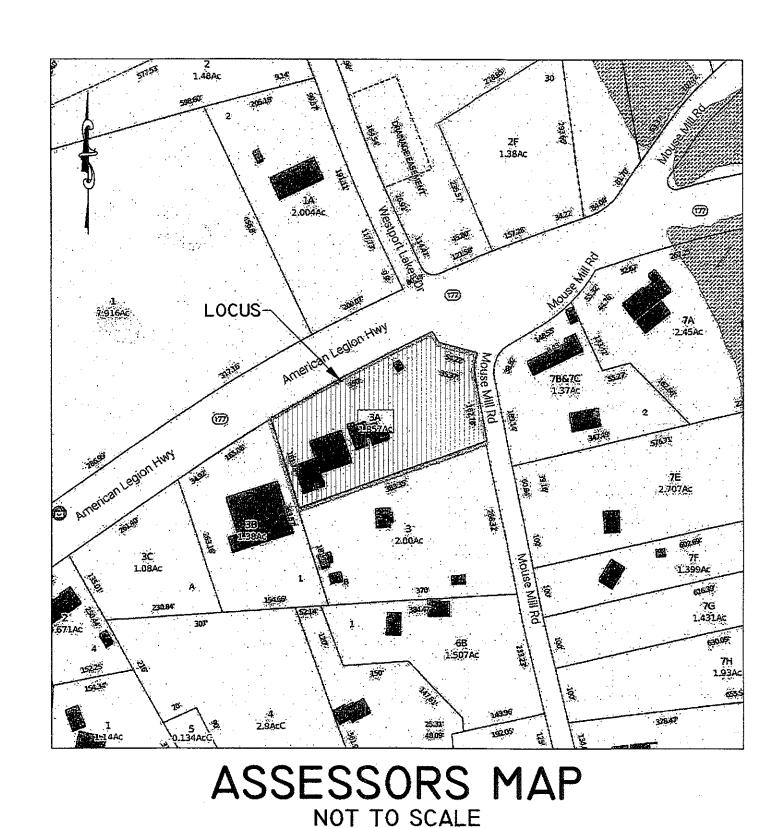
COMMERCIAL PROJECT - EXPANSION PLAN 5-STAR COLLISION CENTER

