

SITE IMPROVEMENT PLAN

NORTH WOODS VILLAGE

PLANNED RESIDENTIAL DEVELOPMENT

25 COLONIAL DRIVE
KILLINGLY, CONNECTICUT

PREPARED FOR
CANTERBURY HOLDINGS, LLC
18 GAVIN WAY
LISBON, CONNECTICUT 06351

PROPERTY

25 COLONIAL DRIVE
KILLINGLY, CT 06241
PARCEL: #113-029-006
MBL: 113-29.6

ZONE

LOW DENSITY RESIDENTIAL (LD)

PROPERTY OWNER

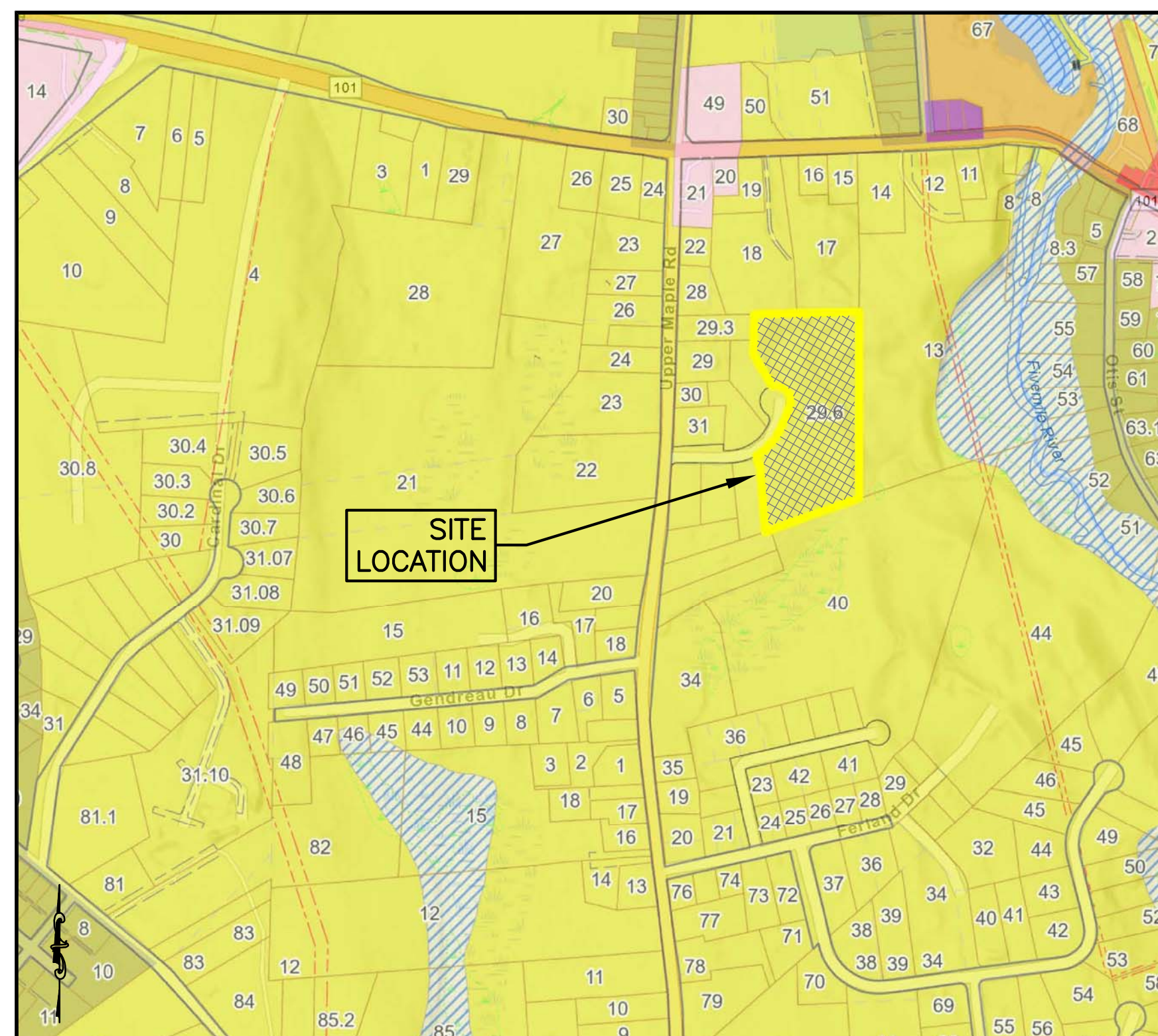
UPPER MAPLE LLC
105 CENTER STREET
THOMPSON, CT 06277

APPLICANT

CANTERBURY HOLDINGS LLC
18 GAVIN WAY
LISBON, CT 06351

INDEX TO DRAWINGS

DRAWING NO.	DESCRIPTION OF DRAWINGS
1	Boundary & Topographic Survey
2	Plan of Development
3-4	Site Plan
5-6	Grading, Drainage, and Utility Plan
7-9	Driveway Plan & Profile
10-11	Landscaping Plan
12	Erosion & Sedimentation Control and Stormwater Management Plan
13	Erosion & Sedimentation Control and Stormwater Management Details
14-17	Construction Details



LOCATION & ZONING MAP

SCALE: 1"=±500'

Revised: September 7, 2023
July 7, 2023

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING

317 Main Street Norwich, CT 06360
(860) 886-1966 Fax (860) 886-9165

LEGEND TO DRAWINGS

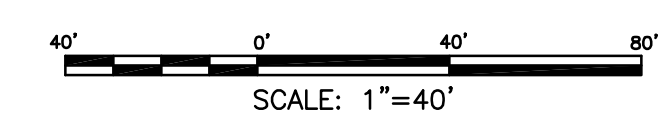
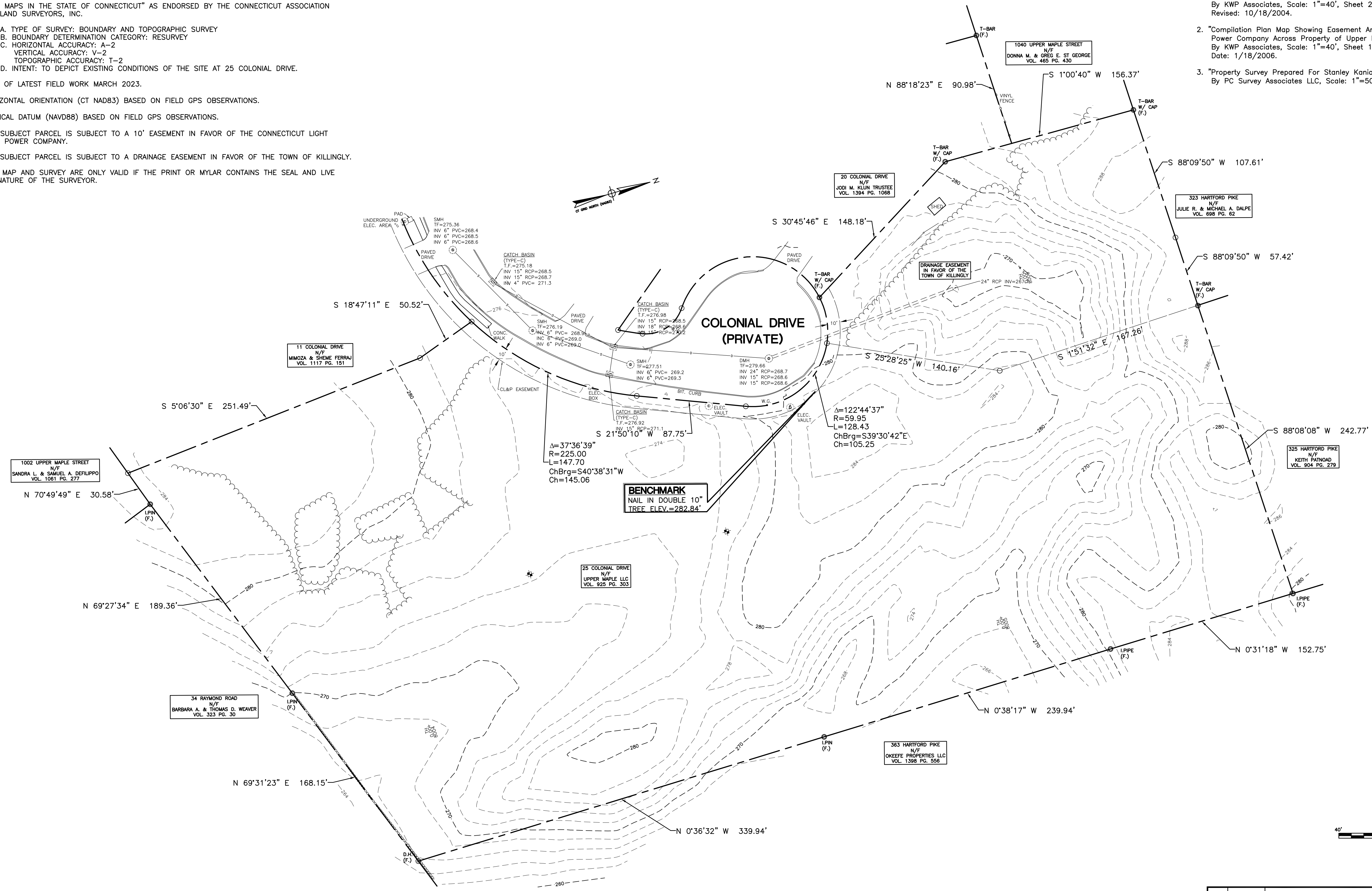
EXISTING		PROPOSED
---	PROPERTY LINE	---
---	BUILDING SETBACK LINE	---
---	CATCH BASIN & CULVERT	---
---	WATER	---
---	SEWER	---
---	SEWER FORCE MAIN	---
---	GAS	---
---	CONTOUR	---
124.2 x	SPOT ELEVATION	124.2 x
---	UTILITY POLE	---
---	ELECTRIC	---
---	TELEPHONE	---
---	ELECTRIC & TELECOM.	---
---	SILT FENCE	---
---	FENCE	---
---	RETAINING WALL	---
---	STONE WALL	---
---	TEST HOLE	---
---	TREE/SHRUB LINE	---

SURVEY NOTES

- THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS FOR STATE AGENCIES "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.
 - TYPE OF SURVEY: BOUNDARY AND TOPOGRAPHIC SURVEY
 - BOUNDARY DETERMINATION CATEGORY: RESURVEY
 - HORIZONTAL ACCURACY: A-2
 - VERTICAL ACCURACY: V-2
 - TOPOGRAPHIC ACCURACY: T-2
 - INTENT: TO DEPICT EXISTING CONDITIONS OF THE SITE AT 25 COLONIAL DRIVE.
- DATE OF LATEST FIELD WORK MARCH 2023.
- HORIZONTAL ORIENTATION (CT NAD83) BASED ON FIELD GPS OBSERVATIONS.
- VERTICAL DATUM (NAVD88) BASED ON FIELD GPS OBSERVATIONS.
- THE SUBJECT PARCEL IS SUBJECT TO A 10' EASEMENT IN FAVOR OF THE CONNECTICUT LIGHT AND POWER COMPANY.
- THE SUBJECT PARCEL IS SUBJECT TO A DRAINAGE EASEMENT IN FAVOR OF THE TOWN OF KILLINGLY.
- THIS MAP AND SURVEY ARE ONLY VALID IF THE PRINT OR MYLAR CONTAINS THE SEAL AND LIVE SIGNATURE OF THE SURVEYOR.

MAP REFERENCES

- "Subdivision Plan Prepared For Upper Maple, LLC", Upper Maple Street Killingly, Connecticut, By KWP Associates, Scale: 1"=40', Sheet 2 of 6, Proj. No: 04011, Date: 4/12/2004, Revised: 10/18/2004.
- "Compilation Plan Map Showing Easement Area Granted to The Connecticut Light and Power Company Across Property of Upper Maple LLC", Upper Maple Street Killingly, Connecticut, By KWP Associates, Scale: 1"=40', Sheet 1 of 1, Proj. No: 04011, File No: E5387, Date: 1/18/2006.
- "Property Survey Prepared For Stanley Kania Living Trust", Upper Maple Street, Killingly, Connecticut, By PC Survey Associates LLC, Scale: 1"=50', Job No: 03030, Map No: A-456, Date: August 2003.



TO MY KNOWLEDGE AND BELIEF THIS PLAN IS SUBSTANTIALLY CORRECT AS NOTED OR DEPICTED HEREON.

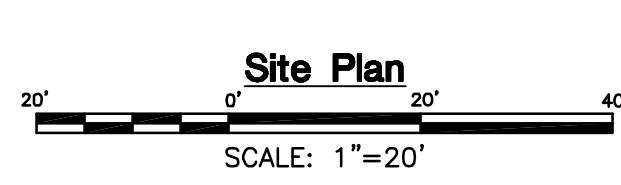
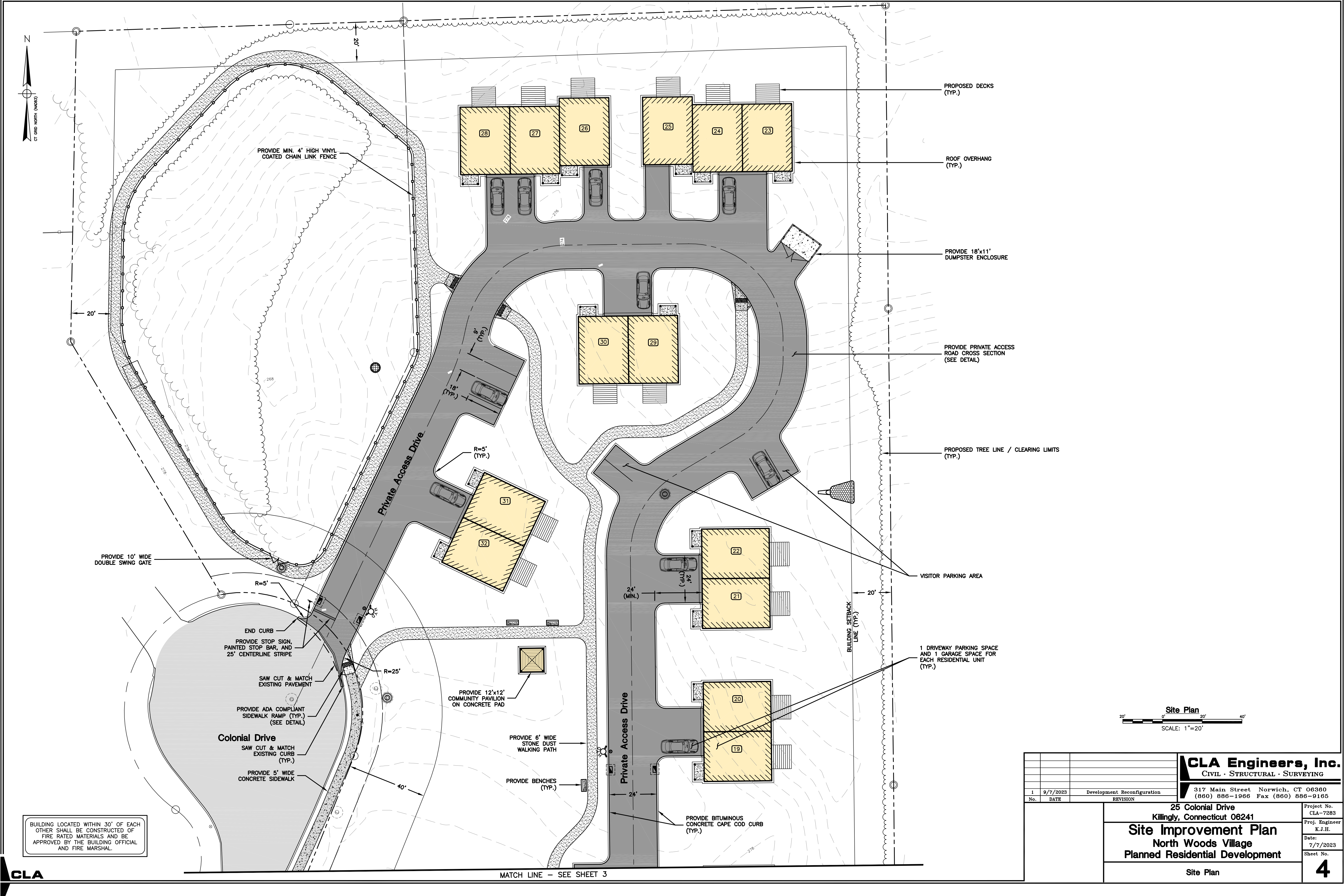
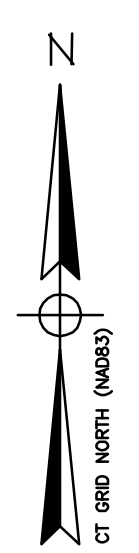
PRELIMINARY

RYAN J. CHEVERIE, L.L.S. #70454 DATE

<p>CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING</p> <p>317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165</p>		Project No. CLA-7283
		Proj. Surveyor R.J.C.
<p>TOPOGRAPHIC SURVEY</p> <p>PREPARED FOR X X</p> <p>25 COLONIAL DRIVE KILLINGLY, CONNECTICUT</p>		Date: 03/13/23
		Sheet No. 01



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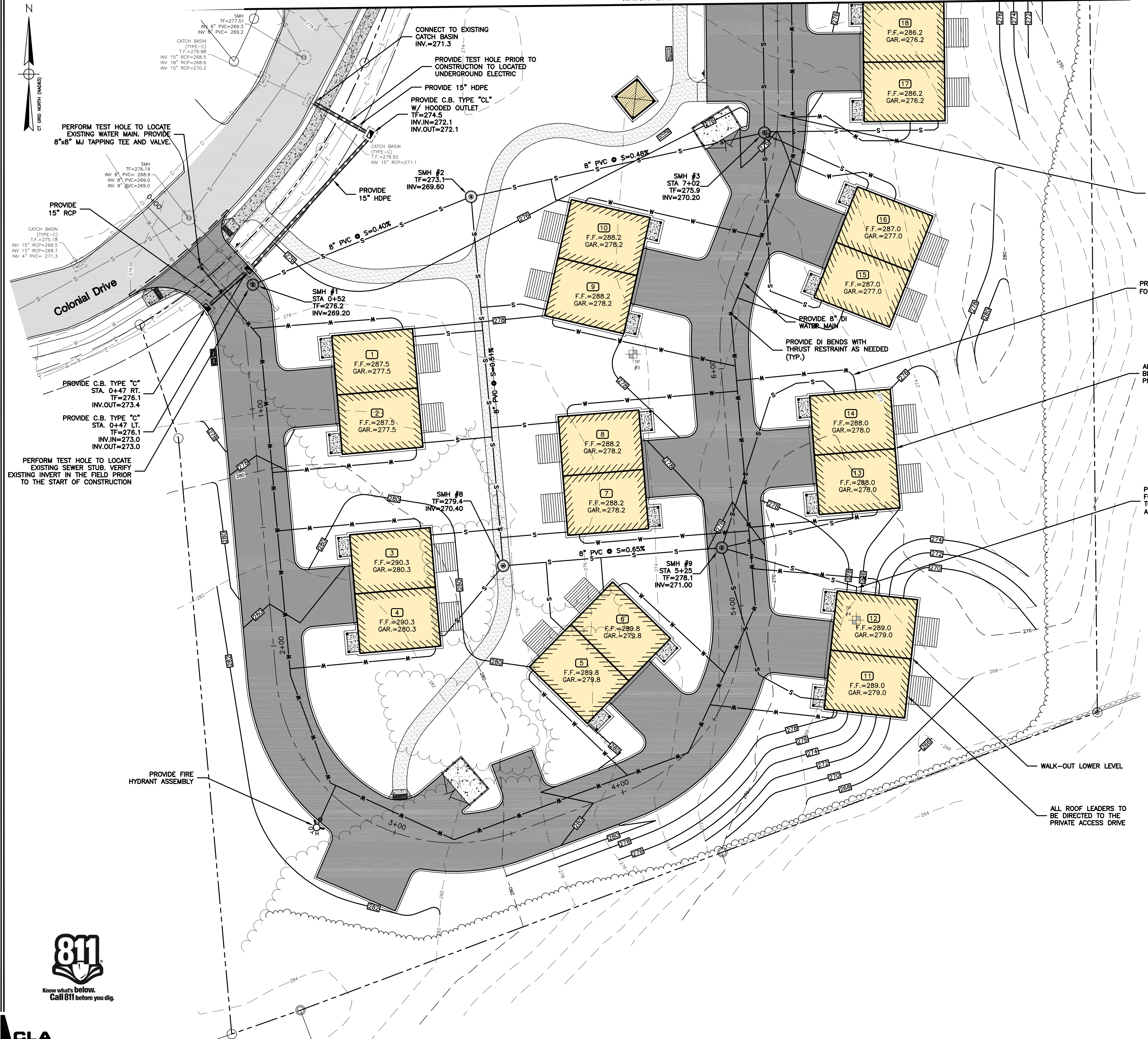
BUILDING LOCATED WITHIN 30' OF EACH OTHER SHALL BE CONSTRUCTED OF FIRE RATED MATERIALS AND BE APPROVED BY THE BUILDING OFFICIAL AND FIRE MARSHAL.

		CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING	
		317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165	
1	9/7/2023	Development Reconfiguration	
No.	DATE	REVISION	
25 Colonial Drive Killingly, Connecticut 06241			Project No. CLA-7283
Site Improvement Plan			Proj. Engineer K.J.H.
North Woods Village Planned Residential Development			Date: 7/7/2023
Site Plan			Sheet No. 4

MATCH LINE - SEE SHEET 3

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TEST PIT LOGS
 TEST PITS WITNESSED BY CLA ENGINEERS ON 4/27/2023

TP #4
 0-18" TOPSOIL, DARK BROWN FINE SANDY LOAM
 18-34" SAND WITH SOME FINES
 34-78" FINE SAND
 78-96" MEDIUM SAND WITH SOME GRAVEL

NO WATER
 NO MOTTLING
 NO LEDGE

TP #5
 0-12" TOPSOIL, DARK BROWN FINE SANDY LOAM
 12-24" BROWN COARSE SAND WITH GRAVEL
 24-75" GRAY SANDY GRAVEL WITH COBBLES
 75-98" LIGHT GRAY COARSE SAND AND GRAVEL

NO WATER
 NO MOTTLING
 NO LEDGE

SEE SHEETS 7-9 FOR CENTERLINE HORIZONTAL AND VERTICAL ALIGNMENTS (TYP.)

PROVIDE WATER SERVICE PIPE FOR EACH UNIT. (TYP.)

ALL ROOF LEADERS TO BE DIRECTED TO THE PRIVATE ACCESS DRIVE

PROVIDE SEWER SERVICE PIPE FOR EACH UNIT. PROVIDE CLEAN-OUTS TO GRADE AT FOUNDATION AND AT ANY NECESSARY BENDS. (TYP.)

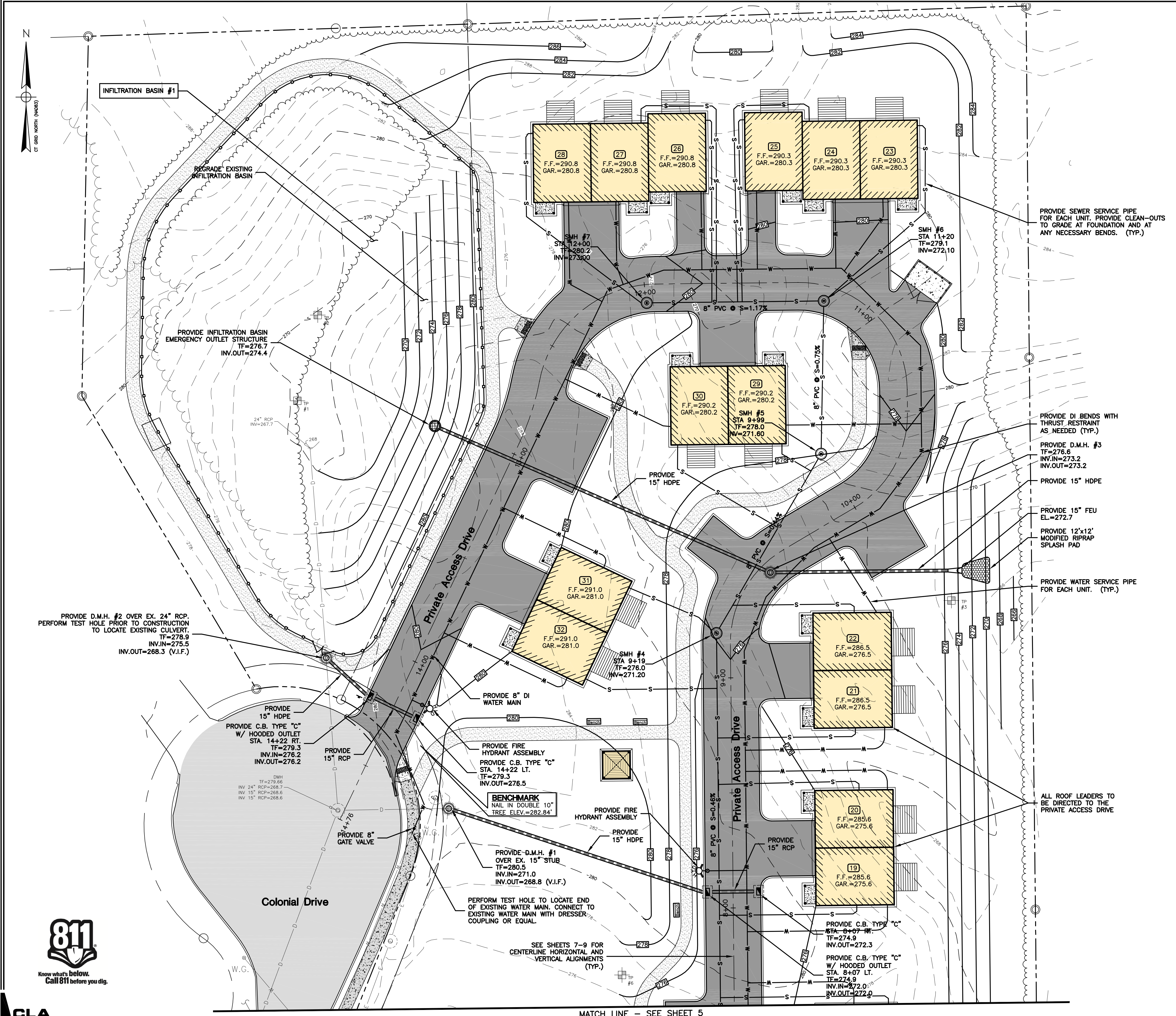
WALK-OUT LOWER LEVEL

ALL ROOF LEADERS TO BE DIRECTED TO THE PRIVATE ACCESS DRIVE

Grading, Drainage, and Utility Plan
 SCALE: 1"=20'



<p>CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING</p> <p>317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165</p>		<p>Project No. CLA-7283</p> <p>Proj. Engineer K.J.H.</p> <p>Date: 7/7/2023</p> <p>Sheet No. 5</p>						
<p>25 Colonial Drive Killingly, Connecticut 06241</p> <p>Site Improvement Plan North Woods Village Planned Residential Development</p> <p>Grading, Drainage, and Utility Plan</p>								
<table border="1"> <thead> <tr> <th>No.</th> <th>DATE</th> <th>REVISION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>9/7/2023</td> <td>Development Reconfiguration</td> </tr> </tbody> </table>	No.	DATE	REVISION	1	9/7/2023	Development Reconfiguration		
No.	DATE	REVISION						
1	9/7/2023	Development Reconfiguration						



- TEST PIT LOGS**
 TEST PITS WITNESSED BY CLA ENGINEERS ON 4/27/2023
- TP #1**
 0-13" TOPSOIL, DARK BROWN FINE SANDY LOAM
 13-21" DARK BROWN GRAVELLY SAND
 21-102" GRAY BROWN COARSE SAND AND GRAVEL w/ COBBLES
- NO WATER
 NO MOTTLING
 NO LEDGE
- TP #2**
 0-28" TOPSOIL, DARK BROWN FINE SANDY LOAM
 28-52" BROWN COARSE SAND WITH GRAVEL, TRACE FINES
 52-106" BROWN GRAVEL AND SAND WITH COBBLES, FEW STONES
- NO WATER
 NO MOTTLING
 NO LEDGE
- TP #3**
 0-6" TOPSOIL, DARK BROWN FINE SANDY LOAM
 6-36" BROWN MEDIUM SAND
 36-58" COARSE SAND WITH GRAVEL
 58-100" GRAVEL AND COARSE SAND
- NO WATER
 NO MOTTLING
 NO LEDGE
- TP #6**
 0-9" TOPSOIL, DARK BROWN FINE SANDY LOAM
 9-28" BROWN MEDIUM SAND
 28-48" GRAY COARSE SANDY GRAVEL
 48-57" GRAY FINE SAND
 57-102" GRAVEL AND COARSE SAND, COMPACT
- NO WATER
 MOTTLING AT 57"
 NO LEDGE

PROVIDE SEWER SERVICE PIPE FOR EACH UNIT. PROVIDE CLEAN-OUTS TO GRADE AT FOUNDATION AND AT ANY NECESSARY BENDS. (TYP.)

