



**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT NAME: GAS LAND PETROLEUM, INC.
PROJECT NO.: 2019-16
PROJECT LOCATION: 5200 ROUTE 9W
SECTION 43, BLOCK 5, LOT 1
REVIEW DATE: 13 SEPTEMBER 2024
MEETING DATE: 19 SEPTEMBER 2024
PROJECT REPRESENTATIVE: LABELLA

1. The subsurface sanitary sewer disposal system has been revised according to our previous comments. Surface sanitary sewer disposal system is now located in an area without proposed filling. The system is designed to treat 356 gallons per day based on the SSDS Demand Calculations provided.
2. Approval from NYSDOT for the entrance drive is required.
3. The NYSDOT is requiring a left turn lane within NYS Route 9W. Approval of this left turn lane is required. Ken Wersted's comments regarding this should be received.
4. A watermain has been depicted on the plans which has been up-sized to 8 inches. An easement in favor of the Town of Newburgh is proposed. Any approval should address the easement for the watermain.
5. Orange County Health Department approval for watermain extension with hydrants is required.
6. The plan requires the abandonment of on-site wells. Approval resolution should address the requirement to abandon the wells in compliance with applicable codes.
7. A note appears on the plan identifying potential underground tanks, potential contaminated soil and previous piping. Status of any underground tanks should be identified and addressed on the plans.
8. A permit from the Town of Newburgh is required for any tank removals.
9. Coordination with Central Hudson Gas and Electric should be undertaken regarding proposed activities within the Central Hudson gas line easement. Several proposed utilities including stormwater, potable water as well as the site access drive improvements cross the Central Hudson high pressure gas main.

NEW YORK OFFICE

33 Airport Center Drive, Suite 202, New Windsor, NY 12553
845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

PENNSYLVANIA OFFICE

111 Wheatfield Drive, Suite 1, Milford, PA 18337
570-296-2765 | F: 570-296-2767 | mhepa@mhepc.com

10. Status of NYSDOT's approval for sidewalks which are within the right-of-way and on the project, site should be addressed.
11. Architectural review of the commercial buildings will eventually be required prior to approvals.
12. Approval for stormwater connection to DOT catch basin required.
13. Since the project was previously before the Board the Town has adopted a Tree Preservation Ordinance. Compliance with the Tree Preservation Ordinance must be documented.
14. A location on the plan where the former subsurface sanitary disposal system material is to be buried should be depicted.
15. Information pertaining to the existing 2-story dwellings subsurface sanitary sewer disposal system should be provided.
16. Ken Wersted's comments on the improvements should be received.
17. Any architectural review should address signage proposed on the site. It is noted that signage on the canopy requires ZBA approval.
18. Final review of the SWPPP prepared for the site is being undertaken. The site is a stormwater hot spot. This must be addressed on the SWPPP.

Respectfully submitted,

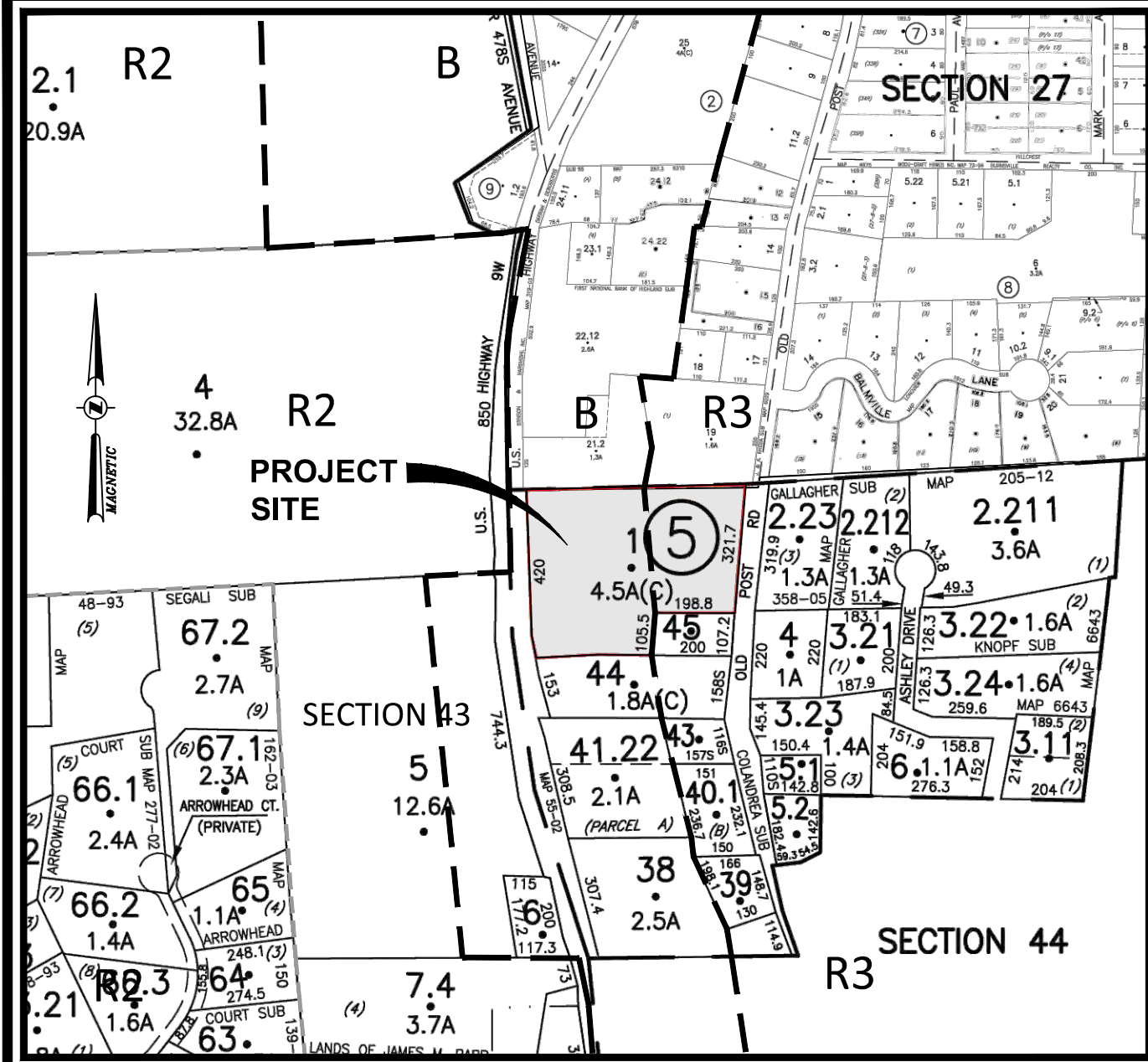
MHE Engineering, D.P.C.



Patrick J. Hines
Principal
PJH/kmm/kbw

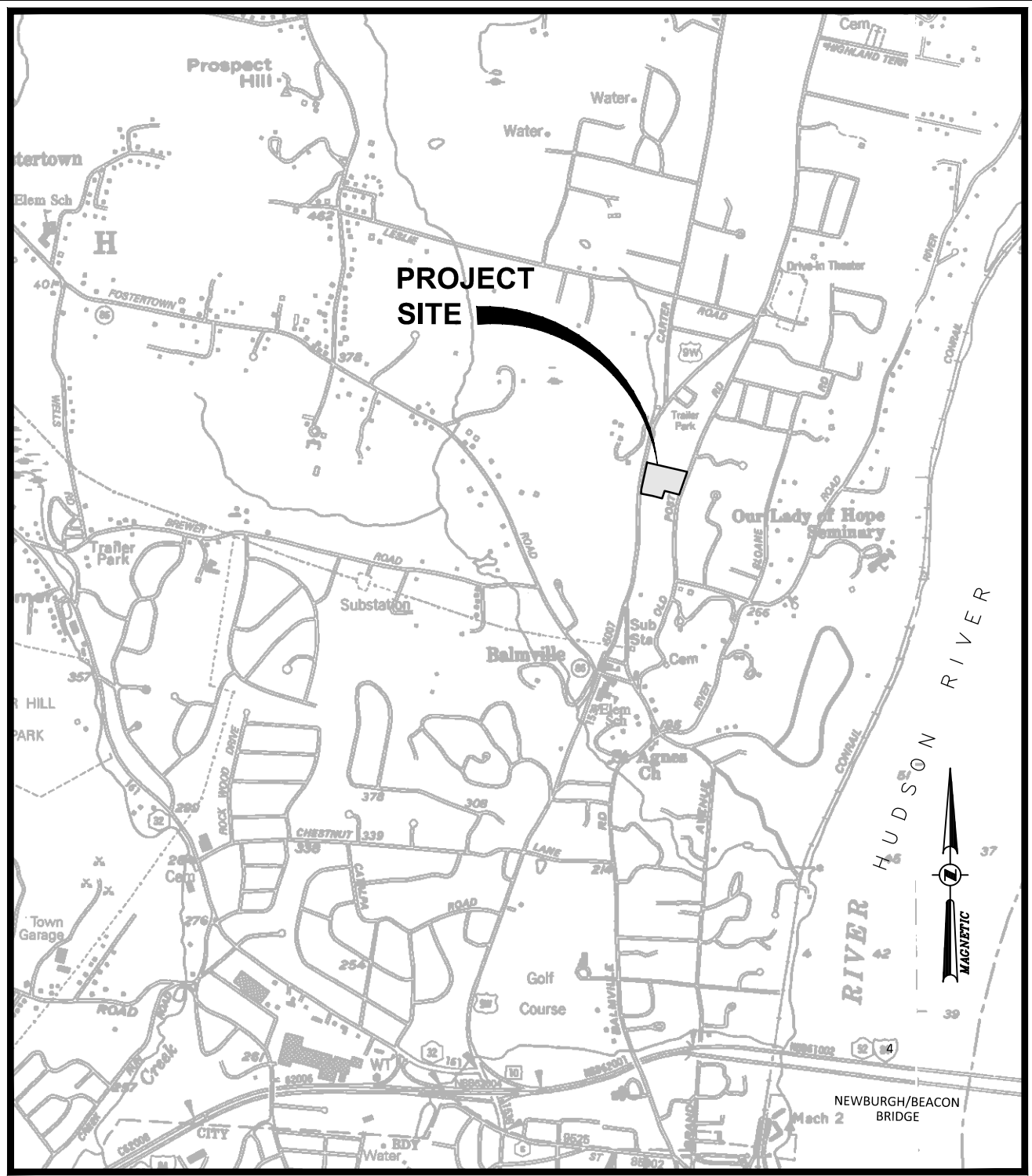


Michael W. Weeks, P.E.
Principal



MAP SOURCES: ORANGE COUNTY TAX MAP
TOWN OF NEWBURGH ZONING MAP (EXISTING CONDITION)

VICINITY MAP
SCALE: 1"=400'



LOCATION MAP
SCALE: 1"=2000'

MAP SOURCE: USGS MAPPING

SITE PLAN

PREPARED FOR

GAS LAND PETROLEUM, INC.

FOR A

CONVENIENCE STORE WITH A GASOLINE FILLING STATION

LOCATED AT

5200 N.Y.S. ROUTE 9W
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

JANUARY 20, 2022
LAST REVISED: MARCH 4, 2024

BULK TABLE 1 ACCESSORY BUILDING ¹		
REQUIREMENTS:	REQUIRED	PROPOSED
MINIMUM LOT AREA ⁵	0.69 ACRES	4.52± ACRES
MINIMUM LOT WIDTH	150 FT	415± FT
MINIMUM LOT DEPTH	175 FT	287.0 FT
SETBACKS:		
MINIMUM YARD FRONT ²	N/A	119.6 FT (NYS 9W) 147.0 FT (OLD POST RD)
MINIMUM YARD SIDE ³	15 FT	9.0 FT ^{6,7}
MINIMUM YARD REAR ³	5 FT	N/A
MINIMUM DISTANCE TO MAIN BUILDING	10 FT	318.1 FT
MAXIMUM PERCENTAGE IN YARD AREA ⁴	10%	12% ^{6,7}
MAXIMUM HEIGHT	15 FT	2 STORY ^{6,7}
MAXIMUM LOT COVERAGE (BUILDING)	40%	4.1% (ALL BLDGS)
MAXIMUM IMPERVIOUS SURFACE	50%	30% (ENTIRE SITE)
NOTES:		
¹ EXISTING ON-SITE APARTMENTS ARE ACCESSORY BUILDINGS TO THE PRINCIPAL USE. BULK REQUIREMENTS ARE PER FOR ACCESSORY BUILDINGS IN SECTION 185-15 AND EXISTING SINGLE-FAMILY DWELLINGS WITH EITHER PUBLIC SEWER OR PUBLIC WATER ONLY.		
² PER SECTION 185-15.B, NO SUCH BUILDING SHALL PROJECT CLOSER TO THE FRONTING STREET THAN THE FRONT OF THE MAIN BUILDING.		
³ PER SECTION 185-15.A(2), SUCH BUILDING SHALL BE SET BACK AT LEAST FIVE FEET FROM ANY SIDE OR REAR LOT LINE.		
⁴ PER SECTION 185-15.A(3), SUCH BUILDING SHALL NOT OCCUPY MORE THAN 10% OF THE REQUIRED YARD AREA IN WHICH IT IS PROPOSED TO BE SITUATED.		
⁵ MINIMUM LOT AREA FOR LOT BOUNDED BY TWO OR MORE STREETS.		
⁶ EXISTING NON-CONFORMANCE VARIANCE REQUIRED. TOWN HAS STATED 15 FT SIDE WARD SETBACK APPLIES TO ACCESSORY STRUCTURE.		
⁷ ZONING VARIANCE GRANTED ON 10/28/21 BY TOWN OF NEWBURGH ZONING BOARD OF APPEALS.		

BULK TABLE 2 ZONING DISTRICT: BUSINESS (B) ZONING DISTRICT / LHI OVERLAY "MOTOR VEHICLE SERVICE STATION AND PUBLIC GARAGE"		
ZONING REQUIREMENTS (B):	REQUIRED	PROPOSED
MINIMUM LOT AREA ³	0.690 ACRES	4.52± ACRES
MINIMUM LOT WIDTH	100 FT	415± FT
MINIMUM LOT DEPTH	150 FT	287.0 FT
SETBACKS:		
MINIMUM YARD FRONT	40 FT	259.5 FT (U.S. RTE 9W) 202.2 FT. (OLD POST RD)
MINIMUM YARD SIDE	15 FT	39.0 FT
MINIMUM YARD REAR	30 FT	N/A
PROPERTY LINE TO DRIVEWAY	10 FT	90.0 FT
PROPERTY LINE TO UNDERGROUND FUEL TANK	15 FT	154.5 FT
PROPERTY LINE TO PUMP ISLAND	15 FT	107.9 FT
PROPERTY LINE TO PARKED VEHICLES	10 FT	20.9 FT
DISTANCE TO MOTOR VEHICLE SERVE STATION ¹	1000 FT	900.0 FT ^{4,5}
MAXIMUM LOT COVERAGE (BUILDING) ²	40%	4.1% (ALL BLDGS)
MAXIMUM IMPERVIOUS SURFACE	80%	30% (ENTIRE SITE)
MAXIMUM HEIGHT	35 FT	<35 FT
NOTES:		
¹ IN NO INSTANCE SHALL A NEW MOTOR VEHICLE SERVICE STATION OR ANY OTHER ESTABLISHMENT DISPENSING GASOLINE BE PERMITTED TO BE ESTABLISHED WITHIN 1,000 FEET IN ANY DIRECTION FROM A LOT ON WHICH THERE IS AN EXISTING MOTOR VEHICLE SERVICE STATION OR OTHER ESTABLISHMENT DISPENSING GASOLINE.		
² MAXIMUM LOT BUILDING COVERAGE IS 40% IF NO PUBLIC WATER OR SEWER AND 50% IF PUBLIC WATER AND SEWER.		
³ MINIMUM LOT AREA FOR LOT BOUNDED BY TWO OR MORE STREETS.		
⁴ EXISTING NON-CONFORMANCE VARIANCE REQUIRED.		
⁵ ZONING VARIANCE GRANTED ON 10/28/21 BY TOWN OF NEWBURGH ZONING BOARD OF APPEALS.		

BULK TABLE 3 ZONING DISTRICT: BUSINESS (B) ZONING DISTRICT / LHI OVERLAY "CONVENIENCE STORE WITH OR WITHOUT GASOLINE FILLING STATION"		
ZONING REQUIREMENTS (B):	REQUIRED	PROPOSED
MINIMUM LOT AREA ¹	0.459 ACRES	4.52± ACRES
MINIMUM LOT WIDTH	100 FT	415± FT
MINIMUM LOT DEPTH	125 FT	287.0 FT
SETBACKS:		
MINIMUM YARD FRONT	60 FT	80.0 FT (U.S. RTE 9W) 372.9 FT (OLD POST RD)
MINIMUM YARD SIDE	15 FT	17.0 FT
MINIMUM YARD REAR	30 FT	N/A
PROPERTY LINE TO DRIVEWAY	10 FT	90.0 FT
PROPERTY LINE TO UNDERGROUND FUEL TANK	15 FT	154.5 FT
PROPERTY LINE TO PUMP ISLAND	15 FT	107.9 FT
PROPERTY LINE TO PARKED VEHICLES	10 FT	20.9 FT
DISTANCE TO MOTOR VEHICLE SERVE STATION ²	1000 FT	900.0 FT ⁴
MAXIMUM LOT COVERAGE (BUILDING) ³	40%	4.1% (ALL BLDGS)
MAXIMUM IMPERVIOUS SURFACE	80%	30% (ENTIRE SITE)
MAXIMUM HEIGHT	35 FT	1 STORY
NOTES:		
¹ MINIMUM LOT AREA FOR LOT BOUNDED BY ONE STREET.		
² IN NO INSTANCE SHALL A NEW MOTOR VEHICLE SERVICE STATION OR ANY OTHER ESTABLISHMENT DISPENSING GASOLINE BE PERMITTED TO BE ESTABLISHED WITHIN 1,000 FEET IN ANY DIRECTION FROM A LOT ON WHICH THERE IS AN EXISTING MOTOR VEHICLE SERVICE STATION OR OTHER ESTABLISHMENT DISPENSING GASOLINE.		
³ MAXIMUM LOT BUILDING COVERAGE IS 40% IF NO PUBLIC WATER OR SEWER AND 50% IF PUBLIC WATER AND SEWER.		
⁴ ZONING VARIANCE GRANTED ON 10/28/21 BY TOWN OF NEWBURGH ZONING BOARD OF APPEALS.		

INDEX OF DRAWINGS				
PAGE NO.	REV	SHEET NO.	DATE	DESCRIPTION
1	2	G001	03/04/24	TITLE SHEET
2	1	G002	03/03/22	NOTES & LEGENDS
3	0	SV1	10/21/19	EXISTING CONDITIONS PLAN (BY OTHERS)
4	3	C120	03/04/24	DEMOLITION PLAN
5	3	C130	03/04/24	SITE PLAN
6	1	C131	03/03/22	TRUCK MANEUVERING PLAN
7	1	C132	03/03/22	TRUCK MANEUVERING PLAN WB-67 PULL IN
8	3	C140	03/04/24	GRADING & DRAINAGE PLAN
9	3	C150	03/04/24	EROSION & SEDIMENT CONTROL PLAN
10	3	C160	03/04/24	UTILITY PLAN
11	2	C170	10/07/22	LANDSCAPE PLAN
12	1	C180	03/03/22	PHOTOMETRIC LIGHTING PLAN
13	2	C500	10/07/22	SITE DETAILS
14	1	C501	03/03/22	NYS DOT DETAILS
15	1	C502	03/03/22	NYS DOT NOTES
16	1	C510	03/03/22	STORM SEWER DETAILS
17	1	C520	03/03/22	EROSION & SEDIMENT CONTROL DETAILS AND NOTES
18	1	C530	03/03/22	WATER DETAILS
19	2	C540	03/04/24	SUBSURFACE DISPOSAL SYSTEM DETAILS
20	1	C541	03/04/24	SUBSURFACE DISPOSAL SYSTEM DETAILS
20	1	C550	03/03/22	LANDSCAPE DETAILS & NOTES
20	1	C560	03/04/24	PUMP STATION DETAILS

RECORD OWNER:
P&J PROPERTY WALNUT ST LLC
24 WALNUT ST
NEW WINDSOR NY 12553

SITE AREA:
TOTAL PROJECT ACREAGE : 4.517 ACRES

ZONING:
BUSINESS DISTRICT WITH LIGHT AND HEAVY INDUSTRIAL EQUIPMENT AND RECREATIONAL VEHICLE SALES, SERVICE AND REPAIR OVERLAY DISTRICT, 150 FT-DEEP ON THE EASTERLY PORTION OF THE LOT IS IN R-3 DISTRICT, PER TABLE OF ZONING MAP AMENDMENTS.

DEVELOPER / APPLICANT:
GAS LAND PETROLEUM, INC.
3 S.OHIOVILLE ROAD
NEW PALTZ, NY 12561

ADDRESS:
5200 ROUTE 9W
NEWBURGH, NY 12550

TAX MAP INFORMATION:
MUNICIPALITY OF NEWBURGH
SECTION 43, BLOCK 5, LOT 1

SITE CIVIL ENGINEER:
CHAZEN ENGINEERING & LAND SURVEYING CO., P.C.
21 FOX STREET, POUGHKEEPSIE, NY 12601
PHONE: (845) 454-3980

SURVEYOR:
HERITAGE LAND SURVEYING, P.C.
DARREN J. STRIDIRON, PROFESSIONAL LAND SURVEYOR
P.O. BOX 579 PLATTEKILL, NEW YORK 12568
PHONE: (845) 562-4148

PARKING SPACE CALCULATIONS:
TOTAL SPACES PROVIDED ON SITE = 45 (W/INCLUDES 3 INTERIOR BAY SPACES)
CONVENIENCE STORE WITH GASOLINE FILLING STATION: REQUIRED = 20 SPACES PROVIDED* = 24 SPACES (12 SPACES + 12 SPACES AT THE PUMPS)
PER SECTION 185-13.C(1)(b): REQUIRED PARKING FOR A RETAIL STORE, SHOPPING CENTER, AND PERSONAL SERVICE STORE IS 1 PER 150 SQUARE FEET OF GROSS LEASABLE FLOOR SPACE. (2,940 SQUARE FEET X 1 SPACE PER 150 SQUARE FEET = 20)
*THE TOTAL SPACES PROVIDED INCLUDES THE 12 SPACES AT THE FUEL PUMPS.
AUTO REPAIR GARAGE: REQUIRED (MIN.) = 8 SPACES PROVIDED = 19 SPACES (3 INTERIOR BAYS + 16 SPACES = 19)
PER SECTION 185-13.C(1)(b): REQUIRED PARKING FOR A REPAIR GARAGE IS PARKING SPACES FOR ALL VEHICLES BEING SERVICED AT ANY 1 PERIOD OF TIME, PLUS A MINIMUM OF 5 ADDITIONAL SPACES.
RESIDENTIAL BUILDING: (ACCESSORY BUILDING) REQUIRED = 2 SPACES PROVIDED = 2 SPACES
PER SECTION 185-13.C(1)(c): FOR ONE RESIDENTIAL SINGLE FAMILY UNIT, 2 SPACES SHALL BE PROVIDED.

OWNER ENDORSEMENT TOWN OF NEWBURGH, NEW YORK	
THE UNDERSIGNED APPLICANT/OWNER OF THE PROPERTY HEREON STATES THAT THE OWNER IS FAMILIAR WITH THIS MAP, ITS CONTENTS, LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS, AND CONDITIONS STATED HEREON, INCLUDING APPROVAL FOR FILING.	
APPLICANT	DATE
OWNER	DATE

TOWN PLANNING BOARD NEWBURGH, NEW YORK SITE PLAN APPROVAL	
FILE NO: _____	checked CPL _____
PROJECT NAME: _____	date 01/20/22 AS SHOWN _____
PROJECT LOCATION: _____	scale 81912.00
APPLICANT: _____	project no. 81912.00
OFFICIALLY APPROVED at the Planning Board meeting held the _____ day of _____, 20____	sheet no. G001
PLANNING CHAIRMAN: _____	
DESIGNEE: _____	
DATE SIGNED: _____	
CONDITIONS: _____	

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

Dig Safely.
New York
Call Before You Dig
Mark The Required Time
Confirm Utility Response
Respect The Marks
Dig With Care
800-962-7962
www.digsafelynewyork.com

0 1 2 3
ORIGINAL SCALE IN INCHES

Drawing Name: B:\GLOBAL\Legacy\Chazen\Projects\B1900-81999\B1912.00 Gas Land Town of Newburgh Route 9 W\DWG\00_Plan_G001_B1912-00_TITLE.dwg
User's Attached: JTB_20042_21912-00
Date Printed: Mar 04, 2024, 4:33pm

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED. ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION OTHER THAN THAT FOR WHICH IT WAS PREPARED, WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION ALTERED BY FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



CHAZEN ENGINEERING, LAND SURVEYING,
LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

THE CHAZEN COMPANIES
Proud to be a Engage Group Company

www.chazencompanies.com
(888) 503-9073

Office Locations

- Glens Falls, NY
- Troy, NY
- Poughkeepsie, NY
- White Plains, NY
- New York City, NY

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

rev.	date	description
3	02/09/24	REVISIONS PER SDS SUBMISSION
2	10/07/22	REVISIONS PER TOWN COMMENTS
1	03/03/22	REVISIONS PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

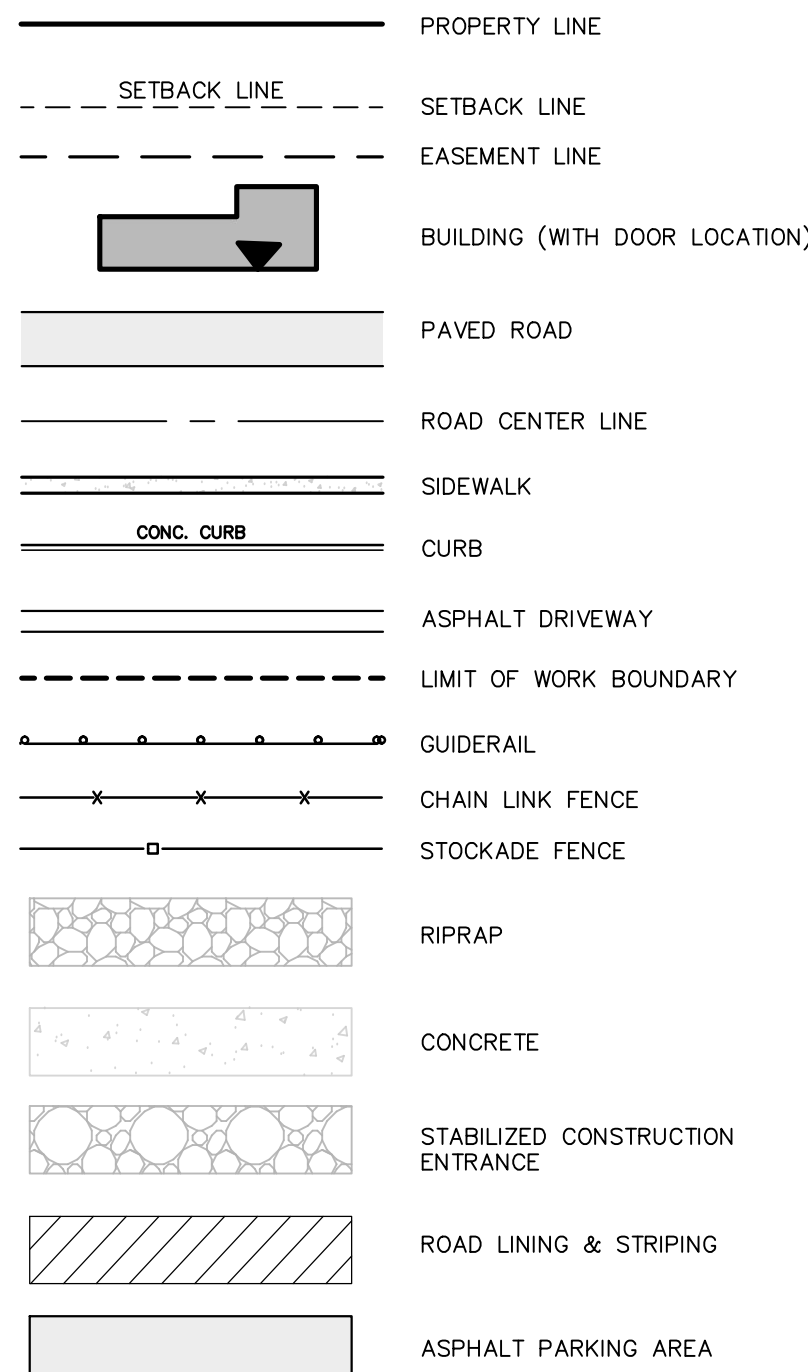
TITLE SHEET

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

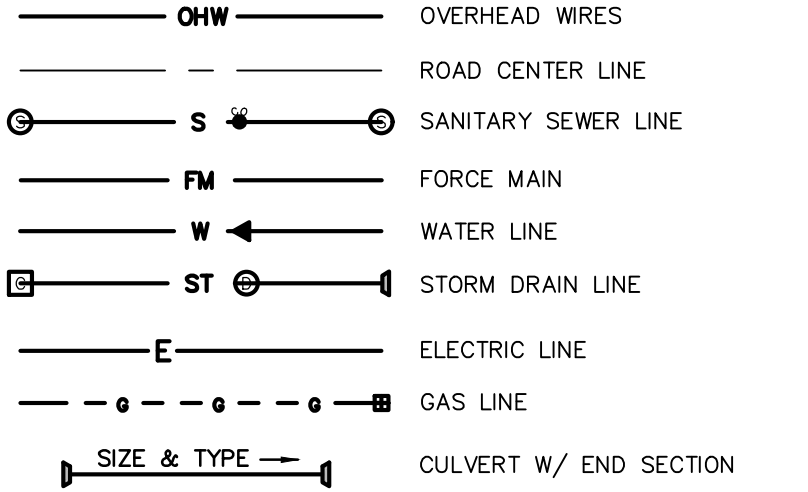
designed SPL
checked CPL
date 01/20/22 AS SHOWN
scale 81912.00
project no. 81912.00
sheet no. G001

LEGEND:

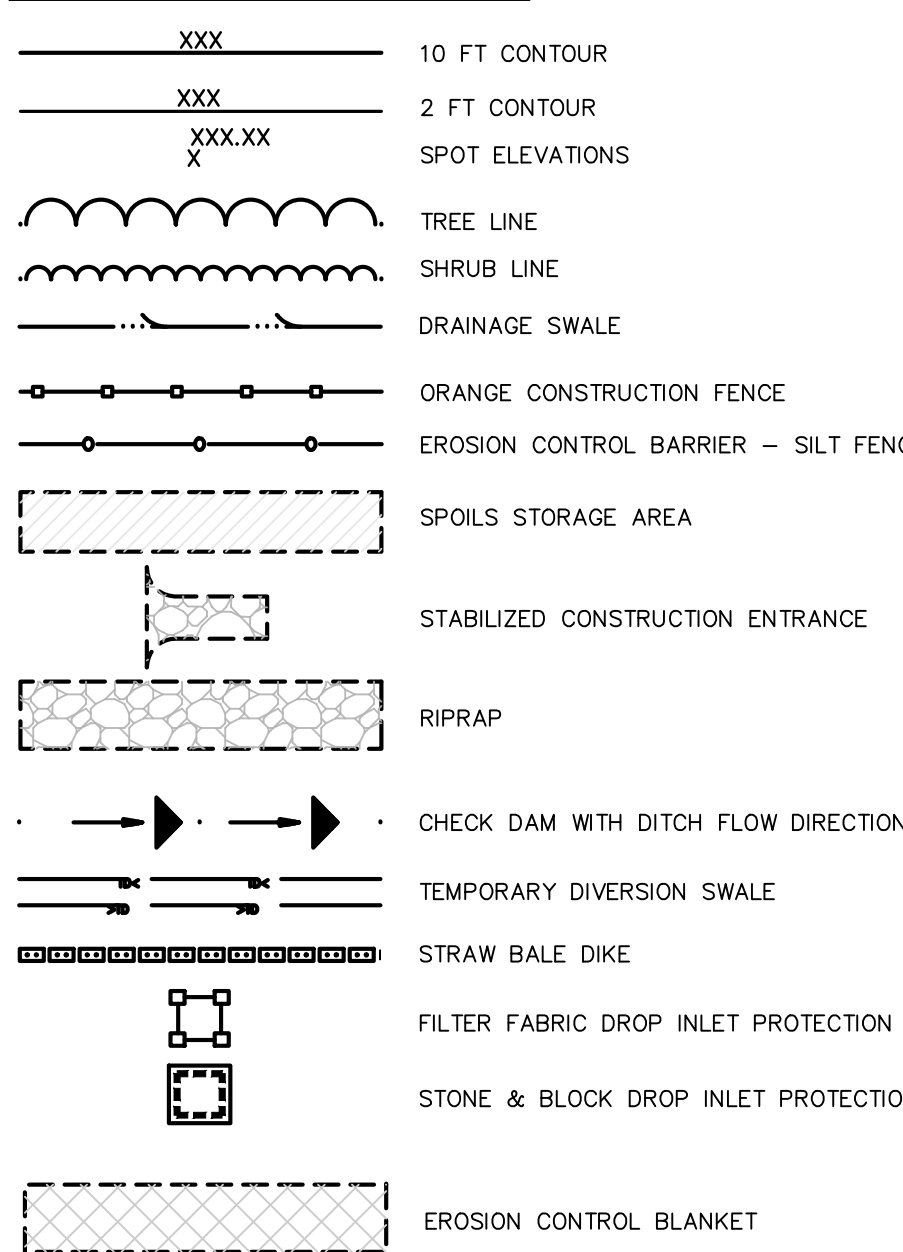
LAYOUT:



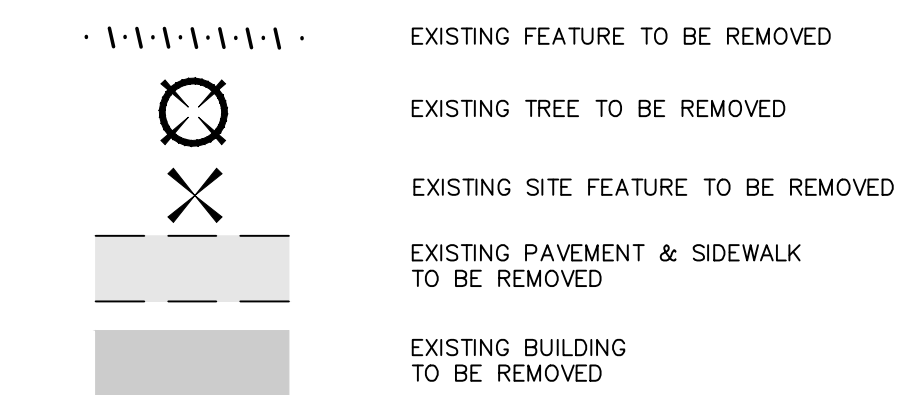
UTILITIES:



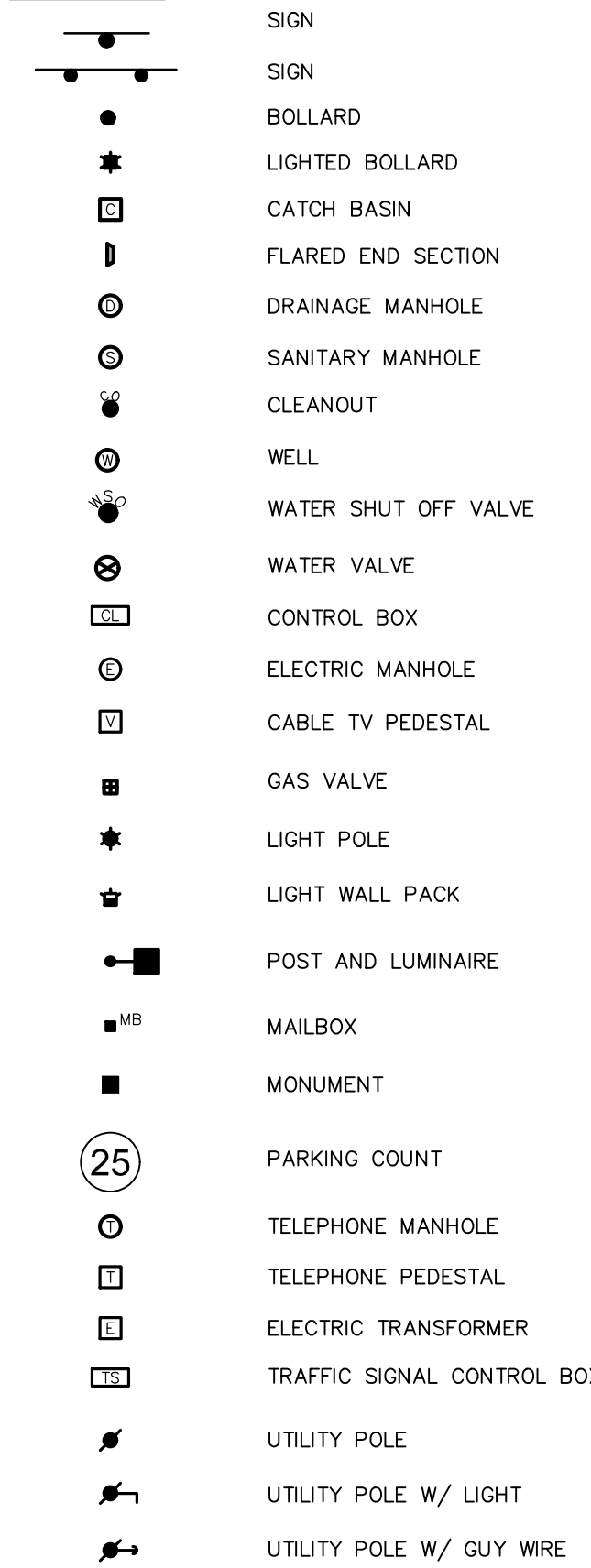
GRADING & EROSION CONTROL:



DEMOLITION:



SYMBOLS:



DEMOLITION NOTES:

- REFER TO REQUIREMENTS OUTLINED IN THE EROSION & SEDIMENTS CONTROL PLANS & NOTES PRIOR TO COMMENCEMENT OF WORK.
- BUILDING/STRUCTURE TO BE DEMOLISHED ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE NOT TO BE DEMOLISHED AS PART OF THIS WORK. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION.
- CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES. SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
- PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
- MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
- NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
- PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
- LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
- DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
- PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
- CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.
- MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS. COORDINATE W/ AUTHORITY HAVING JURISDICTION.
- CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
- ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
- FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
- CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
- CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
- USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS CAUSING ICING, FLOODING, AND TRANSPORTING POLLUTANTS.
- REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
- PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.
- REMOVAL OF ALL ELECTRICAL SERVICE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE. COORDINATE WITH LOCAL UTILITY HAVING JURISDICTION.
- ANY DEMOLITION OF ANY STRUCTURES ON THE SITE WILL REQUIRE A PERMIT FROM THE BUILDING DEPARTMENT.
- ANY NECESSARY TREE CLEARING WILL OCCUR BETWEEN NOVEMBER 1ST AND MARCH 31ST TO AVOID DIRECT OR INDIRECT TAKE OF THE BAT SPECIES, AS DURING THIS TIME, THE BATS WOULD BE HIBERNATING AND NOT PRESENT ON-SITE.

WELL ABANDONMENT NOTES:

- THE ABANDONMENT AND/OR DECOMMISSIONING OF ALL EXISTING WELLS MUST BE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN AWWA STANDARD A100.
- ALL PUMPS, WIRING, AND PIPING SHALL BE PULLED OUT OF THE EXISTING WELL.
- WELLS TO BE ABANDONED SHALL: (a) BE SEALED TO PREVENT UNDESIRABLE EXCHANGE OF WATER FROM ONE AQUIFER TO ANOTHER; (b) BE FILLED WITH SODIUM BENTONITE SLURRY; (c) WHEN FILLING WITH SODIUM BENTONITE SLURRY, THIS MATERIAL SHALL BE APPLIED TO THE WELL HOLE THROUGH A PIPE, TREMIE, OR BAILER.
- AFTER COMPLETION OF GROUTING PROCEDURE, THE CONTRACTOR SHALL EXCAVATE AROUND THE WELL CASING AND CUT THE CASING TO A DEPTH OF FOUR FEET BELOW EXISTING GRADE. A CONCRETE CAP MEASURING APPROXIMATELY 2-FOOT IN DIAMETER WITH A THICKNESS OF 1-FOOT, IS TO BE PLACED ON TOP OF THE CASING. REMAINDER OF EXCAVATION SHALL BE BACKFILLED WITH A SUITABLE BACKFILL MATERIAL.
- WELLS TO BE ABANDONED SHALL BE CERTIFIED BY A NYS PROFESSIONAL ENGINEER (P.E.).

SITE PLAN NOTES:

GENERAL CONSTRUCTION:

- THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
- ALL PAVEMENT RESTORATION SHALL MEET AND MATCH EXISTING GRADES.
- ALL SAWCUT LINES SHALL BE PARALLEL AND CURVILINEAR TO EXISTING OR PROPOSED CURBING AND SHALL BE A CONSTANT DISTANCE OF 18" MIN AWAY.
- ALL ARCHITECTURE IS SUBJECT TO PLANNING BOARD REVIEW.
- NOTIFY ENGINEER 48 HOURS PRIOR TO INITIALIZATION OF ANY WORK ON SITE.
- THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW FROM THE ENGINEER.
- CONTRACTOR IS RESPONSIBLE FOR EMPLOYING AND MAINTAINING ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR PROPERLY & SAFELY MAINTAINING AREA BETWEEN ALL ADJOINING PROPERTIES.
- NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE SITE PROPERTY LINES OR PUBLIC RIGHT-OF-WAY.
- ALL EXISTING LAWN AREA, CURBING, PAVING, SIDEWALKS, CULVERTS OR OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED BY TRENCHING OR EXCAVATION OPERATIONS SHALL BE REPLACED OR REPAIRED TO A CONDITION EQUAL TO EXISTING, AS DESCRIBED IN CONTRACT DOCUMENTS OR AS ORDERED BY ENGINEER (AOBE). MAILBOXES, SIGN POSTS, ETC SHALL BE PROTECTED OR REMOVED AND REPLACED EXACTLY AS THEY WERE BEFORE BEING DISTURBED. REMOVE AND REPLACE AFFECTED CURBING AND SIDEWALK TO NEAREST JOINT. REMOVE PAVEMENT AND REPLACE TO SAW CUT LINE. SAW CUT IN STRAIGHT LINE TO POINT NEEDED TO BLEND GRADE, REMOVE LAWN AND REPLACE TO MINIMUM LIMIT OF EXCAVATION.
- THE HOURS OF OPERATION OF THE CONVENIENCE STORE AND GAS STATION SHALL BE LIMITED TO 24 HOURS.

LAYOUT:

- BUILDING DIMENSIONS TO BE TAKEN FROM ARCHITECTURAL BUILDING PLANS. NOTIFY THE ENGINEER OF ANY DEVIATION FROM CONDITIONS SHOWN ON THIS PLAN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FIELD LAYOUT. THE CONTRACTOR SHALL MAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND JOINTS. ALL BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND THE ENGINEER AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADDITIONS TO THE SATISFACTION OF THE OWNER AND THE ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.

PAVING:

- NO VEHICULAR TRAFFIC OF ANY SORT SHALL BE PERMITTED ON THE SURFACE OF SUBBASE COURSE MATERIAL ONCE IT HAS BEEN FINE GRADED, COMPACTED, AND IS READY FOR PAVING. SUBBASE MATERIAL SO PREPARED FOR PAVING SHALL BE PAVED WITHIN THREE DAYS OF PREPARATION.
- SUBBASE MATERIAL AND THE VARIOUS ASPHALT CONCRETE MATERIALS CALLED FOR IN THESE DRAWINGS SHALL CONFORM WITH THE REFERENCED SECTION OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008. CONSTRUCTION SHALL BE AS FURTHER SET FORTH IN THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
- PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE, SPREAD AND STRIKE-OFF USING A SELF-PROPELLED PAVING MACHINE, WITH VIBRATING SCREED. PLACEMENT IN UNACCESSIBLE AND SMALL AREAS MAY BE BY HAND.
- PROVIDE JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAYS' WORK.
- TACK COAT WHEN SPECIFIED OR CALLED OUT ON THE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATION SHALL CONFORM WITH THE FOLLOWING:
 - TACK COAT SHALL MEET THE MATERIAL REQUIREMENTS OF 702-90 ASPHALT EMULSION FOR TACK COAT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, SHALL BE APPLIED IN ACCORDANCE WITH SECTION 407.
 - TACK COAT SHALL BE IN ACCORDANCE WITH THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
 - REMOVE LOOSE AND FOREIGN MATERIAL FROM ASPHALT SURFACE BEFORE PAVING NEXT COURSE. USE POWER BROOMS, BLOWERS OR HAND BROOM.
 - APPLY TACK COAT TO ASPHALT PAVEMENT SURFACES & AND SURFACES OF CURBS, GUTTERS, MANHOLES, AND OTHER STRUCTURES PROJECTING INTO OR ABUTTING PAVEMENT. DRY TO A "TACKY" CONSISTENCY BEFORE PAVING.
 - TACK COAT ENTIRE VERTICAL SURFACE OF ABUTTING EXISTING PAVEMENT.
- AFTER COMPLETION OF PAVING AND SURFACING OPERATIONS, CLEAN SURFACES OF EXCESS OR SPILLED ASPHALT, GRAVEL OR STONE MATERIALS TO THE SATISFACTION OF THE ENGINEER.

STRIPING:

- STRIPES PAVEMENT AS INDICATED ON THE PLANS AND/OR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
- COLOR: DRIVE LANE DIVIDERS - WHITE OR AOE
NO PARKING ZONE WARNINGS - WHITE OR AOE
PARKING DIVIDERS - WHITE OR AOE
WALKING LINES - WHITE OR AOE
HANDICAP PARKING LINES & SYMBOL - BLUE

WATER SYSTEM NOTES:

- CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDOH AND THE TOWN OF NEWBURGH.
- ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIAMETER SHALL BE CEMENT LINED CLASS 52 DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.51 FOR DUCTILE IRON PIPE. LATEST REVISION. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.
- THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THRUST BLOCKS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE EBBA IRON MEGALUG SERIES 1100 OR APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER DEPARTMENT.
- ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA C110/A21.10 FOR DUCTILE AND GRAY IRON FITTINGS OR ANSI/AWWA C153/A21.53 FOR DUCTILE IRON COMPACT FITTINGS, LATEST REVISION.
- ALL VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509 SUCH AS MUELLER MODEL A-2360-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).
- TAPPING SLEEVE SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-615 OR EQUAL. TAPPING VALVES 4 TO 12 INCHES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C509 SUCH AS MUELLER MODEL T-2360-19 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.
- ALL HYDRANTS SHALL BE CLOW-EDDY F-2640 CONFORMING TO AWWA STANDARD C- 502, LATEST REVISION. ALL HYDRANTS SHALL INCLUDE A 5 1/4 INCH MAIN VALVE OPENING, TWO 2 1/2 INCH DIAMETER NPT HOSE NOZZLES, ONE 4 INCH NPT STEAMER NOZZLE, A 6 INCH DIAMETER INLET CONNECTION AND A 1 1/2 INCH PENTAGON OPERATING NUT. ALL HYDRANTS SHALL OPEN LEFT (COUNTER-CLOCKWISE). HYDRANTS ON MAINS TO BE DEDICATED TO THE TOWN SHALL BE EQUIPMENT YELLOW. HYDRANTS LOCATED ON PRIVATE PROPERTY SHALL BE RED.
- ALL WATER SERVICE LINES TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. CORPORATION STOPS SHALL BE MUELLER H-15020N FOR 3/4 AND 1 INCH, MUELLER H-15000N OR 8-25000N FOR 1 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-1502-2N FOR 3/4 AND 1 INCH AND MUELLER 8-2500N FOR 1 1/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-10314N FOR 3/4 AND 1 INCH AND MUELLER H-10310N FOR 1 1/2 AND 2 INCH SIZES.
- ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT.
- THE WATER MAIN SHALL BE TESTED, DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING, DISINFECTION AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT. PRIOR TO PUTTING THE WATER MAIN IN SERVICE SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE WATER DEPARTMENT.
- THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. NO PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.

LANDSCAPING NOTES:

- SEE SHEET C550 FOR ALL LANDSCAPING NOTES.

SITE LIGHTING NOTES:

- SEE SHEET C180 FOR ALL LIGHTING NOTES.
- SEE SHEET C550 FOR LIGHTING DETAILS.

UTILITY PLAN NOTES:

GENERAL CONSTRUCTION:

- ALL UNDERGROUND UTILITIES ARE SHOWN IN THEIR RELATIVE POSITION AND ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY THEIR ACTUAL LOCATION IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- ANY CONDITION ENCOUNTERED IN THE FIELD DIFFERING FROM THOSE SHOWN HEREON, SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION IS TO PROCEED.
- SEWER MAINS IN RELATION TO WATER MAINS, WHERE POSSIBLE, SEWERS SHALL BE LAID AT LEAST 10 (TEN) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. VERTICAL SEPARATION SHALL BE MAINTAINED TO PROVIDE 18 (EIGHTEEN) INCHES BETWEEN TOP OF SEWER AND BOTTOM OF THE WATER MAIN AT UTILITY CROSSINGS. WHEN NOT POSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, SEWER PIPE SHALL BE PRESSURE RATED AND TESTED @ 150psi, 10 (TEN) FEET ON EACH SIDE OF THE WATER MAIN BEING CROSSED.
- ALL PROPOSED UTILITIES SHALL TERMINATE 5 FEET FROM ANY PROPOSED BUILDING FACE. CONTRACTOR TO COORDINATE WITH BUILDING PLANS FOR ANY CONNECTIONS.
- ALL STORM SEWER SHALL BE SMOOTH INTERIOR HOPE UNLESS OTHERWISE SPECIFIED.
- ALL GRAVITY SANITARY SEWER SHALL BE SDR 35 PVC UNLESS OTHERWISE SPECIFIED.
- ALL WATER PIPES LESS THAN, OR EQUAL TO, 2-INCHES SHALL BE K-COPPER UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR TO VERIFY STATUS OF ALL UTILITY SERVICES PRIOR TO INTERRUPTION.
- EXPLORATORY EXCAVATIONS SHALL BE PERFORMED BY THE CONTRACTOR AT ALL UTILITY CONNECTION LOCATIONS AND AS NEEDED TO VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK.
- BEFORE CONSTRUCTING LINES TO CONNECT TO EXISTING UTILITIES, VERIFY EXISTING UTILITY INVERTS AND NOTIFY THE ENGINEER IF ANY VARIATION FROM THE PLAN IS REQUIRED.
- THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE FOR THE DURATION OF THE WORK.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS AND ASSOCIATED CONDITIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING UTILITY TRENCHES AND EXCAVATIONS AND FOR THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK.
- IF ROCK REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

UNDERGROUND TANKS, CONTAMINATED SOIL, AND PIPING NOTES:

- EXISTING UNDERGROUND TANKS, CONTAMINATED SOIL, AND PIPING TO BE REMOVED IN ACCORDANCE WITH FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS.

GRADING NOTES:

- PRIOR TO SITE DISTURBANCE, CONTRACTOR TO INSTALL EROSION & SEDIMENT CONTROL MEASURES.
- IF ROCK IS ENCOUNTERED DURING CONSTRUCTION & REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
- ALL BLASTING OPERATIONS WILL ADHERE TO NEW YORK STATE AND LOCAL AUTHORITY ORDINANCES GOVERNING THE USE OF EXPLOSIVES. THE STATE REGULATIONS ARE CONTAINED IN 12 NYCRR 39 AND INDUSTRIAL CODE RULE 753.
- STRIP ALL TOPSOIL PRIOR TO COMMENCING EARTHWORK OPERATIONS. TOPSOIL MAY BE STORED AND REUSED IN LAWN AND PLANTING AREAS. UNDISTURBED AND SEED ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE TO REMAIN GREEN.
- BOX ALL TREES AND HOUSE ALL SHRUBS AND HEDGES BEFORE PLACING EARTH AGAINST OR NEAR THEM. ORNAMENTAL TREES, SHRUBS AND HEDGES WHICH MUST BE REMOVED DURING CONSTRUCTION SHALL BE HEALED IN AND RE-PLANTED IN AS GOOD A CONDITION AS THEY WERE BEFORE THEIR REMOVAL. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE BOUNDARIES OF ANY EASEMENT OR PROPERTY LINE.
- REMOVE ALL VEGETATION, TREES, STUMPS, GRASSES, ORGANIC SOILS, DEBRIS AND DELETERIOUS MATERIALS WITHIN THE AREAS SLATED FOR CONSTRUCTION.
- IF PREVIOUSLY UNKNOWN CULTURAL, ARCHEOLOGICAL, OR HISTORIC REMAINS OR ARTIFACTS ARE DISCOVERED IN THE COURSE OF CONSTRUCTION OF THIS PROJECT, THE PROJECT SPONSORS SHALL SUSPEND CONSTRUCTION OPERATIONS IN THE PERTINENT AREA AND SHALL NOTIFY THE PROJECT ENGINEER. CONSTRUCTION IN THAT AREA SHALL RESUME ONLY AFTER COMPLETION OF FEDERAL, TRIBAL AND STATE COORDINATION TO DETERMINE WHETHER PROTECTION OR RECOVERY OF THE REMAINS IS WARRANTED, OR WHETHER THE SITE IS ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES.