683A AND 683B AMERICAN LEGION HIGHWAY (ROUTE 177)
ASSESSOR'S PLAT 35 LOT 3A
WESTPORT, MASSACHUSETTS



SHEET INDEX

SHEET I COVER SHEET

SHEET 2 EXISTING CONDITIONS PLAN

SHEET 3 PROPOSED SITE PLAN - LAYOUT, DESCRIPTIONS, AND

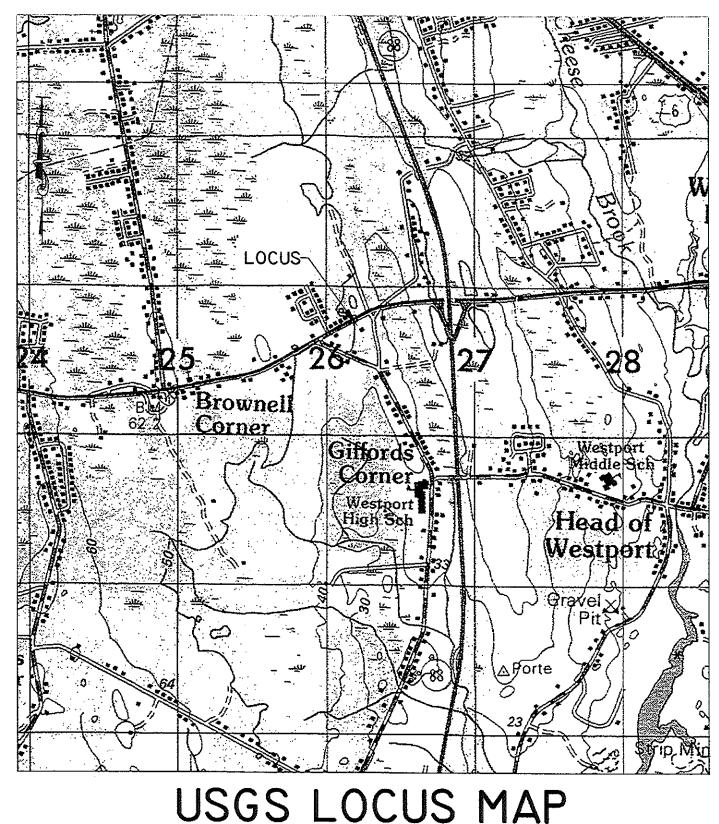
BOARD OF HEALTH CERTIFICATION

SHEET 4 PROPOSED SITE PLAN - GRADING

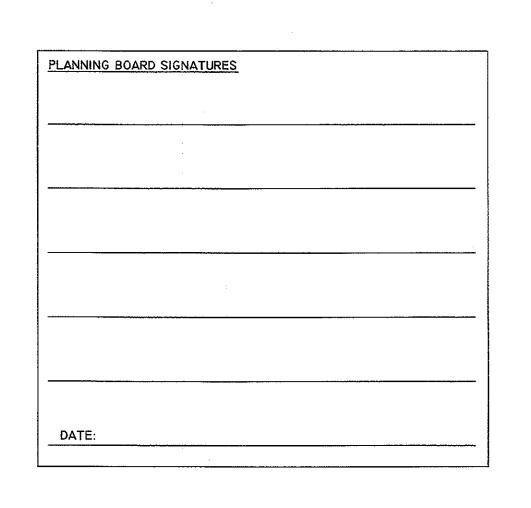
SHEET 5 DETAIL SHEET - SEPTIC SYSTEM AND EROSION CONTROL

SHEET 6 DETAIL SHEET - STORM DRAINAGE AND LIGHTING DETAILS

SHEET 7 PROPOSED OFF-SITE STORM DRAINAGE
RECONSTRUCTION/IMPROVEMENTS PLAN



 $I'' = 2083' \pm$



NOTES:

I) OWNER: RUSSELL OAGLES, JR. AND ANTONE RODRIGUES
683A AMERICAN LEGION HIGHWAY
WESTPORT, MA 02790

2) APPLICANT: RUSSELL OAGLES, JR
683A AMERICAN LEGION HIGHWAY
WESTPORT, MA 02790

SHEET | OF 7

REQUESTED WAIVERS:

THE FOLLOWING WAIVERS ARE REQUESTED FROM THE TOWN OF WESTPORT PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND:

1) SECTION IV, PART D, #II: WAIVER OF UP TO 38' FROM

THE 50' SETBACK REQUIREMENT FROM THE PROPERTY LINE
TO THE DETENTION BASIN. (PROPOSAL IS FOR THE DETENTION
BASIN TO BE SET BACK 12' FROM THE SOUTHERLY SIDE
PROPERTY LINE AND 26' FROM THE STREET LINE
OF MOUSE MILL ROAD.)

RECEIVE

NOV - 3 2020

WESTPORT
PLANNING BOARD

COVER SHEET

5 STAR COLLISION CENTER

ASSESSOR'S PLAT 35 LOT 3A 683A & 683B AMERICAN LEGION HIGHWAY WESTPORT, MASSACHUSETTS

DATE: NOVEMBER 20, 2019

Civil Engineering Concepts, Inc.

