

GENERAL NOTES

- BOUNDARY INFORMATION IS BASED UPON A FIELD SURVEY CONDUCTED BY SLR AND TOPOGRAPHIC INFORMATION IS BASED ON GIS WITH LIMITED FIELD TOPO.
- INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-322-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- THE EXACT LOCATION AND SIZE OF ELECTRIC, TELEPHONE AND CABLE TELEVISION ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES.
- ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
- ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL AND BE SEEDED WITH GROUND COVER SEED MIX, AS SHOWN ON THE PLANS, ALL VEGETATIVE ESTABLISHMENT SHALL CONFORM TO THE "STANDARDS FOR ORGANIC LAND CARE, NORA CONNECTICUT 2011," AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
- IN ALL CASES, TOPSOIL AND OTHER CONSTRUCTION MATERIALS SHALL BE DRAWN FROM THE ON-SITE STOCKPILES OF EXISTING MATERIAL. ONLY WHEN ON-SITE STOCKPILES HAVE BEEN USED SHALL MATERIAL BE IMPORTED TO THE SITE.
- ALL STORM DRAIN PIPE HDPE UNLESS OTHERWISE INDICATED.
- ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
- ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE CITY OF TORRINGTON REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 818 AND ADDENDUMS
- THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
- COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITTEE.
- THE PROPERTY OWNER MUST MAINTAIN (REPAIR/REPLACE WHEN NECESSARY) THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
- A SUPPLY OF ABSORBENT SPILL RESPONSE MATERIAL SHOULD BE KEPT ON-SITE TO CLEAN UP ANY SPILLS OF HAZARDOUS MATERIALS.
- A NATIVE WILDFLOWER PLANTING MIX OR APPROVED EQUAL TO BE USED ON ALL STEEP SLOPES, SEPTIC LEACHING AREAS AND DETENTION BASINS.

CONSTRUCTION SEQUENCE

- PRIOR TO COMMENCEMENT OF WORK A PRECONSTRUCTION MEETING SHALL BE HELD WITH CITY STAFF AND REPRESENTATIVES OF THE CONTRACTOR AND OWNER. AT THIS MEETING, ONE PERSON WILL BE PLACED IN CHARGE OF SEDIMENT AND EROSION CONTROL FOR THE ENTIRE SITE.
- CONTRACTOR TO STAKE OUT LIMIT OF DISTURBANCE AND VEGETATION TO BE RETAINED. NO DISTURBANCE IS TO TAKE PLACE BEYOND THE LIMITS OF WORK SHOWN.
- CONTRACTOR TO INSTALL SEDIMENT AND EROSION CONTROLS ALONG THE PERIMETER, AND STABILIZED CONSTRUCTION ENTRANCES.
- CLEAR AND GRUB SITE AND STOCKPILE TOPSOIL. PLACE SEDIMENT FILTER FENCE AND HAYBALES AROUND STOCKPILES.
- CONTRACTOR TO INSTALL TEMPORARY SEDIMENT TRAPS PER THE SEDIMENT AND EROSION CONTROL PLAN.
- INITIATE MASS EARTHWORK OPERATIONS AFTER ALL BASINS, BERMS, SWALES, SILT FENCE & HAYBALES ARE INSTALLED
- INSTALL UTILITIES, RV SITES AND PARKING LOTS/DRIVEWAYS WHERE NOTED ON THE PLANS.
- SLOPES ARE TO BE ESTABLISHED AS SOON AS PRACTICAL BEFORE UTILITY INSTALLATION. STABILIZE ALL SLOPES IMMEDIATELY AFTER THEIR ESTABLISHMENT.
- THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND DESIGNATED CITY REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS.

GENERAL CONSTRUCTION NOTES

- TEMPORARY SEDIMENT BASINS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. CLEAN THE SEDIMENT BASIN WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN.
- SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER.
- INSPECTION OF THE SITE FOR EROSION SHALL CONTINUE FOR A PERSON OF THREE MONTHS AFTER COMPETITION WHEN RAINFALLS OF ONE INCH OR MORE OCCUR.
- THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR WETLANDS.
- A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING CONSTRUCTION.

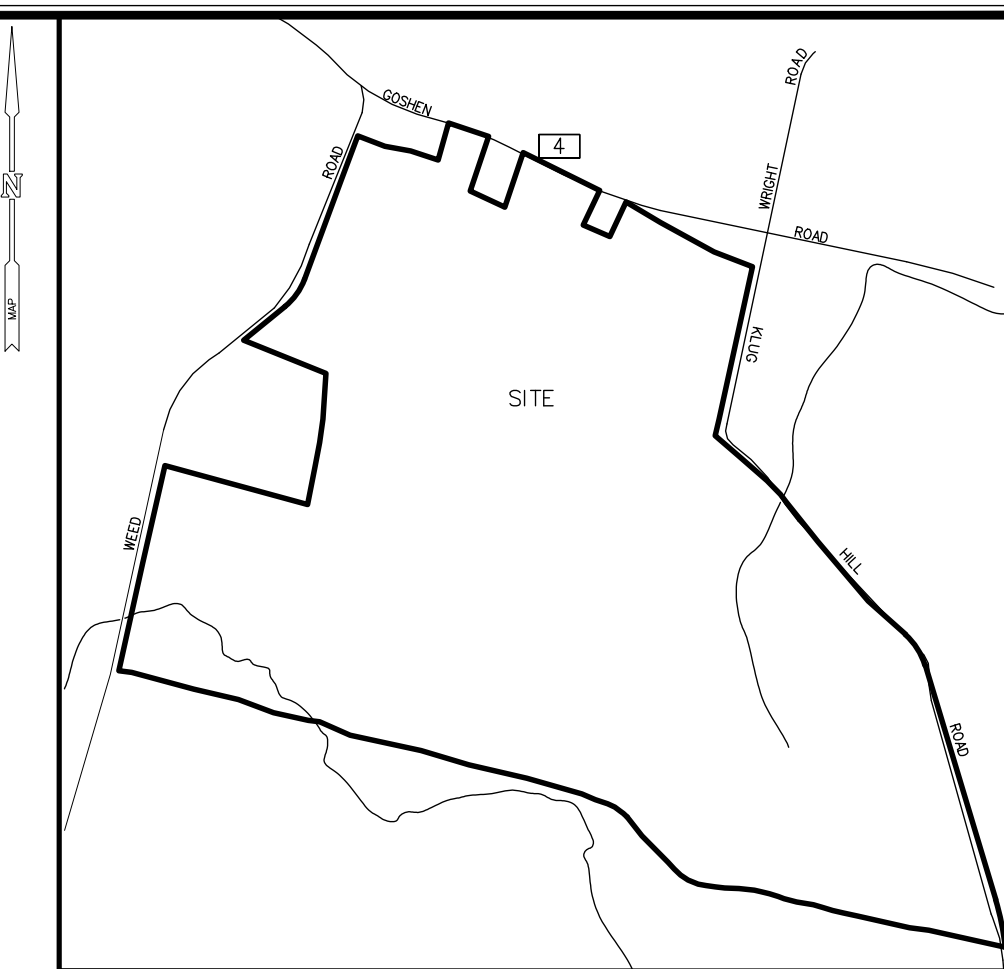
OPERATION AND MAINTENANCE PLAN (POST-CONSTRUCTION)

- ALL CATCH BASIN SUMPS SHOULD BE INSPECTED TWO TIMES PER YEAR AND SEDIMENT REMOVED WHEN IT EXTENDS TO WITHIN SIX INCHES OF THE OUTLET PIPE INVERT, NOT LESS THAN ONCE PER YEAR. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.
- A VEGETATIVE OR IMPROVED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE OF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCEDURES.
- A LOG OF ALL INSPECTION AND CLEANING SHALL BE MAINTAINED BY THE OCCUPANT AND BE AVAILABLE FOR INSPECTION.
- DURING CONSTRUCTION AND FOR THREE MONTHS AFTER PROJECT COMPLETION INSPECTION OF SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MADE ON A WEEKLY BASIS AND AFTER RAINFALL EVENTS OF 1/2" OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.

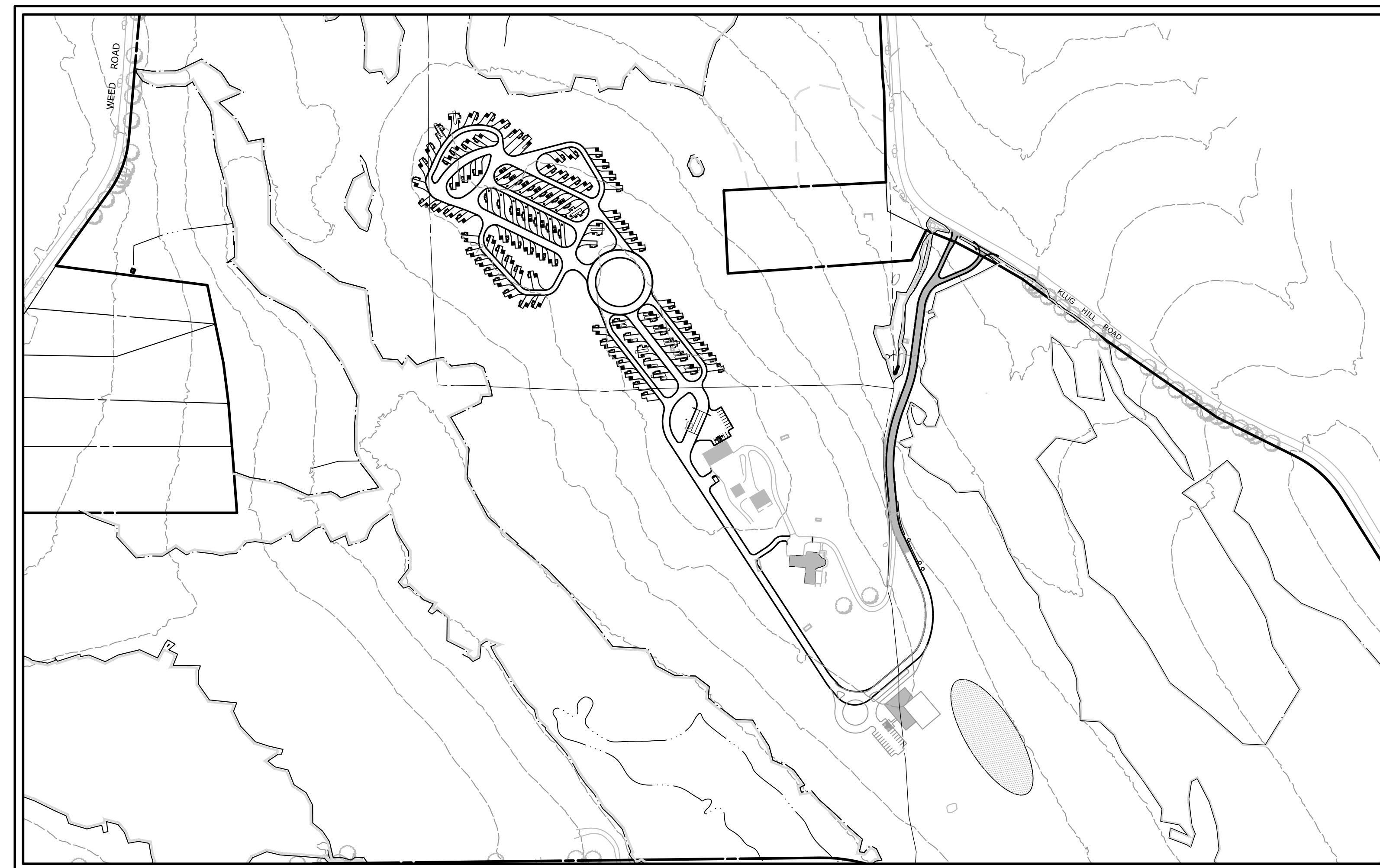
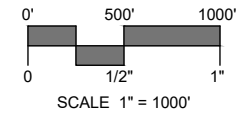
LITCHFIELDS HILLS CT KOA CAMPGROUND

232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

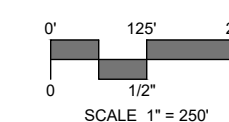
REGULATORY SUBMISSION
NOVEMBER 9, 2022
LAST REVISED: AUGUST 7, 2023



LOCATION MAP:



PROJECT SITE VICINITY MAP:



PROJECT DATA

EXISTING ZONE:	R-60
PROPOSED USE:	RECREATIONAL VEHICLE PARK
TOTAL PARCEL AREA:	±225.87 AC.
TOTAL PROPOSED RV SITES:	92 SITES

R-60 - DIMENSIONAL CRITERIA	REQ'D/PERMITTED	PROPOSED/PROVIDED
LOT AREA	60,000 SF (MIN)	±225.87 AC.
LOT WIDTH	200' (MIN)	>200'
FRONT YARD SETBACK	50' (MIN)	>50'
SIDE YARD SETBACK	25' (MIN)	>25'
REAR YARD SETBACK	100' (MIN)	>100'
IMPERVIOUS SURFACE RATIO	30% (MAX)	<30%
BUILDING COVERAGE RATIO	10% (MAX)	<10%

RV PARK - DIMENSIONAL CRITERIA	REQ'D/PERMITTED	PROPOSED/PROVIDED
LOT AREA	25 AC. (MIN)	±225.87 AC.
PARK DENSITY	1 SITE PER 40,000 SF (MIN)	1 SITE PER ±106,942 SF
RV SITE AREA	1500 SF (30' W X 50' D) (MIN)	>1500 SF PER SITE
SETBACK FROM ANY PROPERTY LINE	100' (MIN)	>100'
COMMON RECREATION AREA	150 SF PER SITE (MIN)	> 150 SF PER SITE

PREPARED BY:



OWNER:

GREENSTONE INVESTMENTS, INC
232 KLUG HILL ROAD
TORRINGTON, CT 06790

APPLICANT:

LELAH CAMPO
COZY HILLS II CAMPGROUND
1311 BANTAM ROAD
BANTAM, CT 06750

LIST OF DRAWINGS

NO.	NAME	TITLE
01	-	TITLE SHEET
02	IN	INDEX & PHASING PLAN
03 - 05	EX-1 - 3	EXISTING CONDITIONS
06 - 08	LL-1 - 3	SITE PLAN - LAYOUT AND LANDSCAPING
09 - 11	GR-1 - 3	SITE PLAN - GRADING
12 - 14	UT -1-3	SITE PLAN - UTILITIES
15 - 17	SE-1 - 3	SEDIMENT AND EROSION CONTROL PLAN
18 - 19	PP-1 - 2	SITE PLAN - PLAN & PROFILE
20 - 21	SD-1 - SD-2	SEPTIC SYSTEM - SOIL TESTING RESULTS
22	SD-3	SEPTIC SYSTEM - MLSS DATA TABLE
23 - 25	SD-4 - SD-6	SEPTIC SYSTEM - SEPTIC DESIGN & CROSS SECTIONS
26 - 30	SD-7 - SD-11	SITE DETAILS

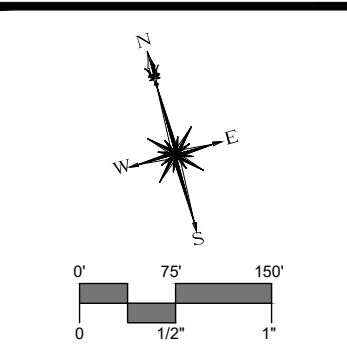


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LEGEND

- PROPERTY LINE
- MATCHLINE
- LIMIT OF UPLAND REVIEW AREA
- WETLAND
- WATERCOURSE
- PROJECT LIMITS
- STORMWATER BASIN EXTENTS
- SEPTIC LEACHING FIELD EXTENTS



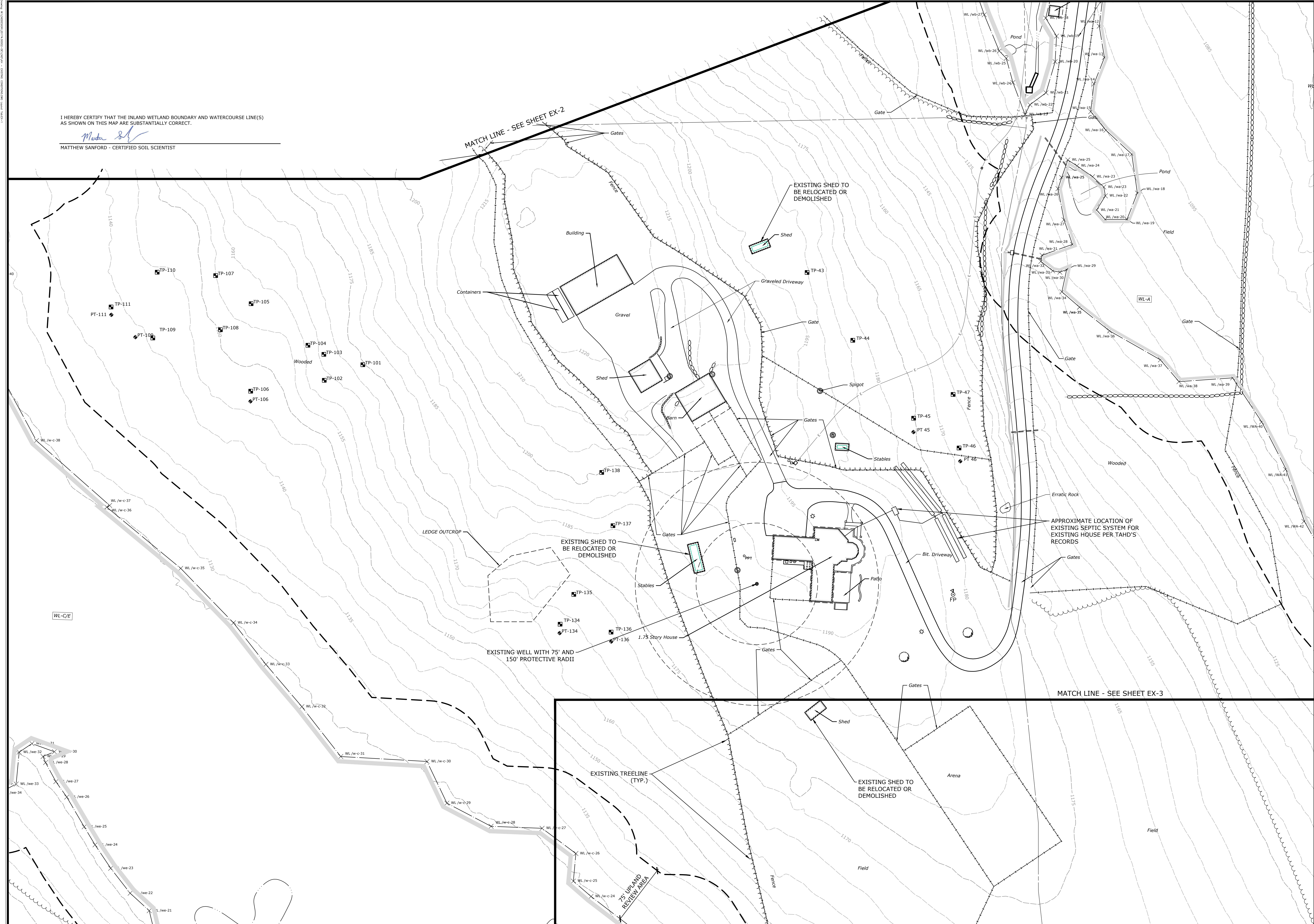
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BASIN & LEACHING FIELD AREAS	11/02/2023	ACD
ADDITION OF PHASE 3	2/06/2023	ACD
REVISED PHASING	4/13/2023	ACD
LAYOUT CHANGES	8/7/2023	ACD

INDEX & PHASING PLAN
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

RJM	ACD	RJM
DESIGNED	DRAWN	CHECKED

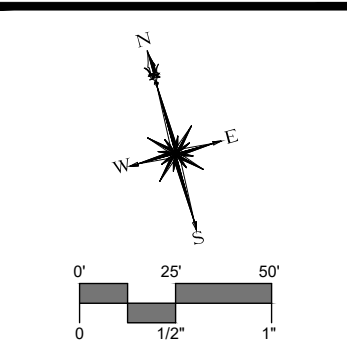
1"=150'
 NOVEMBER 9, 2022
 DATE
 20174.00002
 PROJECT NO.
 02 OF 30
 SHEET NO.

IN
 SHEET NAME
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I HEREBY CERTIFY THAT THE INLAND WETLAND BOUNDARY AND WATERCOURSE LINE(S) AS SHOWN ON THIS MAP ARE SUBSTANTIALLY CORRECT.

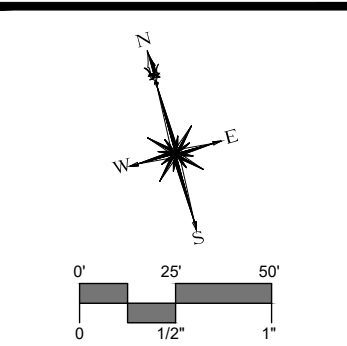
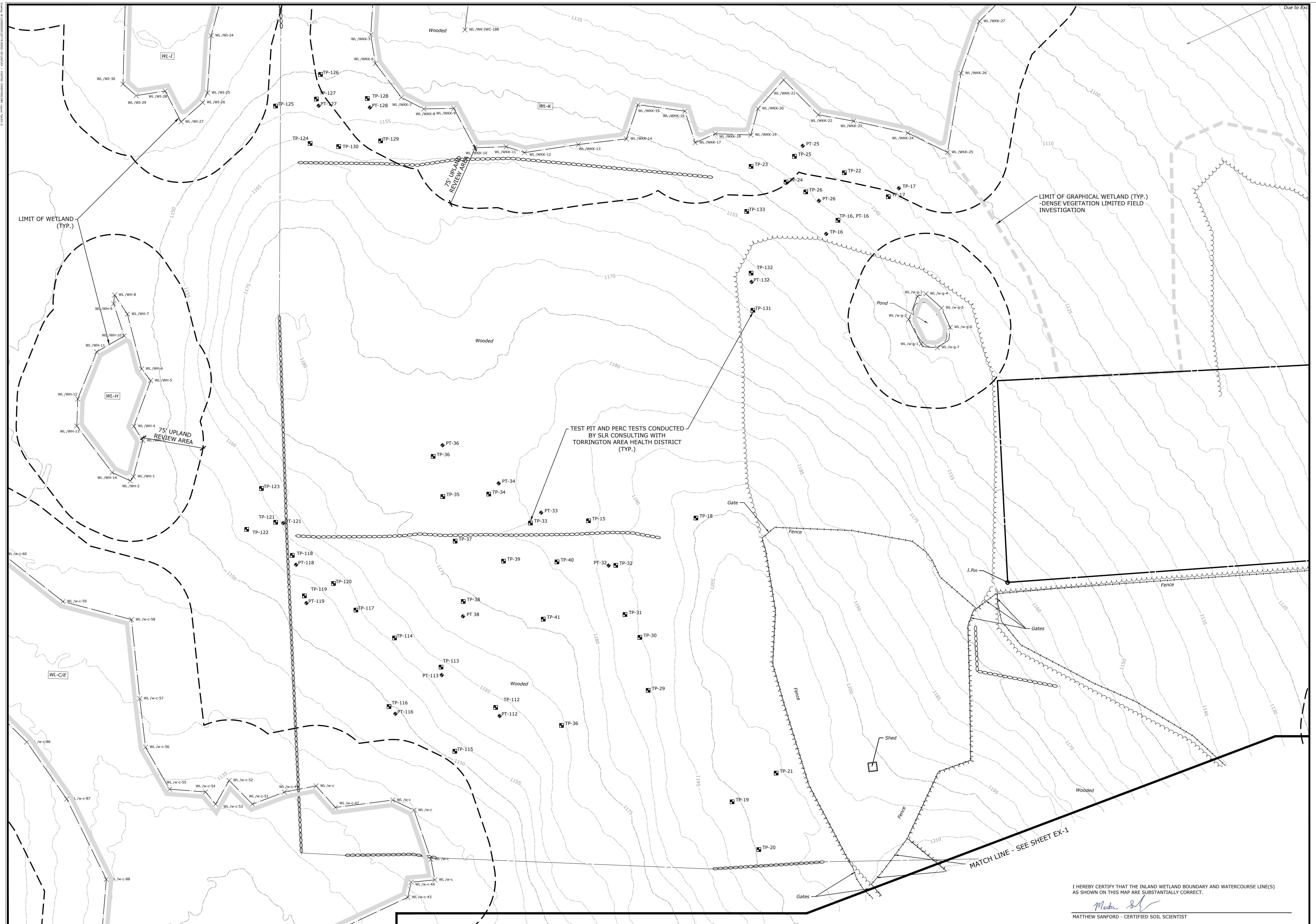
Matthew Sanford
 MATTHEW SANFORD - CERTIFIED SOIL SCIENTIST



DESCRIPTION	REVISIONS	DATE	BY
EX-3 MATCHLINE	1	11/10/2023	ACD
	2	4/13/2023	ACD

SITE PLAN - EXISTING CONDITIONS
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED
SCALE: 1"=50'		
DATE: NOVEMBER 9, 2022		
PROJECT NO: 20174.00002		
SHEET NO: 03 OF 30		
EX-1		



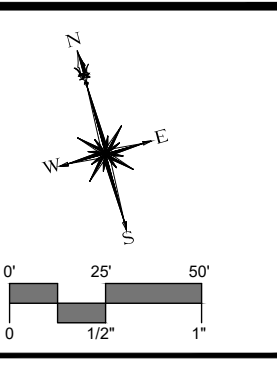
DESCRIPTION	DATE	BY
TYPO FIX	1/10/2023	ACD

SITE PLAN - EXISTING CONDITIONS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED
SCALE: 1"=50'		
DATE: NOVEMBER 9, 2022		
PROJECT NO: 20174.00002		
SHEET NO: 04 OF 30		

EX-2

I HEREBY CERTIFY THAT THE INLAND WETLAND BOUNDARY AND WATERCOURSE LINE(S) AS SHOWN ON THIS MAP ARE SUBSTANTIALLY CORRECT.
Matthew Sanford
 MATTHEW SANFORD - CERTIFIED SOIL SCIENTIST



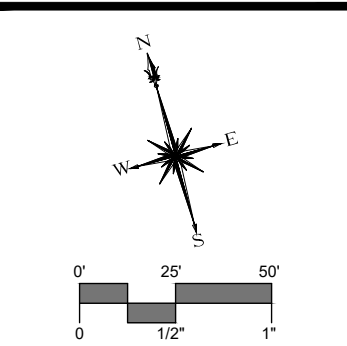
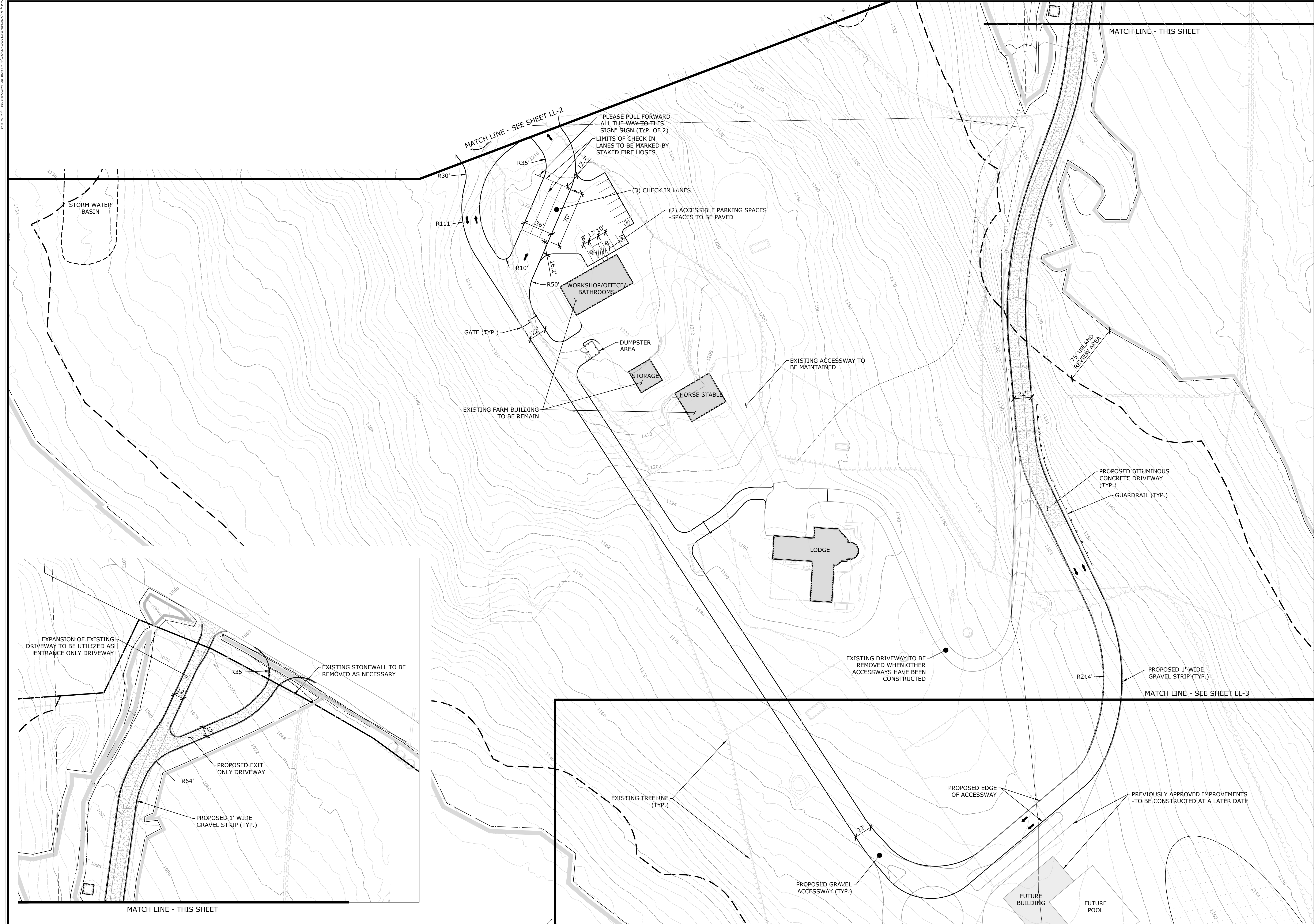
DESCRIPTION	DATE	BY

SITE PLAN - EXISTING CONDITIONS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED
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APRIL 13, 2023		
DATE		
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PROJECT NO.		
05 OF 30		
SHEET NO.		

EX-3

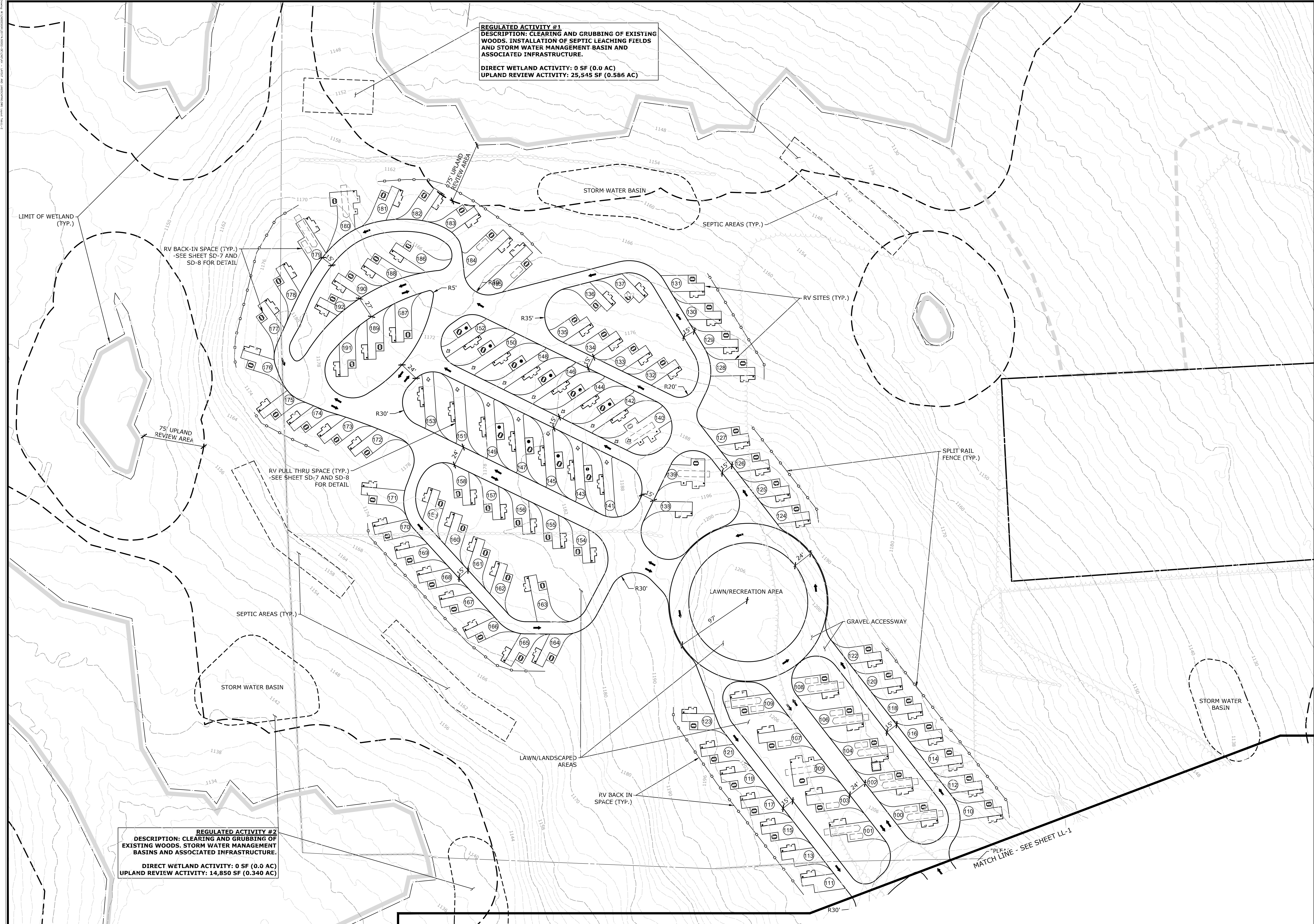
EXISTING AND PROPOSED AREAS SHOWN ON THIS SHEET ARE BASED ON THE DATA PROVIDED BY THE CLIENT AND ARE NOT GUARANTEED BY SLR CONSULTING.



DESCRIPTION	DATE	BY
CITY STAFF COMMENTS	1/10/2023	ACD
EX. UG ELECTRIC CONDUIT	1/23/2023	ACD
DRIVEWAY REVISIONS	2/02/2023	KJG
LAYOUT CHANGES	7/12/2023	ACD
STAFF COMMENTS	8/7/2023	ACD

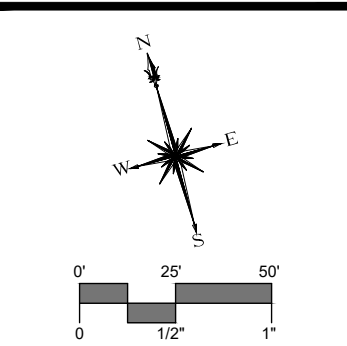
SITE PLAN - LAYOUT & LANDSCAPING
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED
SCALE: 1"=50'		
DATE: NOVEMBER 9, 2022		
PROJECT NO.: 20174.00002		
SHEET NO.: 06 OF 30		
LL-1		



REGULATED ACTIVITY #1
 DESCRIPTION: CLEARING AND GRUBBING OF EXISTING WOODS. INSTALLATION OF SEPTIC LEACHING FIELDS AND STORM WATER MANAGEMENT BASIN AND ASSOCIATED INFRASTRUCTURE.
 DIRECT WETLAND ACTIVITY: 0 SF (0.0 AC)
 UPLAND REVIEW ACTIVITY: 25,545 SF (0.586 AC)

REGULATED ACTIVITY #2
 DESCRIPTION: CLEARING AND GRUBBING OF EXISTING WOODS. STORM WATER MANAGEMENT BASINS AND ASSOCIATED INFRASTRUCTURE.
 DIRECT WETLAND ACTIVITY: 0 SF (0.0 AC)
 UPLAND REVIEW ACTIVITY: 14,850 SF (0.340 AC)



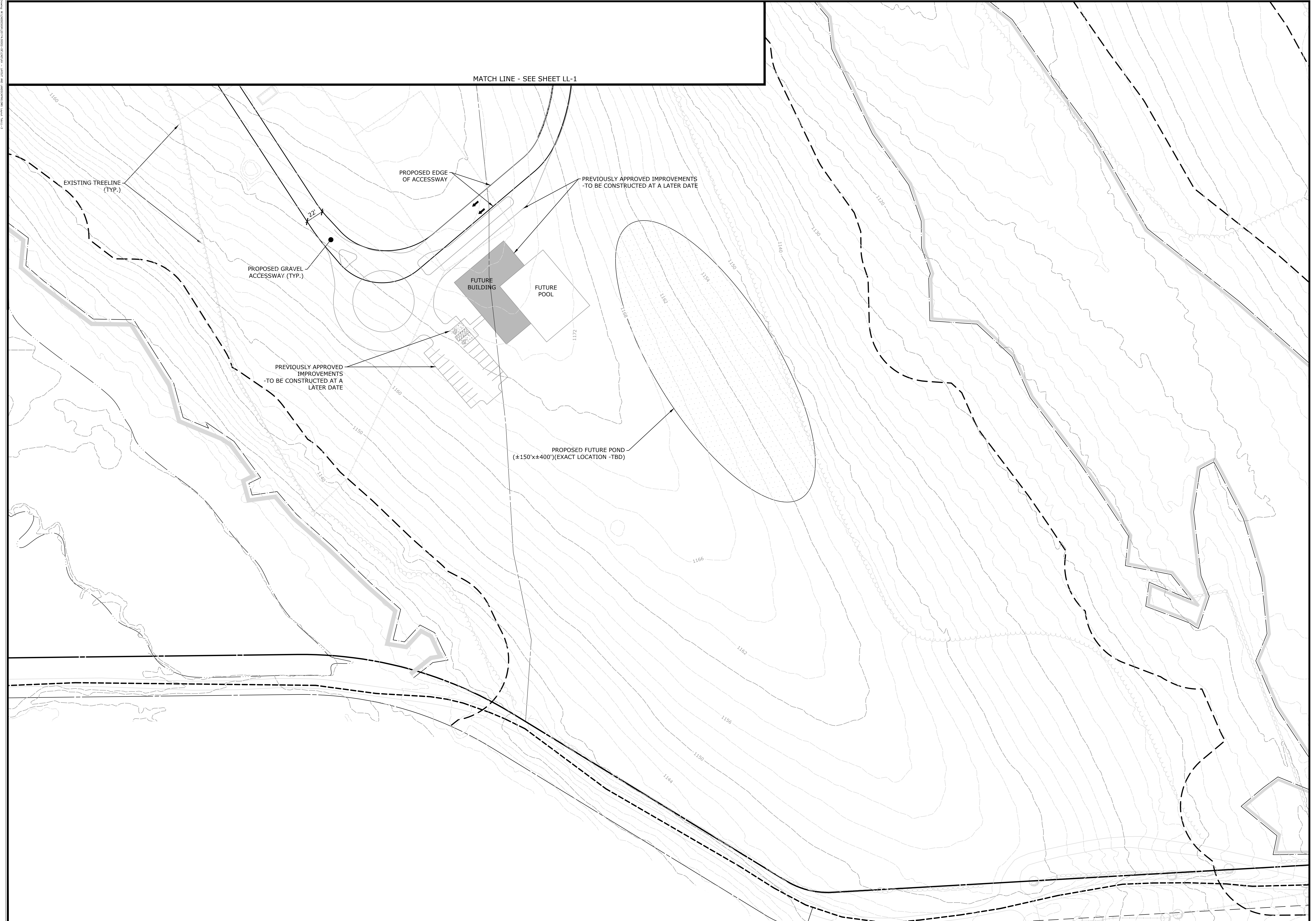
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CITY STAFF COMMENTS	1/10/2023	ACD
LAYOUT CHANGES	7/12/2023	ACD

SITE PLAN - LAYOUT & LANDSCAPING
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

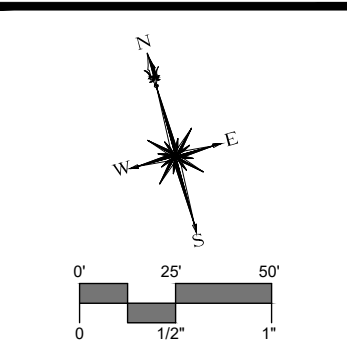
ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

