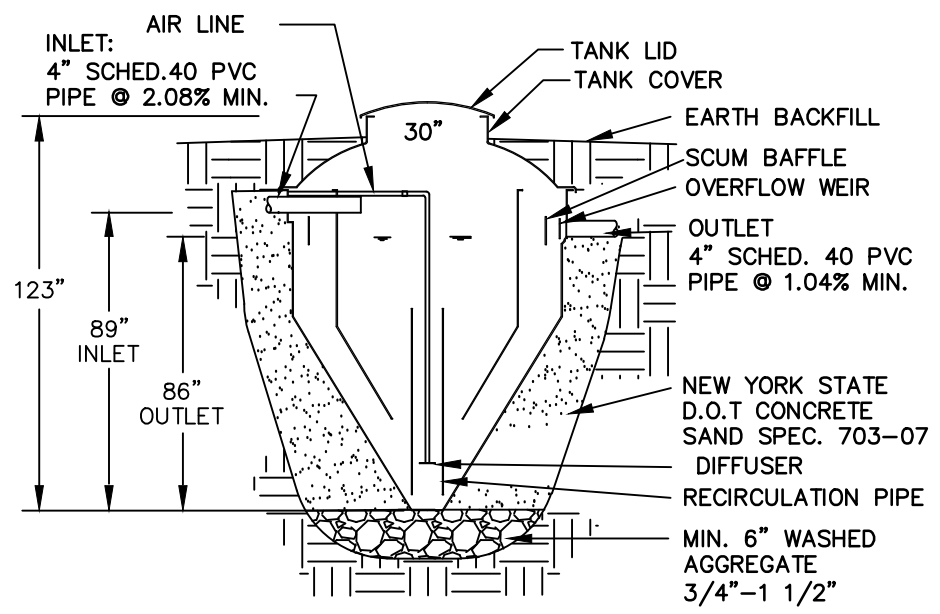
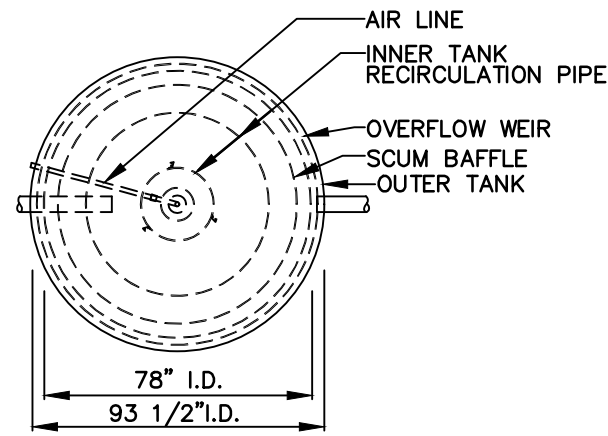


AEROBIC TREATMENT UNIT NOTES:

- MODEL M1200 (RATED 1000 GPD) - NAYADIC TREATMENT SYSTEMS, CONSOLIDATE TREATMENT SYSTEMS, INC. 1501 COMMERCE CENTER DRIVE FRANKLIN, OHIO 45005, WWW.CONSOLIDATEDTREATMENT.COM
- PRIOR TO COMPLETION OF CONSTRUCTION AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY, A SIGNED SERVICE CONTRACT MUST BE SUBMITTED TO THE ORANGE COUNTY HEALTH DEPARTMENT AND LOCAL CODE ENFORCEMENT OFFICER. THE CONTRACT MUST INCLUDE ALL OF THE FOLLOWING:
 - A MINIMUM DURATION OF 3 YEARS
 - SEMI ANNUAL INSPECTIONS BY A QUALIFIED INDIVIDUAL.
- AEROBIC TREATMENT UNITS TO MEET NATIONAL SANITATION FOUNDATION (NSF) STANDARD 40, CLASS 1 REQUIREMENTS. ANALYSES FOR BIOLOGICAL OXYGEN DEMAND (BOD) AND TOTAL SUSPENDED SOLIDS AS DESCRIBED BY NSF MAY BE REQUIRED TO DEMONSTRATE THE UNIT'S COMPLIANCE WITH USEPA SECONDARY TREATMENT GUIDELINES (ANALYSES SHALL BE PERFORMED BY A NYS CERTIFIED LABORATORY).
- THE UNIT SHALL BE PUMPED OUT AT LEAST EVERY 3 YEARS, OR MORE FREQUENTLY IF DETERMINED NECESSARY BY SERVICE PERSONNEL.
- AFTER CONTRACT HAS EXPIRED, IF THE OWNER SO CHOOSE, A DIFFERENT QUALIFIED SERVICE PROVIDER CAN BE CHOSEN.
- A SERVICE CONTRACT MEETING ALL OF THE REQUIREMENTS OF NOTE 2 MUST BE IN EFFECT FOR LIFE OF THE AEROBIC UNIT
- INSTALLATION TO BE IN ACCORDANCE WITH NAYADIC WASTEWATER TREATMENT SYSTEMS "PROCEDURES FOR ASSEMBLY AND INSTALLATION" MANUAL.

