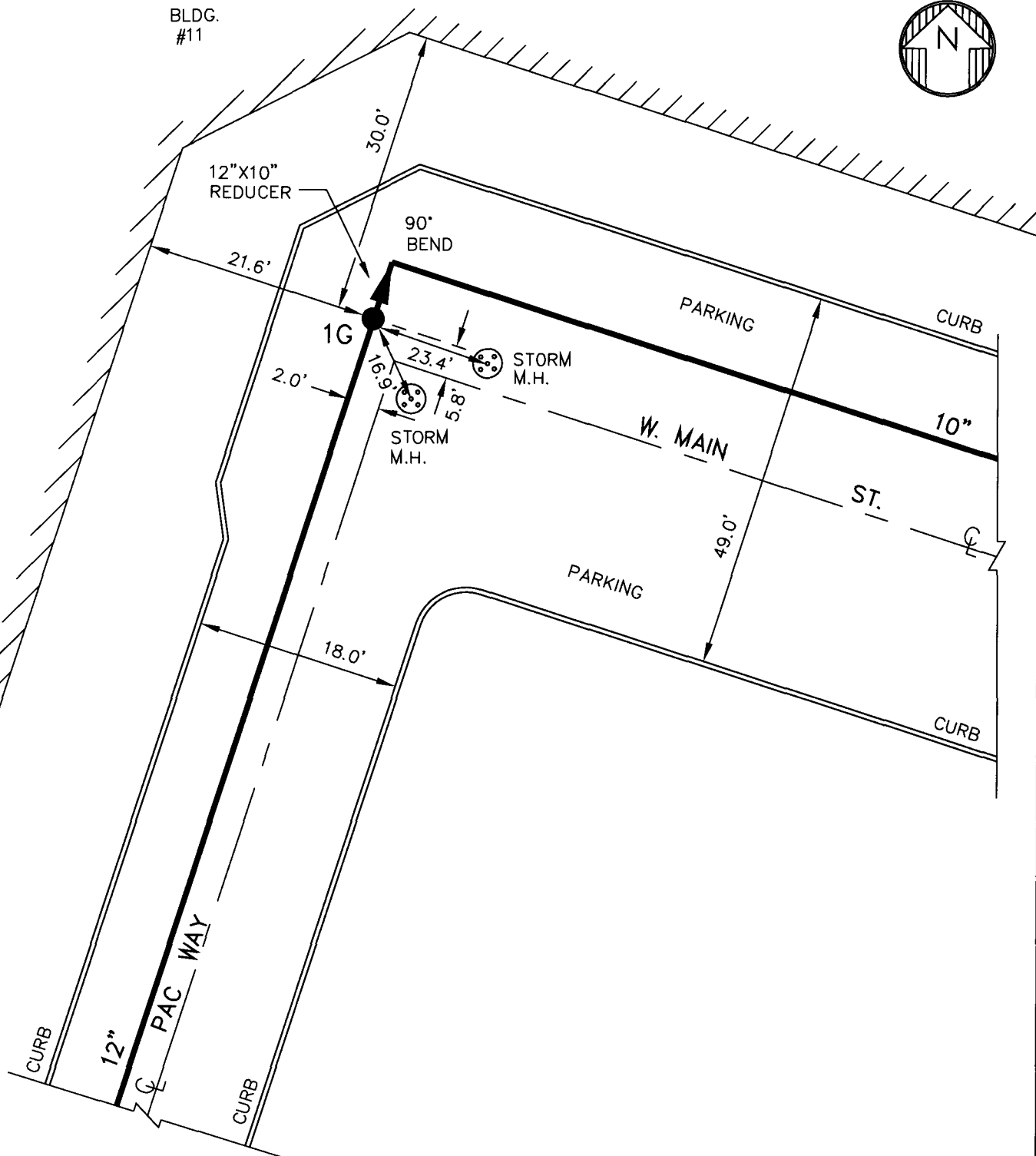
VILLAGE OF LANCASTER
E.C.W.A.

L10-D60A

DETAIL SHT. NO.

200100183

CURRENT PROJECT NO.



NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101

L10-D60A

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. DR. CHM
DATE: 6/27/11
FIELD

REV. DR.
DATE:
OFFICE

VILLAGE OF LANCASTER
E.C.W.A.

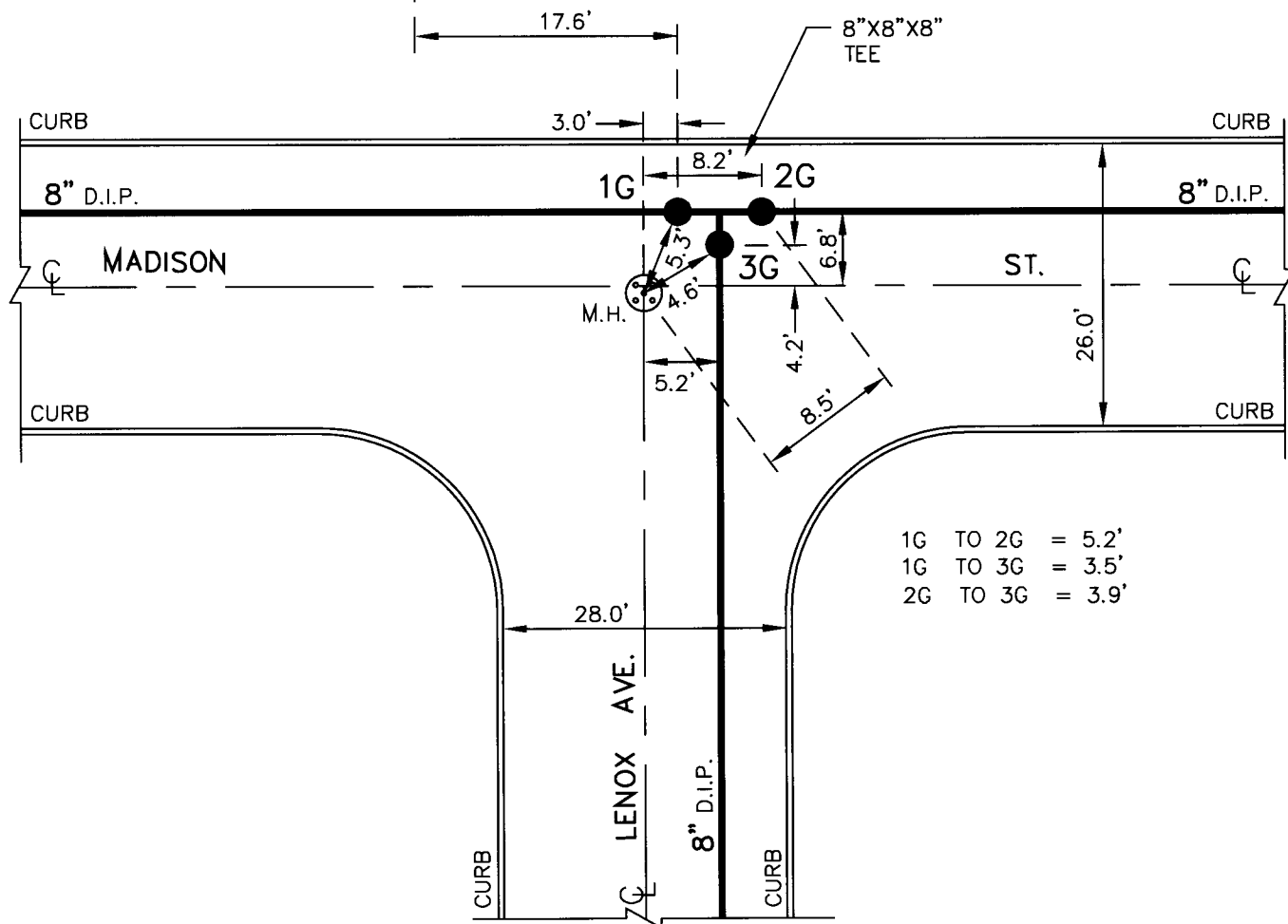
L10-H36A

DETAIL SHT. NO.

200100183

CURRENT PROJECT NO.

HO.
#60



1G TO 2G = 5.2'
1G TO 3G = 3.5'
2G TO 3G = 3.9'

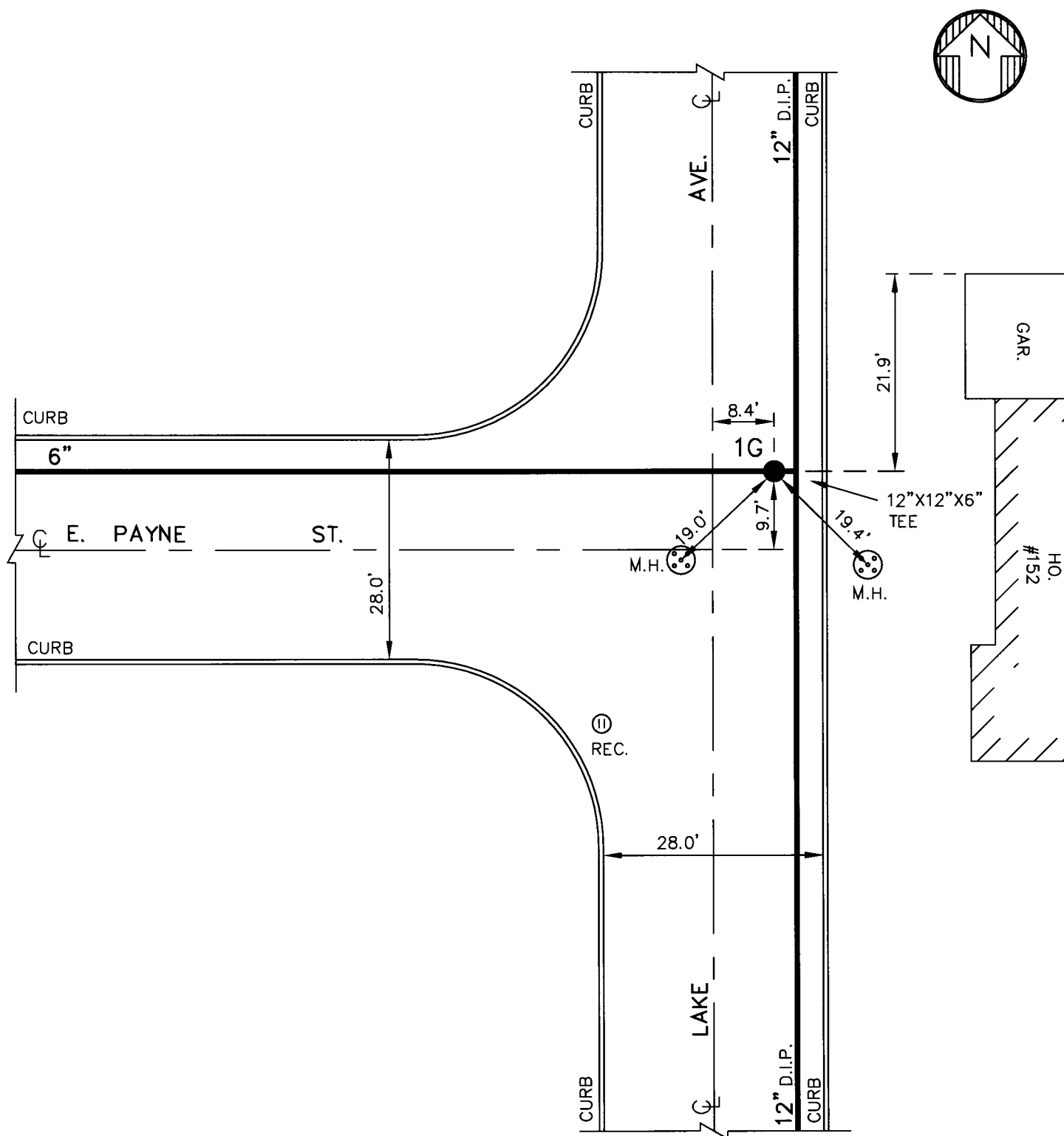
NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101
DWG. SET E

L10-H36A
DETAIL SHT. NO.

MASTER COPY

MASTER COPY



NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101

L10-H46
DETAIL SHT. NO.

MASTER COPY



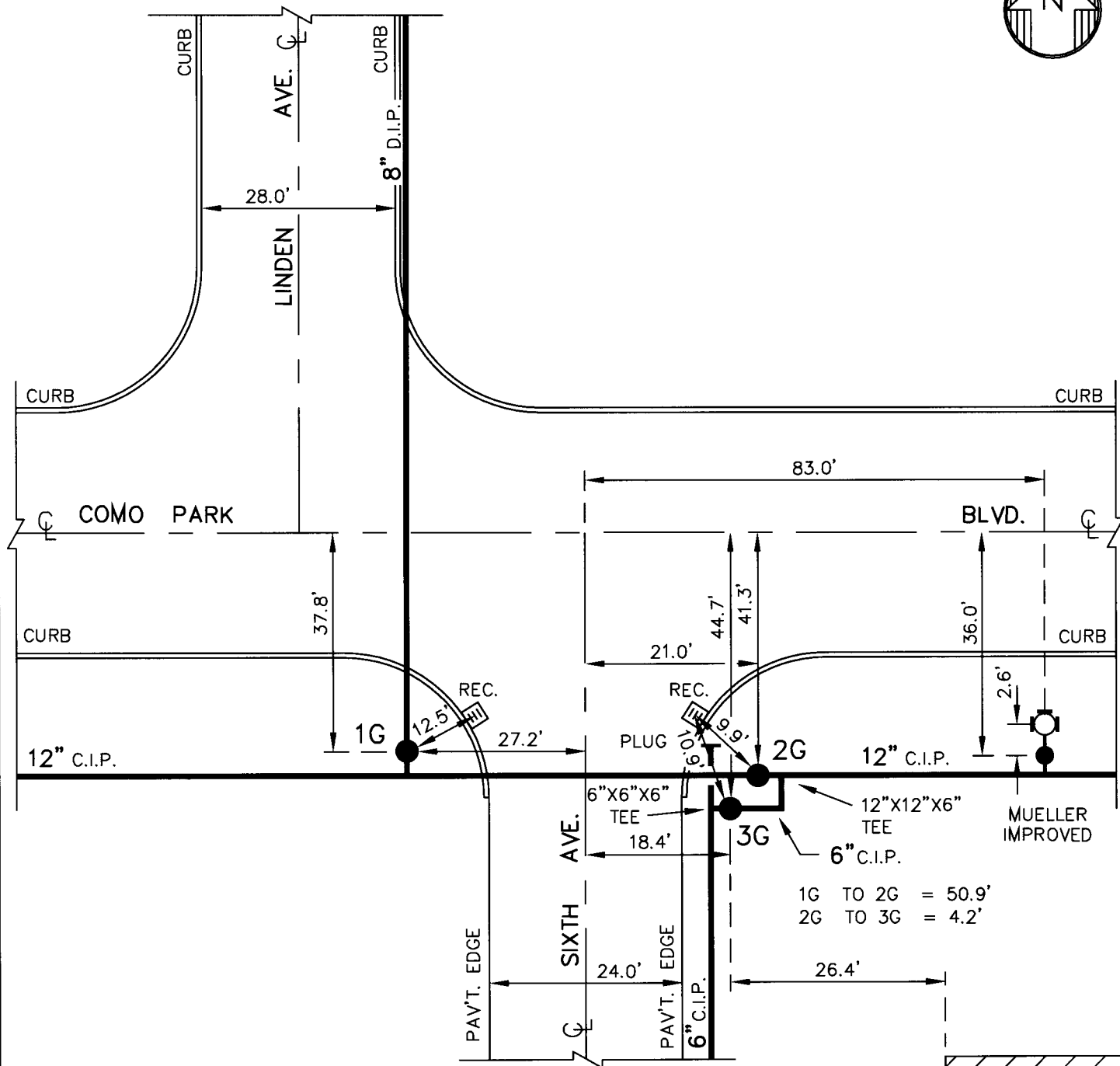
ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV.
DR. CHM
DATE: 7/1/11
FIELD

REV.
DR.
DATE:
OFFICE

VILLAGE OF LANCASTER
E.C.W.A.

L10-H53
DETAIL SHT. NO.
200100183
CURRENT PROJECT NO.



1G TO 2G = 50.9'
2G TO 3G = 4.2'

HO.
#2071

NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101
DWG. SET J

L10-H53
DETAIL SHT. NO.

MASTER COPY





ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DRAWN
BY: R.B.B.

REVISED
DR.

DATE: 7/12/11

DATE:

FIELD

OFFICE

VILLAGE OF LANCASTER

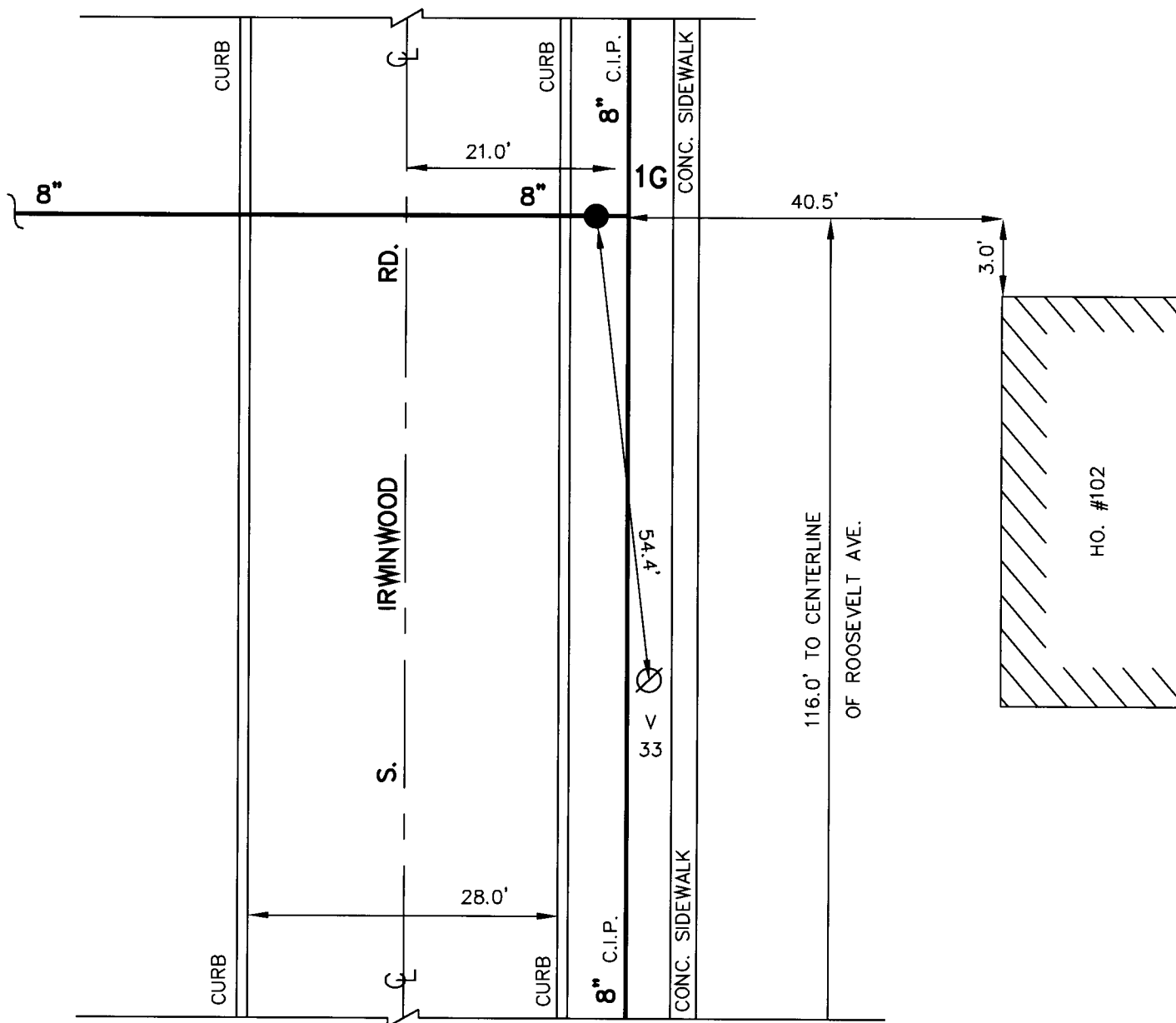
E.C.W.A.

L11-C12A

DETAIL SHT. NO.

200100183

CURRENT PROJECT NO.



NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101

L11-C12A

DETAIL SHT. NO.

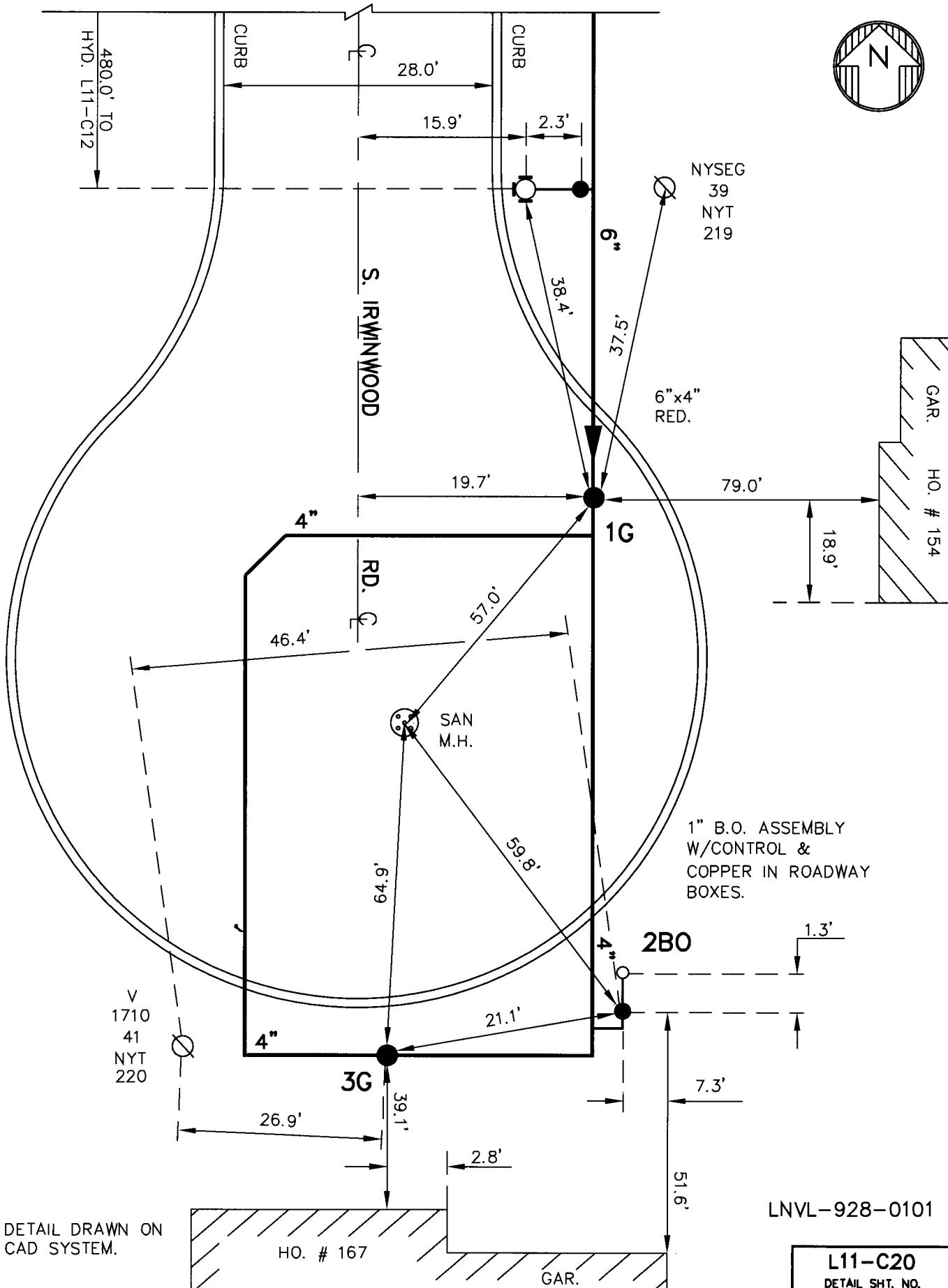
MASTER COPY



DETAIL SHT. NO.

E.C.W.A.

CURRENT PROJECT NO.

