

Holland Heights

Single Family Subdivision

1789 Dodge Road
Amherst, New York

AGENCIES

ENGINEERING DEPARTMENT
NAME/TITLE: JEFFERY BURROUGHS, P.E. — TOWN ENGINEER
COMPANY/DEPT: TOWN OF AMHERST ENGINEERING DEPARTMENT
ADDRESS: 1100 NORTH FOREST ROAD
WILLIAMSVILLE, NEW YORK 14221

TELEPHONE 716-631-7154

PLANNING & ZONING DEPARTMENT
NAME/TITLE: DANIEL HOWARD — PLANNING DIRECTOR
COMPANY/DEPT: TOWN OF AMHERST PLANNING DEPARTMENT
ADDRESS: 5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221

TELEPHONE 716-631-7051

BUILDING DEPT.
NAME/TITLE: BERKE, MARK S. — COMMISSIONER OF BUILDING
COMPANY/DEPT.: TOWN OF AMHERST BUILDING DEPT.
5583 MAIN ST.
ADDRESS: AMHERST, NEW YORK 14221

TELEPHONE 716-631-7080

ECDOH
NAME/TITLE:
COMPANY/DEPT.: ERIE COUNTY DEPARTMENT OF HEALTH
503 KENSINGTON AVE
ADDRESS: BUFFALO, NEW YORK 14214

TELEPHONE 716-961-6854

NYSDEC
NAME/TITLE:
COMPANY/DEPT: NEW YORK STATE DEPT. OF ENVIRONMENTAL
CONSERVATION
ADDRESS: 700 DELAWARE AVE.
BUFFALO, NEW YORK 14209

TELEPHONE 716-851-7070

UTILITIES

NATURAL GAS
COMPANY/DEPT.: NATIONAL FUEL GAS CORP.
ADDRESS: 6363 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221

TELEPHONE 716-857-7000

TELEPHONE COMPANY
COMPANY/DEPT: VERIZON
ADDRESS: 65 FRANKLIN STREET
BUFFALO, NEW YORK 14203

TELEPHONE 716-840-8748

CABLE COMPANY
COMPANY/DEPT: TIME WARNER
ADDRESS: 789 CHURCH ROAD
WEST SENECA, NEW YORK

TELEPHONE 716-558-8615

ELECTRIC COMPANY
COMPANY/DEPT: NATIONAL GRID
ADDRESS: 144 KENSINGTON AVENUE
BUFFALO, NEW YORK 14214

TELEPHONE 716-236-2738

WATER
COMPANY/DEPT.: ERIE COUNTY WATER AUTHORITY
ADDRESS: 3030 UNION ROAD
CHEEKTOWAGA, NEW YORK 14227

TELEPHONE 716-684-1510

DIG SAFELY NEW YORK

TELEPHONE 1-800-962-7962

DESIGN CONSULTANTS

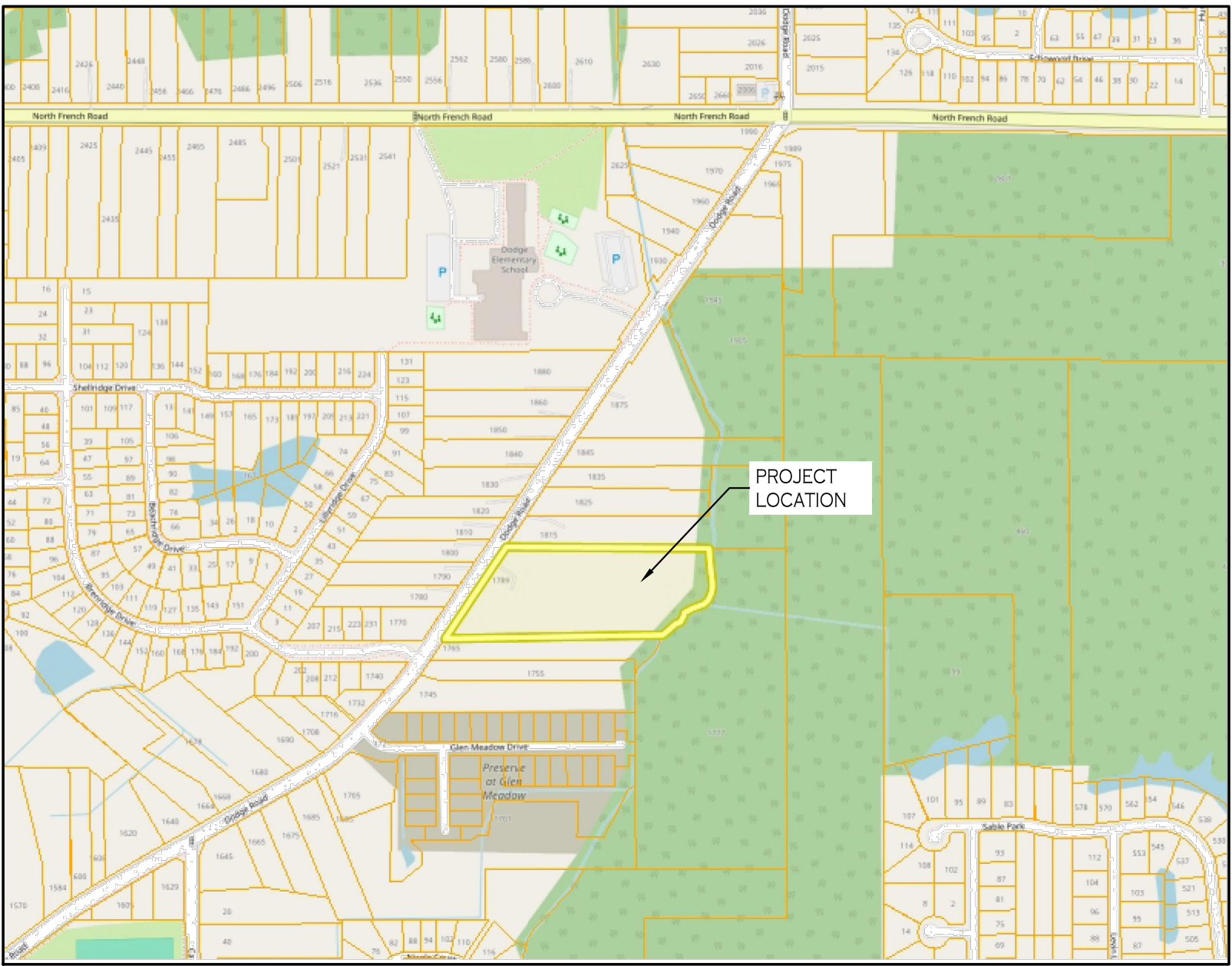
PROJECT SURVEYOR
COMPANY/DEPT: NUSSBAUMER & CLARKE, INC.
ADDRESS: 3556 LAKESHORE ROAD, SUITE 500
BUFFALO, NEW YORK 14219

TELEPHONE 716-827-8000

OWNER/DEVELOPER

NAME: JOE RUBINO
ADDRESS: 5500 MAIN STREET, SUITE 343
WILLIAMSVILLE, NY 14221

CONTACT: JOE RUBINO
TELEPHONE 716-510-4338



LOCATION MAP
NOT TO SCALE

| DRAWING NO. | DRAWING TITLE |
|-------------|---|
| — | COVER SHEET |
| — | LAND SURVEY (PREPARED BY NUSSBAUMER & CLARKE) |
| C-001 | DEMOLITION & EROSION CONTROL PLAN |
| C-002 | DEMOLITION & EROSION CONTROL DETAILS |
| P-100 | PRELIMINARY PLAT/LAYOUT PLAN |
| C-101 | SITE DETAILS |
| C-200 | GRADING PLAN |
| C-201 | ROAD PROFILE |
| C-300 | STORM WATER MANAGEMENT PLAN |
| C-301 | BASIN DETAILS |
| C-302 | STORM DRAINAGE DETAILS |
| C-303 | STORM DRAINAGE DETAILS |
| C-400 | UTILITY PLAN |
| C-401 | UTILITY PROFILES |
| C-402 | SANITARY SEWER DETAILS |
| C-403 | SANITARY SEWER DETAILS |
| C-404 | SANITARY SEWER NOTES |
| C-405 | WATER DETAILS |
| C-406 | WATER DETAILS |
| C-407 | LIGHTING DETAILS |
| C-408 | LIGHTING DETAILS |
| C-409 | LIGHTING DETAILS |
| L-100 | LANDSCAPE PLAN |
| L-101 | LANDSCAPE DETAILS |
| AP-100 | ADDRESS PLAN |

| REV # | DESCRIPTION | DATE |
|-------|---------------------------|------------|
| 1 | Rev. Per Town Comments | 9/19/2024 |
| 2 | Rev. Per Town Comments | 10/24/2024 |
| 3 | Rev. Per Town Comments | 11/11/2024 |
| 4 | Rev. Per Town Comments | 3/20/2025 |
| 5 | Rev. Per Town Comments | 4/16/2025 |
| 6 | Rev. Permanent Open Space | 5/13/2025 |
| 7 | Rev. Per Town Comments | 5/23/2025 |
| 8 | Rev. Per Town Comments | 6/10/2025 |
| 9 | Rev. Per Town Comments | 7/1/2025 |
| 10 | Rev. Per Town Comments | 7/25/2025 |

CARMINAWOOD
DESIGN

FEBRUARY 2025
REV. JULY 2025

Holland Heights
Single Family Subdivision
1789 Dodge Road
Amherst, New York

© CARMINA WOOD DESIGN







1. INSTALL TEMPORARY SILT SOCK BARRIERS AS DIRECTED BY THE OWNER AND AT ALL EXISTING STORMWATER CATCH BASINS WITHIN THE WORK AREA TO PREVENT SEDIMENT MIGRATION. ALL SILT SOCK BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS.
2. TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR RE-USE AS DIRECTED BY THE OWNER. ALL RE-USE OF TOPSOIL INCLUDING THE SALE OF TOPSOIL MUST BE FOLLOWED. TOPSOIL MAY NOT BE REMOVED WITHOUT A PERMIT.
3. ALL SILT SOCK BARRIERS SHALL BE REPLACED WHEREVER THEY BECOME CLOGGED OR INOPERABLE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS.
5. THE CONTRACTOR MUST CONTROL DUST DURING CONSTRUCTION. DURING EARTHWORK OPERATIONS, WATER SPREADING EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR, AND SPREAD WATER AS NECESSARY AND AS DIRECTED BY THE OWNER IN ORDER TO CONTROL DUST.
6. DIRT OR DEBRIS LEFT ON LOCAL PUBLIC ROADS AS A RESULT OF THIS CONSTRUCTION PROJECT SHALL BE REMOVED AND ROAD SURFACES CLEANED BY THE CONTRACTOR ON A DAILY BASIS.
7. ALL DISTURBED AREAS (EXCEPT AREAS TO BE PAVED OR BUILT UPON) SHALL BE TOPSOILED TO A MINIMUM 4" DEPTH AND SEEDED IMMEDIATELY AFTER FINE GRADING TAKES PLACE AND AS SOON AS PHYSICALLY POSSIBLE.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF DOWNSTREAM STORM SEWERS, DITCHES, AND CULVERTS. SILT BUILDUP FOUND TO BE A RESULT OF THIS SITE CONSTRUCTION WORK SHALL BE REMOVED FROM DOWNSTREAM CULVERTS BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE TOWN/CITY.
9. ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES AND MATERIALS SHALL BE IN PLACE PRIOR TO BEGINNING EARTHWORK OPERATIONS AND SHALL BE MAINTAINED UNTIL THE NEW SLOPES ARE STABILIZED WITH SEEDING AND/OR SLOPE PROTECTION, AS DIRECTED BY THE ENGINEER.
10. INSTALL TEMPORARY SILT SOCK AROUND THE BASE OF STOCKPILES.

1. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT THOSE ITEMS TO REMAIN, SUCH AS TREES, PROPERTY CORNER PINS, UTILITY POLES, VALVES, HYDRANTS, CURBS, MANHOLES AND CATCH BASINS.
2. TEMPORARY SILT SOCK AND STRAW BALES TO BE INSTALLED AS DIRECTED BY THE OWNERS FIELD REPRESENTATIVE. MAINTAIN UNTIL VEGETATION IS ESTABLISHED AND PAVEMENT IS INSTALLED.
3. CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCES WHERE ACCESSING THE SITE FROM PAVED ROADWAYS. STORM DRAINAGE INLETS THAT INTERFERE WITH CONSTRUCTION ENTRANCE TO BE PROTECTED WITH SILT SACK AND OTHER PROPER TEMPORARY INLET PROTECTION MEASURES.
4. CONTRACTOR SHALL INSTALL TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH NYS M.U.T.C.D. STANDARDS PRIOR TO STARTING WORK.
5. COVERED DUMPSTERS SHALL BE PROVIDED ONSITE AS REQUIRED FOR CONSTRUCTION WASTE.
6. CONTRACTOR TO PROTECT ALL TREES/BRUSH NOT DISTURBED BY CONSTRUCTION ACTIVITY.
7. REMOVE EXISTING HOUSE TO INCLUDE ALL FOUNDATIONS, PORCHES, STEPS, ETC. ALL UTILITY CONNECTIONS TO BE ABANDONED AND/OR REMOVED PER COUNTY, TOWN, AND UTILITY COMPANY REQUIREMENTS.
8. EXISTING CURB AT DRIVEWAY ENTRANCE TO BE REMOVED SHALL BE SAW CUT FULL-DEPTH AND NEATLY REMOVED FROM THE BACKSIDE. EXISTING PAVEMENT SHALL NOT BE DISTURBED AND THE PAVEMENT EDGE SHALL BE USED AS FOR PLACING NEW CURB.

1. CONSTRUCT TEMPORARY CONSTRUCTION EXIT, INSTALL PERIMETER SILT SOCK AND DRAINAGE INLET PROTECTION.
2. CLEAR AND GRUB SITE.
3. COMMENCE SITE GRADING.
4. INSTALL PROPOSED UTILITIES. PROVIDE EROSION AND SEDIMENT CONTROL DURING UTILITY CONSTRUCTION.
5. CONSTRUCTION OF HOME, DRIVEWAY, GRADING OF THE REMAINING SITE. PROTECT DRAINAGE SWALES DURING HOME CONSTRUCTION.
6. REPLACE TOPSOIL WHERE NEEDED AND SEED ALL DISTURBED AREA.
7. AFTER SITE STABILIZATION REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS.

DEMOLITION & EROSION CONTROL LEGEND

| | |
|--|---|
| PROPOSED SILT FENCE | — SF — |
| EXISTING TREE TO BE REMOVED |  |
| PROPOSED STORM INLET PROTECTION |  |
| STABILIZED CONSTRUCTION ENTRANCE |  |
| APPROXIMATE LIMITS OF EXISTING BUILDING FOUNDATION, WALL, SLAB, SUPERSTRUCTURE, ETC. TO BE REMOVED |  |

TOWN OF AMHERST APPROVAL BOX:

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION
PROVIDED BY OTHERS, CARMINA WOOD DESIGN
ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



**CARMIN/WOOD
DESIGN**

DESIGN

Buffalo | Utica | Greensboro

Single Family Subdivision

1789 Dodge Road
Amherst, New York

| REVIEWS: | | No. | Description | Date |
|----------|--|-----|---------------------------|-----------|
| | | 5 | Rev. Per Town Comments | 4/16/2025 |
| | | 6 | Rev. Permanent Open Space | 5/13/2025 |
| | | 7 | Rev. Per Town Comments | 5/23/2025 |
| | | 8 | Rev. Per Town Comments | 6/10/2025 |
| | | 9 | Rev. Per Town Comments | 7/01/2025 |
| | | 10 | Rev. Per Town Comments | 7/25/2025 |



DRAWING NAME:

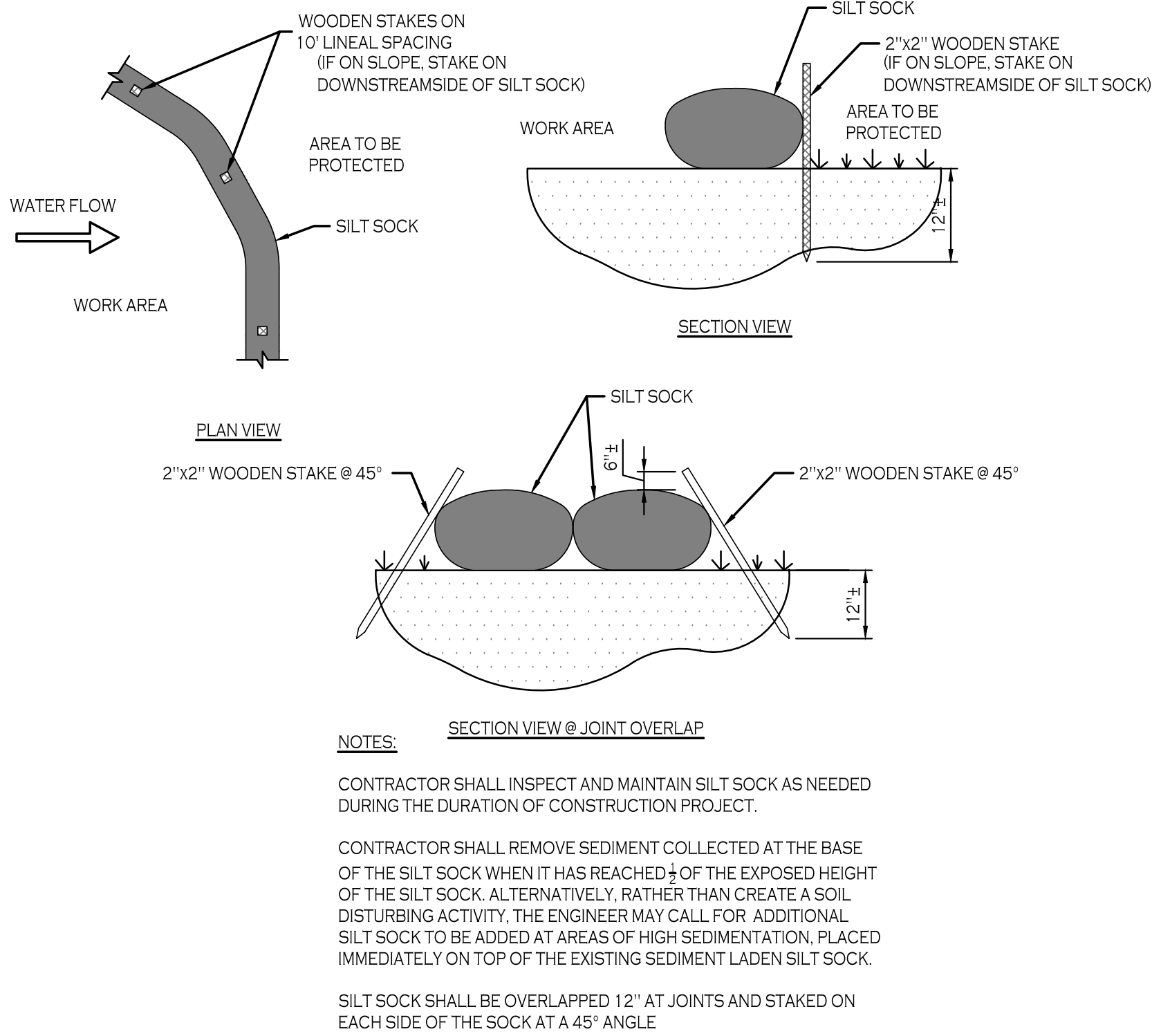
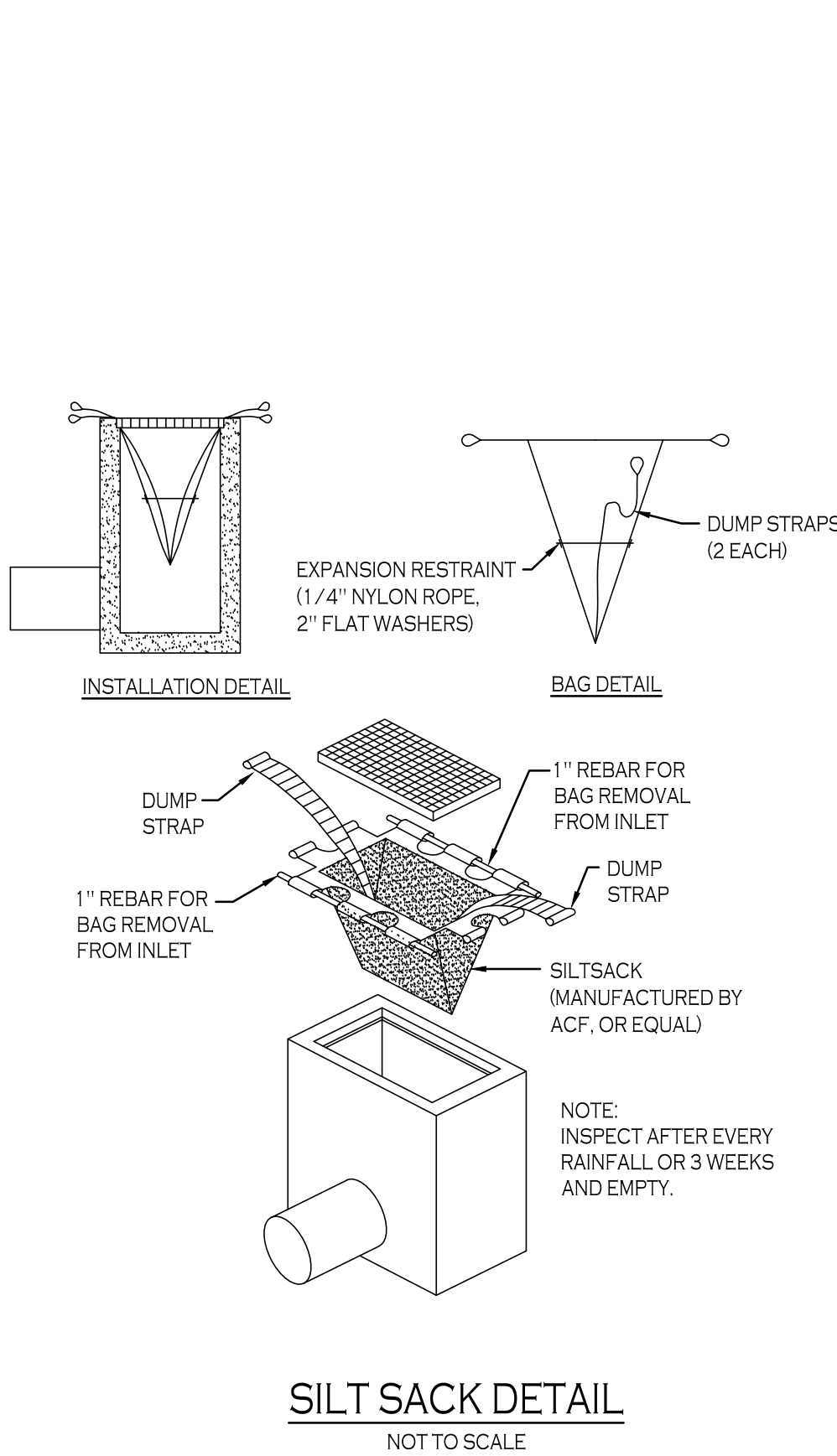
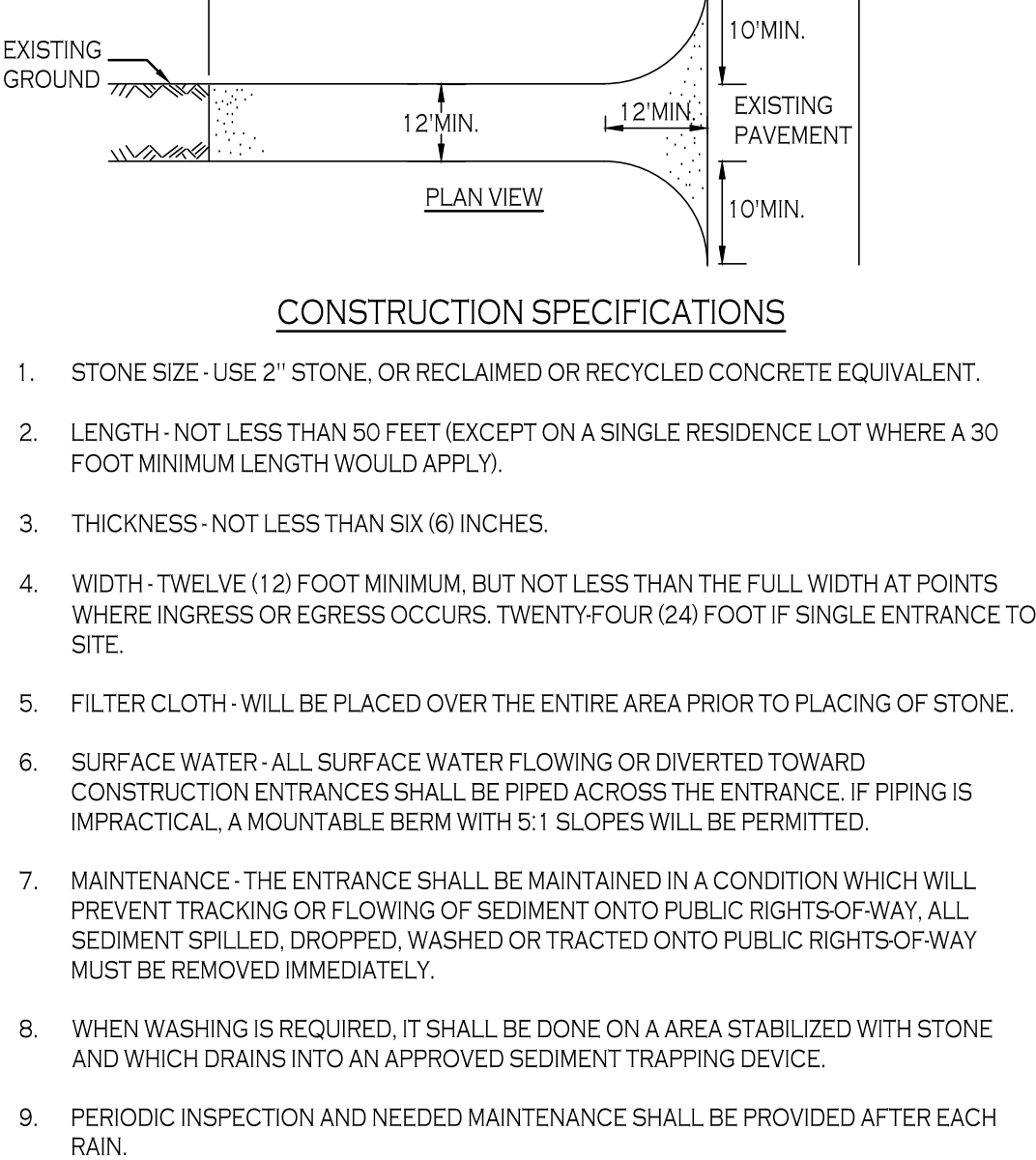
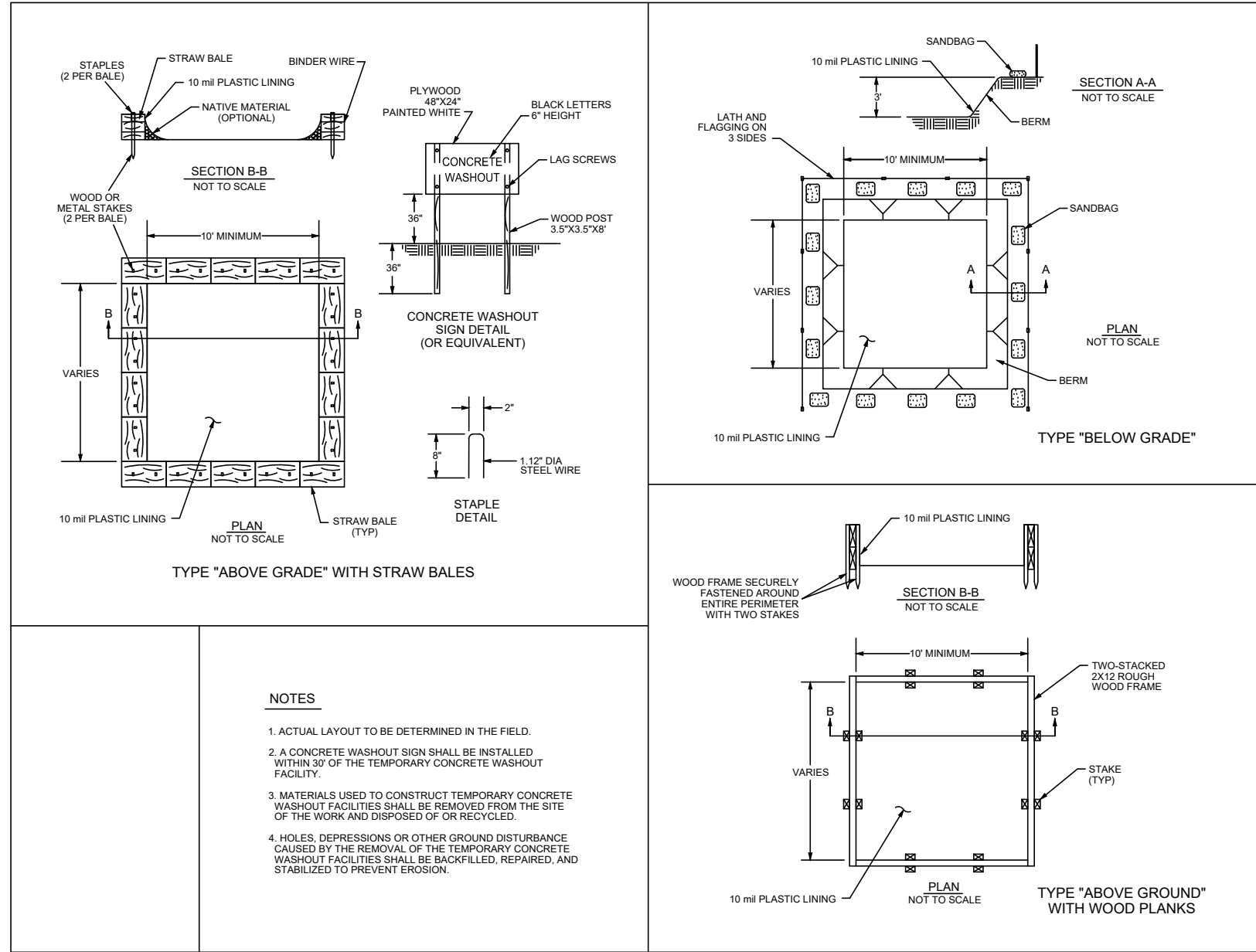
Demolition and Sediment & Erosion Control Plan

