

I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE PLANNING BOARD APPROVAL AND THAT NO APPEAL HAS BEEN FILED IN THIS OFFICE.

\_\_\_\_\_  
TOWN CLERK, NORFOLK, MASSACHUSETTS

**NORFOLK PLANNING BOARD**

DATE APPROVED \_\_\_\_\_

DATE ENDORSED \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

EXISTING CONDITIONS  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS  
PREPARED FOR  
JOHN PANTONIO  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

**UNITED CONSULTANTS INC.**

860 FRANKLIN STREET SUITE 11D  
WRENTHAM, MASSACHUSETTS 02093  
508-384-8680 FAX 508-384-8686



*Andrew C. Murphy*  
12-21-18  
ANDREW C. MURPHY P.L.S. #35042

NO.	DATE	DESCRIPTION	BY

DATE: DECEMBER 20, 2018 PROJECT: UC 1386  
SCALE: 1" = 30' SHEET: 2 of 9

**PARKING REQUIREMENTS**  
 OFFICE - 960 SF @ 1/200 SF = 4.8 ~ 5 SPACES  
 WAREHOUSE - 6 EMPLOYEES @ 1/EMPLOYEE = 6 SPACES  
 TOTAL SPACES REQUIRED - 11 SPACES  
 TOTAL SPACES PROVIDED - 12 SPACES

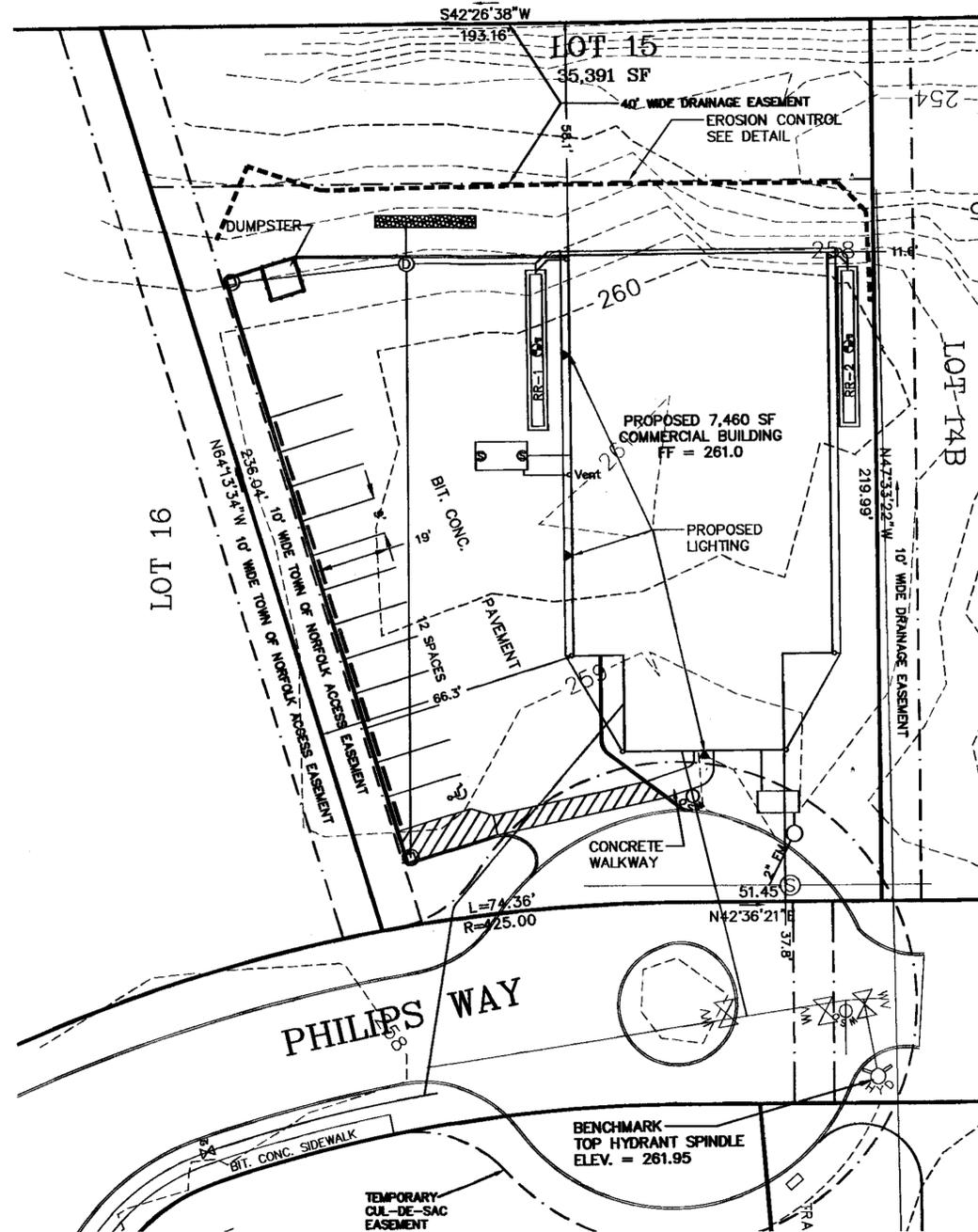
**SEWAGE REQUIREMENTS**  
 OFFICE - 960 SF @ 75 GPD/1000 SF = 72 GPD  
 WAREHOUSE - 6 EMPLOYEES @ 15 GPD/EMPLOYEE = 90 GPD  
 TOTAL DAILY FLOW - 162 GPD

**IMPERVIOUS CALCULATIONS**

BUILDING AREA 7,460 SF  
 PAVEMENT AREA 10,065 SF  
 CONCRETE WALK 95 SF  
 TOTAL IMPERVIOUS AREA 17,620 SF  
 LOT AREA 35,391 SF  
 % IMPERVIOUS 49.8%

**EXCAVATION QUANTITIES**

CUTS TO SUBGRADE 1,000 CY  
 FILLS TO SUBGRADE 150 CY



**GRAPHIC SCALE**

( IN FEET )  
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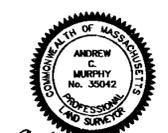
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**LAYOUT PLAN**  
 5 PHILLIPS WAY  
 NORFOLK, MASSACHUSETTS  
 PREPARED FOR  
 JOHN PANTONIO  
 5 PHILLIPS WAY  
 NORFOLK, MASSACHUSETTS