SCALE: 1"=50'
 DATE: NOVEMBER 9, 2022
 PROJECT NO: 20174.00002
 SHEET NO: 07 OF 30

LL-2



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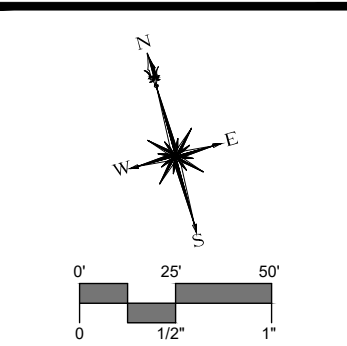
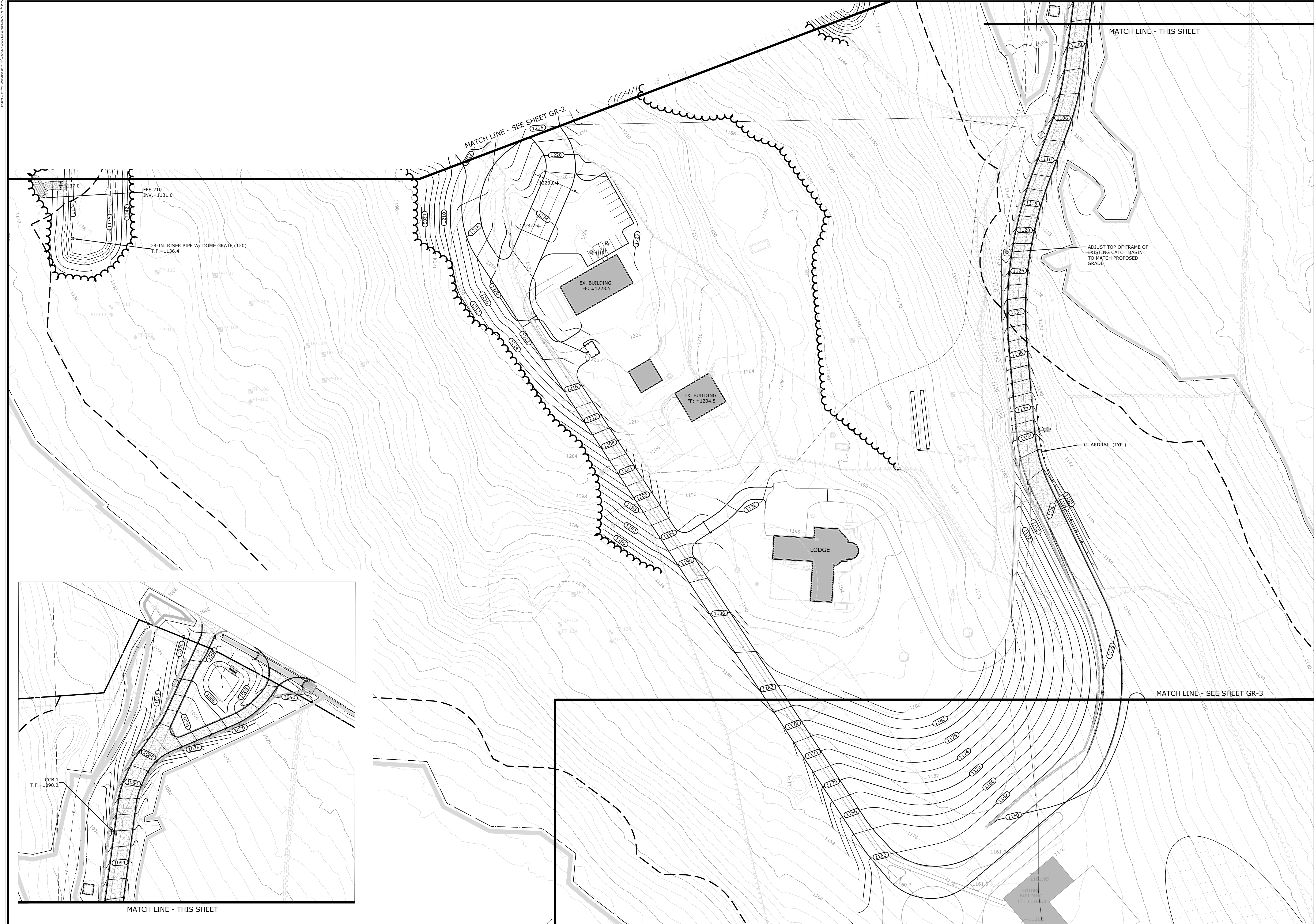
DESCRIPTION	DATE	BY
LAYOUT CHANGES	7/12/2023	ACD
STAFF COMMENTS	8/7/2023	ACD

SITE PLAN - LAYOUT & LANDSCAPING	
LITCHFIELDS HILLS CT	
KOA CAMPGROUND	
232 KLUG HILL ROAD	
TORRINGTON, CONNECTICUT	

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

SCALE: 1"=50'
 DATE: APRIL 13, 2023
 PROJECT NO.: 20174.00002

SHEET NO.: 08 OF 30
LL-3



DESCRIPTION	DATE	BY
LAYOUT CHANGES	4/13/2023	ACD
LAYOUT CHANGES	7/20/2023	ACD

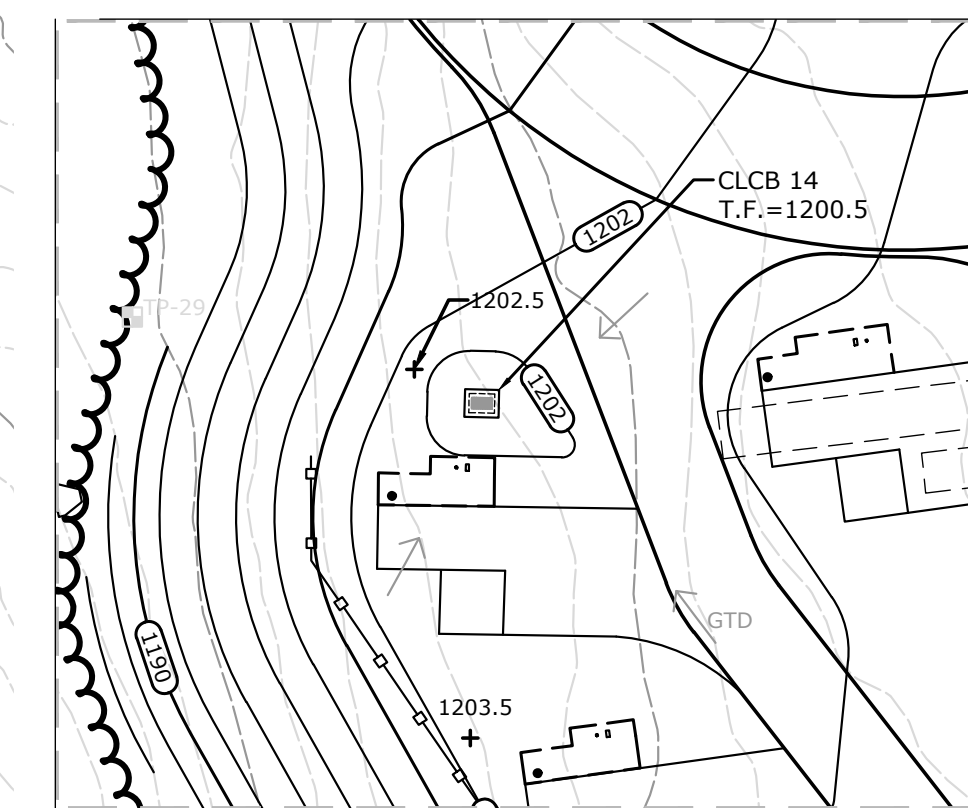
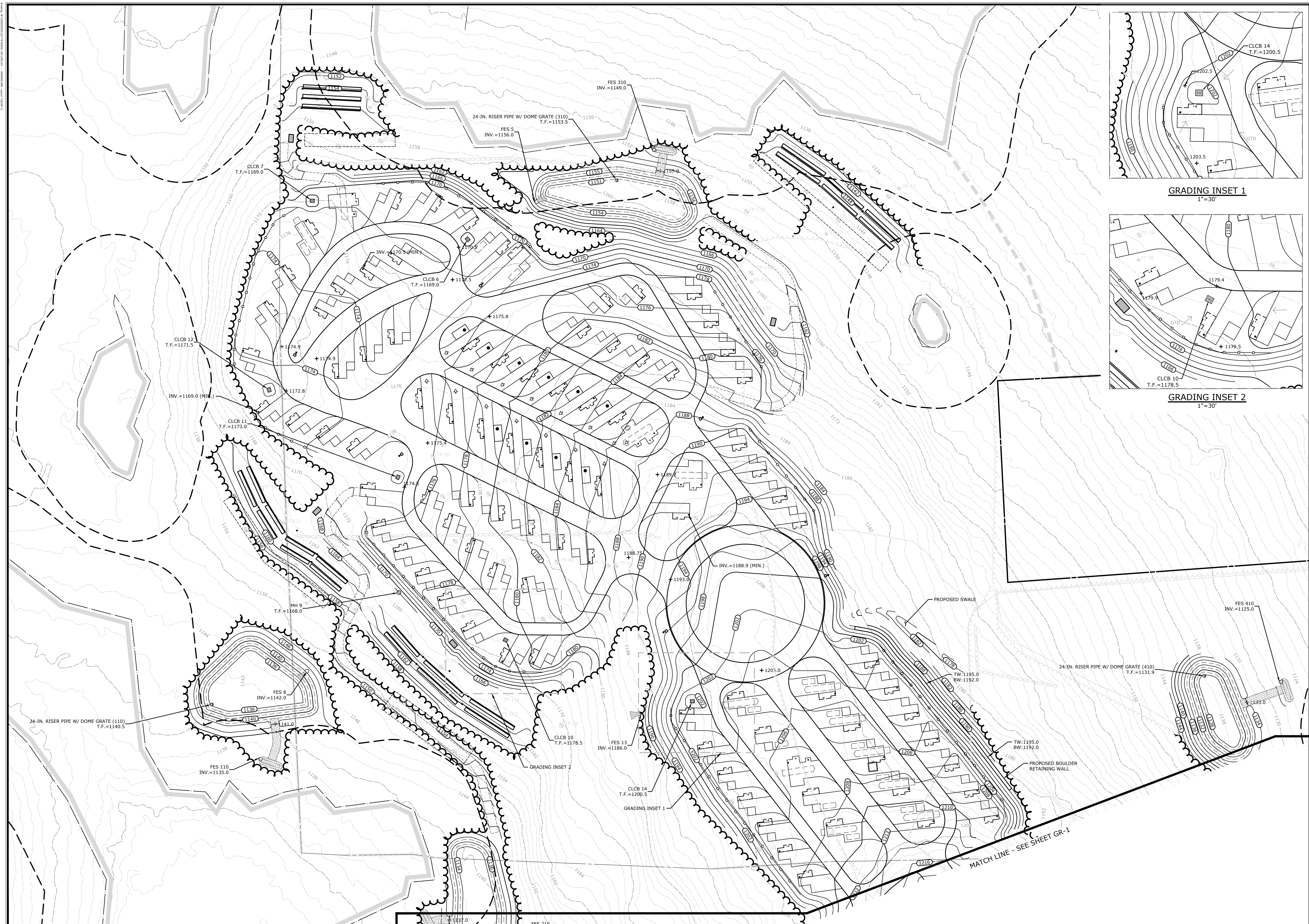
SITE PLAN - GRADING
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

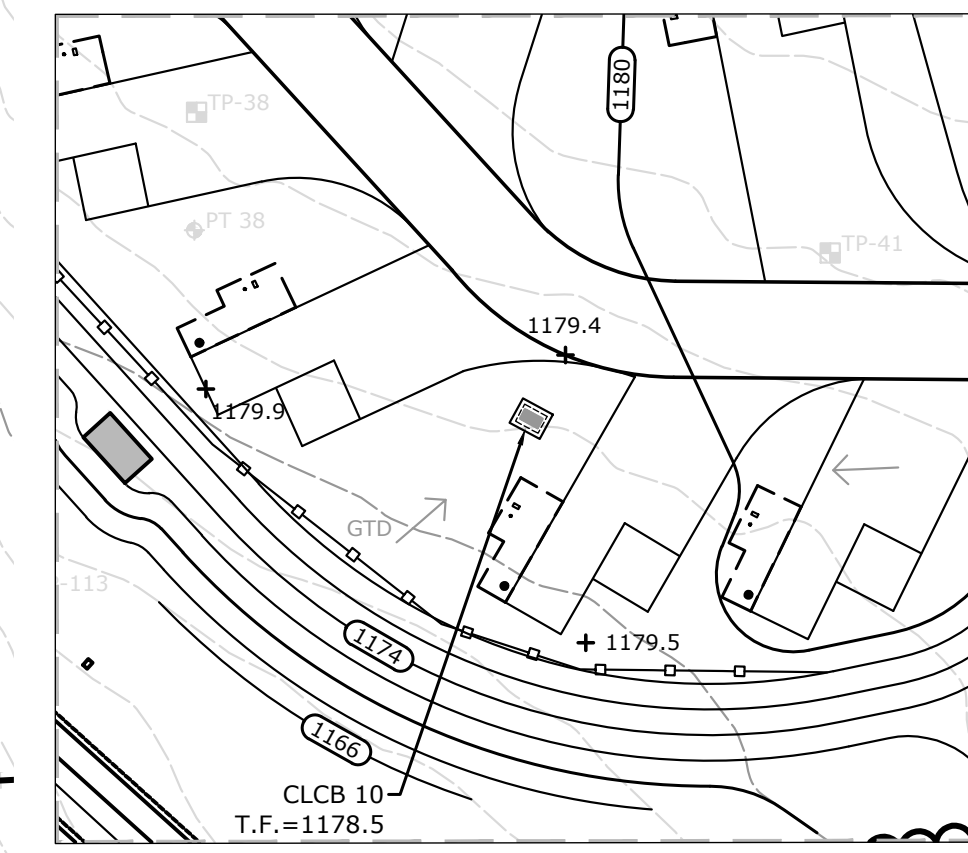
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 DATE: FEBRUARY 6, 2023
 PROJECT NO.: 20174.00002
 SHEET NO.: 09 OF 30

GR-1

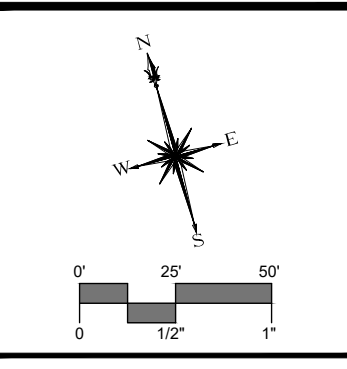
TORRINGTON, CT 06810
 203.271.1773
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GRADING INSET 1
1"=30'



GRADING INSET 2
1"=30'



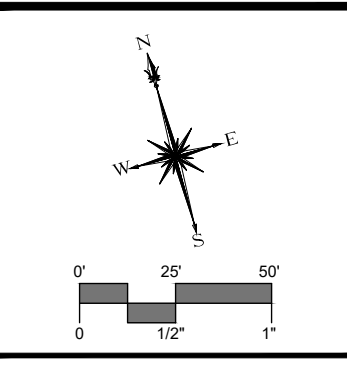
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PR. GRADING - ROUNDABOUT	06/01/2023	ACD	
LAYOUT CHANGES	7/20/2023	ACD	

SITE PLAN - GRADING
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

SCALE: 1"=50'
DATE: FEBRUARY 6, 2023
PROJECT NO.: 20174.00002
SHEET NO.: 10 OF 30

GR-2



MATCH LINE - SEE SHEET GR-1

SLR
 99 REALTY DRIVE
 TORRINGTON, CT 06460
 203.271.1773
 SLRCONSULTING.COM

DESCRIPTION	DATE	BY
LAYOUT CHANGES	7/20/2023	ACD

SITE PLAN - GRADING
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

SCALE: 1"=50'

DATE: APRIL 13, 2023

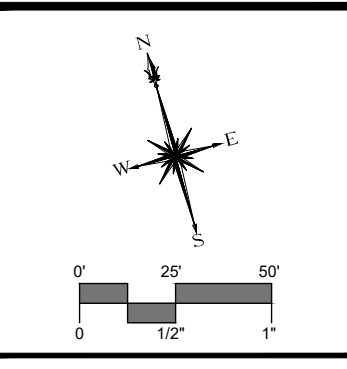
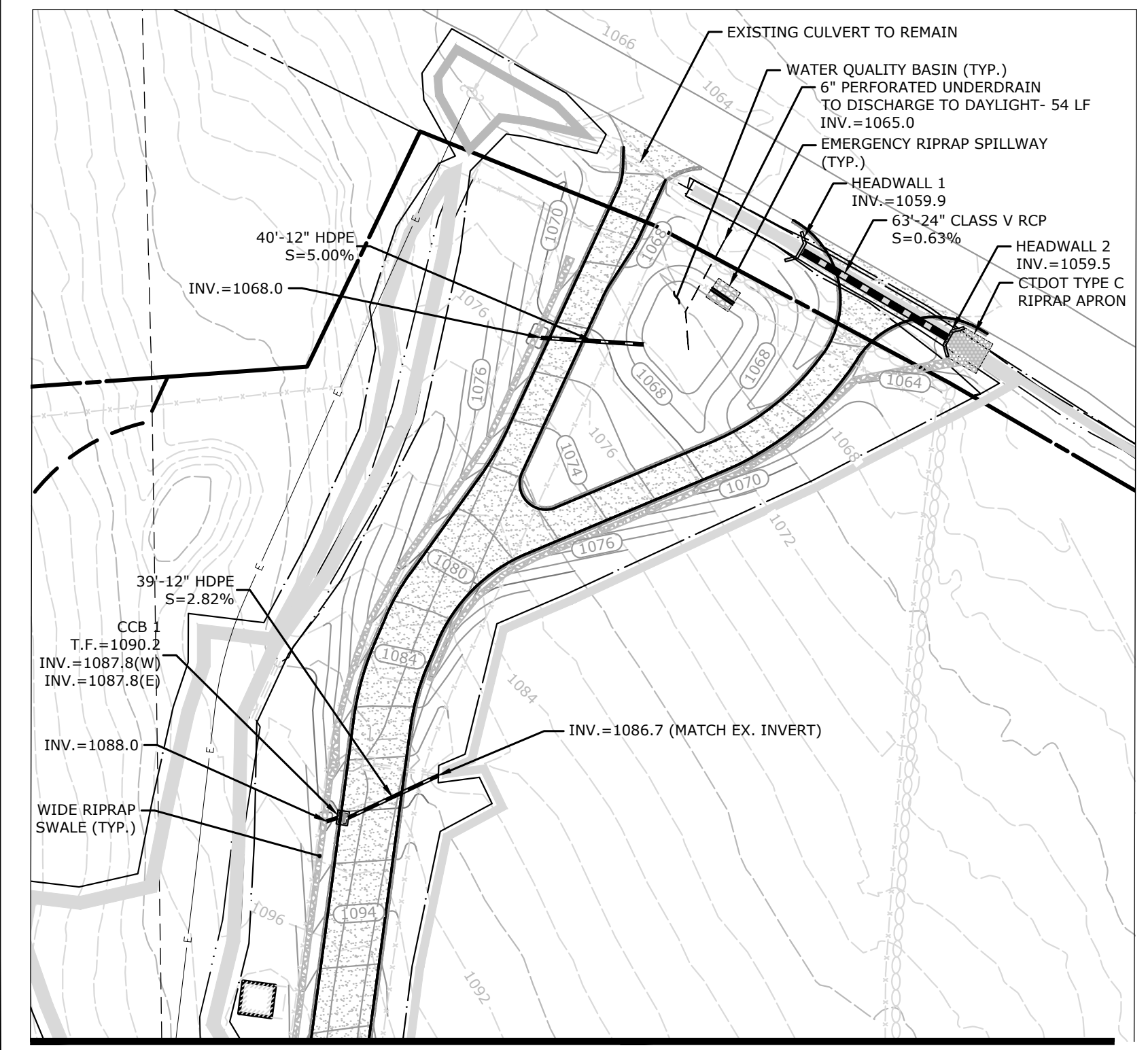
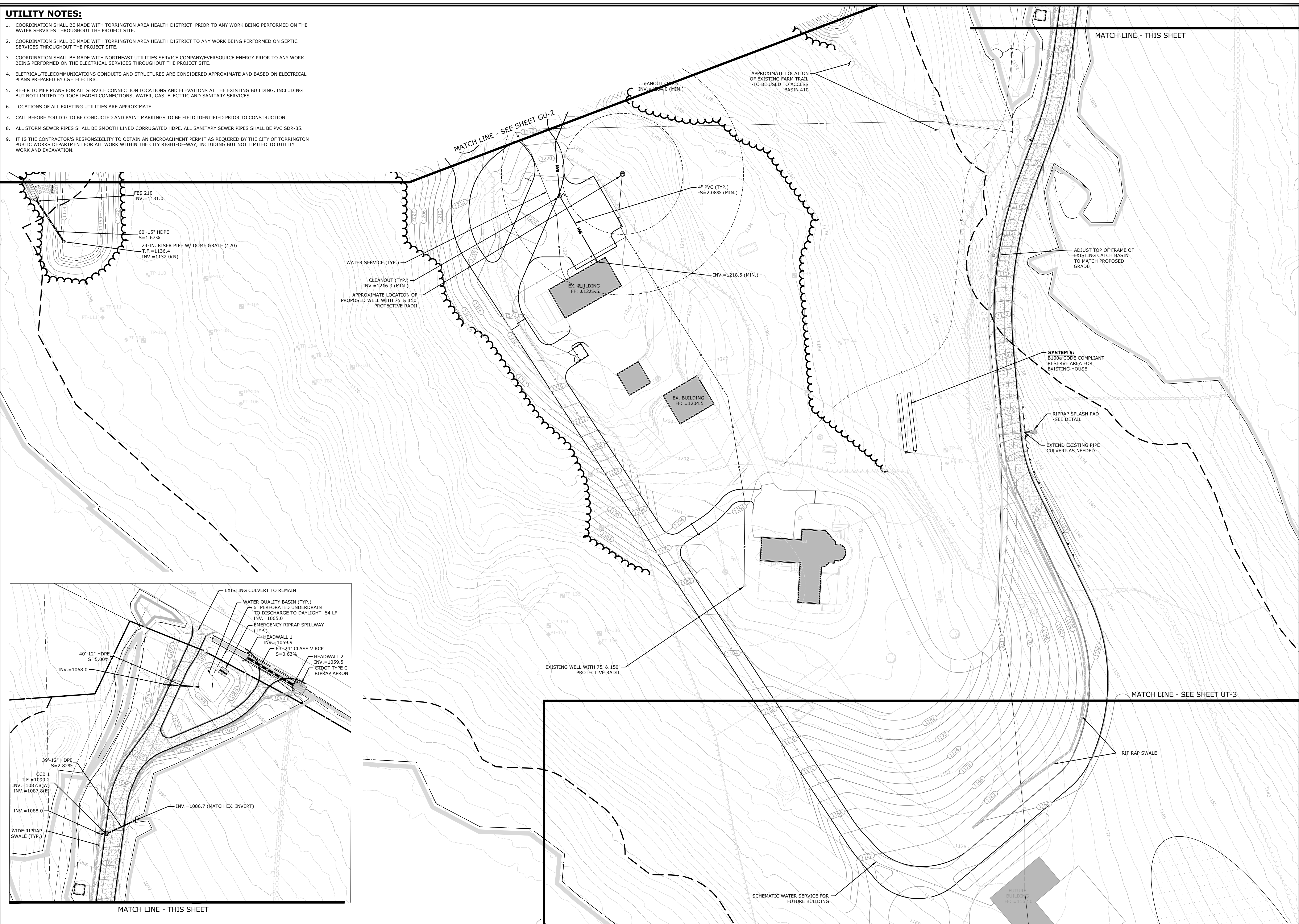
PROJECT NO.: 20174.00002

SHEET NO.: 11 OF 30

GR-3

UTILITY NOTES:

- COORDINATION SHALL BE MADE WITH TORRINGTON AREA HEALTH DISTRICT PRIOR TO ANY WORK BEING PERFORMED ON THE WATER SERVICES THROUGHOUT THE PROJECT SITE.
- COORDINATION SHALL BE MADE WITH TORRINGTON AREA HEALTH DISTRICT TO ANY WORK BEING PERFORMED ON SEPTIC SERVICES THROUGHOUT THE PROJECT SITE.
- COORDINATION SHALL BE MADE WITH NORTHEAST UTILITIES SERVICE COMPANY/EVERSOURCE ENERGY PRIOR TO ANY WORK BEING PERFORMED ON THE ELECTRICAL SERVICES THROUGHOUT THE PROJECT SITE.
- ELECTRICAL/TELECOMMUNICATIONS CONDUITS AND STRUCTURES ARE CONSIDERED APPROXIMATE AND BASED ON ELECTRICAL PLANS PREPARED BY C&H ELECTRIC.
- REFER TO MEP PLANS FOR ALL SERVICE CONNECTION LOCATIONS AND ELEVATIONS AT THE EXISTING BUILDING, INCLUDING BUT NOT LIMITED TO ROOF LEADER CONNECTIONS, WATER, GAS, ELECTRIC AND SANITARY SERVICES.
- LOCATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE.
- CALL BEFORE YOU DIG TO BE CONDUCTED AND PAINT MARKINGS TO BE FIELD IDENTIFIED PRIOR TO CONSTRUCTION.
- ALL STORM SEWER PIPES SHALL BE SMOOTH LINED CORRUGATED HDPE. ALL SANITARY SEWER PIPES SHALL BE PVC SDR-35.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN AN ENCROACHMENT PERMIT AS REQUIRED BY THE CITY OF TORRINGTON PUBLIC WORKS DEPARTMENT FOR ALL WORK WITHIN THE CITY RIGHT-OF-WAY, INCLUDING BUT NOT LIMITED TO UTILITY WORK AND EXCAVATION.



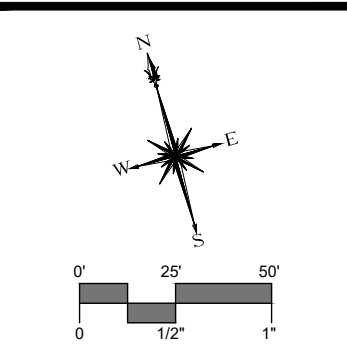
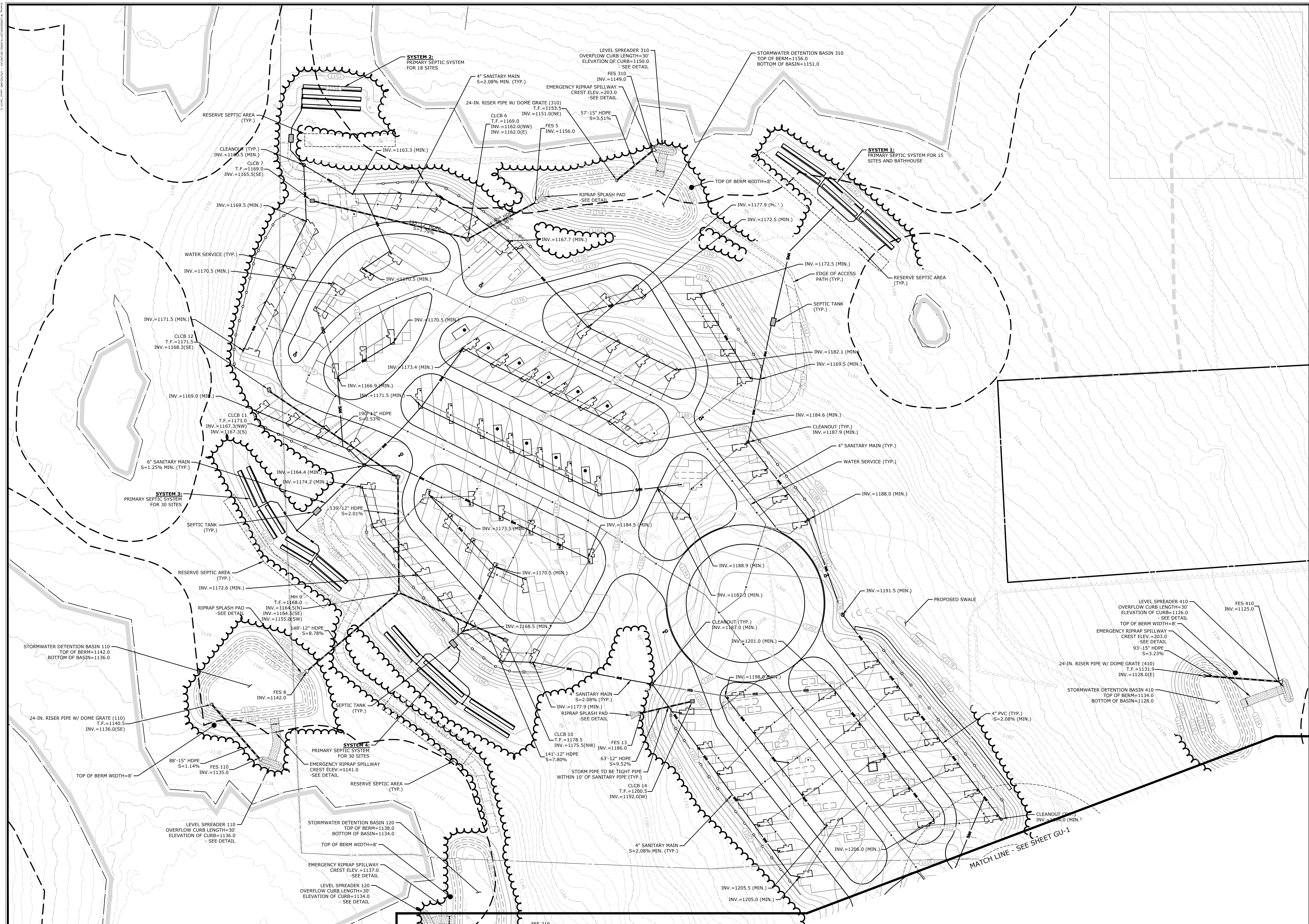
DESCRIPTION	DATE	BY
LAYOUT CHANGES	4/13/2023	ACD
LAYOUT CHANGES	7/20/2023	ACD

SITE PLAN - UTILITIES
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

SCALE: 1"=50'
 DATE: FEBRUARY 6, 2023
 PROJECT NO.: 20174.00002
 SHEET NO.: 12 OF 30

UT-1



SLR
 99 REALTY DRIVE
 263.271.1773
 SLRCONSULTING.COM

DESCRIPTION	DATE	BY	ACD
PR. GRADING - ROUNDABOUT	05/01/2023	ACD	
LAYOUT CHANGES	7/20/2023	ACD	

SITE PLAN - UTILITIES
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

1"=50'
 FEBRUARY 6, 2023
 PROJECT NO. 20174.00002
 SHEET NO. 13 OF 30

UT-2



DESCRIPTION	DATE	BY
LAYOUT CHANGES	7/20/2023	ACD

SITE PLAN - UTILITIES
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD DESIGNED	ACD DRAWN	RJM CHECKED
SCALE 1"=50'		
DATE APRIL 13, 2023		
PROJECT NO. 20174.00002		
SHEET NO. 14 OF 30		
UT-3		

20174.00002 2023 APR 13 11:00 AM
 20174.00002 2023 APR 13 11:00 AM
 20174.00002 2023 APR 13 11:00 AM

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002, TOWN OF TORRINGTON REQUIREMENTS, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.

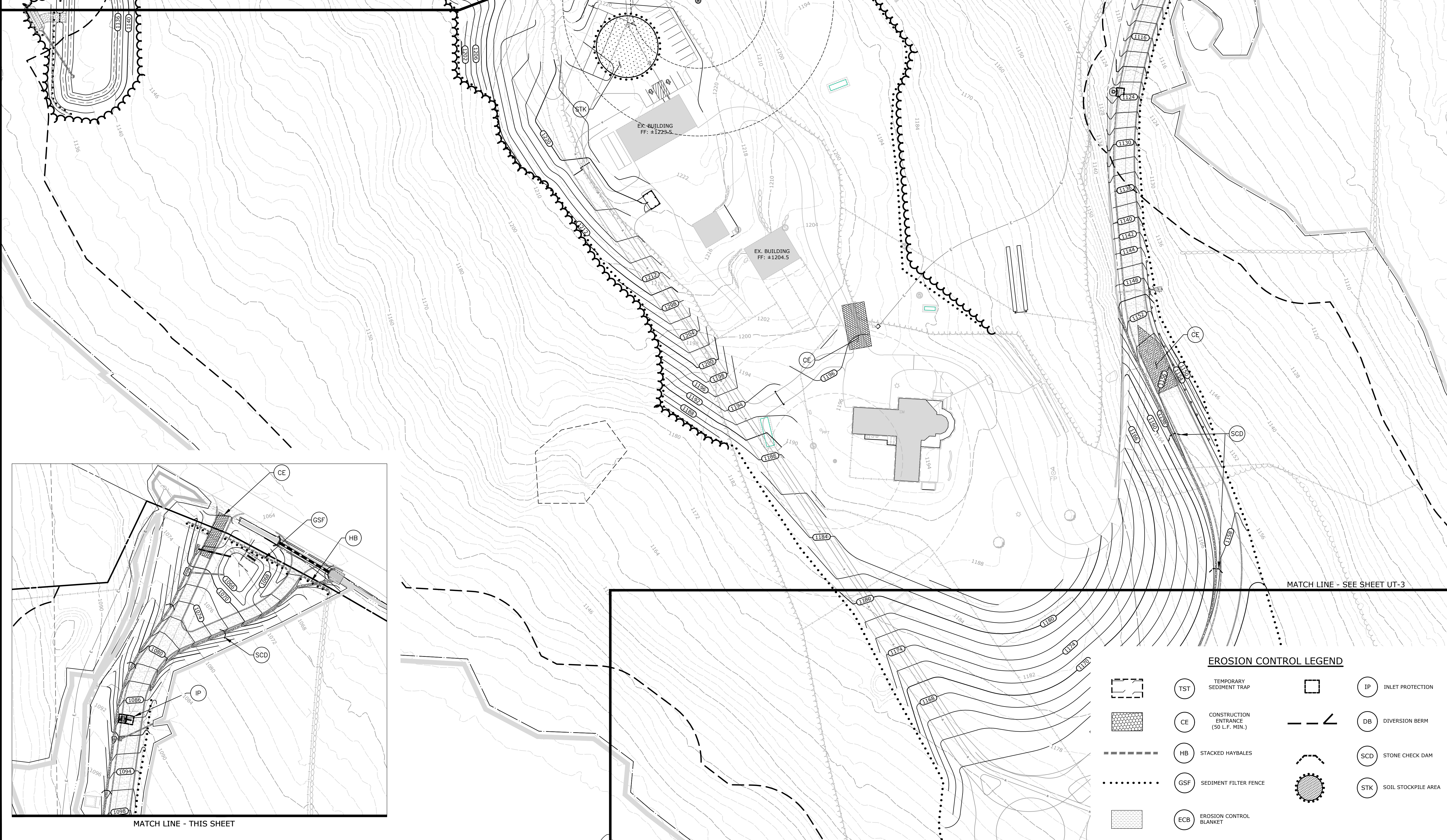
1. PURPOSE AND DESCRIPTION OF PROJECT
 A.) THE CONSTRUCTION OF A 92 SITE RV PARK DEVELOPMENT
 B.) DISTURBED AREA: ±30.0 AC.

2. IDENTIFICATION OF EROSION AND SEDIMENT CONTROL CONCERNS
 A.) CUTS AND FILLS ASSOCIATED WITH CONSTRUCTION.
 B.) PROTECTION OF OFFSITE DRAINAGE SYSTEMS
 C.) PROTECTION OF ON-SITE WETLANDS

3. IDENTIFICATION OF OTHER POSSIBLE PERMITS
 THE PERMITS REQUIRED FOR THE PROJECT ARE LOCAL INLAND WETLANDS, PLANNING AND ZONING PERMITS.

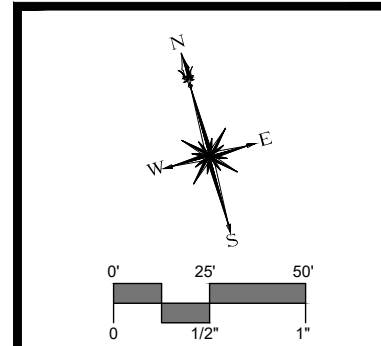
TEMPORARY SEDIMENT TRAP SIZING SUMMARY				
TRAP NO.	ACRES	VOLUME STORAGE REQUIRED	DEPTH STORAGE REQUIRED	VOLUME PROVIDED
#1	±5.0	670 CY	3.0 FT.	722 CY
#2	±5.0	670 CY	3.0 FT.	722 CY

*134 CY STORAGE VOLUME REQUIRED PER ACRE CONTRIBUTING AREA TO TST



EROSION CONTROL LEGEND

	TST	TEMPORARY SEDIMENT TRAP		IP	INLET PROTECTION
	CE	CONSTRUCTION ENTRANCE (50 L.F. MIN.)		DB	DIVERSION BERM
	HB	STACKED HAYBALES		SCD	STONE CHECK DAM
	GSF	SEDIMENT FILTER FENCE		STK	SOIL STOCKPILE AREA
	ECB	EROSION CONTROL BLANKET			

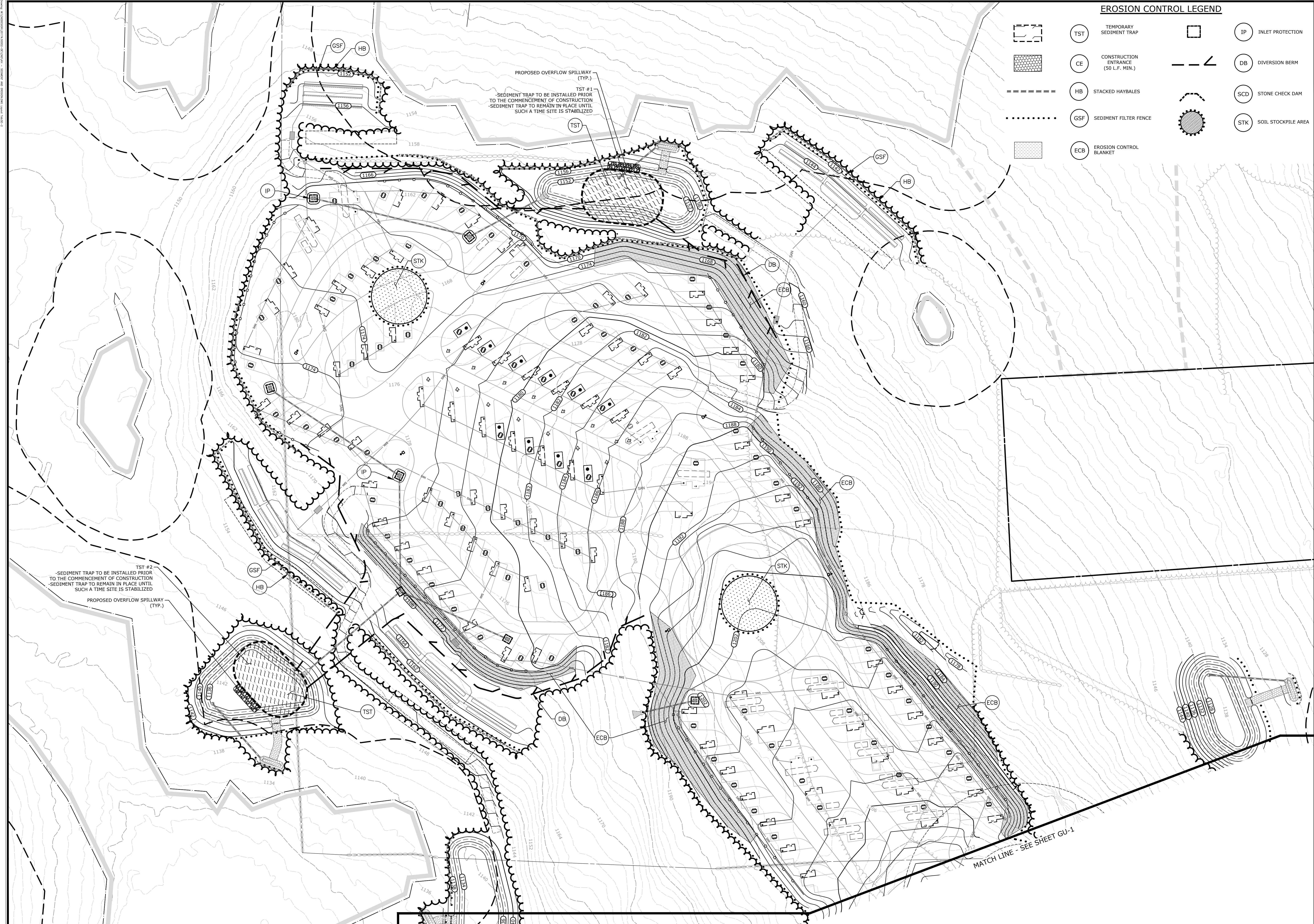


DESCRIPTION	DATE	BY
CITY STAFF COMMENTS	1/10/2023	ACD
DRIVEWAY LAYOUT	2/6/2023	ACD
LAYOUT CHANGES	4/13/2023	ACD
LAYOUT CHANGES	8/7/2023	ACD

SITE PLAN - SEDIMENT & EROSION CONTROL PLAN
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

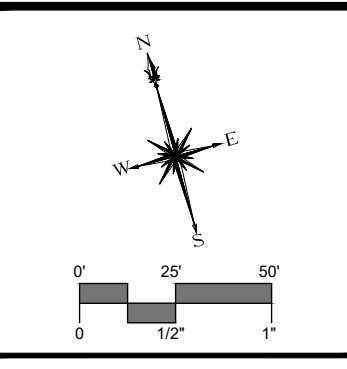
ACD	MLA	RJM
DESIGNED	DRAWN	CHECKED

SCALE: 1"=50'
 DATE: NOVEMBER 9, 2022
 PROJECT NO: 20174.00002
 SHEET NO: 15 OF 30
SE-1



EROSION CONTROL LEGEND

- TST TEMPORARY SEDIMENT TRAP
- CE CONSTRUCTION ENTRANCE (50 L.F. MIN.)
- HB STACKED HAYBALES
- GSF SEDIMENT FILTER FENCE
- ECB EROSION CONTROL BLANKET
- IP INLET PROTECTION
- DB DIVERSION BERM
- SCD STONE CHECK DAM
- STK SOIL STOCKPILE AREA

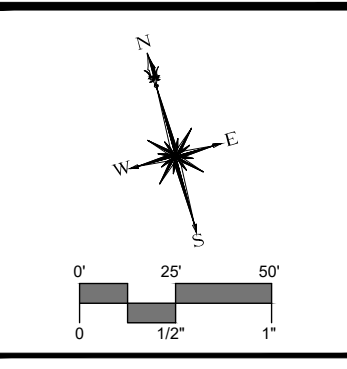


DESCRIPTION	DATE	BY
CITY STAFF COMMENTS	11/02/2023	ACD
CALLOUT CLEANUP	8/7/2023	ACD

SITE PLAN - SEDIMENT & EROSION CONTROL PLAN
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	MLA	RJM
DESIGNED	DRAWN	CHECKED
1"=50'		
NOVEMBER 9, 2022		
DATE		
20174.00002		
PROJECT NO.		
16 OF 30		
SHEET NO.		