Date: 01/29/21
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-001

Project No: 20.247



TOWN OF AMHERST APPROVAL BOX:

| REVISIONS: | | No. | Description | Date |
|------------|----|---------------------------|-------------|------|
| | 5 | Rev. Per Town Comments | 4/16/2025 | |
| | 6 | Rev. Permanent Open Space | 5/13/2025 | |
| | 7 | Rev. Per Town Comments | 5/23/2025 | |
| | 8 | Rev. Per Town Comments | 6/10/2025 | |
| | 9 | Rev. Per Town Comments | 7/01/2025 | |
| | 10 | Rev. Per Town Comments | 7/25/2025 | |



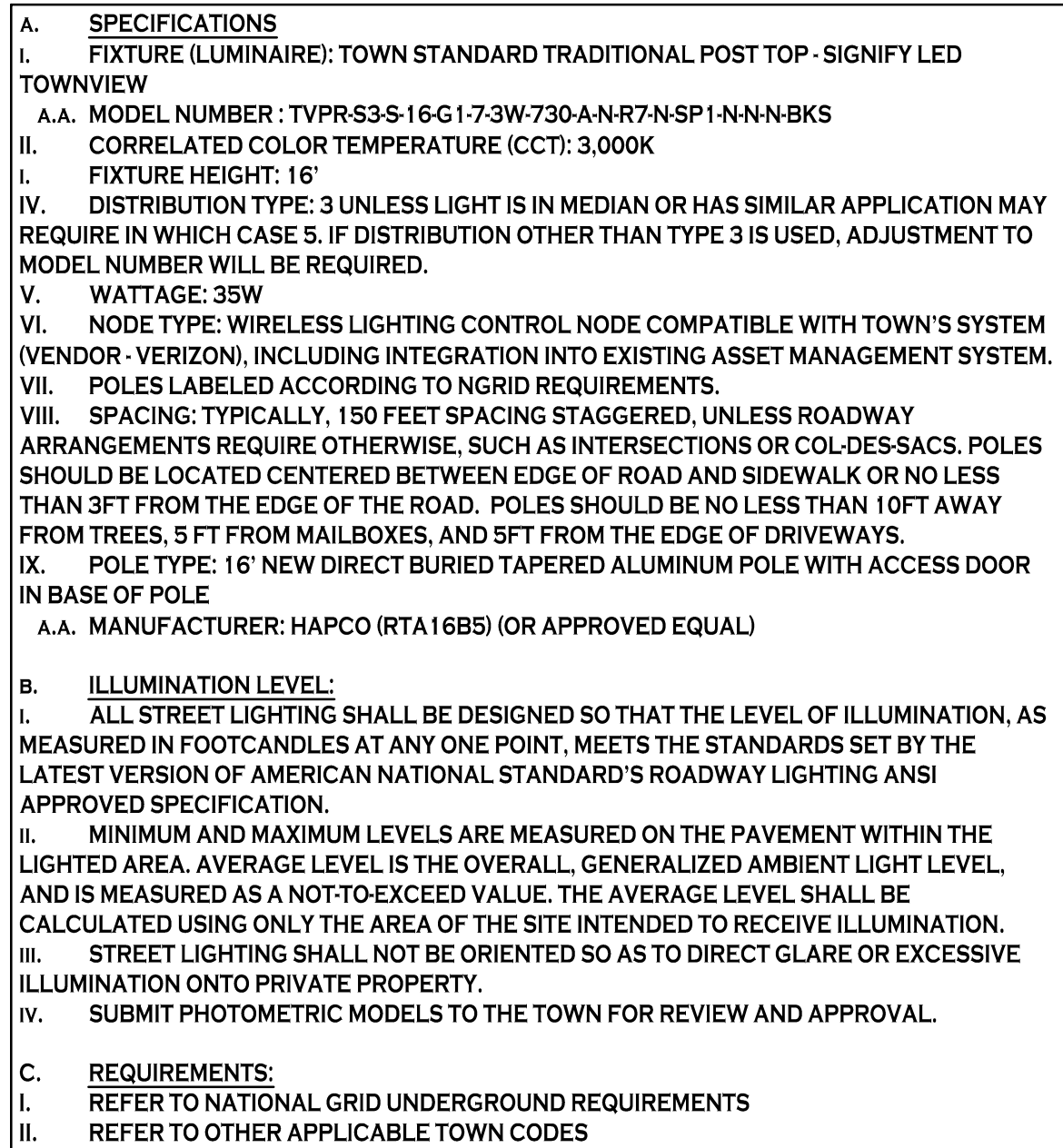
DRAWING NAME:
Demolition & Erosion Control Details

Date: 06/28/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

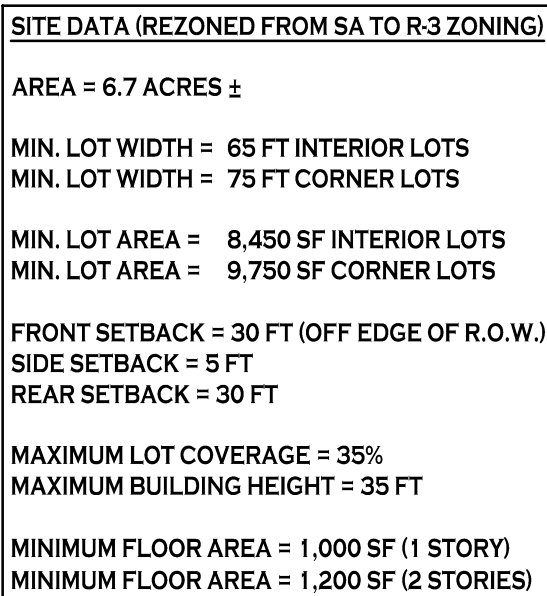
C-002

Project No: 20.247



SCALE: 1"=40

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION
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| LOT | AREA (SF) | AREA (AC) |
|--------------|-------------------|------------------|
| LOT 1 | 7.569 | 0.17 |
| LOT 9 | 76.254 | 1.75 |
| LOT 17 | 2.925 | 0.07 |
| REAR YARDS | 31.688 | 0.72 |
| TOTAL | 118,426 SF | 2.71 AC |

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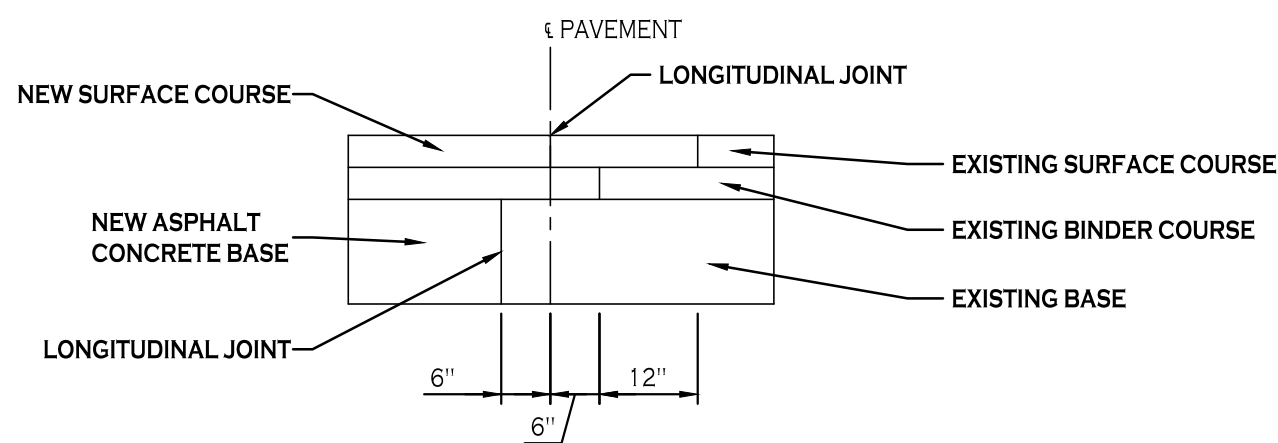
| REVIEWS: | | No. | Description | Date |
|----------|----|---------------------------|-------------|------|
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| | 6 | Rev. Permanent Open Space | 5/13/2025 | |
| | 7 | Rev. Per Town Comments | 5/23/2025 | |
| | 8 | Rev. Per Town Comments | 6/10/2025 | |
| | 9 | Rev. Per Town Comments | 7/01/2025 | |
| | 10 | Rev. Per Town Comments | 7/15/2025 | |



Date: 01/29/2017
 Drawn By: C. Wood
 Scale: As Noted
DRAWING NO.
P-100
Project No: 20.247

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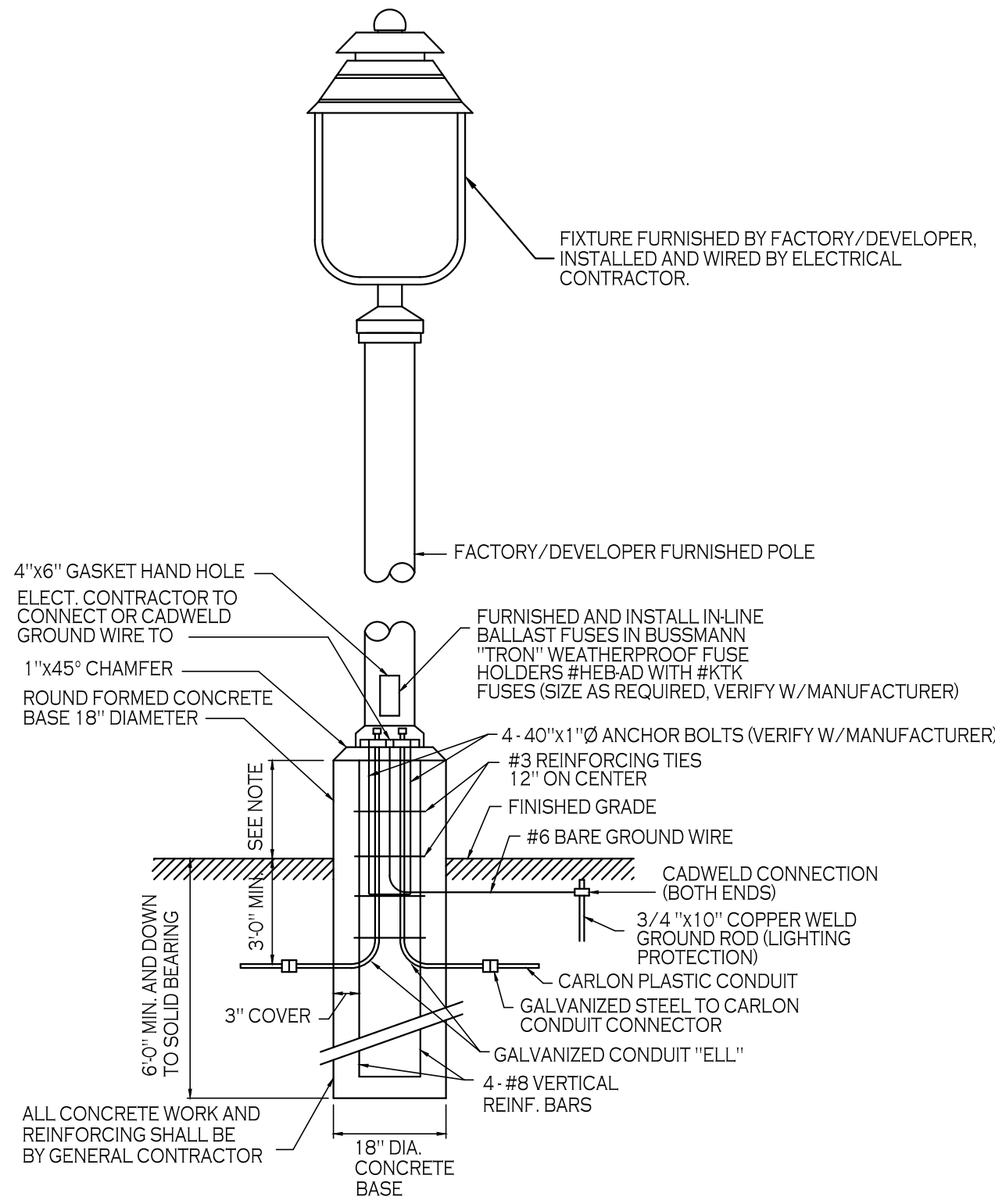
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NOTE:
THE WIDTH OF SPREAD SHOULD BE PLANNED TO PROVIDE FOR THE OFFSETTING OF LONGITUDINAL JOINTS IN THE SEVERAL COURSES

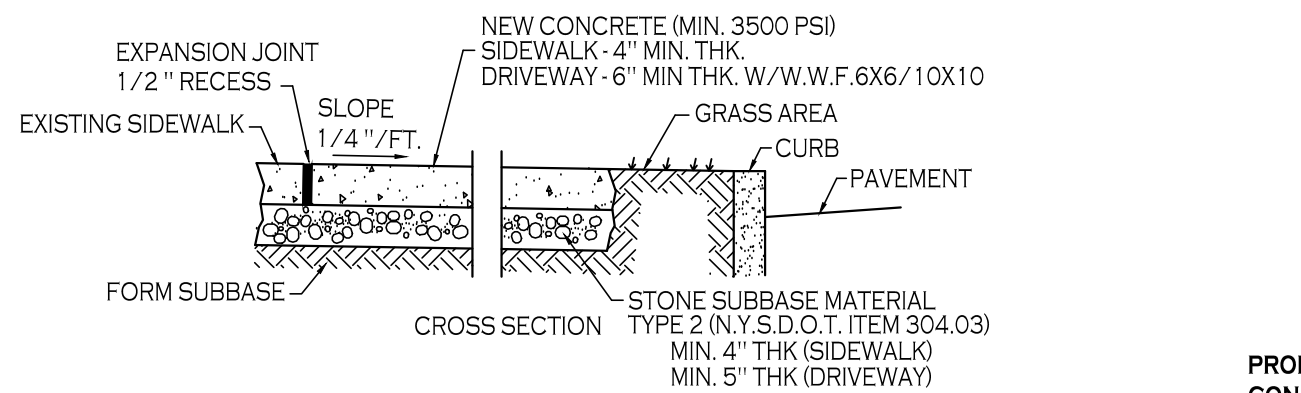
PAVEMENT OVERLAPPING DETAIL

NOT TO SCALE



- NOTES:
- FOR LOCATIONS OF FOUNDATIONS SEE SITE PLAN
 - FOR LIGHT FIXTURE, POLE & BASE ORDERING INFORMATION SEE LIGHTING PLAN
 - VERIFY INFORMATION WITH OWNER PRIOR TO ORDERING.
 - LIGHT POLE BASE EXPOSURE ABOVE GRADE SHALL BE:
IN CURBED ISLANDS: 6" ABOVE TOP OF CURB ELEVATION
IN PAVEMENT: 3" ABOVE GRADE
IN NONCURBED GRASS AREAS: 6" ABOVE GRADE

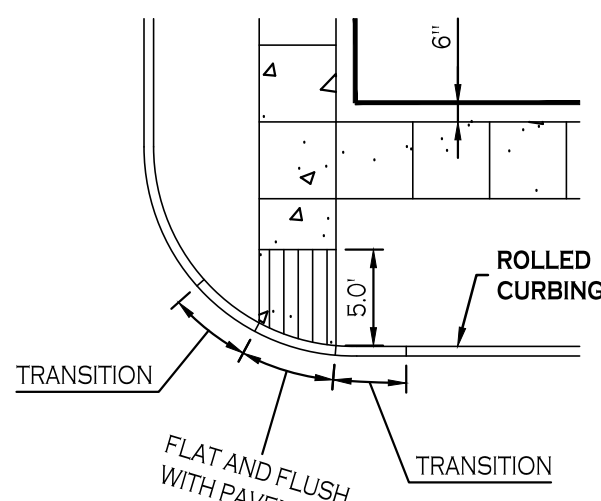
LIGHT POLE FOUNDATION



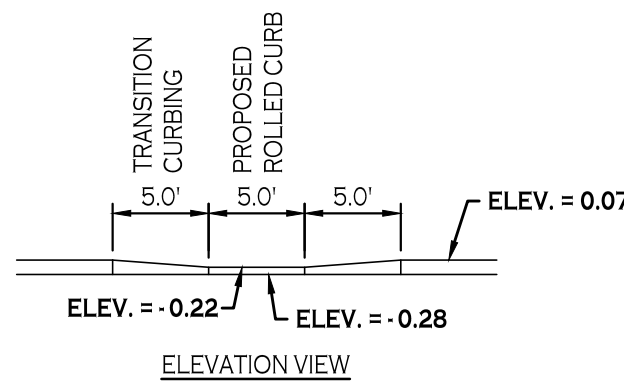
- NOTES:
- CONTROL JOINTS TO BE AT 5'-0" O.C., BOTHWAYS WHERE APPLICABLE. SEE SPECIFICATIONS FOR FURTHER JOINT REQUIREMENTS NYSDOT 702-0700.
 - CONCRETE SIDEWALK AND DRIVEWAY MATERIAL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 501 AND CONSTRUCTION METHODS SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 608.3.
 - SUBBASE GRADE SHALL FOLLOW THE PROPOSED GRADE OF THE SIDEWALK AND SLOPE AWAY FROM BUILDING WHERE APPLICABLE, PROVIDE CONTINUOUS STONE PATH TO CURB UNDERDRAIN WHERE PROVIDED.
 - FULL DEPTH EXPANSION JOINTS SHALL BE INSTALLED EVERY 20' O.C., BOTHWAYS WHERE APPLICABLE. SEE SPECIFICATIONS FOR FURTHER JOINT REQUIREMENTS NYSDOT 702-0700.
 - SEE CURB DETAIL FOR DOWLING REQUIREMENTS WHERE ABUTTING CURB
 - INSTALL 6" LONG #3 DOWELS @ 12" O.C. WHERE SIDEWALK ABUTS A BUILDING WALL AT AN ENTRANCE, THICKEN SIDEWALK TO 6" AT BUILDING WALL AND INSTALL DOWEL CENTERED IN THE 6" DEPTH. DOWELS AND THICKENING OF SIDEWALK SHALL EXTEND 18" EITHER SIDE OF ENTRANCE.
 - INSTALL 1/2" PREMOLED EXPANSION JOINT WITH BACKER ROD & SEALANT WHERE SIDEWALK ABUTS BUILDING OR OTHER STRUCTURE

CONCRETE SIDEWALK

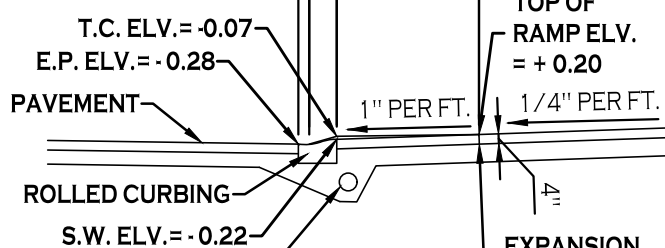
NOT TO SCALE



PLAN VIEW



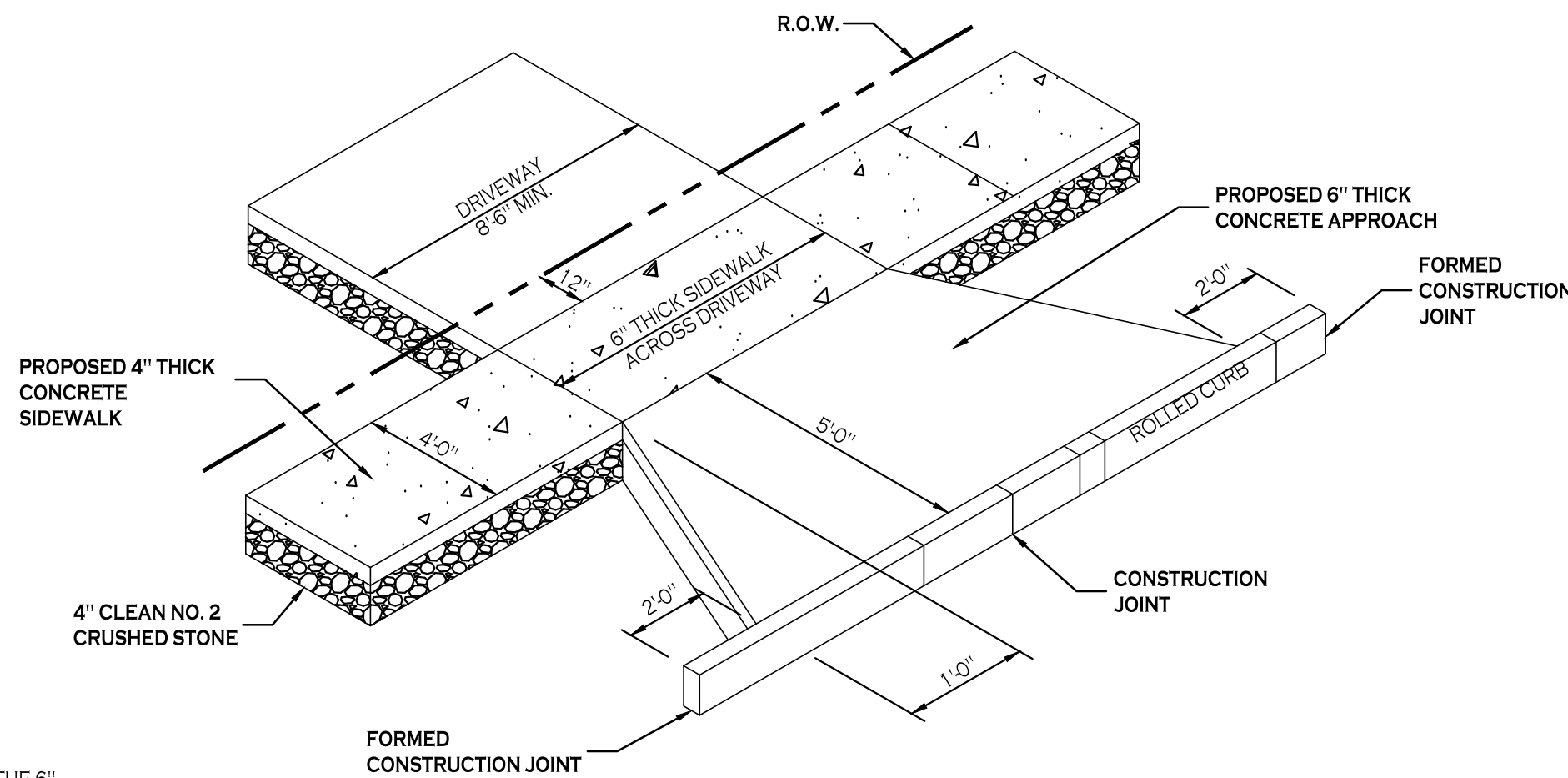
ELEVATION VIEW



DROP CURB DETAIL

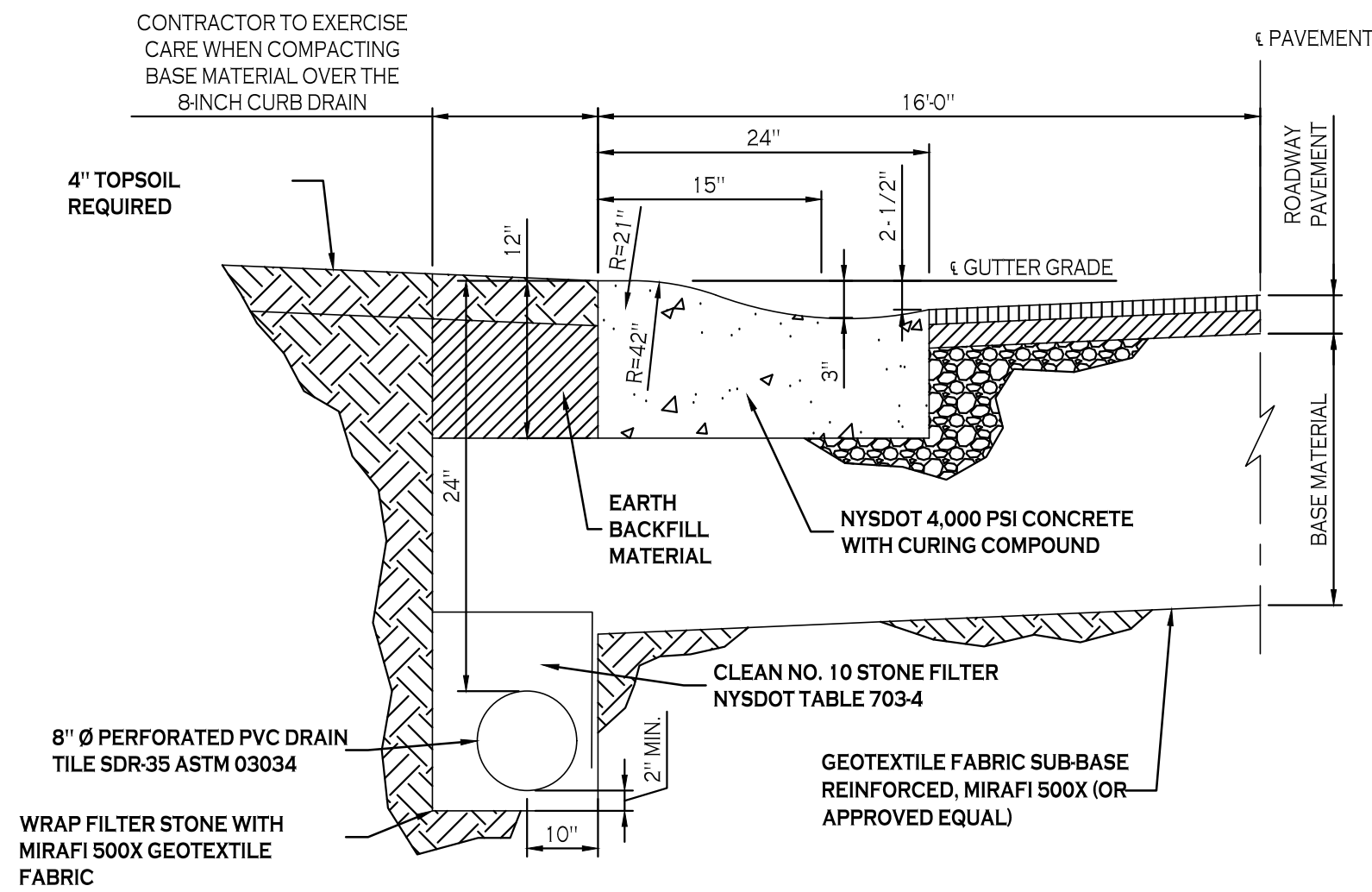
SIDEWALK RAMP DETAILS

NOT TO SCALE



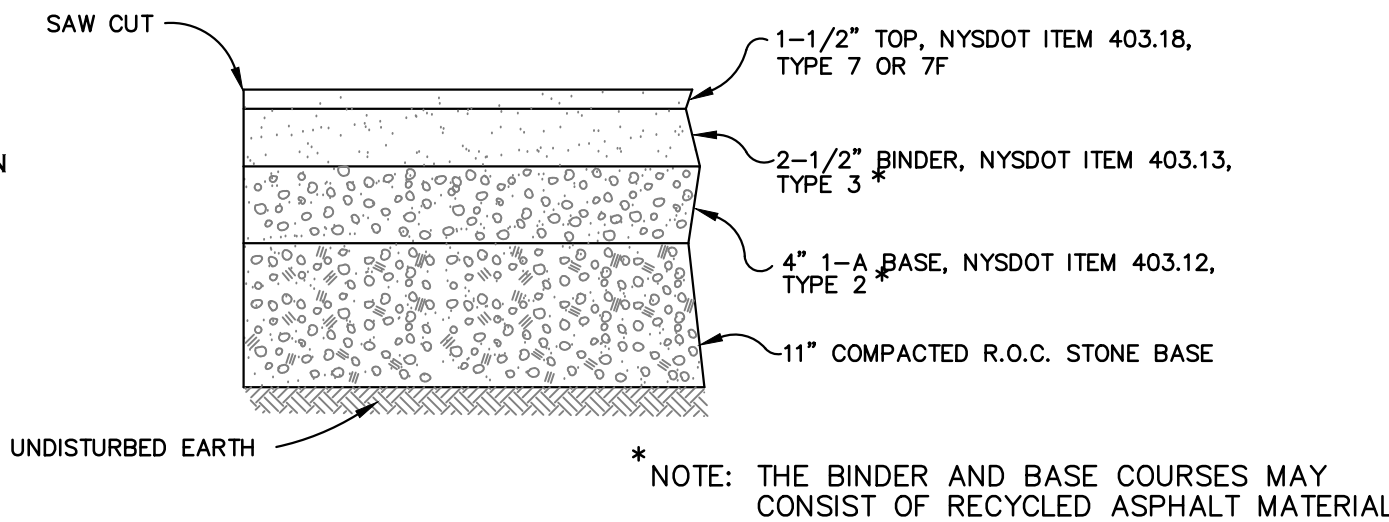
TYPICAL DRIVEWAY APRON & SIDEWALK

NOT TO SCALE



ROLLED CURB DETAIL

NOT TO SCALE



TOWN OF AMHERST TYPICAL PAVEMENT SECTION

* NOTE: THE BINDER AND BASE COURSES MAY CONSIST OF RECYCLED ASPHALT MATERIAL

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS. CARMINA WOOD DESIGN ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



TOWN OF AMHERST APPROVAL BOX:

APPROVAL BOX

CARMINA WOOD
DESIGN

Buffalo | Utica | Greensboro

Single Family Subdivision

1789 Dodge Road
Amherst, New York

| REVISIONS: | | No. | Description | Date |
|------------|------|-----|----------------------|-----------|
| 1 | Rev. | 1 | Per Town Comments | 4/16/2025 |
| 2 | Rev. | 2 | Permanent Open Space | 5/13/2025 |
| 3 | Rev. | 3 | Per Town Comments | 5/23/2025 |
| 4 | Rev. | 4 | Per Town Comments | 6/10/2025 |
| 5 | Rev. | 5 | Per Town Comments | 7/01/2025 |
| 6 | Rev. | 6 | Per Town Comments | 7/25/2025 |



DRAWING NAME:

