

# TOWN OF UNION BROOME COUNTY, NEW YORK

## 300 BLOCK N. ADAMS AVE STREET RECONSTRUCTION JENKINS TO PINE STREET - VILLAGE OF ENDICOTT TOWN OF UNION FFY 2022 CDBG PROGRAM

ISSUED FOR BID

MARCH 24, 2023

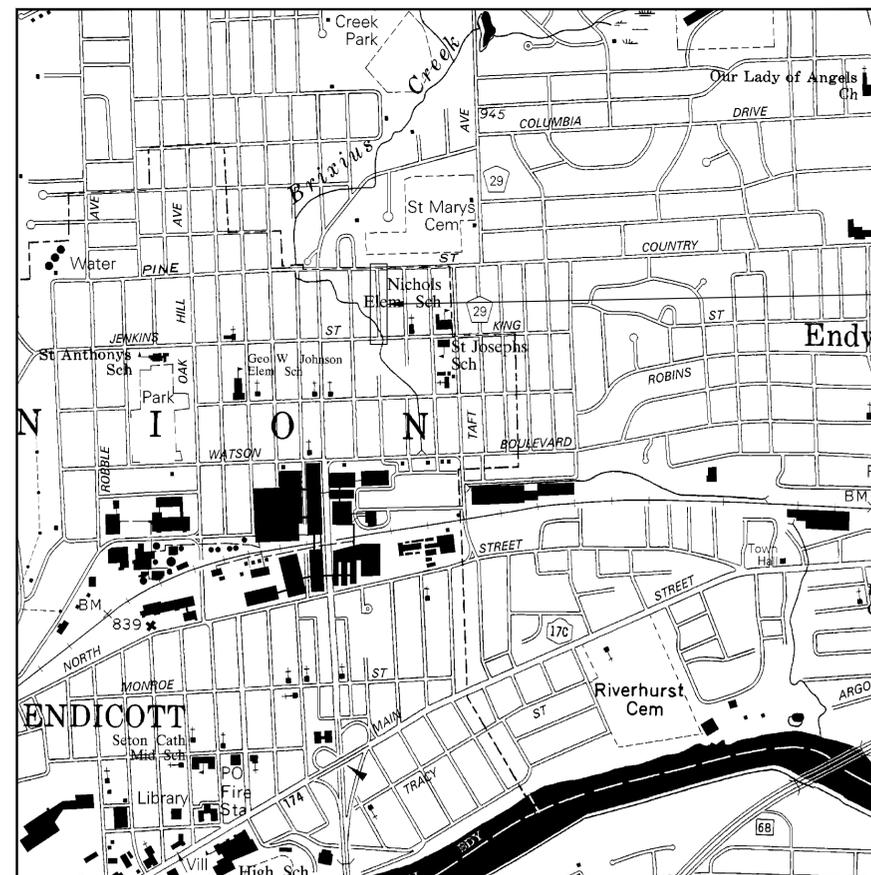
**SUPERVISOR  
ROBERT MACK**

**DEPUTY SUPERVISOR  
THOMAS R. AUGOSTINI**

**TOWN BOARD  
FRANK J. BERTONI  
DAVID KUDGUS  
JOSEPH P. NIRCHI, SR.**

**CLERK  
LEONARD J. PERFETTI**

**COMMISSIONER OF PUBLIC WORKS  
LOUIS CAFORIO**



**LOCATION PLAN**  
SCALE: 1"=1,000'

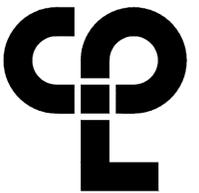
### DRAWING INDEX:

DWG. NO.	SHEET TITLE
G000	COVER SHEET
C000	NOTES
C100	EXISTING SITE PLAN
C200	PLAN AND PROFILE
C201	CONNECTION DETAILS
C300	DETAILS
C301	DETAILS
C302	DETAILS
C303	DETAILS

APPROVED BY VILLAGE OF ENDICOTT:

*Cameron Williams*  
Name

3/23/2023  
Date



CPL | Architecture Engineering Planning  
59 Court St.  
Binghamton, NY 13901  
CPLteam.com



#### PROJECT INFORMATION

Project Number

R22.00061.00

Client Name

TOWN OF UNION

Project Name

300 BLOCK N. ADAMS AVE  
STREET RECONSTRUCTION

Project Address

NORTH ADAMS AVENUE  
ENDICOTT, NY 13760

#### PROJECT ISSUE & REVISION SCHEDULE

No. Date Description

#### PROFESSIONAL STAMPS



NEW YORK STATE EDUCATION STATEMENT  
IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S  
REGULATIONS FOR ANY PERSON, EMPLOYER OR SCHOOL UNDER THE SUPERVISION OF AN ARCHITECT,  
ARCHITECT, ENGINEER OR LAND SURVEYOR, IS TO BE REFERRED TO ANY BOARD OR AGENCY  
BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR SURVEYOR IN ANY MANNER, THE ALTERNATE  
PARTY SHALL FIRST FILE THE SEAL WITH THE ARCHITECT, ENGINEER OR SURVEYOR TO BE FOLLOWED BY  
THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE  
ALTERATION.

#### SHEET INFORMATION

Issued Scale

03/24/23 AS SHOWN

Project Status

ISSUED FOR BID

Drawn By Checked By

NMO DE

Drawing Title

COVER SHEET

Drawing Number Revision Number

G  
000

## RESTORATION NOTES:

- ALL DISTURBED AREAS SHALL BE RESTORED TO MATCH PRE EXISTING CONDITIONS.
- RESTORE ASPHALT AND CONCRETE PAVEMENT AREAS PER SECTIONS PROVIDED ON THESE PLANS. ASPHALT COURSE DEPTHS SHOWN ON THE PLANS ARE COMPACTED DEPTHS.
- RESTORE LAWN AREAS WITH 4" TOPSOIL, SEED, AND MULCH.
- RESTORE OTHER LANDSCAPED AREAS WITH A MINIMUM 4" TOPSOIL, FABRIC, AND MULCH TO MATCH PRE EXISTING CONDITIONS.
- RESTORE ALL DISTURBED UTILITIES TO MATCH PRE EXISTING CONDITIONS. PAYMENT WILL NOT BE MADE FOR SANITARY LATERALS OR GAS SERVICES WHICH SHALL BE MAINTAINED AT ALL TIMES. PAYMENT WILL ALSO NOT BE MADE FOR UTILITY RESTORATION/REPLACEMENT DUE TO CONTRACTOR NEGLIGENCE.
- THE CONTRACTOR SHALL TEMPORARILY RESTORE ALL EXCAVATIONS IN TRAVELED AREAS INCLUDING ROADS, DRIVEWAYS, SIDEWALKS, AND PARKING AREAS WITH A MINIMUM 2" OF ASPHALT PAVEMENT OR (COLD-PATCH) IF MORE THAN ONE WEEK WILL PASS BETWEEN BACKFILLING AND FINAL RESTORATION.
- PROTECT TREES AND OTHER PLANTS FROM DAMAGE UNLESS THEIR REMOVAL IS REQUIRED FOR CONSTRUCTION OR AOB. NO TREE SHALL BE REMOVED THAT IS NOT IMPACTED BY THE WORK. ALL TREES TO BE REMOVED SHALL BE REPLACED WITH A NEW TREE OF THE SAME SPECIES AS PART OF THE RESTORATION WORK. NEW TREES SHALL BE A MINIMUM CALIPER OF 3" DIAMETER AT BREST HEIGHT (DBH). THE LOCATION AND/OR SPECIES OF NEW TREES MAY VARY AOE.
- CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL FENCES, STAIRS, RAILINGS, MAILBOXES, SHRUBBERY, AND OTHER EXISTING IMPROVEMENTS WITHIN THE ROW AND EASEMENT. WHEREVER THESE ITEMS ARE IN CONFLICT WITH PROPOSED CONSTRUCTION, THEY SHALL BE REMOVED AND RESET AOE.

## EROSION CONTROL NOTES:

- EROSION CONTROL MEASURES WILL BE STRICTLY ENFORCED BY THE ENGINEER. ANY EROSION CONTROL DEVICE WHICH IS DEEMED NECESSARY BY THE ENGINEER SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO CONTINUING WITH THE WATER MAIN INSTALLATION.
- ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT MIGRATION INTO WATER BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, CONCRETE LEACHATE OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION PROCEDURES.
- ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION OF THIS PROJECT SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED AND BANKS OF ALL WATER AREAS TO AN APPROPRIATE UPLAND AREA FOR DISPOSAL.
- DRAINAGE (STORM PIPES, CATCH BASINS, ETC.) SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- ROADS SHALL BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- PERIODIC CLEANING AND INSPECTION OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES WILL BE NECESSARY. MAINTENANCE SHALL BE REQUIRED AFTER ALL STORM EVENTS.
- IN THE EVENT DEWATERING OPERATIONS BECOME NECESSARY, A SETTLING BASIN WILL BE REQUIRED UNLESS THE PUMP DISCHARGE IS AS CLEAR AND FREE OF SEDIMENT AS THE FLOWING STREAM. PRIOR TO USE, THE SETTLING BASIN LOCATION AND DESIGN SHALL BE APPROVED BY THE ENGINEER.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EXCAVATION OR OTHER GROUND DISTURBANCE AND SHALL BE PROPERLY MAINTAINED UNTIL UNDISTURBED SOILS HAVE BEEN SUCCESSFULLY RE-VEGETATED.
- THE CONTROL OF DUST ORIGINATING FROM THE CONSTRUCTION OPERATIONS IS CONSIDERED A CRITICAL RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER WILL BE THE FINAL JUDGE OF THE ADEQUACY OF THE CONTRACTOR'S DUST CONTROL EFFORTS. WORK MAY BE SUSPENDED BY THE ENGINEER UNTIL ADEQUATE DUST CONTROL IS ATTAINED.