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

GAS LAND 5200 ROUTE 9W

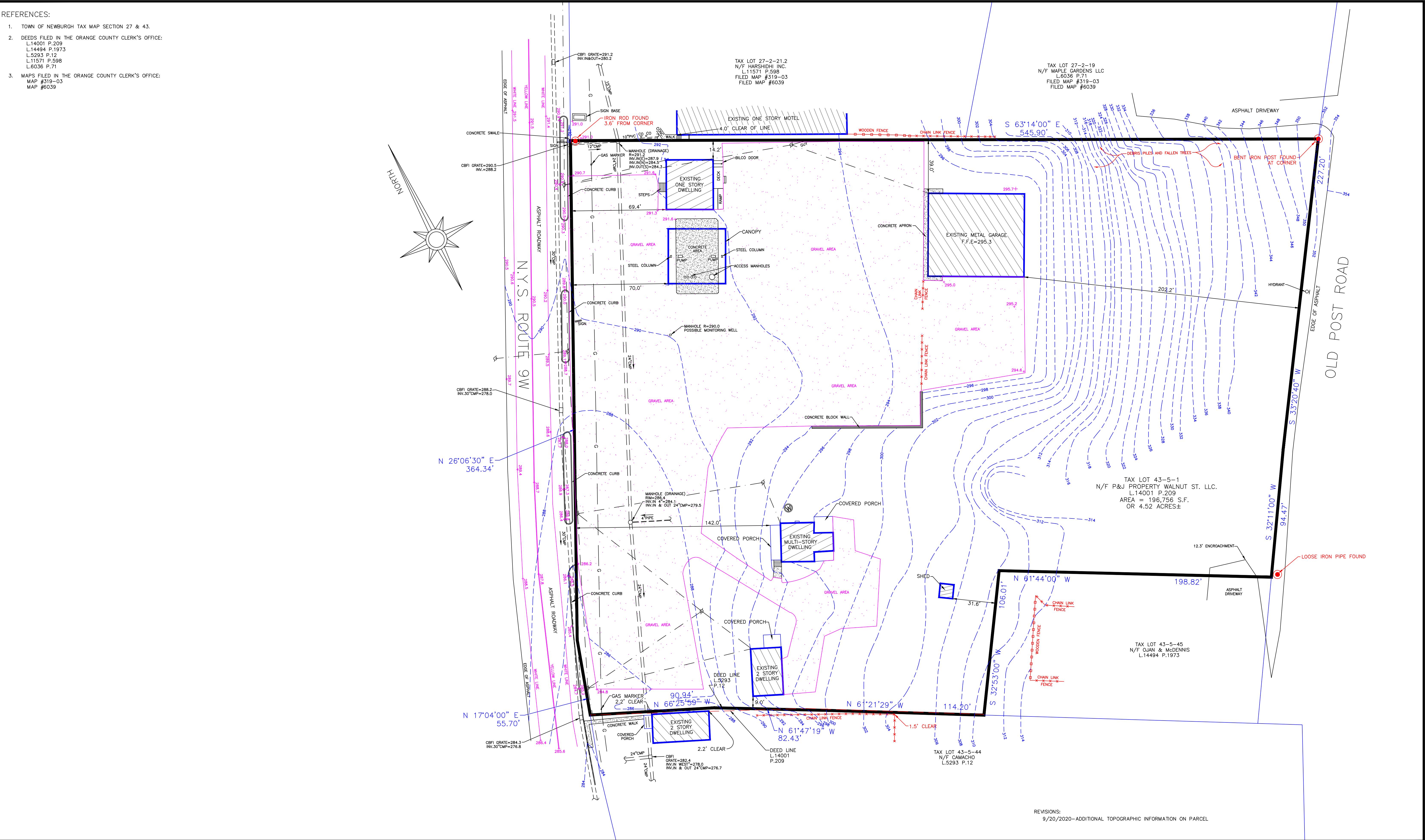
NOTES & LEGENDS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SMO	checked CPL
date 01/20/22	scale 1"=20'
project no. 81912.00	
sheet no. G002	

REFERENCES:

- TOWN OF NEWBURGH TAX MAP SECTION 27 & 43.
- DEEDS FILED IN THE ORANGE COUNTY CLERK'S OFFICE:
L.14001 P.209
L.14494 P.1973
L.5293 P.12
L.11571 P.598
L.6036 P.71
- MAPS FILED IN THE ORANGE COUNTY CLERK'S OFFICE:
MAP #319-03
MAP #6039



LEGEND

- 490 ——— DENOTES EXISTING CONTOUR LINE
- x — x — x — DENOTES EXISTING CHAIN LINK FENCE
- □ — □ — □ — DENOTES EXISTING WOODEN FENCE
- — ○ — ○ — DENOTES EXISTING UTILITY POLE
- — ○ — ○ — DENOTES EXISTING CLEANOUT
- 490.0+ ——— DENOTES EXISTING SPOT GRADE
- — — — — DENOTES EXISTING OVERHEAD WIRES
- ⊙ DENOTES EXISTING WELL

0 1 2 3
ORIGINAL SIZE IN INCHES

..\\SurveyDivision\\seal (2).tif

I HEREBY CERTIFY THAT:
THIS MAP OR PLAT IS BASED UPON THE FIELD NOTES OF THE SURVEY AND OTHER REFERENCES SHOWN.
ALL RECORDED EASEMENTS OR RIGHTS-OF-WAY AS SHOWN IN THE TITLE REPORT AND OTHER REFERENCES ARE SHOWN.
ALL OBSERVABLE EVIDENCE OF EASEMENTS ON THE GROUND ARE SHOWN.
ALL OBSERVABLE, ABOVE GROUND EVIDENCE OF BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS ARE SHOWN.
UNAUTHORIZED ALTERATION TO A MAP BEARING A LICENSED PROFESSIONAL LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
THIS CERTIFICATION IS NOT AN EXPRESS OR IMPLIED WARRANTY OR GUARANTEE, IT IS PURELY A STATEMENT OF PROFESSIONAL OPINION BASED ON KNOWLEDGE, INFORMATION AND BELIEF, BASED ON EXISTING FIELD EVIDENCE AND DOCUMENTARY EVIDENCE AVAILABLE.
CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
PLAN PREPARED PURSUANT TO SECTION 7208m OF THE NEW YORK STATE EDUCATION LAW.
SUBJECT TO THE FINDINGS OF TITLE REPORT M-052439 PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY.

Darren Stridiron
DARREN J. STRIDIIRON, PROFESSIONAL LAND SURVEYOR
NEW YORK STATE LICENSE No. 050487

HERITAGE LAND SURVEYING, P.C.

P.O. BOX 579 PLATTEKILL, NEW YORK 12568
TEL (845)562-4148, FAX (845)562-4148, e-mail: heritagesurvey@hotmail.com

SURVEY OF PROPERTY

5200 ROUTE 9W
LOCATED AT
TAX LOT 43-5-1
TOWN OF NEWBURGH
COUNTY OF ORANGE, NEW YORK

Date 10/21/19	Work Order	Drawing No.	SHEET
Scale 1" = 30'	2019-053	2019-053S2	1

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

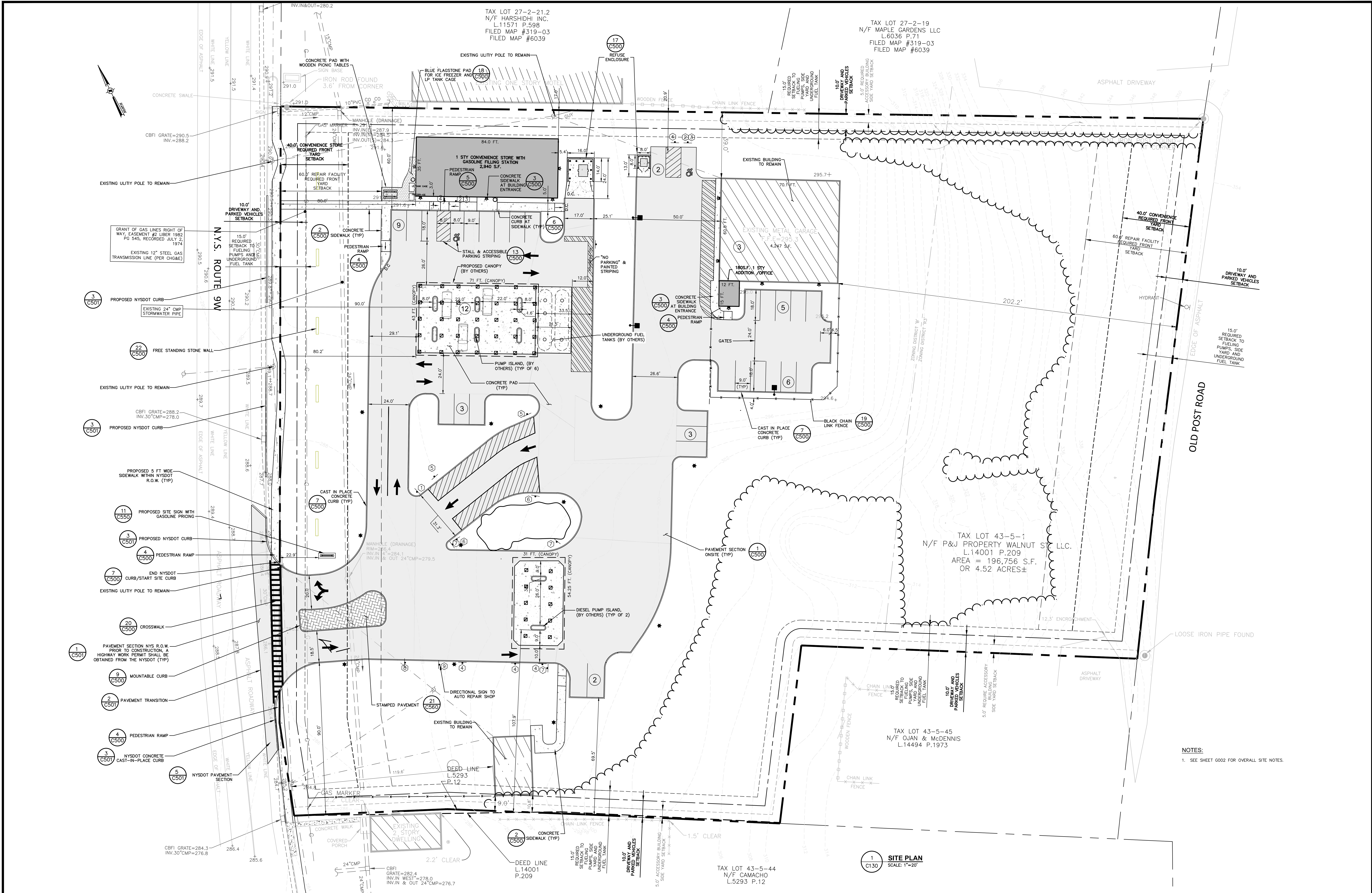
3	03/04/24	REVISIONS PER SDDS SUBMISSION
	10/07/22	REVISED PER TOWN COMMENTS
1	03/03/22	REVISED PER TOWN COMMENTS
rev.	date	description

GAS LAND 5200 ROUTE 9W

DEMOLITION PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SMD	checked CPL
date 01/20/22	scale 1"=20'
project no. 81912.00	
sheet no. C120	



FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED TO BE SUITABLE FOR ANY OTHER PURPOSE OTHER THAN THAT FOR WHICH IT WAS DESIGNED AND FOR WHICH IT WAS PREPARED. ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION OTHER THAN THAT FOR WHICH IT WAS DESIGNED WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

Office Locations:

- Glens Falls, NY
- Troy, NY
- Poughkeepsie, NY
- White Plains, NY
- New York City, NY

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

www.chazencompanies.com
(888) 539-9073

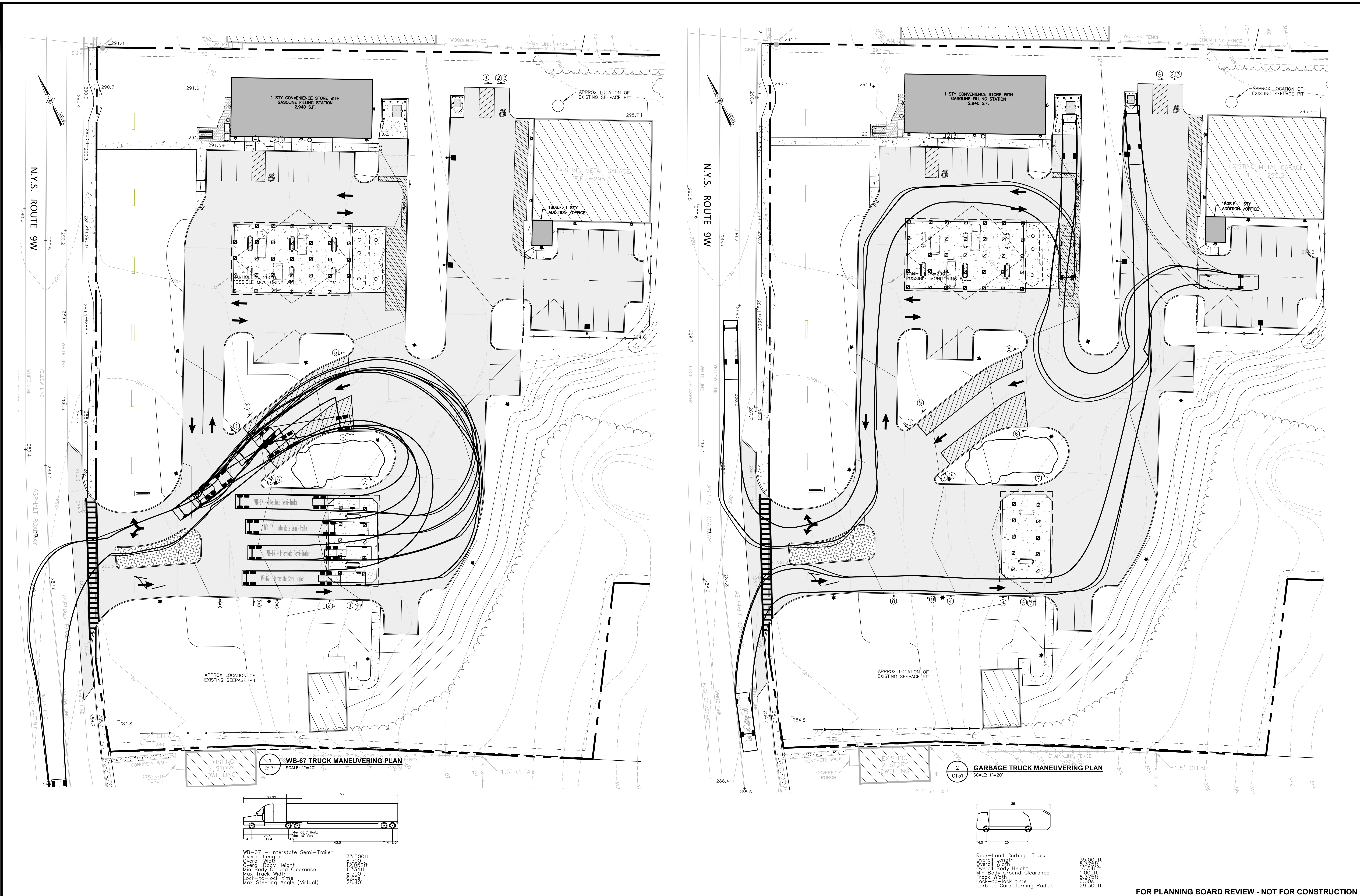
rev.	date	description
3	03/04/24	REVISED PER 9505 DESIGN
2	10/07/23	REVISED PER TOWN COMMENTS
1	03/03/22	REVISED PER TOWN COMMENTS

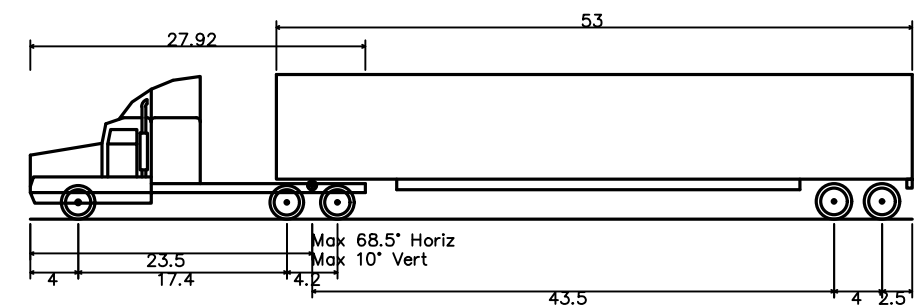
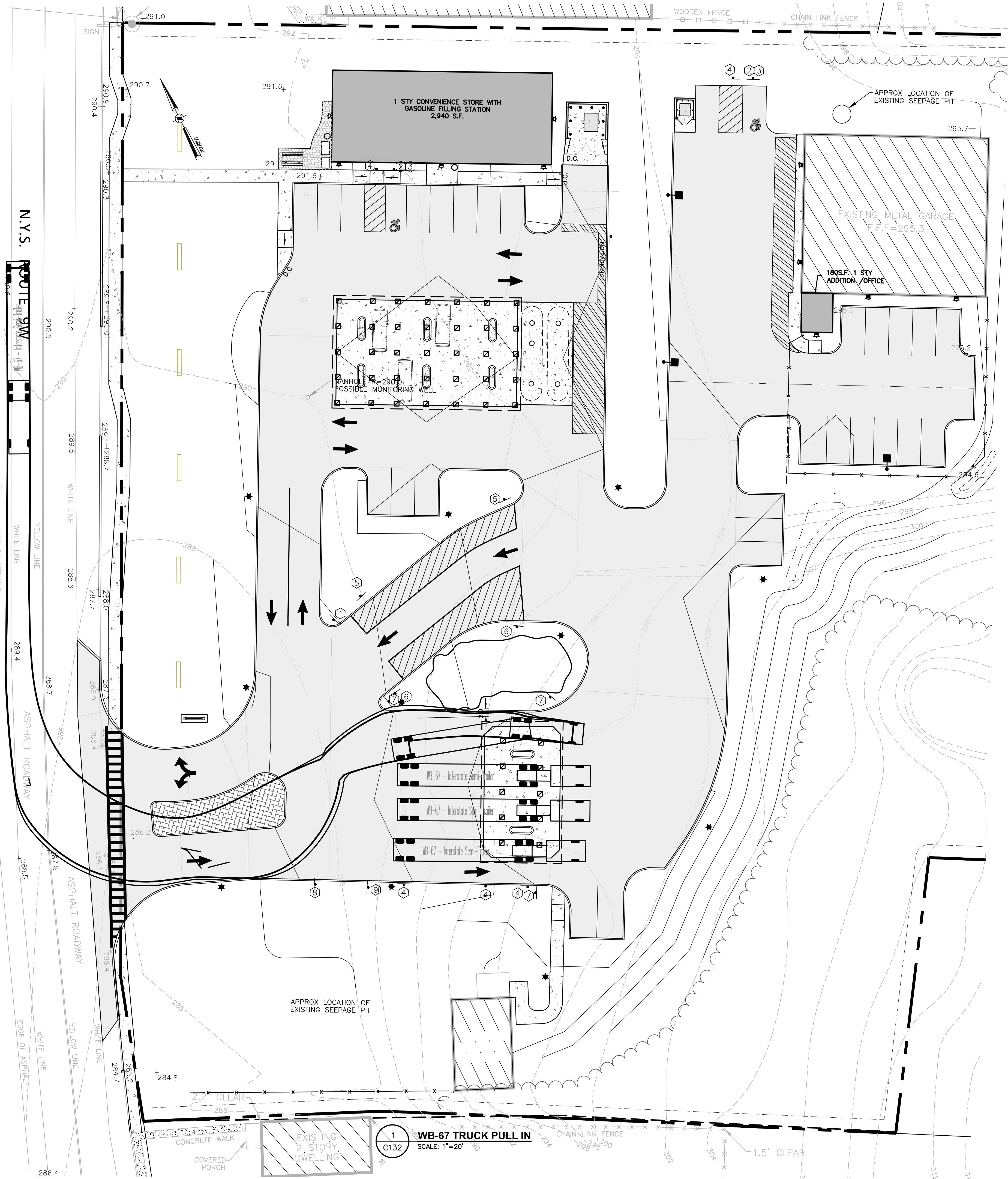
GAS LAND 5200 ROUTE 9W

SITE PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
SPL	CPL
01/20/22	scale 1"=20'
project no.	81912.00
sheet no.	C130





WB-67 - Interstate Semi-Trailer
Overall Length 73.500ft
Overall Width 8.500ft
Overall Body Height 12.052ft
Min Body Ground Clearance 13.144ft
Max Track Width 8.500ft
Lock-to-lock time 8.00s
Max Steering Angle (Virtual) 28.40°

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT, APPLICATION OR SITUATION FOR WHICH IT WAS INTENDED. ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION OTHER THAN THAT FOR WHICH IT WAS INTENDED, WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION ALTERED BY FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



CHAZEN ENGINEERING, LAND SURVEYING,
LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

THE Chazen COMPANIES
27002 65th Ave, Empire Center
www.chazen.com 845-781-0500
888-538-9073

Office Locations

- o Glens Falls, NY
- o Troy, NY
- o Poughkeepsie, NY
- o White Plains, NY
- o New York City, NY

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

SHEET ADDED TO PLAN

rev.	date	description
1	03/03/22	REVISED PER TOWN COMMENTS

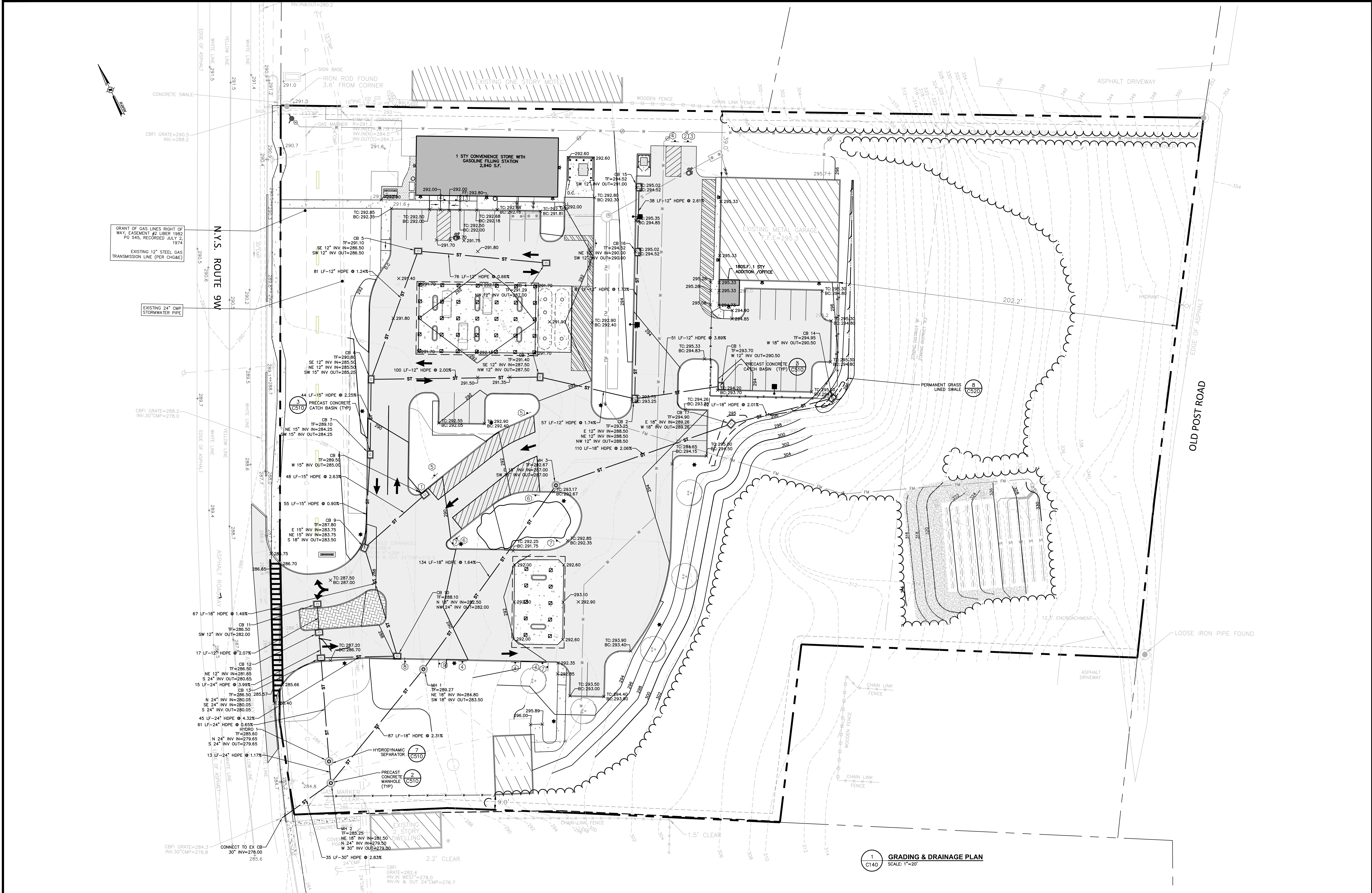
GAS LAND 5200 ROUTE 9W

**TRUCK MANUEVERING PLAN
WB-67 PULL IN**

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
CPL	CPL
date	scale
01/20/22	1"=20'
project no.	
61912.00	
sheet no.	
C132	





FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE A SUBSTITUTE FOR ANY PROFESSIONAL DESIGN OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION, OR SITUATION OTHER THAN THAT FOR WHICH IT WAS PREPARED. THE USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION ALTERED BY FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

Chazen
COMPANIES

21 Fox Street
Poughkeepsie, New York 12601

Office Locations:
• Glens Falls, NY
• Troy, NY
• Poughkeepsie, NY
• White Plains, NY
• New York City, NY

rev.	date	description
3	05/04/24	REVISED PER SDRS DESIGN
2	10/07/23	REVISED PER TOWN COMMENTS
1	05/03/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

GRADING & DRAINAGE PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SPL	checked CPL
date 01/20/22	scale 1"=20'
project no. 81912.00	
sheet no. C140	



EROSION & SEDIMENT CONTROL PLAN

designed SPL	checked CPL
date 01/20/22	scale 1"=20'
project no. 81912.00	
sheet no. C150	

ALL RIGHTS RESERVED. COPIES OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, FOR ANY PURPOSES WITHOUT THE WRITTEN PERMISSION OF THE PROFESSIONAL SOCIETY OF LANDSCAPE ARCHITECTS OF NEW YORK STATE IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR CONSTRUCTION OR FOR ANY OTHER PURPOSE. ANY REPRODUCTION OF THIS DRAWING OR DOCUMENT FOR ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION WITHOUT THE WRITTEN PERMISSION OF THE PROFESSIONAL SOCIETY OF LANDSCAPE ARCHITECTS OF NEW YORK STATE, ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY MANNER. ANY PERSON WHO ALTERS THIS DRAWING OR DOCUMENT IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE PROFESSIONAL SOCIETY OF LANDSCAPE ARCHITECTS OF NEW YORK STATE, ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST) IS VIOLATING THE LAW. IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NAME OF THE PERSON WHO ALTERED IT, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



**CHAZEN ENGINEERING, LAND SURVEYING,
LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.**

THE
Chazen
COMPANIES[®]
PROUD TO BE EMPLOYERS OWNED

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

Office Locations

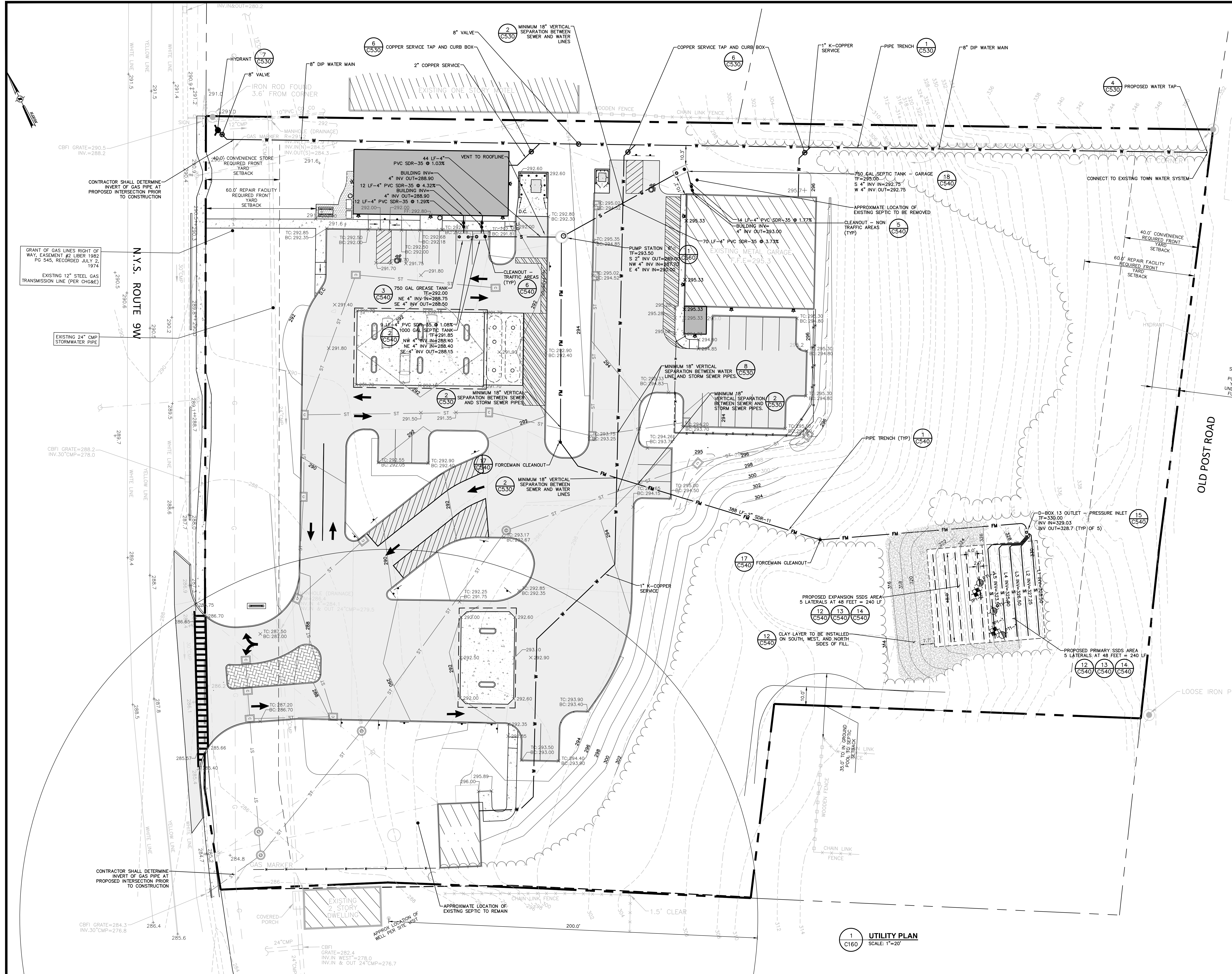
- o Glens Falls, NY
- o Troy, NY
- o Poughkeepsie, NY
- o White Plains, NY
- o New York City, NY

www.chazenco.com
(888) 539-9073

3	03/04/24	REVISED PER SSO'S DESIGN	
2	10/07/22	REVISED PER TOWN COMMENTS	
1	03/03/22	REVISED PER TOWN COMMENTS	
rev	date	description	



Drawing Name: B:\GLOBAL\Legacy\Chazen\Projects\B1900-B1999\B1912.00 Gas Land Town of Newburgh Route 9 W\DWG\05_PLAN_C150_B1912-00_EROS.dwg
Xrefs Attached: XBASE-ENG_B1912-00_Stridiron; XLAYOUT_B1912-00; XTB_30X42_B1912-00; XLAYOUT_to be revised; XENG_B1912-00



- ### SEWAGE DISPOSAL SYSTEM DESIGN NOTES
1. NO COMPONENT OF THE SEWAGE DISPOSAL SYSTEM IS TO BE BACK FILLED UNTIL INSPECTED BY THE ENGINEER PERFORMING THE CERTIFICATION AND THE TOWN ENGINEER.
 2. FINAL GRADING SHALL BE PERFORMED SO THAT NO SURFACE WATER WILL RUN ON OR COLLECT ON THE INSTALLED SEPTIC SYSTEM.
 3. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
 4. HEAVY EQUIPMENT SHALL BE KEPT OFF OF THE ABSORPTION FIELD AREA EXCEPT FOR ACTUAL CONSTRUCTION OF THE FIELD. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE AREA OF THE PROPOSED FIELD, BEFORE, DURING AND AFTER CONSTRUCTION.
 5. TRENCHES SHALL NOT BE CONSTRUCTED IN WET SOIL.
 6. SIDES AND BOTTOM OF TRENCHES SHALL BE RAKED IMMEDIATELY PRIOR TO PLACING GRAVEL.
 7. THE END OF ALL DISTRIBUTION PIPES SHALL BE PLUGGED.
 8. THE LOCATION OF THE SEPTIC FIELD IS TO BE FIELD LOCATED BY A LICENSED NYS SURVEYOR PRIOR TO CONSTRUCTION. THE SEPTIC FIELD MUST BE CONSTRUCTED IN THE AREA SHOWN ON PLAN.
 9. THE ENGINEER MUST BE CONTACTED 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, TO SCHEDULE A REVIEW OF THE SEPTIC INSTALLATION.
 10. A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SHALL INSPECT THE SANITARY FACILITIES (WATER SUPPLY, ANY WATER TREATMENT, AND SEWAGE DISPOSAL FACILITIES) AT THE TIME OF CONSTRUCTION. PRIOR TO OCCUPANCY, THE ENGINEER SHALL CERTIFY TO THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES ARE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
 11. THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE OF THE START OF WORK.
 12. ALL PIPES AT STRUCTURES AND CONTACT SURFACES ON GREASE TRAP, SEPTIC TANK & PUMP STATION TO HAVE AN ASPHALTIC SEAL OR ACCEPTABLE EQUAL.
 13. SANITARY FACILITIES ARE NOT TO BE RELOCATED OR REDESIGNED WITHOUT REVIEW AND APPROVAL OF THE ENGINEER AND THE AUTHORITY HAVING JURISDICTION ENGINEER.
 14. THERE WILL BE NO REGRADING OR COMPACTING IN THE AREA OF THE PROPOSED TILE FIELD.

- ### SUBSURFACE SEWAGE DISPOSAL SYSTEM
1. THE PROPOSED FACILITY SHALL NOT PROVIDE "SIT DOWN" SERVICE.
 2. FLOOR, FOOTING OR ROOF DRAINS, ETC. SHALL NOT BE ALLOWED TO ENTER THE SEWAGE DISPOSAL SYSTEM.
 3. THERE ARE NO KITCHEN SINK GARBAGE DISPOSAL SYSTEMS PLANNED OR INCLUDED IN THE DESIGN.
 4. IF AND WHEN IT BECOMES NECESSARY TO CONSTRUCT THE PROPOSED 100% RESERVE AREA, IT SHALL BE INSTALLED IN CONFORMANCE WITH THE SAME CONDITIONS AND SPECIFICATIONS SET FORTH AND APPROVED AS PART OF THIS PLAN.
 5. ONLY KITCHEN TYPE WASTEWATER FIXTURES MAY BE CONNECTED TO THE GREASE TRAP PIPING AND A PROFESSIONAL ENGINEER SHALL CERTIFY SO TO THE HEALTH DEPARTMENT.
 6. SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.
 7. DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE.
 8. DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.

SSDS DEMAND CALCULATIONS:

CONVENIENCE STORE/ DELI	= 400 GPD/TOILET * 1 TOILET
	= 400 GPD
AUTO REPAIR FACILITY	= 15 GPD/EMPLOYEE * 3 EMPLOYEES
	= 45 GPD
80% REDUCTION FOR LOW FLOW	= (400 GPD + 45 GPD) * 80%
	= 356 GPD
TOTAL DEMAND	= 356 GPD

- ### NOTES:
1. PROPOSED SEPTIC FIELD REQUIRES A SUBMISSION OF AN AS-BUILT PLAN AND CERTIFICATION BY A LICENSED DESIGN PROFESSIONAL PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
 2. SEE DEEP AND PERC TEST RESULTS ON SHEET C541.

INFILTRATOR SYSTEM DESIGN CALCULATIONS

DESIGN FLOW	= 356 GPD
PERCOLATION RATE	= 21-30 MINUTES
APPLICATION RATE	= 0.60
AREA REQUIRED	= 356 / 60 = 5.93 SF
	= 593 SF / 2 FT = 296 LF OF TRENCH
AREA PROVIDE	= 296 LF * 0.75 (INFILTRATOR REDUCTION CONSTANT) = 222 LF
LINEAR FOOTAGE PROPOSED:	
5 ROWS X 48 L.F.	= 240 LF TOTAL

1 UTILITY PLAN
SCALE: 1"=20'

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED TO BE A SUBSTITUTE FOR ANY OTHER DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OF SITUATION, OR OTHER THAN THAT FOR WHICH IT WAS DESIGNED. WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

THE CHAZEN COMPANIES
Prior to be employed by Chazen

www.chazencompanies.com
(888) 528-9073

Office Locations

- o Glen Falls, NY
- o Troy, NY
- o Poughkeepsie, NY
- o White Plains, NY
- o New York City, NY

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

rev.	date	description
3	05/04/24	REVISED PER SSDES DESIGN
2	10/07/23	REVISED PER TOWN COMMENTS
1	05/03/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

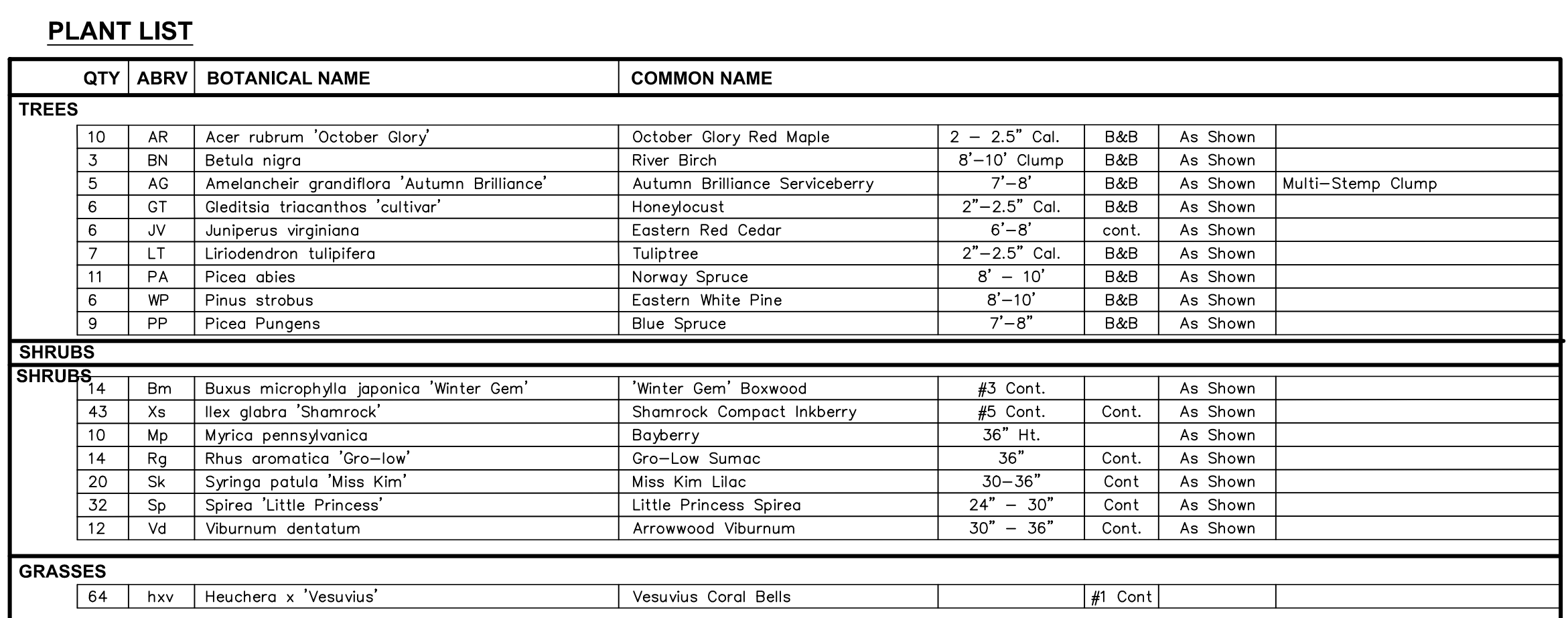
UTILITY PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SPL	checked CPL
date 01/20/24	scale 1"=20'
project no. 61912.00	sheet no. C160

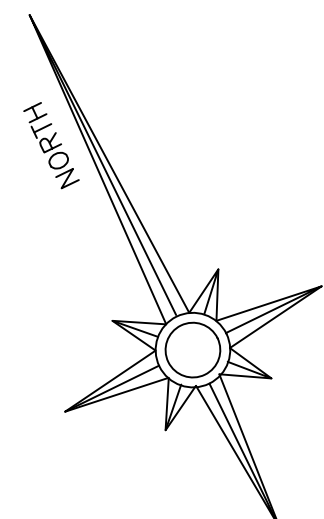
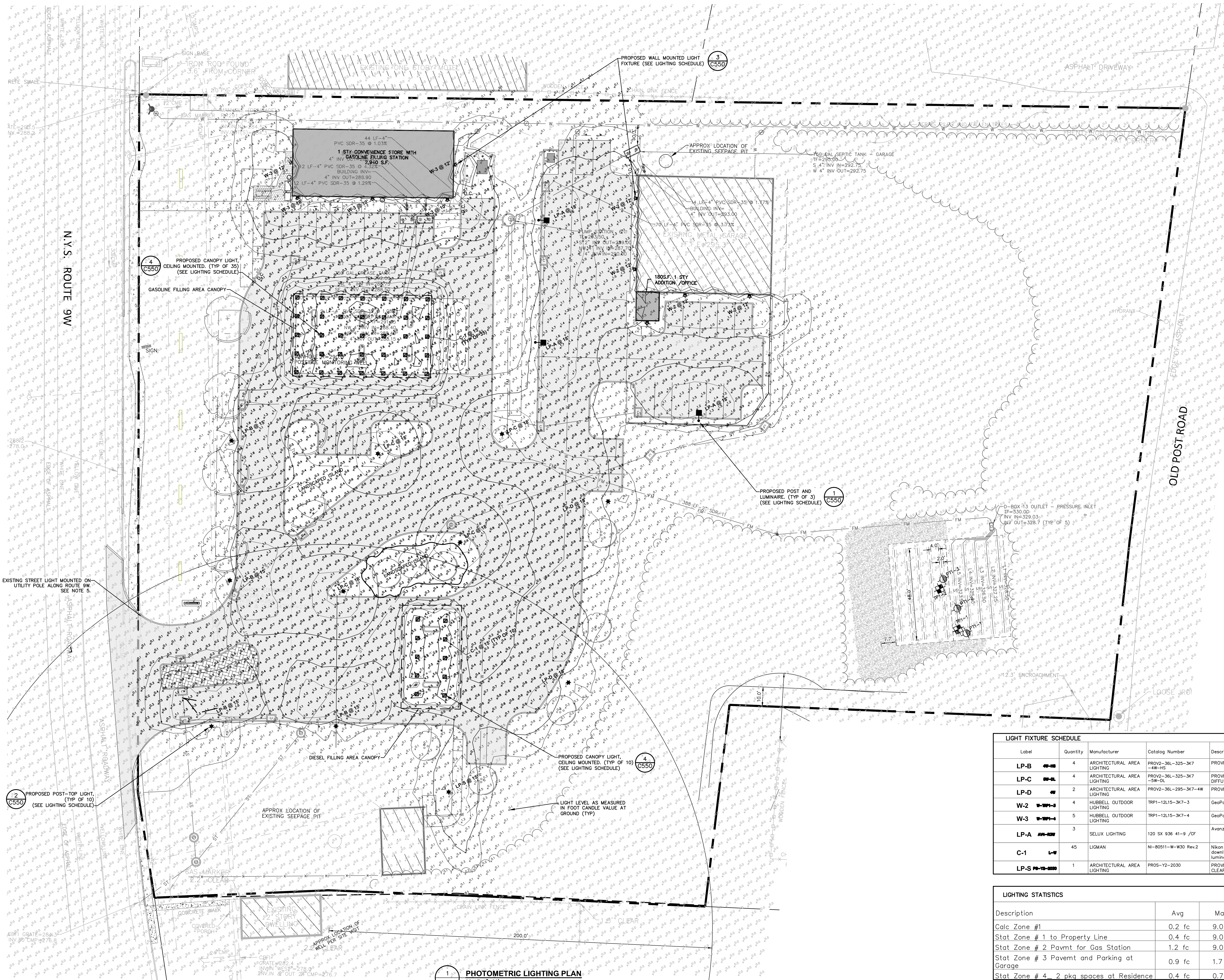
0 1 2 3
ORIGINAL SCALE IN INCHES

Drawing Name: B:\GASLAND\Legacy\Chazen\Projects\81900-81991\81912-00 Day Land Town of Newburgh Route 9 W\DWG\GAS_PLAN_C160_81912-00.dwg
User's Attached: JBAE-DWG-81912-00-01.dwg
Date Printed: Mar 04, 2024, 4:37pm



2 LANDSCAPE SCHEDULE
C170 SCALE: NOT TO SCALE

designed	checked CP
date 01/20/22	scale 1"=3'
project no. 81912.00	
sheet no. C170	



GENERAL NOTES:

1. SEE SHEET C550 FOR LIGHTING & LANDSCAPING DETAILS AND NOTES.

LIGHTING NOTES:

1. PROPOSED LIGHTING AS MANUFACTURED BY ARCHITECTURAL AREA LIGHTING, SELUX LIGHTING, HUBBELL LIGHTING, AND LIGMAN LIGHTING.
2. THE LIGHTING FIXTURES, SURFACE LOCATIONS ARE IDENTIFIED BY THE CHAZEN COMPANIES. DETAILED DESIGN OF THE LIGHTING SPECIFICATIONS, FOUNDATION DESIGN, LIGHTING CONDUIT, WIRING, AND CONTROL CIRCUITRY SHALL BE BY OTHERS.
3. IF DISCREPANCIES EXIST BETWEEN THE LIGHTING SCHEDULE AND LIGHTING PLAN, THE PLAN SHALL DICTATE.
4. GRID NUMBERS SHOWN REPRESENT FOOT-CANDLE VALUES AT GROUND PLANE.
5. THE EXISTING STREET LIGHTS IN THE RIGHT-OF-WAYS HAVE NOT BEEN INCLUDED IN THIS PHOTOMETRIC ANALYSIS. THE LIGHT LEVELS SHOWN HEREON REFLECT THE PROPOSED LIGHTING ON SITE.
6. ALL LIGHTING SHOWN ON THIS PLAN SHALL BE DIRECTED AND/OR SHIELDED SO AS TO PREVENT OBJECTIONABLE GLARE FROM BEING OBSERVABLE FROM ADJOINING STREETS AND PROPERTIES.
7. CONCRETE LIGHT BASE PER MANUFACTURER.
8. EXISTING AND PROPOSED UTILITIES NOT SHOWN ON THIS SHEET FOR CLARITY. REFER TO SHEET C160 FOR UTILITY PLANS.
9. ALL NON-ESSENTIAL LIGHTING SHALL BE TURNED-OFF AFTER BUSINESS HOURS, LEAVING ON ONLY THE NECESSARY LIGHTING FOR SITE SECURITY.

LIGHT FIXTURE SCHEDULE										
Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	MOUNT HEIGHT	Light Loss Factor	Wattage	Notes
LP-B	4	ARCHITECTURAL AREA LIGHTING	PROV2-36L-325-3K7-4W-HS	PROVIDENCE MEDIUM 2.0	1	2225	1	0.92	37.82	MEDIUM POST TOP, HOUSE-SIDE SHIELD
LP-C	4	ARCHITECTURAL AREA LIGHTING	PROV2-36L-325-3K7-5W-DL	PROVIDENCE MEDIUM 2.0 WITH DIFFUSED LENS	1	2466	1	0.92	37.73	MEDIUM POST TOP
LP-D	2	ARCHITECTURAL AREA LIGHTING	PROV2-36L-295-3K7-4W	PROVIDENCE MEDIUM 2.0	1	3498	1	0.92	34.1	MEDIUM POST TOP
W-2	4	HUBBELL OUTDOOR LIGHTING	TRP1-12L15-3K7-3	GeoPak Size 1	1	1478	1	0.92	13.9	WALL-MOUNTED, SMALL
W-3	5	HUBBELL OUTDOOR LIGHTING	TRP1-12L15-3K7-4	GeoPak Size 1	1	1471	1	0.92	13.9	WALL-MOUNTED, SMALL
LP-A	3	SELUX LIGHTING	120 SX 936 41-9 /OF	Avanza 450 w/ OF Tilt	1	2755	1	0.92	38	POST & LUMINAIRE
C-1	45	LIGMAN	N-80511-W-300 Rev.2	Nikon 2 recessed exterior downlight square 120mm, luminaire LED	1	753	1	0.92	12.5	CANOPY LIGHTS
LP-S	1	ARCHITECTURAL AREA LIGHTING	PRO5-Y2-2030	PROVIDENCE SMALL WITH CLEAR FLAT GLASS LENS	1	1792	1	0.95	25.1	SMALL POST TOP

LIGHTING STATISTICS					
Description	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	0.2 fc	9.0 fc	0.0 fc	N/A	N/A
Stat Zone # 1 to Property Line	0.4 fc	9.0 fc	0.0 fc	N/A	N/A
Stat Zone # 2 Pavmt for Gas Station	1.2 fc	9.0 fc	0.0 fc	N/A	N/A
Stat Zone # 3 Pavmt and Parking at Garage	0.9 fc	1.7 fc	0.2 fc	8.5:1	4.5:1
Stat Zone # 4 - 2 pk spaces at Residence	0.4 fc	0.7 fc	0.2 fc	3.5:1	2.0:1

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDING OR REPRESENTED TO BE SUITABLE FOR ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION OTHER THAN THAT FOR WHICH IT WAS PREPARED. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION ALTERED BY FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

THE Chazen COMPANIES

21 Fox Street
Poughkeepsie, New York 12601

Office Locations:
• Glen Falls, NY
• Troy, NY
• Poughkeepsie, NY
• White Plains, NY
• New York City, NY

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

0 1 2 3
ORIGINAL SCALE IN INCHES

DESIGNED SD
DATE 01/20/22
PROJECT NO. 61912.00
SHEET NO. C180

checked CPL
DATE 01/20/22
SCALE 1"=20'

1 05/03/22 REVISED PER TOWN COMMENTS
rev. date description

GAS LAND 5200 ROUTE 9W

PHOTOMETRIC LIGHTING PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

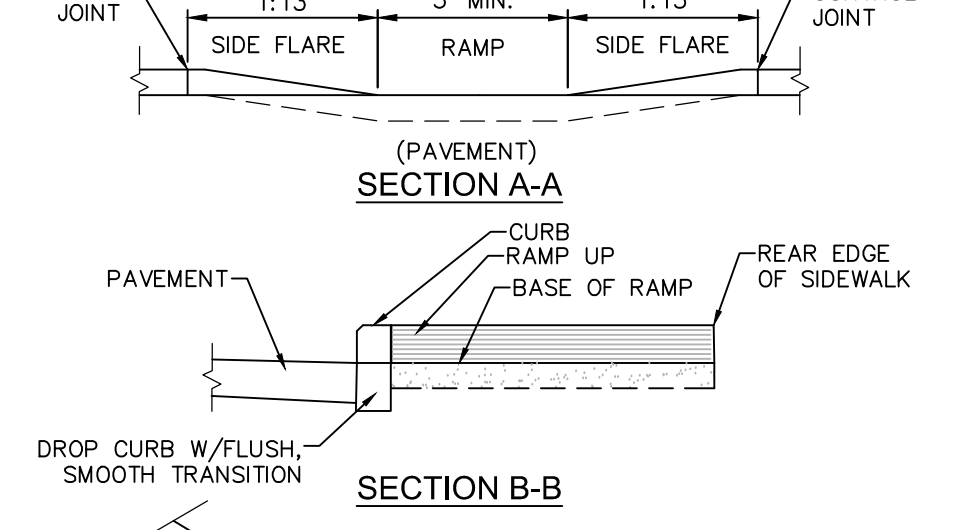


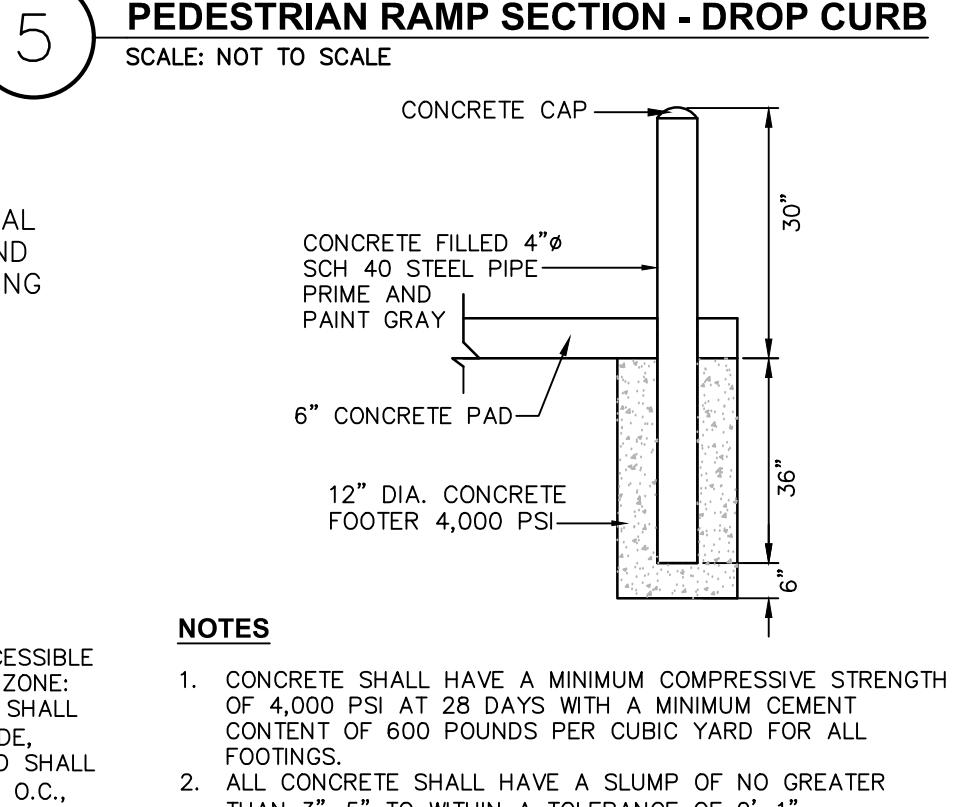
Diagram illustrating the construction and materials data for a crosswalk, showing dimensions and components:

- Dimensions:**
 - 1.5' MAX.
 - 1.5' MAX.
 - 1.5' MAX. SEE PLAN
 - 5' MIN. SEE PLAN
- Components and Labels:**
 - SIDEWALK
 - DETECTABLE WARNING UNITS (8' 1500')
 - BROOM FINISH PERPENDICULAR TO WALK
 - CROSSWALK
 - DRINKS OR KICKING STALL
 - RIPING TYP.