**UNITED CONSULTANTS INC.**

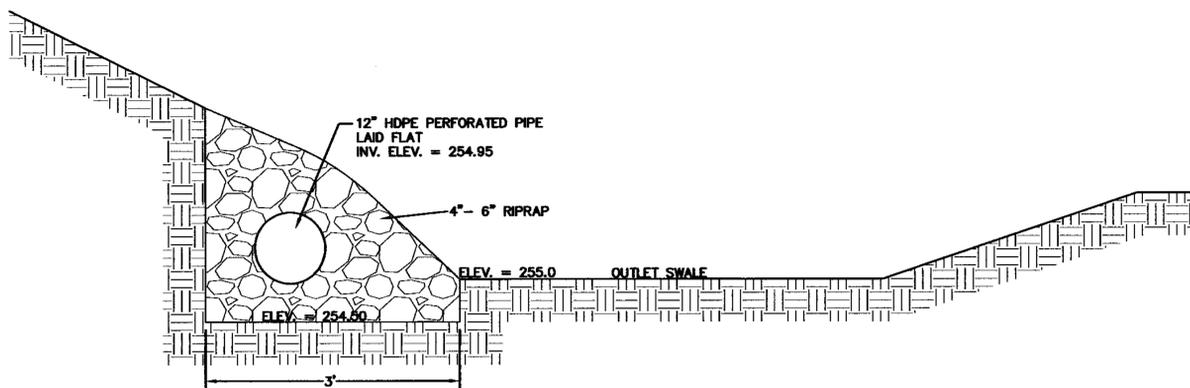
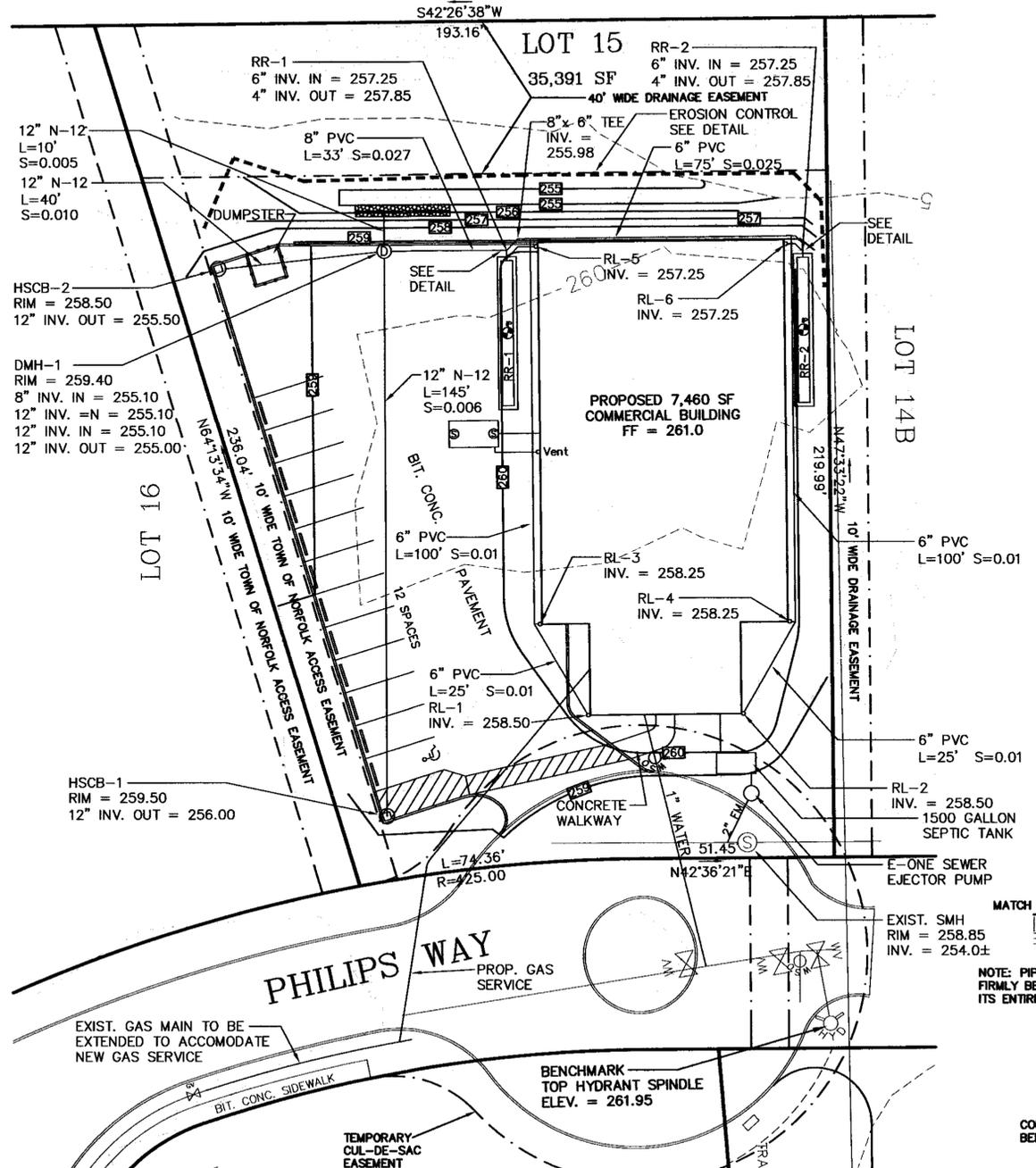
850 FRANKLIN STREET SUITE 11D  
 WRENTHAM, MASSACHUSETTS 02093  
 508-364-0500 FAX 508-364-0506



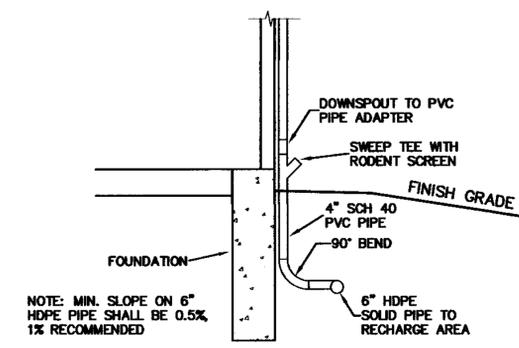
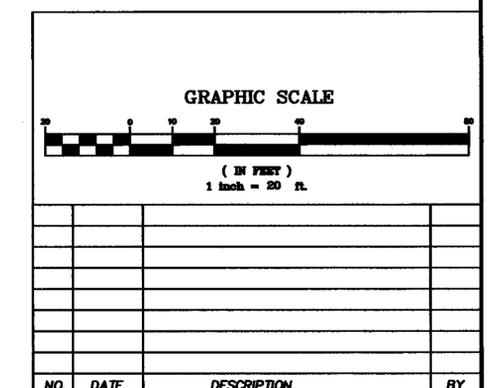
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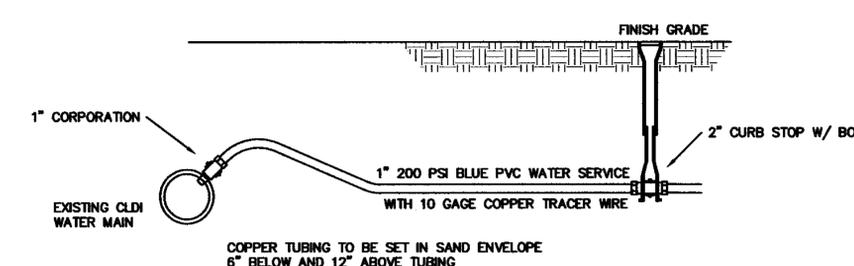
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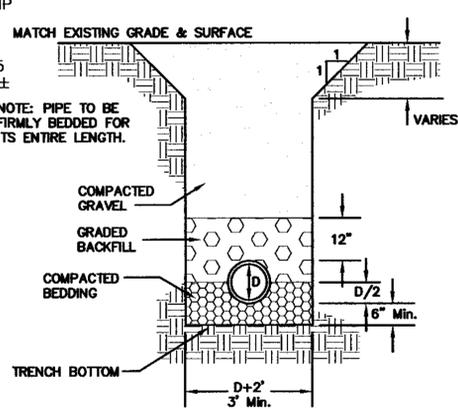
SECTION VIEW  
LEVEL SPREADER DETAIL



ROOF LEADER DETAIL



1" DOMESTIC WATER SERVICE



TYPE OF PIPE	PVC/HDPE DRAIN	PVC WATER	PVC SEWER
BEDDING MATERIAL	SAND	SAND	3/4" STONE
BACKFILL MATERIAL	ORD. FILL	SAND	3/4" STONE

UTILITY TRENCH DETAIL

UTILITY NOTES:

1. ALL CONSTRUCTION TO CONFORM TO THE TOWN OF NORFOLK PLANNING BOARD RULES AND REGULATION AND DPW RULES, REGULATIONS AND STANDARDS.
2. WATER MAINS, HYDRANTS, AND VALVE MATERIALS SHALL BE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE NORFOLK DEPARTMENT OF PUBLIC WORKS STANDARDS INCLUDING COVER.
2. ALL UTILITIES SHALL BE UNDERGROUND.
3. WATER SERVICE SHALL HAVE A MINIMUM OF 5' OF COVER.