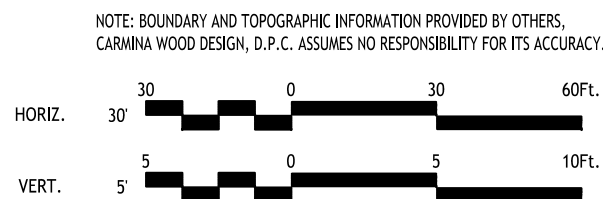
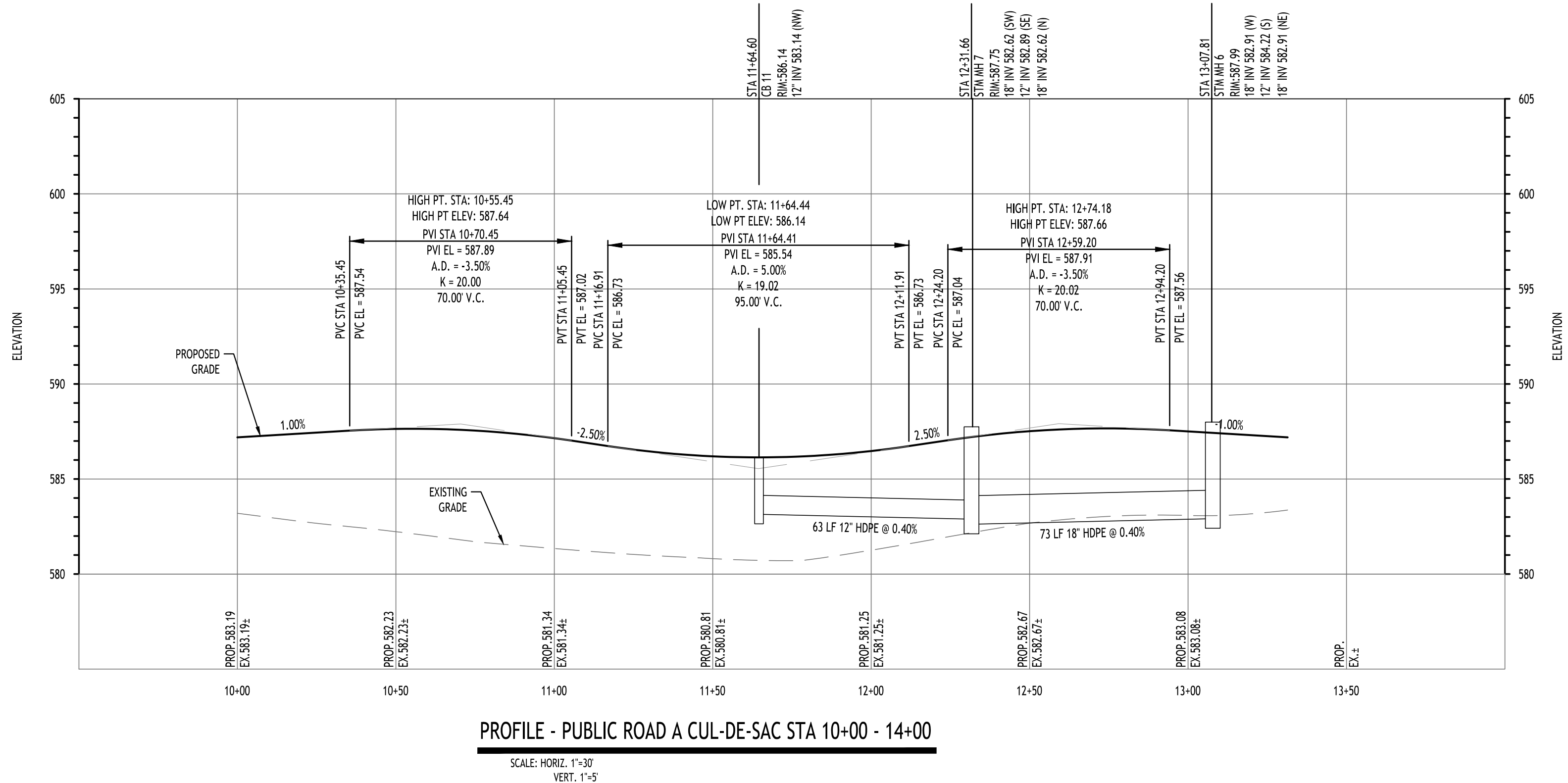
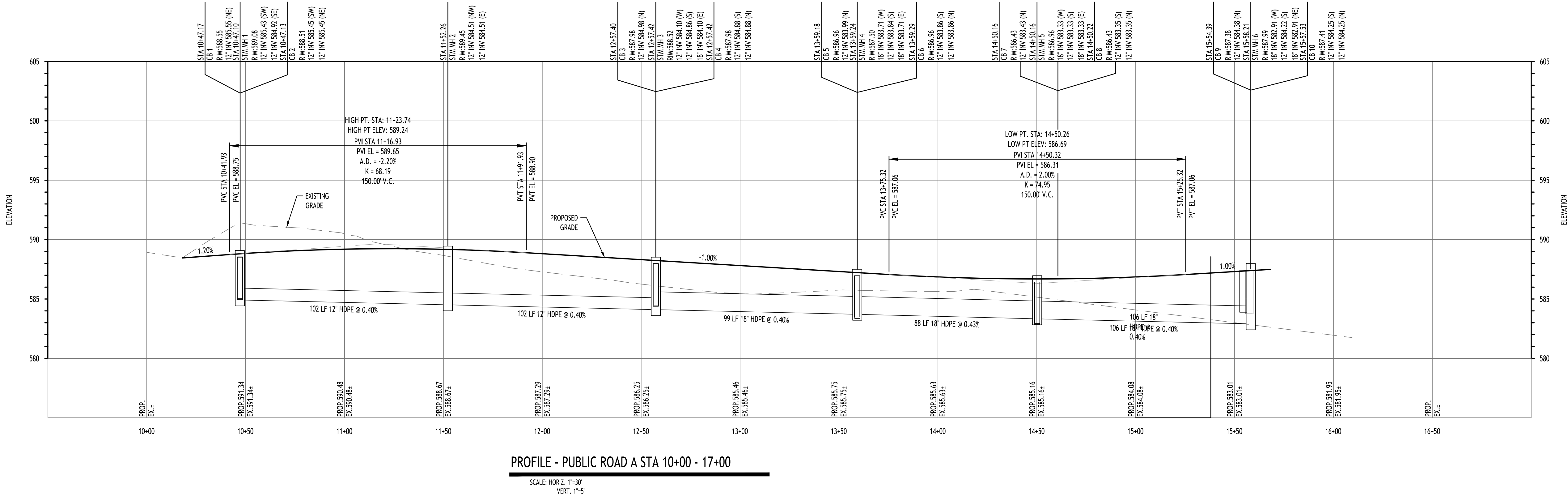
Site Details

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-100

Project No: 20.247



TOWN OF AMHERST APPROVAL BOX:



DRAWING NAME:
Road Profile

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-201

Project No: 20.247

| REVISIONS: | | No. | Description | Date |
|------------|---------------------------|-----------|-------------|------|
| 5 | Rev. Per Town Comments | 4/16/2025 | | |
| 6 | Rev. Permanent Open Space | 5/13/2025 | | |
| 7 | Rev. Per Town Comments | 5/23/2025 | | |
| 8 | Rev. Per Town Comments | 6/10/2025 | | |
| 9 | Rev. Per Town Comments | 7/01/2025 | | |
| 10 | Rev. Per Town Comments | 7/25/2025 | | |

Single Family Subdivision
1789 Dodge Road
Amherst, New York

CARMINA WOOD
DESIGN
Buffalo | Utica | Greensboro

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1820 DODGE ROAD
OWNER: JOHN R HANSIK
ZONE: SA
SBL 28.18-6-10

1810 DODGE ROAD
OWNER: TRACY & JAMES THURSTON H/W
ZONE: SA
SBL 28.18-6-11

1800 DODGE ROAD
OWNER: MERJA I KENOLA
ZONE: SA
SBL 28.18-6-12

1790 DODGE ROAD
OWNER: SANDRA MACK
ZONE: SA
SBL 28.18-6-13

1780 DODGE ROAD
OWNER: MATTHEW SMYNTK
ZONE: SA
SBL 28.18-6-14

1770 DODGE ROAD
OWNER: MARLENE D WAGNER
ZONE: SA
SBL 28.18-6-15.2

1815 DODGE ROAD
OWNER: SHIRLEY PITZ
ZONE: SA
SBL 42.00-1-46

1717 DODGE ROAD REAR
OWNER: TOWN OF AMHERST
ZONE: SA
SBL 42.00-1-45.1

1765 DODGE ROAD
OWNER: NICHOLAS ROCKWELL
ZONE: SA
SBL 42.00-1-45.2



STORM WATER MANAGEMENT PLAN

SCALE: 1"=40'

PROPOSED STORM/UTILITY LEGEND

PROPOSED STORM SEWER — ST —

PROPOSED SANITARY SEWER — 6" SA —

PROPOSED WATERLINE — 1" W —

PROPOSED CATCH BASIN ■ CB

PROPOSED MANHOLE ● MH

PROPOSED GATE VALVE ⊕ GV

NOTE: FOR PROPOSED VALVE BOXES, CLEANOUTS, ETC., INSTALL A 3,000 PSI CONCRETE COLLAR AROUND THE ITEM AT GRADE. THE COLLAR SHALL BE A MINIMUM OF 6" WIDER, ON ALL SIDES, THAN THE BOX, CLEANOUT, ETC. THE COLLAR SHALL BE A MINIMUM OF 6" THICK.

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS. CARMINA WOOD DESIGN ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

40' 0 40 80FT.

TOWN OF AMHERST APPROVAL BOX:



DRAWING NAME:
Storm Water
Management Plan

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-300

Project No: 20.247

Single Family Subdivision

1789 Dodge Road
Amherst, New York

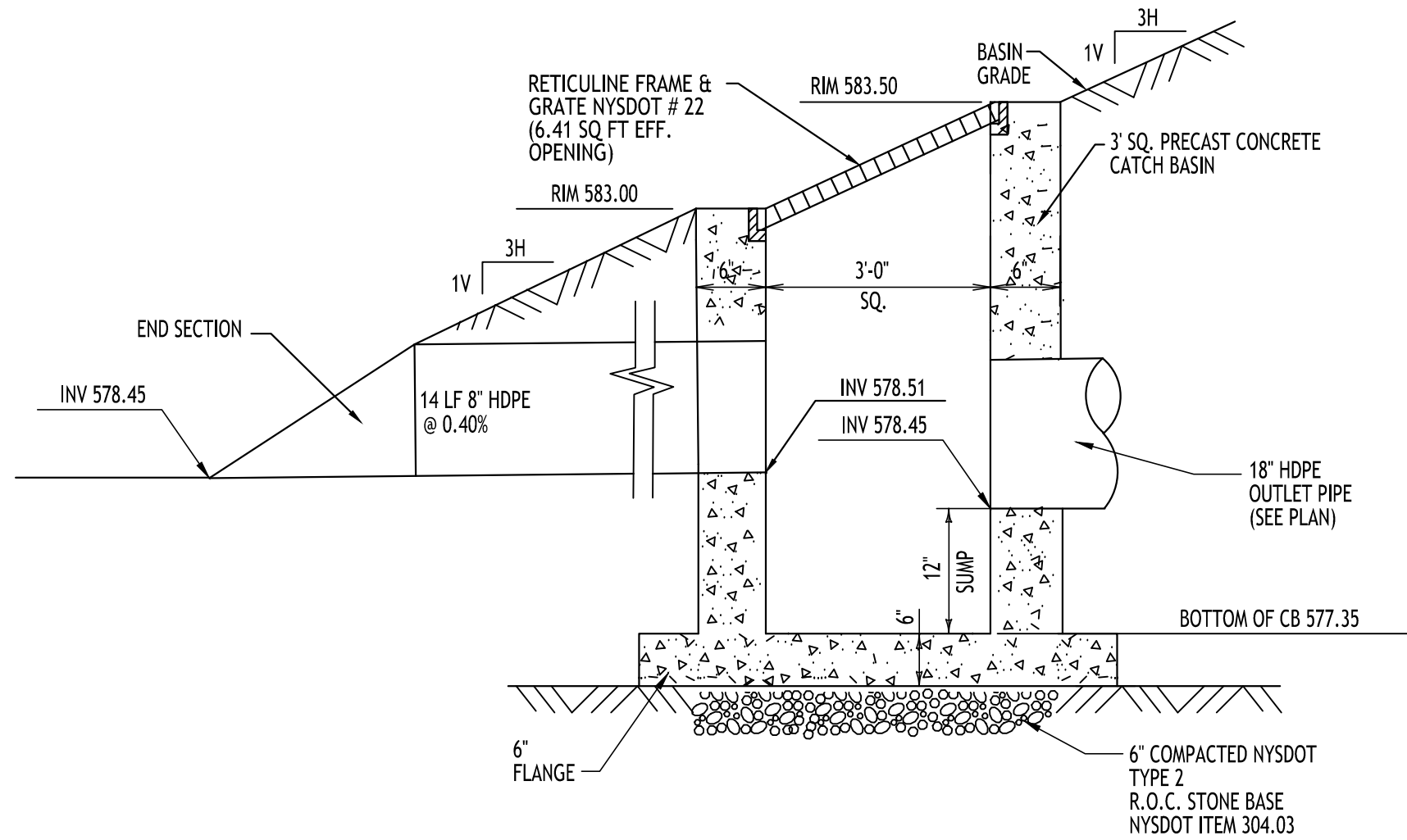
CARMINA WOOD

DESIGN

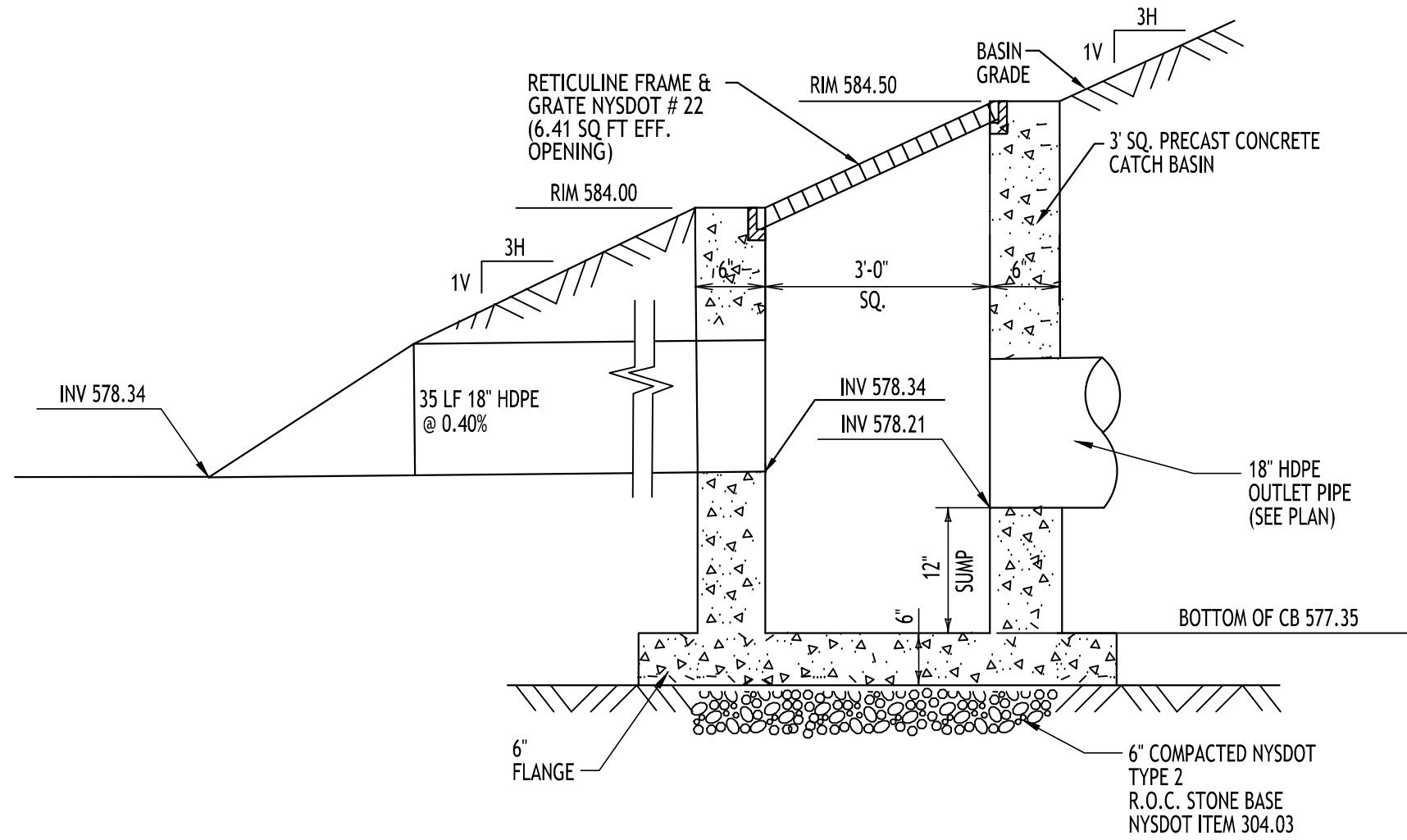
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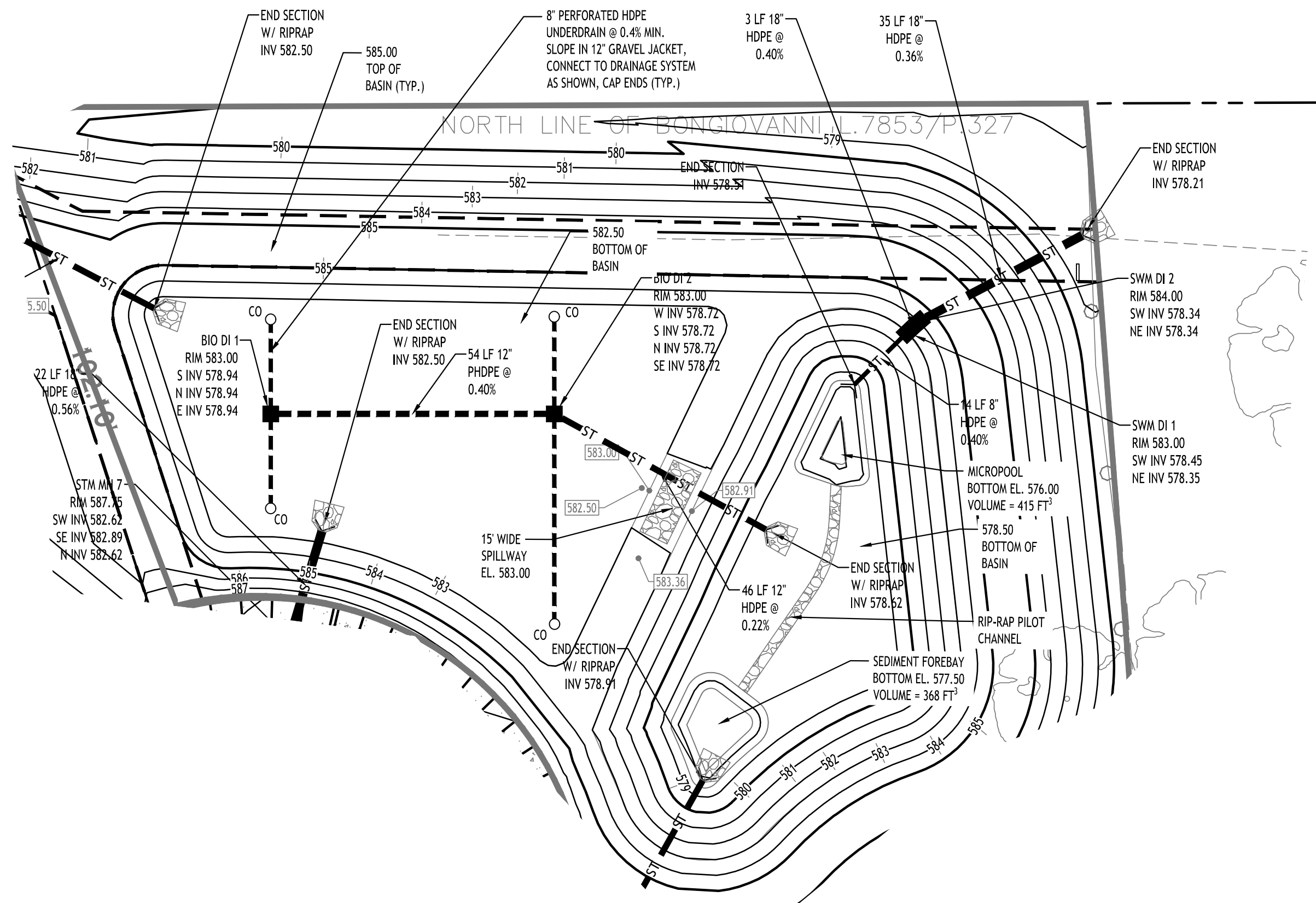
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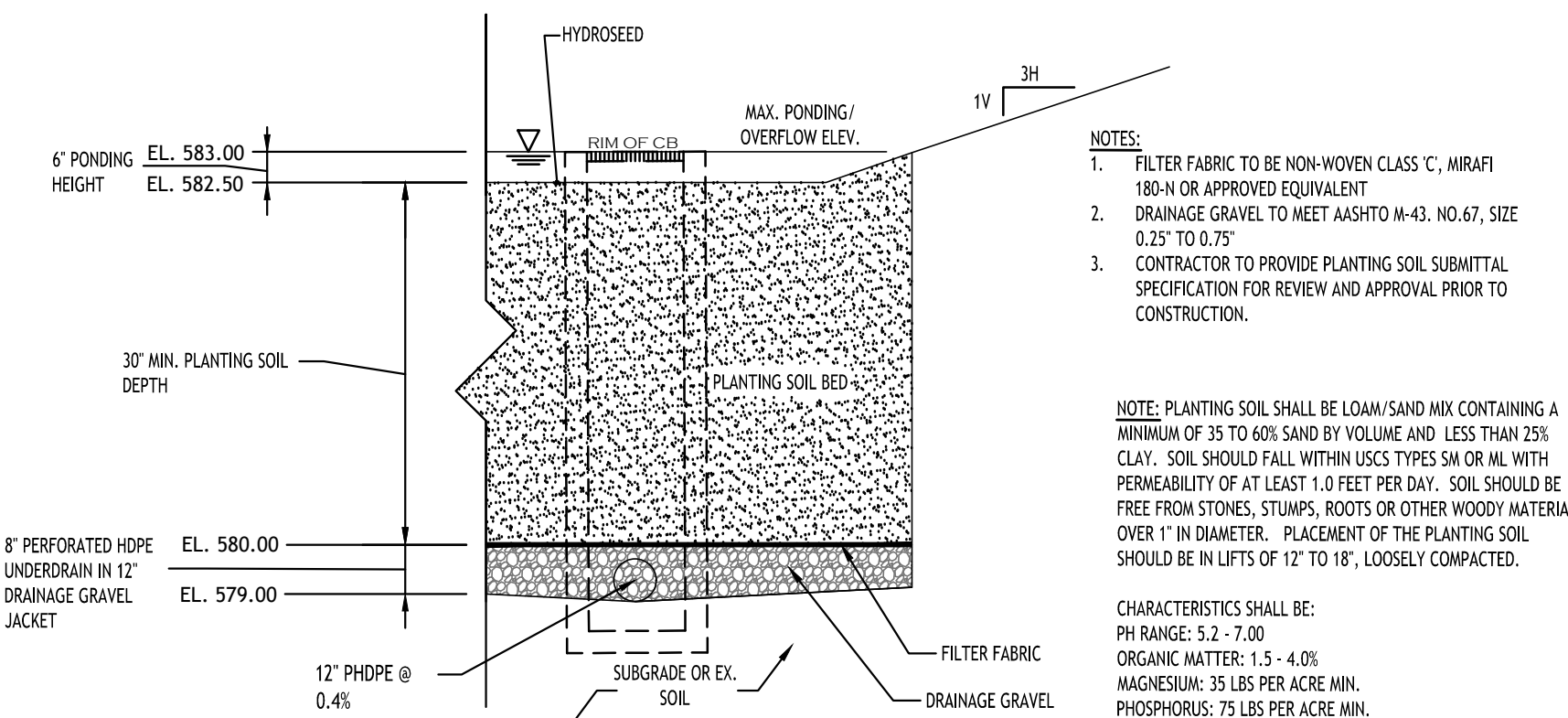
RETENTION BASIN OUTLET STRUCTURE - SWM DI 1
N.T.S.



RETENTION BASIN OUTLET STRUCTURE - SWM DI 2
N.T.S.



Detention Basin Plan
SCALE: 1"=20'

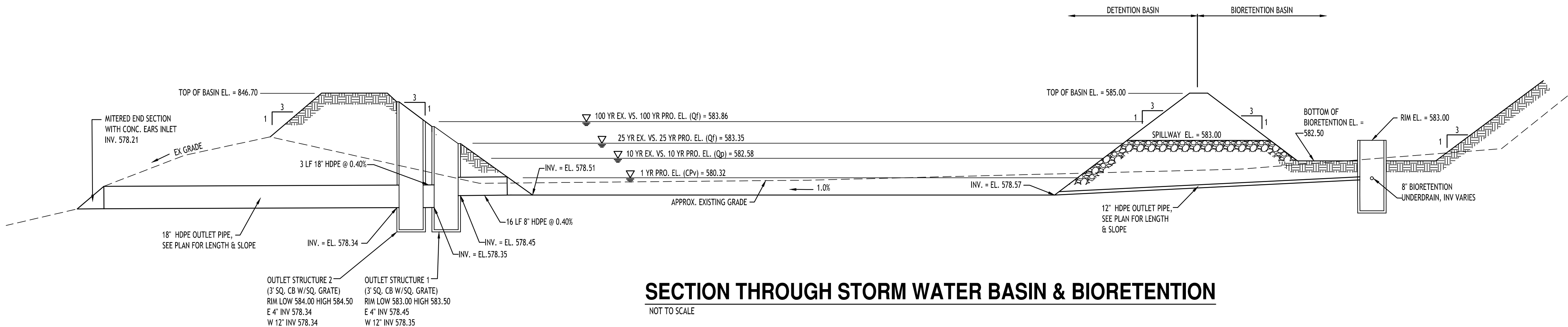


BIORETENTION AREA - TYPICAL SECTION

BIO-RETENTION AREA SEEDING SPEC (Northeast Wetland Grass Seed Mix):

| Seed Mixture | Variety | Percent by No. of Seeds |
|--------------------|-------------------------|-------------------------|
| Creeping Bentgrass | Agrostis stolonifera | 63.0 |
| Rough Bluegrass | Poa trivialis | 17.0 |
| Meadow Foxtail | Alopecurus arundinaceus | 11.0 |
| Annual Ryegrass | Lolium multiflorum | 4.5 |
| Deertongue | Panicum clandestinum | 4.5 |

CHARACTERISTICS SHALL BE:
PH RANGE: 5.2 - 7.00
ORGANIC MATTER: 1.5 - 4.0%
MAGNESIUM: 35 LBS PER ACRE MIN.
PHOSPHORUS: 85 LBS PER ACRE MIN.
SOLUBLE SALTS: 500 PPM
CLAY: 10 TO 25%
SILT: 30 TO 55%
SAND: 35 TO 60%



SECTION THROUGH STORM WATER BASIN & BIORETENTION
NOT TO SCALE

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION
PROVIDED BY OTHERS, CARMINA WOOD MORRIS, D.P.C.
ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

20 0 20 40ft.

CARMINA WOOD
DESIGN
Buffalo | Utica | Greensboro

Single Family Subdivision
1789 Dodge Road
Amherst, New York

| REVISIONS: | No. | Description | Date |
|------------|-----|---------------------------|-----------|
| 1 | 5 | Rev. Per Town Comments | 4/16/2025 |
| 2 | 6 | Rev. Permanent Open Space | 5/13/2025 |
| 3 | 7 | Rev. Per Town Comments | 5/23/2025 |
| 4 | 8 | Rev. Per Town Comments | 6/10/2025 |
| 5 | 9 | Rev. Per Town Comments | 7/01/2025 |
| 6 | 10 | Rev. Per Town Comments | 7/25/2025 |



TOWN OF AMHERST APPROVAL BOX:

DRAWING NAME:
Detention Basin
Plan

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

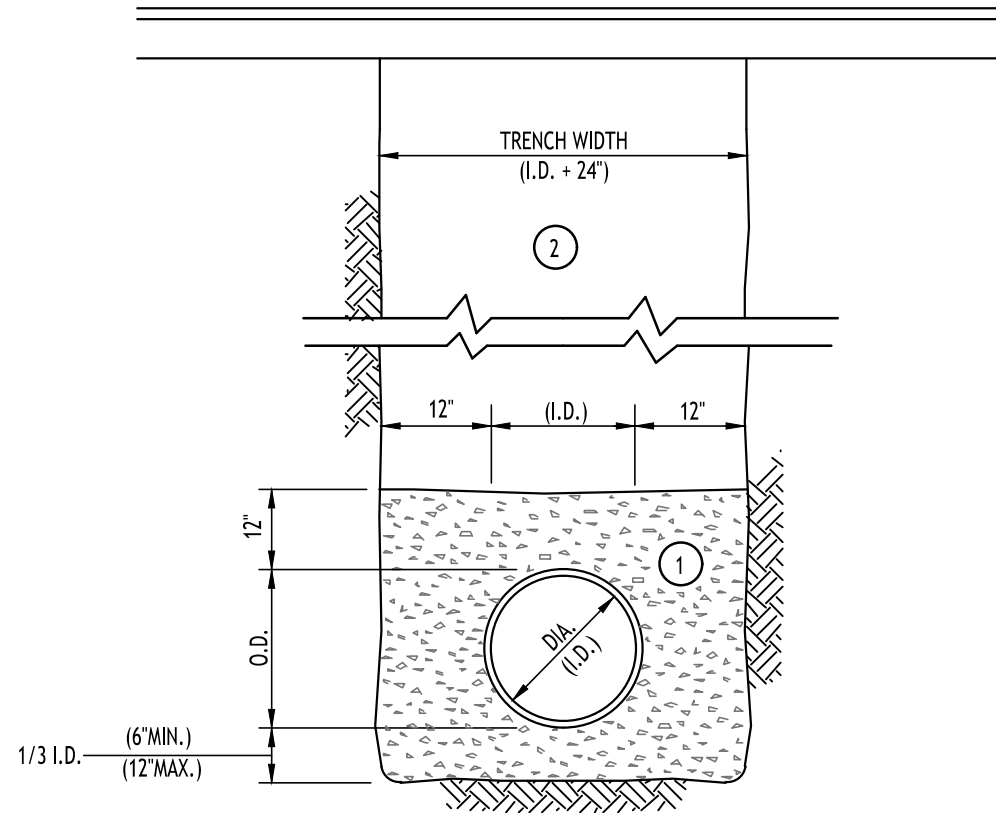
DRAWING NO.

C-301

Project No: 20.247

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- NOTES:
- PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 - TRENCHING OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING.
 - TRENCH DETAILS ARE ONLY SHOWN FOR PURPOSES OF MATERIAL PLACEMENT AND MAXIMUM PAY LIMITS.
 - AN OSHA APPROVED MOVABLE PROTECTIVE TRENCH SHIELD SHALL BE USED IN ALL UNSHEETED TRENCH AREAS.