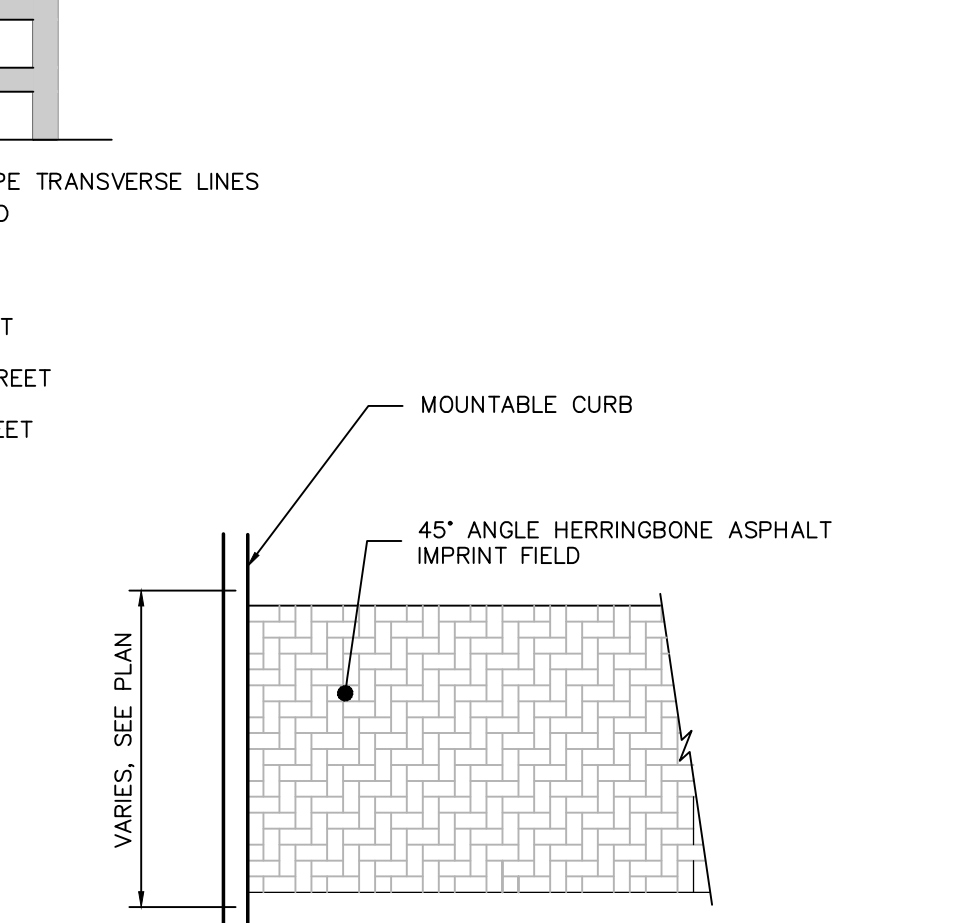
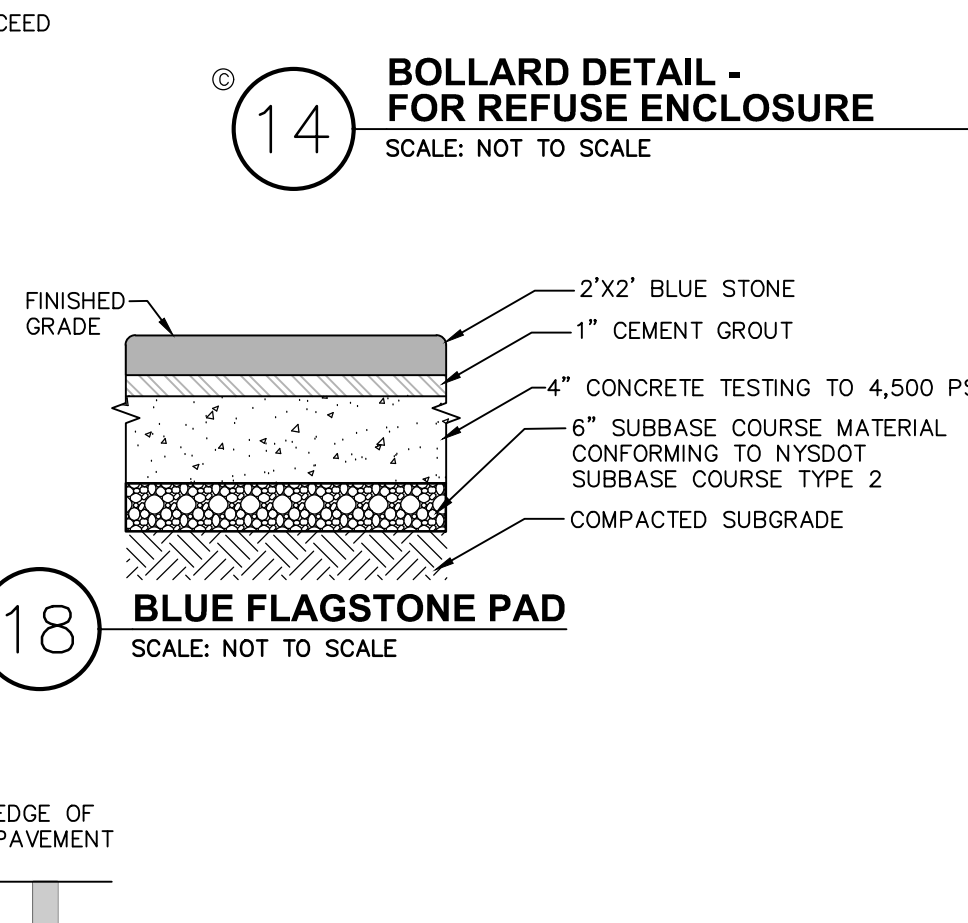
NOTES:

1. ALL WORK SHALL CONFORM WITH THE NYS DOT STANDARD SPECIFICATION FOR CONSTRUCTION AND MATERIALS DATA, "CURRENT VERSION" AND ALL ADDENDA THERE TO, SPECIFICALLY SECTION 808- SIDEWALKS, DRIVEWAYS, AND BICYCLE PATHS.

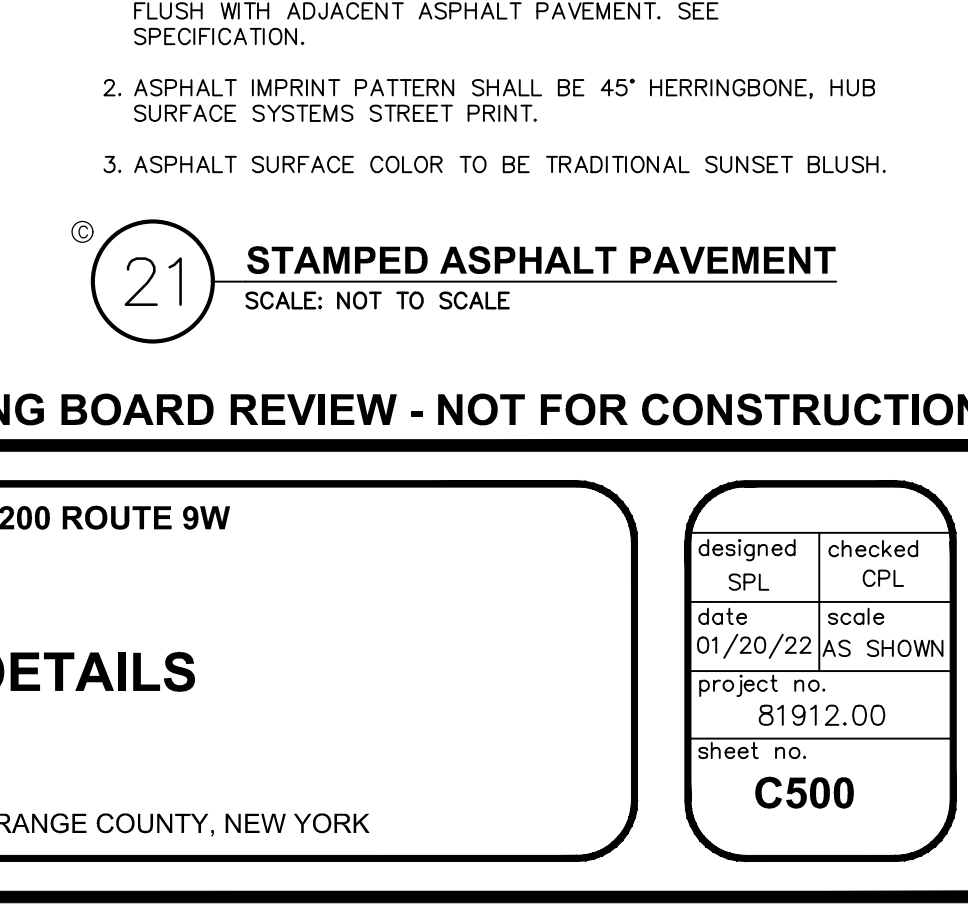
0



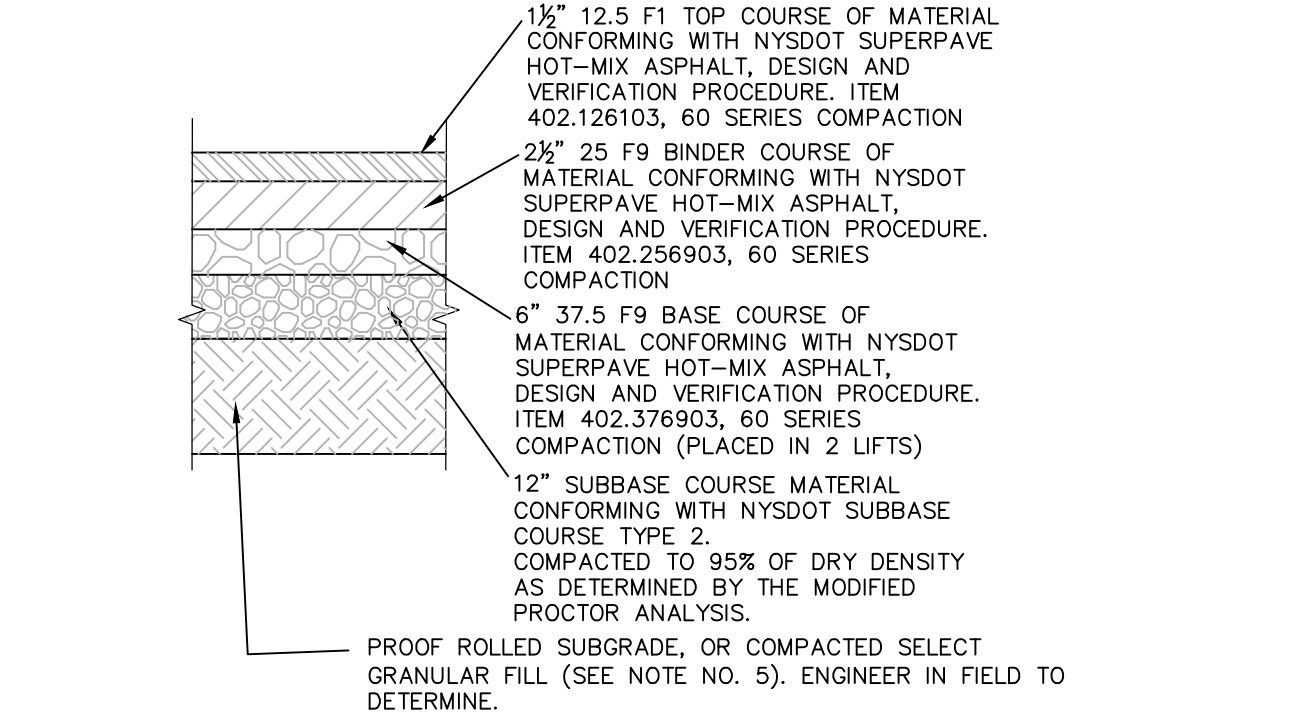
SINGLE POST IN CONCRETE SIGN MOUNTING DETAIL



WIRE MESH WITH 3 COVER

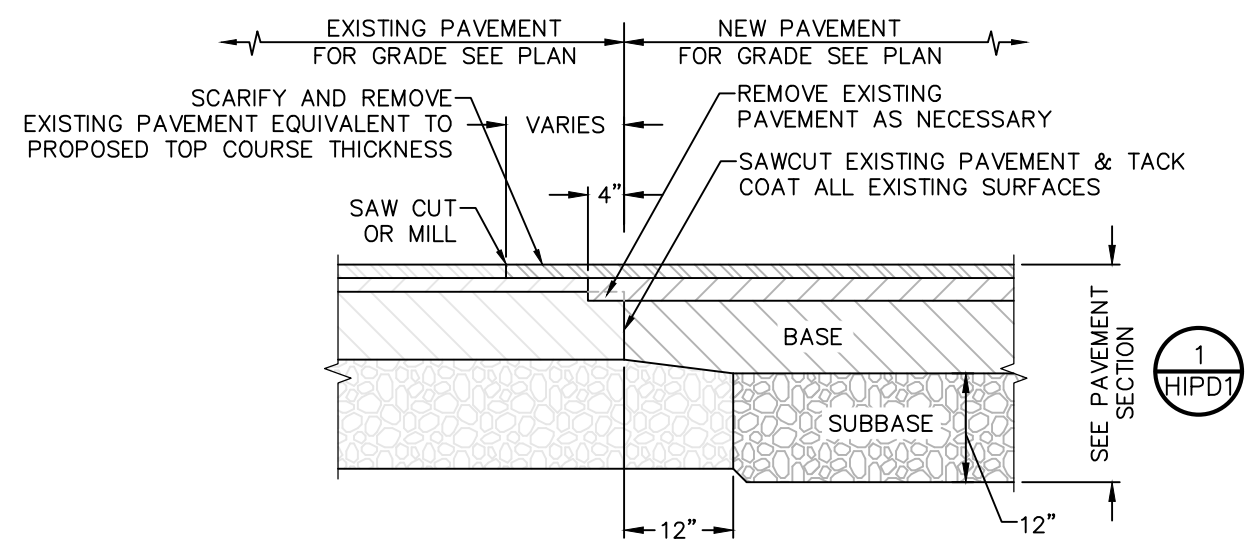


designed SPL	checked CPL
date 01/20/22	scale AS SHOWN
project no. 81912.00	
sheet no.	

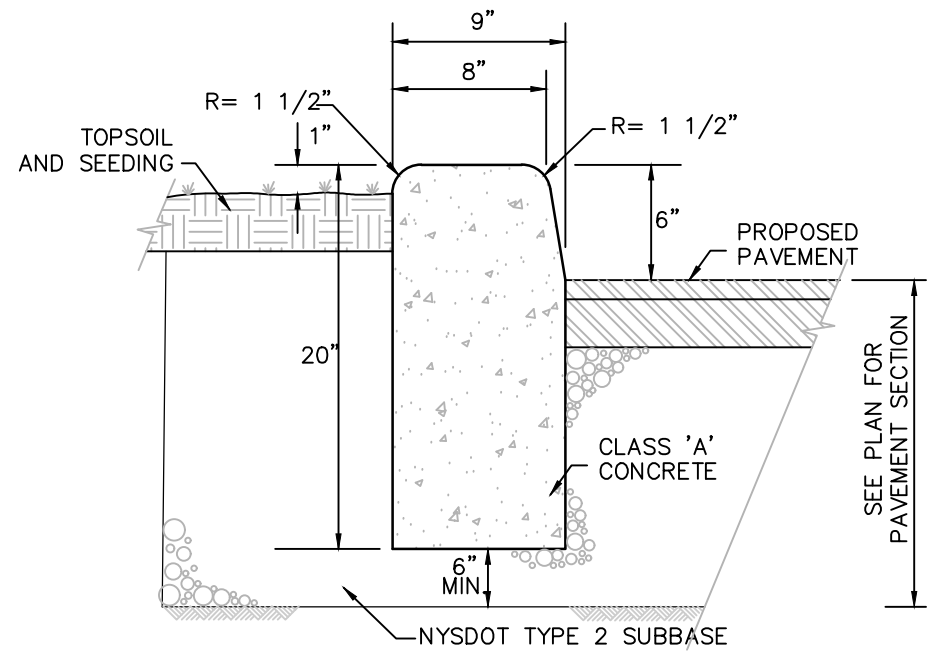


- NOTES:**
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERE TO.
 2. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 - SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 3. HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WITH SECTION 400-HOT MIX ASPHALT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 4. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 5. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 6. PAVEMENT SECTION SHOWN IS PRELIMINARY. PRIOR TO BIDDING AND COMMENCEMENT OF CONSTRUCTION, THE FINAL DESIGN OF THE PAVEMENT SECTION MUST BE PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER AND MUST BE BASED ON A CURRENT GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
 7. PG BINDER 64E-22 SHALL BE IMPLEMENTED FOR ALL PAVING PROCEDURES.
 8. STRAIGHT TACK COAT (ITEM 407.0103) SHALL BE APPLIED BETWEEN ALL PAVEMENT LIFTS.
 9. JOINT ADHESIVE (ITEM 418.7603) SHALL BE APPLIED WHEREVER NEW PAVEMENT WILL ADJOIN EXISTING PAVEMENT.

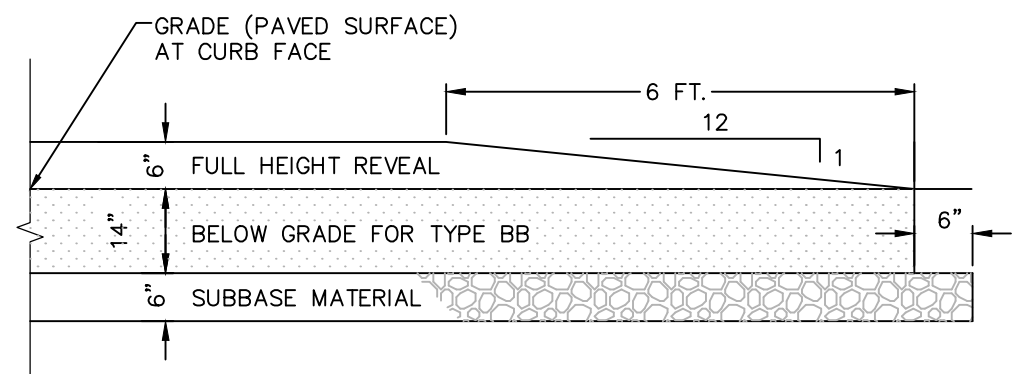
1 NYSDOT TRAVEL LANE PAVEMENT DETAIL
SCALE: NOT TO SCALE



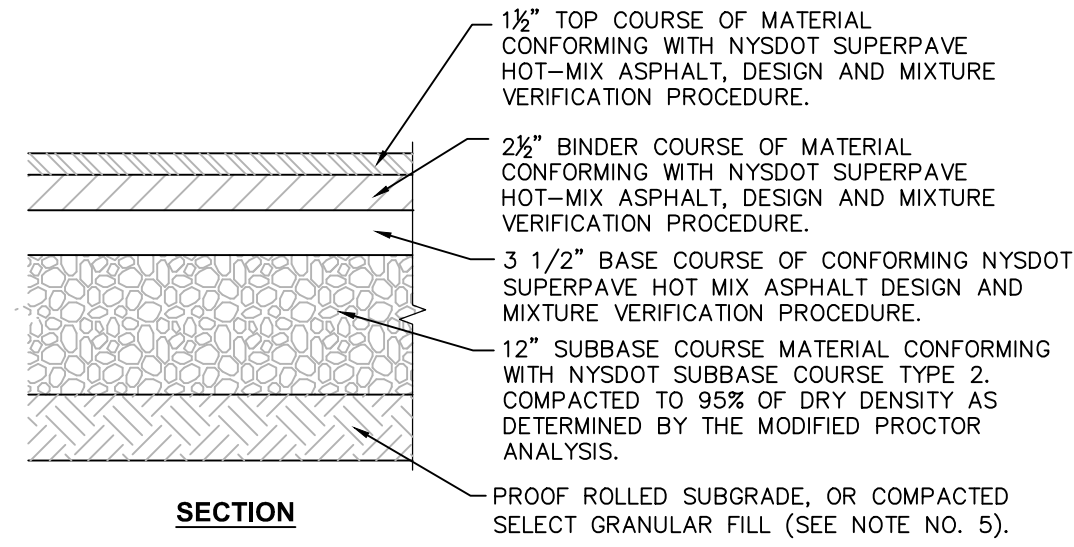
2 NYSDOT PAVEMENT TRANSITION
SCALE: NOT TO SCALE



3 NYSDOT CURB DETAIL
SCALE: NOT TO SCALE



4 NYSDOT CURB TERMINAL
SCALE: NOT TO SCALE



- NOTES:**
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERE TO.
 2. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 - SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 3. HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WITH SECTION 400-HOT MIX ASPHALT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 4. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 5. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 6. PAVEMENT SECTION SHOWN IS PRELIMINARY. PRIOR TO BIDDING AND COMMENCEMENT OF CONSTRUCTION, THE FINAL DESIGN OF THE PAVEMENT SECTION MUST BE PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER AND MUST BE BASED ON A CURRENT GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
 7. PG BINDER 64E-22 SHALL BE IMPLEMENTED FOR ALL PAVING PROCEDURES.
 8. STRAIGHT TACK COAT (ITEM 407.0103) SHALL BE APPLIED BETWEEN ALL PAVEMENT LIFTS.
 9. JOINT ADHESIVE (ITEM 418.7603) SHALL BE APPLIED WHEREVER NEW PAVEMENT WILL ADJOIN EXISTING PAVEMENT.

5 NYSDOT SHOULDER PAVEMENT DETAIL
SCALE: NOT TO SCALE

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION



ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT, OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT, APPLICATION AND SITUATION FOR WHICH IT WAS INTENDED. ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION OTHER THAN THAT FOR WHICH IT WAS INTENDED, WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION "ALTERED BY FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION."



CHAZEN ENGINEERING, LAND SURVEYING,
LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

THE Chazen COMPANIES
27002 65 Ave 6 Poughkeepsie, New York 12601
www.chazenco.com
(888) 538-9073

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

Office Locations

- o Glens Falls, NY
- o Troy, NY
- o Poughkeepsie, NY
- o White Plains, NY
- o New York City, NY

rev.	date	description
1	03/03/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

NYSDOT DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SPL	checked CPL
date 01/20/22	scale AS SHOWN
project no. 81912.00	
sheet no. C501	

CONSTRUCTION PHASING NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE OWNER AND NYSDOT ENGINEER IN WRITING WHEN CONSTRUCTION WILL BEGIN, AT LEAST TWO (2) WEEKS PRIOR TO THE START OF WORK.
2. PRIOR TO LEAVING THE WORK SITE EACH DAY, THE CONTRACTOR SHALL REMOVE OR PROTECT ANY PART OF THE WORK SITE THAT MAY BE CONSIDERED HAZARDOUS TO THE TRAVELING PUBLIC.
3. WHILE PAVING WITHIN WORK ZONE, THE CONTRACTOR SHALL FOLLOW FIGURE 302-9B ON PAGE 2532 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. PAVEMENT RESURFACING OPERATIONS SHALL BE SCHEDULED SO AS TO MINIMIZE THE LONGITUDINAL LENGTH OF EXPOSED PAVEMENT EDGE LEFT OVERNIGHT. REFER TO N.Y.S.D.O.T. STANDARD SPECIFICATION SECTION 402-3.09 JOINTS.

HIGHWAY WORK PERMIT NOTES:

1. NO TRAVEL LANE CLOSURE DURING THE FOLLOWING TIMES (OR ACCORDING TO PERMIT):
6:30 TO 9:30 A.M.
4:30 TO 6:30 P.M.
2. ALL LANE CLOSURE AND TRAFFIC CONTROL MUST CONFORM TO THE LATEST EDITION OF THE NYSDOT SPECIFICATIONS, SECTION 640 AND THE CODES RULES AND REGULATIONS OF THE STATE OF NEW YORK (NYCRR) TITLE 17-TRANSPORTATION VOLUME B-CHAPTER V "UNIFORM TRAFFIC CONTROL DEVICES," AS PER FHWA MUTCD 2009 EDITION AND NYS SUPPLEMENTAL TO NATIONAL MUTCD 2010 EDITION.
3. THE CONTRACTOR SHALL COMPLY WITH THE WORK RESTRICTIONS FOR HOLIDAYS AND OTHER EVENTS AS PART OF THE STANDARD CONDITION AND OBLIGATION FOR HIGHWAY WORK PERMITS. LANE CLOSURES WILL NOT BE PERMITTED DURING THE FOLLOWING HOLIDAY PERIODS: EASTER WEEKEND, MEMORIAL DAY, INDEPENDENCE DAY, THANKSGIVING, CHRISTMAS, AND NEW YEARS DAY.

REFERENCE NOTES:

1. EXISTING PAVEMENT MARKINGS TO BE CLEANED UNDER ITEMS 635.0103, 635.0203, AND 635.0303, PRIOR TO THE INSTALLATION OF NEW PAVEMENT MARKINGS, A.O.B.E.
2. PAVEMENT MARKINGS ARE TO BE DIMENSIONED AS PER NYS STANDARD SHEETS 685-1, 685-1R1, 685-2R2, 685-3R2, 685-4R2, 685-5.

GENERAL NOTES:

1. EXISTING TOPOGRAPHIC INFORMATION FOR HERON WAS COMPILED FROM A SURVEY COMPLETED OCTOBER 21, 2019, BY HERITAGE LAND SURVEYING, P.C..
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.
3. SURVEYED WITHOUT THE BENEFIT OF A TITLE SEARCH.
4. COPYRIGHT CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., D.P.C., ALL RIGHTS RESERVED.
5. SURVEYED FROM RECORD DESCRIPTION AND AS IN POSSESSION.
6. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
7. BUILDING SHOWN HEREON SERVED BY UNDERGROUND UTILITIES.
8. THE CONTRACTOR SHALL COMPLY WITH NEW YORK STATE INDUSTRIAL CODE RULE 753 - 48 HOURS PRIOR TO DIGGING CALL DIGSAFELY NEW YORK 1-800-962-7862 TO HAVE PUBLIC UTILITY LOCATIONS PAINTED.
9. TOPOGRAPHY SHOWN HEREON WAS COMPILED FROM A FIELD SURVEY COMPLETED NOVEMBER 16, 2017, BY CHAZEN ENGINEERING, LAND SURVEYING AND LANDSCAPE ARCHITECTURE CO. D.P.C. DATUM NAVD-88, 1 FOOT CONTOUR INTERVAL.
10. UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON WERE TAKEN FROM DATA OBTAINED FROM PREVIOUS MAPS AND RECORD DRAWINGS. ALL ABOVE GROUND STRUCTURES AND SURFACE FEATURES SHOWN HEREON ARE THE RESULT OF A FIELD SURVEY UNLESS OTHERWISE NOTED. THERE MAY BE OTHER UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN OR CERTIFIED BY THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES. THE UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION MUST BE NOTIFIED PRIOR TO CONDUCTING TEST BORINGS, EXCAVATION AND CONSTRUCTION.
11. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES, EXISTING STRUCTURE LOCATIONS AND OTHER EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE FOR FURTHER RESOLUTION.
12. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT OTHER CONTRACTORS MAY BE WORKING IN THE AREA ON OTHER CONSTRUCTION AT THE SAME TIME THAT WORK IS PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR SHALL BE AWARE OF THE NATURE AND EXTENT OF THIS OTHER WORK AND SHALL SCHEDULE AND CONDUCT HIS OWN OPERATION SO THAT THERE WILL BE NO CONFLICT IN OPERATIONS.
13. SINCE THIS PROJECT INVOLVES CONSTRUCTION WITHIN AN ACTIVE ROADWAY, IT IS IMPERATIVE THAT THE CONSTRUCTION BE CARRIED FORTH IN SUCH A MANNER AS TO INSURE THAT PROPER TRAFFIC FLOW IS MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE MAINTENANCE AND PROTECTION OF TRAFFIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND STANDARD SPECIFICATIONS.
14. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS AND SHALL BE RESPONSIBLE FOR FIELD FIT FINISH AND QUALITY OF WORK AND MATERIALS USED IN THE CONSTRUCTION. NO ALLOWANCE SHALL BE MADE ON BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLECT ON HIS PART.
15. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT AND RESTORATION OF ALL NATURAL AND MANMADE FEATURES WHETHER SHOWN ON THE PLANS OR ENCOUNTERED IN THE FIELD. IT IS THE INTENTION OF THE PLANS TO SHOW ONLY MAJOR FEATURES TO BE PROTECTED, RESTORED OR REPLACED.
16. PROTECTION AND RESTORATION OF PROPERTY SHALL BE IN ACCORDANCE WITH THE NYSDOT STANDARD SPECIFICATIONS.
17. TOPSOIL SHALL BE PLACED AND AREAS SHALL BE SEEDED AS SOON AS FINAL GRADES ARE ESTABLISHED ON PERMANENT SLOPES. SLOPES SHALL ALSO BE MULCHED.
18. THE CONTRACTOR SHALL CONTACT ALL THE APPROPRIATE PARTIES WITH JURISDICTION OVER THE UTILITIES ENTERING ON OR NEAR THE PROJECT AREA PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES AND PROVIDE THOSE AGENCIES 72 HOURS NOTIFICATION.
19. THE CONTRACTOR SHALL VERIFY THE LOCATION OF AND SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES ADJACENT TO THE SITE OF CONSTRUCTION, IN SO FAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES NOT SHOWN ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION TO UTILITY SERVICES.
20. IF TEMPORARY UTILITY SERVICES ARE REQUIRED, THE CONTRACTOR SHALL SEE TO IT THAT THEY ARE PROVIDED, AT NO ADDITIONAL COST TO THE OWNER, AND SHALL BE HIS RESPONSIBILITY TO MAINTAIN SUCH TEMPORARY FACILITIES FOR THE DURATION OF THE PROJECT AS NECESSARY.
21. ALL EPOXY PAVEMENT MARKINGS AND ALL SIGNS SHALL BE IN CONFORMANCE WITH THE NYSDOT MUTCD.
22. ALL DISTURBED AREAS WITHIN THE R.O.W. SHALL BE TOPSOILED, SEEDED AND MULCHED.
23. ALL SIGNING WILL BE IN ACCORDANCE WITH THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES WITH NYS SUPPLEMENT, MOST RECENT VERSION.
24. PRIOR TO LEAVING THE WORK SITE EACH DAY, THE CONTRACTOR SHALL REMOVE OR PROTECT ANY PART OF THE WORK SITE THAT IS CONSIDERED HAZARDOUS TO THE TRAVELING PUBLIC, BY THE NYSDOT RESIDENT ENGINEER OR PERMIT ENGINEER, TOWN ENGINEER, OR POLICE DEPARTMENT.
25. DURING ALL CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL MAINTAIN ACCESS TO EACH ADJACENT SITE. IF CONDITIONS REQUIRE THAT ACCESS BE TEMPORARILY CLOSED, THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 24 HOURS IN ADVANCE. ALL ACCESS DRIVES WILL BE OPEN FOR SAFE USE AT THE END OF EACH WORK DAY.
26. PAVEMENT LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH NYSDOT STANDARD SHEET 685-2R2.
27. IN ADDITION TO THE ABOVE NOTES, THE CONTRACTOR SHALL FOLLOW ALL NOTES ATTACHED TO THE NYSDOT WORK PERMIT.
28. AREAS DISTURBED NOT RECEIVING PAVEMENT OR CONCRETE SHALL BE TOPSOILED, SEEDED, AND MULCHED IN ACCORDANCE WITH SPECIFICATIONS ON ATTACHED SHEETS.

SIGNAGE AND PAVEMENT MARKING NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MAY 1, 2008 EDITION OF THE NYSDOT STANDARD SPECIFICATIONS WITH LATEST REVISIONS, SECTION 645 AND AS NOTED IN 4, 5, AND 6 BELOW, AND THE CODES RULES AND REGULATIONS OF THE STATE OF NEW YORK (NYCRR) TITLE 17-TRANSPORTATION VOLUME B-CHAPTER V "UNIFORM TRAFFIC CONTROL DEVICES, AS PER FHWA MUTCD 2009 EDITION AND NYS SUPPLEMENTAL TO NATIONAL MUTCD 2010 EDITION.
2. STRIPING WORK WILL BE REVIEWED AND ACCEPTED BY THE NYSDOT.
3. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
4. PAVEMENT MARKINGS SHALL CONFORM WITH NYSDOT SECTION 685 - EPOXY REFLECTORIZED PAVEMENT MARKINGS
5. SURFACE PREPARATION FOR THE INSTALLATION OF PAVEMENT MARKING, SHALL CONFORM WITH SECTION 635 - CLEANING AND PREPARATION OF PAVEMENT SURFACES FOR PAVEMENT MARKINGS.
6. PERMANENT SIGNING SHALL BE INSTALLED ON TYPE A POSTS.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
2. ALL PAVEMENT RESTORATION SHALL MEET AND MATCH EXISTING GRADES.
3. ALL SAWCUT LINES SHALL BE PARALLEL AND CURVILINEAR TO EXISTING OR PROPOSED CURBING AND SHALL BE A CONSTANT DISTANCE OF 18" MIN AWAY.
4. NOTIFY ENGINEER 48 HOURS PRIOR TO INITIALIZATION OF ANY WORK ON SITE.
5. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW FROM THE ENGINEER.
6. CONTRACTOR IS RESPONSIBLE FOR EMPLOYING AND MAINTAINING ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR PROPERLY & SAFELY MAINTAINING AREA BETWEEN ALL ADJOINING PROPERTIES.
8. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE SITE PROPERTY LINES OR PUBLIC RIGHT-OF-WAY.
9. ALL EXISTING LAWN AREA, CURBING, PAVING, SIDEWALKS, CULVERTS OR OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED BY TRENCHING OR EXCAVATION OPERATIONS SHALL BE REPLACED OR REPAIRED TO A CONDITION EQUAL TO EXISTING. AS DESCRIBED IN CONTRACT DOCUMENTS OR AS PROVIDED BY THE ENGINEER, MAILBOXES, SIGN POSTS, ETC SHALL BE PROTECTED OR REMOVED AND REPLACED EXACTLY AS THEY WERE BEFORE BEING DISTURBED. REMOVE AND REPLACE AFFECTED CURBING AND SIDEWALK TO NEAREST JOINT. REMOVE PAVEMENT AND REPLACE TO SAW CUT LINE. SAW CUT IN STRAIGHT LINE TO POINT NEEDED TO BLEND GRADE, REMOVE LAWN AND REPLACE TO MINIMUM LIMIT OF EXCAVATION.

LAYOUT:

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND THE ENGINEER AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADDITIONS TO THE SATISFACTION OF THE OWNER AND THE ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.

11. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION, ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
12. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW BY THE ENGINEER.

PAVING:

1. NO VEHICULAR TRAFFIC OF ANY SORT SHALL BE PERMITTED ON THE SURFACE OF SUBBASE COURSE MATERIAL ONCE IT HAS BEEN FINE GRADED, COMPACTED, AND IS READY FOR PAVING. SUBBASE MATERIAL SO PREPARED FOR PAVING SHALL BE PAID WITHIN THREE DAYS OF PREPARATION.
2. SUBBASE MATERIAL AND THE VARIOUS ASPHALT CONCRETE MATERIALS CALLED FOR IN THESE DRAWINGS SHALL CONFORM WITH THE REFERENCED SECTION OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008. CONSTRUCTION SHALL BE AS FURTHER SET FORTH IN THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
3. PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE. SPREAD AND STRIKE-OFF USING A SELF-PROPELLED PAVING MACHINE, WITH VIBRATING SLOPE, PLACEMENT IN INACCESSIBLE AND SMALL AREAS MAY BE BY HAND.
4. PROVIDE JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAYS' WORK.
5. TACK COAT WHEN SPECIFIED OR CALLED OUT ON THE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATION SHALL CONFORM WITH THE FOLLOWING:
 - A. TACK COAT SHALL MEET THE MATERIAL REQUIREMENTS OF 702-90 ASPHALT EMULSION FOR TACK COAT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, SHALL BE APPLIED IN ACCORDANCE WITH SECTION 407 - TACK COAT SHALL BE IN ACCORDANCE WITH THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
 - B. REMOVE LOOSE AND FOREIGN MATERIAL FROM ASPHALT SURFACE BEFORE PAVING NEXT COURSE. USE POWER BROOMS, BLOWERS OR HAND BROOM.
 - C. APPLY TACK COAT TO ASPHALT PAVEMENT SURFACES & SURFACES OF CURBS, GUTTERS, MANHOLES, AND OTHER STRUCTURES PROJECTING INTO OR ABUTTING PAVEMENT. DRY TO A "TACKY" CONSISTENCY BEFORE PAVING.
 - D. TACK COAT ENTIRE VERTICAL SURFACE OF ABUTTING EXISTING PAVEMENT.
6. AFTER COMPLETION OF PAVING AND SURFACING OPERATIONS, CLEAN SURFACES OF EXCESS OR SPILLED ASPHALT, GRAVEL OR STONE MATERIALS TO THE SATISFACTION OF THE ENGINEER.

STRIPING REMOVAL NOTES:

1. REMOVAL OF EXISTING PAVEMENT STRIPING SHALL BE ACCOMPLISHED BY MILLING. THE WORK SHALL BE PERFORMED IN SUCH A MANNER THAT THE FINISHED PAVEMENT IS NOT DAMAGED OR LEFT IN A PATTERN THAT WILL MISLEAD OR MISDIRECT THE MOTORISTS. WHEN THESE OPERATIONS ARE COMPLETED THE PAVEMENT SURFACE SHALL FIRST BE POWER BROOMED AND THEN BLOWN OFF WITH COMPRESSED AIR TO REMOVE RESIDUE AND DEBRIS RESULTING FROM THE WORK. ALL SUCH DEBRIS THAT REMAINS ON THE ROADWAY, INCLUDING BROKEN PARTS FROM CLEANING EQUIPMENT, SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL AND STATE GUIDELINES.
2. THE CONTRACTOR SHALL CONDUCT THE REMOVAL AND CLEANING WORK IN SUCH A MANNER AS TO MINIMIZE AIRBORNE DUST AND SIMILAR DEBRIS, SO AS TO PREVENT A HAZARD TO MOTOR VEHICLE OPERATION OR NUISANCE TO PROPERTY OWNERS.

TRENCHING & INSTALLATION NOTES:

1. ALL AREAS DISTURBED DURING TRENCHING AND WORK OPERATIONS MUST BE STABILIZED WITHIN 14 DAYS.
2. ALL TRENCHING IN PAVEMENT SHOULD BE SAW-CUT PRIOR TO TRENCHING. PAVEMENT RESTORATIONS MAY REQUIRE ADDITIONAL CUTBACKS AFTER TRENCHING OPERATIONS HAVE BEEN COMPLETED.
3. ALL PAVED AREAS MUST BE RESTORED WITH A MINIMUM OF 4" TEMPORARY PAVING AT THE CLOSE OF EACH DAY'S WORK OPERATIONS.
4. PERMANENT PAVING MUST BE COMPLETED AT AMBIENT TEMPERATURES OF 40 DEGREES AND RISING. ANY PAVING OPERATIONS COMPLETED BELOW 40 DEGREES SHALL BE CONSIDERED TEMPORARY.
5. ALL SIGNS REMOVED FOR CONSTRUCTION MUST BE RESET USING TYPE A POSTS.

DEMOLITION NOTES:

1. REFER TO REQUIREMENTS OUTLINED IN THE EROSION & SEDIMENTS CONTROL PLANS & NOTES PRIOR TO COMMENCEMENT OF WORK.
2. CONFORM TO APPLICABLE CODE FOR SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNERS.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE VICINITY OF ANY TRENCHING OR DIGGING. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES PRIOR TO ANY TRENCHING OR DIGGING. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACESSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS. COORDINATE W/ AUTHORITY HAVING JURISDICTION.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.

14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
16. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
17. USE WATER MIT. TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT, COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, LANDSCAPING, AND TRANSPORTING POLLUTANTS.
18. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
19. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
20. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

WINTER WORK:

SNOW PLOWING REQUIREMENTS:

DUE TO POSSIBLE SNOW FALL AND HENCE SNOW PLOWING OPERATIONS, ANY STEEL PLATES USED TO COVER AN EXCAVATION SHALL BE:

1. RECESSED INTO THE PAVEMENT AND PINNED.

OR

2. PINNED WITH ASPHALT RAMPS PLACED ALONG ALL EDGES. RAMPS SHALL BE SLOPED AT 1 INCH RISE PER 6 FEET RUN MAXIMUM. "RAISE FLOW" SIGNS SUPPLEMENTED WITH TYPE A FLASHING LIGHTS MUST BE ERECTED AN APPROPRIATE DISTANCE BEFORE THE EXCAVATION; SIGNS AND LIGHTS MUST MEET NYSDOT MUTCD SPECIFICATIONS.

WINTER TIME EARTHWORK REQUIREMENTS:

ALL PERMIT WORK UNDER CONSTRUCTION BETWEEN THE DATES OF NOVEMBER 1 THROUGH MAY 1 SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

1. GRANULAR OR OTHER FROST SUSCEPTIBLE MATERIAL SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 32 DEGREES FAHREHIEIT.
2. FROZEN MATERIAL SHALL NOT BE INCORPORATED INTO EMBANKMENTS OR BACKFILLS.
3. MATERIAL SHALL NOT BE PLACED ON FROZEN GROUND.
4. THE MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH HIGHWAY DESIGN MANUAL CHAPTER 13 APPENDIX 13C, REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF UNDERGROUND UTILITY INSTALLATIONS WITHIN THE STATE HIGHWAY RIGHT-OF-WAY" (AKA BLUE BOOK), LATEST REVISION, AND/OR E104-015 (ENGINEERING INSTRUCTION).
5. ANY SPECIAL CONDITIONS AND RESTRICTIONS AS MAY BE IMPOSED BY THE RESIDENT ENGINEER OR THE REGIONAL GEOTECHNICAL (SOLS) ENGINEER.

PAVEMENT REPLACEMENT REQUIREMENTS:

DUE TO ASPHALT PLANTS CLOSED IN THE WINTER, TEMPORARY PAVEMENT REPLACEMENTS SHALL BE AS PER THE NYSDOT PERMIT FIELD ENGINEER (AKA INSPECTOR) AND/OR RESIDENT ENGINEER. PERMITTEE MUST MONITOR AND MAINTAIN THE TEMPORARY PAVEMENT REPLACEMENT.

TEMPORARY PAVEMENT REPLACEMENTS ARE REQUIRED TO BE REPLACED-KIND IN THE SPRING WHEN THE WEATHER ALLOWS NYSDOT STANDARD SPECIFICATIONS TO BE MET.

THERE MAY BE DIFFERENT MATERIAL REQUIREMENTS, PAVEMENT/ SUBBASE COURSES AND PAVEMENT/ SUBBASE THICKNESS FOR THE DIFFERENT PAVEMENT AREAS. ALL AREAS ARE REQUIRED TO BE REPLACED -KIND AS PER THE NYSDOT PERMIT INSPECTOR AND/OR RESIDENT ENGINEER. TYPES OF PAVEMENT AREAS ARE AS FOLLOWS:

1. STATE HIGHWAY TRAVEL AND TURNING LANES PAVEMENT
2. STATE HIGHWAY SHOULDER PAVEMENT
3. COMMERCIAL DRIVEWAY ENTRANCES TO A STATE HIGHWAY
4. IF COMMERCIAL DRIVEWAY ENTRANCE HAS MORE PAVEMENT THAN SHOULDER, COMMERCIAL DRIVEWAY PAVEMENT IS USED FOR DRIVEWAY APRON/ TURNING AREA ACROSS THE SHOULDER.
5. MOST COMMERCIAL DRIVEWAY ENTRANCES HAVE THE SAME AMOUNT OF PAVEMENT AS STATE HIGHWAY TRAVEL AND TURNING LANES DUE TO VOLUME OF TRAFFIC AND TRUCK TRAFFIC USING THE ENTRANCE.
6. PUBLIC ROAD AND SUBDIVISION ENTRANCES TO A STATE HIGHWAY
SEE COMMENTS FOR COMMERCIAL DRIVEWAY ENTRANCES.
7. RESIDENTIAL DRIVEWAY ENTRANCES TO A STATE HIGHWAY
IF SHOULDER HAS MORE PAVEMENT THAN RESIDENTIAL DRIVEWAY ENTRANCE, SHOULDER PAVEMENT IS USED FOR SHOULDER AREA AND RESIDENTIAL DRIVEWAY PAVEMENT BEGINS AT BACK EDGE OF SHOULDER.

ALL PAVEMENT CROSS SLOPES AND DRIVEWAY PROFILES SHALL BE MAINTAINED OR CAN BE CORRECTED (DEPENDING ON EXTENT OF THE UTILITY WORK) AS ORDERED BY THE NYSDOT PERMIT FIELD ENGINEER (AKA INSPECTOR) AND/OR RESIDENT ENGINEER (AOE).

PERMANENT PAVEMENT REPLACEMENTS FOR UNDERGROUND UTILITIES SHALL BE AS PER NYSOT HIGHWAY DESIGN MANUAL CHAPTER 13 APPENDIX 13C "REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF UNDERGROUND UTILITY INSTALLATIONS WITHIN THE STATE HIGHWAY RIGHT-OF-WAY" (AKA BLUE BOOK), LATEST REVISION AND/OR EDITION AND DRAWINGS.

DWG. 7 BACKFILL AND PAVEMENT STRUCTURE REPLACEMENT DETAILS FOR FULL DEPTH REPAIR OF UTILITY CUTS
IN EXISTING PORTLAND CEMENT CONCRETE (PCC) PAVEMENT

DWG. 8 BACKFILL AND PAVEMENT STRUCTURE REPLACEMENT DETAILS FOR FULL DEPTH REPAIR OF UTILITY CUTS IN EXISTING HOT MIX ASPHALT (HMA) PAVEMENT

DWG. 9 BACKFILL AND PAVEMENT STRUCTURE REPLACEMENT DETAILS FOR UTILITY KEYHOLE AND BELLHOLE CUTOUTS

DWG. 10 PLACING "CONTROLLED LOW STRENGTH MATERIAL (CLSM)" BACKFILL AT EXISTING UTILITIES

PERMITTEE MUST MAKE ARRANGEMENTS WITH THE NYSDOT PERMIT FIELD ENGINEER (AKA INSPECTOR) AND/OR RESIDENT ENGINEER FOR FIELD VIST TO ENSURE PAVEMENT REPLACEMENT IS DONE PROPERLY TO CORRECT THICKNESS.

ROCK REMOVAL NOTES:

ROCK REMOVAL BY MECHANICAL MEANS ONLY IS PERMITTED WITHIN THE NYSDOT ROW. BLASTING OF BEDROCK IS NOT PERMITTED AT THIS SITE IN ORDER TO COMPLETE THE PROPOSED DEVELOPMENT. HOWEVER, THESE NOTES ARE INCLUDED SHOULD UNFORESEEN CONDITIONS REQUIRE THE NEED FOR BLASTING TO EXCAVATE BEDROCK AND NYSDOT WERE TO AMEND THE PERMIT TO ALLOW THE CONTRACTOR TO DO, ALL COSTS SHALL BE BOURNE BY THE CONTRACTOR.

1. ALL RECOMMENDED SAFETY REQUIREMENTS AND STANDARDS REFERENCED AND ANY LOCAL RESTRICTIONS SHALL BE APPLIED AS REQUIRED FOR SAFETY, SECURITY, AND SPECIFICALLY RELATED DETAILS FOR BLASTING PROCEDURES. AT ALL TIMES, THE CONTRACTOR'S MANAGEMENT OF AND ORDINANCES WILL BE FOLLOWED CONCERNING THE TRANSPORTATION AND STORAGE OF EXPLOSIVES.
2. A MINIMUM OF FOUR (4) WEEKS PRIOR TO COMMENCEMENT OF THE INITIAL BLASTING OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AS APPROPRIATE: POLICE AGENCIES, GAS AND ELECTRIC SERVICE COMPANIES, TELEPHONE AND CABLE COMPANIES, TOWN WATER AND SEWER DEPARTMENTS, NYSDOT, AND LOCAL FIRE, RESCUE, AND AMBULANCE SERVICES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE RESULTING FROM THE USE OF EXPLOSIVES. EXPLOSIVES SHALL BE STORED IN A SECURE MANNER IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES.
4. THE CONTRACTOR SHALL NOTIFY EACH PROPERTY AND UTILITY OWNER HAVING A BUILDING, STRUCTURE, OR OTHER INSTALLATION ABOVE OR BELOW GROUND IN PROXIMITY TO THE SITE OF THE WORK OF HIS INTENTION TO USE EXPLOSIVES. NOTICE SHALL BE GIVEN SUFFICIENTLY IN ADVANCE TO ENABLE THE OWNERS TO TAKE NECESSARY STEPS TO PROTECT THEIR PROPERTY. NOTICE SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DAMAGE RESULTING FROM HIS BLASTING OPERATIONS.
5. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT PRE-BLAST SURVEYS WITH PROPERTY OWNERS LOCATED IN THE AREA POTENTIALLY AFFECTED BY AIRBLAST OVERPRESSURE AND GROUND VIBRATION OR AS REQUIRED.
6. THE CONTRACTOR SHALL IMPLEMENT ENGINEERING MEASURES IN ORDER TO MINIMIZE THE POTENTIAL IMPACTS OF DUST, NOISE AND GROUND VIBRATION. BLAST VIBRATION CONTROL WILL BE ACHIEVED BY LIMITING THE CHARGE PER DELAY SO THAT THE PEAK PARTICLE VELOCITY REMAINS BELOW THE SPECIFIED LEVELS.
7. A APPROPRIATELY QUALIFIED, LICENSED BLASTING SPECIALIST, WITH EXPERIENCE SHALL BE ONSITE AND SUPERVISE BLASTING OPERATIONS. AT ALL TIMES, THE BLASTING AREA SHALL BE RESTRICTED TO BLASTING OPERATIONS AND AUTHORIZED PERSONNEL ONLY.
8. PROTECTIVE MEASURES INCLUDING INSTALLATION OF SIGNAGE, NOTIFICATION OF RESIDENTS, TRAFFIC CONTROL AS NECESSARY ALONG NEARBY ROADS, AUDIBLE PRE-BLAST WARNINGS, AND USE OF BLAST MATS SHALL BE IMPLEMENTED.
9. DELIVERY AND TRANSPORT OF EXPLOSIVES FROM THE POWDER MAGAZINES TO THE BLAST AREA WILL BE BY VEHICLES SPECIFICALLY DESIGNED FOR THIS USE BY THE CRITERIA OUTLINED IN THE SAFETY REQUIREMENTS. ONLY AUTHORIZED PERSONS WILL TRANSPORT AND HANDLE THE EXPLOSIVES AS DESIGNATED BY THE ISSUING AUTHORITY OF THOSE LICENSES FOR THIS PURPOSE.
10. MONITORING OF PEAK PARTICLE VELOCITY (INCHES/SECOND) AND PEAK AIRBLAST OVERPRESSURE (PSI) SHALL BE PERFORMED DURING ALL BLASTS.

GRADING NOTES:

1. PRIOR TO SITE DISTURBANCE, CONTRACTOR TO INSTALL EROSION & SEDIMENT CONTROL MEASURES.
- IF ROCK REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
- ALL BLASTING OPERATIONS WILL ADHERE TO NEW YORK STATE AND LOCAL AUTHORITY ORDINANCES GOVERNING THE USE OF EXPLOSIVES. THE STATE REGULATIONS ARE CONTAINED IN 12 NYCRR 39 AND INDUSTRIAL CODE RULE 153.
- STRIP ALL TOPSOIL PRIOR TO COMMENCING EARTHWORK OPERATIONS. TOPSOIL MAY BE STORED AND REUSED IN LAWN AND PLANTING AREAS ONLY. TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE TO REMAIN GREEN.
- BOX ALL TREES AND HOUSE ALL SHRUBS AND HEDGES BEFORE PLACING EARTH AGAINST OR NEAR THEM. ORNAMENTAL TREES, SHRUBS AND HEDGES WHICH MUST BE REMOVED DURING CONSTRUCTION SHALL BE HEADED IN AND RE-PLANTED IN AS GOOD A CONDITION AS THEY WERE BEFORE THEIR REMOVAL. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE BOUNDARIES OF ANY EASEMENT OR PROPERTY LINE.
- REMOVE ALL VEGETATION, TREES, STUMPS, GRASSES, ORGANIC SOILS, DEBRIS AND DELETERIOUS MATERIALS WITHIN THE AREAS SLATED FOR CONSTRUCTION.