## MAINTENANCE AND PROTECTION OF TRAFFIC NOTES:

- MAINTAIN AND PROTECT TRAFFIC ON ALL OF THE EXISTING ROADWAYS WHERE WORK IS BEING PERFORMED UNDER THIS CONTRACT. TRAFFIC SHALL BE MAINTAINED AND PROTECTED FOR THE DURATION OF THE CONTRACT, INCLUDING THE PERIODS WHEN CONSTRUCTION OPERATIONS ARE NOT IN PROGRESS.
- ALL SIGNS SHALL BE IN PLACE PRIOR TO COMMENCING WORK ON THE PROJECT. SIGNS SHALL BE COVERED AND UNCOVERED AS NECESSARY OR AS ORDERED BY THE ENGINEER TO PREVENT CONFLICTING WARNINGS.
- COMPETENT FLAGGERS SHALL BE USED WHEN CONSTRUCTION OPERATIONS ARE IN POTENTIAL CONFLICT WITH PUBLIC TRAFFIC AND/OR AS DIRECTED BY THE ENGINEER.
- WHEN THE ROADWAY IS REDUCED TO ONE TRAVEL LANE, TWO-WAY TRAFFIC RIGHT-OF-WAY SHALL BE CONTROLLED BY FLAGGERS ON EACH END OF THE WORK AREA.
- MATERIALS, EQUIPMENT, AND VEHICLES SHALL NOT BE STORED ON ANY ROADWAY WITHOUT PRIOR WRITTEN APPROVAL FROM THE AUTHORITY HAVING JURISDICTION OVER THE ROAD.
- SAFE AND CONTINUOUS THROUGH TRAFFIC AND INGRESS AND EGRESS FOR ADJACENT OWNER DRIVEWAYS, SERVICE ROADS AND PUBLIC STREETS SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION.
- THERE SHALL BE NO DISRUPTION TO MAIL DELIVERY THROUGHOUT CONSTRUCTION. COORDINATION WITH PROPERTY OWNERS AND/OR THE POSTAL SERVICE MAY BE REQUIRED.
- THERE SHALL BE NO DISRUPTION TO SCHOOL BUS ACCESS THROUGHOUT CONSTRUCTION. COORDINATION WITH BUS OPERATORS MAY BE REQUIRED.

## WATER MAIN TESTING AND DISINFECTION NOTES:

- WATER FOR TESTING AND FLUSHING SHALL BE OBTAINED FROM EXISTING WATER SYSTEM. ARRANGEMENTS SHALL BE MADE WITH THE WATER DEPARTMENT FOR PAYMENT OF WATER USE.
- FLUSH MAINS AND SERVICES BEFORE TESTING. MINIMUM FLUSHING VELOCITY SHALL BE 2.5 FEET PER SECOND.
- BEFORE TESTING, SECTIONS ADJACENT TO THE TEST SECTION SHALL BE FILLED WITH WATER. THE CONTRACTOR SHALL FURNISH ALL WATER, EQUIPMENT, CONNECTIONS, PIPING, METERS, MEASURING DEVICES, PUMPS, AND TEMPORARY ENCLOSURES NECESSARY TO PERFORM THE REQUIRED TESTS. TESTING SHALL BE MADE ON SECTIONS OF WATER MAIN NOT TO EXCEED 2000 FEET IN LENGTH.
- TESTING SHALL MEET THE MINIMUM REQUIREMENTS OF AWWA C-400 SECTION 4, EXCEPT WHERE MORE RIGID REQUIREMENTS ARE ESTABLISHED BY THESE SPECIFICATIONS. ALL PRESSURE TESTS MUST BE WITNESSED BY A VILLAGE OF ENDICOTT WATER DEPARTMENT REPRESENTATIVE. BEFORE APPLYING TEST PRESSURE, ALL AIR SHALL BE EXPELLED FROM THE PIPE. AFTER THE PIPE HAS BEEN FILLED, IT SHALL BE SUBJECT TO HYDROSTATIC PRESSURE OF 50 PSI ABOVE NORMAL LINE PRESSURE OR A MINIMUM OF 150 PSI FOR A PERIOD OF TWO HOURS.
- A PRELIMINARY TEST OF 50 PSI ABOVE NORMAL LINE PRESSURE OR A MINIMUM OF 150 PSI SHALL BE PERFORMED BY THE CONTRACTOR. AFTER THE PRELIMINARY TEST IS SATISFACTORY, THE WATER SYSTEM OPERATOR SHALL BE GIVEN 24 HOURS NOTICE, AND A FINAL TEST PERFORMED.
- LEAKAGE SHALL BE DETERMINED AT 30 MINUTE INTERVALS BY MEANS OF VOLUMETRIC MEASUREMENT OF THE WATER ADDED DURING THE TEST.
- LEAKAGE SHALL BE DEFINED AS THE QUANTITY OF WATER SUPPLIED TO THE SECTION OF THE PIPE UNDER TEST NECESSARY TO MAINTAIN THE REQUIRED PRESSURE. SHOULD ANY TEST DISCLOSE LEAKAGE GREATER THAN THE ALLOWABLE, THE DEFECT SHALL BE LOCATED AND REPAIRED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT INSTALL CORPORATION STOPS FOR THE SERVICES UNTIL THE WATER MAIN HAS PASSED THE PRESSURE TEST, HAS PASSED ALL HEALTH SAMPLE TESTING, ALL SAMPLE DISINFECTION CORPORATIONS HAVE BEEN REMOVED AND PLUGGED, THE WATER MAIN HAS BEEN PLACED IN SERVICE BY THE WATER DEPARTMENT AND THE CONTRACTOR HAS RECEIVED APPROVAL TO INSTALL THE SERVICES FROM THE OWNER/ENGINEER.
- TEST PRESSURE SHALL BE BASED ON THE ELEVATION OF THE LOWEST POINT UNDER TEST. PRESSURE SHALL BE APPLIED BY A PUMP CONNECTED TO THE PIPE, THE PUMP, PIPE, CONNECTIONS, GAGES, AND MEASURING DEVICES SHALL BE CALIBRATED TO THE SATISFACTION OF THE ENGINEER.
- ALL WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C 651 DISINFECTING WATER MAINS, ITEM 5.1 DELETED, AND THE REQUIREMENTS OF NYS DEPARTMENT OF HEALTH, USING THE CONTINUOUS FEED METHOD. THE REQUIREMENTS OF NYS DEPARTMENT OF HEALTH SHALL GOVERN WHEN THERE IS A CONFLICT. USE 50 PPM INITIAL CHLORINE DOSE. DISINFECTANT SHALL REMAIN IN THE SYSTEM FOR A PERIOD OF 24 HOURS AFTER WHICH THE RESIDUAL SHALL BE AT LEAST 25 PPM. FOLLOWING DISINFECTION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE MAIN.
- WATER USED FOR DISINFECTING THE WATER MAINS, IF DISCHARGED TO THE STREAMS, MUST HAVE A CHLORINE RESIDUAL NOT EXCEEDING 0.05 MG/L AT THE POINT OF DISCHARGE. THE CONTRACTOR IS RESPONSIBLE TO ATTAIN THIS CHLORINE RESIDUAL LEVEL BY WHATEVER MEANS NECESSARY AT NO COST TO THE OWNER.
- THE INTERIORS OF ALL APPURTENANCES AND SECTIONS OF WATER MAIN THAT CANNOT NORMALLY BE DISINFECTED SHALL BE SWABBED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ENGINEER, WITH A CONCENTRATED CHLORINE SOLUTION CONTAINING NO LESS THAN 200 PPM OF FREE CHLORINE. THE CONTRACTOR SHALL ALSO DISINFECT ALL EXISTING WATER LINES AND APPURTENANCES WHICH WERE BROKEN, DAMAGED, CONTAMINATED, OR SUSPECTED OF BEING CONTAMINATED AS A RESULT OF WORK DONE WITH THIS PROJECT.
- WATER SAMPLES SHALL BE COLLECTED BY THE CONTRACTOR AND ANALYZED BY A NEW YORK STATE DEPARTMENT OF HEALTH APPROVED TESTING LABORATORY FOR BACTERIOLOGICAL CONTENT. A MINIMUM OF ONE SAMPLE PER 1000 FEET OF NEW WATER MAIN AND ONE FOR EACH SIDE STREET SHALL BE COLLECTED AND ANALYZED. LOCATION OF SAMPLING TAP AS APPROVED BY THE ENGINEER AND L.C.D.O.H. FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING DEVICES. THE CONTRACTOR SHALL COORDINATE WITH THE LIVINGSTON COUNTY HEALTH DEPARTMENT TO OBTAIN THESE SAMPLES. THE WORK WILL NOT BE ACCEPTED UNTIL A REPORT IS SUBMITTED TO THE ENGINEER, SHOWING THAT A WATER SAMPLE IS SATISFACTORY, AND THE SYSTEM IS READY FOR USE. THE WATER MAIN SHALL NOT BE PLACED INTO SERVICE UNTIL SO AUTHORIZED BY THE BROOME COUNTY HEALTH DEPARTMENT.
- THE MUNICIPALITY'S DESIGN ENGINEER IS RESPONSIBLE FOR CERTIFYING TO THE WATER SYSTEM OPERATOR AND THE DEPARTMENT OF HEALTH THAT THE WATER MAIN WAS INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THAT THE FLUSHING, TESTING, AND DISINFECTION WAS PERFORMED IN ACCORDANCE WITH THESE REQUIREMENTS. THE DESIGN ENGINEER SHALL SUBMIT THIS CERTIFICATION ALONG WITH THE PRESSURE TEST AND BACTERIOLOGICAL TESTING RESULTS TO THE WATER SYSTEM OPERATOR AND THE GENESEE COUNTY HEALTH DEPARTMENT. THE WATER MAIN CANNOT BE PLACED IN SERVICE UNTIL AN APPROVAL OF COMPLETED WORKS IS RECEIVED FROM THE BROOME COUNTY HEALTH DEPARTMENT.