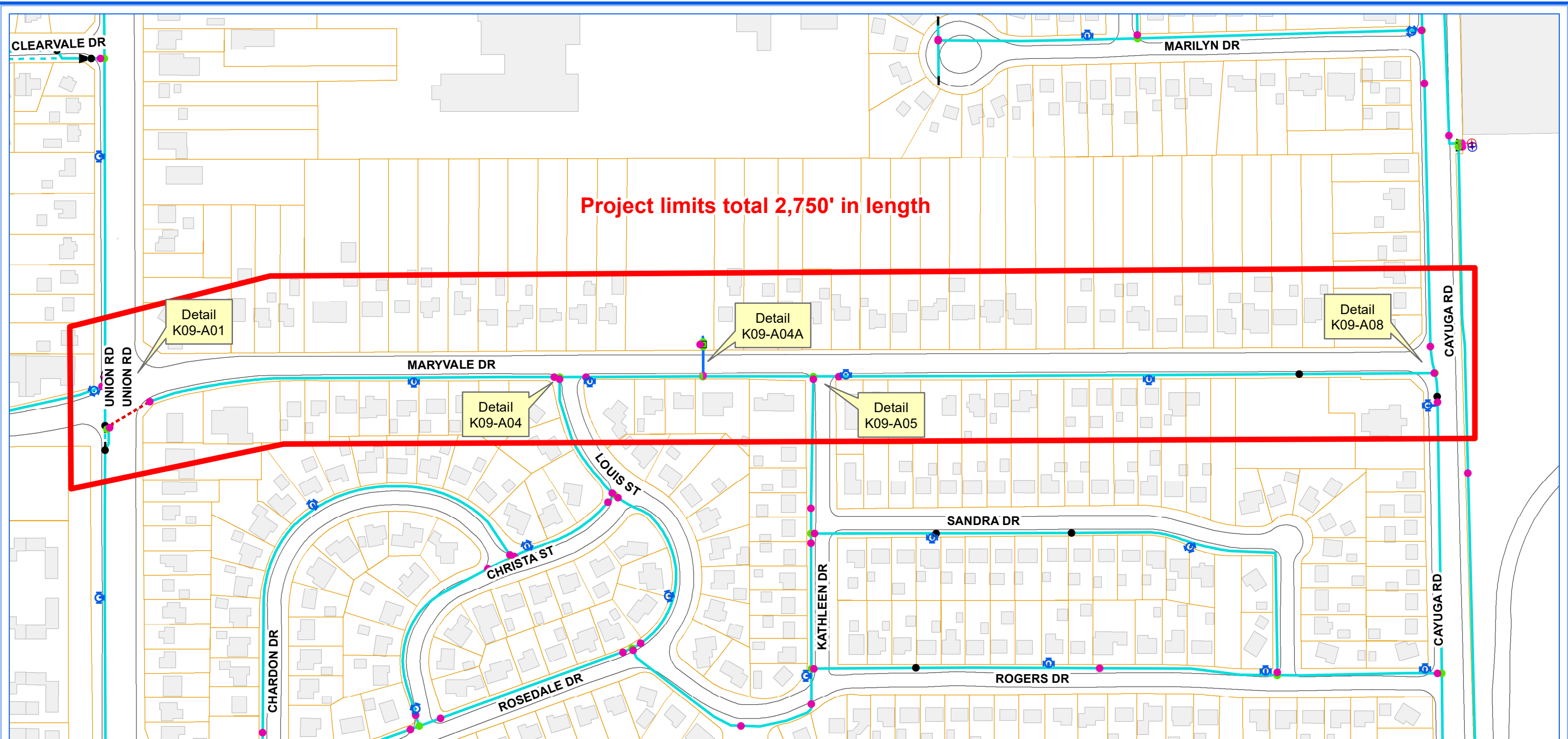


NOTE: DETAIL DRAWN ON
CAD SYSTEM.

LNVL-928-0101

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "E"**

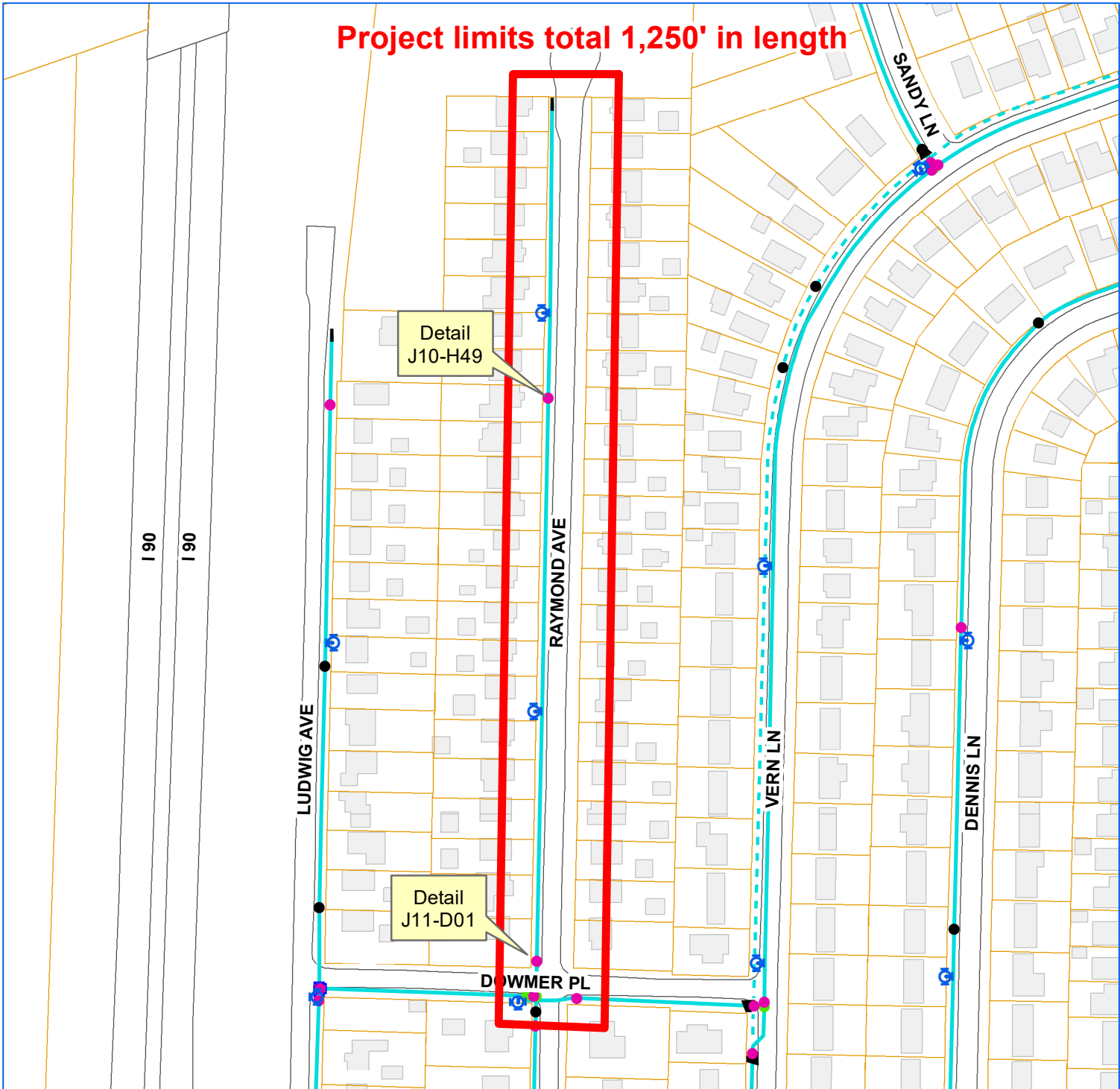
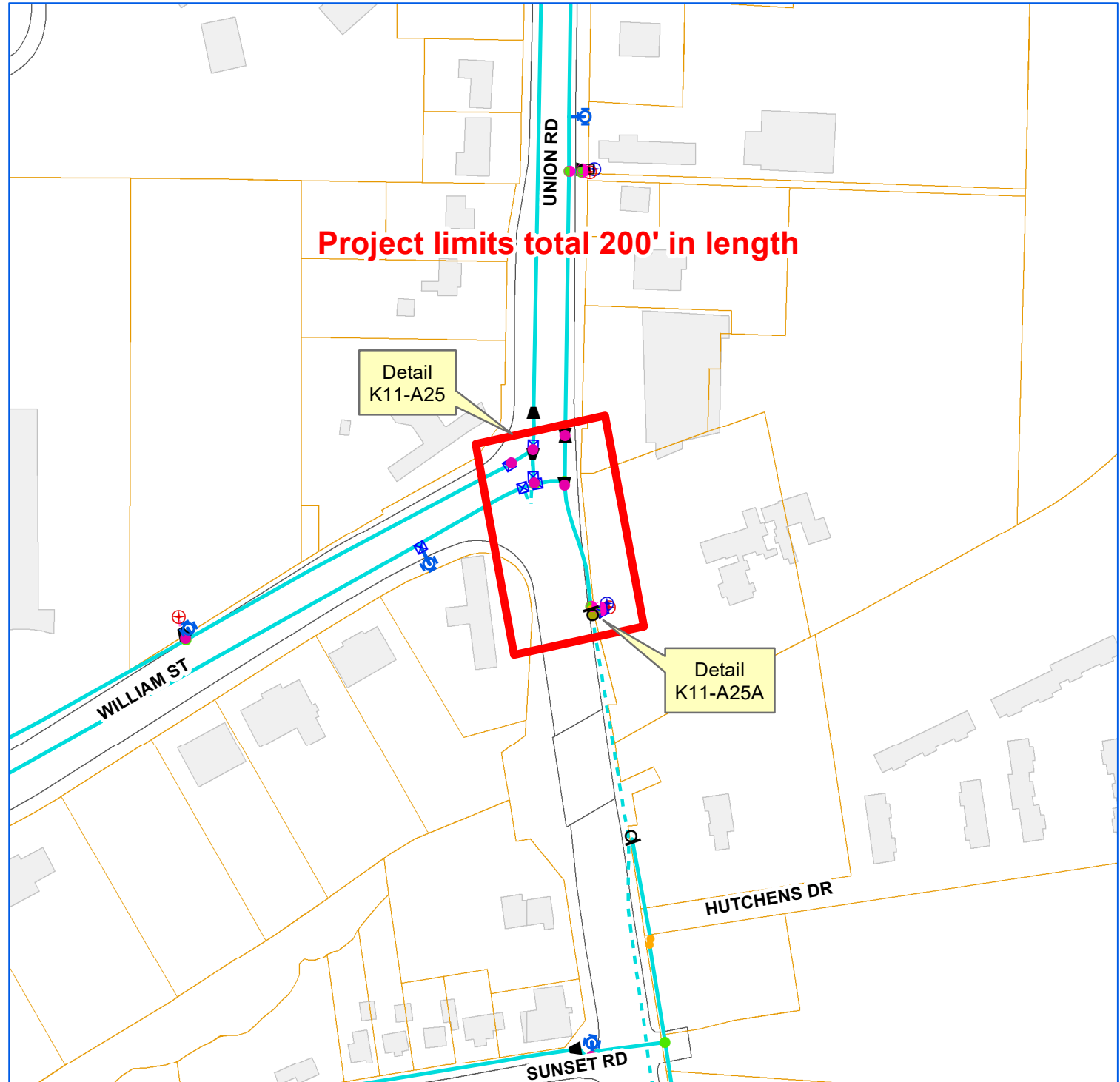
**MARYVALE DR. FROM UNION RD. TO CAYUGA RD. / UNION RD. FROM WILLIAM ST. TO #2669
RAYMOND AVE. FROM DOWMER PL. TO DEAD END / HUXLEY DR. FROM CLEVELAND DR. TO WEHRLE DR.
ARIS AVE. FROM DINGENS ST. TO WILLIAM ST.
TOWN OF CHEEKTOWAGA, NY**



0 130 260 390
Feet

1 inch = 200 feet

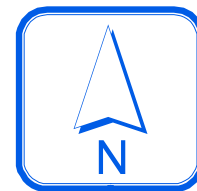
MJM



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

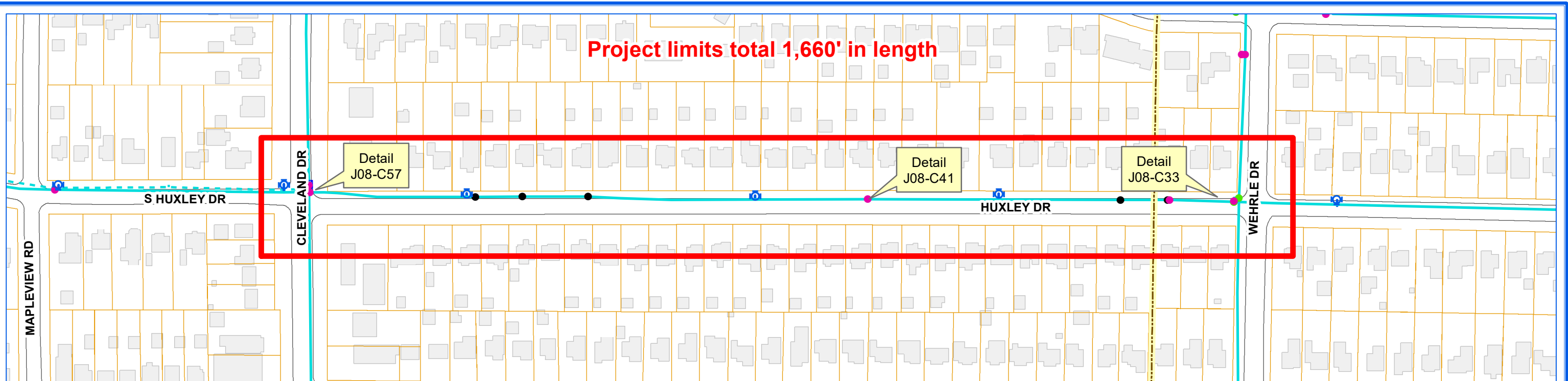
**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "E"**

**MARYVALE DR. FROM UNION RD. TO CAYUGA RD. / UNION RD. FROM WILLIAM ST. TO #2669
RAYMOND AVE. FROM DOWER PL. TO DEAD END / HUXLEY DR. FROM CLEVELAND DR. TO WEHRLE DR.
ARIS AVE. FROM DINGENS ST. TO WILLIAM ST.
TOWN OF CHEEKTOWAGA, NY**

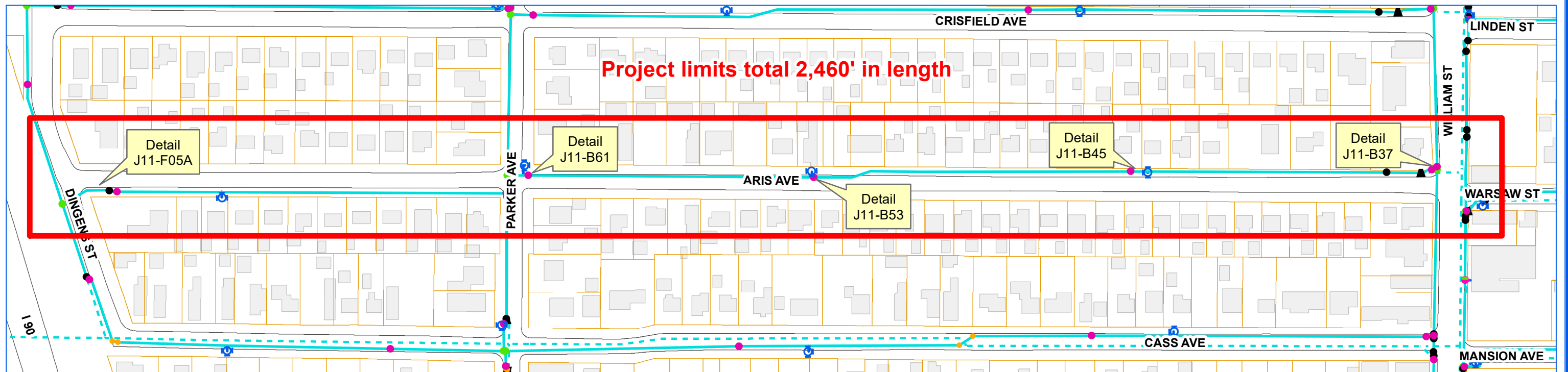


1 inch = 200 feet

Project limits total 1,660' in length



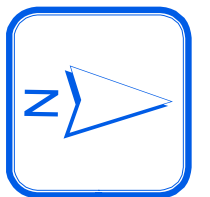
Project limits total 2,460' in length



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "E"

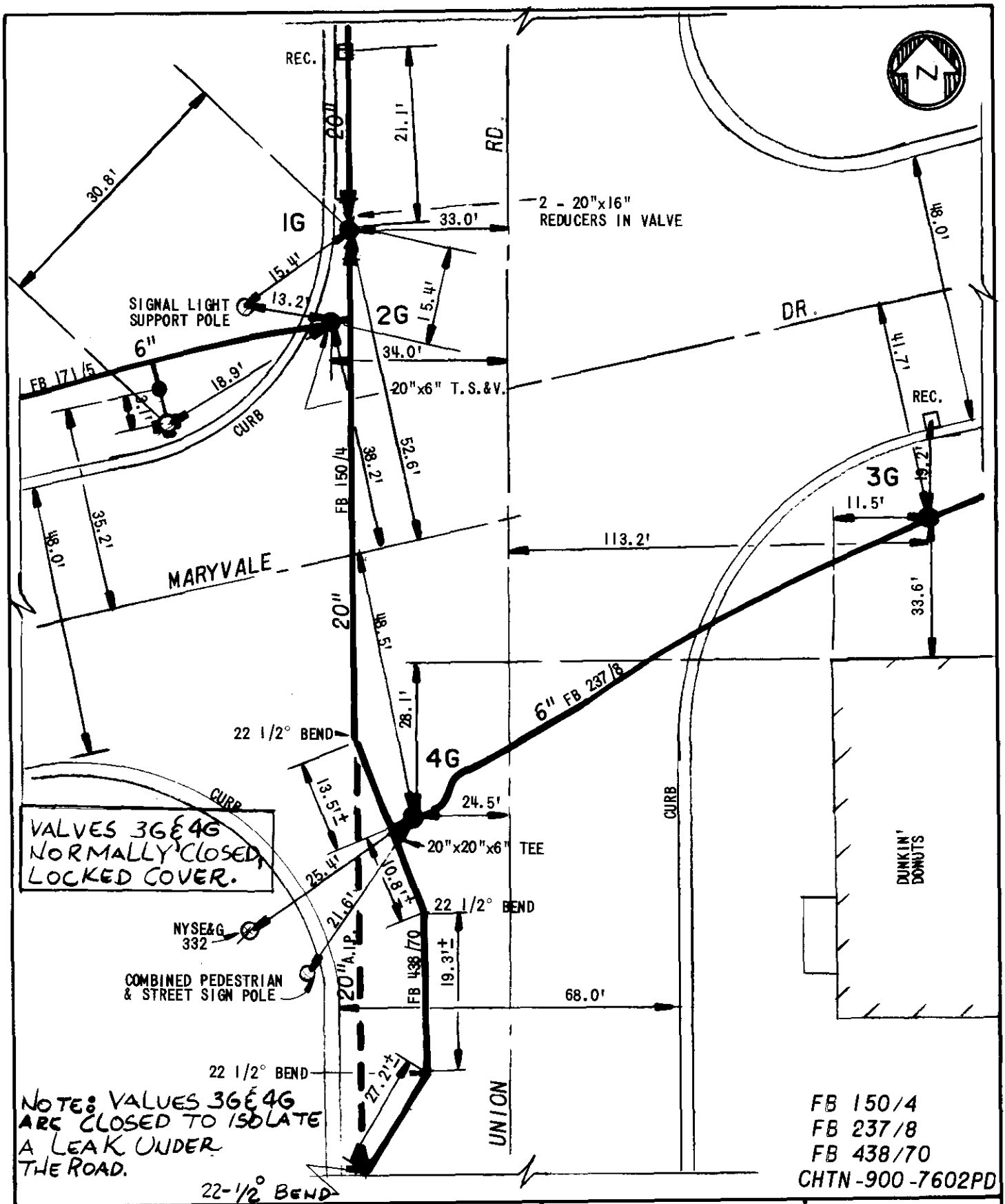
MARYVALE DR. FROM UNION RD. TO CAYUGA RD. / UNION RD. FROM WILLIAM ST. TO #2669
RAYMOND AVE. FROM DOWMER PL. TO DEAD END / HUXLEY DR. FROM CLEVELAND DR. TO WEHRLE DR.
ARIS AVE. FROM DINGENS ST. TO WILLIAM ST.
TOWN OF CHEEKTOWAGA, NY



0 110 220 330 Feet

1 inch = 175 feet

MJM



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. BY: *FDB*
DATE: *3-12-09*
NOT TO SCALE

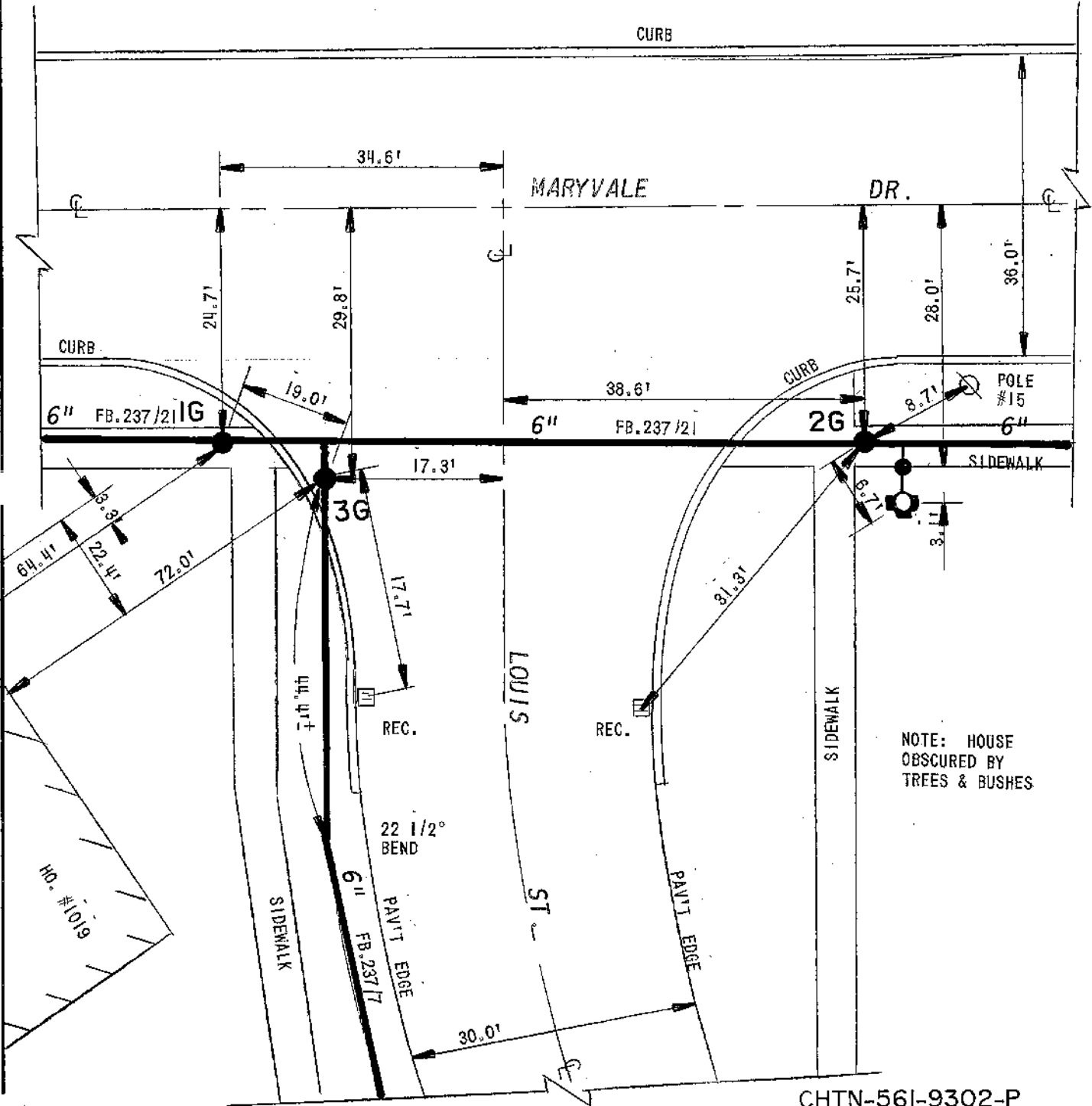
TOWN OF CHEEKTOWAGA
E.C.W.A.

K09-A01
DETAIL SHEET NO.



ATTENTION:

As per Rick Meahl 05/12/15,
Valve 3G goes past
seat 2 to 3 turns.

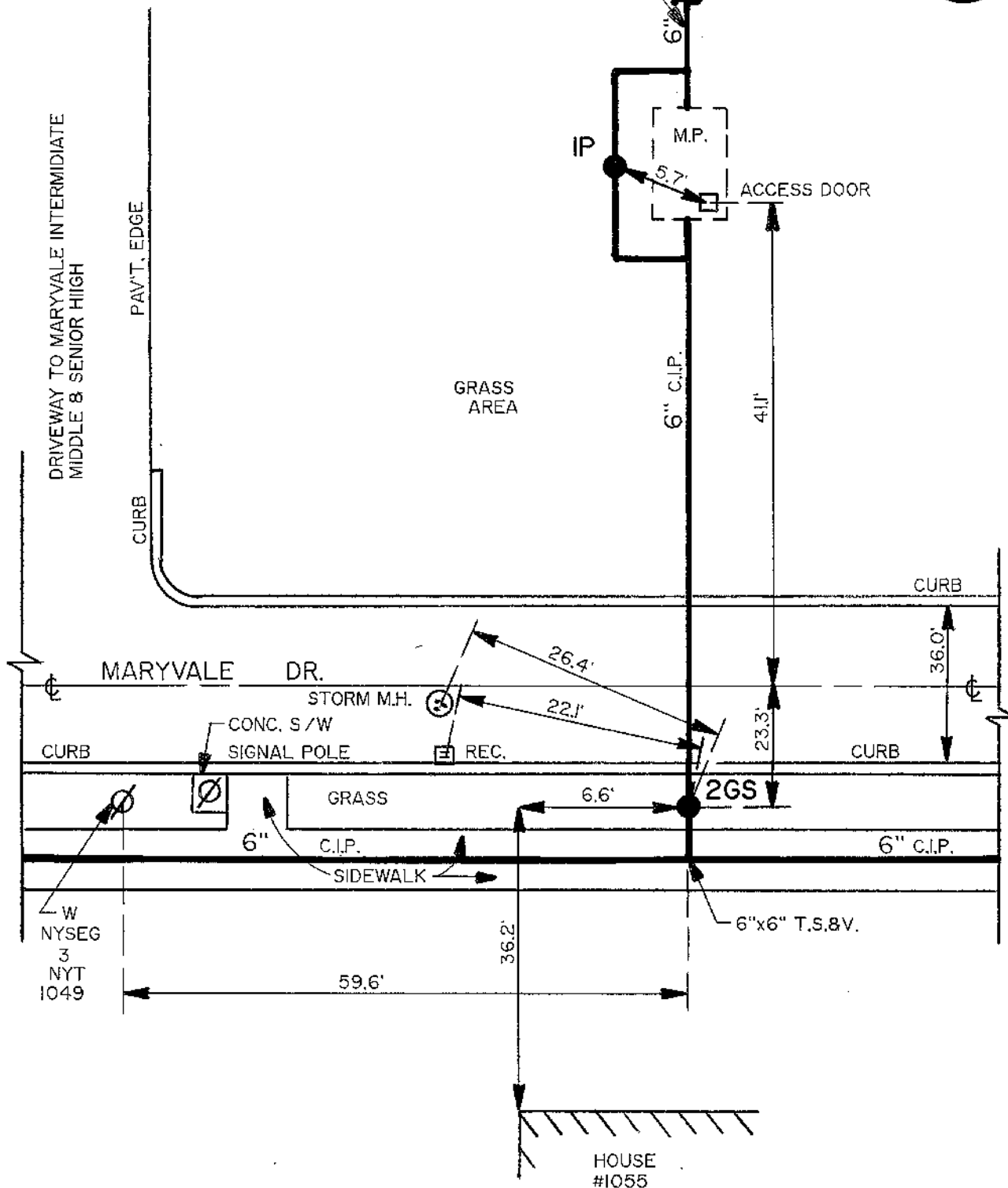


NOTE: HOUSE
OBSCURED BY
TREES & BUSHES

MASTER COPY

CHTN-561-9302-P
FB.237/7 & 21

6" DOM. SVC. TO
MARYVALE H.S.
#1050 MARYVALE DR.