TRAFFIC CONTROL PLAN:

TEMPORARY LANE CLOSURES:

IT WILL BE NECESSARY TO TEMPORARILY CLOSE TRAVEL LANES IN ORDER TO PERFORM THE CONTRACT WORK. THE FOLLOWING RESTRICTIONS SHALL APPLY TO LANE CLOSURES:

1. NO LANE CLOSURES SHALL BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER-IN-CHARGE (EIC).
2. THE STATE RESERVES THE RIGHT TO ALLOW WORK WITHIN THE CONTRACT LIMITS BY OTHERS ALONG KEY CORRIDORS. IN ORDER TO MINIMIZE INCONVENIENCE TO THE TRAVELING PUBLIC, ANY LANE CLOSURES REQUIRED WITHIN CONTRACT LIMITS MUST BE APPROVED BY THE SURFACE TRANSPORTATION CONTROLLER (STC). KEY CORRIDORS ARE DESIGNATED 1-84, TACONIC STATE PARKWAY (TSP), PALISADES INTERSTATE PARKWAY (PIP), SPRAIN BROOK PARKWAY (SBP), SAW MILL RIVER PARKWAY (SMRP), HUTCHINSON RIVER PARKWAY (HRP), CROSS COUNTRY PARKWAY (CCP), NYS RTE17 (FUTURE 1-86), 1-84 (INCLUDING THE NEWBURGH-BEACON BRIDGE), 1-87 (INCLUDING THE TAPPAN ZEE BRIDGE), 1-287, 1-66 AND 1-90.
3. NO LANE CLOSURES WILL BE PERMITTED DURING NON-WORKING HOURS, UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT.
4. ON KEY CORRIDORS AS DESCRIBED IN (B) THE REQUIRED NUMBER OF LANES BY TIME OF DAY CHART IN THE PROPOSAL SHALL BE FOLLOWED, ON ALL OTHER ROUTES THE SAME NUMBER OF TRAVEL LANES (INCLUDING TURNING LANES), AS EXIST PRIOR TO THIS CONTRACT, SHALL BE MAINTAINED IN EACH DIRECTION DURING THE HOURS OF 7:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 6:00 P.M. - MONDAY TO FRIDAY, INCLUSIVE.
5. IN AREAS OF MAJOR SHOPPING MALLS, THE SAME NUMBER OF TRAVEL LANES (INCLUDING TURNING LANES), AS EXIST PRIOR TO THIS CONTRACT, SHALL BE MAINTAINED IN EACH DIRECTION DURING THE HOURS OF 10:00 A.M. TO 4:00 P.M. ON SATURDAYS.
6. THE TIME RESTRICTIONS LISTED ABOVE CAN BE SHIFTED AS TRAFFIC CONDITIONS WARRANT, AND THE CONTRACTOR SHALL BE AWARE THAT THE ENGINEER-IN-CHARGE (EIC) HAS THE ABILITY TO ORDER ADDITIONAL TIME RESTRICTIONS OF UP TO ONE HOUR PER WORK DAY TO THE TIME RESTRICTIONS LISTED ABOVE. IF TRAFFIC CONDITIONS WARRANT, AT NO COST TO THE CONTRACTOR, THE CONTRACTOR SHALL NOT HAVE ANY DELAY CLAIMS AGAINST THE STATE IF THE EIC ORDERS UP TO ONE HOUR OF ADDITIONAL TIME RESTRICTIONS PER DAY.
6. THE ENGINEER-IN-CHARGE IS AUTHORIZED TO REDUCE THE ABOVE TIME RESTRICTIONS ON THE NON-WORKY CORRIDORS IF TRAFFIC CONDITIONS WARRANT.
7. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THE FOLLOWING HOLIDAY WORK RESTRICTIONS ARE APPLICABLE TO THIS PROJECT. DURING THESE HOLIDAY PERIODS, THE CONTRACTOR WILL NOT BE ALLOWED TO PERFORM ANY WORK THAT WILL BE DISRUPTIVE TO TRAFFIC, INCLUDING BUT NOT LIMITED TO LANE CLOSURES. LANE CLOSURES WILL NOT BE PERMITTED DURING THE FOLLOWING STATE RECOGNIZED HOLIDAYS:

NEW YEAR'S DAY
MEMORIAL DAY
INDEPENDENCE DAY
LABOR DAY
THANKSGIVING DAY
CHRISTMAS DAY

IF THE HOLIDAY IS ON A MONDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM FRIDAY TO 10 A.M. TUESDAY. IF THE HOLIDAY IS ON A TUESDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM FRIDAY TO 10 A.M. WEDNESDAY. IF THE HOLIDAY IS ON A WEDNESDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM TUESDAY TO 10 A.M. THURSDAY. IF THE HOLIDAY IS ON A THURSDAY OR FRIDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM THE DAY BEFORE THE HOLIDAY TO 10 A.M. MONDAY. IF THE HOLIDAY IS ON A WEEKEND DAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM FRIDAY TO 10 A.M. MONDAY.

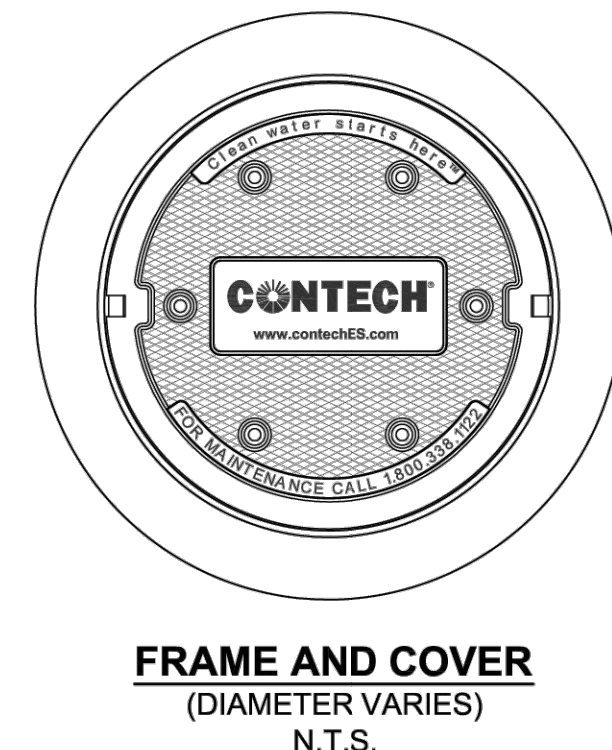
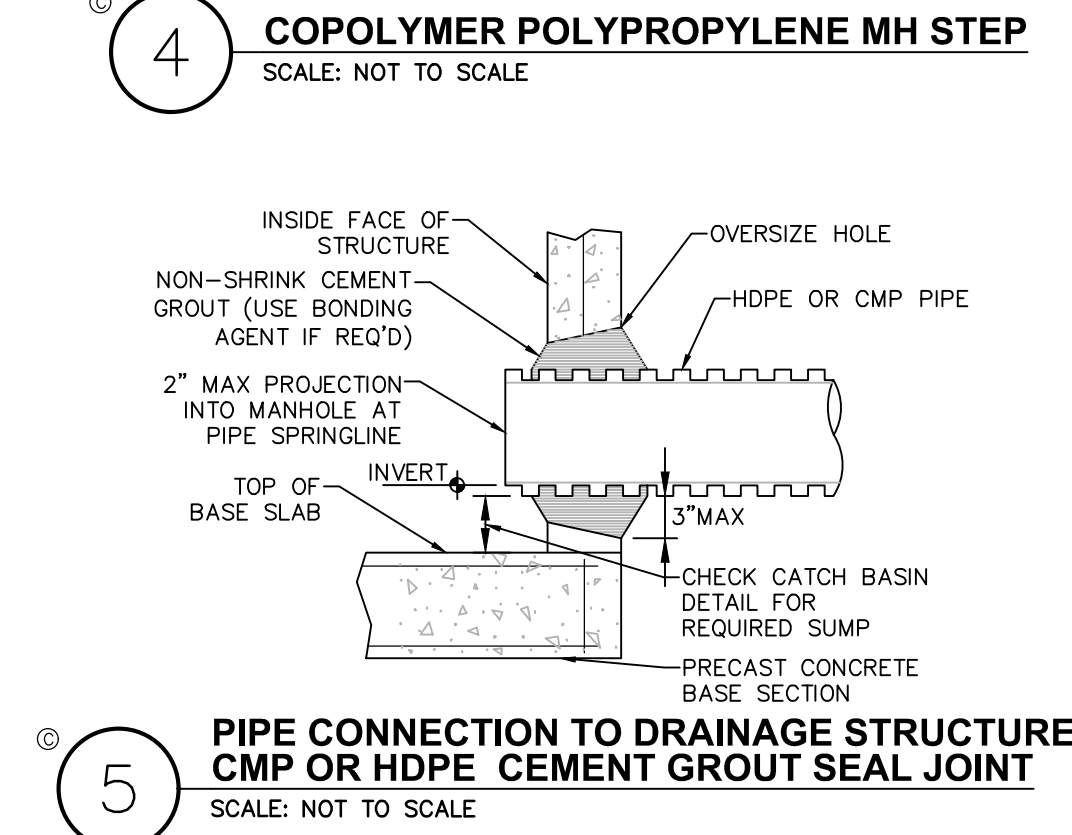
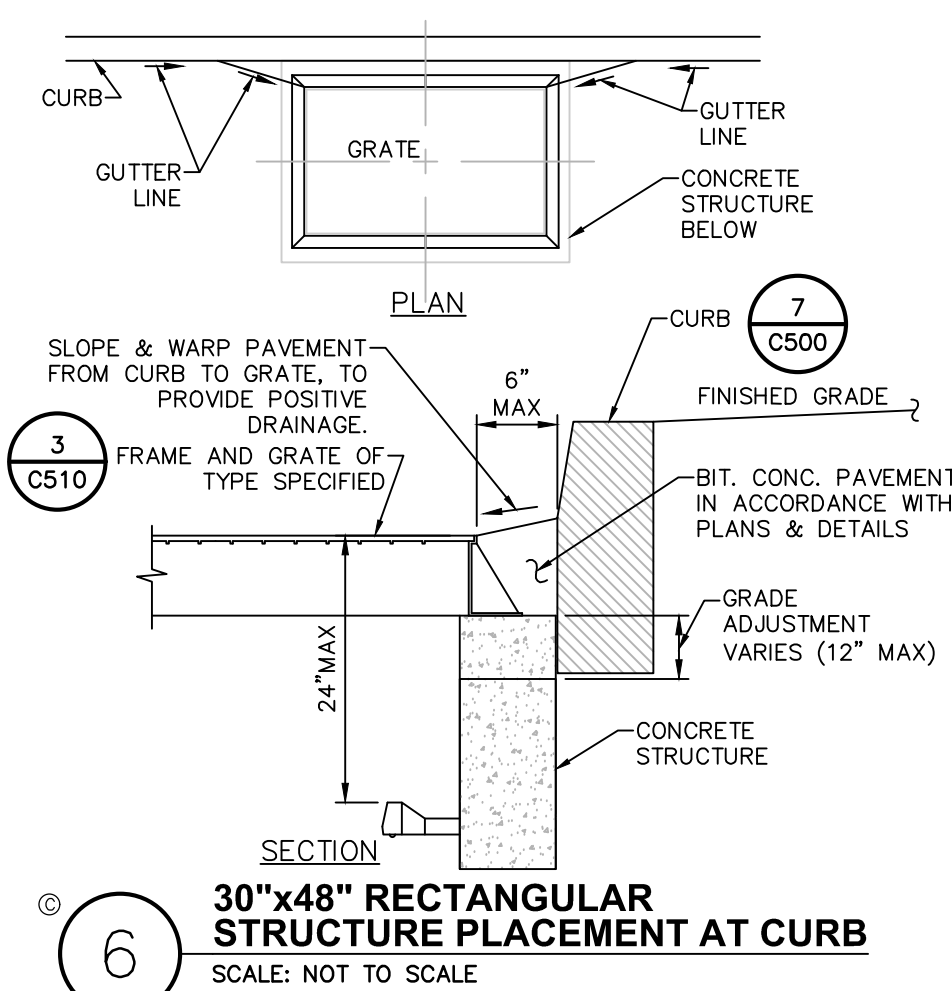
8. THE CONTRACTOR IS ALSO ADVISED THAT THE STATE RESERVES THE RIGHT TO PRECLUDE LANE CLOSURES DURING PERIODS OF SEVERE WEATHER OR IF OTHER EMERGENCIES OCCUR. THE CONTRACTOR SHALL BE AWARE THAT THE STATE RESERVES THE RIGHT TO PRECLUDE LANE CLOSURES DURING PERIODS OF SEVERE WEATHER OR IF OTHER EMERGENCIES OCCUR. THE STATE MAY ALTER ANY LANE CLOSURES SHOULD TRAFFIC CONDITIONS OR OTHER UNFORESEEN CIRCUMSTANCES ARISE, WHICH WOULD ADVERSELY AFFECT THE TRAFFIC FLOW. THE CONTRACTOR IS ALSO ALERTED TO THE FACT THAT THE CONTRACTOR'S MANAGEMENT OF TRAFFIC CONDITIONS MIGHT FORCE HIS/HER CONSTRUCTION OPERATION TO STOP, EVEN DURING TIME WHERE SUCH OPERATION WOULD NORMALLY BE PERMITTED. TEN SUCH OCCURRENCES PER CALENDAR YEAR SHOULD BE TAKEN INTO CONSIDERATION AS A REASONABLE FREQUENCY OF SUCH EVENT WHEN BIDDING THIS PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM AGAINST THE STATE FOR ANY DELAYS OR EXTRA COSTS INCURRED IN COMPLYING WITH THESE RESTRICTIONS.
9. THE STATE MAY GRANT A WAIVER OF THESE RESTRICTIONS UPON A TIMELY RECEIPT OF A REQUEST FOR SAID WAIVER FROM THE CONTRACTOR. A MINIMUM OF FIVE WORKING DAYS FOR THE REVIEW OF THE CONTRACTOR'S REQUEST WILL BE REQUIRED.

LANDSCAPE, ADA, & ENVIRONMENTAL NOTES:

1. ALL DISTURBED AREAS WITHIN THE STATE R.O.W. ARE TO BE TOPSOILED, SEEDED AND MULCHED TO GUARANTEE AN ACCEPTABLE STATE OF GRASS.
2. NO TREES WITHIN THE STATE R.O.W. OVER 6" D.B.H. (DIAMETER BREAST HEIGHT) ARE TO BE REMOVED WITHOUT PRIOR PERMISSION FROM THE REGIONAL LANDSCAPE ARCHITECT / OFFICE. THE REGIONAL LANDSCAPE ARCHITECT/ OFFICE MAY BE CONTACTED AT (845) 431-5853.
3. ACCEPTABLE ISLAND TREATMENTS OR OTHER LANDSCAPED AREAS ARE:
 - a. MAINTAINED TURF.
 - b. ORGANIC MULCH WITH OR WITHOUT PLANTS.
 - c. PLANTS, AT THEIR NATURAL HEIGHT, SHALL NOT INVADE THE SIGHT DISTANCE REQUIREMENTS OF DRIVEWAYS. PLANTS MUST BE 2 FEET OR LESS IN HEIGHT ABOVE THE DRIVEWAY PAVEMENT (18" ABOVE 6" CURB).
 - c. CONCRETE PAVERS/ LANDSCAPE BRICK.
 - d. FLUSH CHANNELIZING ISLANDS IN LEU OF LARGE ASPHALT DRIVEWAYS WITH PAVEMENT MARKINGS MUST BE DESIGNED AND CONSTRUCTED TO SUPPORT TRAFFIC LOADS OF LARGE VEHICLE TURN PATNS.
 - d. CONCRETE (IF FOR SIDEWALK, 5 FEET + SPACE FOR SIGNS MINIMUM BETWEEN CURBS).
 - e. COMBINATIONS OF THESE.
 - f. LANDSCAPE PLANTING DETAILS SHALL COMPLY WITH NYSDOT STANDARD SHEET M611-1 OR 611-01.
4. UNACCEPTABLE ISLAND TREATMENTS OR OTHER LANDSCAPED AREAS ARE:
 - a. ASPHALT
 - b. LOOSE STONE/ GRAVEL OF ANY SIZE.
5. APPLICANT/ PERMITTEE AGREES TO MAINTAIN LANDSCAPING ON NYSDOT ROW.

**BLOWING OF HAZARDOUS DEBRIS (DUST, DIRT, LEAVES, ETC.) WITH ANY KIND OF FORCE TOWARDS THE STATE HIGHWAY, OTHER PUBLIC ROADWAY OR DRIVEWAY ENTRANCES IS PROHIBITED. LEAF BLOWERS OR OTHER POWER TOOLS THAT CAN INTERFERE WITH TRAFFIC, DAMAGE A VEHICLE / BICYCLE / PROPERTY OF OTHER HIGHWAY USERS OR CAUSE INJURY TO PERSONS ARE NOT PERMITTED FOR MAINTENANCE OPERATIONS. MAINTENANCE SHALL INCLUDE NORMAL LANDSCAPE TYPE LABOR.

6. ALL SIDEWALK CURB RAMPS AND DETECTABLE WARNING SURFACES SHALL BE AS PER:
 - a. NYSDOT STANDARD SHEETS
METRIC UNITS (EB 08-051, APPROVED 2006-12-07 EFFECTIVE 2007-05-03)
M608-10 SHEET 1 OF 4 SIDEWALK CURB RAMPS DIMENSIONS, DETAILS AND GEOMETRY
M608-11 SHEET 2 OF 4 SIDEWALK CURB RAMPS CONFIGURATIONS: TYPE 1 THRU 8
M608-12 SHEET 3 OF 4 SIDEWALK CURB RAMPS CONFIGURATIONS: TYPE 9 THRU 13
M608-13 SHEET 4 OF 4 SIDEWALK CURB RAMPS DETECTABLE WARNING DETAILS
US CUSTOMARY UNITS (EB 08-036, APPROVED 2008-09-19 EFFECTIVE 2009-01-08)
608-01 SHEET 1 OF 4 SIDEWALK CURB RAMP DETAILS: DIMENSIONS AND GEOMETRY
608-01 SHEET 2 OF 4 SIDEWALK CURB RAMP DETAILS CONFIGURATIONS: TYPE 1 THRU 8
608-01 SHEET 3 OF 4 SIDEWALK CURB RAMP DETAILS CONFIGURATIONS: TYPE 9 THRU 13
608



SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
PEAK QUALITY FLOW RATE (CFS OR L/s)		*	
WATER FLOW RATE (CFS OR L/s)		*	
RETURN PERIOD OF PEAK FLOW (YRS)		*	
SCREEN APERTURE (2400 OR 4700)		*	
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION		*	
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			
* PER ENGINEER OF RECORD			