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NORFOLK PLANNING BOARD

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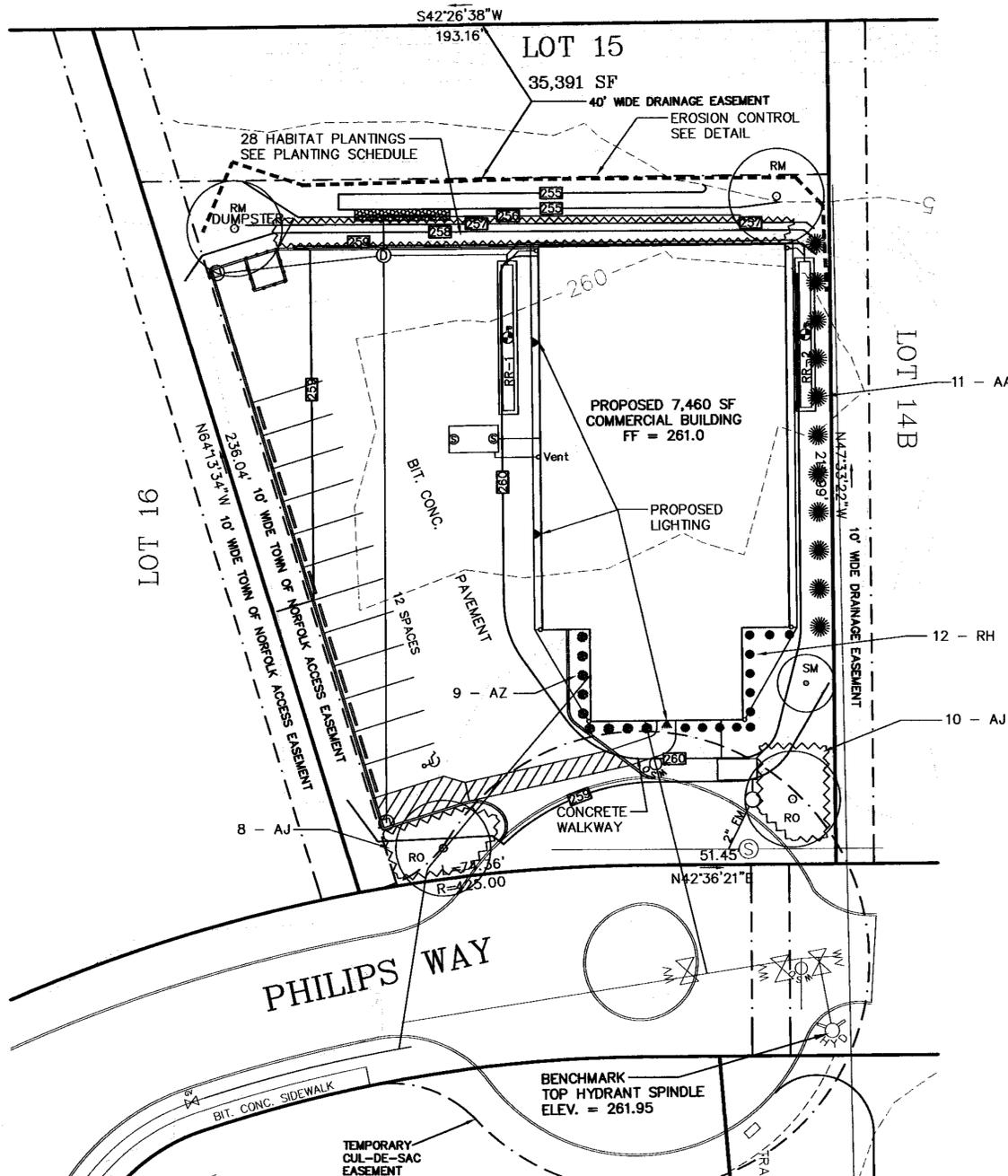
GRADING & UTILITIES  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS  
PREPARED FOR  
JOHN PANTONIO  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

CARLOS A. QUINTAL  
CIVIL ENGINEER  
No. 30812  
MASSACHUSETTS  
CARLOS A. QUINTAL P.E. #30812

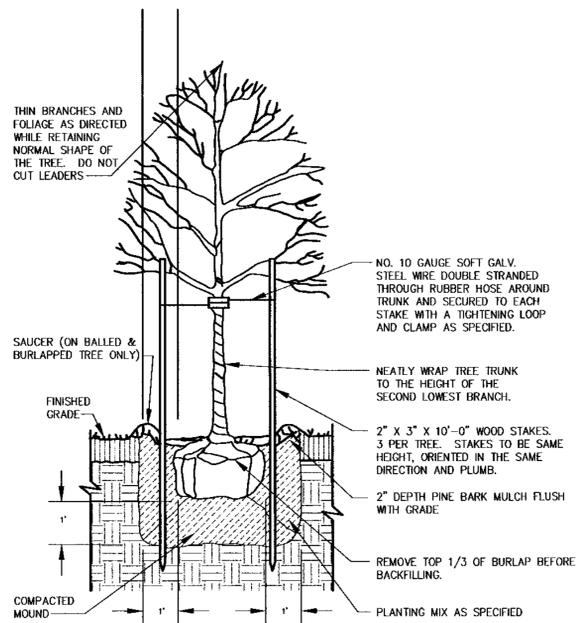
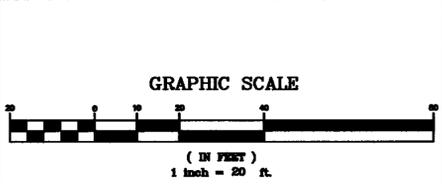
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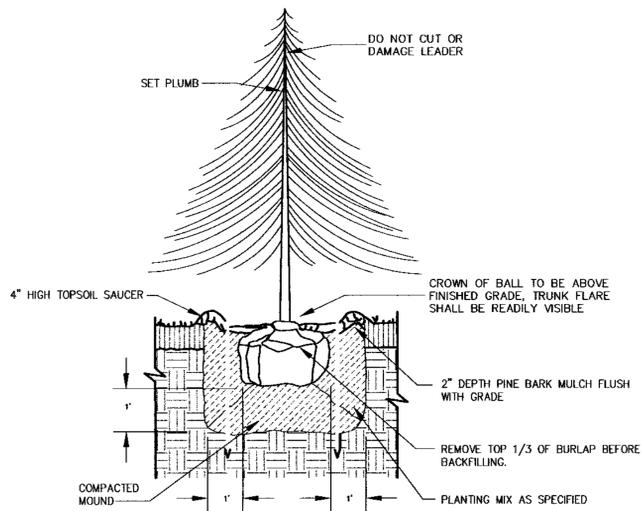
DATE: DECEMBER 20, 2018 PROJECT: UC 1386  
SCALE: 1" = 30' SHEET: 4 of 9



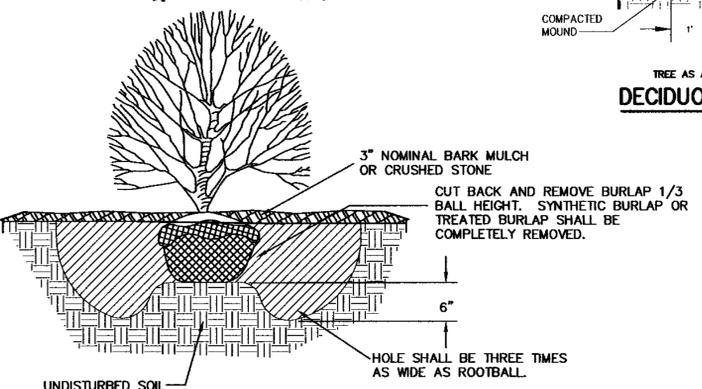
SPECIES	SIZE	CONDITION	QUAN.
<b>TREES</b>			
RM RED MAPLE	3.5-4" Cal.	B&B	2
RO RED OAK	3.5-4" Cal.	B&B	2
SM STAR MAGNOLIA	3.5-4" Cal.	B&B	1
AA AMERICAN ARBORVITAE	4-5' Ht.	B&B	11
		TOTAL TREES	16
<b>SHRUBS</b>			
AJ ANDORRA JUNIPER	18-24"	CONTAINER, 5'0/C	18
AZ AZALEA	2.5-3' Ht.	B&B, 5'0/C	9
RH RHODODENDRON	2.5-3' Ht.	B&B, 5'0/C	12
		TOTAL SHRUBS	39
<b>HABITAT</b>			
MW MALE WINTERBERRY	1 GAL.	CONTAINER, 5'0/C	2
FW FEMALE WINTERBERRY	1 GAL.	CONTAINER, 5'0/C	10
SP SWEET PEPPERBUSH	1 GAL.	CONTAINER, 5'0/C	8
AC AMERICAN CRANBERRYBUSH	1 GAL.	CONTAINER, 5'0/C	8
		TOTAL HABITAT	28
		TOTAL PLANTINGS	83



TREE AS APPROVED BY PARK COMMISSION  
**DECIDUOUS TREE PLANTING**  
NTS



**EVERGREEN TREE PLANTING**  
NTS



**SHRUB PLANTING**  
NTS

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**NORFOLK PLANNING BOARD**  
DATE APPROVED \_\_\_\_\_  
DATE ENDORSED \_\_\_\_\_

**PLANTING PLAN**  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS  
PREPARED FOR  
JOHN PANTONIO  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