SE-2



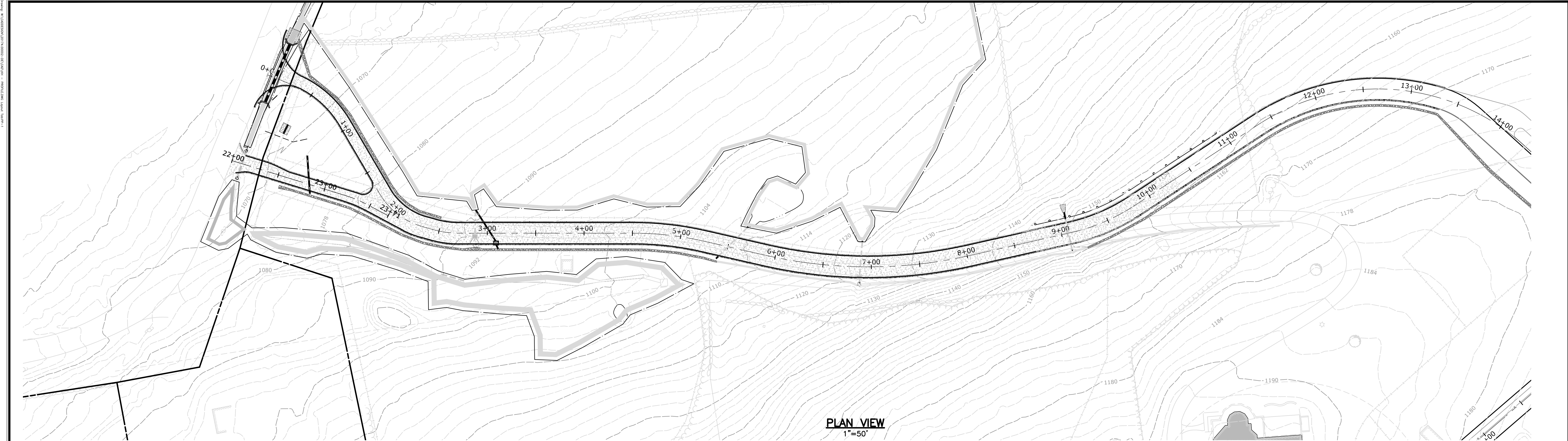
DESCRIPTION	DATE	BY
LAYOUT CHANGES	8/17/2023	ACD

DESCRIPTION	DATE	BY
LAYOUT CHANGES	8/17/2023	ACD

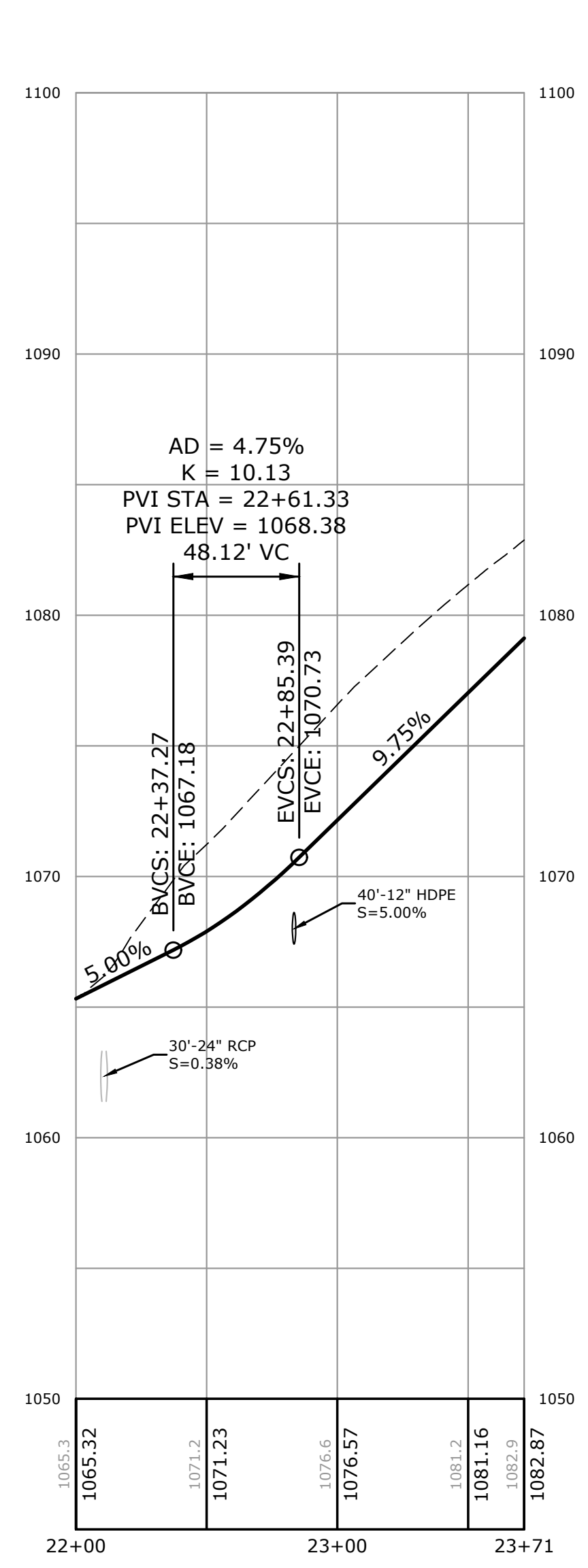
SITE PLAN - SEDIMENT & EROSION CONTROL PLAN
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	MLA	RJM
DESIGNED	DRAWN	CHECKED
SCALE: 1"=50'		
DATE: APRIL 13, 2023		
PROJECT NO.: 20174.00002		
SHEET NO.: 17 OF 30		
SE-3		

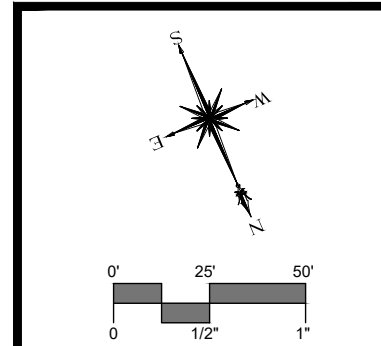
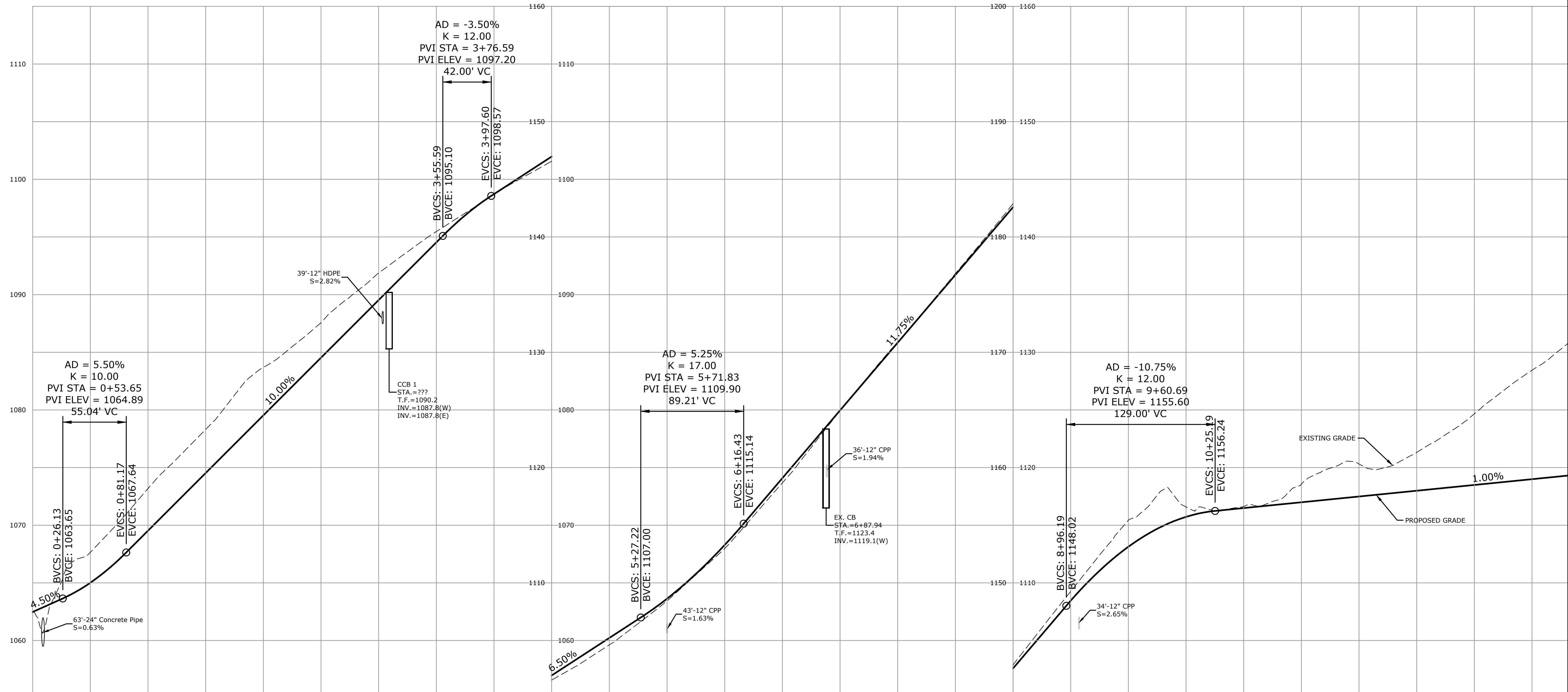
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PLAN VIEW
1"=50'



PROFILE VIEW
1"=50' H
1"=5' V

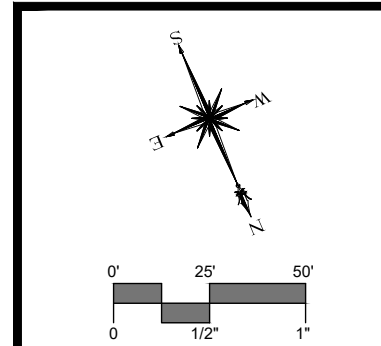
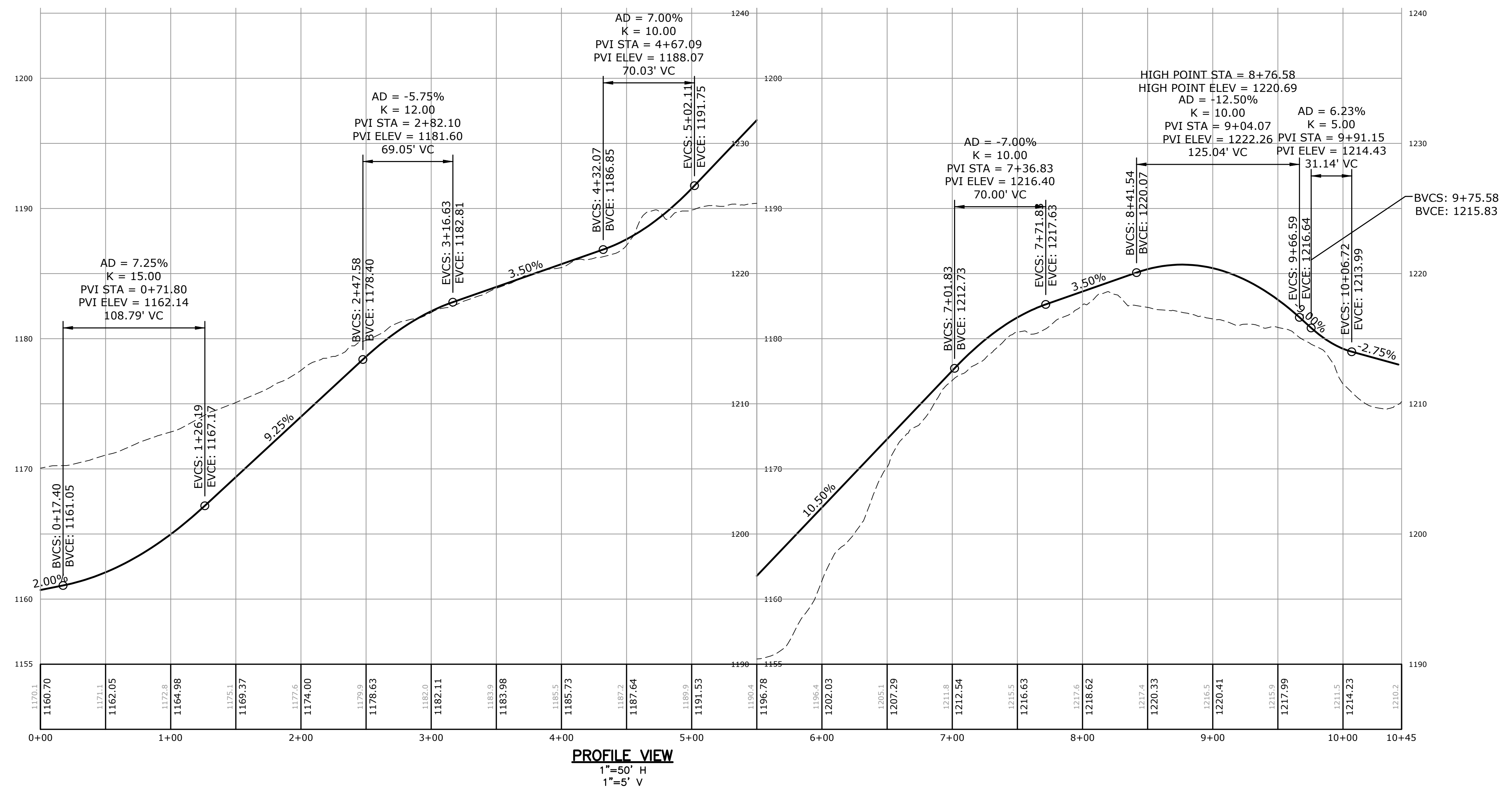
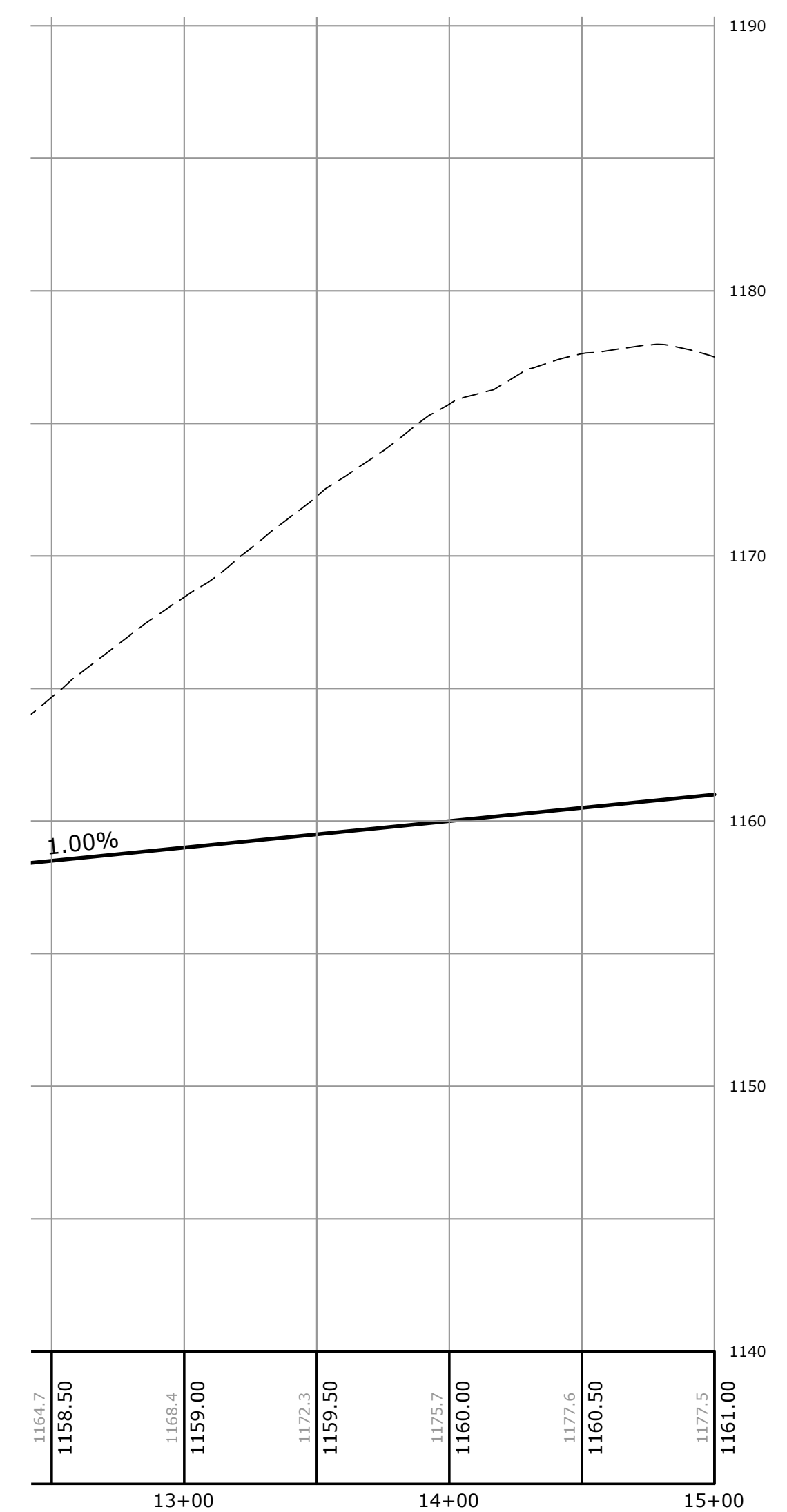
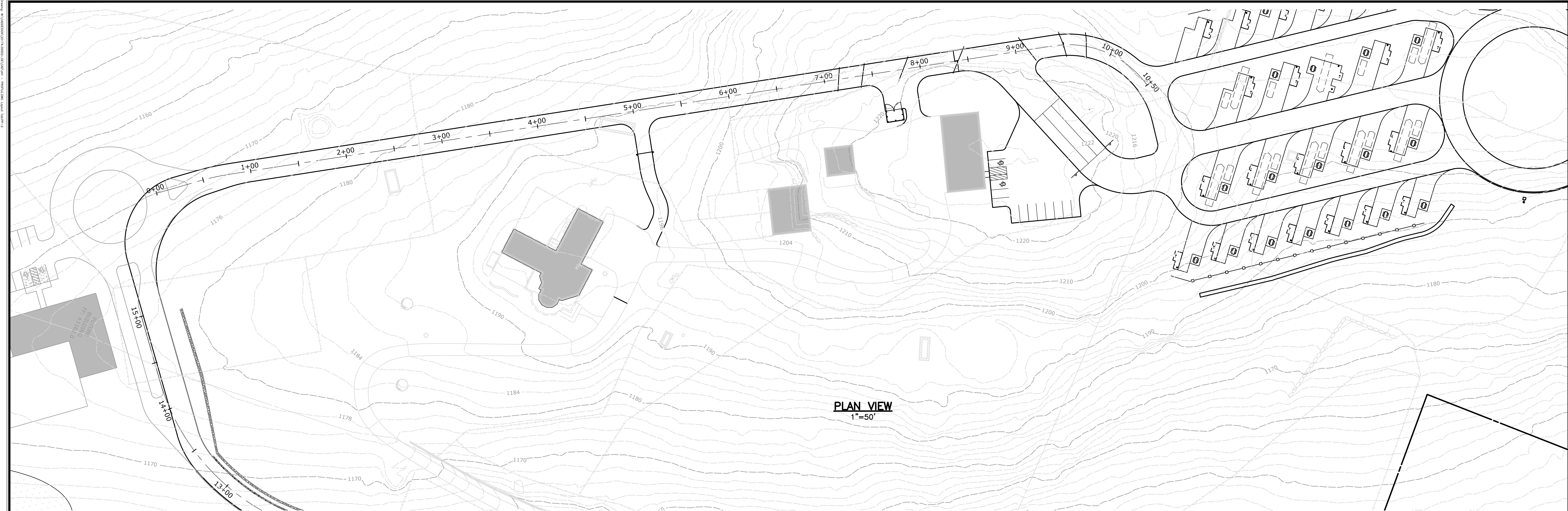


DESCRIPTION	DATE	BY
PROFILE REVISIONS	2022/03/03	KJG
LAYOUT CHANGES	4/13/2023	ACD

SITE PLAN - PLAN & PROFILE
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

AS NOTED
DATE: JANUARY 13, 2023
PROJECT NO.: 20174.00002
SHEET NO.: 18 OF 30



DESCRIPTION	DATE	BY
PROFILE REVISIONS	2022/03/23	KJG
LAYOUT CHANGES	4/13/2023	ACD
LAYOUT CHANGES	8/7/2023	ACD

SITE PLAN - PLAN & PROFILE
LITCHFIELDS HILLS CT
KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED
AS NOTED		
DATE: JANUARY 13, 2023		
PROJECT NO: 20174.00002		
SHEET NO: 19 OF 30		

PP-2

SOIL TESTING DATA - DECEMBER 2021

OBSERVED BY JUSTIN ROMPRE, TORRINGTON & RYAN MCEVOY, SLR CONSULTING. TEST PITS #1-26 ON 12/16/21. TEST PITS #26-47 ON 12/17/21.

Test Pit: 1
00"-11" TOPSOIL
11"-21" ORANGE BROWN FINE SANDY LOAM WITH SILTS
21"-91" DARK-BROWN FINE SAND WITH SILT AND COBBLES

MOTTLLING - 24"
RESTRICTIVE - 24"
WEEPING - 61"
GROUNDWATER - 89"
LEDGE - N/A

Test Pit: 2
00"-09" TOPSOIL
09"-24" ORANGE BROWN FINE SANDY LOAM
24"-40" MEDIUM-BROWN FINE SAND AND SILT, LITTLE GRAVEL, FIRM
40"-94" FINE SAND AND SILT, FIRM

MOTTLLING - 24" (FAINT)
RESTRICTIVE - 24"
WEEPING - 71"
GROUNDWATER - 90"
LEDGE - N/A

PERC: 2
DEPTH: 18"
RATE: 10.1-20.0

Test Pit: 3
00"-09" TOPSOIL
09"-23" ORANGE BROWN FINE SANDY LOAM
23"-35" MEDIUM-BROWN FINE SAND AND SILT, LITTLE GRAVEL, FIRM
35"-83" FINE SAND AND SILT, FIRM

MOTTLLING - 23"
RESTRICTIVE - 23"
WEEPING - 55"
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 4
00"-10" TOPSOIL
10"-22" ORANGE BROWN FINE SANDY LOAM
22"-38" MEDIUM-BROWN FINE SAND AND SILT, LITTLE GRAVEL, FIRM
38"-91" FINE SAND AND SILT, FIRM

MOTTLLING - N/A
RESTRICTIVE - 22"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 4
DEPTH: 18"
RATE: 10.1-20.0

Test Pit: 5
00"-10" TOPSOIL
10"-19" ORANGE BROWN FINE SANDY LOAM
19"-38" MEDIUM-BROWN FINE SAND AND SILT, LITTLE GRAVEL, FIRM
38"-91" FINE SAND AND SILT, FIRM

MOTTLLING - 19"
RESTRICTIVE - 19"
WEEPING - N/A
GROUNDWATER - 72"
LEDGE - N/A

PERC: 5
DEPTH: 18"
RATE: 10.1-20.0

Test Pit: 6
00"-10" TOPSOIL
10"-27" ORANGE BROWN FINE SANDY LOAM
27"-40" MEDIUM-BROWN FINE SILTY SAND
40"-90" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - N/A
RESTRICTIVE - 27"
WEEPING - N/A
GROUNDWATER - 71"
LEDGE - N/A

Test Pit: 7
00"-09" TOPSOIL
09"-18" ORANGE BROWN FINE SANDY LOAM
18"-37" MEDIUM-BROWN FINE SILTY SAND
37"-86" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - N/A
RESTRICTIVE - 18"
WEEPING - 68"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 7
DEPTH: 17"
RATE: 1.1-10.0

Test Pit: 8
00"-07" TOPSOIL
07"-19" ORANGE BROWN FINE SANDY LOAM
19"-30" LIGHT-BROWN FINE SAND, SOME SILT
30"-88" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - 19"
RESTRICTIVE - 19"
WEEPING - 73"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 8
DEPTH: 21"
RATE: 10.1-20.0

Test Pit: 9
00"-08" TOPSOIL
08"-20" ORANGE BROWN FINE SANDY LOAM
20"-41" LIGHT-BROWN FINE SAND, SOME SILT
41"-88" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - 20" (FAINT)
RESTRICTIVE - 20"
WEEPING - 81"
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 10
00"-08" TOPSOIL
08"-15" ORANGE BROWN FINE SANDY LOAM
15"-34" LIGHT-BROWN FINE SAND, SOME SILT
34"-87" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - N/A
RESTRICTIVE - 15"
WEEPING - 79"
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 11
00"-06" TOPSOIL
06"-22" ORANGE BROWN FINE SANDY LOAM
22"-35" LIGHT-BROWN FINE SAND, SOME SILT
35"-93" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - 22"
RESTRICTIVE - 22"
WEEPING - 87"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 11
DEPTH: 18"
RATE: 10.1-20.0

Test Pit: 12
00"-09" TOPSOIL
09"-22" ORANGE BROWN FINE SANDY LOAM
22"-33" LIGHT-BROWN FINE SAND, SOME SILT
33"-97" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - 22"
RESTRICTIVE - 22"
WEEPING - N/A
GROUNDWATER - 82"
LEDGE - N/A

PERC: 12
DEPTH: 24"
RATE: 10.1-20.0

Test Pit: 13
00"-12" TOPSOIL
12"-20" ORANGE BROWN FINE SANDY LOAM
20"-39" LIGHT-BROWN FINE SAND, SOME SILT
39"-93" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - 20"
RESTRICTIVE - 20"
WEEPING - 68"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 13
DEPTH: 21"
RATE: 30.1-45.0

Test Pit: 14
00"-10" TOPSOIL
10"-27" ORANGE BROWN FINE SANDY LOAM
24"-36" LIGHT-BROWN FINE SAND, SOME SILT
36"-80" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - N/A
RESTRICTIVE - 24"
WEEPING - 61"
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 15
00"-09" TOPSOIL
09"-19" ORANGE BROWN FINE SANDY LOAM
19"-34" LIGHT-BROWN FINE SAND, LITTLE SILT, TRACE GRAVEL
34"-90" MEDIUM-BROWN FINE SAND, SOME SILT, LITTLE GRAVEL, COMPACT

MOTTLLING - 34" (FAINT)
RESTRICTIVE - 24"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A
ROOTS - 34"

Test Pit: 16
00"-11" TOPSOIL
11"-31" ORANGE BROWN FINE SANDY LOAM
31"-96" MEDIUM-BROWN FINE SAND AND SILT (MOIST)

MOTTLLING - 31"
RESTRICTIVE - 31"
WEEPING - 73"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 16
DEPTH: 19"
RATE: 10.1-20.0

Test Pit: 17
00"-08" TOPSOIL
08"-19" ORANGE BROWN FINE SANDY LOAM
19"-96" MEDIUM-BROWN FINE SAND AND SILT

MOTTLLING - 19"
RESTRICTIVE - 19"
WEEPING - N/A
GROUNDWATER - 81"
LEDGE - N/A
ROOTS - 19"

PERC: 27
DEPTH: 18.5"
RATE: 1.1-10.0

Test Pit: 18
00"-22" LEDGE

Test Pit: 19
00"-34" LEDGE

Test Pit: 20
00"-23" LEDGE

Test Pit: 21
00"-24" LEDGE

Test Pit: 22
00"-09" TOPSOIL
09"-24" LIGHT BROWN FINE-MEDIUM SAND
24"-96" BROWN FINE SAND AND SILT, MODERATE COMPACTION

MOTTLLING - 24"
RESTRICTIVE - 24"
WEEPING - N/A
GROUNDWATER - 44"
LEDGE - N/A

Test Pit: 23
00"-08" TOPSOIL
08"-20" ORANGE BROWN FINE SANDY LOAM
20"-84" BROWN FINE SAND WITH SILT

MOTTLLING - N/A
RESTRICTIVE - 29"
WEEPING - N/A
GROUNDWATER - 29"
LEDGE - N/A

Test Pit: 24
00"-10" TOPSOIL
10"-24" ORANGE BROWN FINE SANDY LOAM
24"-36" LIGHT-BROWN FINE SAND, SOME SILT
36"-80" MEDIUM-BROWN FINE SAND WITH SILT, MODERATE COMPACTION

MOTTLLING - 36"
RESTRICTIVE - 36"
WEEPING - N/A
GROUNDWATER - 55"
LEDGE - N/A

Test Pit: 25
00"-10" TOPSOIL
10"-21" ORANGE BROWN FINE SANDY LOAM
21"-90" BROWN FINE SAND AND SILT

MOTTLLING - N/A
RESTRICTIVE - 37"
WEEPING - 37"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 25
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 26
00"-12" TOPSOIL
12"-24" MEDIUM BROWN FINE SANDY LOAM WITH SILT
24"-89" MEDIUM-BROWN VERY FINE SAND, MOIST

MOTTLLING - 24"
RESTRICTIVE - 24"
WEEPING - 26"
GROUNDWATER - N/A
LEDGE - N/A

PERC: 26
DEPTH: 16.5"
RATE: 1.1-10.0

Test Pit: 27
00"-10" TOPSOIL
10"-20" ORANGE BROWN FINE SANDY LOAM
20"-28" LIGHT-BROWN FINE SAND WITH SILT
28"-83" MEDIUM-BROWN SAND AND SILT, COMPACT

MOTTLLING - N/A
RESTRICTIVE - 28"
WEEPING - N/A
GROUNDWATER - 64"
LEDGE - N/A

PERC: 27
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 28
00"-10" TOPSOIL
10"-33" ORANGE BROWN FINE SANDY LOAM
33"-81" MEDIUM-BROWN FINE SAND WITH SILT

MOTTLLING - 33"
RESTRICTIVE - 33"
WEEPING - N/A
GROUNDWATER - 59"
LEDGE - N/A

Test Pit: 29
00"-30" LEDGE ROCK

Test Pit: 30
00"-06" TOPSOIL
06"-24" ORANGE BROWN FINE SANDY LOAM
24"-50" FRACTURED LEDGE

MOTTLLING - N/A
RESTRICTIVE - 24"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - 50"

Test Pit: 31
- LEDGE ROCK WITH FRACTURES
VARYING DEPTH: 30-57"

Test Pit: 32
00"-10" TOPSOIL
10"-25" ORANGE BROWN FINE SANDY LOAM
25"-39" LIGHT-BROWN FINE TO MEDIUM SAND WITH SILT
39"-80" MEDIUM BROWN SAND AND SILT

MOTTLLING - 39"
RESTRICTIVE - 39"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 32
DEPTH: 19.5"
RATE: 1.1-10.0

Test Pit: 33
00"-08" TOPSOIL
08"-19" ORANGE BROWN FINE SANDY LOAM
19"-27" LIGHT-BROWN FINE TO MEDIUM SAND WITH SILT
27"-74" MEDIUM BROWN SAND AND SILT WITH GRAVEL, COMPACT

MOTTLLING - N/A
RESTRICTIVE - 27"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 33
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 34
00"-08" TOPSOIL
08"-30" ORANGE BROWN FINE SANDY LOAM
30"-56" FRACTURED LEDGE

MOTTLLING - N/A
RESTRICTIVE - 30"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 34
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 35
00"-10" TOPSOIL
10"-27" ORANGE BROWN FINE SANDY LOAM, COMPACT
27"-75" MEDIUM-BROWN VERY FINE SAND WITH GRAVEL, COMPACT

MOTTLLING - N/A
RESTRICTIVE - 27"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 36
00"-12" TOPSOIL
12"-29" ORANGE BROWN FINE SANDY LOAM
29"-40" LIGHT BROWN SAND WITH SILT
40"-78" MEDIUM BROWN FINE SAND WITH SILT, COMPACT WITH COBBLES

MOTTLLING - N/A
RESTRICTIVE - 40"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 36
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 37
00"-10" TOPSOIL
10"-33" ORANGE BROWN FINE SANDY LOAM
33"-81" MEDIUM-BROWN FINE SAND, SOME SILT AND COBBLES

MOTTLLING - N/A
RESTRICTIVE - N/A
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 38
00"-11" TOPSOIL
11"-34" ORANGE BROWN FINE SAND, SOME SILT
34"-71" DARK-BROWN FINE SAND, SOME SILT AND COBBLES

MOTTLLING - 34"
RESTRICTIVE - 34"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 38
DEPTH: 21"
RATE: 1.1-10.0

Test Pit: 39
00"-11" TOPSOIL
11"-37" ORANGE BROWN FINE SANDY LOAM
37"-86" LIGHT-BROWN FINE SAND, SOME COBBLES

MOTTLLING - 37"
RESTRICTIVE - 37"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A
ROOTS - 37"

Test Pit: 40
00"-09" TOPSOIL
09"-30" ORANGE BROWN FINE SANDY LOAM
30"-72" FRACTURED LEDGE , ABLE TO DIG OUT

MOTTLLING - 30"
RESTRICTIVE - 30"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 41
00"-06" TOPSOIL
06"-24" ORANGE BROWN FINE SANDY LOAM
24"-56" BROWN FINE SAND, SOME SILTS WITH DECOMPOSED ROCKS

MOTTLLING - N/A
RESTRICTIVE - 24"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - 56" (FRACTURED)
ROOTS - 24"

Test Pit: 42
00"-36" LEDGE ROCK AT BOTTOM

Test Pit: 43
00"-04" TOPSOIL
04"-25" ORANGE BROWN FINE SANDY LOAM
25"-40" LIGHT-BROWN FINE SAND, SOME SILT MIXED WITH DIGGABLE LEDGE

MOTTLLING - N/A
RESTRICTIVE - 25"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 44
00"-06" TOPSOIL
06"-22" ORANGE BROWN FINE SANDY LOAM
22"-38" LIGHT-BROWN FINE-MEDIUM SAND, WITH SOME SILT
38"-52" MEDIUM BROWN SAND AND SILT AND DIGGABLE LEDGE

MOTTLLING - N/A
RESTRICTIVE - 38"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

Test Pit: 45
00"-09" TOPSOIL
09"-17" ORANGE BROWN FINE SANDY LOAM
17"-28" LIGHT-BROWN VERY FINE SAND, TRACE SILT
28"-59" DARK BROWN FINE TO MEDIUM SAND, SOME GRAVEL, SOME COBBLES (WELL GRADED), COMPACT

MOTTLLING - N/A
RESTRICTIVE - 28"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A

PERC: 45
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 46
00"-07" TOPSOIL
07"-20" ORANGE BROWN FINE SANDY LOAM
20"-60" MEDIUM-BROWN FINE SAND, WITH SOME SILT WITH DIGGABLE LEDGE @ 40"

MOTTLLING - N/A
RESTRICTIVE - 40"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - 40" FRACTURED

PERC: 46
DEPTH: 19"
RATE: 10.1-20.0

Test Pit: 47
00"-09" TOPSOIL
09"-20" ORANGE BROWN FINE SANDY LOAM
20"-31" MEDIUM-BROWN FINE SANDY LOAM
31"-58" DIGGABLE LEDGE

MOTTLLING - N/A
RESTRICTIVE - 32"
WEEPING - N/A
GROUNDWATER - N/A
LEDGE - N/A
ROOTS - 32"



DESCRIPTION	DATE	BY

SEPTIC SYSTEM - SOIL TESTING RESULTS

 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

DESIGNED	MLA	RJM
DRAWN	CHECKED	

NOT TO SCALE

NOVEMBER 9, 2022

PROJECT NO. 20174.00002

SHEET NO. 20 OF 30

SD-1

SOIL TESTING DATA - SEPTEMBER 2022

OBSERVED BY JUSTIN ROMPRE, TORRINGTON & RYAN MCEVOY, SLR CONSULTING. TEST PITS #101-120 ON 9/1/20. TEST PITS #121-138 ON 9/2/22.

Test Pit: 101
00"-05" TOPSOIL
05"-23" ORANGE BROWN FINE SANDY LOAM
23"-41" LIGHT-BROWN FINE SAND, LITTLE SILT

MOTTILING - N/A
RESTRICTIVE - 41"
ROOTS - 30"
LEDGE - N/A

Test Pit: 102
00"-05" TOPSOIL
05"-21" ORANGE BROWN FINE SANDY LOAM
21"-48" LIGHT-BROWN FINE SAND, LITTLE SILT

MOTTILING - N/A
RESTRICTIVE - 38"
ROOTS - 27"
LEDGE - DIGGABLE @ 38"

Test Pit: 103
00"-06" TOPSOIL
06"-17" ORANGE BROWN FINE SANDY LOAM
17"-26" LIGHT-BROWN FINE SAND, LITTLE SILT, BOULDERS

MOTTILING - N/A
RESTRICTIVE - 26"
LEDGE - 26"

Test Pit: 104
00"-03" TOPSOIL
03"-18" ORANGE BROWN FINE SANDY LOAM
18"-57" LIGHT-BROWN FINE SAND, LITTLE SILT

MOTTILING - N/A
RESTRICTIVE - 18"
ROOTS - 25"
LEDGE - DIGGABLE @ 18"

Test Pit: 105
00"-05" TOPSOIL
05"-23" ORANGE BROWN FINE SANDY LOAM
23"-60" LIGHT-BROWN FINE SAND, LITTLE SILT, COMPACT @ 31"

MOTTILING - N/A
RESTRICTIVE - 31"
ROOTS - 24"
LEDGE - N/A

Test Pit: 106
00"-06" TOPSOIL
06"-23" ORANGE BROWN FINE SANDY LOAM
23"-84" LIGHT-BROWN FINE SAND, LITTLE SILT, COMPACT @ 35"

MOTTILING - N/A
RESTRICTIVE - 35"
ROOTS - 28"
LEDGE - N/A

PERC: 106
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 107
00"-08" TOPSOIL
08"-20" ORANGE BROWN FINE SANDY LOAM
20"-42" LIGHT-BROWN FINE SAND, LITTLE SILT

MOTTILING - N/A
RESTRICTIVE - 28"
ROOTS - 28"
LEDGE - DIGGABLE @ 28"

Test Pit: 108
00"-07" TOPSOIL
07"-24" ORANGE BROWN FINE SANDY LOAM

MOTTILING - N/A
RESTRICTIVE - 24"
ROOTS - N/A
LEDGE - 24"

Test Pit: 109
00"-08" TOPSOIL
08"-24" ORANGE BROWN FINE SANDY LOAM
24"-64" LIGHT-BROWN FINE-MEDIUM SAND, LITTLE SILT, COMPACT @ 34"

MOTTILING - N/A
RESTRICTIVE - 34"
ROOTS - 31"
LEDGE - N/A

PERC: 109
DEPTH: 20"
RATE: 1.1-10.0

Test Pit: 110
00"-06" TOPSOIL
06"-23" ORANGE BROWN FINE SANDY LOAM
23"-51" LIGHT-BROWN FINE-MEDIUM SAND, LITTLE SILT
51"-74" DECOMPOSED DIGGABLE LEDGE, COMPACT @ 28"

MOTTILING - N/A
RESTRICTIVE - 28"
ROOTS - N/A
LEDGE - N/A

Test Pit: 111
00"-06" TOPSOIL
06"-23" ORANGE BROWN FINE SANDY LOAM
23"-48" LIGHT-BROWN FINE SAND, LITTLE SILT, COMPACT @ 29"
48"-58" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 29"
ROOTS - 27"
LEDGE - DIGGABLE @ 48"

PERC: 111
DEPTH: 17"
RATE: 1.1-10.0

Test Pit: 112
00"-07" TOPSOIL
07"-32" ORANGE BROWN FINE SANDY LOAM
32"-45" LIGHT-BROWN FINE SAND WITH SILT
45"-79" MEDIUM BROWN FINE SAND WITH SILT, COBBLES, COMPACT @ 45"

MOTTILING - N/A
RESTRICTIVE - 45"
ROOTS - N/A
LEDGE - N/A

PERC: 112
DEPTH: 20"
RATE: 1.1-10.0

Test Pit: 113
00"-07" TOPSOIL
07"-24" ORANGE BROWN FINE SANDY LOAM
24"-41" LIGHT-BROWN FINE SAND, SOME SILT
41"-47" MEDIUM BROWN FINE SAND WITH SILT
47"-62" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 47"
ROOTS - N/A
LEDGE - N/A

PERC: 113
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 114
00"-08" TOPSOIL
08"-26" ORANGE BROWN FINE SANDY LOAM
26"-35" LIGHT-BROWN FINE SAND, SOME SILT
35"-82" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 35"
ROOTS - 35"
LEDGE - N/A

Test Pit: 115
00"-08" TOPSOIL
08"-25" ORANGE BROWN FINE SANDY LOAM
25"-52" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 35"
ROOTS - 25"
LEDGE - N/A

Test Pit: 116
00"-08" TOPSOIL
08"-29" ORANGE BROWN FINE SANDY LOAM
29"-62" LIGHT BROWN FINE SAND, SOME SILT, COMPACT @ 40"

MOTTILING - N/A
RESTRICTIVE - 40"
ROOTS - 40"
LEDGE - N/A

PERC: 116
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 117
00"-05" TOPSOIL
05"-27" ORANGE BROWN FINE SANDY LOAM
27"-30" LIGHT BROWN FINE SAND, SOME SILT

MOTTILING - N/A
RESTRICTIVE - 30"
ROOTS - 30"
LEDGE - N/A

Test Pit: 118
00"-05" TOPSOIL
05"-31" ORANGE BROWN FINE SANDY LOAM
31"-82" LIGHT-BROWN FINE SAND, SOME SILT, SOME GRAVEL, FIRM @ 35"

MOTTILING - N/A
RESTRICTIVE - 35"
ROOTS - 35"
LEDGE - N/A

PERC: 118
DEPTH: 17.5"
RATE: 1.1-10.0

Test Pit: 119
00"-09" TOPSOIL
09"-28" ORANGE BROWN FINE SANDY LOAM
28"-74" LIGHT-BROWN FINE SAND, SOME SILT, COMPACT @ 37"

MOTTILING - N/A
RESTRICTIVE - 37"
ROOTS - 46"
LEDGE - N/A

PERC: 119
DEPTH: 21"
RATE: 1.1-10.0

Test Pit: 120
00"-04" TOPSOIL
04"-30" ORANGE BROWN FINE SANDY LOAM
30"-41" LIGHT-BROWN FINE SAND, SOME SILT
41"-68" MEDIUM BROWN FINE-MEDIUM SAND, SOME SILT, COMPACT @ 41"

MOTTILING - N/A
RESTRICTIVE - 41"
ROOTS - 36"
LEDGE - N/A

Test Pit: 121
00"-05" TOPSOIL
05"-32" ORANGE BROWN FINE SANDY LOAM
32"-44" LIGHT-BROWN FINE-MEDIUM SAND, SOME SILT, SOME GRAVEL
44"-66" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 44"
ROOTS - 44"
LEDGE - DIGGABLE @ 44"

PERC: 121
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 122
00"-08" TOPSOIL
08"-24" ORANGE BROWN FINE SANDY LOAM
24"-38" LIGHT-BROWN FINE SAND, SOME SILT
38"-75" LIGHT-BROWN FINE-MEDIUM SAND, SOME SILT, SOME GRAVEL, COMPACT @ 38"