WATER SERVICE INFORMATION			
ADDRESS	PARCEL SBL #	SIZE	LOCATION
310 N. ADAMS AVE.	141.15-4-13	3/4"	FAR SIDE
311 N. ADAMS AVE.	141.15-3-11	3/4"	NEAR SIDE
314 N. ADAMS AVE.	141.15-4-14	3/4"	FAR SIDE
315 N. ADAMS AVE.	141.15-3-9	3/4"	NEAR SIDE
318 N. ADAMS AVE.	141.15-4-15	3/4"	FAR SIDE
321 N. ADAMS AVE.	141.15-3-8	3/4"	NEAR SIDE
324 N. ADAMS AVE.	141.15-4-18	3/4"	FAR SIDE

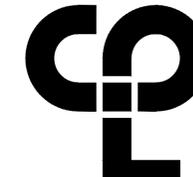
## WATER MAIN GENERAL NOTES:

- ALL WORK IS TO BE COMPLETED IN ACCORDANCE WITH NYSDOH, OSHA, BROOME COUNTY DOH, AND VILLAGE OF ENDICOTT REQUIREMENTS.
- PROVIDE ALL NECESSARY DOCUMENTATION TO SECURE WORK PERMITS WITHIN ALL RIGHTS OF WAY PRIOR TO COMMENCING WORK.
- THE LOCATIONS, SIZES AND ELEVATIONS OF EXISTING UTILITIES ARE BASED ON INFORMATION COMPILED BY THE SURVEYOR AND ENGINEER FROM DRAWINGS OF RECORD AND INFORMATION FURNISHED BY THE VARIOUS UTILITIES, WITH FIELD SURVEY VERIFICATION WHERE POSSIBLE. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND SHALL BE CONSIDERED APPROXIMATE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE THIS INFORMATION VERIFIED AND LOCATED PRIOR TO CONSTRUCTION. NO CONSTRUCTION EXCAVATION OR BORING SHALL BE DONE WITHOUT CERTIFICATION OF THE DEPTH AND LOCATION OF UTILITIES. CALL DIG SAFELY NY AT 811 AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.
- WATER TIGHT CONDITIONS MAY NOT EXIST WHEN EXISTING VALVES ARE CLOSED.
- THE VILLAGE OF ENDICOTT RESERVES THE RIGHT OF FIRST REFUSAL OF ANY AND ALL REMOVED MATERIALS INCLUDING VALVES, FITTINGS, HYDRANTS, ETC.
- THE USE OF EXISTING FIRE HYDRANTS FOR ANY REASON IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE VILLAGE OF ENDICOTT WATER DEPARTMENT. THIS INCLUDES NEWLY INSTALLED FIRE HYDRANTS THAT HAVE BEEN PLACED INTO SERVICE.
- LOCATE, FLAG AND PRESERVE SURVEY MONUMENTS AND PROPERTY CORNER MARKERS. A LICENSED SURVEYOR SHALL REESTABLISH ANY PROPERTY CORNERS OR SURVEY MONUMENTS DISTURBED DURING CONSTRUCTION.
- HAVE ALL EQUIPMENT, MANPOWER, AND MATERIALS REQUIRED ON SITE AND READY FOR USE PRIOR TO COMMENCING ANY SHUT-DOWN OR REMOVING ANY EXISTING FACILITIES FROM SERVICE. NOTIFY ALL AFFECTED CUSTOMERS OF ANY SHUTDOWN AT LEAST 48 HOURS IN ADVANCE. SHUTDOWNS SHALL BE LIMITED TO 4 CONSECUTIVE HOURS.
- NOTIFY THE APPROPRIATE FIRE STATION(S) 48 HOURS IN ADVANCE OF TAKING ANY FIRE HYDRANT OUT OF SERVICE. ANY FIRE HYDRANTS NOT IN SERVICE SHALL BE BAGGED IN BURLAP OR PLASTIC.
- THE APPROXIMATE LOCATION OF THE PROPOSED WATER MAIN IS INDICATED ON THE PLANS, HOWEVER, THE ACTUAL LOCATION WILL BE GOVERNED BY THE ACTUAL LOCATION OF THE UNDERGROUND UTILITIES OR OTHER CONTROLLING FACTORS AS DETERMINED BY THE ENGINEER DURING CONSTRUCTION.
- EXPOSE EXISTING UTILITIES, SERVICES, SEWERS AND LATERALS AHEAD OF PIPE LAYING OR OTHER WORK OPERATIONS SO THAT IF MINOR ADJUSTMENTS MUST BE MADE IN ELEVATION AND/OR ALIGNMENT, DUE TO INTERFERENCE, THESE CHANGES CAN BE MADE IN ADVANCE OF THE WORK. EXISTING WATER SERVICES WERE LOCATED WHERE POSSIBLE BUT IT SHALL NOT BE ASSUMED THAT THEY ARE ALL SHOWN. EXISTING SANITARY SEWER LATERALS WERE NOT LOCATED. WATER SERVICES AND SANITARY SEWER LATERALS ARE NOT SHOWN IN PROFILE VIEWS.
- PROVIDE TEMPORARY BYPASSES FOR EXISTING WATER SERVICES AS NECESSARY WHERE IT IS NOT POSSIBLE FOR THE EXISTING MAIN TO REMAIN IN SERVICE WHILE THE NEW MAIN IS BEING INSTALLED, WHERE TEMPORARY BYPASSES ARE REQUIRED, PROVIDE A PROPOSED BYPASS PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTING THE BYPASS. THE COST OF ANY NECESSARY TEMPORARY BYPASSES SHALL BE INCLUDED IN THE PAY ITEMS FOR THE RESPECTIVE WATER MAIN. NO ADDITIONAL PAYMENTS WILL BE MADE FOR TEMPORARY BYPASSES.
- MINIMUM COVER ON ALL NEW WATER MAIN SHALL BE FIVE (5) FEET, MEASURED FROM FINISH GROUND SURFACE EXCEPT AS OTHERWISE NOTED. THE INSTALLATION OF WATER MAIN WITH LESS THAN THE MINIMUM COVER SHALL ONLY BE NOT BE DONE WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
- MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND STORM AND SANITARY SEWER LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, WHEN THE WATER MAIN PASSES UNDER THE SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL OR CONCRETE) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF THE JOINTS AND SETTLING TO THE SEWER ON THE WATER MAIN. WHEN 18" VERTICAL SEPARATION IS IMPOSSIBLE AT VERTICAL CROSSINGS, THE WATER MAIN SHALL BE FULLY ENCASED IN CONCRETE AS SHOWN IN THE DETAILS.
- ALL PIPE JOINTS SHALL BE RESTRAINED WITH FIELD-LOK GASKETS OR APPROVED EQUAL.
- ALL FITTINGS SHALL BE RESTRAINED WITH CONCRETE THRUST BLOCKS AND MEGALUGS, OR APPROVED EQUAL. ALL THRUST BLOCKS SHALL BE INSTALLED AGAINST UNDISTURBED SOIL.
- EXISTING WATER MAINS WHICH ARE BEING REPLACED SHALL BE REMOVED WHEREVER THEY CONFLICT WITH NEW CONSTRUCTION. OTHERWISE, THEY MAY BE ABANDONED IN PLACE, WHERE THEY ARE ABANDONED, THE ENDS SHALL BE CAPPED AND ALL VALVES CLOSED. WHERE VALVES ARE ABANDONED, THE VALVE BOXES SHALL BE REMOVED ENTIRELY AND THE AREA SHALL BE BACKFILLED AND RESTORED PER THE TRENCH DETAIL.
- HYDRANT REMOVAL SHALL INCLUDE THE VERTICAL HYDRANT PIPE TO A MINIMUM 5'-0" BELOW GRADE AND THE AREA SHALL BE BACKFILLED AND RESTORED PER THE TRENCH DETAIL.
- PROVIDE SHEETING AND SHORING (AS REQUIRED DURING CONSTRUCTION) TO MAINTAIN SAFE WORKING CONDITIONS, AND TO PROTECT NEW AND EXISTING WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DISPOSAL OF EXCAVATED MATERIAL FROM THE SITE.
- IF MATERIAL AT THE DESIGN GRADE IS UNSUITABLE AS DETERMINED BY THE ENGINEER, THE CONTRACTOR, WHEN ORDERED IN WRITING, SHALL EXCAVATE ADDITIONAL MATERIAL TO THE DEPTH NECESSARY AND SHALL BACKFILL TO THE PROPOSED GRADE WITH SELECT GRANULAR MATERIAL.
- BLASTING IS NOT PERMITTED.
- A 30 INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN OUTSIDE EDGE OF UTILITY POLES AND OUTSIDE EDGE OF WATER MAIN. PROVIDE SUPPORT FOR UTILITY POLES, WHERE NECESSARY. MAKE ALL NECESSARY ARRANGEMENTS WITH THE UTILITY COMPANY.
- ALL MATERIALS SHALL BE MADE IN THE U.S.A.
- THE CONTRACTOR SHALL BE PRESENT AND ASSIST IN A FINAL WALK THROUGH INSPECTION. THE CONTRACTOR SHALL PROVIDE SUFFICIENT PERSONNEL AND EQUIPMENT TO DEMONSTRATE TO THE ENGINEER THAT ALL VALVES, FIRE HYDRANTS, AND CURB STOPS OPERATE AS REQUIRED.
- IN ACCORDANCE WITH THE JANUARY 2011 REDUCTION OF LEAD IN DRINKING WATER ACT, PIPES AND FITTINGS CONTAINING MORE THAN 0.25% LEAD SHALL NOT BE USED.

## MATERIALS FURNISHED BY VILLAGE OF ENDICOTT:

- THE MATERIALS LISTED BELOW HAVE BEEN PROCURED AND WILL BE FURNISHED BY THE VILLAGE OF ENDICOTT.
- THE VILLAGE OF ENDICOTT WATER DEPARTMENT WILL DELIVER MATERIALS TO THE SITE WHEN THE CONTRACTOR IS READY FOR THEM. CONTRACTOR TO COORDINATE WITH THE VILLAGE OF ENDICOTT WATER DEPARTMENT FOR DELIVERY.
- THE CONTRACTOR SHALL PROVIDE ALL MATERIALS NOT LISTED BELOW INCLUDING ADDITIONAL FITTINGS, RESTRAINED COUPLINGS, MEGALUG JOINT RESTRAINTS, AND FIELD-LOK 350 GASKETS.
- LIST OF MATERIALS:

QUANTITY	ITEM DESCRIPTION
800 FEET	6" DUCTILE IRON PIPE
3	6" DUCTILE IRON TEE
1	6" DUCTILE IRON ELBOW
2	6" 22.5° DUCTILE IRON BENDS
2	6" 45° DUCTILE IRON BENDS
7	6" DUCTILE IRON GATE VALVES
7	DUCTILE IRON VALVE BOXES
1	DUCTILE IRON HYDRANT
200 FEET	3/4" COPPER PIPE
7	3/4" CORPORATION STOPS
7	3/4" CURB STOPS WITH CURB BOXES



CPL | Architecture Engineering Planning  
59 Court St.  
Binghamton, NY 13901  
CPLTeam.com

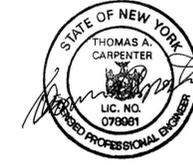


PROJECT INFORMATION  
Project Number  
R22.00061.00  
Client Name  
TOWN OF UNION

Project Name  
300 BLOCK N. ADAMS AVE  
STREET RECONSTRUCTION  
Project Address  
NORTH ADAMS AVENUE  
ENDICOTT, NY 13760

PROJECT ISSUE & REVISION SCHEDULE  
No. Date Description

PROFESSIONAL STAMPS



NEW YORK STATE EDUCATION DEPARTMENT  
IF A VERIFICATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S  
REGULATIONS FOR ANY PERSON, BASED ON THE INFORMATION ON THIS FORM, REVEALS  
AN INDIVIDUAL IS NOT A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, ENGINEER OR SURVEYOR, THE ALTERNATE  
PARTY SHALL BE RESPONSIBLE FOR THE INDIVIDUAL'S AND THE PROFESSION'S REPUTATION. THE ALTERNATE  
PARTY SHALL BE RESPONSIBLE AND THE CARE OF SUCH ALTERNATE, AND A SPECIFIC DESCRIPTION OF THE  
ALTERNATE.