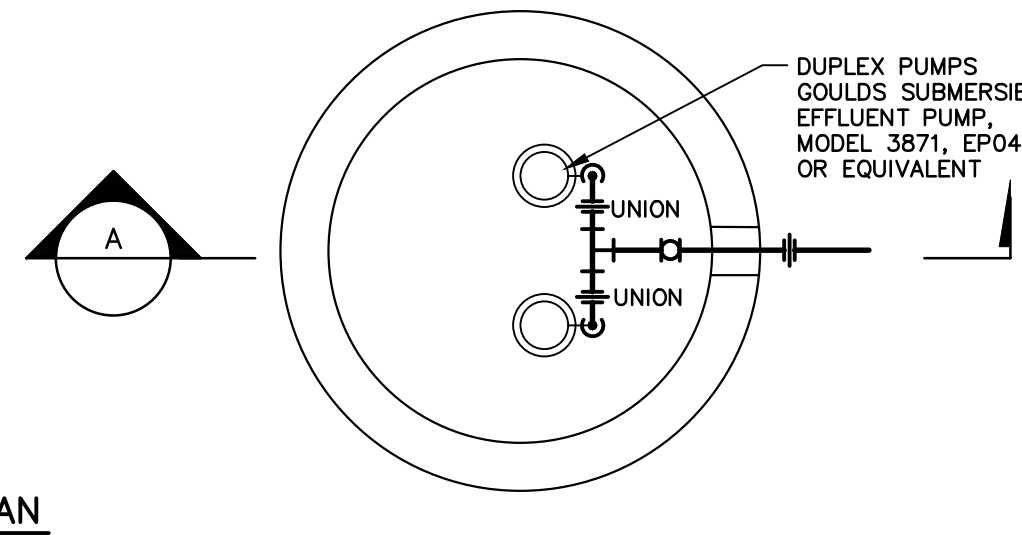
SIEVE SIZE	PERCENT PASSING BY WEIGHT	
	MINIMUM	MAXIMUM
3/8 INCH	100	100
NO. 4	90	100
NO. 8	75	100
NO. 16	50	85
NO. 30	25	60
NO. 50	10	30
NO. 100	1	10
NO. 200 (WET)	0	3