MATERIALS

PIPE BEDDING MATERIAL (NYS DOT 1985 EDITION)

- 1 NO. 1 CRUSHED STONE OR CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYS DOT SECTION 703-02. THE MATERIAL SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN ONE INCH AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6' LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

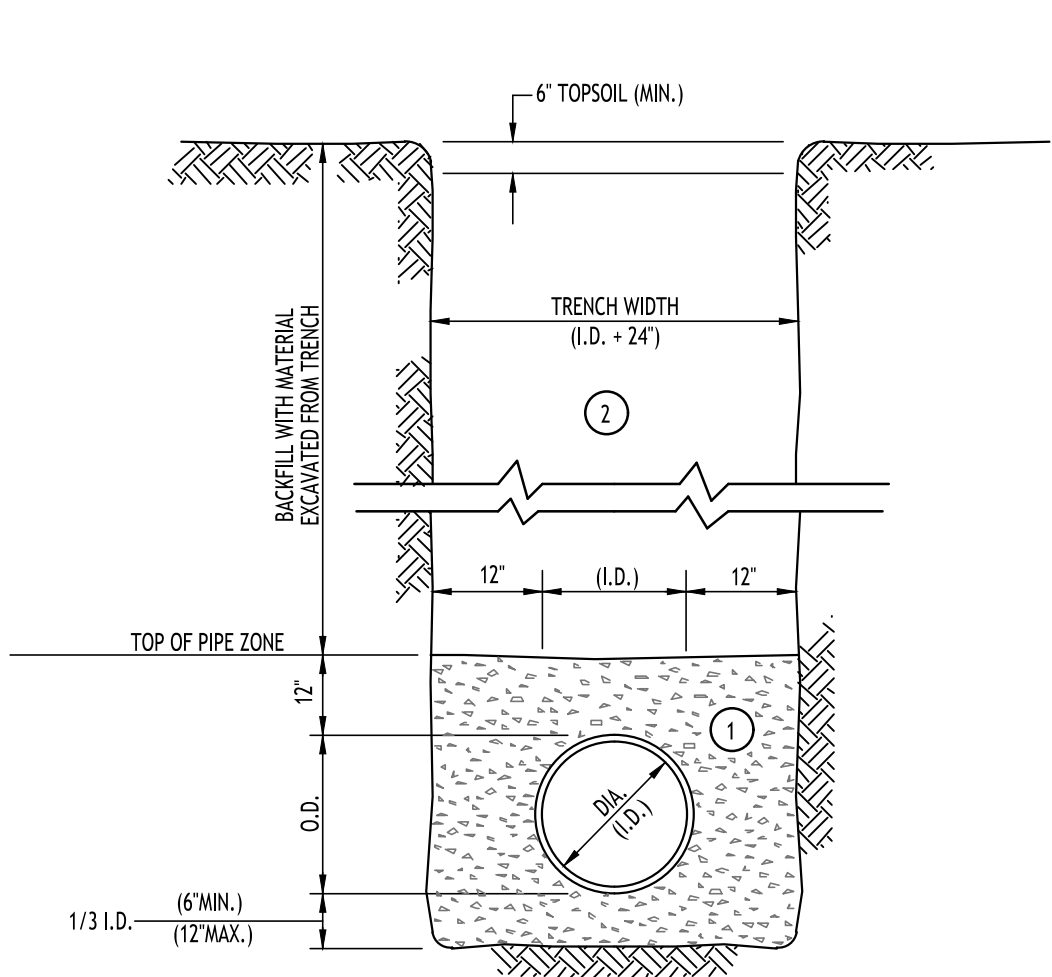
NO SLAG SHALL BE ALLOWED FOR MATERIAL

- 2 TYPE 2 CRUSHED STONE OR CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYS DOT SECTION 304-2.02 TYPE 2. THE MATERIAL SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN TWO INCHES AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6' LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

NO SLAG SHALL BE ALLOWED FOR MATERIAL

STORM SEWER TRENCH SECTION
IN PAVED AREAS

NOT TO SCALE



- NOTES:
- PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 - TRENCHING OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING.
 - TRENCH DETAILS ARE ONLY SHOWN FOR PURPOSES OF MATERIAL PLACEMENT AND MAXIMUM PAY LIMITS.
 - AN OSHA APPROVED MOVABLE PROTECTIVE TRENCH SHIELD SHALL BE USED IN ALL UNSHEETED TRENCH AREAS.

MATERIALS

PIPE BEDDING MATERIAL (NYS DOT 1985 EDITION)

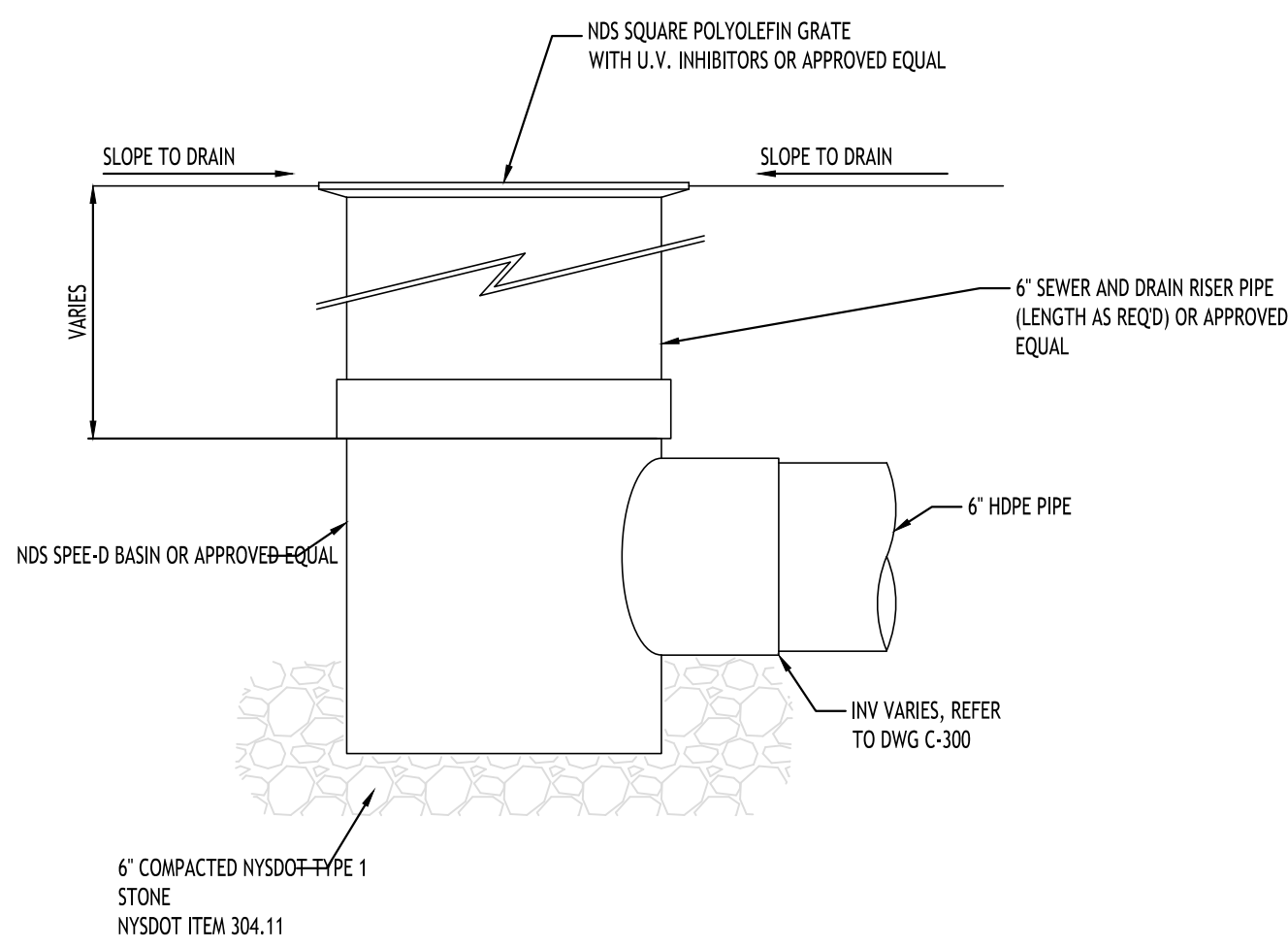
- 1 NO. 1 CRUSHED STONE OR CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYS DOT SECTION 703-02. THE MATERIAL SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN ONE INCH AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6' LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

NO SLAG SHALL BE ALLOWED FOR MATERIAL

- 2 BACKFILL MATERIAL SHALL BE NATIVE SOIL CONTAINING NO UNSUITABLE MATERIAL COMPACTED IN 6' LIFTS.

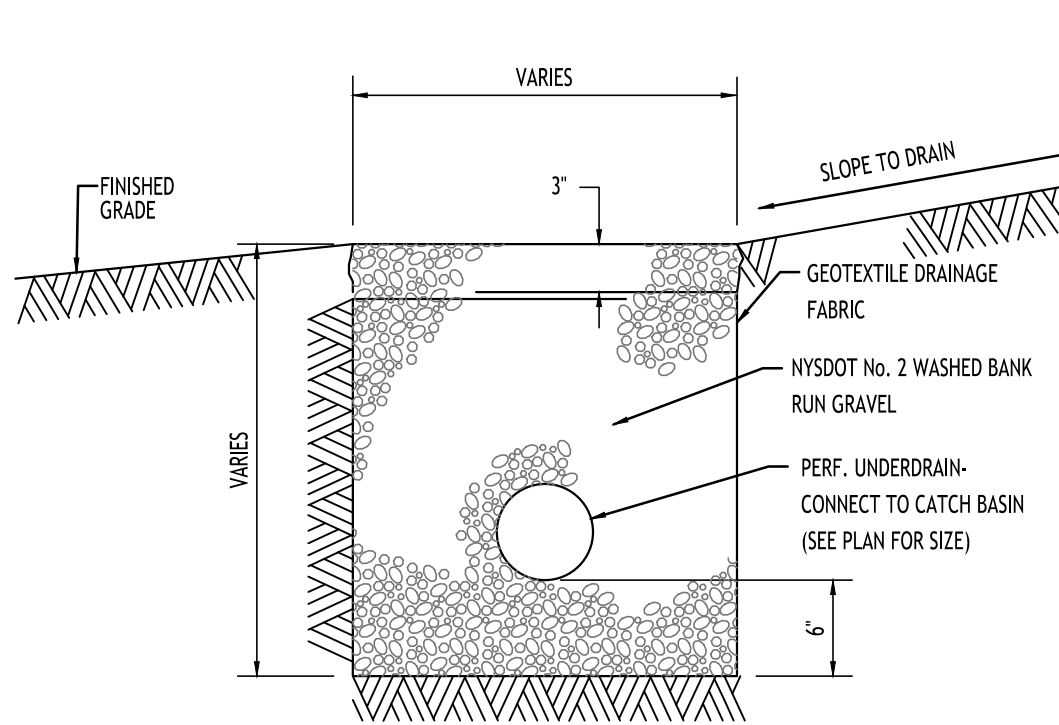
STORM SEWER TRENCH SECTION
IN UNPAVED AREAS

NOT TO SCALE



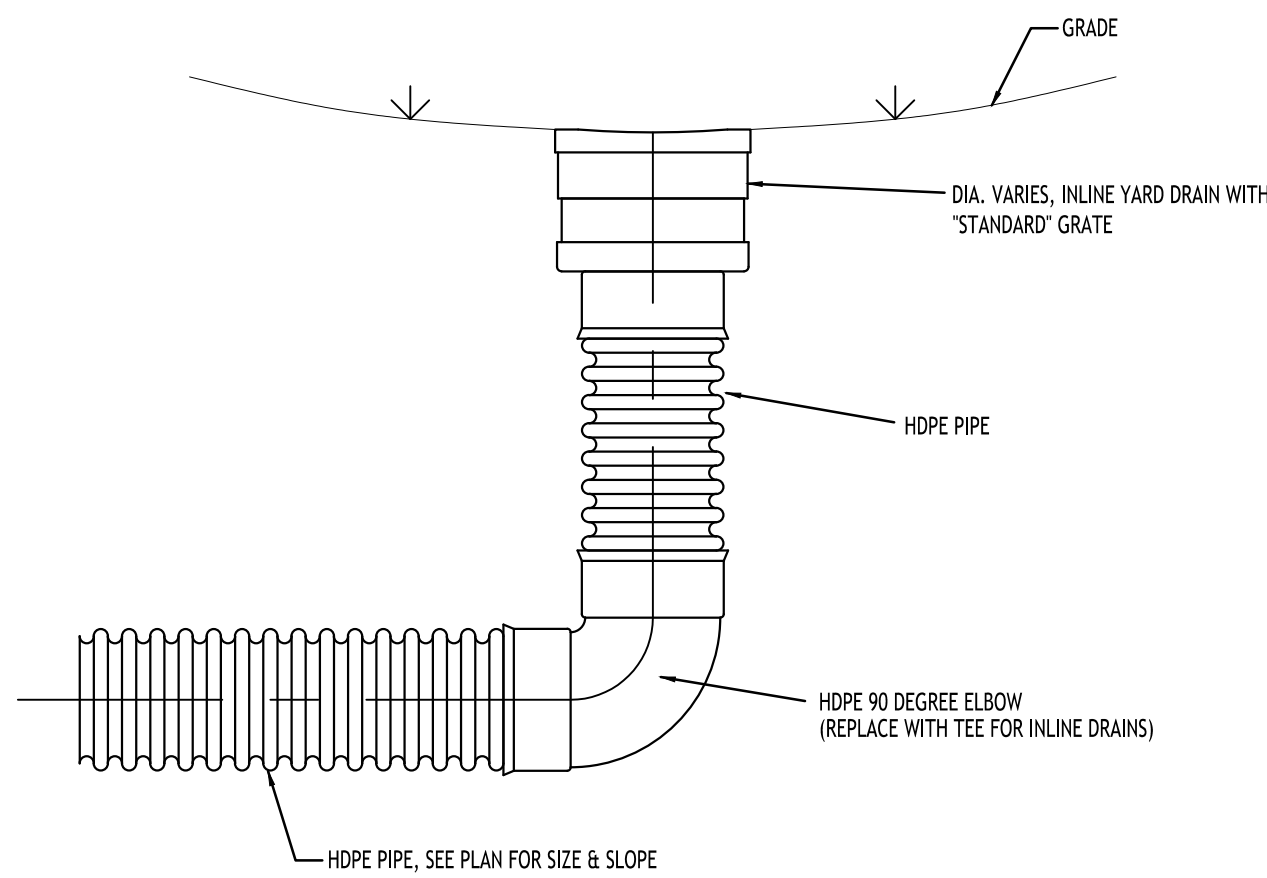
TYPICAL AREA DRAIN DETAIL

NOT TO SCALE



FRENCH DRAIN DETAIL

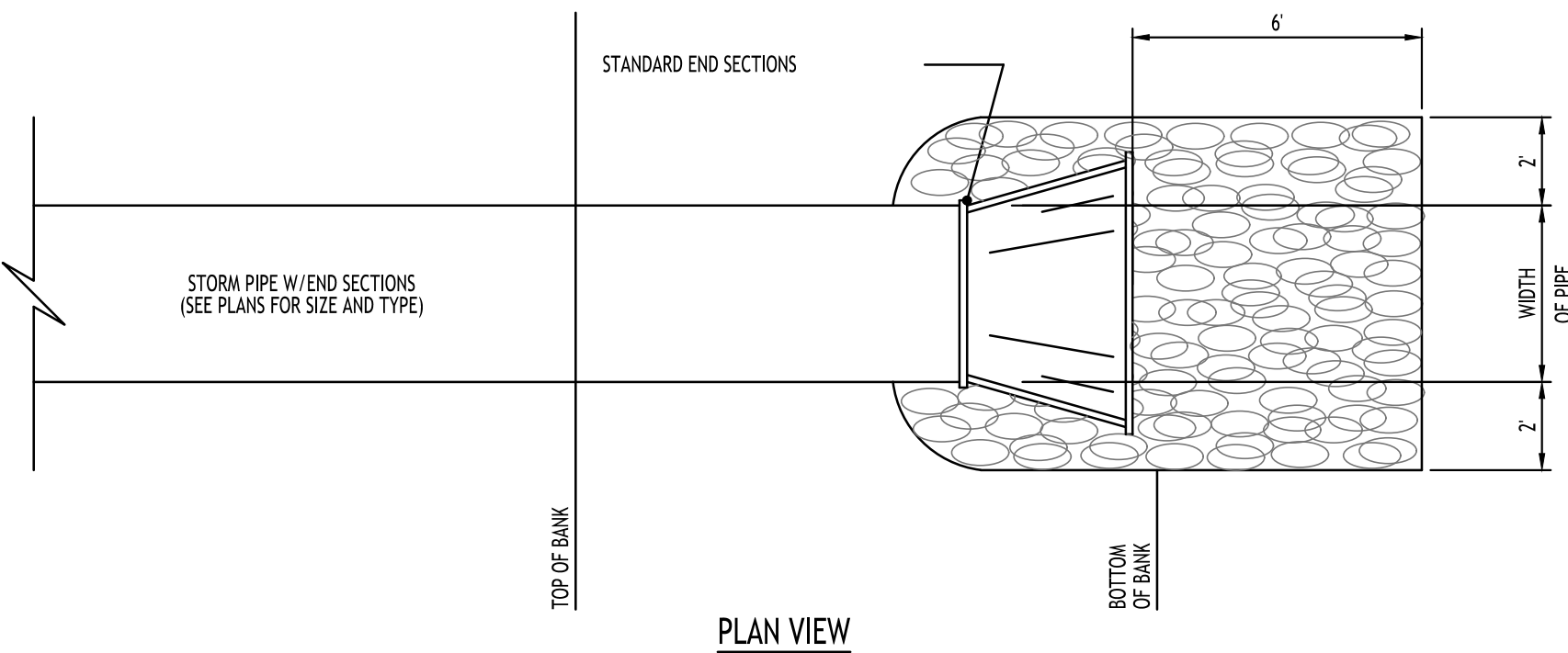
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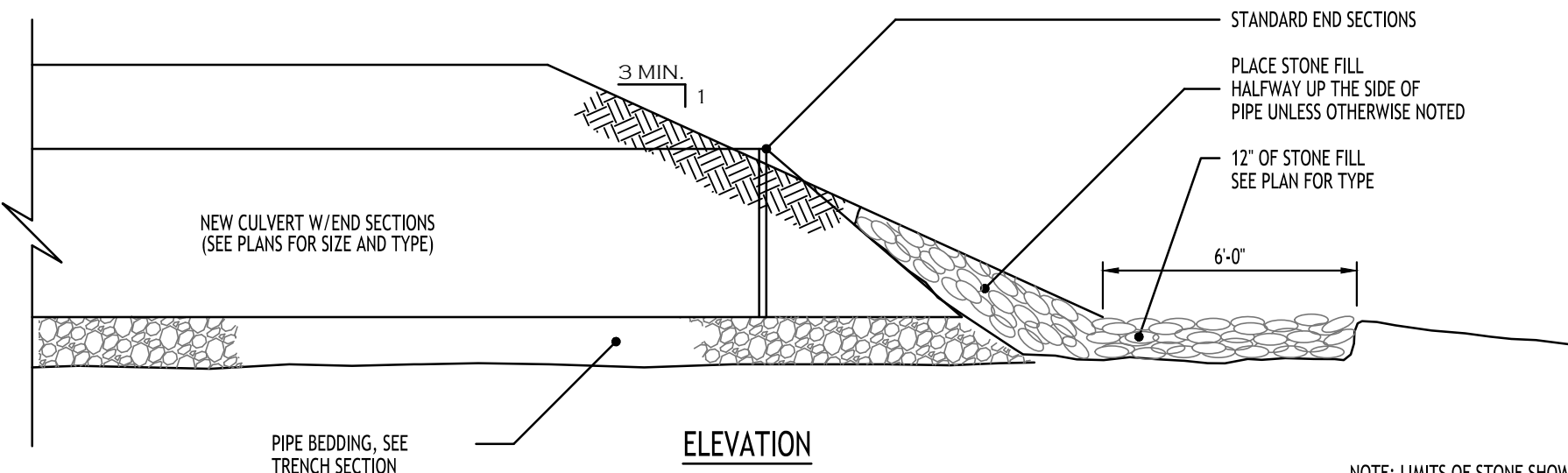
NOTE:
SEE TYPICAL TRENCH SECTION FOR BEDDING REQUIREMENTS

TYPICAL YARD DRAIN DETAIL

NOT TO SCALE



PLAN VIEW



ELEVATION

NOTE: LIMITS OF STONE SHOWN ARE MINIMUMS, PLAN MAY INDICATE GREATER LIMITS

TYPICAL PIPE OUTLET W/ END SECTION & RIP RAP

NOT TO SCALE

TOWN OF AMHERST APPROVAL BOX:



DRAWING NAME:

Storm Drainage
Details

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-302

Project No: 20.247

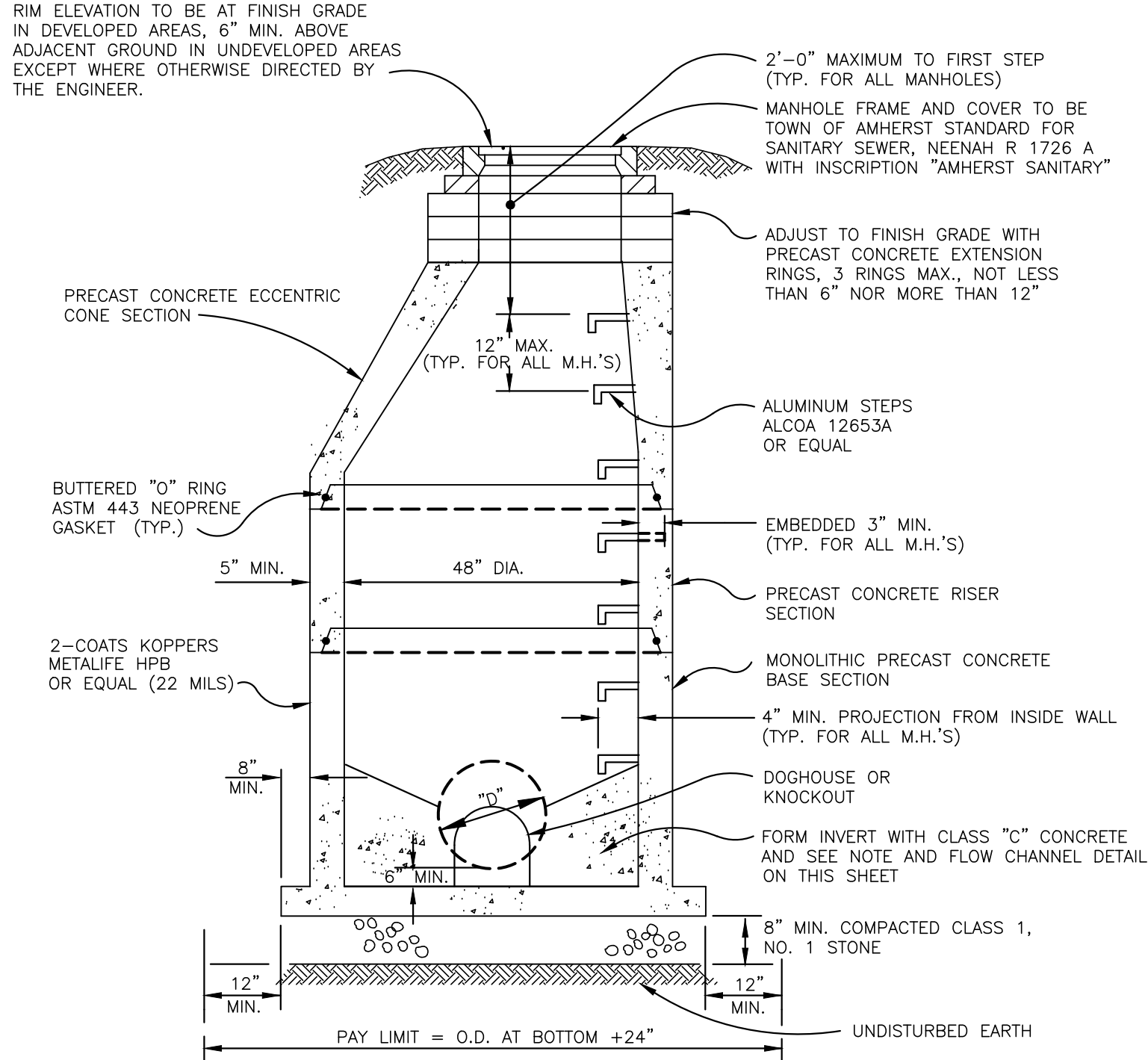
Single Family Subdivision

1789 Dodge Road
Amherst, New York

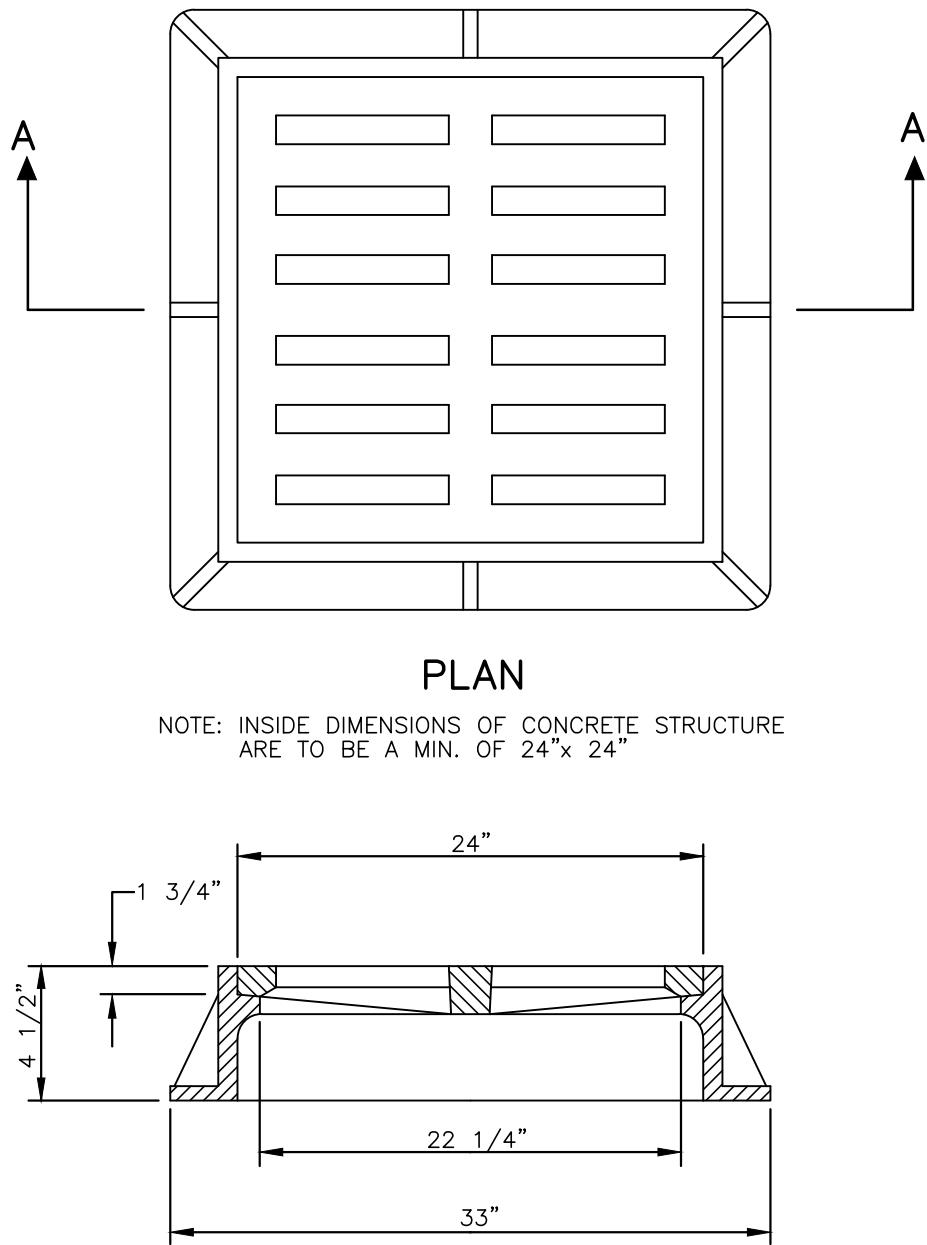
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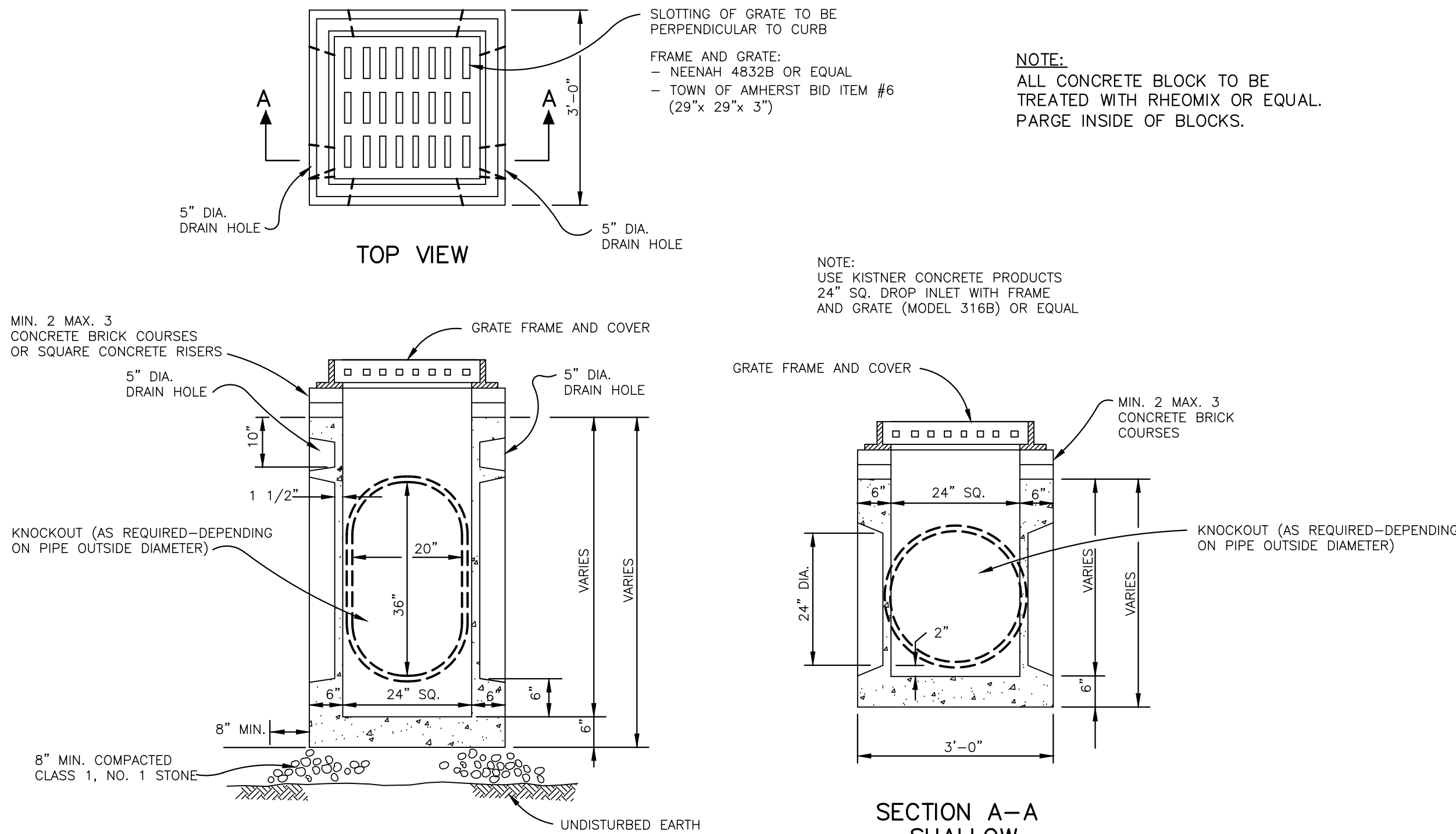
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STANDARD STORM MANHOLE
NOT TO SCALE