PROVIDE DI BENDS WITH THRUST RESTRAINT AS NEEDED (TYP.)

PROVIDE D.M.H. #3
 TF=276.8
 INV.IN=273.2
 INV.OUT=273.2

PROVIDE 15" HDPE

PROVIDE 15" FEU
 EL.=272.7

PROVIDE 12"x12" MODIFIED RIPRAP SPLASH PAD

PROVIDE WATER SERVICE PIPE FOR EACH UNIT. (TYP.)

ALL ROOF LEADERS TO BE DIRECTED TO THE PRIVATE ACCESS DRIVE

Grading, Drainage, and Utility Plan
 SCALE: 1"=20'

CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING 317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165		Project No. CLA-7283
		Proj. Engineer K.J.H.
25 Colonial Drive Killingly, Connecticut 06241 Site Improvement Plan North Woods Village Planned Residential Development Grading, Drainage, and Utility Plan		Date: 7/7/2023
1 9/7/2023 Development Reconfiguration No. DATE REVISION		Sheet No. 6

PROVIDE D.M.H. #2 OVER EX. 24" RCP. PERFORM TEST HOLE PRIOR TO CONSTRUCTION TO LOCATE EXISTING CULVERT.
 TF=278.9
 INV.IN=275.5
 INV.OUT=268.3 (V.I.F.)

PROVIDE 15" HDPE
 PROVIDE C.B. TYPE "C" W/ HOODED OUTLET
 STA. 14+22 RT.
 TF=279.3
 INV.IN=276.2
 INV.OUT=276.2

DMH
 TF=279.66
 INV. 24" RCP=268.7
 INV. 15" RCP=268.6
 INV. 15" RCP=268.6

PROVIDE 8" GATE VALVE

PROVIDE FIRE HYDRANT ASSEMBLY
 PROVIDE C.B. TYPE "C"
 STA. 14+22 LT.
 TF=279.3
 INV.OUT=276.5

BENCHMARK
 NAIL IN DOUBLE 10" TREE
 ELEV.=282.84'

PROVIDE D.M.H. #1 OVER EX. 15" STUB
 TF=280.5
 INV.IN=271.0
 INV.OUT=268.8 (V.I.F.)

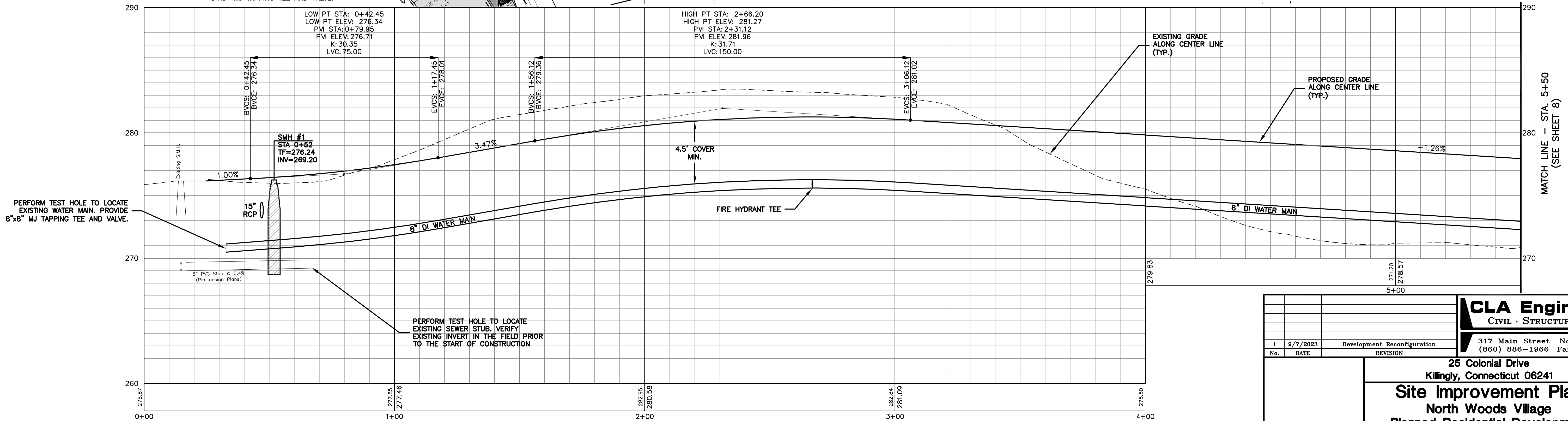
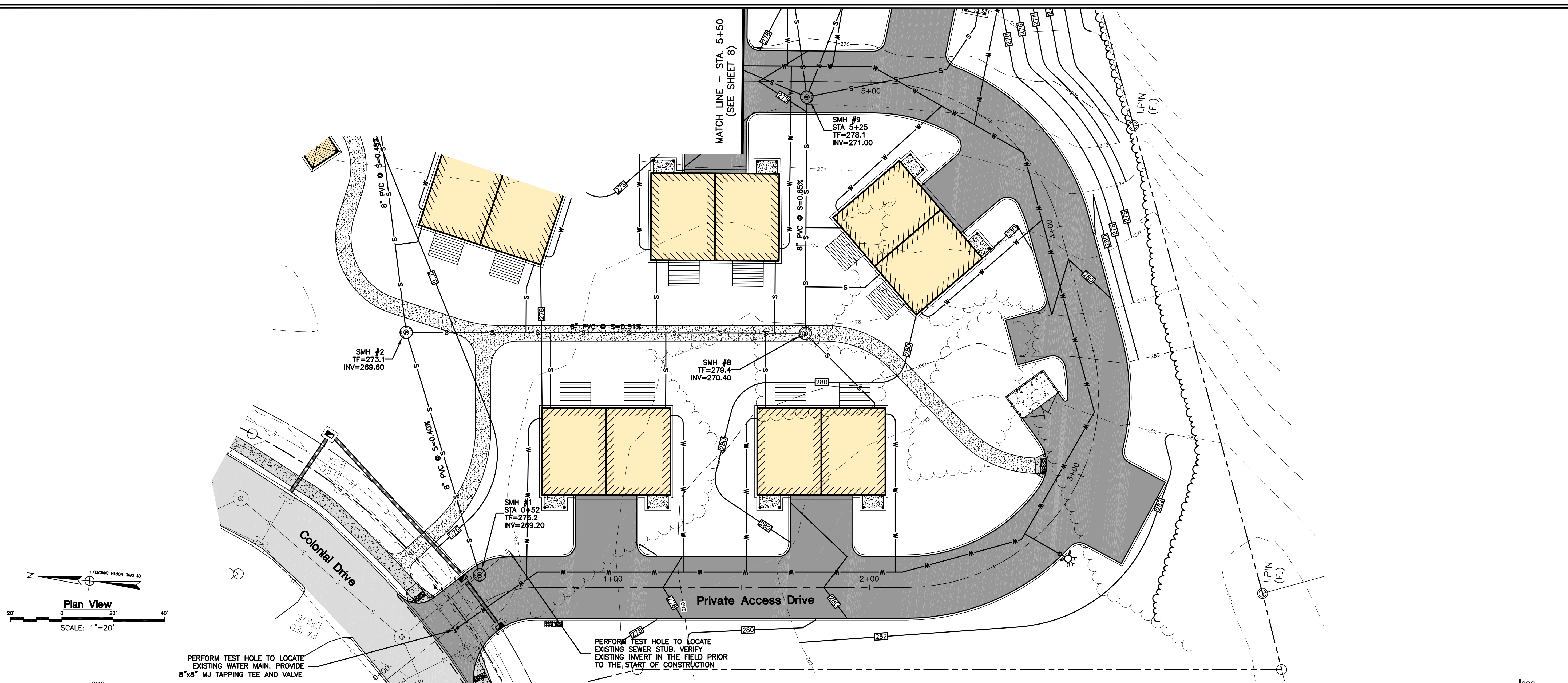
PERFORM TEST HOLE TO LOCATE END OF EXISTING WATER MAIN. CONNECT TO EXISTING WATER MAIN WITH DRESSER COUPLING OR EQUAL.

SEE SHEETS 7-9 FOR CENTERLINE HORIZONTAL AND VERTICAL ALIGNMENTS (TYP.)

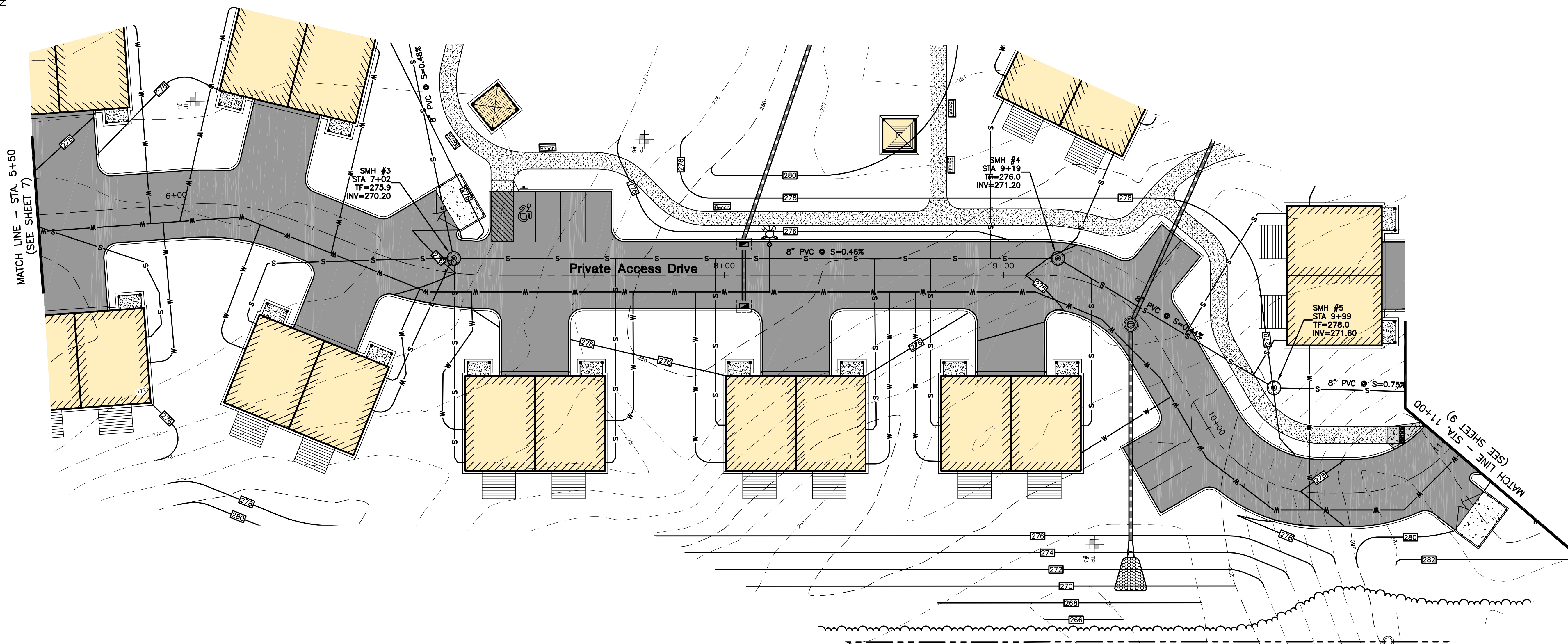
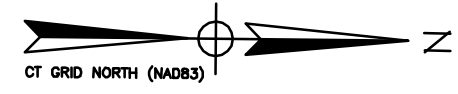
MATCH LINE - SEE SHEET 5



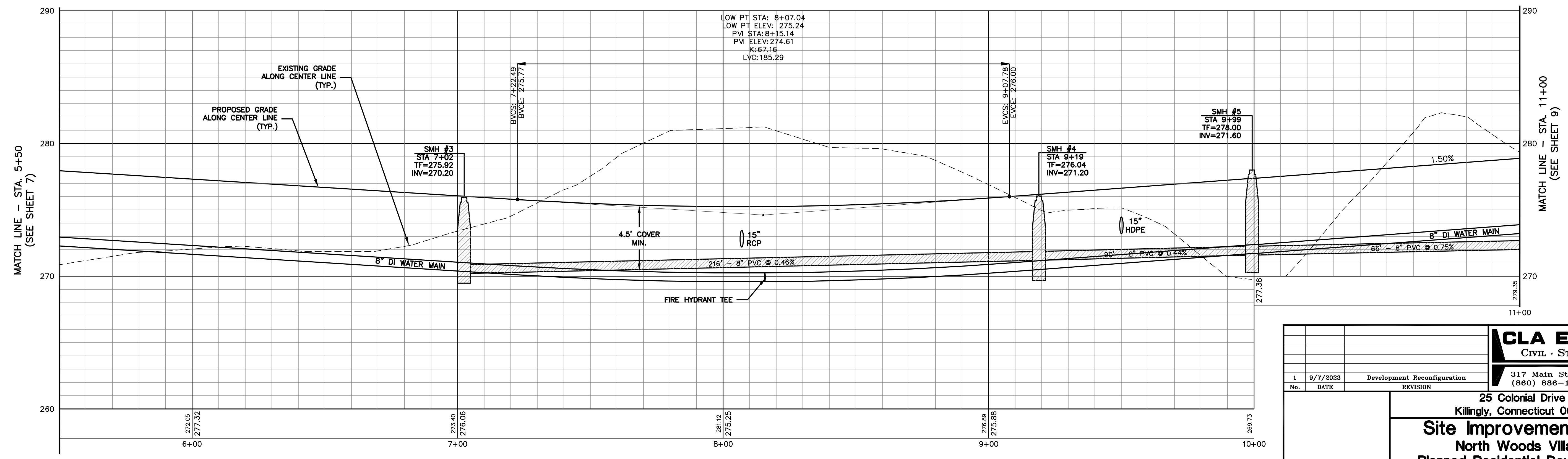
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		Proj. Engineer K.J.H.						
<p>25 Colonial Drive Killingly, Connecticut 06241</p> <p>Site Improvement Plan North Woods Village Planned Residential Development</p> <p>Driveway Plan & Profile</p>		Date: 7/7/2023						
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No.	DATE	REVISION						
1	9/7/2023	Development Reconfiguration						



Plan View
SCALE: 1"=20'

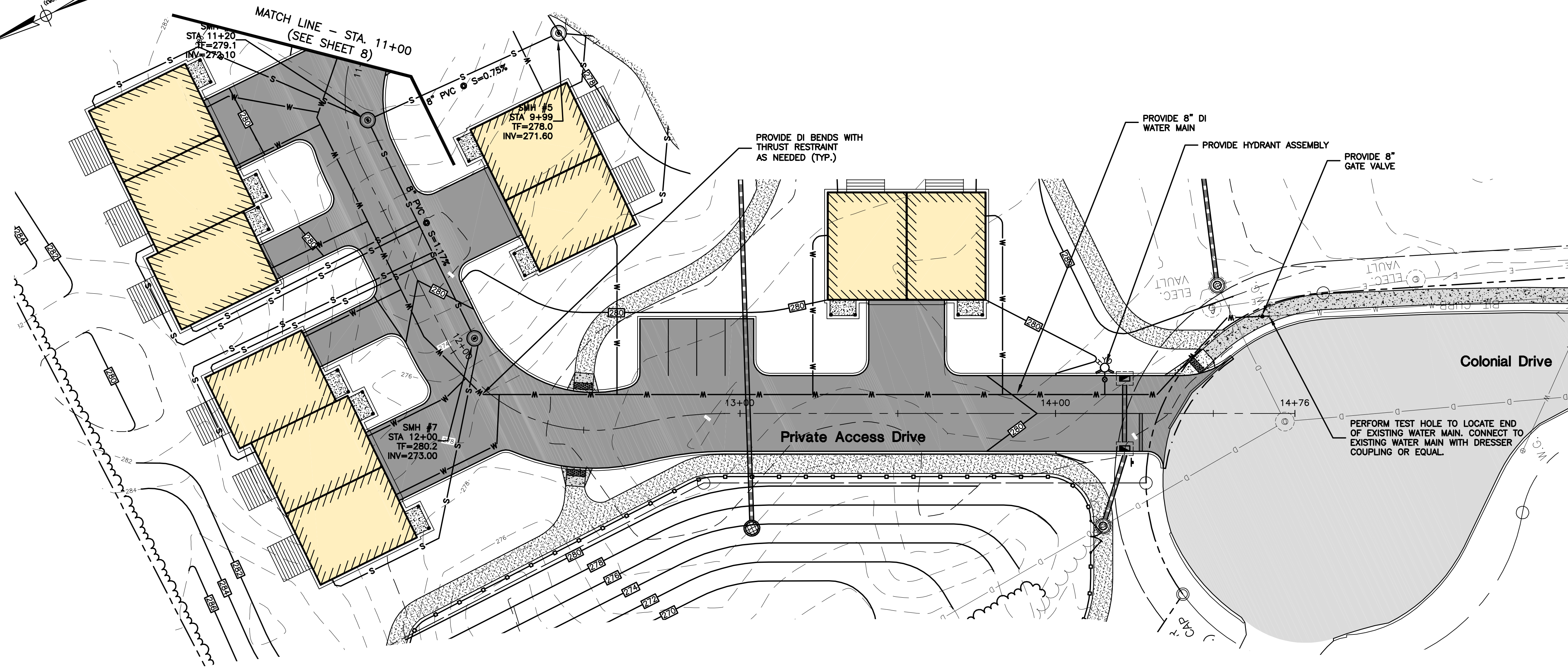
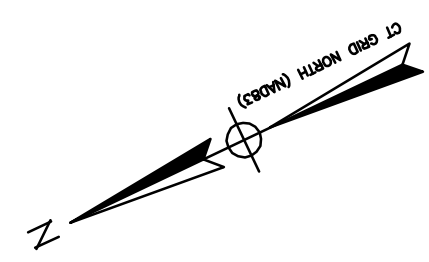


Profile View
SCALE: HORIZ: 1"=20'
VERT: 1"=4'

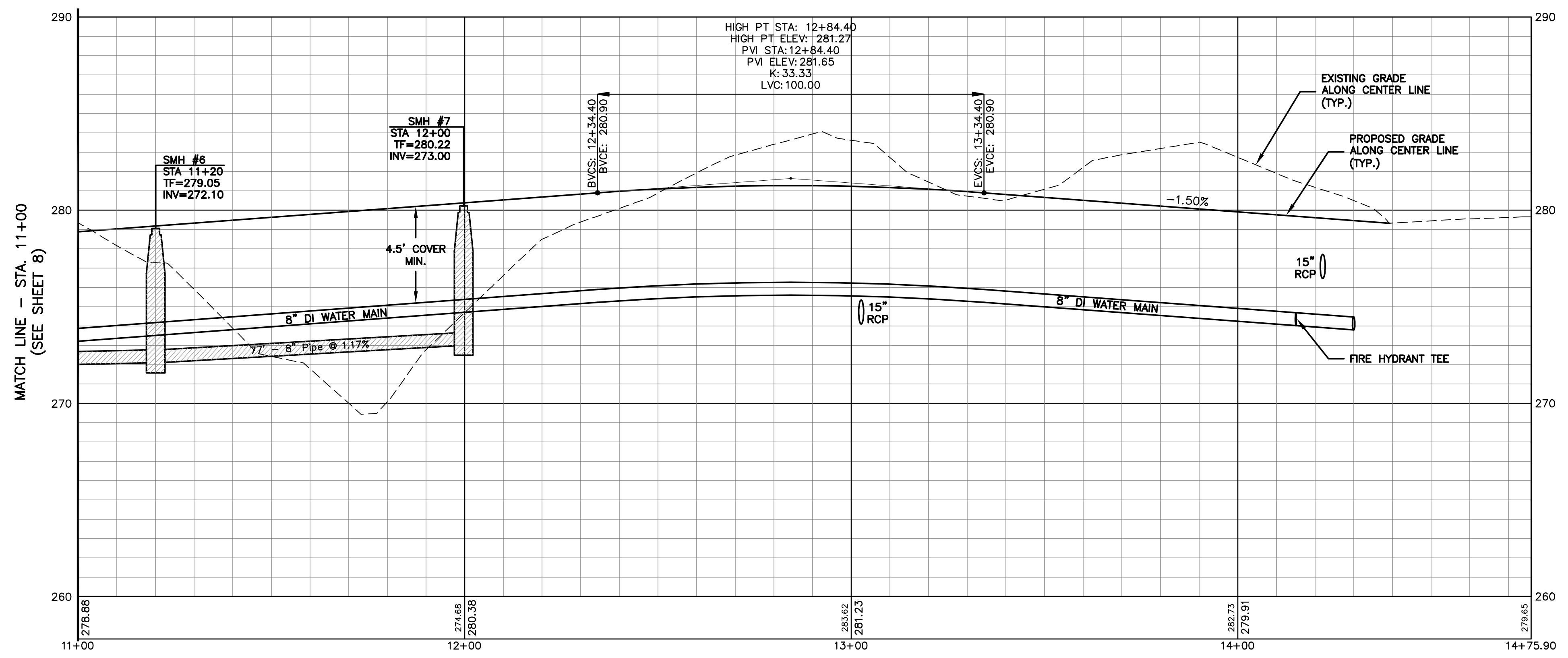
CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING 317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165		Project No. CLA-7283 Proj. Engineer K.J.H. Date: 7/7/2023 Sheet No. 8
1 No. DATE REVISION 9/7/2023 Development Reconfiguration	25 Colonial Drive Killingly, Connecticut 06241 Site Improvement Plan North Woods Village Planned Residential Development Driveway Plan & Profile	



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Plan View
SCALE: 1"=20'



Profile View
SCALE: HORIZ: 1"=20'
VERT: 1"=4'

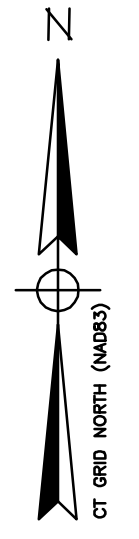


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25 Colonial Drive Killingly, Connecticut 06241 Site Improvement Plan North Woods Village Planned Residential Development Driveway Plan & Profile		Date: 7/7/2023
		Sheet No. 9

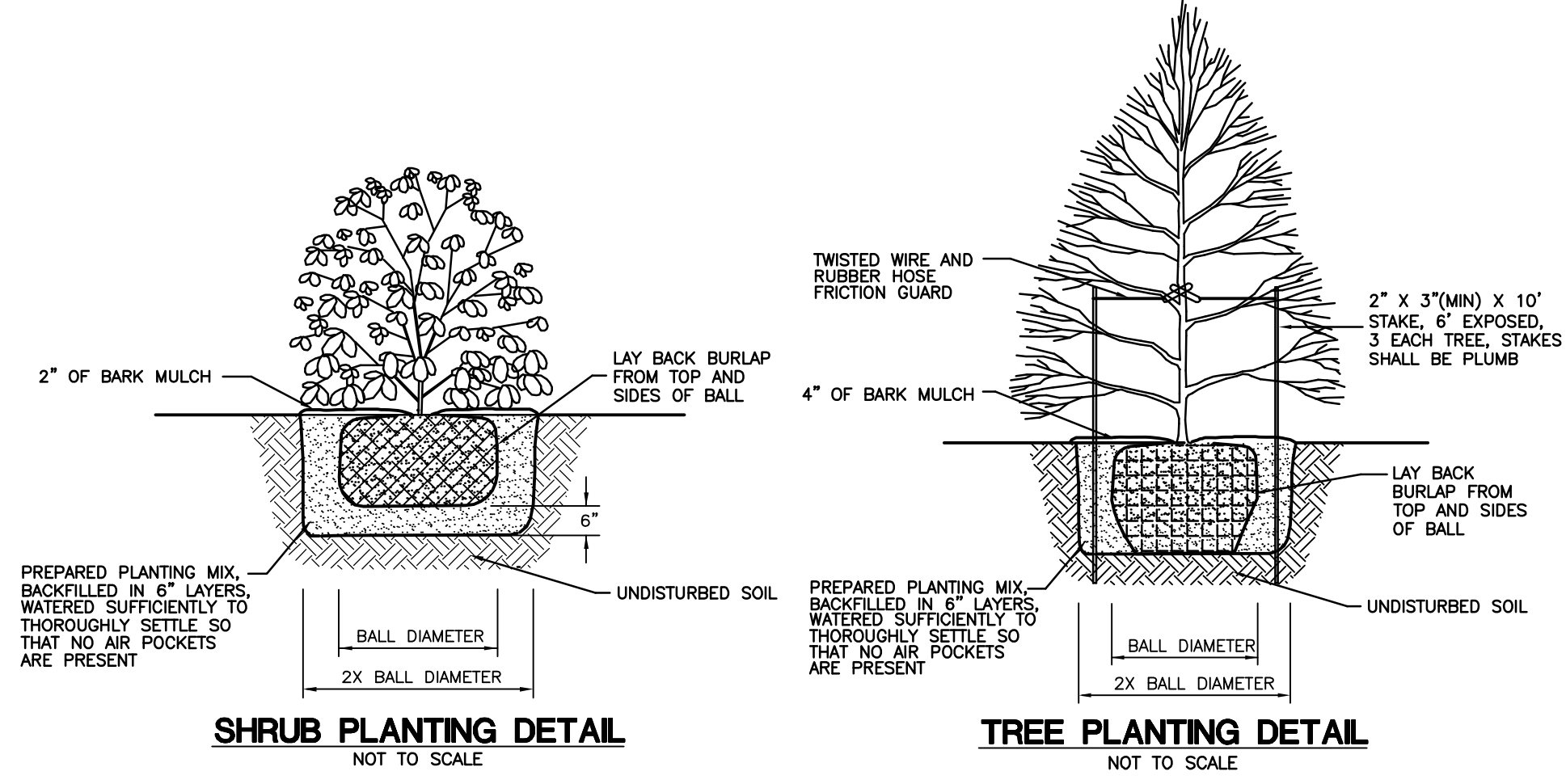
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MATCH LINE - SEE SHEET 11



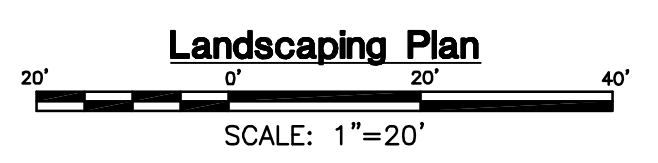
LANDSCAPE NOTES

1. ALL PLANTS SHALL BE NURSERY GROWN AND CONFORM TO THE LATEST EDITION OF ANSI Z60.1, AMERICAN STANDARD FOR NURSERY STOCK.
2. ALL SIZES NOTED IN THE LANDSCAPE SCHEDULE ARE MINIMUMS.
3. NO SUBSTITUTION OF PLANT MATERIALS SHALL BE ALLOWED WITHOUT THE PRIOR WRITTEN CONSENT OF THE PROJECT OWNER AND THE TOWN ZONING OFFICIAL.
4. PLANTING MIXTURE FOR TREES AND SHRUBS:
 - 1 PART DEHYDRATED COW MANURE OR COMPOSTED ORGANIC MATERIAL
 - 2 PARTS PEAT MOSS AND 5 PARTS TOPSOIL
5. FERTILIZER: TO BE COMPLETE PLANT FOOD WITH A GUARANTEED ANALYSIS OF 10-10-10 UNLESS OTHERWISE APPROVED BY THE OWNER. FERTILIZER SHALL CONTAIN 50% SLOW RELEASE NITROGEN AND 50% QUICK RELEASE.
6. ALL PLANT PITS MUST BE FREE DRAINING. BREAK UP THE BOTTOM OF THE HOLE BY FORK IF NECESSARY TO ENSURE PLANT HAS PROPER DRAINAGE.
7. SET ALL PLANTS IN CENTER OF PLANT PITS. PLUMB AND STRAIGHT AND AS DETAILED ON THE DRAWING. ALL PLANT BACK-FILL SHALL BE THE SAME RELATIONSHIP TO FINISHED GRADE AS TO ORIGINAL PLANTING GRADE PRIOR TO DIGGING. TREES SHALL BE PLANTED WITH THE JUNCTION OF ROOTS AND STEM LEVEL WITH FINISHED GRADE.
8. HANDLE BALLED AND BURLAPPED PLANTS FROM THE BALL ONLY. ONCE POSITIONED IN THE HOLE, REMOVE THE TOP 1/3 OF THE BURLAP FROM THE ROOT BALL WITHOUT DISTURBING THE ROOTS.
9. FACE EACH PLANT TO GIVE THE BEST APPEARANCE.
10. FILL PLANT PITS 2/3 THEIR DEPTH WITH PREPARED PLANTING MIXTURE. WATER THOROUGHLY AND ALLOW TO SETTLE. COMPLETE BACK-FILLING. WATER THOROUGHLY TO ELIMINATE ANY VOIDS AND AIR POCKETS. PROVIDE ADDITIONAL BACK-FILL AS NECESSARY TO CONFORM TO REQUIRED ELEVATION AND AS DETAILED.
11. FORM SAUCER AND INSTALL MULCH OVER ENTIRE PLANT PIT AND SAUCER AREA AS DETAILED.
12. 4 INCHES SHREDDED HEMLOCK BARK MULCH OR EQUAL SHALL BE USED AROUND ALL TREES AND SHRUB PLANTINGS.
13. ALL PLANTS AND TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE FULL YEAR AFTER INSPECTION AND ACCEPTANCE BY THE OWNER OR OWNER'S REPRESENTATIVE.
14. ALL DISTURBED AREAS SHALL BE LOAMED, SEEDED, FERTILIZED, AND MULCHED IN ACCORDANCE WITH THE SLOPE STABILIZATION DETAILS.
15. THE OWNER AND/OR CONTRACTOR SHALL ENSURE THAT ONLY CLEAN FILL/SOIL IS USED FOR THE SITE THAT IS FREE OF INVASIVE SPECIES.
16. NO PROPOSED PLANTINGS OR SUBSTITUTE PLANTINGS SHALL BE ALLOWED THAT ARE INCLUDED ON THE CONNECTICUT INVASIVE PLANT LIST PUBLISHED BY THE CT INVASIVE PLANTS COUNCIL (AS UPDATED).