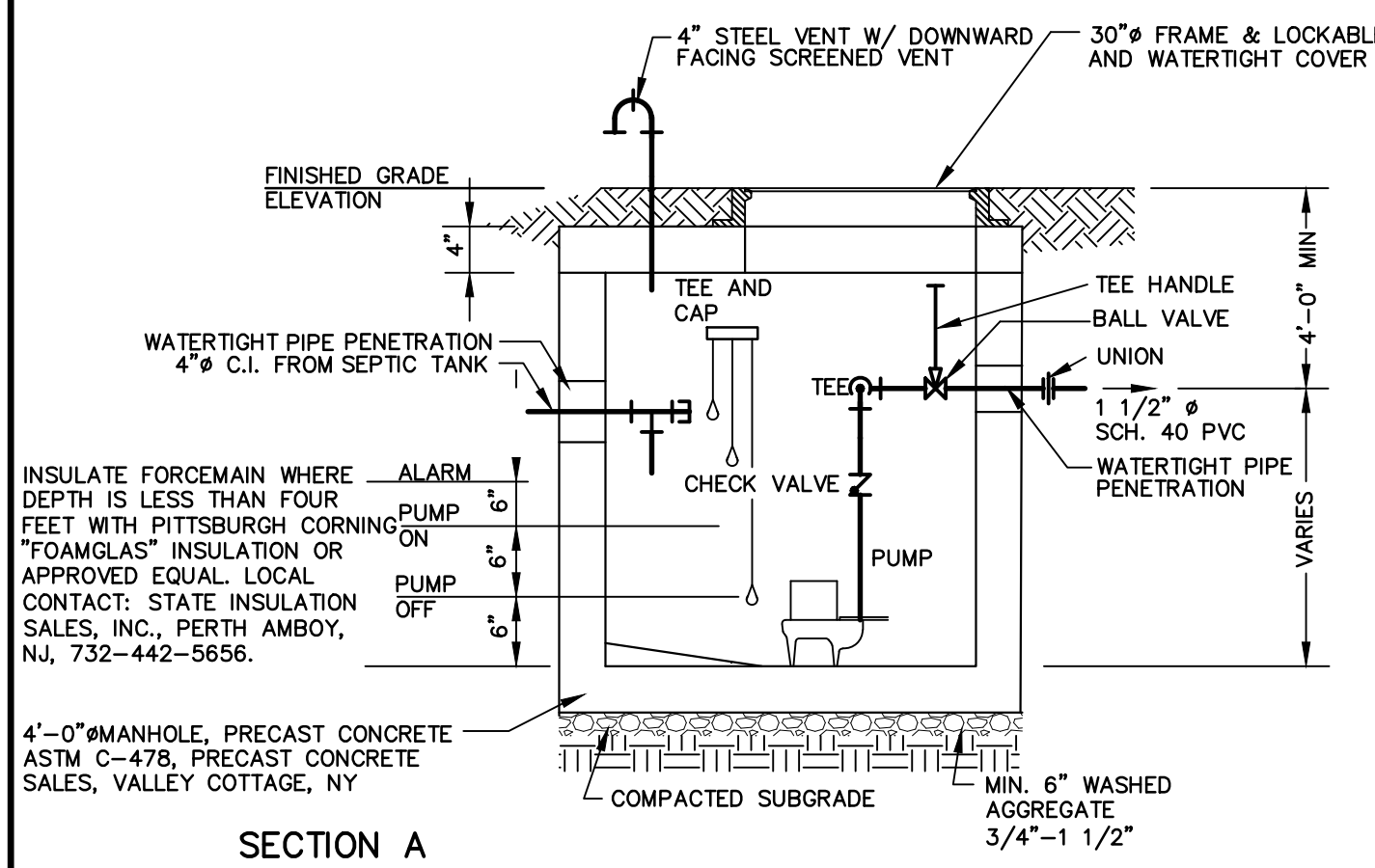
AEROBIC WASTEWATER TREATMENT SYSTEM

SCALE: 1/4" = 1'