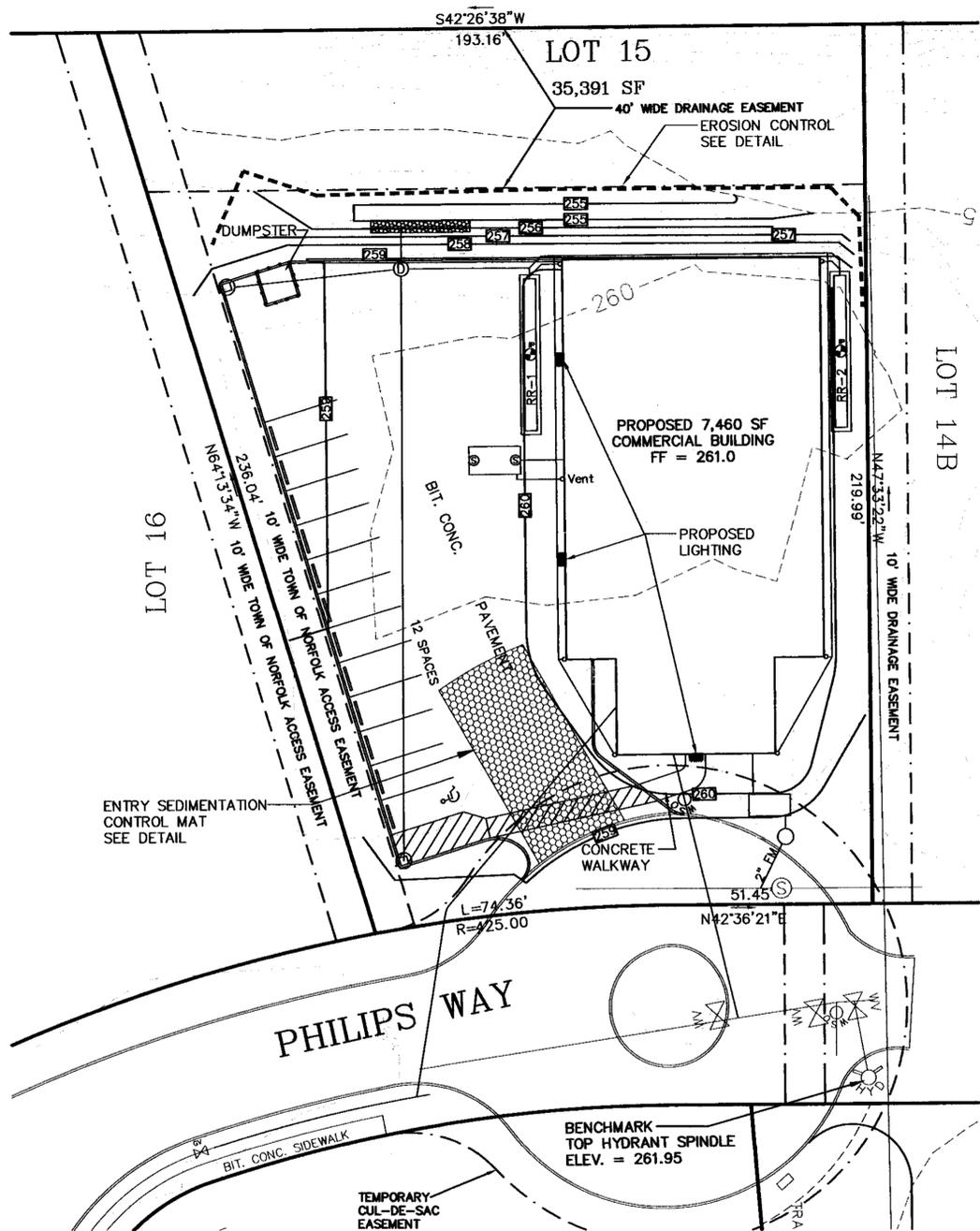


*Carlos A. Quintal*  
CARLOS A. QUINTAL P.E. #30812

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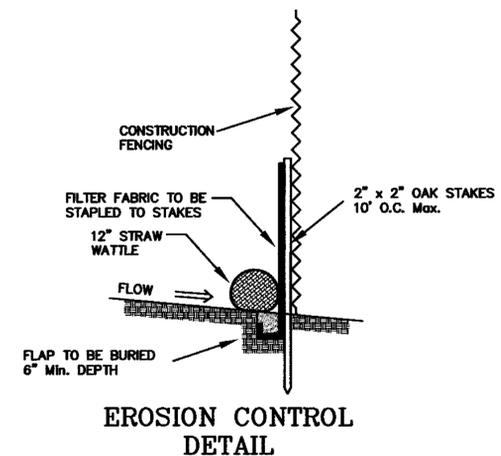
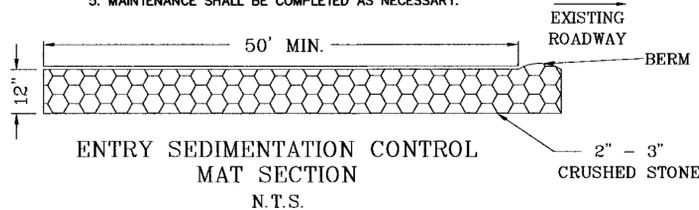
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DATE: DECEMBER 20, 2018 PROJECT: UC 1386  
SCALE: 1" = 30' SHEET: 5 of 9



**ENTRY SEDIMENTATION MAT NOTES**

1. ENTRANCE MAT WIDTH TO BE A MINIMUM OF 24' AND SHALL NOT BE LESS THAN THE FULL WIDTH REQUIRED FOR ENTRY AND EGRESS.
2. THE ENTRANCE MAT SHALL BE MAINTAINED TO PREVENT THE TRACKING OF SEDIMENT ONTO SHARON AVENUE. REMOVAL OF SEDIMENT OR TOP DRESSING WITH ADDITIONAL STONE SHALL BE COMPLETED AS REQUIRED.
3. ANY SEDIMENT WASHED, SPILLED, DROPPED OR TRACKED ONTO THE ROADWAYS SHALL BE REMOVED IMMEDIATELY.
4. INSPECTION SHALL BE COMPLETED WEEKLY AND AFTER ALL RAIN EVENTS.
5. MAINTENANCE SHALL BE COMPLETED AS NECESSARY.



**GRAPHIC SCALE**  
( IN FEET )  
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**NORFOLK PLANNING BOARD**

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**EROSION CONTROL PLAN**  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS  
PREPARED FOR  
JOHN PANTONIO  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

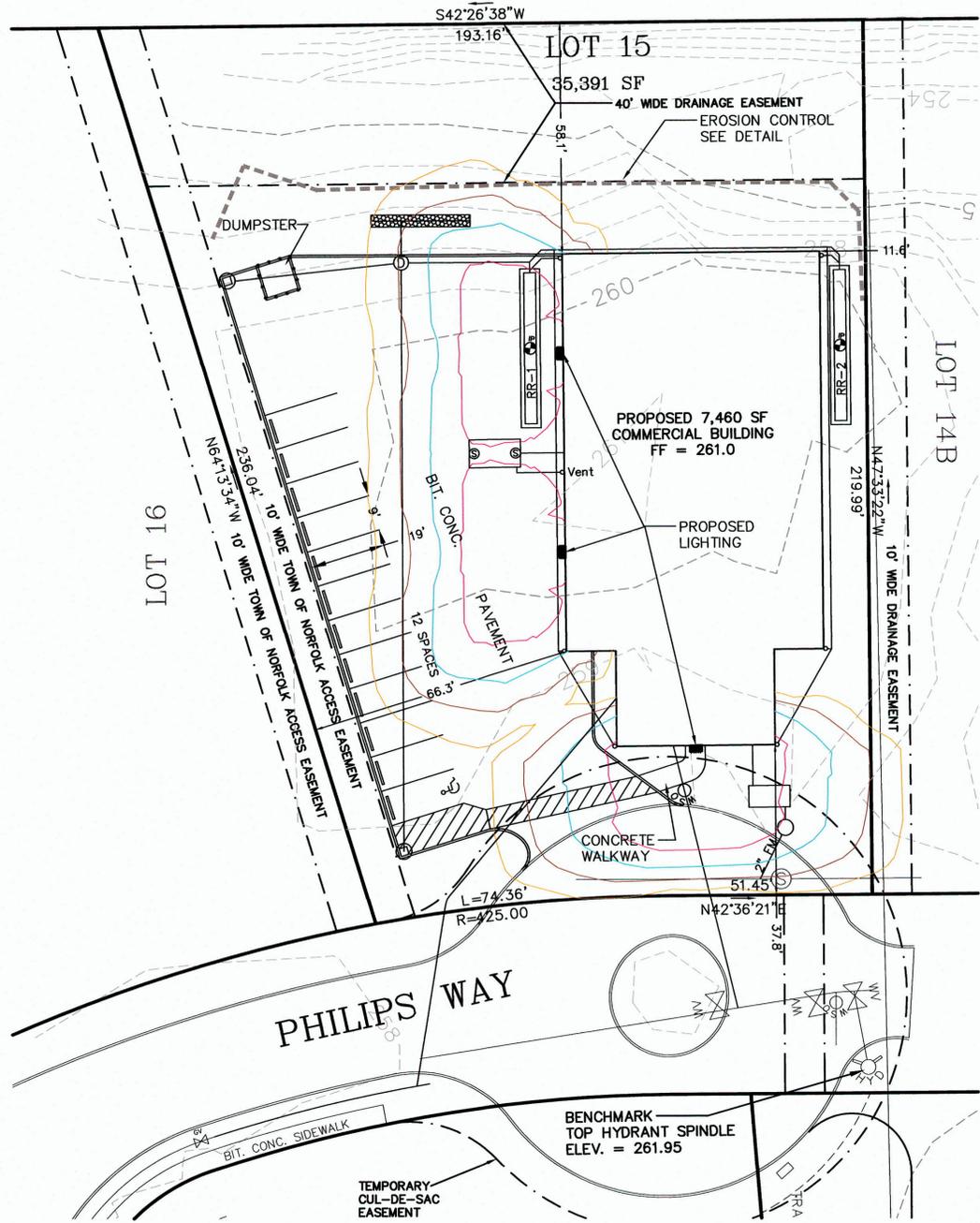
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850 FRANKLIN STREET SUITE 11D  
WRENTHAM, MASSACHUSETTS 02093  
508-384-6600 FAX 508-384-6606

DATE	DECEMBER 20, 2018	PROJECT	UC 1386
SCALE	1" = 30'	SHEET	6 of 9

NO.	DATE	DESCRIPTION	BY



**LITEPAK SERIES LNC3**

**HUBBELL Outdoor Lighting**

**SPECIFICATIONS**

**General:** The LNC3 is designed for perimeter illumination for safety, security and identity. No light and/or glare is visible from the interior of the building. The LNC3 is designed for long service life. The LNC3 is designed for long service life. The LNC3 is designed for long service life.