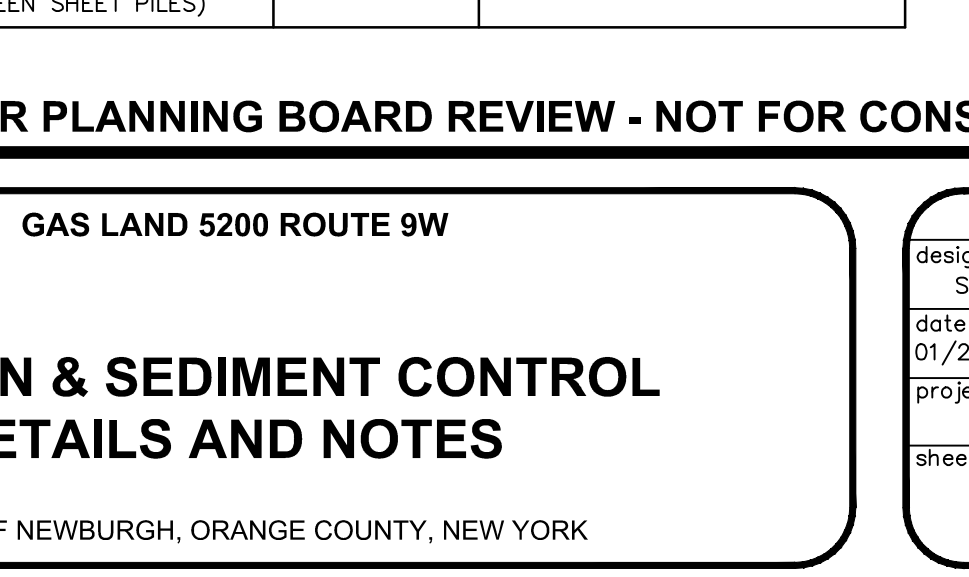
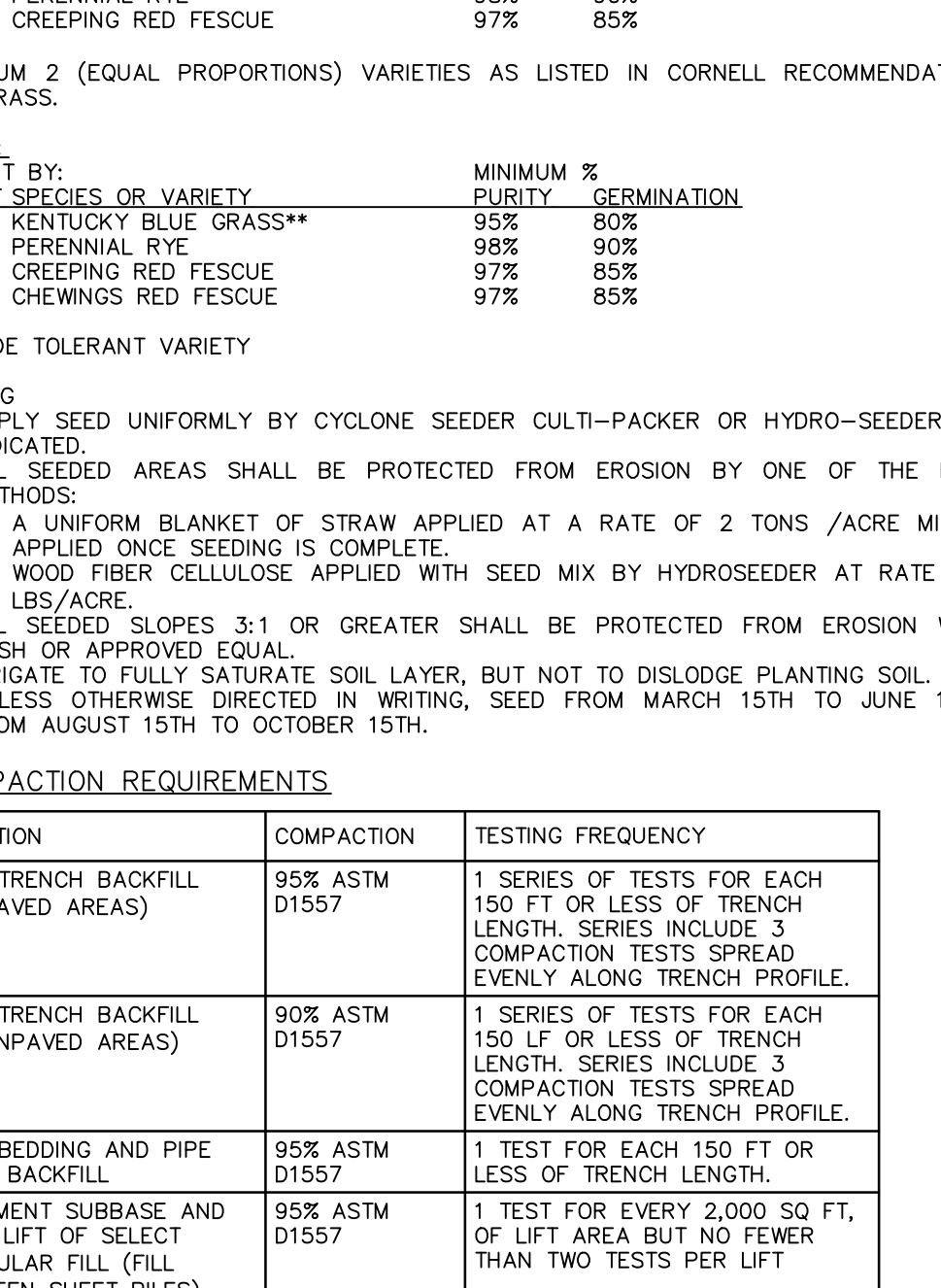
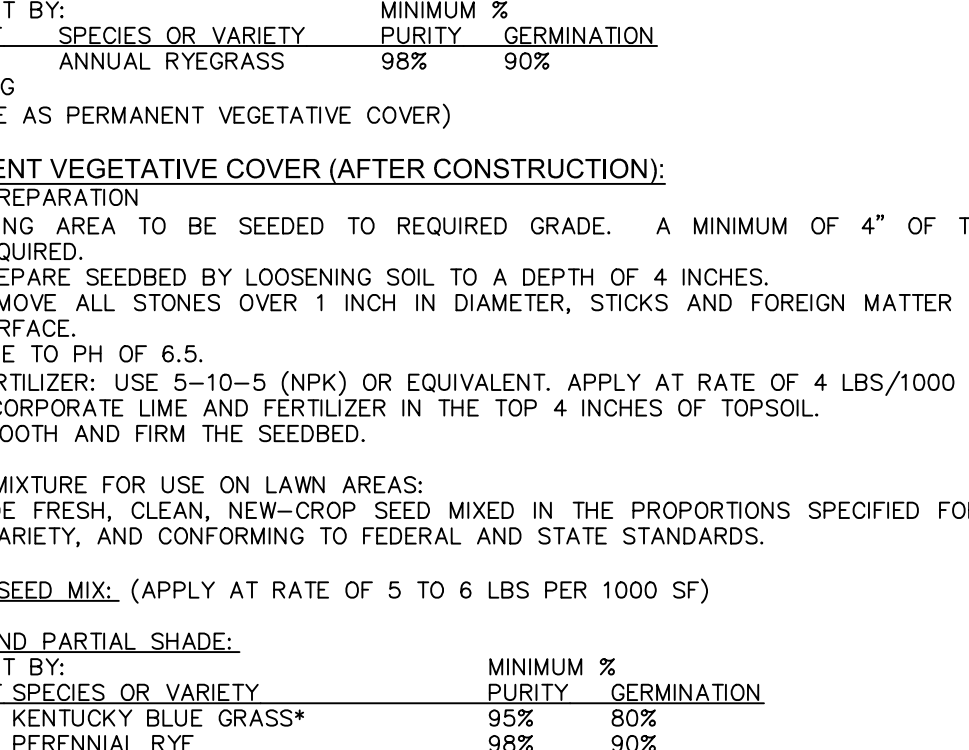
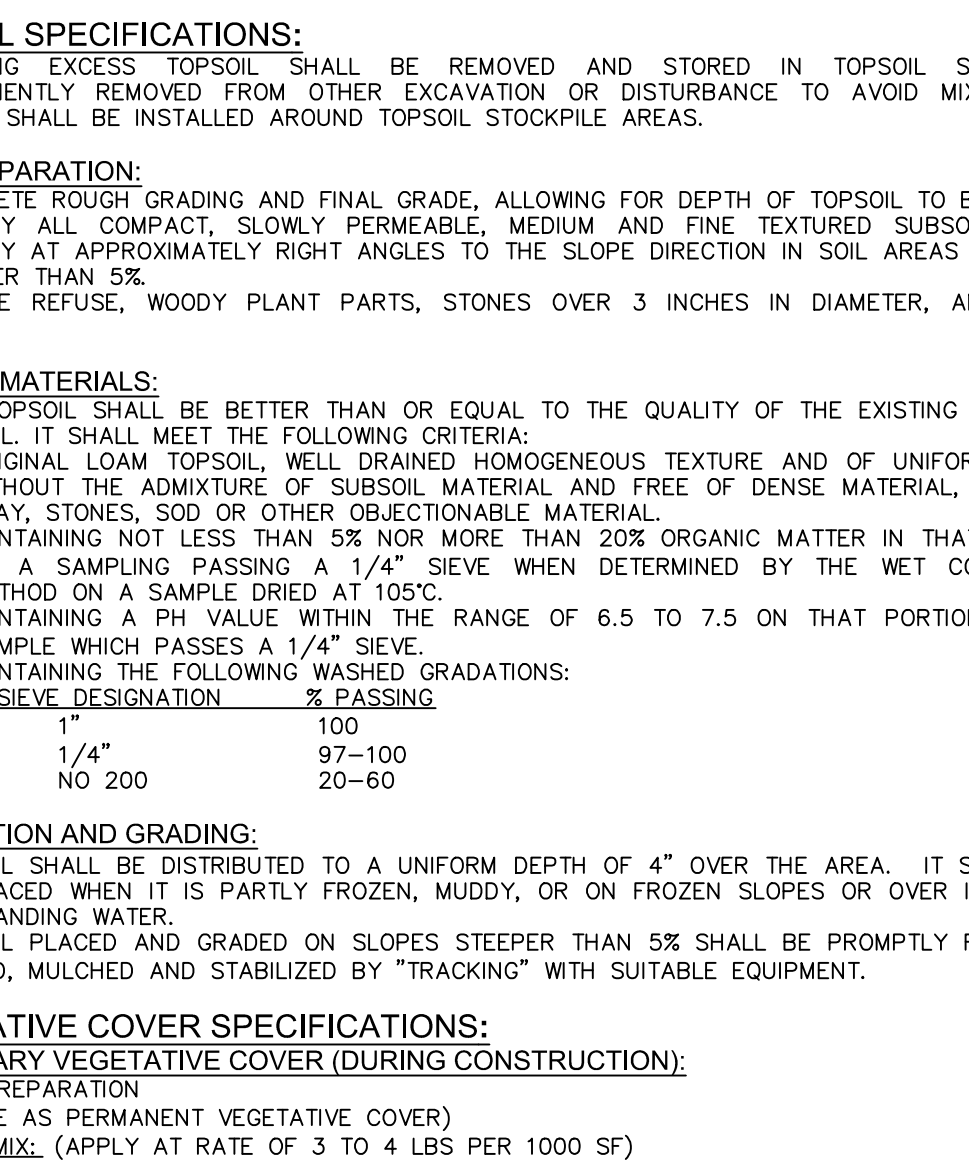
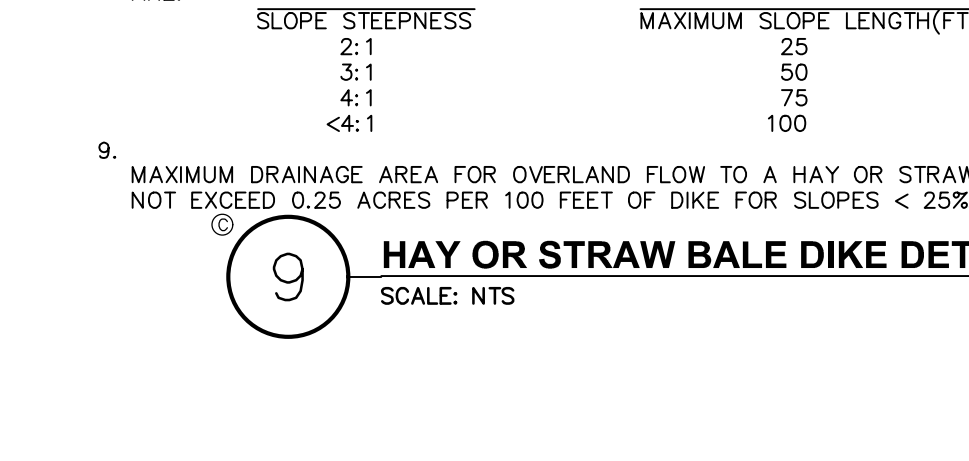
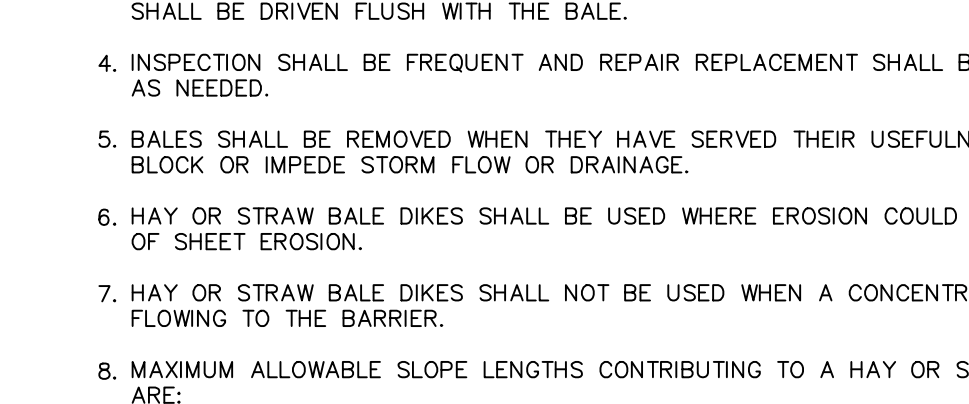
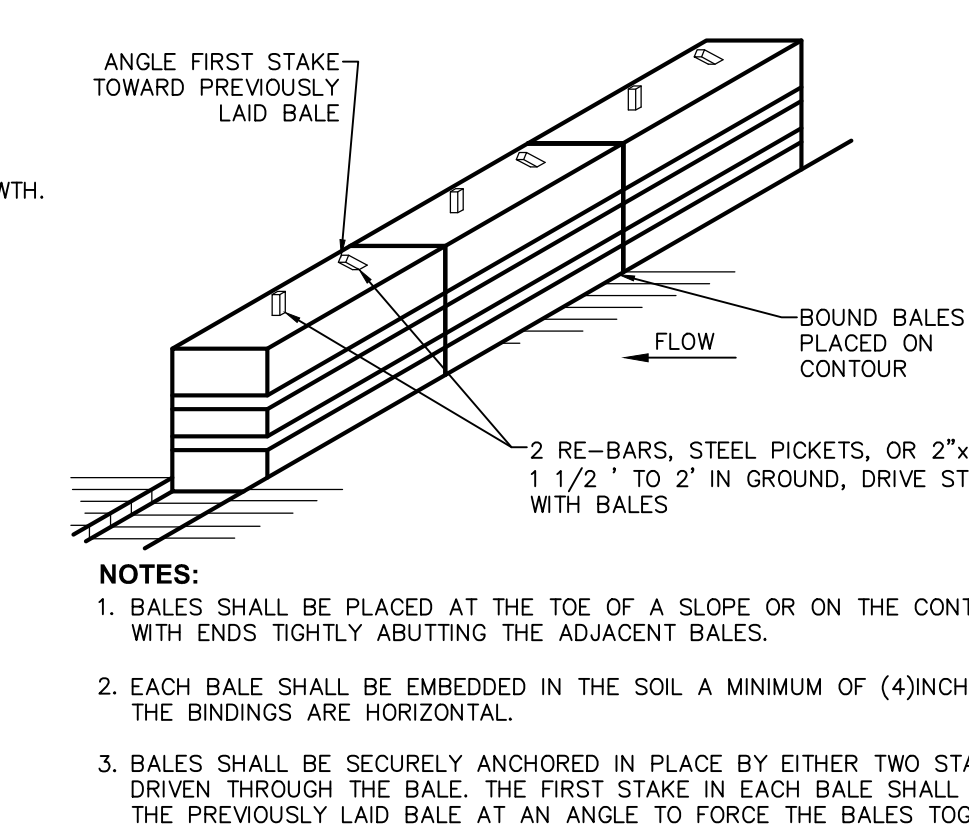
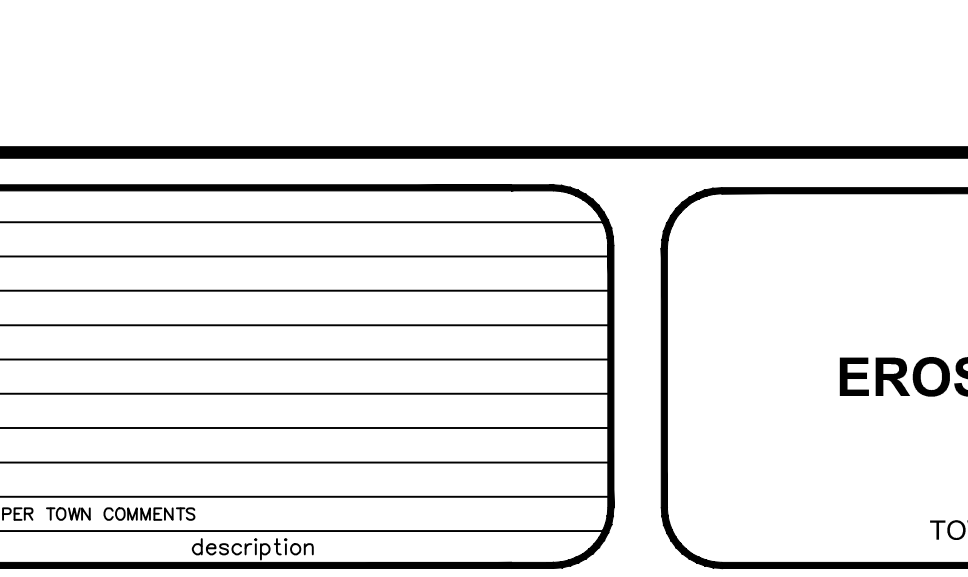
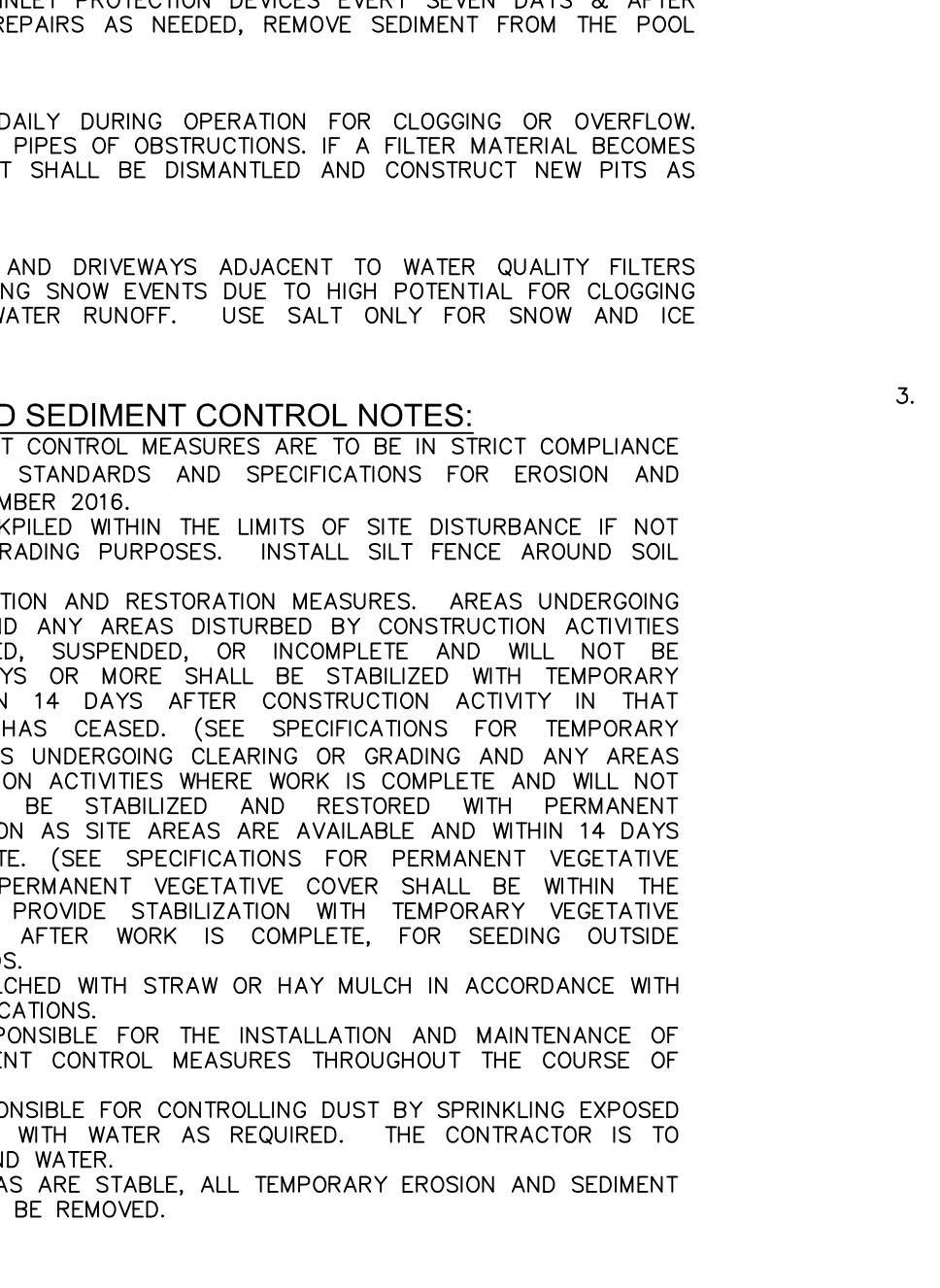
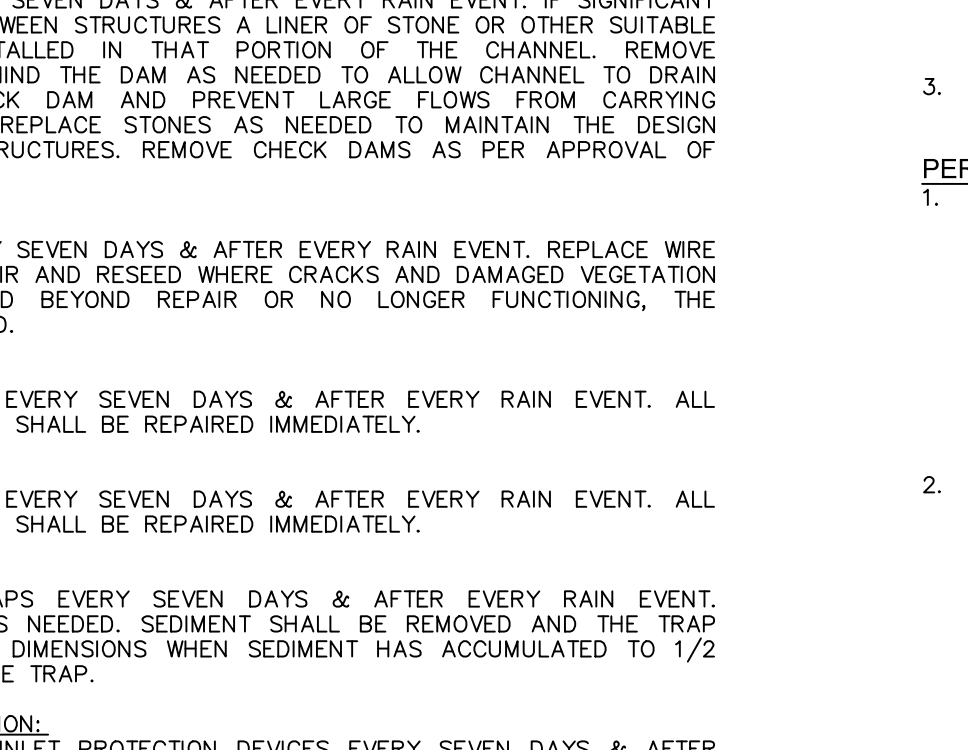
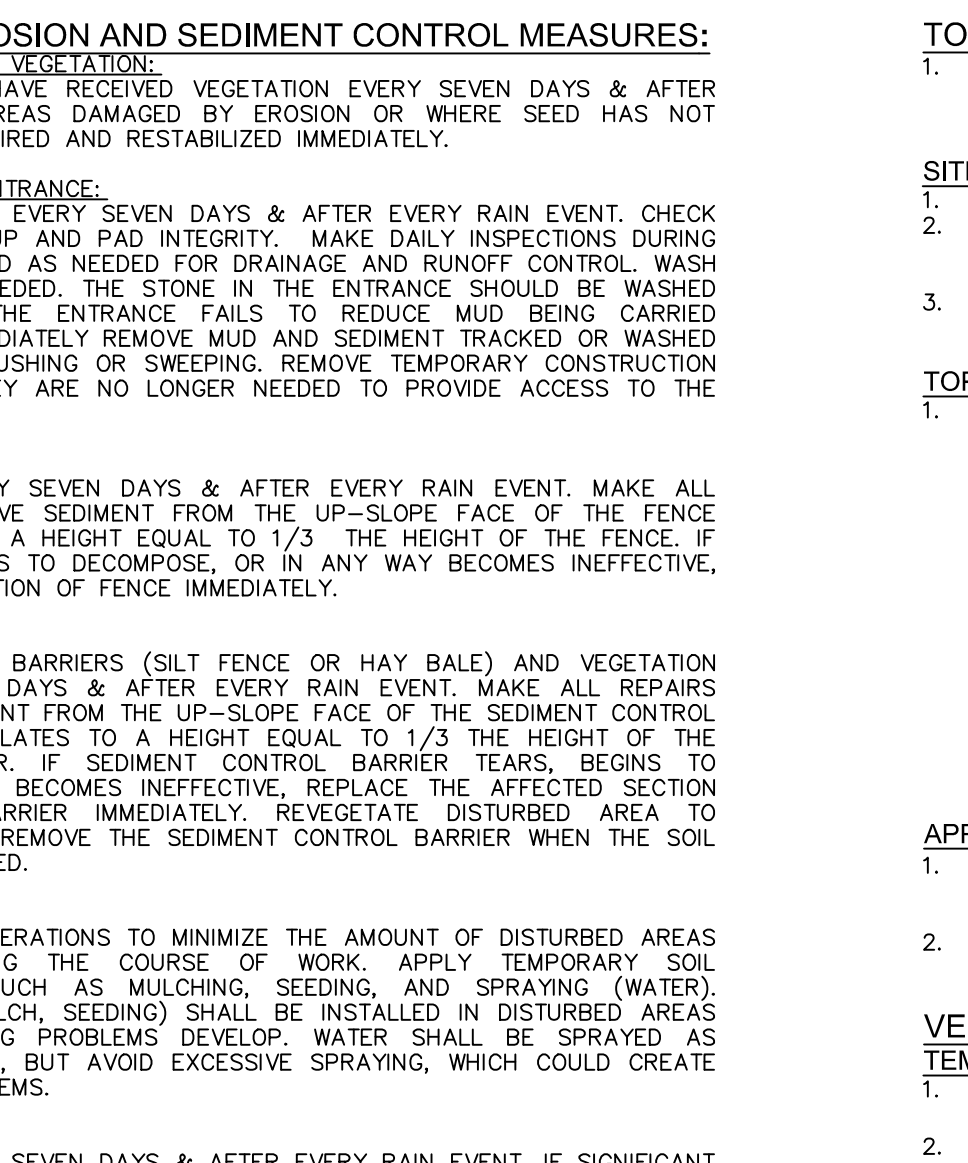
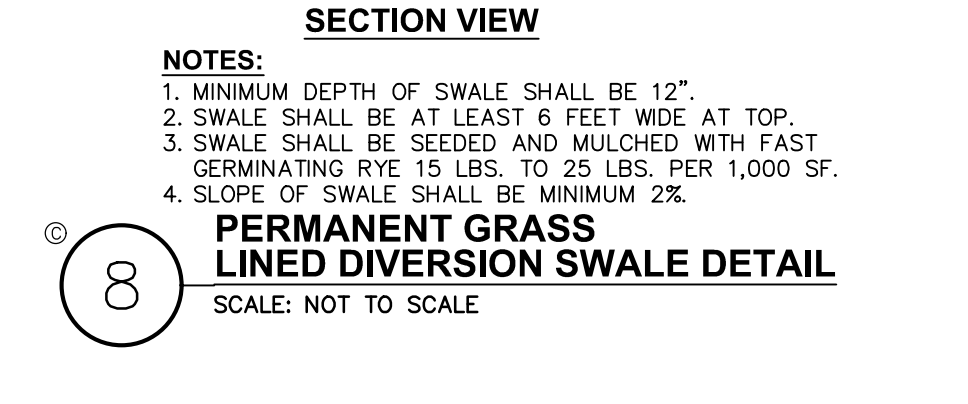
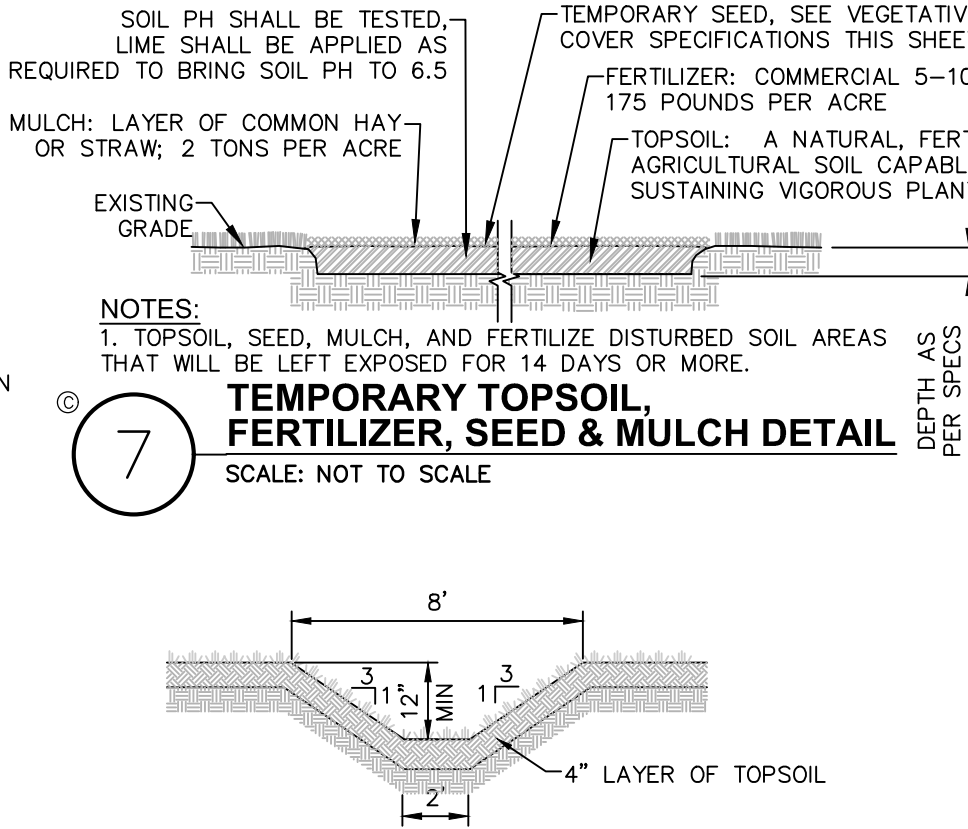
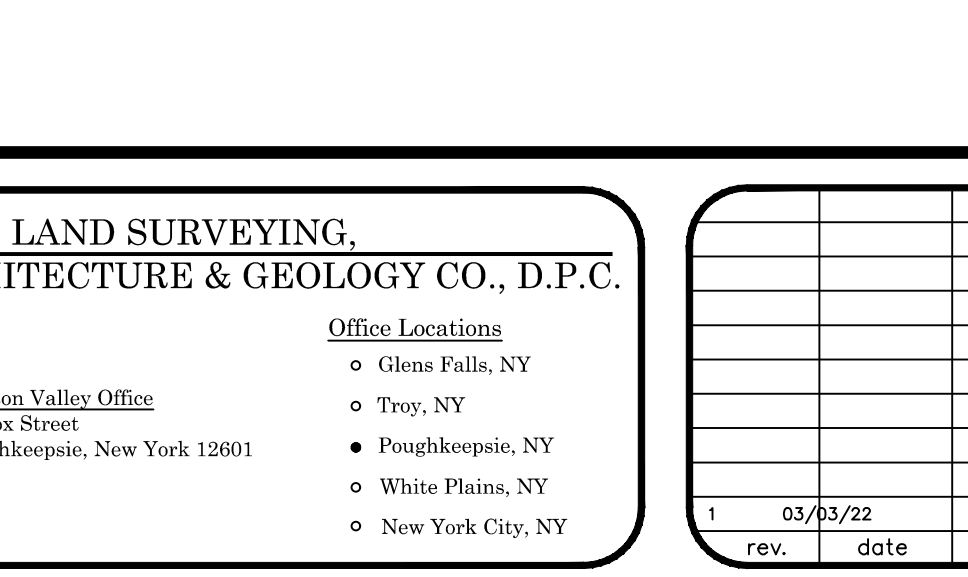
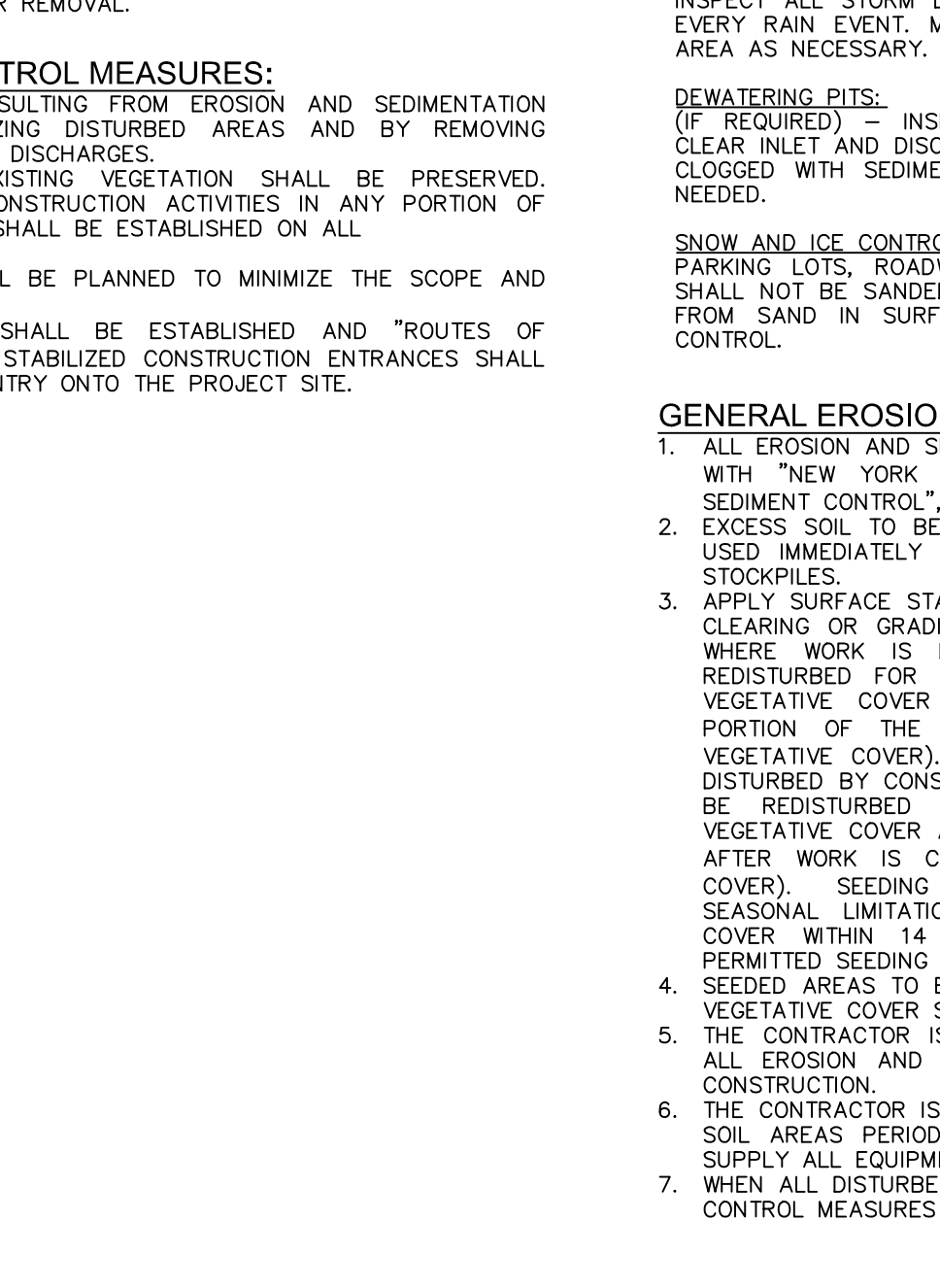
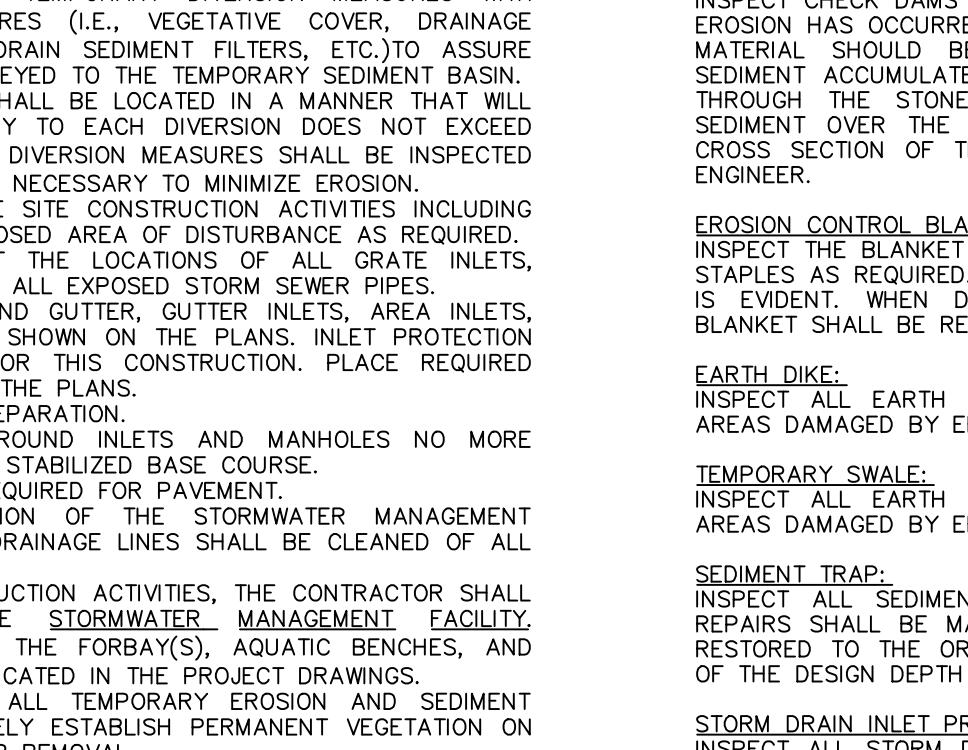
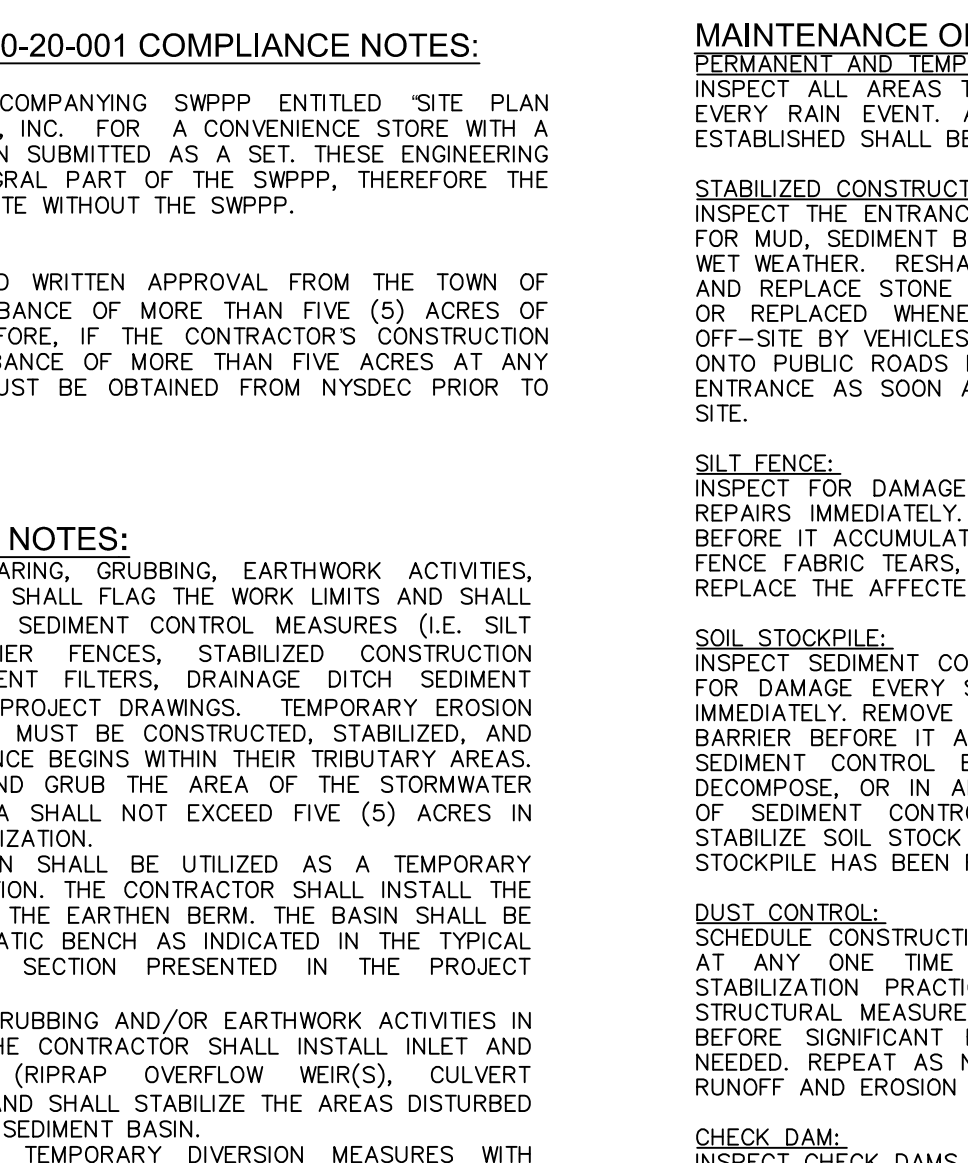
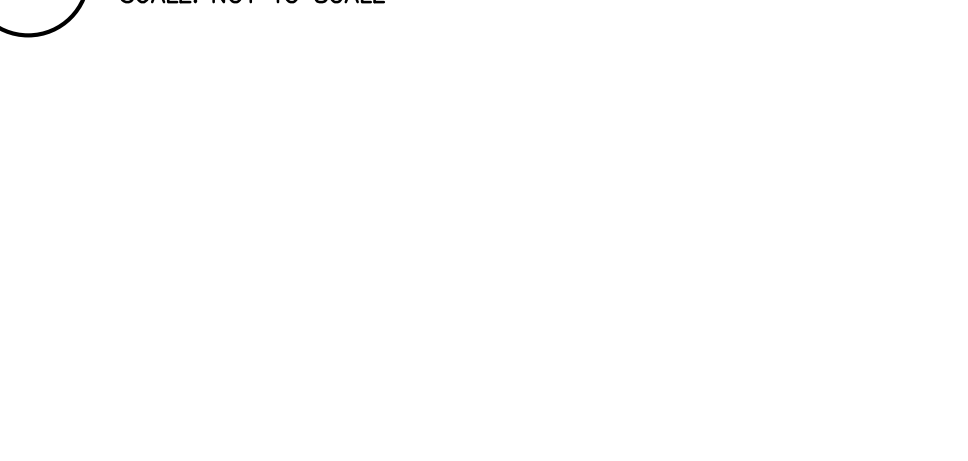
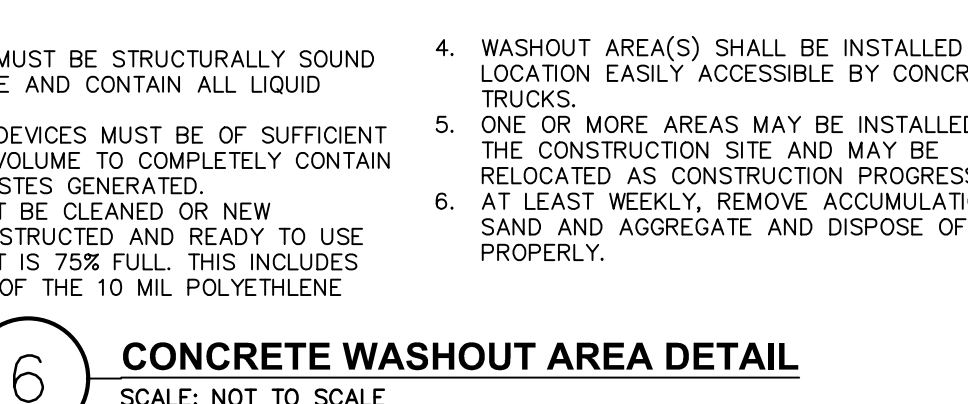
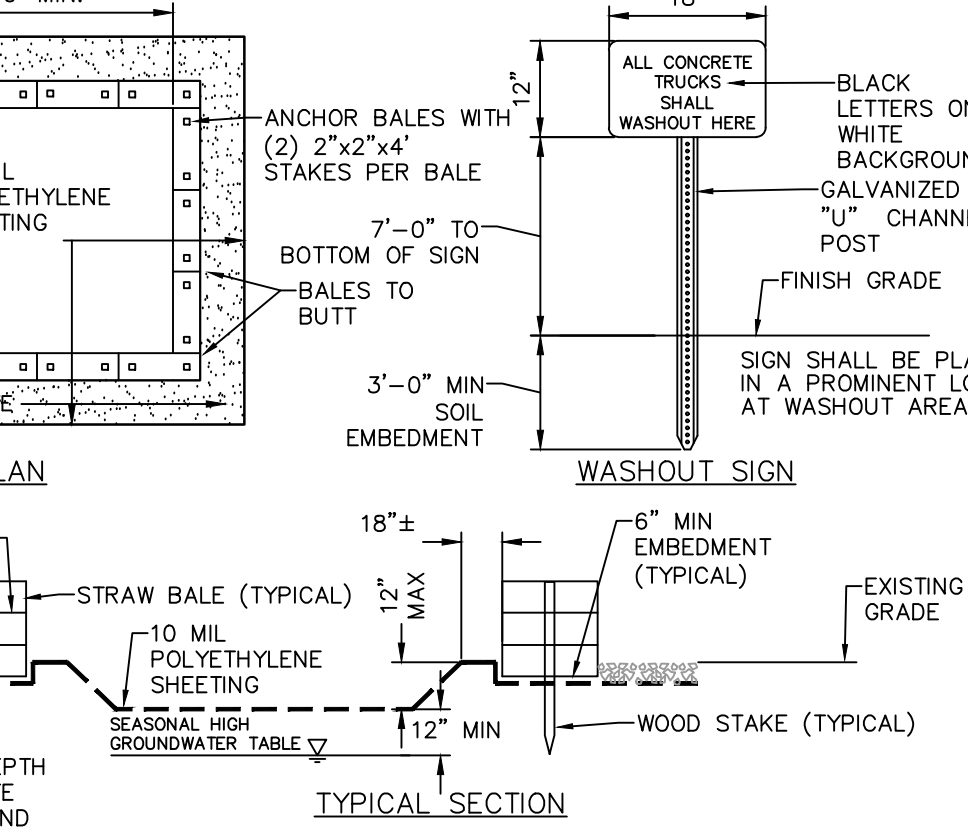
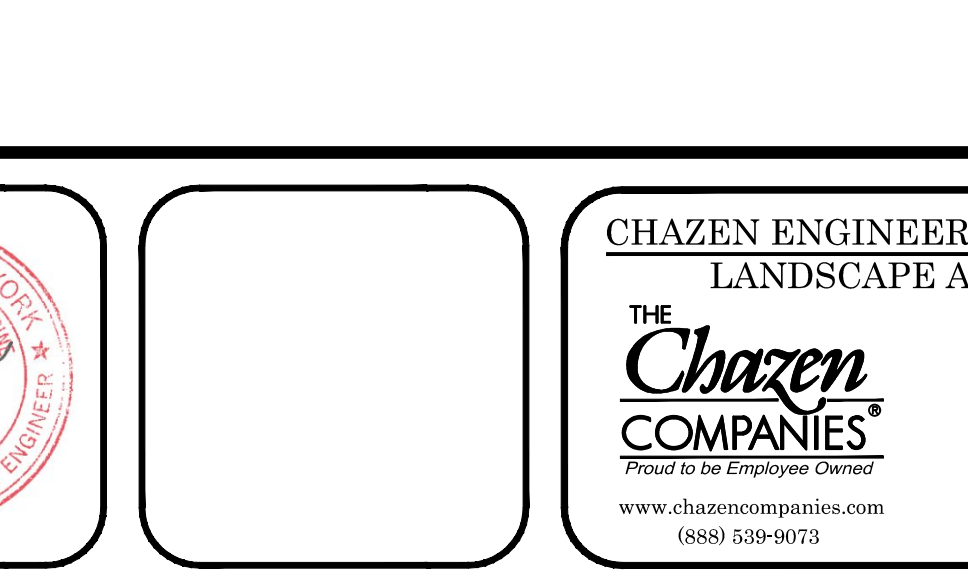
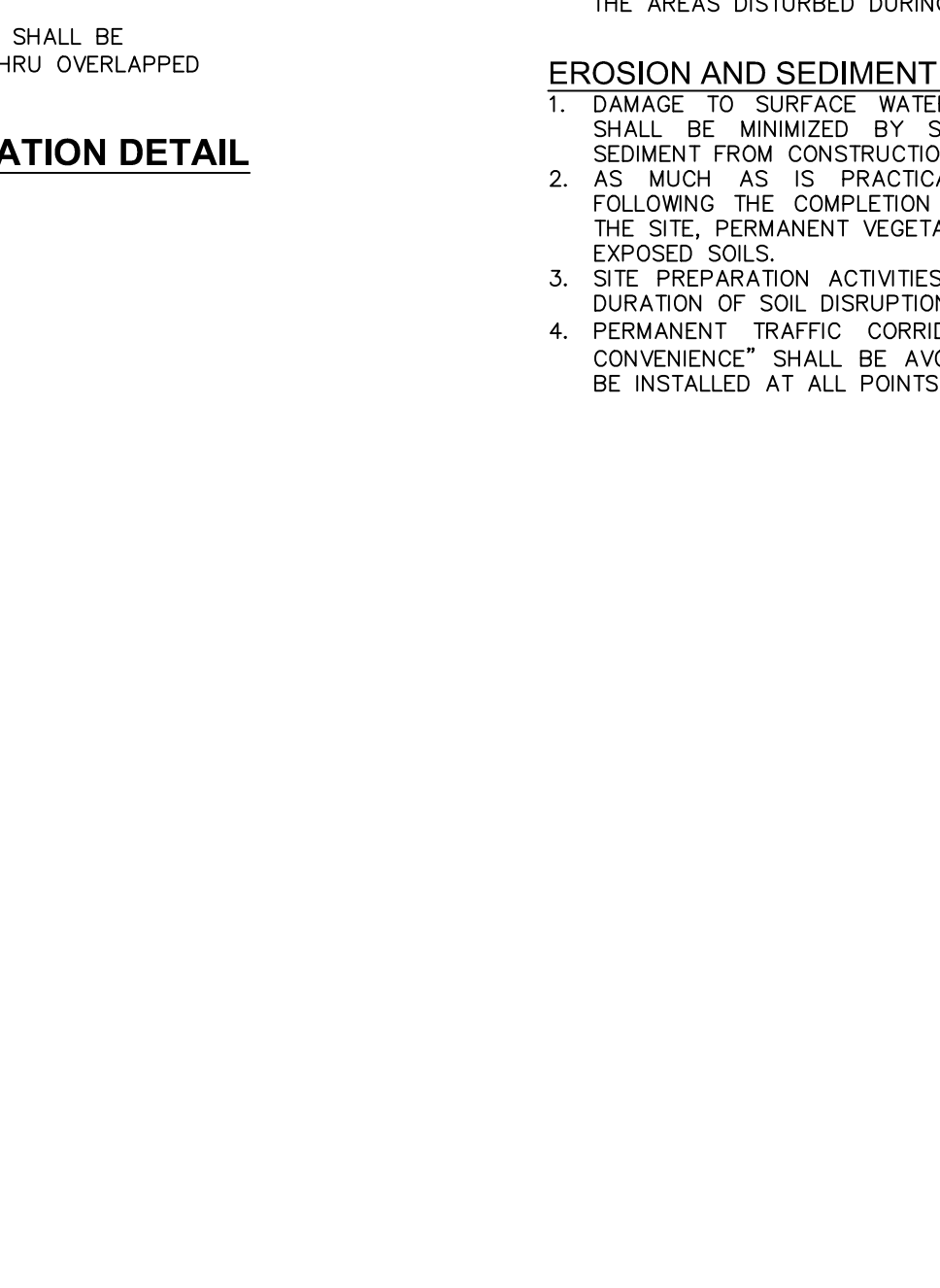
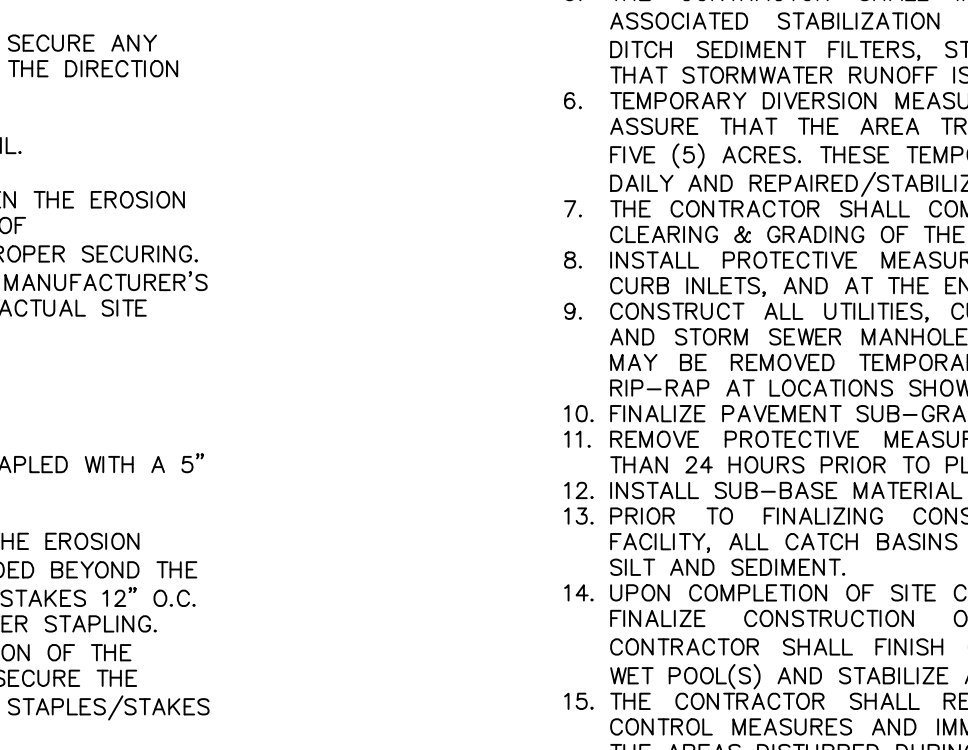
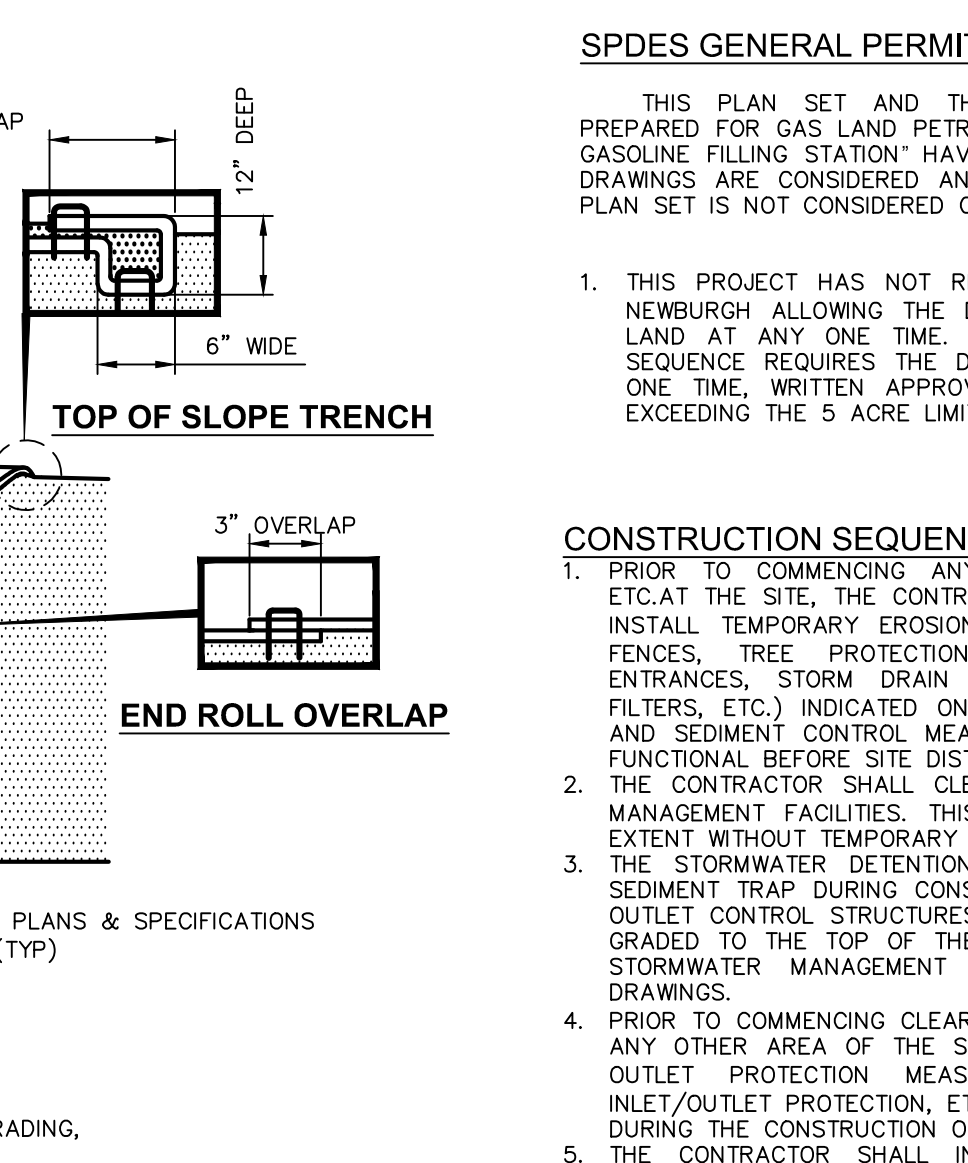
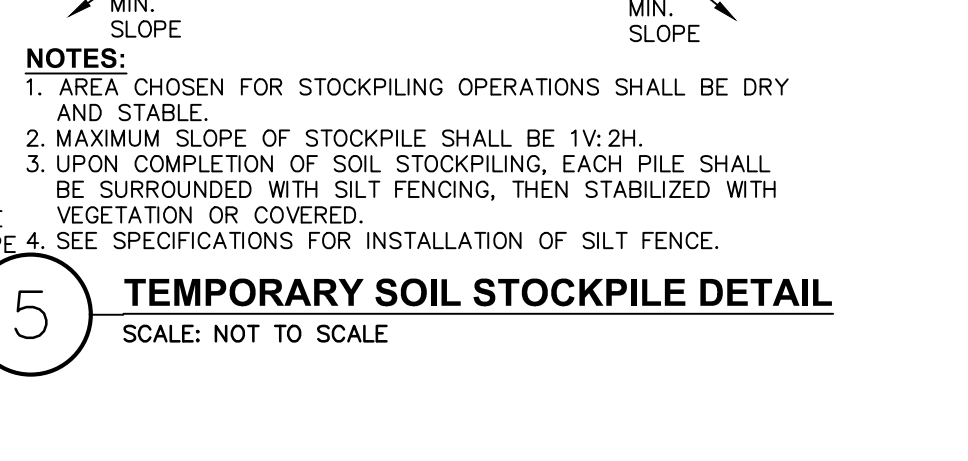
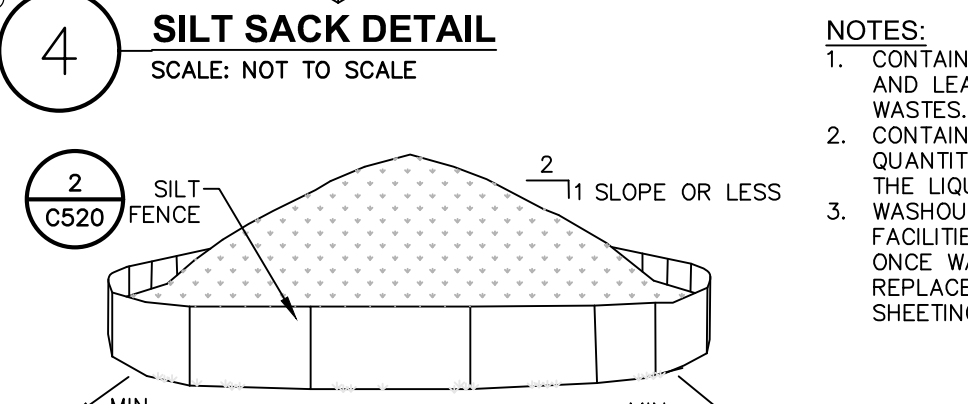
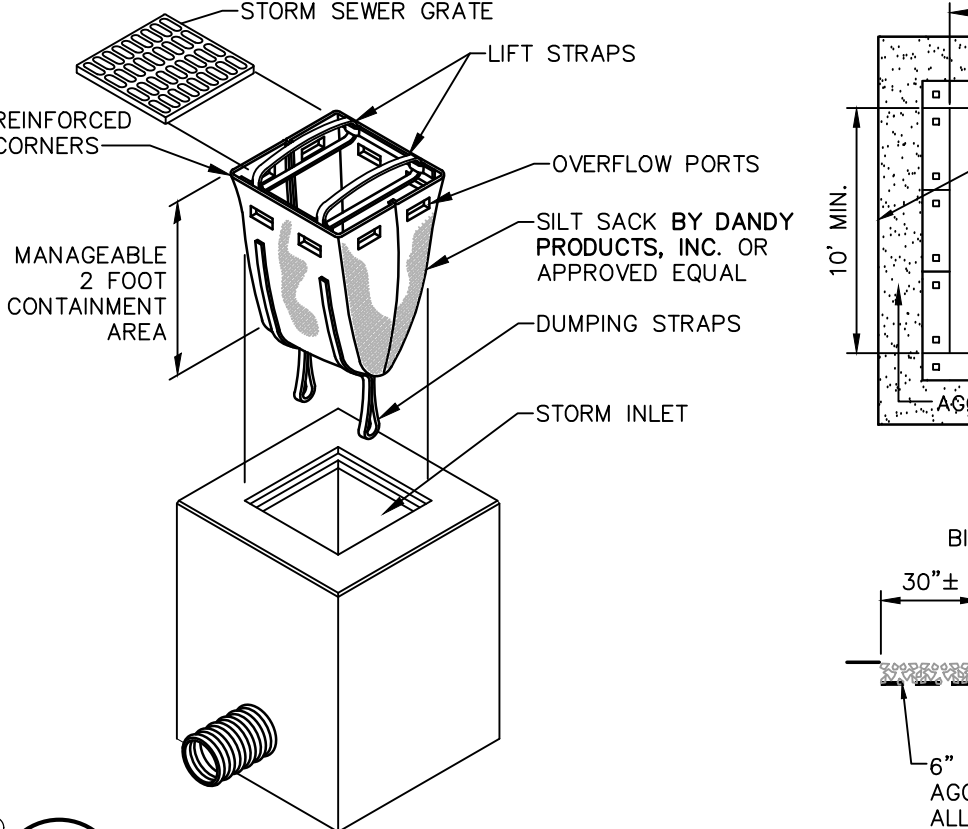
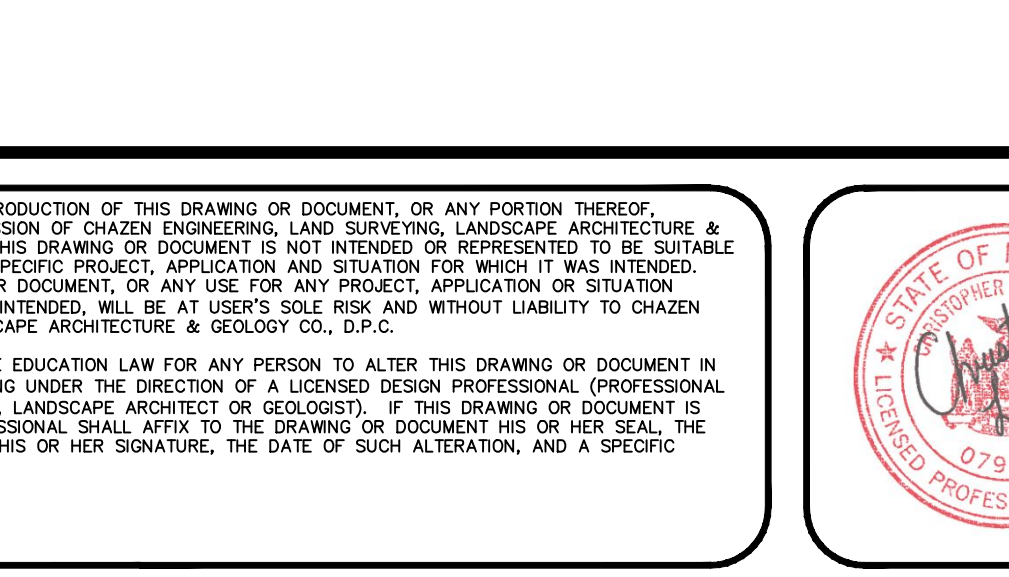
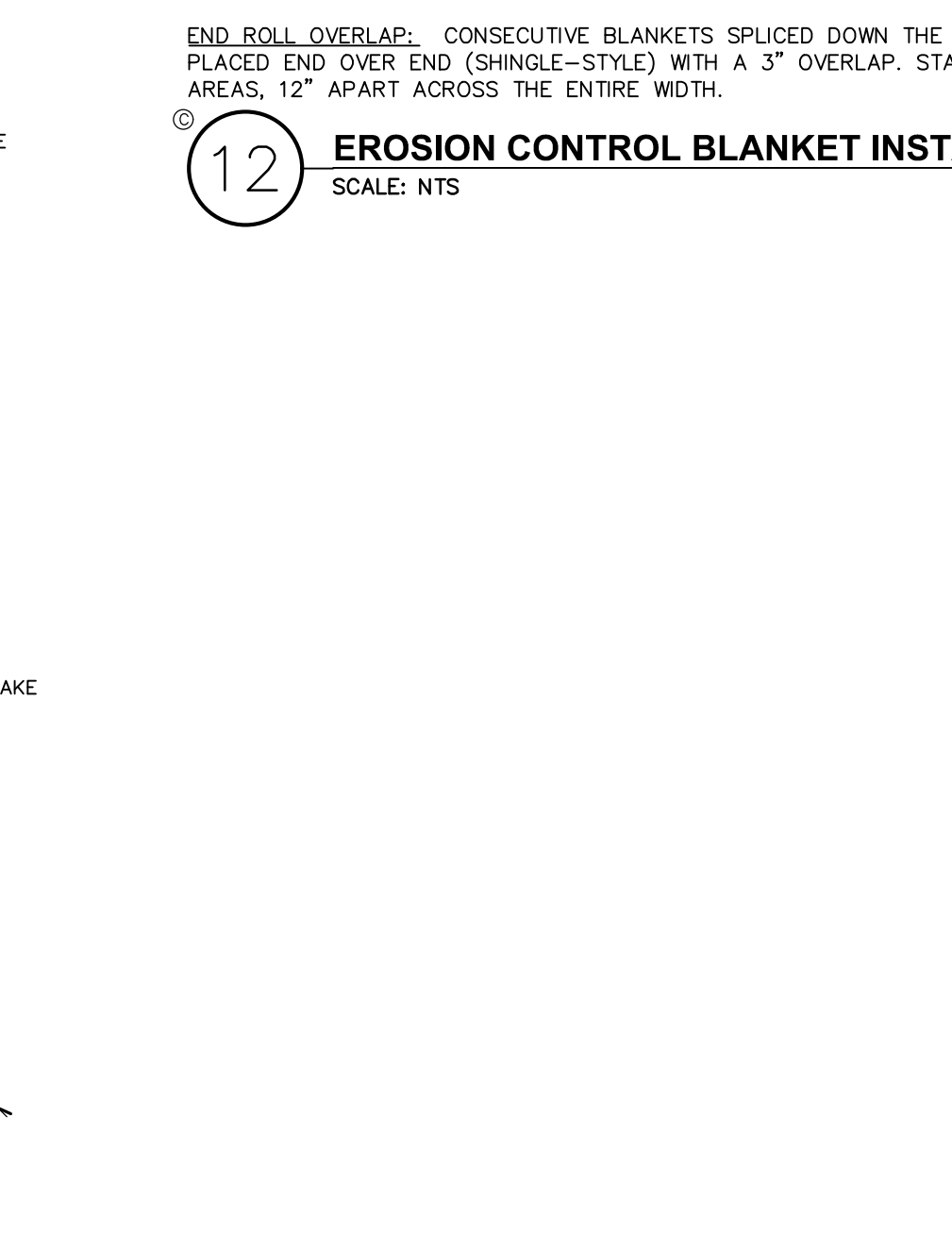
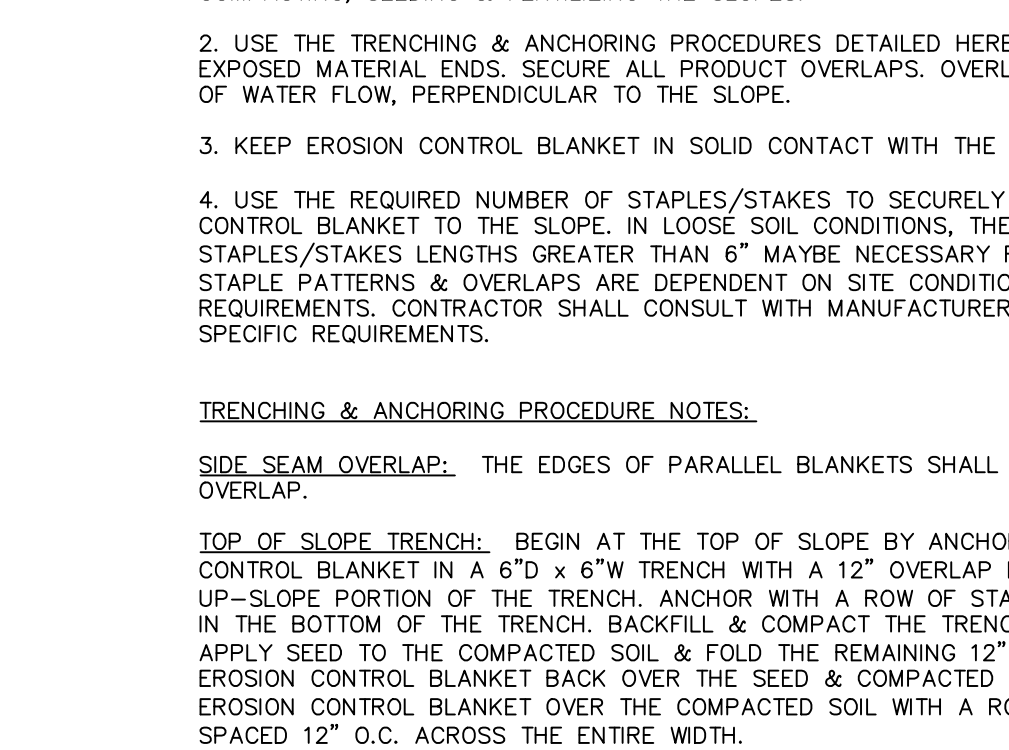
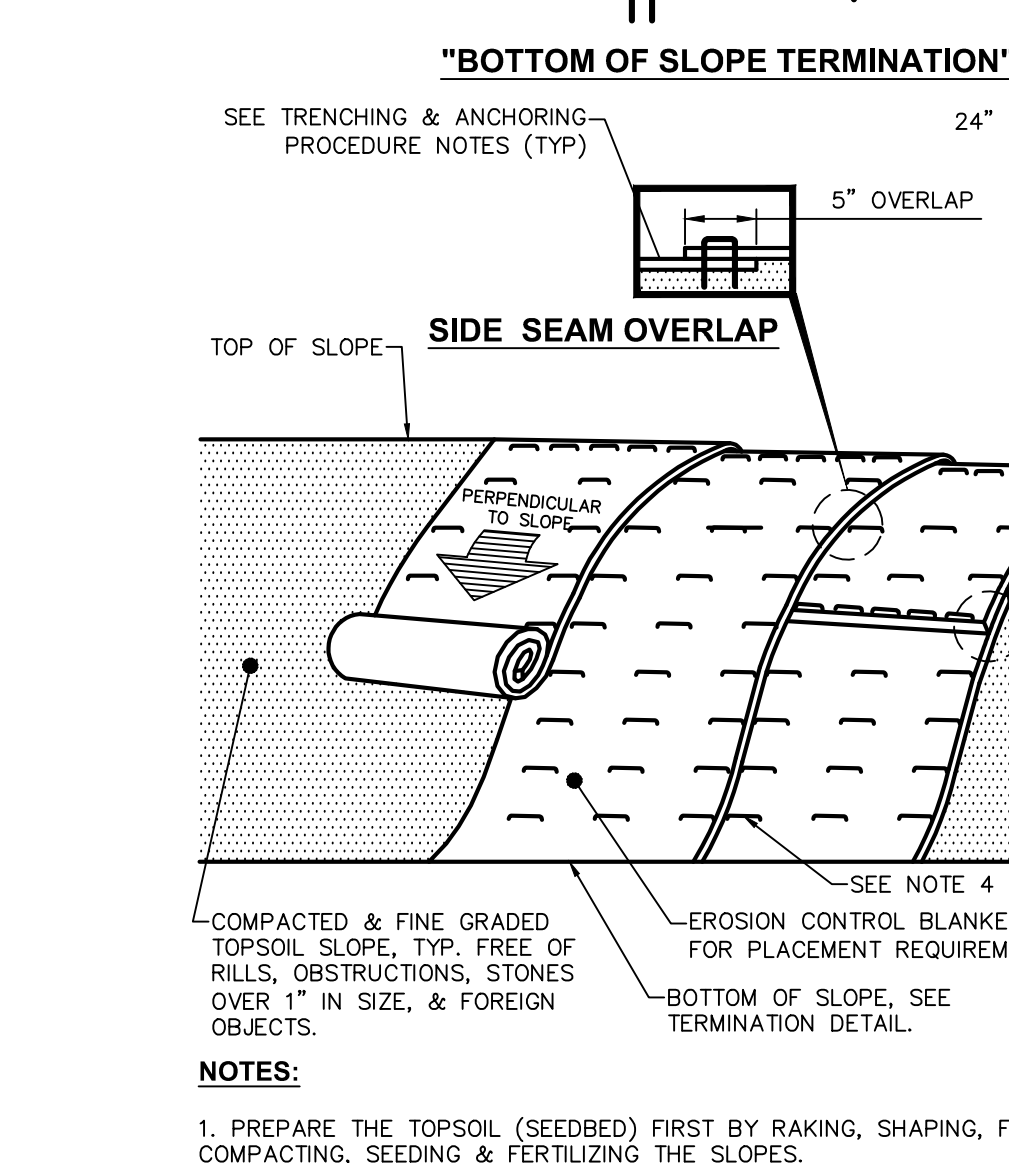
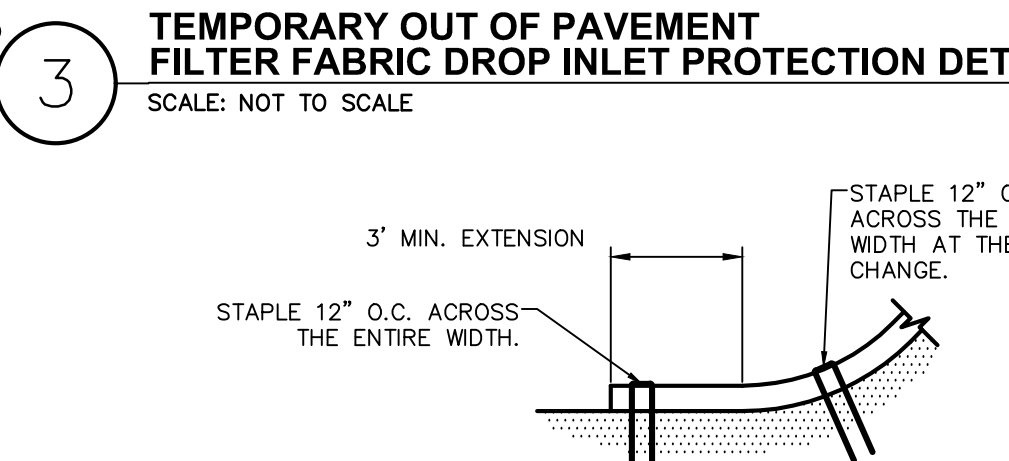
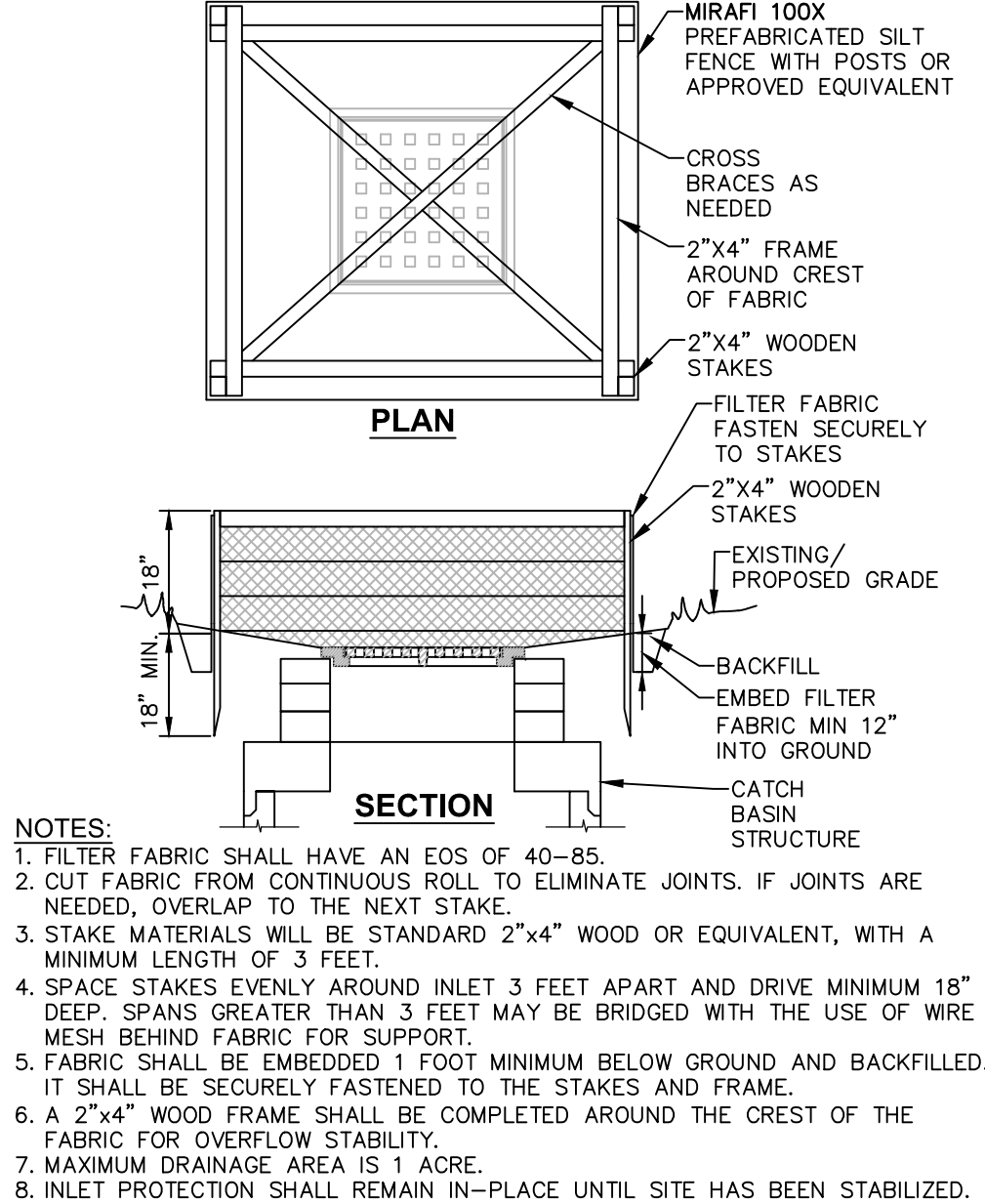
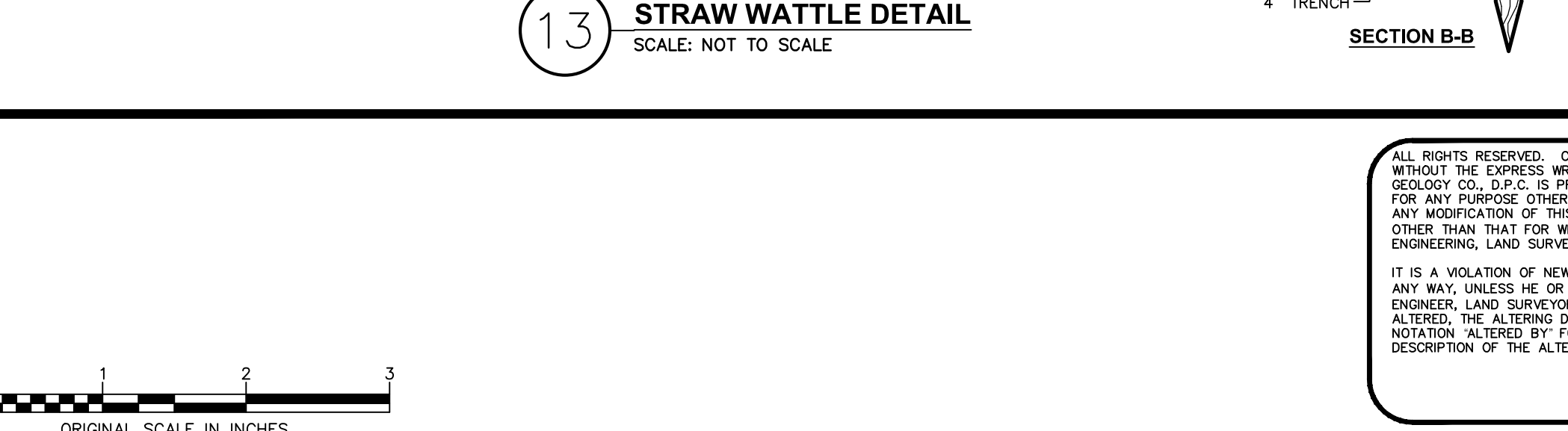
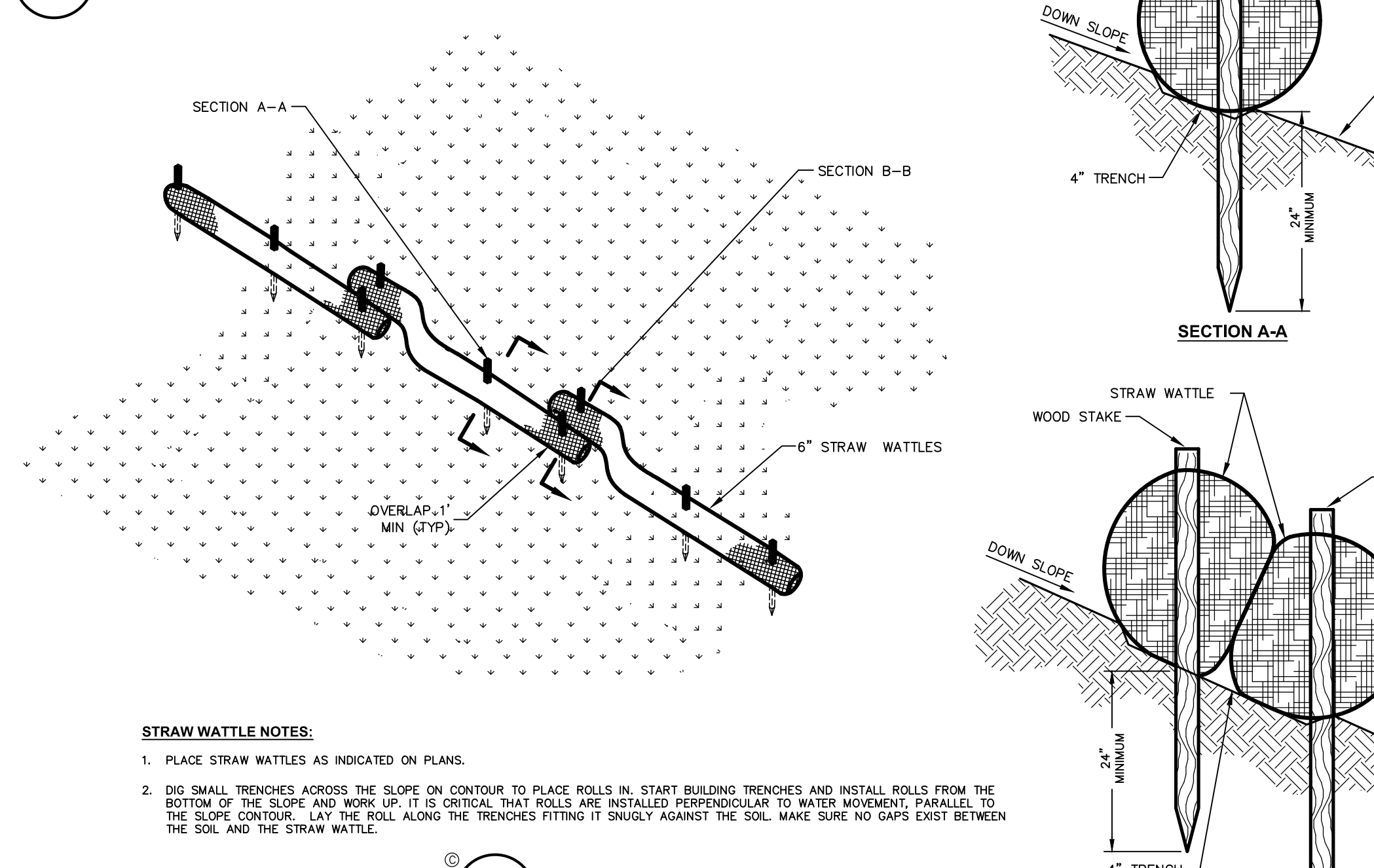
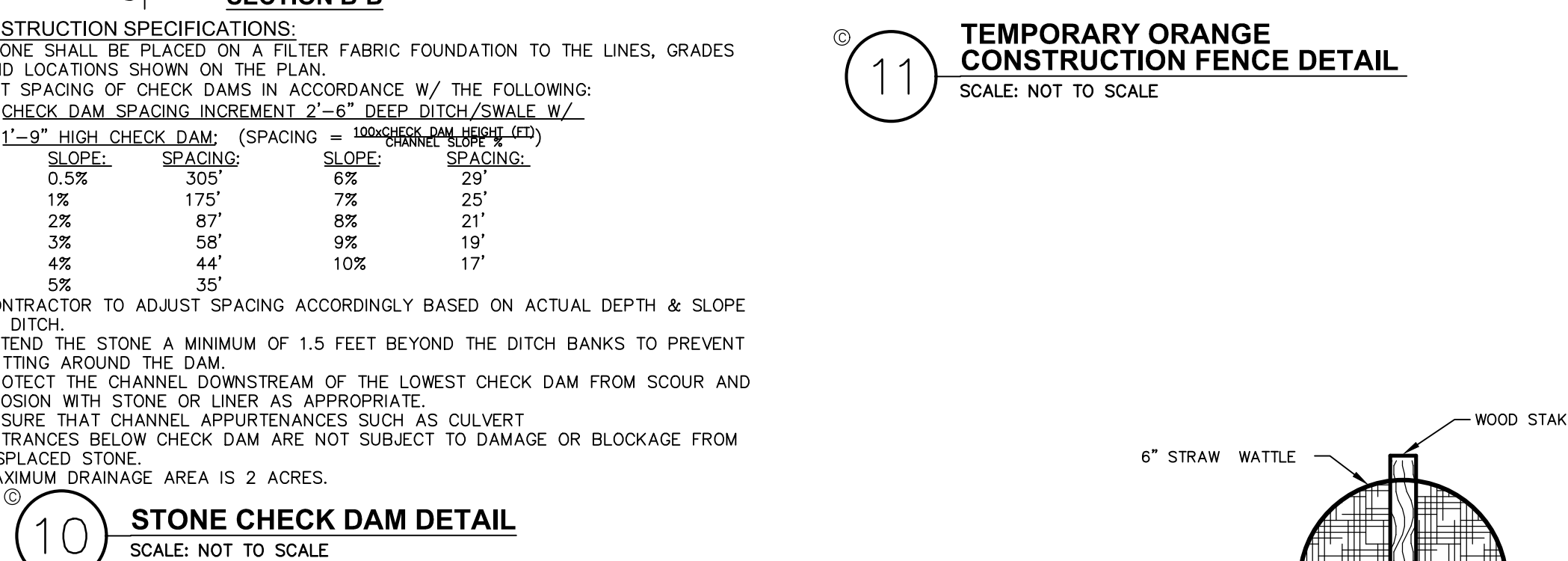
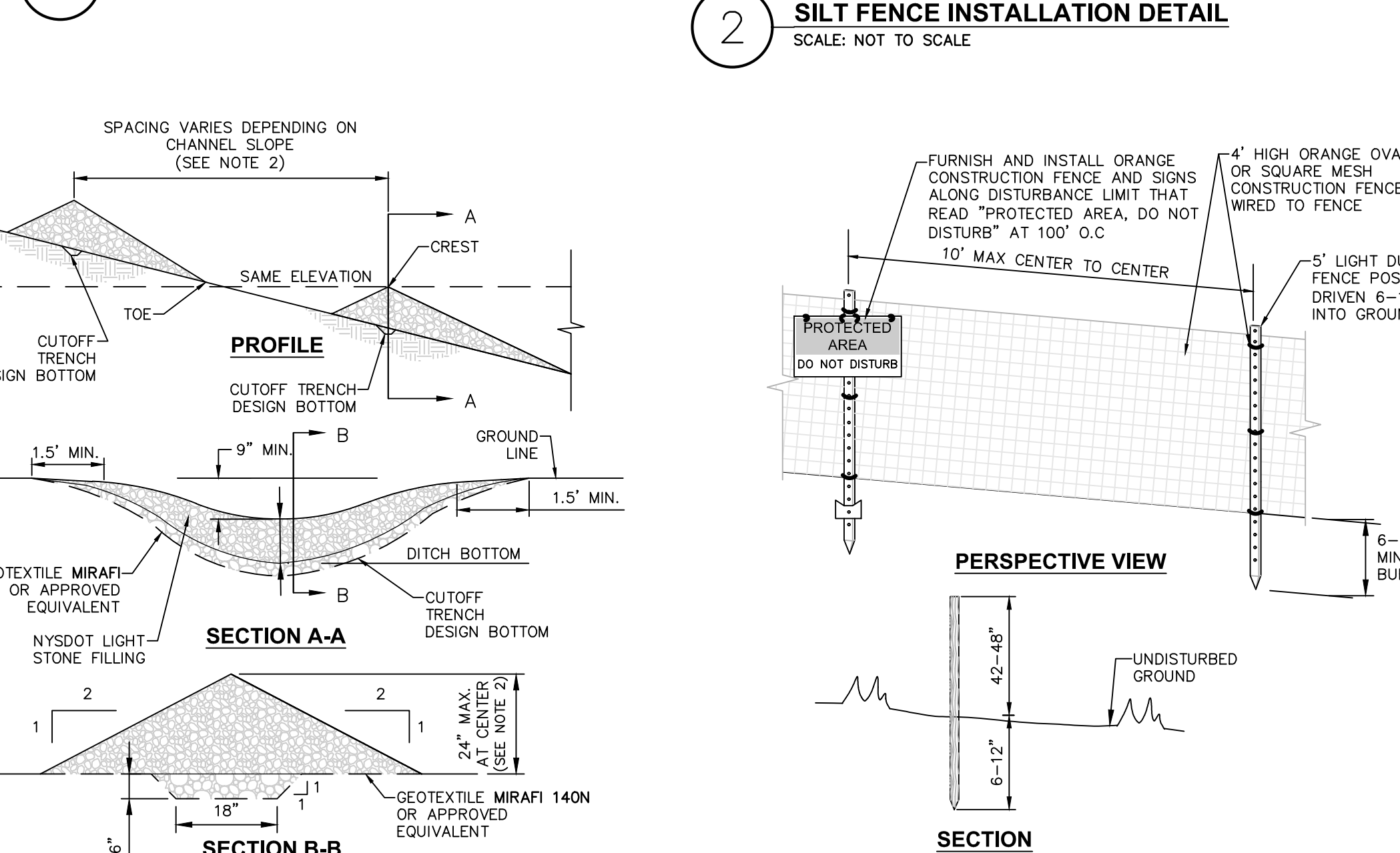
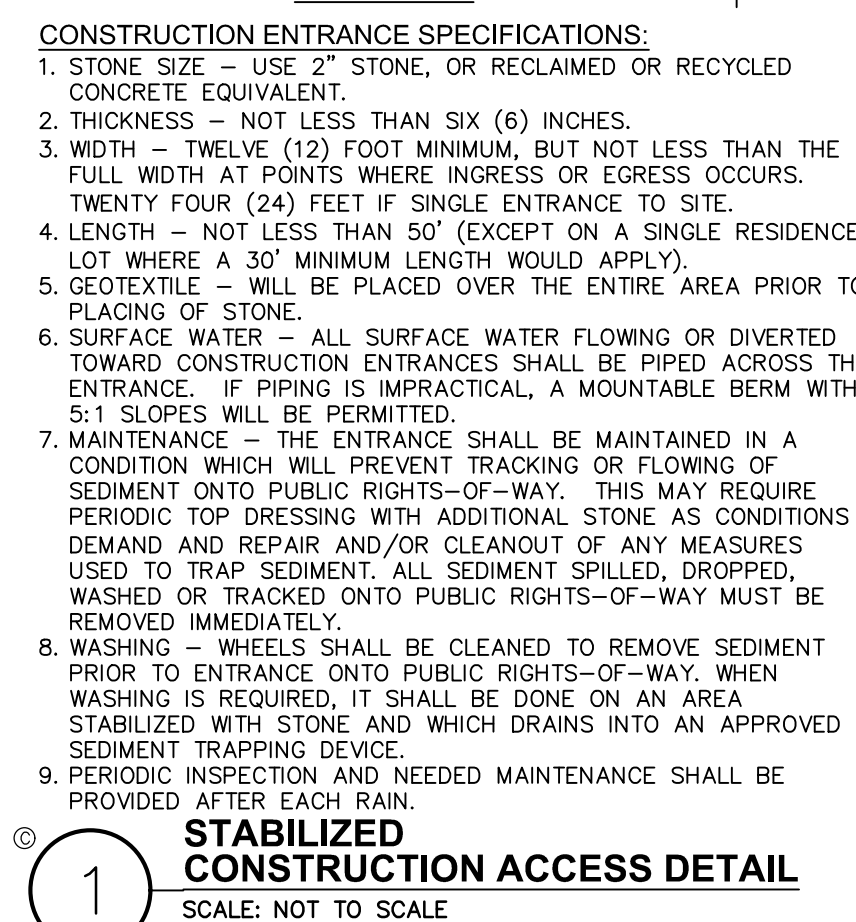
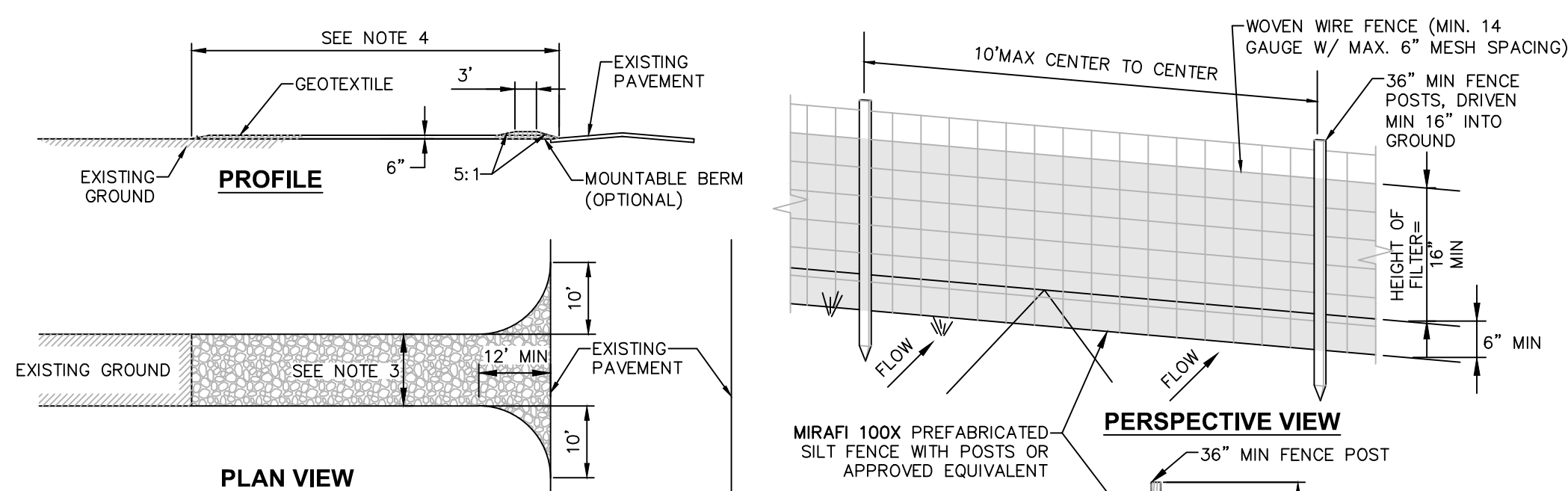
GENERAL NOTES