1
C-2



PLAN

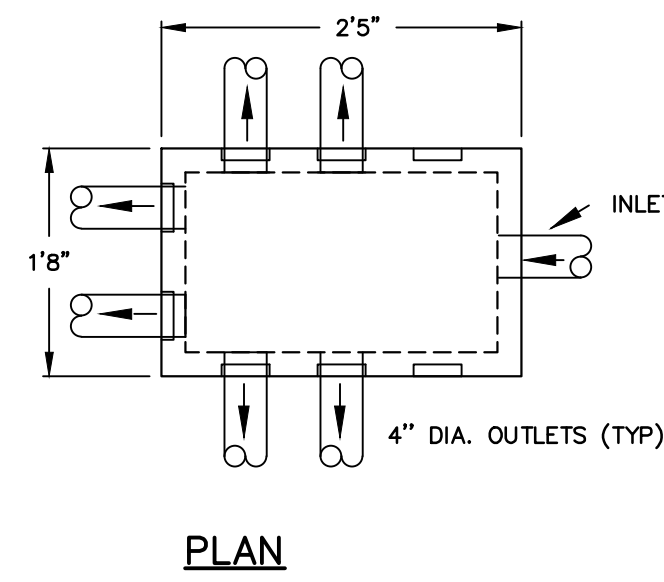


SECTION A

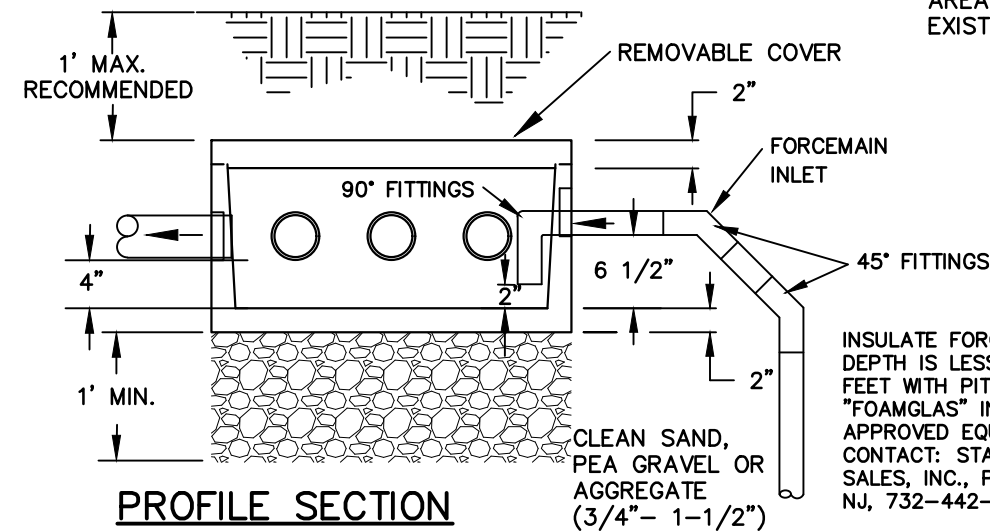
REINFORCED CONCRETE EFFLUENT PUMP PIT

SCALE: NTS NOT FOR REVIEW OR APPROVAL OF ORANGE COUNTY HEALTH DEPARTMENT

2
C-2



PLAN

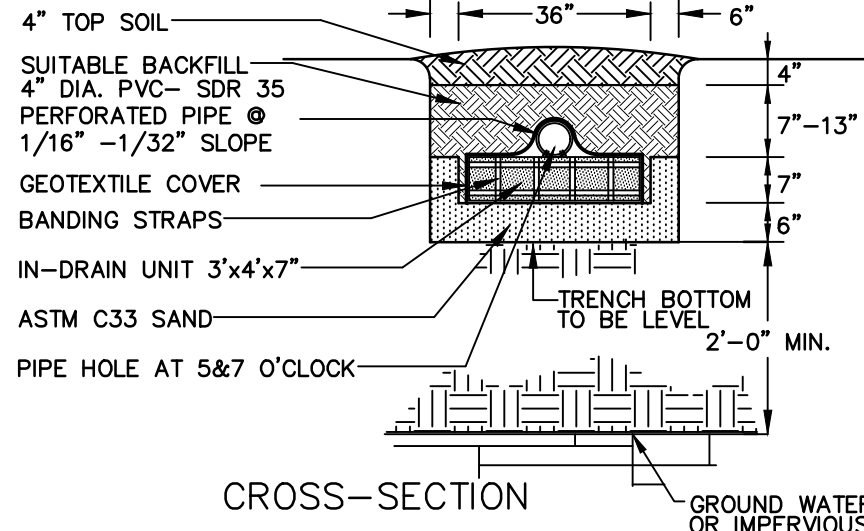
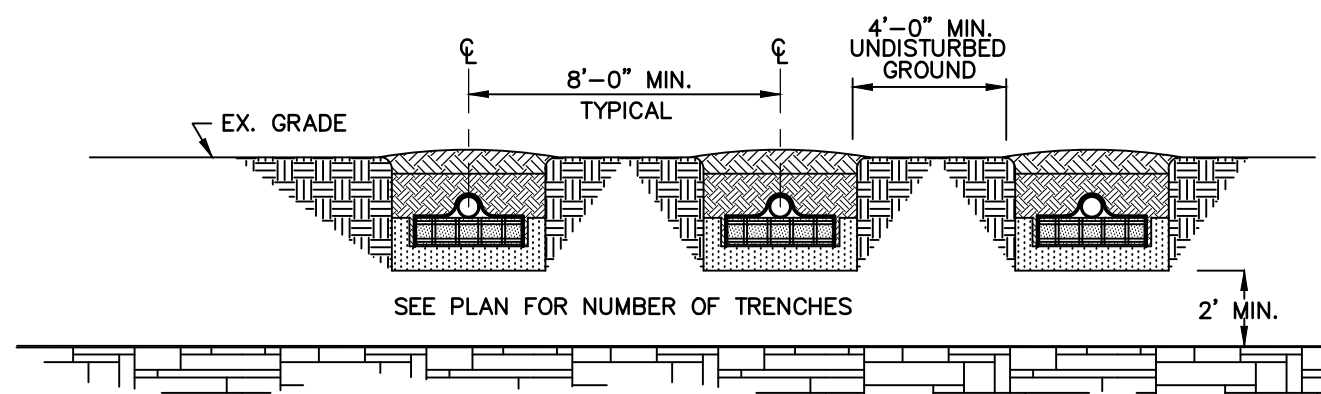


PROFILE SECTION

DISTRIBUTION BOX (8 OUTLETS)

SCALE: NTS NOT FOR REVIEW OR APPROVAL OF ORANGE COUNTY HEALTH DEPARTMENT

3
C-2

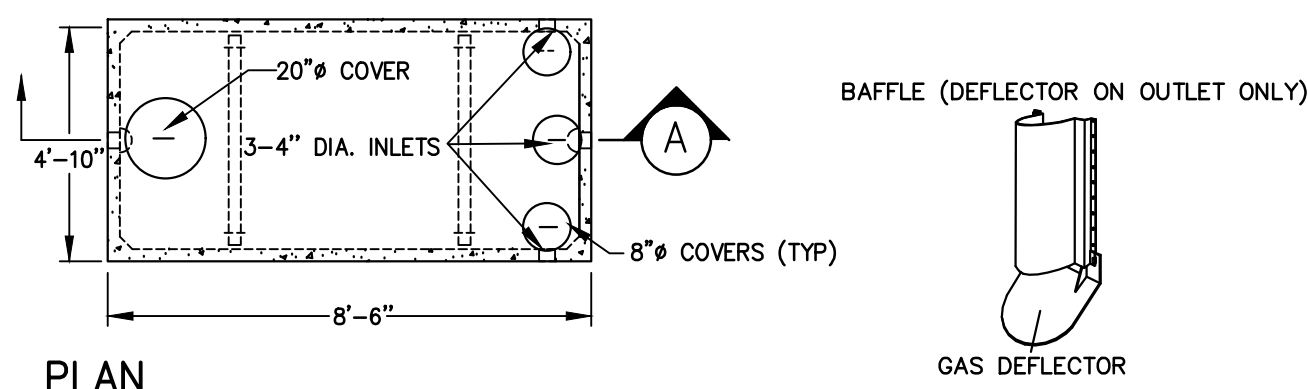


NOTES:
DO NOT INSTALL TRENCHES IN WET SOIL. INSTALL TRENCH PARALLEL TO CONTOURS. INSTALL TRENCHES AS SHALLOW AS POSSIBLE WHICH MEET ABOVE NOTED DEPTHS. RAKE SIDES AND BOTTOM OF TRENCH PRIOR TO PLACING SAND. ENDS OF ALL DISTRIBUTION PIPES MUST BE CAPPED. PERFORATIONS IN PIPE MUST FACE DOWN.