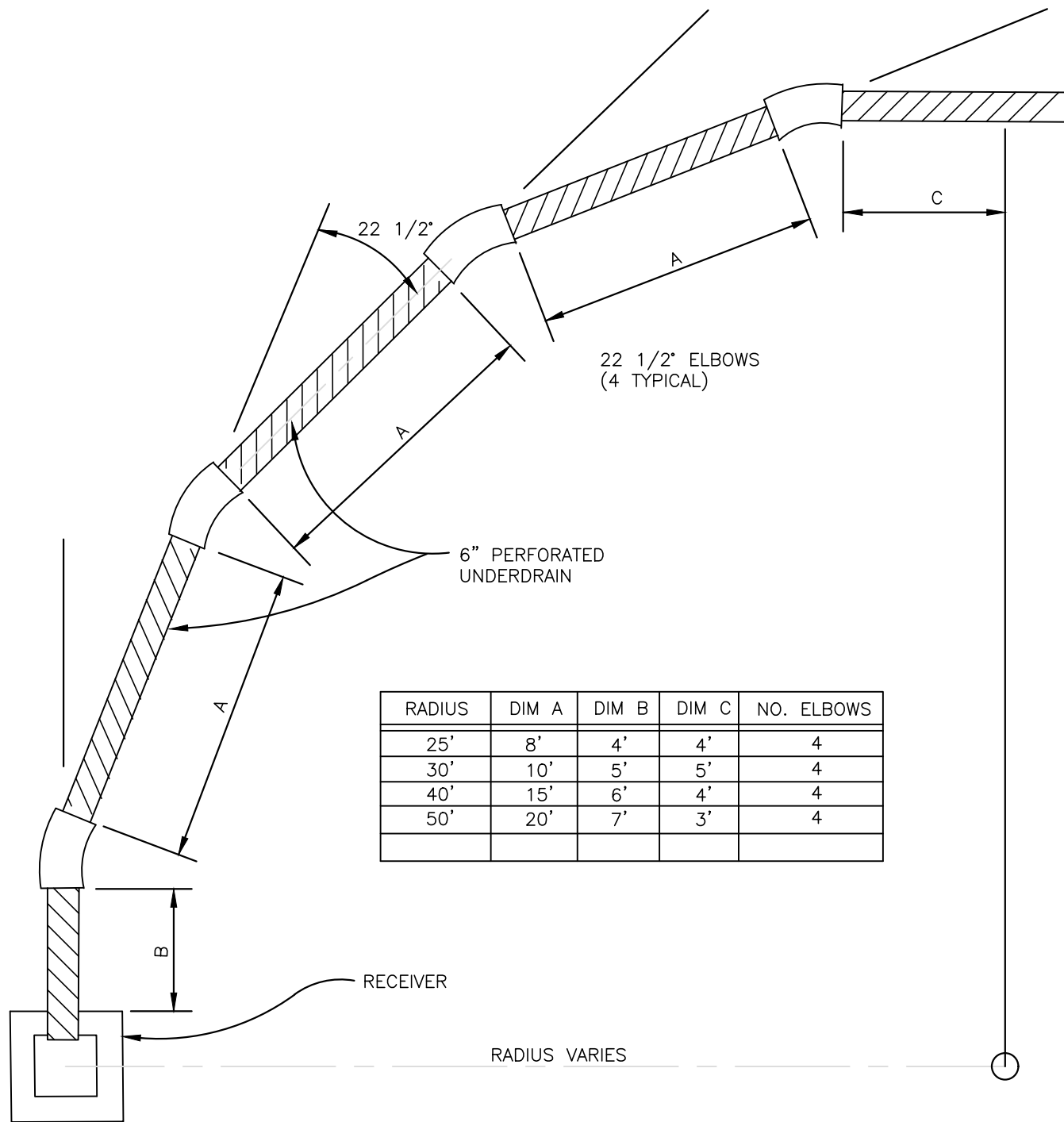


CAST IRON FRAME AND GRATE
B (NEENAH R3433 OR EQUAL)
NOT TO SCALE

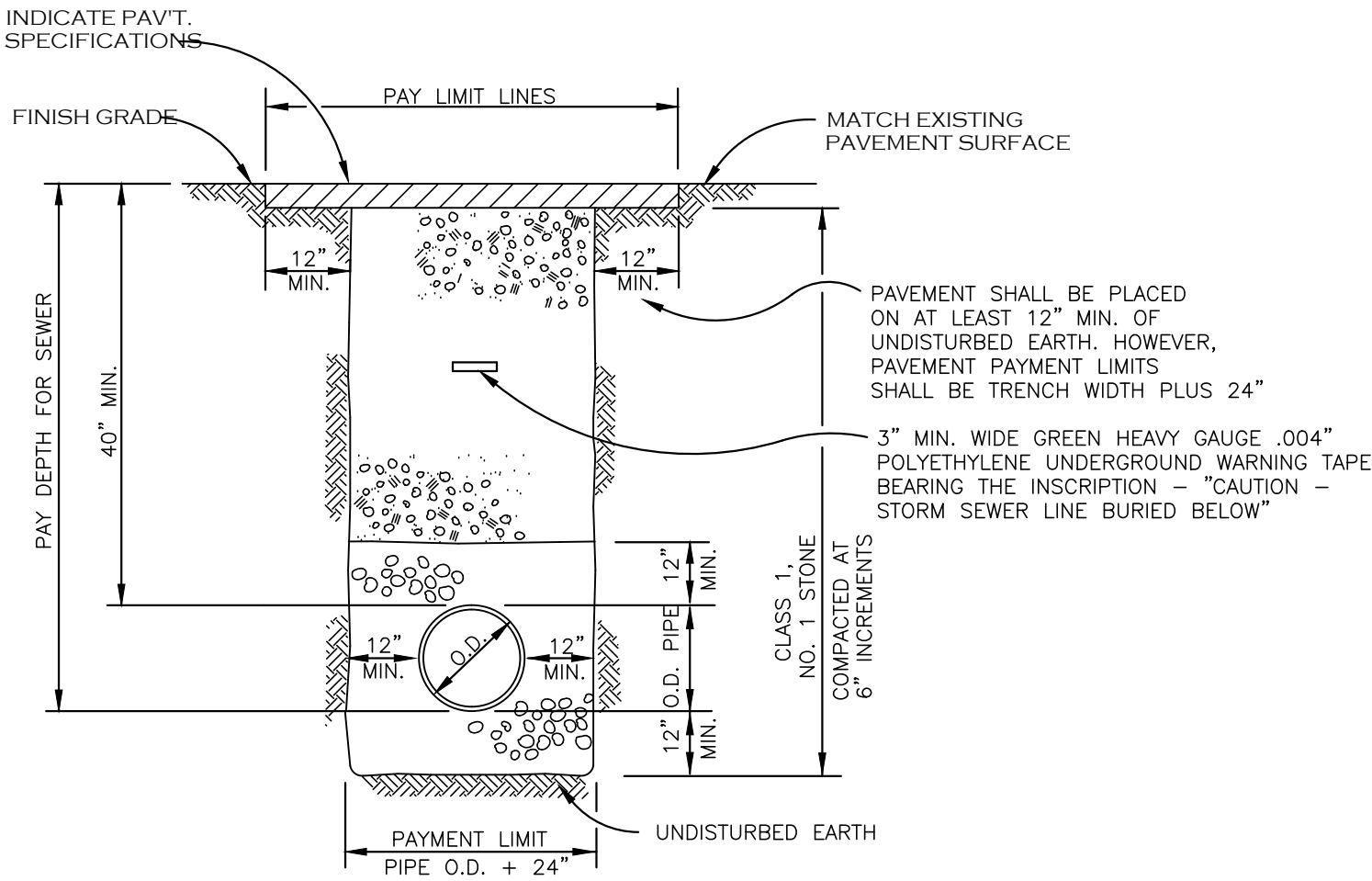


SECTION A-A
STANDARD
316B

STANDARD PRECAST CONCRETE
DROP INLET
NOT TO SCALE

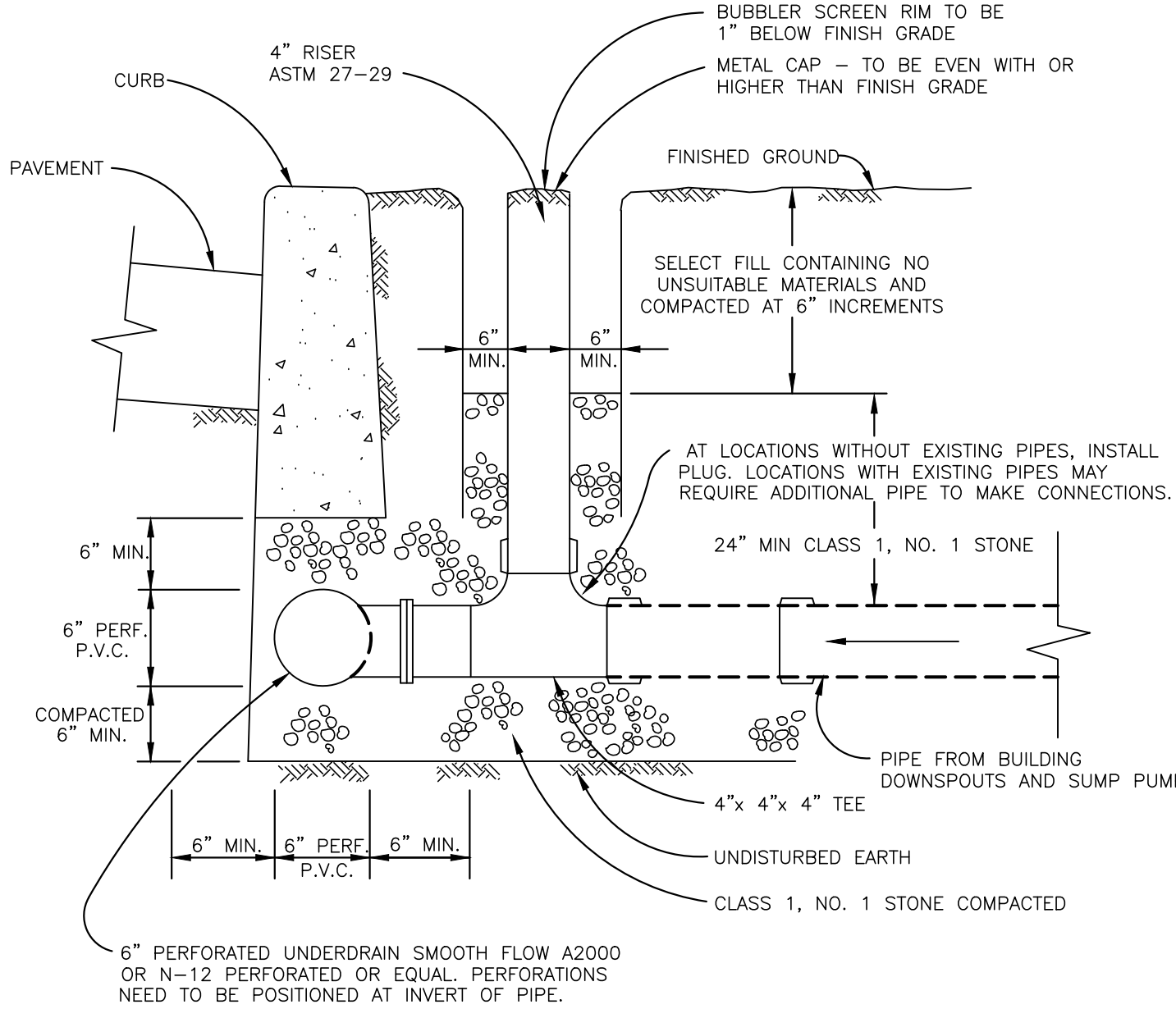


TYPICAL UNDERDRAIN
INSTALLED AROUND CURVE
NOT TO SCALE



NOTE:
WHERE THE CONTRACTOR EXCAVATES BEYOND THE PAY LIMITS
SHOWN: SELECT FILL AND PAVEMENT, SIDEWALK & DRIVEWAY
REPLACEMENT OUTSIDE THE PAY LIMITS SHALL BE FURNISHED
AND PLACED AT THE CONTRACTOR'S EXPENSE (TYP.)

TYPICAL TRENCH DETAIL
TOWN ROAD CROSSING
NOT TO SCALE



CURB BUBBLER DETAIL
NOT TO SCALE

TOWN OF AMHERST APPROVAL BOX:



DRAWING NAME:
Storm Drainage
Details

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-303

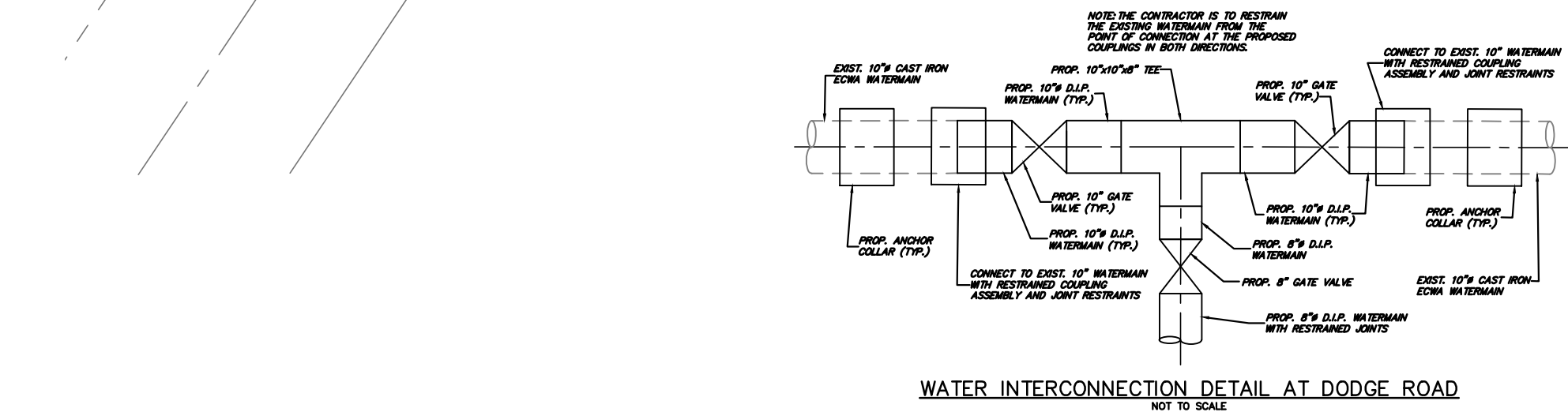
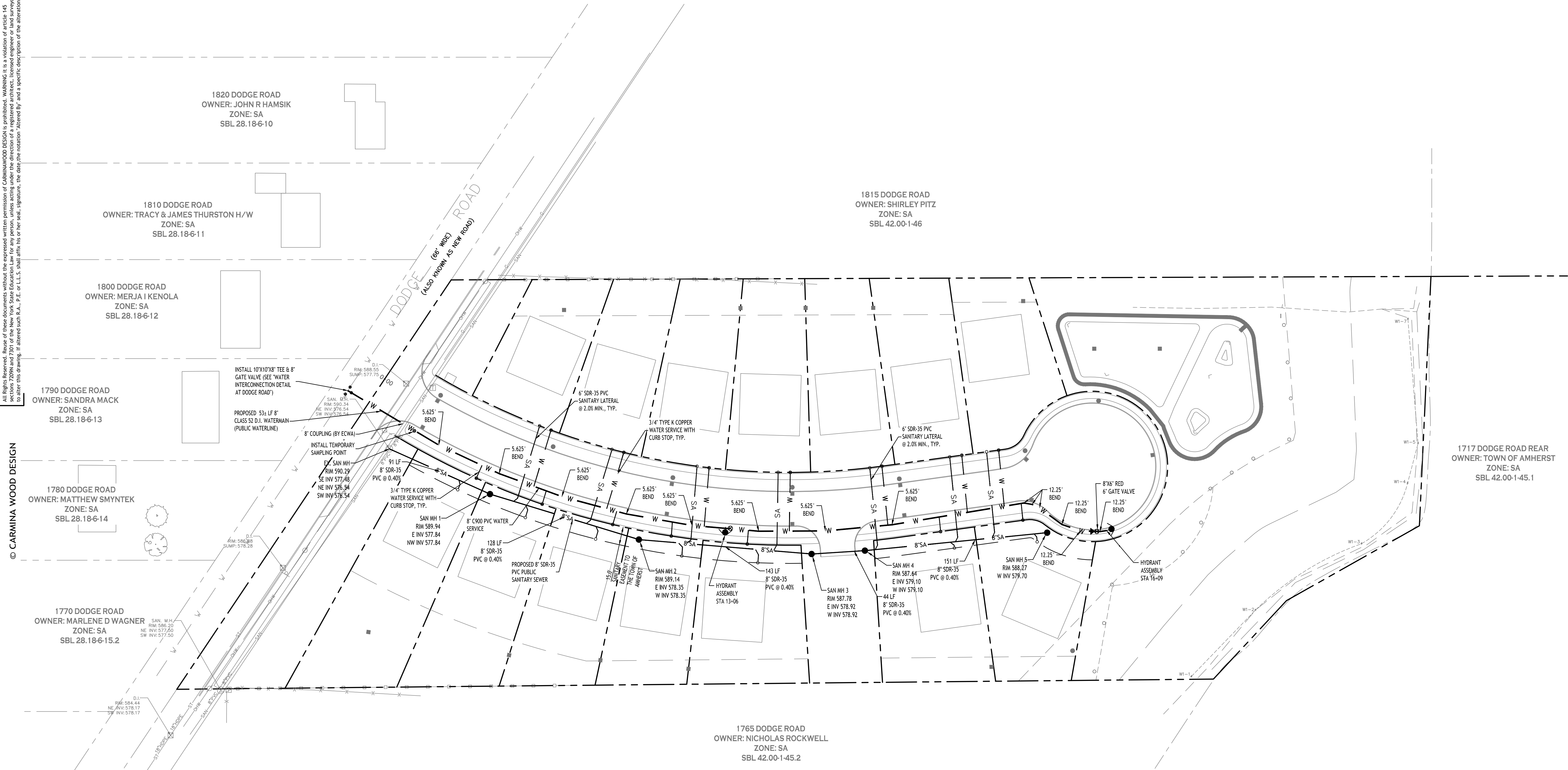
Project No: 20.247

Single Family Subdivision
1789 Dodge Road
Amherst, New York

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UTILITY PLAN
SCALE: 1"=40'

PROPOSED STORM/UTILITY LEGEND

- PROPOSED STORM SEWER — ST —
PROPOSED SANITARY SEWER — 6" SA —
PROPOSED WATERLINE — 1" W —
PROPOSED CATCH BASIN ■ CB
PROPOSED MANHOLE ● MH
PROPOSED GATE VALVE ⊕ GV

NOTE: FOR PROPOSED VALVE BOXES, CLEANOUTS, ETC., INSTALL A 3,000 PSI CONCRETE COLLAR AROUND THE ITEM AT GRADE. THE COLLAR SHALL BE A MINIMUM OF 6" WIDER, ON ALL SIDES, THAN THE BOX, CLEANOUT, ETC. THE COLLAR SHALL BE A MINIMUM OF 6" THICK.

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TOWN OF AMHERST APPROVAL BOX:



DRAWING NAME:
Utility Plan

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

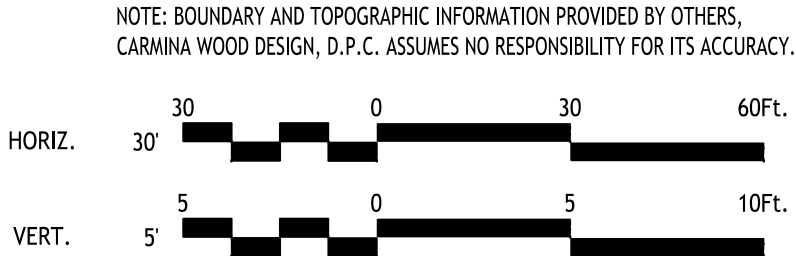
C-400

Project No: 20.247

Single Family Subdivision
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Amherst, New York

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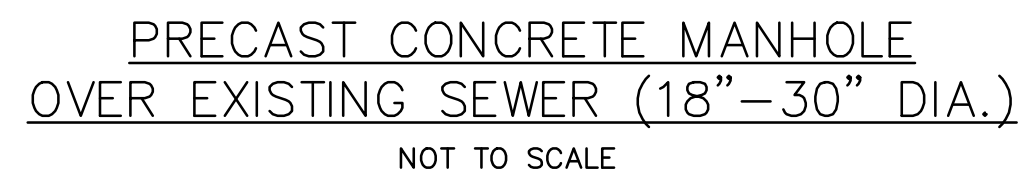
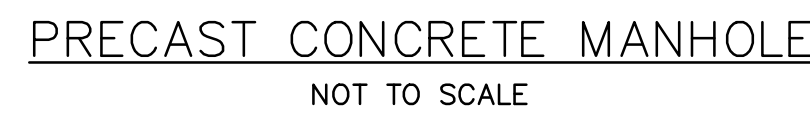
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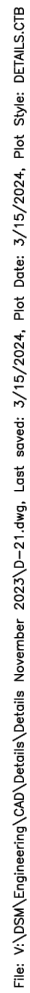
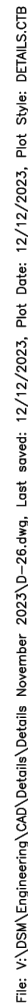
SCALE: HORIZ. 1"=30'
VERT. 1"=5'

C-401
Project No: 20.247

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Project No: 20.247



(A) LEAKAGE TESTS

- (B) INFILTRATION TEST CRITERIA FOR USE

01. THIS TEST METHOD MAY ONLY BE USED WHEN GROUND WATER LEVELS ARE AT LEAST TWO (2) FEET ABOVE THE TOP OF THE PIPE FOR THE ENTIRE LENGTH OF THE SECTION TO BE TESTED DURING THE ENTIRE PERIOD OF THE TESTS.
02. GROUND WATER LEVELS MAY BE MEASURED IN AN OPEN TRENCH OR IN STANDPIPES PREVIOUSLY PLACED IN BACKFILLED TRENCHES DURING BACKFILLING.
03. THE NUMBER OF STANDPIPES REQUIRED AND LOCATION OF THE SAME ARE TO BE AS ORDERED BY THE ENGINEER. STANDPIPES ARE TO BE OF ANHPI MATERIAL BUT MUST BE OF SUCH DIAMETER (2" MINIMUM) AS TO PERMIT THE INSERTION OF A RULE OR LEVEL ROD. CRUSHED STONE SHALL BE PLACED AROUND THE LOWER OPEN ENDS OF THE STANDPIPES.
04. STANDPIPES ARE TO BE REMOVED AT THE SATISFACTORY COMPLETION OF THE TESTS.
05. IF IN LIEU OF STANDPIPES, THE TRENCH IS TO BE LEFT OPEN FOR GROUND WATER OBSERVATION, THE LENGTH OF UNBACKFILLED TRENCH AT ANY ONE TIME MAY HAVE TO BE LIMITED FOR REASONS OF SAFETY.

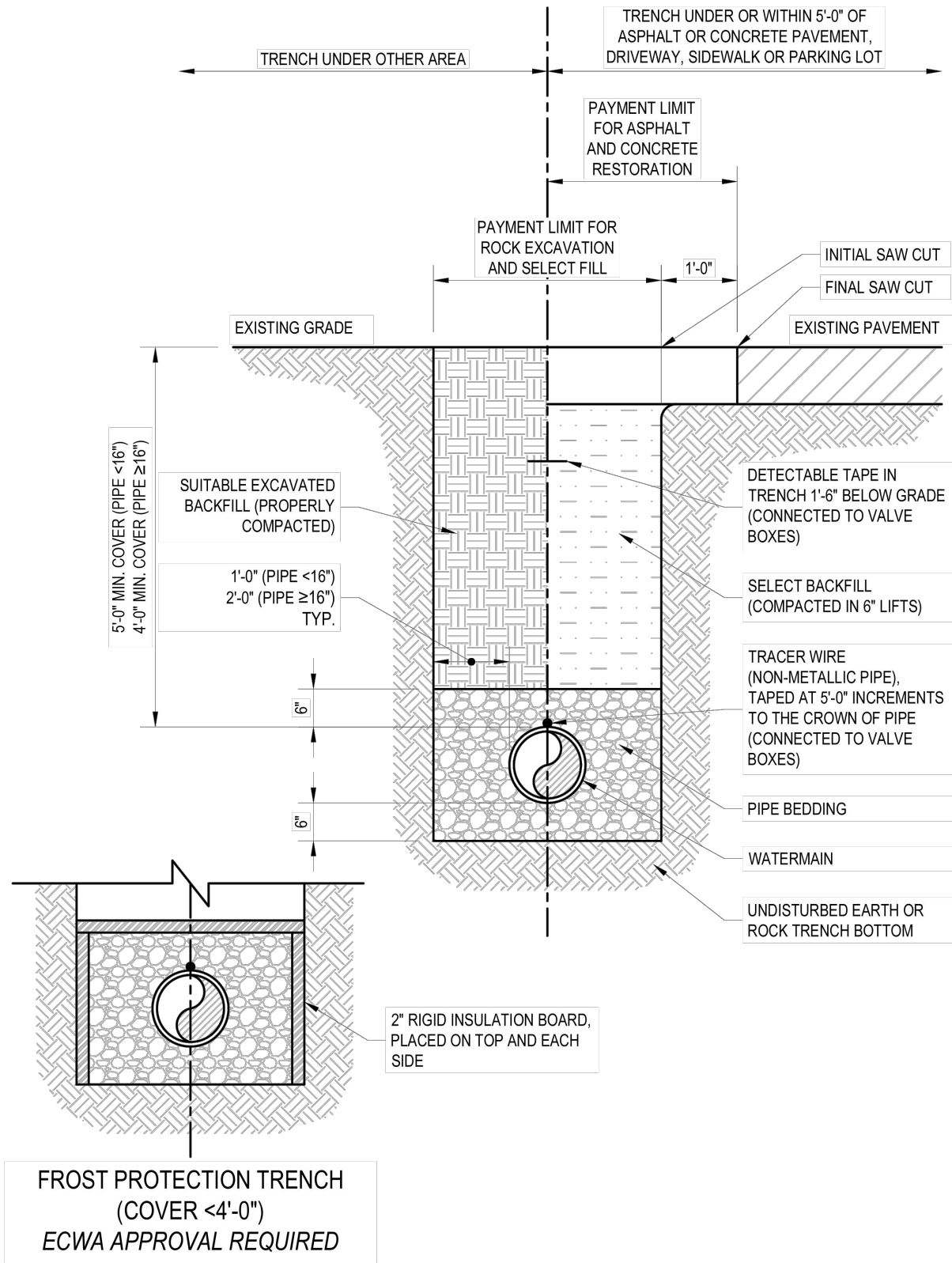
01. THIS TEST CONSISTS OF FILLING THE PIPE WITH WATER TO PROVIDE A HEAD OF AT LEAST TWO (2) FEET ABOVE THE TOP OF THE PIPE OR ABOVE GROUND WATER WHICHEVER IS HIGHER AT THE HIGHEST POINT OF THE PIPE LINE UNDER TEST, AND THEN MEASURING THE LOSS OF WATER TO MAINTAIN THE ORIGINAL LEVEL.
02. IN THIS TEST THE PIPE LINE MUST BE FILLED WITH WATER AND ALLOWED TO REMAIN SO FILLED FOR AT LEAST 24 HOURS PRIOR TO TAKING MEASUREMENTS.
03. REGARDING GROUND WATER MEASUREMENTS: SEE NOTES 02 THROUGH 05 ABOVE.
04. REGARDING THE TEST STANDPIPE: THERE MUST BE SOME POSITIVE METHOD OF RELEASING ENTRAPPED AIR IN THE SEWER PRIOR TO TAKING MEASUREMENTS.

01. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE GRAVITY SEWER PIPE. TESTS SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS.
02. NO PIPE SHALL EXCEED DEFLECTION OF 5%. DEFLECTION GAGE MAY BE BORROWED FROM THE TOWN ENGINEER FOR 8" AND 10" PIPE. THE DEFLECTION TEST MUST BE EXECUTED AFTER 30 DAYS OF PLACEMENT OF FINAL BACKFILL. THE TEST WILL ALSO BE DONE WITHOUT MECHANICAL PULLING DEVICES.

ALL MANHOLE STRUCTURES SHALL BE MADE ACCESSIBLE TO THE TOWN OF AMHERST TELEVISION/MAINTENANCE CREWS. THE CONTRACTOR AND/OR DEVELOPER SHALL PROVIDE A DRY, WELL COMPACTED, STABLE SURFACE FREE OF OBSTACLES, DEBRIS, AND POTENTIAL TRIP HAZARDS TO THE TOWN VEHICLES. SHOULD THE CONTRACTOR AND/OR DEVELOPER WISH TV INSPECTIONS DURING WET WEATHER/WET SOFT SOIL CONDITIONS, HE SHALL PROVIDE ALL NECESSARY GRANULAR BACKFILL, DISTRIBUTED AND COMPACTED TO SURELY ACCESS TO EACH MANHOLE. THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR COVERING DOWN ALL EXCAVATIONS AND DAMAGE ALONG WITH RESTORATION, SHOULD SUCH ACCESSWAYS FAIL.