MOTTILING - N/A
RESTRICTIVE - 38"
ROOTS - 38"
LEDGE - N/A

Test Pit: 123
00"-05" TOPSOIL
05"-23" ORANGE BROWN FINE SANDY LOAM
23"-37" LIGHT-BROWN FINE SAND, SOME SILT
37"-54" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 37"
ROOTS - N/A
LEDGE - N/A

Test Pit: 124
00"-07" TOPSOIL
07"-29" ORANGE BROWN FINE SANDY LOAM
29"-51" DIGGABLE LEDGE

MOTTILING - N/A
RESTRICTIVE - 29"
ROOTS - 29"
LEDGE - N/A

Test Pit: 125
00"-07" TOPSOIL
07"-20" ORANGE BROWN FINE SANDY LOAM
20"-36" LIGHT BROWN FINE SAND, SOME SILT

MOTTILING - N/A
RESTRICTIVE - 36"
ROOTS - 25"
LEDGE - N/A

Test Pit: 126
00"-05" TOPSOIL
05"-29" ORANGE BROWN FINE SANDY LOAM
29"-65" LIGHT-BROWN FINE SAND, SOME SILT, SOME GRAVEL, COMPACT @ 29"

MOTTILING - 29"
RESTRICTIVE - 35"
ROOTS - 29"
LEDGE - N/A

Test Pit: 127
00"-07" TOPSOIL
07"-30" ORANGE BROWN FINE SANDY LOAM
30"-54" MEDIUM-BROWN FINE SAND, SOME SILT

MOTTILING - 37"
RESTRICTIVE - 37"
ROOTS - 37"
LEDGE - N/A

PERC: 127
DEPTH: 19"
RATE: 1.1-10.0

Test Pit: 128
00"-08" TOPSOIL
08"-37" ORANGE BROWN FINE SANDY LOAM, COMPACT @ 37"
37"-76" MEDIUM-BROWN FINE-MEDIUM SAND, SOME SILT, SOME GRAVEL

MOTTILING - N/A
RESTRICTIVE - 37"
ROOTS - 37"
LEDGE - N/A

PERC: 128
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 129
00"-06" TOPSOIL
06"-27" ORANGE BROWN FINE SANDY LOAM
27"-58" FRACTURED LEDGE

MOTTILING - N/A
RESTRICTIVE - 27"
ROOTS - 27"
LEDGE - N/A

Test Pit: 130
00"-10" TOPSOIL
10"-24" ORANGE BROWN FINE SANDY LOAM
24"-37" FRACTURED LEDGE

MOTTILING - N/A
RESTRICTIVE - 24"
ROOTS - 24"
LEDGE - N/A

Test Pit: 131
00"-06" TOPSOIL
06"-25" ORANGE BROWN FINE SANDY LOAM
25"-74" LIGHT-BROWN FINE-MEDIUM SAND, SOME SILT, SOME GRAVEL, COMPACT @ 25"

MOTTILING - N/A
RESTRICTIVE - 25"
ROOTS - 25"
LEDGE - N/A

Test Pit: 132
00"-07" TOPSOIL
07"-24" ORANGE BROWN FINE SANDY LOAM
24"-87" MEDIUM-BROWN FINE SAND WITH SILT, SOME GRAVEL, COMPACT @ 24"

MOTTILING - N/A
RESTRICTIVE - 24"
ROOTS - N/A
LEDGE - N/A

PERC: 132
DEPTH: 17.5"
RATE: 1.1-10.0

Test Pit: 133
00"-07" TOPSOIL
07"-30" ORANGE BROWN FINE SANDY LOAM
30"-83" MEDIUM-BROWN FINE SAND WITH SILT, SOME GRAVEL, COMPACT @ 30"

MOTTILING - N/A
RESTRICTIVE - 30"
ROOTS - N/A
LEDGE - N/A

Test Pit: 134
00"-07" TOPSOIL
07"-22" ORANGE BROWN FINE SANDY LOAM, BOULDERS
22"-31" LIGHT-BROWN FINE SAND, SOME SILT
31"-77" MEDIUM-BROWN FINE-MEDIUM SAND, SOME SILT, SOME GRAVEL, COMPACT @ 31"

MOTTILING - FAINT @ 31"
RESTRICTIVE - 31"
ROOTS - 25"
LEDGE - OUTCROP 35' TO THE NORTH

PERC: 134
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 135
00"-05" TOPSOIL
05"-19" ORANGE BROWN FINE SANDY LOAM
19"-43" LIGHT-BROWN FINE SAND, SOME SILT, SOME GRAVEL

MOTTILING - N/A
RESTRICTIVE - 43"
ROOTS - N/A
LEDGE - N/A

Test Pit: 136
00"-05" TOPSOIL
05"-39" ORANGE BROWN FINE SANDY LOAM, BOULDERS
39"-82" LIGHT-BROWN FINE SAND, SOME SILT, SOME GRAVEL, FIRM @ 36"

MOTTILING - N/A
RESTRICTIVE - 36"
ROOTS - 34"
LEDGE - N/A

PERC: 136
DEPTH: 18"
RATE: 1.1-10.0

Test Pit: 137
00"-05" TOPSOIL
05"-27" ORANGE BROWN FINE SANDY LOAM
27"-43" LIGHT-BROWN FINE-MEDIUM SAND, SOME SILT, WITH COBBLES, COMPACT @ 27"

MOTTILING - N/A
RESTRICTIVE - 27"
ROOTS - N/A
LEDGE - N/A

Test Pit: 138
00"-06" TOPSOIL
06"-16" ORANGE BROWN FINE SANDY LOAM
16"-28" LIGHT-BROWN FINE-MEDIUM SAND, SOME SILT

MOTTILING - N/A
RESTRICTIVE - 28"
ROOTS - 28"
LEDGE - N/A



DESCRIPTION	DATE	BY

SEPTIC SYSTEM - SOIL TESTING RESULTS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUK HILL ROAD
TORRINGTON, CONNECTICUT

DESIGNED	MLA	RJM
DRAWN		CHECKED

SCALE: NOT TO SCALE

DATE: NOVEMBER 9, 2022

PROJECT NO.: 20174.00002

SHEET NO.: 21 OF 30

SHEET NAME: SD-2

SEPTIC SYSTEM DESIGN

Design Criteria	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	AREA 6
Testpits in or near System	16, 17, 22, 23, 24, 25, 26	125, 126, 127, 128	118, 119, 120, 121, 122, 123	112, 113, 114, 115, 116	45,46,47	27, 28
Percolation Tests in or near System	16, 17, 26	127, 128	118, 121	112,113	45,46	28
Testpit(s) Used for Design	16, 17, 22, 23, 24, 25, 26	125, 126, 127, 128	118, 119, 120, 121, 122, 123	112, 113, 114, 115, 116	45,46,47	27, 28
Percolation Rate (Min/inch)	1.1-10.0	1.1-10.0	PL	1.1-10.0	10.1-20.0	10.1-20.0
Required Effective Area (sq. ft.)	2456.25	1462.5	2437.5	2437.5	787.5	1183
Restrictive Layer	Mottling	Mottling/Compact	Compact/Diggable	Compact/Diggable	Compact	Mottling
Receiving Soil Depth (inch)	(36" (Top of System to RL)+ 26.5" (Avg. depth to RL)/2 = 31.25" Avg.	See Septic Design Sheets (Avg. depth to RL) = 42.5" Avg.	(42" (Top of System to RL)+ 37.5" (Avg. depth to RL)/2 = 39.75" Avg.	(42" (Top of System to RL)+ 32.5" (Avg. depth to RL)/2 = 37.2" Avg.	(Avg. depth to RL) = 33.3" Avg.	(36" (Top of System to RL)+ 30" (Avg. depth to RL)/2 = 33" Avg.
Slope (%)	10.1-15.0	8.1-10.0	10.1-15.0	>15.0	>15.0	10.1-15.0
Hydraulic Factor (HF)	20	18	18	16	18	20
Flow Factor (FF)	6.55	3.9	6.5	6.5	1.75	3.40
Percolation Factor (PF)	1	1	1	1	1.25	1.25
MLSS (ft.)	131	70.2	117	104	39.38	85.00
Primary System Type	18" C.G.*	18" C.G.*	18" C.G.*	18" C.G.*		12" C.G.
Effective Leaching (SF/LF)	7.0	7.0	7.0	7.0		5.9
Length Used (ft.)	2x176	3x72	2x176	2x176		2x104
Effective Leaching Area Provided (SF)	2464	1512	2464	2464		1227.2
Center to Center Spacing (ft.)	12	12	12	12		12
Reserve System Type	18" C.G.*	18" C.G.*	18" C.G.*	18" C.G.*	12" C.G.	Mantis 536-8
Effective Leaching (SF/LF)	7.0	7.0	7.0	7.0	5.9	55
Length Used (ft.)	2x208	2x112	2x176	3x120	2x72	2x55
Effective Leaching Area Provided (SF)	2912	1568	2464	2520	849.5	1210
Center to Center Spacing (ft.)	12	12	12	12	12	N/A
C.G. = Concrete Gallery						
*Top Distribution Pipe/ **1' of Stone at Each End of Row						



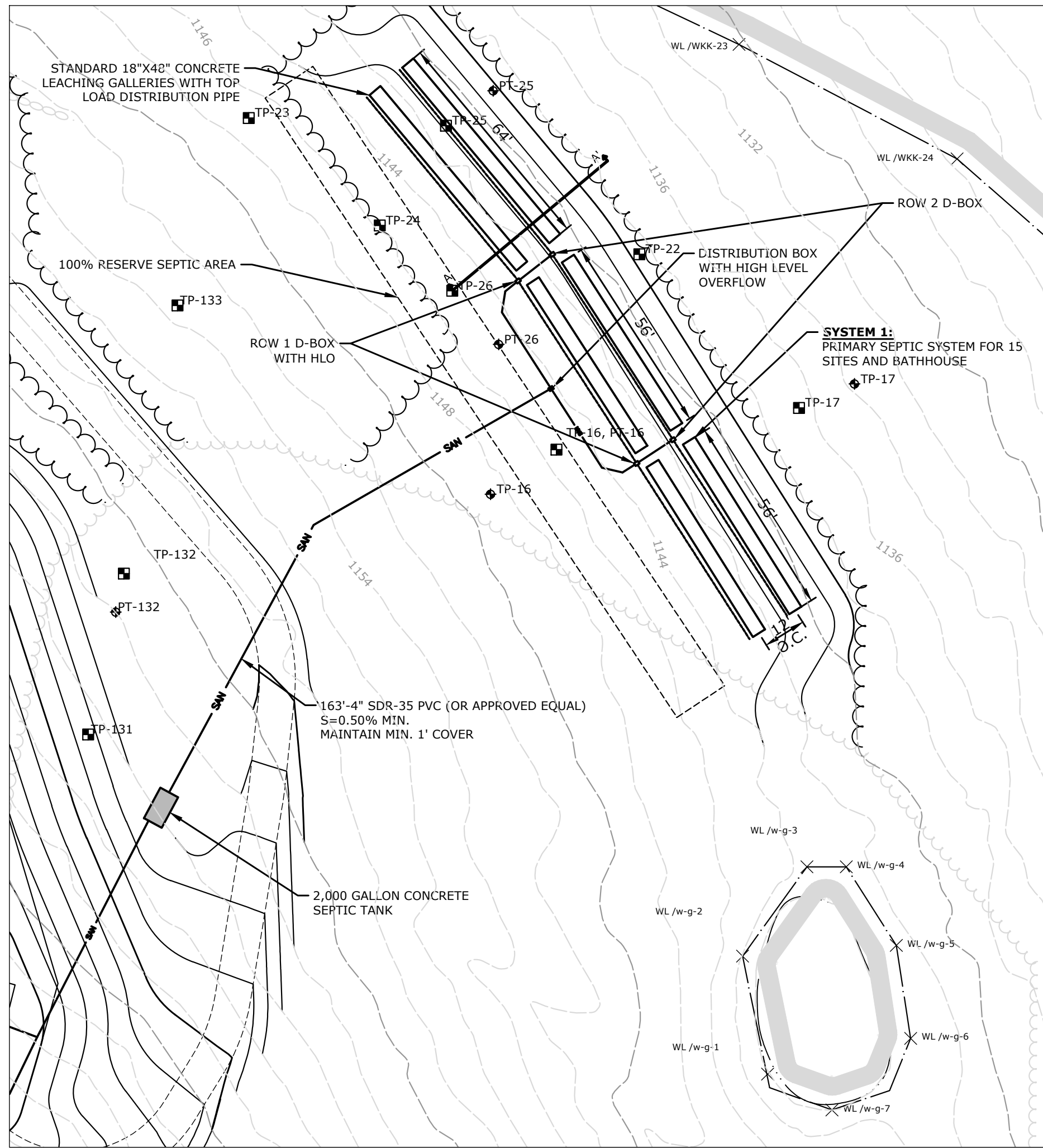
DESCRIPTION	DATE	BY
TAHD COMMENTS	12/29/2021	ACD
SYSTEM 5 & 6 CHANGES	4/6/2023	ACD
DESIGN CHANGES	7/20/2023	ACD
SEPTIC COMPUTATIONS	7/28/2023	ACD

SEPTIC SYSTEM - MLSS DATA TABLE

LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

ACD DESIGNED	MLA DRAWN	RJM CHECKED
NOT TO SCALE		
NOVEMBER 9, 2022		
DATE		
20174.00002		
PROJECT NO.		
22 OF 30		
SHEET NO.		
SD-3		
SHEET NAME		

SYSTEM 1



SYSTEM DESIGN

DESIGN BASIS: CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS DATED JANUARY 2023, AS AMENDED.

FLOW: 15 RV SITES, BATHHOUSE AND OFFICE

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 2456.25 SQ.FT.

RESTRICTIVE LAYER = MOTTILING AT 24" - TP-26

SLOPE = 10.1-15.0%

RS DEPTH = [36" (TOP OF SYSTEM TO RESTRICTIVE LAYER) + 26.5" (AVERAGE DEPTH TO RESTRICTIVE LAYER)] / 2 = 31.25"

HYDRAULIC FACTOR (HF) = 20

FLOW FACTOR (FF) = 6.55

PERCOLATION FACTOR (PF) = 1.0

MLSS = 20*6.55*1.0 = 131 LF

PRIMARY AREA - USE 352 LF (2 ROWS OF 176") OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE

EFFECTIVE LEACHING AREA PROVIDED = 2,464 SF (2X176 LF @ 7.0 SQ.FT./L.F.)

RESERVE AREA

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 2,807.15 SQ.FT.

RESTRICTIVE LAYER = 31" - TP-16

RESERVE AREA - USE 416 LF (2 ROWS OF 208") OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE

EFFECTIVE LEACHING AREA PROVIDED = 2,912 SF (2X208 LF @ 7.0 SQ.FT./L.F.)

SEPTIC SYSTEM INVERT ELEVATIONS

SEPTIC TANK INLET = 1161.00

SEPTIC TANK OUTLET = 1160.75

D-BOX = 1144.70

ROW 1 D-BOX = 1144.25

(HLO) = 1144.35

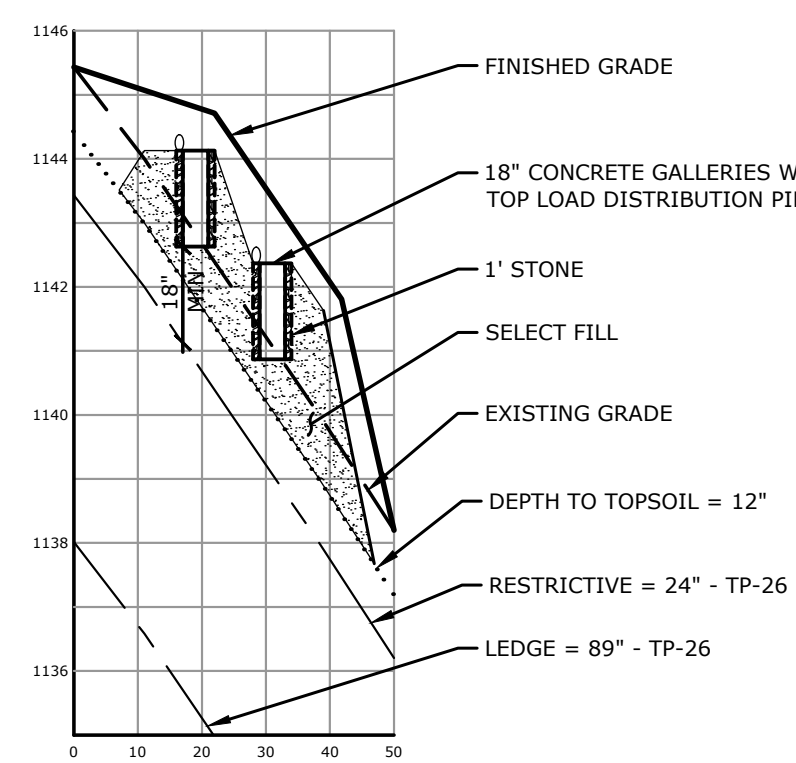
ROW 1 INVERT ELEVATION = 1144.13

ROW 1 BOTTOM ELEVATION = 1142.63

ROW 2 D-BOX = 1142.50

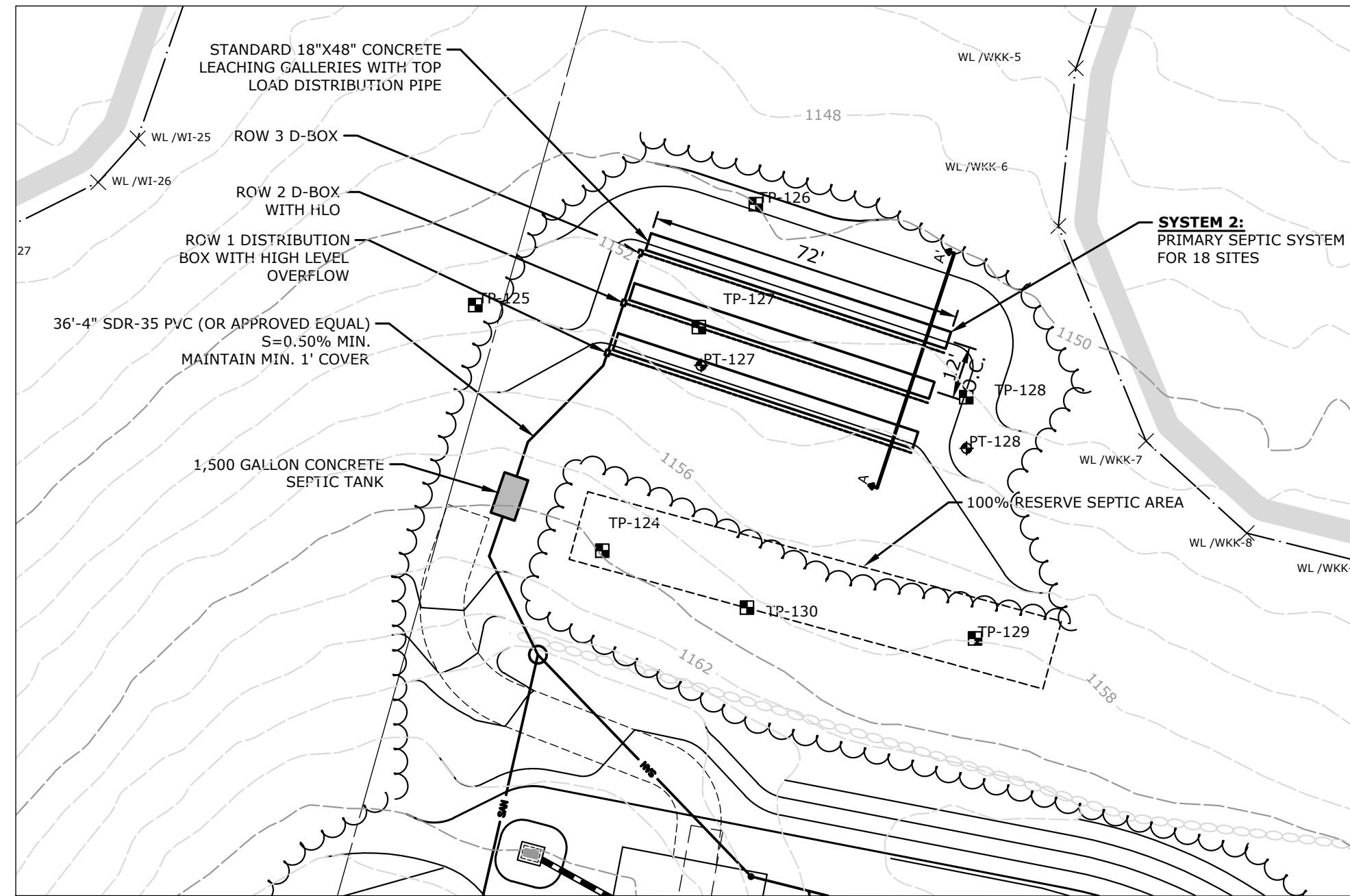
ROW 2 INVERT ELEVATION = 1142.37

ROW 2 BOTTOM ELEVATION = 1140.87



SECTION A-A' - SYSTEM 1
1"=30' HORIZONTAL - 1"=3' VERTICAL

SYSTEM 2



SYSTEM DESIGN

DESIGN BASIS: CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS DATED JANUARY 2023, AS AMENDED.

FLOW: 18 RV SITES

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 1,462.5 SQ.FT.

RESTRICTIVE LAYER = MOTTILING AT 37" - TP-127

SLOPE = 8.1-10.0%

RS DEPTH = [52" (TOP OF SYSTEM TO RL) + 33" (AVERAGE DEPTH TO RESTRICTIVE LAYER SURROUNDING THE LEACHING SYSTEM)] = 42.5"

HYDRAULIC FACTOR (HF) = 18

FLOW FACTOR (FF) = 3.9

PERCOLATION FACTOR (PF) = 1.0

MLSS = 18*3.9*1.0 = 70.2 LF

PRIMARY AREA - USE 216 LF (3 ROWS OF 72") OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE

EFFECTIVE LEACHING AREA PROVIDED = 1,512 SF (3X72 LF @ 7.0 SQ.FT./L.F.)

RESERVE AREA

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 1,462.5 SQ.FT.

RESTRICTIVE LAYER = 24"

RESERVE AREA - USE 224 LF (2 ROWS-112" LONG) OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE

EFFECTIVE LEACHING AREA PROVIDED = 1,568 SF (224 LF @ 7.0 SQ.FT./L.F.)

SEPTIC SYSTEM INVERT ELEVATIONS

SEPTIC TANK INLET = 1156.75

SEPTIC TANK OUTLET = 1156.50

ROW 1 D-BOX = 1155.35

(HLO)=1155.45

ROW 1 INVERT ELEVATION = 1155.25

ROW 1 BOTTOM ELEVATION = 1153.75

ROW 2 D-BOX = 1154.30

(HLO)=1154.40

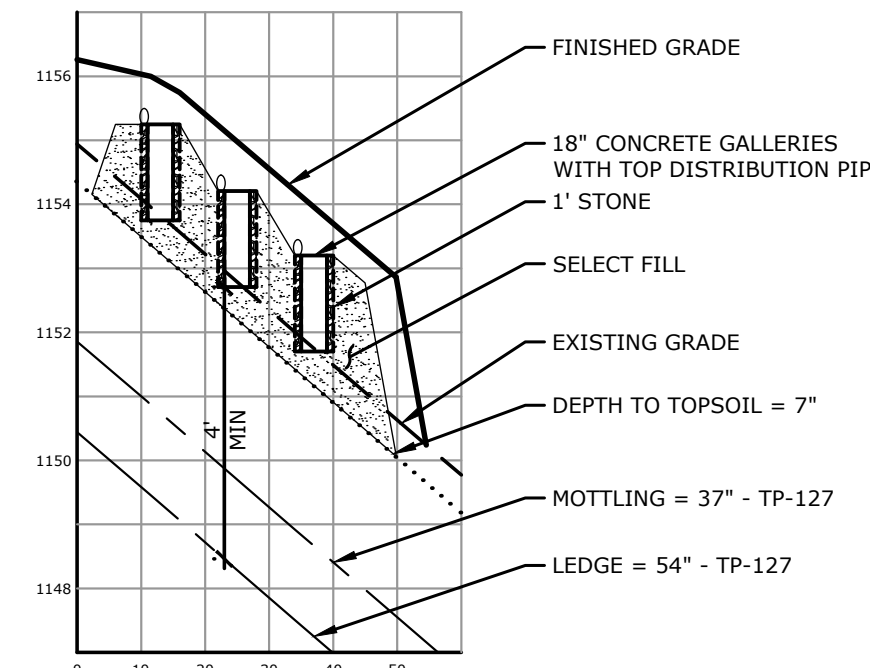
ROW 2 INVERT ELEVATION = 1153.20

ROW 2 BOTTOM ELEVATION = 1152.70

ROW 3 D-BOX = 1153.30

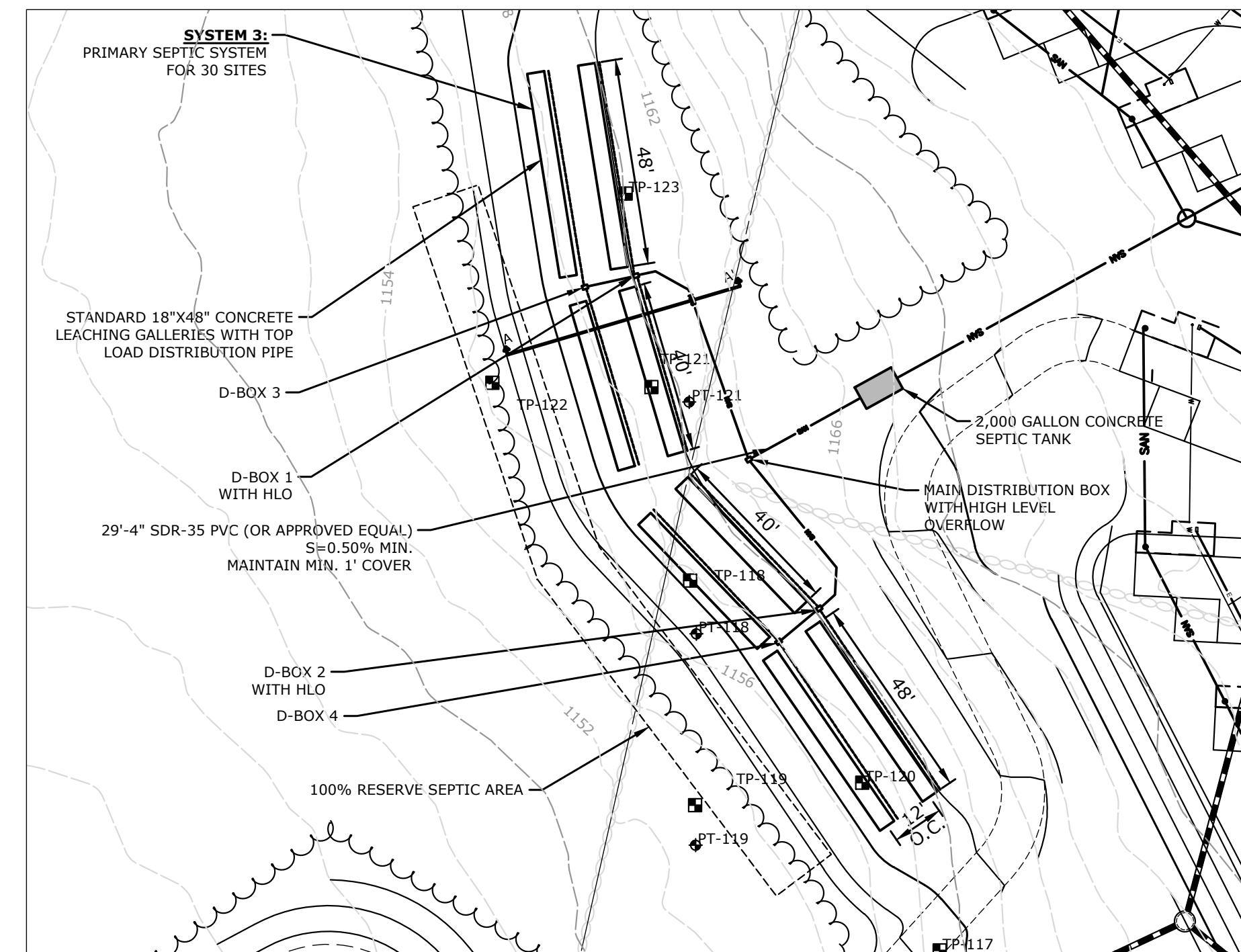
ROW 3 INVERT ELEVATION = 1153.20

ROW 3 BOTTOM ELEVATION = 1151.70



SECTION A-A' - SYSTEM 2
1"=30' HORIZONTAL - 1"=3' VERTICAL

SYSTEM 3



SYSTEM DESIGN

DESIGN BASIS: CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS DATED JANUARY 2023, AS AMENDED.

FLOW: 30 RV SITES

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 2437.5 SQ.FT.

RESTRICTIVE LAYER = DIGGABLE LEDGE AT 37" - TP-123

SLOPE = 10.1-15.0%

RS DEPTH = [42" (TOP OF SYSTEM TO RESTRICTIVE LAYER) + 37.50" (AVERAGE DEPTH TO RESTRICTIVE LAYER)] / 2 = 39.75"

HYDRAULIC FACTOR (HF) = 18

FLOW FACTOR (FF) = 6.5

PERCOLATION FACTOR (PF) = 1.0

MLSS = 18*6.5*1.0 = 117 LF

PRIMARY AREA - USE 352 LF (2 ROWS OF 176") OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE

EFFECTIVE LEACHING AREA PROVIDED = 2,464 SF (2X176 LF @ 7.0 SQ.FT./L.F.)

RESERVE AREA

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 2,437.5 SQ.FT.

RESTRICTIVE LAYER = 37" - TP-119

RESERVE AREA - USE 352 LF (2 ROWS OF 176") OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE

EFFECTIVE LEACHING AREA PROVIDED = 2,464 SF (352LF @ 7.0 SQ.FT./L.F.)

SEPTIC SYSTEM INVERT ELEVATIONS

SEPTIC TANK INLET = 1163.00

SEPTIC TANK OUTLET = 1162.75

MAIN D-BOX = 1162.00

ROW 1

D-BOX 1 = 1161.20

(HLO)=1161.30

SECTION 1 INVERT ELEVATION = 1161.07

SECTION 1 BOTTOM ELEVATION = 1159.57

D-BOX 2 = 1161.45

(HLO)=1161.55

SECTION 2 INVERT ELEVATION = 1161.35

SECTION 2 BOTTOM ELEVATION = 1158.85

ROW 2

D-BOX 3 = 1159.95

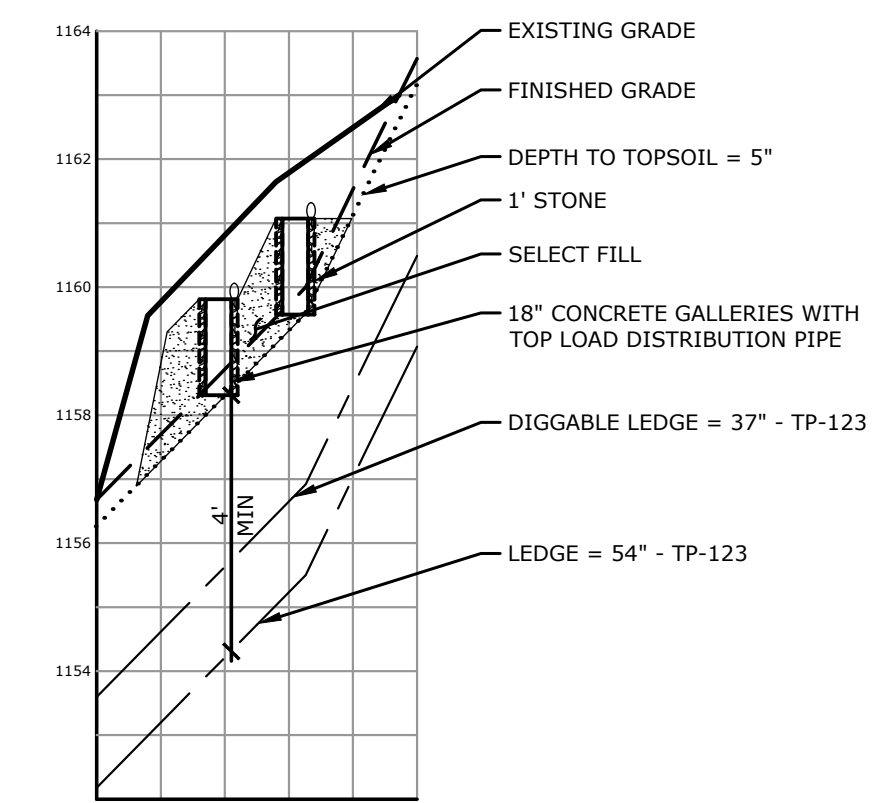
SECTION 1 INVERT ELEVATION = 1159.81

SECTION 1 BOTTOM ELEVATION = 1158.31

D-BOX 4 = 1159.60

SECTION 2 INVERT ELEVATION = 1159.50

SECTION 2 BOTTOM ELEVATION = 1158.00



SECTION A-A' - SYSTEM 3
1"=30' HORIZONTAL - 1"=3' VERTICAL



DESCRIPTION	DATE	BY
T&E COMMENTS	12/29/2022	ACD
DESIGN CHANGES	7/20/2023	ACD
SEPTIC COMPUTATIONS	7/28/2023	ACD

SEPTIC SYSTEM - SEPTIC DESIGN & CROSS SECTIONS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

ACD	MLA	RJM
DESIGNED	DRAWN	CHECKED

AS NOTED

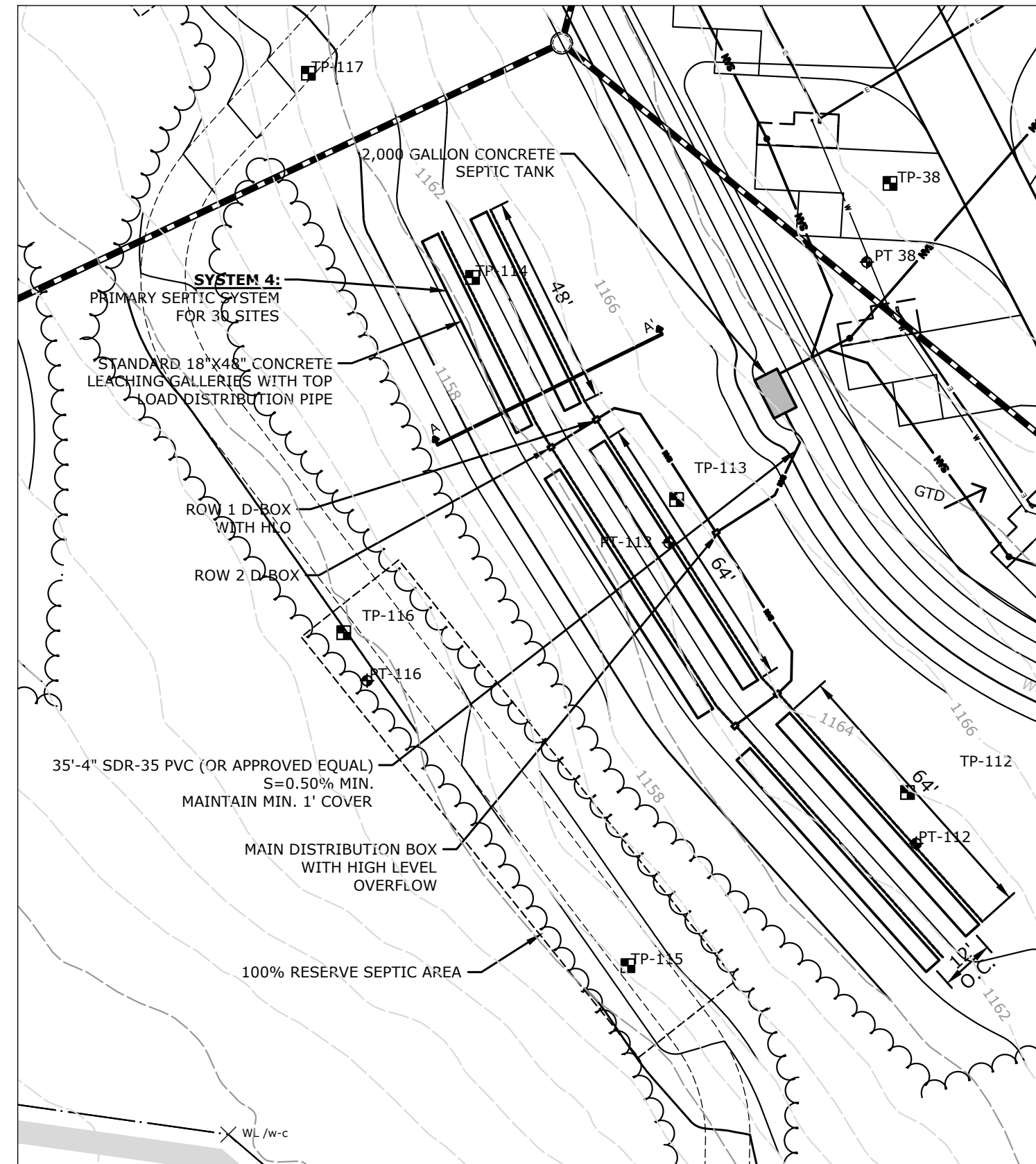
NOVEMBER 9, 2022
DATE

20174.00002
PROJECT NO.

23 OF 30
SHEET NO.

SD-4
SHEET NAME

SYSTEM 4



SYSTEM DESIGN

DESIGN BASIS: CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS DATED JANUARY 2023, AS AMENDED.

FLOW: 30 RV SITES

PERC RATE: 1.1-10.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 2,437.5 SQ.FT.
 RESTRICTIVE LAYER = DIGGABLE AT 35" - TP-114
 SLOPE = >15.0%
 RS DEPTH = [42" (TOP OF SYSTEM TO RESTRICTIVE LAYER) + 32.5" (AVERAGE DEPTH TO RESTRICTIVE LAYER)] / 2 = 37.2"

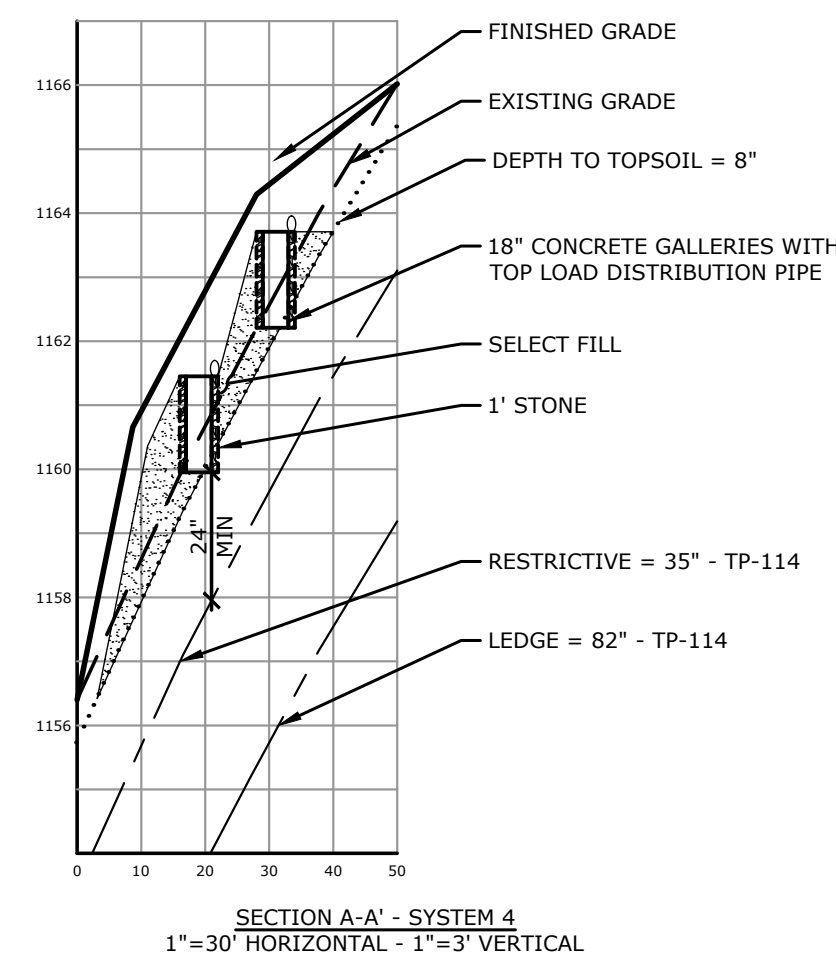
HYDRAULIC FACTOR (HF) = 16
 FLOW FACTOR (FF) = 6.5
 PERCOLATION FACTOR (PF) = 1.0
 MLSS = 16*6.5*1.0 = 104 LF
 PRIMARY AREA - USE 352 LF (2 ROWS OF 176') OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE
 EFFECTIVE LEACHING AREA PROVIDED = 2,464 SF (2X176 LF @ 7.0 SQ.FT./L.F.)

RESERVE AREA
 PERC RATE: 1.1-10.0 MIN/INCH
 EFFECTIVE AREA REQUIRED = 2,437.5 SQ.FT.
 RESTRICTIVE LAYER = 25"

RESERVE AREA - USE 360 LF (3 ROWS OF 120') OF 18"x48" CONCRETE GALLERIES WITH TOP LOAD DISTRIBUTION PIPE
 EFFECTIVE LEACHING AREA PROVIDED = 2,520 SF (360 LF @ 7.0 SQ.FT./L.F.)

SEPTIC SYSTEM INVERT ELEVATIONS

SEPTIC TANK INLET = 1168.00
 SEPTIC TANK OUTLET = 1167.75
 MAIN D-BOX = 1164.00
 ROW 1 D-BOX = 1163.80 (HLO) = 1163.90
 ROW 1 INVERT ELEVATION = 1163.71
 ROW 1 BOTTOM ELEVATION = 1162.21
 ROW 2 D-BOX = 1161.55
 ROW 2 INVERT ELEVATION = 1161.44
 ROW 2 BOTTOM ELEVATION = 1159.94



SECTION A-A' - SYSTEM 4
 1"=30' HORIZONTAL - 1"=3' VERTICAL

SYSTEM 5



SYSTEM DESIGN

DESIGN BASIS: CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS DATED JANUARY 2023, AS AMENDED.