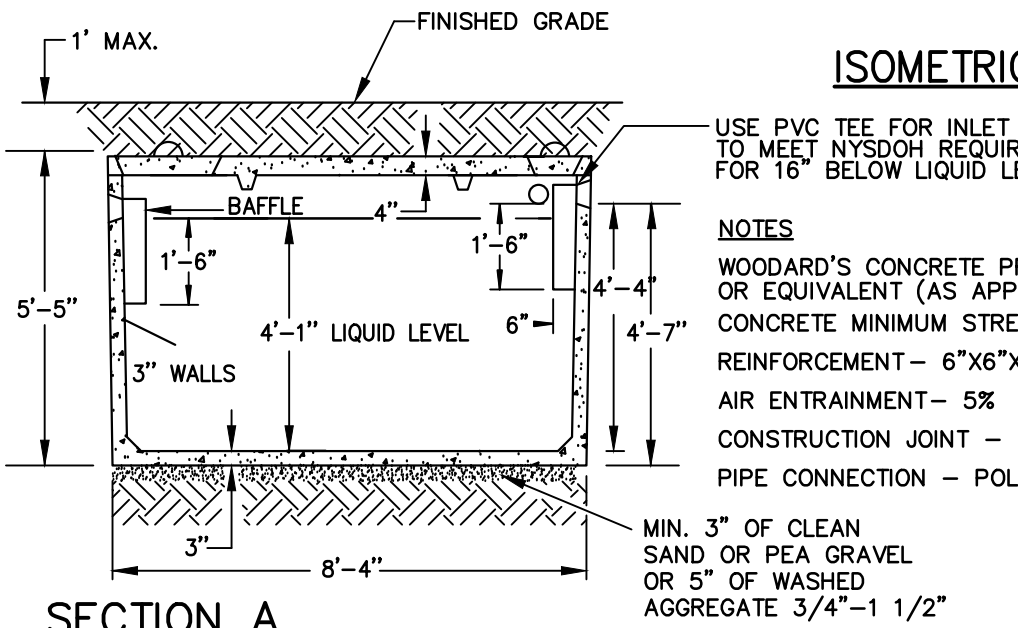
ELJEN IN-DRAINS SYSTEM DETAIL

SCALE: NTS NOT FOR REVIEW OR APPROVAL OF ORANGE COUNTY HEALTH DEPARTMENT

4
C-2



PLAN



ISOMETRIC

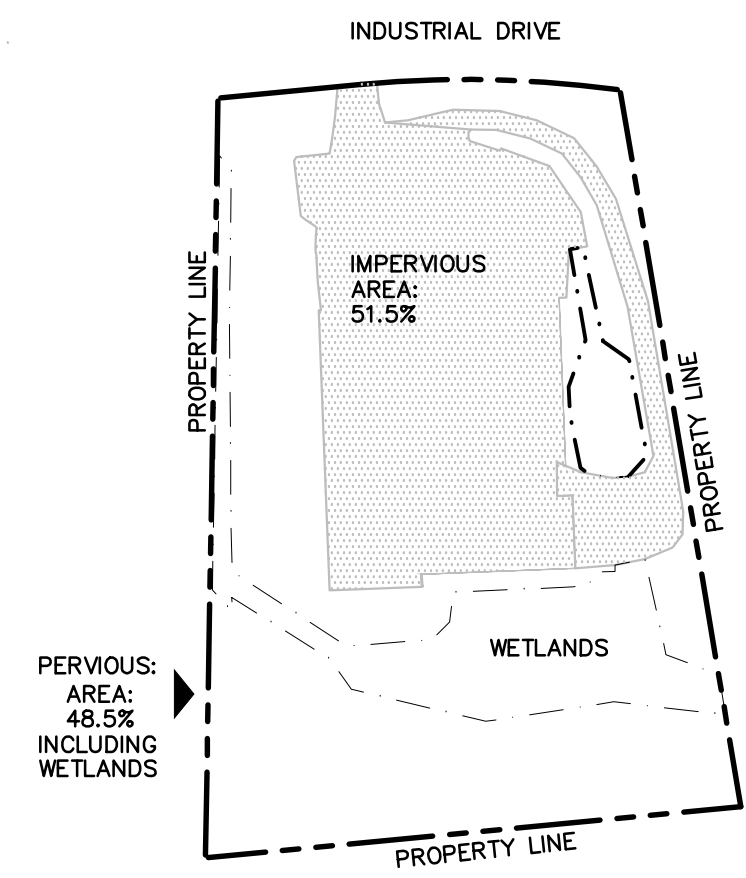
SECTION A

PRECAST PRE-TREATMENT/SEPTIC TANK-1000 GAL.