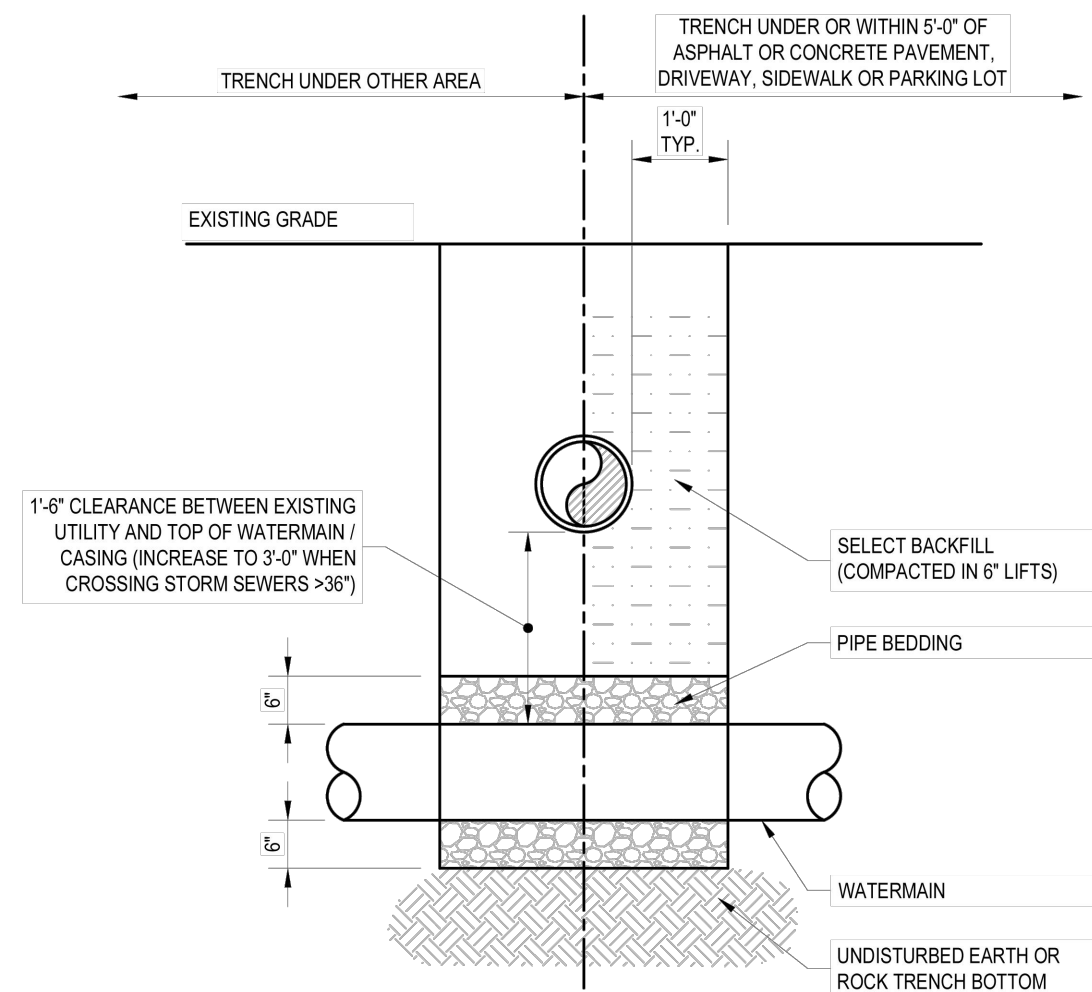
- THE CONTRACTOR SHALL COMPLY WITH THE TOWN OF AMHERST STANDARD DRAWINGS AND SPECIFICATIONS.
02. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER AND THE TOWN OF AMHERST ENG. DEPT. OF ANY HAZARDOUS SUBSTANCE ENCOUNTERED DURING THE CONSTRUCTION OF THE WORK. HE SHALL AT HIS EXPENSE, CONFORM TO ALL LAWS, RULES, REGULATIONS AND DIRECTIONS AS PROMULGATED BY THE UNITED STATES DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, THE NEW YORK STATE DEPARTMENT OF HEALTH AND ANY SUCH LOCAL RULES, ORDINANCES AND LAWS WHEN ENCOUNTERING OR WORKING WITH ANY SUCH HAZARDOUS SUBSTANCE.
03. THE CONTRACTOR SHALL COMPLY IN ALL RESPECTS TO THE INDUSTRIAL CODE PART (RULE NO.) 53 RELATING TO CONSTRUCTION, EXCAVATION AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES, AS ISSUED BY THE STATE OF NEW YORK DEPARTMENT OF LABOR, BOARD OF STANDARD AND APPEALS.
04. SINCE THE ERIE COUNTY WATER AUTHORITY OPERATES AND MAINTAINS THE EXISTING WATER LINES, THEY ARE TO BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION. ALL EXISTING VALVES ARE TO BE OPERATED BY THE ERIE COUNTY WATER AUTHORITY PERSONNEL.
05. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AHEAD OF THE PIPE LAYING OPERATION, SO THAT, IF MINOR ADJUSTMENTS MUST BE MADE IN ELEVATION AND/OR ALIGNMENT DUE TO INTERFERENCE FROM THESE UTILITIES, SAID CHANGES CAN BE MADE IN ADVANCE OF THE WORK.
06. WHERE SUCH FACILITIES ARE UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER, HE SHALL CERTIFY TO THE ENGINEERING DEPARTMENT OF THE TOWN OF AMHERST THAT SAID FACILITIES AS CONSTRUCTED WERE SUPERVISED BY HIMSELF (HERSELF) AND THAT THE WORKS HAVE BEEN FULLY COMPLETED IN ACCORDANCE WITH THE APPROVED ENGINEERING REPORTS, PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS AND ANY AND ALL ADDENDA TO SAME.
07. THE CONSTRUCTION OF THE FACILITIES SHALL BE UNDER THE SUPERVISION OF A PERSON OR FIRM QUALIFIED TO PRACTICE PROFESSIONAL ENGINEERING IN NEW YORK STATE UNDER THE EDUCATION LAW OF THE STATE, WHOEVER ENGINEERING SERVICES ARE REQUIRED BY SUCH LAW FOR SUCH PURPOSES.
08. A WRITTEN CERTIFICATE OF CONSTRUCTION COMPLIANCE, INCLUDING THE RESULTS OF HYDROSTATIC LEAKAGE TESTS, MADE BY THE PROFESSIONAL ENGINEER SUPERVISING THE CONSTRUCTION, SHALL BE SUBMITTED TO THE ERIE COUNTY DEPT. OF ENVIRONMENT PLANNING AND NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION WITHIN THIRTY (30) DAYS AFTER CONSTRUCTION COMPLETION.
09. UNSUITABLE MATERIALS SUCH AS FROZEN ORGANIC AND/OR VEGETABLE MATERIAL, DEBRIS, TRELLIS, LUMBER, LARGE STONES OR CLODS 6" OR LARGER), MUCK, PEAT, ORGANIC SILT WILL NOT BE ACCEPTABLE FILL AND CERTAIN MAN-MADE DEPOSITS OF INDUSTRIAL WASTE, SLUDGE OR LANDFILL MAY ALSO BE DETERMINED AS UNSUITABLE HAZARDOUS MATERIAL.
10. THE COMPACTION OF ALL MATERIALS WILL OCCUR AT 6" INCREMENTS.
11. VERIFICATION OF ALL EXISTING EASEMENTS IS THE RESPONSIBILITY OF THE DESIGN ENGINEER AND THEY MUST BE SHOWN ALONG WITH ALL PROPOSED EASEMENTS ON PLAN DRAWINGS.
12. SHOULD A FLUID CONDITION BE ENCOUNTERED AT THE TRENCH BOTTOM, THE CONTRACTOR IS TO INSTALL ADDITIONAL STONE CRADLE AS ORDERED BY THE ENGINEER.
13. ALL PIPE CROSSING UNDER PAVED AREAS ARE TO BE BACKFILLED TO SUBGRADE WITH COMPACTED SELECT MATERIAL TO FIVE (5) FEET OUTSIDE THE PAVEMENT EDGES.
14. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A QUALIFIED TREE EXPERT TO REMOVE, WHERE NECESSARY, BRANCHES WHICH INTERFERE WITH THE CONSTRUCTION AND AS FAR AS POSSIBLE FROM HAVING SUFFERED DAMAGE BY CONSTRUCTION ACTIVITIES. THE COST INVOLVED IN THE ABOVE IS TO BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.
15. SEWERS SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATERMAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN FOOT SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATERMAIN, PROVIDED THAT THE WATERMAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATERMAIN IS AT LEAST 18" (46CM) ABOVE THE TOP OF THE SEWER.
16. SEWERS CROSSING WATERMAINS SHALL BE LAID TO PROVIDE MINIMUM VERTICAL DISTANCE OF 18" (46CM) BETWEEN THE OUTSIDE OF A WATERMAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATERMAIN IS EITHER ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATERMAIN JOINTS. WHERE A WATERMAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER, TO PREVENT DAMAGE TO THE WATERMAIN.
17. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE AND SHALL BE PRESSURE TESTED AS TO ASSURE WATERTIGHTNESS PRIOR TO BACKFILLING.
18. THE PIPE SHALL BE P.V.C. SEWER PIPE CONFORMING TO THE LATEST REVISIONS OF ASTM DESIGNATION D-3034, SDR-35, INSTALLED IN ACCORDANCE WITH ASTM.
19. THE MANHOLE COVERS ARE TO BEAR THE INSCRIPTION "AMHERST ANTI-TANK".

TOWN OF AMHERST APPROVAL BOX:



TYPICAL TRENCH DETAIL
SCALE: NTS

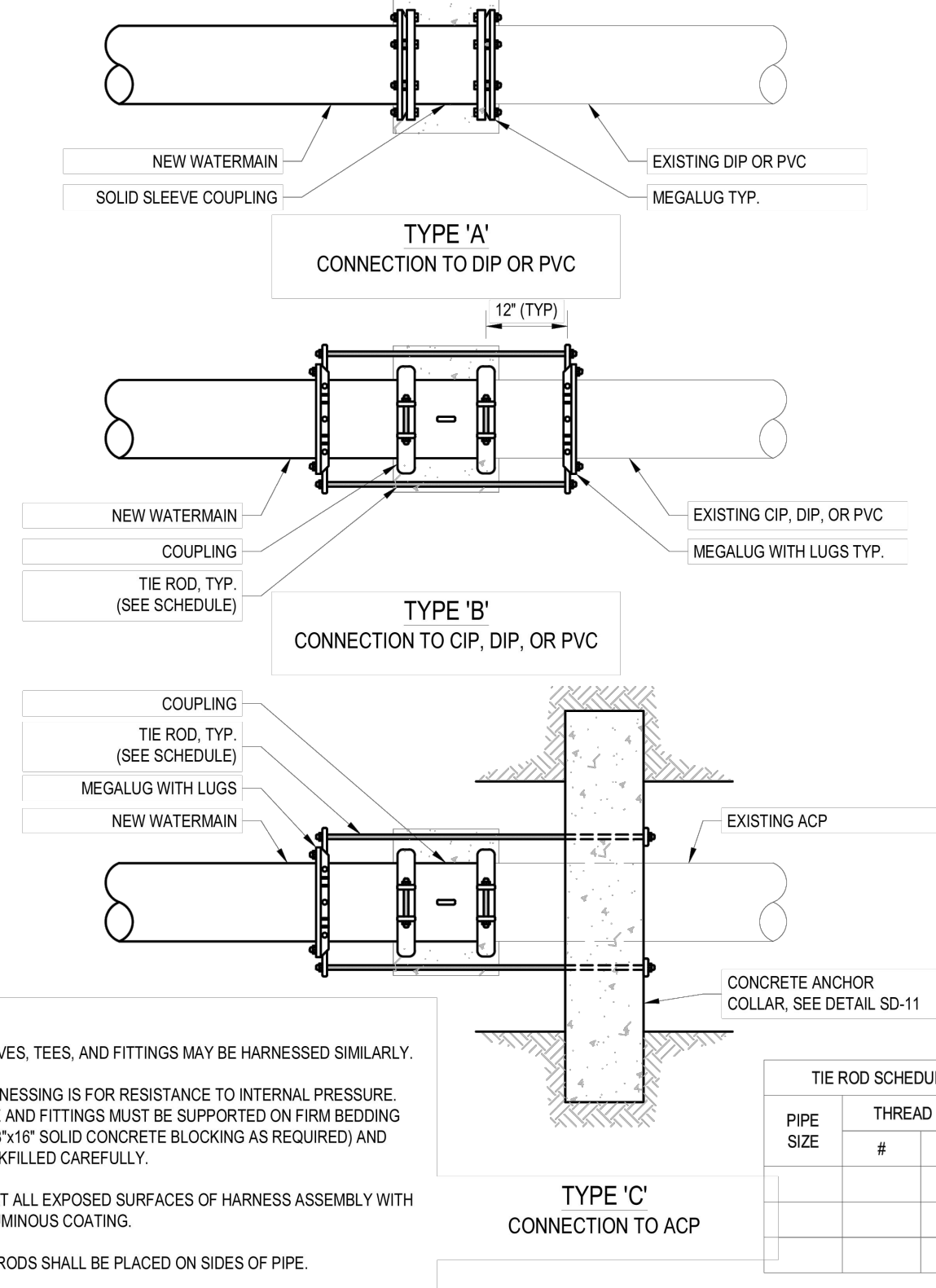
Revision: 2024-01
Detail: SD-01



- NOTES:
- ALL EXISTING UTILITIES MUST BE SUPPORTED WITH APPROPRIATE CHAINS / STRAPS DURING CONSTRUCTION OF THE NEW WATERMAIN. CONTRACTOR IS REQUIRED TO COORDINATE WITH THE OWNER FOR THEIR PREFERRED SUPPORT REQUIREMENTS.
 - WHEN CROSSING A SEWER LINE WITH NEW WATERMAIN (AND WITHOUT A CASING PIPE), ONE FULL LENGTH (18'-0" MIN.) SHALL BE USED AT THE POINT OF CROSSING. THE WATERMAIN SHALL BE PLACED SO THAT BOTH JOINT ENDS ARE AS FAR AS POSSIBLE FROM THE EXISTING SEWER.
 - IF CASING PIPE IS USED, IT SHALL EXTEND 5'-0" BEYOND THE EXISTING PIPE OUTER EDGE IN EACH DIRECTION, AND NO WATERMAIN JOINTS OR FITTINGS SHALL BE LOCATED WITHIN 4'-0" FROM THE CASING PIPE EDGE.

PIPE CROSSING DETAIL
SCALE: NTS

Revision: 2024-01
Detail: SD-02

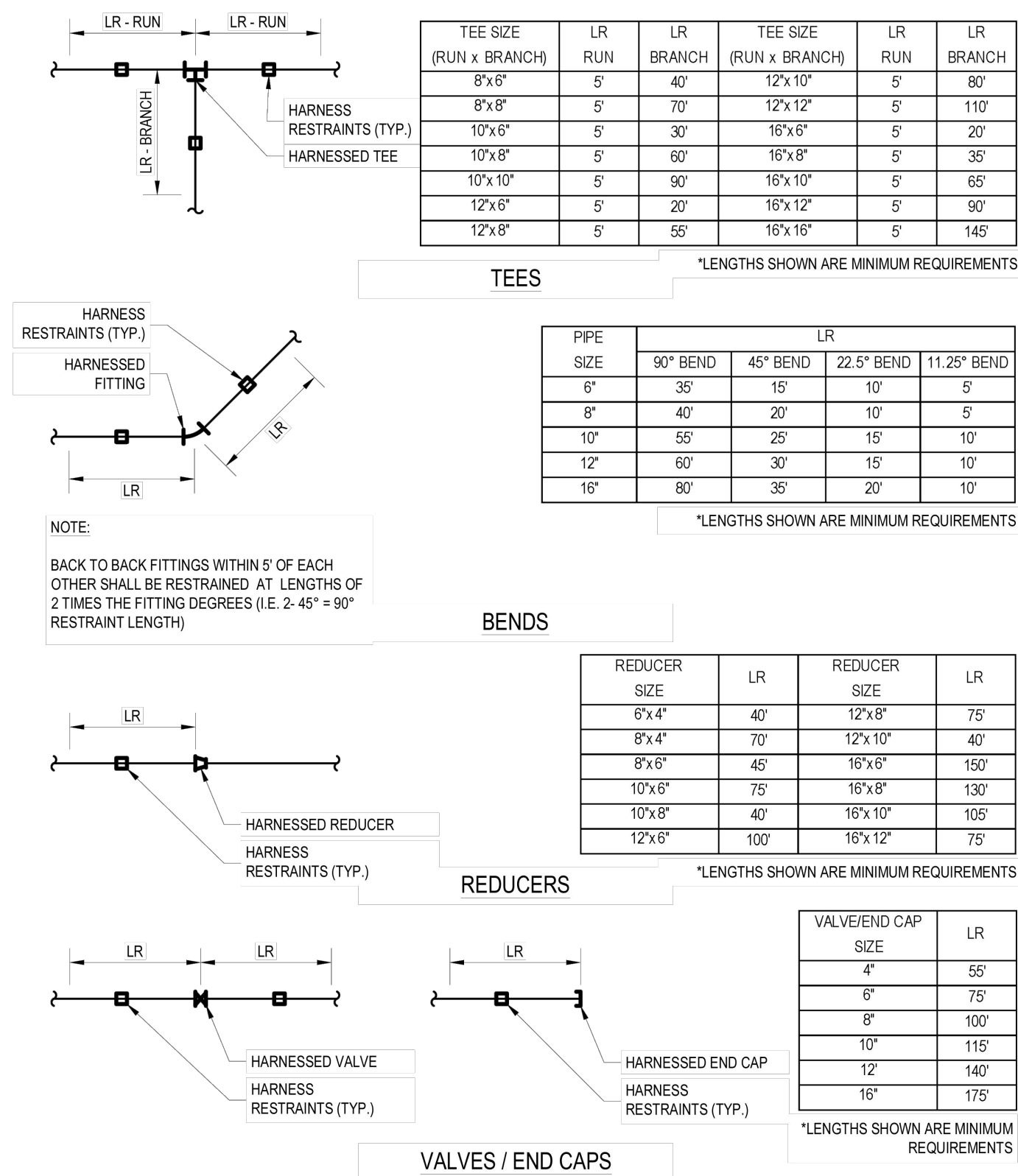


- NOTES:
- VALVES, TEES, AND FITTINGS MAY BE HARNESSSED SIMILARLY.
 - HARNESSING IS FOR RESISTANCE TO INTERNAL PRESSURE. PIPE AND FITTINGS MUST BE SUPPORTED ON FIRM BEDDING (4"x8"x16" SOLID CONCRETE BLOCKING AS REQUIRED) AND BACKFILLED CAREFULLY.
 - COAT ALL EXPOSED SURFACES OF HARNESS ASSEMBLY WITH BITUMINOUS COATING.
 - TIE RODS SHALL BE PLACED ON SIDES OF PIPE.

| TIE ROD SCHEDULE | | |
|------------------|---|---|
| PIPE SIZE | # | Ø |
| | | |
| | | |
| | | |

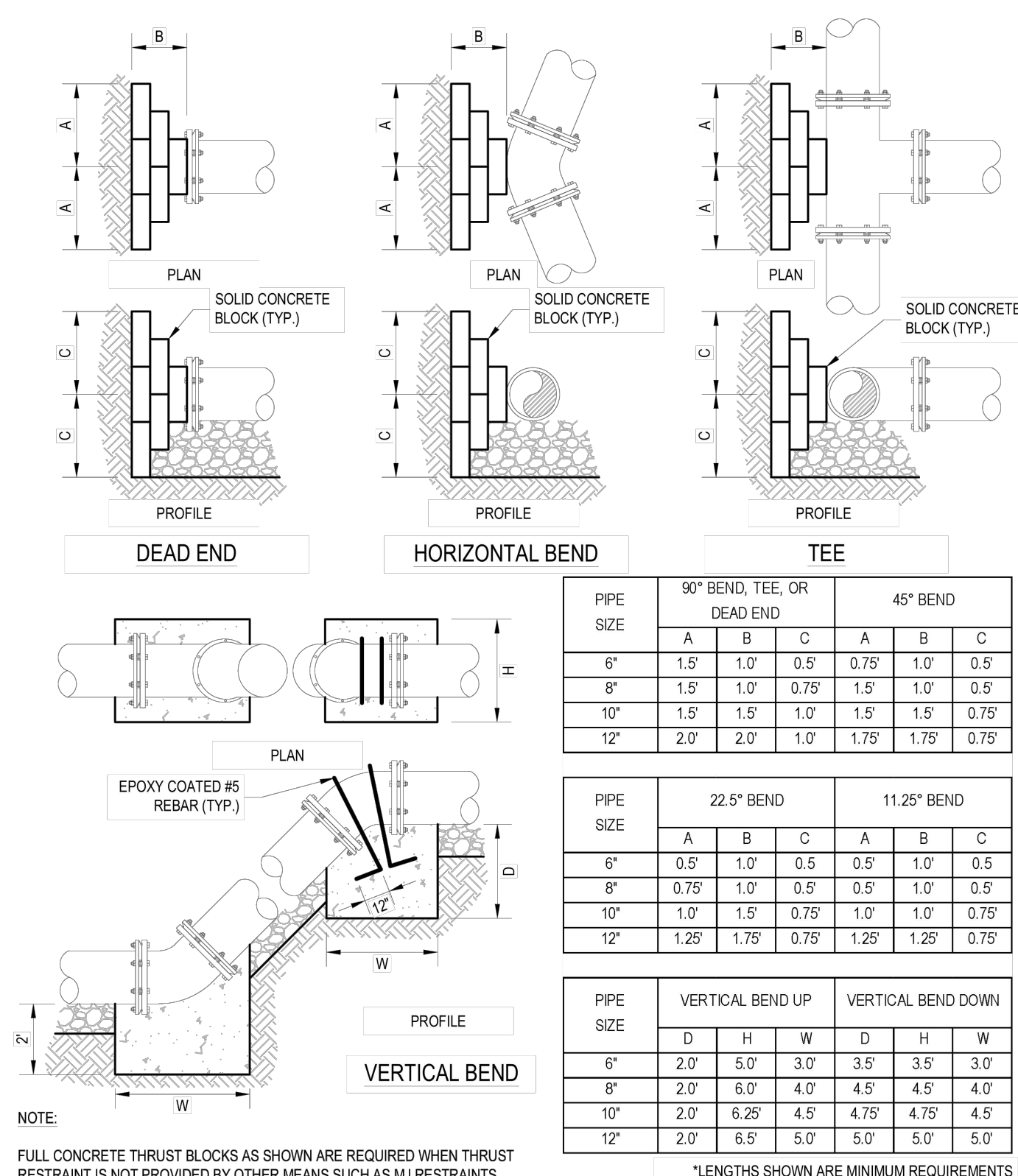
TYPICAL CONNECTION TO EXISTING WATERMAIN
SCALE: NTS

Revision: 2024-01
Detail: SD-08



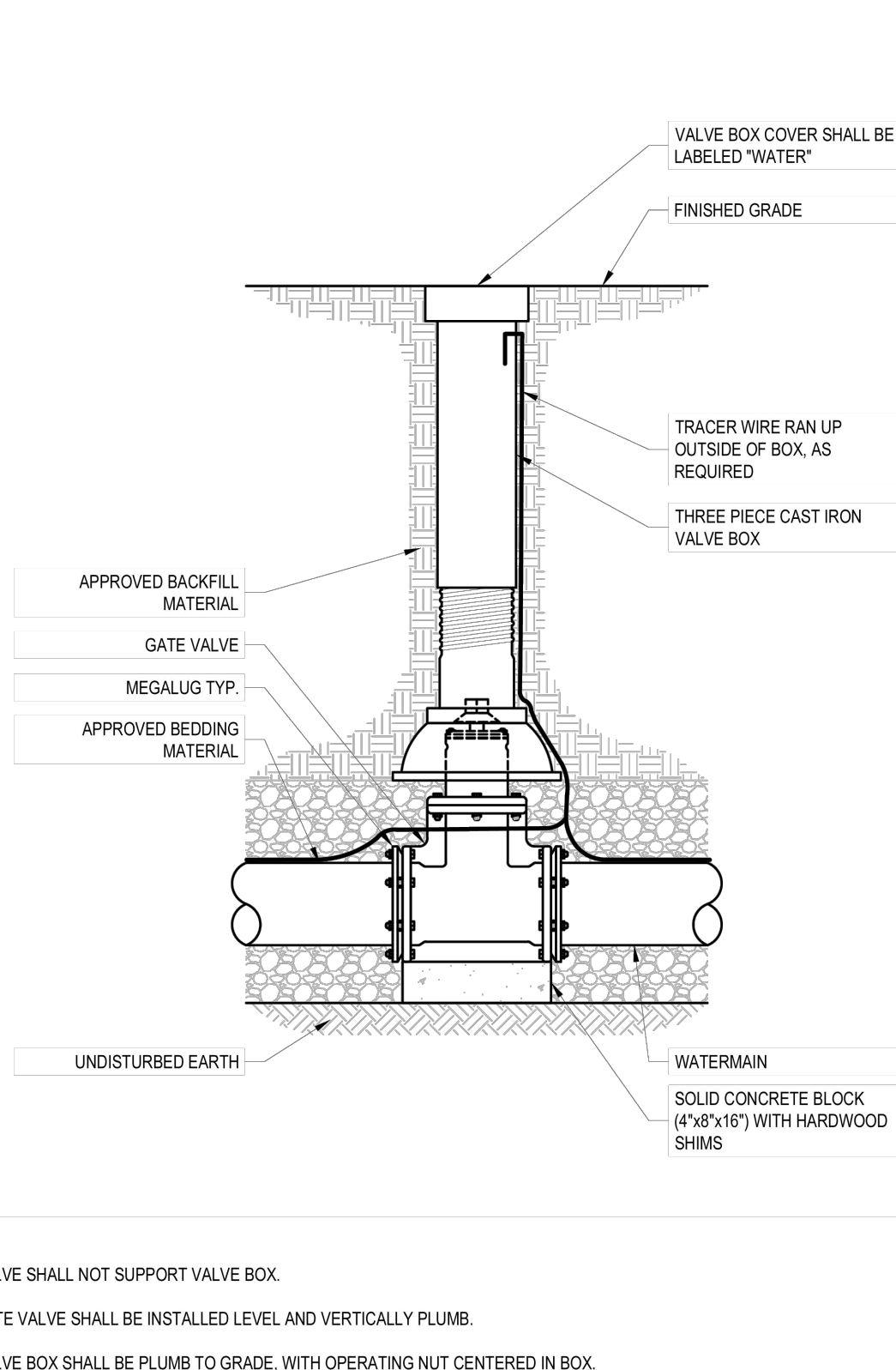
RESTRAINED JOINT SCHEDULE
SCALE: NTS

Revision: 2024-01
Detail: SD-09



THRUST BLOCKS
SCALE: NTS

Revision: 2024-01
Detail: SD-10



- NOTES:
- VALVE SHALL NOT SUPPORT VALVE BOX.
 - GATE VALVE SHALL BE INSTALLED LEVEL AND VERTICALLY PLUMB.
 - VALVE BOX SHALL BE PLUMB TO GRADE, WITH OPERATING NUT CENTERED IN BOX.