LANDSCAPE SCHEDULE (THIS SHEET)

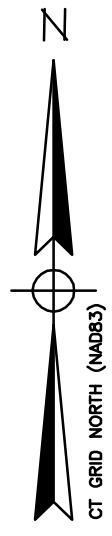
Key	Botanical Name	Common Name	Size	Quantity
Evergreen Trees				
Jv	Juniperus virg. 'Emerald Sentinel'	Emerald Sentinel Red Cedar	6' ht.	17
Tp	Thuja plicata 'Green Giant'	Giant Arborvitae	6' ht.	17
Deciduous Trees				
CcR	Cercis canadensis	Redbud	6' ht., 2" cal.	4
CcAH	Celtis occidentalis	American Hornbeam	6' ht., 2" cal.	5
Cf	Cornus 'florida'	Flowering Dogwood	6' ht., 2" cal.	4
Lt	Liriodendron tulipifera	Tulip Tree (yellow Poplar)	6' ht., 3" cal.	2
Ps	Prunus serotina	Black Cherry	6' ht., 3" cal.	2
Tc	Tilia cordata 'Greenspire'	Greenspire Linden	6' ht., 3" cal.	1
Shrubs				
Kl	Kalmia latifolia	Mountain Laurel	3 gal.	5
Sm	Syringa meyeri 'Palibin'	Dwarf Korean Lilac	3 gal.	5
Vd	Viburnum dentatum	Arrowwood	3 gal.	2



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<p>25 Colonial Drive Killingly, Connecticut 06241</p> <p>Site Improvement Plan North Woods Village Planned Residential Development</p> <p>Landscaping Plan</p>		Date: 7/7/2023
<p>1 9/7/2023 Development Reconfiguration</p> <p>No. DATE REVISION</p>		Sheet No. 10

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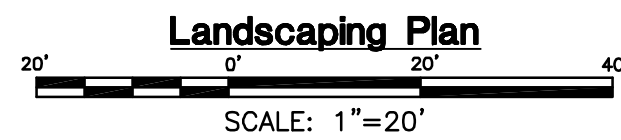


LANDSCAPE SCHEDULE (THIS SHEET)

Key	Botanical Name	Common Name	Size	Quantity
Deciduous Trees				
CcR	Cercis canadensis	Redbud	6' ht., 2" cal.	5
CcAH	Celtis occidentalis	American Hornbeam	6' ht., 2" cal.	4
Cf	Cornus 'florida'	Flowering Dogwood	6' ht., 2" cal.	3
Lt	Liriodendron tulipifera	Tulip Tree (Yellow Poplar)	6' ht., 3" cal.	1
Pa	Prunus serotina	Black Cherry	6' ht., 3" cal.	1
Tc	Tilia cordata 'Greenspire'	Greenspire Linden	6' ht., 3" cal.	2
Shrubs				
Kl	Kalmia latifolia	Mountain Laurel	3 gal.	4
Sm	Syringa meyeri 'Palibin'	Dwarf Korean Lilac	3 gal.	3
Vd	Viburnum dentatum	Arrowwood	3 gal.	5

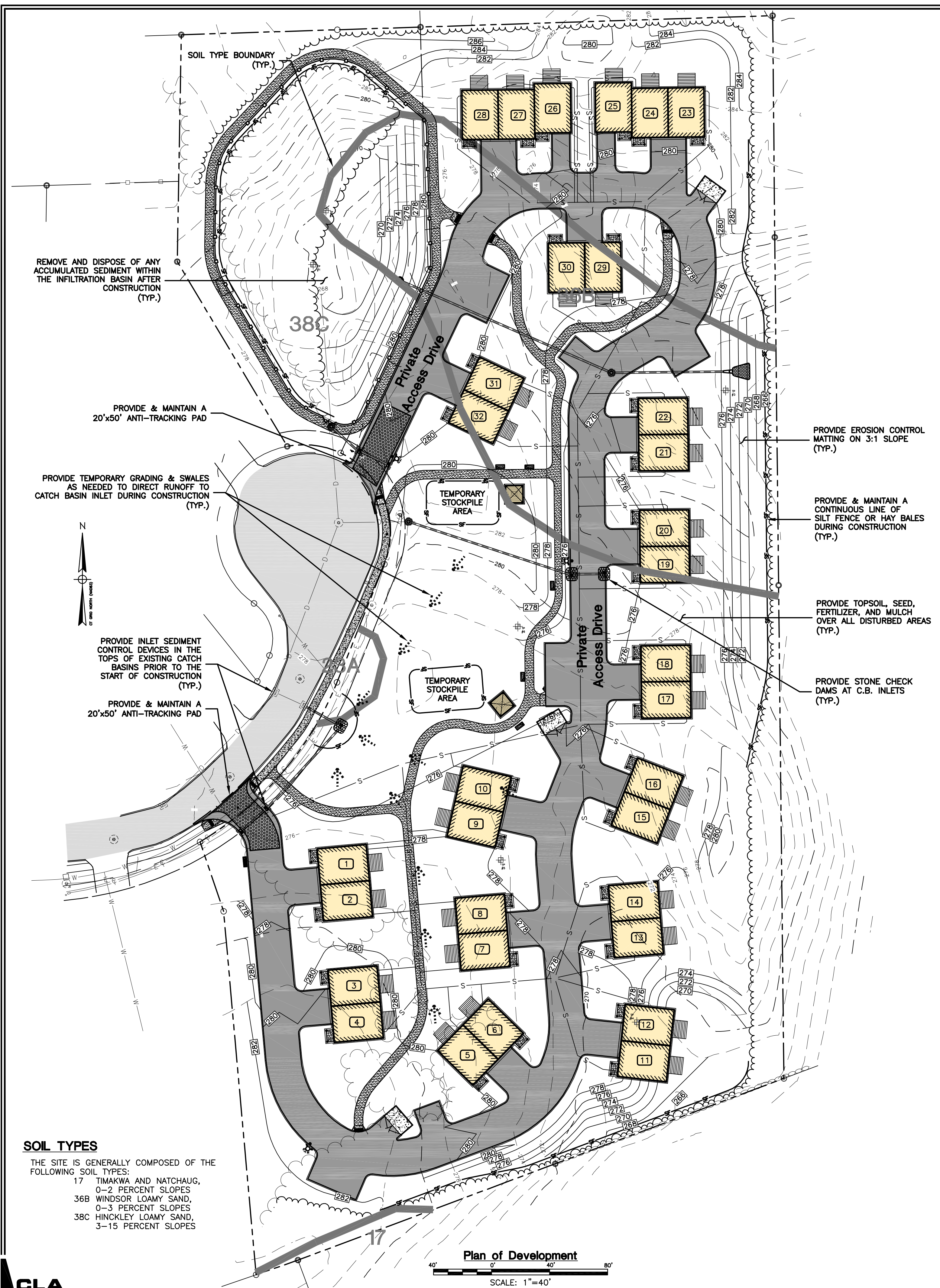


SELECTIVELY CLEAR WITHIN THE COMMON OPEN SPACE AREA. HEALTHY TREES MAY REMAIN. (TYP.)



MATCH LINE - SEE SHEET 10

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<p>1 9/7/2023 Development Reconfiguration</p>	<p>25 Colonial Drive Killingly, Connecticut 06241</p> <p>Site Improvement Plan North Woods Village Planned Residential Development</p> <p>Landscaping Plan</p>	



EROSION & SEDIMENTATION CONTROL NARRATIVE

1. THE EROSION & SEDIMENTATION CONTROL PLAN AND DETAILS HAVE BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEP.
2. THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL MEASURES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE SILT FENCE, STONE CHECK DAMS AND/OR OTHER EROSION CONTROL MEASURES AS NEEDED OR DIRECTED BY THE ENGINEER OR TOWN STAFF TO ADEQUATELY PREVENT SEDIMENT TRANSPORT.
3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE.
4. THE CONTRACTOR SHALL INSPECT, REPAIR AND/OR REPLACE EROSION CONTROL MEASURES EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.
5. STAKED HAY BALE SILT BARRIERS OR SILT FENCE SHALL BE INSTALLED AROUND ANY TEMPORARY STOCKPILE AREAS. TEMPORARY VEGETATIVE COVER MAY BE REQUIRED (SEE NOTE).
6. CONTINUOUS DUST CONTROL USING WATER, CALCIUM CHLORIDE OR APPROVED EQUAL SHALL BE PROVIDED FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS, SURFACES OF BACKFILLED TRENCHES AND GRAVELED ROADWAY SURFACES.
7. IF DEWATERING IS NECESSARY DURING ANY TIME OF CONSTRUCTION A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS SHOWN IN THE HAY-BALE BARRIER DEWATERING DETAIL OR ALTERNATE METHOD PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER AND TOWN STAFF.
8. ALL DISTURBED AREAS SHALL BE RESTORED PER THE SLOPE STABILIZATION AND PERMANENT VEGETATION DETAILS. ALL DISTURBED AREAS THAT ARE SLOPED LESS THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) SLOPE SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED PER THE PERMANENT VEGETATIVE COVER SPECIFICATIONS. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL DISTURBED AREAS THAT ARE SLOPED MORE THAN THREE HORIZONTAL TO ONE VERTICAL (3:1).
9. IF FINAL SEEDING OF DISTURBED AREAS IS NOT TO BE COMPLETED BEFORE OCTOBER 15, THE CONTRACTOR SHALL PROVIDE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY PERMANENT SEEDING.
10. WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISHED GRADED SHALL BE COMPLETED PRIOR TO OCTOBER 15.
11. ANY EROSION WHICH OCCURS WITHIN THE DISTURBED AREAS SHALL BE IMMEDIATELY REPAIRED AND STABILIZED. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT SHALL BE RETURNED TO THE SITE. POST SEEDING, INTERCEPTED SEDIMENT, IF ANY, SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE TOWN AND ENGINEER.
12. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION IS RE-ESTABLISHED OR SLOPES ARE STABILIZED AND REMOVAL IS APPROVED BY THE TOWN.
13. UNFORESEEN PROBLEMS WHICH ARE ENCOUNTERED IN THE FIELD SHALL BE SOLVED ACCORDING TO THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEP.
14. THE CONTRACTOR SHALL PROVIDE THE NAME AND EMERGENCY CONTACT INFORMATION FOR THE PROJECT PERSONNEL RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROLS PRIOR TO THE START OF CONSTRUCTION.
15. THE WETLANDS ENFORCEMENT OFFICER SHALL BE NOTIFIED AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION TO INSPECT EROSION CONTROLS.

NOTE: THE CONTRACTOR SHALL CONTINUALLY STORE THE FOLLOWING MATERIALS ON-SITE DURING CONSTRUCTION TO MEET UNEXPECTED EROSION NEEDS

- * 100 LF OF SILT FENCE
- * 10 HAY BALES
- * 10 CY OF WOOD CHIPS OR CRUSHED STONE

STORMWATER MANAGEMENT & POLLUTION PREVENTION PLAN

- DURING CONSTRUCTION**
- POLLUTION PREVENTION TEAM:**
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARRYING OUT THE PROVISIONS OF THIS PLAN.
1. SWEEPING: IMPERVIOUS SURFACES BEYOND THE WORK SITE SHALL BE SWEEPED CLEAN OF SAND, SILT AND LITTER DAILY AT THE END OF THE WORK DAY.
 2. OUTSIDE STORAGE: ACCESSORIES OR EQUIPMENT STORED OUTSIDE SHALL BE COVERED OR MAINTAINED TO MINIMIZE POSSIBILITY OF THESE MATERIALS OR THEIR RESIDUE PASSING TO STORM WATER.
 3. WASHING: NO WASHING OF VEHICLES, ACCESSORIES, EQUIPMENT OR APPLIANCES IN WORK SITE.
 4. MAINTENANCE AND INSPECTION:
 - A. THE CONTRACTOR SHALL INSPECT, REPAIR AND/OR REPLACE EROSION CONTROL MEASURES EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT.
 - B. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
 - C. DAILY DUST CONTROL USING WATER, OR APPROVED EQUAL, SHALL BE PROVIDED FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS, SURFACES OF BACKFILLED TRENCHES AND GRAVELED SURFACES.
 5. SPILLS OR ACCIDENTAL DISCHARGES:
 - A. COMPLY WITH STATE AND FEDERAL REGULATIONS TO CONTAIN AND CLEAN UP ANY SPILL OR DISCHARGE AND DISPOSE OF MATERIALS AT AN APPROVED FACILITY.
 - B. CONTACT CONNECTICUT DEEP OIL AND CHEMICAL SPILL RESPONSE DIVISION (860) 424-3338
 - C. THE FOLLOWING STEPS SHOULD BE PERFORMED AS SOON AS POSSIBLE:
 - a. STOP THE SOURCE OF THE SPILL
 - b. CONTAIN THE SPILL
 - c. COVER SPILL WITH ABSORBENT MATERIAL SUCH AS KITTY LITER, SAWDUST OR OIL ABSORBENT PADS. DO NOT USE STRAW.
 - d. DISPOSE OF ABSORBENT IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.
- POST CONSTRUCTION**
- POLLUTION PREVENTION TEAM:**
THE PROPERTY OWNER WILL BE RESPONSIBLE FOR MAINTAINING THE STORMWATER MANAGEMENT SYSTEMS LOCATED ON THE PROPERTY AND CARRYING OUT THE PROVISIONS OF THIS PLAN.
1. SWEEPING: THE PRIVATE DRIVE SHALL BE SWEEPED CLEAN OF SAND AND LITTER AND ANY OTHER POLLUTANTS AT LEAST TWICE PER YEAR.
 - A. BETWEEN NOVEMBER 15 AND DECEMBER 15 (AFTER LEAF FALL)
 - B. DURING APRIL (AFTER SNOW MELT)
 2. OUTSIDE STORAGE: ACCESSORIES OR EQUIPMENT STORED OUTSIDE SHALL BE COVERED OR MAINTAINED TO MINIMIZE POSSIBILITY OF THESE MATERIALS OR THEIR RESIDUE PASSING TO STORM WATER.
 3. WASHING: NO WASHING OF VEHICLES, ACCESSORIES, EQUIPMENT OR APPLIANCES IN IMPERVIOUS AREAS.
 4. MAINTENANCE AND INSPECTION:
 - A. WATER QUALITY BASINS
 - a. INSPECT BASIN & SIDE SLOPES FOR INVASIVE VEGETATION - ANNUALLY
 - b. INSPECT FOR DAMAGED, UNDERCUT, OR ERODED AREAS - SEMI-ANNUALLY
 - c. CLEAN AND REMOVE DEBRIS FROM THE OUTLET, INSPECT AND CLEAN DEBRIS IN THE BASIN, MOW SIDE SLOPES - SEMI-ANNUALLY
 - d. REMOVE SEDIMENT AND DEBRIS FROM WATER QUALITY BASINS WHEN SEDIMENT ACCUMULATION REACHES 2/3 OF THE STORAGE VOLUME OF THE BASIN.
 - B. GRASS SWALES
 - a. MOW - AS NEEDED
 - b. REMOVE SEDIMENT AND LEAF LITTER - BETWEEN NOVEMBER 15 AND DECEMBER 15 (AFTER LEAF FALL) AND DURING APRIL (AFTER SNOW MELT)
 - C. RAIN GARDENS: SEE DETAIL
 5. SPILLS OR ACCIDENTAL DISCHARGES:
 - A. COMPLY WITH STATE AND FEDERAL REGULATIONS TO CONTAIN AND CLEAN UP ANY SPILL OR DISCHARGE AND DISPOSE OF MATERIALS AT AN APPROVED FACILITY.
 - B. CONTACT CONNECTICUT DEEP OIL AND CHEMICAL SPILL RESPONSE DIVISION (860) 424-3338
 - C. THE FOLLOWING STEPS SHOULD BE PERFORMED AS SOON AS POSSIBLE:
 - a. STOP THE SOURCE OF THE SPILL
 - b. CONTAIN THE SPILL
 - c. COVER SPILL WITH ABSORBENT MATERIAL SUCH AS KITTY LITER, SAWDUST OR OIL ABSORBENT PADS. DO NOT USE STRAW.
 - d. DISPOSE OF ABSORBENT IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS.

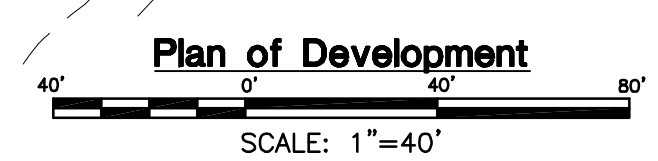
STORMWATER SYSTEM OPERATIONS AND MAINTENANCE

Maintenance Schedule for Infiltration Basins	
Activity	Schedule
<ul style="list-style-type: none"> Prior to new spring growth reaching a height of 2" (e.g., shortly after forsythia or redbud blooms), trim any material standing from the previous year close to the ground (approximately 2"). This will allow the soil to warm more quickly, which will stimulate the emergence and growth of native seedlings and reduce the likelihood of the meadow being invaded by shrubs. Problem weeds should be hand pulled or spot sprayed with an approved herbicide, such as Rodeo® or Garlon® 3A. If you did not plant vines or spiny plants as part of your mix, be vigilant about controlling them. These are more easily pulled when they are young rather than after they have had two to three months of growth. Examples include bindweed, blackberry, multiflora rose, mile-a-minute and Japanese hops. Be equally vigilant about controlling other invasive species, such as autumn olive and Japanese knotweed. Special Circumstances If you notice a heavy infestation of ragweed or foxtail in the second growing season, trim the meadow to a height of 8". Trimming should cease by mid-September. 	Second growing season
<ul style="list-style-type: none"> For the basin and side slopes, inspect for invasive vegetation. Grassy weeds or persistent perennials can re-establish in these soils. Monitor and control weeds by hand pulling or spot spraying. 	Monthly
<ul style="list-style-type: none"> Inspect for damage, undercut, or eroded area Monitor for sediment accumulation Repair undercut or eroded areas 	Semi-Annual inspection As needed maintenance
<ul style="list-style-type: none"> Clean and remove debris & sediment from inlet and outlet structures Inspect and clean debris & sediment in the basin Clean and remove debris from the plunge pools Mow side slopes. Close mowing throughout the regular growing season or extensive chemical use is not conducive to water quality improvement and wildlife habitat. Spring mowed vegetation can typically remain within basins providing cover for new emerging vegetation. 	Semi-annual

Maintenance Schedule for Catch Basins	
Activity	Schedule
<ul style="list-style-type: none"> Clean out sediment from catch basin and hydrodynamic separator 	<ul style="list-style-type: none"> Between November 15th and December 15th (after leaf fall) During April (after snow melt)

Maintenance Schedule for Parking / Driveway Areas	
Activity	Schedule
<ul style="list-style-type: none"> Sweep impervious areas 	<ul style="list-style-type: none"> Between November 15th and December 15th (after leaf fall) During April (after snow melt)
<ul style="list-style-type: none"> Remove and dispose of trash and debris onsite 	Daily - As needed maintenance

SOIL TYPES
THE SITE IS GENERALLY COMPOSED OF THE FOLLOWING SOIL TYPES:
17 TIMAKWA AND NATCHAUG, 0-2 PERCENT SLOPES
36B WINDSOR LOAMY SAND, 0-3 PERCENT SLOPES
38C HINCKLEY LOAMY SAND, 3-15 PERCENT SLOPES



<p>CLA Engineers, Inc. CIVIL · STRUCTURAL · SURVEYING</p> <p>317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165</p>		<p>Project No. CLA-7283</p>
		<p>Proj. Engineer K.J.H.</p>
<p>1 9/7/2023 Development Reconfiguration</p>	<p>25 Colonial Drive Killingly, Connecticut 06241</p>	<p>Date: 7/7/2023</p>
<p>No. DATE REVISION</p>	<p>Site Improvement Plan North Woods Village Planned Residential Development Stormwater Management Plan and Erosion & Sedimentation Control Plan</p>	<p>Sheet No. 12</p>

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TEMPORARY VEGETATIVE COVER

A TEMPORARY SEEDING OF RYE GRASS WILL BE COMPLETED WITHIN 15 DAYS OF THE FORMATION OF STOCKPILES. IF THE SOIL IN THE STOCKPILES HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS IT SHALL BE LOOSENED TO A DEPTH OF 2 INCHES BEFORE THE FERTILIZER, LIME AND SEED IS APPLIED. 10-10-10 FERTILIZER AT A RATE OF 7.5 POUNDS PER 1000 S.F. LESTONE AT A RATE OF 90 LBS. PER 1000 S.F. SHALL BE USED. RYE GRASS APPLIED AT A RATE OF 1 LB. PER 1000 S.F. SHALL PROVIDE THE TEMPORARY VEGETATIVE COVER. STRAW FREE FROM WEEDS AND COARSE MATTER SHALL BE USED AT A RATE OF 70-90 LBS. PER 1000 S.F. AS A TEMPORARY MULCH. APPLY MULCH AND DRIVE TRACKED EQUIPMENT UP AND DOWN SLOPE OVER ENTIRE SURFACE SO CLEAT MARKS ARE PARALLEL TO THE CONTOURS.

PERMANENT VEGETATIVE COVER

TOPSOIL WILL BE REPLACED ONCE THE EXCAVATIONS HAVE BEEN COMPLETED AND THE SLOPES ARE GRADED AS SHOWN ON THE PLANS. PROVIDE SLOPE PROTECTION AS CALLED FOR ON THE PLANS AND DETAILS. TOPSOIL SHALL BE SPREAD AT A MINIMUM COMPACTED DEPTH OF 6 INCHES. ONCE THE TOPSOIL HAS BEEN SPREAD, ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION WILL BE REMOVED AS WELL AS DEBRIS.

- APPLY AGRICULTURAL GROUND LESTONE AT THE RATE OF TWO TONS PER ACRE OR 100 LBS. PER 1000 S.F.
- APPLY 10-10-10 FERTILIZER OR EQUIVALENT AT A RATE OF 300 LBS. PER ACRE OR 7.5 LBS. PER 1000 S.F.
- WORK LESTONE AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES.
- INSPECT SEEDBED BEFORE SEEDING.
- IF TRAFFIC HAS COMPACTED THE SOIL, RETILL COMPACTED AREAS.
- APPLY THE FOLLOWING GRASS SEED MIX:

TYPICAL SEED MIXTURE

ALL DISTURBED AREAS	LBS./ACRE	LBS./1000 S.F.
KENTUCKY BLUEGRASS	20	0.45
CREeping RED FESCUE	20	0.45
PERENNIAL RYEGRASS	5	0.10
	45	1.00

TYPICAL SEED MIXTURE FOR NON-MOWED SLOPES (3:1 OR STEEPER)

CT DEP SEED MIX NO. 26	LBS./ACRE	LBS./1000 S.F.
SWITCHGRASS (BLACKWELL, SHELTER, CAVE-IN-ROCK)	4.0	0.10
BIG BLUESTEM (NIAGRA, KAW)	4.0	0.10
LITTLE BLUESTEM (BLAZE, ALDOUS, CAMPER)	2.0	0.05
SAND LOVEGRASS (NE-27, BEND)	1.5	0.03
BIRD'S-FOOT TREFOLI (EMPIRE VIKING)	2.0	0.05
	13.5	0.33

THE RECOMMENDED SEEDING DATES ARE:
APRIL 1 - JUNE 15 AND AUGUST 15 - OCTOBER 15

IMMEDIATELY FOLLOWING SEEDING, FIRM SEED BED WITH A ROLLER AND MULCH WITH WEED FREE STRAW. IF PERMANENT VEGETATIVE COVER IS HAS NOT BEEN ESTABLISHED BY OCTOBER 15, APPLY A TEMPORARY VEGETATIVE COVER ON THE TOPSOIL.

VEGETATIVE COVER FOR WATER QUALITY BASIN

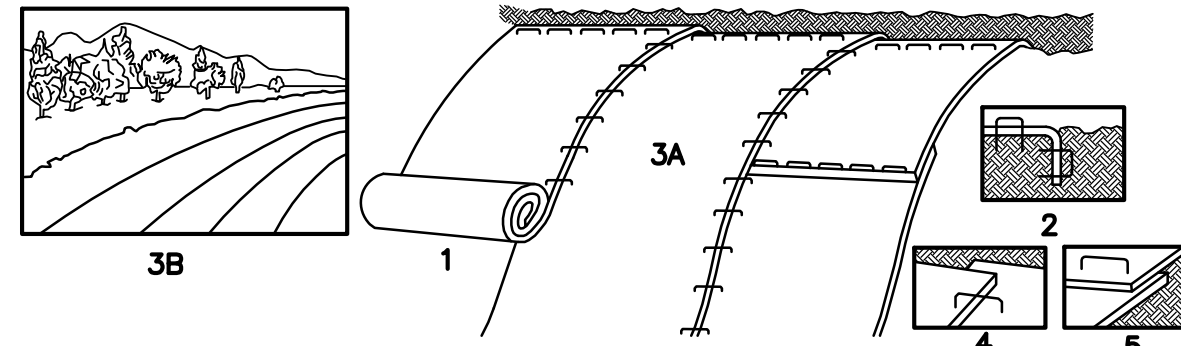
SEED MIXTURE FOR SETTLING BASINS SHALL BE THE "NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR MOIST SITES" FROM NEW ENGLAND WETLAND PLANTS, AMHERST, MA, TELEPHONE NO. 413-548-8000

THE BEST RESULTS ARE OBTAINED WITH A SPRING SEEDING. SUMMER AND FALL SEEDING REQUIRE A LIGHT MULCHING OF WEED FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A 10% INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.

RAIN GARDEN SEED MIXTURE

NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES	LBS./ACRE	LBS./1000 S.F.
	35	0.80

SPECIES: Virginia Wild Rye, (Elymus virginicus), Creeping Red Fescue, (Festuca rubra), Little Bluestem, (Schizachyrium scoparium), Big Bluestem, (Andropogon gerardii), Fox Sedge, (Carex vulpinoidea), Switch Grass, (Panicum virgatum), Rough Bentgrass, (Agrostis scabra), New England Aster, (Aster novae-angliae), Boneset, (Eupatorium perfoliatum), Grass Leaved Goldenrod, (Euthamia graminifolia), Green Burrush, (Scirpus atrovirens), Blue Vervain, (Verbena hastata), Soft Rush, (Juncus effusus), Wool Grass, (Scirpus cyperinus)



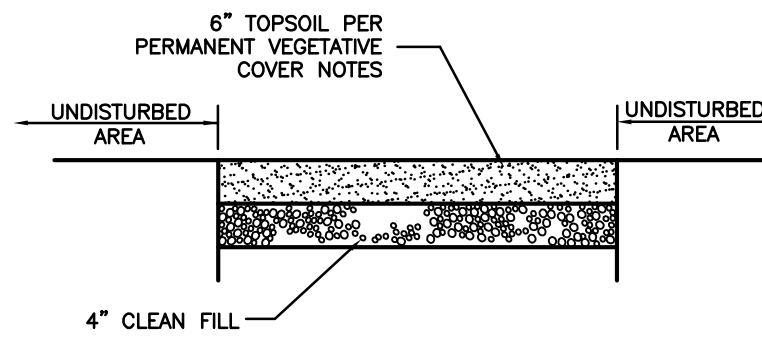
- INSTALLATION NOTES:**
1. PROVIDE 4" THICKNESS OF TOPSOIL OVER CLEAN FILL. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED MIX PER PERMANENT VEGETATIVE COVER NOTES. (SHALL BE PAID FOR AT THE UNIT PRICE FOR LOAM, SEED, FERTILIZER & MULCH)
 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP x 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
 3. ROLL THE BLANKET (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
 5. WHEN BLANKETS MUST BE SPUNCE DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

- PRODUCT NOTES:**
1. EROSION CONTROL MATTING MUST BE LISTED ON THE LATEST CT DOT QUALIFIED PRODUCTS LIST UNDER CLASS E SLOPE PROTECTION, TYPE D.