SCALE: NTS

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C-2

- PIPE JOINTS TO BE SEALED WITH ASPHALT MATERIAL OR EQUIVALENT.
- INVERT ELEVATIONS OF ALL OUTLET PIPES MUST BE EQUAL IN EACH BOX. USE OF SPEED LEVELING DEVICES IS REQUIRED.
- THE SLOPE OF OUTLET PIPES BETWEEN THE DISTRIBUTION BOX AND DISTRIBUTOR LATERALS SHOULD BE AT LEAST 1/32" PER FOOT.
- WOODARD'S CONCRETE PRODUCTS INC. MODEL DB-9 OR EQUIVALENT (AS APPROVED BY ENGINEER).
- IF SITE CONDITIONS PREVENT A DISTRIBUTION BOX FROM BEING WITHIN 1' OF THE FINISHED GRADE, THEN AN EXTENSION COLLAR SHALL BE INSTALLED.
- UNUSED OUTLETS TO REMAIN SEALED.
- THE OUTLET OF THE DISTRIBUTION BOX MUST BE USED IN A MANNER WHICH WILL ALLOW CONNECTION TO THE EXPANSION AREA WITHOUT DISTURBANCE OF EXISTING PIPING.



PREVIOUS/IMPERVIOUS COVERAGE

SCALE: 1"=100'

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C-2

REQUIRED SEPARATION DISTANCES FROM WASTEWATER SYSTEM COMPONENTS:

SYSTEM COMPONENTS (a)	TO STREAM, LAKE OR WETLAND DWELLING (b), (c), (d), (e), (f), (g)				
	WELL (f) OR SUCTION LINE (g)	25' IF CAST IRON OR PVC WITH O-RING JOINTS, 50' OTHERWISE	25'	10'	10'
SEPTIC TANK	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	20'
ABSORPTION FIELD	100' (a)	100'	20'	10'	50'
SEEPAGE PIT	150' (a)	100'	20'	10'	50'
DRY WELL (ROOF AND FOOTING)	50'	25'	20'	10'	10'
RAISED OR MOUND SYSTEM (c)	100' (a)	100'	20'	10'	50'
INTERMITTENT SAND FILTER (c)	100' (a)	100'	20'	10'	50'
EVAPOTRANSPIRATION-ABSORPTION SYSTEM (c)	100' (a)	50'	20'	10'	50'
COMPOSTER	50'	50'	20'	10'	10'
SANITARY PRIVY PIT	100'	50'	20'	10'	20'
PRIVY, WATERTIGHT VAULT	50'	50'	20'	10'	10'

- NOTES:
- WHEN SEWAGE TREATMENT SYSTEMS ARE LOCATED IN COARSE GRAVEL OR UPGRADE IN THE GENERAL PATH OF DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM WILL BE AT LEAST 200 FEET AWAY FROM THE WELL.
 - MEAN HIGH WATER MARK
 - FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF SLOPE OF THE FILL.
 - ANY WATER SERVICE LINE UNDER PRESSURE (I.E., PUBLIC WATER SUPPLY MAIN, HOUSEHOLD SERVICE LINE, WELL TO HOUSEHOLD SERVICE LINE) LOCATED WITHIN 10 FEET OF ANY ABSORPTION FIELD, SEEPAGE PIT OR SANITARY PRIVY SHALL BE INSTALLED INSIDE A LARGER DIAMETER WATER MAIN TO PROTECT THE POTABLE WATER SUPPLY.
 - ANY WATER SERVICE LINE UNDER PRESSURE (I.E., PUBLIC WATER SUPPLY MAIN, HOUSEHOLD SERVICE LINE) WELL TO HOUSEHOLD SERVICE LINE) CROSSING A SEWER SHALL BE INSTALLED WITH ONE FULL LENGTH OF WATER MAIN CENTERED ABOVE THE SEWER SO BOTH WATER-CONNECTING JOINTS ARE AS FAR AS POSSIBLE FROM THE SEWER. SECTION 8.6 OF THE CLUMBER, RECOMMENDED STANDARDS FOR WATER WORKS, SHALL BE FOLLOWED FOR SEPARATION OF WATER MAINS, SANITARY SEWERS AND STORM SEWERS.
 - THE MINIMUM SEPARATION DISTANCE BETWEEN A SEPTIC TANK AND A COMMUNITY-TYPE PUBLIC WATER SUPPLY WELL SHOULD BE 100 FEET. DISTRIBUTION BOXES AND ABSORPTION FACILITIES (E.G., ABSORPTION TRENCHES/BEDS, SEEPAGE PITS, RAISED SYSTEMS, MOUND SYSTEMS, ETC.) SHOULD BE AT LEAST 200 FEET FROM COMMUNITY-TYPE PUBLIC WATER SUPPLY WELLS.
 - RECOMMENDED SEPARATION DISTANCES.