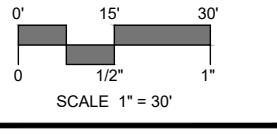
FLOW: EXISTING HOUSE (4 BEDROOMS)

PERC RATE: 10.1-20.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 787.5 SQ.FT.
 RESTRICTIVE LAYER = COMPACT AT 28" - TP-45
 SLOPE = >15.0%
 RS DEPTH = (AVERAGE DEPTH TO RESTRICTIVE LAYER) = 33.3"

HYDRAULIC FACTOR (HF) = 18
 FLOW FACTOR (FF) = 1.75
 PERCOLATION FACTOR (PF) = 1.25
 MLSS = 18*1.75*1.25 = 39.375 LF

RESERVE AREA - USE 144 LF (2 ROW OF 72') OF 12"x48" CONCRETE GALLERIES
 EFFECTIVE LEACHING AREA PROVIDED = 849.6 SF (2X72 LF @ 5.9 SQ.FT./L.F.)



DESCRIPTION	DATE	BY
TAK COMMENTS	12/20/2022	ACD
SITE LAYOUT CHANGES	4/6/2023	ACD
SITE LAYOUT CHANGES	4/6/2023	ACD
SITE LAYOUT CHANGES	7/20/2023	ACD

SEPTIC SYSTEM - SEPTIC DESIGN & CROSS SECTIONS

LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	MLA	RJM
DESIGNED	DRAWN	CHECKED

AS NOTED

NOVEMBER 9, 2022
 DATE

20174.00002
 PROJECT NO.

24 OF 30
 SHEET NO.

SD-5

SYSTEM 6



SYSTEM DESIGN

DESIGN BASIS: CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS DATED JANUARY 2023, AS AMENDED.

FLOW: FUTURE BUILDING (OFFICE/CAFE/LAUNDRY/STORE)

PERC RATE: 10.1-20.0 MIN/INCH

EFFECTIVE AREA REQUIRED = 1183 SQ.FT.
 RESTRICTIVE LAYER = MOTTILING AT 33" - TP-28
 SLOPE = 10.1-15.0%
 RS DEPTH = 36" (TOP OF SYSTEM TO RESTRICTIVE LAYER) + 30" (DEPTH TO RESTRICTIVE LAYER SURROUNDING THE LEACHING SYSTEM) = 33"

HYDRAULIC FACTOR (HF) = 20
 FLOW FACTOR (FF) = 3.4
 PERCOLATION FACTOR (PF) = 1.25
 MLSS = 20*3.4*1.25 = 85 LF

PRIMARY AREA - USE 208 LF (2 ROWS OF 104' OF 12"x46" CONCRETE GALLERIES)
 EFFECTIVE LEACHING AREA PROVIDED = 1227.2 (2x104 LF @ 5.9 SQ.FT./L.F.)

RESERVE AREA

PERC RATE: 10.1-20.0 MIN/INCH
 EFFECTIVE AREA REQUIRED = 1138 SQ.FT.
 RESTRICTIVE LAYER = N/A

RESERVE AREA - USE 110 LF (2 ROWS-55' LONG) MANTIS 536-8
 EFFECTIVE LEACHING AREA PROVIDED = 1210 SF (2x55 LF @ 11.0 SQ.FT./L.F.)

SEPTIC SYSTEM INVERT ELEVATIONS

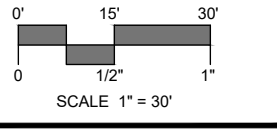
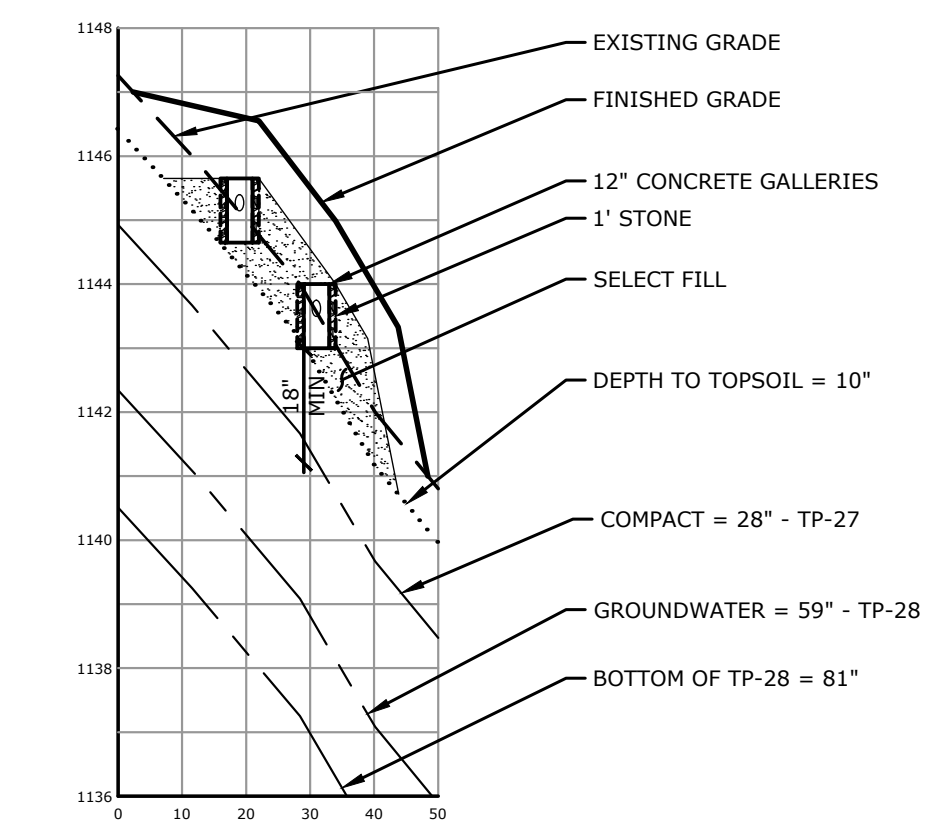
SEPTIC TANK INLET = 1155.25
 SEPTIC TANK OUTLET = 1155.00

ROW 1 D-BOX = 1145.25
 (HLO) = 1145.40

ROW 1 INVERT ELEVATION = 1145.15
 ROW 1 BOTTOM ELEVATION = 1144.65

ROW 2 D-BOX = 1143.6

ROW 2 INVERT ELEVATION = 1143.50
 ROW 2 BOTTOM ELEVATION = 1143.00



DESCRIPTION	DATE	BY
TAK COMMENTS	12/20/2022	ACD
SITE LAYOUT CHANGES	4/8/2023	ACD
LAYOUT CHANGES	7/20/2023	ACD

SEPTIC SYSTEM - SEPTIC DESIGN & CROSS SECTIONS
 LITCHFIELDS HILLS CT
 KOA CAMPGROUND
 232 KLUG HILL ROAD
 TORRINGTON, CONNECTICUT

ACD	MLA	RJM
DESIGNED	DRAWN	CHECKED

AS NOTED

NOVEMBER 9, 2022
 DATE

20174.00002
 PROJECT NO.

25 OF 30
 SHEET NO.

SD-6

SEDIMENT & EROSION CONTROL SPECIFICATIONS

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT AND TO POLLUTE ANY WETLANDS, WATERCOURSES, WATER BODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INsofar AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATER BODIES, AND TO PREVENT, INsofar AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

- 1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
a. THE PERMANENT CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
b. THE PERMANENT EXPOSED FACES OF EARTHEN FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATER BODIES.
g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

TOPSOILING

- GENERAL:
1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
2. UPON ATTAINING FINAL UPGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
3. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION APRON WITH MODIFIED ROCK RIPRAP (5' MIN. LENGTH)
4. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.
MATERIAL:
1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
3. TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF STONES (OVER 1" IN DIAMETER), LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, KNOTGRASS, AND QUAKERS.
4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
5. SOLUBLE SALT CONTENT OF OVER 500 PARTS PER MILLION (PM) IS LESS SUITABLE. AVOID TIDAL MARSH SOILS BECAUSE OF HIGH SALT CONTENT AND SULFUR ACIDITY.
6. THE pH SHOULD BE MORE THAN 6.0. IF LESS, ADD LIME TO INCREASE pH TO AN ACCEPTABLE LEVEL.
APPLICATION:
1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST SIX INCHES (6") OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

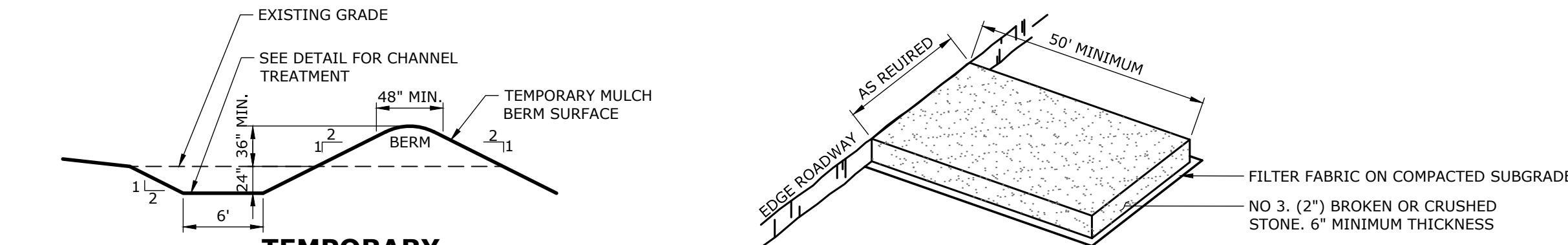
- GENERAL:
1. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS MORE THAN 30 DAYS. AREAS TO BE LEFT EXPOSED FOR MORE THAN 30 DAYS SHALL BE SEEDED WITHIN 7 DAYS OF SUSPENSION OF CONSTRUCTION ACTIVITIES. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.
SITE PREPARATION:
1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. APPLY LIME ACCORDING TO SOIL TEST OR AT A RATE OF ONE (1) TON OF GROUND DOLOMITIC LIMESTONE PER ACRE (5 LBS. PER 100 SQ. FT.).
4. APPLY FERTILIZER ACCORDING TO SOIL TEST OR AT THE RATE OF 300 LBS. OF 10-10-10 PER ACRE (7 LBS. PER 1,000 SQ. FT.) AND SECOND APPLICATION OF 200 LBS. OF 10-10-10 (5 LBS. PER 1,000 SQ. FT.) WHEN GRASS IS FOUR INCHES (4") TO SIX INCHES (6") HIGH. APPLY ONLY WHEN GRASS IS DRY.
5. UNLESS HYDROSEEDED, WORK IN LIME AND FERTILIZER TO A DEPTH OF FOUR (4") INCHES USING A DISK OR ANY SUITABLE EQUIPMENT.
6. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDED. WORK ON CONTOUR IF SITE IS SLOPING.
ESTABLISHMENT:
1. SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
2. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW OR HAY MULCH AND ANCHOR TO SLOPES GREATER THAN 3% OR WHERE CONCENTRATED FLOW WILL OCCUR.

PERMANENT VEGETATIVE COVER

- GENERAL:
1. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED SHALL BE SEEDED WITHIN 7 DAYS OF ESTABLISHMENT OF FINAL GRADES.
SITE PREPARATION:
1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
5. APPLY FERTILIZER ACCORDING TO SOIL TEST OR:
o SPREAD SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 300 LBS. OF 10-10-10 FERTILIZER PER ACRE (7 LBS. PER 1,000 SQ. FT.); THEN SIX (6) TO EIGHT (8) WEEKS LATER, APPLY ON THE SURFACE AN ADDITIONAL 300 LBS. OF 10-10-10 FERTILIZER PER ACRE. AFTER SEPTEMBER 1, TEMPORARY VEGETATIVE COVER SHALL BE APPLIED.
o FALL SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 600 LBS. OF 10-10-10 FERTILIZER PER ACRE (14 LBS. PER 1,000 SQ. FT.).

VEGETATIVE COVER SELECTION & MULCHING

- TEMPORARY VEGETATIVE COVER:
PERENNIAL RYEGRASS 3 LBS./1,000 SQ.FT. (LOLUM PERENNE)
* PERMANENT VEGETATIVE COVER:
BARON KENTUCKY BLUEGRASS 60%
JAMESTOWN II CHEWINGS FESCUE 20%
PALMER PERENNIAL RYEGRASS 20%
* LOFTS - "TRIPLEX GENERAL" MIX OR APPROVED EQUAL.
RECOMMENDED TIME SEEDING. 5 LB./1000 S.F. SEEDING RATE.
SPRING SEEDING: 4/1 TO 5/31
FALL SEEDING: 8/16 TO 10/15
TEMPORARY MULCHING:
STRAY OR HAY 70-90 LBS./1,000 SQ.FT. (TEMPORARY VEGETATIVE AREAS)
WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.
ESTABLISHMENT:
1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
5. MULCH IMMEDIATELY AFTER SEEDING. IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
6. USE PROPER INOCULANT ON ALL LEGUME SEEDINGS, USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
7. USE SOO WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT EROSION.

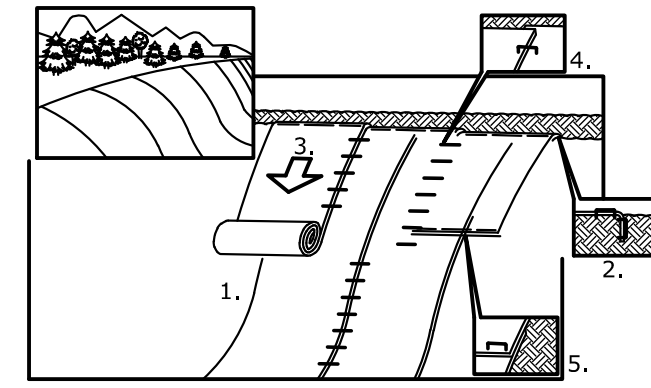


TEMPORARY DIVERSION BERM AND SWALE
NOT TO SCALE

NOTES:

- 1. CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH GENERATE VEHICULAR TRACKING OF MUD.

CONSTRUCTION ENTRANCE PAD
NOT TO SCALE

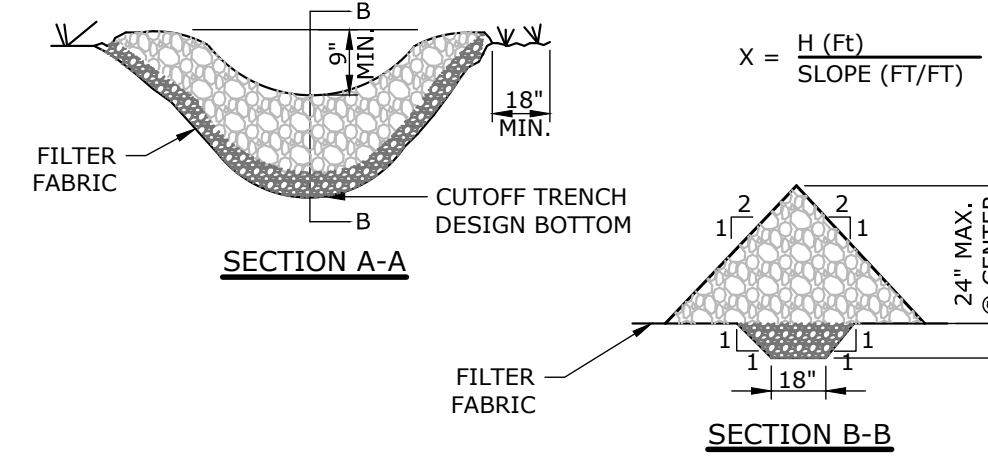
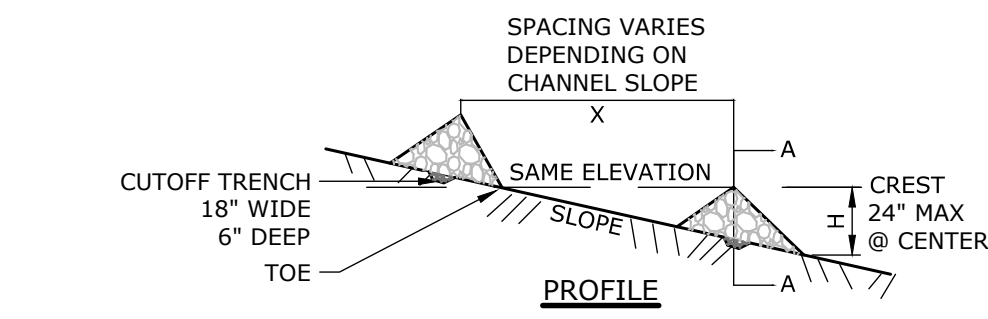


NOTES:

- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING SCC225, DO NOT SEED PREPARED AREA. SCC225 MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6\"/>

REFER TO GENERAL STAPLE PATTERN GUIDE IN NORTH AMERICAN GREEN CATALOG FOR CORRECT STAPLE PATTERN RECOMMENDATIONS FOR SLOPE INSTALLATIONS.

APPLICATION OF EROSION CONTROL BLANKET ON SLOPES
NOT TO SCALE



NOTES:

- 1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISCHARGE FROM MAXIMUM DRAINAGE AREA 2 ACRES.

STONE CHECK DAM
NOT TO SCALE

SILTSACK SPECIFICATIONS

NOTES:

- 1. THE SILTSACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS.

REGULAR FLOW SILTSACK
(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

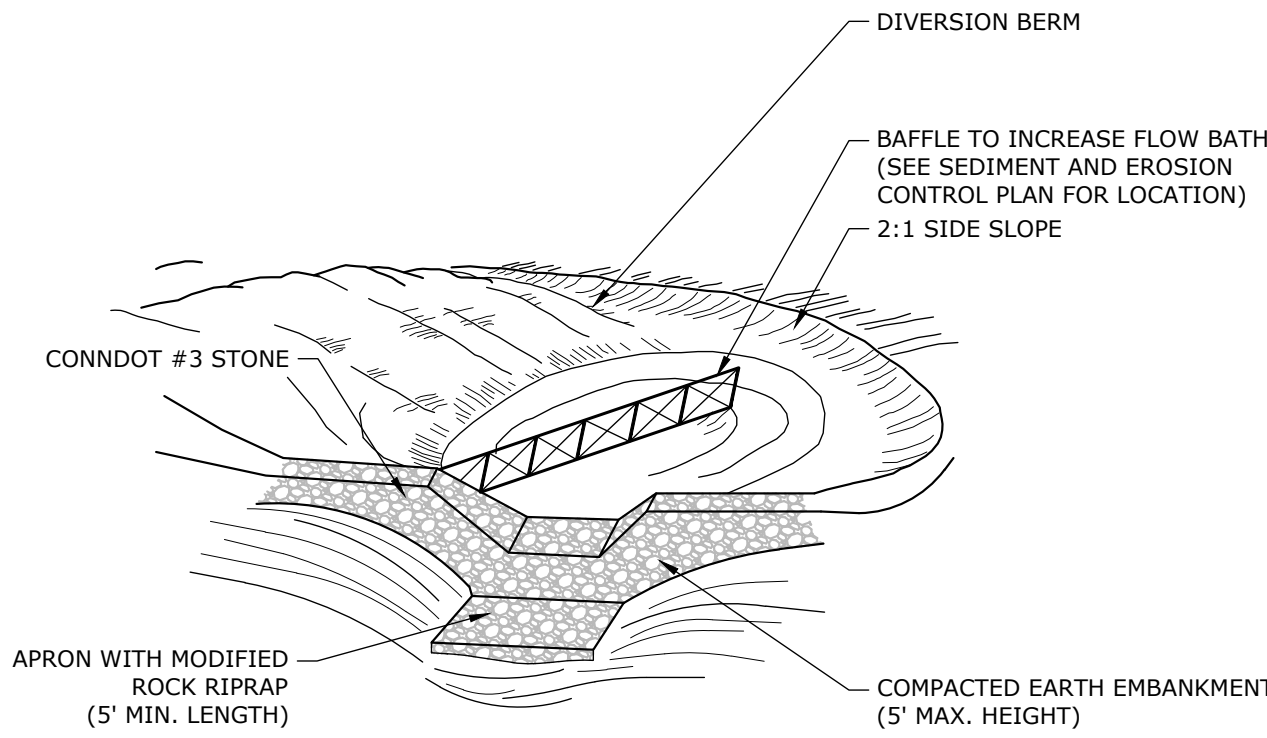
Table with columns: PROPERTIES, TEST METHOD, UNITS. Rows include GRAB TENSILE STRENGTH, GRAB TENSILE ELONGATION, PUNCTURE, MULLEN BURST, TRAPEZOID TEAR, UV RESISTANCE, APPARENT OPENING SIZE, FLOW RATE, PERMITTIVITY.

HI-FLOW SILTSACK
(FOR AREAS OF MODERATE TO HEAVY PRECIPITATION AND RUN-OFF)

Table with columns: PROPERTIES, TEST METHOD, UNITS. Rows include GRAB TENSILE STRENGTH, GRAB TENSILE ELONGATION, PUNCTURE, MULLEN BURST, TRAPEZOID TEAR, UV RESISTANCE, APPARENT OPENING SIZE, FLOW RATE, PERMITTIVITY.

OIL- ABSORBANT SILTSACK
(FOR AREAS WHERE THERE IS A CONCERN FOR OIL RUN-OFF OR SPILLS)

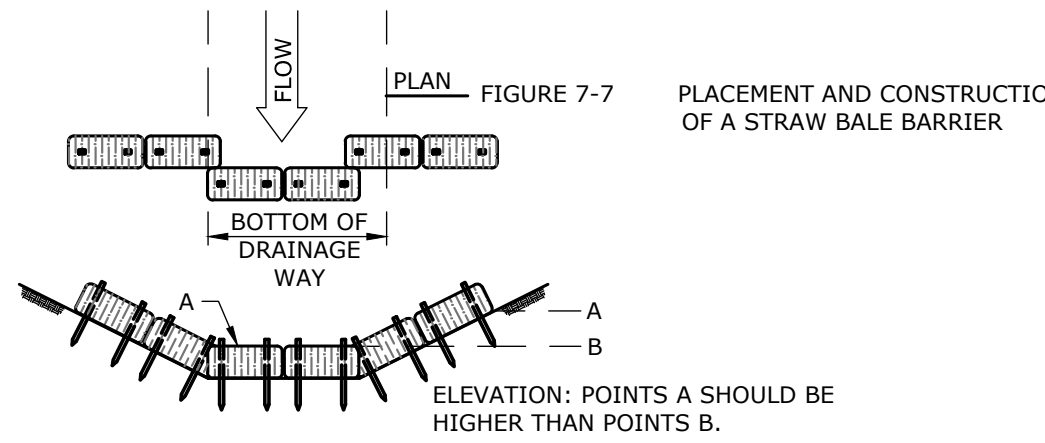
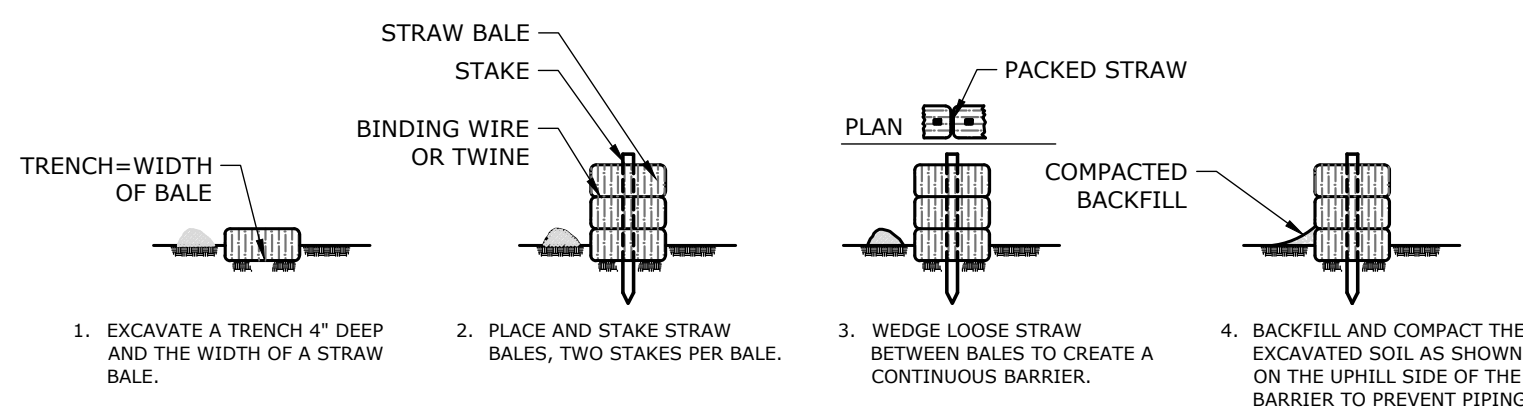
DEPENDING ON YOUR PARTICULAR APPLICATION, THE SILTSACK CAN BE MADE FROM EITHER ONE OF THE ABOVE FABRICS WITH AND OIL-ABSORBANT PILLOW INSERT OR, MADE COMPLETELY FROM AN OIL-ABSORBANT SILTSACK, WITH A WOVEN PILLOW INSERT.



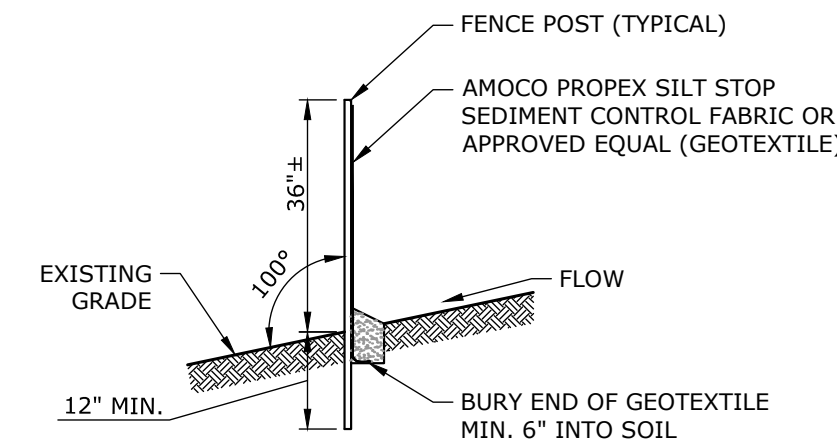
NOTES:

- 1. REFER TO SEDIMENT & EROSION CONTROL PLAN FOR APPROXIMATE DIMENSIONS AND REQUIRED VOLUME.

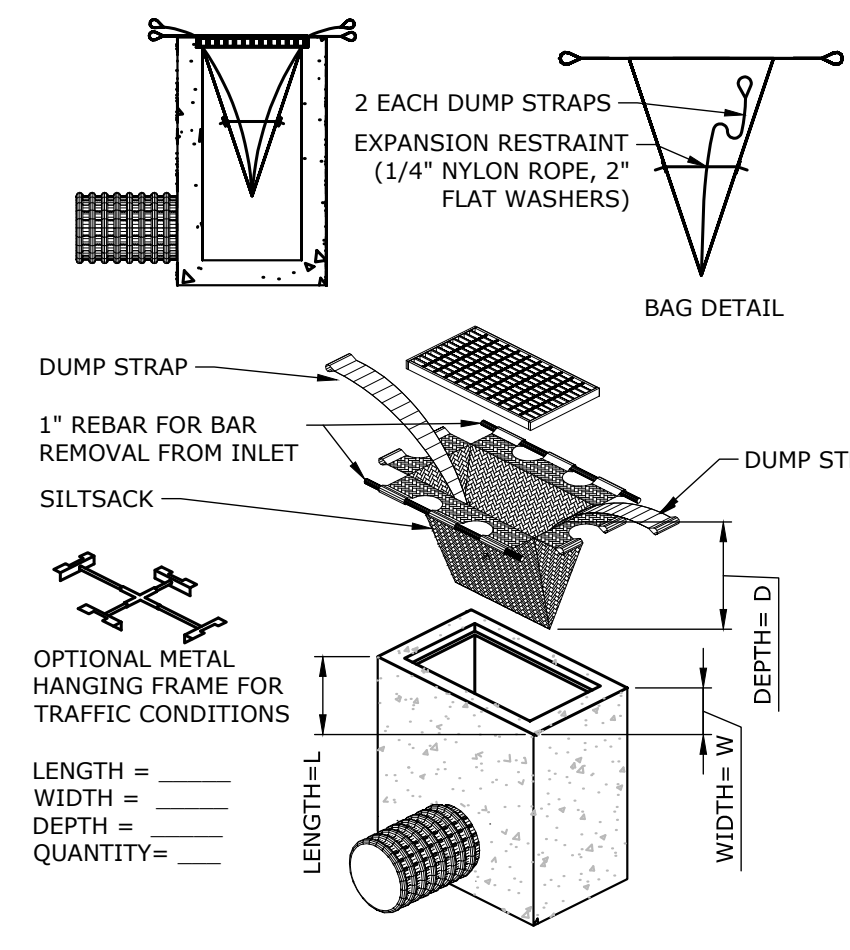
TEMPORARY SEDIMENT TRAP
NOT TO SCALE



PLACEMENT & CONSTRUCTION OF A HAY BALE BARRIER
NOT TO SCALE



SEDIMENT FILTER FENCE
NOT TO SCALE



INLET SEDIMENT CONTROL DEVICE
NOT TO SCALE

EROSION CONTROL MAINTENANCE INTERVALS

Table with 5 columns: EROSION CONTROL MEASURE, CONTROL OBJECTIVE, INSPECTION/MAINTENANCE, FAILURE INDICATORS, REMOVAL. Rows include Temporary Sediment Trap (TST), Silt Fence (SF), Hay Bales (HB), Construction Entrance (CE), Catch Basin Inlet Protection (IP), and Stockpile Protection (STK).



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SIRCONCONSULTING.COM

Table with columns: DATE, BY, DESCRIPTION

SITE DETAILS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

Table with columns: ACD, RJM. Rows: DESIGNED, DRAWN, CHECKED.