1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH * ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. CONTECH SHALL MEET AASHTO H20-44 AND CASTINGS SHALL MEET H20 (AASHTO M 309) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OR RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES

- A. JUMP SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OR RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUP PIPS. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UPPI IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.





SPDES GENERAL PERMIT GP-02-00-001 COMPLIANCE NOTES:

THIS PLAN SET AND THE ACCOMPANYING SWPPP ENTITLED, SITE PLAN PREPARED FOR GAS LAND PETROLEUM, INC. FOR A CONVENIENCE STORE WITH GASOLINE FILLING STATION" HAVE BEEN SUBMITTED AS A SET. THESE ENGINEERING DRAWINGS ARE CONSIDERED AN INTEGRAL PART OF THE SWPPP. THEREFORE, THE PLAN SET IS NOT CONSIDERED COMPLETE WITHOUT THE SWPPP.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES:

PERMANENT AND TEMPORARY VEGETATION:
INSPECT ALL AREAS THAT HAVE RECEIVED VEGETATION EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. ALL AREAS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED SHALL BE REPAIRED AND RESTABILIZED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE:
INSPECT THE ENTRANCE PAD EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. CHECK FOR MUD, SEDIMENT BUILD-UP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING WET WEATHER. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL. WASH AND REPLACE STONE AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE STONE BECOMES COVERED WITH MUD OR OTHER DEBRIS. OFF-SITE BY VEHICLES. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. REMOVE TEMPORARY CONSTRUCTION ENTRANCE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE.

SILT FENCE:
INSPECT FOR DAMAGE EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE FENCE BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE FENCE. FENCE FABRIC TEARS, BEGINS TO DECOMPOSE OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF FENCE IMMEDIATELY.

SOIL STOCKPILE:
INSPECT SEDIMENT CONTROL BARRIERS (SILT FENCE OR HAY BALE) AND VEGETATION FOR DAMAGE EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE ALL REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE SEDIMENT CONTROL BARRIER BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE SEDIMENT CONTROL BARRIER. IF SEDIMENT CONTROL BARRIER TEARS, BEGINS TO DECOMPOSE OR IN ANYWAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED SECTION OF SEDIMENT CONTROL BARRIER IMMEDIATELY. REVEGETATE DISTURBED AREA TO STABILIZE SOIL STOCK PILE. REMOVE THE SEDIMENT CONTROL BARRIER WHEN THE SOIL STOCKPILE HAS BEEN REMOVED.

DUST CONTROL:
SCHEDULE CONSTRUCTION OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED AREAS. DURING THE TIME DURING THE PERIOD OF WORK, APPLY TEMPORARY SOIL STABILIZATION PRACTICES SUCH AS MULCHING, SEEDING, AND SPRAYING (WATER). TEMPORARY MEASURES SHALL BE USED TO PREVENT LARGE FLOWS FROM CARRYING BEFORE SIGNIFICANT BLOWING PROBLEMS DEVELOP. WATER SHALL BE SPRAYED AS NEEDED. REPEAT AS NEEDED, BUT AVOID EXCESSIVE SPRAYING, WHICH COULD CREATE RUNOFF AND EROSION PROBLEMS.

CHECK DAM:
INSPECT CHECK DAMS EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. IF SIGNIFICANT EROSION HAS OCCURRED BETWEEN STRUCTURES A LINDER OF STONE OR OTHER SUITABLE MATERIAL SHOULD BE INSTALLED IN THAT PORTION OF THE CHANNEL. REMOVE SEDIMENT ACCUMULATED BEHIND THE DAM AS NEEDED TO ALLOW CHANNEL TO DRAIN. TEMPORARY DIVERSION MEASURES SHALL BE USED TO PREVENT FLOODING FROM CARRYING SEDIMENT OVER THE DAM. REPLACE STONES AS NEEDED TO MAINTAIN THE DESIGN CROSS SECTION OF THE STRUCTURES. REMOVE CHECK DAMS AS PER APPROVAL OF ENGINEER.

EROSION CONTROL BLANKET:
INSPECT THE BLANKET EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE REPAIRS IMMEDIATELY. REMOVE SEDIMENT FROM THE UP-SLOPE FACE OF THE BLANKET BEFORE IT ACCUMULATES TO A HEIGHT EQUAL TO 1/3 THE HEIGHT OF THE BLANKET. IF THE BLANKET IS DAMAGED BY EROSION OR WHERE SEED HAS NOT ESTABLISHED, REPLACE THE AFFECTED SECTION OF THE BLANKET IMMEDIATELY.

EARTH DIKE:
INSPECT ALL EARTH DIKES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. ALL AREAS DAMAGED BY EROSION SHALL BE REPAIRED IMMEDIATELY.

TEMPORARY SWALE:
INSPECT ALL EARTH DIKES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. ALL AREAS DAMAGED BY EROSION SHALL BE REPAIRED IMMEDIATELY.

SEED MIXTURE:
INSPECT ALL SEDIMENT TRAPS EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. REPAIRS SHALL BE MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO 1/2 OF THE DESIGN DEPTH OF THE TRAP.

STORM DRAIN INLET PROTECTION:
INSPECT ALL STORM DRAIN INLET PROTECTION DEVICES EVERY SEVEN DAYS & AFTER EVERY RAIN EVENT. MAKE REPAIRS AS NEEDED, REMOVE SEDIMENT FROM THE POOL AREA AS NECESSARY.

DEWATERING PITS:
(IF REQUIRED) - INSPECT DAILY DURING OPERATION FOR CLOGGING OR OVERFLOW. CLEAR INLET AND DISCHARGE PIPES OF OBSTRUCTIONS. IF A FILTER MATERIAL BECOMES CLOGGED WITH SEDIMENT, PIT SHALL BE DISMANTLED AND CONSTRUCT NEW PITS AS NEEDED.

SNOW AND ICE CONTROL:
INSPECT ALL DRIVEWAYS, ROADS, AND DRIVEWAYS ADJACENT TO WATER QUALITY FILTERS SHALL NOT BE SANDED DURING SNOW EVENTS DUE TO HIGH POTENTIAL FOR CLOGGING DAM SAND IN SURFACE WATER RUNOFF. USE SALT ONLY FOR SNOW AND ICE CONTROL.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IN STRICT COMPLIANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", NOVEMBER 2016.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.

2. EXCESS SOIL TO BE STOCKPILED WITHIN THE LIMITS OF SITE DISTURBANCE IF NOT USED IMMEDIATELY FOR GRADING PURPOSES. INSTALL SILT FENCE AROUND SOIL STOCKPILES.

3. APPLY SURFACE STABILIZATION AND RESTORATION MEASURES. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS DELAYED, OR INCOMPLETE AND WILL NOT BE REDISTURBED FOR 21 DAYS OR MORE SHALL BE STABILIZED WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS CEASED. SEE SPECIFICATIONS FOR TEMPORARY VEGETATIVE COVER. AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE WORK IS COMPLETE AND WILL NOT BE REDISTURBED SHALL BE STABILIZED AND RESTORED WITH PERMANENT VEGETATIVE COVER AS SOON AS SITE AREAS ARE AVAILABLE AND WITHIN 14 DAYS AFTER WORK IS COMPLETE. (SEE SPECIFICATIONS FOR PERMANENT VEGETATIVE COVER).

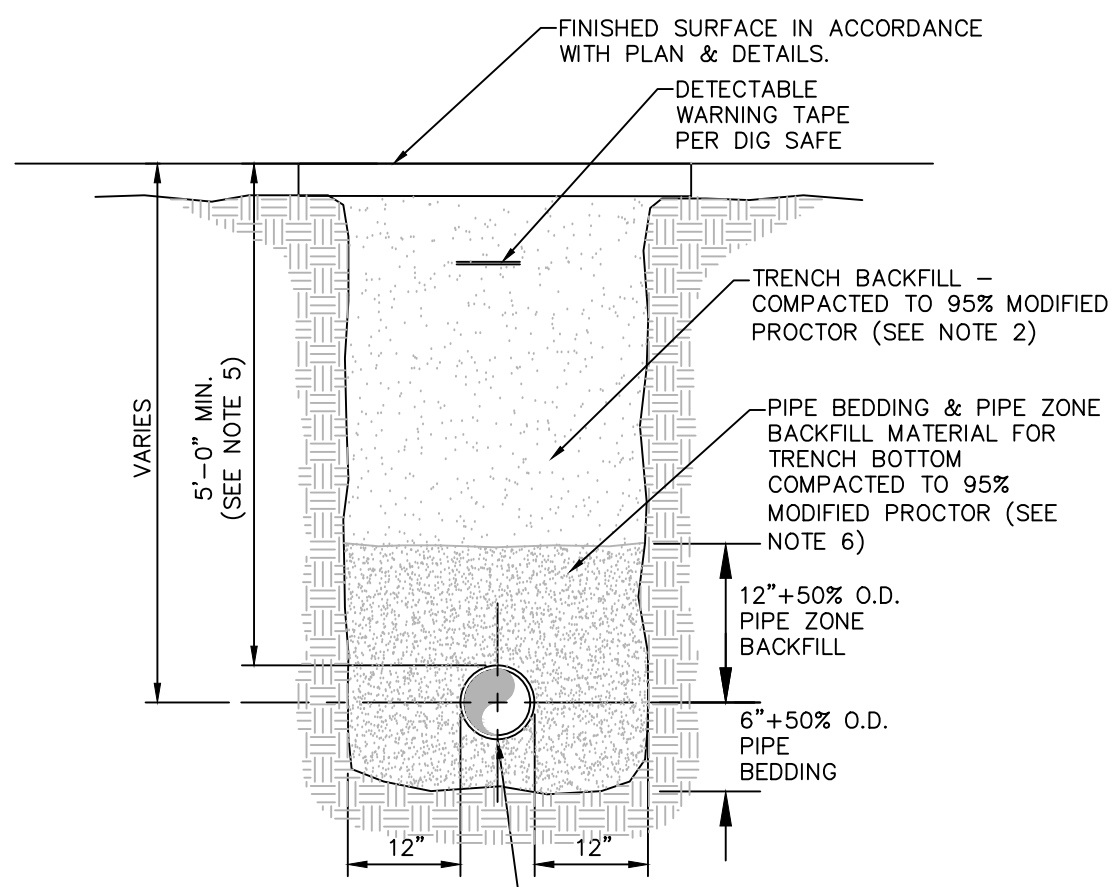
4. SEEDING FOR PERMANENT VEGETATIVE COVER SHALL BE WITHIN THE SEASONAL LIMITATIONS. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER WITHIN 14 DAYS AFTER WORK IS COMPLETE. FOR SEEDING OUTSIDE PERMITTED SEEDING PERIODS.

5. SEEDING AREAS TO BE MULCHED WITH STRAW OR HAY MULCH IN ACCORDANCE WITH VEGETATIVE COVER SPECIFICATIONS.

6. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION.

7. WHEN ALL DISTURBED AREAS ARE STABLE, ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED.

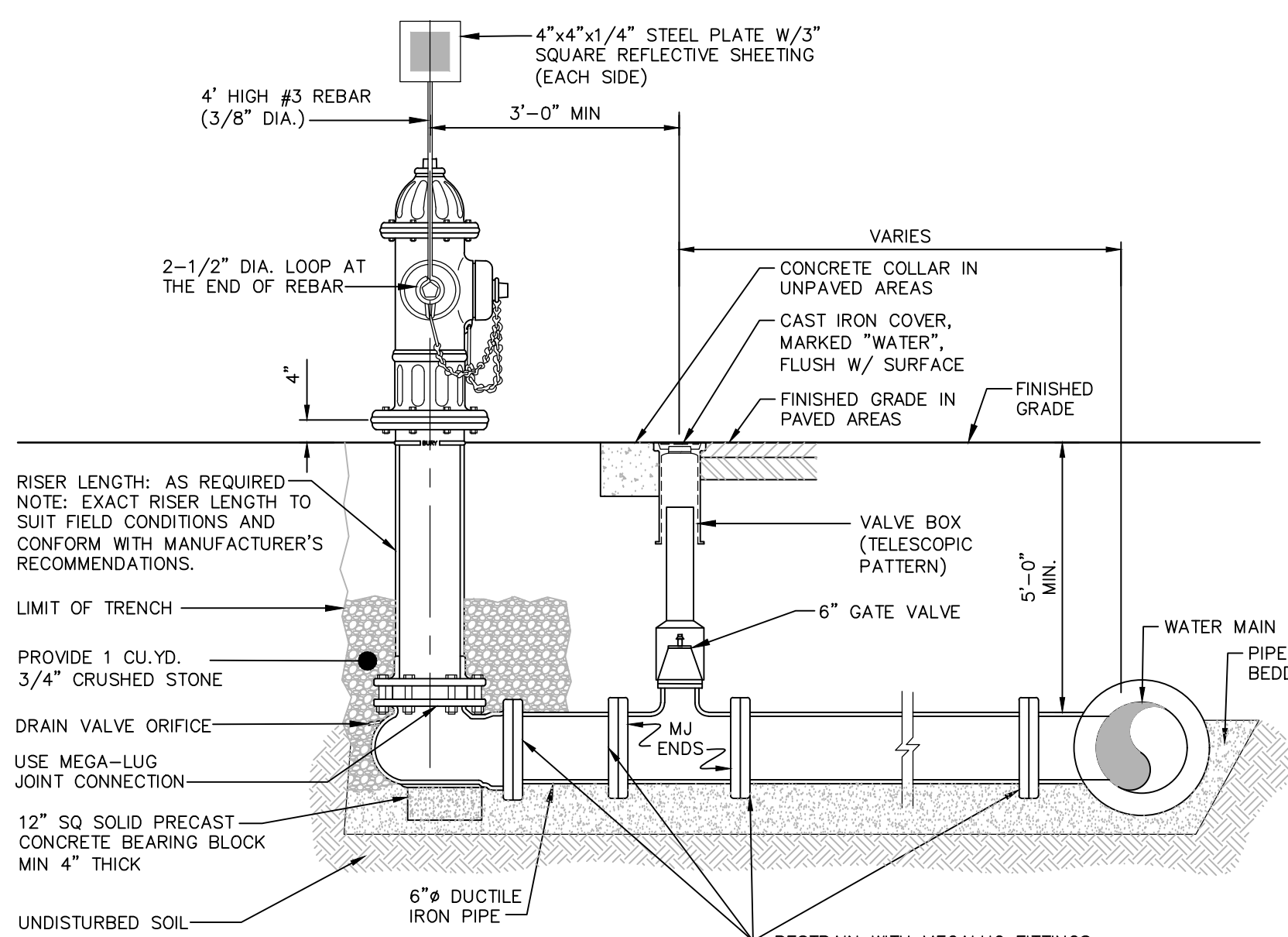
SEEDING:
1. APPLY SEED UNIFORMLY BY CYCLONE SEEDER CULTI-PACKER OR HYDRO-SEEDER AT RATE INDICATED.</



- NOTES:**
- PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
- | SIEVE DESIGNATION | % PASSING |
|-------------------|-----------|
| 3/4" | 100% |
| NO. 40 | 0-70% |
| NO. 200 | 0-10% |
- TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL, OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
- | SIEVE DESIGNATION | % PASSING |
|-------------------|-----------|
| 4" | 100% |
| NO. 40 | 0-70% |
| NO. 200 | 0-10% |

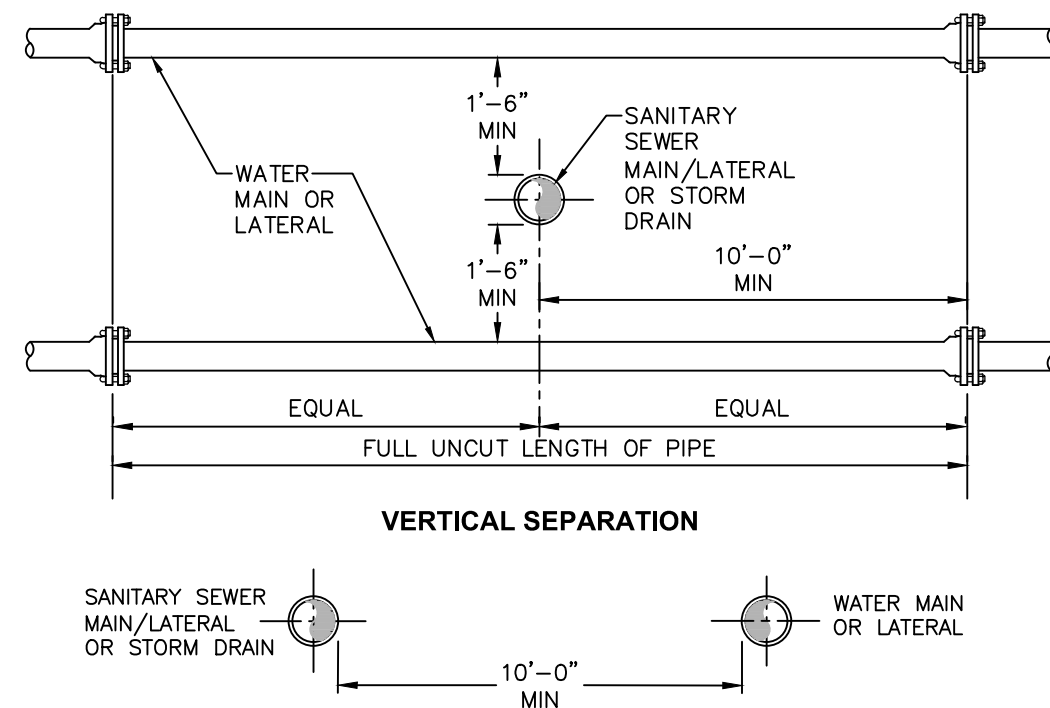
- IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.
- INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.
- TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
- 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.
- BEDDING AND PIPE ZONE MATERIAL SHALL BE SAND ONLY FOR COPPER WATER SERVICE.

1 PIPE TRENCH DETAIL (TYPICAL)
SCALE: NOT TO SCALE



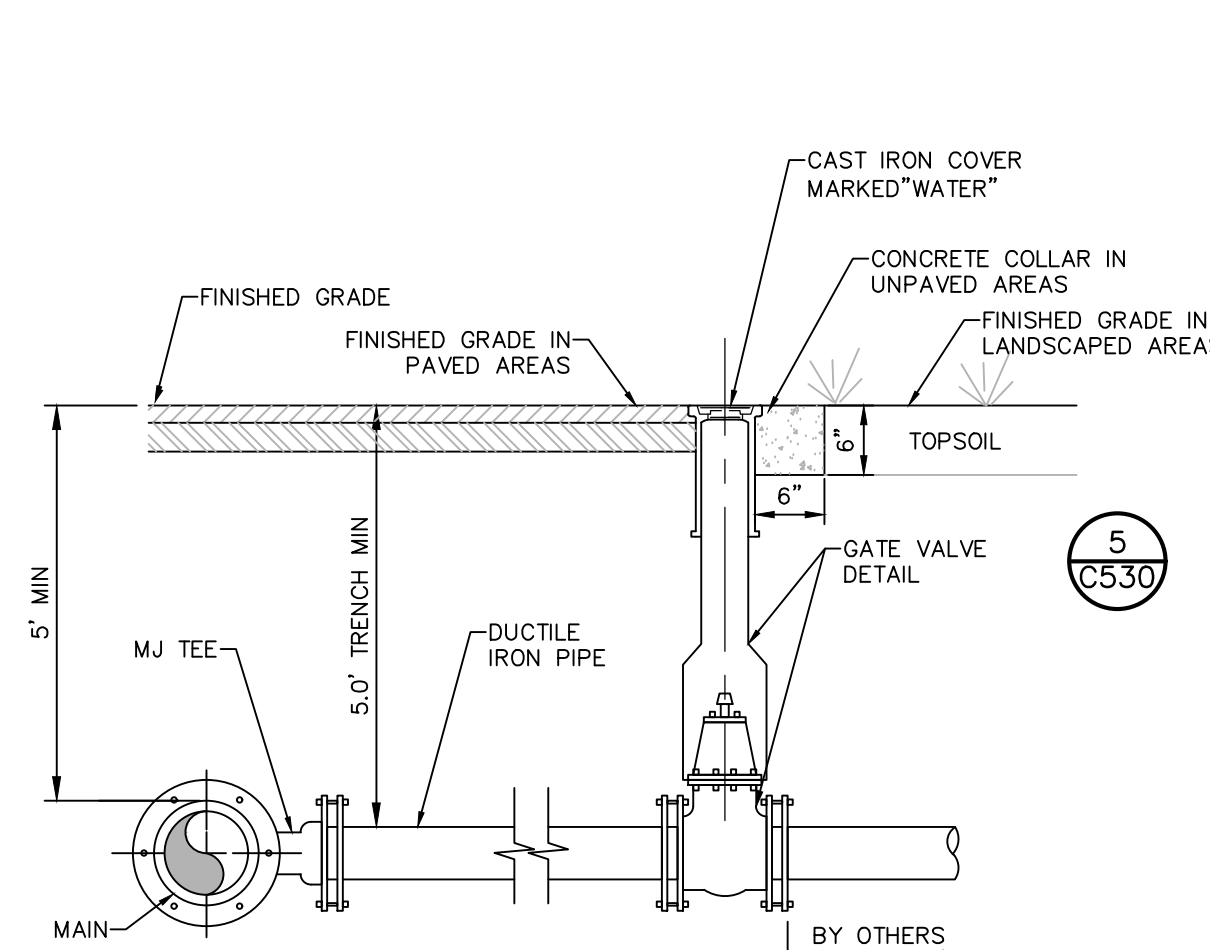
- NOTES:**
- HYDRANTS SHALL BE AMERICAN DARLING, MODEL B-62-B OR APPROVED EQUIVALENT BY THE AUTHORITY HAVING JURISDICTION. HYDRANTS SHALL MEET REQUIREMENTS OF AWWA STANDARD C-502.
 - BOTTOM VALVE DIAMETER SHALL BE 5-1/4 INCHES.
 - WEEP HOLES SHALL BE PLUGGED IF GROUNDWATER OR MOTTUNG IS OBSERVED WITHIN SEVEN FEET (7') OF FINISHED GRADE.
 - EACH NEWLY INSTALLED FIRE HYDRANT WITHIN THE PUBLIC RIGHT-OF-WAY SHOULD BE FLOW TESTED BY THE FIRE DEPARTMENT TO DETERMINE ITS CAPACITY. EACH FIRE HYDRANT SHOULD BE PAINTED WITH APPROPRIATE MARKINGS OR PROVIDED WITH A REFLECTIVE HYDRANT COLOR TO IDENTIFY ITS FLOW CAPACITY PER THE FIRE DEPARTMENT REQUIREMENTS.

7 HYDRANT ASSEMBLY DETAIL
SCALE: NOT TO SCALE

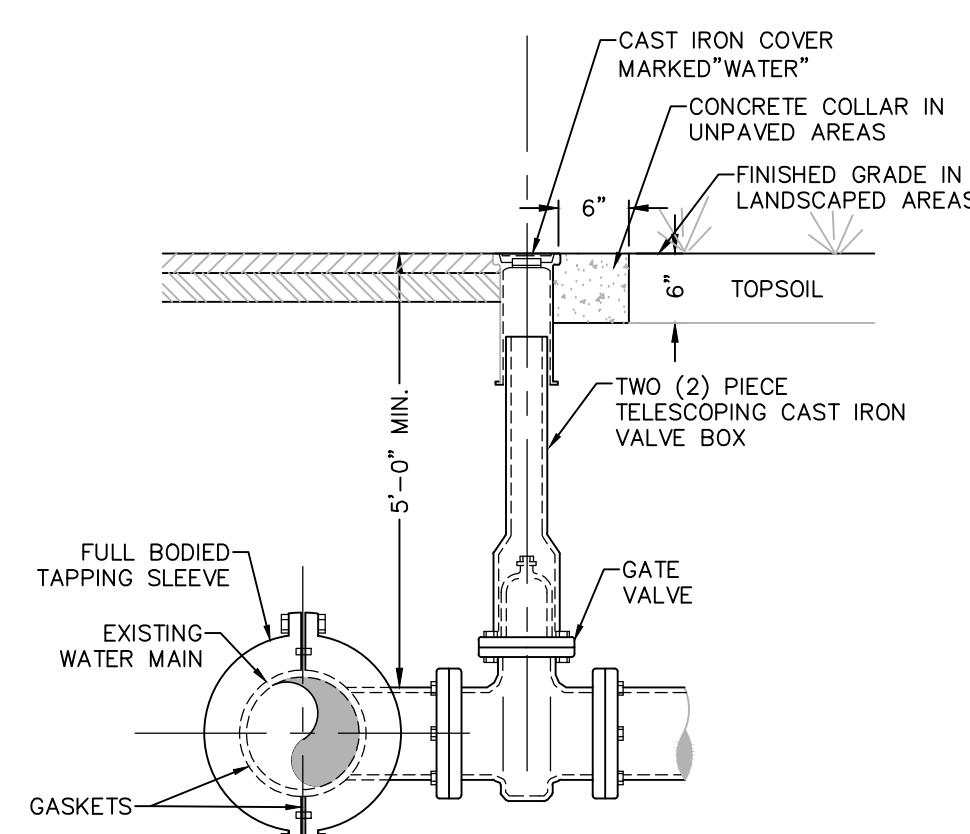


- NOTES:**
- NO DEVIATION IN THE SEPARATION REQUIREMENTS WILL BE PERMITTED WITHOUT THE EXPRESS APPROVAL OF THE NYS HEALTH DEPARTMENT. OFFSETTING OF WATERLINE SHALL BE REQUIRED WHERE SEPARATION DISTANCES CANNOT BE MAINTAINED.
 - WHEN IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS INDICATED ABOVE, BOTH THE WATER MAIN AND THE SEWER MAIN SHALL BE CONSTRUCTED OF MECHANICAL JOINT, DUCTILE IRON PIPE OR PVC WATER WORKS GRADE PRESSURE PIPE FOR 10' EACH SIDE OF CROSSING AND SHALL BE PRESSURE TESTED TO 150psi TO ASSURE WATER TIGHTNESS.

2 SANITARY/STORM SEWER AND WATERMAIN SEPARATION DETAIL
SCALE: NOT TO SCALE

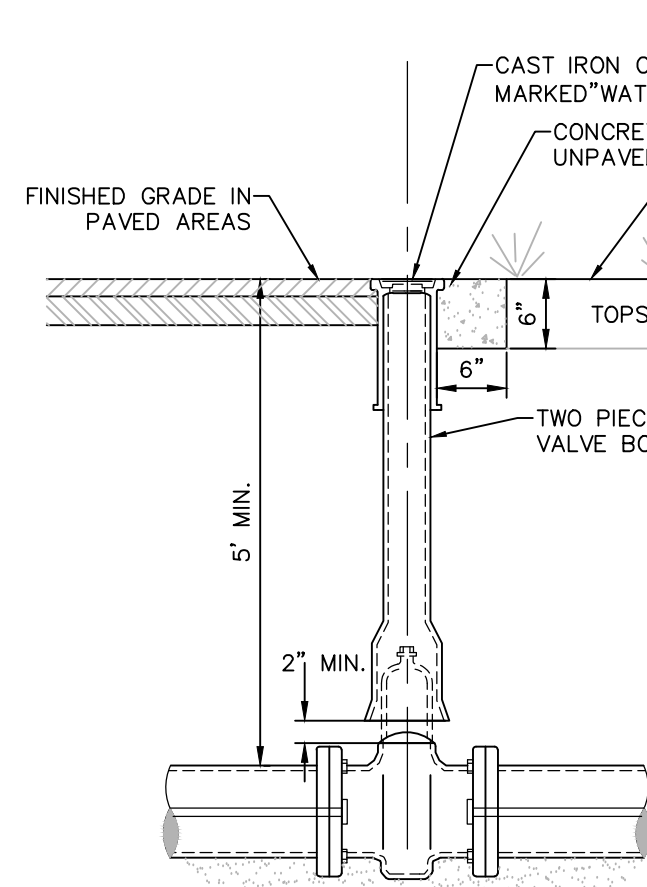


3 DUCTILE IRON SERVICE PIPE
SCALE: NOT TO SCALE



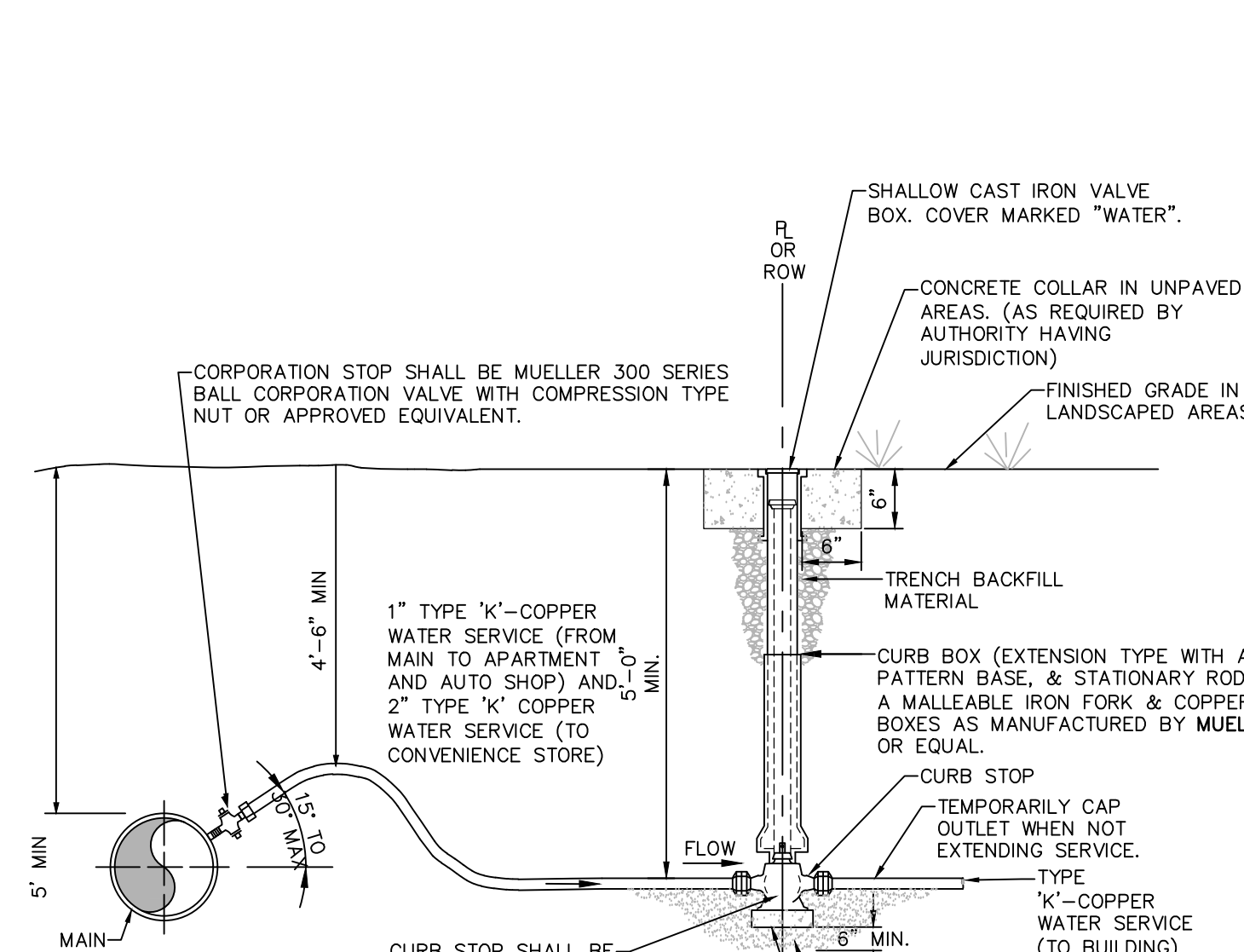
- NOTES:**
- NET TAP OF PUBLIC WATER MAIN SHALL BE PERFORMED UNDER THE SUPERVISION OF THE ENGINEER, AND THE AUTHORITY HAVING JURISDICTION.
 - TAPPING SLEEVE AND VALVE SUPPORT SHALL BE COORDINATED WITH THE ENGINEER TO SUIT FIELD CONDITIONS.
 - MINIMUM DISTANCE TO JOINTS, FITTINGS, OR OTHER WET TAPS OR STOPS SHALL BE 3 FEET.
 - VALVE OPERATING DIRECTION SHALL BE COUNTERCLOCKWISE TO OPEN (TURNING LEFT).
 - TAPPING SLEEVE SHALL BE SELECTED TO FIT EXISTING PIPE MATERIAL (C.I., D.I., A.C.) AND OUTSIDE DIAMETERS.
 - THRUST BLOCK IS REQUIRED WHERE THE BRANCH OF THE TAPPING SLEEVE DOES NOT HAVE RESTRAINED JOINTS.
 - TAPPING SLEEVE, VALVE & VALVE BOX SHALL BE IN ACCORDANCE WITH MUNICIPAL STANDARDS & AS MANUFACTURED BY (MUELLER, CLOW OR WATEROUS) OR APPROVED EQUIVALENT.

4 TAPPING SLEEVE AND VALVE DETAIL
SCALE: NOT TO SCALE



- NOTES:**
- NON-RISING STEM GATE VALVE, OPERATING DIRECTION SHALL BE COUNTERCLOCKWISE TO OPEN.
 - MINIMUM DISTANCE TO JOINTS, FITTINGS, OR OTHER WET TAPS OR STOPS SHALL BE 3 FEET.
 - IF VALVE IS TO BE ROODED, PROVIDE VALVE WITH ROODING FLANGES OR EYEBOLTS. TWO (2) 3/4" GALVANIZED STEEL RODS WITH MALLEABLE IRON NUTS AT 180" SPACING SHALL BE USED FOR ROODING VALVES. FOR 12" DIA. PIPE OR LESS, SEE TABLE FOR NUMBER OF THE RODS REQUIRED--JOINT RESTRAINT OPTION DETAILS.
 - GATE VALVE & VALVE BOX SHALL BE IN ACCORDANCE WITH MUNICIPAL STANDARDS & AS MANUFACTURED BY (MUELLER, CLOW OR WATEROUS) OR APPROVED EQUIVALENT.

5 TYPICAL GATE VALVE DETAIL
SCALE: NOT TO SCALE



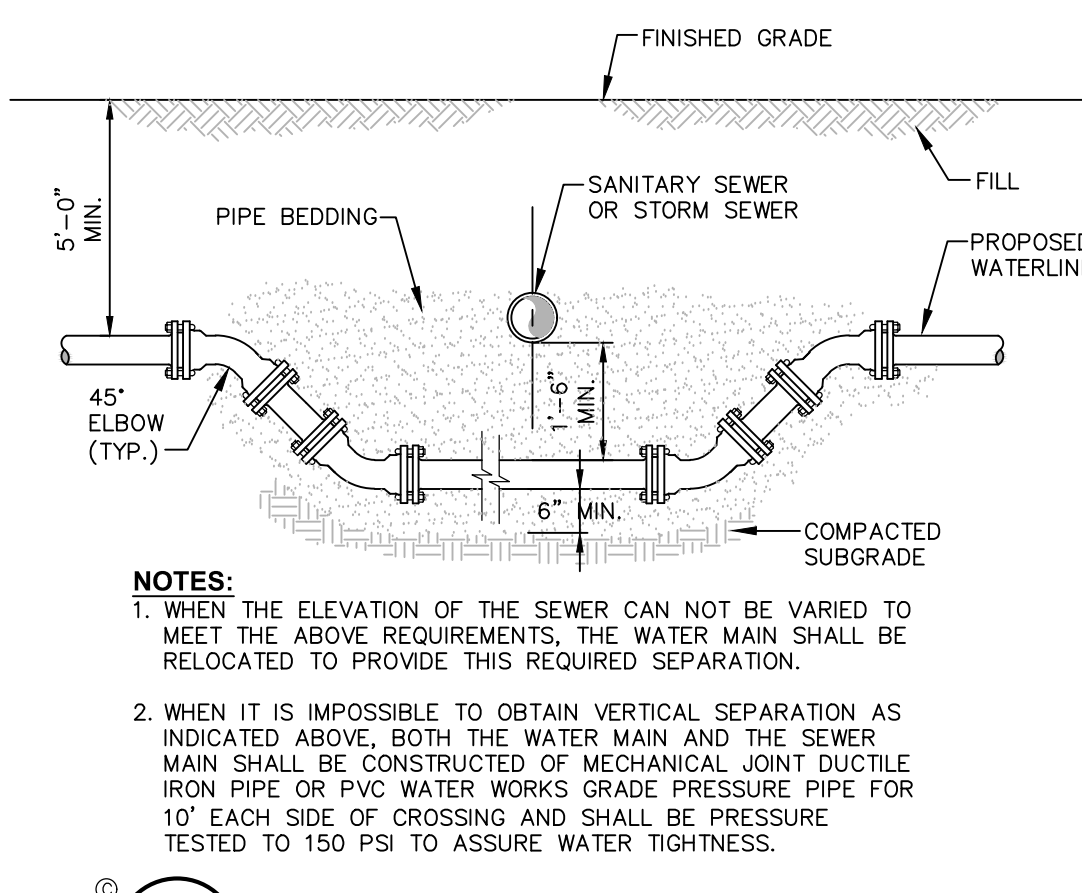
- NOTE:**
- MINIMUM DISTANCE TO JOINTS, FITTINGS OR OTHER WET TAPS OR STOPS SHALL BE MAINTAINED IN ACCORDANCE WITH REGULATORY AGENCY.

6 COPPER WATER SERVICE
SCALE: NOT TO SCALE

SCHEDULE OF JOINT RESTRAINT BARE DIP (NOT POLYWRAPPED)																
(LENGTH OF PIPE EACH SIDE OF FITTING TO BE RESTRAINED IN FEET "L")																
PIPE SIZE (INCHES)	FITTING TYPE															
	90°	45°	22 1/2°	11 1/2°	TEE	VALVE	DEAD END	6"	8"	10"	12"	16"	18"	24"		
6"	43	18	8	4	29	31	31									
8"	56	23	11	5	38	41	41	17								
10"	68	28	14	7	48	50	50	31	17							
12"	81	34	16	8	57	59	59	43	31	17						
16"	106	44	21	10	76	78	78	66	57	46	33					
18"	119	49	24	12	85	88	88	69	59	48	18					
24"	156	65	31	15	116	116	116			86	63	50				
30"	192	80	38	19	142	144	144					91	50			

- NOTES:**
- THE LENGTH OF PIPE REQUIRING RESTRAINT IS BASED UPON THE FOLLOWING ASSUMPTIONS:
A. BEDDING TYPE 2 - FLAT BOTTOM TRENCH, BACKFILL LIGHTLY CONSOLIDATED TO CENTER LINE OF PIPE.
B. SOIL TYPE CLAY 1 - CLAY OF MEDIUM TO LOW PLASTICITY, LL<50, <25% COARSE PARTICLES [CL & CL-ML].
CL - INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
ML - INORGANIC SILTS, VERY FINE SAND, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS.
C. PIPE IS BARE DUCTILE IRON PIPE (NOT POLYWRAPPED)
D. DEPTH TO TOP OF PIPE 5'-0" MINIMUM
E. MAXIMUM OPERATING PRESSURE OF 150 PSI
F. FACTOR OF SAFETY OF 1.5
 - FOR END PLUGS, RESTRAIN PIPE LENGTH GIVEN FOR DEAD END FITTING.
 - THE LENGTH OF NEW PIPE TO BE RESTRAINED IS THE LENGTH FOR EACH SIDE OF THE FITTING.
 - THE ABOVE INFORMATION WAS PROVIDED USING THE THRUST RESTRAINT PROGRAM ISSUED BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) AND IS BASED ON THE ASSUMPTIONS LISTED IN NOTE 1. RESTRAINED LENGTH REQUIREMENTS FOR FIELD CONDITIONS AND PIPE SIZES DIFFERING FROM THOSE LISTED ABOVE SHOULD BE EVALUATED SEPARATELY.
 - RESTRAINED JOINT PIPE AND FITTINGS SHALL BE USED ONLY AS ALLOWED BY THE PROJECT PLANS AND/OR SPECIFICATION.

9 JOINT RESTRAINT SCHEDULE AND NOTES
SCALE: NOT TO SCALE



8 WATERLINE OFFSET DETAIL
SCALE: NOT TO SCALE

GENERAL CONSTRUCTION NOTES:

- ALL UTILITY WORK INVOLVING CONNECTION TO EXISTING MUNICIPAL WATER MAIN SHALL BE COORDINATED WITH OWNER AND OWNER'S REPRESENTATIVE. NOTIFY OWNER AND THE OWNER'S REPRESENTATIVE 3 WORKING DAYS BEFORE CONNECTION IS MADE.
- THE CONTRACTOR SHALL VERIFY THE PRESENCE OF AND EXACT LOCATION OF ALL UTILITIES PRIOR TO COMMENCING ANY EXCAVATION WORK AS THE EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST.
- THE CONTRACTOR SHALL REVIEW ALL FIELD UTILITY MARKOUT INFORMATION AND BRING ANY CONFLICTS TO THE ATTENTION OF THE PROJECT ENGINEER PRIOR TO COMMENCING ANY WORK OPERATIONS. TEST PITS MAY BE REQUIRED BY THE CONTRACTOR TO VERIFY ACTUAL UTILITY LOCATIONS AND/OR DEPTHS. TEST PIT OPERATIONS WILL MEET ALL NECESSARY REQUIREMENTS AS SET FORTH IN THESE PLANS, DISTRICT, STATE, FEDERAL, STATE/LOCAL REGULATIONS AND ANY SPECIFIC PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATIONS AT ALL UTILITY CONNECTION LOCATIONS AND AS NEEDED TO VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER AND OWNER'S REPRESENTATIVE 3 WORKING DAYS PRIOR TO SUCH EXCAVATIONS TO ENSURE THEIR PRESENCE.
- THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING FOR THE PROPOSED STRUCTURES AND WATER LINES AS THE EXACT LOCATION OF UNDERGROUND STRUCTURES AND UTILITIES ARE NOT KNOWN. ANY DAMAGE TO EXISTING STRUCTURES/UTILITIES ABOVE OR BELOW GRADE, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR AT HIS OWN EXPENSE.

WATER LINE NOTES:

- THE WATER LINE MAY BE FLEXED WITHIN PIPE SPECIFICATIONS OR LAID DEEPER IN AREAS WHERE A CROSSING WITH A SANITARY LINE OCCURS, TO ACHIEVE THE REQUIRED 1.5' VERTICAL SEPARATION DISTANCE. IF THIS DISTANCE CANNOT BE REASONABLY ACHIEVED, THE CONTRACTOR SHALL USE PRESSURE RATED SANITARY SEWER PIPE OF EQUAL OR GREATER RATING THAT THE PRESSURE CLASS FOR THE WATER LINE.
- MINIMUM VERTICAL SEPARATION BETWEEN WATER LINES AND SEWER PIPE SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. IN ADDITION, WHEN THE WATER LINE PASSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECT FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER PIPE ON THE WATER LINE. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER LINES AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.
- ALL WATER LINES SHALL HAVE A MINIMUM OF (5) FIVE FEET OF COVER FROM THE TOP OF THE LINE TO FINISHED GRADE. THE CONTRACTOR SHALL CHECK ALL FINISHED GRADE STAKES BEFORE TRENCHING TO ENSURE THAT ALL INSTALLED WATER LINES WILL HAVE THE REQUIRED COVER.
- THE CONTRACTOR SHALL COORDINATE THE TESTING WITH THE WATER DEPARTMENT SO AS TO MAINTAIN THE AMOUNT OF SERVICE INTERRUPTION TO EXISTING USERS TO THE LEAST EXTENT PRACTICABLE. WATER LINE INSTALLATION AND TESTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE PROJECT ENGINEER OR HIS DESIGNEE AS NECESSARY TO MEET CONDITIONS IN NOTE 5 ABOVE.
- ALL NEW WATER LINE INSTALLATIONS SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH AWWA STANDARD C 600(LATEST REVISION) AT A PRESSURE OF 150 PSI, OR 1.5 TIMES (AS REFERENCED ABOVE) THE WORKING PRESSURE OF THE SYSTEM AS A MINIMUM. ALLOWABLE LEAKAGE OF THIS TEST SHALL BE AS DEFINED IN SECTION 4.2 OF SAID AWWA SPECIFICATION.
- APPROVED AND TESTED WATER LINE SHALL BE DISINFECTED PER AWWA SECTION C 651 (AS REFERENCED ABOVE), AS DIRECTED BY ENGINEER.
- THE WATER LINE SHALL BE DISINFECTED EQUAL TO AWWA STANDARD FOR DISINFECTING WATER MAINS DESIGNATION C651 (LATEST REVISION). FOLLOWING DISINFECTION, THE WATER MAIN SHALL BE FLUSHED UNTIL THE CHLORINE CONCENTRATION IN THE WATER LEAVING THE MAIN IS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM. THE PROJECT ENGINEER OR HIS DESIGNEE SHALL ALSO WITNESS DISINFECTION AND FLUSHING.
- FIRE HYDRANTS WEEP HOLES (DRAINS) SHALL BE PLUGGED WHEN GROUND WATER IS ENCOUNTERED WITHIN SEVEN FEET OF THE FINISHED GRADE. WHEN DRAINS ARE PLUGGED, THE BARRELS MUST BE FLUSHED DRY AFTER USE DURING FREEZING WEATHER. SUCH HYDRANTS SHALL BE IDENTIFIED BY MARKINGS APPROVED BY THE TOWN WATER DEPARTMENT.
- PROPOSED WATER METERS LOCATED WITHIN THE METER PIT OR BUILDING SHALL BE A COMPATIBLE REMOTE STYLE TYPE, AND SHALL BE APPROVED BY THE TOWN WATER DEPARTMENT PRIOR TO INSTALLATION.
- THE WATER LINE SHALL BE INSTALLED AT A CONTINUOUS GRADE WITH NO ABRUPT HIGH POINTS OR LOW POINTS.
- FINAL WATER DISTRIBUTION SYSTEM IS SUBJECT TO REVIEW, REVISION AND APPROVAL BY THE TOWN WATER DEPARTMENT.
- ALL WATER LINES AND RELATED APPURTENANCES SHALL BE CONSTRUCTED TO THE LATEST STANDARDS AND SPECIFICATIONS OF THE TOWN.
- THE WATER LINE SHALL NOT BE PLACED INTO SERVICE UNTIL SO AUTHORIZED BY THE TOWN.
- ALL WATER SERVICE CONSTRUCTION SHALL BE SUBJECT TO INSPECTION BY THE TOWN WATER DEPARTMENT PRIOR TO BACKFILLING.
- THE SITE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BURIED PIPING TO THE LOCATION OF THE PROPOSED BUILDING CONNECTION POINT (I.E. INSIDE THE BUILDING). THIS INCLUDES THE TESTING AND CERTIFICATION OF ALL WATER SERVICE WORK FROM THE TOWNWATER CONNECTION POINT TO THE PROPOSED BUILDINGS INTERIOR CONNECTION POINT.
- ALL WATER SERVICE PIPING INSTALLATION, BACKFILL AND TESTING SHALL BE REVIEWED, AND APPROVED BY THE TOWN WATER MAINTENANCE SUPERVISOR OR HIS DESIGNEE.