- SECTION 75.4 (A-5) ACCEPTED AS ORANGE COUNTY HEALTH DEPARTMENT POLICY AND STANDARD WITH THE FOLLOWING ADDITIONS:
- SEPARATION WELL TO SWALE, STREAM, OR WATER COURSE - 25 FEET.
 - SEPARATION ABSORPTION FIELD TO THE HIGH HIGH WATER LINE OF A WET POND - 100'
 - SEPARATION ABSORPTION FIELD TO INTERMITTENT STREAM, DRY WELL, CULVERT OR STORM SEWER (NON-GASKETED PIPE) OR CATCH BASIN - 50'
 - SEPARATION ABSORPTION FIELD TO CULVERT OR STORM SEWER (GASKETED, TIGHT PIPE) - 35'.
 - SEPARATION ABSORPTION FIELD TO CURTAIN DRAIN - 15'.
 - SEPARATION ABSORPTION FIELD, PITS, EXPANSION AREA, TO TOP OF EMBANKMENT OR STEEP (1 ON 3) SLOPE - 25'.
 - SEPARATION ABSORPTION FIELD TO SOLID CURTAIN DRAIN, ROOF OR FOOTING PIPES, SNOW STORAGE ESMT - 10'
 - DRAINAGE PIPES WITHIN 25' OF ANY WELL MUST BE WATER TIGHT.
 - SEPARATION: WELL TO CEMETERY PROPERTY LINE - 100'.
 - SEPARATION: WELL TO SUBDIVISION BOUNDARY - 50'.

SEPTIC DESIGN NOTES:

- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED.
- ALL WELLS WITHIN 300 FEET 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 UNDUE 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 OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
- SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS. PUMP STATION/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 A 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.
- 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.
- ORANGE COUNTY HEALTH DEPARTMENT PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED ON REGULATIONS IN EFFECT AT THE TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.

DEEP SOIL TESTS

AUG. 21, 2018
TEST HOLE #1
0' - 0.5' TOPSOIL
0.5' - 2.5' GRAVELLY SILT LOAM, YELLOW BROWN
2.5' - 6.5' VERY GRAVELLY WITH SAND & SILT, GRAYISH, STONES TO 4" DIA.
WATER SEEPAGE AT 5.5'. NO BEDROCK

TEST HOLE #2
0' - 0.5' TOPSOIL
0.5' - 2.5' GRAVELLY SILT LOAM, YELLOW BROWN
2.5' - 6.5' VERY GRAVELLY WITH SAND & SILT, GRAYISH, STONES TO 4" DIA.
WATER SEEPAGE AT 4.5'. NO BEDROCK

PERCOLATION TESTS

AUG. 21, 2018
TEST HOLE #A
STABILIZED RATE: 1" DROP IN 4 MIN. 10 SEC.

TEST HOLE #B
STABILIZED RATE: 1" DROP IN 1 MIN. 13 SEC.

SEPTIC DESIGN BASIS FOR EMPIRE VENTILATION OUTLET 1 EXISTING

SEPTIC TANK PROVIDED: 1,000 GAL
PERCOLATION RATE: 8 DROP MIN./INCH
DESIGN PERCOLATION RATE: 8-10 DROP MIN./INCH
APPLICATION RATE: 0.9 GALLONS/DAY/SQ.FT.
250 GALLONS/DAY REQUIRE: 250/0.9 = 278 SQ.FT. OF ABSORPTION AREA
278/2 = 139 LF TRENCH REQUIRED
6 TRENCHES @ 23.5 LF = 141 LF PROVIDED
DESIGN PROVIDED BY "SEWAGE DISPOSAL SYSTEM, LOT 17, INDUSTRIAL ROAD, TOWN OF GOSHEN, NY, DATED: 8/24/1988, LAST REVISED: 12/8/1988 AS PREPARED BY ROGER LUPINO, PE

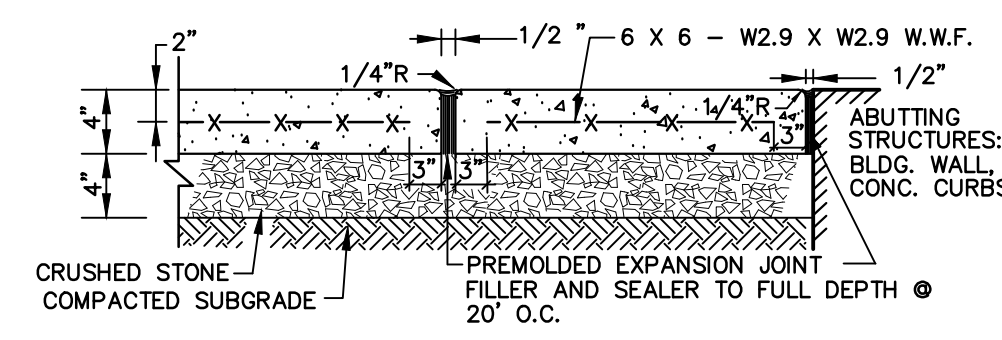
SEPTIC DESIGN BASIS FOR BREWERY OUTLET 2