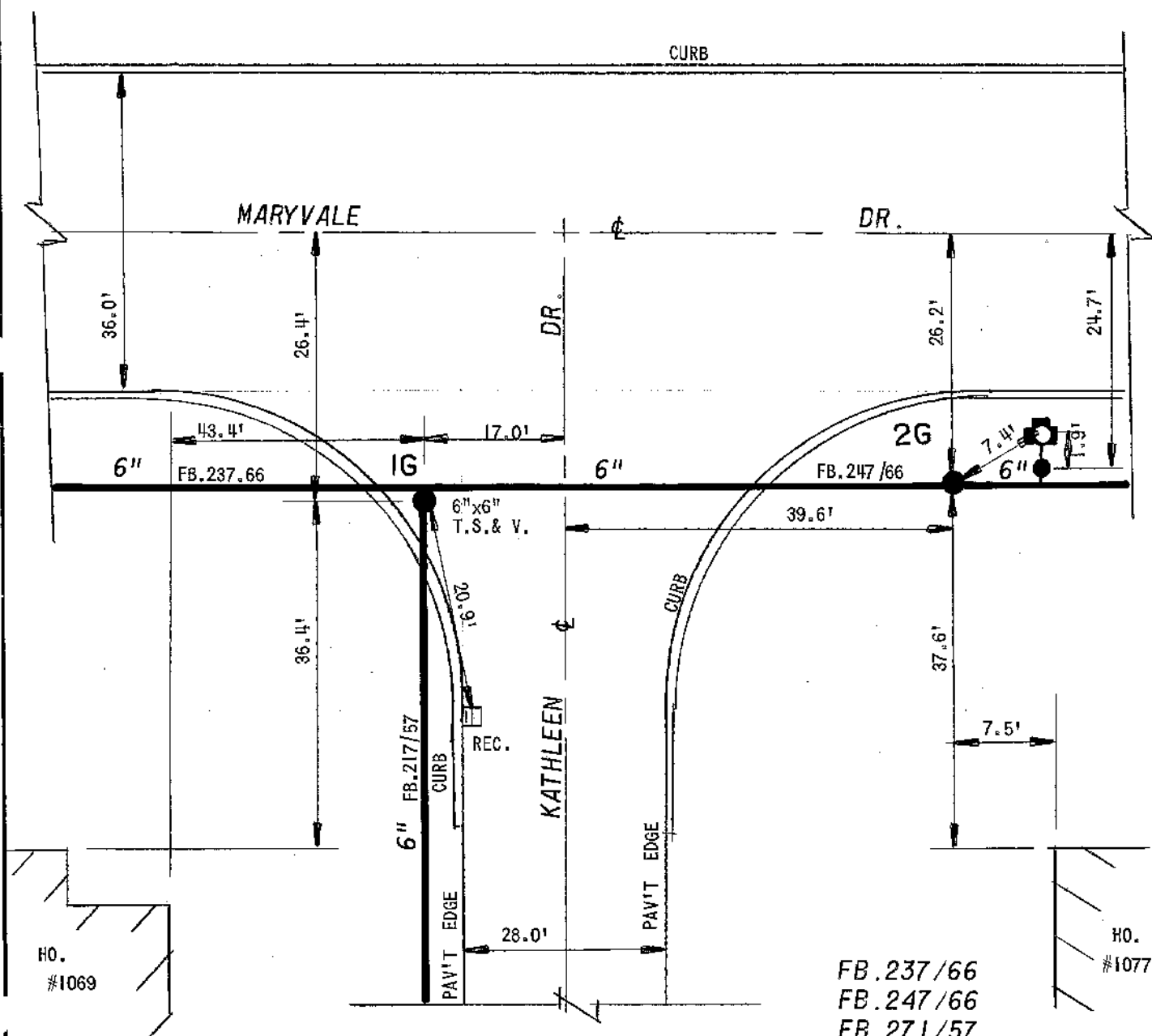


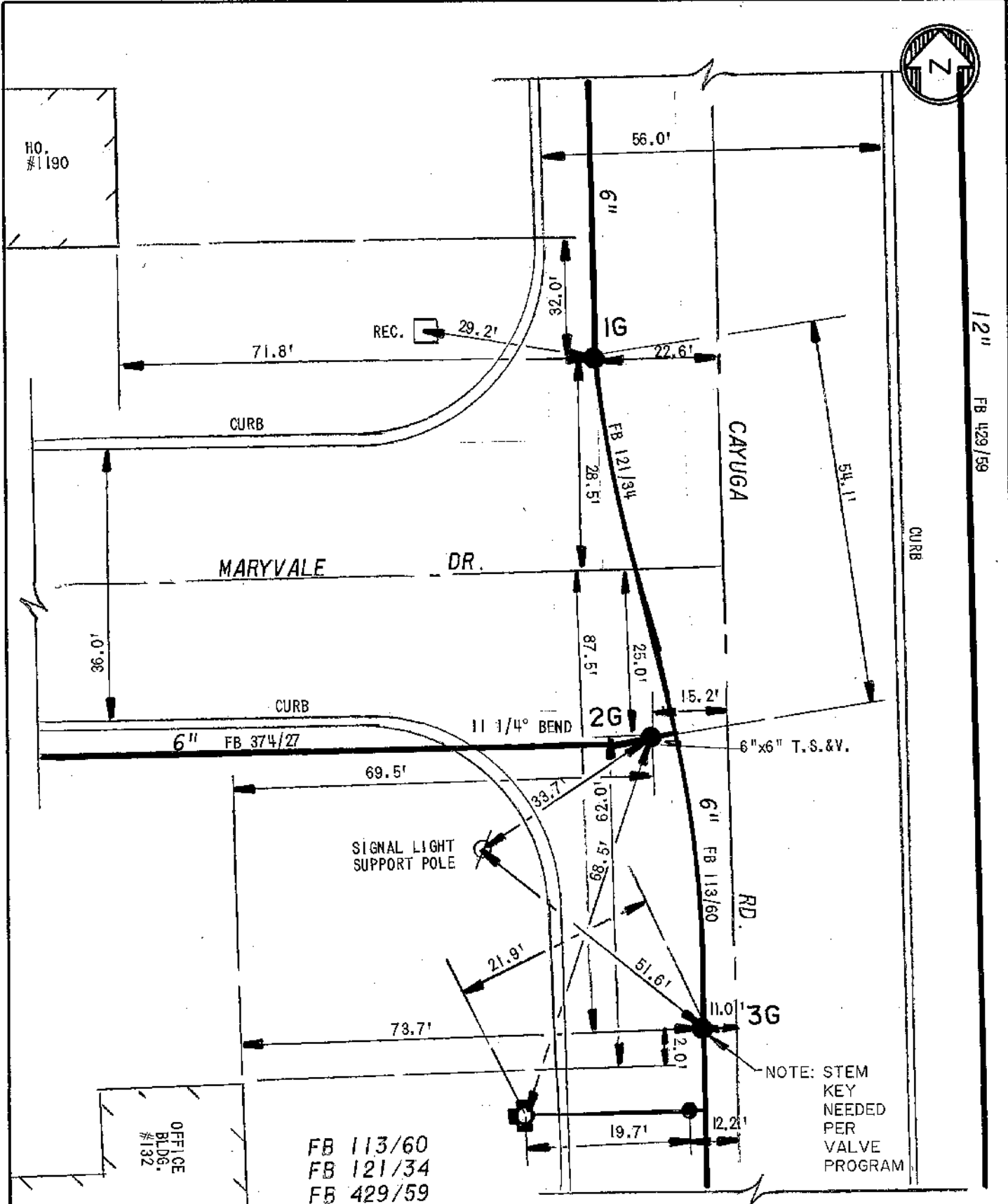
ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. R.L.S.
DATE: 10-28-93
N.T.S.

TOWN OF CHEEKTOWAGA
E.C.W.A.

K09-A04A
DETAIL SHEET NO.





EC ERIE COUNTY
WA WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. BY: MRV
DATE: 1-17-91
NOT TO SCALE

TOWN OF CHEEKTOWAGA
E.C.W.A.

K09-A08
DETAIL SHEET NO.



ERIE COUNTY

WATER AUTHORITY

BUFFALO, NEW YORK

REVISED DR. R.D.C.

DATE: 10/19/2019

FIELD

REVISED DR. R.D.C.

DATE: 7/13/2020

OFFICE

TOWN OF CHEEKTOWAGA

E.C.W.A.

K11-A25

DETAIL SHT. NO.

201800081

CURRENT PROJECT NO.

NOTE: VALVE 5G REPLACED UNDER A2-145 IN 1966.
VALVE 6G REPLACED UNDER VALR-153-8708-PA ON 8/5/1987.
VALVES 2G & 3P REMOVED & REPLACED W/ B.V. UNDER CONT-WSA-013-1801.
VALVE 4G REPLACED UNDER CONT-WSA-013-1801.
VALVE 5G A.I.P. UNDER CONT-WSA-013-1801.

TRAFFIC SIGNAL POLE
VALVE 2G & 3P REMOVED UNDER CONT-WSA-013-1801

21" SAN. SEWER IN ENCASING PIPE

20" C.I.P. F.B. 127/51

16" C.I.P.

WILLIAM

INTERCONNECTION DETAIL

45° BEND ROLLED

24" D.I.P.

20" D.I.P.

HYMAX

24"X16" RED.

SOLID SLEEVE

11.25° BEND

24"x20" RED.

45° BEND ROLLED

54.9'

46.4'

67.5' D.I.P.

52.1'

21.0'

HYMAX

16" D.I.P.

ST.

VALVE 5G REMOVED UNDER CONT-WSA-013-1801

24"X20" TEE ROLLED UP

24" D.I.P.

24"X16" RED.

HYMAX

16" D.I.P.

20" C.I.P.

24" C.I.P.

24"X20" TEE ROLLED & 24"X16" RED.

16"X16" TEE, HYMAX, & 11.25° BEND

16" C.I.P.

16" D.I.P.

20.4'

20.9'

6G

6" C.I.P. F.B. 143/51

UNION RD.

73.0'

CURB

NOTE: DETAIL DRAWN ON CAD SYSTEM. ± DIMENSIONS FROM INSP. FIELD BOOK, NOT FIELD CHECKED.

CONT-WSA-013-1801 F.B. 129/51
HWNY-900-9801-PS-220 F.B. 128/27
VALR-163-8708-PA F.B. 127/26
HWNY-900-8501-PFD-68 F.B. 88/11
A2-145 F.B. 131/10

PL. 104

F.B. 129/6

85.0'

16" C.I.P.

16" F.B. 88/11

16"X12" RED. S

16"X16" TEE W/16"X6" RED. SOUTH

31.0'

42.3'

REC.

DRIVEWAY TO #2669 & 2695 UNION RD.

CURB

TRAFFIC SIG. M.H.

1G TO 6G = 70.1'
1G TO 7B = 47.3'
1G TO 8B = 84.8'
1G TO 9B = 78.1'
6G TO 7B = 66.5'
6G TO 8B = 82.7'
6G TO 9B = 42.0'
7B TO 8B = 37.5'
7B TO 9B = 46.6'
8B TO 9B = 44.5'

TRAFFIC SIG. M.H.

16"X16" TEE W/16"X6" RED. SOUTH

REC.



K11-A25

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY

WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. M.T.F.

DATE: 11/18/2009

FIELD

REVISED
DR. R.D.C.

DATE: 1/6/2020

OFFICE

TOWN OF CHEEKTOWAGA

E.C.W.A.

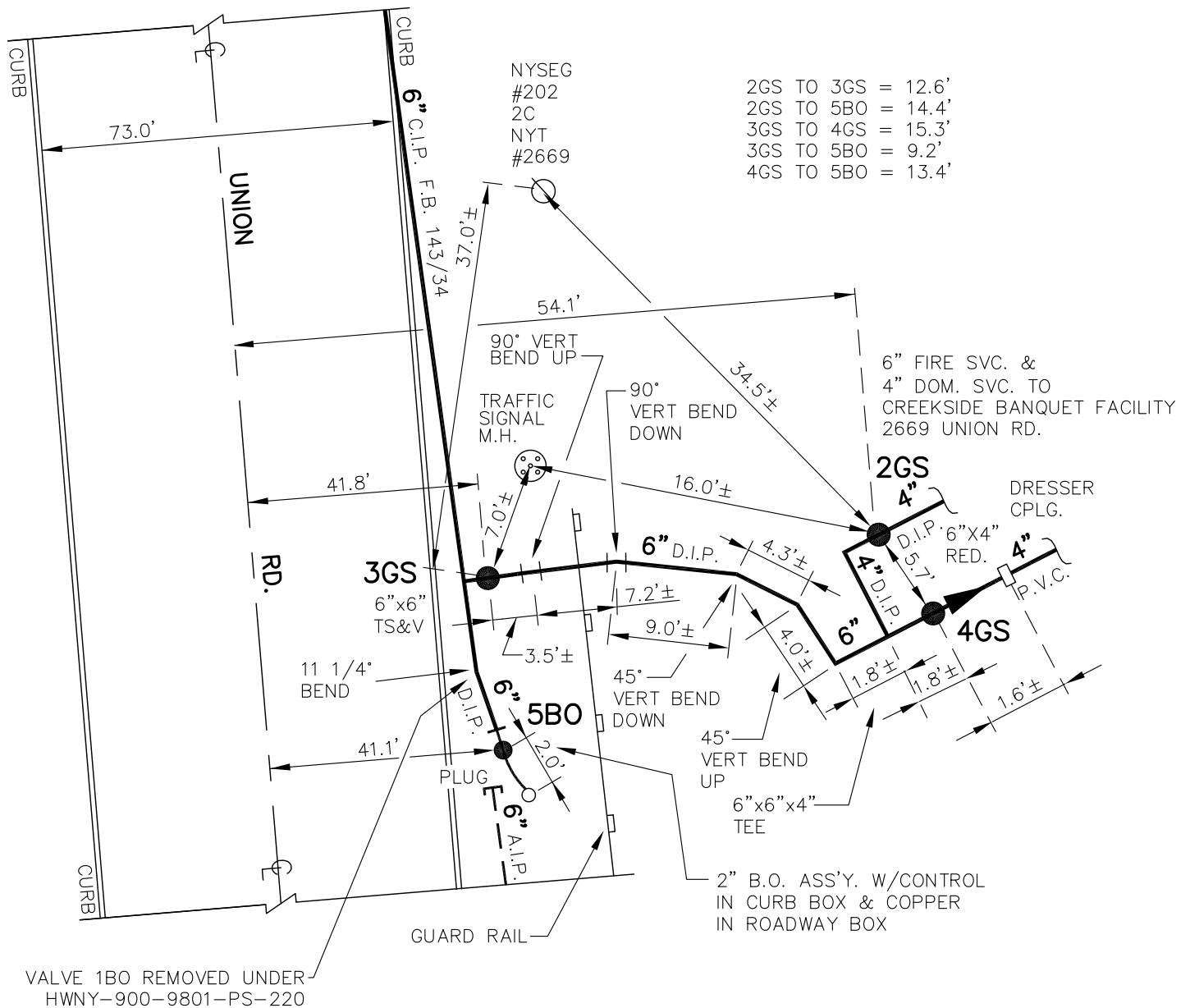
K11-A25A

DETAIL SHT. NO.

199800206

CURRENT PROJECT NO.

NOTE: VALVE 1BO REMOVED UNDER
HWNY-900-9801-PS-220.
VALVE 3GS REQUIRES LONG
KEY PER VALVE PROGRAM.



2GS TO 3GS = 12.6'
2GS TO 5BO = 14.4'
3GS TO 4GS = 15.3'
3GS TO 5BO = 9.2'
4GS TO 5BO = 13.4'

VALVE 1BO REMOVED UNDER
HWNY-900-9801-PS-220

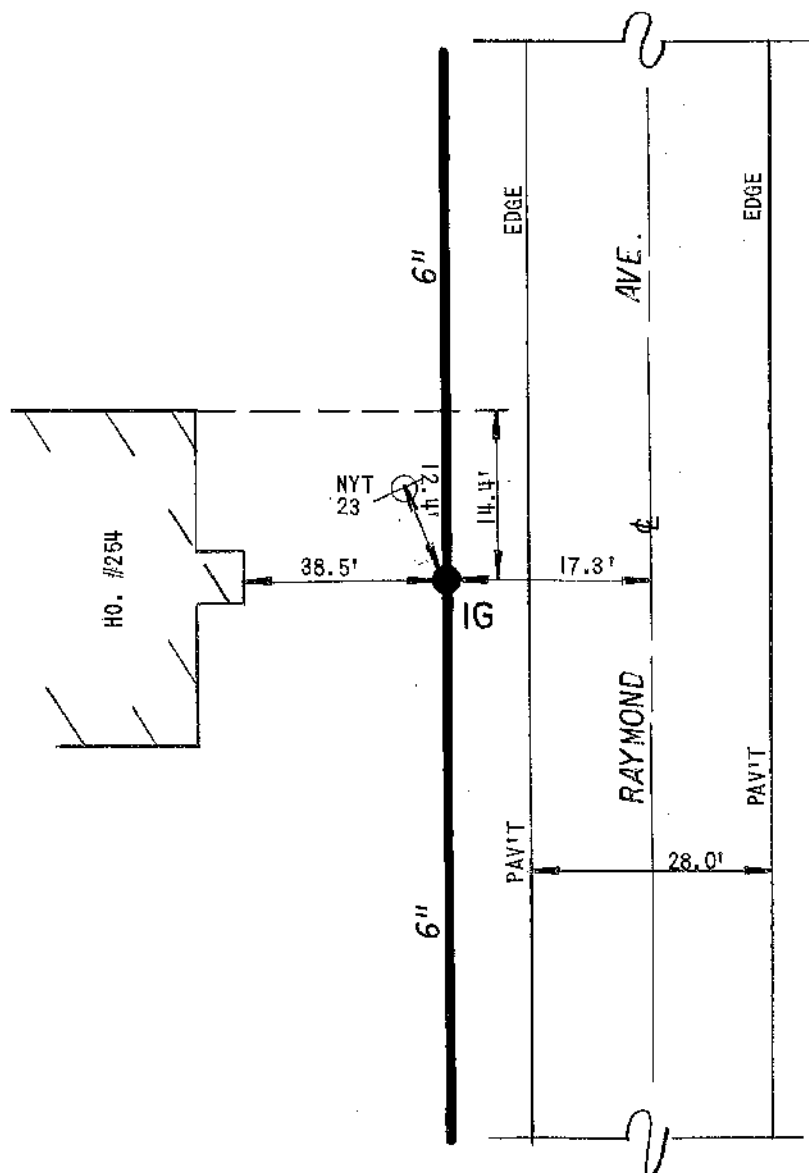
NOTE: DETAIL DRAWN ON CAD
SYSTEM.
± DIMENSIONS FROM INSP.
FIELD BOOK, NOT FIELD
CHECKED.

HWNY-900-9801-PS-220
CHTN-900-9702-P
F.B. 459/71
HWNY-900-8501-PFD-68
F.B. 143/34
PL. 104

K11-A25A

DETAIL SHT. NO.

MASTER COPY



FB. 358/15
DETAIL SHEET NO.

EC **ERIE COUNTY**
WA **WATER AUTHORITY**
BUFFALO, NEW YORK

DR. BY: *D.L.R.*
DATE: *7/10/73*
SCALE: *NONE*

TOWN OF CHEEKTOWAGA
E.C.W.A.

J10-H49



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. DR. D.K.C.

DATE: 3.31.04

FIELD

DR.

DATE:

OFFICE

TN. OF CHEEKTOWAGA

E.C.W.A.

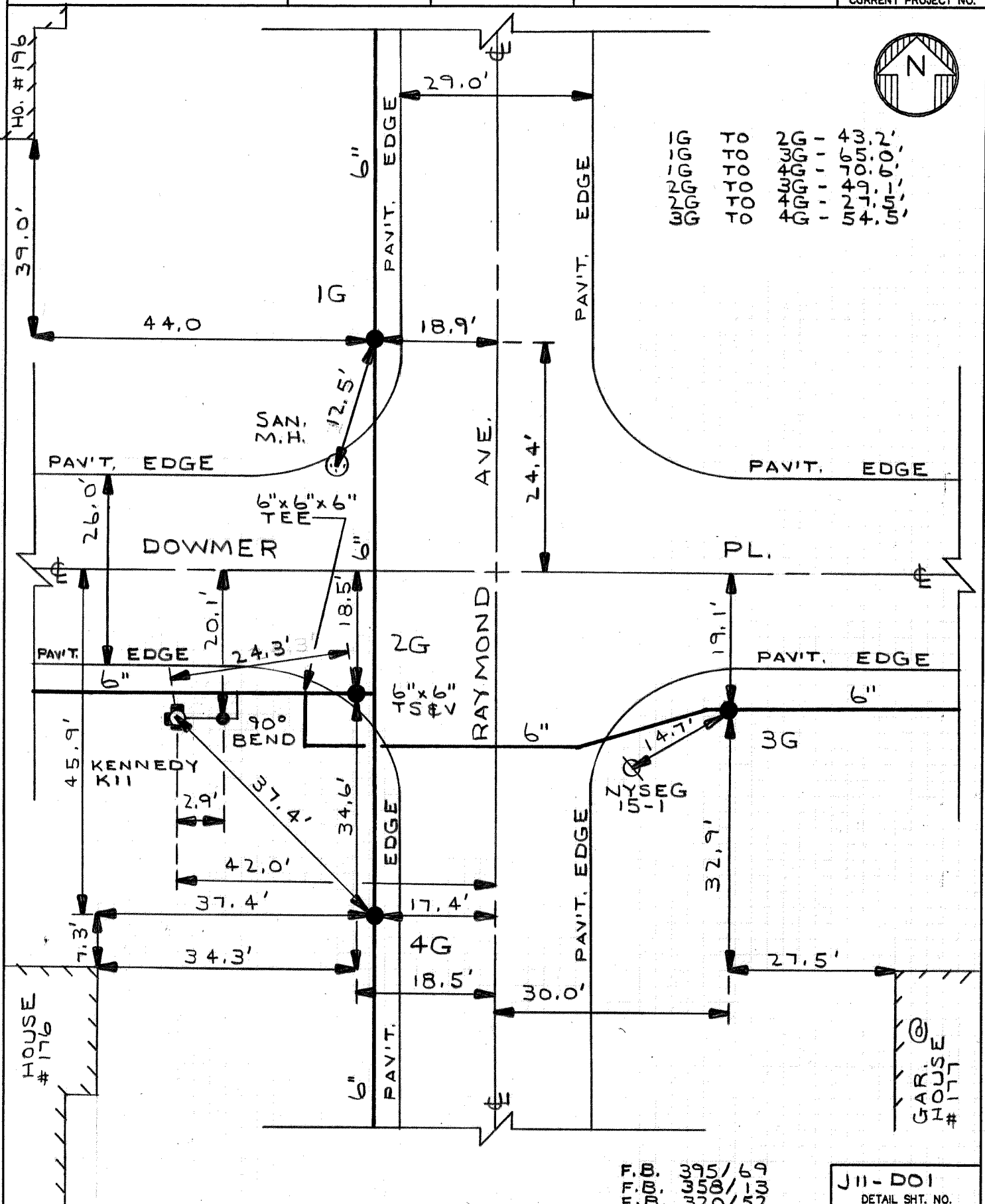
J11-DOI

DETAIL SHT. NO.

CURRENT PROJECT NO.