SHEET INFORMATION  
Issued  
03/24/23  
Project Status  
ISSUED FOR BID  
Drawn By  
NMO  
Drawing Title  
NOTES  
Scale  
N.T.S.  
Checked By  
DE

Drawing Number  
Revision Number

C  
000

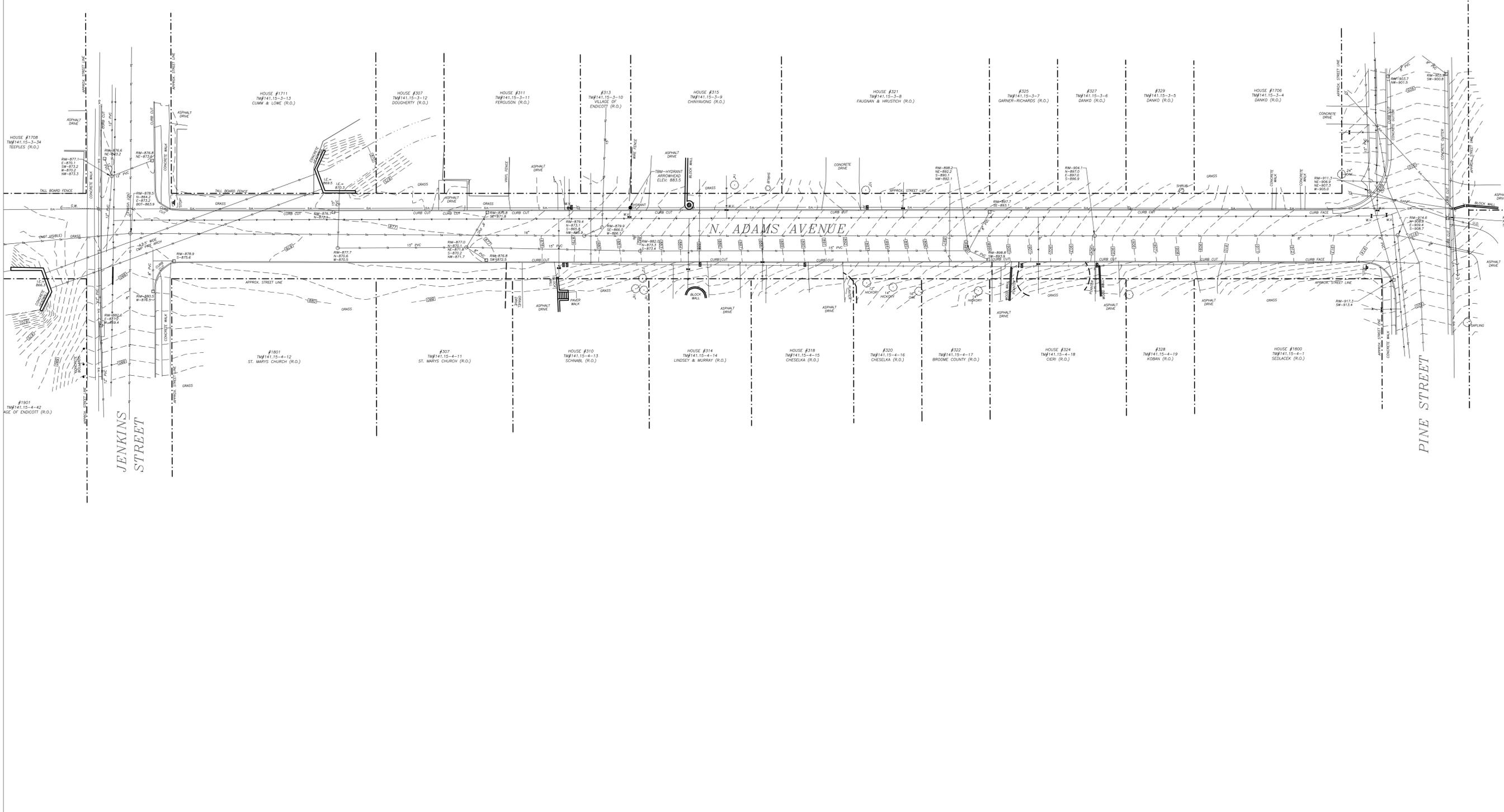


NOTES

- 1- Unauthorized alteration or addition to a survey map bearing a licensed land surveyor's seal is a violation of section 7209, sub-division 2, of the New York State Education Law.
- 2- Only copies from the original of this survey map with the surveyor's embossed seal are genuine, true and valid copies of the surveyor's original work and opinion.
- 3- Certifications on this boundary survey map signify that the map was prepared in accordance with the current existing Code of Practice for Land Surveys adopted by the New York State Association of Land Surveyors, Inc. The certification is limited to persons for whom the boundary survey map is prepared, to the title company, and to the lending institution listed on this survey map and are not transferable.
- 4- Vertical datum is NAVD83 per the NYSnet Continuous Operating Reference Stations.
- 5- Underground utilities shown herein are per visual evidence of their existence found in the field at the date of this survey. Locations of these utilities are approximate. Additional underground utilities may exist in the area of mapping, verify all utilities prior to any design or construction. Utility laterals not shown.
- 6- Property lines shown herein are approximate.

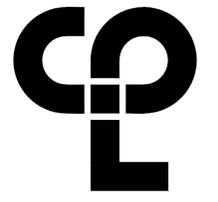
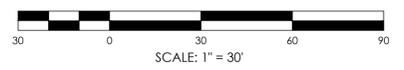
LEGEND

- MAILBOX
- UTILITY POLE
- HYDRANT
- WATER VALVE
- CATCHBASIN
- MANHOLE
- GAS VALVE
- STREET SIGN
- DEODOROUS TREE
- CONIFEROUS TREE



Plotted By: Nathan Otko  
 Date last plotted: 3/24/2023 9:15 AM  
 Date last accessed: 3/24/2023 9:12 AM

Sheet Size: 22x34  
 Drawing Name: S:\Projects\Union\_Town Adams Ave Street Records\Design\ACAD\Civil\Site\101\Madamk Ave\_C1\_Site Plan.dwg



CPL | Architecture Engineering Planning  
 59 Court St.  
 Binghamton, NY 13901  
 CPLTeam.com



**PROJECT INFORMATION**  
 Project Number: R22.00061.00  
 Client Name: TOWN OF UNION  
 Project Name: 300 BLOCK N. ADAMS AVE STREET RECONSTRUCTION  
 Project Address: NORTH ADAMS AVENUE, ENDCOTT, NY 13760

**PROJECT ISSUE & REVISION SCHEDULE**

No.	Date	Description

PROFESSIONAL STAMPS

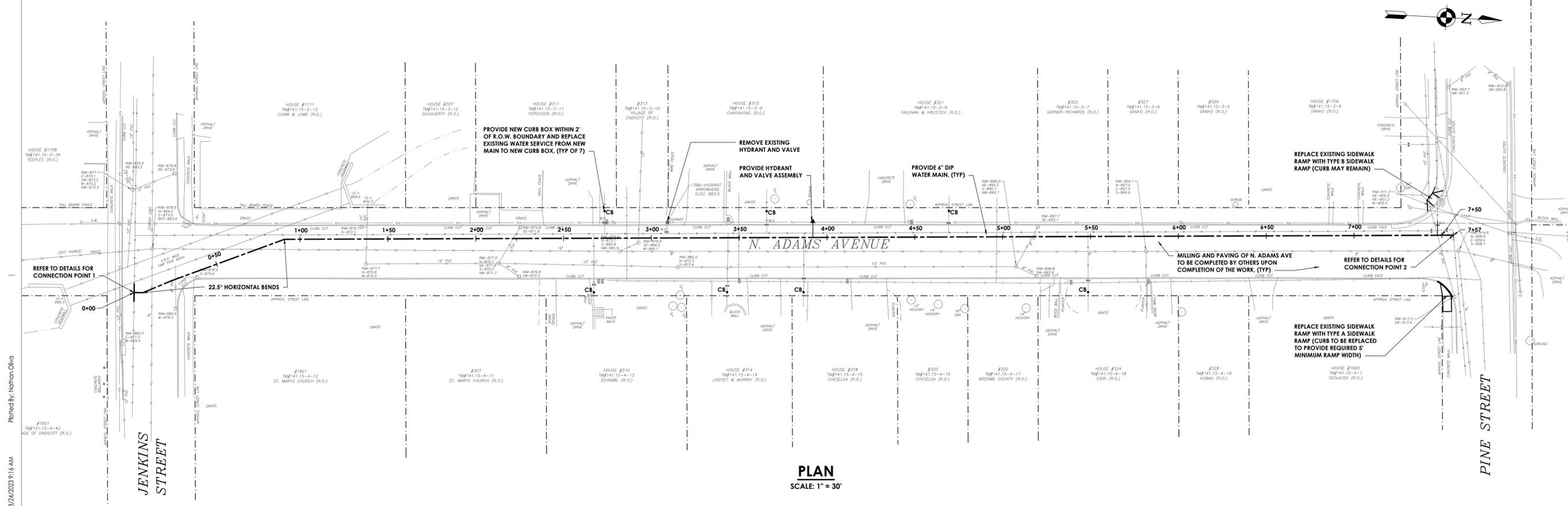


NEW YORK STATE EDUCATION STATEMENT  
 IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S REGULATIONS FOR ANY PERSON, DESIGNATED UNDER THE COMMISSIONER OF ALTERNATE PROFESSIONS, OCCURS OR IS SUSPECTED TO OCCUR UNDER THE COMMISSIONER OF ALTERNATE PROFESSIONS, ENGINEER OR SURVEYOR, TO BE AVOIDED BY ANY PARTY ALLEGEDLY PARTICIPATING IN THE DESIGN, DRAWING AND/OR CONSTRUCTION OF SUCH ALTERNATE AND A SPECIFIC DESCRIPTION OF THE VIOLATION.