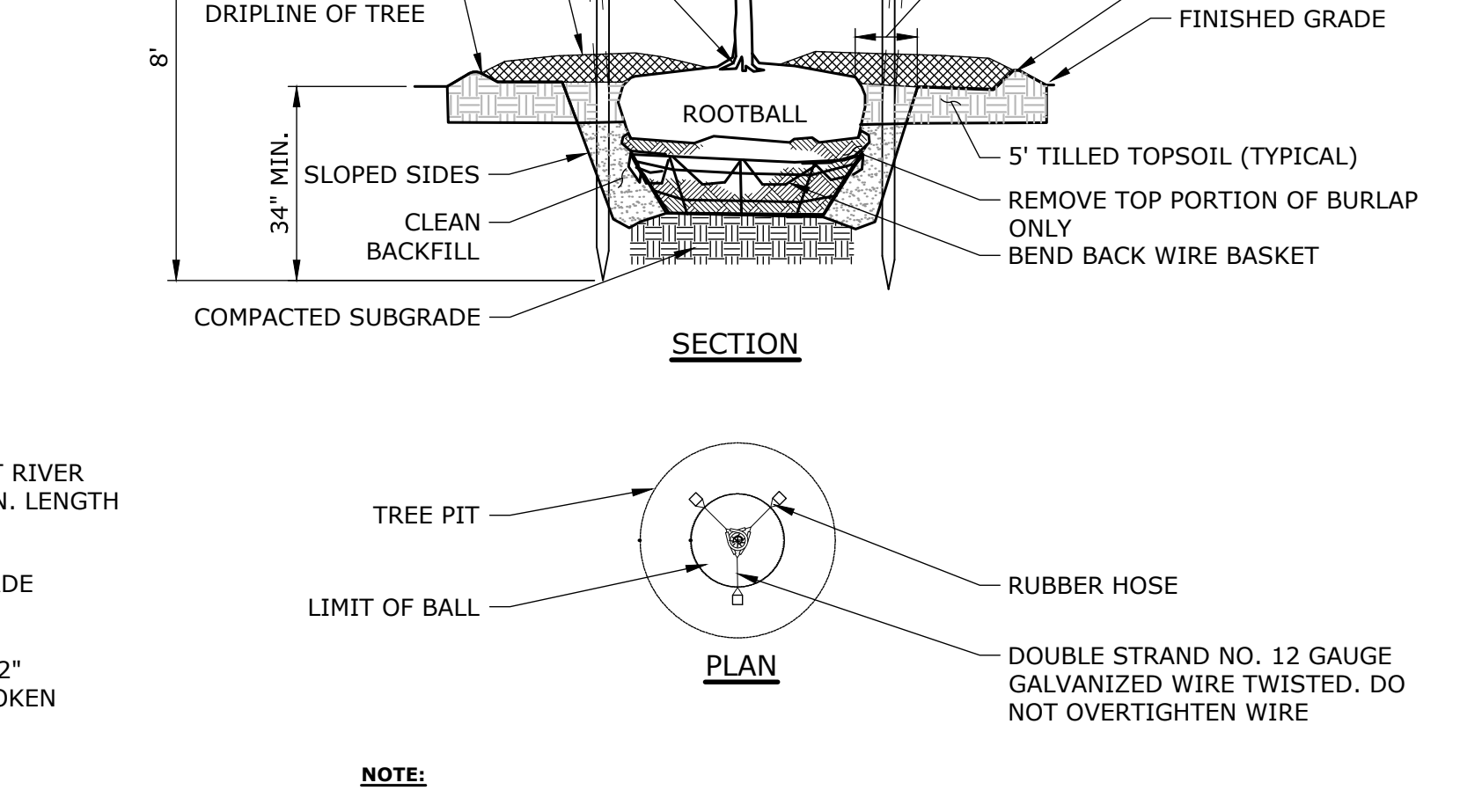
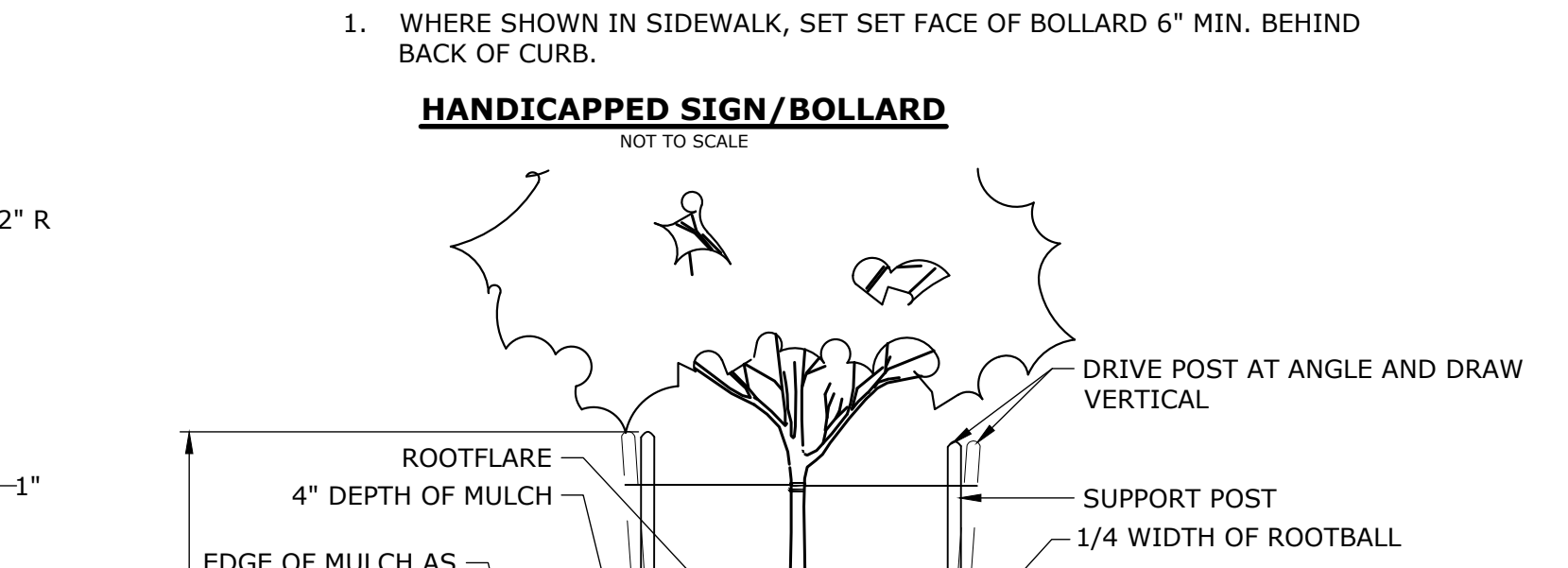
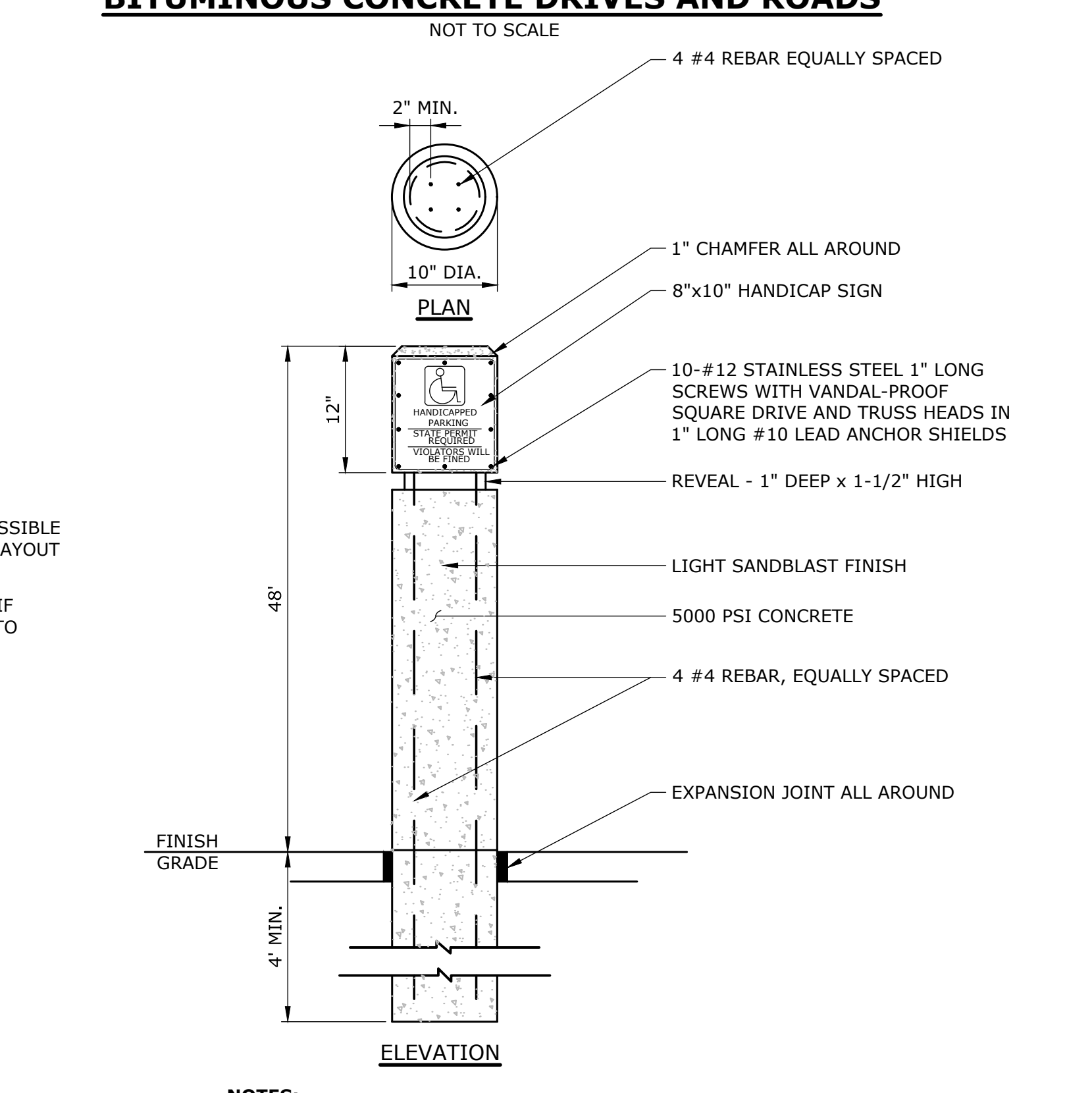
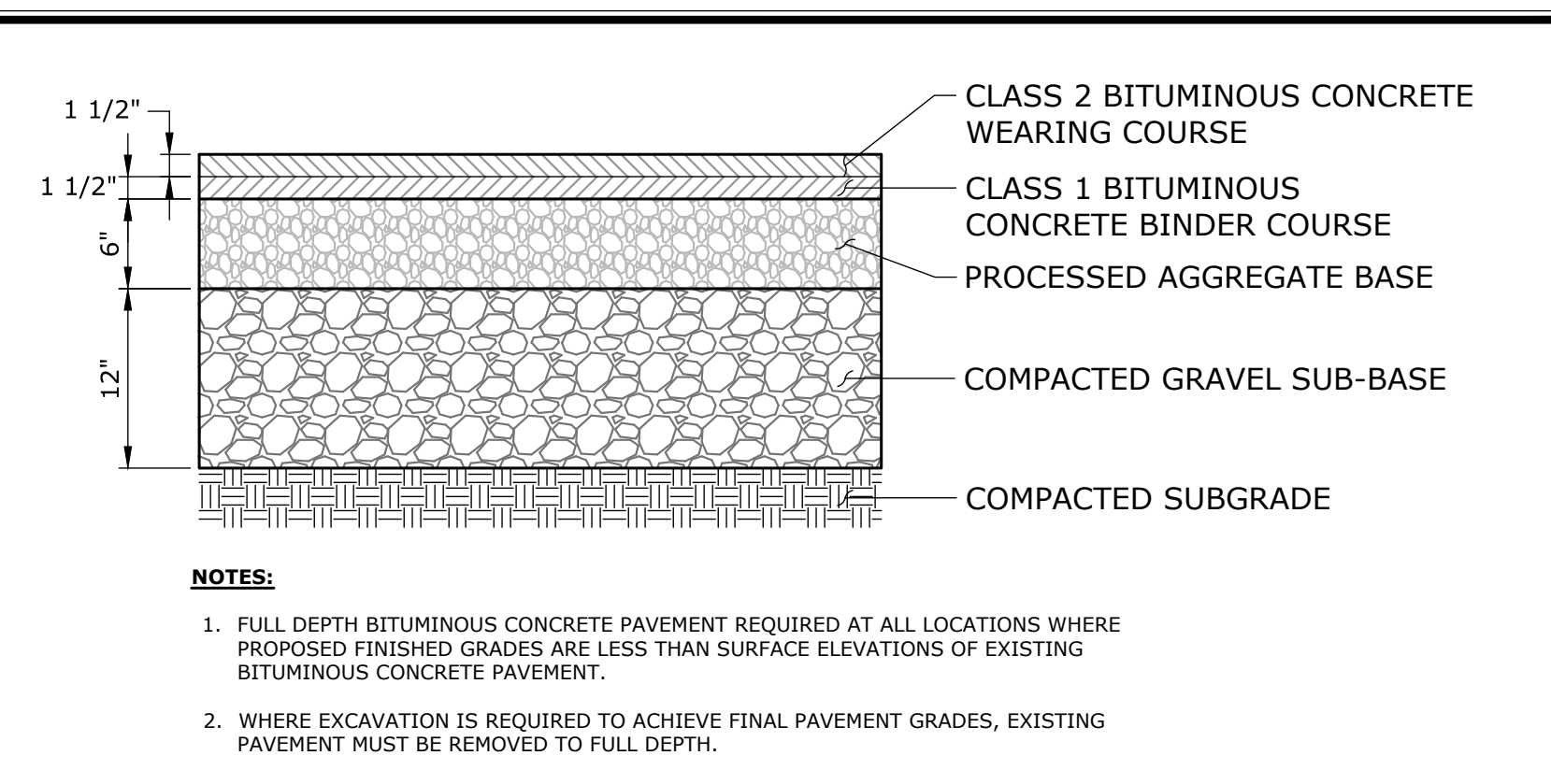
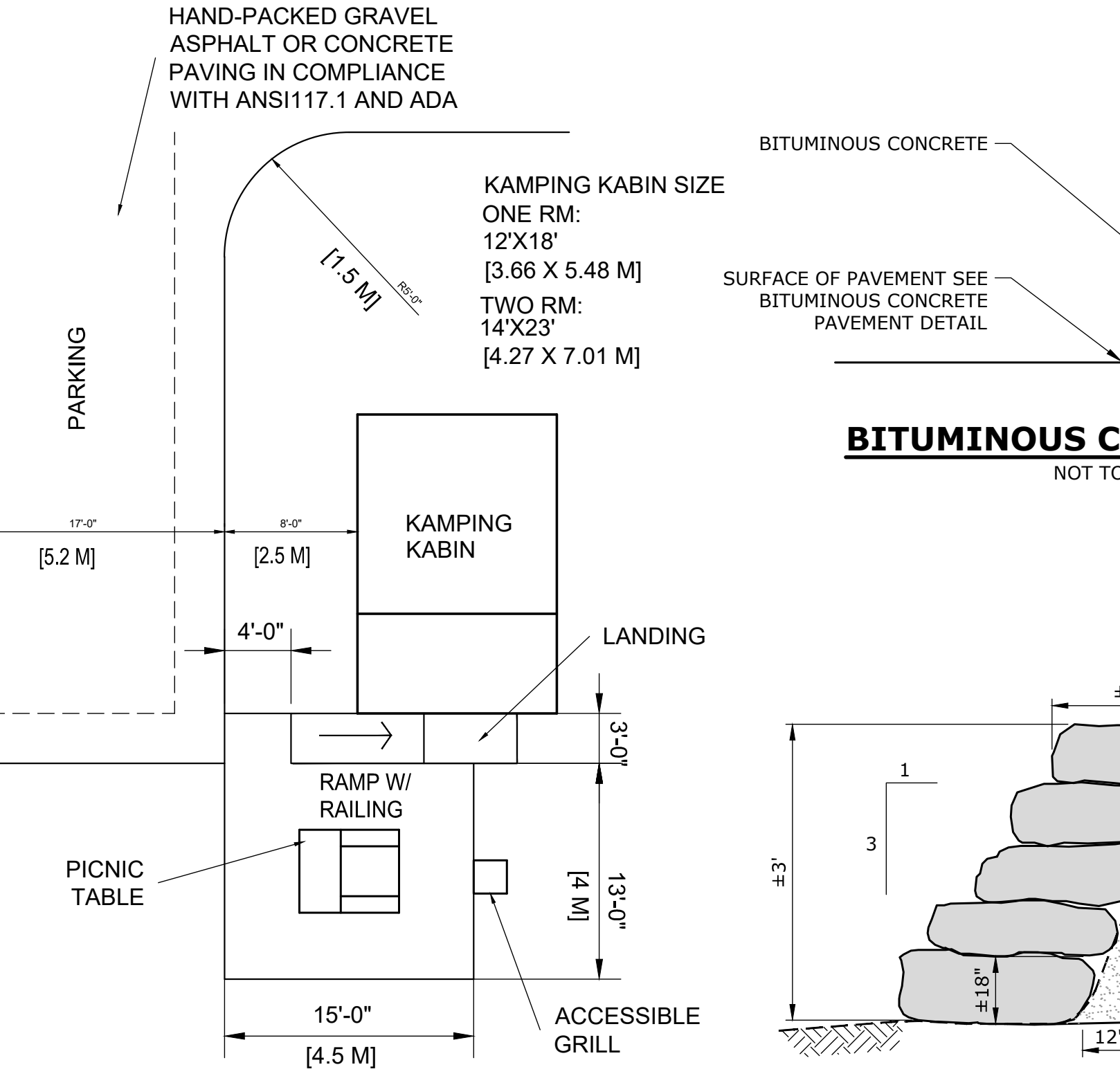
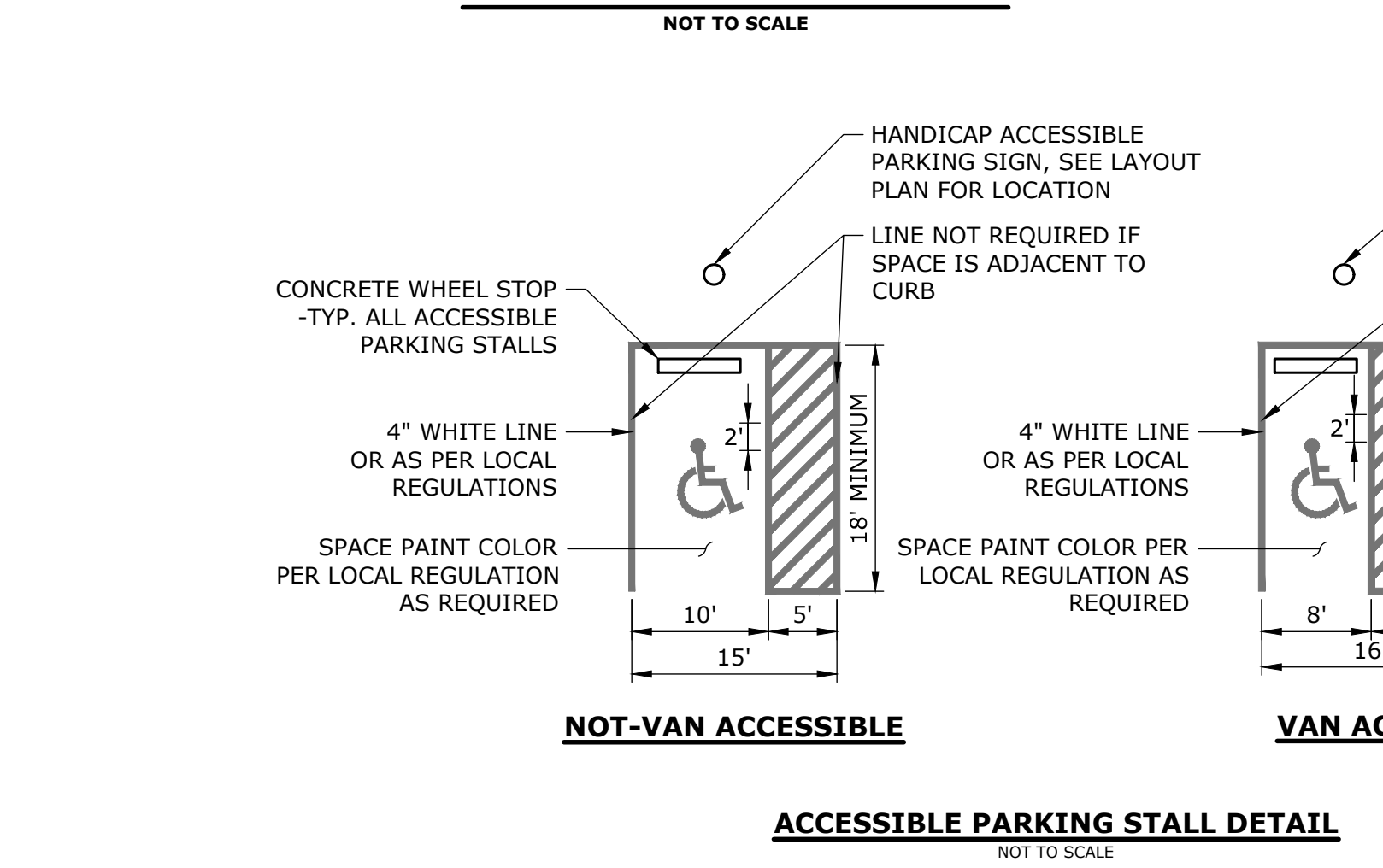
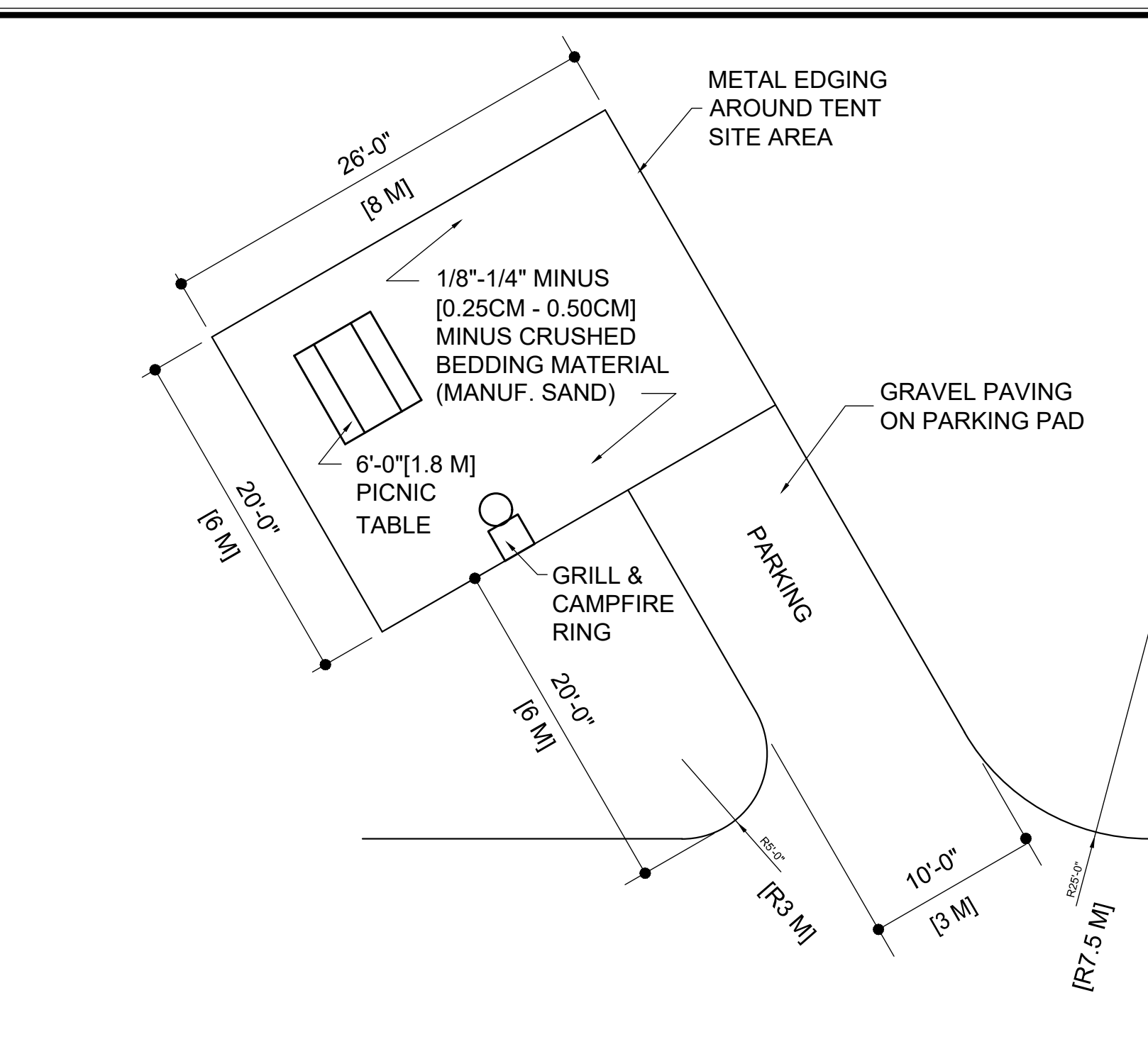
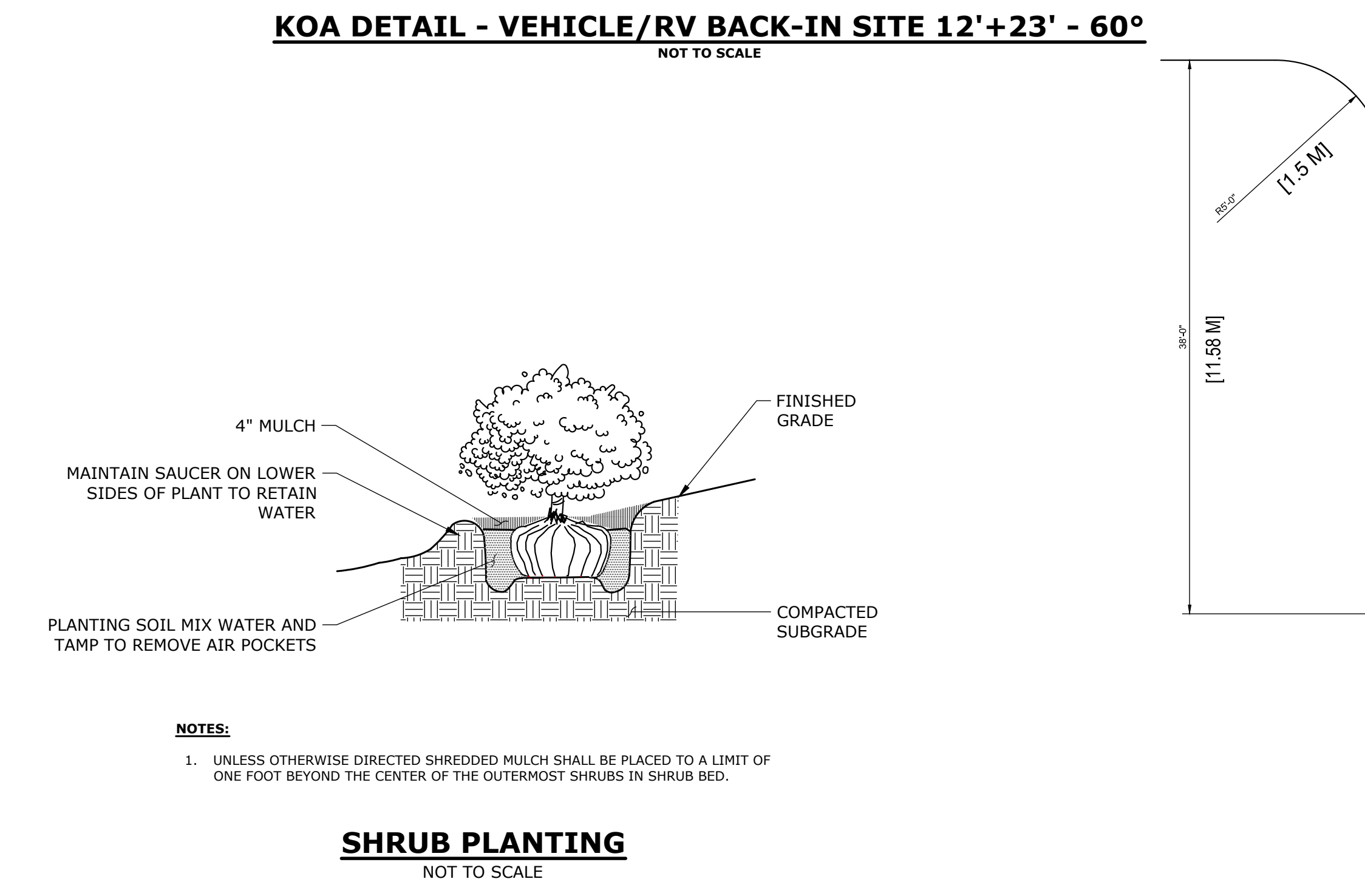
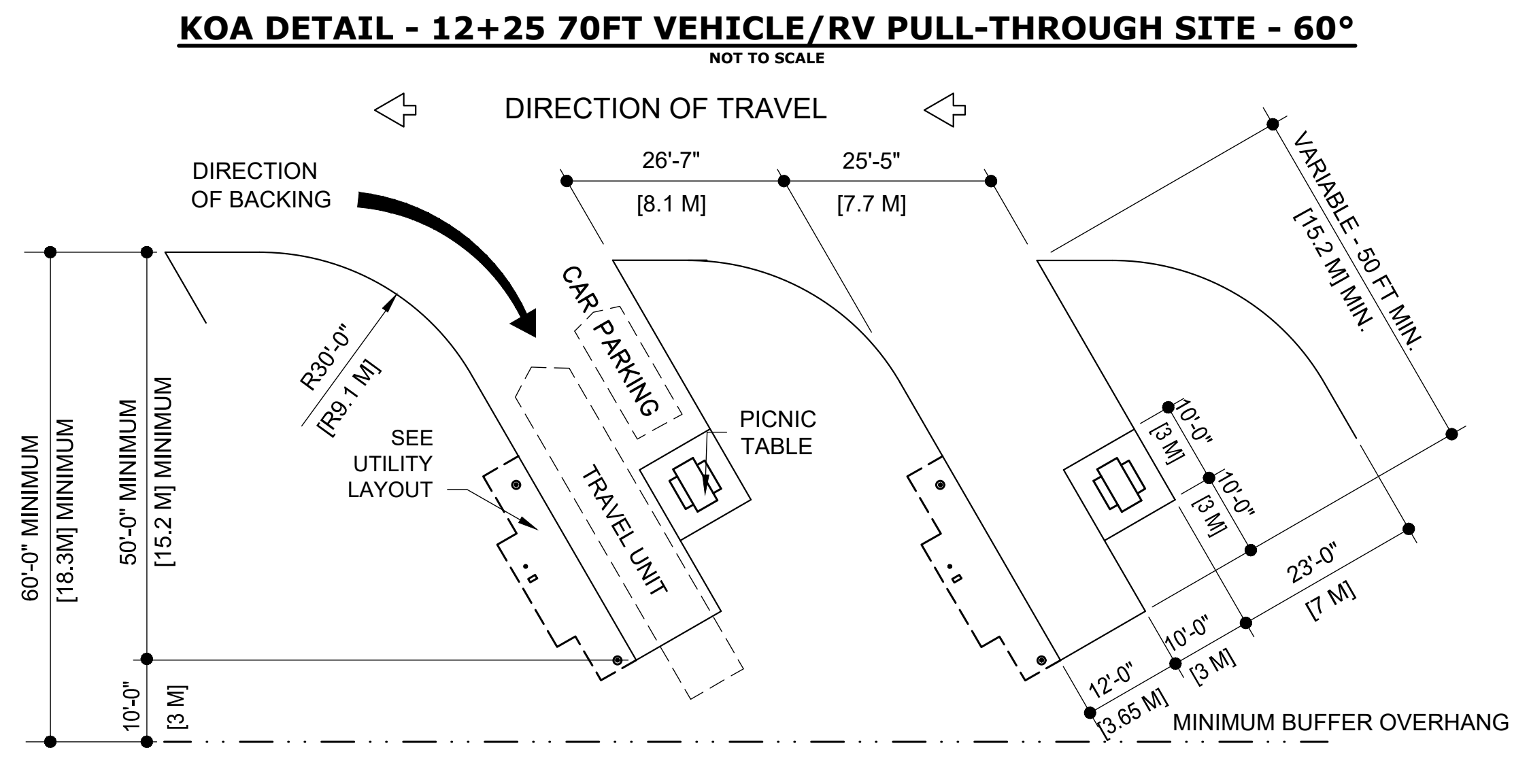
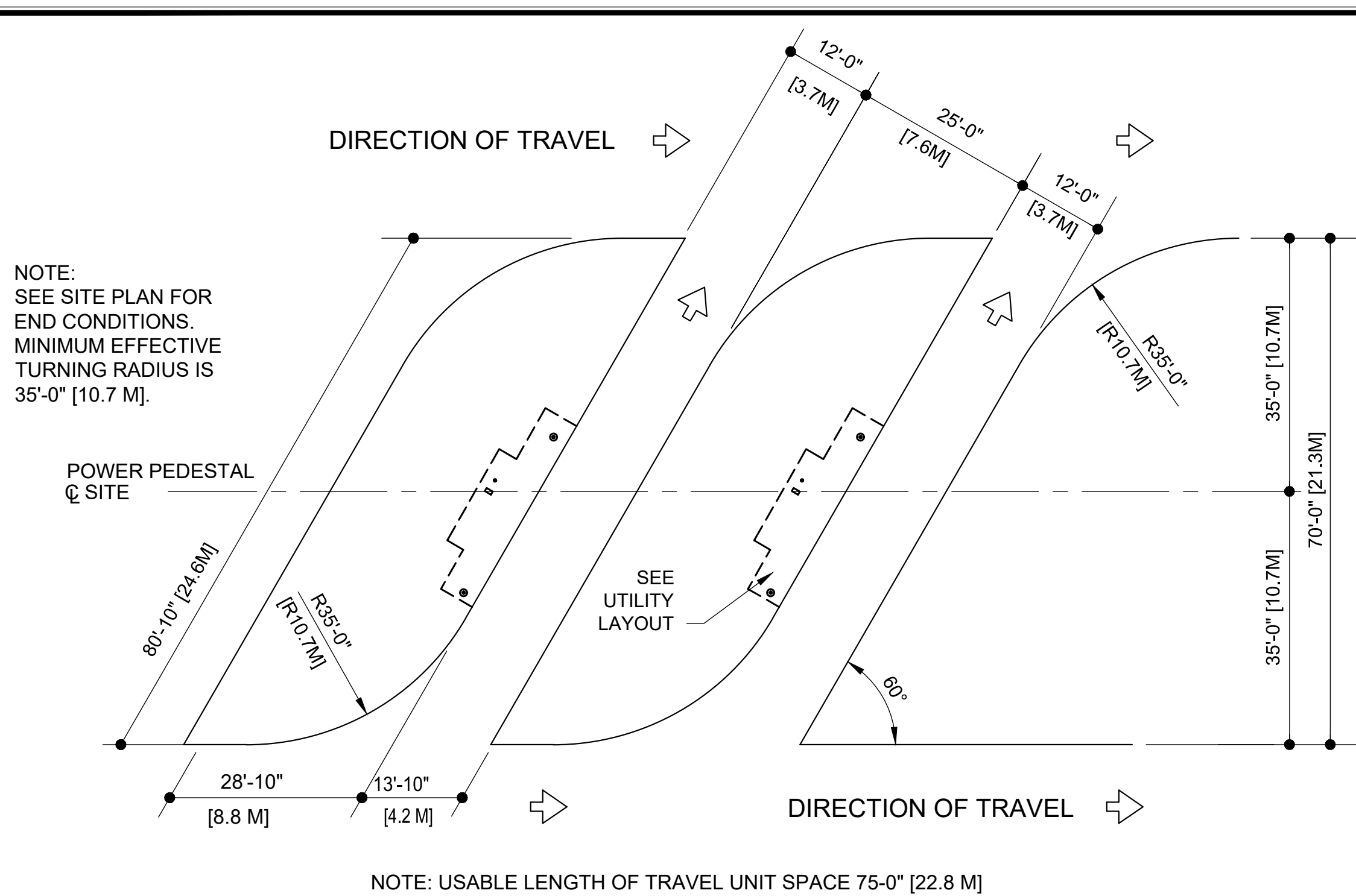
NOT TO SCALE

NOVEMBER 9, 2022
DATE

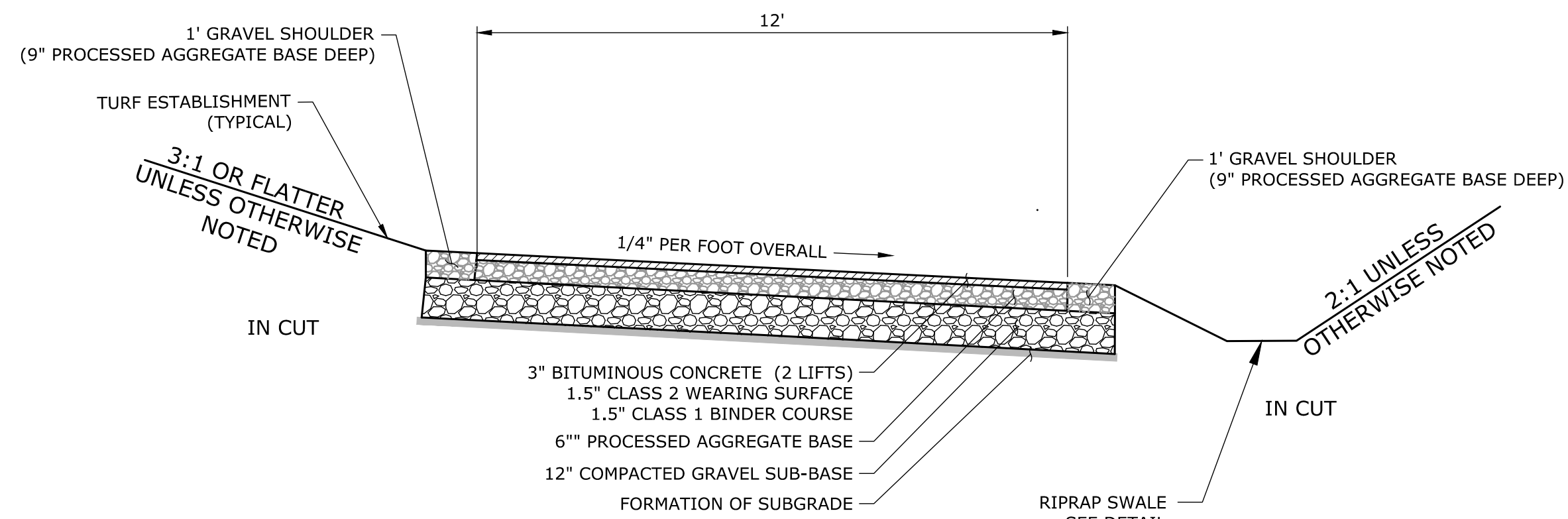
20174.00002
PROJECT NO.

26 OF 30
SHEET NO.

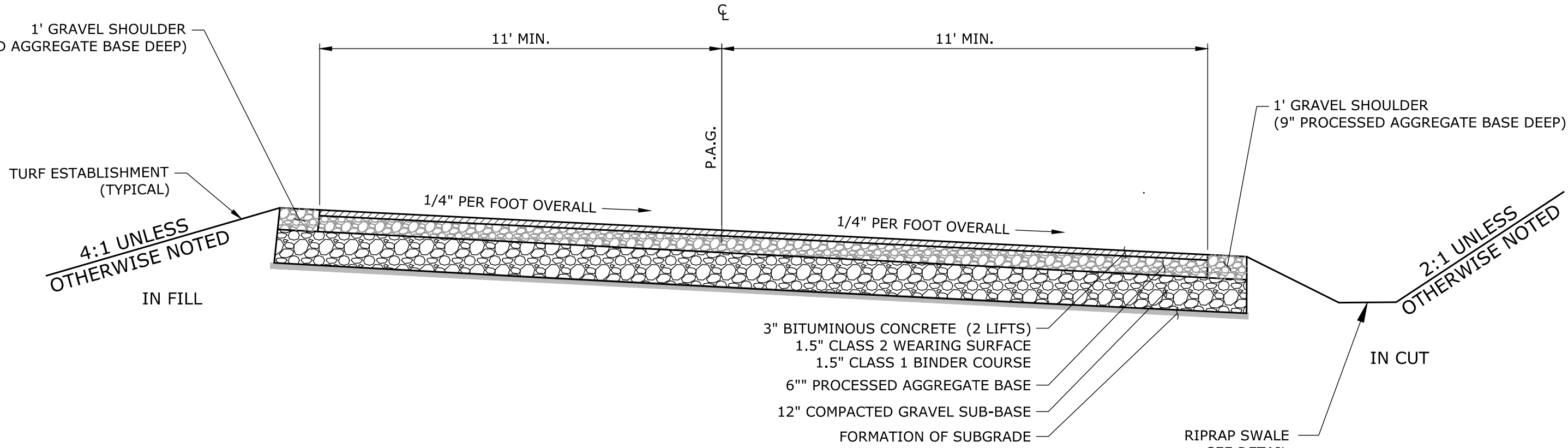
SD-7



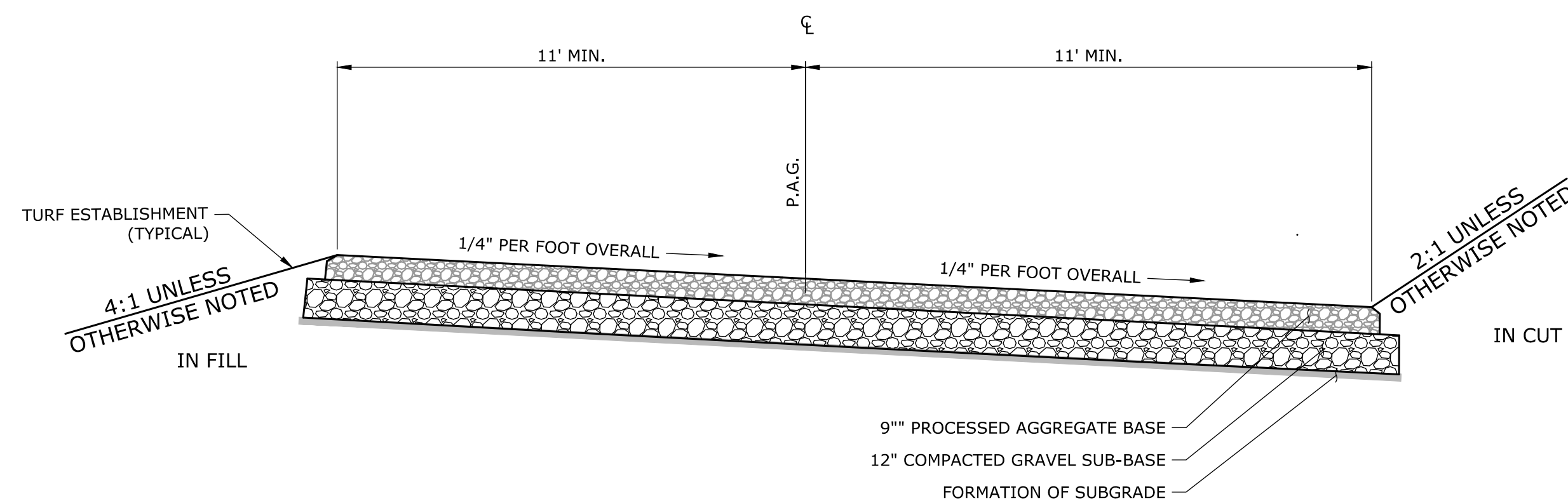
DESIGNED	MLA	RJM
DRAWN		CHECKED
SCALE: NOT TO SCALE		
DATE: NOVEMBER 9, 2022		
PROJECT NO.: 20174.00002		
SHEET NO.: 27 OF 30		
SHEET NAME: SD-8		
SITE DETAILS: LITCHFIELDS HILLS CT KOA CAMPGROUND 232 KLUG HILL ROAD TORRINGTON, CONNECTICUT		



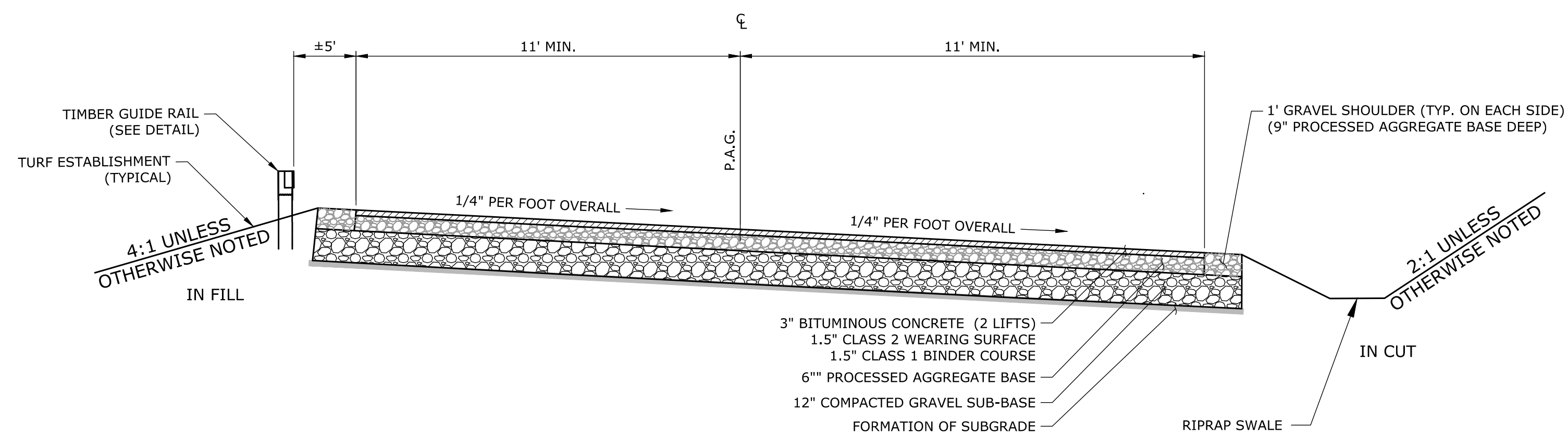
ROADWAY CROSS SECTION - IN/OUT LANES
NOT TO SCALE



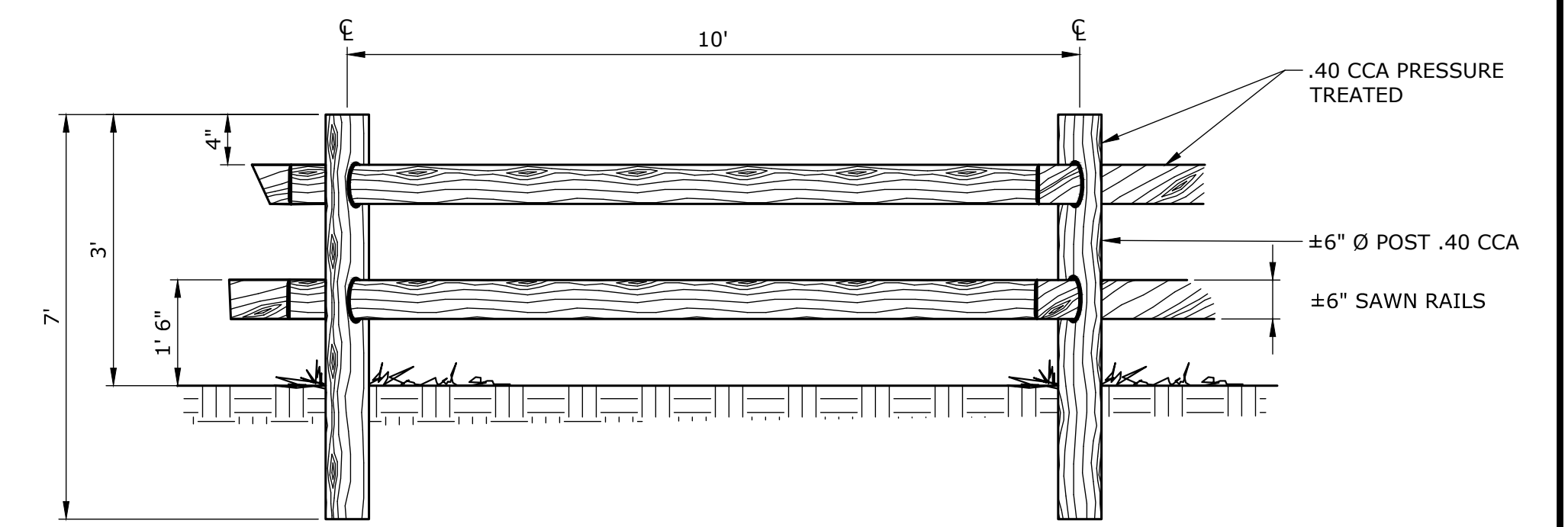
ROADWAY CROSS SECTION - TYPICAL
NOT TO SCALE



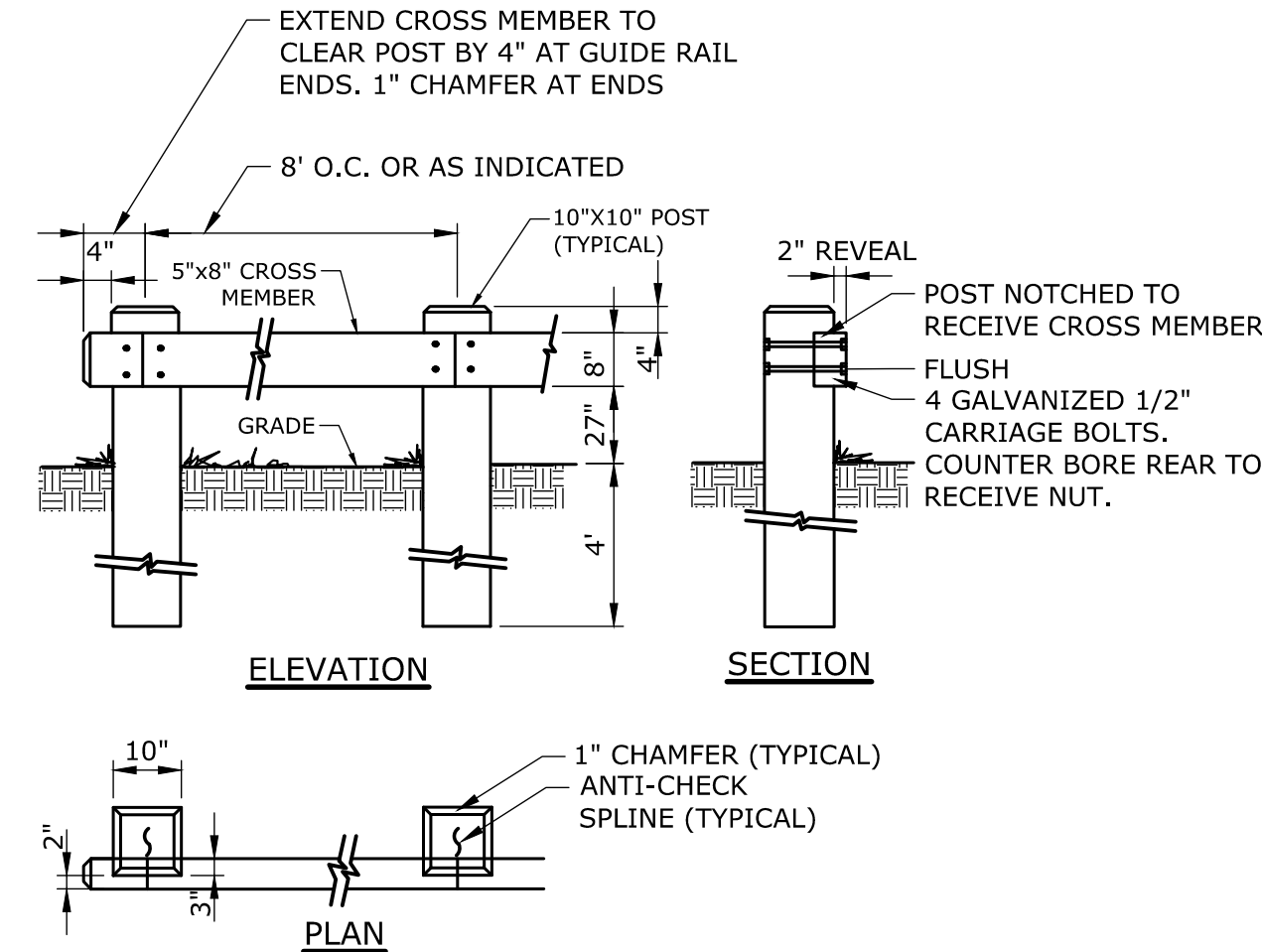
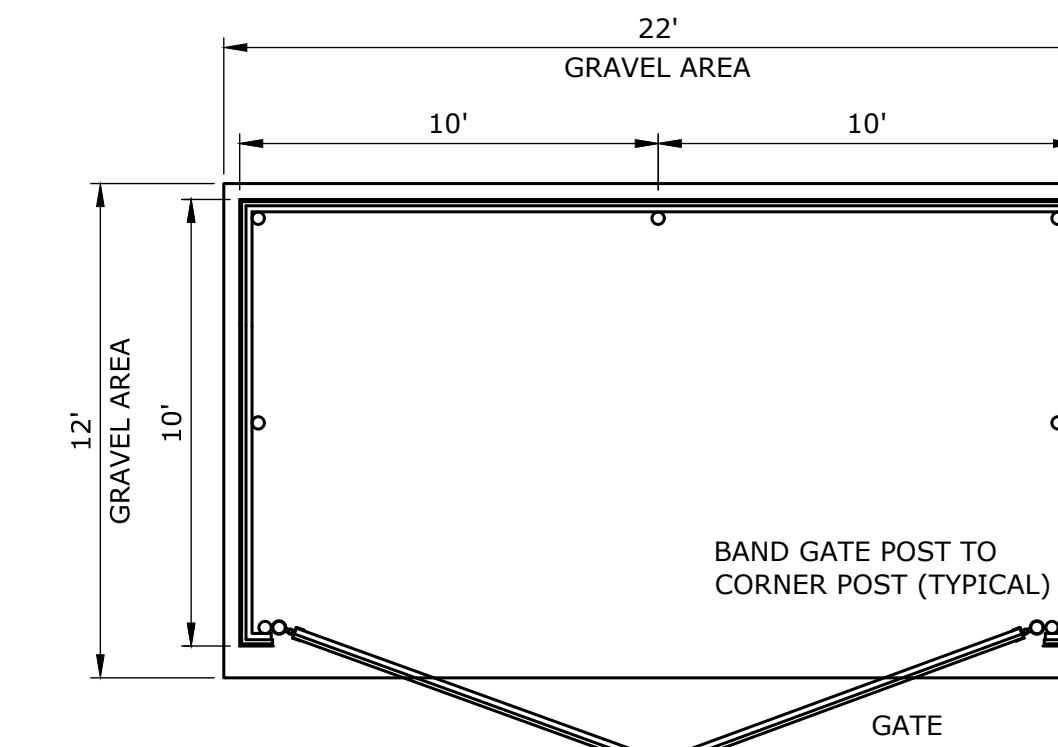
ROADWAY CROSS SECTION - GRAVEL
NOT TO SCALE