GATE VALVE SETTING
SCALE: NTS

Revision: 2024-01
Detail: SD-12

TOWN OF AMHERST APPROVAL BOX:

| REVISIONS: | | Date |
|------------|---------------------------|-----------|
| No. | Description | |
| 5 | Rev. Per Town Comments | 4/16/2025 |
| 6 | Rev. Permanent Open Space | 5/13/2025 |
| 7 | Rev. Per Town Comments | 5/23/2025 |
| 8 | Rev. Per Town Comments | 6/10/2025 |
| 9 | Rev. Per Town Comments | 7/01/2025 |
| 10 | Rev. Per Town Comments | 7/25/2025 |



DRAWING NAME:
Water Details

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-405

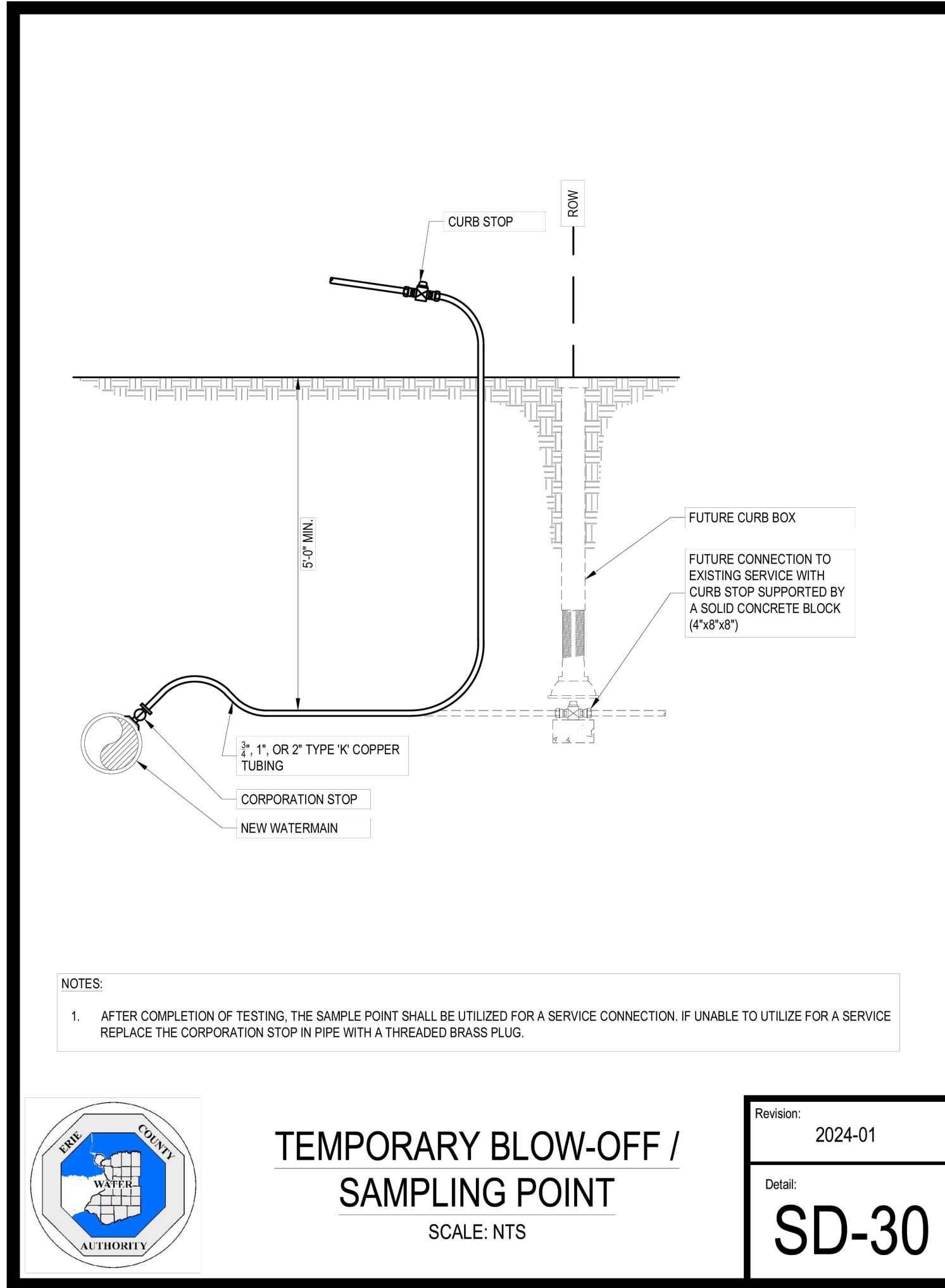
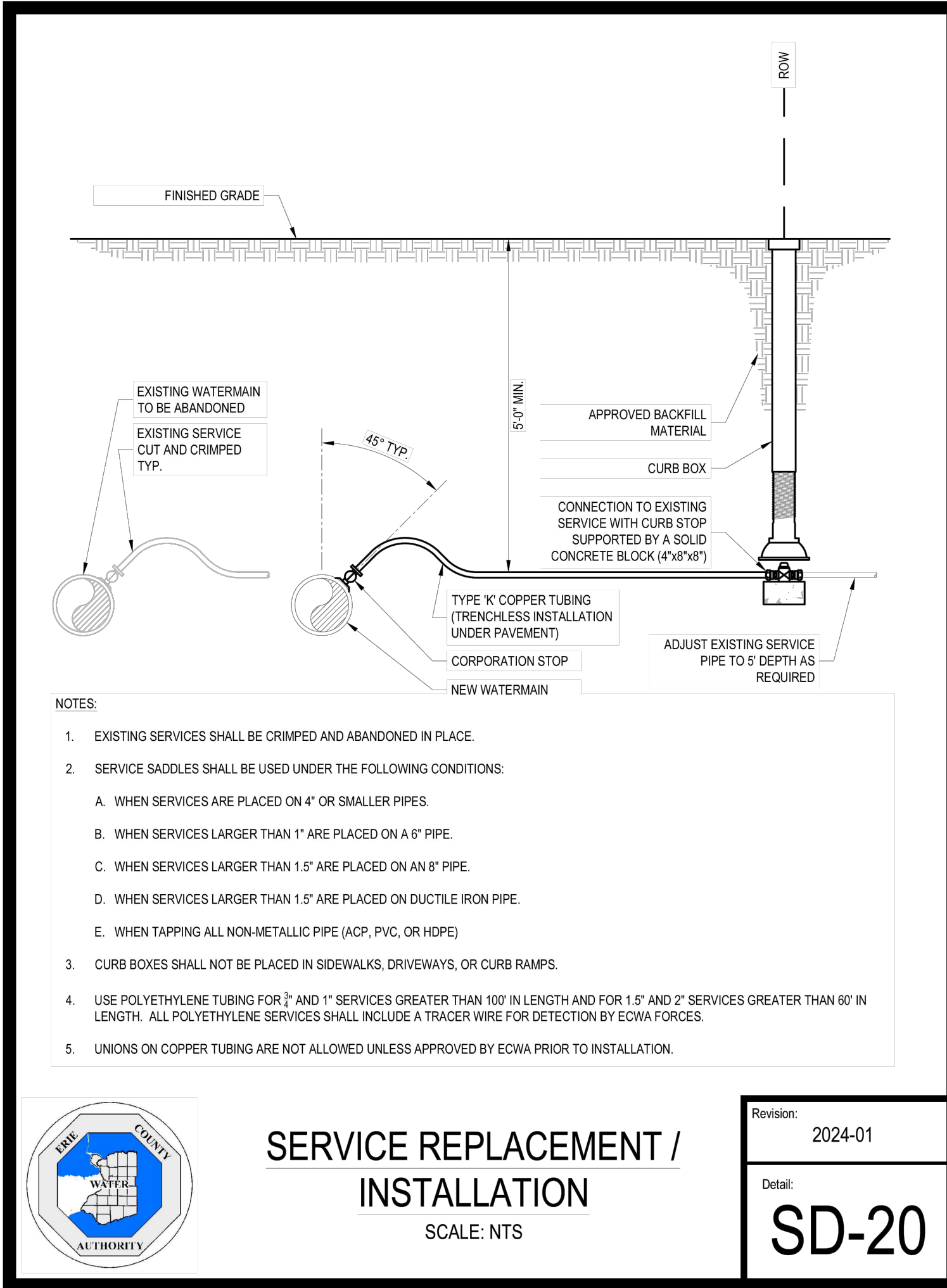
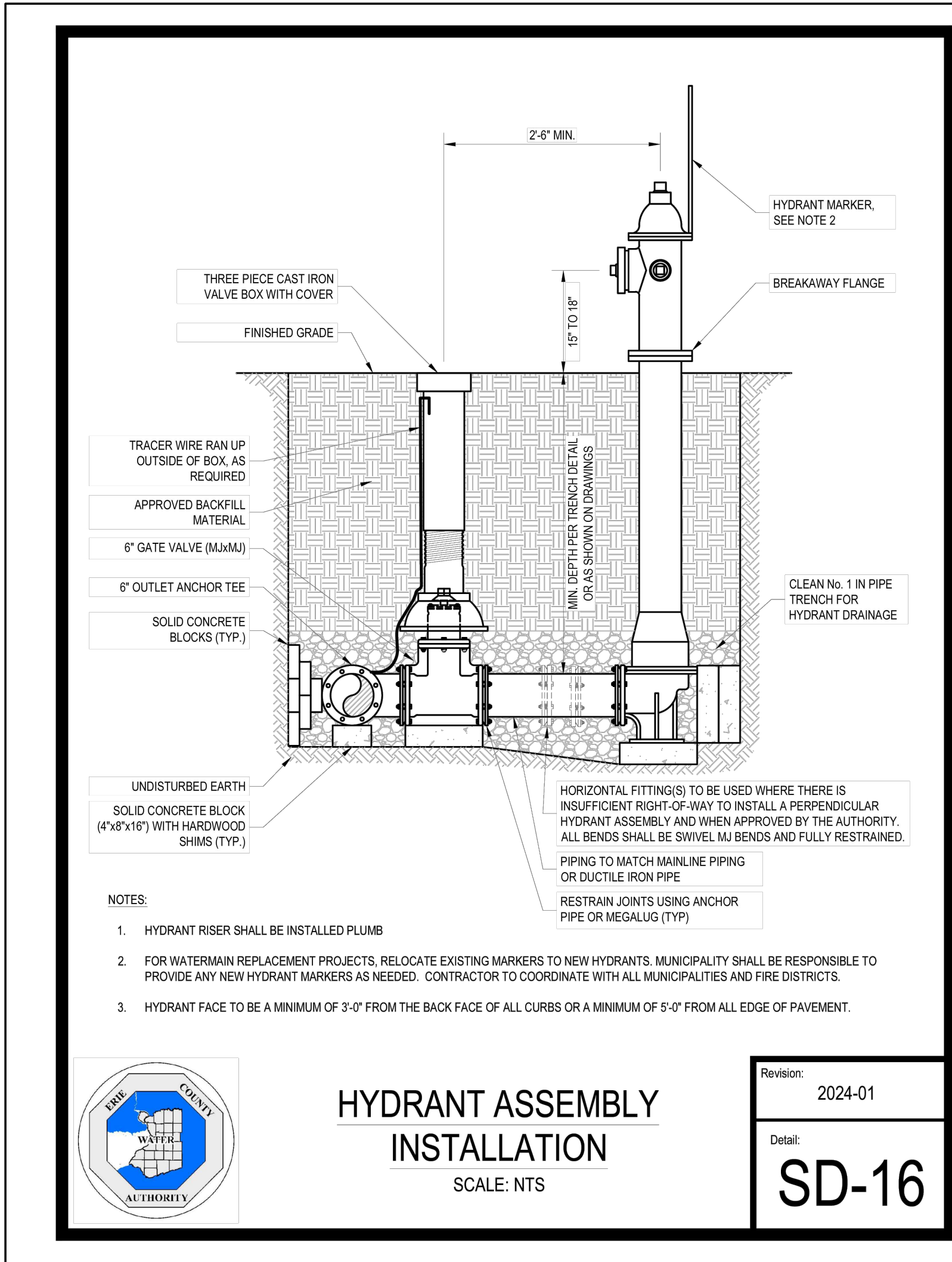
Project No: 20.247

Single Family Subdivision
1789 Dodge Road
Amherst, New York

CARMINA WOOD
DESIGN
Buffalo | Utica | Greensboro

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| REVISIONS: | | No. | Description | Date |
|------------|------|-----|----------------------|-----------|
| 1 | Rev. | 5 | Per Town Comments | 4/16/2025 |
| | Rev. | 6 | Permanent Open Space | 5/13/2025 |
| | Rev. | 7 | Per Town Comments | 5/23/2025 |
| | Rev. | 8 | Per Town Comments | 6/10/2025 |
| | Rev. | 9 | Per Town Comments | 7/01/2025 |
| 2 | Rev. | 10 | Per Town Comments | 7/25/2025 |



TOWN OF AMHERST APPROVAL BOX:

DRAWING NAME:
Water Details

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

C-406

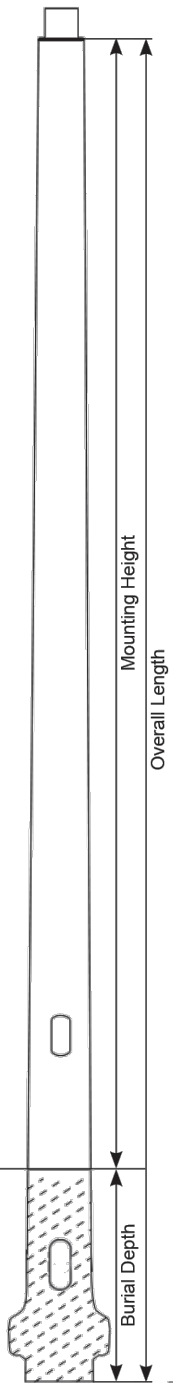
Project No: 20.247



O-SERIES

ROUND TAPERED COMPOSITE LIGHT POLE DIRECT BURIAL INSTALLATION

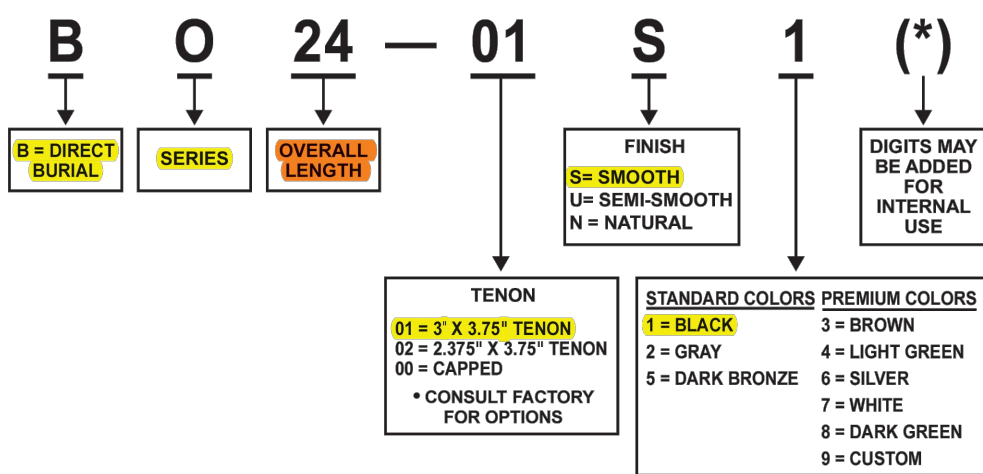
SHAKESPEARE O-SERIES DIRECT BURIAL POLES



| OVERALL LENGTH | MOUNTING HEIGHT | BURIAL DEPTH | TIP DIAMETER | GROUNDLINE DIAMETER | WEIGHT |
|----------------|-----------------|--------------|--------------|---------------------|--------|
| 14 | 11 | 3 | 4.1 | 5.4 | 26 |
| 15 | 12 | 3 | 4.1 | 5.6 | 29 |
| 16 | 13 | 3 | 4.1 | 5.7 | 31 |
| 18 | 15 | 4 | 4.1 | 5.8 | 34 |
| 19 | 16 | 4 | 4.1 | 5.9 | 37 |
| 20 | 17 | 4 | 4.1 | 6.1 | 38 |
| 21 | 18 | 4 | 4.1 | 6.2 | 42 |
| 22 | 19 | 4 | 4.1 | 6.3 | 45 |
| 23 | 20 | 4 | 4.1 | 6.5 | 49 |
| 24 | 21 | 4 | 4.1 | 6.6 | 51 |
| 25 | 22 | 4 | 4.1 | 6.7 | 52 |

- Mounting heights to 20 feet
- Smooth, semi-smooth or natural finish
- 3 standard and 5 special architectural colors available
- High performance UV and weather-resistant pigmented resin system with an additional pigmented polyurethane coating.
- Tenon top or Drilled and Capped
- Standard 2-1/2" x 5" handhole located 18" above grade
- Standard 2 EA - 2-1/2" x 6" wire access hole 24" below grade
- Anti-rotation flare structurally integrated into the pole base during manufacture
- Poles are individually identified with a permanent embossed tag located 9" from tip.
- Sleeved individually for shipment
- Lightweight, easy to install, saves money

ORDERING INFORMATION



SHAKESPEARE - VALMONT COMPOSITE STRUCTURES, INC. 19845 U.S. HIGHWAY 76 - NEWBERRY, SC 29108 USA
803.276.5504 • 800.800.9008 • FAX: 803.276.8940 SKP-CS.COM

O-SERIES



ROUND TAPERED COMPOSITE LIGHT POLE - DIRECT BURIAL INSTALLATION

SPECIFICATIONS

1. Lighting poles shall be fiberglass reinforced composite per Shakespeare design.
2. Wind loading shall be calculated for the appropriate wind velocity with a 3 second gust factor per ASCE.
3. Effective projected area (EPA) is the actual area adjusted with the appropriate drag coefficient (shape factor) to result in an equivalent area having a drag coefficient equal to one (1) using ANSI 136.20

MATERIALS

1. The round tapered pole shall be constructed by the filament winding process from thermosetting polyester resin and contain a minimum of 65 percent "E" type fiberglass by weight. The filament windings shall be continuously applied with uniform tension and shall be placed on the pole helically at low angles to provide axial strength. Additional windings shall be placed on the pole in a circular manner to provide compressive strength.
2. The resin to make the pole shall be ultraviolet resistant and pigmented approximately the same color as the final coating to be applied. A highly weather resistant, pigmented, polyurethane coating shall be applied to the pole. The coating shall have a minimum thickness of 1.5 mils.
3. The poles shall be flame resistant per ASTM D635. Specimens must cease to burn before the gauge mark of 100mm (3.9 inches) is reached.
4. (If applicable) The poles shall be delivered predrilled and capped (if applicable) to accommodate the lighting fixture(s) or mast arm(s) specified.
5. (If applicable) Tenons shall be permanently bonded to the fiberglass shaft and shall be hot-dipped galvanized steel to ASTM A153 or shall be 6061-T6 or A356-T6 aluminum
6. The handhole opening shall be 2.5" x 5". The handhole cover is attached with a 1/4" socket head screw.

IDENTIFICATION & PACKAGING

- Each pole shall bear an identification tag which shall list the model, catalog number, month and year of manufacture.
- Each pole shall be individually packaged for protection during shipping.

TESTING

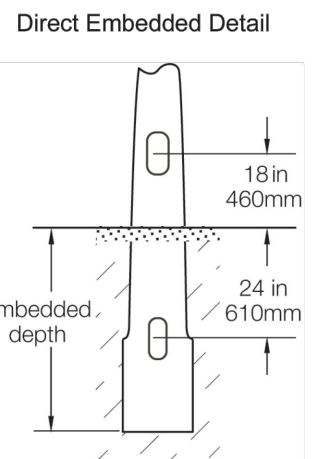
- The surface shall have been tested for a minimum of 5000 hours of accelerated testing in accordance with ASTM G154 (UV-A Lamp 340 NM wavelength 130° F, cycle lamp 4 hours on, 4 hours off) with the following performance results:

- Fiber exposure: None | Cracking: None | Chalking: None | Color: Slight dulling may occur

WIND LOADING DATA

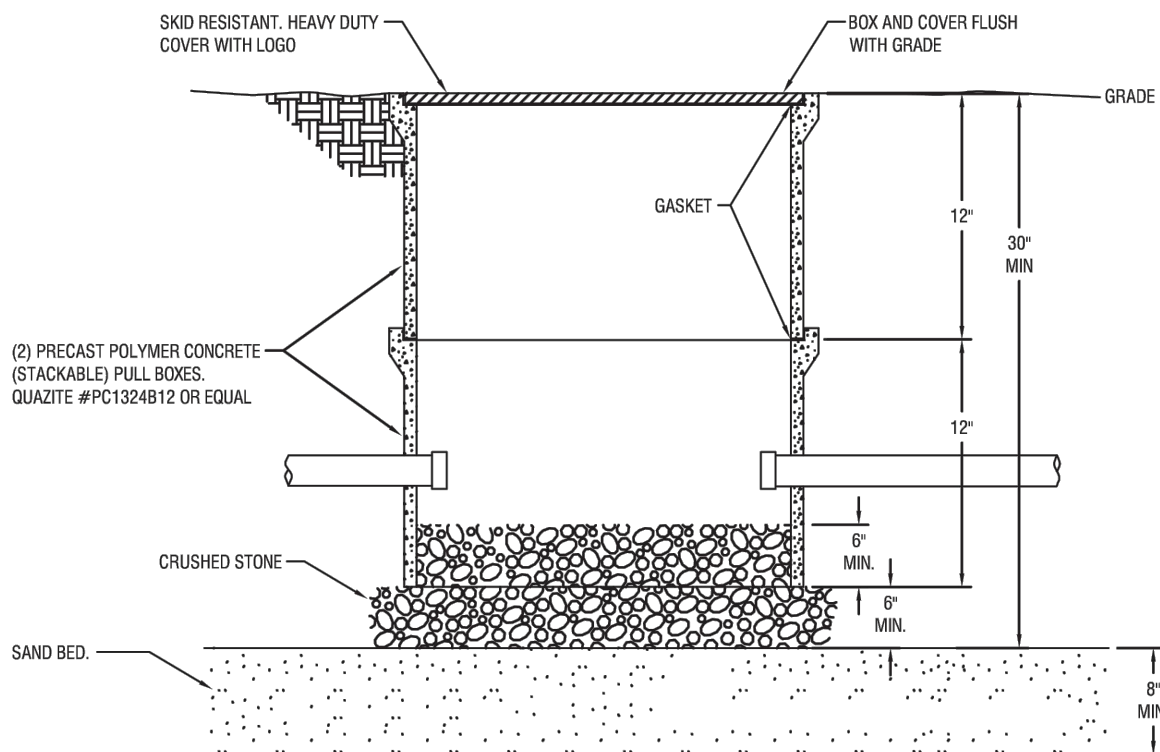
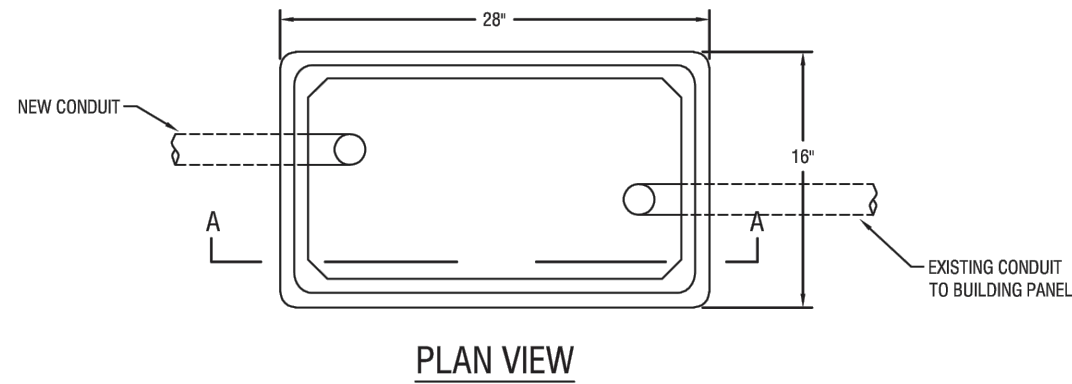
Wind speed (mph) values calculated as per ANSI C136.20 for a 3-second gust factor.

| OVERALL LENGTH | MOUNTING HEIGHT | LUMINAIRE MAX WEIGHT (LBS.) | 90 MPH | 100 MPH | 110 MPH | 120 MPH | 130 MPH | 140 MPH | 150 MPH |
|----------------|-----------------|-----------------------------|--------|---------|---------|---------|---------|---------|---------|
| 13 | 10 | 11.8 | 9.2 | 7.5 | 6.2 | 5.2 | 4.4 | 3.8 | |
| 14 | 11 | 11.3 | 8.8 | 7.2 | 5.9 | 5.0 | 4.2 | 3.6 | |
| 15 | 12 | 10.2 | 8.0 | 6.5 | 5.3 | 4.4 | 3.7 | 3.2 | |
| 16 | 13 | 150 | 9.4 | 7.4 | 5.9 | 4.9 | 4.1 | 3.4 | 2.9 |
| 18 | 14 | 150 | 8.7 | 6.8 | 5.5 | 4.5 | 3.7 | 3.1 | 2.6 |
| 19 | 15 | 100 | 9.2 | 6.0 | 6.5 | 5.3 | 4.4 | 3.7 | 3.1 |
| 20 | 16 | 100 | 9.3 | 7.3 | 5.9 | 4.8 | 4.0 | 3.3 | 2.8 |
| 21 | 17 | 100 | 8.6 | 6.7 | 5.4 | 4.4 | 3.6 | 3.0 | 2.5 |
| 22 | 18 | 100 | 7.9 | 6.1 | 4.9 | 3.9 | 3.2 | 2.7 | 2.2 |
| 23 | 19 | 100 | 7.2 | 5.6 | 4.4 | 3.6 | 2.9 | 2.4 | 2.0 |
| 24 | 20 | 100 | 6.6 | 5.1 | 4.0 | 3.2 | 2.6 | 2.1 | 1.8 |

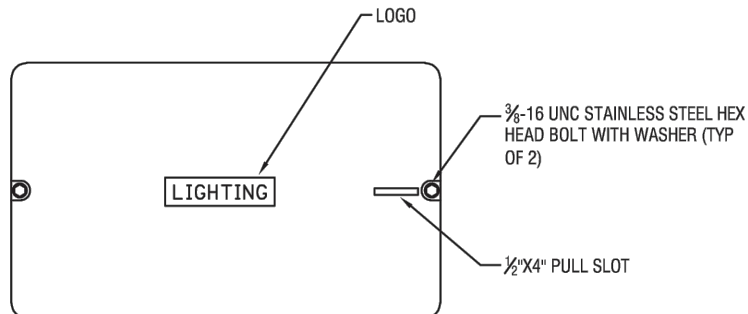


SHAKESPEARE - VALMONT COMPOSITE STRUCTURES, INC. 19845 U.S. HIGHWAY 76 - NEWBERRY, SC 29108 USA
803.276.5504 • 800.800.9008 • FAX: 803.276.8940 SKP-CS.COM

SPCT7095 11/15 skp-cs.com carries the most current spec information and supersedes these guidelines.



SECTION A-A



Town of Amherst LED Street Lighting Retrofit

Proj. No. 261343

Date: 04-20-2021

Underground Pull Box Detail

Ref. Dwg.

No.

How to Order

A complete Shakespeare Composite Structures Composite Tuff-Pole® Catalog Number includes all of the information detailed below, in order from left to right, including the dash. The letters and numbers to the left of the dash are the Basic Catalog Number found in the listings of the poles. Poles with mast arms include two digits to the right of the dash. The remainder of the Catalog Number details the options which you can specify in the order listed to define accessories, handholes, colors, etc. Please use the

standard specification for these options whenever possible. You can assemble your own catalog numbers, or call for assistance. Most of the available options are listed in the template. Call for information on all other options.

How to use this manual

To decide which Tuff-Pole® you need, first consider your application: Anchor Base or Direct Burial. Shakespeare Composite Structures recommends Direct Burial style

poles for cost efficiency and ease of installation, if your application permits. Next choose round or square, standard or Breakaway, hinge or stub styles, and the method of luminaire attachment and wiring access. Then, using your required mounting height, wind speed, and the total EPA and weight of all intended attachments, select a pole with loading ratings that meet your needs. If you need help choosing or specifying, our experienced staff will be glad to help. Just call.

LUMINAIRE MOUNTING

- 00 = Capped Only (Not predrilled)
- 01 = 3" Tenon (1 1/4" min. ID x 3 1/2" long)
- 02 = 2 1/2" Tenon (1 1/4" min. ID x 3 1/2" long)
- 03 = 4" Tenon (1 1/2" ID x 6" long) - not available on R10 through R25 or R10 through R25
- 04 = 3" Tenon (1 1/2" ID x 2" long) - R6 and R9 series only - variable for mast to tie ballast fixture
- 08 = Capped and predrilled for single Shakespeare R" to 30" arm
- 09 = Capped and predrilled for twin Shakespeare R" to 30" arms
- 10 = Capped and predrilled for single Shakespeare 4" to 12" mast arm
- 20 = Capped and predrilled for twin Shakespeare 4" to 12" mast arms
- 15 = Capped and predrilled for single Shakespeare 15" truss arm
- 25 = Capped and predrilled for twin Shakespeare 15" truss arms
- 99 = Other (specify)

FINISH

N = Natural

U = Semi-smooth Wall

S = Smooth Wall

COLOR

Black (Standard) 1

Gray (Standard) 2

Brown (Special) 3

Light Green (Special) 4

Dark Green (Standard) 5

Silver (Special) 6

White (Special) 7

Dark Green (Special) 8

Premium Colors (specify by color name)

Custom Color Match (contact factory)

SERIES

S = Standard

O = Hinged

A = Breakaway

B = Direct Burial

G = Round

Q = Square

R = Triangular

T = Tetrapod

D = Drilled and Capped

W = Weather Vane

Y = Y-Bracket

Z = Z-Bracket

Other (specify)