EROSION CONTROL MATTING DETAIL (FOR 3:1 SLOPES OR STEEPER)

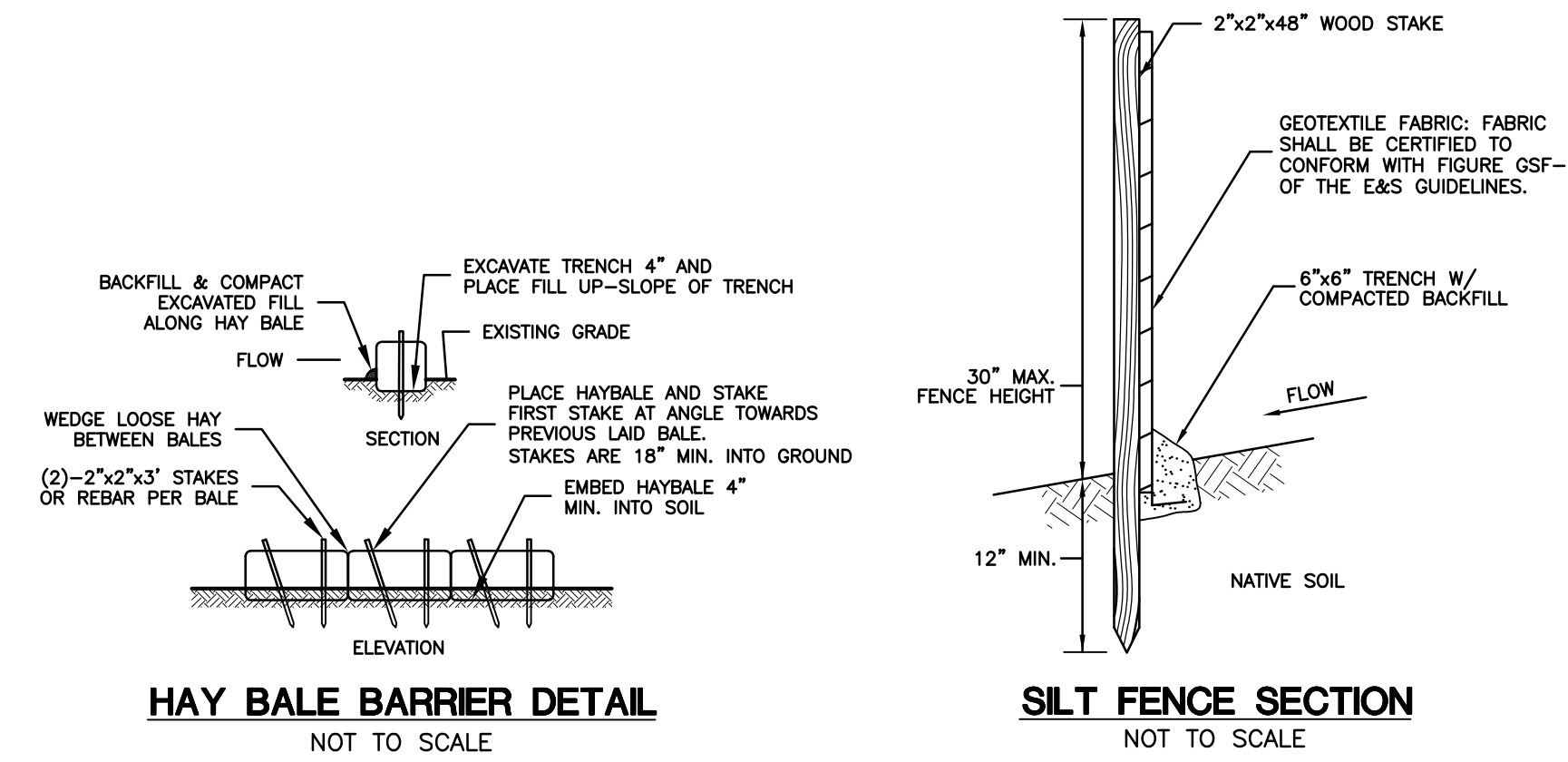
- NOTES:**
1. HYDROSEED SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 9.50.3.b OF DOT FORM 818.
 2. BONDED FIBER MATRIX (BFM) OR FLEXIBLE GROWTH MEDIUM (FGM) MUST BE INCLUDED IN THE HYDROSEED SLURRY. MIX RATE PERCENTAGES SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS FOR THE FINISHED SLOPES. THE FOLLOWING ARE ACCEPTABLE PRODUCTS:
 - A. PROFILE FLEXITERRA FGM
 - B. PROFILE HYDRO-BLANKET BONDED FIBER MATRIX
 - C. MAT, INC. SOIL GUARD BONDED FIBER MATRIX
 - D. NORTH AMERICAN GREEN HYDRA GT OR HYDRA CM
 3. THE REQUIRED SEED MIX SHALL BE IN ACCORDANCE WITH THE PERMANENT VEGETATIVE COVER NOTES. ALL APPLICATION RATES SHALL BE INCREASED BY 10% FOR HYDROSEEDING.
 4. THE CONTRACTOR SHALL ENSURE 100% COVERAGE OF THE DISTURBED SOIL.

HYDROSEED REQUIREMENTS (FOR 3:1 SLOPES OR STEEPER)



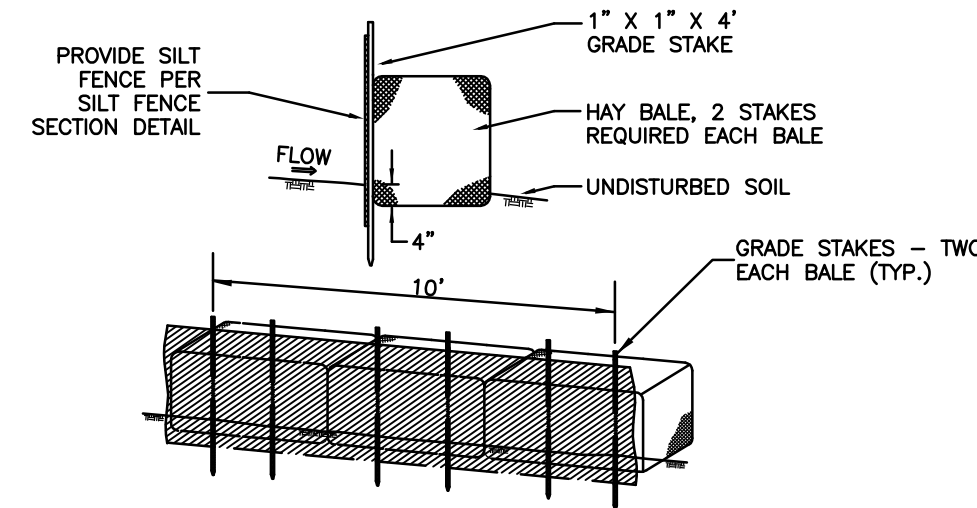
TYPICAL LOAM & SEED SECTION DETAIL (FOR ALL DISTURBED AREAS)

SLOPE STABILIZATION DETAILS
NOT TO SCALE



HAY BALE BARRIER DETAIL
NOT TO SCALE

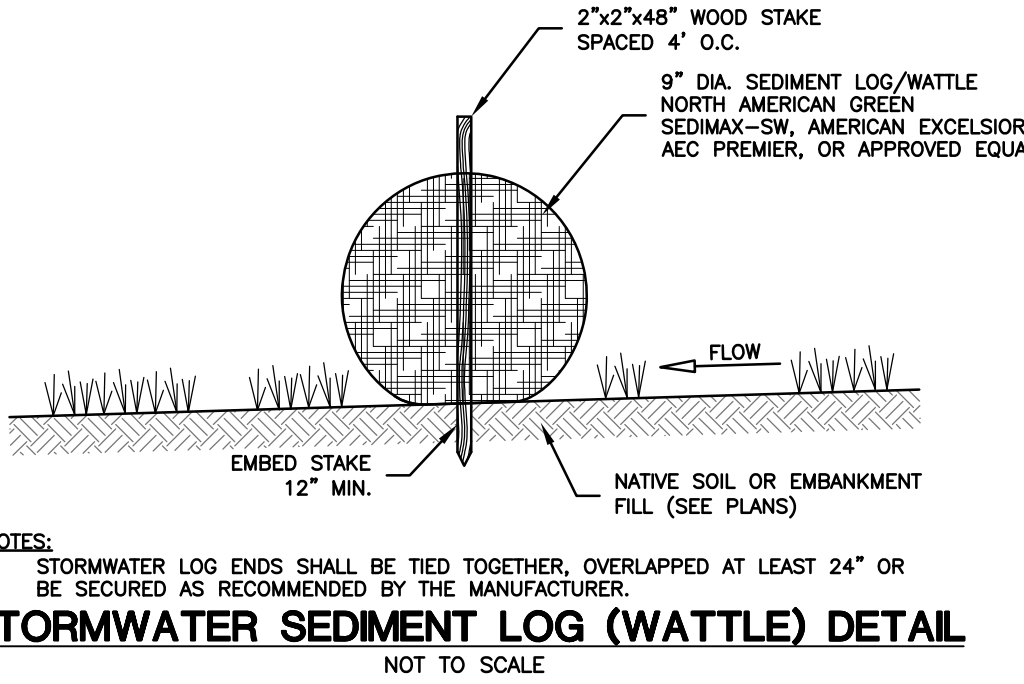
SILT FENCE SECTION
NOT TO SCALE



CONSTRUCTION NOTES:

1. SILT FENCE FILTER CLOTH TO BE SECURELY FASTENED TO GRADE STAKE WITH STAPLES, 6" ON CENTER.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN ONE ANOTHER THEY SHALL OVERLAP BY 6" AND BE FOLDED.
3. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

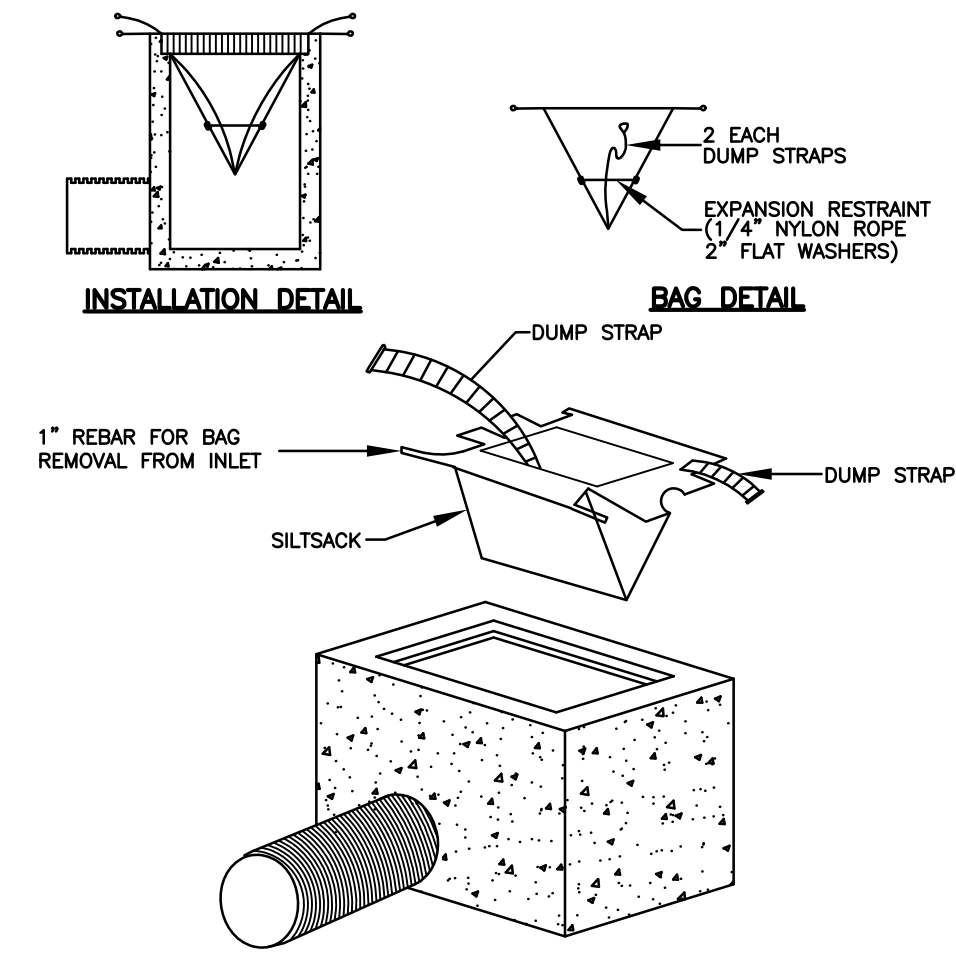
SILT FENCE BACKED BY HAY BALES DETAIL
NOT TO SCALE



NOTES:

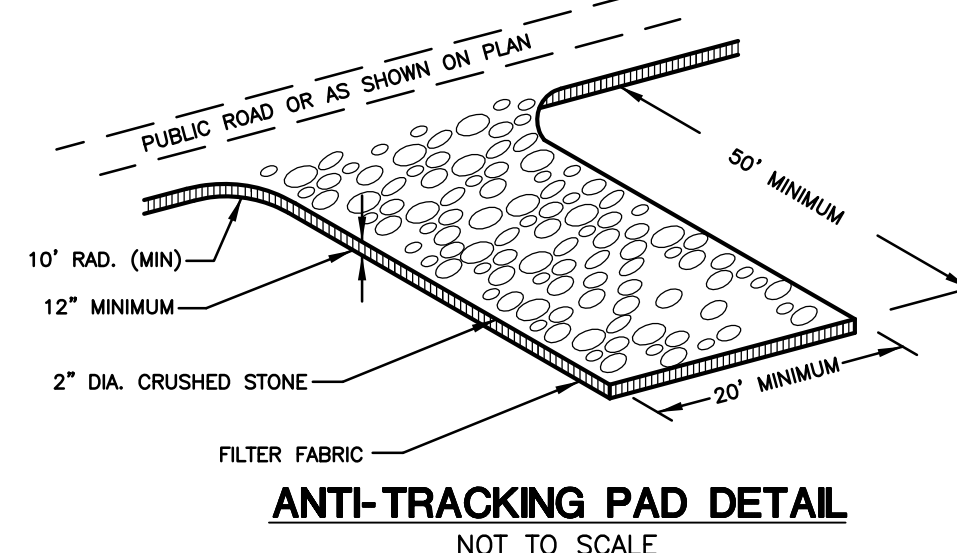
1. STORMWATER LOG ENDS SHALL BE TIED TOGETHER, OVERLAPPED AT LEAST 24" OR BE SECURED AS RECOMMENDED BY THE MANUFACTURER.

STORMWATER SEDIMENT LOG (WATTLE) DETAIL
NOT TO SCALE

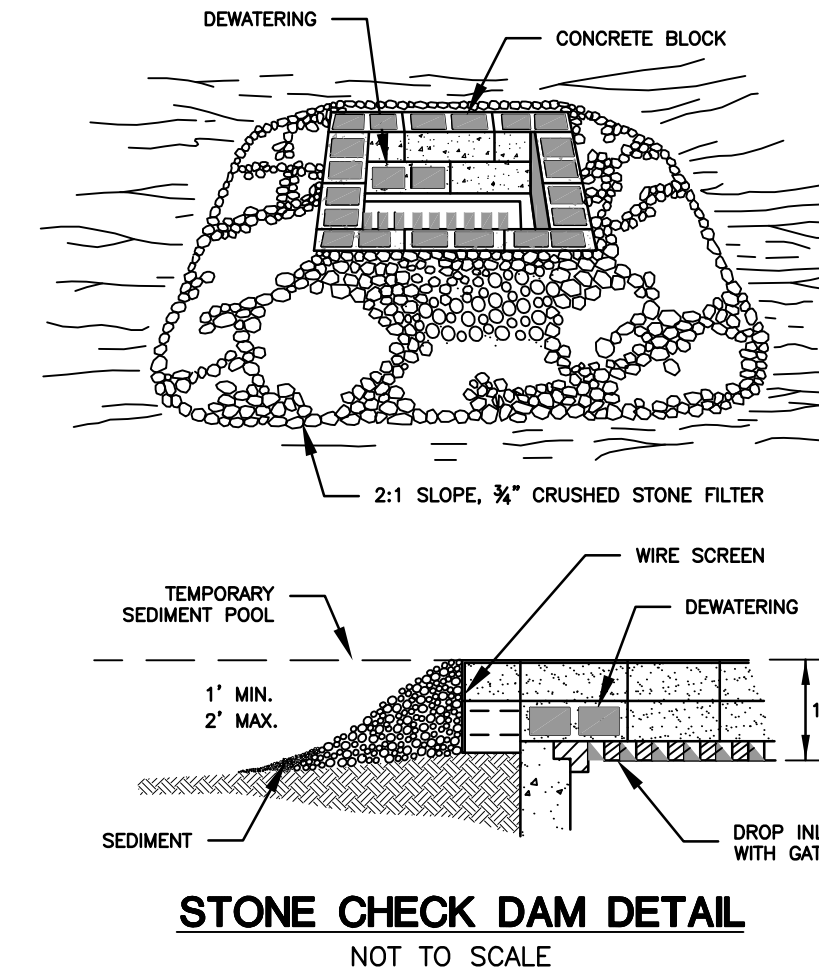


NOTE: TO BE PROVIDED IN ALL NEW CATCH BASINS AT THE TIME OF INSTALLATION AND WITHIN BASINS ADJACENT TO THE WORK AREA PRIOR TO THE START OF CONSTRUCTION

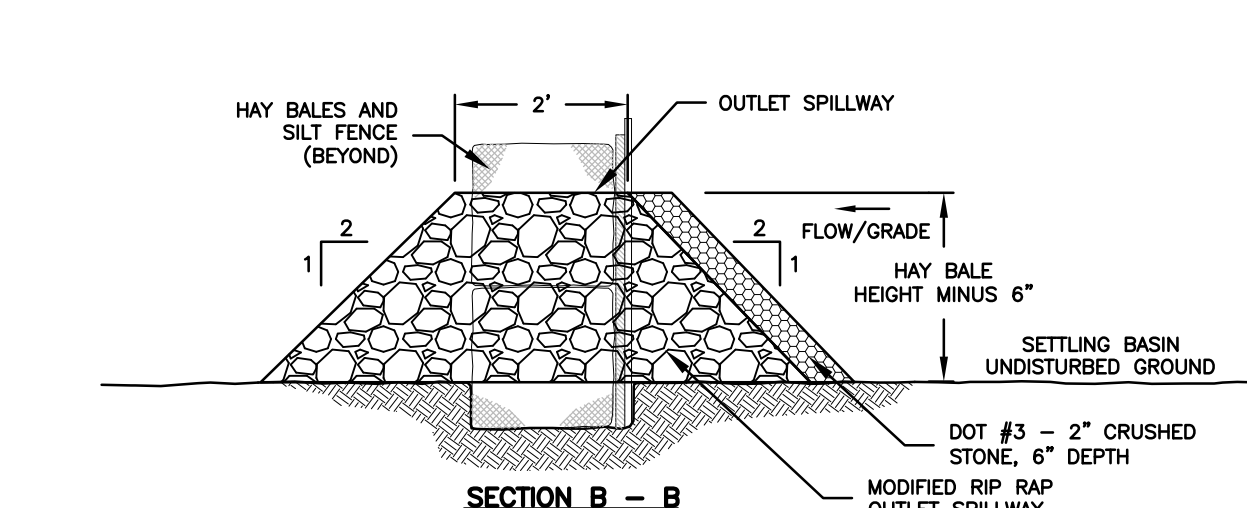
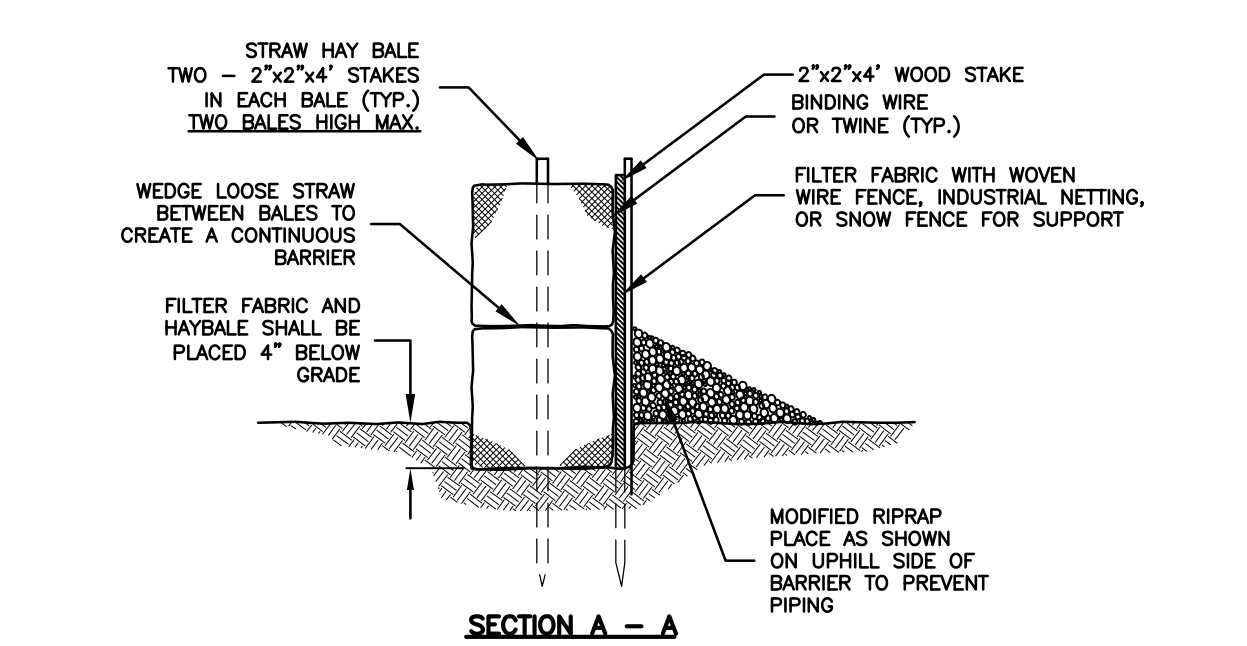
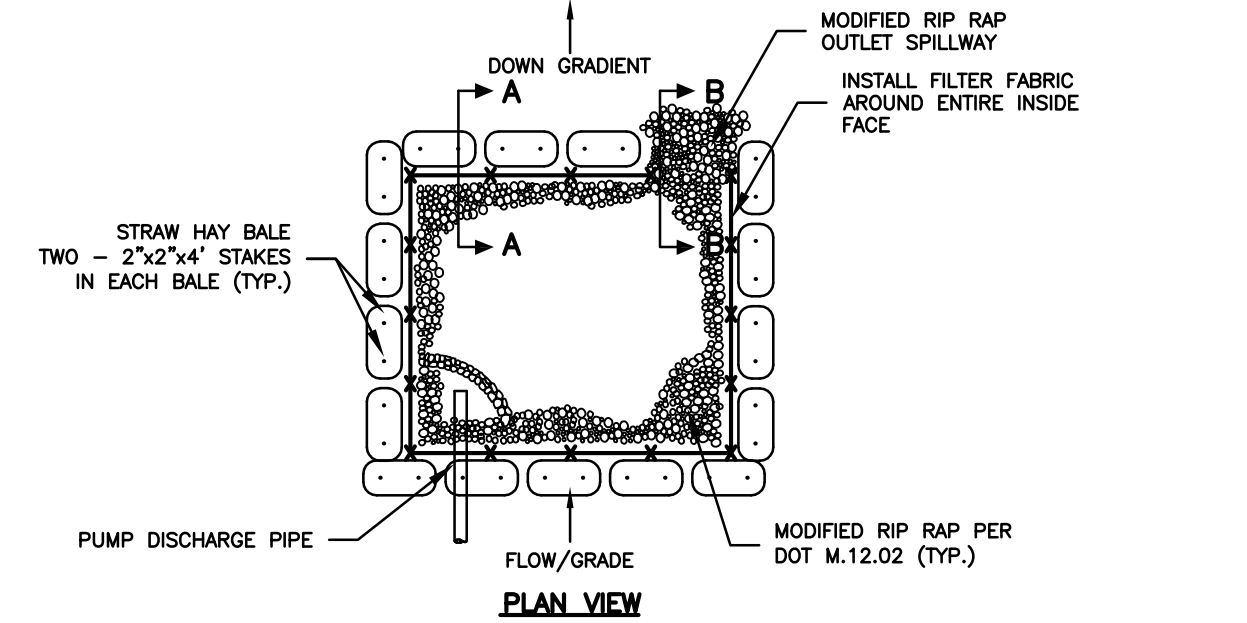
INLET SEDIMENT CONTROL DEVICE DETAIL
NOT TO SCALE



ANTI-TRACKING PAD DETAIL
NOT TO SCALE



STONE CHECK DAM DETAIL
NOT TO SCALE

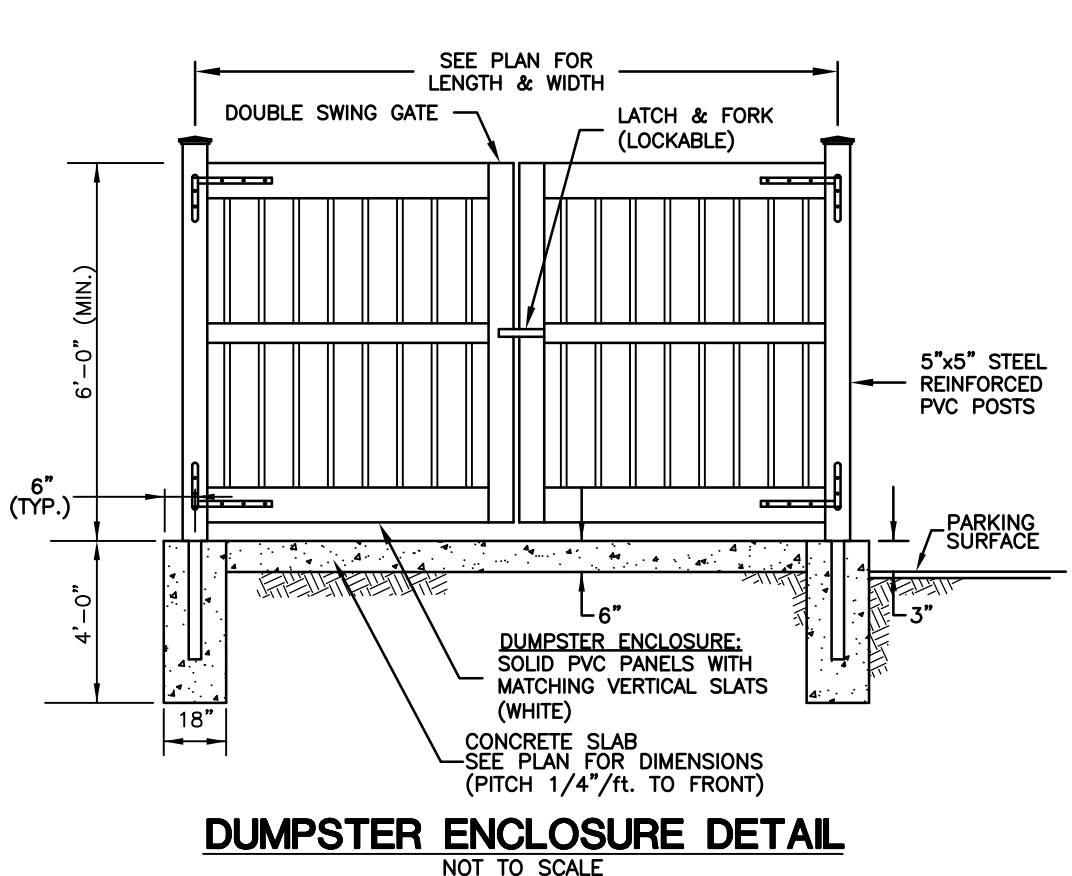


- CONSTRUCTION NOTES:**
1. SILT FENCE FILTER CLOTH TO BE SECURELY FASTENED TO GRADE STAKE WITH STAPLES, 6" ON CENTER.
 2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN ONE ANOTHER THEY SHALL OVERLAP BY 6" AND BE FOLDED.
 3. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

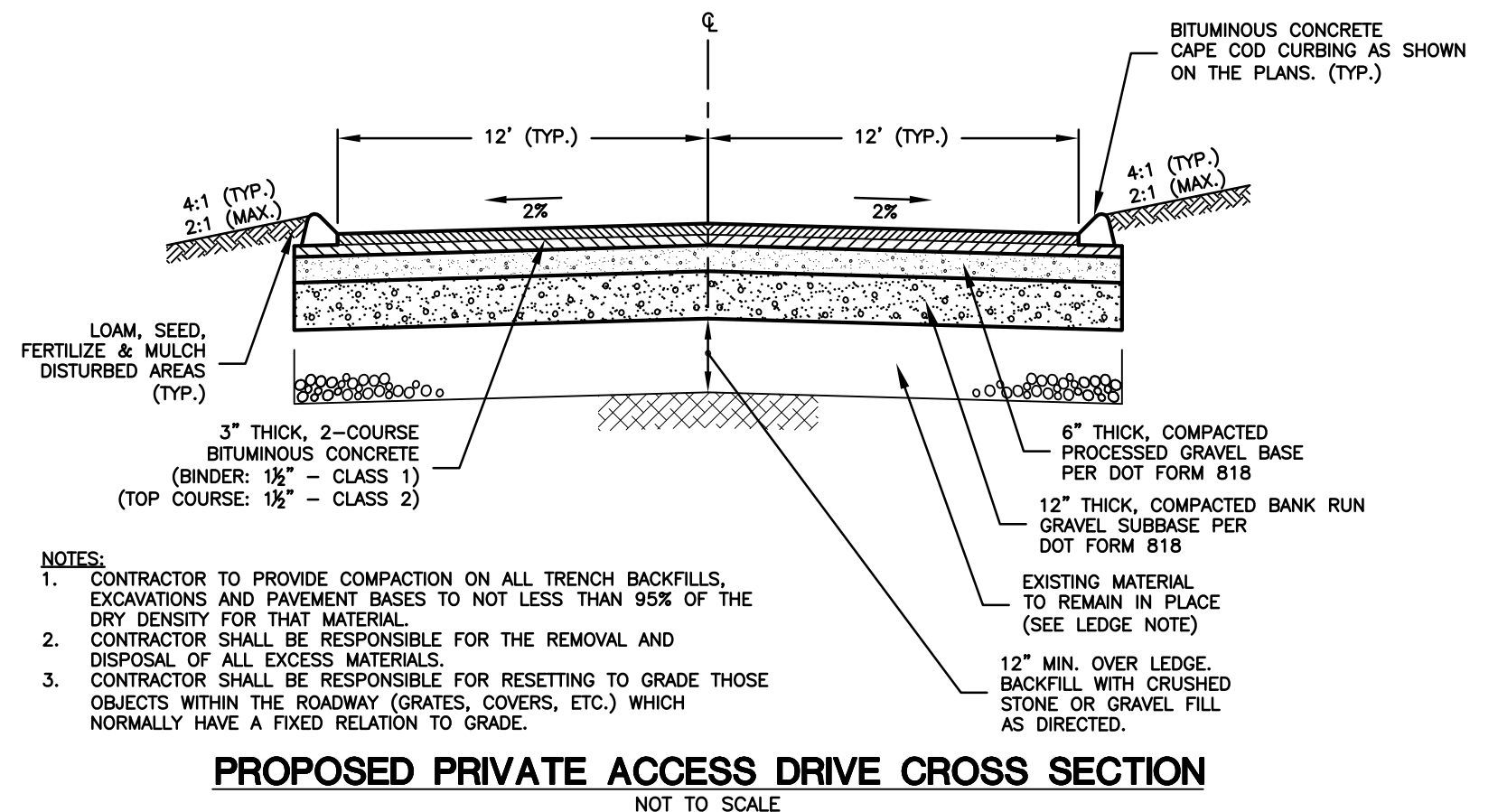
- DEWATERING PLAN**
- A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS FOLLOWS:
1. PUMP INLET SHALL BE PROTECTED WITH FILTER FABRIC & CRUSHED STONE.
 2. PUMP SHALL BE SITED OUTSIDE OF WETLANDS.
 3. THE WATER SHALL BE PUMPED TO A DEWATERING STRUCTURE WHICH SHALL BE LOCATED AT LEAST 50 FEET FROM ANY REGULATED WETLAND AREA OR AS SHOWN ON THE PLANS.
 4. THE DEWATERING STRUCTURE SHALL BE SIZED TO ACCOMMODATE PUMP DISCHARGE RATE. $REQUIRED\ VOLUME\ (CF) = PUMP\ DISCHARGE\ (GPM) \times 10$
 5. THE DEWATERING STRUCTURE SHALL DISCHARGE TO A VEGETATED AREA.
 6. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN AND PROPERLY DISPOSED OF WHEN ACCUMULATION REACHES HALF OF THE REQUIRED STORAGE VOLUME.
 7. DEWATERING AREA SHALL BE RESTORED WITH NEW ENGLAND EROSION CONTROL SEED MIX.