**Construction:** The cast aluminum housing protects components and provides an architectural appearance. Cooling thermally conductive LED heat to optimize performance and long life. Powder paint finish provides durability in outdoor environments. Four 1/2" conduit entries top, bottom and sides provided for surface conduit.

**Electrical:** 120-277, 240 and 480 voltage, 50/60Hz, 0-10V dimming driver. Electronic driver. Full range protection.

**LEDs CRI:** Ambient operating temperature -40°C to 40°C. 3000K, 5000K and 5000K CRI (neutral) with T5CR.

**Leases:** 2-in. light distribution using individual acrylic LED optics provide 85° beam angle. 10 and 15° distributions. (35° frosted acrylic diffuser option for reduced glare). (35° frosted acrylic diffuser for "inverted" up-mounting applications (see request).

**Lighting:** Designlights Consortium (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org. Listed to UL 1598 and CULC22 28250 0-24 for wet locations. PFI Assembly - EA Approved (5000K configurations).

**Warranty:** Three year limited warranty for more information visit: www.hubbell.com/litepakseries

**PRODUCT IMAGE(S)**

**DIMENSIONS**

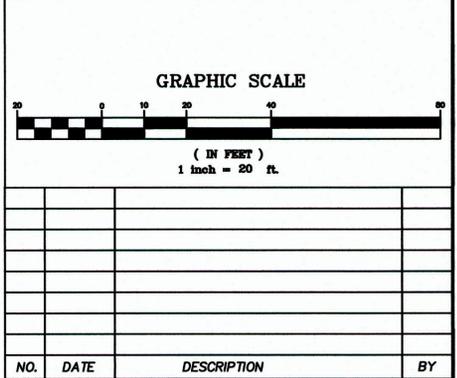
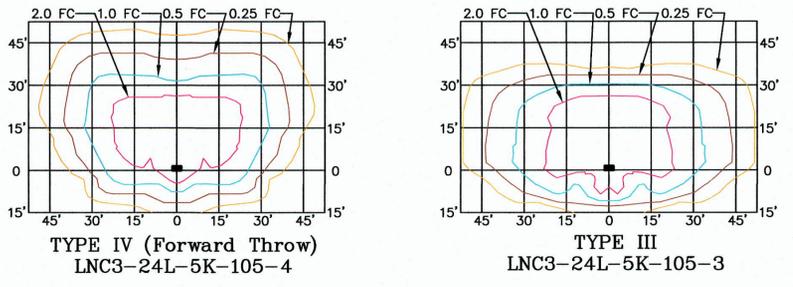
Model	A	B	C	D	E	Weight / BBU
LNC3-24L-5K-105-3	13"	10.5"	9.9"	5.8"	8.3"	18 lbs.
LNC3-24L-5K-105-4	33.2 mm	266.7 mm	251 mm	147.3 mm	210.8 mm	8.2 kg

**ORDERING INFORMATION - ORDERING EXAMPLE: LNC3-24L-5K-105-2-1-DB-7FR-SCP**

FAMILY	MODEL	DRIVE CURRENT	LED DISTRIBUTION	VOLTAGE	FINISH	CONTROL OPTIONS	OPTIONS
LNC3	24L 5K 105	4K 4000mA	2 Type I	120V	BL Black	7FR 7FR	SCP
LNC3	24L 5K 105	4K 4000mA	2 Type II	240V	WH White	7FR 7FR	SCP
LNC3	24L 5K 105	4K 4000mA	2 Type III	240V	GR Grey	7FR 7FR	SCP
LNC3	24L 5K 105	4K 4000mA	2 Type IV	240V	PS Platinum	7FR 7FR	SCP
LNC3	24L 5K 105	4K 4000mA	2 Type V	240V	CC Custom	7FR 7FR	SCP

**STOCK ORDERING INFORMATION - 2L COB MODELS**

CATALOG NUMBER	DESCRIPTION	DISTRIBUTION	WATTAGE	LUMENS	LPW	VOLTAGE	# OF DRIVERS	WEIGHTS
LNC3-24L-5K-105-3	2LED - 90W Configuration, 4000K, Dark Bronze		62.0	5,837	94.1	120-277V	1 @ 750mA	
LNC3-24L-5K-105-4	2LED - 90W Configuration, 4000K, Dark Bronze	Type II	67.4	7,721	86.1	120-277V	1 @ 1000mA	16(7.3)
LNC3-24L-5K-105-5	2LED - 90W Configuration, 4000K, Dark Bronze	Type III	67.4	7,288	82.8	120-277V	1 @ 1000mA	16(7.3)
LNC3-24L-5K-105-6	2LED - 90W Configuration, 4000K, Dark Bronze	Type IV	67.4	7,721	86.1	120-277V	1 @ 1000mA	16(7.3)
LNC3-24L-5K-105-7	2LED - 90W Configuration, 4000K, Dark Bronze	Type V	67.4	7,721	86.1	120-277V	1 @ 1000mA	16(7.3)



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NORFOLK PLANNING BOARD

DATE APPROVED \_\_\_\_\_

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LIGHTING PLAN  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS  
PREPARED FOR  
JOHN PANTONIO  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

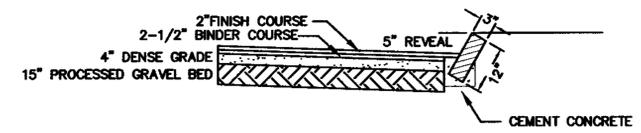
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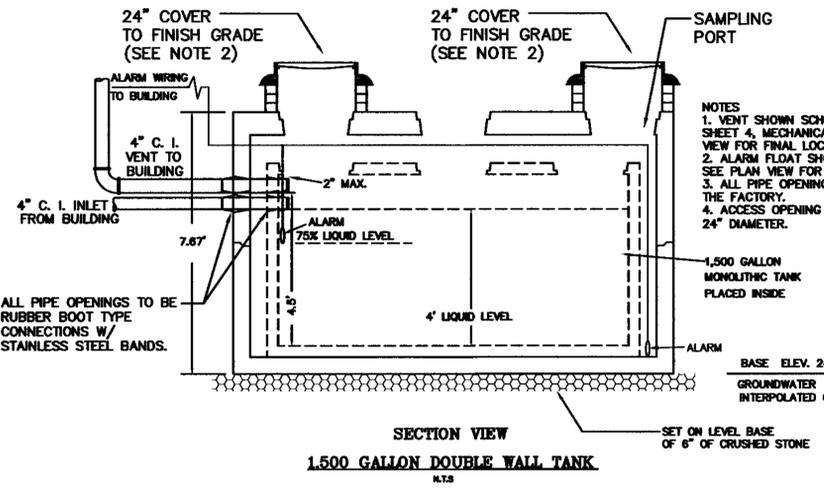
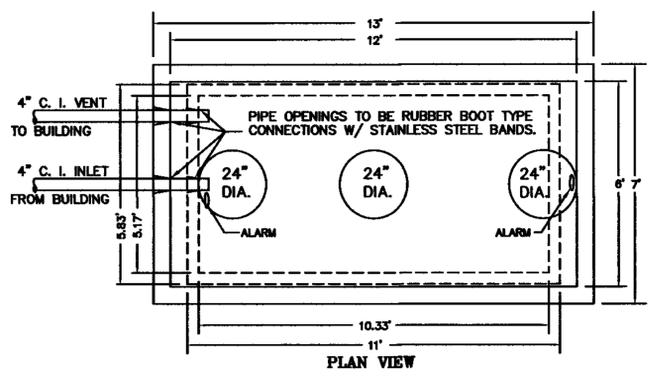
- HOLDING TANK NOTES:**
- HOLDING TANK TO BE H-20 LOADING.
  - PROVIDE A 24" FRAME AND COVER MARKED "NON-HAZARDOUS INDUSTRIAL WASTEWATER"; FRAME AND COVER TO BE SET TO FINISH GRADE.
  - PROVIDE A HIGH LIQUID LEVEL ALARM DEVICE WHICH SHALL BE CONNECTED TO AN AUDIO AND VISUAL ALARM SYSTEM LOCATED WITHIN A STAFFED AREA OF THE BUILDING. ALARM SHALL BE ACTIVATED WHEN LIQUID LEVEL REACHES 75% OF THE TANK CAPACITY.
  - HIGH LIQUID LEVEL MERCURY FLOAT SWITCH SHALL BE SET AT 3' LIQUID LEVEL.
  - SPACE BETWEEN THE INNER TANK AND OUTER TANK SHALL BE KEPT FREE FROM DEBRIS AND MATERIALS AND SHALL PROVIDE SPACE AND ACCESS TO DETECT AND REMOVE ANY LEAKAGE FROM THE INNER TANK.
  - SEAL ALL TANK SEAMS AND PENETRATION WITH BIT. BUTYL MASTIC SEALANT.
  - TANK TO BE INSPECTED ON A WEEKLY BASIS FOR LEAKAGE.
  - TANK TO BE IMMEDIATELY REPLACED IF LEAKAGE IS DISCOVERED.
  - POTENTIAL AVERAGE DAILY FLOW 10 GALLONS - 500K CAPACITY 50 GALLONS. PRIMARY HOLDING TANK CAPACITY = 1,500 GALLONS BELOW INLET INVERT.
  - WASTE ANTICIPATED TO BE RAIN WATER AND SNOW MELT CARRIED IN ON VEHICLES AND EQUIPMENT.
  - HOLDING TANK PUMPING TO BE COMPLETED BY: J. HOCKMAN, INC. 11 SHEERWOOD DRIVE, NORFOLK, MA PHONE 1-508-384-1400.
  - EMERGENCY RESPONSE, SPILL CONTROL AND CONTAINMENT TO BE COMPLETED BY: DOWLING CORP., 713 DEDHAM STREET, WRENTHAM, MA PHONE 1-508-384-7617.
  - TANK TO BE VENTED THROUGH ROOF FOR ODOR CONTROL.
  - OWNER TO COMPLY WITH ALL PERMITS OR OTHER REQUIREMENTS MANDATED BY THE LOCAL AUTHORITIES PERTAINING TO THE HOLDING TANK.