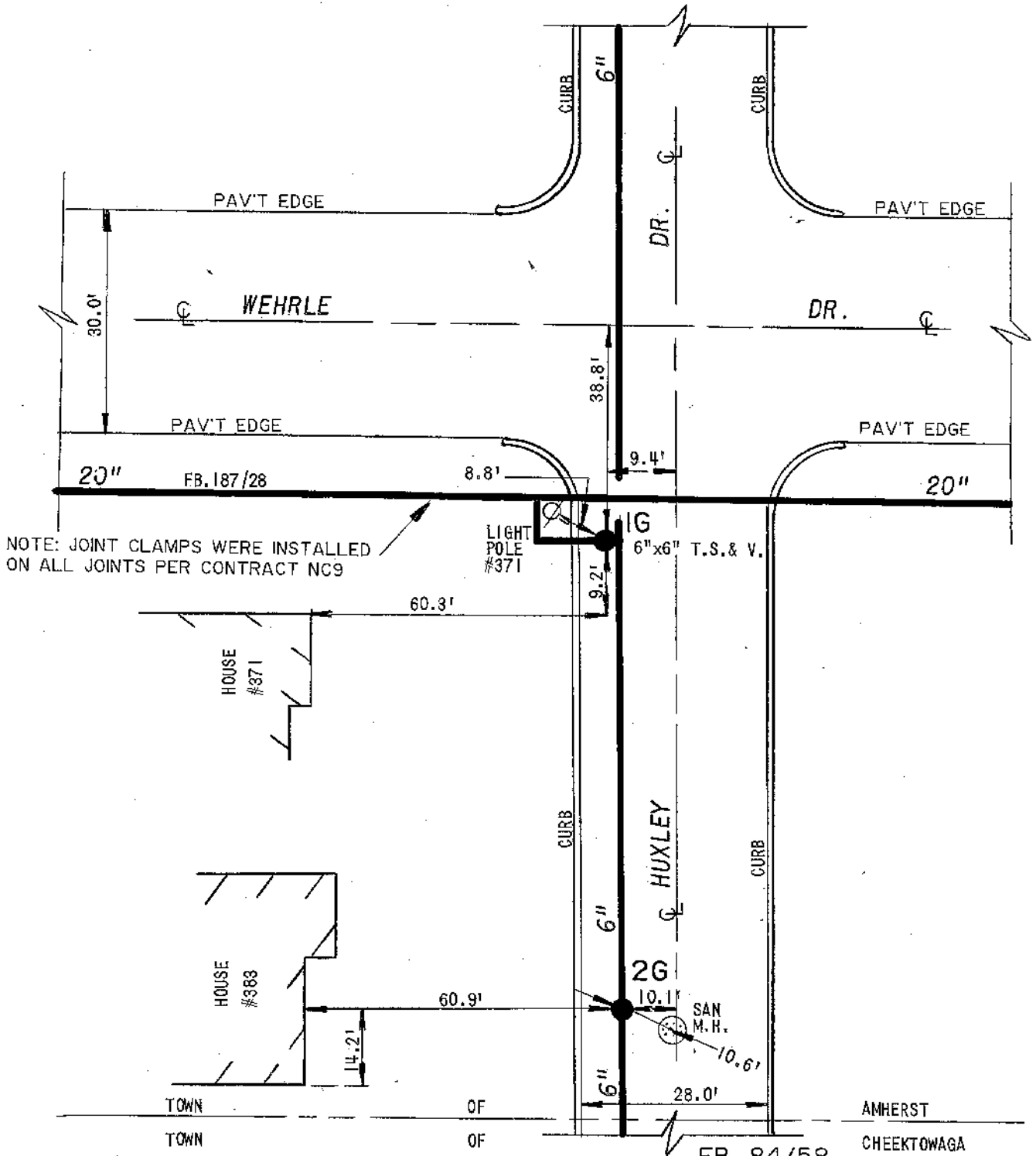
1G	TO	2G	-	43.2'
1G	TO	3G	-	65.0'
1G	TO	4G	-	70.6'
2G	TO	3G	-	49.1'
2G	TO	4G	-	27.5'
3G	TO	4G	-	54.5'



F.B. 395/69
F.B. 358/13
F.B. 320/52

J11-DOI

DETAIL SHT. NO.



NOTE: JOINT CLAMPS WERE INSTALLED
ON ALL JOINTS PER CONTRACT NC9

LIGHT
POLE
#371

IG
6"x6" T.S. & V.

2G
10.1'

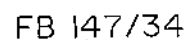
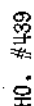
SAN
M.H.

10.6'

28.0'

FB. 84/58
FB. 187/28

CONT-NC-009-8701-PDT-131





ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. D.K.C.
DR.

DATE: 3-8-05

FIELD

REV. R.D.C.
DR.

DATE: 2/5/2020

OFFICE

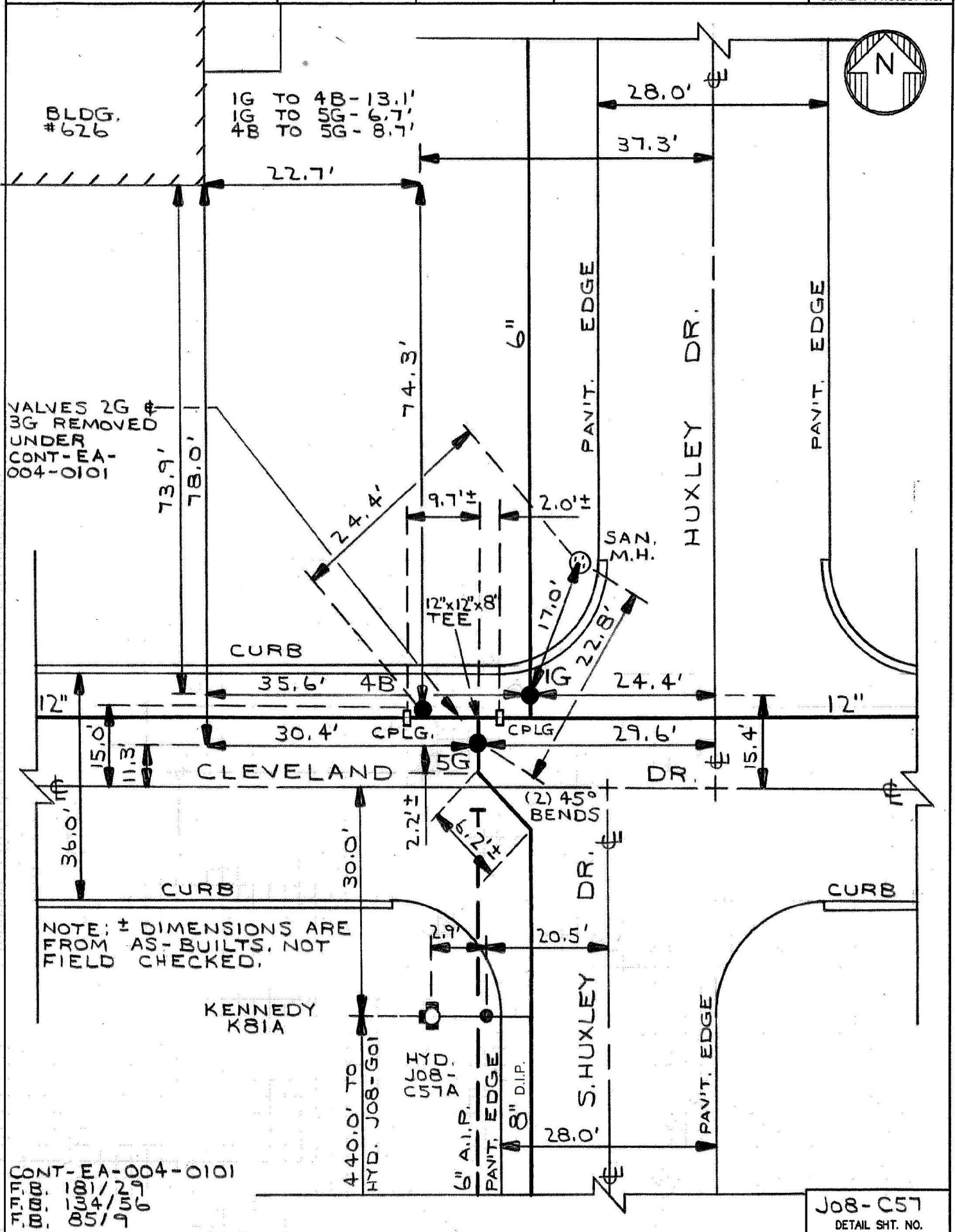
TN. OF CHEEKTOWAGA

E.C.W.A.

J08-C57
DETAIL SHT. NO.

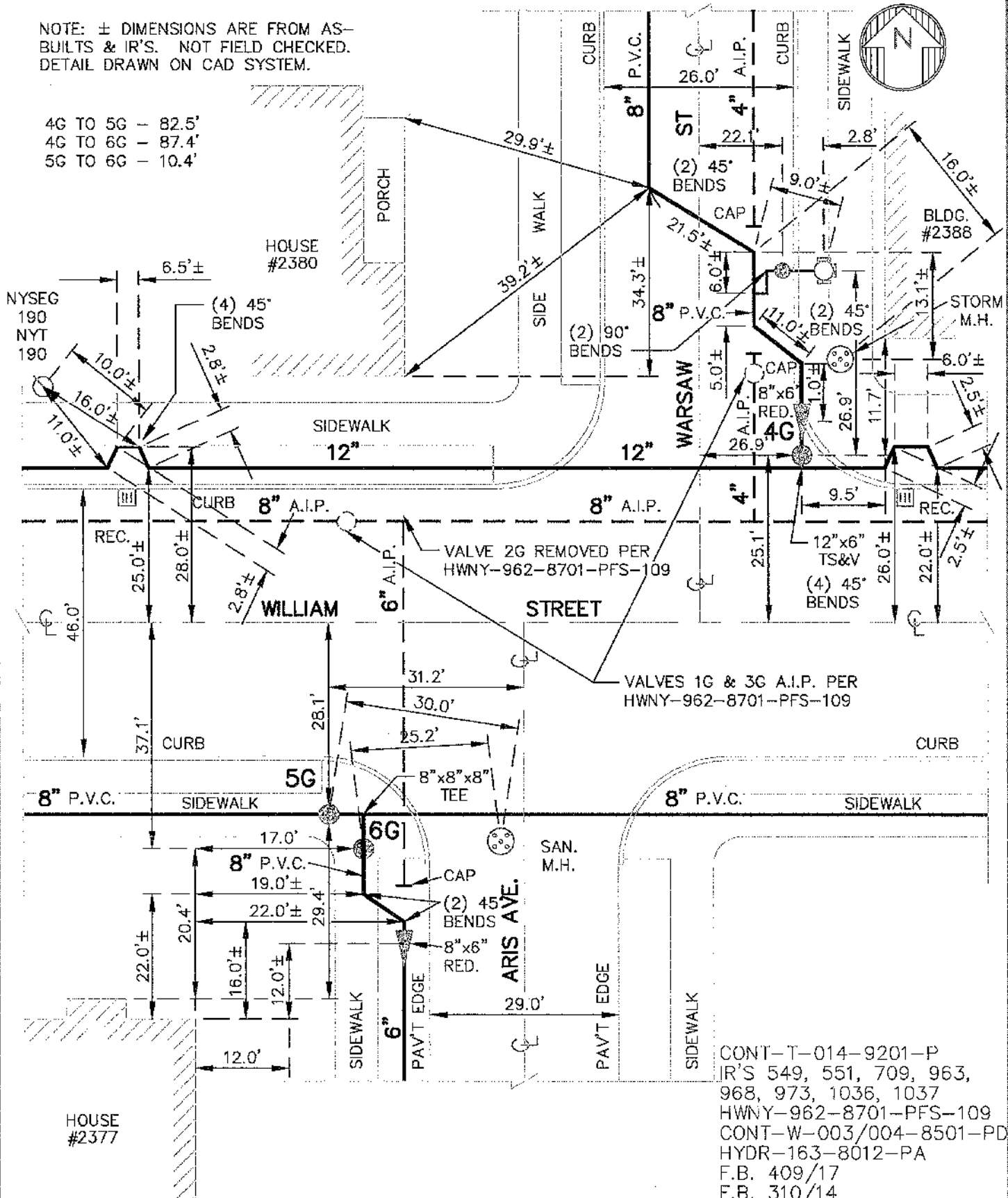
200100025

CURRENT PROJECT NO.



NOTE: ± DIMENSIONS ARE FROM AS-BUILTS & IR'S. NOT FIELD CHECKED.
DETAIL DRAWN ON CAD SYSTEM.

4G TO 5G - 82.5'
4G TO 6G - 87.4'
5G TO 6G - 10.4'



CONT-T-014-9201-P
IR'S 549, 551, 709, 963,
968, 973, 1036, 1037
HWNY-962-8701-PFS-109
CONT-W-003/004-8501-PD
HYDR-163-8012-PA
F.B. 409/17
F.B. 310/14
F.B. 27/47



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR.

DKC

DATE: 7-8-94

FIELD

REVISED
DR.

WB

DATE: 1-11-95

OFFICE

TOWN OF CHEEKTOWAGA

E.C.W.A.

J11-B37

DETAIL SHT. NO.
N.T.S.

EC
WA

ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. D.K.C.
DR.

DR.

DATE: 5.8.13

DATE:

FIELD

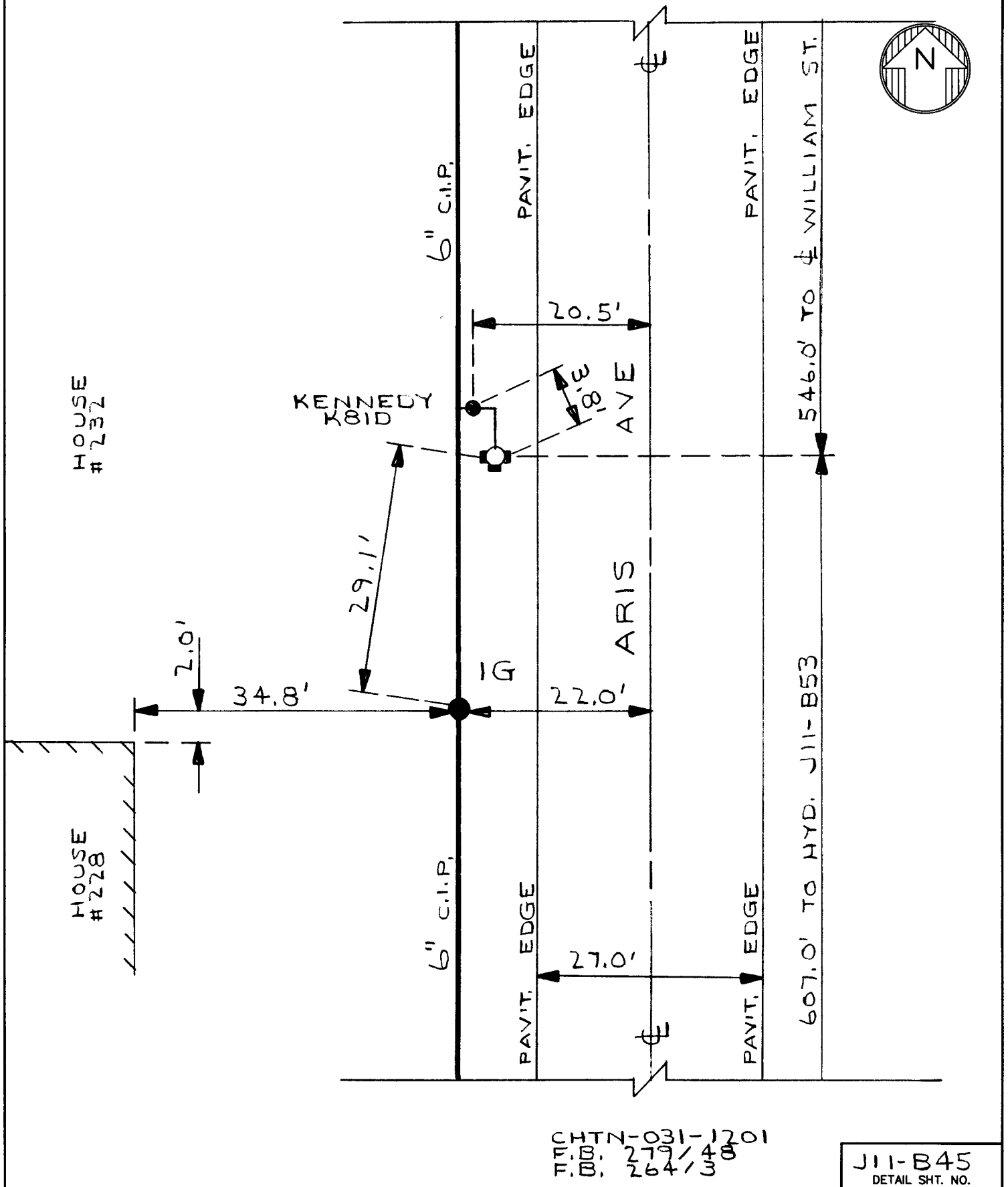
OFFICE

TOWN OF CHEEKTOWAGA

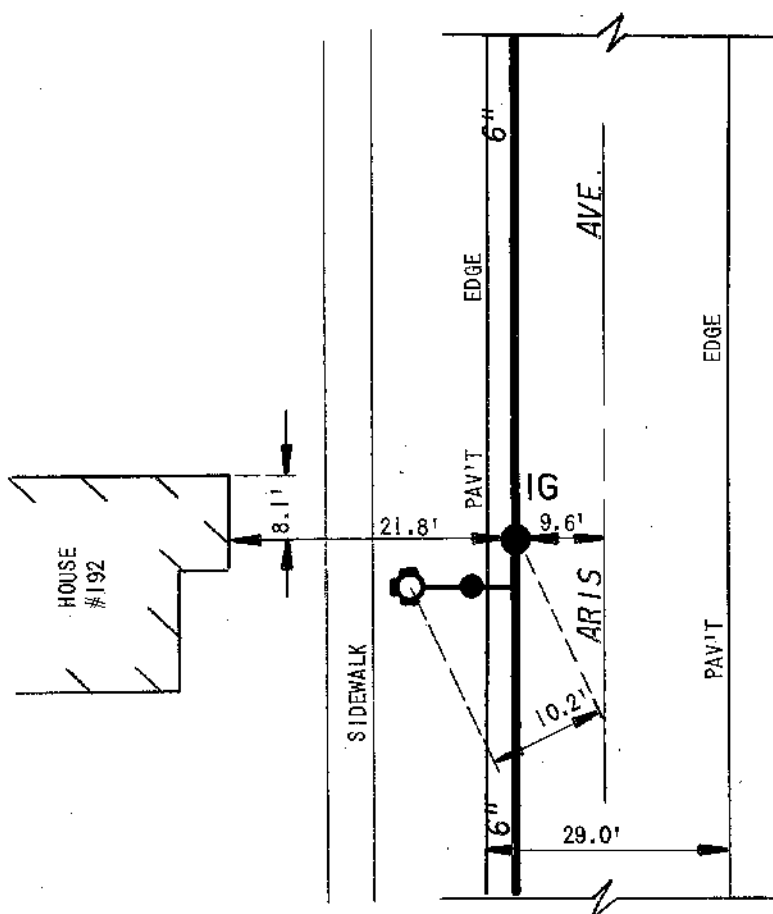
E.C.W.A.

J11-B45
DETAIL SHT. NO.

201200210
CURRENT PROJECT NO.



MASTER COPY



FB.244/31

DETAIL SHEET NO.



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REV. D.K.C.
DR.

DR.

TOWN OF CHEEKTOWAGA

J11-B61
DETAIL SHT. NO.

DATE: 5.8.13

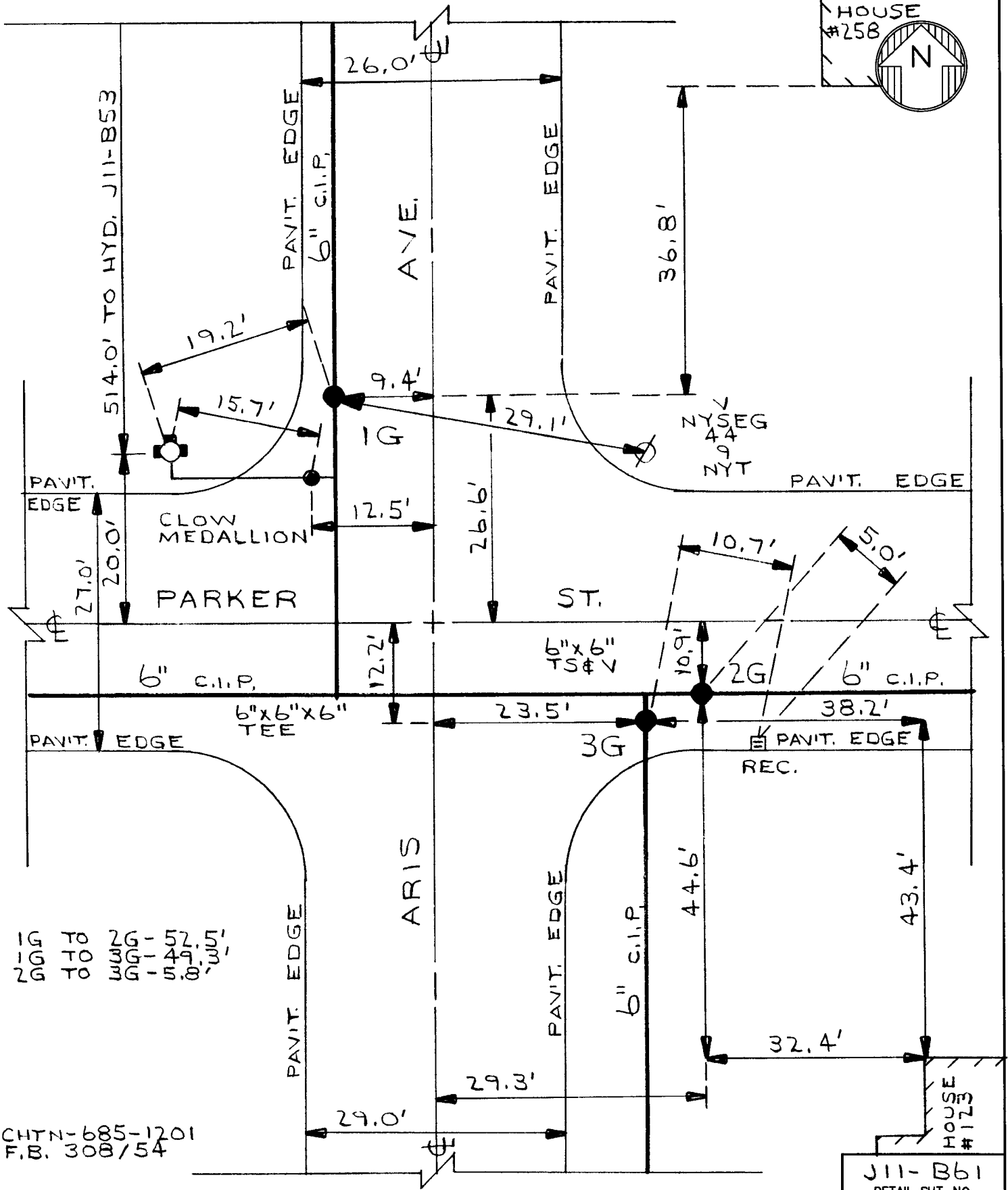
DATE:

E.C.W.A.

FIELD

OFFICE

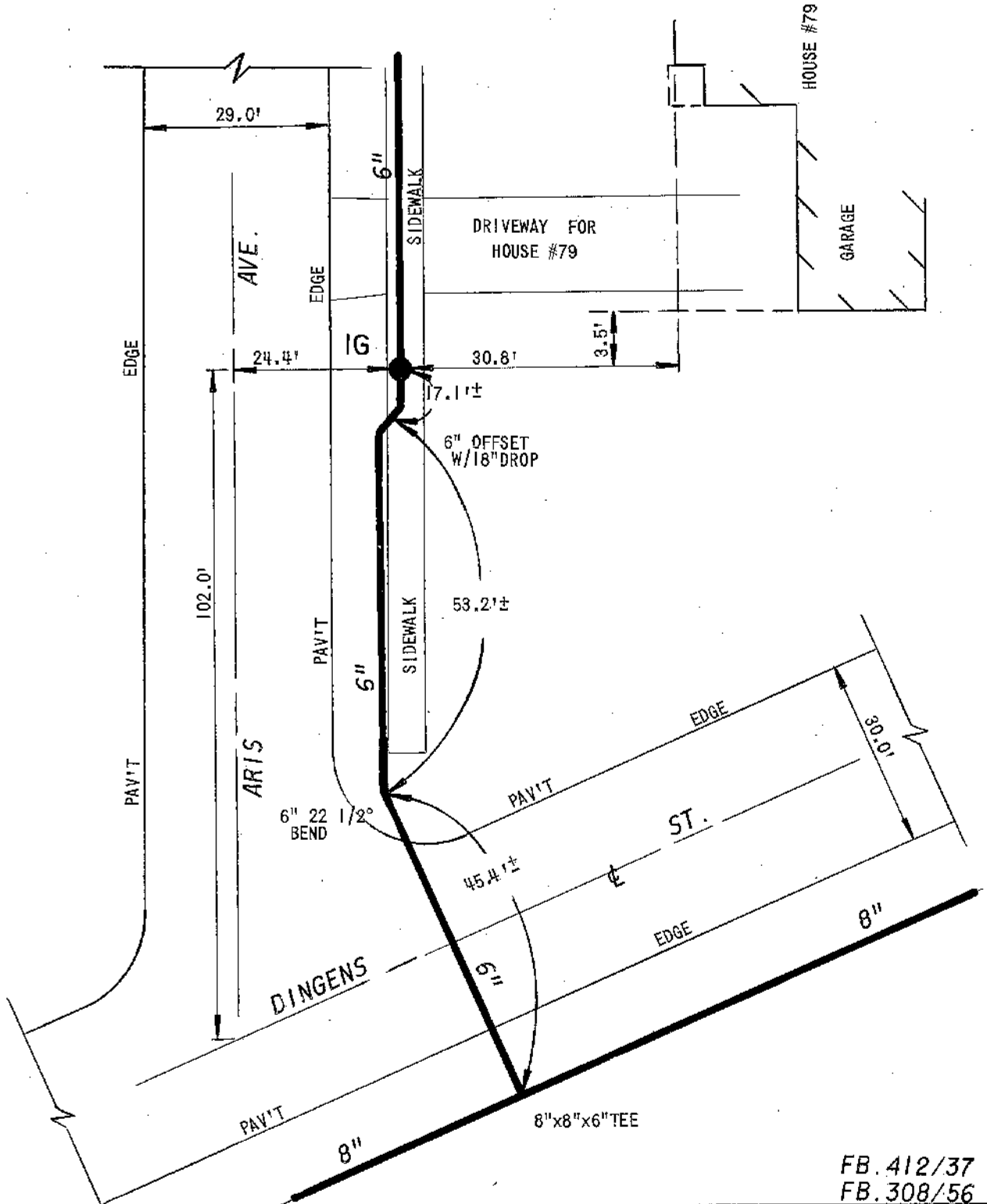
201200206
CURRENT PROJECT NO.