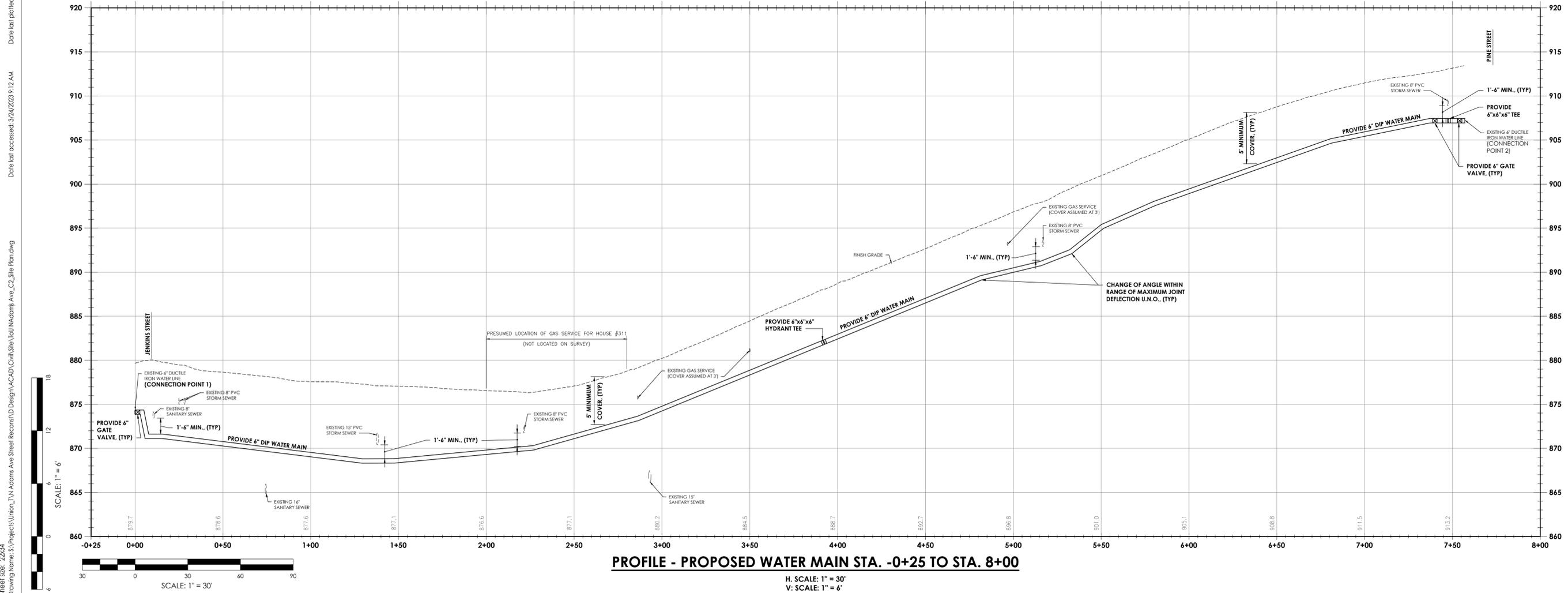
**SHEET INFORMATION**

Issued	Scale
03/24/23	1" = 30'
Project Status: ISSUED FOR BID	
Drawn By: DE	Checked By: DAC
Drawing Title: EXISTING SITE PLAN	

Drawing Number: C 100  
 Revision Number: --

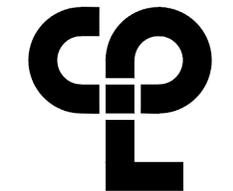


**PLAN**  
SCALE: 1" = 30'



**PROFILE - PROPOSED WATER MAIN STA. -0+25 TO STA. 8+00**  
H. SCALE: 1" = 30'  
V. SCALE: 1" = 6'

Sheet Size: 22x34  
 Drawing Name: S:\Projects\Union\_Town\Adams Ave Street Records\Design\ACAD\Civil\Site\Town\Madamk Ave\_C3\_Site Plan.dwg  
 Date last accessed: 3/24/2023 9:12 AM  
 Date last plotted: 3/24/2023 9:15 AM  
 Plotted By: Nathan Okiva



CPL | Architecture Engineering Planning  
 59 Court St.  
 Binghamton, NY 13901  
 CPLTeam.com



**PROJECT INFORMATION**  
 Project Number: R22.00061.00  
 Client Name: TOWN OF UNION  
 Project Name: 300 BLOCK N. ADAMS AVE STREET RECONSTRUCTION  
 Project Address: NORTH ADAMS AVENUE, ENDICOTT, NY 13760

**PROJECT ISSUE & REVISION SCHEDULE**  
 No. Date Description

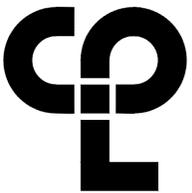
PROFESSIONAL STAMPS



NEW YORK STATE EDUCATION STATEMENT  
 IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S REGULATIONS FOR ANY PERSON, EMPLOYED OR TO BE EMPLOYED UNDER THE SUPERVISION OF AN ARCHITECT, ENGINEER OR LAND SURVEYOR, IS FOUND AFTER THE ARCHITECT, ENGINEER OR LAND SURVEYOR HAS BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR SURVEYOR IN ATTENDING THE PROFESSION, AND THE PERSON HAS NOT BEEN RECALLED TO BE FOLLOWED BY THE SUPERVISOR AND THE CARE OF SUCH PERSON, AND A SPECIFIC DESCRIPTION OF THE VIOLATION.

**SHEET INFORMATION**  
 Issued: 03/24/23 Scale: 1" = 30'  
 Project Status: ISSUED FOR BID  
 Drawn By: NMO Checked By: DE  
 Drawing Title: PLAN AND PROFILE

Drawing Number: C 200  
 Revision Number: --



CPL | Architecture Engineering Planning  
59 Court St.  
Binghamton, NY 13901  
CPLteam.com



PROJECT INFORMATION

Project Number  
R22.00061.00  
Client Name

TOWN OF UNION

Project Name  
**300 BLOCK N. ADAMS AVE  
STREET RECONSTRUCTION**

Project Address  
NORTH ADAMS AVENUE  
ENDICOTT, NY 13760

PROJECT ISSUE & REVISION SCHEDULE

No.	Date	Description

PROFESSIONAL STAMPS



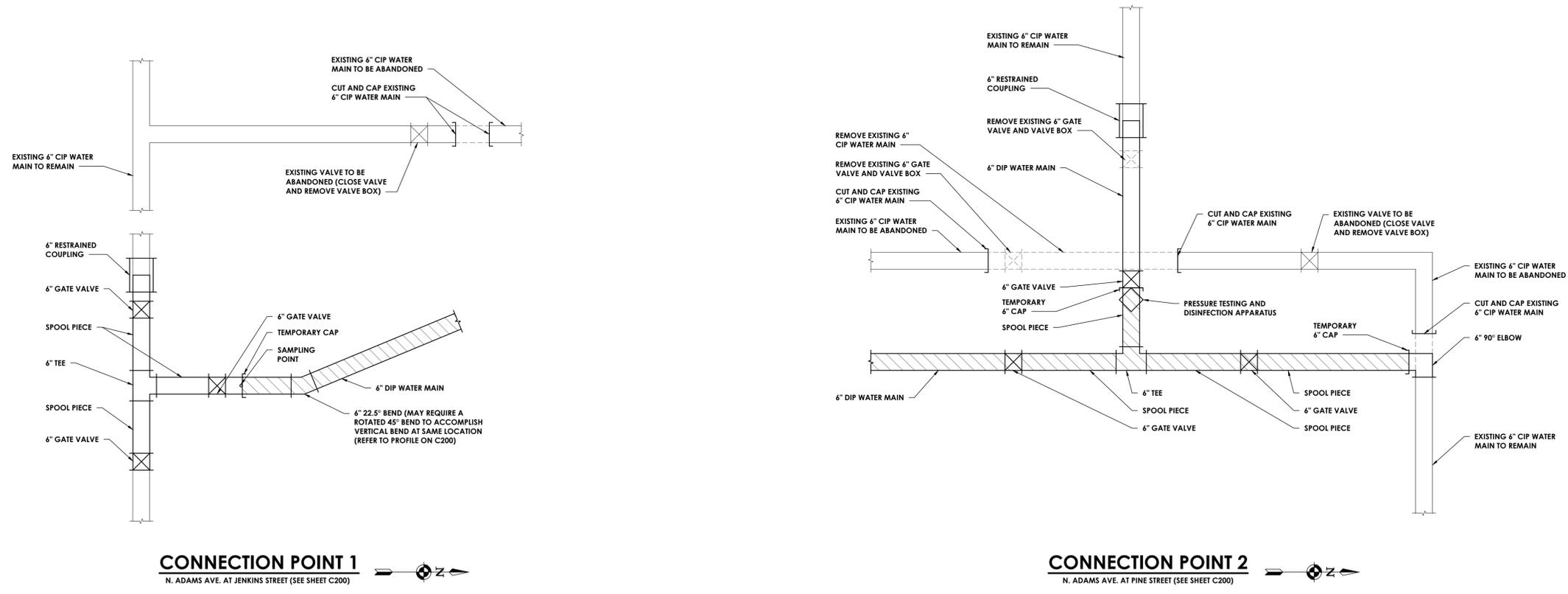
NEW YORK STATE EDUCATION STATEMENT  
IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S  
REGULATIONS FOR ANY PERSON, DESIGNATED UNDER THE COMMISSIONER OF EDUCATION,  
REGISTERED ENGINEER OR LAND SURVEYOR, IS TO BE REPORTED BY ANY MEMBER  
BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR SURVEYOR, BY ALTERING,  
FALSIFYING, ADDING TO OR REMOVING FROM THE SEAL AND THE RECORD IN ANY MANNER  
THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE  
ALTERATION.