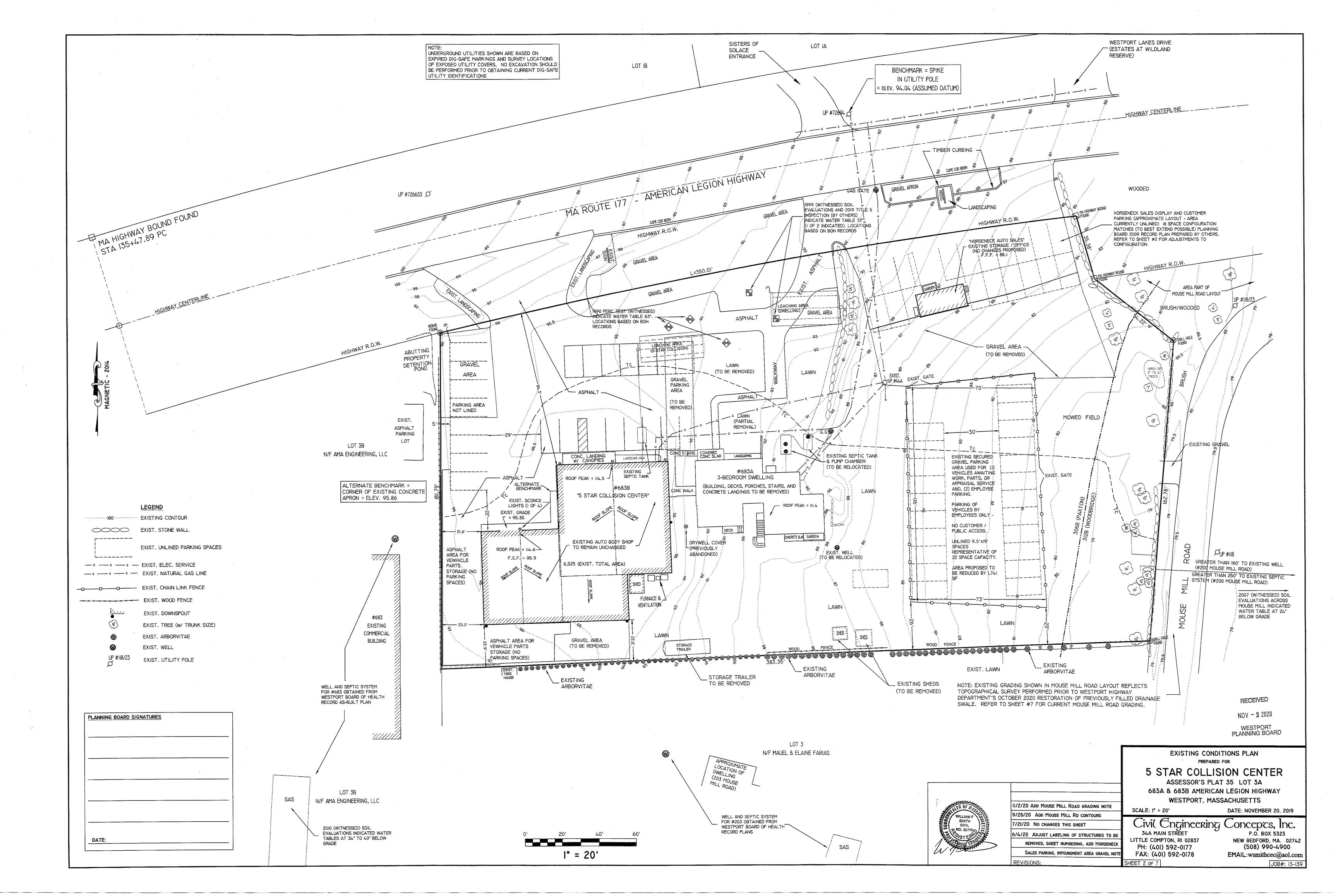
34A MAIN STREET
P.O. BOX 5323

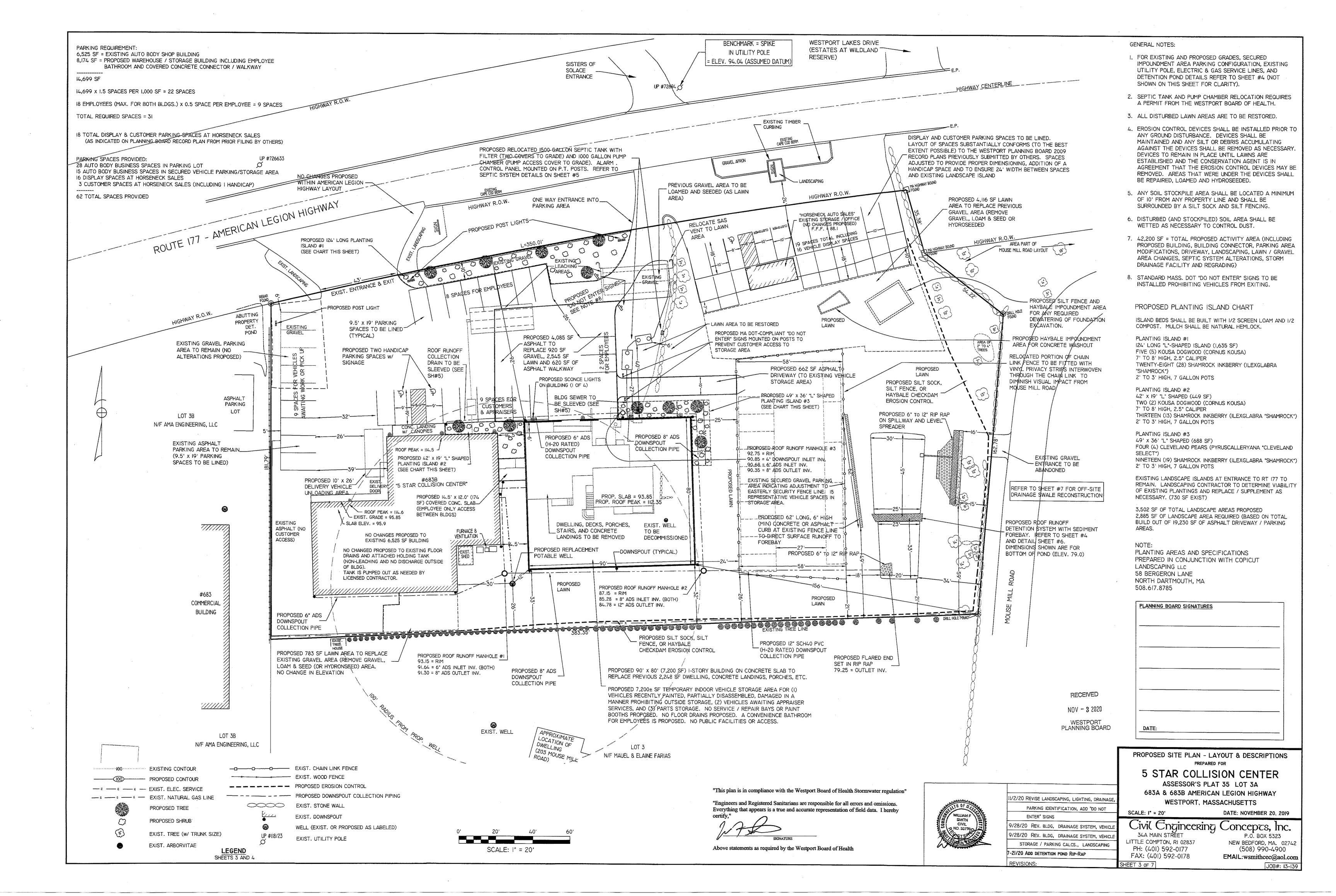
PH: (401) 592-0177