WATER DISINFECTION NOTES:

- APPROVED AND TESTED WATER MAIN SHALL BE DISINFECTED PER AWWA SECTION C651, LATEST EDITION. TABLET OR POWDERED METHOD IS NOT ALLOWED.
- THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY AND THE PROJECT ENGINEER 48 HOURS PRIOR TO DISINFECTING THE SERVICE LINES.
- DISINFECTED WATER MUST REMAIN IN THE WATER MAINS FOR A MINIMUM OF 24 HOURS BEFORE BEING THOROUGHLY FLUSHED OUT.
- WATER SERVICE LINES SHALL BE DISINFECTED AS PER AWWA SECTION C651 WHERE:
A. CHLORINE CONCENTRATION IN WATER LINES SHALL BE NO LESS THAN 50 MG/L AT START OF 24-HOUR TEST.
B. CHLORINE RESIDUAL SHALL BE NO LESS THAN 10 MG/L AT END OF TEST.
- PRIOR TO RECEIVING CERTIFICATE OF OCCUPANCY, MICROBIOLOGICAL SAMPLES SHALL BE COLLECTED FROM BOTH ENDS AND THE MIDDLE OF EACH NEW LINE. ALL LINES SHALL NOT BE USED UNTIL MICROBIOLOGICAL SAMPLES ARE ACCEPTED BY THE TOWN. RESULTS OF ALL MICROBIOLOGICAL TESTING SHALL BE SUBMITTED TO THE TOWN ALONG WITH ENGINEER'S CERTIFICATE OF COMPLETION.

WATER NOTES:

- SHEETING AND EXCAVATION BRACING FOR THE WATERMAIN INSTALLATION SHALL BE PROVIDED IN ACCORDANCE WITH OSHA REQUIREMENTS TO SUIT EXISTING SOIL CONDITIONS. SHEETING, IF REQUIRED, SHALL BE TIGHT WOOD SHEETING AND SHALL BE LEFT IN PLACE, AND AFTER BACKFILLING SHALL BE CUT AT GROUND LEVEL OR AS ORDERED BY THE OWNER'S REPRESENTATIVE.
- MATERIALS USED IN CONSTRUCTION THAT WILL CONTACT POTABLE WATER SHALL BE ANSI/NSF 61 CERTIFIED OR EQUIVALENT.

TESTING WATER MAINS:

- AFTER TRENCH HAS BEEN BACKFILLED, HYDROSTATIC ACCEPTANCE TESTS, CONSISTING OF A PRESSURE TEST AND A LEAKAGE TEST, SHALL BE CONDUCTED ON ALL WATER MAINS INSTALLED. LEAKAGE TEST SHALL BE CONDUCTED CONCURRENTLY WITH PRESSURE TEST. TEST SECTION SHALL BE LIMITED TO ABOUT 2000 FT (MAX) UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- AFTER ALL TESTS AND INSPECTIONS HAVE BEEN PERFORMED EVIDENCE OF COMPLIANCE SHALL BE FORWARDED TO OWNER/ENGINEER AND THE MUNICIPALITY PRIOR TO ACCEPTANCE.
- ALL WATER FOR TESTS SHALL BE FURNISHED AND DISPOSED OF BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. SOURCE AND/OR QUALITY OF WATER WHICH THE CONTRACTOR PROPOSES TO USE IN TESTING LINES SHALL BE ACCEPTABLE TO THE ENGINEER.
- HYDROSTATIC PRESUMPTIVE TESTS MAY BE PERFORMED WHEN SYSTEM IS PARTIALLY BACKFILLED TO SIMPLY CHECK WORK, BUT ACCEPTANCE OF SYSTEM SHALL BE BASED ON HYDROSTATIC TESTS RUN ON FINISHED SYSTEM AFTER IT HAS BEEN COMPLETELY BACKFILLED. ALL HYDROSTATIC TESTS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 4 OF AWWA STANDARD C 600 OR LATER ADDITION, AS MODIFIED HEREIN.
- FOR THE PRESSURE TEST, SYSTEM SHALL BE PRESSURIZED AND MAINTAINED AT A MINIMUM OF 150 POUNDS PER SQUARE INCH, OR 1.5 TIMES THE WORKING PRESSURE, WHICHEVER IS GREATER, BASED ON THE ELEVATION OF THE LOWEST POINT IN THE SECTION BEING TESTED AND CORRECTED TO THE ELEVATION OF THE GAUGE. PROVISIONS SHALL BE MADE TO RELIEVE AIR TRAPPED AT HIGH POINTS IN THE SYSTEM THROUGH ADEQUATE HYDRANTS OR THROUGH TAPS AND CORPORATION STOPS INSTALLED FOR THIS PURPOSE BY THE CONTRACTOR. AFTER SAID PRESSURE HAS BEEN MAINTAINED SUCCESSFULLY, WITH FURTHER PUMPING AS REQUIRED, FOR A PERIOD OF AT LEAST TWO HOURS, THE SECTION UNDER TEST SHALL BE CONSIDERED TO HAVE PASSED THE PRESSURE TEST.
- LEAKAGE TEST SHALL BE PERFORMED CONCURRENTLY WITH A MINIMUM TEST PRESSURE OF 150 LBS/SQUARE INCH, OR 1.5 TIMES THE WORKING PRESSURE, WHICHEVER IS GREATER, BASED ON THE ELEVATION OF THE LOWEST POINT IN THE SECTION UNDER TEST AND CORRECTED TO ELEVATION OF THE GAUGE. LEAKAGE TEST DURATION SHALL BE A MINIMUM OF 2 HOURS AFTER LEAKAGE RATE HAS STABILIZED.
- MAXIMUM ALLOWABLE LEAKAGE SHALL BE AS SHOWN IN THE FOLLOWING TABLE:
ALLOWABLE LEAKAGE PER 1000 FT (305M) OF PIPELINE (GPH)

AVG. TEST PRESSURE (PSI)	8	10	12	14	16
450	0.57	0.86	1.15	1.43	1.72
400	0.54	0.81	1.08	1.35	1.62
350	0.51	0.76	1.01	1.26	1.52
300	0.47	0.70	0.94	1.17	1.40
275	0.45	0.67	0.90	1.12	1.34
250	0.43	0.64	0.85	1.07	1.28
225	0.41	0.61	0.81	1.01	1.22
200	0.38	0.57	0.76	0.96	1.15
175	0.36	0.54	0.72	0.89	1.07
150	0.33	0.50	0.66	0.83	0.99
125	0.30	0.45	0.60	0.76	0.91
100	0.27	0.41	0.54	0.68	0.81

- IF LEAKAGE IN SYSTEM EXCEEDS THE SPECIFIED AMOUNT, THE CONTRACTOR SHALL, AT NO ADDED COST TO THE OWNER, LOCATE, REPAIR, AND/OR REPLACE DEFECT(S) AND RE-TEST PIPING SYSTEM.

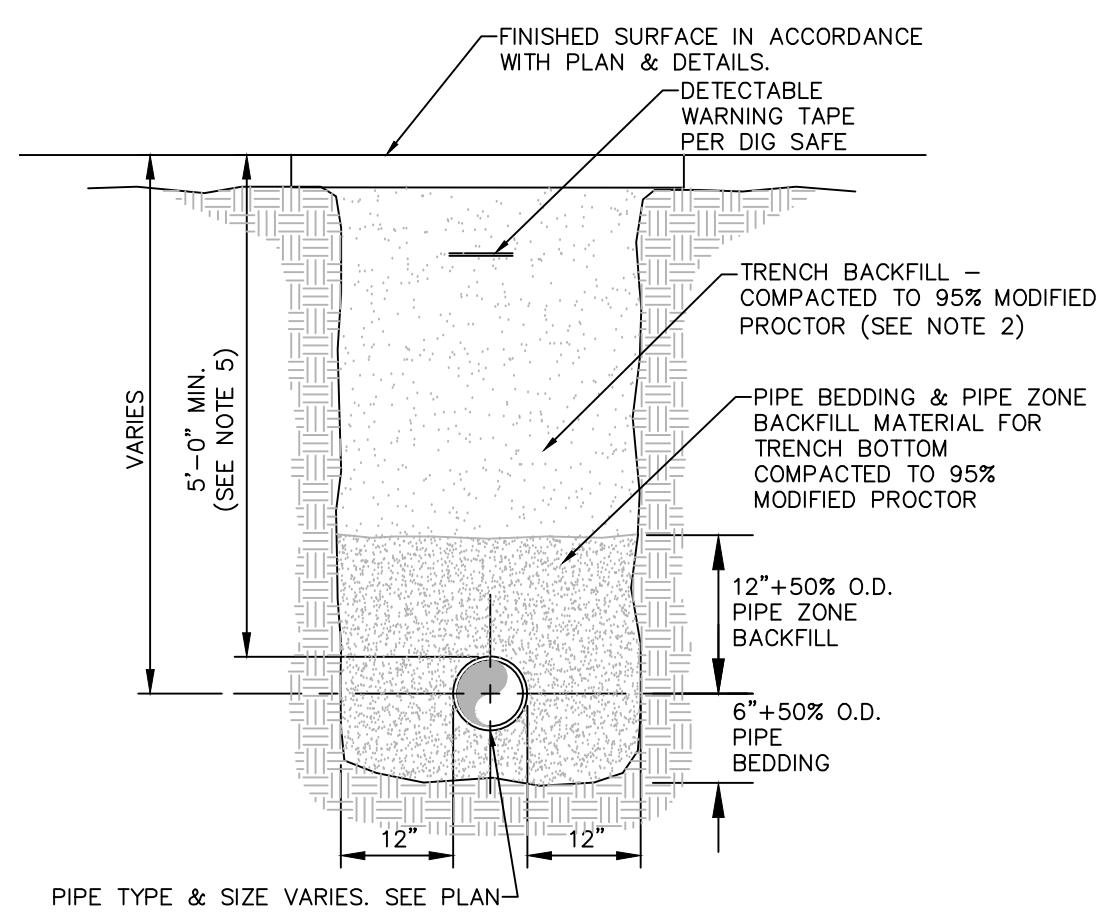
FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

GAS LAND 5200 ROUTE 9W

WATER DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
SPL	CPL
date	scale
01/20/22	AS SHOWN
project no.	81912-00
sheet no.	C530



NOTES:
1. PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS, AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL, OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS, AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.

SIEVE DESIGNATION	% PASSING
3/4"	100%
NO. 40	0-70%
NO. 200	0-10%

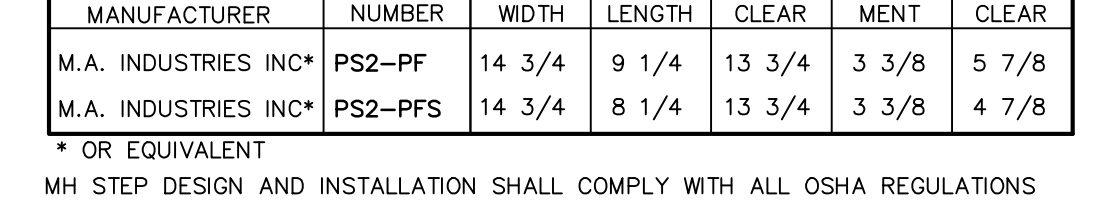
SIEVE DESIGNATION	% PASSING
4"	100%
NO. 40	0-70%
NO. 200	0-10%

IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.
3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.
5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.

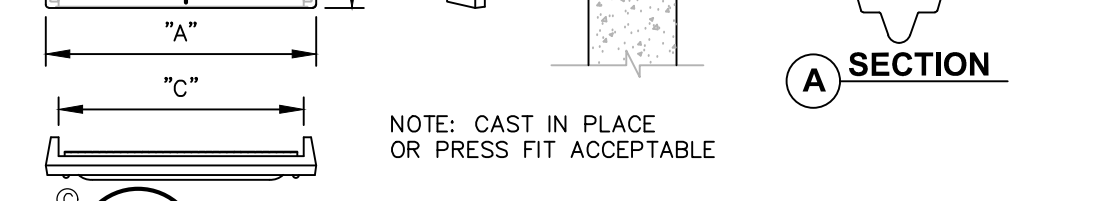
1 PIPE TRENCH DETAIL (TYPICAL)
SCALE: NOT TO SCALE

MANUFACTURER	PATTERN NUMBER	"A" STEP WIDTH	"B" LEG LENGTH	"C" RUNG CLEAR	"D" EMBED-MENT	"E" RUNG CLEAR
M.A. INDUSTRIES INC	PS2-PF	14 3/4	9 1/4	13 3/4	3 3/8	5 7/8
M.A. INDUSTRIES INC	PS2-PFS	14 3/4	8 1/4	13 3/4	3 3/8	4 7/8

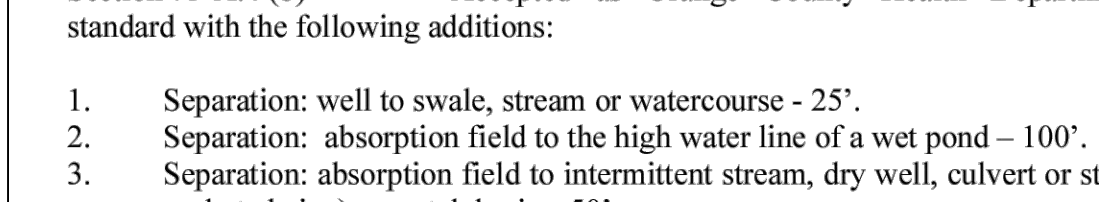
OR EQUIVALENT
MH STEP DESIGN AND INSTALLATION SHALL COMPLY WITH ALL OSHA REGULATIONS



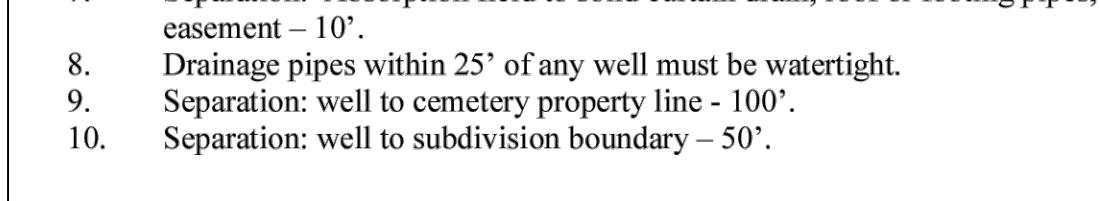
9 COPOLYMER POLYPROPYLENE MH STEP
SCALE: NOT TO SCALE



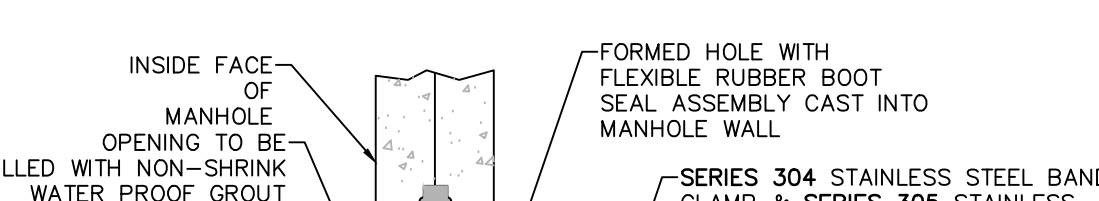
10 MANHOLE JOINT
SCALE: NOT TO SCALE



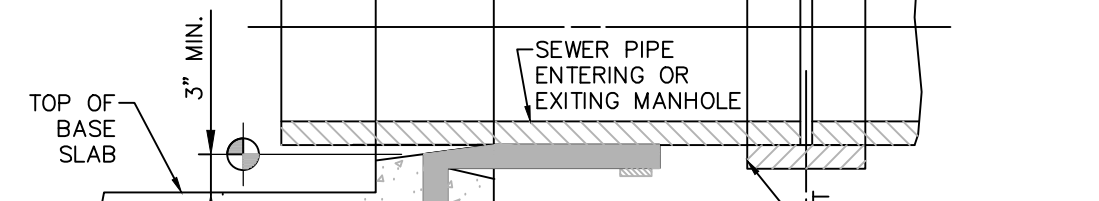
11 INFILTRATOR® QUICK4 EQUALIZER 36 CHAMBER DETAIL
SCALE: NOT TO SCALE



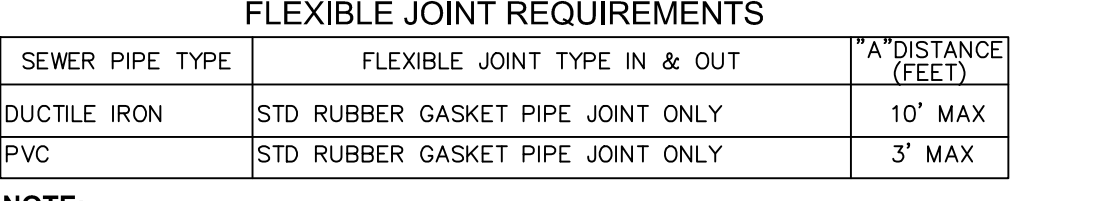
12 ABSORPTION TRENCH DETAIL
SCALE: NOT TO SCALE



13 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



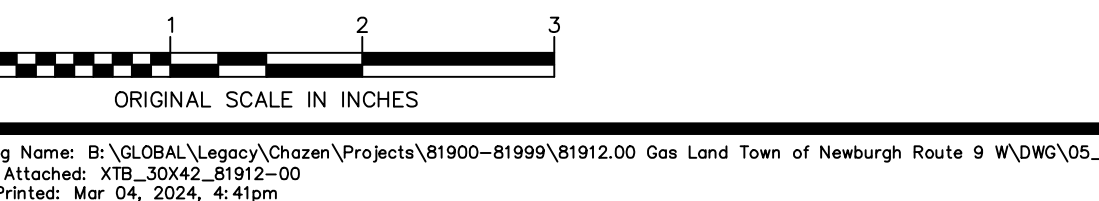
14 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



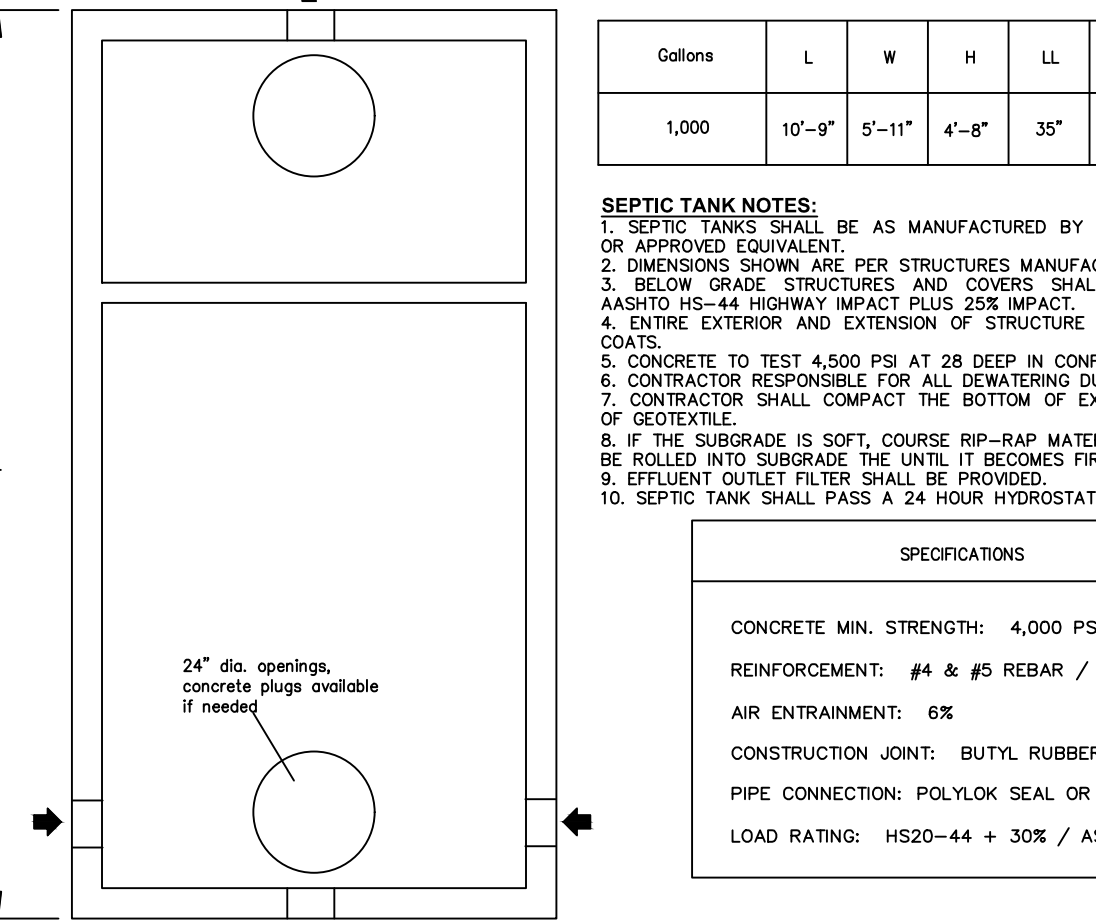
15 13-OUTLET DISTRIBUTION BOX
SCALE: NOT TO SCALE



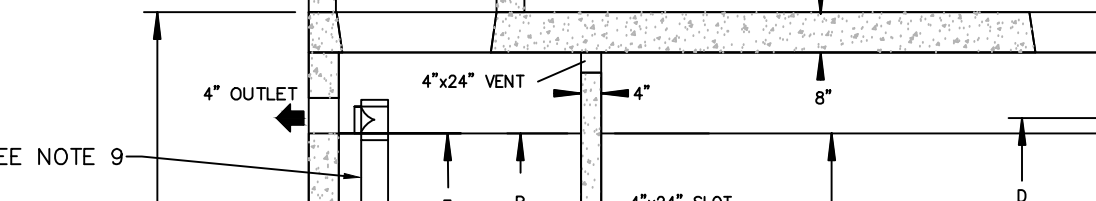
16 PIPE CONNECTION TO MANHOLE-FLEXIBLE RUBBER BOOT CAST INTO MANHOLE WALL
SCALE: NOT TO SCALE



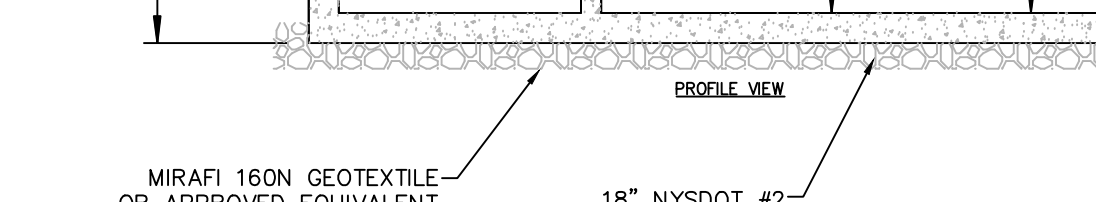
17 SANITARY FORCEMAIN CLEANOUT DETAIL
SCALE: NOT TO SCALE



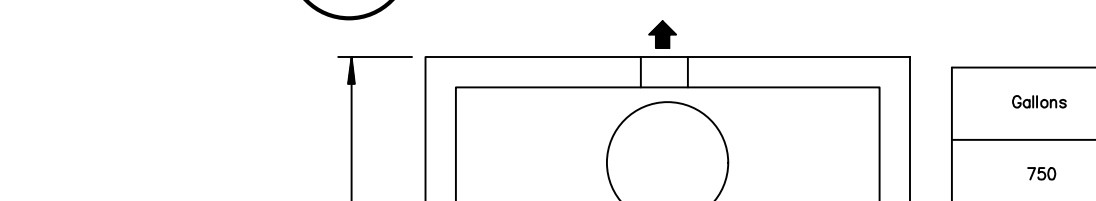
2 1000 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



3 750 GAL HEAVY DUTY CONCRETE GREASE TRAP
SCALE: NOT TO SCALE



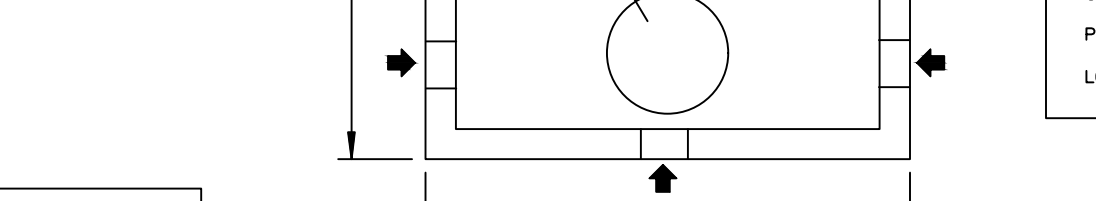
4 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



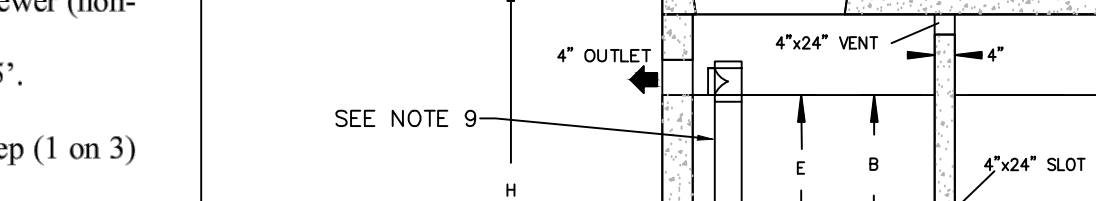
5 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



6 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



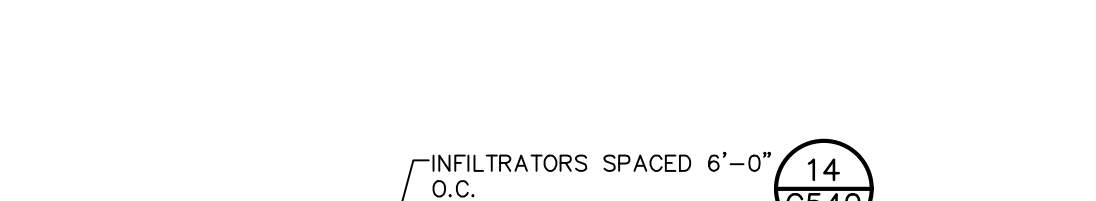
7 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



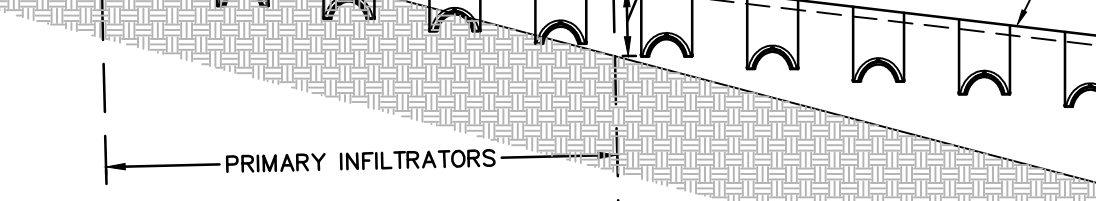
8 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



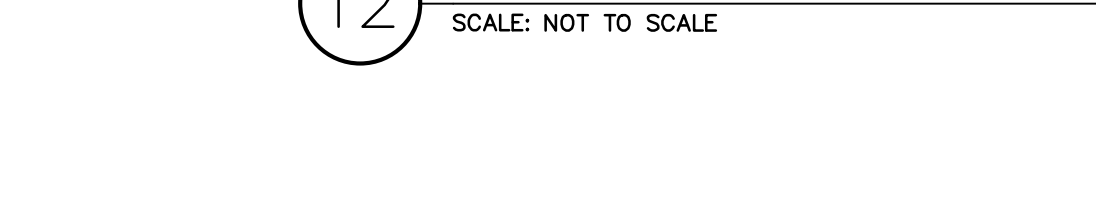
9 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



10 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



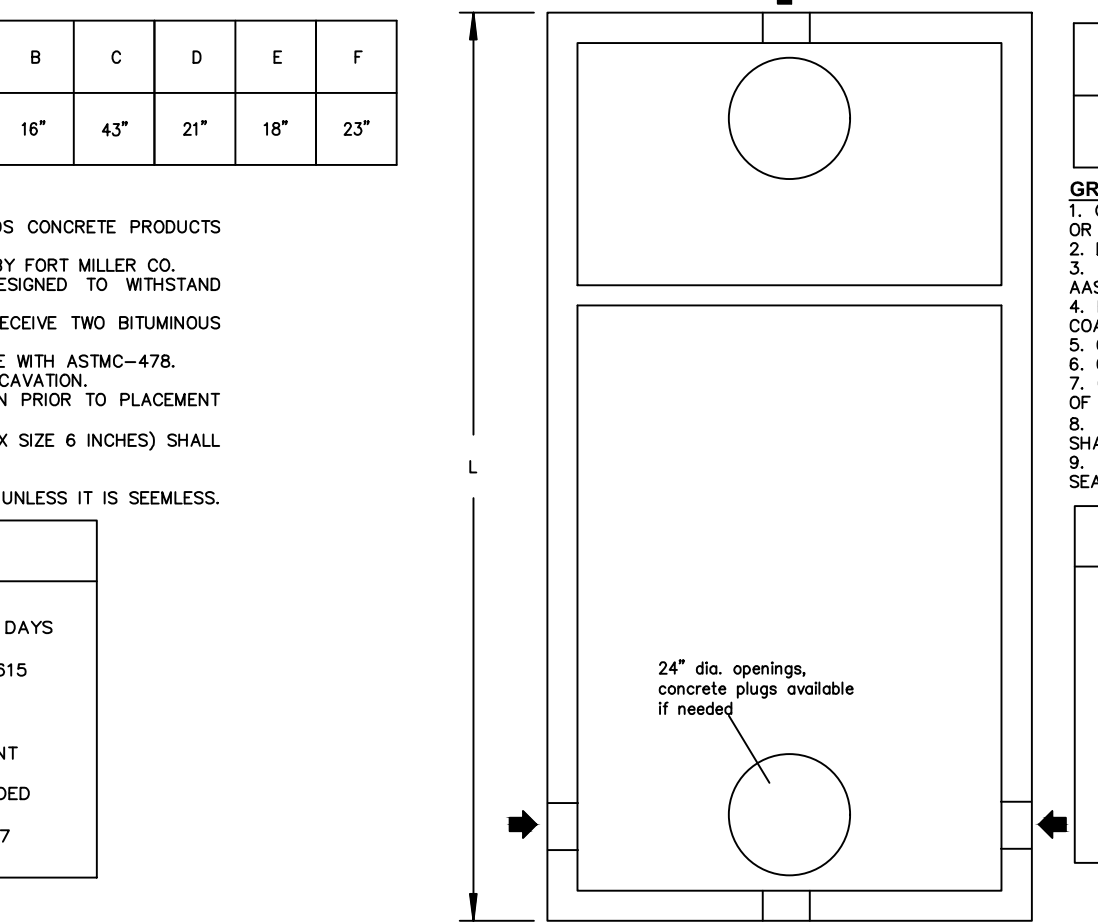
11 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



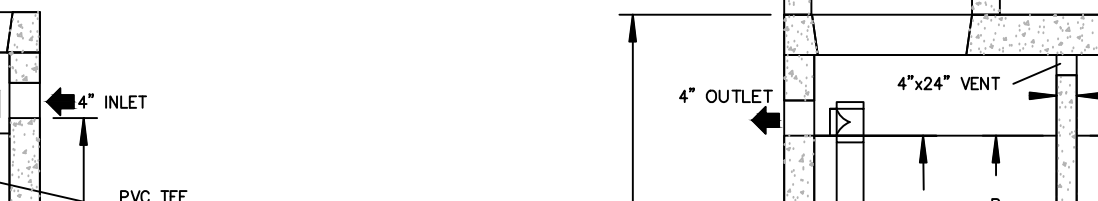
12 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



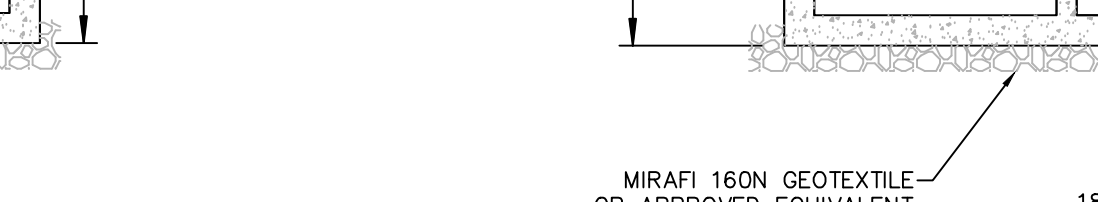
13 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



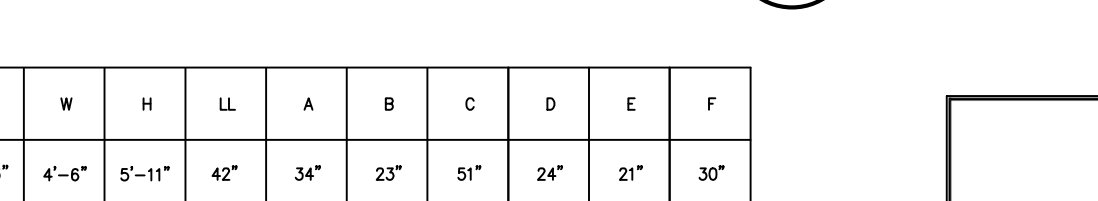
14 INFILTRATOR® QUICK4 EQUALIZER 36 CHAMBER DETAIL
SCALE: NOT TO SCALE



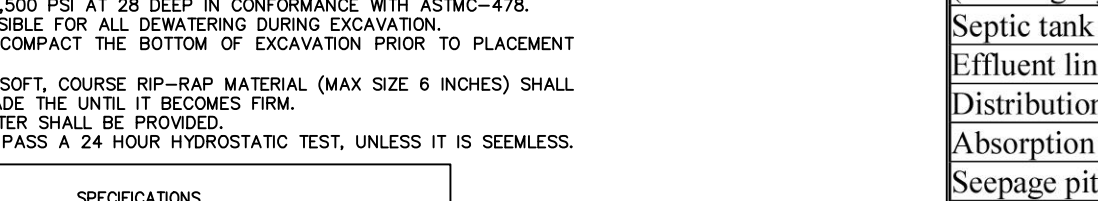
15 13-OUTLET DISTRIBUTION BOX
SCALE: NOT TO SCALE



16 PIPE CONNECTION TO MANHOLE-FLEXIBLE RUBBER BOOT CAST INTO MANHOLE WALL
SCALE: NOT TO SCALE



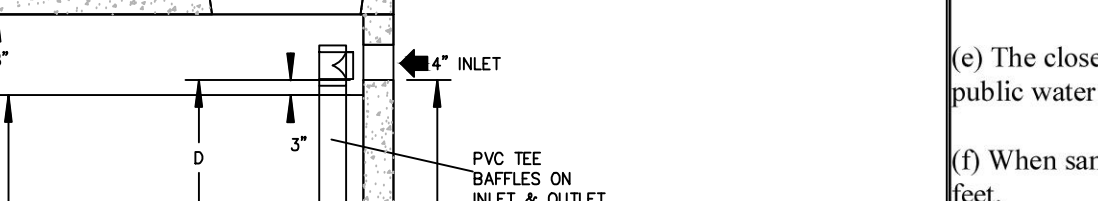
17 SANITARY FORCEMAIN CLEANOUT DETAIL
SCALE: NOT TO SCALE



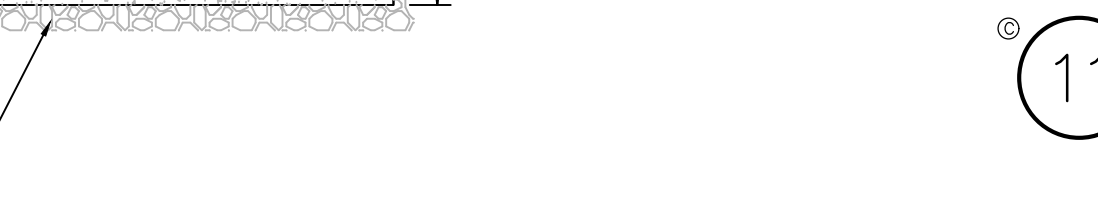
18 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



19 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



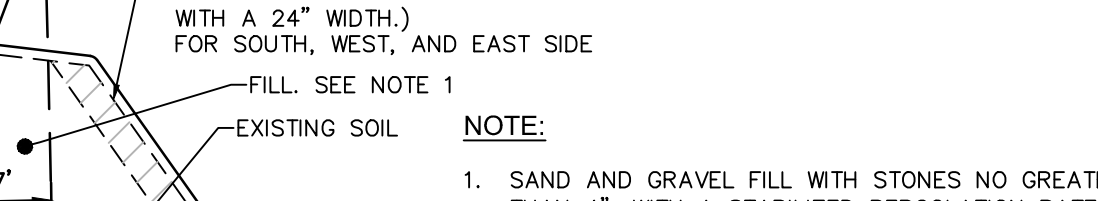
20 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



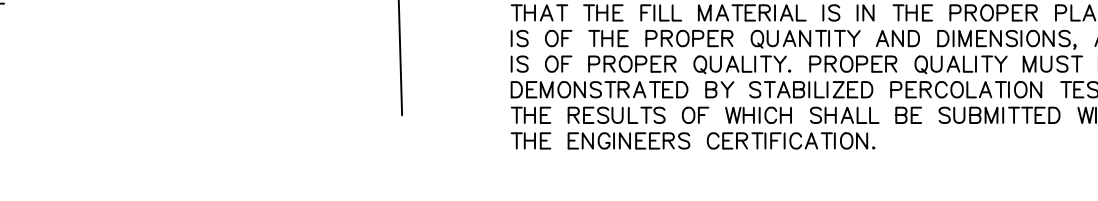
21 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



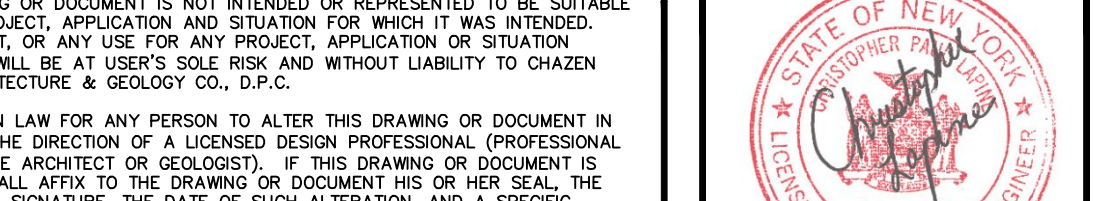
22 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



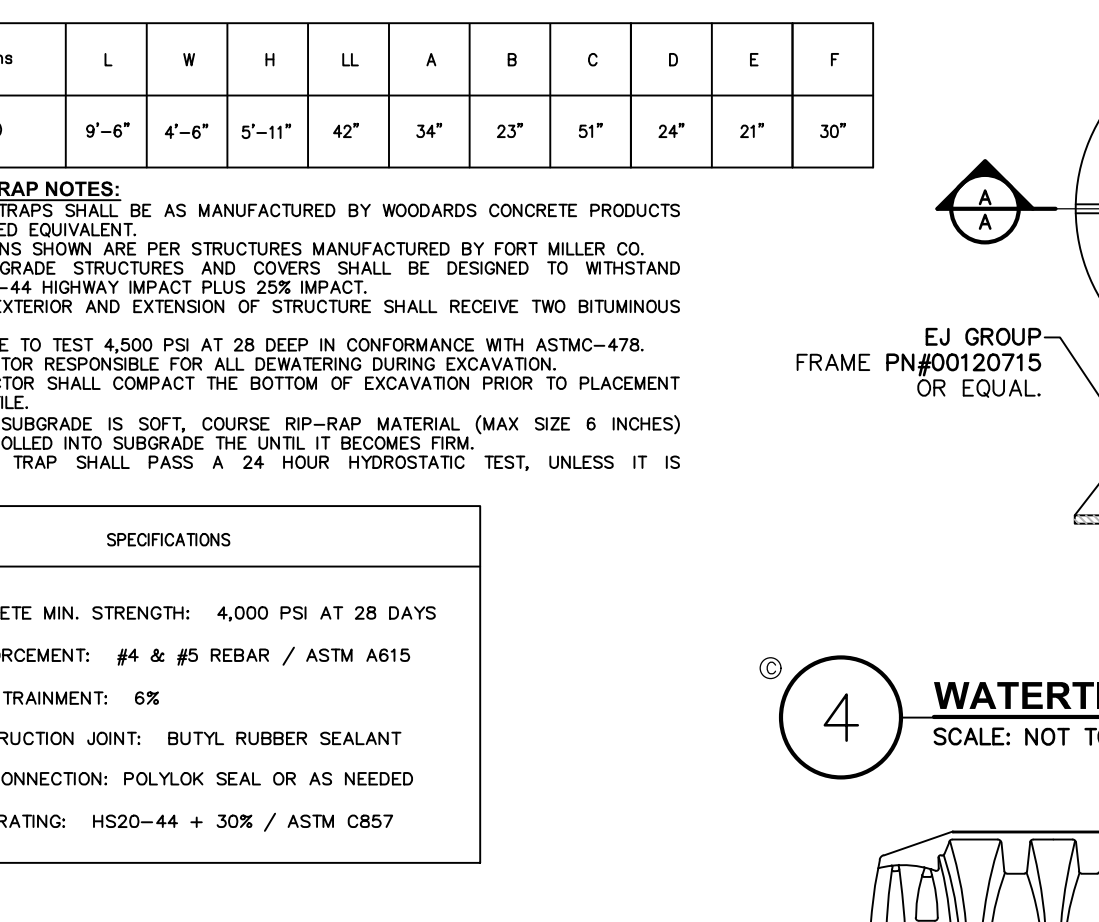
23 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



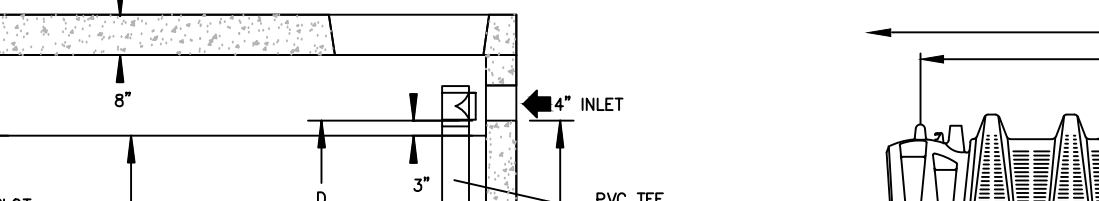
24 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



25 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



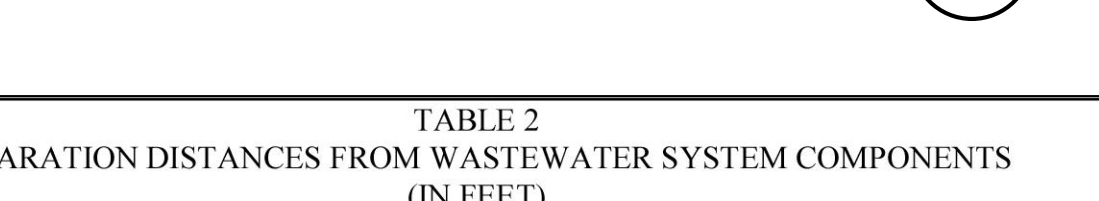
26 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



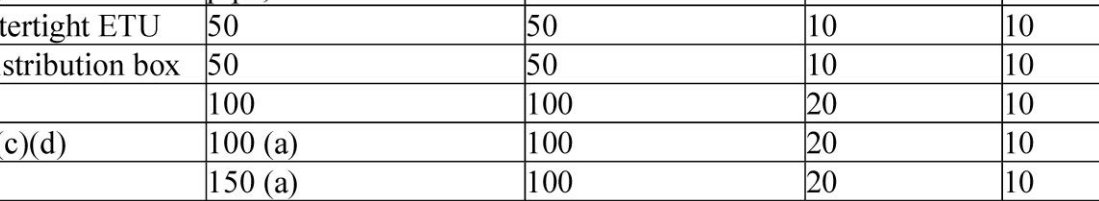
27 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



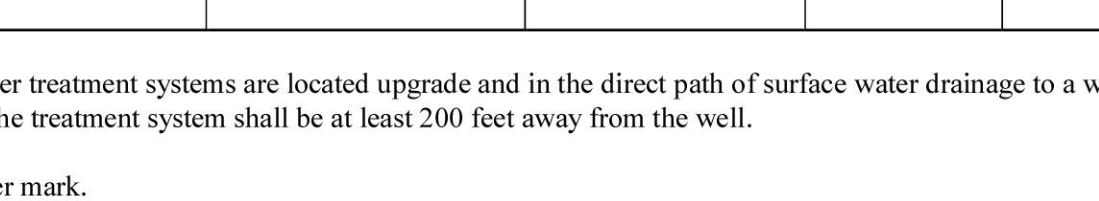
28 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



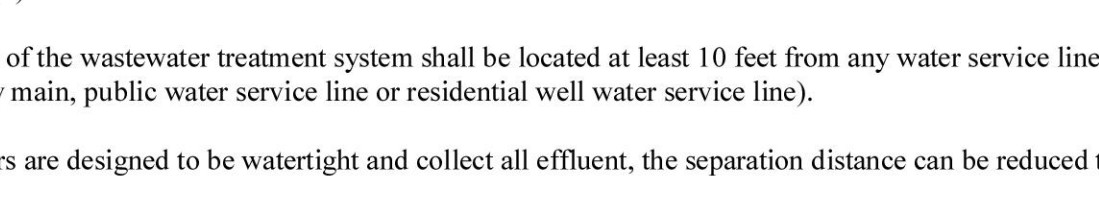
29 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



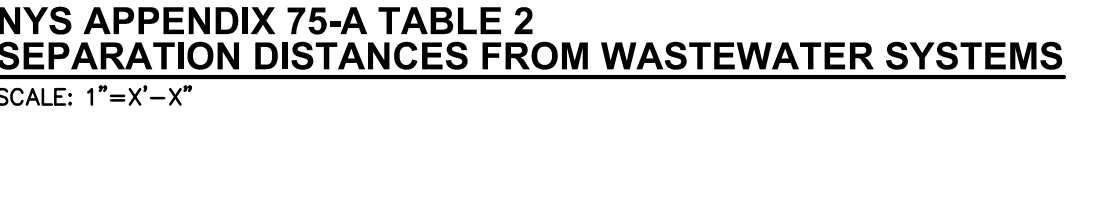
30 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



31 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



32 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



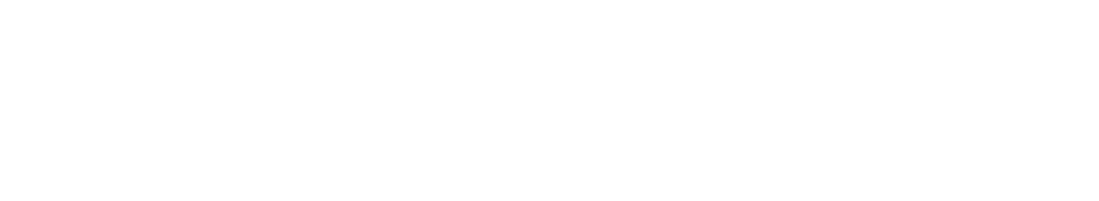
33 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



34 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



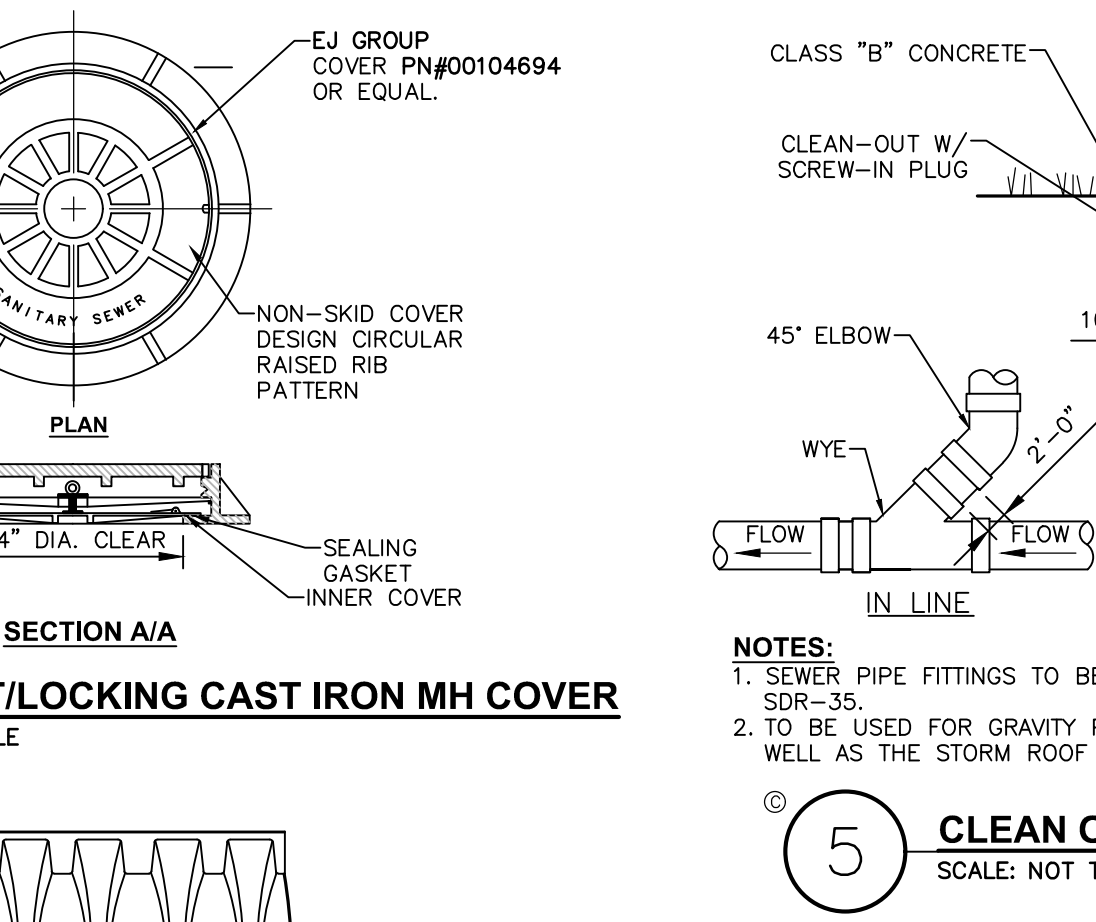
35 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



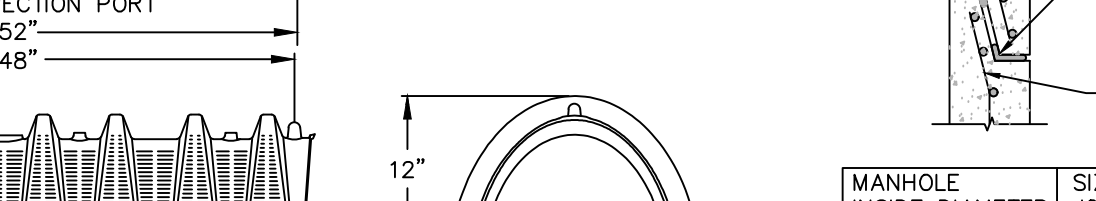
36 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



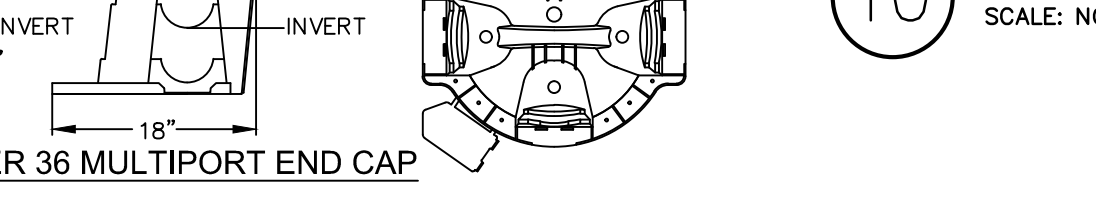
37 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



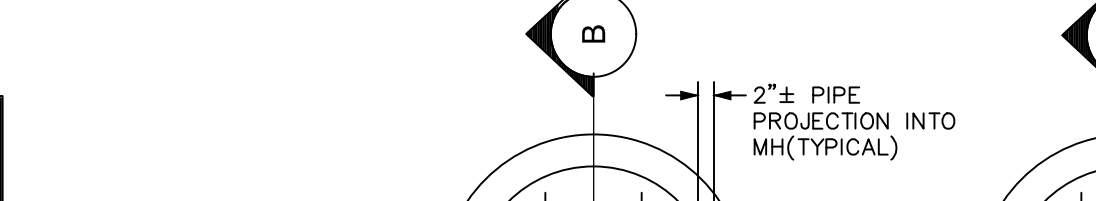
38 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