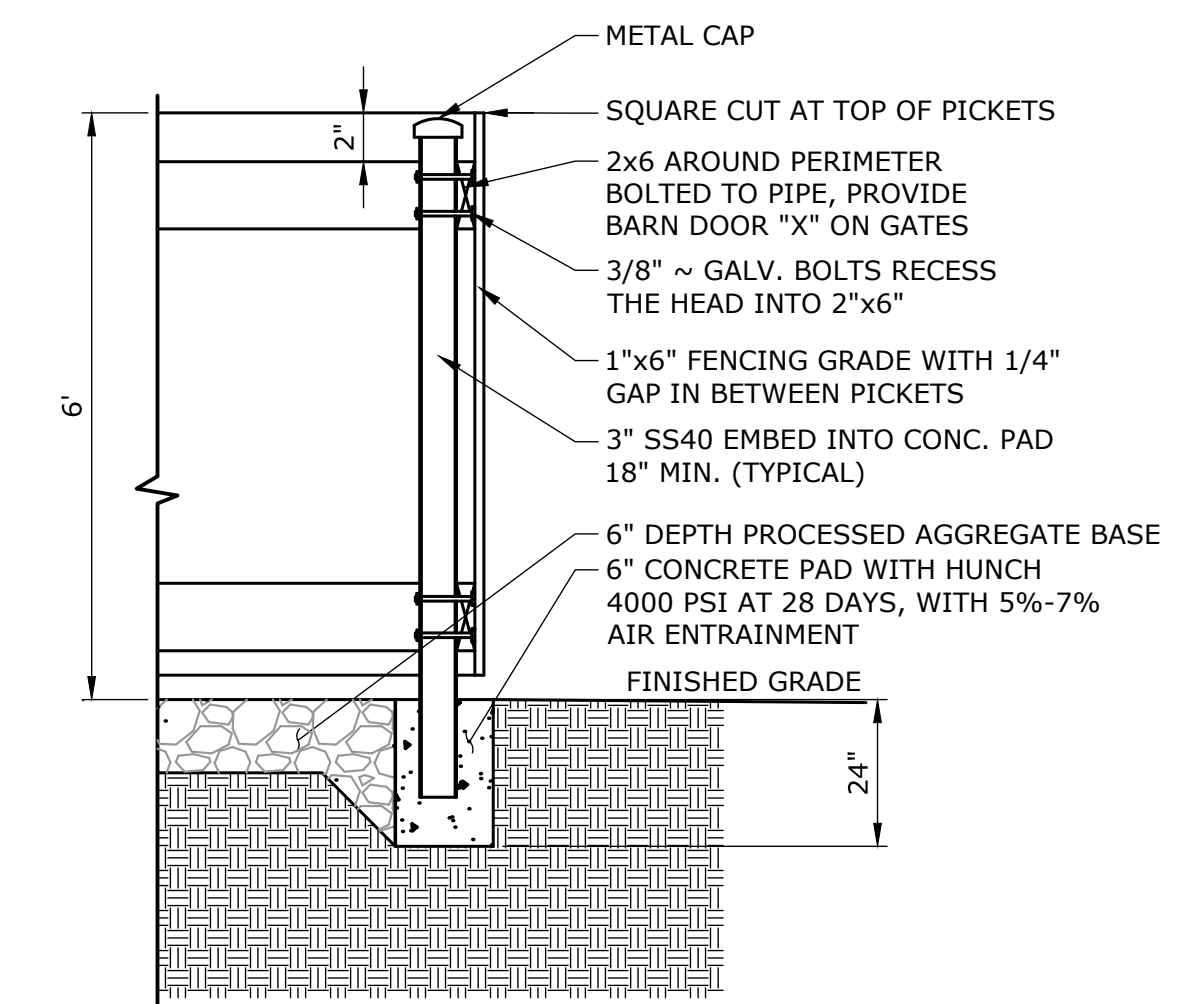
ROADWAY CROSS SECTION - TYPICAL WITH GUARDRAIL
NOT TO SCALE



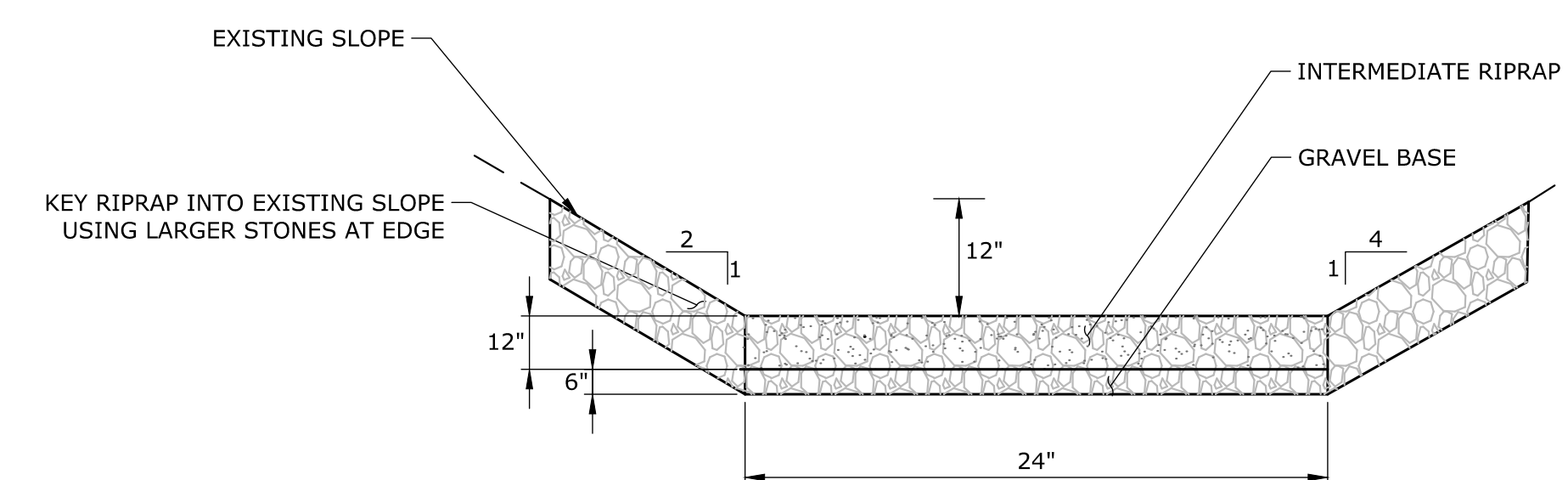
SPLIT RAIL FENCE
NOT TO SCALE



TIMBER GUIDE RAIL FACEMOUNT 10x10 POSTS
NOT TO SCALE



NOTES:
1. ALL WOODS TO BE WHITE CEDAR.
DUMPSTER SCREEN WITH STEEL FRAME
NOT TO SCALE



RIPRAP SWALE
NOT TO SCALE



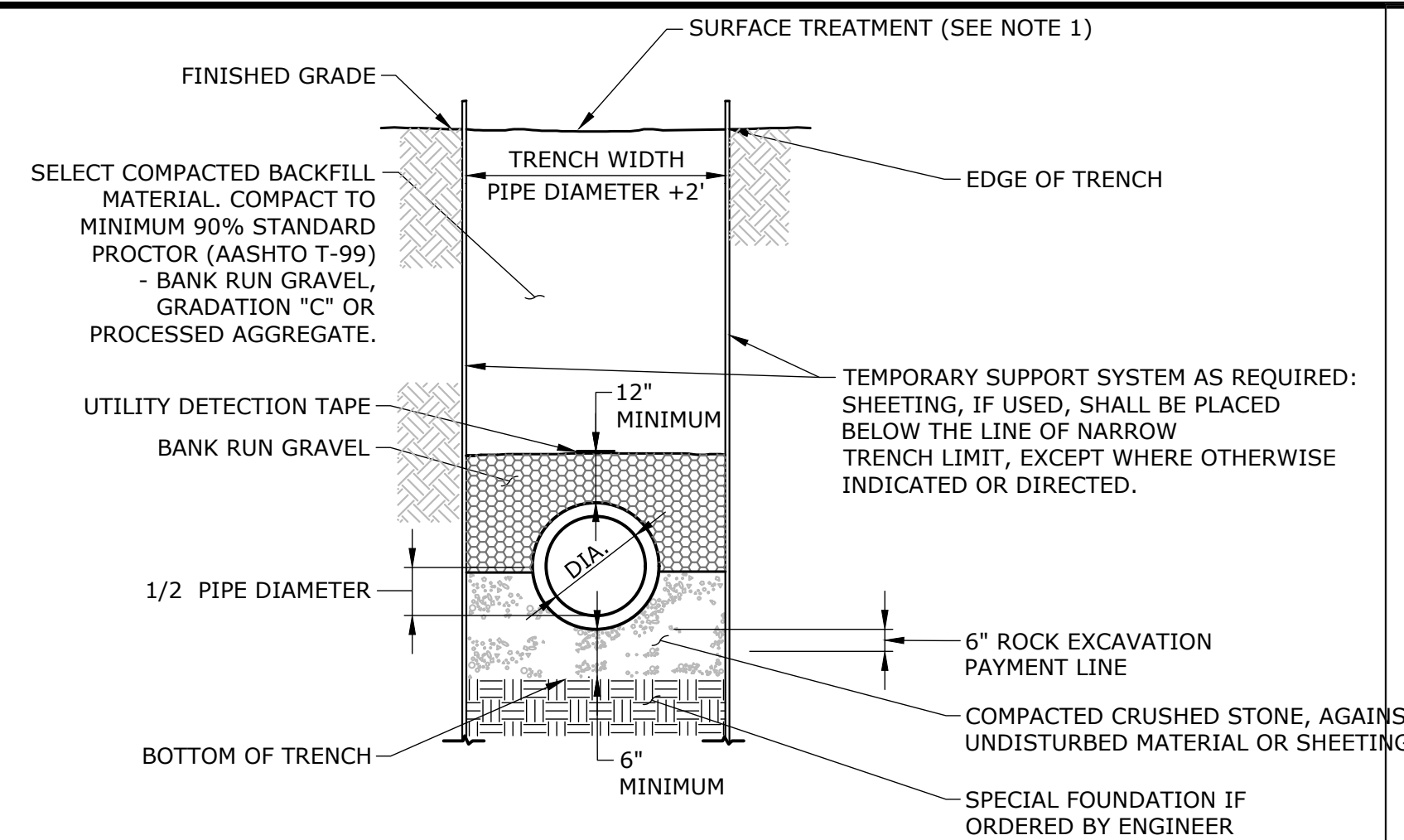
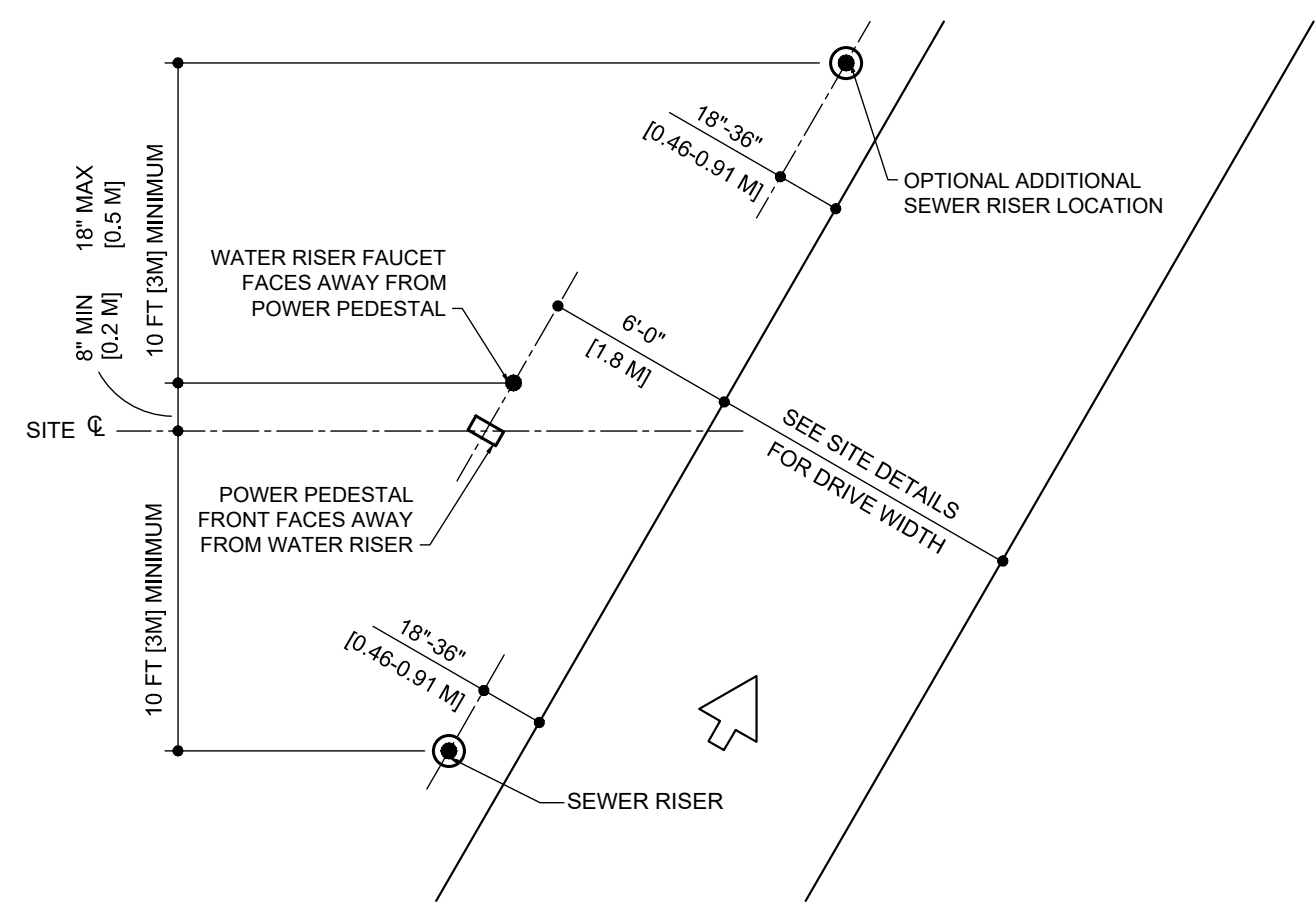
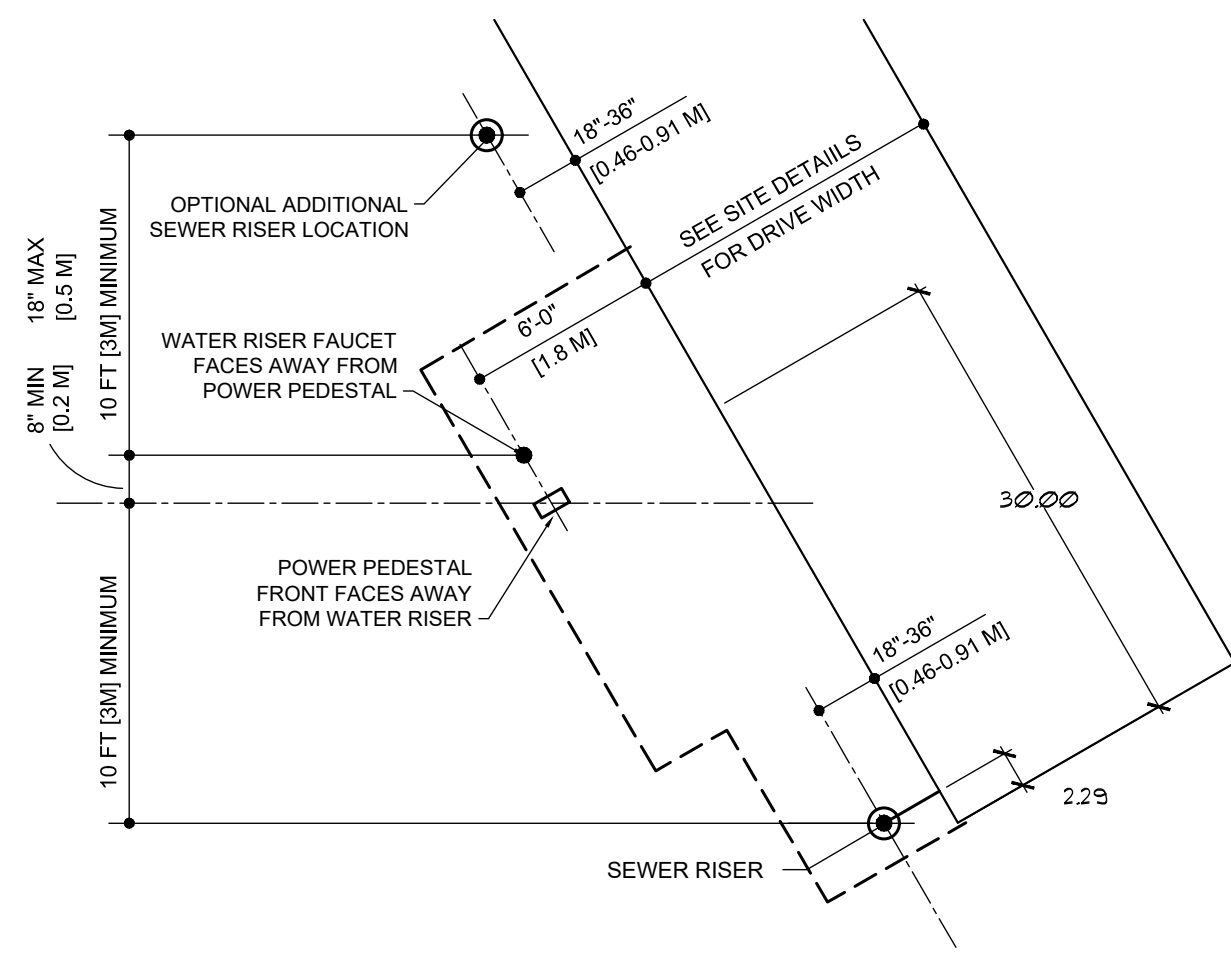
DESCRIPTION	DATE	BY
TOWN STAFF COMMENTS	1/10/2023	ACD
DETAIL REVISIONS	2/06/2023	ACD

SITE DETAILS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

ACD	ACD	RJM
DESIGNED	DRAWN	CHECKED

AS NOTED
DATE: NOVEMBER 9, 2022
PROJECT NO.: 20174.00002
SHEET NO.: 28 OF 30

SD-9



2000 GALLON REGULAR SEPTIC TANK

TANK DESIGN SPECIFICATION CONFORMS TO LATEST: ASTM DESIGNATION C1227

NOTES:

- JOINT SEALANT IS BUTYL RUBBER MASTIC TYPE SEAL THAT CONFORMS TO LATEST AASHTO SPECIFICATION M-198. MEETS FEDERAL SPECIFICATION SS-S-0021(210-A).
- PIPE INLET AND OUTLET LOCATIONS HAVE POLYLOK II PIPE SEALS.
- REINFORCING STEEL DEFORMED BARS CONFORM TO LATEST ASTM SPECIFICATION A615.
- REINFORCING STEEL WELDED WIRE FABRIC CONFORM TO LATEST ASTM SPECIFICATION A185.
- CONCRETE COMPRESSIVE STRENGTH- 4000 PSI AT 28 DAYS.
- METHOD OF MANUFACTURE: WET CAST.
- SECTIONS ARE MONOLITHIC.

WEIGHT CHART

PRODUCT	TANK	APPROX WEIGHT
		16100 LBS.

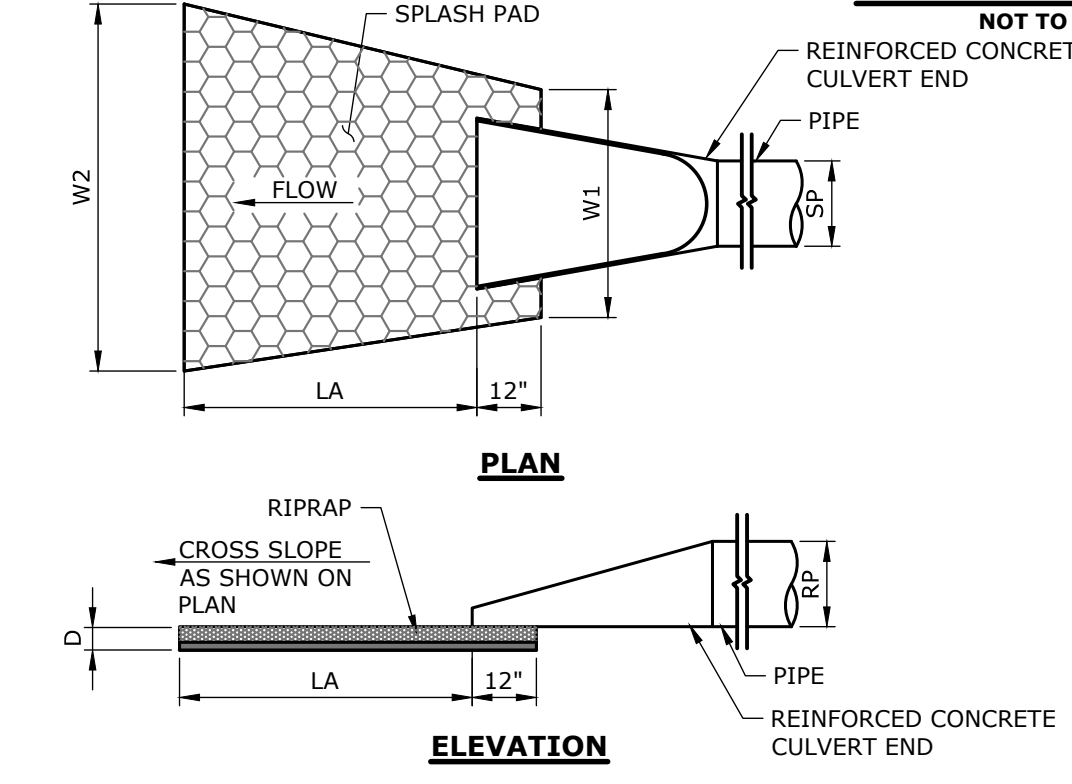
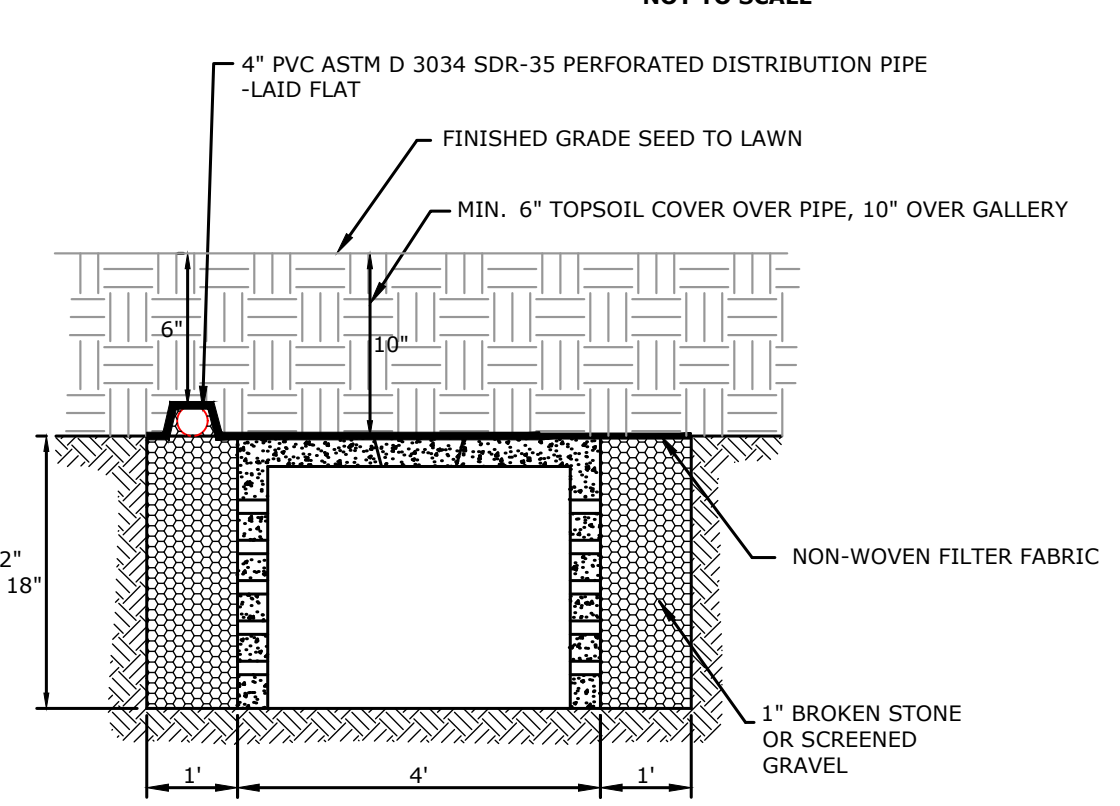
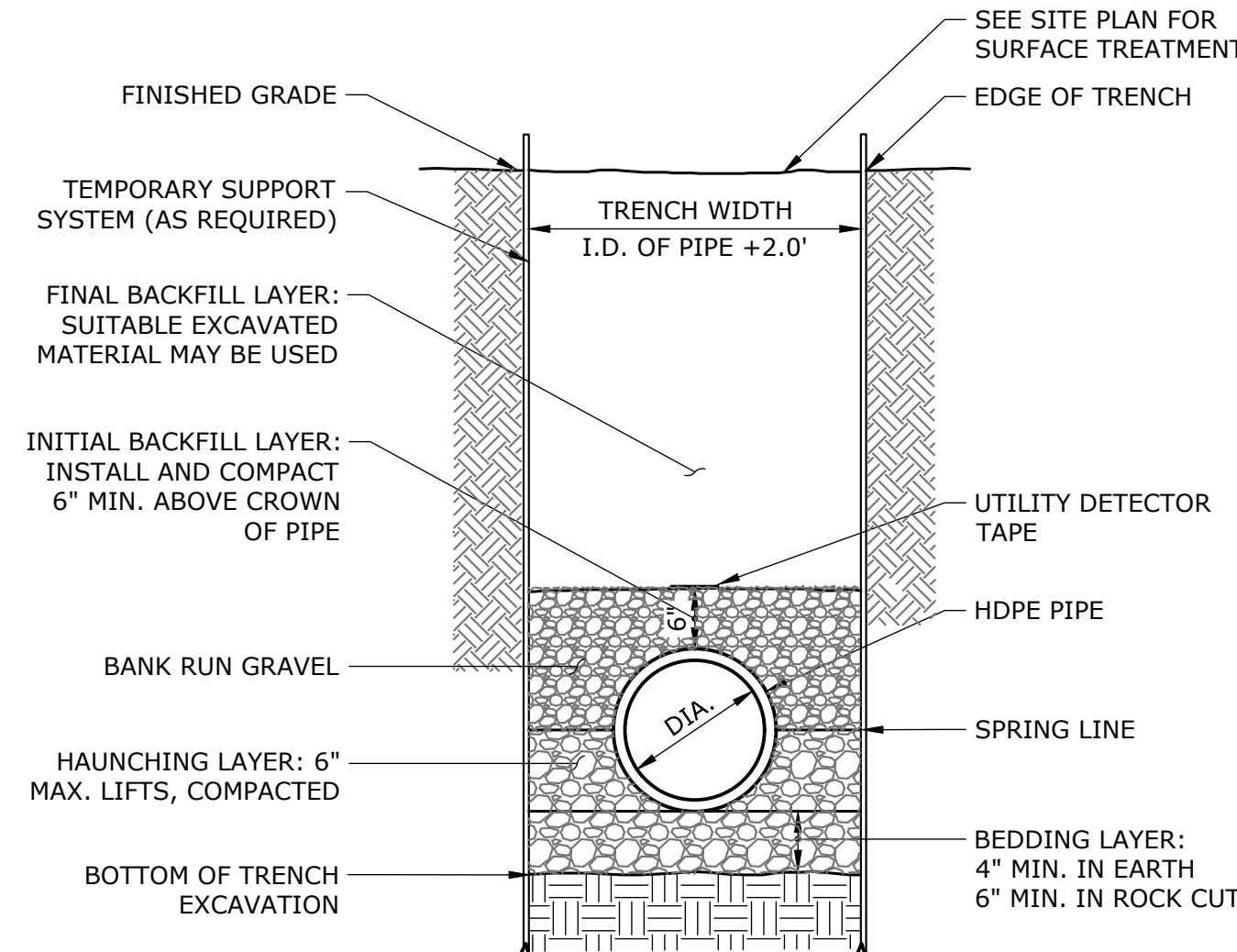
KOA DETAIL - BACK-IN SITE UTILITY LAYOUT DETAIL

KOA DETAIL - STANDARD PULL THROUGH UTILITY LAYOUT DETAIL

NOTES:

- SEE APPROPRIATE DETAIL FOR PAVEMENT REPAIR INFORMATION WHEN INSTALLING SANITARY SEWER MAINS IN PAVED AREAS.

SANITARY SEWER TRENCH



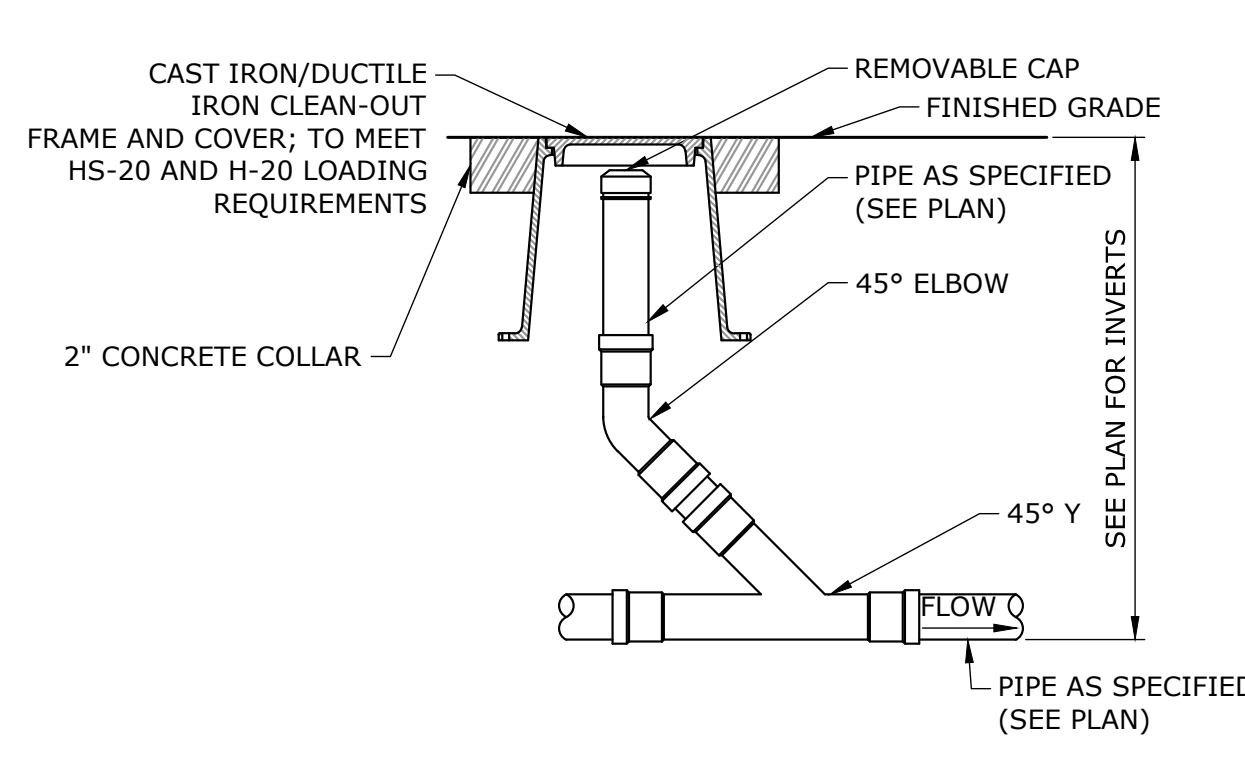
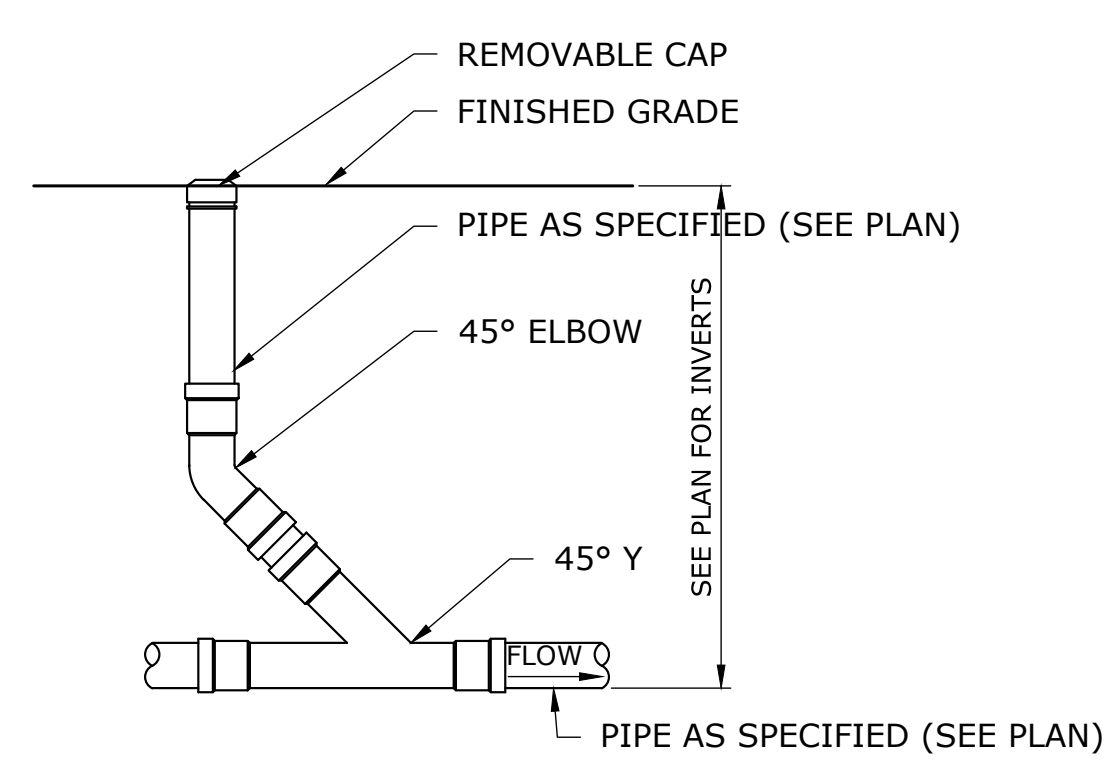
OUTLET PROTECTION ID	TYPE	SP (FT)	RP (FT)	LA (FT)	W1 (FT)	W2 (FT)	D (IN)
FES 5	INTERMEDIATE TYPE A	1.0	1.0	10.0	3.0	10.0	18
FES 8	STANDARD TYPE B	1.0	1.0	12.0	3.0	8.0	36
FES 13	MODIFIED TYPE A	1.0	1.0	10.0	3.0	10.0	12

TYPICAL SECTION THRU LEACHING GALLERY WITH TOP DISTRIBUTION PIPE

FLARED END WITH RIP RAP SPLASH PAD

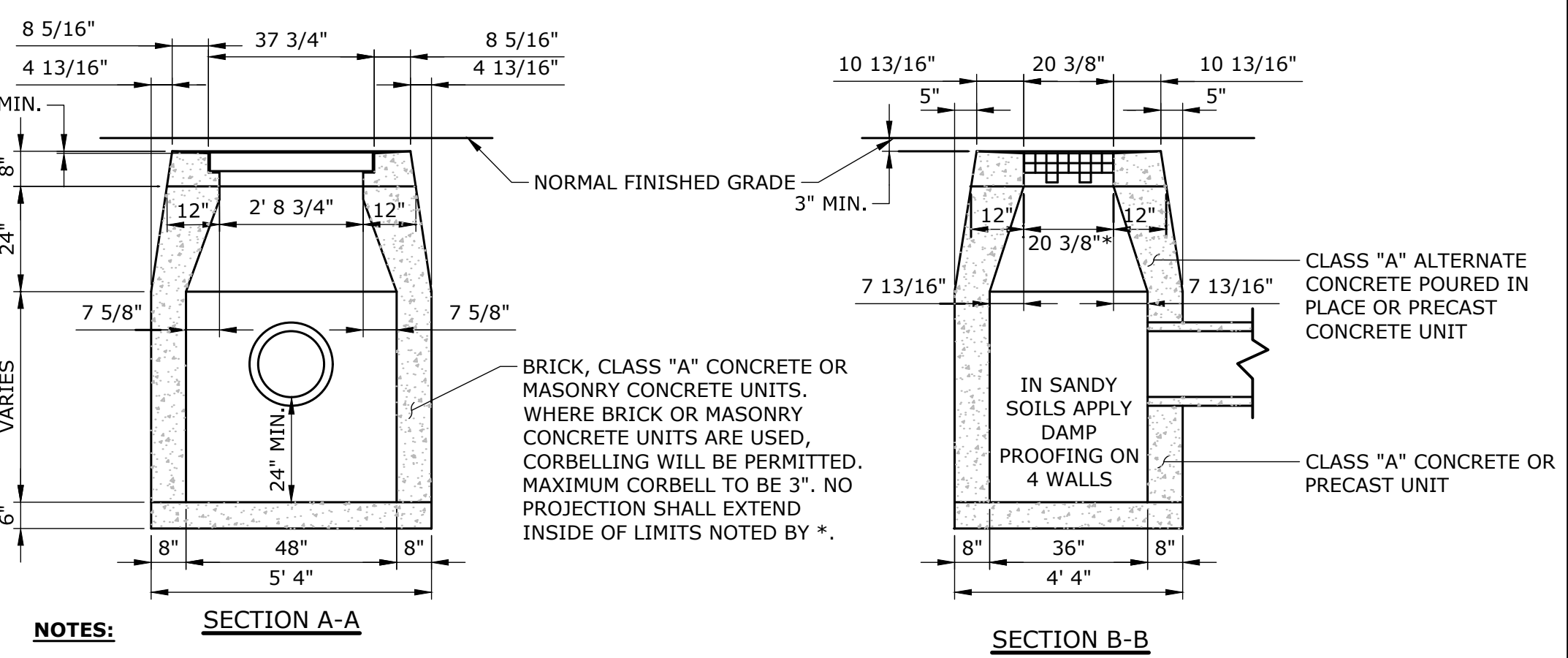
STORM DRAINAGE TRENCH

- NOTES:
- BACKFILL MATERIAL USED IN BEDDING AND HAUNCHING SHALL BE 3/4\"/>
 - PAYMENT LIMIT FOR ROCK IN TRENCH TO BE PIPE DIAMETER + 3.0'



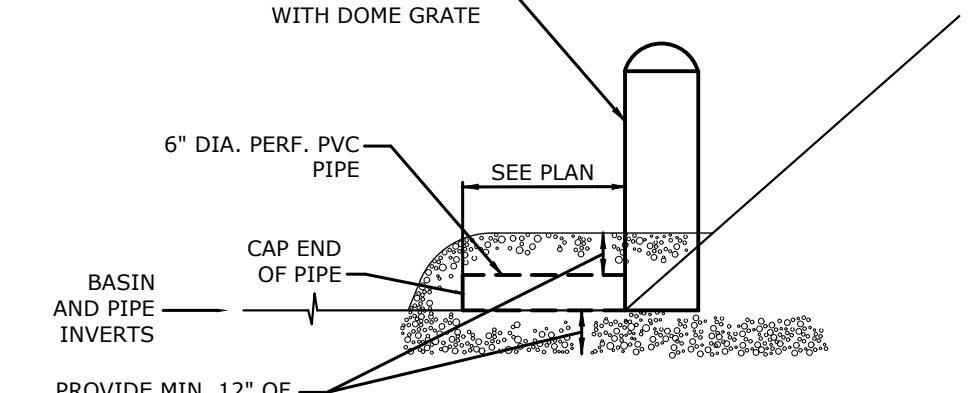
SANITARY/STORM CLEANOUT FOR USE ON PAVED AREAS

TYPE "C-L" CATCH BASIN

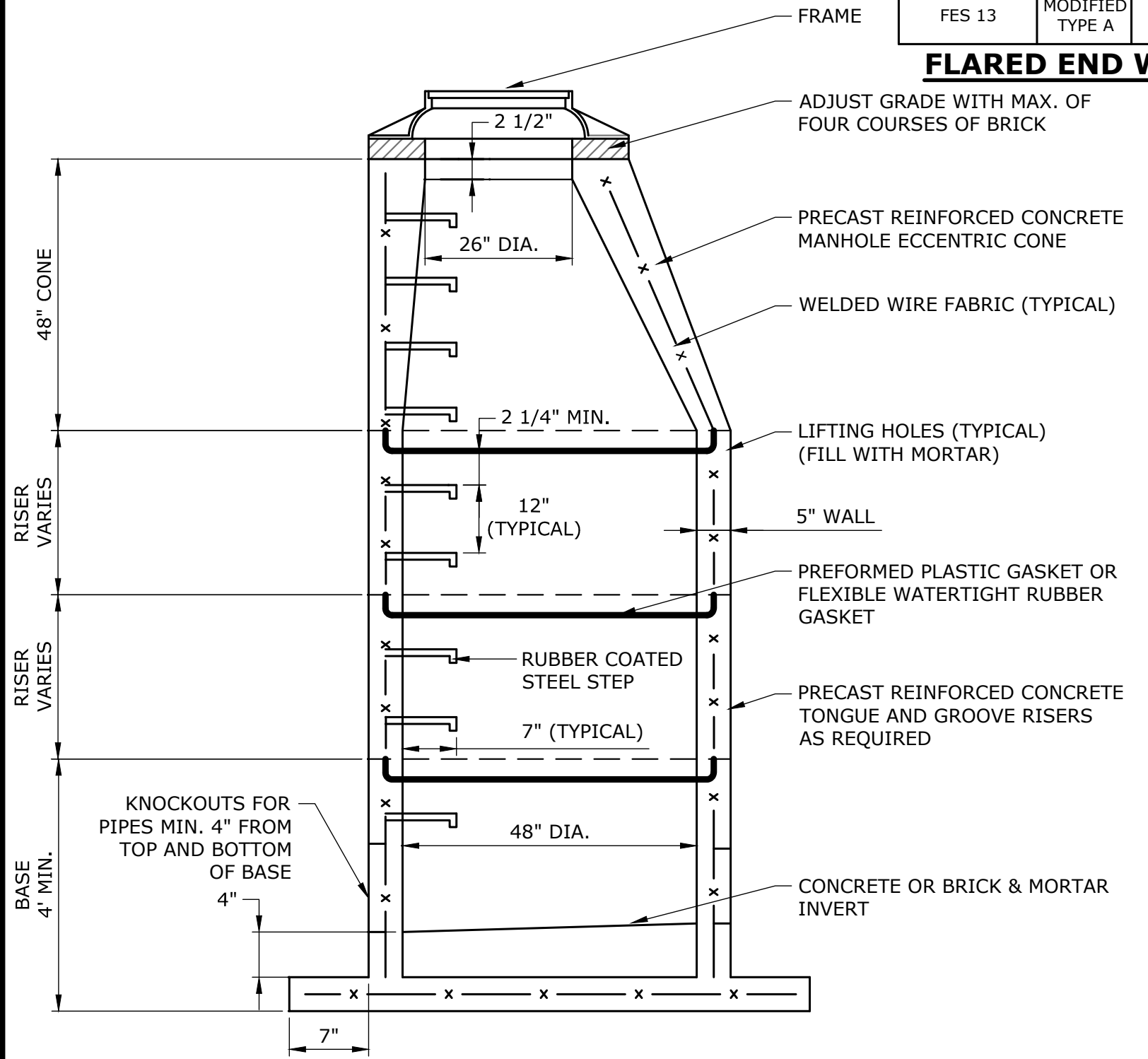


- NOTES:
- WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6\"/>

DEWATERING UNDERDRAIN



STORM MANHOLE



DESCRIPTION	DATE	BY
RIP RAP SWALE DETAIL	12/7/2022	ACD
TOWN STAFF COMMENTS	11/10/2022	ACD

SITE DETAILS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

DESIGNED	MLA	RJM
	DRAWN	CHECKED

SCALE: NOT TO SCALE
DATE: NOVEMBER 9, 2022
PROJECT NO: 20174.00002
SHEET NO: 29 OF 30

SD-10

FORMATION OF EMBANKMENTS FOR STORMWATER BASINS

1. MATERIALS

ALL FILL MATERIALS SHALL BE OBTAINED FROM REQUIRED EXCAVATIONS OR DESIGNATED BORROW AREAS. FILL MATERIAL SHALL CONTAIN NO FROZEN MATERIAL, SOD, BRUSH, ROOTS, OR OTHER ORGANIC MATERIAL. EARTH EMBANKMENTS SHALL CONTAIN NO STONES OR ROCK PARTICLES OVER THREE INCHES IN DIAMETER.