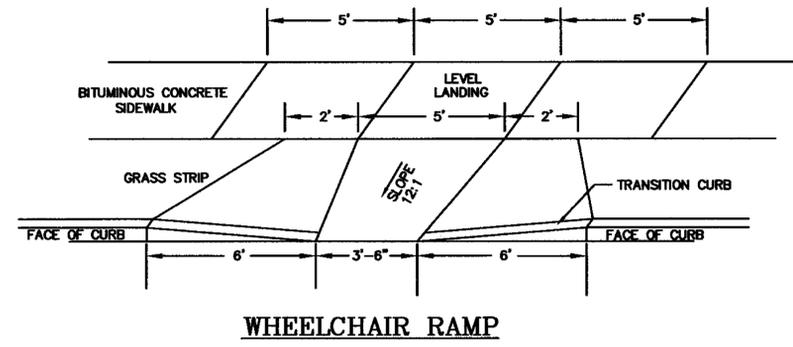
**BIT. CONC. PAVEMENT & TYPE SB SLOPED GRANITE CURBING**

	PROCESSED GRAVEL	DENSE GRADE	BINDER	FINISH
BIT. CONCRETE PARKING AND SITE DRIVE AREAS	15"	4"	2 1/2"	2"

- NOTES:**
- PROCESSED GRAVEL TO BE PLACED IN 6" LIFTS - MIN. 95% DRY DENSITY COMPACTION.
  - PROCESSED GRAVEL AND DENSE GRADE MATERIALS SHALL COMPLY WITH THE TOWN OF NORFOLK PLANNING BOARD RULES AND REGULATIONS.



- DESIGN NOTES:**
- CONCRETE 5,000 PSI @ 28 DAYS.
  - HS-20-44 LOADING WITH 12" - 60" COVER.
  - REINFORCEMENT ASTM A-615 GRADE 60.
  - CONST. JOINT TO HAVE MIN. 1" BUTYL SEALANT.
  - EXTERIOR OF INNER AND OUTER TANKS TO BE COVERED WITH A BITUMINOUS COATING. (INCLUDING BOTTOM OF TANKS)
- TANK NOTES:**
- OUTER TANK - 6" SIDEWALLS AND BOTTOM AND 6" TOP.
  - INNER TANK - 4" SIDEWALL, BOTTOM AND TOP.
  - INNER AND OUTER TANK TO BE PRECAST CONCRETE.
  - PROVIDE MIN. 24" DIAMETER OPENING.
- BUOYANCY CALCULATIONS**
- IWWHT BASE ELEV. = 245.97  
 INTERPOLATED GROUNDWATER ELEV. = 248.0  
 BUOYANCE = 13' x 7' x 2.03' x 62.4 = 11,527 LBS  
 IWWHT INNER TANK WEIGHT = 13,135 LBS
- TANK WILL NOT FLOAT**

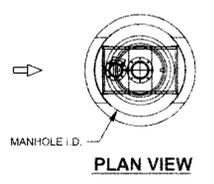


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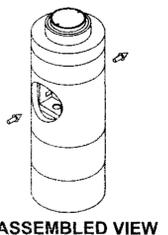
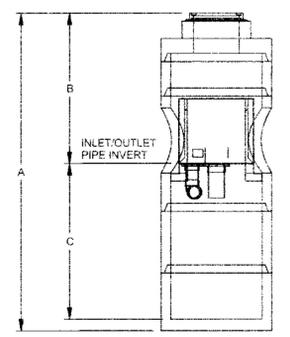
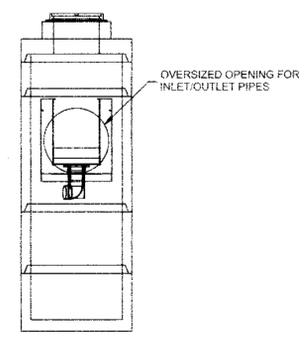
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This CADD file is for the purpose of specifying stormwater treatment equipment to be furnished by CONTECH Stormwater Solutions and may only be transferred to other documents exactly as provided by CONTECH Stormwater Solutions. Title block information, excluding the CONTECH Stormwater Solutions logo and the VortSentry HS Stormwater Treatment System designation and patent number, may be deleted if necessary. Revisions to any part of this CADD file without prior coordination with CONTECH Stormwater Solutions shall be considered unauthorized use of proprietary information.

THE VORTSENTRY HS CONTROL SECTION SHALL BE STENCILED WITH THE CONTECH STORMWATER SOLUTIONS NAME AND LOGO. PIPE OPENINGS SHALL BE STENCILED "INLET" OR "OUTLET" AS APPROPRIATE.



- NOTES:**
- STORMWATER TREATMENT SYSTEM (SWTS) SHALL REMOVE 80% OF A SEDIMENT GRADATION WITH AN AVERAGE PARTICLE SIZE OF 240 MICRONS AT THE DESIGNATED TREATMENT FLOW RATE LISTED IN THE TABLE FOR EACH CORRESPONDING MODEL.
  - SWTS REMOVAL EFFICIENCY CLAIM SHALL BE CORROBORATED BY FULL SCALE LABORATORY TEST PERFORMANCE DATA.
  - SWTS MAINTENANCE RECOMMENDATIONS SHALL BE SUPPORTED BY FULL SCALE WASH-OUT TESTING.
  - SWTS SHALL PROVIDE INTERNAL BYPASS OF FLOWS THAT EXCEED THE TREATMENT FLOW RATE.
  - SWTS MAXIMUM HYDRAULIC CAPACITY MAY VARY DEPENDING UPON THE INLET PIPE DIAMETER, MATERIAL AND SLOPE.
  - SWTS INVERTS IN AND OUT SHALL BE AT THE SAME ELEVATION INLET AND OUTLET PIPES MUST BE 180° FROM EACH OTHER.
  - MINIMUM RIM TO INVERT DISTANCE MAY BE REDUCED DEPENDING UPON ACTUAL PIPE DIAMETER. CONTACT CONTECH STORMWATER SOLUTIONS FOR SITE SPECIFIC INFORMATION.
  - PIPE SIZE MAY BE SMALLER THAN THE MAXIMUM PIPE SHOWN ON THE TABLE; SEE SITE PLAN FOR PIPE SIZE.
  - PURCHASER SHALL NOT BE RESPONSIBLE FOR ASSEMBLY OF INTERNAL COMPONENTS.
  - ACCESS FRAME AND COVER SUPPLIED WITH SYSTEM. NOT INSTALLED. SWTS MAY ALSO HAVE A GRATED INLET COVER (NOT SHOWN).
  - PURCHASER TO PREPARE EXCAVATION AND PROVIDE LIFTING EQUIPMENT.
  - VORTSENTRY HS BY CONTECH STORMWATER SOLUTIONS, PORTLAND, OR (800) 945-4567; SCARBOROUGH, ME (877) 907-6676; LINTHICUM, MD (866) 740-3318.