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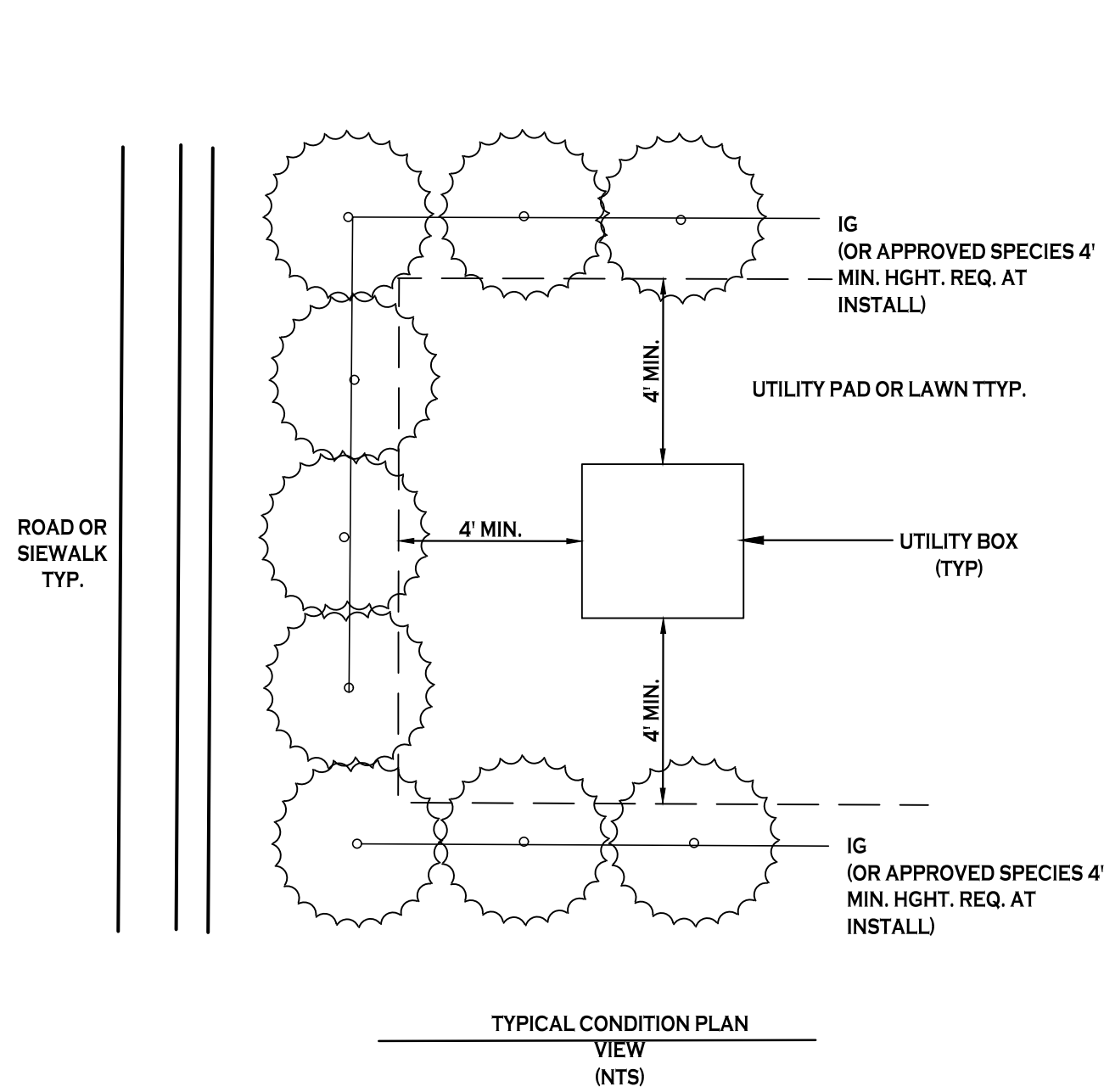
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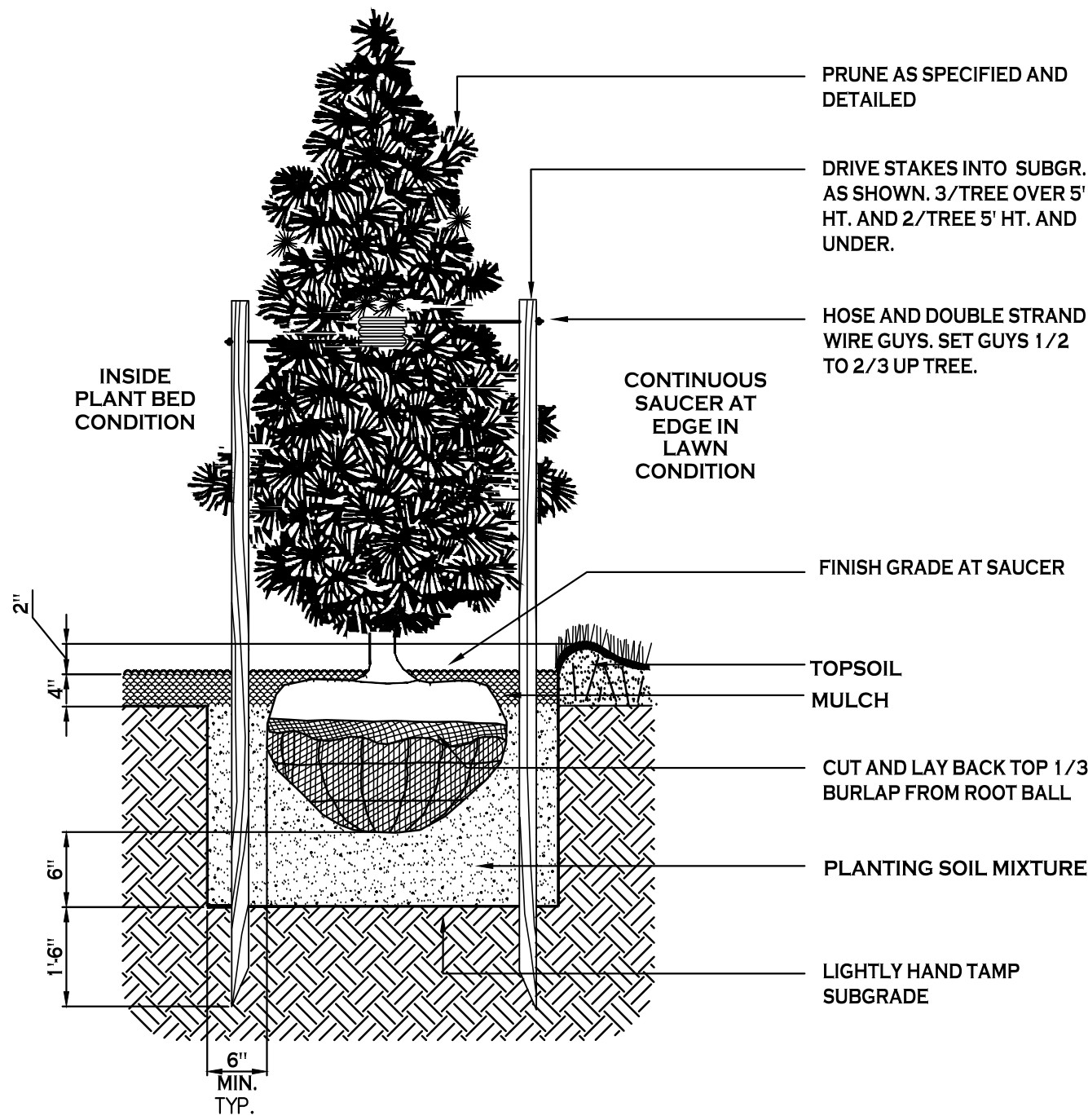
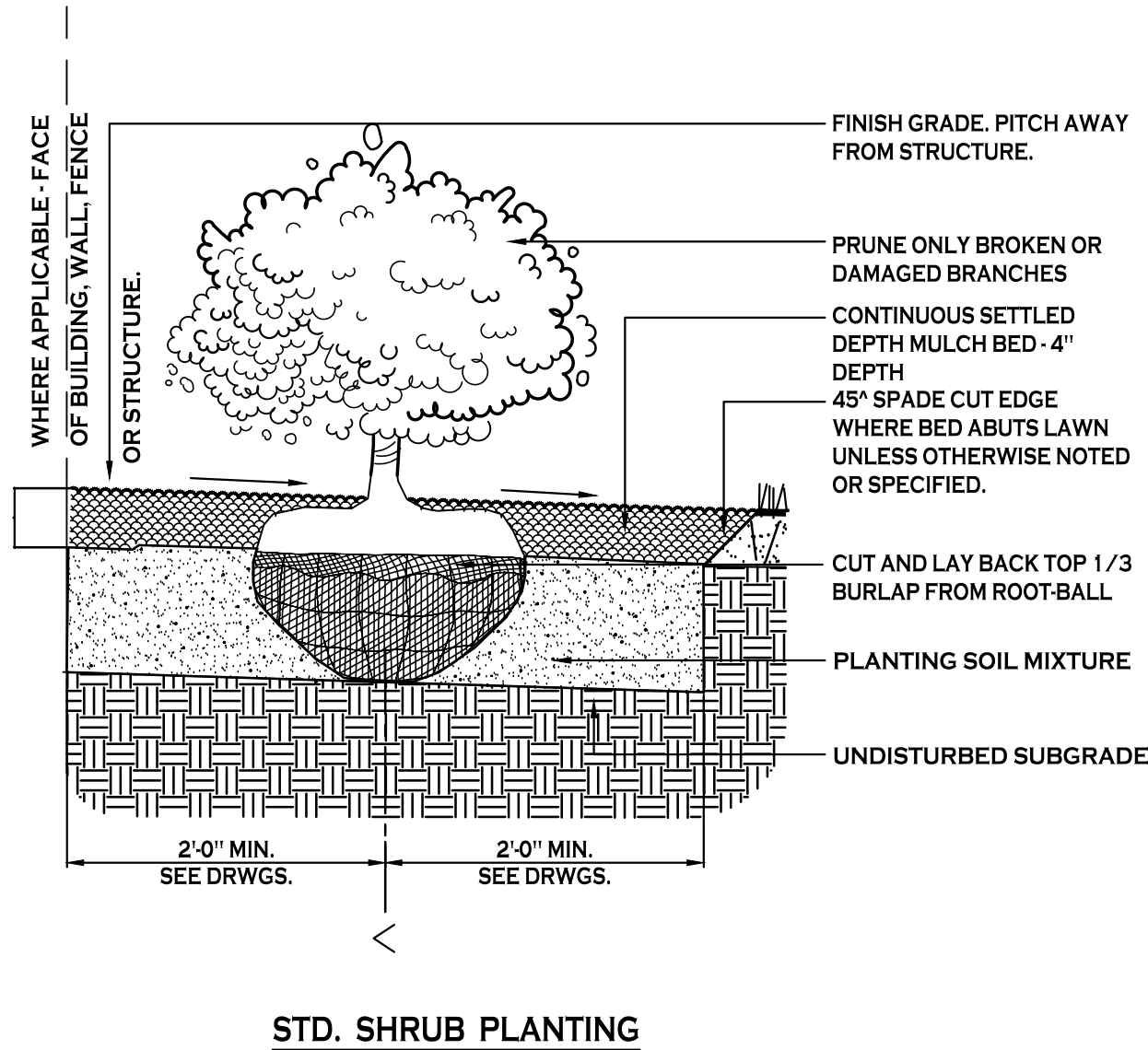
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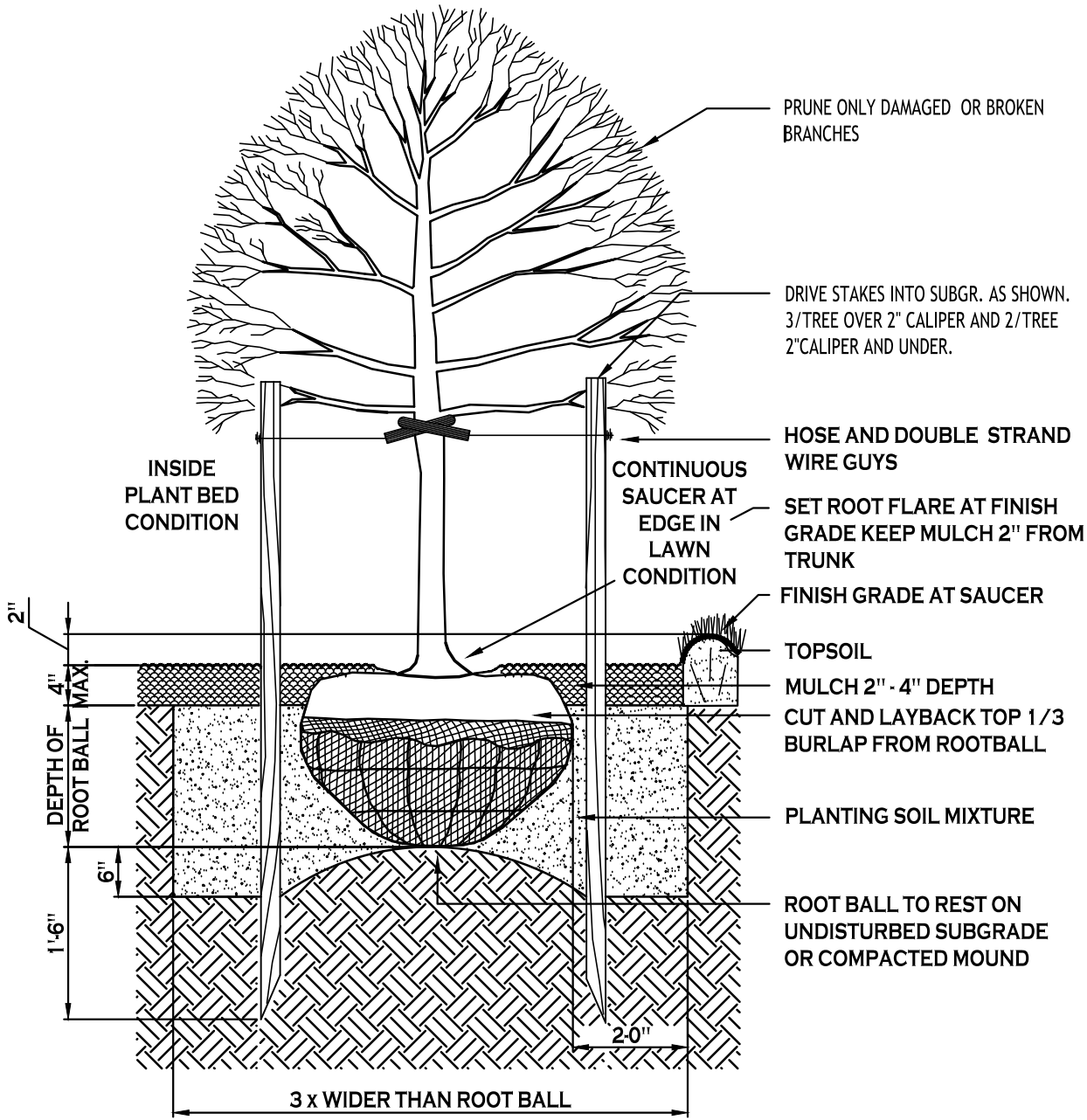


- NOTES:
- USE EVERGREEN SHRUBS TO SCREEN ALL ABOVEGROUND UTILITY BOXES AND INFRASTRUCTURE FROM ADJACENT ROAD OR SIDEWALK PER TOWN OF AMHERST CODE
 - PROVIDE A MINIMUM 4' OFFSET FROM THE SHRUBS PLANTED EDGE TO THE EDGE OF THE UTILITY BOX TO ALLOW ENOUGH CLEARANCE FOR UTILITY MAINTENANCE TO BE PERFORMED

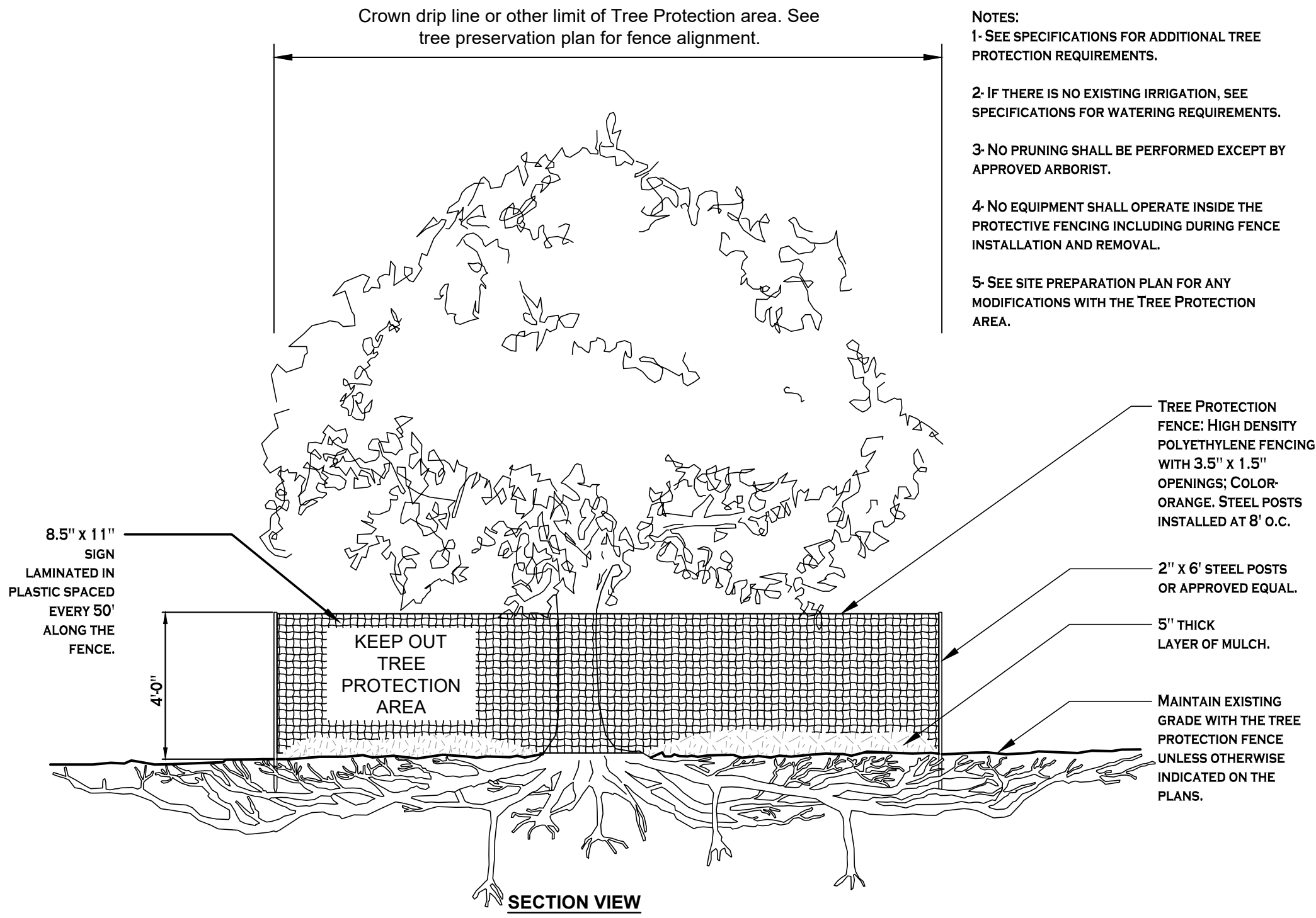
TYPICAL SHRUB PLANTING TO SCREEN UTILITY INFRASTRUCTURE



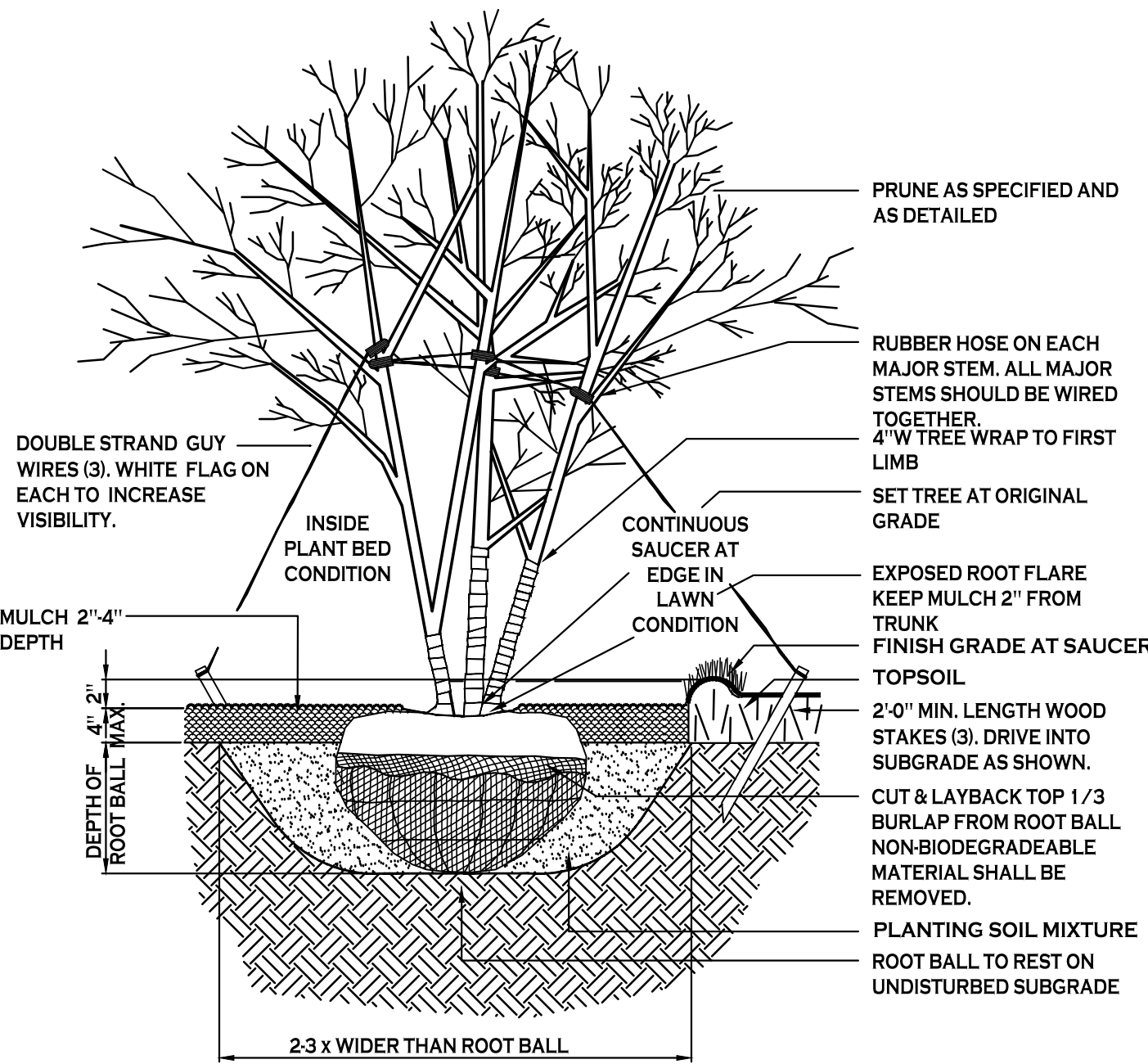
STD. EVERGREEN PLANTING



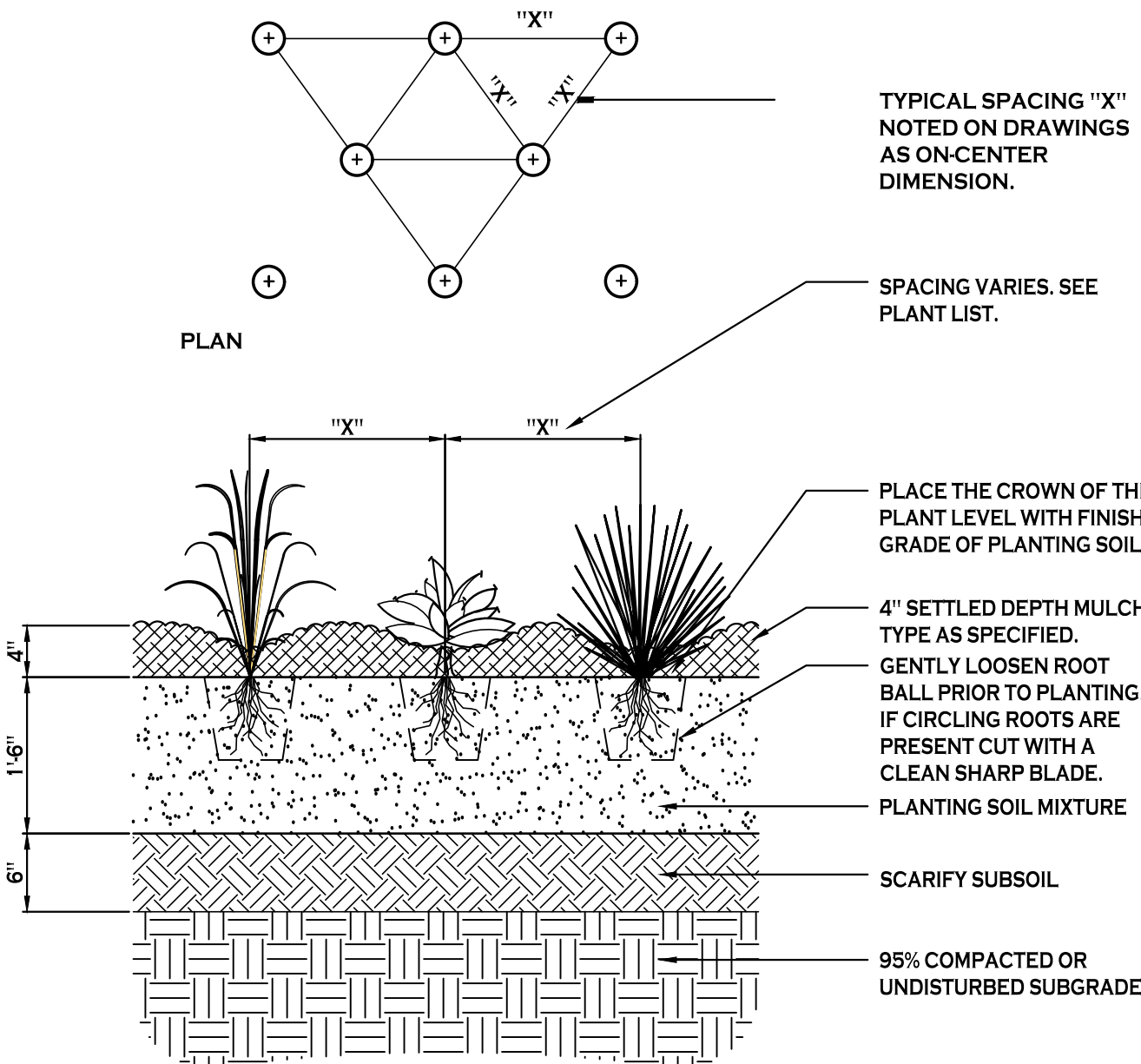
STD. DECIDUOUS TREET PLANTING



TREE PROTECTION / SAFETY NETTING
NO TO SCALE



DECIDUOUS TREE PLANTING - MULTI - STEM
NO TO SCALE



SECTION
NOTE: PLANT BULBS IN TRENCHES AND BOUQUET PLANTING GROUPS.
GROUND COVER PLANT SPACING
NO TO SCALE

PLANT FINISH SCHEDULE - 1789 DODGE ROAD -AMHERST, NEW YORK

| KEY | QTY. | BOTANICAL NAME | COMMON NAME | MIN. SIZE | REMARKS |
|---|------|---|-----------------------|------------------|---------------------|
| D E C I D U O U S T R E E S | | | | | |
| QC | 2 | Quercus coccinea | Scarlet Oak | 2 1/2" - 3" CAL. | B&B, HT. 60', W 40' |
| NSW | 3 | Nyssa sylvatica 'Wildfire' | Wildfire Tupelo | 2 1/2" - 3" CAL. | B&B, HT. 35', W 18' |
| QB | 3 | Quercus bicolor 'Bonnie & Mike' | Bonnie & Mike Oak | 2 1/2" - 3" CAL. | B&B, HT. 40', W 15' |
| S M A L L / O R N A M E N T A L T R E E S | | | | | |
| CC | 2 | Cercis canadensis | Redbud | 2 1/2" - 3" CAL. | B&B, HT. 20', W 25' |
| AC | 4 | Amelanchier canadensis | Shadblow Serviceberry | 2 1/2" - 3" CAL. | B&B, HT. 20', W 25' |
| E V E R G R E E N T R E E S | | | | | |
| PG | 23 | Picea glauca 'Densata' | White Spruce | 6-8' Tall | B&B, HT. 20', W 8' |
| AC | 6 | Abies concolor | White Fir | 6-8' Tall | B&B, HT. 60', W 20' |
| S H R U B S | | | | | |
| CS | 18 | Cornus sericea 'Arctic Fire' | Arctic Fire Dogwood | 24-36" Tall | B&B, HT. 4', W 4' |
| CAsd | 22 | Cornus amomum 'Silky Dogwood' | Silky Dogwood | 24-36" Tall | B&B, HT. 4', W 4' |
| CA | 19 | Clethra alnifolia | Summersweet | 24-36" Tall | B&B, HT. 4', W 4' |
| VT | 9 | Viburnum plicatum tomentosum 'Mariesii' | Doublefile Viburnum | 24-36" Tall | B&B, HT. 4', W 4' |

TOWN OF AMHERST APPROVAL BOX:

CARMINA WOOD
DESIGN
Buffalo | Utica | Greensboro

Single Family Subdivision
1789 Dodge Road
Amherst, New York

| REVISIONS: | | No. | Description | Date |
|------------|---|-----|---------------------------|-----------|
| | 1 | 5 | Rev. Per Town Comments | 4/16/2025 |
| | 2 | 6 | Rev. Permanent Open Space | 5/13/2025 |
| | 3 | 7 | Rev. Per Town Comments | 5/23/2025 |
| | 4 | 8 | Rev. Per Town Comments | 6/10/2025 |
| | 5 | 9 | Rev. Per Town Comments | 7/01/2025 |
| | 6 | 10 | Rev. Per Town Comments | 7/25/2025 |



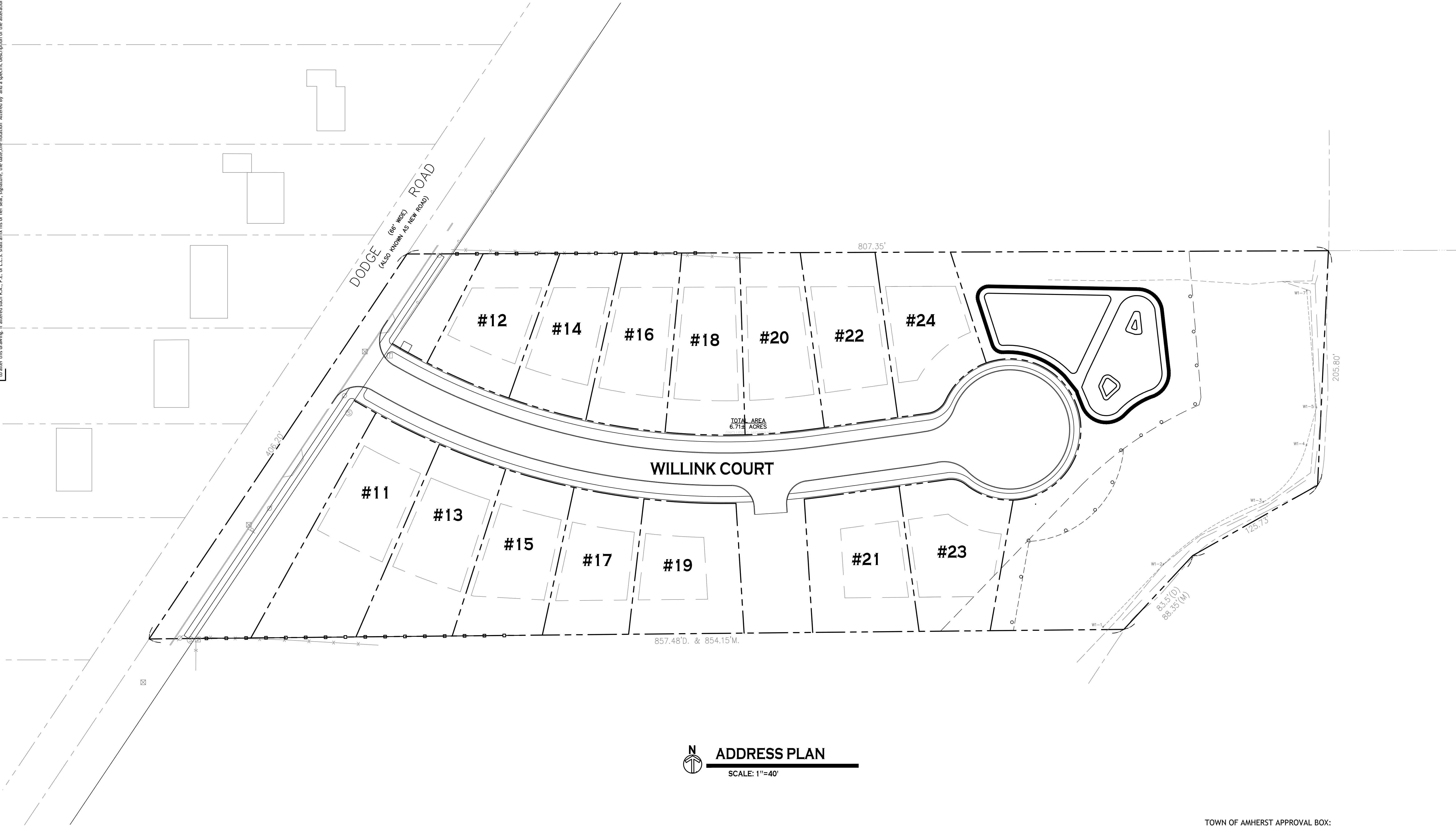
DRAWING NAME:
Landscape Details
Plant Schedule

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

L-101

Project No: 20.247



NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS. CARMINA WOOD DESIGN ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



TOWN OF AMHERST APPROVAL BOX:

Empty box for Town of Amherst approval.



DRAWING NAME:

Address Plan

Date: 01/29/25
Drawn By: C. Wood
Scale: As Noted

DRAWING NO.

AP-100

Project No: 20.247

Single Family Subdivision

1789 Dodge Road
Amherst, New York

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