PRE-TREATMENT SEPTIC TANK PROVIDED: 1,000 GAL
NAYADIC UNIT PROVIDED: M-1200A
PERCOLATION RATE: 1-5 DROP MIN./INCH
DESIGN PERCOLATION RATE: 6-7 DROP MIN./INCH
APPLICATION RATE: 1.0 GALLONS/DAY/SQ.FT.
806/6 = 135 LF OF ELJEN TRENCH REQUIRED
USE THREE LINES AT 48 LF EACH,
PROVIDED TOTAL OF 144 LF, 12 ELJEN UNITS EACH LINE

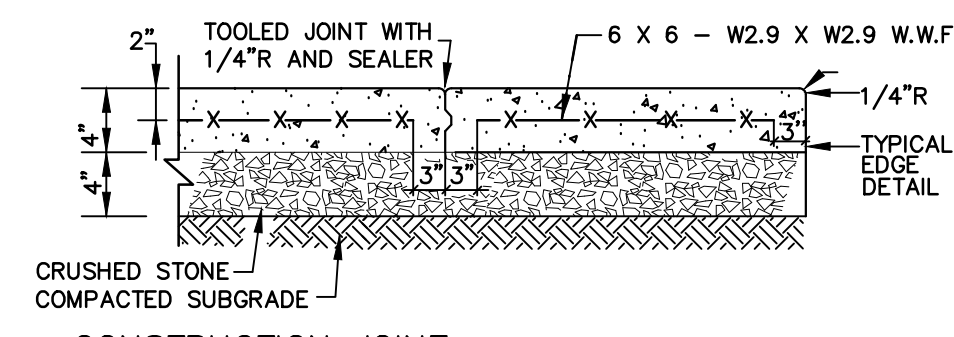
CONCRETE WALKWAY DETAIL

SCALE: NTS

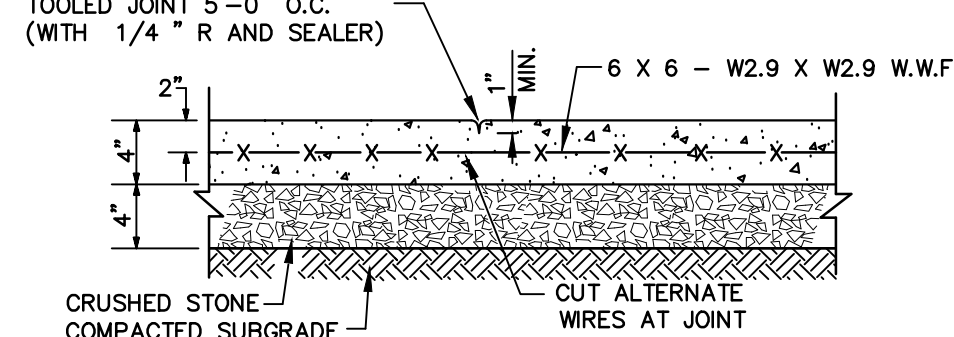
7
C-2



EXPANSION JOINT



CONSTRUCTION JOINT



CONTRACTION JOINT

CONCRETE WALKWAY DETAIL

SCALE: NTS

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C-2

NO.	DATE	REVISION	BY	CHK.
F	2/17/2020	SUBMITTED TO PLANNING BOARD	JCC	MJS
E	8/6/2019	SUBMITTED TO NYSDEC	JCC	MJS
D	5/15/2019	SUBMITTED TO PLANNING BOARD	JCC	MJS
C	2/20/2019	SUBMITTED TO OCHD	JCC	MJS
B	10/01/2018	SUBMITTED TO PLANNING BOARD	JCC	MJS
A	9/06/2018	SUBMITTED TO PLANNING BOARD	JCC	MJS

MICHAEL J. SANDOR, PE
NY PROFESSIONAL ENGINEER NO. 60445

DRAWN BY: JCC
DEPT. CK.: MJS
DEP. APPR.
COORD. CK.
P.M. APPR.
CLIENT APPR.

MJS ENGINEERING & LAND SURVEYING, PC

261 Greenwich Ave
Goshen, NY 10924
845-291-8650
Fax 845-291-8657

SHEET TITLE:

CONSTRUCTION DETAILS

JOB NAME:

EMPIRE VENTILATION, INC.
SHEPHERDS EYE BREWERY
SECTION 20 BLOCK 2 LOT 17
TOWN OF GOSHEN, ORANGE COUNTY, NY

DATE: 9/06/2018

JOB NO. 050139

SCALE: AS SHOWN

REV. NO. F

DWG. NO.

C-2
SHEET 2 OF 2

THIS PLAN INCOMPLETE AND INVALID UNLESS ACCOMPANIED BY EACH OF THE SHEETS