VortSentry Model	Manhole Diameter (D)		Total Treatment Flow Rate		Typical Total Distance Rim to Outside Bottom		Typical Distance Rim to Invert		Typical Depth Below Invert (inside)		Approximate Minimum Distance Rim to Invert (See Note 7)		Maximum Pipe Diameter (ID)	
	ft	mm	cfs	l/s	ft	m	ft	m	ft	m	ft	m		
HS36	3	900	0.55	15.6	10.16	3.1	4.08	1.24	5.58	1702	3.00	0.91	18	450
HS48	4	1200	1.20	34.0	13.50	4.11	6.00	1.83	7.00	2.13	4.00	1.22	24	600
HS72	6	1800	3.70	104.8	16.26	4.96	6.75	2.06	8.84	2.69	5.09	1.55	36	900
HS96	8	2400	8.10	229.4	20.92	6.36	8.50	2.59	11.59	3.53	6.17	1.88	48	1200

**TYPICAL DETAIL WITH SIZING TABLE STORMWATER TREATMENT SYSTEM VORTSENTRY HS**

US PATENT PENDING

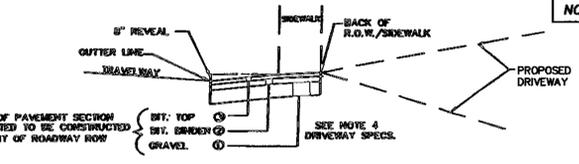
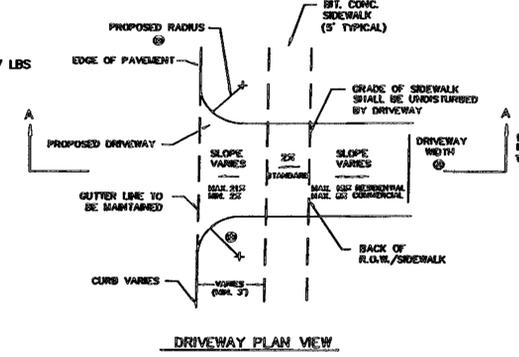
SCALE: NONE

DRAWN: GMC

CHECKED: GWB

FILE NAME: TYPTBLVSHS

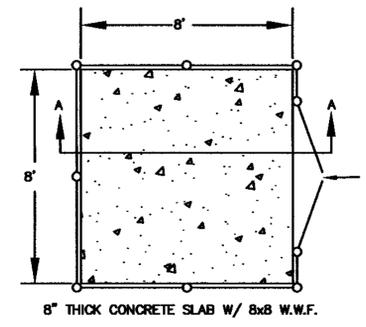
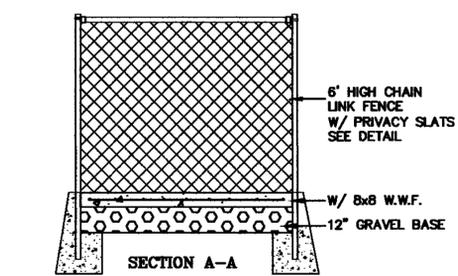
DATE: 12/28/08



TYPE	MAX. @ MIN.	MAX. @ MIN.	MIN.	MIN.	MIN.	MIN.
RESIDENTIAL	12'	8'	10'	5'	12"	1"
COMMERCIAL	24'	20'	30'	20'	12"	1.5"

MAXIMUM ALLOWABLE GRADE CHANGE: DESIRABLE MAXIMUM  
 LOW VOLUME DRIVEWAY ON LOCAL STREET: ± 8% ± 6% (CREST CURVE) ± 8% (SAG CURVE)

NOTE: MORE ABRUPT CHANGES REQUIRE VERTICAL CURVES AT LEAST 10' LONG



**CONCRETE DUMPSTER PAD**

**RESIDENTIAL & COMMERCIAL DRIVEWAY DETAIL**

DRIVEWAY SECTION A - A

CARLOS A. QUINTAL P.E. #30812

CONSTRUCTION DETAILS  
 5 PHILLIPS WAY  
 NORFOLK, MASSACHUSETTS  
 PREPARED FOR  
 JOHN PANTONIO  
 5 PHILLIPS WAY  
 NORFOLK, MASSACHUSETTS

**UNITED CONSULTANTS INC.**  
 850 FRANKLIN STREET SUITE 11D  
 WRENTHAM, MASSACHUSETTS 02093  
 508-384-6580 FAX 508-384-6586

NO.	DATE	DESCRIPTION	BY

DATE: DECEMBER 20, 2018 PROJECT: UC 1386  
 SCALE: 1" = 30' SHEET: 8 of 9

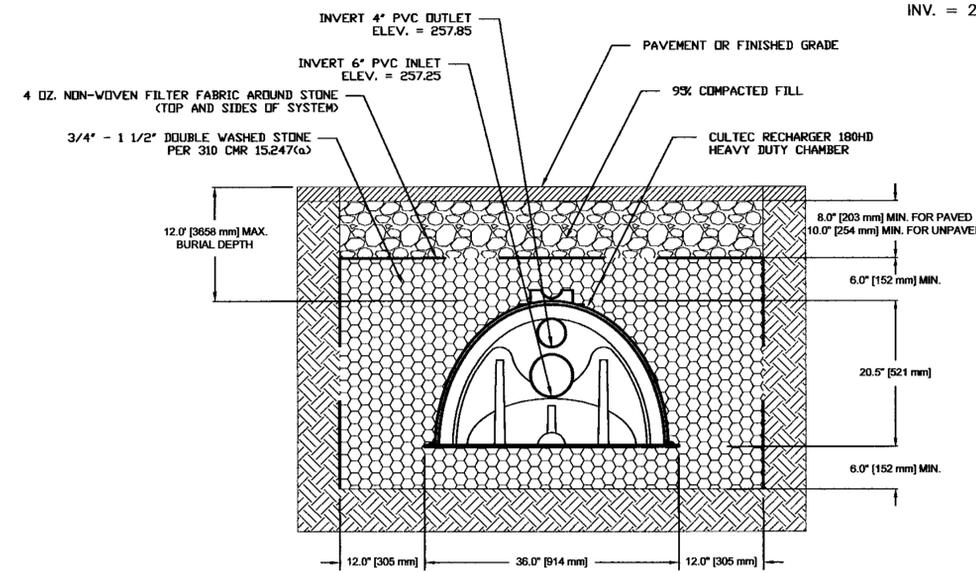
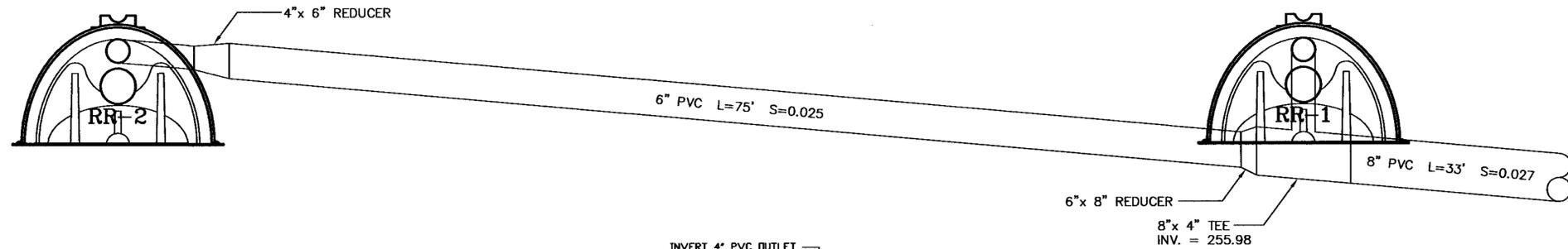
I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE PLANNING BOARD APPROVAL AND THAT NO APPEAL HAS BEEN FILED IN THIS OFFICE.