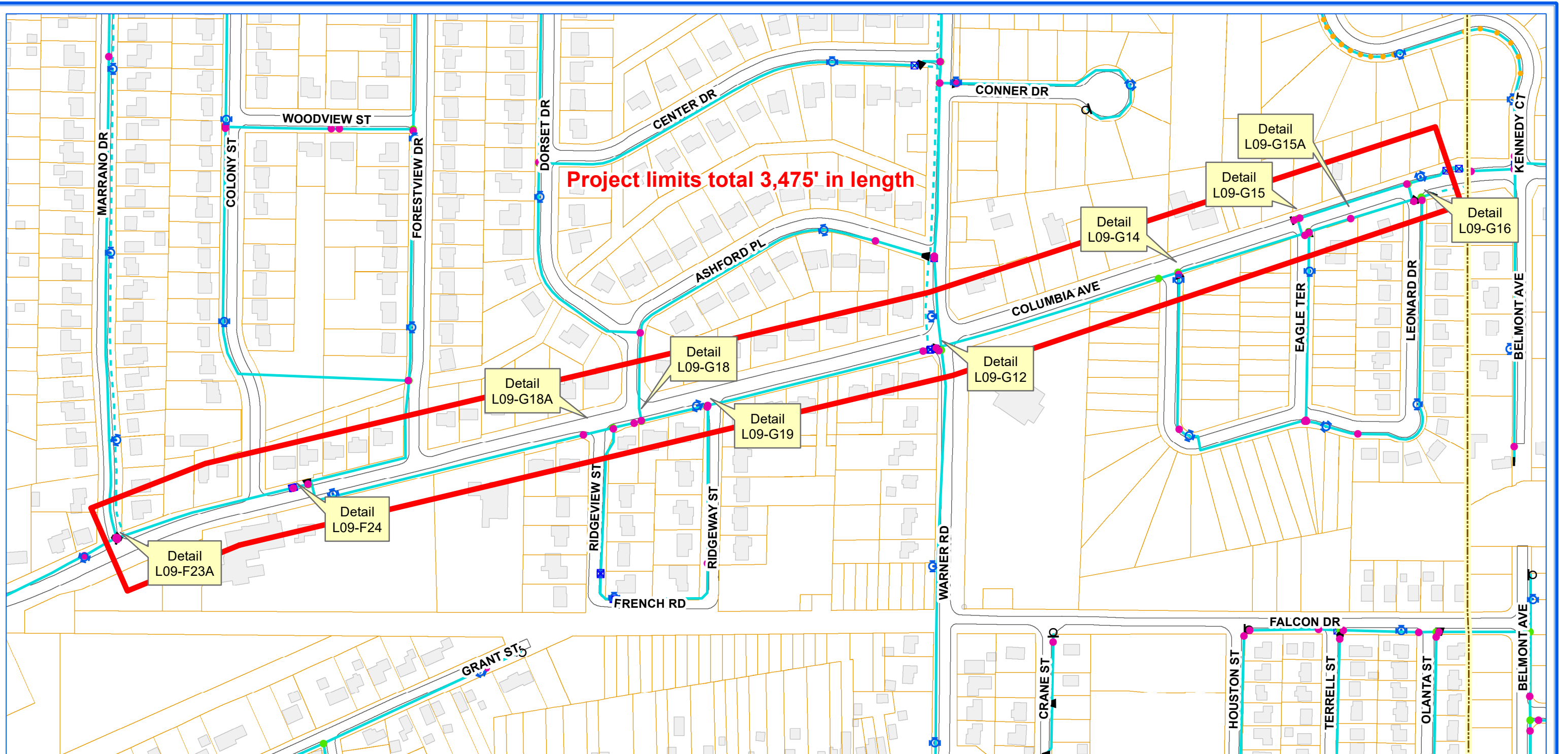
CHTN-685-1201
F.B. 308/54

J11-B61
DETAIL SHT. NO.

MASTER COPY



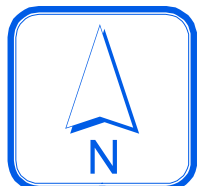
FB. 412/37
FB. 308/56



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

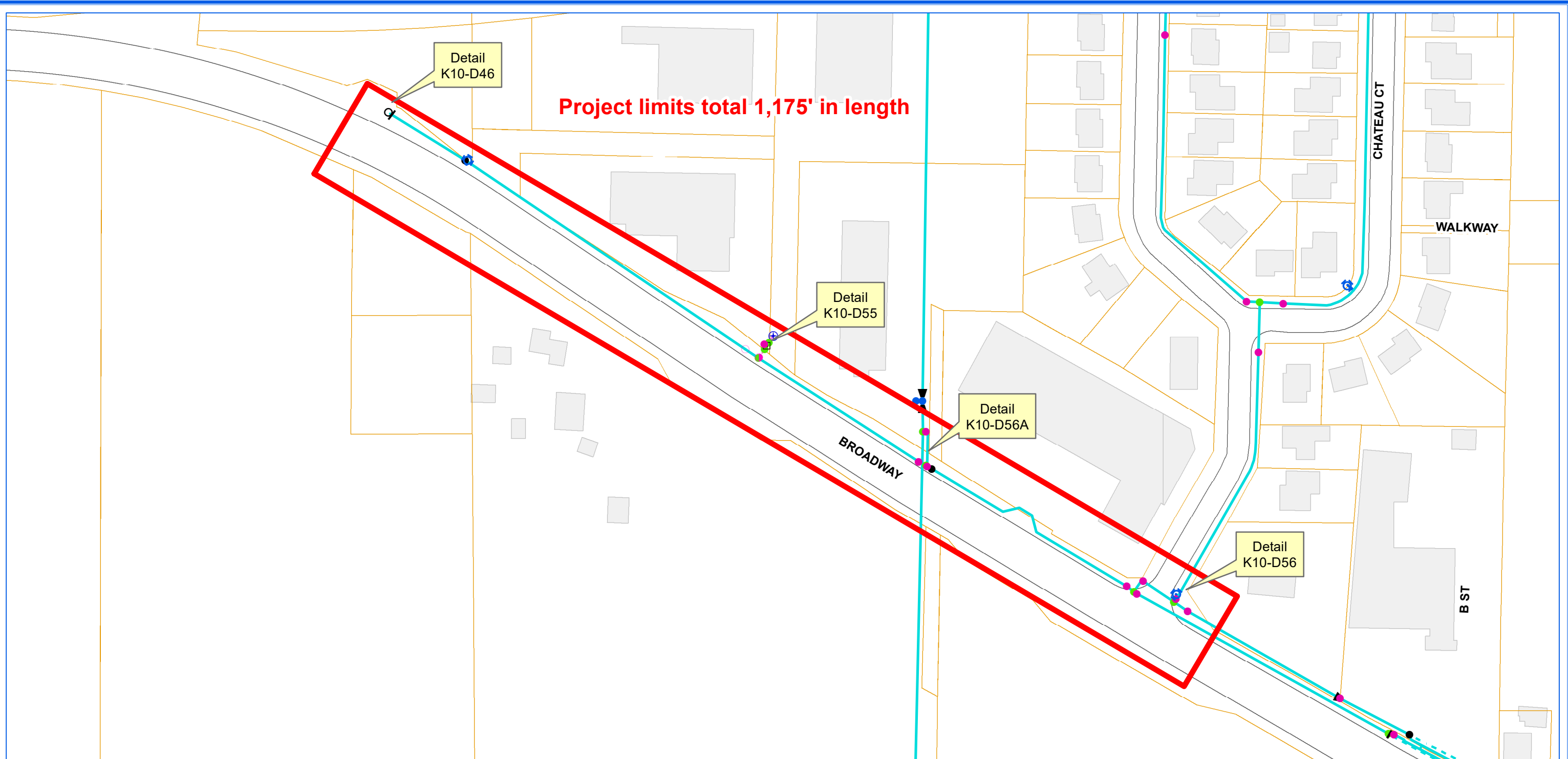
**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "F"**

**COLUMBIA AVE. FROM MARRANO DR. TO LEONARD DR. / BROADWAY FROM CHATEAU CT. TO DEAD END
BEECH ST. FROM LINCOLN AVE. TO JACKSON AVE. / PINE ST. FROM LINCOLN AVE. TO MADISON AVE.
SPRUCE ST. FROM MADISON AVE. TO JACKSON AVE.
VILLAGE OF DEPEW AND CITY OF LACKAWANNA, NY**



0 150 300 450
Feet

1 inch = 250 feet



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "F"**

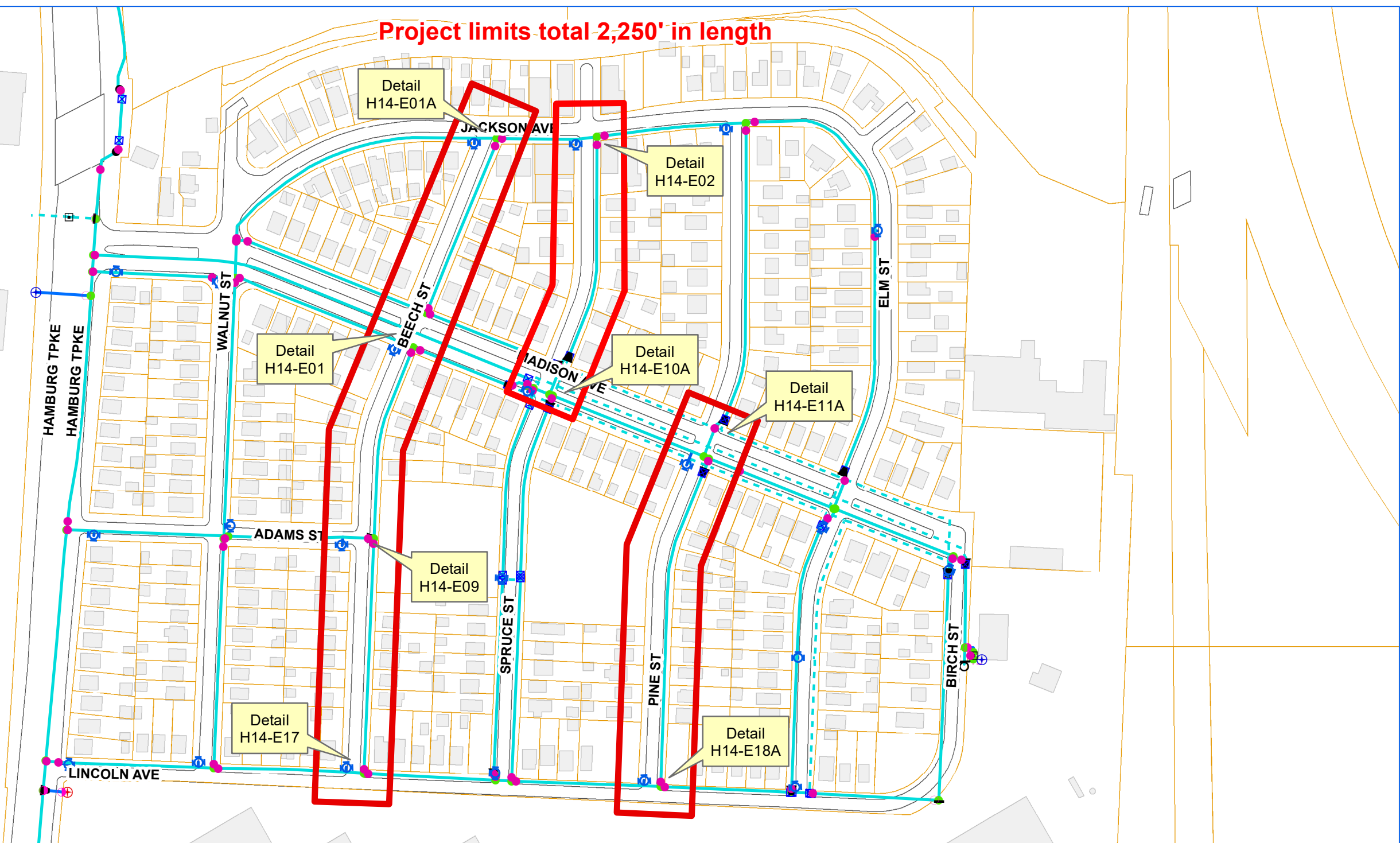
**COLUMBIA AVE. FROM MARRANO DR. TO LEONARD DR. / BROADWAY FROM CHATEAU CT. TO DEAD END
BEECH ST. FROM LINCOLN AVE. TO JACKSON AVE. / PINE ST. FROM LINCOLN AVE. TO MADISON AVE.
SPRUCE ST. FROM MADISON AVE. TO JACKSON AVE.
VILLAGE OF DEPEW AND CITY OF LACKAWANNA, NY**



0 75 150 225 Feet

1 inch = 125 feet

MJM



ERIE COUNTY WATER AUTHORITY
BUFFALO, NY

**ECWA-223-2101 / ECWA P.N. 202100007
DISTRIBUTION MAIN DESIGN PROJECTS / 2021 - 2022
CONTRACT "F"**

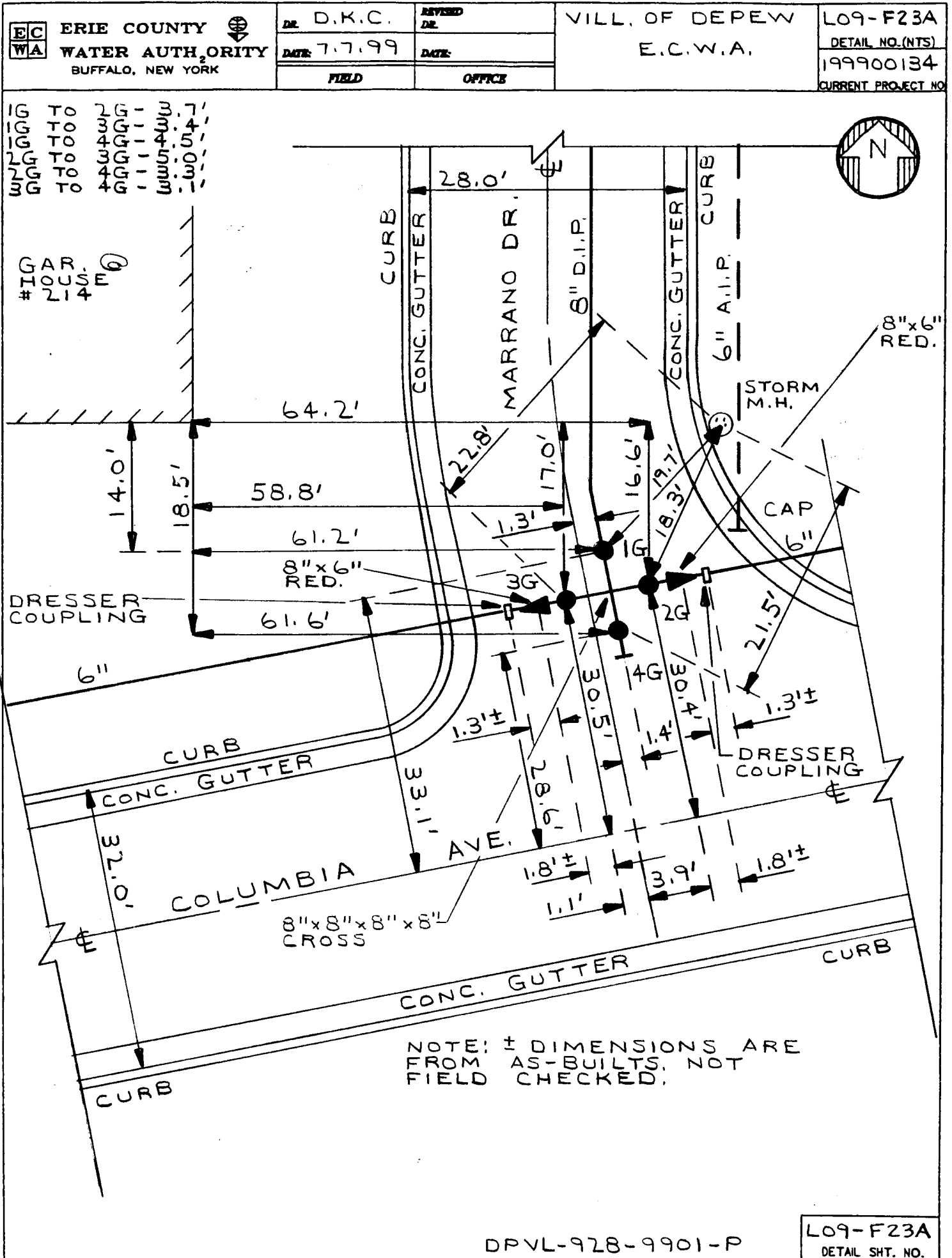
**COLUMBIA AVE. FROM MARRANO DR. TO LEONARD DR. / BROADWAY FROM CHATEAU CT. TO DEAD END
BEECH ST. FROM LINCOLN AVE. TO JACKSON AVE. / PINE ST. FROM LINCOLN AVE. TO MADISON AVE.
SPRUCE ST. FROM MADISON AVE. TO JACKSON AVE.
VILLAGE OF DEPEW AND CITY OF LACKAWANNA, NY**



0 125 250 375 Feet

1 inch = 200 feet

MJM



DPVL-928-9901-P

 L09-F23A
 DETAIL SHT. NO.
MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK



REVISED
DR. R.D.C.
DATE: 3/16/2020
FIELD

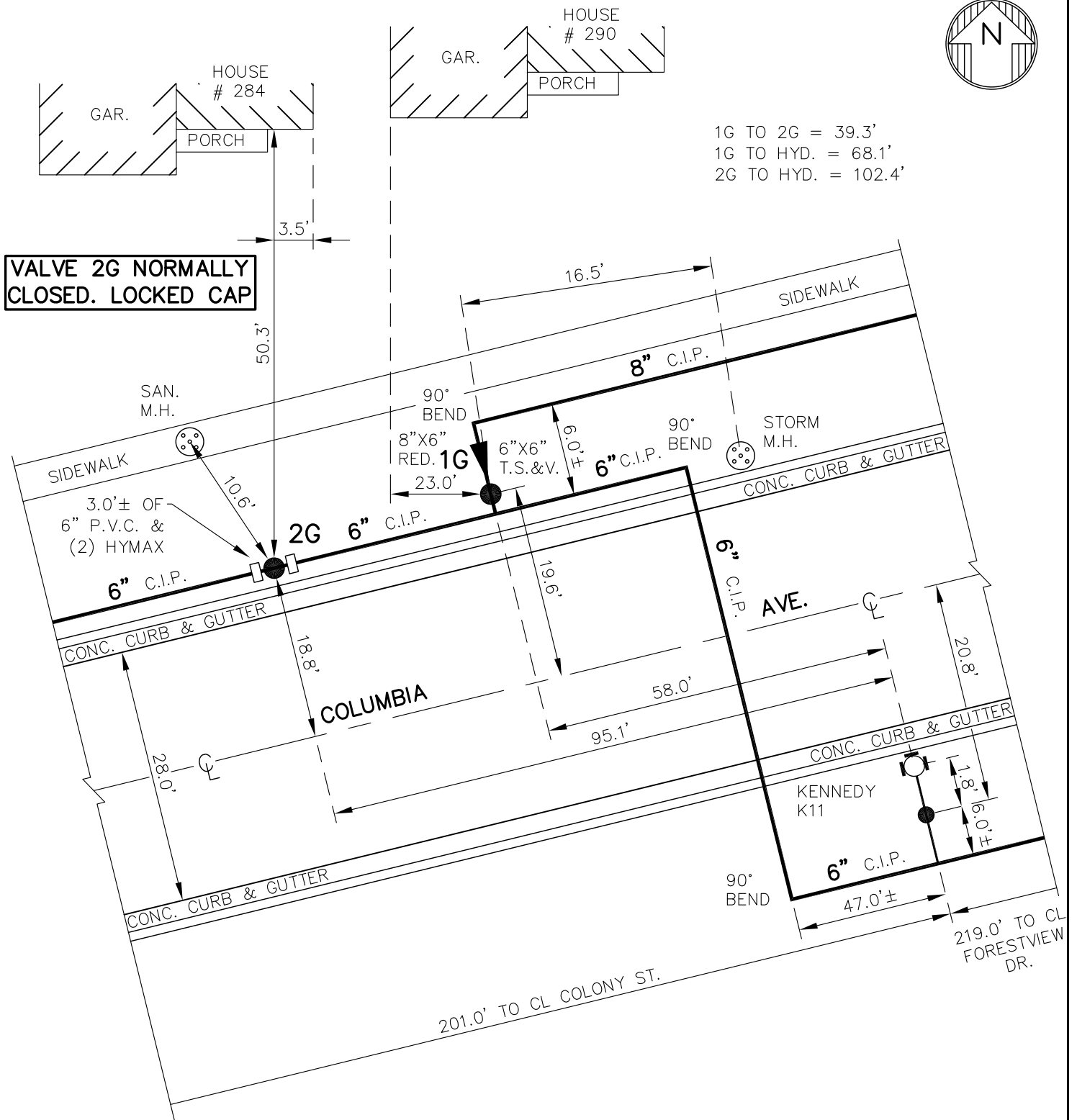
REVISED
DR. M.J.M.
DATE: 6/4/2020
OFFICE

VILLAGE OF DEPEW/
TOWN OF LANCASTER

E.C.W.A.

L09-F24
DETAIL SHT. NO.

202000128
CURRENT PROJECT NO.



NOTE: DETAIL DRAWN ON CAD SYSTEM.
± DIMENSIONS FROM W.O. &
VILLAGE OF DEPEW RECORDS.

DPVL-177-2001
DPVL-928-9901-P
DPVL-928-9001-FD

L09-F24
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DE. D.K.C.

REVISED
DE.

DATE: 7.19.99

DATE:

FIELD

OFFICE

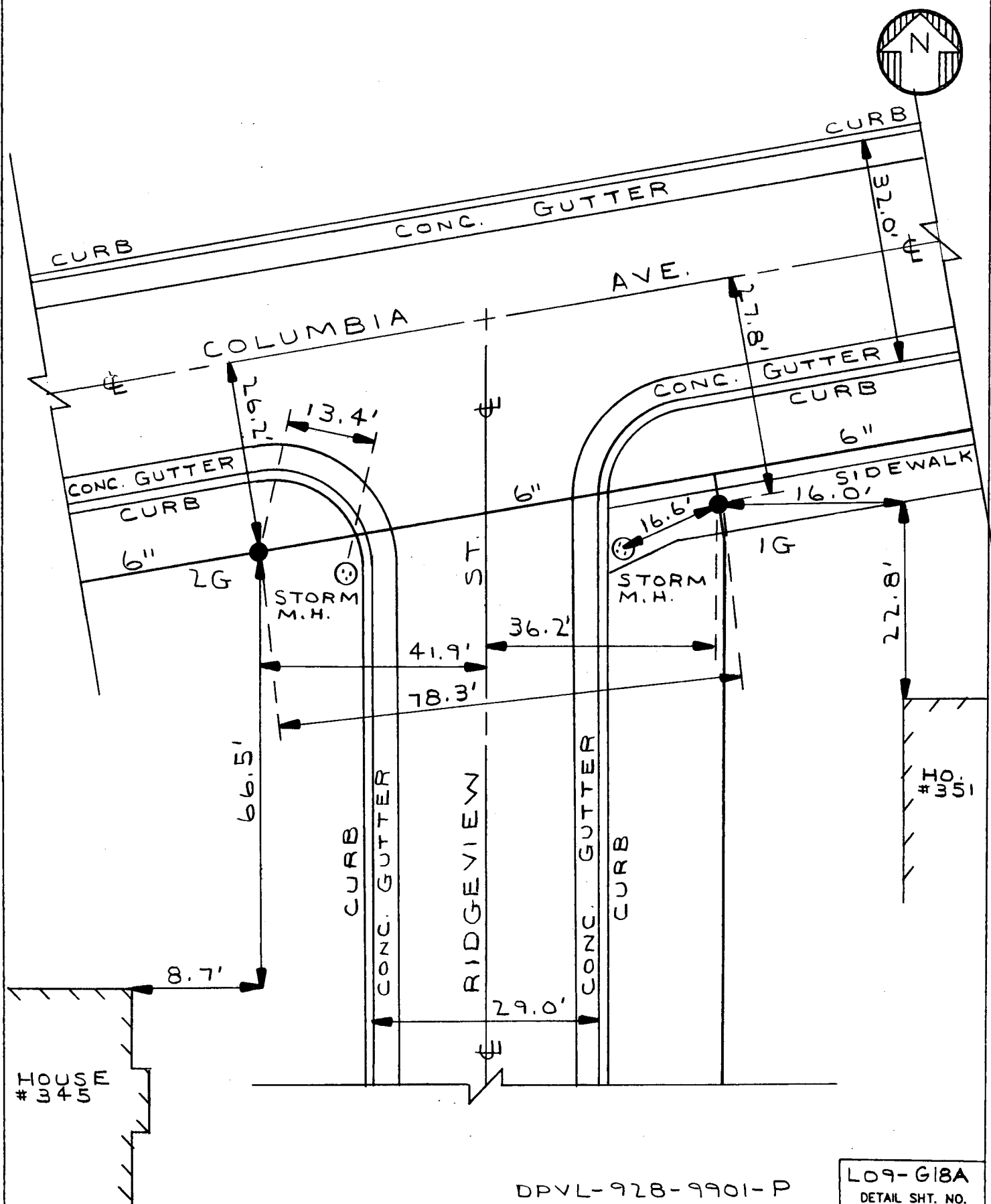
VILL. OF DEPEW
E.C.W.A.

LO9-G18A

DETAIL NO.(NTS)

199900134

CURRENT PROJECT NO.



DPVL-928-9901-P

LO9-G18A

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

REVISED

DR.