HAY BALE BARRIER DE-WATERING DETAIL
NOT TO SCALE

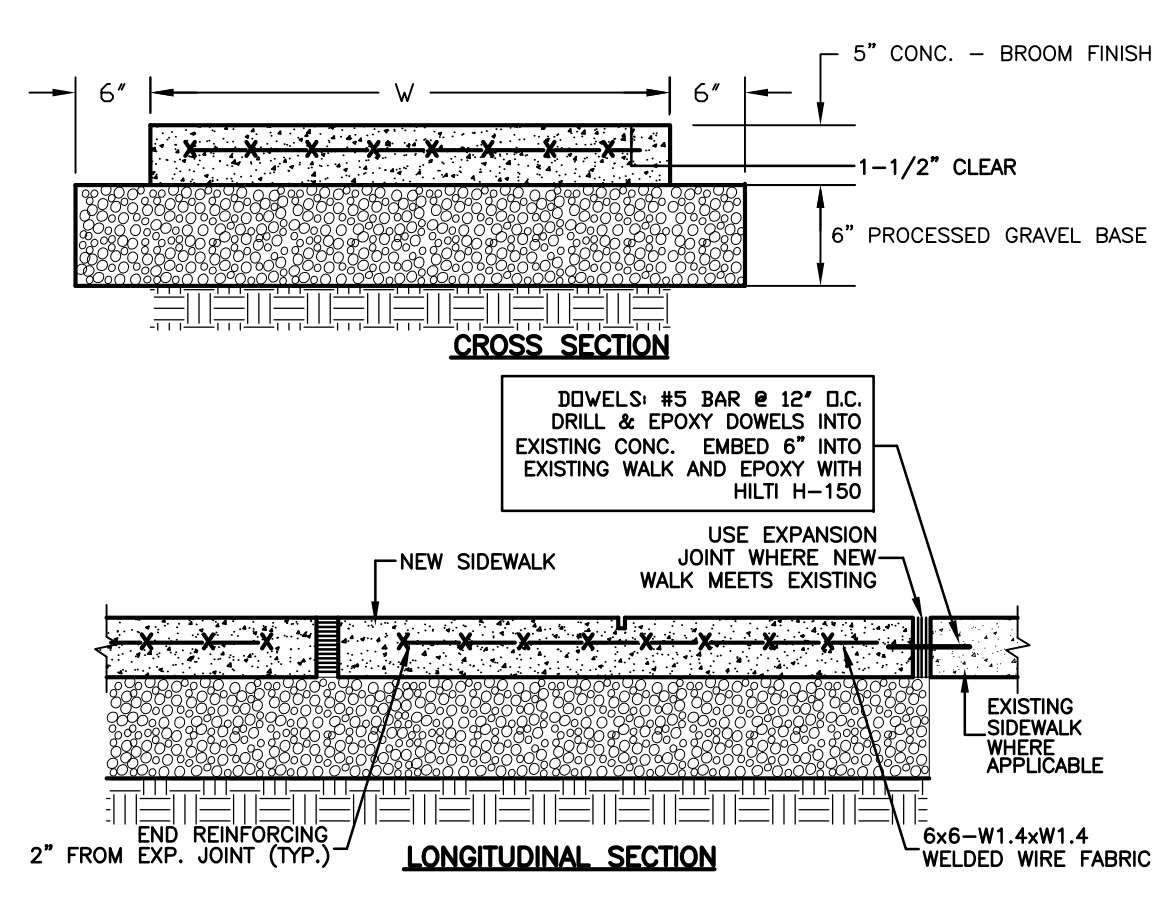
<p>CLA Engineers, Inc. Civil · Structural · Surveying</p> <p>317 Main Street Norwich, CT 06360 (860) 886-1966 Fax (860) 886-9165</p>		Project No. CLA-7283		
		Proj. Engineer K.J.H.		
1	9/7/2023	Misc. Revisions	25 Colonial Drive Killingly, Connecticut 06241	Project No. CLA-7283
No.	DATE	REVISION	<p>Site Improvement Plan North Woods Village Planned Residential Development</p> <p>Stormwater Management Plan and Erosion & Sedimentation Control Details</p>	Date: 7/7/2023
				Sheet No. 13



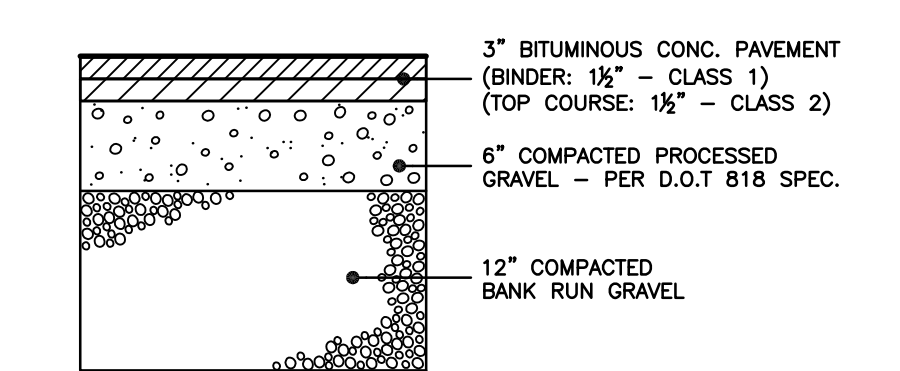
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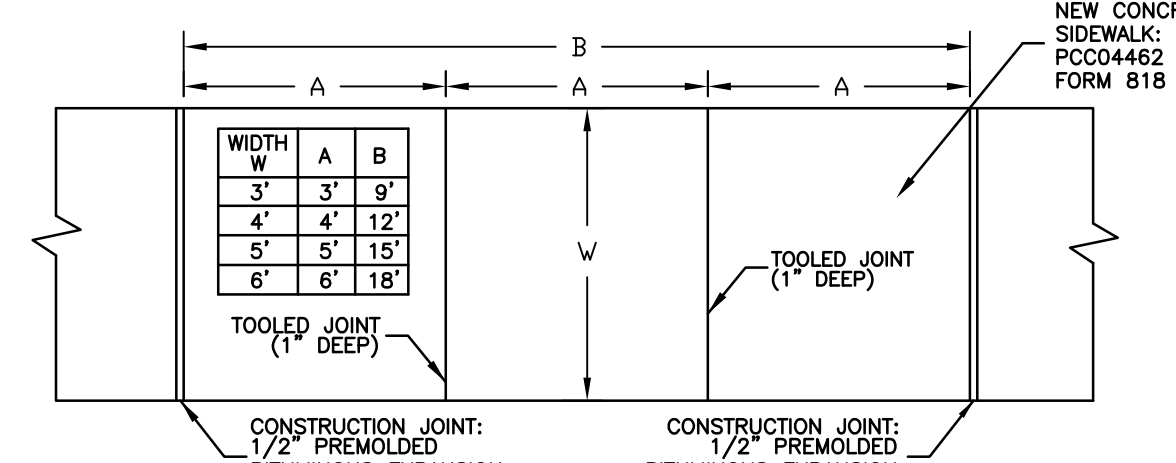
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NOT TO SCALE



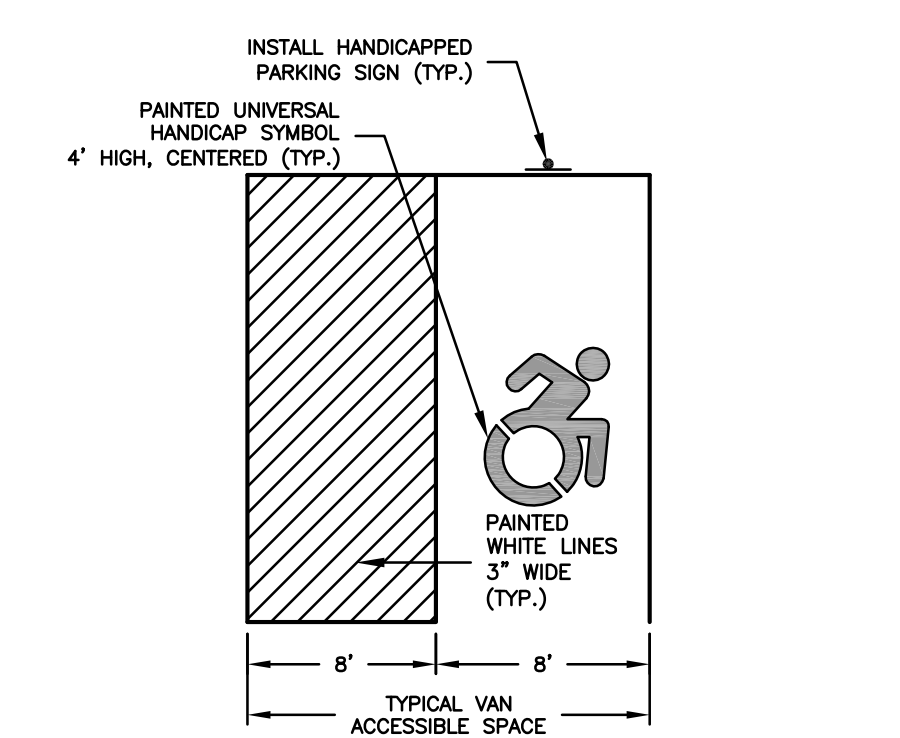
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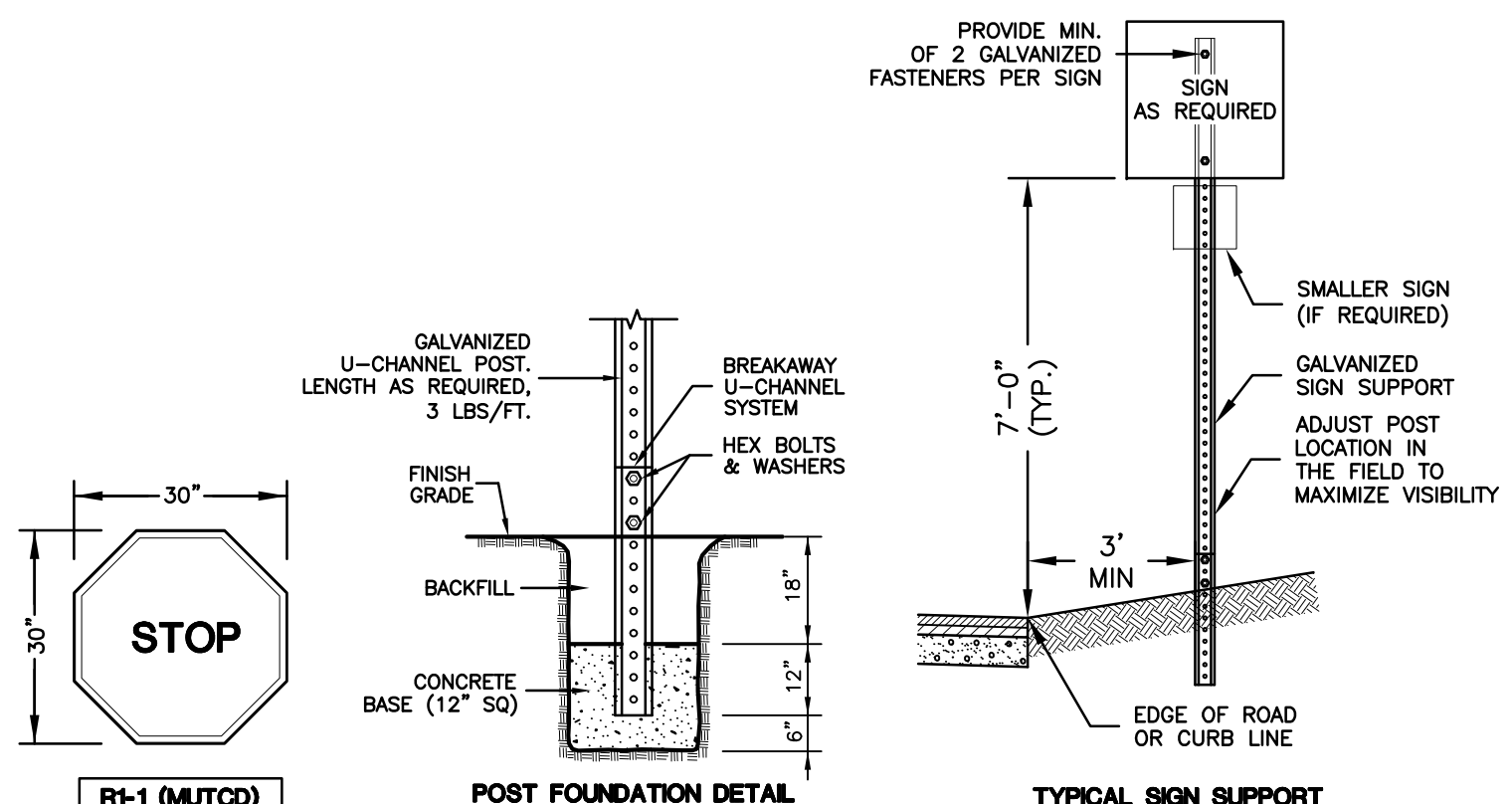
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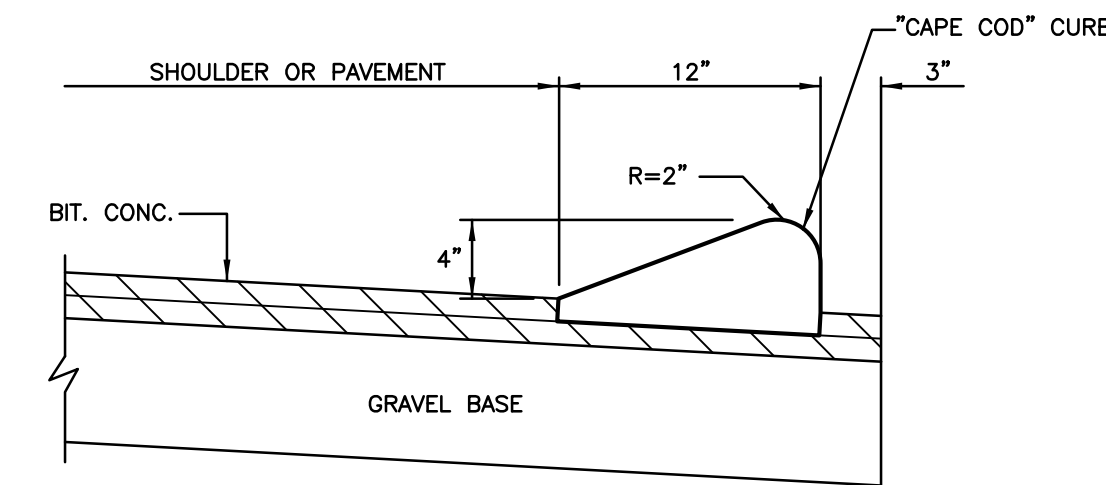
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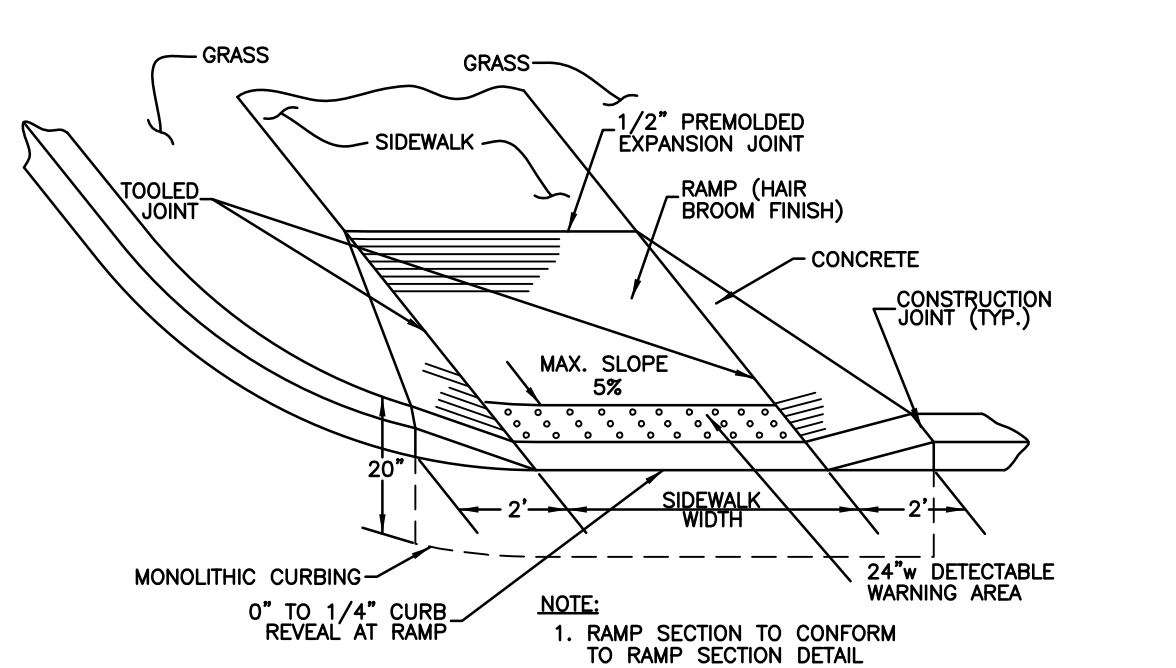
ADA ACCESSIBLE PARKING SPACE DETAIL
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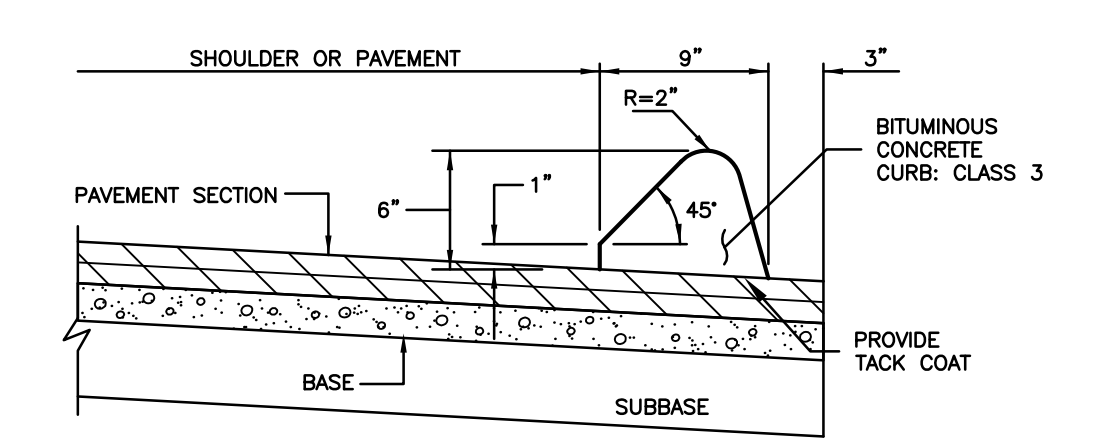
TRAFFIC SIGNING & PAVEMENT MARKING DETAILS
NOT TO SCALE



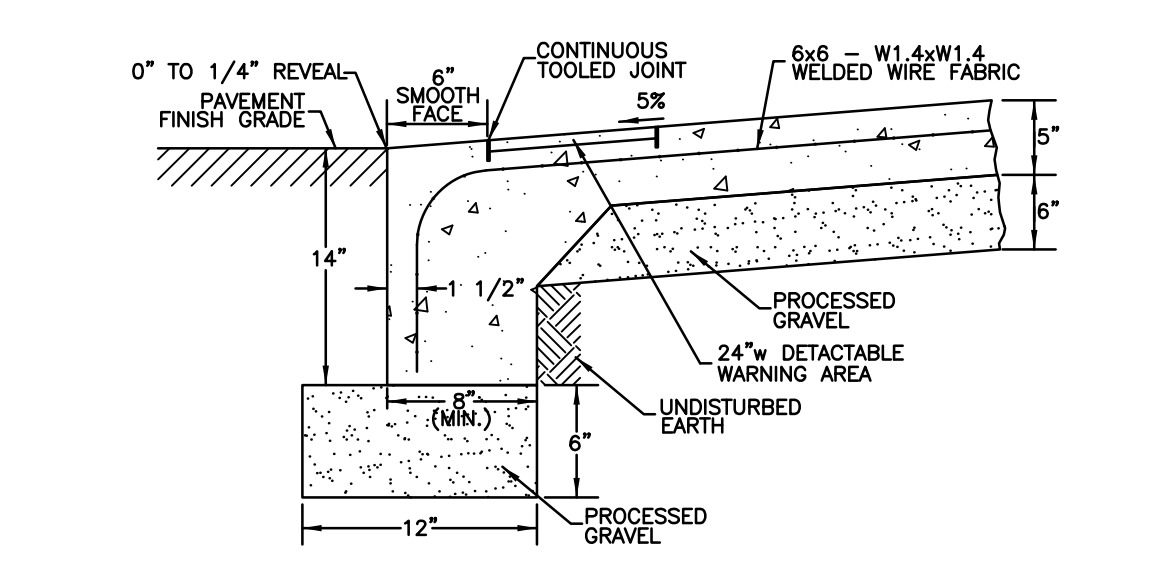
BITUMINOUS CONCRETE CAPE COD CURBING
NOT TO SCALE