PAX: (401) 592-0178

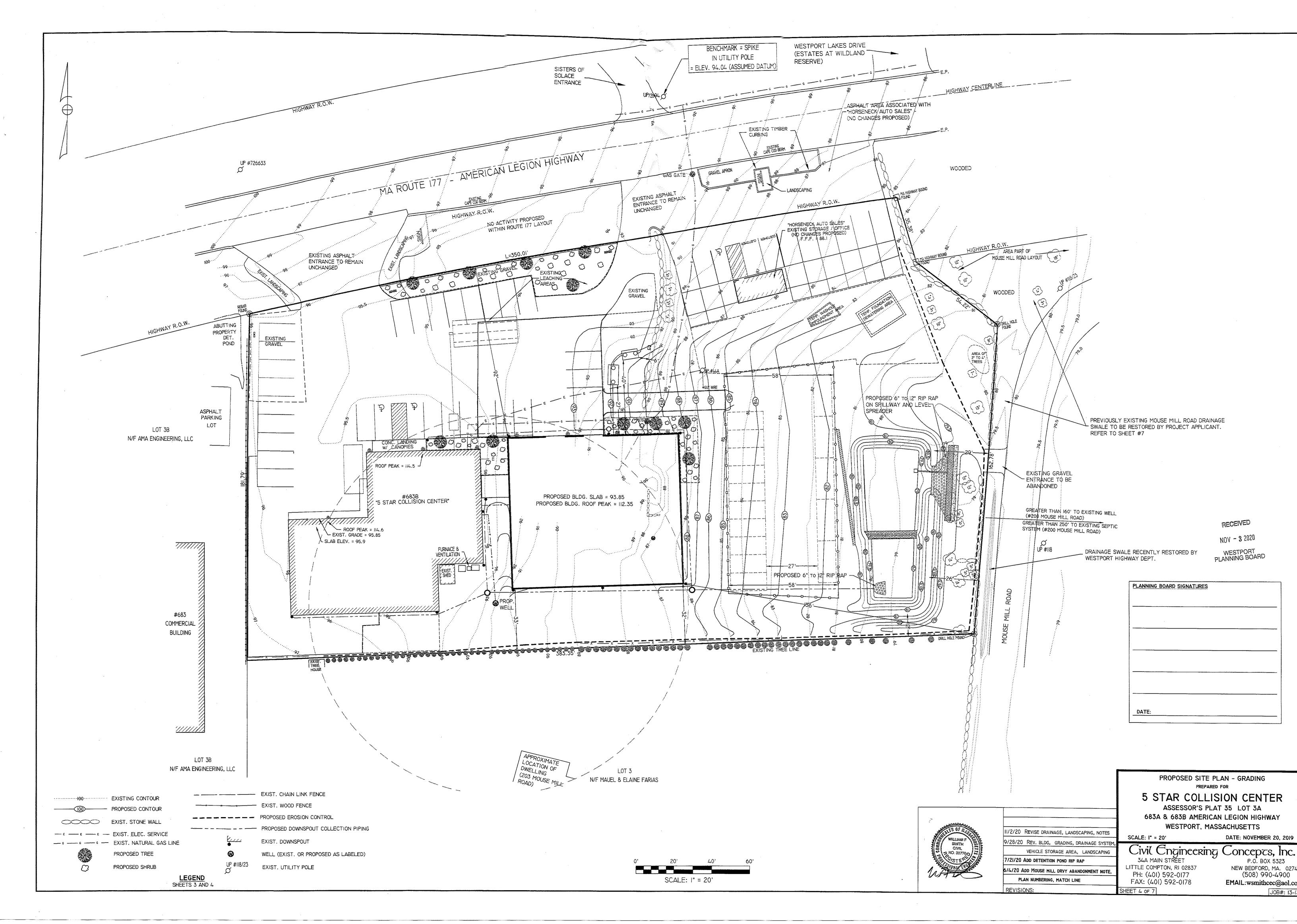
Concepts, Inc.
P.O. BOX 5323
NEW BEDFORD, MA. 02742
(508) 990-4900