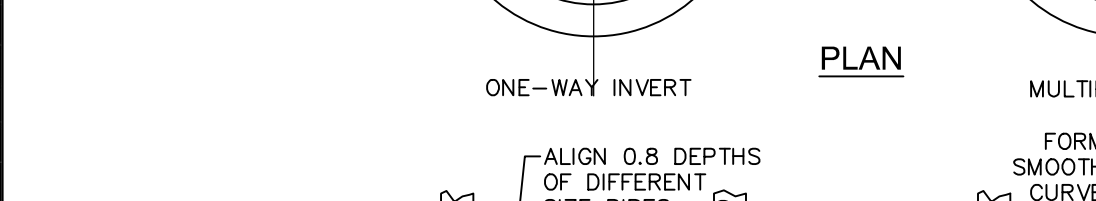
39 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



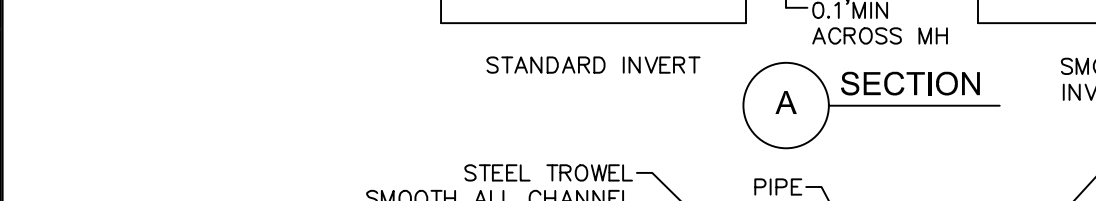
40 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



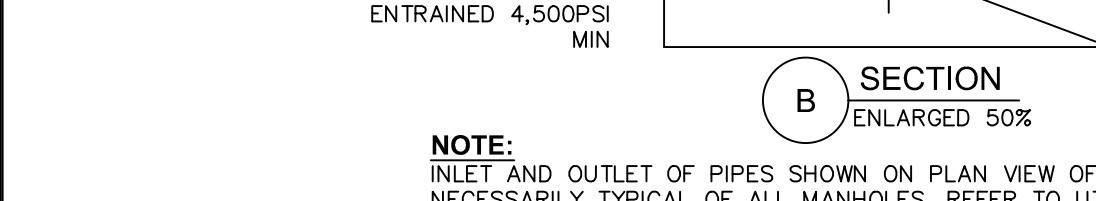
41 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



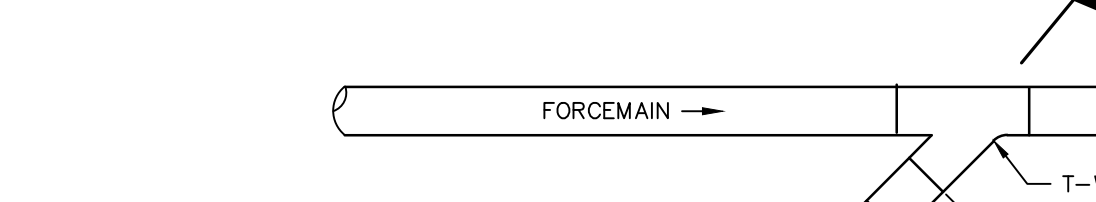
42 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



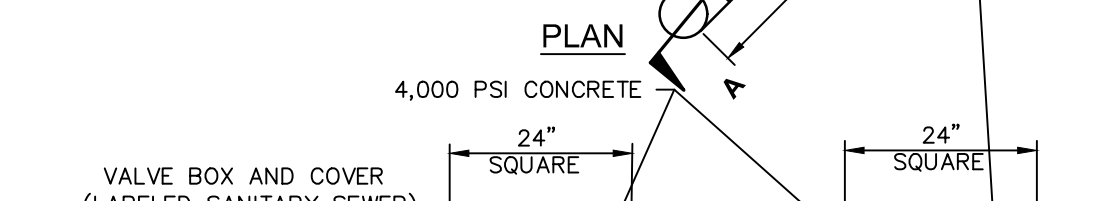
43 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



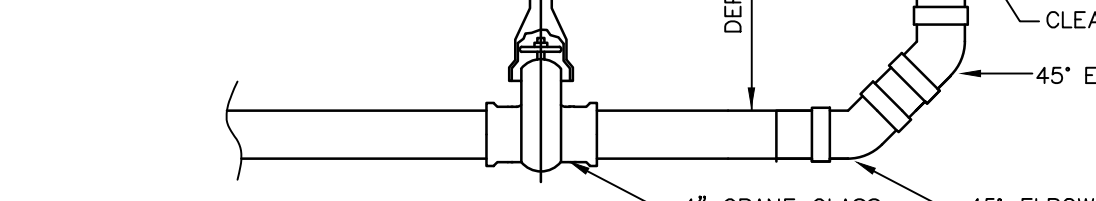
44 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



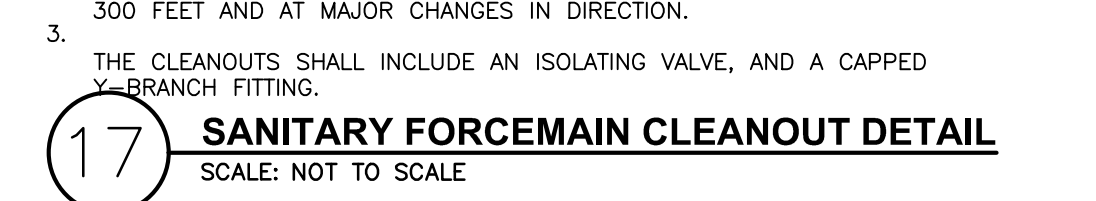
45 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



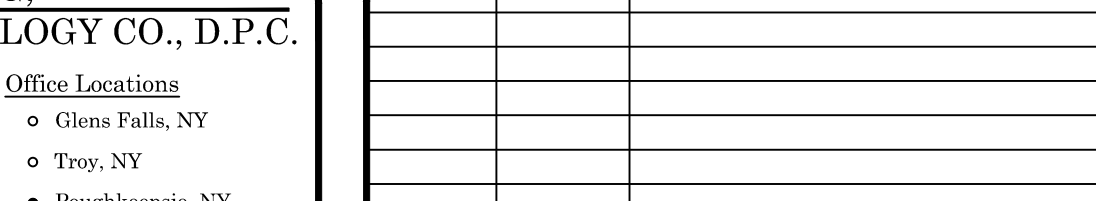
46 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



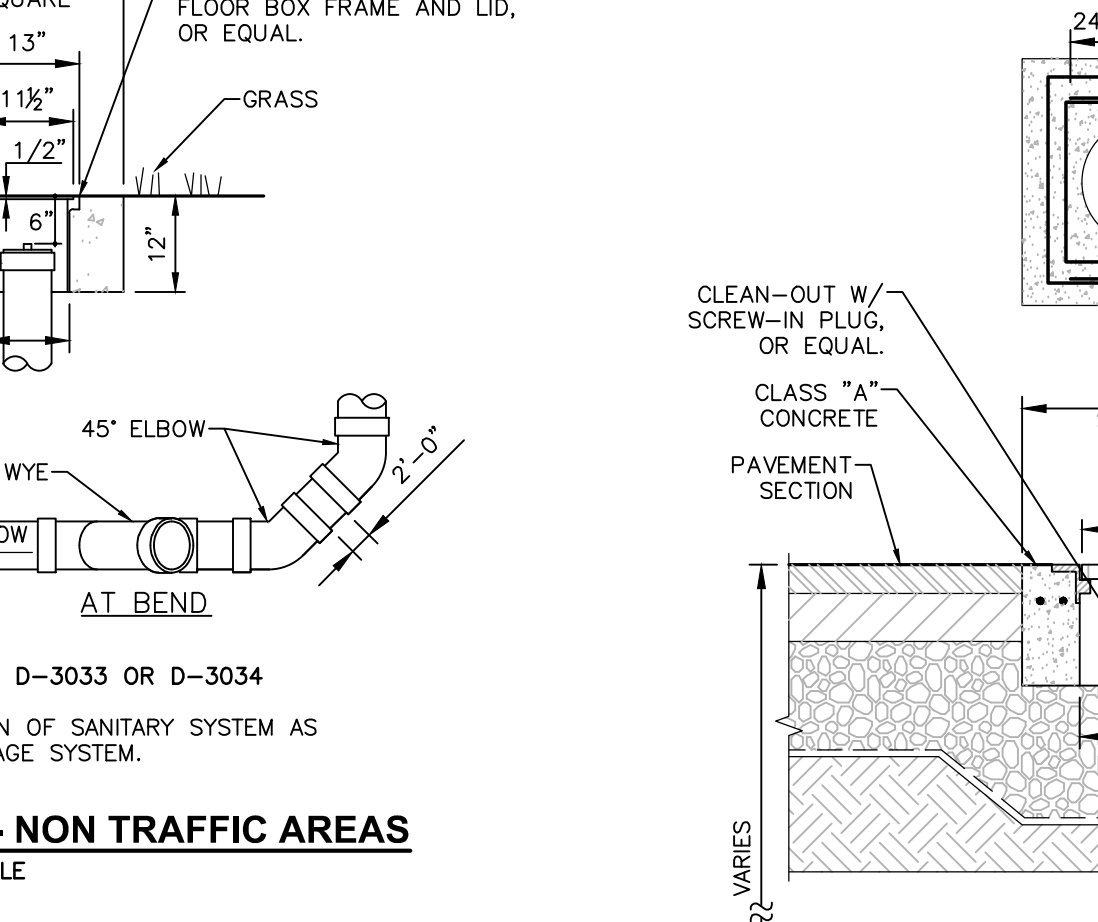
47 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



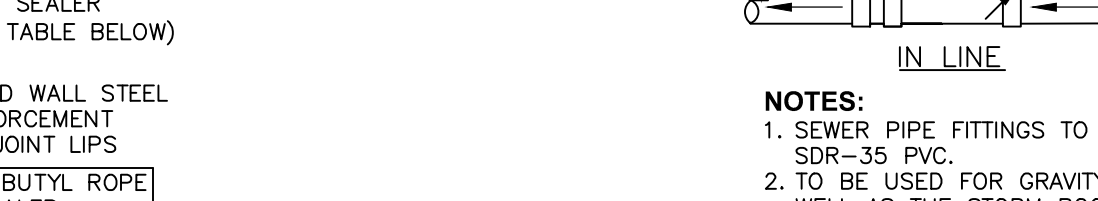
48 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



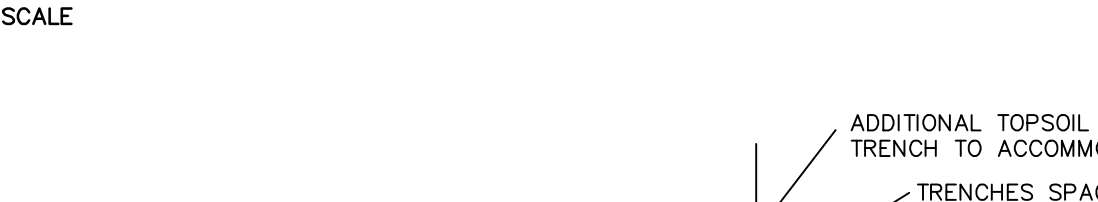
49 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



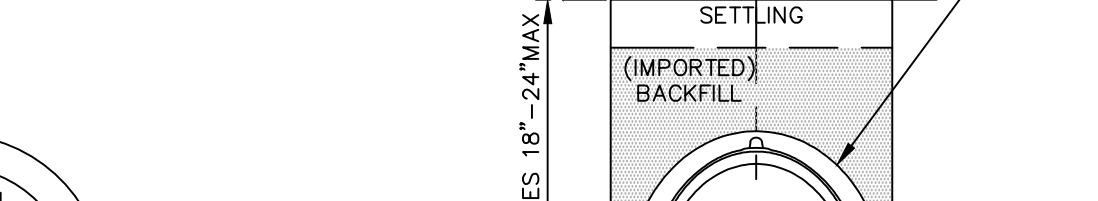
50 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



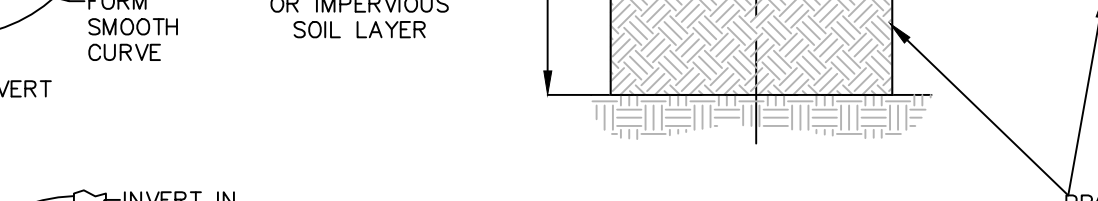
51 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



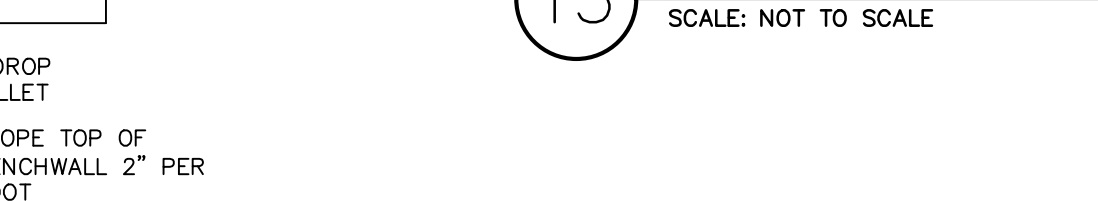
52 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



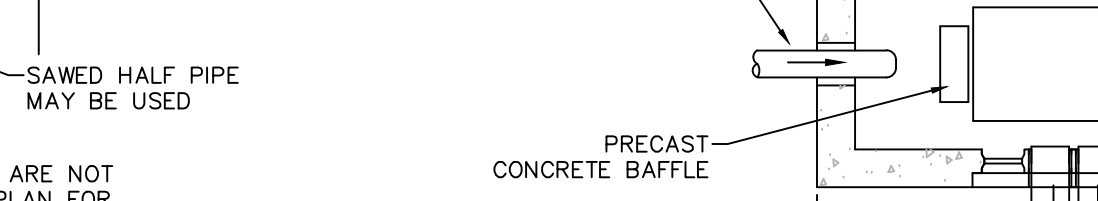
53 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



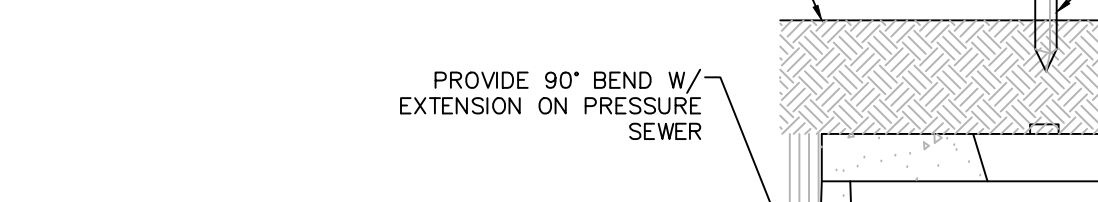
54 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



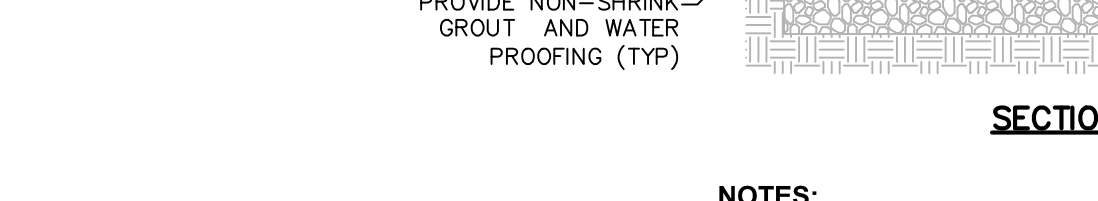
55 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



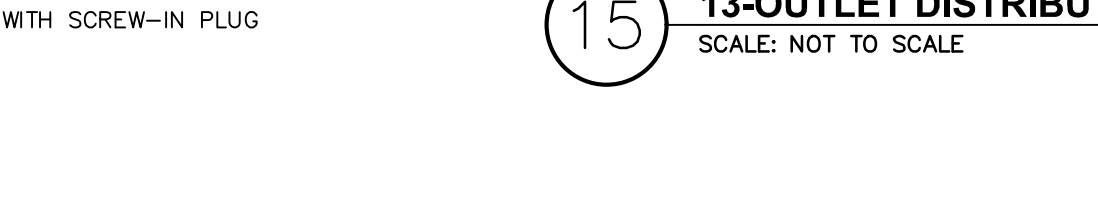
56 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



57 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



58 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



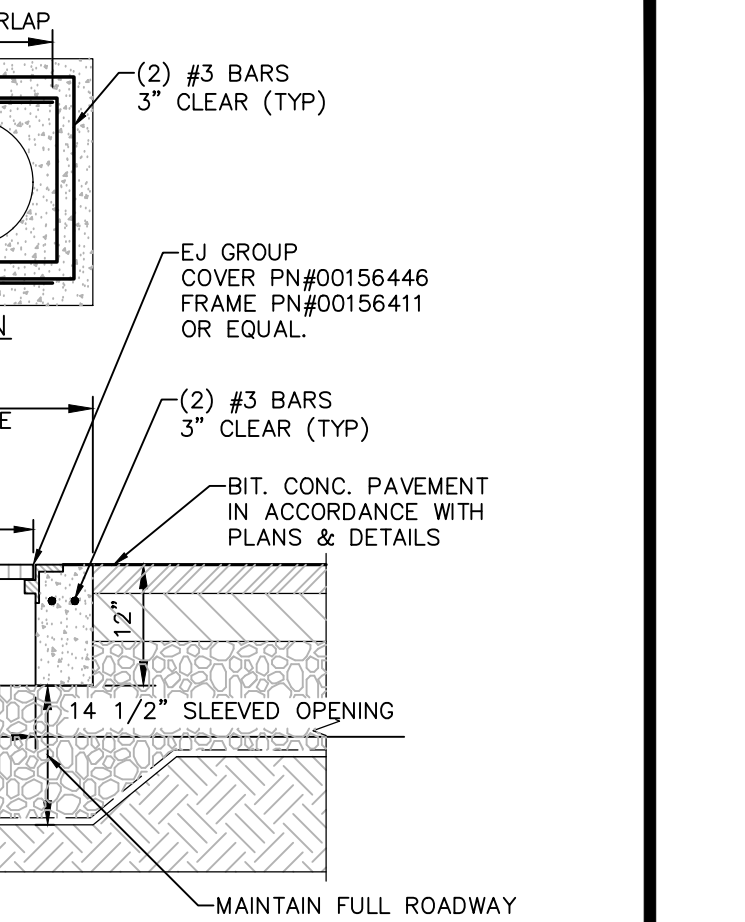
59 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



60 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



61 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE



62 750 GAL HEAVY DUTY CONCRETE SEPTIC TANK
SCALE: NOT TO SCALE

SOIL TEST RESULTS

PERCOLATION TESTS – 2023-09-05									
TEST HOLE NO.	TEST HOLE DEPTH	PRE-SOAKED	TEST RUNS					STABILIZATION TIME	
			*	1	2	3	4	5	
PT-1-1	24"	Yes	9:26 AM	9:45 AM	9:58 AM	10:16 AM	10:16 AM		20 min
			9:39 AM	9:58 AM	10:16 AM	10:36 AM	10:36 AM		
			13	13	18	20	20		
PT-1-2	24"	Yes	9:27 AM	9:44 AM	10:06 AM	10:35 AM			30 min
			9:43 AM	10:06 AM	10:35 AM	11:05 AM			
			16	22	29	30			
PT-1-3	24"	Yes	9:27 AM	9:41 AM	9:52 AM	10:03 AM			12 min
			9:38 AM	9:52 AM	10:03 AM	10:15 AM			
			11	11	11	12			

DEEP TESTS – 2023-10-11						
Deep Test Hole No.	Date:	Test Hole Depth	Mottlin g Depth	Bedrock Depth	Water Depth	Soil Profile Description
TP1-1	10/11/2023	96"	-	-	-	0"-24" Topsoil with roots 24"-96" Sandy loam with silt and small to medium cobbles
TP1-2	10/11/2023	96"	-	-	-	0"-18" Topsoil with roots 18"-96" Silty loam with sand, pockets of clay, and small to medium cobbles

ORANGE COUNTY DEPARTMENT OF HEALTH

SEWAGE DISPOSAL SYSTEM NOTES:

- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED WITHOUT REVIEW AND APPROVAL OF THE ORANGE COUNTY DEPARTMENT OF HEALTH.
- ALL WELLS WITHIN 300 FT. OF THIS PROJECT HAVE BEEN LOCATED AND ARE SHOWN ON THE PLANS.
- TRENCHES SHALL NOT BE INSTALLED IN WET SOIL. THE SIDES AND BOTTOM OF TRENCHES MUST BE RAKED. THE ENDS OF THE LATERALS MUST BE CAPPED.
- THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING.
- THE ACTUAL CONSTRUCTION, THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUCE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
- NO SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
- THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS, AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED. UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
- THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
- THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
- PROVIDE NOTES FOR ANY OF THE FOLLOWING THAT MAY APPLY:
 - 11.1. SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS
 - 11.2. PUMP STATIONS/DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE.
 - 11.3. DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED ANNUALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
 - 11.4. INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.
 - 11.5. ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
 - 11.6. THIS NOTE MUST BE ADDED TO PAGE 1 OF THE PLANS • UDIO NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION (DIAL 811 OR WWW.UODIGOV.ORG)
 - 11.7. A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL, AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS.

TESTING GRAVITY SEWER SYSTEM:

- CONTRACTOR SHALL INSPECT AND TEST THE INSTALLATIONS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION WHEN WORK IS READY FOR TESTING. AFTER ALL TESTS HAVE BEEN PERFORMED, EVIDENCE OF COMPLIANCE SHALL BE FORWARDED TO OWNER/ENGINEER AND THE AUTHORITY HAVING JURISDICTION PRIOR TO ACCEPTANCE.
- THE CONTRACTOR SHALL TEST AND INSPECT FOR ALIGNMENT OF ALL SANITARY SEWERS.
- EACH MANHOLE--TO-MANHOLE SECTION SHALL BE REJECTED OR ACCEPTED BASED ONLY ON RESULTS OF ITS OWN INDEPENDENT SECTION TEST AND NOT ON RESULTS OF ANY ONE TEST RUN. SIMULTANEOUSLY OVER MORE THAN ONE CONSECUTIVE MANHOLE-TO-MANHOLE SECTION, THE ONLY EXCEPTION ALLOWED: ACCEPTING SEVERAL CONSECUTIVE MANHOLE-TO-MANHOLE SECTIONS BASED ON ONE COMBINED INFILTRATION TEST INDICATING ZERO INFILTRATION.
- LOW PRESSURE AIR TESTING SHALL BE PERFORMED UNDER DIRECTION OF ENGINEER ACCORDING TO ASTM F1417. LOW PRESSURE AIR TEST IS A COMPARISON OF THE MEASURED PRESSURE FOR ONE (1) PSIG PRESSURE DROP TO OCCUR. IF AT ALL TIMES WITH MINIMUM ALLOWABLE TIME FOR THAT PRESSURE DROP TO OCCUR DETERMINED BY METHODS INDICATED IN ASTM F1417, IF THE ONE (1) PSIG PRESSURE DROP OCCURS FASTER THAN ALLOWABLE TIME, SECTION IS UNACCEPTABLE.
- AN AIR TEST SHALL NOT BE RUN UNTIL SECTION OF LINE TO BE TESTED HAS BEEN CLEANED OF ALL FOREIGN MATERIAL BY FLUSHING AND HAS BEEN VISUALLY INSPECTED AND APPROVED BY THE ENGINEER. CERTAIN PIPE MATERIALS PRODUCE MORE CONSISTENT RESULTS WHEN INTERIOR OF PIPE IS WETTED PRIOR TO TESTING.
- WHERE FLEXIBLE PIPE IS USED, CONTRACTOR SHALL TEST ALL MAINLINE PIPE FOR MAXIMUM ALLOWABLE DEFLECTION OF 5% OF OUTSIDE DIAMETER. DEFLECTION TESTS SHALL BE PERFORMED USING A CIRCULAR STEEL BALL ON SLED 1/16-INCH IN DIAMETER SMALLER THAN ALLOWABLE INSIDE DIAMETER OF FLEXIBLE PIPE WHEN DEFLECTED A MAXIMUM OF 5% OF OUTSIDE DIAMETER. DEFLECTION TESTING OF ANY PIPE SHALL BE DONE NO SOONER THAN 30 DAYS AFTER DATE OF INSTALLATION OF PIPE SECTION UNLESS WRITTEN EXCEPTION.
- SEWERS SHALL BE LAID WITH STRAIGHT ALIGNMENT BETWEEN MANHOLES. STRAIGHT ALIGNMENT SHALL BE CHECKED EITHER USING A LASER BEAM OR LAMPING. TESTING SHALL COMPLY WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- MANHOLES, WHICH CANNOT BE PROPERLY AIR TESTED, SHOULD BE VISUALLY INSPECTED AND LEAKAGE--TESTED USING INTERNAL OR EXTERNAL HYDROSTATIC PRESSURE. LEAKAGE TESTING SHALL COMPLY WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- IN AREAS WHERE CONVENTIONAL TESTING IS IMPRACTICAL, (I.E. AREAS DESIGNATED BY ENGINEER WHERE EXISTING SERVICES ARE TIED INTO NEW LINE IMMEDIATELY AND ANY BLOCKAGE COULD RESULT IN HEALTH PROBLEMS) NO LINES SHALL BE BACKFILLED UNTIL EACH PIPE SECTION AND CONNECTION IS INSPECTED AND APPROVED.
- WHERE SEWERS ARE CONSTRUCTED OF PRESSURE-RATED PIPE AND INSTALLED WITH LESS THAN 18 INCHES VERTICAL SEPARATION FROM EXISTING OR PROPOSED WATER MAINS, SEWERS SHALL BE HYDROSTATICALLY TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS. HYDROSTATIC ACCEPTANCE TESTS SHALL BE CONDUCTED AS SPECIFIED FOR TESTING WATER MAINS, EXCEPT THAT TESTING MAY BE PERFORMED WITH THE PIPE SECTION PARTIALLY BACK-FILLED.
- IF THE ALLOWABLE RATE OF AIR LEAKAGE IS EXCEEDED, THE CONTRACTOR SHALL LOCATE POINTS OF EXCESSIVE LEAKAGE AND SHALL PROMPTLY CORRECT, REPAIR, AND BRING SYSTEM UP TO THE STANDARD. COSTS OF ALL SUCH REPAIRS AND CORRECTIVE MEASURES, INCLUDING COSTS OF REPEATED TESTS, SHALL BE BORN BY CONTRACTOR. THE SEWER LINE SECTION (INCLUDING MANHOLES AND BUILDING SERVICES) UNDER TEST SHALL NOT BE ACCEPTED UNTIL THESE TEST CRITERIA ARE MET.
- SANITARY MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C1244. A VACUUM OF 10 INCHES OF Hg SHOULD BE DRAWN ON THE MANHOLE AFTER ALL HOLES ARE PLUGGED, AND INLETS/OUTLETS ARE TEMPORARILY PLUGGED AND SECURED. THE TIME IS MEASURED FOR THE VACUUM TO DROP TO 9 INCHES Hg. THE MANHOLE IS ACCEPTED IF THE MEASURED TIME MEETS OR EXCEEDS THE VALUES PRESENTED IN TABLE 1 OF ASTM C1244. IF THE MANHOLE FAILS THE INITIAL TEST, IT SHALL BE REPAIRED BY AN APPROVED METHOD UNTIL A SATISFACTORY TEST IS OBTAINED. MANHOLES, WHICH CANNOT BE PROPERLY AIR TESTED, SHOULD BE VISUALLY INSPECTED AND LEAKAGE--TESTED USING INTERNAL OR EXTERNAL HYDROSTATIC PRESSURE. LEAKAGE TESTING SHALL COMPLY WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.

SSDS NOTES:

- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED.
- ALL WELLS WITHIN 300 FT. OF THE PROPOSED ONSITE WASTE WATER TREATMENT FACILITY HAVE BEEN LOCATED AND ARE SHOWN ON THE PLANS.
- TRENCHES SHALL NOT BE INSTALLED IN WET SOIL. THE SIDES AND BOTTOM OF TRENCHES MUST BE RAKED. THE ENDS OF THE LATERALS MUST BE CAPPED.
- THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUCE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
- NO SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
- THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS, AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED. UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
- THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
- THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
- PROVIDE NOTES FOR ANY OF THE FOLLOWING THAT MAY APPLY:
 - SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.
 - DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE.
 - DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
- INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.
- ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
- A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL, AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS.

SEWAGE FACILITIES DEMOLITION NOTES:

- CONTRACTOR SHALL LOCATE AND REMOVE ALL COMPONENTS OF THE EXISTING SSDS SERVING ALL BUILDINGS PROPOSED FOR DEMOLITION.
- SEPTIC TANKS, LEACHING FIELDS, AND OTHER SIMILAR FACILITIES ASSOCIATED WITH THE EXISTING BUILDING SHALL BE PUMPED FREE OF SEPTAGE, REMOVED AND THE RESULTING HOLE SHALL BE BACKFILLED IN LIFTS OF COMPACTED SUITABLE FILL MATERIAL.
- THE ABANDONMENT AND/OR DECOMMISSIONING OF ALL EXISTING SUBSURFACE DISPOSAL SYSTEMS MUST BE IN ACCORDANCE WITH THE PROCEDURES APPROVED BY THE COUNTY DEPARTMENT OF HEALTH AND CERTIFIED BY A NYS PROFESSIONAL ENGINEER.
- TANKS SHALL BE PUMPED BY A DEC CERTIFIED SEEPAGE HAULER AND ITEMS REMOVED FROM SITE SHALL BE IN ACCORDANCE WITH DEC TRANSPORT AND DISPOSAL REQUIREMENTS.
- A PROFESSIONAL ENGINEER SHALL CERTIFY TO THE PROPER ABANDONMENT OF THE SSDS AREA TO THE TOWN.

FORCE MAIN TESTING:

- THE COMPLETE SEWAGE FORCE MAIN INCLUDING VALVES, FITTINGS CONNECTIONS TO PUMPS AND OTHER PIPELINE SYSTEMS SHALL BE TESTED FOR LEAKAGE.
- THE SYSTEM SHALL BE PRESSURIZED TO 1.5 TIMES THE PIPE WORKING PRESSURE AT THE LOWEST POINT OF THE MAIN OR 100 PSI, WHICHEVER IS GREATER. AFTER THIS PRESSURE IS ESTABLISHED, HAS BEEN MAINTAINED SUCCESSFULLY FOR ONE HOUR, THE LEAKAGE TEST SHALL BE PERFORMED FOR A PERIOD OF NO LESS THAN 2 HOURS. HYDROSTATIC TESTS SHALL BE PERFORMED AND SUCCESSFUL RESULTS DERIVED IN ACCORDANCE WITH AWWA C 600-05, SECTION 5. IN NO CASE SHALL THE TEST PRESSURE EXCEED THE DESIGN PRESSURE LIMITS FOR ANY PIPE, THROST RESTRAINT, FITTINGS, VALVES OR OTHER APPURTENANCE OF THE TEST SECTION.
- IF THE LEAKAGE IN THE SYSTEM EXCEEDS THE SPECIFIED AMOUNT, MAKE ANY REPAIRS OR REPLACEMENTS NECESSARY TO REDUCE THE LEAKAGE TO THE REQUIRED LIMITS AND RETEST THE SYSTEM.

THE MAXIMUM ALLOWABLE LEAKAGE SHALL BE AS SHOWN IN THE FOLLOWING TABLE: ALLOWABLE LEAKAGE IN GALLONS PER 1000 FT OF PIPELINE (GPH).

AVG. TEST PRESSURE	PSI	NOMINAL PIPE DIAMETER--IN.
450	0.29	0.57 0.86
350	0.27	0.54 0.81
300	0.26	0.51 0.76
250	0.24	0.47 0.70
225	0.23	0.45 0.67
200	0.22	0.43 0.64
225	0.21	0.41 0.61
200	0.19	0.38 0.57
175	0.18	0.36 0.54
150	0.17	0.33 0.50
125	0.15	0.30 0.45
100	0.14	0.27 0.41

SEPTIC TANK AND GREASE TRAP HYDROSTATIC TESTING:

- SEPTIC TANK AND GREASE TRAP SHALL BE TESTED FOR LEAKAGE AND ALL LEAKS SHALL BE REPAIRED IN A MANNER SUBJECT TO THE ENGINEER'S APPROVAL. UNLESS A SEAMLESS TANK IS DELIVERED TO THE SITE, A HYDROSTATIC SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS.
- HYDROSTATIC TESTING
 - UNLESS OTHERWISE APPROVED, CONDUCT ALL TESTING IN THE PRESENCE OF THE ENGINEER.
 - NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF TESTING.
 - THE STRUCTURE SHALL BE COMPLETELY PLUGGED AND FILLED WITH WATER AND ALLOWED TO STAND FOR TWENTY-FOUR (24) HOURS PRIOR TO ANY READING IN ORDER TO PERMIT ABSORPTION BY THE STRUCTURE.
 - AFTER TWENTY-FOUR (24) HOURS, A READING SHALL BE TAKEN AND THE STRUCTURE ALLOWED TO STAND FOR 24 HOURS.
 - THE DROP IN WATER LEVEL AFTER 24 HOURS SHALL BE NOTED.
 - LEAKAGE IN THE STRUCTURE SHALL NOT EXCEED THE ALLOWABLE LOSS OF 1 GALLON PER VERTICAL FOOT OF MANHOLE SECTION FOR A 24-HOUR PERIOD, PER TR-16 GUIDE OR THE DESIGN OF WASTEWATER TREATMENT WORKS.
 - STRUCTURE FAILING THE TEST SHALL BE REPAIRED AND RETESTED TO THE SATISFACTION OF THE ENGINEER.
 - THE CONTRACTOR SHALL COORDINATE AND BEAR ALL COSTS FOR PROVISION AND DISPOSAL OF WATER NECESSARY FOR THE LEAK TESTING OF THE STRUCTURE.

GREASE TRAP SIZING CALCULATIONS :

PER THE 2014 NYSDEC DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS, GREASE TRAPS SHALL BE SIZED BASED ON THE 30-MINUTE DETENTION TIME OF PEAK FLOW.

PER TABLE E 103.3(2), LOAD VALUES ASSIGNED TO FIXTURES, IN THE NYS PLUMBING CODE THE LOAD VALUES, IN WATER SUPPLY FIXTURES UNITS (WSFU) OF A KITCHEN SINK ASSOCIATED WITH A HOTEL/RESTAURANT WOULD BE 4 FIXTURE UNITS.

PER TABLE 709.1 DRAINAGE FIXTURE UNITS FOR FIXTURES AND GROUPS, IN THE NYS PLUMBING CODE, THE LOAD VALUES ASSOCIATED WITH FLOOR DRAINS WOULD BE 2 (REFER TO NOTE H -- SEE SECTION 709.4 AND 709.4.1 OF PLUMBING CODE), FLOOR SINKS (REFER TO NOTE H SEE SECTION 709.4 AND 709.4.1 OF PLUMBING CODE), AND HANDWASH SINKS WOULD BE 2.

- 709.4 VALUES FOR INDIRECT WASTE RECEPTOR. THE DRAINAGE FIXTURE UNIT LOAD OF AN INDIRECT WASTE RECEPTOR RECEIVING THE DISCHARGE OF INDIRECTLY CONNECTED FIXTURES SHALL BE THE SUM OF THE DRAINAGE FIXTURE UNIT VALUES OF THE FIXTURES THAT DISCHARGE TO THE RECEPTOR, BUT NOT LESS THAN THE DRAINAGE FIXTURE UNIT VALUE GIVEN FOR THE INDIRECT WASTE RECEPTOR IN TABLE 709.1 OR 709.2.
- 709.4.1 CLEAR-WATER WASTE RECEPTORS. WHERE WASTE RECEPTORS SUCH AS FLOOR DRAINS, FLOOR SINKS AND HUB DRAINS RECEIVE ONLY CLEAR-WATER WASTE FROM DISPLAY CASES, REFRIGERATED DISPLAY CASES, ICE BINS, COOLERS AND FREEZERS, SUCH RECEPTORS SHALL HAVE A DRAINAGE FIXTURE UNIT VALUE OF ONE HALF.

TOTAL FIXTURE UNITS

1 KITCHEN SINKS AT 4 FIXTURE UNITS = 4 FIXTURE UNITS
1 BEVERAGE FOUNTAIN AT 0.25 FIXTURE UNITS = 0.25 FIXTURE UNITS
1 ICE MACHINE DRAIN AT 0.5 FIXTURE UNITS = 0.5 FIXTURE UNITS
1 CONDENSATE DRAIN AT 0.5 = 0.5 FIXTURE UNITS
2 HAND WASH SINKS AT 2 FIXTURE UNITS = 4 FIXTURE UNITS
1 FLOOR SINKS WITH HOT/COLD AT 4 FIXTURE UNITS = 4 FIXTURE UNITS

TOTAL = 13.25 FIXTURE UNITS

PER TABLE E103.3(3) FOR ESTIMATING DEMAND IN THE NYS PLUMBING CODE THE DEMAND ASSOCIATED WITH 13.25 FIXTURE UNITS IS 17 GPM.

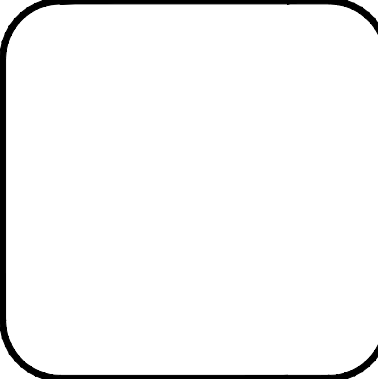
TO ACHIEVE A 30 MINUTE DETENTION TIME THE TANK WOULD NEED TO BE : 17 GPM X 30 MIN= 510 GALLON TANK
A 750 GALLON GREASE TRAP IS PROPOSED.

GREASE TRAP/SEPTIC TANK/PUMP STATION HYDROSTATIC TESTING:

- IF THE GREASE TRAP/SEPTIC TANK/PUMP STATION IS DELIVERED IN TWO PIECES (NON-MONOLITHIC), THEY SHALL BE TESTED FOR LEAKAGE AND ALL LEAKS SHALL BE REPAIRED IN A MANNER SUBJECT TO THE ENGINEER'S APPROVAL. A HYDROSTATIC TEST SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS.
- HYDROSTATIC TESTING
 - UNLESS OTHERWISE APPROVED, CONDUCT ALL TESTING IN THE PRESENCE OF THE ENGINEER.
 - NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF TESTING.
 - THE STRUCTURE SHALL BE COMPLETELY PLUGGED AND FILLED WITH WATER AND ALLOWED TO STAND FOR TWO (2) HOURS PRIOR TO ANY READING IN ORDER TO PERMIT ABSORPTION BY THE WET WELL STRUCTURE.
 - AFTER TWO (2) HOURS, A READING SHALL BE TAKEN AND THE STRUCTURE ALLOWED TO STAND FOR 24 HOURS.
 - THE DROP IN WATER LEVEL AFTER 24 HOURS SHALL BE NOTED.
 - LEAKAGE IN THE GREASE TRAP/SEPTIC TANK/PUMP STATION SHALL NOT EXCEED 0.6 GALLONS/FT MANHOLE DIAMETER/FT OF MANHOLE DEPTH.
 - GREASE TRAP/SEPTIC TANK/PUMP STATION FAILING THE TEST SHALL BE REPAIRED AND RETESTED TO THE SATISFACTION OF THE ENGINEER.
 - THE CONTRACTOR SHALL COORDINATE AND BEAR ALL COSTS FOR PROVISION AND DISPOSAL OF WATER NECESSARY FOR THE LEAK TESTING OF THE STRUCTURE.

ALL RIGHTS RESERVED. COPY OR REPRODUCTION OF THIS DRAWING OR DOCUMENT OR ANY PORTION THEREOF, WITHOUT THE EXPRESS WRITTEN PERMISSION OF CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C. IS PROHIBITED. THIS DRAWING OR DOCUMENT IS NOT INTENDED OR REPRESENTED TO BE USED FOR ANY PURPOSE OTHER THAN THE SPECIFIC PROJECT, APPLICATION OR SITUATION FOR WHICH IT WAS INTENDED. ANY MODIFICATION OF THIS DRAWING OR DOCUMENT, OR ANY USE FOR ANY PROJECT, APPLICATION OR SITUATION OTHER THAN THAT FOR WHICH IT WAS INTENDED, WILL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING OR DOCUMENT IN ANY WAY, UNLESS HE OR SHE IS ACTING UNDER THE DIRECTION OF A LICENSED DESIGN PROFESSIONAL (PROFESSIONAL ENGINEER, LAND SURVEYOR, ARCHITECT, LANDSCAPE ARCHITECT OR GEOLOGIST). IF THIS DRAWING OR DOCUMENT IS ALTERED, THE ALTERING DESIGN PROFESSIONAL SHALL AFFIX TO THE DRAWING OR DOCUMENT HIS OR HER SEAL, THE NOTATION "ALTERED BY" FOLLOWED BY HIS OR HER SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



CHAZEN ENGINEERING, LAND SURVEYING, LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

Office Locations

- Glen Falls, NY
- Troy, NY
- Poughkeepsie, NY
- White Plains, NY
- New York City, NY

www.chazencompanies.com
(888) 538-9073

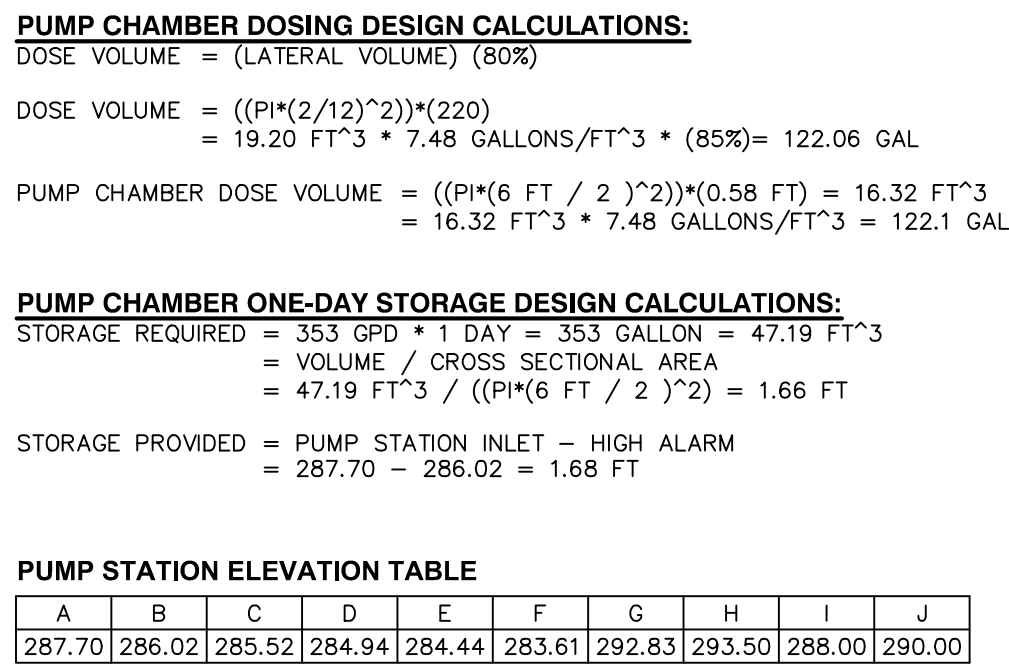
rev.	date	description
1	03/04/24	THIS SHEET ADDED.

GAS LAND 5200 ROUTE 9W

SUBSURFACE DISPOSAL SYSTEM DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SMD checked CPL
date 01/20/22 scale AS SHOWN
project no. 61912.00
sheet no. C541



(



2) **PUMP STATION ALUMINUM ACCESS HATCH DETAIL**
SCALE:

2)

SCA.

- ALL PRE CAST CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE A.S.T.M. STANDARDS. CONCRETE TO TEST 4000 PSI AT 28 DAYS.
- CONTRACTOR SHALL SUBMIT PRE CAST CONCRETE CHAMBER SHOP DRAWINGS INDICATING PERTINENT DIMENSIONING REINFORCEMENT SIZES, SPACING, LOCATIONS AND QUANTITIES. CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS CREATED BY AN HS20-44 TRUCK PLUS 20% IMPACT AS DEFINED IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) DESIGN STANDARDS.
- AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE CHAMBER. THE PLATE SHALL BE A MINIMUM OF 12" X 12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING - CONFINED SPACE - ENTRY PROHIBITED WITHOUT AUTHORIZATION".
- ALL MOUNTING HARDWARE INCLUDING BOLTS, NUTS, ANGLE BRACKETS AND OTHER MIS. ITEMS LOCATED WITHIN THE PUMP STATION SHALL BE OF NON-CORROSIVE CONST. (I.E.-STAINLESS STL., ALUM., GALV.)
- ALL INSTALLATION SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, LATEST EDITION.
- PROVIDE ADDITIONAL CONDUITS FOR CONTROL WIRING AS PER MANUFACTURER'S RECOMMENDATIONS. ALL CONDUITS SHALL BE GASKET TIGHT SEALED.
- MANHOLE STEPS SHALL BE ORIENTATED SUCH THAT ACCESS TO THE PUMP STATION WILL NOT BE RESTRICTED. STEPS SHALL BE COMPOMER POLYPROPYLENE MANHOLE STEPS 12" O.C.
- PROJECT ENGINEER AND OWNER'S REPRESENTATIVE SHALL BE NOTIFIED 72-HOURS PRIOR TO START UP AND TESTING OF THE STATION.
- THE PUMP STATION SHALL BE PROVIDED WITH SUBMERSIBLE NON-CLOG SEWAGE PUMP INCLUDING CONTROL PANEL.
- THE CONTROL PANEL SHALL INCLUDE THE FOLLOWING FEATURES AND ACCESSORIES:
 - NEMA 4X AND UL RATED ENCLOSURE W/ LOCAL HATCH
 - INTRINSICALLY SAFE RELAYS
 - HAND-OFF-AUTO (HOA) LOGIC/ SWITCH FOR EACH PUMP
 - INTRINSICALLY SAFE MECHANICAL FLOAT SWITCHES
 - TOP MOUNTED ALARM LIGHT
 - ALARM HORN WITH SILENCE SWITCH - MANUAL RESET
 - AUXILIARY DRY CONTACTS FOR ALARMS
 - CIRCUIT BREAKER PUMP DISCONNECT
 - GREEN RUN PILOT LIGHT FOR EACH PUMP
 - SEAL FAIL INDICATOR LIGHTS
 - THERMAL OVERLOAD PROTECTION
- IN ADDITION THE CONTROL PANEL SHALL INCLUDE INDIVIDUAL PUMP RUN TIME METERS AND ONE WEATHER PROOF 120V DUAL GFCI RECEPTACLE OUTLET.
- ELECTRICAL SERVICE DESIGN FOR PUMP STATION BY OTHERS.
- THE FOLLOWING ALARMS SHALL BE RELATED TO AN ON-SITE CENTRAL LOCATION OR TO A 24-HOUR ON CALL SERVICE AT THE DIRECTION OF OWNER:
 - PUMP FAILURE
 - HIGH WATER/START PUMP
 - LOW WATER
 - COMMUNICATION LINK FAILURE
- PUMP STATION PROVIDES FOR A MINIMUM TWO(2) DAY'S STORAGE CAPACITY BETWEEN THE HIGH LEVEL ALARM AND PIPE INLET.
- CONTRACTOR RESPONSIBLE FOR ALL DEWATERING DURING EXCAVATION.
- CONTRACTOR SHALL COMPACT THE BOTTOM OF EXCAVATION PRIOR TO PLACEMENT OF GEOTEXTILE.
- IF THE SUBGRADE IS SOFT, COURSE RIP-RAP MATERIAL (MAX SIZE 6 INCHES) SHALL BE ROLLED INTO SUBGRADE THE UNTIL IT BECOMES FIRM.
- CONTRACTOR SHALL SUBMIT PRE CAST CONCRETE CHAMBER SHOP DRAWINGS INDICATING PERTINENT DIMENSIONING REINFORCEMENT SIZES, SPACING, LOCATIONS AND QUANTITIES.
- ALL PRE CAST CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE A.S.T.M. STANDARDS. CONCRETE TO TEST 4000 PSI AT 28 DAYS.
- VENTS SHALL EXTEND A MINIMUM OF 3' ABOVE ROOF LINE.

1. STARTING SYSTEM
 - A. THE CONTRACTOR SHALL PROVIDE THREE (3) DAYS NOTIFICATION TO THE OWNER REPRESENTATIVES, PROJECT ENGINEER, AND BUILDING INSPECTOR, PRIOR TO START-UP OF THE PUMP STATION.
 - B. THE CONTRACTOR SHALL ENSURE THAT EACH PIECE OF EQUIPMENT AND COMPONENT OF THE SYSTEM IS READY FOR OPERATION.
 - C. THE CONTRACTOR SHALL EXECUTE START-UP UNDER THE SUPERVISION OF OWNER REPRESENTATIVES, PROJECT ENGINEER, BUILDING INSPECTOR, AND MUNICIPALITY HAVING JURISDICTION.
 - D. THE CONTRACTOR SHALL SUBMIT A WRITTEN REPORT INDICATING THAT EACH PIECE OF EQUIPMENT AND COMPONENT OF THE SYSTEM HAS BEEN PROPERLY INSTALLED AND IS FUNCTIONING CORRECTLY.
2. DEMONSTRATIONS AND INSTRUCTIONS
 - A. THE CONTRACTOR SHALL DEMONSTRATE OPERATION AND MAINTENANCE OF THE SYSTEM TO OWNER TWO (2) WEEKS PRIOR TO DATE OF PROJECT COMPLETION OR ISSUANCE OF CERTIFICATE OF OCCUPANCY.
 - B. THE CONTRACTOR SHALL DEMONSTRATE START-UP, OPERATION, CONTROL, ADJUSTMENT, TROUBLE-SHOOTING, SERVICING, MAINTENANCE, AND SHUTDOWN OF EACH ITEM OF EQUIPMENT.
3. TESTING, ADJUSTING, AND BALANCING
 - A. THE CONTRACTOR SHALL PROVIDE ALL TESTING, ADJUSTING, AND BALANCING OF SYSTEM.
 - B. THE CONTRACTOR SHALL CLEAN, FLUSH, PRESSURE LEAK TEST ALL THE PIPING AND EQUIPMENT ACCORDING TO ACCEPTED STANDARDS.
4. OPERATION AND MAINTENANCE DATA
 - A. THE CONTRACTOR SHALL SUBMIT THREE (3) SETS PRIOR TO PROJECT COMPLETION, BOUND IN 8-1/2 X 11 INCH TEXT PAGES, THREE (3) D RING BINDER WITH DURABLE PLASTIC COVERS.
 - B. A BINDER COVER SHALL BE PROVIDED WITH PRINTED TITLE "OPERATION AND MAINTENANCE INSTRUCTIONS" AND TITLE OF PROJECT.
 - C. THE BINDER CONTENTS SHALL BE INTERNALLY SUBDIVIDED WITH PERMANENT PAGE DIVIDERS, LOGICALLY ORGANIZED, WITH TABS. TITLES CLEARLY PRINTED UNDER REINFORCED LAMINATED PLASTIC TABS.
5. AS A MINIMUM THE BINDER SHALL CONTAIN THE FOLLOWING:
 1. PART 1: DIRECTORY, LISTING NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF ENGINEER, CONTRACTOR, SUBCONTRACTORS, AND MAJOR EQUIPMENT SUPPLIERS.
 2. PART 2: COPY OF PLANS WITH ANNOTATED CHANGES IF ANY, SPECIFICATIONS AND ENGINEERING REPORT, COPY OF ALL APPROVED SHOP DRAWINGS, INSTALLATION MANUALS, OPERATION AND MAINTENANCE MANUALS, ARRANGED BY SYSTEM'S COMPONENTS.
 3. PART 3: PROJECT DOCUMENTS, MANUFACTURER'S AND SUPPLIER'S WARRANTIES AND CERTIFICATES.

1. PUMP STATION WET WELL SHALL BE TESTED FOR LEAKAGE AND ALL LEAKS SHALL BE REPAIRED IN A MANNER SUITABLE TO THE ENGINEER'S APPROVAL. A HYDROSTATIC SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS.

2. HYDROSTATIC TESTING

- UNLESS OTHERWISE APPROVED, CONDUCT ALL TESTING IN THE PRESENCE OF THE ENGINEER.
- NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF TESTING.
- THE STRUCTURE SHALL BE COMPLETELY FILLED AND FLOODED WITH WATER AND ALLOWED TO STAND FOR TWENTY FOUR (24) HOURS PRIOR TO ANY READING IN ORDER TO PERMIT ABSORPTION BY THE WET WELL STRUCTURE.
- AFTER THE FOUR (4) HOURS HAVE ELAPSED, THE WATER SHALL BE DRAINED AND THE STRUCTURE ALLOWED TO STAND FOR 24 HOURS.
- THE DROP IN WATER LEVEL AFTER 24 HOURS SHALL BE NOTED.
- LEAKAGE IN THE WET WELL SHALL NOT EXCEED THE ALLOWABLE LOSS OF 1 GALLON PER VERTICAL FOOT OF MANHOLE SECTION FOR 24 HOURS PER 10-16 GUIDE FOR THE DESIGN OF WASTEWATER TREATMENT WORKS.
- WET WELL FAILING THE TEST SHALL BE REPAIRED AND RETESTED TO THE SATISFACTION OF THE ENGINEER.
- THE ENGINEER SHALL DETERMINE AND BEAR ALL COSTS FOR PROVISION AND DISPOSAL OF WATER NECESSARY FOR THE LEAK TESTING OF THE WET WELL.

designed FMK	checked CPL
date 01/20/22	scale AS SHOWN
project no. 81912.00	
sheet no. C560	