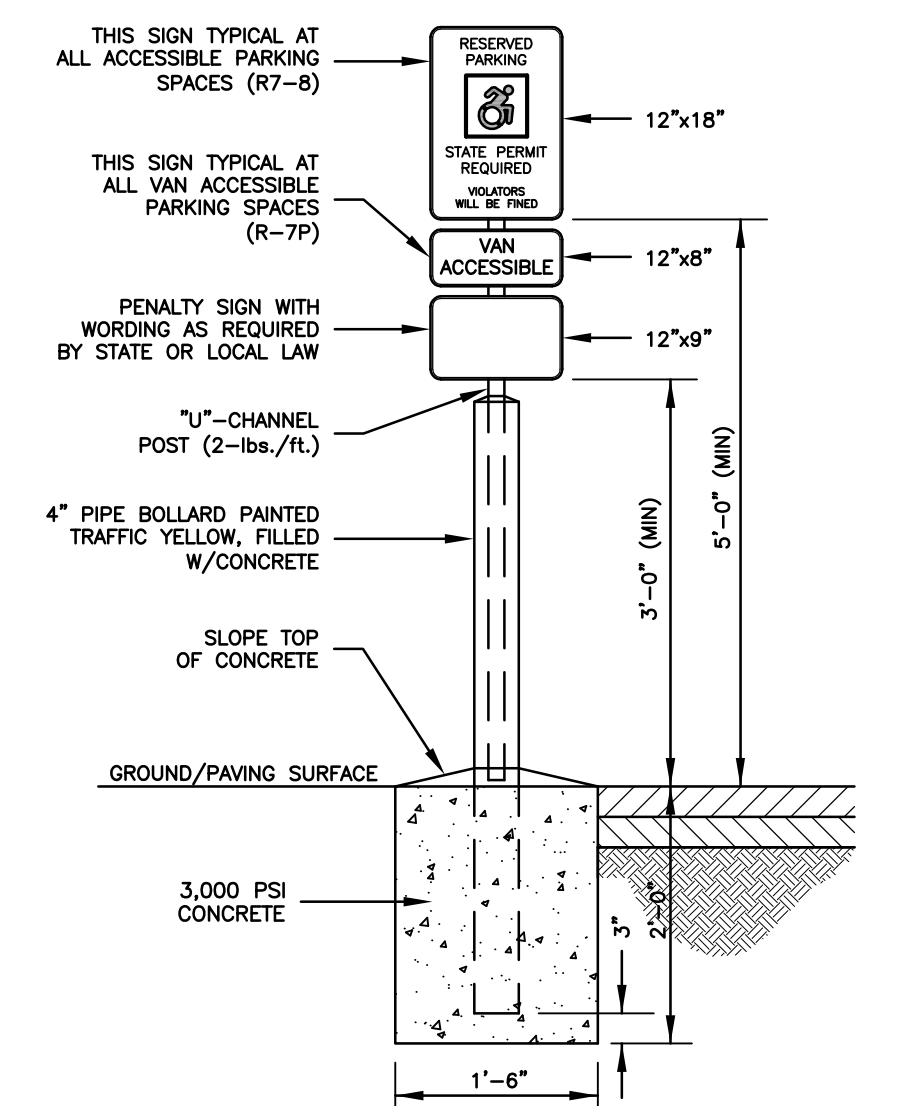
SIDEWALK RAMP DETAIL
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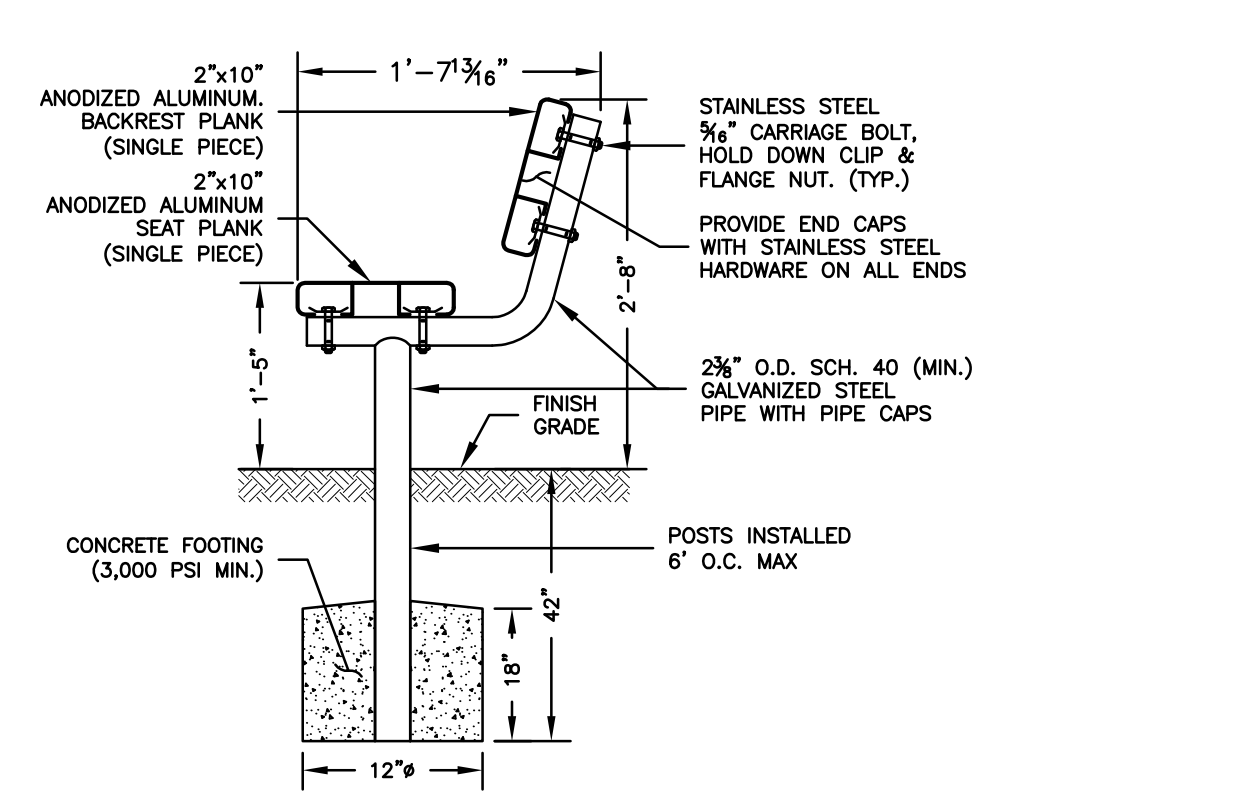
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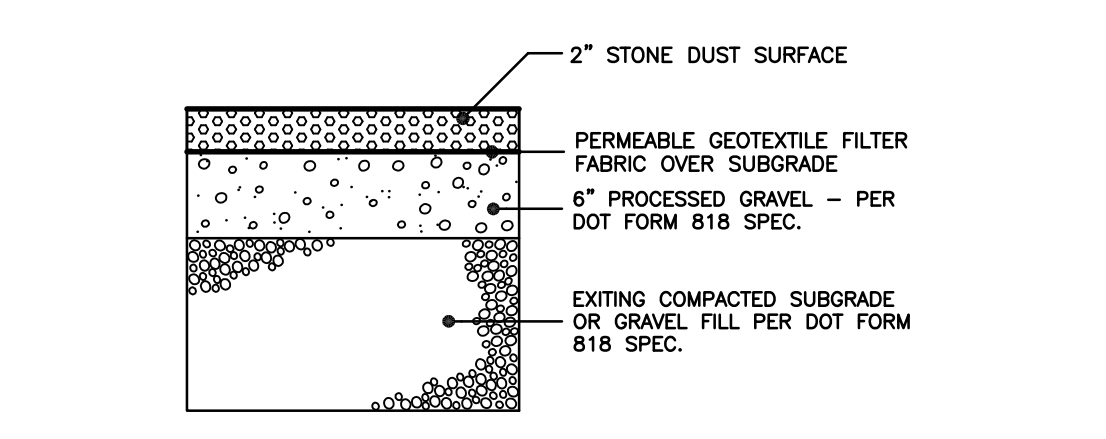
CURB RAMP SECTION
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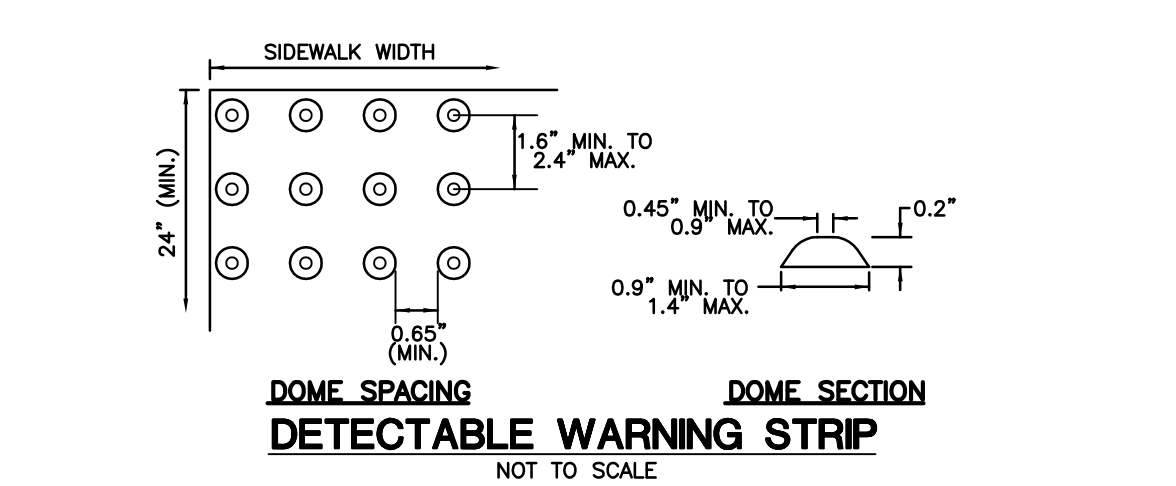
ADA ACCESSIBLE PARKING SIGN DETAIL
NOT TO SCALE



IN-GROUND ALUMINUM BENCH DETAIL
NOT TO SCALE



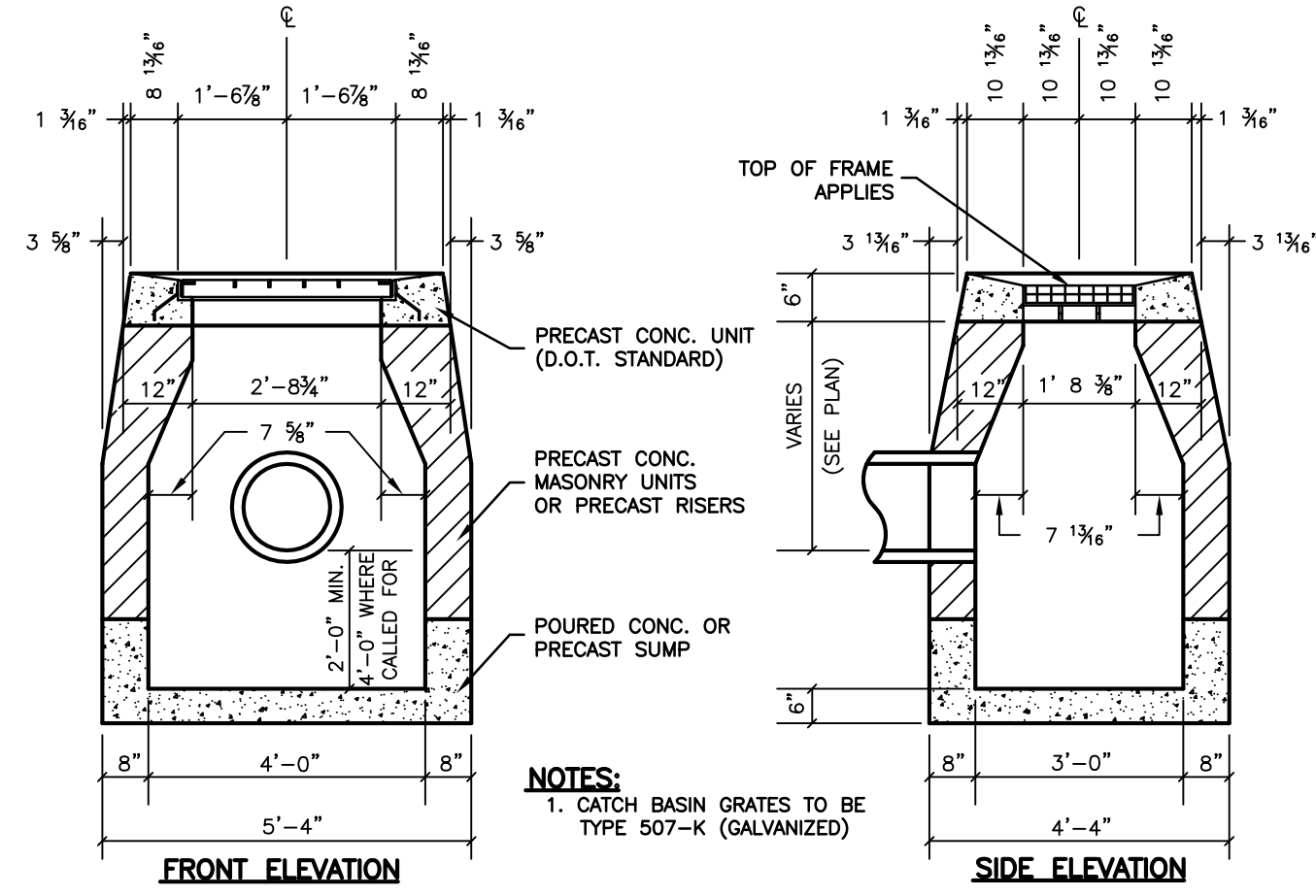
STONE DUST WALK SECTION DETAIL
NOT TO SCALE



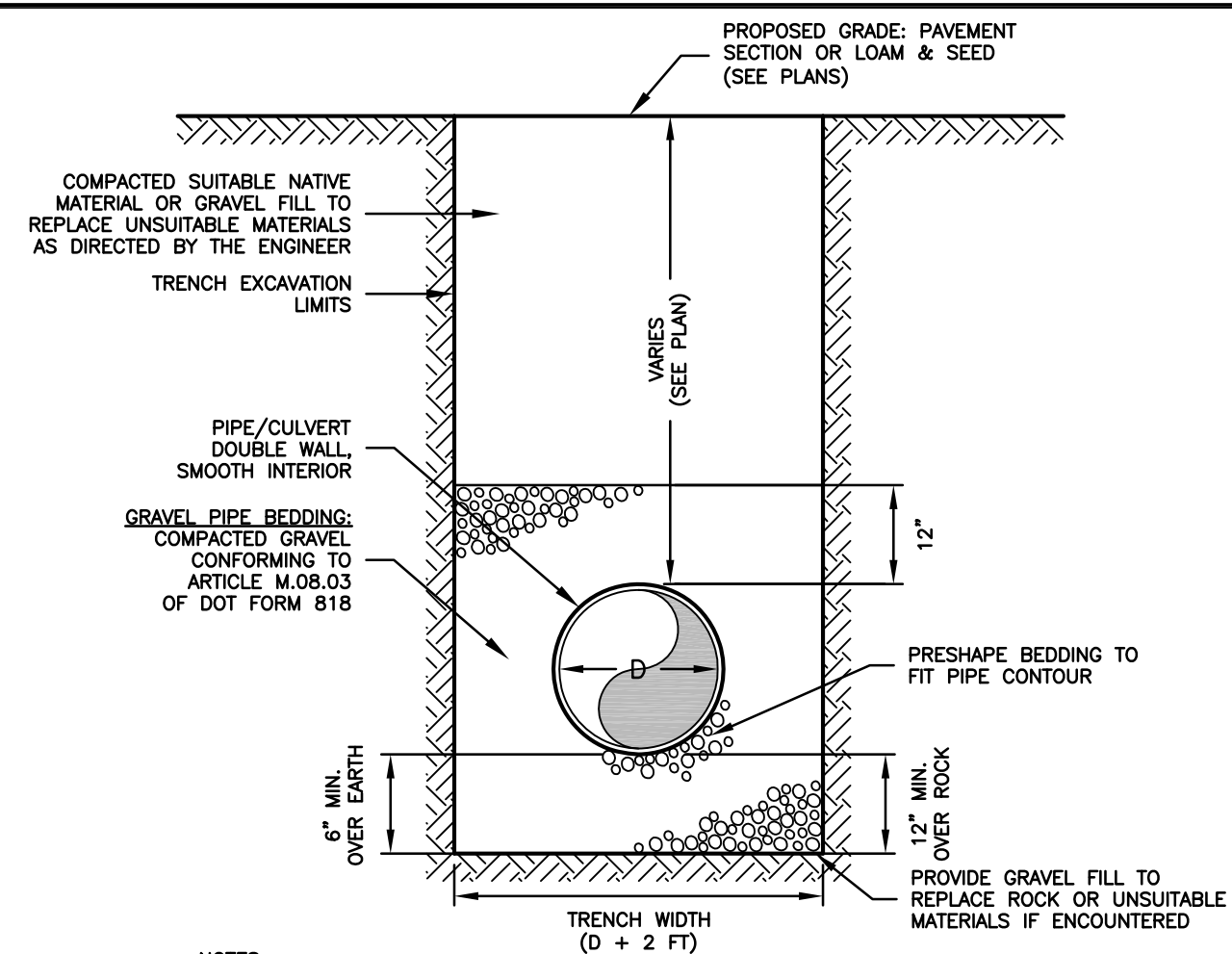
DOME SPACING DETECTABLE WARNING STRIP
NOT TO SCALE

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		Proj. Engineer K.J.H.
25 Colonial Drive Killingly, Connecticut 06241 Site Improvement Plan North Woods Village Planned Residential Development Construction Details		Date: 7/7/2023
1 9/7/2023 Misc. Revisions No. DATE REVISION		Sheet No. 14

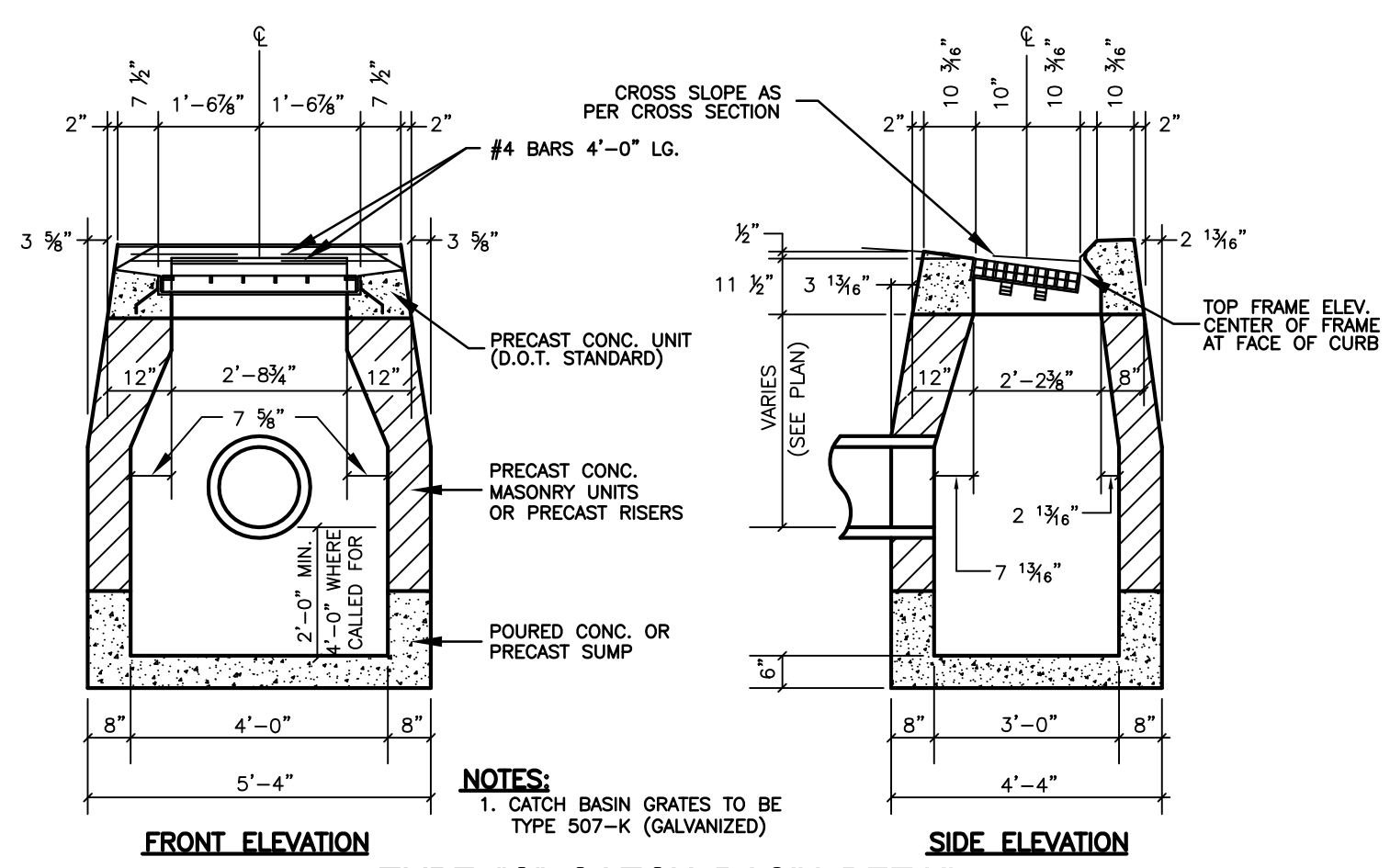
M:\7000\2007\2383 Brown Lot Investigation\Drawings\CLA-7283 - Planned Residential Development - Sheet 12-16 Details.dwg



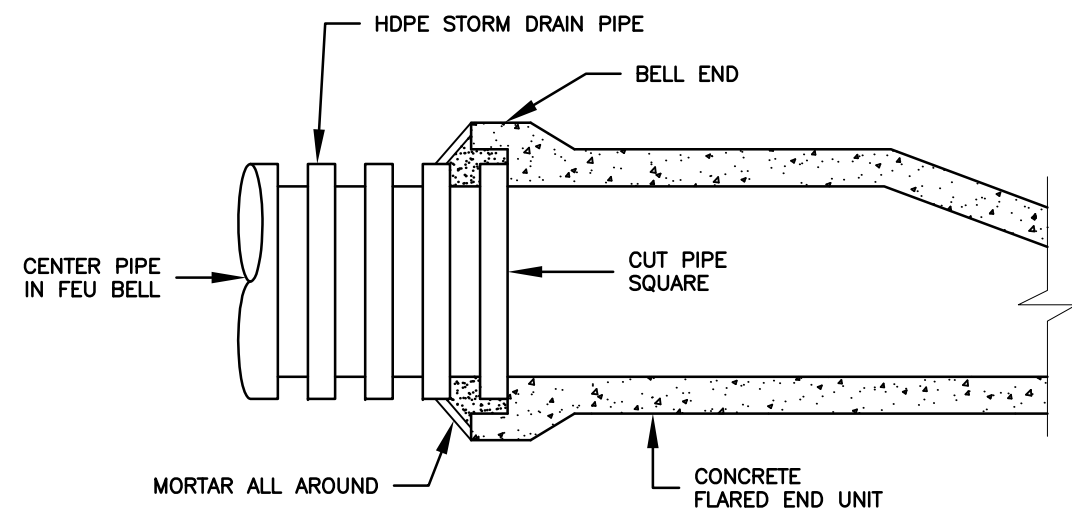
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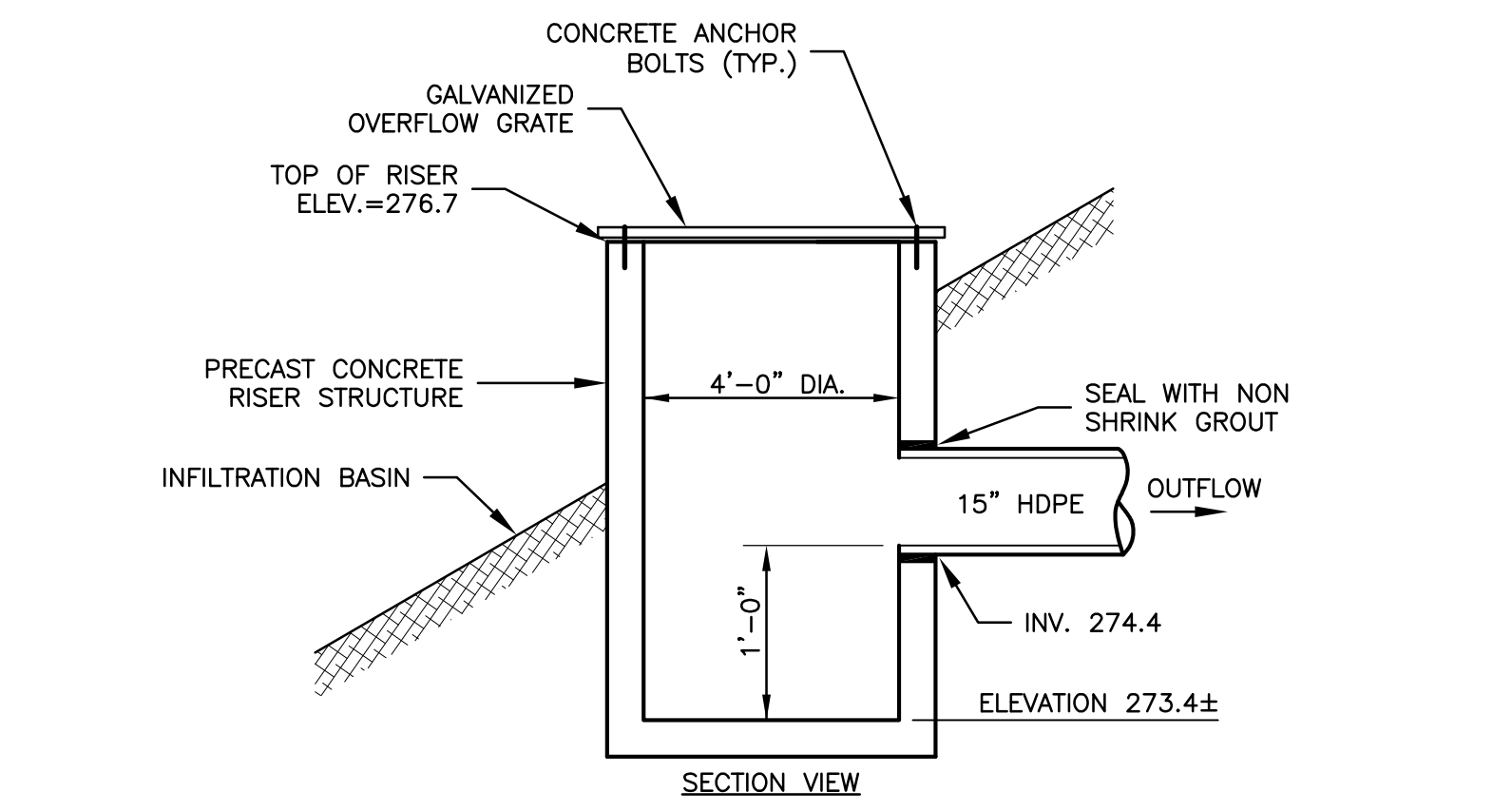
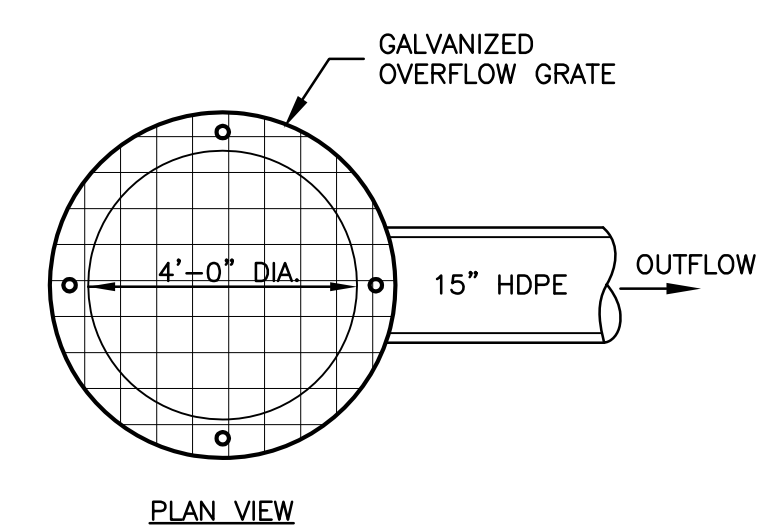
TRENCH DETAIL: DRAINAGE CULVERT
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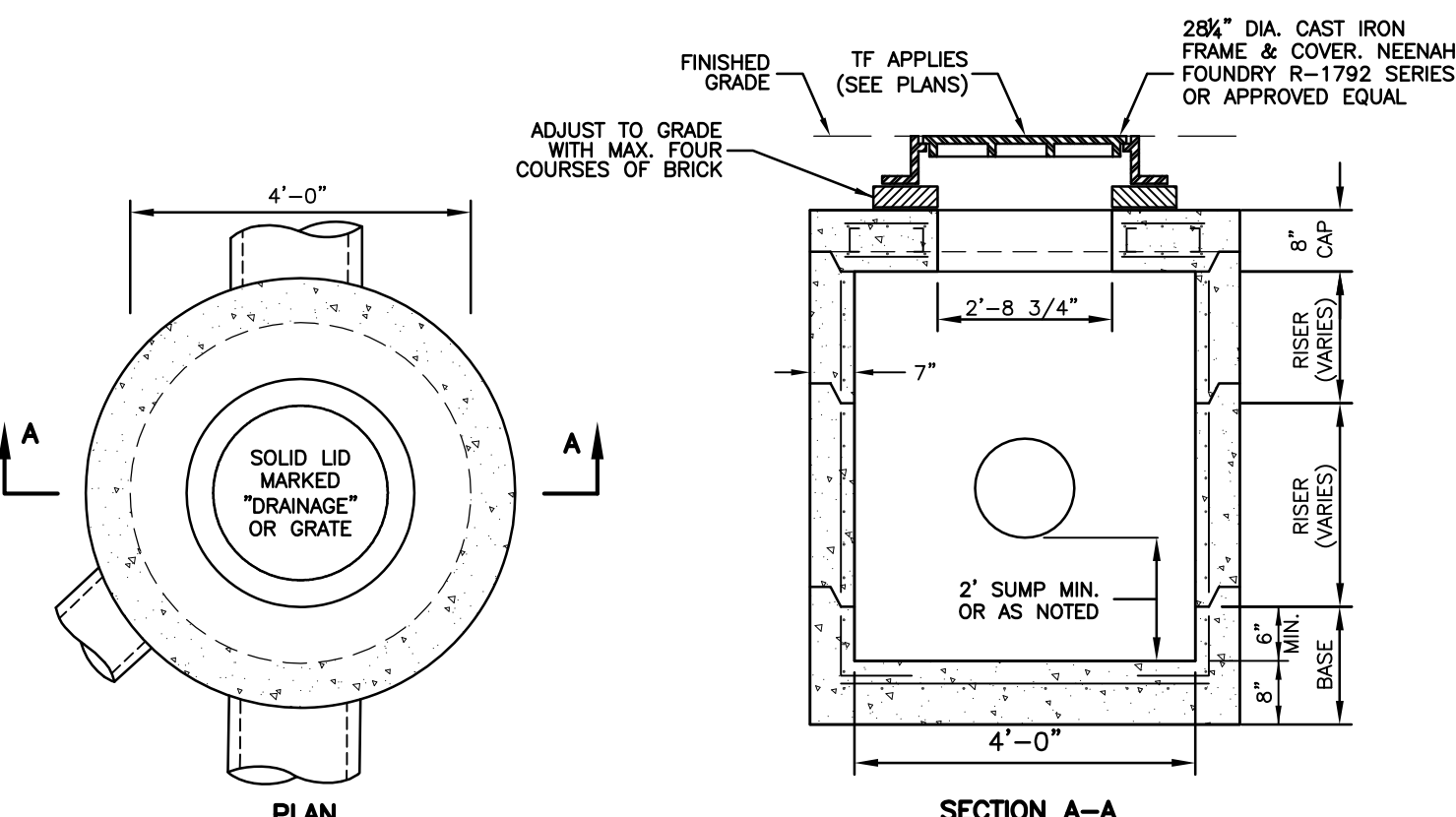
TYPE "C" CATCH BASIN DETAIL
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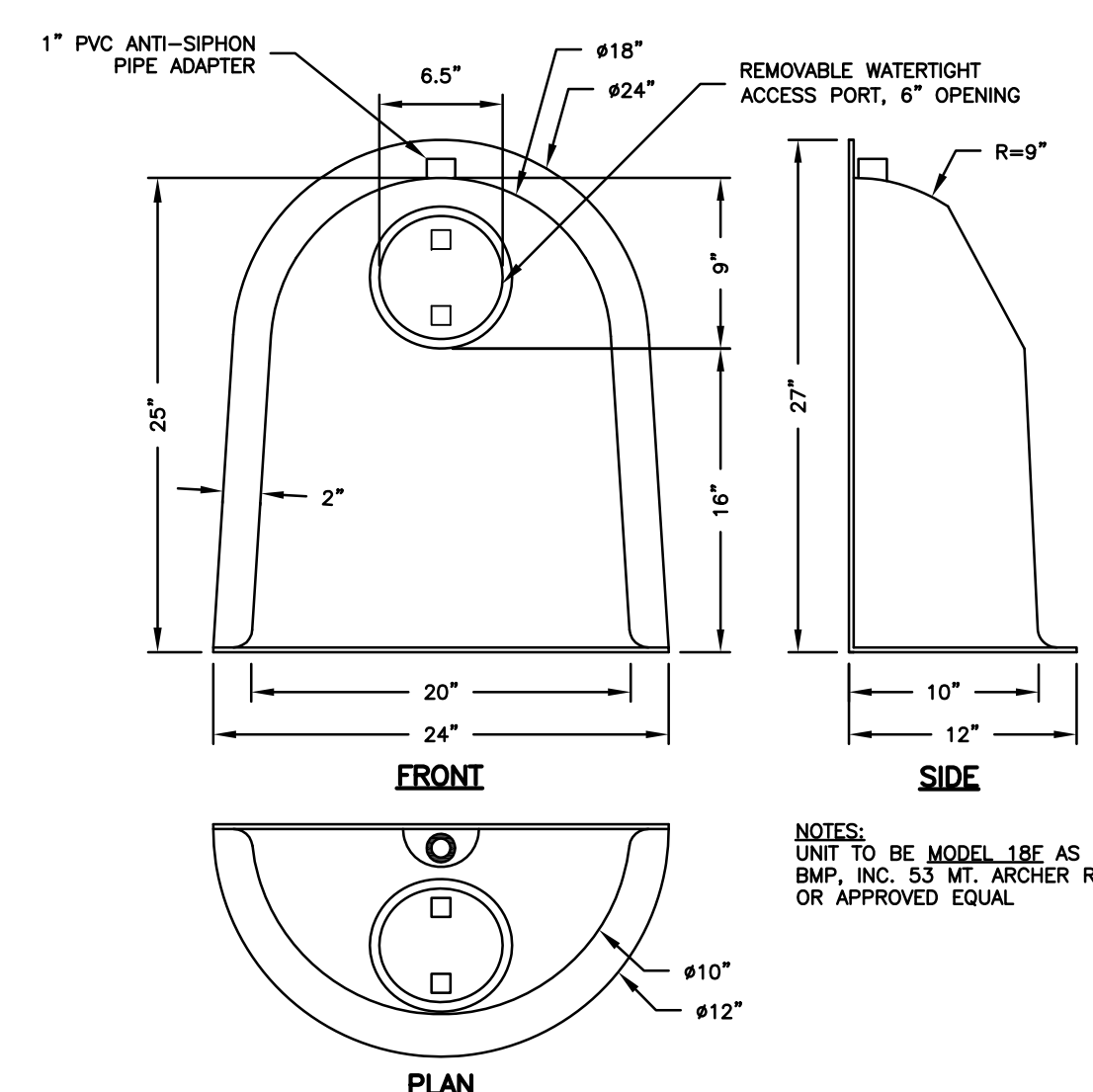
FLARED END UNIT DETAIL
NOT TO SCALE