DATE: 7-19-99

DATE:

FIELD

OFFICE

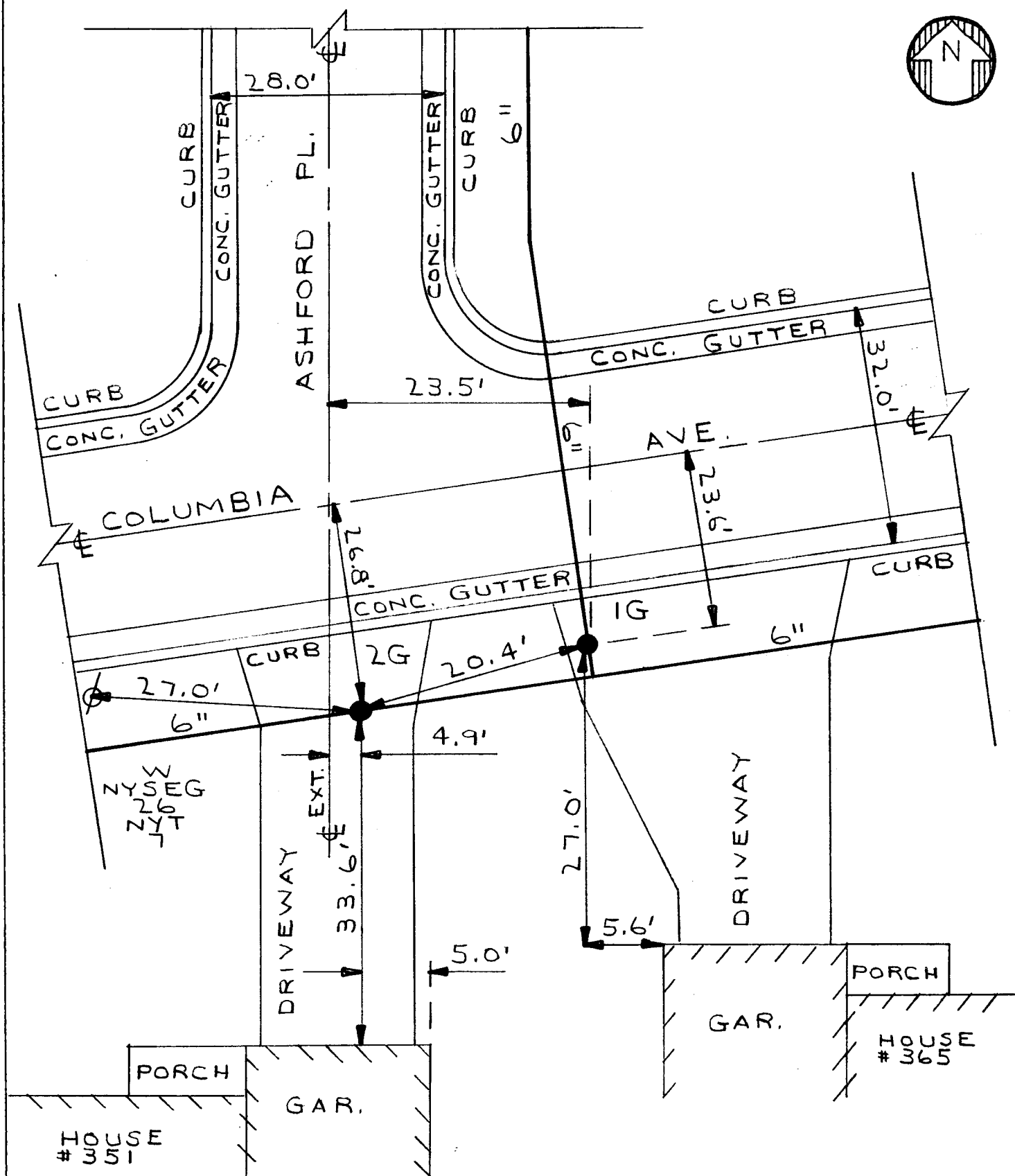
VILL. OF DEPEW
E.C.W.A.

LO9-G18

DETAIL NO. (NTS)

199900134

CURRENT PROJECT NO.



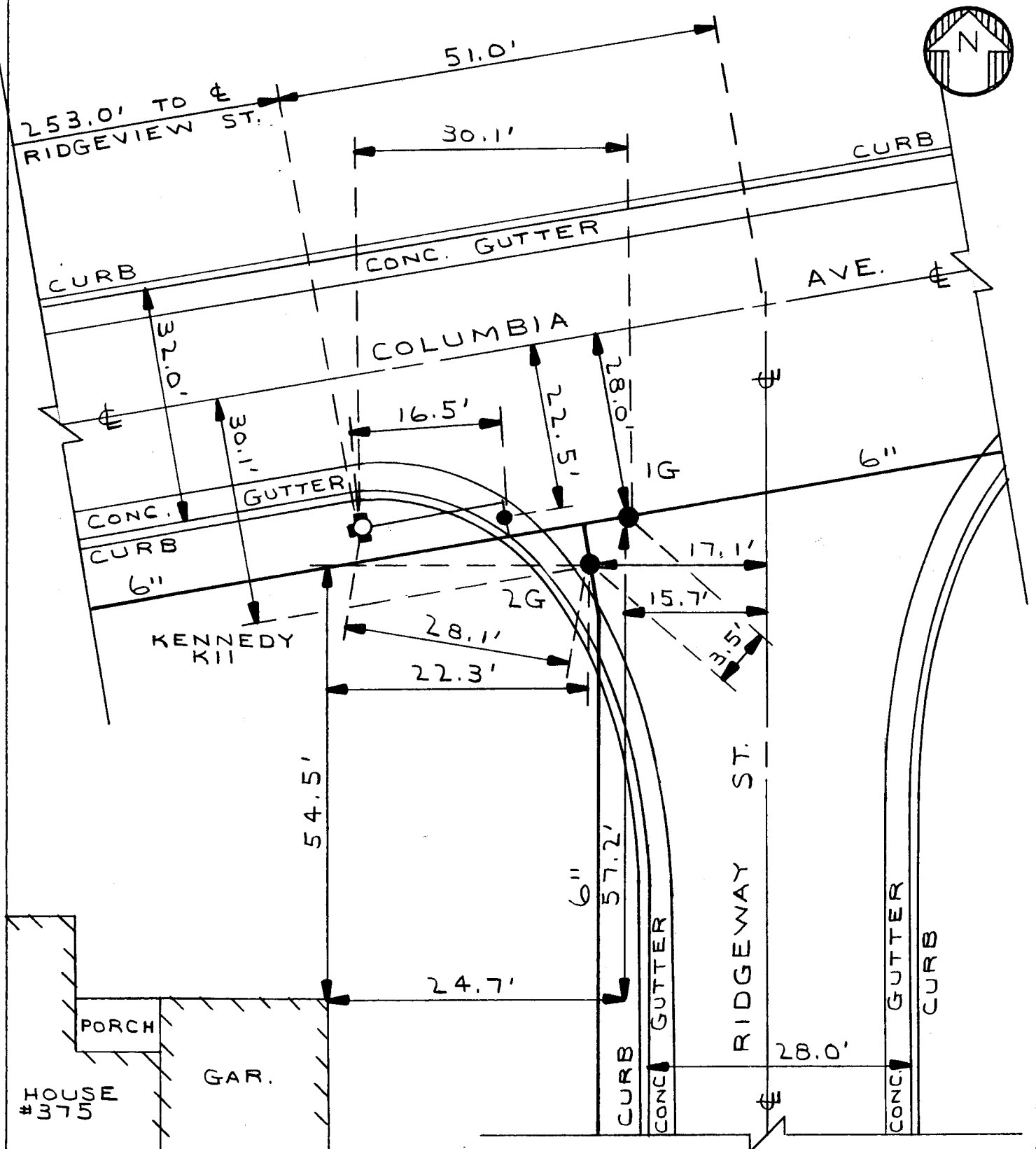
DPVL-928-9901-P

LO9-G18

DETAIL SHT. NO.

MASTER COPY

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DPVL-928-9901-P

LOG-G19
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DE. D.K.C.

DATE: 6-1-00

FIELD

REVISED
DE. FDB

DATE: 6-5-14

OFFICE

VILLAGE OF DEPEW

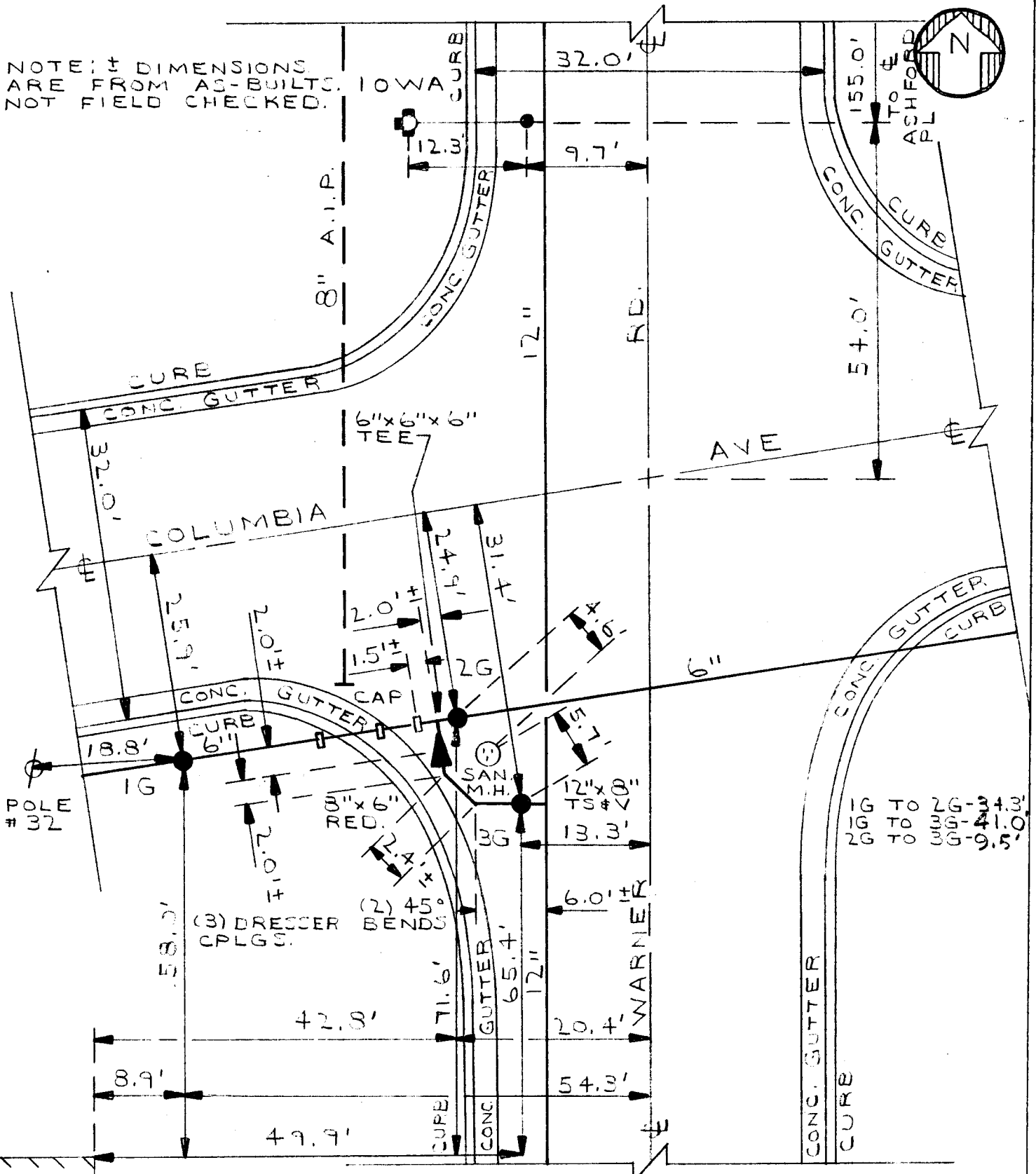
E.C.W.A.

LO9-G12
DETAIL NO. (NTS)

199900134

CURRENT PROJECT NO

NOTE: ± DIMENSIONS
ARE FROM AS-BUILTS. IOWA
NOT FIELD CHECKED.



HO.
#437

DPVL-928-9901-P

LO9-G12
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

REVIEW
DR.

DATE: 7.20.99

DATE:

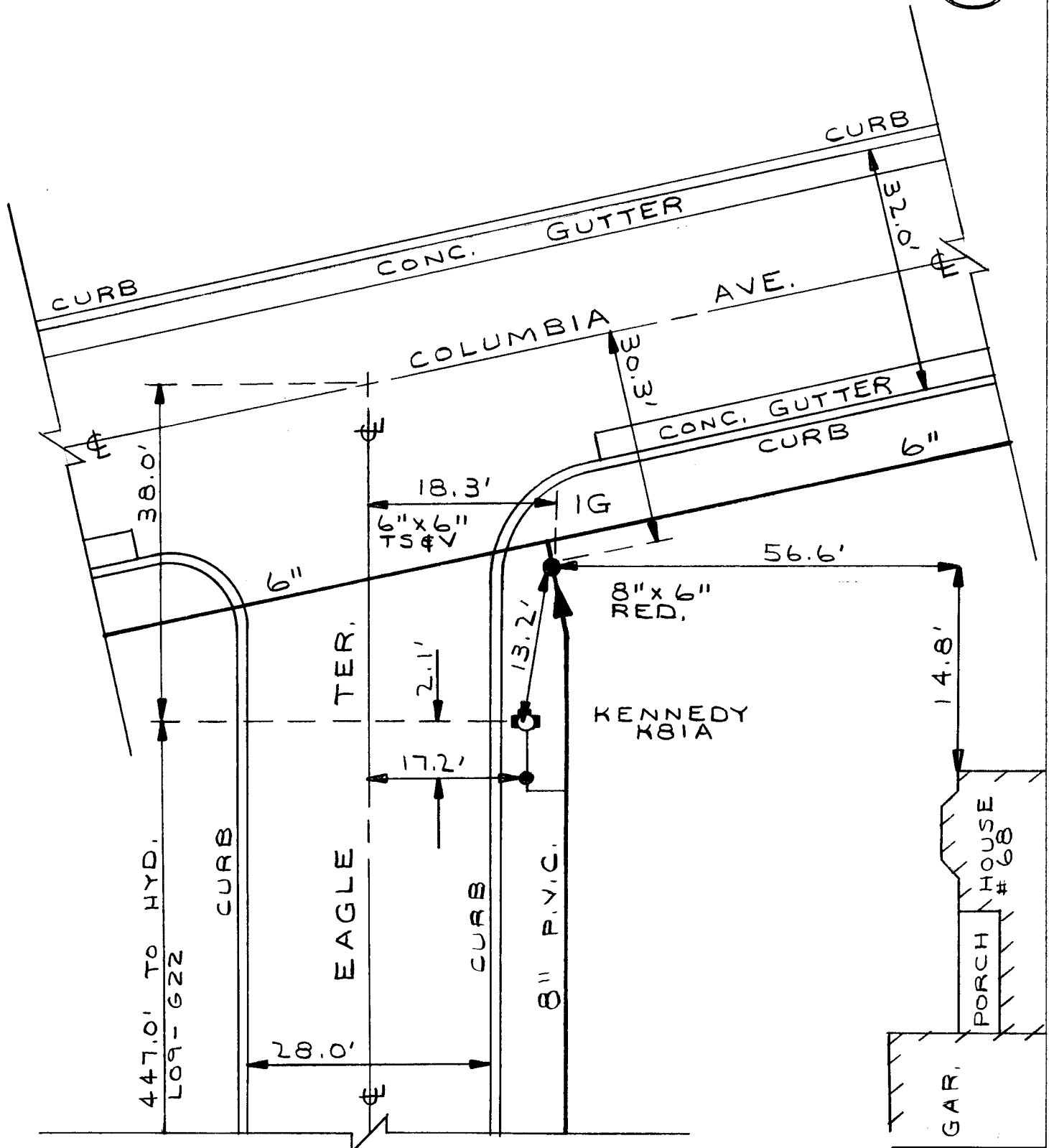
FIELD

OFFICE

VILL. OF DEPEW
E.C.W.A.

LO9-G14
DETAIL NO.(NTS)

199900134
CURRENT PROJECT NO.



DPVL-928-9901-P

LO9-G14
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DE D.K.C.

REVISED
DE

DATE: 7.20.99

DATE:

FIELD

OFFICE

VILL. OF DEPEW
E.C.W.A.

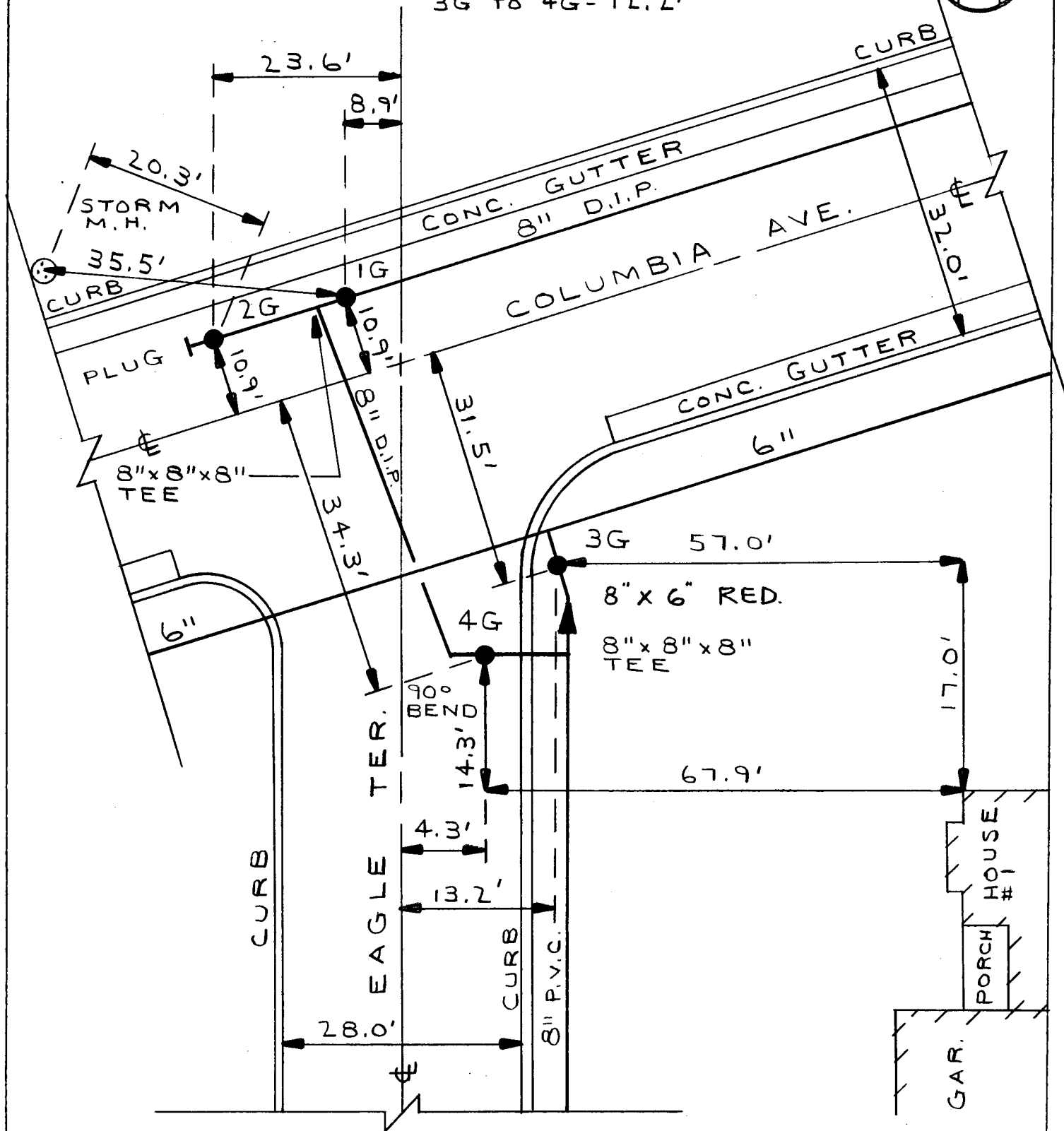
LO9-G15

DETAIL NO.(NTS)

199900134

CURRENT PROJECT NO

1G TO 2G - 15.7'
1G TO 3G - 43.7'
1G TO 4G - 44.8'
2G TO 3G - 49.9'
2G TO 4G - 46.9'
3G TO 4G - 12.2'




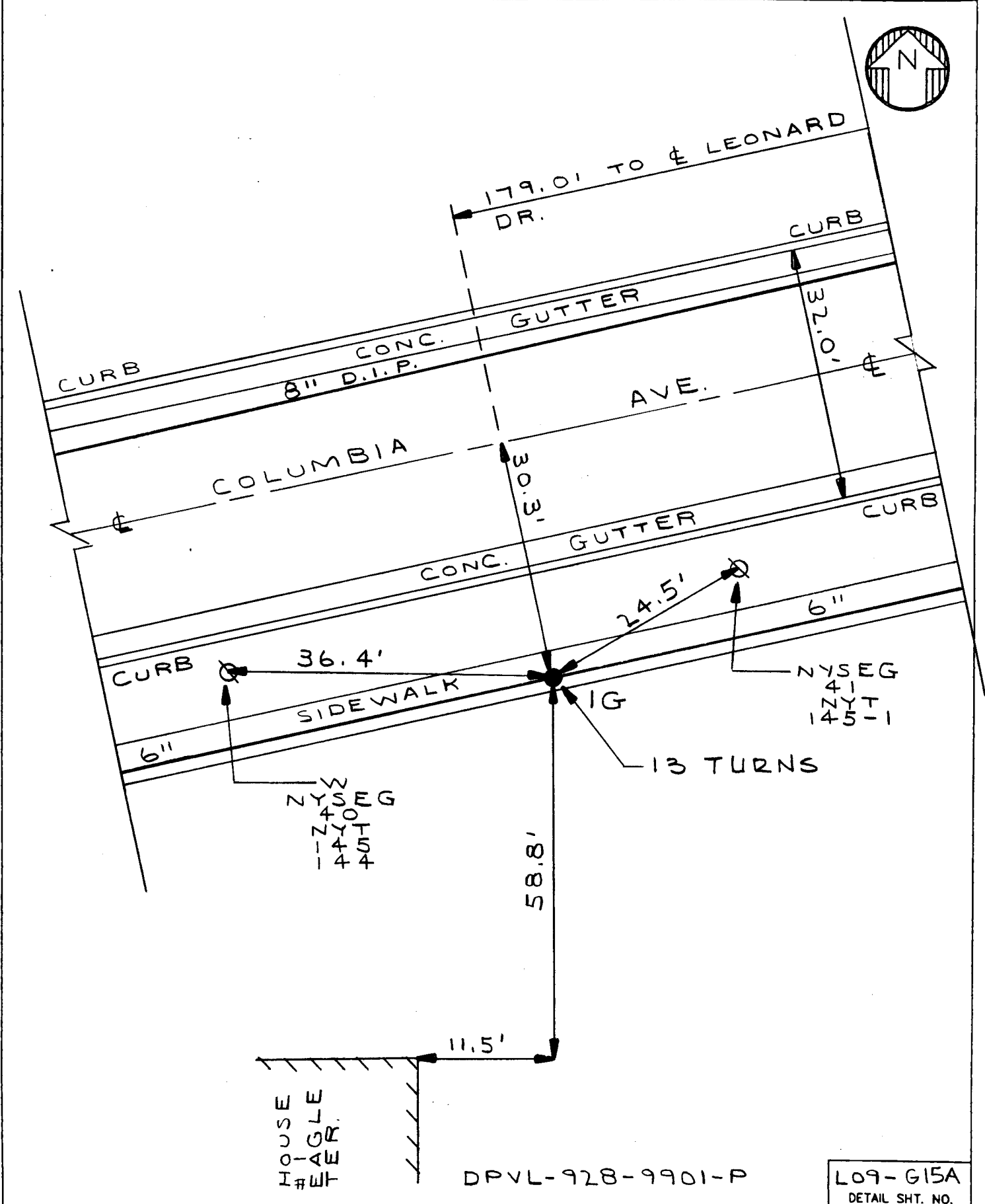
DPVL-928-9901-P

LO9-G15

DETAIL SHT. NO.

MASTER COPY

 ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK	DR. D.K.C.	REVISION DR.	VILL. OF DEPEW E.C.W.A.	LO9-G15A
	DATE: 7.21.99	DATE:		DETAIL NO.(NTS)
	FIELD	OFFICE		199900134 CURRENT PROJECT NO



MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

DR. D.K.C.

REVISED
DR.

DATE: 7.21.99

DATE:

FIELD

OFFICE

VILL. OF DEPEW
E.C.W.A.

LO9-G16

DETAIL NO.(NTS)

199900134

CURRENT PROJECT NO

NOTE: ± DIMENSIONS ARE FROM
AS-BUILTS. NOT FIELD CHECKED.



IG TO 2G - 36.1'
IG TO 3G - 52.1'
2G TO 3G - 20.9'

HYD LO9-G16A
KENNEDY
K81A

8"x8"x8"
TEE

53.7' 19.0' 263.0' TO & BELMONT ST.

NYSEG
44S
147-S

CURB

CONC. GUTTER
8" D.I.P.

8" D.I.P.

COLUMBIA

AVE.

32.0'

(2)
PLUGS

CONC. GUTTER

CURB

6" A.I.P.

NYSEG
44

6"x6"x6"
TEE

2G

8"x6"
RED.

3G

2.0'±

4.9'

27.5' 25.1'

27.4'

CURB

LEONARD DR.

CURB

6" C.I.P.