SHEET INFORMATION

Issued	Scale
03/24/23	N.T.S.
Project Status	ISSUED FOR BID
Drawn By	Checked By
NMO	DE
Drawing Title	CONNECTION DETAILS

Drawing Number	Revision Number
C 201	--

LEGEND:

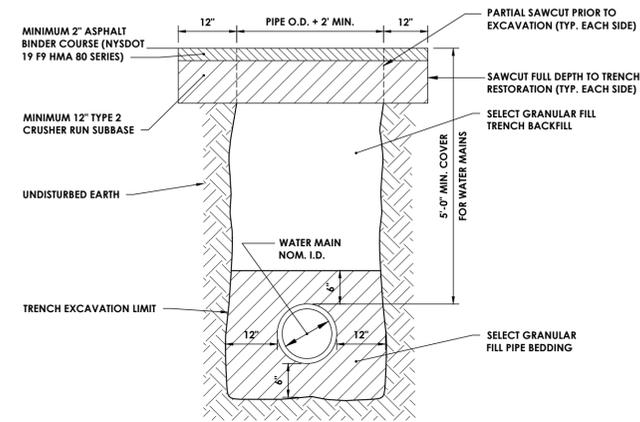


**CONNECTION POINT 1**  
N. ADAMS AVE. AT JENKINS STREET (SEE SHEET C200)

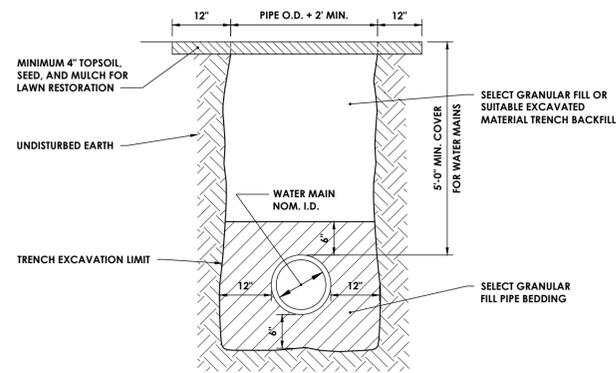
**CONNECTION POINT 2**  
N. ADAMS AVE. AT PINE STREET (SEE SHEET C200)

Sheet Size: 22x34  
 Drawing Name: S:\Projects\Union\_Town\Adams Ave Street Reconstruction\Design\ACAD\Civil\Detail\Tou\Mapings\_Ave\_C1\_Connection\_Details.dwg  
 Date last accessed: 3/24/2023 9:13 AM  
 Date last plotted: 3/24/2023 9:16 AM  
 Plotted By: Nathan O'Lea

Sheet Size: 20x34  
 Drawing Name: S:\Projects\Union\_Town Adams Ave Street Reconstruction\Design\ACAD\Civil\Details\TOU\_MAdams Ave\_C3\_Details.dwg  
 Date last accessed: 3/24/2023 9:14 AM  
 Date last plotted: 3/24/2023 9:15 AM  
 Plotted By: Nathan Orliva

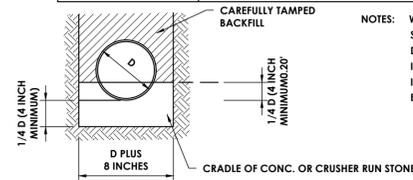


**1** PIPE TRENCH IN PAVEMENT  
 N.T.S.



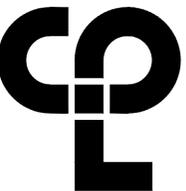
**2** PIPE TRENCH IN LAWN  
 N.T.S.

WATER LINE-SEWER LINE CROSSING PROVISIONS		
SITUATION	SCHEMATIC	REQUIREMENTS
I WATER LINE ABOVE SEWER LINE		
II WATER LINE ABOVE SEWER LINE		A) WATER LINE AND SEWER LINE SHALL BE ONE FULL LENGTH CENTERED AT CROSSING, WHEN POSSIBLE. B) WHEN BOTH WATER LINE AND SEWER LINE ARE NEW, SLEEVE SEWER LINE WITH STEEL CASING FOR FULL LENGTH OF PIPE AT CROSSING. --OR-- CONCRETE ENCASEMENT AS ORDERED BY ENGINEER OR REGULATORY AGENCY
III SEWER LINE ABOVE WATER LINE		A) WATER LINE AND SEWER LINE SHALL BE ONE FULL LENGTH CENTERED AT CROSSING, WHEN POSSIBLE. B) CONCRETE ENCASEMENT AS ORDERED BY ENGINEER OR REGULATORY AGENCY C) PROVIDE CRADLE OF CONCRETE OR CRUSHER RUN STONE (SEE SANITARY SEWER/WATER MAIN CROSSING DETAIL THIS SHEET) FOR WATER LINE AND SEWER LINE FOR ENTIRE LENGTH OF PIPE EACH SIDE OF CROSSING.



NOTES: WL (WATER LINE)  
 SL (SEWER LINE, SANITARY OR STORM)  
 D (OUTSIDE DIAMETER OF PIPE)  
 IN NO CASE SHALL PIPE BE CLOSER THAN 12 INCHES APART. DISTANCES ARE MEASURED BETWEEN OUTSIDES OF PIPE.

**3** SANITARY SEWER/WATER MAIN CROSSING  
 N.T.S.



CPL | Architecture Engineering Planning  
 59 Court St.  
 Binghamton, NY 13901  
 CPLteam.com



PROJECT INFORMATION

Project Number: R22.00061.00  
 Client Name:

TOWN OF UNION

Project Name:  
**300 BLOCK N. ADAMS AVE STREET RECONSTRUCTION**

Project Address:  
 NORTH ADAMS AVENUE  
 ENDICOTT, NY 13760

PROJECT ISSUE & REVISION SCHEDULE

No. Date Description

PROFESSIONAL STAMPS



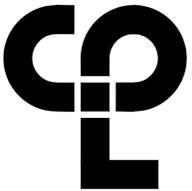
NEW YORK STATE EDUCATION STATEMENT  
 IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S REGULATIONS FOR ANY PERSON, DESIGNATED UNDER THE COMMISSIONER OF EDUCATION, OCCURS, THE DESIGNATED PERSON SHALL BE SUBJECT TO THE COMMISSIONER'S DISCIPLINARY ACTION. THE DESIGNATED PERSON SHALL BE SUBJECT TO THE COMMISSIONER'S DISCIPLINARY ACTION IF THE DESIGNATED PERSON'S SIGNATURE OR SEAL IS USED ON ANY DOCUMENT, PLAN, SPECIFICATION, OR REPORT THAT IS NOT THE PROPERTY OF THE STATE OF NEW YORK, OR IF THE DESIGNATED PERSON'S SIGNATURE OR SEAL IS USED ON ANY DOCUMENT, PLAN, SPECIFICATION, OR REPORT THAT IS NOT THE PROPERTY OF THE STATE OF NEW YORK, OR IF THE DESIGNATED PERSON'S SIGNATURE OR SEAL IS USED ON ANY DOCUMENT, PLAN, SPECIFICATION, OR REPORT THAT IS NOT THE PROPERTY OF THE STATE OF NEW YORK.

SHEET INFORMATION

Issued: 03/24/23 Scale: NTS  
 Project Status: ISSUED FOR BID  
 Drawn By: NMO Checked By: DE  
 Drawing Title: DETAILS

Drawing Number: Revision Number

C  
 300



CPL | Architecture Engineering Planning  
59 Court St.  
Binghamton, NY 13901  
CPLteam.com



PROJECT INFORMATION

Project Number  
R22.00061.00  
Client Name

TOWN OF UNION

Project Name  
**300 BLOCK N. ADAMS AVE  
STREET RECONSTRUCTION**

Project Address  
NORTH ADAMS AVENUE  
ENDICOTT, NY 13760

PROFESSIONAL STAMPS



NEW YORK STATE EDUCATION STATEMENT  
IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S  
REGULATIONS FOR ANY PERSON, UNDER ACTING UNDER THE SUPERVISION OF AN ARCHITECT  
AND/OR ENGINEER OR LAND SURVEYOR, IS TO BE RECORDED IN ANY MANNER, THE  
BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR SURVEYOR IS ALTERING,  
PARTIAL, WITH THE SEAL, AND THE REPRODUCTION THEREOF IS FOLLOWED BY  
THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE  
ALTERATION.

SHEET INFORMATION

Issued: 03/24/23 Scale: NTS  
Project Status: ISSUED FOR BID  
Drawn By: NMO Checked By: DE  
Drawing Title: DETAILS

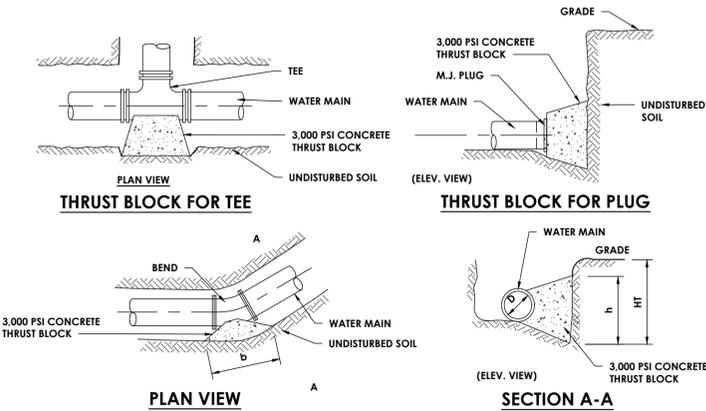
Drawing Number: C 301 Revision Number: --

MINIMUM AREA OF BEARING FACE OF  
CONCRETE THRUST BLOCK (IN SQ. FT.)  
BLOCKS TO BE POURED AGAINST  
UNDISTURBED SOIL

PIPE SIZE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	TEE/TS & V	PLUG
4", 6"	6	3	3	3	5	5
8"	10	6	3	3	8	8
12"	19	7	4	3	16	16
16"	24	13	7	3	19	19
18"	28	15	8	3	36	36
24"	36	21	10	4	47	47

NOTES: 1. BLOCK HEIGHT (H) SHOULD BE EQUAL TO OR LESS THAN ONE-HALF THE TOTAL DEPTH TO THE BOTTOM OF THE BLOCK (HT), BUT NOT LESS THAN PIPE DIAMETER (D).

2. BLOCK HEIGHT (h) SHOULD BE TWO TIMES THE BLOCK WIDTH (b).

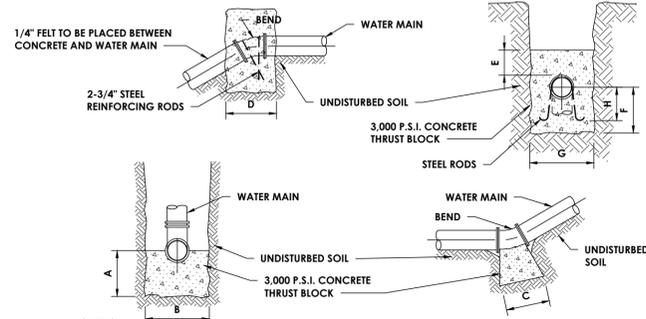


- NOTES:
1. NO CONCRETE IS TO ENCOMPASS ANY BOLTS OR BELL ENDS WHERE POSSIBLE.
  2. THRUST BLOCKS ARE TO EXTEND TO UNDISTURBED SOIL (INCLUDING ALL PITS).
  3. MEGALUGS ARE TO BE USED IN ADDITION TO THRUST BLOCKS AT ALL FITTINGS.