THE MATERIAL USED IN THE CENTER PORTION OF THE EMBANKMENT SHALL BE THE MOST IMPERVIOUS MATERIAL OBTAINED FROM THE BORROW AREAS. IF REQUIRED, THE MORE PERVIOUS MATERIALS SHALL BE USED IN THE OUTER PORTION OF THE EMBANKMENT AS SHOWN ON THE PLANS.

A. IMPERVIOUS FILL MATERIALS

IMPERVIOUS FILL SHALL BE A GLACIAL TILL, AND TO BE PROVIDED FROM AN OFFSITE SOURCE IN THE QUANTITIES REQUIRED FOR COMPLETION. FILL TO BE PROVIDED BY THE ENGINEER. GLACIAL TILL SHALL CONSIST OF HARD AND DURABLE PARTICLES OR FRAGMENTS AND SHALL BE FREE FROM ORGANIC MATTER AND OTHER OBJECTIONABLE MATERIALS. GLACIAL TILL SHALL GENERALLY CONFORM TO THE FOLLOWING GRADATION LIMITS:

U.S. STANDARD SIEVE SIZE	PERCENTAGE PASSING	BY WEIGHT
3 INCH	100	
NO. 4	60-95	
NO. 10	50-95	
NO. 40	30-75	
NO. 100	20-65	
NO. 200	10-40	

2. EMBANKMENT FOUNDATION PREPARATION

AREAS WHERE EMBANKMENTS ARE TO BE FORMED SHALL BE CLEARED AND GRUBBED OF ALL TOPSOIL AND OTHER ORGANIC MATERIALS TO A DEPTH OF AT LEAST 24 INCHES. UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS, FOUNDATION AREAS SHALL BE SCARIFIED TO A DEPTH OF THREE INCHES PRIOR TO PLACEMENT OF FILL MATERIAL.

3. PLACEMENT

NO FILL SHALL BE PLACED UNTIL THE FOUNDATION PREPARATION AND EXCAVATIONS IN THE FOUNDATION HAVE BEEN COMPLETED. NO FILL SHALL BE PLACED ON A FROZEN SURFACE NOR SHALL FROZEN MATERIAL BE INCORPORATED.

A. EMBANKMENT

MATERIAL SHALL BE PLACED IN HORIZONTAL LAYERS. THE THICKNESS OF LAYERS SHALL BE SIX INCHES. DURING CONSTRUCTION, THE SURFACE OF THE FILL SHALL HAVE A CROWN OR CROSS-SLOPE OF NOT LESS THAN TWO PERCENT. EACH LAYER OR LIFT SHALL EXTEND OVER THE ENTIRE AREA OF THE FILL.

THE FILL SHALL BE FREE FROM LENSES, POCKETS, STREAKS, OR LAYERS OF MATERIAL DIFFERING SUBSTANTIALLY IN TEXTURE OR GRADATION FROM THE SURROUNDING MATERIAL. THE MORE PERVIOUS MATERIAL SHALL BE PLACED IN THE OUTSIDE PORTION OF THE EMBANKMENT OR AS INDICATED ON THE DRAWINGS. THE FINISHED FILL SHALL BE SHAPED AND GRADED TO THE LINES AND GRADE SHOWN ON THE DRAWINGS.

B. BACKFILL AT THE PIPE OUTLET

BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED THREE INCHES IN THICKNESS AND SHALL BE BROUGHT UP UNIFORMLY AROUND THE OUTLET PIPE AND FLARED END SECTION.

4. MOISTURE CONTROL

THE MOISTURE CONTENT OF MATERIALS IN THE EMBANKMENT SHALL BE CONTROLLED TO MEET THE REQUIREMENTS OF SECTION 5, "COMPACTION OF EMBANKMENT." WHEN NECESSARY, MOISTURE SHALL BE ADDED BY USE OF APPROVED SPRINKLING EQUIPMENT. WATER SHALL BE ADDED UNIFORMLY AND EACH LAYER SHALL BE THOROUGHLY DISKED OR HARROWED TO PROVIDE PROPER MIXING. ANY LAYER FOUND TOO WET FOR PROPER COMPACTION SHALL BE ALLOWED TO DRY BEFORE ROLLING. PLACING OR ROLLING OF MATERIAL ON EARTH FILLS WILL NOT BE PERMITTED DURING OR IMMEDIATELY AFTER RAINFALLS WHICH INCREASE THE MOISTURE CONTENT BEYOND THE LIMIT OF SATISFACTORY COMPACTION. THE EARTH FILL SHALL BE BROUGHT UP UNIFORMLY AND ITS TOP SHALL BE KEPT GRADED AND SLOPED SO THAT A MINIMUM OF RAINWATER WILL BE RETAINED THEREON. COMPACTED EARTH FILL DAMAGED BY WASHING SHALL BE ACCEPTABLY REPLACED BY THE CONTRACTOR.

5. COMPACTION

A. EMBANKMENT
EMBANKMENT MATERIAL SHALL BE COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY AT NEAR OPTIMUM MOISTURE CONTENT AND BY THE COMPACTION EQUIPMENT SPECIFIED HEREIN. THE COMPACTION EQUIPMENT SHALL TRAVERSE THE ENTIRE SURFACE OF EACH LAYER OF FILL MATERIAL.

APPROVED TAMPING ROLLERS SHALL BE USED FOR COMPACTING ALL PARTS OF THE EMBANKMENTS WHICH THEY CAN EFFECTIVELY REACH. THE CONTRACTOR SHALL DEMONSTRATE THE EFFECTIVENESS OF THE ROLLER BY ACTUAL SOIL COMPACTION RESULTS OF THE SOIL TO BE USED IN THE EMBANKMENT WITH LABORATORY WORK PERFORMED BY AN APPROVED SOIL TESTING LABORATORY.

B. BACKFILL AT OUTLET CONDUIT

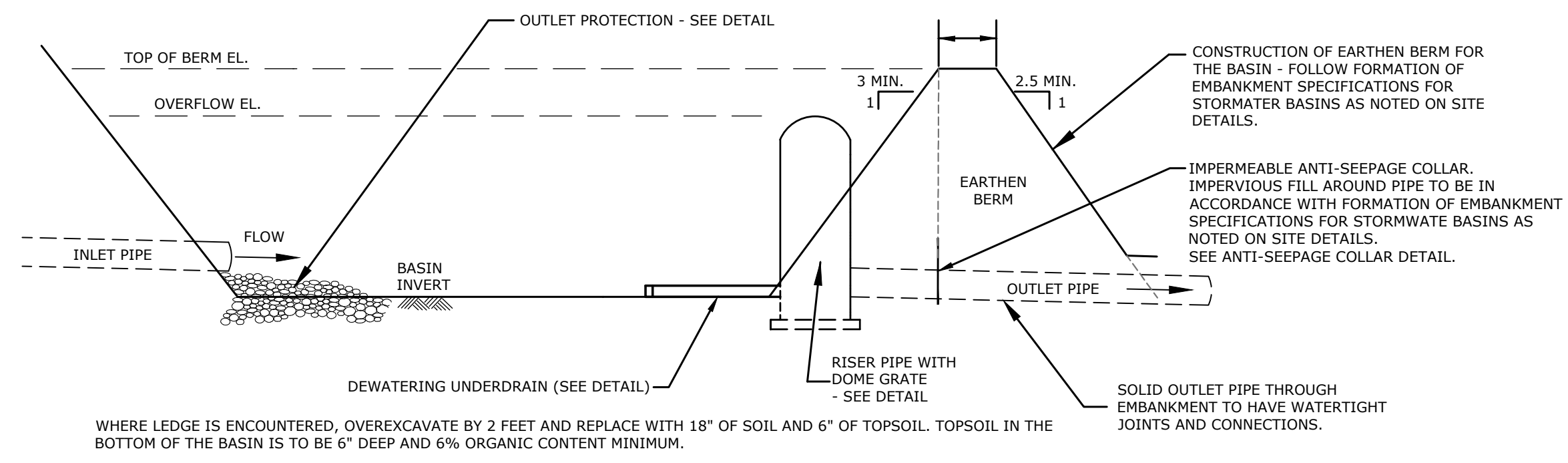
BACKFILL SHALL BE COMPACTED BY HAND TAMPING WITH MECHANICAL TAMPERS. HEAVY EQUIPMENT SHALL NOT BE OPERATED WITHIN TWO FEET OF ANY STRUCTURE. EQUIPMENT SHALL NOT BE ALLOWED TO OPERATE OVER THE OUTLET CONDUITS UNTIL THERE IS 24 INCHES OF FILL OVER THE PIPE CONDUITS.

6. FINISHING EMBANKMENTS

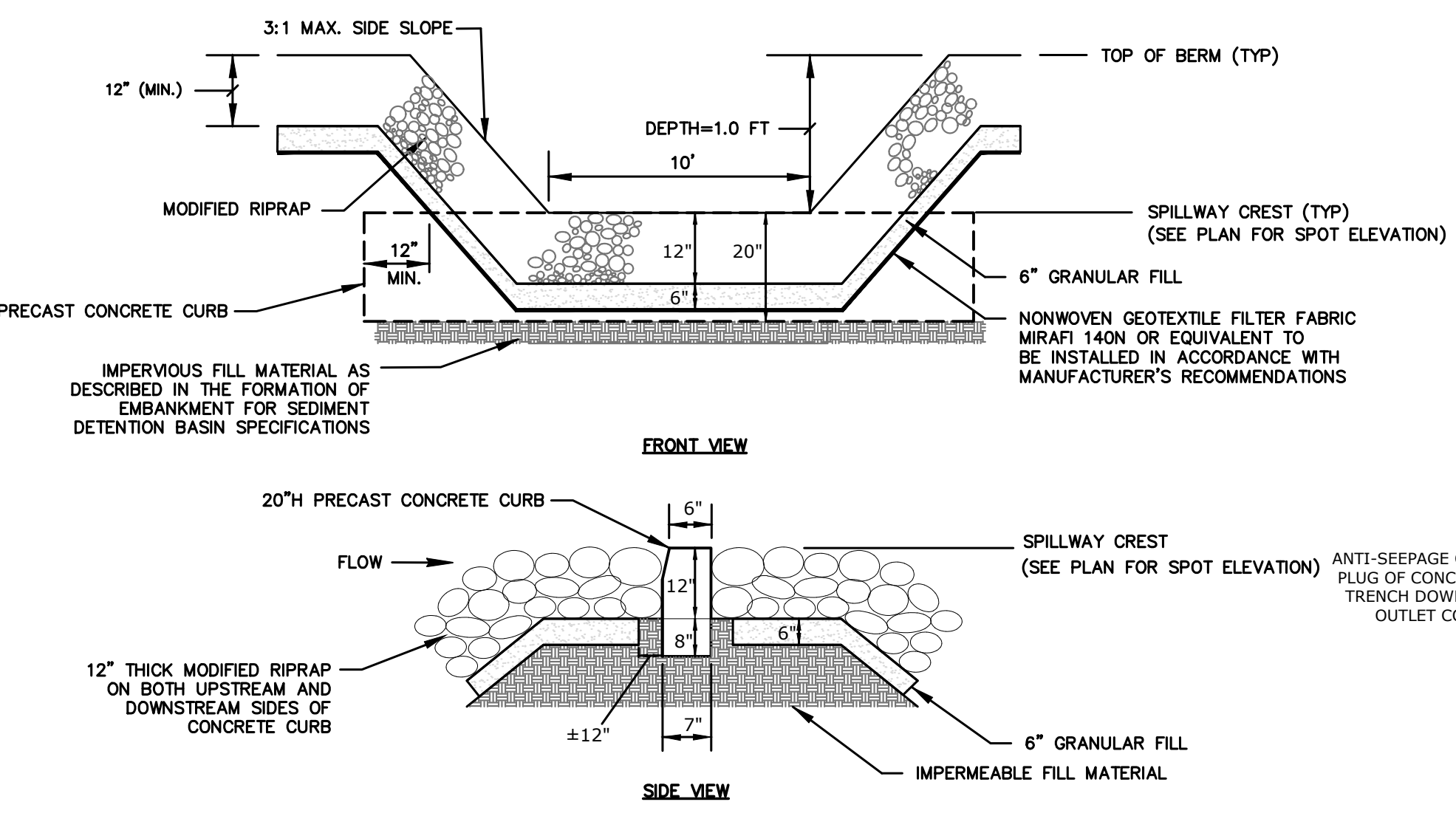
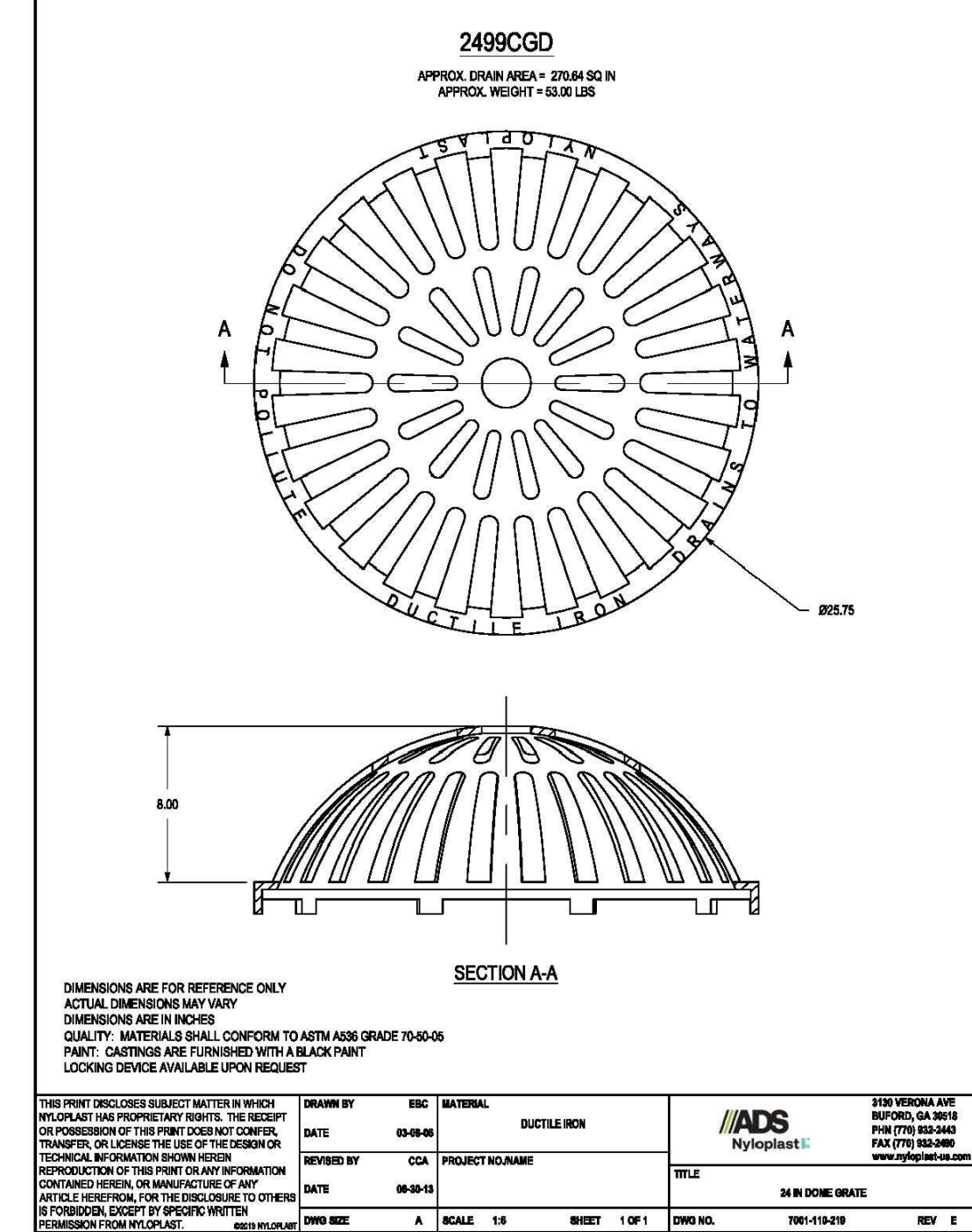
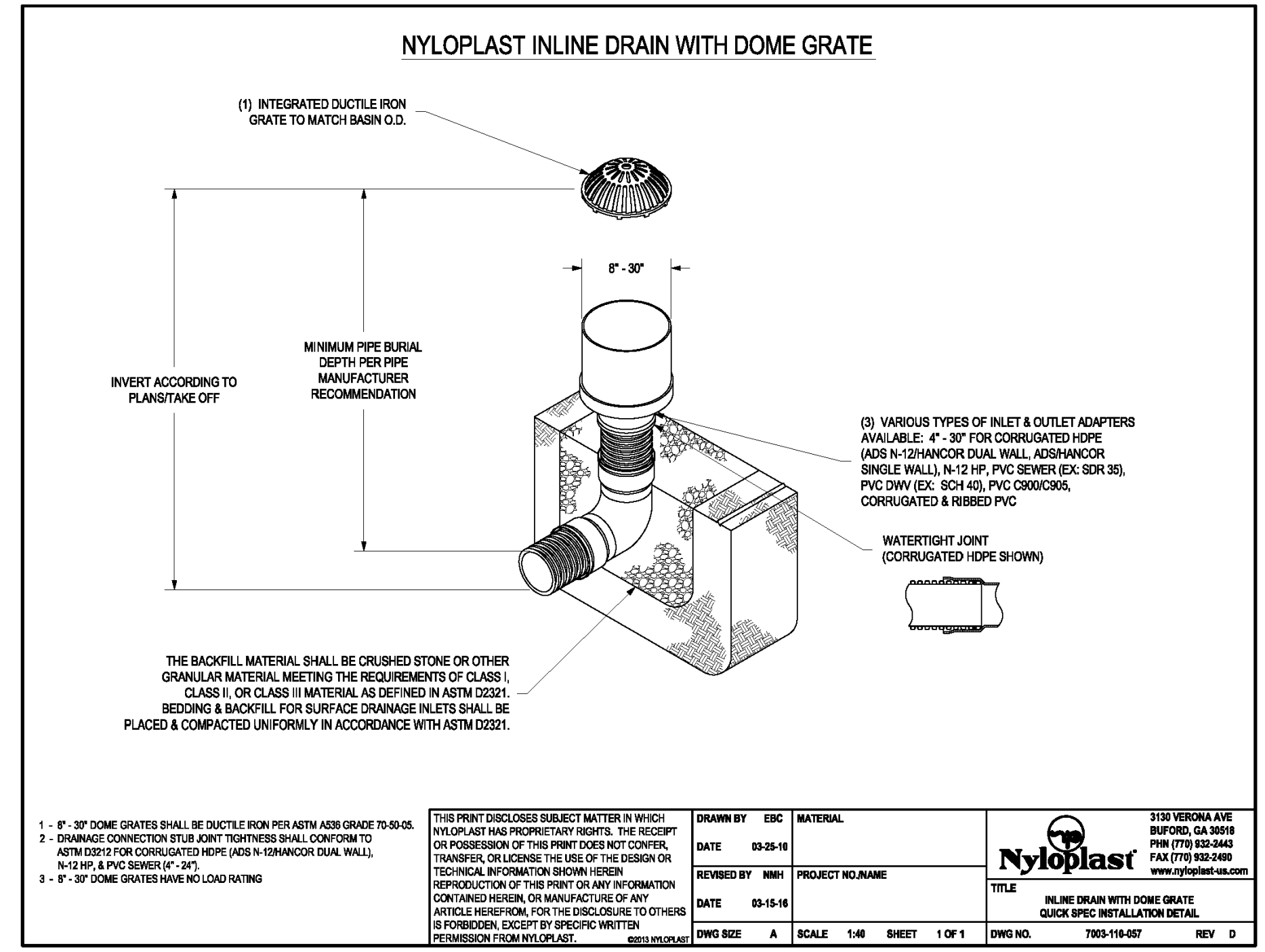
THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE ELEVATIONS, LINES, GRADES AND CROSS-SECTIONS AS SHOWN ON THE DRAWINGS. THE EMBANKMENTS SHALL BE MAINTAINED IN A MANNER SATISFACTORY TO THE ENGINEER AND SURFACES SHALL BE COMPACT AND ACCURATELY GRADED BEFORE TOPSOIL IS PLACED ON THEM. THE CONTRACTOR SHALL CHECK THE EMBANKMENT SLOPES WITH STRING LINES TO INSURE THAT THEY CONFORM TO THE SLOPES GIVEN ON THE PLANS AND ARE UNIFORM FOR THE ENTIRE LENGTH OF THE SLOPE.

7. CONTROL OF WATER

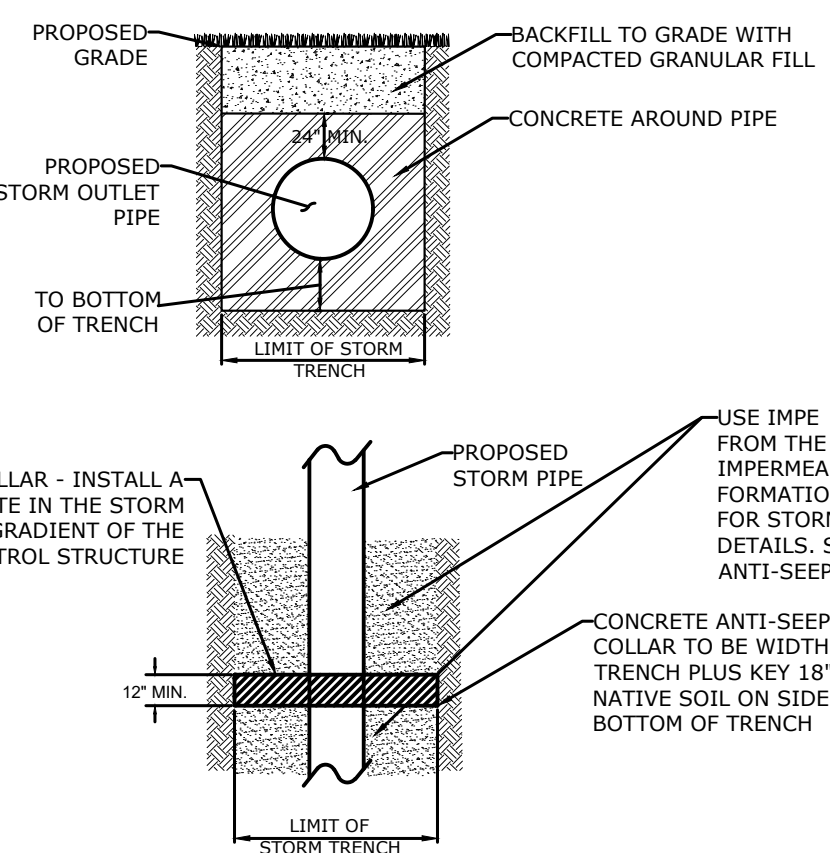
THE PROJECT SITE IS SUBJECT TO HIGH WATER TABLE. THE CONTRACTOR SHALL USE TEMPORARY PIPES OR PUMPS TO ASSURE PLACEMENT OF SELECT FILL IN DRY CONDITIONS.



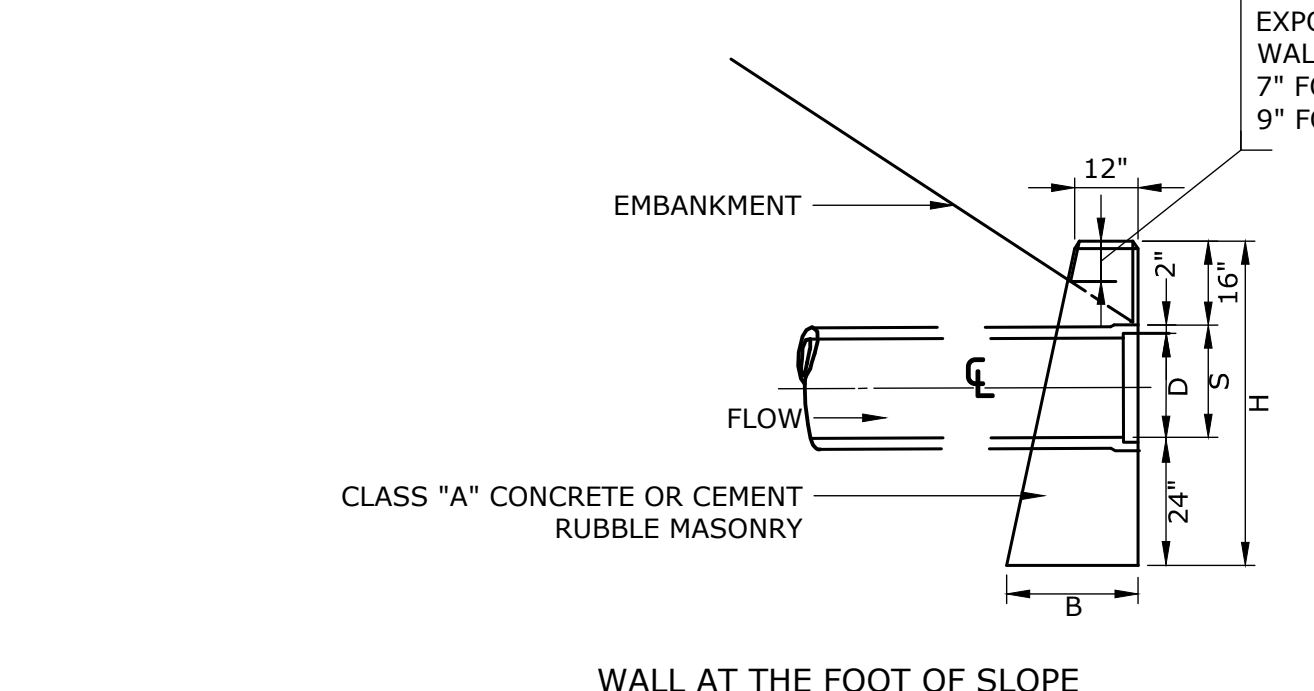
TYPICAL DETENTION BASIN
NOT TO SCALE



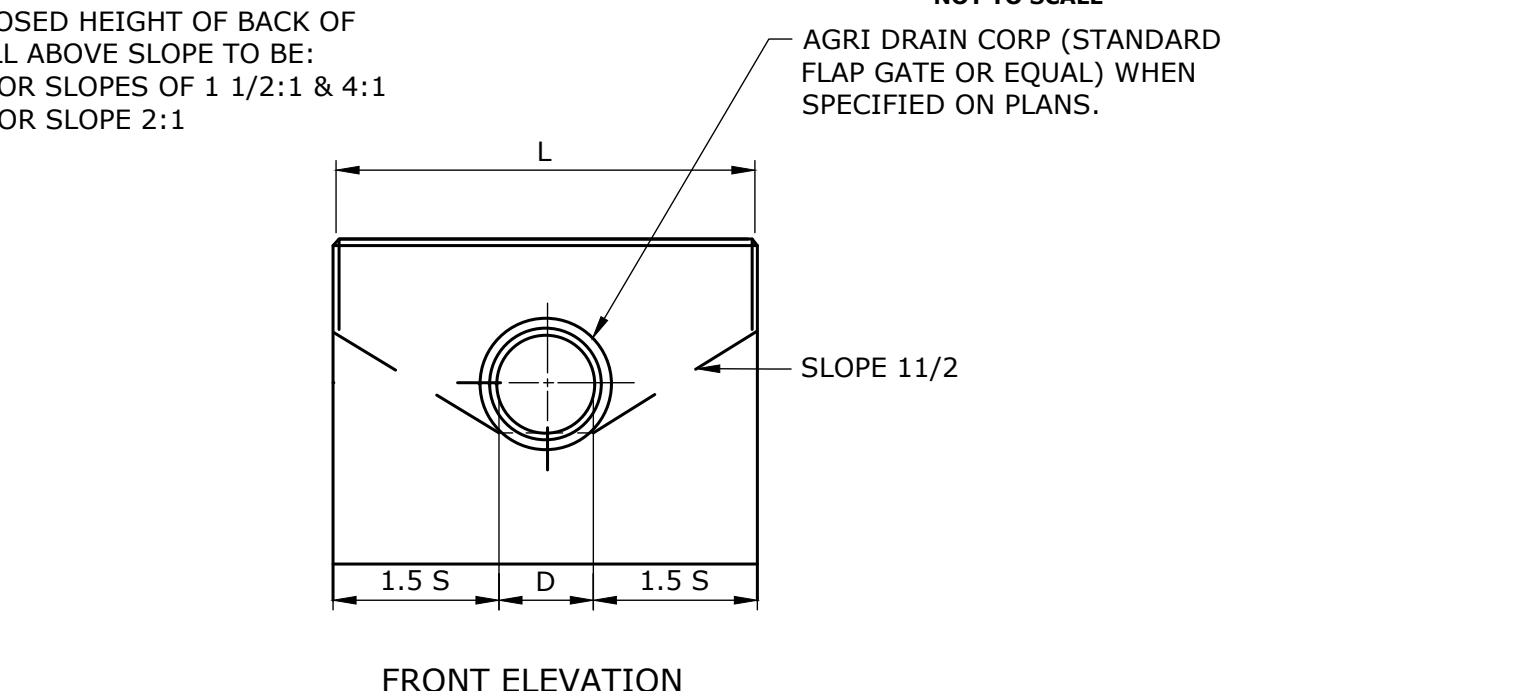
EMERGENCY RIPRAP SPILLWAY
NOT TO SCALE



ANTI SEEPAGE COLLAR
NOT TO SCALE



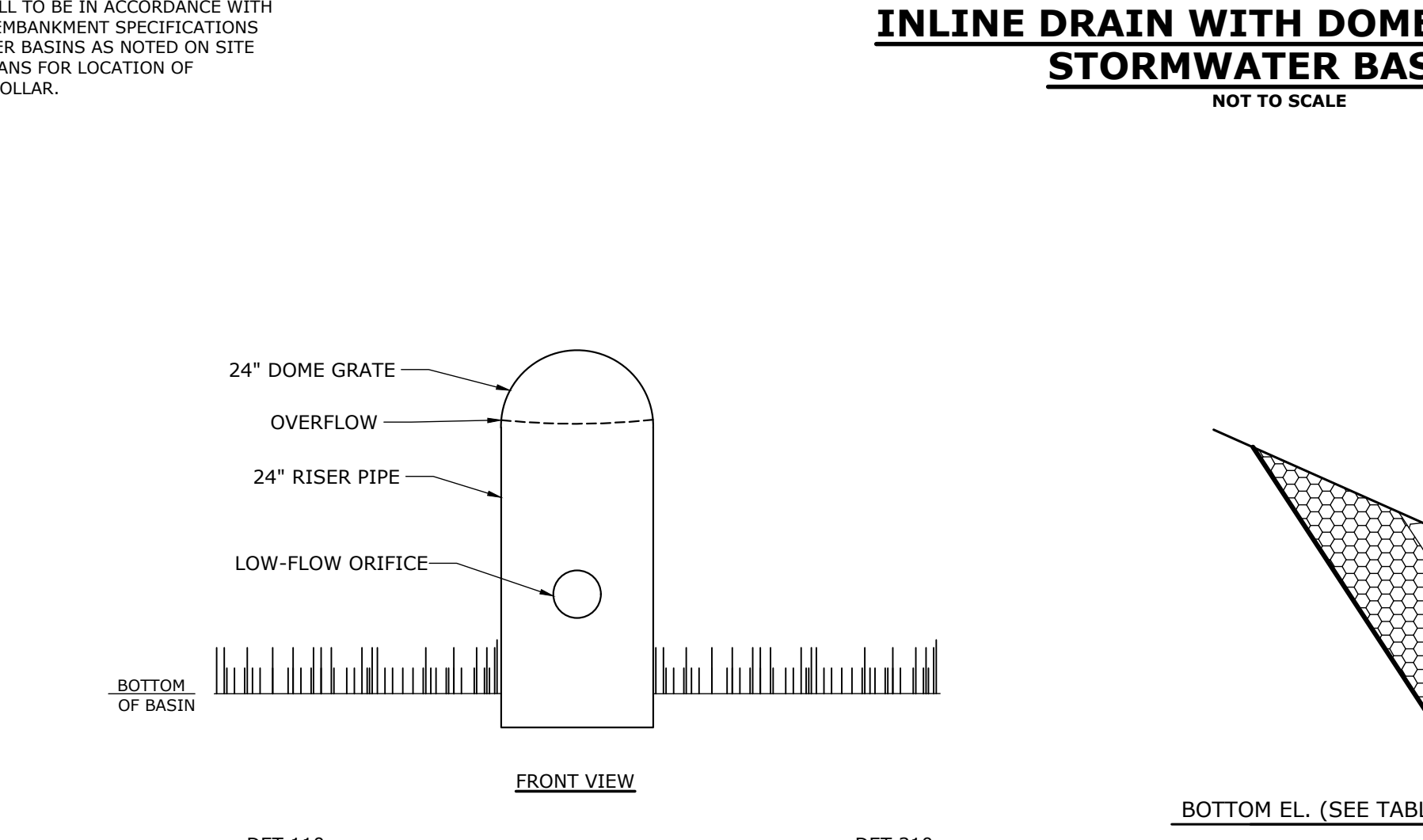
WALL AT THE FOOT OF SLOPE



DEWATERING UNDERDRAIN
NOT TO SCALE

- NOTES:**
- H = TOTAL HEIGHT OF ENDWALL
 - B = BASE
 - D = INSIDE DIAMETER OF PIPE
 - S = HEIGHT OF SLOPE ABOVE FLOW LINE AT FACE OF WALL - MINIMUM = D+2
 - L = LENGTH OF WALL = 3S+D
- CONCRETE END WALL MAY BE SUBSTITUTED WITH STONE END WALL UPON APPROVAL.
 - ALL EDGES OF EXPOSED SURFACES TO BE CHAMFERED APPROXIMATELY 1"
 - VOLUME BASED ON "D" AND WALL THICKNESS AT 1/4 OF PIPE HAS BEEN DEDUCTED.

CONCRETE HEADWALL
NOT TO SCALE

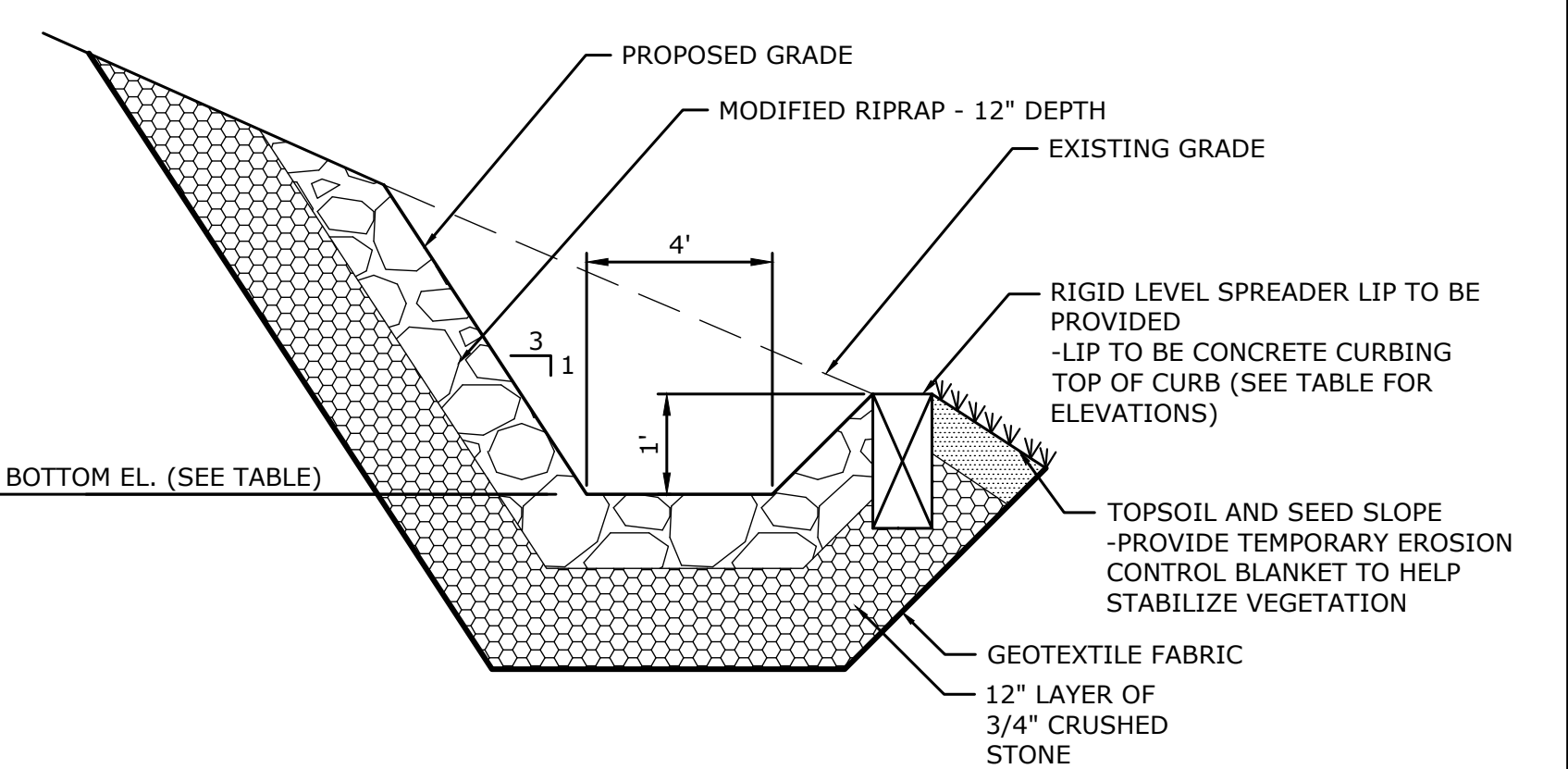


INLINE DRAIN WITH DOME GRATE FOR STORMWATER BASINS
NOT TO SCALE

	DET 110	DET 310
TOP OF BERM ELEVATION	1142.0	1156.0
OVERFLOW ELEVATION	1140.5	1153.5
100-YEAR WATER SURFACE ELEV.	1141.0	1155.0
LOW FLOW ORIFICE DIAMETER	6.0"	8.0"
LOW FLOW ORIFICE INVERT	1137.0	1152.0
OUTLET PIPE DIAMETER	15"	15"
OUTLET PIPE INVERT	1136.0	1151.0
BASIN BOTTOM ELEVATION	1136.0	1151.0

	DET 120	DET 410
TOP OF BERM ELEVATION	1138.0	1134.0
OVERFLOW ELEVATION	1136.4	1131.9
100-YEAR WATER SURFACE ELEV.	1137.0	1133.0
LOW FLOW ORIFICE DIAMETER	6.0"	8.0"
LOW FLOW ORIFICE INVERT	1134.4	1129.1
OUTLET PIPE DIAMETER	15"	15"
OUTLET PIPE INVERT	1134.0	1128.0
BASIN BOTTOM ELEVATION	1134.0	1128.0

DETENTION BASIN OUTLET CONTROL STRUCTURES
SCALE: 1"=2'



LEVEL SPREADER ID	BOTTOM EL. (FT)	TOP OF CURB EL. (FT)
110	1135.0	1136.0
120	1133.0	1134.0
310	1149.0	1150.0
410	1125.0	1126.0

LEVEL SPREADER
NOT TO SCALE



BY	DATE	DESCRIPTION

SITE DETAILS
LITCHFIELDS HILLS CT
KOA CAMPGROUND
232 KLUG HILL ROAD
TORRINGTON, CONNECTICUT

DESIGNED	MLA	RJM

NOT TO SCALE

NOVEMBER 9, 2022

20174.00002

30 OF 30

SD-11