46.1'

HOUSE
#573

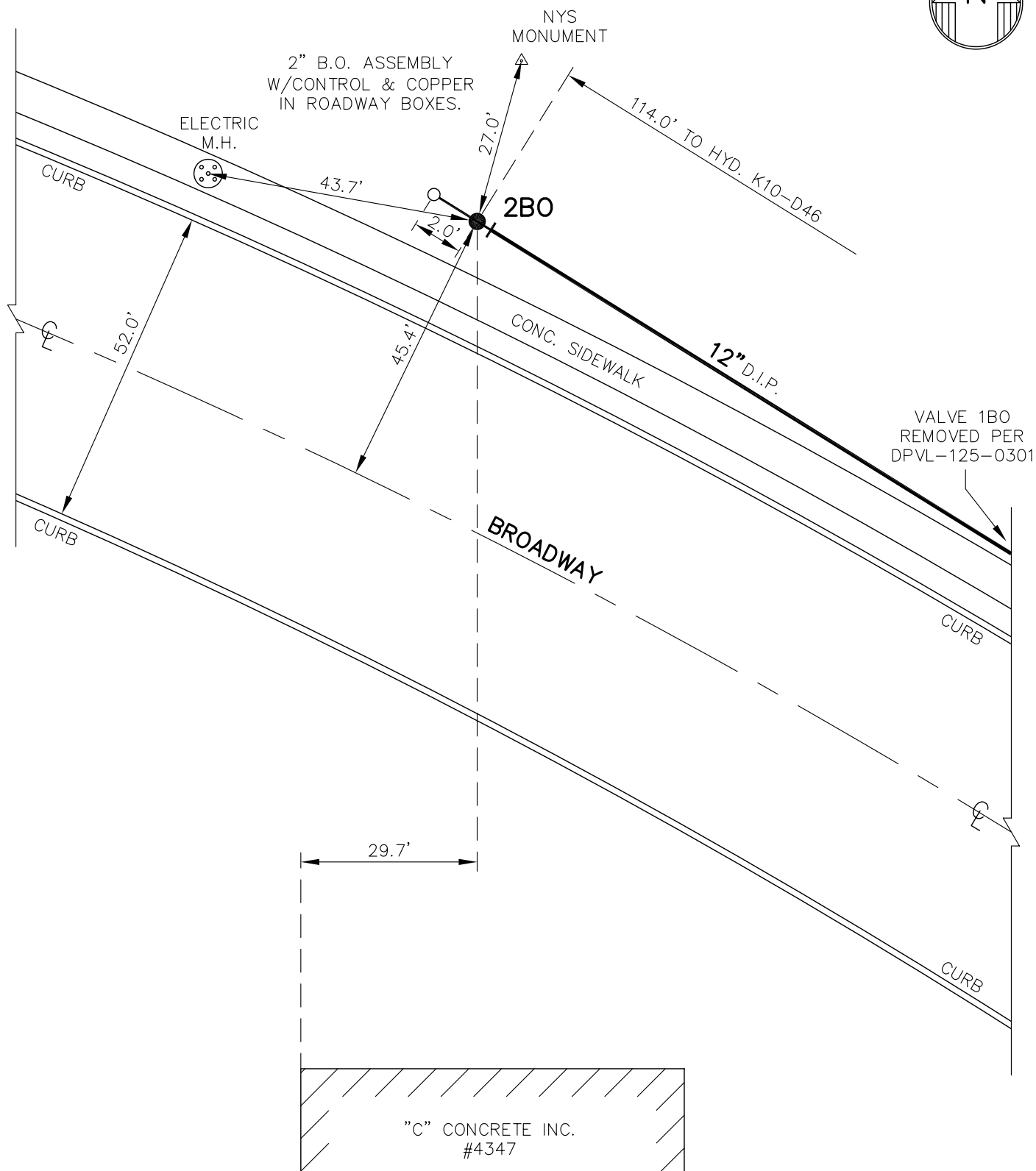
NOTE: 6" C.I.P. IS
CEMENT LINED.

28.0'

DPVL-928-9901-P

LO9-G16
DETAIL SHT. NO.

MASTER COPY



DPVL-125-0301
F.B. 463/76

K10-D46

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. M.J.M.

DATE: 9/7/07

FIELD

REVISED
DR. M.J.M.

DATE: 9/12/07

OFFICE

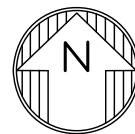
TOWN OF CHEEKTOWAGA /
VILLAGE OF DEPEW
E.C.W.A.

K10-D55

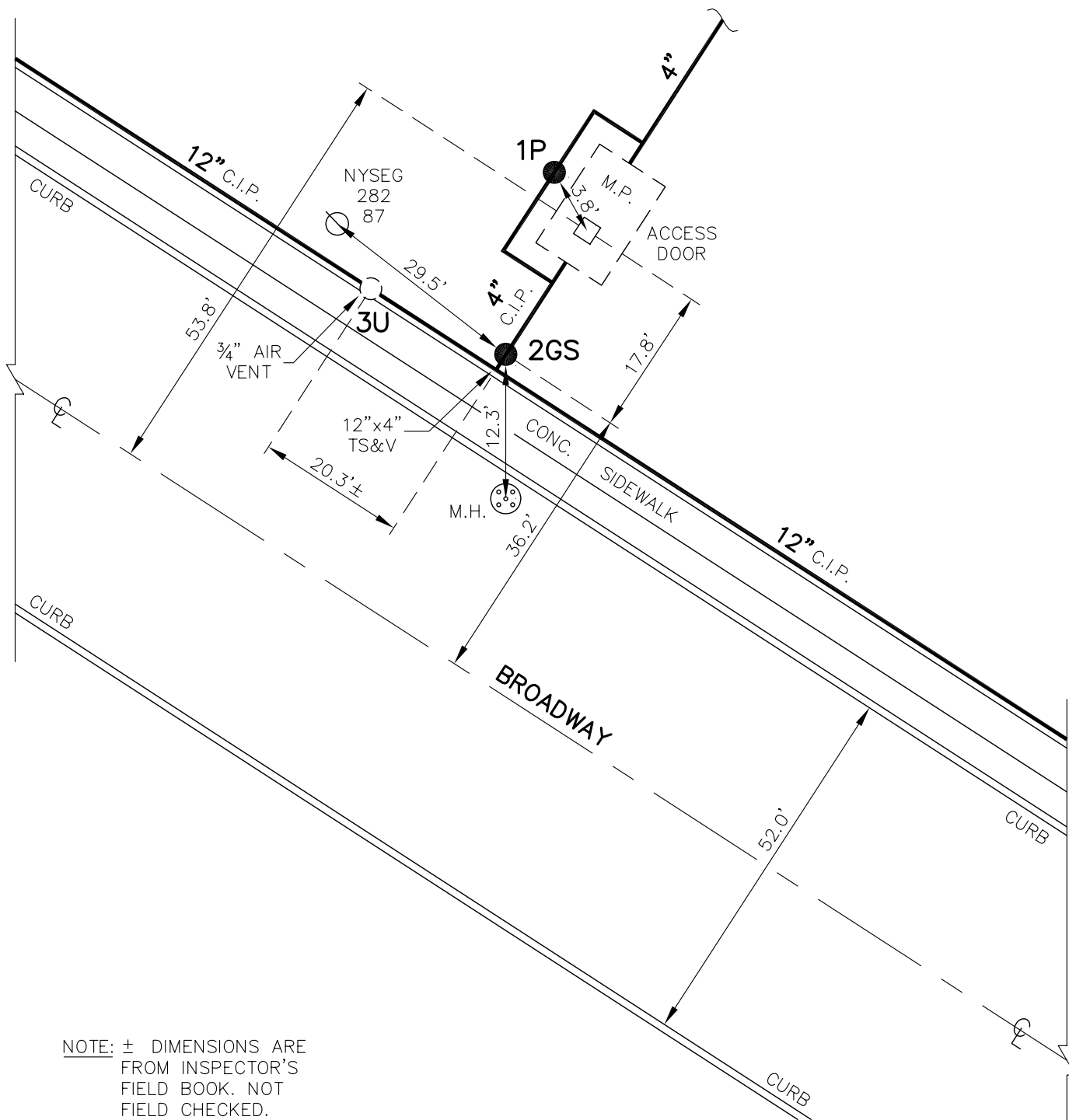
DETAIL SHT. NO.

199500386

CURRENT PROJECT NO.



4" DOMESTIC SERVICE TO
#4400 BROADWAY



NOTE: ± DIMENSIONS ARE
FROM INSPECTOR'S
FIELD BOOK. NOT
FIELD CHECKED.
DETAIL DRAWN ON
CAD SYSTEM.

HWNY-125-9502-PDS-217
B3-82
F.B. 421/70
F.B. 395/48

K10-D55

DETAIL SHT. NO.

MASTER COPY



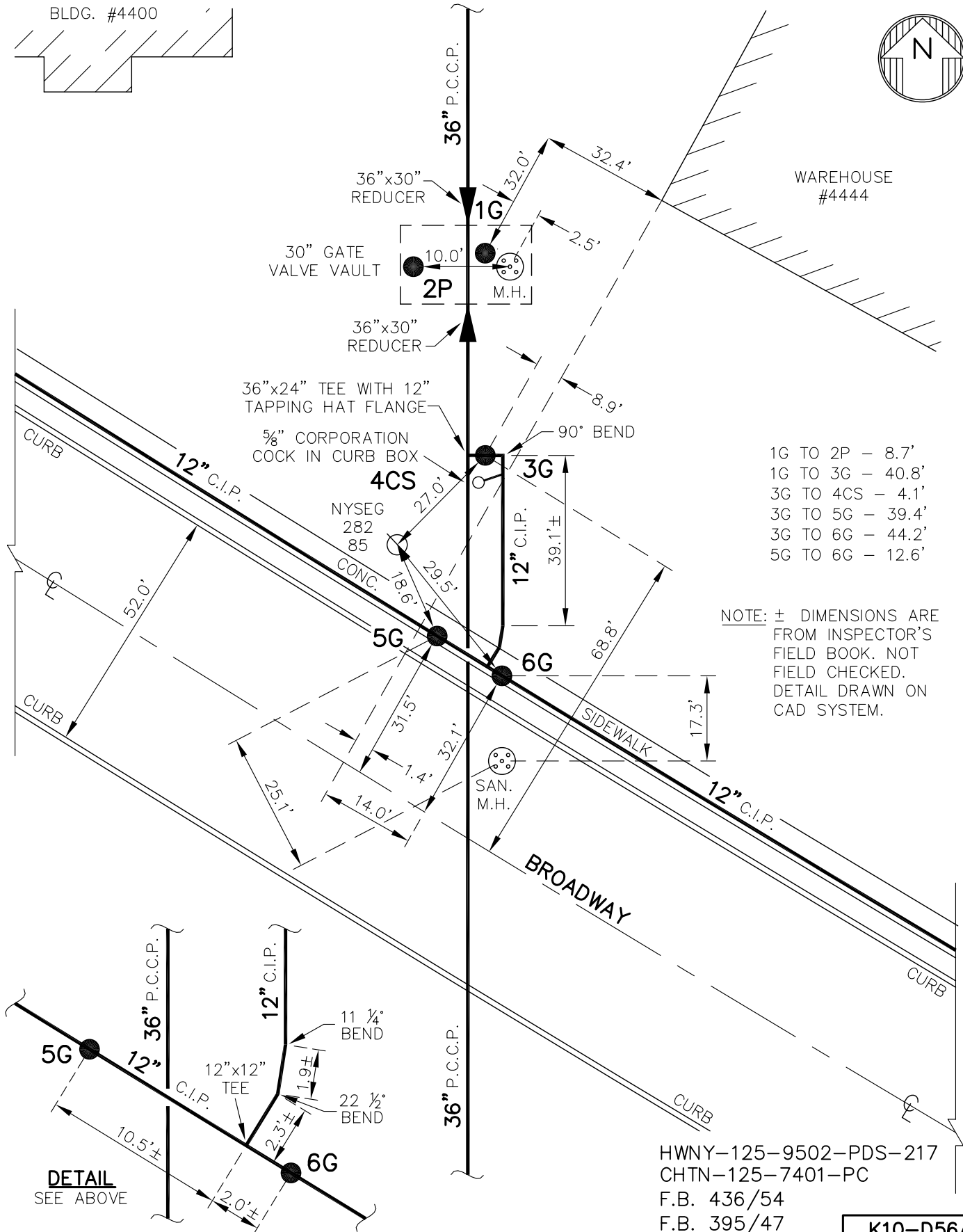
ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. M.J.M.
DATE: 9/18/07
FIELD

REVISED
DR. M.J.M.
DATE: 9/18/07
OFFICE

TOWN OF CHEEKTOWAGA /
VILLAGE OF DEPEW
E.C.W.A.

K10-D56A
DETAIL SHT. NO.
199500386
CURRENT PROJECT NO.



1G TO 2P - 8.7'
1G TO 3G - 40.8'
3G TO 4CS - 4.1'
3G TO 5G - 39.4'
3G TO 6G - 44.2'
5G TO 6G - 12.6'

NOTE: ± DIMENSIONS ARE FROM INSPECTOR'S FIELD BOOK. NOT FIELD CHECKED. DETAIL DRAWN ON CAD SYSTEM.

HWNY-125-9502-PDS-217
CHTN-125-7401-PC
F.B. 436/54
F.B. 395/47
DWG. 15-2-1

K10-D56A
DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
 BUFFALO, NEW YORK

REVISED
 DR. M.J.M.

DATE: 9/18/07

FIELD

REVISED
 DR. M.J.M.

DATE: 9/19/07

OFFICE

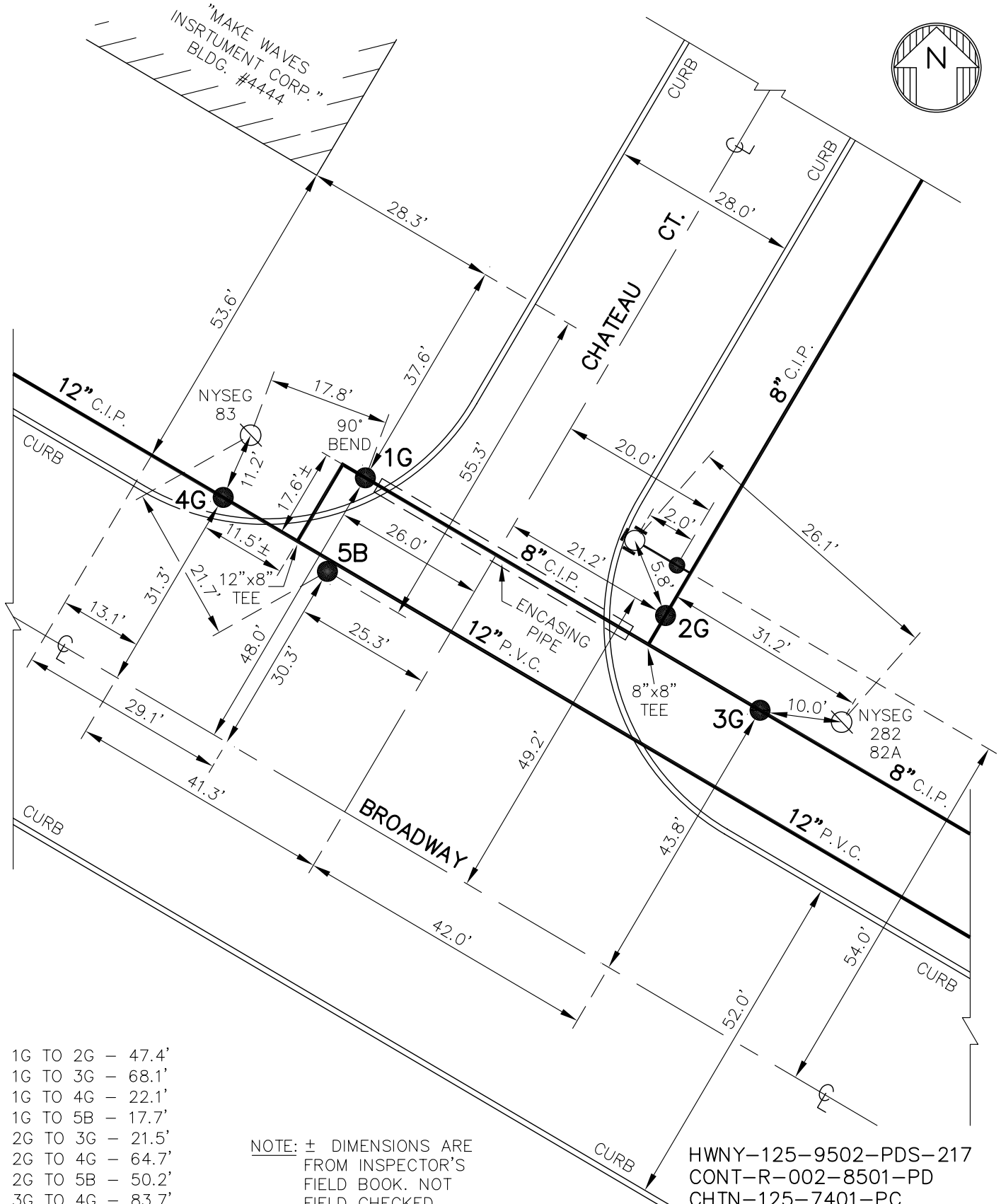
TOWN OF CHEEKTOWAGA /
VILLAGE OF DEPEW
E.C.W.A.

K10-D56

DETAIL SHT. NO.

199500386

CURRENT PROJECT NO.



1G TO 2G - 47.4'
 1G TO 3G - 68.1'
 1G TO 4G - 22.1'
 1G TO 5B - 17.7'
 2G TO 3G - 21.5'
 2G TO 4G - 64.7'
 2G TO 5B - 50.2'
 3G TO 4G - 83.7'
 3G TO 5B - 68.3'
 4G TO 5B - 15.9'

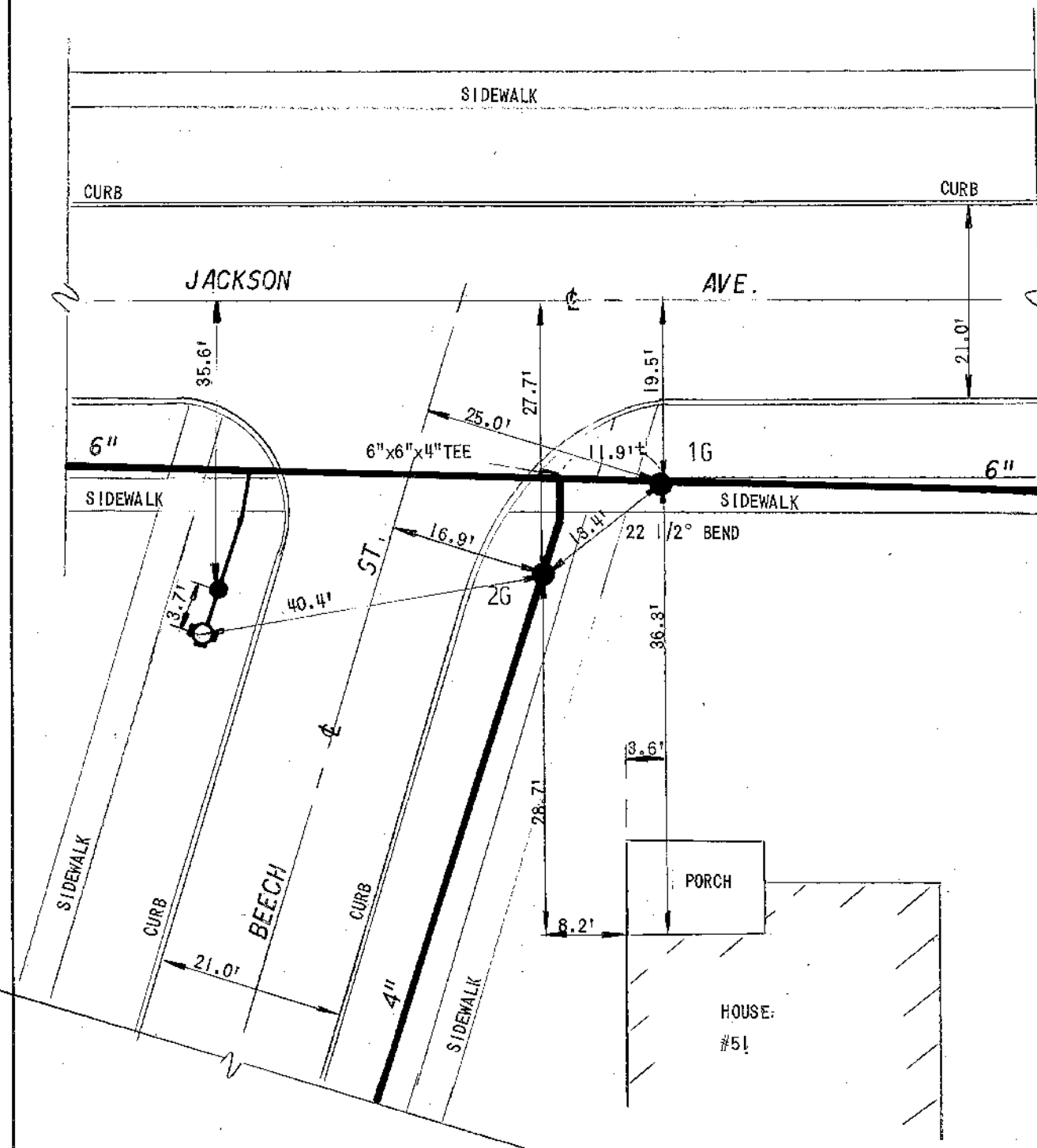
NOTE: ± DIMENSIONS ARE
 FROM INSPECTOR'S
 FIELD BOOK. NOT
 FIELD CHECKED.
 DETAIL DRAWN ON
 CAD SYSTEM.

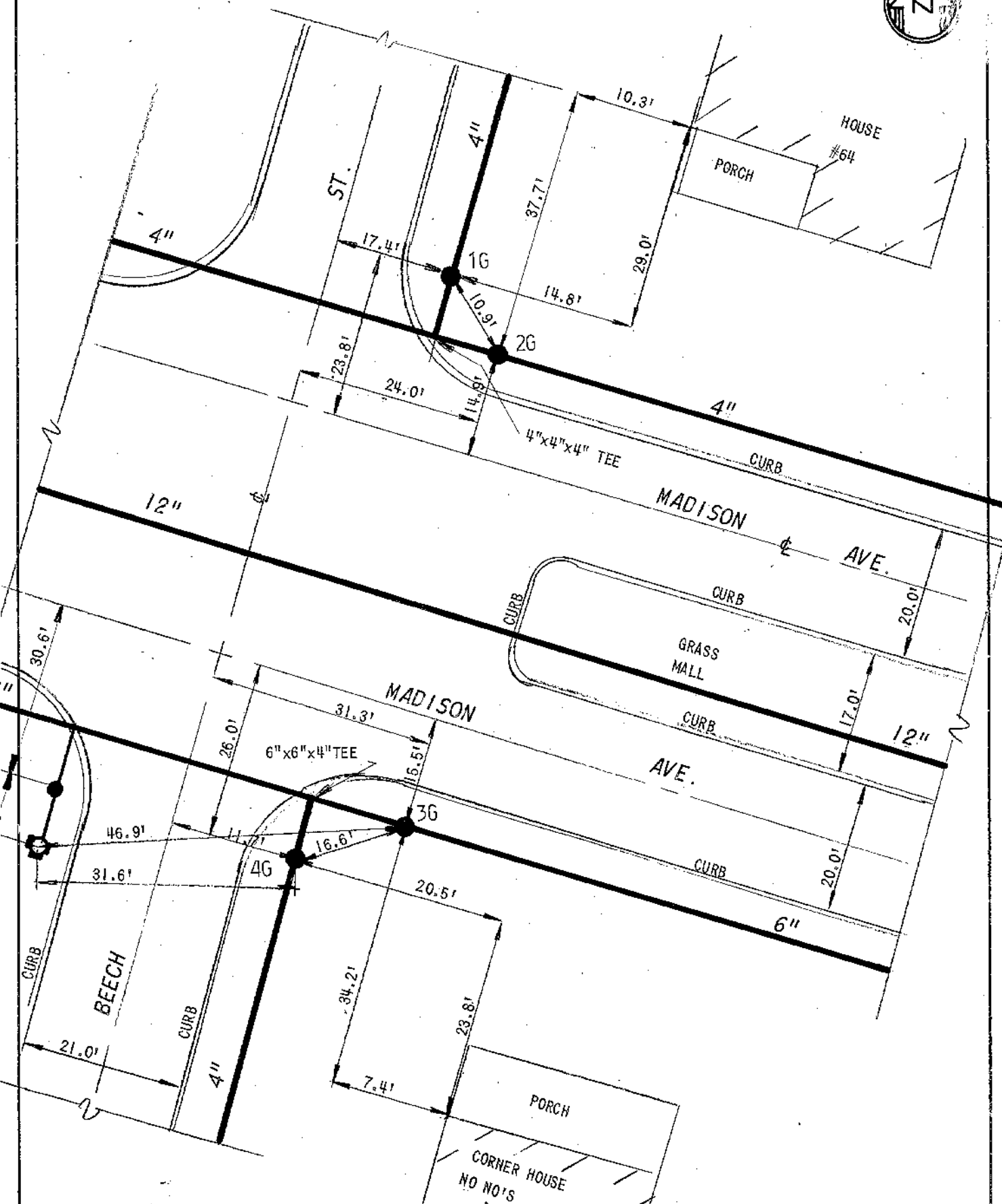
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 CONT-R-002-8501-PD
 CHTN-125-7401-PC
 F.B. 436/53
 D-1-21
 F.B. 419/10

K10-D56

DETAIL SHT. NO.