1 HORIZONTAL THRUST BLOCK  
N.T.S.

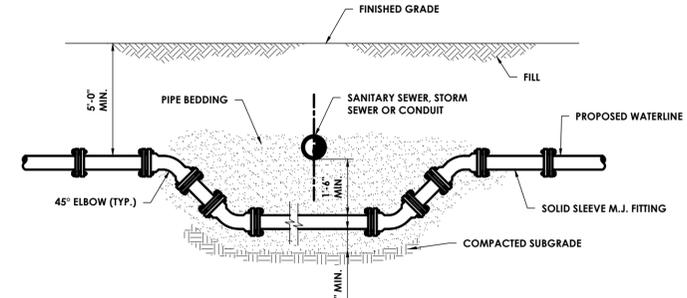
BEND	Min. Volume of Concrete For Block dimensions D,E,F,G	MINIMUM ALLOWABLE DIMENSION FOR VERTICAL THRUST BLOCKS (IN FEET)							
		A	B	C	D	E	F	G	ROD LENGTH H
6" 11 1/4"	.2 Cu. Yd.	1.0	2.5	1.0	2.0	0.5	1.0	2.0	0.5
22 1/2"	.4 Cu. Yd.	1.0	2.5	1.5	2.0	1.0	2.0	2.0	1.5
45°	.8 Cu. Yd.	1.5	2.5	1.5	2.5	1.5	2.0	2.5	1.5
90°	1.5 Cu. Yd.	1.5	2.5	2.0	4.0	1.5	2.0	3.0	1.5
8" 11 1/4"	.35 Cu. Yd.	1.0	2.5	1.5	2.0	1.0	1.5	2.0	1.0
22 1/2"	.7 Cu. Yd.	1.5	2.5	1.5	2.5	1.0	2.0	2.5	1.5
45°	1.4 Cu. Yd.	1.5	2.5	2.0	4.0	1.5	2.0	3.0	1.5
90°	2.6 Cu. Yd.	2.0	2.5	2.0	4.0	2.0	3.0	3.5	2.5
12" 11 1/4"	.8 Cu. Yd.	1.5	3.0	1.5	2.5	1.5	2.0	2.5	1.5
22 1/2"	1.6 Cu. Yd.	1.5	3.0	2.0	4.0	2.0	2.0	3.0	1.5
45°	3.2 Cu. Yd.	2.0	3.0	2.0	5.0	2.0	3.0	3.5	2.5
90°	6.0 Cu. Yd.	2.0	3.0	2.5	5.5	2.5	3.5	3.5	3.0
16" 11 1/4"	2.6 Cu. Yd.	2.0	3.5	4.5	4.1	1.0	2.5	2.0	3.0
22 1/2"	4.8 Cu. Yd.	2.5	3.5	4.5	5.7	1.0	3.5	2.5	4.0
45°	10.0 Cu. Yd.	3.5	3.5	6.0	7.8	1.5	3.5	3.0	4.0
90°	12.0 Cu. Yd.	3.0	3.5	6.0	8.0	2.0	3.5	3.5	4.0

NOTE: THE DEVELOPER MAY ELECT TO USE REINFORCING RODS AS OPPOSED TO CONCRETE THRUST BLOCKS FOR VERTICAL BENDS. ALL THRUST RESTRAINT BY ROD SHALL BE APPROVED BY THE WATER SYSTEM OPERATOR PRIOR TO INSTALLATION.



- NOTES:
1. NO CONCRETE IS TO ENCOMPASS ANY BOLTS OR BELL ENDS WHERE POSSIBLE.
  2. THRUST BLOCKS ARE TO EXTEND TO UNDISTURBED SOIL (INCLUDING ALL PITS).
  3. MEGALUGS ARE TO BE USED IN ADDITION TO THRUST BLOCKS AT ALL FITTINGS.

2 VERTICAL THRUST BLOCK  
N.T.S.



- NOTES:
1. WHEN THE ELEVATION OF THE SEWER CAN NOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATERMAIN SHALL BE RELOCATED TO PROVIDE THIS REQUIRED SEPARATION OR RECONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN (10) FEET ON EACH SIDE OF THE SEWER. ONE FULL, UN-CUT LENGTH OF WATERMAIN SHALL BE CENTERED ON THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR AWAY FROM THE SEWER AS POSSIBLE.

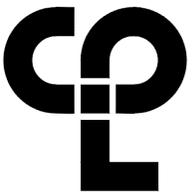
3 WATERLINE OFFSET DETAIL  
N.T.S.

Plotted By: Nathan Olin

Date last plotted: 3/24/2023 9:15 AM

Date last accessed: 3/24/2023 9:14 AM

Sheet Size: 20x34  
Drawing Name: S:\Projects\Union\_Town Adams Ave Street Records\Design\ACAD\Civil\Detail\TOU\Adams Ave\_C3\_Details.dwg



CPL | Architecture Engineering Planning  
59 Court St.  
Binghamton, NY 13901  
CPLteam.com



PROJECT INFORMATION

Project Number  
R22.00061.00  
Client Name

TOWN OF UNION

Project Name  
**300 BLOCK N. ADAMS AVE  
STREET RECONSTRUCTION**

Project Address  
NORTH ADAMS AVENUE  
ENDICOTT, NY 13760

PROFESSIONAL STAMPS

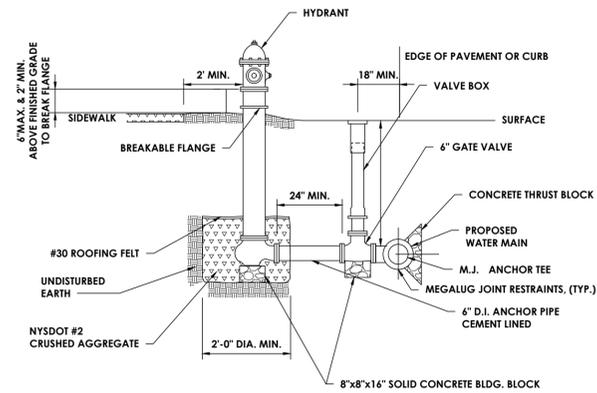


NEW YORK STATE EDUCATION STATEMENT  
IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S  
REGULATIONS FOR ANY PERSON, ENGINEER, ARCHITECT OR PROFESSIONAL ENGINEER  
REGISTERED IN ANY PROFESSION, OCCURS WHILE UNDER THE SUPERVISION OF AN ARCHITECT,  
ARCHITECT, ENGINEER OR LAND SURVEYOR, SUCH PERSON SHALL BE AN ASSISTANT  
REGISTERED PROFESSIONAL ENGINEER OR SURVEYOR. IN THE EVENT OF SUCH A VIOLATION,  
PARTY SHALL SIGN THE PROFESSIONAL SEAL AND THE ACTION SHALL BE FOLLOWED BY  
THEIR SIGNATURE AND THE DATE OF SUCH ACTION, AND A SPECIFIC DESCRIPTION OF THE  
VIOLATION.

SHEET INFORMATION

Issued: 03/24/23 Scale: NTS  
Project Status: ISSUED FOR BID  
Drawn By: NMO Checked By: DE  
Drawing Title: DETAILS

Drawing Number: C302 Revision Number: --

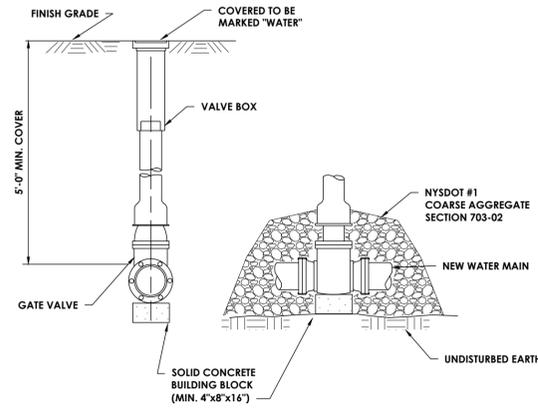


NOTES:

1. HYDRANT WEEP HOLES SHALL NOT BE PLUGGED UNLESS GROUNDWATER IS ENCOUNTERED WITHIN 7 FEET OF FINISHED GRADE. IF HYDRANT WEEP HOLES ARE PLUGGED, NOTIFY VILLAGE OF ENDICOTT IN WRITING.
2. ALL JOINTS ON FIRE HYDRANT LEG SHALL BE MECHANICAL JOINT AND RESTRAINED WITH MEGALUGS.
3. BARREL SHALL BE SINGLE PIECE PROVIDED TO MEET FIELD CONDITIONS AND THE MINIMUM AND MAXIMUM DIMENSIONS AS SHOWN ON THIS DETAIL.
4. ORIENTATION AND EXACT LOCATION TO BE DETERMINED BY ENGINEER.
5. EXISTING GRADE AT HYDRANT LOCATION SHALL BE MODIFIED AS NECESSARY TO MAINTAIN A MINIMUM ELEVATION DIFFERENCE FROM BREAKAWAY FLANGE TO EDGE OF PAVEMENT ELEVATION OF ±2 FEET. THIS INCLUDES CUTTING OR FILLING AS NECESSARY.
6. DIP FITTINGS AND VALVES SHALL BE WRAPPED WITH 2 MIL. THICK POLYETHYLENE, 2 FEET BEYOND END OF FITTING ON PVC PIPE, TO INCLUDE HYDRANT BURY.
7. ALL BOLTS AND NUTS SHALL BE FLUOROCARBON COATED.

**1 PERPENDICULAR FIRE HYDRANT ASSEMBLY**

N.T.S.

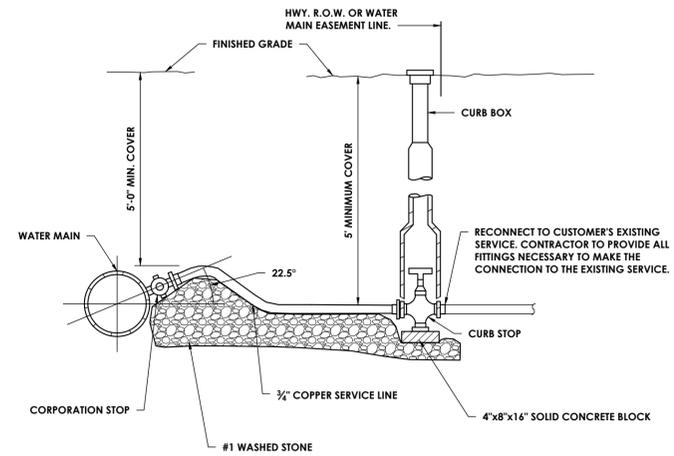


NOTES:

1. VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED FILL.
2. VALVE SHALL NOT SUPPORT VALVE BOX.

**2 WATER MAIN GATE VALVE**

N.T.S.