INFILTRATION BASIN #1 EMERGENCY OVERFLOW STRUCTURE
NOT TO SCALE



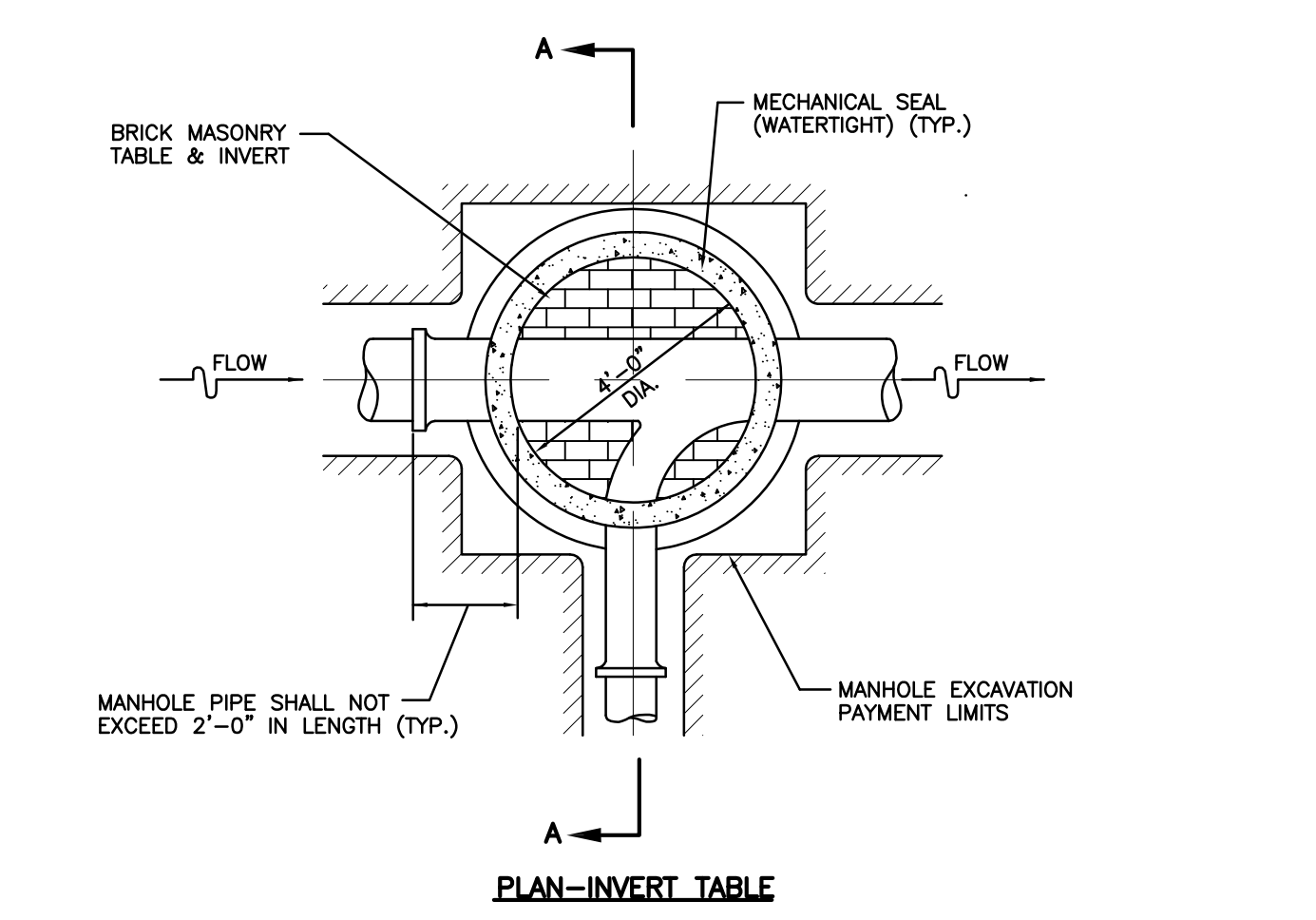
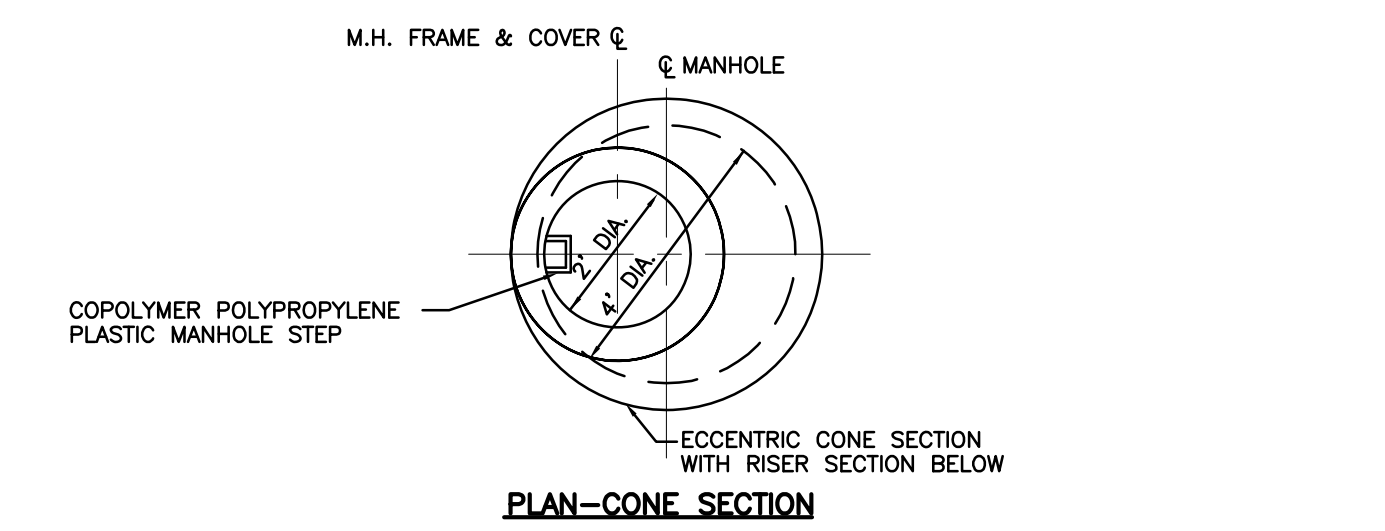
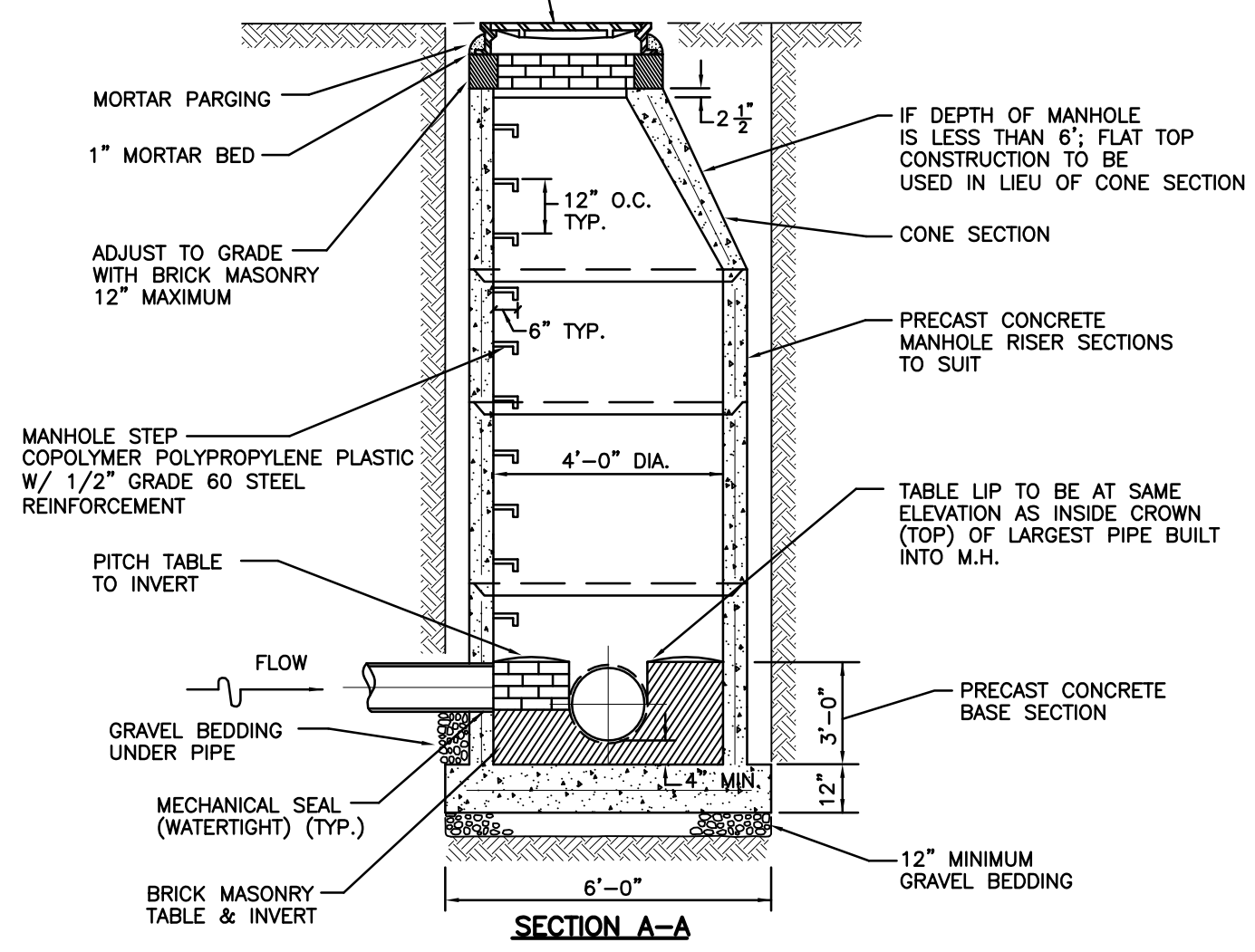
STANDARD DRAINAGE MANHOLE DETAIL
NOT TO SCALE



BMP "SNOOT" CATCH BASIN HOOD DETAIL
NOT TO SCALE

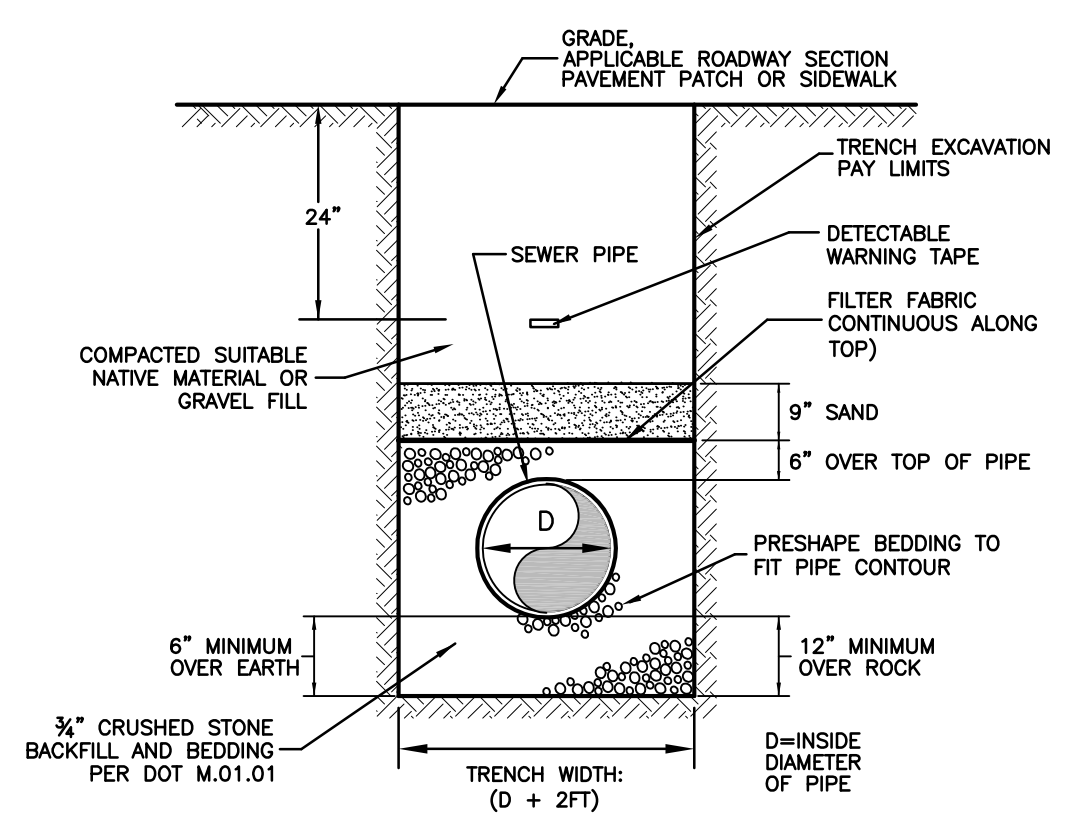
		CLA Engineers, Inc. Civil · Structural · Surveying	
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No.	DATE	REVISION	
1	9/7/2023	Misc. Revisions	
25 Colonial Drive Killingly, Connecticut 06241			Project No. CLA-7283
Site Improvement Plan			Proj. Engineer K.J.H.
North Woods Village Planned Residential Development			Date: 7/7/2023
Construction Details			Sheet No. 15

FRAME AND COVER SHALL BE "CAMBELL" MODEL NO. 10494502 (FRAME) AND 10495132 (COVER) AND SHALL HAVE 2 - 1" VENT HOLE AND EACH COVER SHALL BEAR THE WORDING "SEWER"



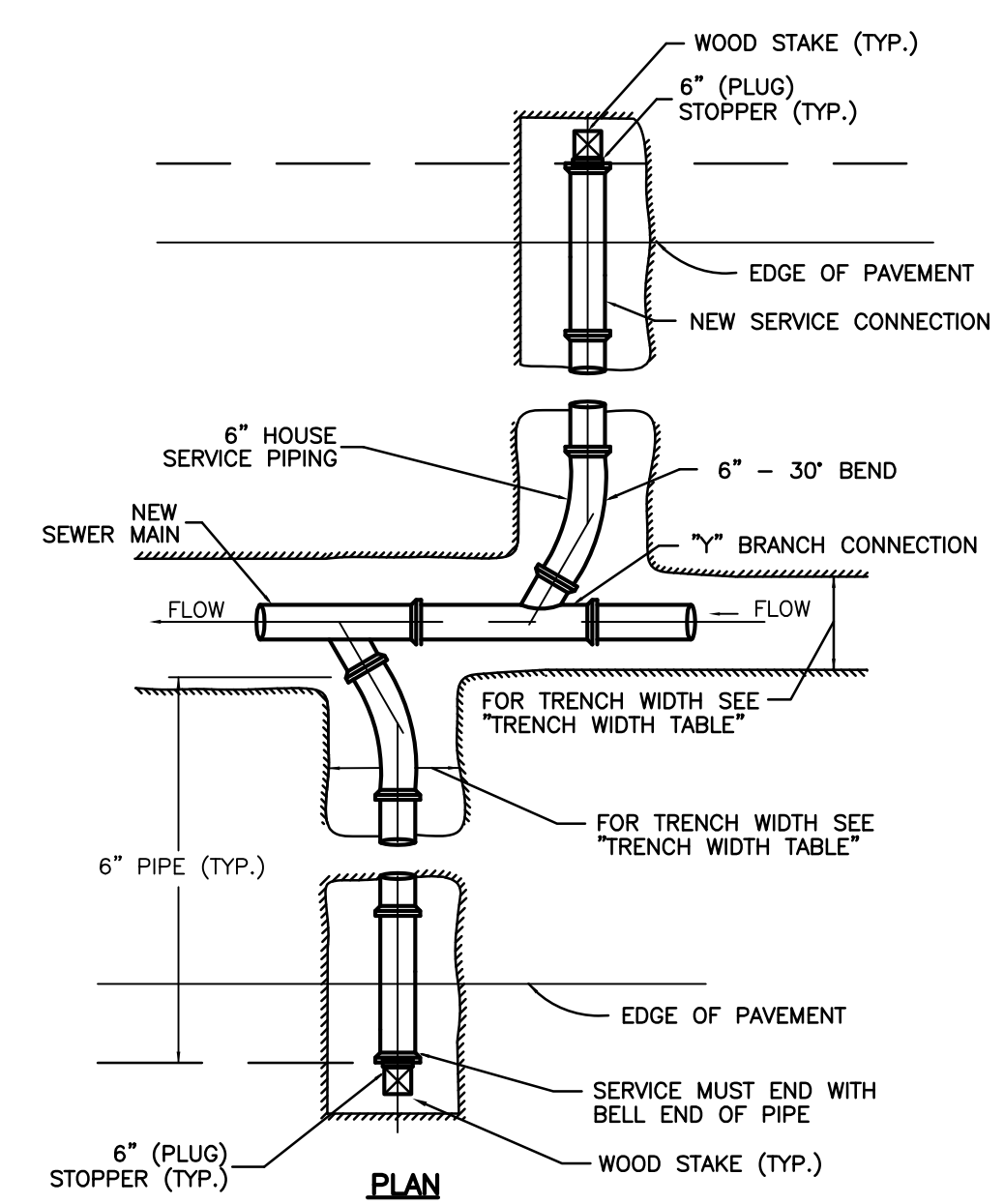
- NOTES**
1. ALL PIPES SHALL BE CUT FLUSH WITH INSIDE WALL OF STRUCTURE.
 2. CONTRACTOR SHALL MORTAR IN LIFTING HOLES.
 3. MANHOLE COVERS SHALL HAVE THE WORDS "SEWER" CAST INTO THE CENTER IN 3" LETTERS.
 4. THE OUTSIDE OF MANHOLE STRUCTURES SHALL BE PAINTED WITH 2 COATS OF BITUMINOUS MATERIAL.

SANITARY MANHOLE DETAIL
NOT TO SCALE

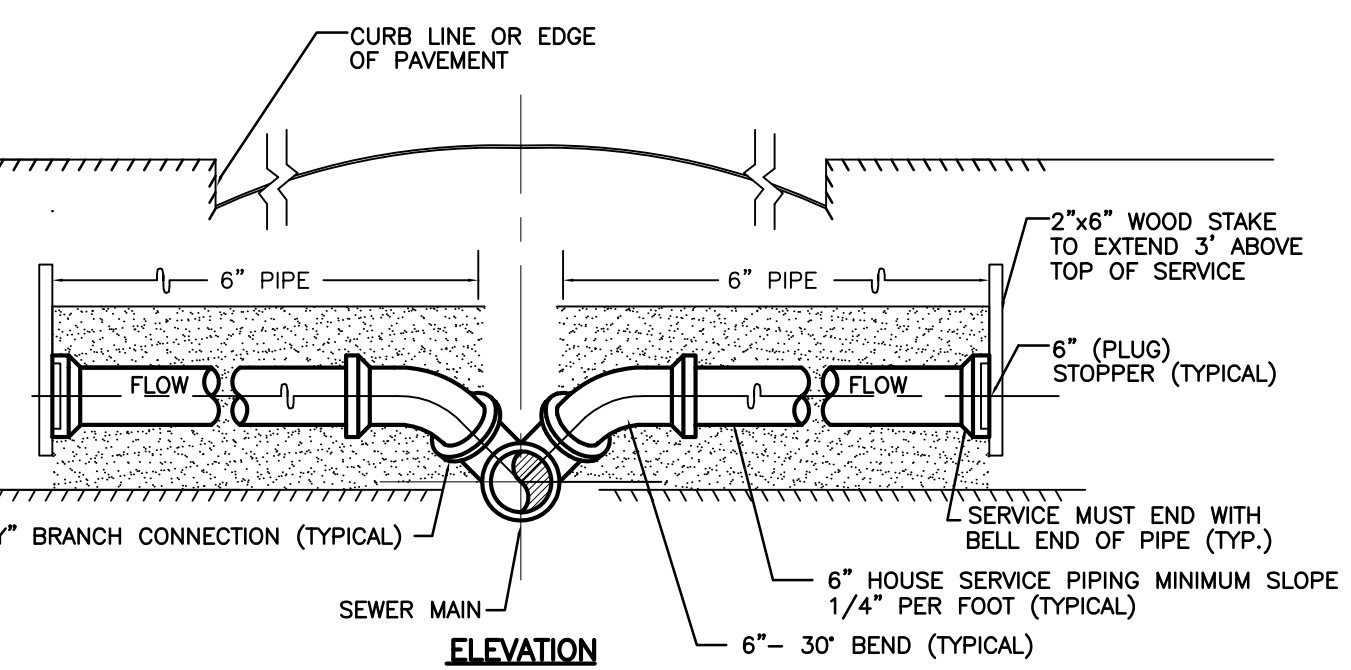


- NOTES**
1. D=INSIDE DIAMETER OF PIPE.
 2. TRENCH WIDTHS NOTED ARE SET TO ESTABLISH PAY LIMITS ONLY.
 3. ALL EXCAVATIONS MUST MEET OSHA STANDARDS.
 4. CONTRACTOR TO PROVIDE COMPACTION ON ALL TRENCH BACKFILLS, EXCAVATIONS AND PAVEMENT BASES TO NOT LESS THAN 95% OF THE DRY DENSITY FOR THAT MATERIAL.