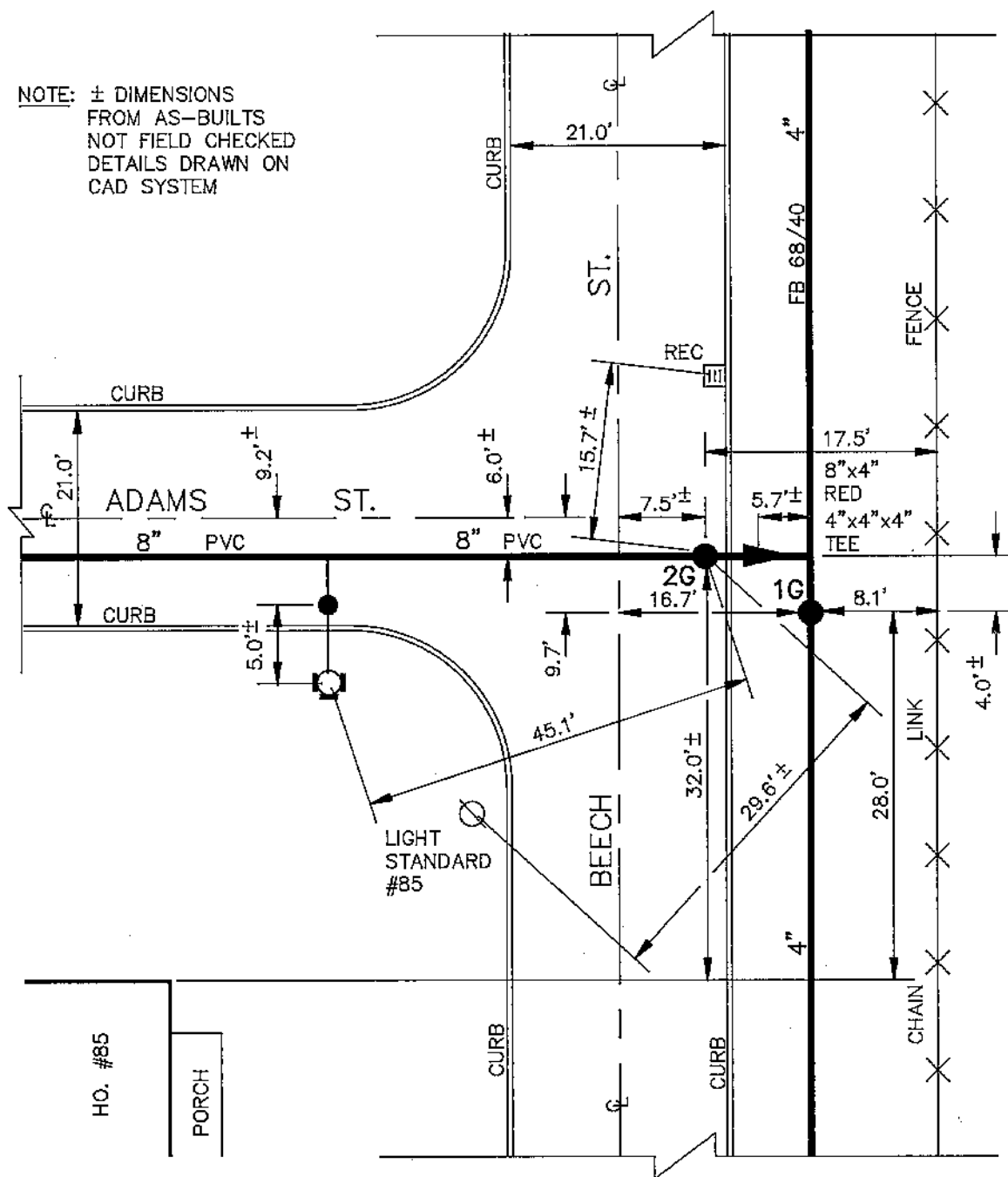
MASTER COPY







NOTE: ± DIMENSIONS
FROM AS-BUILTS
NOT FIELD CHECKED
DETAILS DRAWN ON
CAD SYSTEM



CONT-NC-7-8601-PD
FB. 68/40

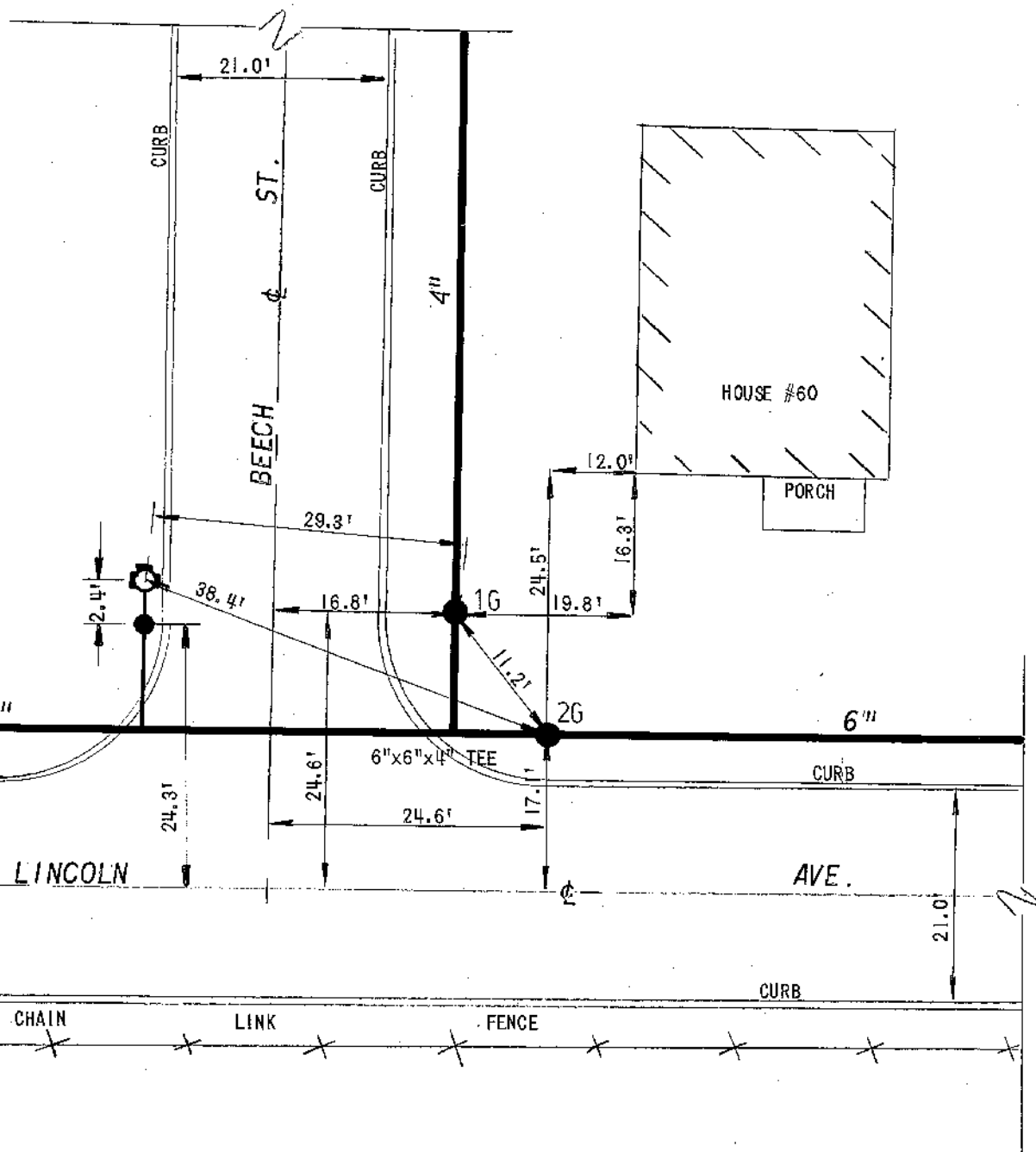


ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED
DR. B.M.
DATE: 11/8/89
N.T.S.

CITY OF LACKAWANNA
E.C.W.A.

H14-E09
DETAIL SHEET NO.



FB 68/40

DETAIL SHEET NO



ERIE COUNTY 
WATER AUTHORITY
BUFFALO, NEW YORK

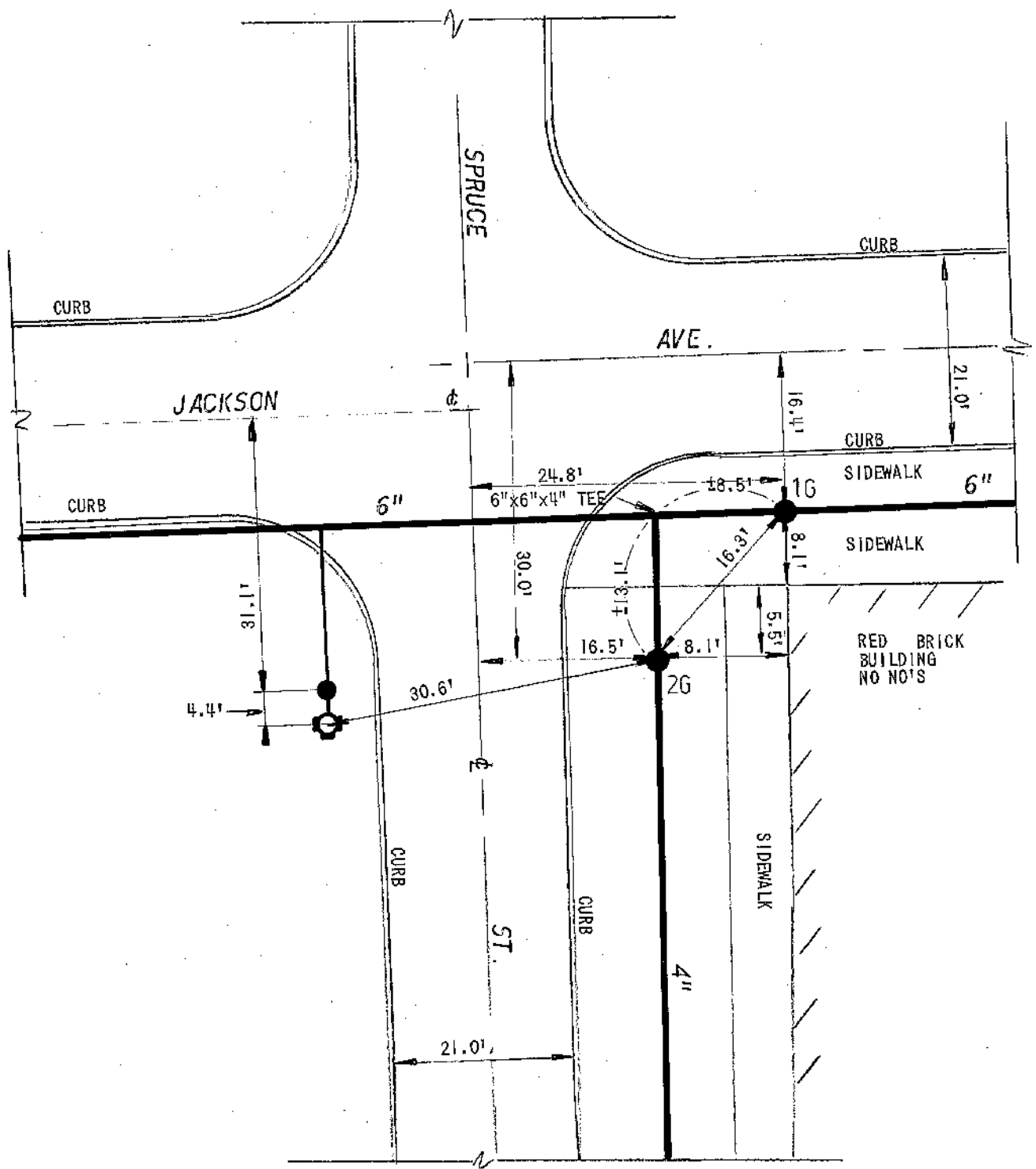
DR. BY: J. C. W.

DATE: 6/28/72

SCALE: NONE

CITY OF LACKAWANNA
E.C.W.A.

H14-E17





ERIE COUNTY
WATER AUTHORITY
 BUFFALO, NEW YORK

REVISED DR. R.D.C.
 DATE: 9/20/2018
 FIELD

REVISED DR.
 DATE:
 OFFICE

CITY OF LACKAWANNA
E.C.W.A.

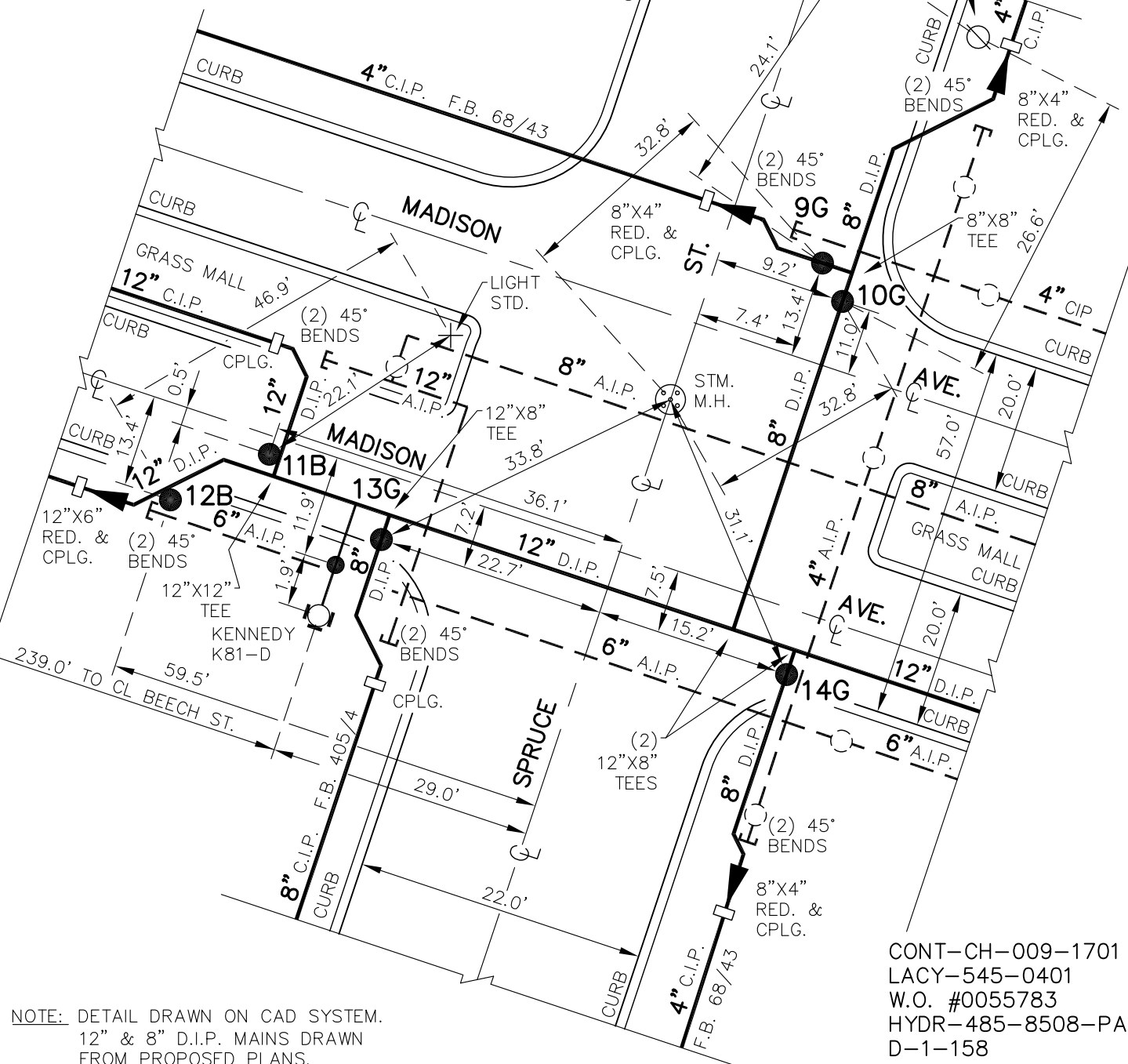
H14-E10A

DETAIL SHT. NO.

201700091

CURRENT PROJECT NO.

NOTE: VALVES 1G, 2G, 3G, 4G, 5G, 7G, & 8G A.I.P. UNDER CONT-CH-009-1701.
 NOTE: VALVE 6G CHANGED TO HYDRANT VALVE UNDER W.O. #0055783 AND A.I.P. UNDER CONT-CH-009-1791.
 VALVE 9G REMOVED UNDER W.O. #0055783.



NOTE: DETAIL DRAWN ON CAD SYSTEM.
 12\" & 8\" D.I.P. MAINS DRAWN FROM PROPOSED PLANS.

9G TO 10G = 3.4'	10G TO 11B = 65.9'	11B TO 12B = 26.5'	13G TO 14G = 37.9'
9G TO 11B = 66.8'	10G TO 12B = 91.4'	11B TO 13G = 15.1'	13G TO HYD. = 10.0'
9G TO 12B = 91.9'	10G TO 13G = 63.4'	11B TO 14G = 51.9'	14G TO HYD. = 48.9'
9G TO 13G = 65.0'	10G TO 14G = 56.0'	11B TO HYD. = 14.6'	
9G TO 14G = 59.0'	10G TO HYD. = 72.8'	12B TO 13G = 37.2'	
9G TO HYD. = 74.3'		12B TO 14G = 74.8'	
		12B TO HYD. = 29.1'	

CONT-CH-009-1701
 LACY-545-0401
 W.O. #0055783
 HYDR-485-8508-PA
 D-1-158
 F.B. 432/41
 10-1-49
 F.B. 405/4
 F.B. 63/43
 PL. 26

H14-E10A

DETAIL SHT. NO.

MASTER COPY



ERIE COUNTY
WATER AUTHORITY
BUFFALO, NEW YORK

REVISED DR. R.D.C.

DATE: 9/20/2018

FIELD

REVISED DR.

DATE:

OFFICE

CITY OF LACKAWANNA

E.C.W.A.

H14-E11A

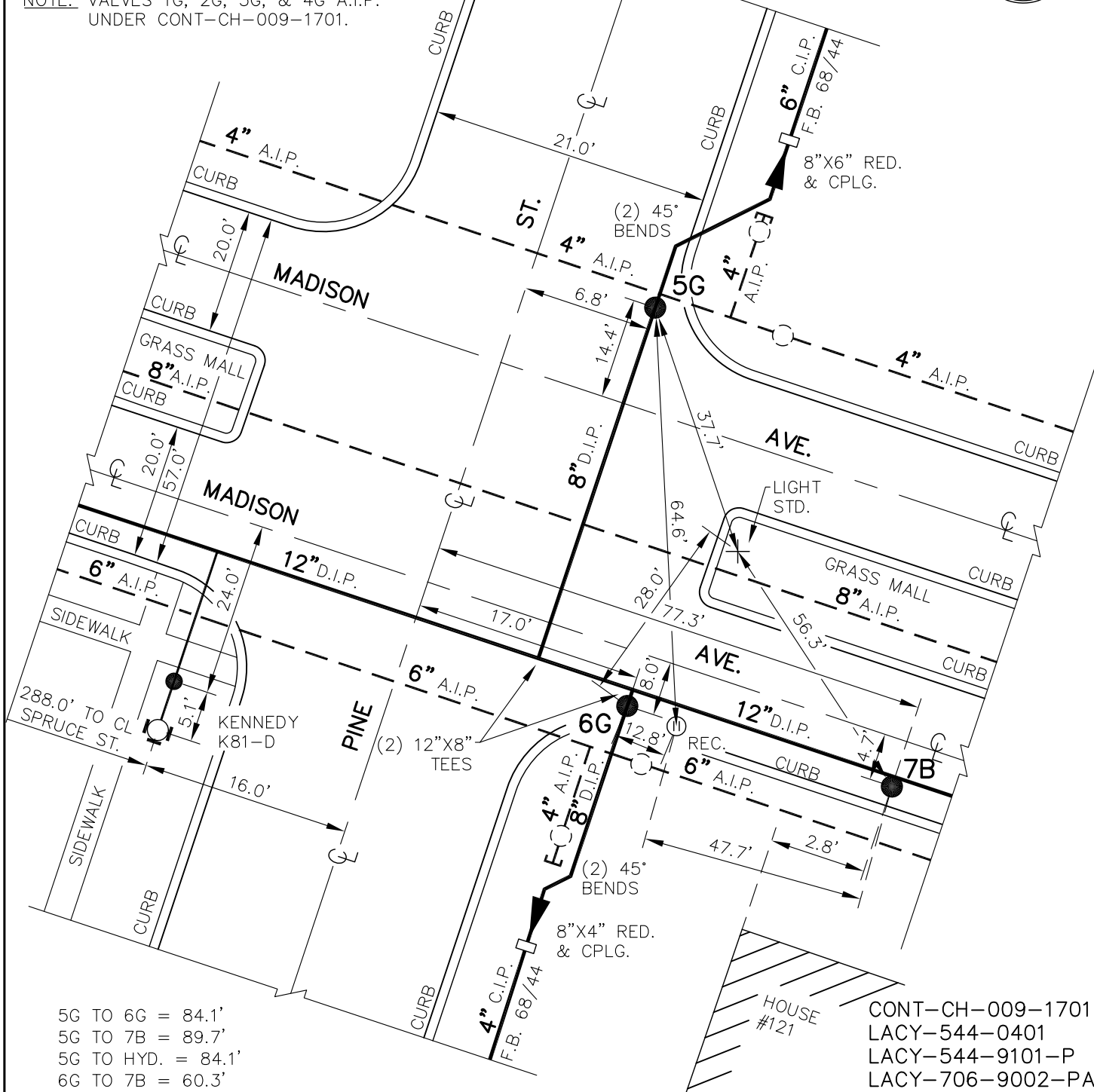
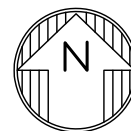
DETAIL SHT. NO.

201700091

CURRENT PROJECT NO.

NOTE: VALVE 1G REPLACED UNDER LACY-706-9002-PA. RECORDS SHOW A 4" WATER MAIN BUT LINE MAINT. REPLACED A 6" VALVE.

NOTE: VALVES 1G, 2G, 3G, & 4G A.I.P. UNDER CONT-CH-009-1701.



5G TO 6G = 84.1'
5G TO 7B = 89.7'
5G TO HYD. = 84.1'
6G TO 7B = 60.3'
6G TO HYD. = 39.7'
7B TO HYD. = 97.0'

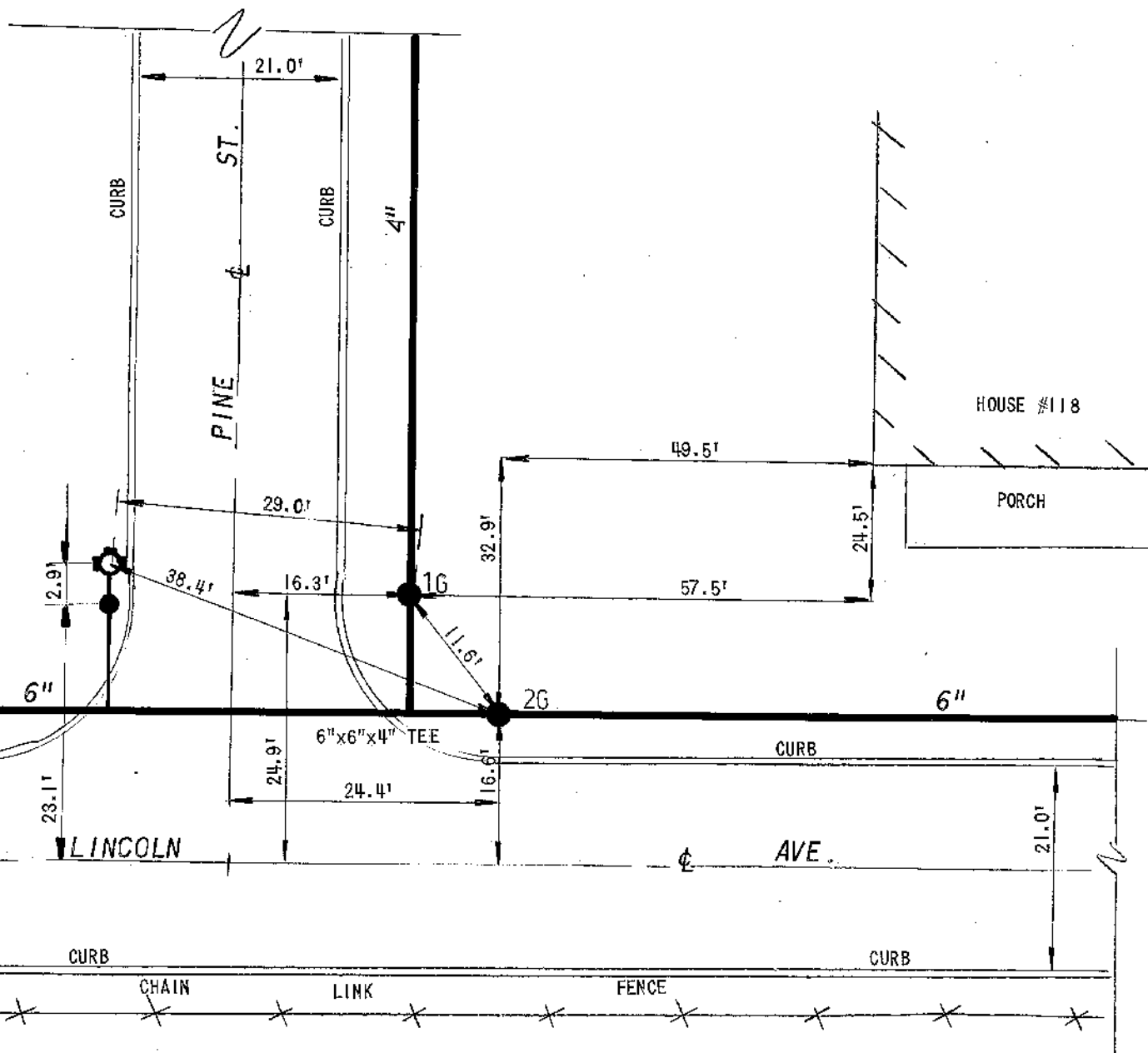
NOTE: DETAIL DRAWN ON CAD SYSTEM.
12" & 8" D.I.P. MAINS DRAWN FROM PROPOSED PLANS.

CONT-CH-009-1701
LACY-544-0401
LACY-544-9101-P
LACY-706-9002-PA
D-1-158
F.B. 432/42
F.B. 68/44
PL. 26

H14-E11A

DETAIL SHT. NO.

MASTER COPY



FB 68/41

DETAIL SHEET NO.

DR. BY: J. C. W.

DATE: 6/28/72

SCALE: NONE

CITY OF LACKAWANNA
E.C.W.A.

H14-E18A