NOTES:

1. NO CURB BOXES SHALL BE LOCATED IN DITCHES OR DRAINAGE SWALES.

**3 TYPICAL WATER SERVICE**

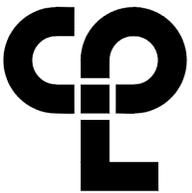
N.T.S.

Plotted By: Nathan Oliva

Date last plotted: 3/24/2023 9:15 AM

Date last accessed: 3/24/2023 9:14 AM

Sheet Size: 22x34  
Drawing Name: S:\Projects\Union\_Town Adams Ave Street Reconstruction\Design\ACAD\Civil\Detail\TOU\Mapings\_Ave\_C3\_Details.dwg



CPL | Architecture Engineering Planning  
59 Court St.  
Binghamton, NY 13901  
CPLTeam.com



PROJECT INFORMATION

Project Number  
R22.00061.00  
Client Name

TOWN OF UNION

Project Name  
**300 BLOCK N. ADAMS AVE  
STREET RECONSTRUCTION**

Project Address  
NORTH ADAMS AVENUE  
ENDICOTT, NY 13760

PROFESSIONAL STAMPS



NEW YORK STATE EDUCATION STATEMENT  
IF A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND THE COMMISSIONER'S  
REGULATIONS FOR ANY PERSON, DESIGNATED UNDER THE COMMISSIONER OF ALTERNATE  
APPLICABLE ENGINEER OR LAND SURVEYOR, IS TO BE FILED WITH AN ALTERNATE  
BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR SURVEYOR IS ALTERED, THE ALTERING  
PARTY SHALL SIGN THE SEAL FROM THE BACK AND THE REASON FOR THE ALTERATION SHALL BE  
THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE  
ALTERATION.

SHEET INFORMATION

Issued: 03/24/23 Scale: NTS  
Project Status: ISSUED FOR BID  
Drawn By: NMO Checked By: DE  
Drawing Title: DETAILS

Drawing Number: C 303 Revision Number: --

**SIDEWALK NOTES**

**GENERAL:**

1. THE DIMENSIONS AND SLOPE PRESENTED IN THE DETAILS ARE THE MINIMUM NECESSARY TO COMPLY WITH THE ADA AND DOT STANDARDS. ANY DEVIATION LESS THAN THE MINIMUM WIDTH OR GREATER THAN THE MAXIMUM SLOPE FROM THESE STANDARDS MUST BE DOCUMENTED WITH THE STANDARDS BEING MET TO THE GREATEST EXTENT PRACTICABLE AND CONSISTENT WITH THE MOST CURRENT ADAAG.
2. THE DETAILS PROVIDED ARE NOT DRAWN TO SCALE. THE QUALITY OF DOMES DEPICTED ON THE DETECTABLE WARNING UNIT (THE DOMES AND THE ENTIRE 24" LEVEL SURFACE) IS FOR ILLUSTRATION ONLY.
3. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.

**CURB RAMP NOTES:**

1. THE MINIMUM WIDTH FOR SIDEWALK CURB RAMPS IS 5'-0".
2. THE RUNNING SLOPE OF A CURB RAMP SHALL BE 1:20 (5%) MINIMUM (PREFERRED) AND 1:12 (8.33%) MAXIMUM.
3. WHERE THE SLOPE OF THE ROADWAY EXCEEDS 8.33% THE CURB RAMP LENGTH IS THE LENGTH NECESSARY TO MEET THE EXISTING SIDEWALK. IT IS NOT NECESSARY THAT THE RAMP LENGTH EXCEED 15'-0".
4. THE CROSS SLOPE OF CURB RAMPS SHOULD BE AS FLAT AS POSSIBLE, NOT TO EXCEED 1:50 (2%).
5. THE VERTICAL ALIGNMENT OF A CURB RAMP, EXCLUDING THE FLARES, SHALL BE PLANAR. GRADE BREAKS SHALL BE FLUSH AND PERPENDICULAR TO THE DIRECTION OF THE RAMP.
6. RAMP TRANSITIONS BETWEEN WALKS, LANDINGS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (1/4" MAX).

**DETECTABLE WARNING UNIT DIMENSIONS:**

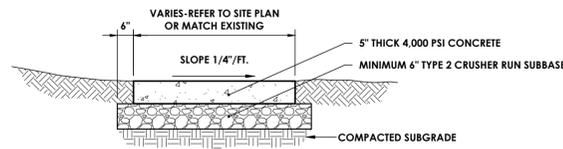
1. THE SIZE OF THE DETECTABLE WARNING FIELD SHALL BE 24" IN THE DIRECTION OF TRAVEL AND SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, EXCLUSIVE OF SIDE FLARES.

**DETECTABLE WARNINGS LOCATIONS:**

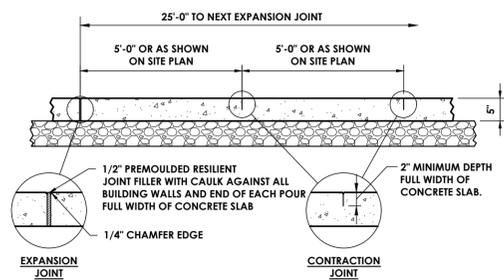
1. DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE OR CORNER OF THE WARNING FIELD NEAREST TO THE ROADWAY IS 5" TO 9" FROM THE FRONT OF THE CURB OR THE ROADWAY EDGE (12" WHERE TRAVERSABLE CURB IS USED).

**DOMES ALIGNMENT:**

1. THE ROWS OF DOMES SHALL BE ALIGNED TO BE PERPENDICULAR OR RADIAL TO THE GRADE BREAK BETWEEN THE RAMP LANDING OR CURB RAMP AND THE STREET.
2. WHERE DOMES ARE ARRAYED RADially THEY MAY DIFFER IN DOME DIAMETER AND CENTER-TO-CENTER SPACING WITHIN THE RANGES SPECIFIED ON THIS SHEET.



**CROSS-SECTIONAL VIEW**

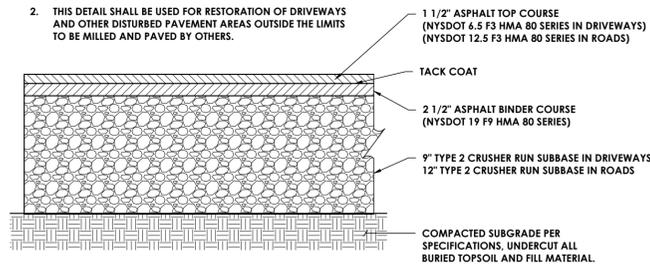


**SIDE VIEW**

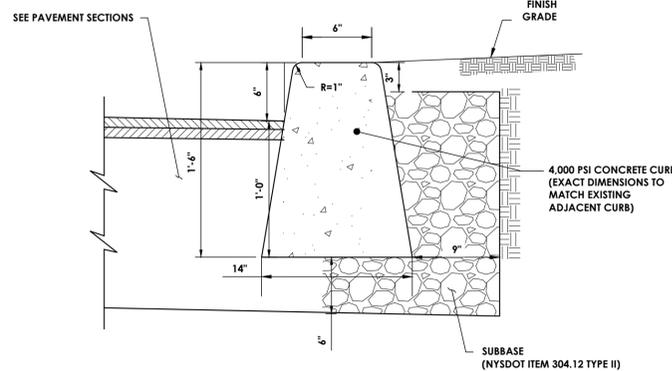
**1 TYPICAL CONCRETE SIDEWALK**  
N.T.S.

**NOTES:**

1. THIS DETAIL IS NOT REQUIRED FOR TRENCH RESTORATION. REFER TO TRENCH SECTION FOR ASPHALT RESTORATION AT TRENCHES.
2. THIS DETAIL SHALL BE USED FOR RESTORATION OF DRIVEWAYS AND OTHER DISTURBED PAVEMENT AREAS OUTSIDE THE LIMITS TO BE MILLED AND PAVED BY OTHERS.

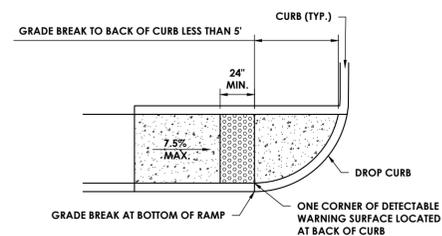


**3 STANDARD DUTY ASPHALT PAVEMENT SECTION**  
N.T.S.

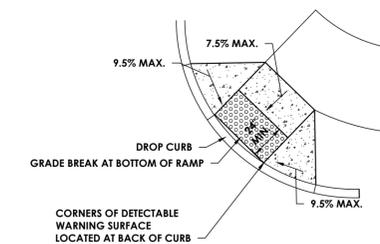


1. CONTRACTION JOINTS TO BE AT 10 FOOT INTERVALS AND SHALL BE FORMED OR SAW CUT TO A DEPTH OF 1/2 INCH BELOW THE SURFACE OF THE CURB.
2. EXPANSION JOINTS TO BE AT 50 FOOT INTERVALS AND SHALL BE FORMED WITH 3/4 INCH WIDE PREMOLDED BITUMINOUS JOINT FILLER. THE FILLER MATERIAL SHALL BE CUT TO CONFORM TO THE CROSS SECTION OF THE CURB.
3. EXPANSION JOINTS AND FORMED CONTRACTION JOINTS ARE TO BE EDGED WITH CONCRETE FINISHING TOOLS.
4. CONCRETE SEALING AGENT SHALL BE APPLIED THE SAME DAY THAT CURBS ARE CONSTRUCTED.

**2 CONCRETE CURB**  
N.T.S.



**4 TYPE A SIDEWALK RAMP**  
N.T.S.



**5 TYPE B SIDEWALK RAMP**  
N.T.S.

Plotted By: Nathan Oliva

Date last plotted: 3/24/2023 9:15 AM

Date last accessed: 3/24/2023 9:14 AM

Sheet Size: 22x34  
Drawing Name: S:\Projects\Union\_Town\Adams Ave Street Reconstruction\Design\ACAD\Civil\Detail\TOU\Mapings\_Ave\_C3\_Details.dwg