TOWN CLERK, NORFOLK, MASSACHUSETTS

**NORFOLK PLANNING BOARD**

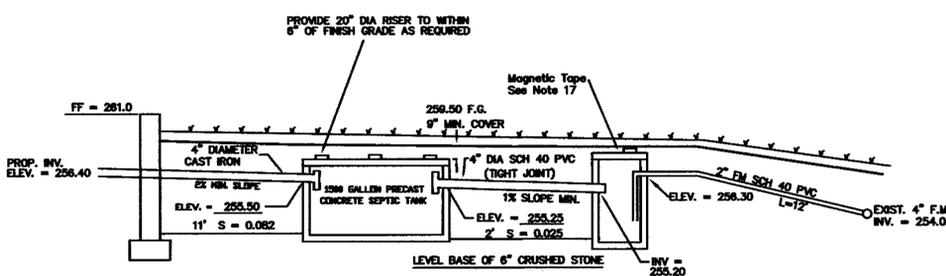
DATE APPROVED \_\_\_\_\_

DATE ENDORSED \_\_\_\_\_

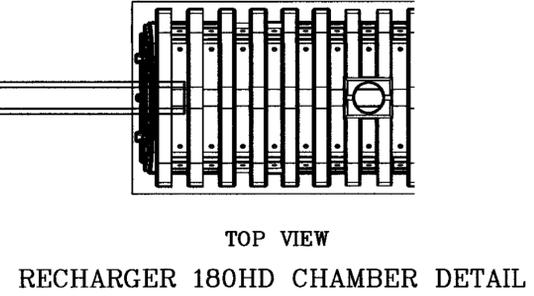
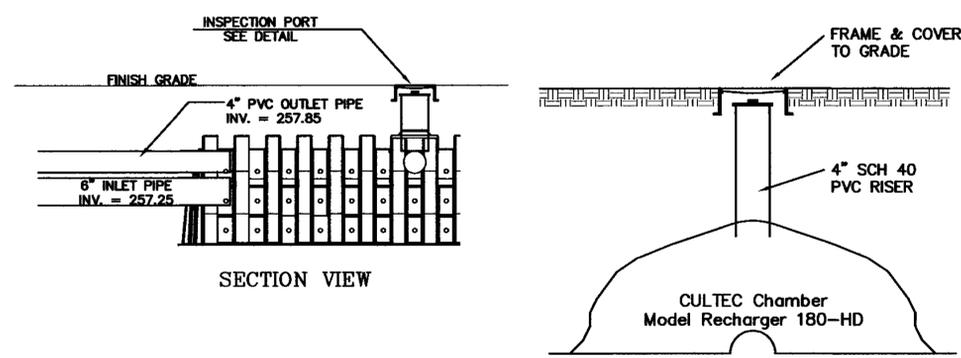
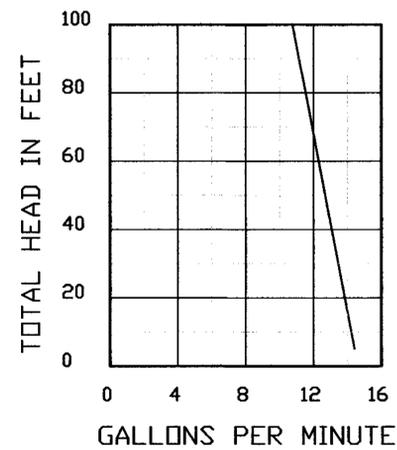


**GRAPHIC SCALE**  
(IN FEET)  
1 inch = 20 ft.

NO.	DATE	DESCRIPTION	BY



**ENVIRONMENT ONE**



**OPTIONS:**  DH152 (HARD WIRED LEVEL CONTROLS)  
 DR152 (WIRELESS LEVEL CONTROLS)

FIELD JOINT REQUIRED FOR MODELS DH152-125 / DR152-125  
DH152-160 / DR152-160

ACCESS WAY VENT  
STRAIN RELIEF CORD CONNECTOR  
POWER & ALARM CABLE 12-6 W/GND  
E/DNE EQUALIZER  
ELECTRICAL QUICK DISCONNECT NEMA 6P (EQD)  
INLET, GROMMET TO ACCEPT 4.50" O.D. PVC PIPE (STANDARD). DUST COVER SUPPLIED FOR SHIPMENT (NOT SUITABLE FOR BURIAL).

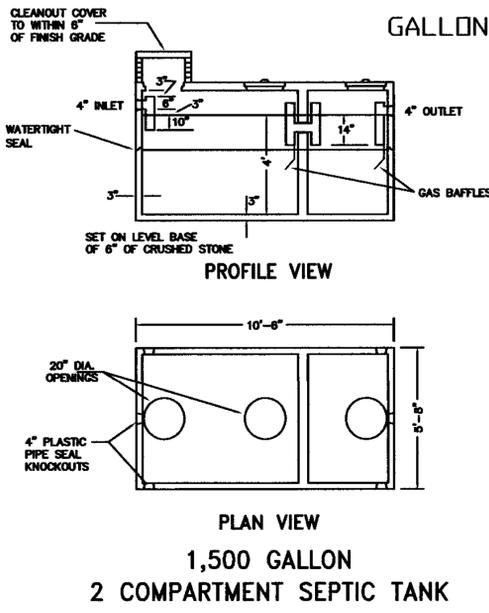
GASKETED LID, FRP  
DUAL WALL, CORRUGATED HOPE ACCESSWAY  
INTERNAL WELL VENT 2.0" DIA.  
DISCHARGE 1 1/4" FPT (304 S.S.)  
QUICK DISCONNECT ASSY. (304 S.S.)  
S.S. CAST BALL VALVE  
1 1/4" DISCHARGE LINE (304 S.S.)  
CHECK VALVE (NORYL)  
ANTI-SIPHON VALVE (NORYL)  
HOPE TANK 1/2" NOMINAL WALL THICKNESS 150 GALLON CAPACITY

SEMI-POSITIVE DISPLACEMENT TYPE PUMP EACH DIRECTLY DRIVEN BY A 1 HP MOTOR

CONCRETE BALLAST MAY BE REQUIRED SEE INSTALLATION INSTRUCTIONS FOR DETAILS

AD	CH	07/13/07	A	SCALE
OR BY	CHK'D	DATE	ISSUE	

SEWER SYSTEMS  
MODEL DH152 / DR152  
DETAIL SHEET  
NA0052P02



THE PUMP INSTALLATION SHALL INCLUDE A CONTROL PANEL TO BE MOUNTED WITHIN THE BUILDING, WHICH INCLUDES A MANUAL ON-MANUAL OFF- AUTOMATIC ON-OFF SWITCH, A VISIBLE ALARM, AUDIBLE ALARM, AND AUDIBLE ALARM SILENCER SWITCH. THERE SHALL BE A MINIMUM OF 3 FLOAT SWITCHES IN THE PUMP CHAMBER. THE ALARM SHALL BE CONNECTED TO A SEPARATE ELECTRICAL CIRCUIT FROM THE PUMP. THE PUMP ELECTRICAL SYSTEM SHALL BE EQUIPPED WITH A TRANSFER SWITCH TO ALLOW CONNECTION TO A PORTABLE GENERATOR. THE PUMP SHALL BE LOCATED UNDER A MANHOLE COVER WHICH SHALL BE INSTALLED TO FINISHED GRADE AND MADE OF A MATERIAL WHICH IS EITHER LOCKABLE OR EXTRA-HEAVY WEIGHT.

DOSE LEACH FIELD 6 TIMES DAILY  
162 GAL/DAY = 27 GAL/DOSE  
USE E-ONE GRINDER PUMP, 1 H.P.

PUMP CHAMBER BASE ELEV. = ADJUSTED GROUNDWATER ELEV. = 75.08  
BUOYANCY = 8.5 x 5.67 x 7.00 x 62.4 = 21,052 LBS  
TANK WEIGHT W/1/3" TOP SLAB = 21,300 LBS  
CHAMBER WILL NOT FLOAT

NOTE: PRIOR TO INSTALLATION OF THE PUMP, THE ENGINEER IS TO BE NOTIFIED IF ANY PUMP OTHER THAN THE SPECIFIED PUMP IS TO BE INSTALLED. CONTRACTOR TO BE RESPONSIBLE FOR SUBMISSION OF PUMP SPECIFICATIONS TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE PLANNING BOARD APPROVAL AND THAT NO APPEAL HAS BEEN FILED IN THIS OFFICE.

TOWN CLERK, NORFOLK, MASSACHUSETTS

**NORFOLK PLANNING BOARD**

DATE APPROVED \_\_\_\_\_

DATE ENDORSED \_\_\_\_\_

CONSTRUCTION DETAILS  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

PREPARED FOR  
JOHN PANTONIO  
5 PHILLIPS WAY  
NORFOLK, MASSACHUSETTS

CARLOS A. QUINTAL  
REGISTERED PROFESSIONAL ENGINEER  
CARLOS A. QUINTAL P.E. #30812

**UNITED CONSULTANTS INC.**

850 FRANKLIN STREET SUITE 11D  
WRENTHAM, MASSACHUSETTS 02093  
508-384-8660 FAX 508-384-8668

NO.	DATE	DESCRIPTION	BY

DATE: **DECEMBER 20, 2018** PROJECT: **UC 1386**

SCALE: **1" = 30'** SHEET: **9 of 9**