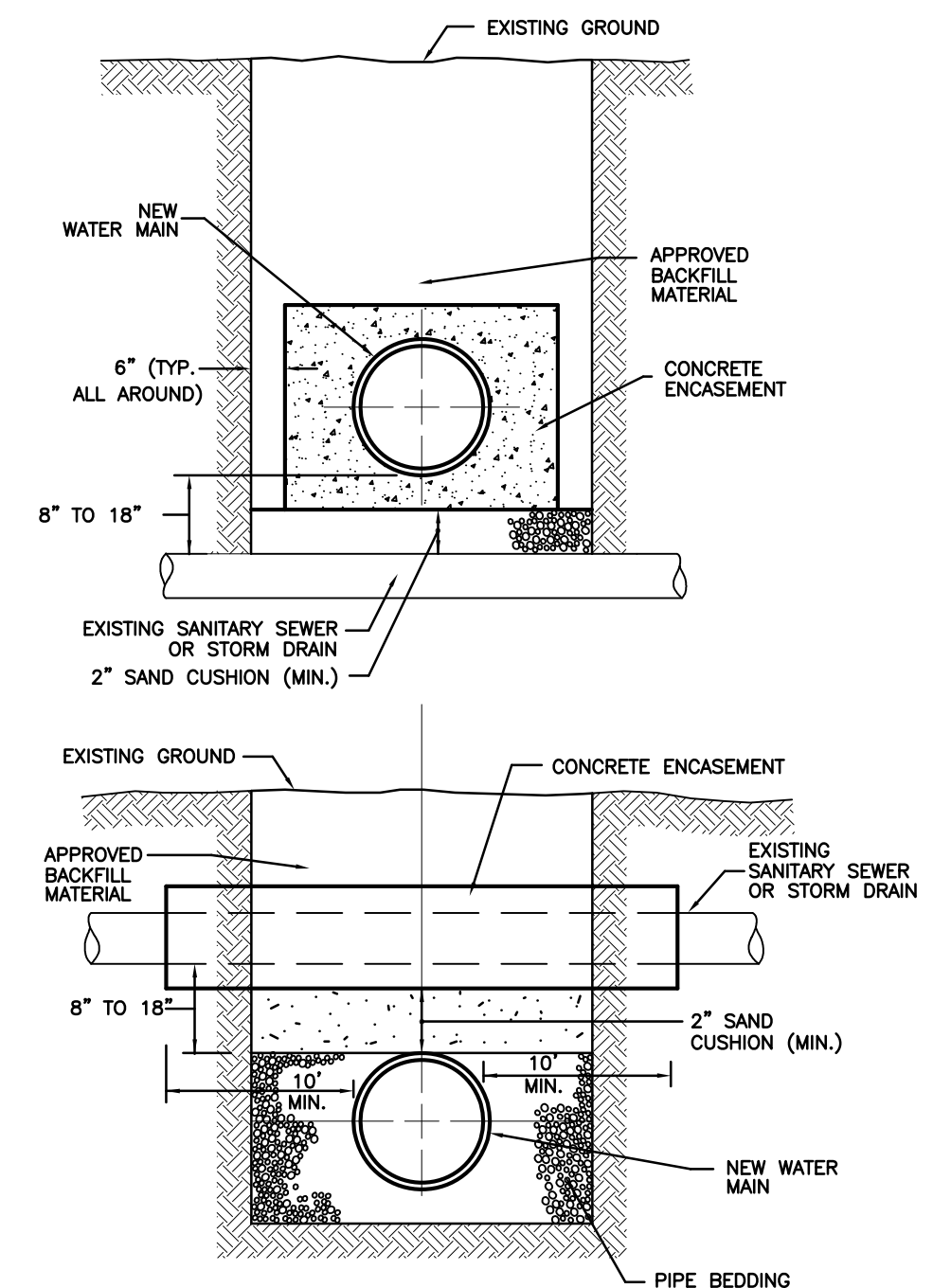
TRENCH DETAIL: SANITARY SEWER PIPE
NOT TO SCALE



SERVICE CONNECTION DETAIL
NOT TO SCALE

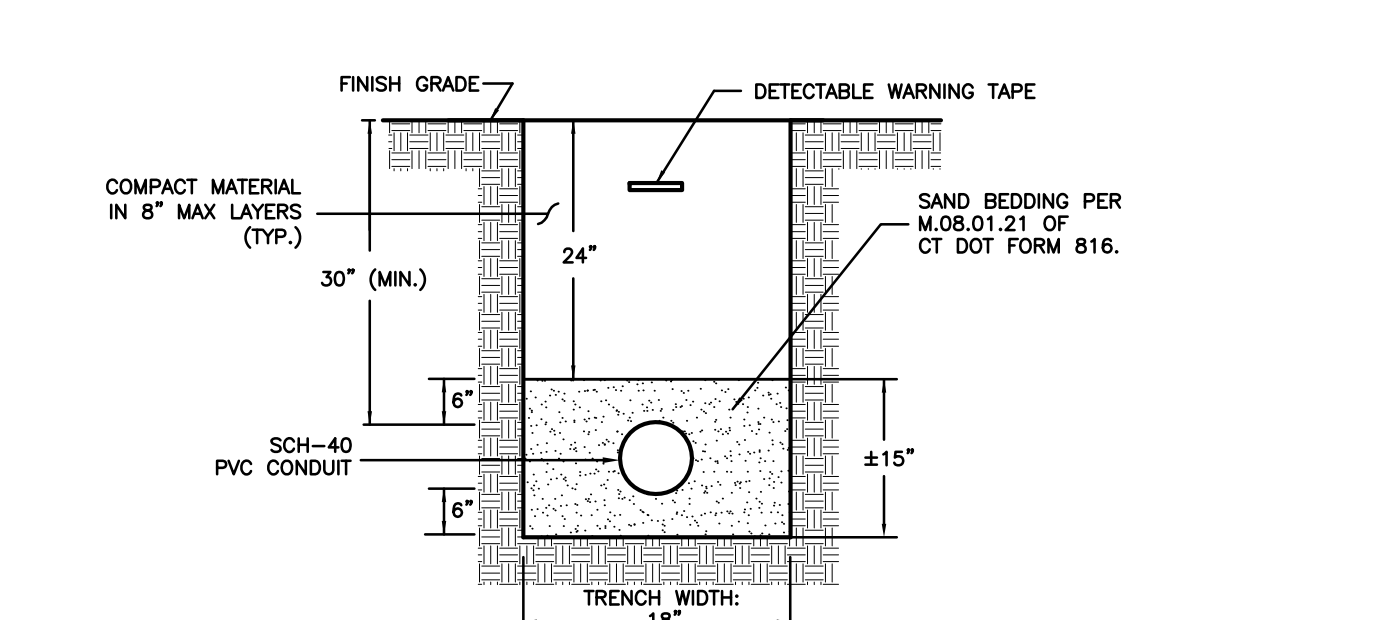


HOUSE SERVICE CONNECTION DETAIL
NOT TO SCALE



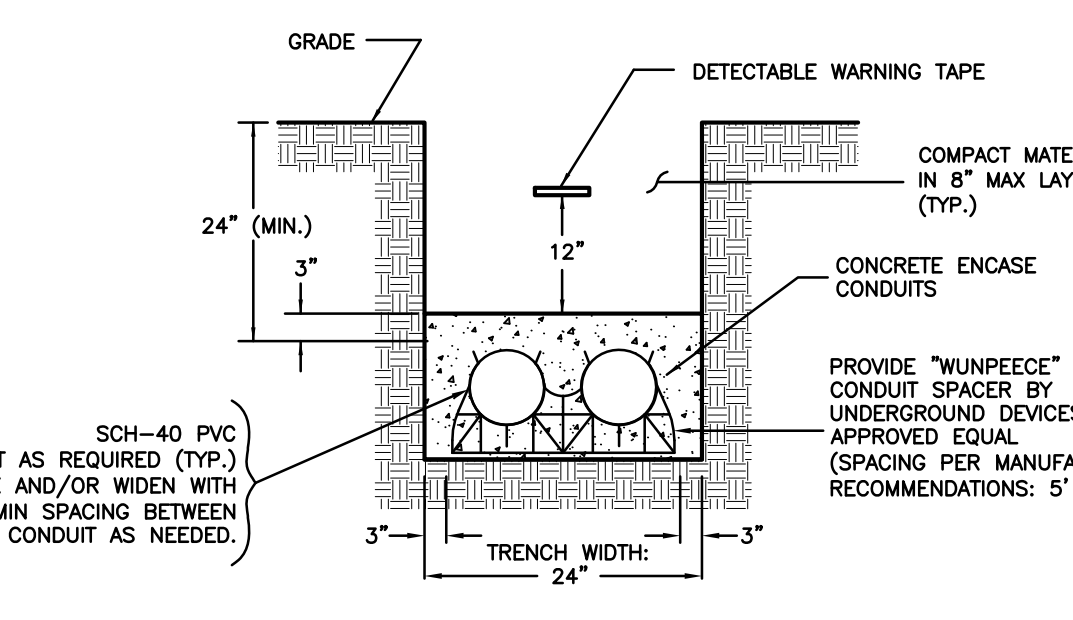
- NOTES**
1. WHERE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND SANITARY SEWERS OR STORM DRAINS IS 18" OR LESS A 6" CONCRETE ENCASEMENT IS REQUIRED FOR A DISTANCE OF TEN FEET ON EACH SIDE OF THE CROSSING.
 2. A FULL LENGTH OF WATER MAIN SHALL BE CENTERED AT ALL SANITARY SEWER AND STORM DRAIN CROSSINGS.

CONCRETE ENCASEMENT DETAIL
NOT TO SCALE



- NOTES**
1. TRENCH WIDTHS NOTED ARE SET TO ESTABLISH PAY LIMITS ONLY.
 2. ALL EXCAVATIONS MUST MEET OSHA STANDARDS.
 3. CONTRACTOR TO PROVIDE COMPACTION ON ALL TRENCH BACKFILLS, EXCAVATIONS AND PAVEMENT BASES TO NOT LESS THAN 95% OF THE DRY DENSITY FOR THAT MATERIAL.
 5. MAINTAIN 2" SEPARATION BETWEEN MULTIPLE CONDUIT TRENCHES

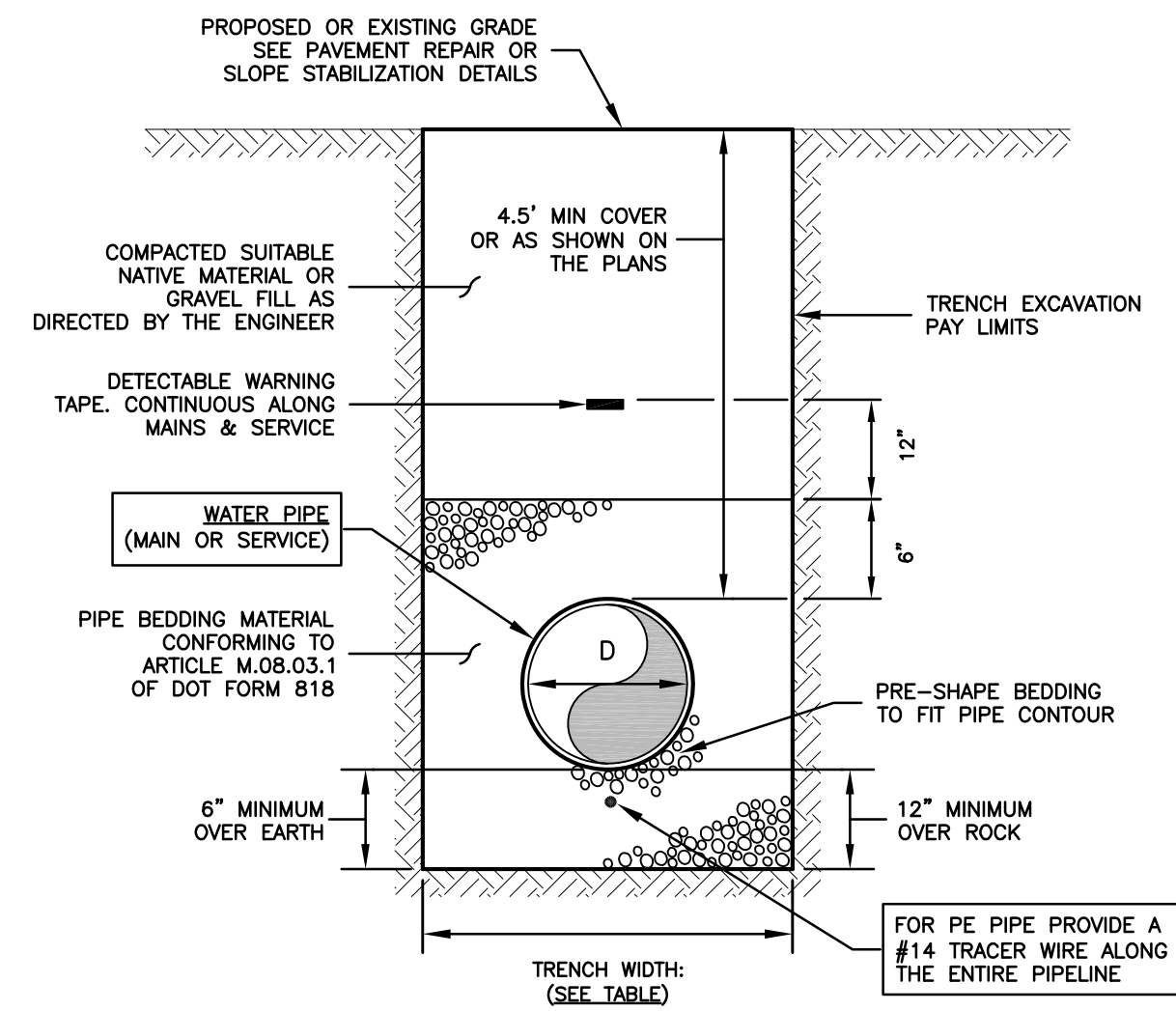
TYPICAL CONDUIT TRENCH DETAIL
NOT TO SCALE



- NOTES**
1. TRENCH WIDTHS NOTED ARE SET TO ESTABLISH PAY LIMITS ONLY.
 2. ALL EXCAVATIONS MUST MEET OSHA STANDARDS.
 4. CONTRACTOR TO PROVIDE COMPACTION ON ALL TRENCH BACKFILLS, EXCAVATIONS AND PAVEMENT BASES TO NOT LESS THAN 95% OF THE DRY DENSITY FOR THAT MATERIAL.
 5. FOR USE WHERE THERE IS LESS THAN 30" OF COVER AVAILABLE

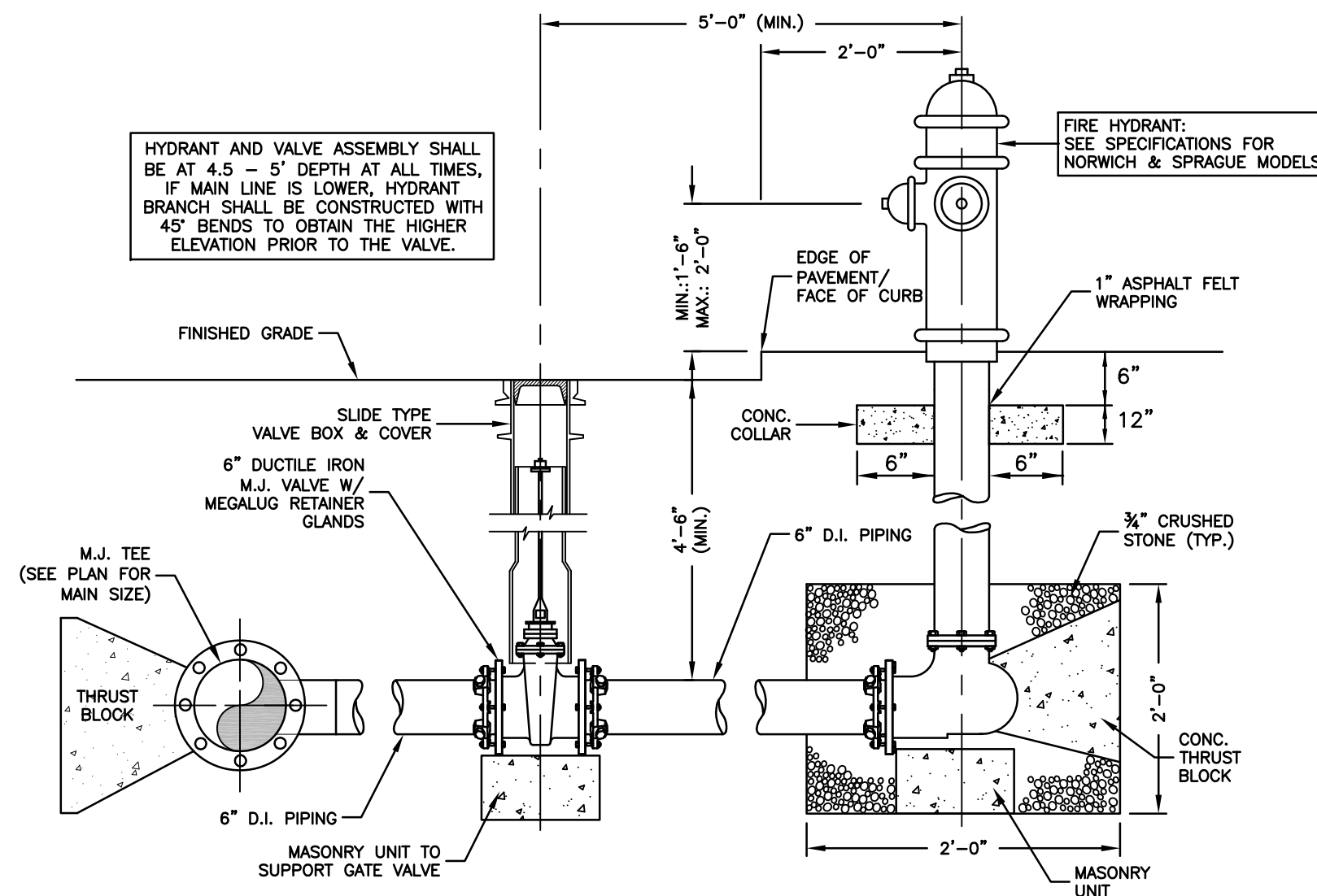
CONDUIT DUCT BANK (CONC. ENCASED) DETAIL
NOT TO SCALE

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No.	DATE	Misc. Revisions	REVISION
1	9/7/2023		
25 Colonial Drive Killingly, Connecticut 06241			Project No. CLA-7283
Site Improvement Plan			Proj. Engineer K.J.H.
North Woods Village Planned Residential Development			Date: 7/7/2023
Construction Details			Sheet No. 16

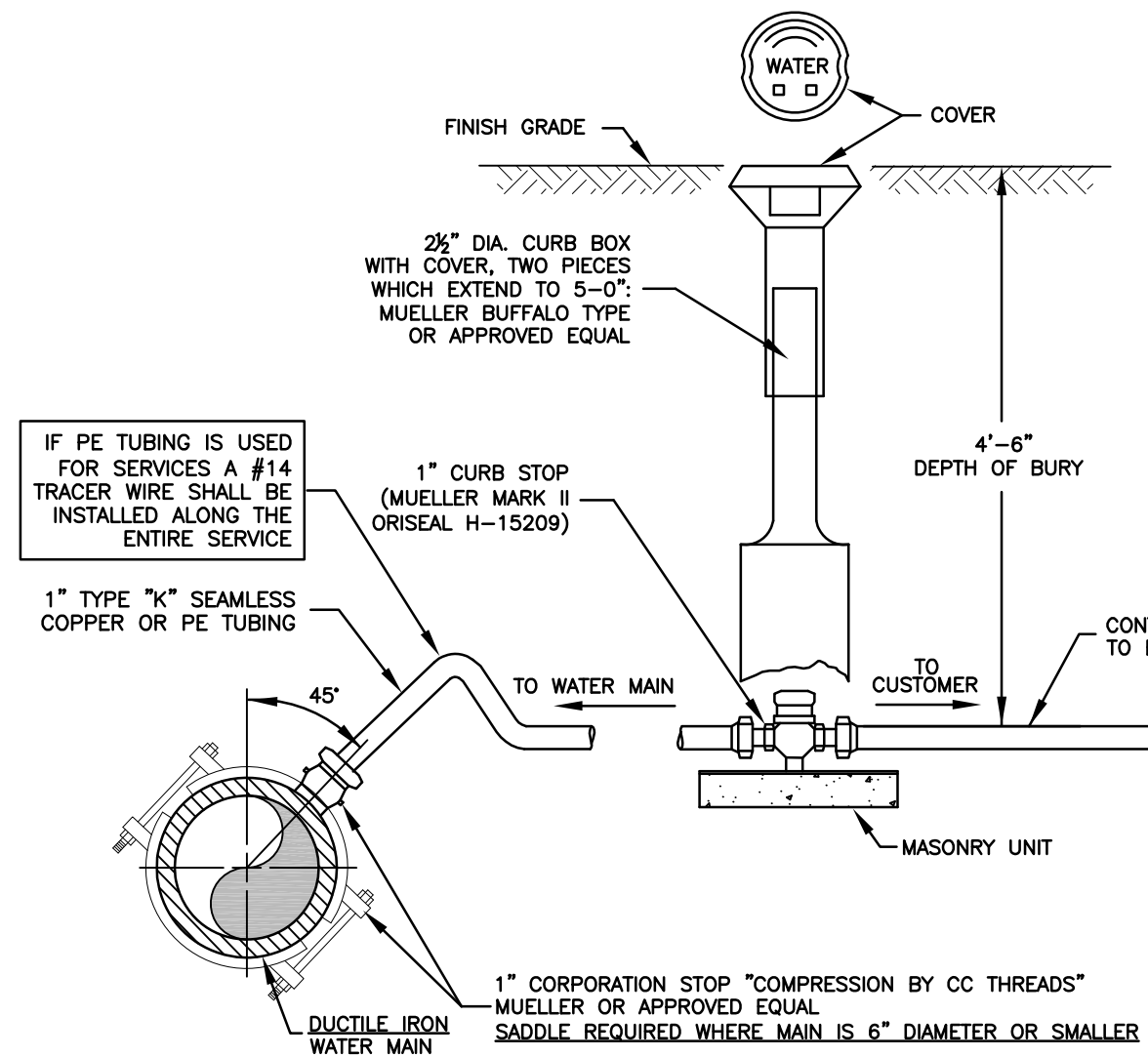


- NOTES:
1. D=INSIDE DIAMETER OF PIPE.
 2. TRENCH WIDTHS NOTED ARE SET TO ESTABLISH PAY LIMITS ONLY.
 3. ALL EXCAVATIONS MUST MEET OSHA STANDARDS.
 4. CONTRACTOR TO PROVIDE COMPACTION ON ALL TRENCH BACKFILLS, EXCAVATIONS AND PAVEMENT BASES TO NOT LESS THAN 95% OF THE DRY DENSITY FOR THAT MATERIAL.
 5. BEDDING MATERIAL TO CONFORM TO M.08.03.1 AS PER CT DOT FORM 818.

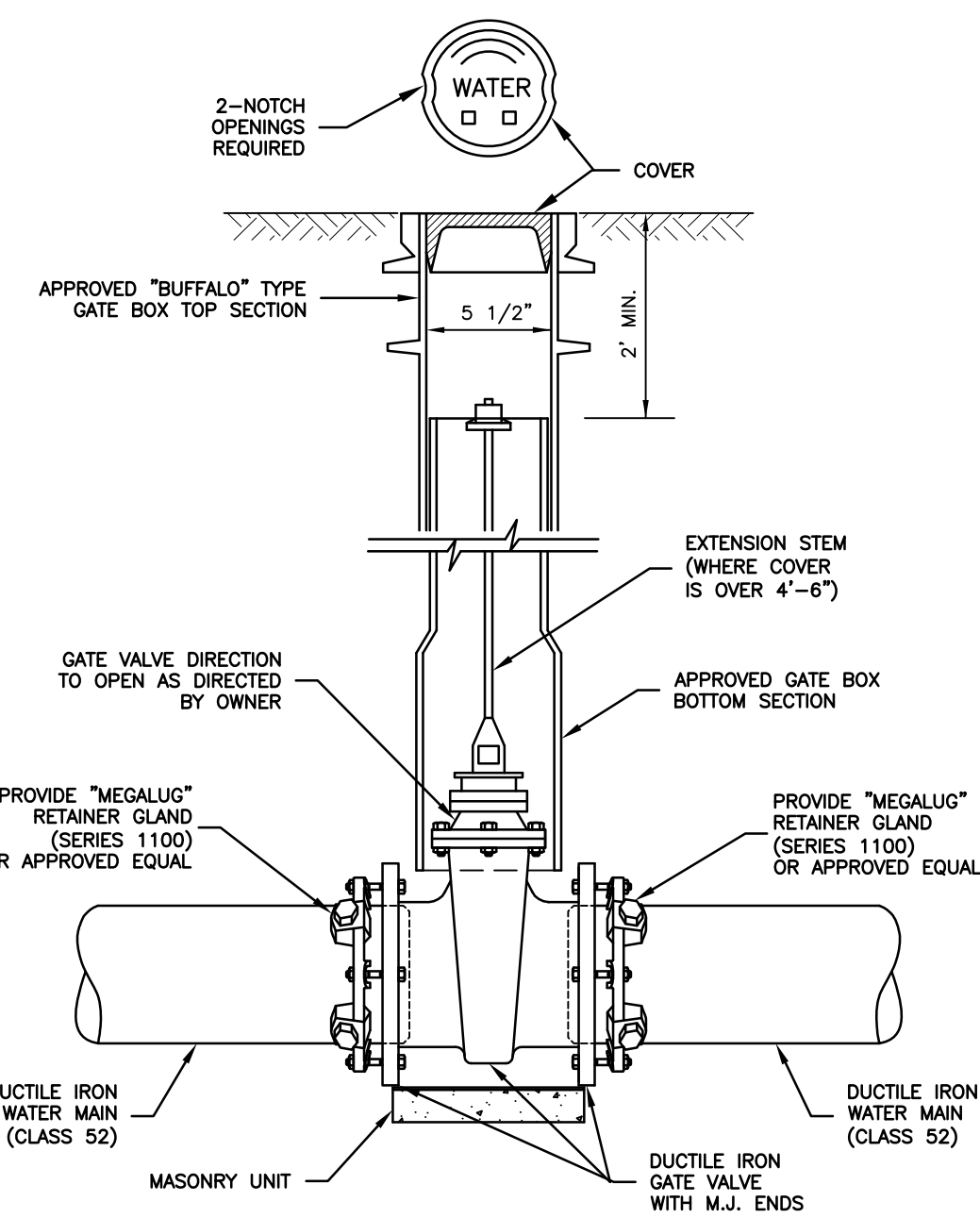
TRENCH DETAIL: WATER MAIN & SERVICE
NOT TO SCALE



FIRE HYDRANT ASSEMBLY DETAIL
NOT TO SCALE



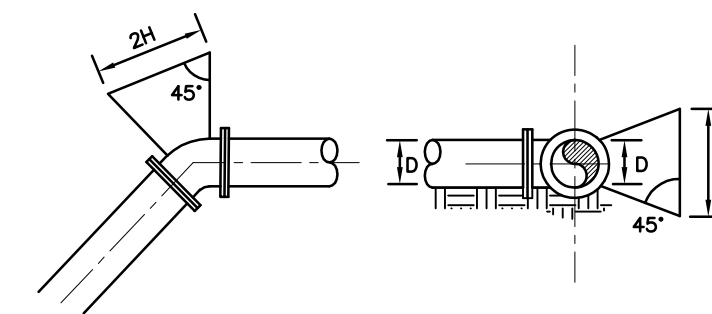
WATER SERVICE CONNECTION DETAIL
NOT TO SCALE



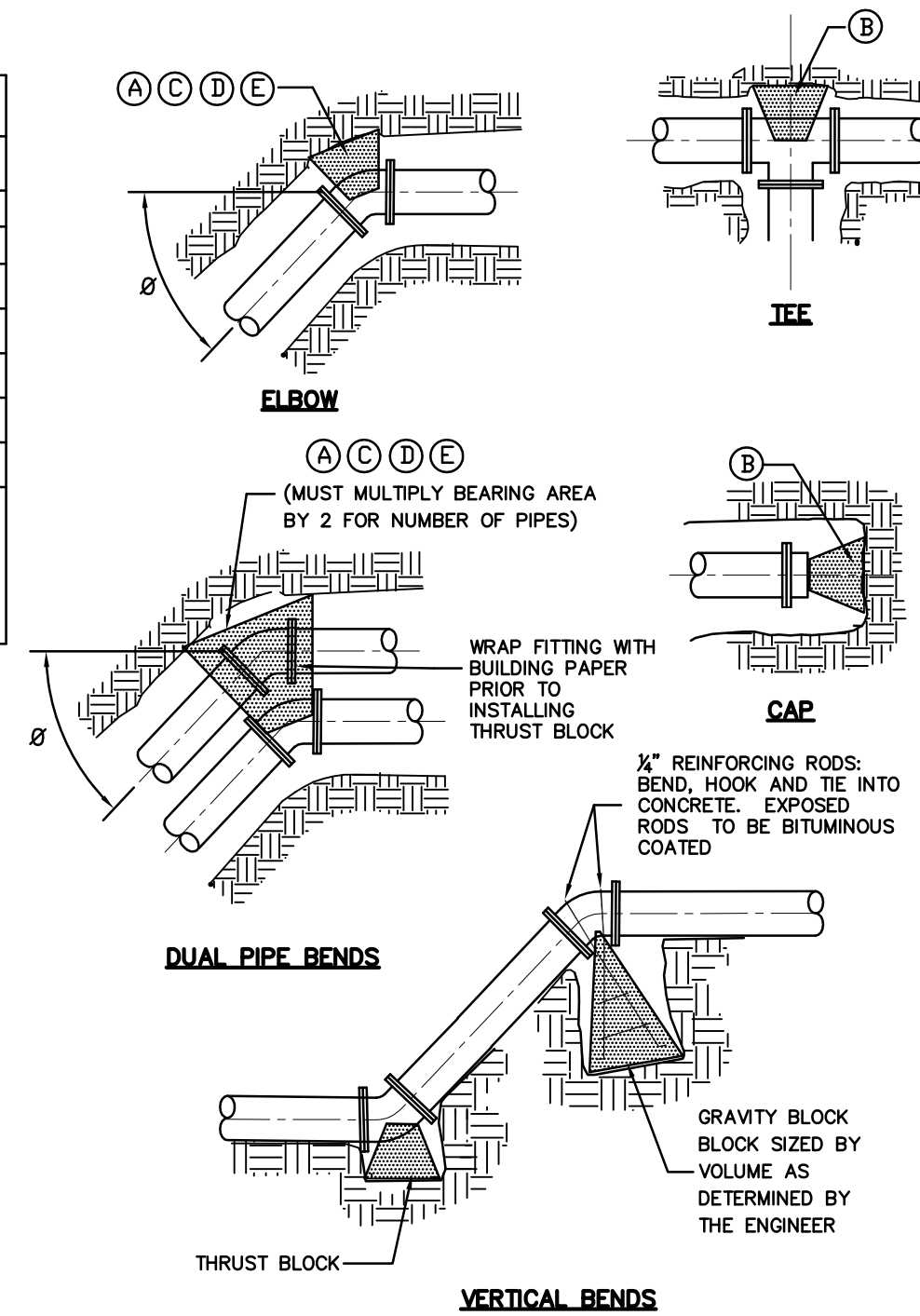
12\"/>

REACTION TYPE	PIPE SIZE						
	4"	6"	8"	10"	12"	16"	24"
A 90° BEND	1.8	4.4	7.8	11.2	17.2	30.8	69.2
B TEE OR CAP	1.4	3.2	5.6	8.4	12.2	21.8	49.5
C 45° BEND	1.0	2.4	4.2	6.0	9.4	16.6	37.6
D 22½° BEND	0.6	1.2	2.2	3.0	4.8	8.6	19.2
E 11¼° BEND	0.2	0.6	1.0	1.6	2.4	4.2	9.6

- NOTES:
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
 2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING. PLACE BOARD IN FRONT OF ALL CAPS BEFORE POURING THRUST BLOCK.
 3. REQUIREMENTS OF THE ABOVE TABLE PRESUME MINIMUM SOIL BEARING OF ONE TON PER SQUARE FOOT, AND MAY BE VARIED BY THE ENGINEER TO MEET OTHER CONDITIONS ENCOUNTERED.
 4. TEST PRESSURE FOR WATER MAINS SHALL BE 200 PSI.



MINIMUM THRUST BLOCK DIMENSION REQUIREMENTS



THRUST BLOCK DETAILS & DIMENSIONS
NOT TO SCALE

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Site Improvement Plan North Woods Village Planned Residential Development		Sheet No. 17
Construction Details		