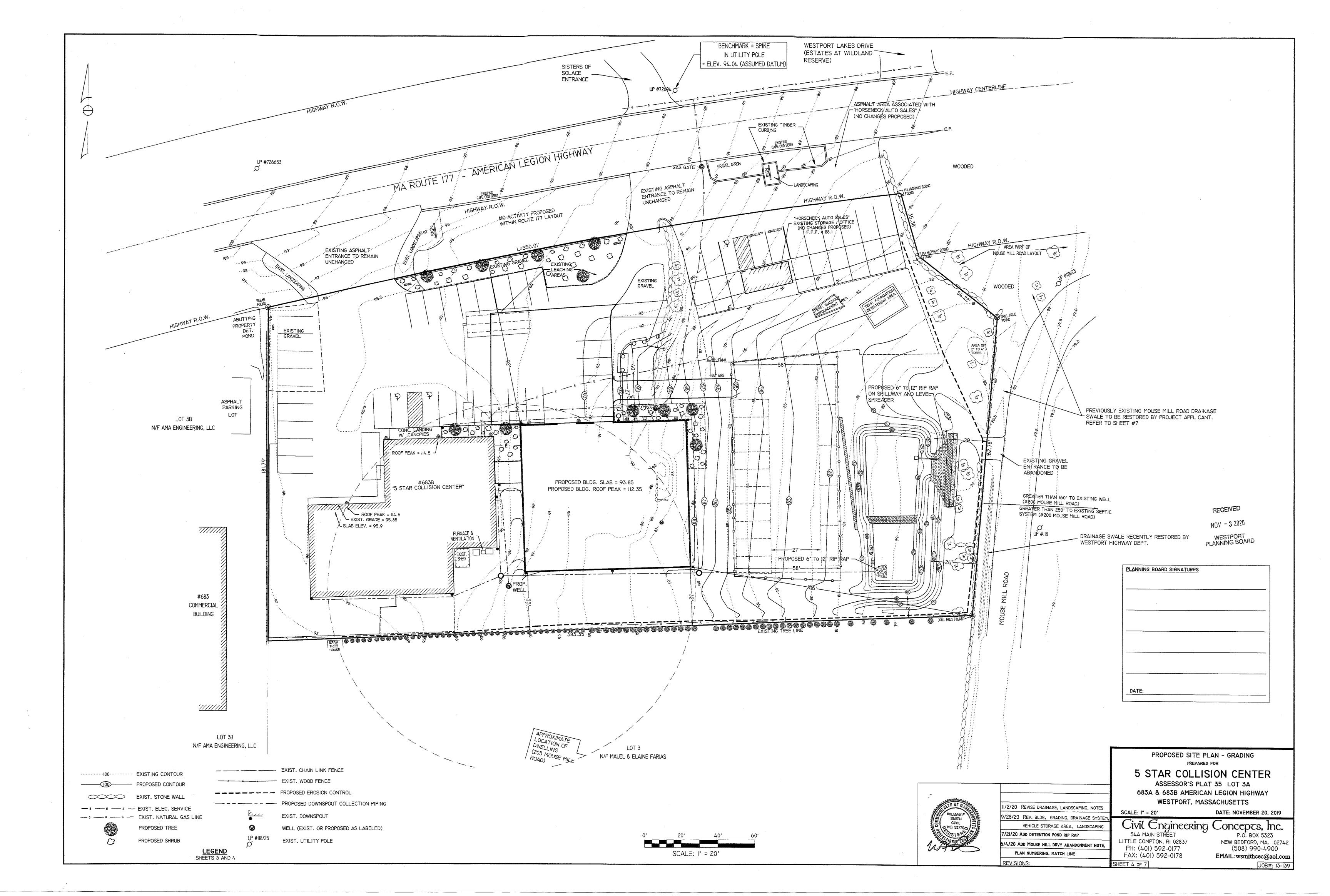
EMAIL: wsmithcec@aol.com

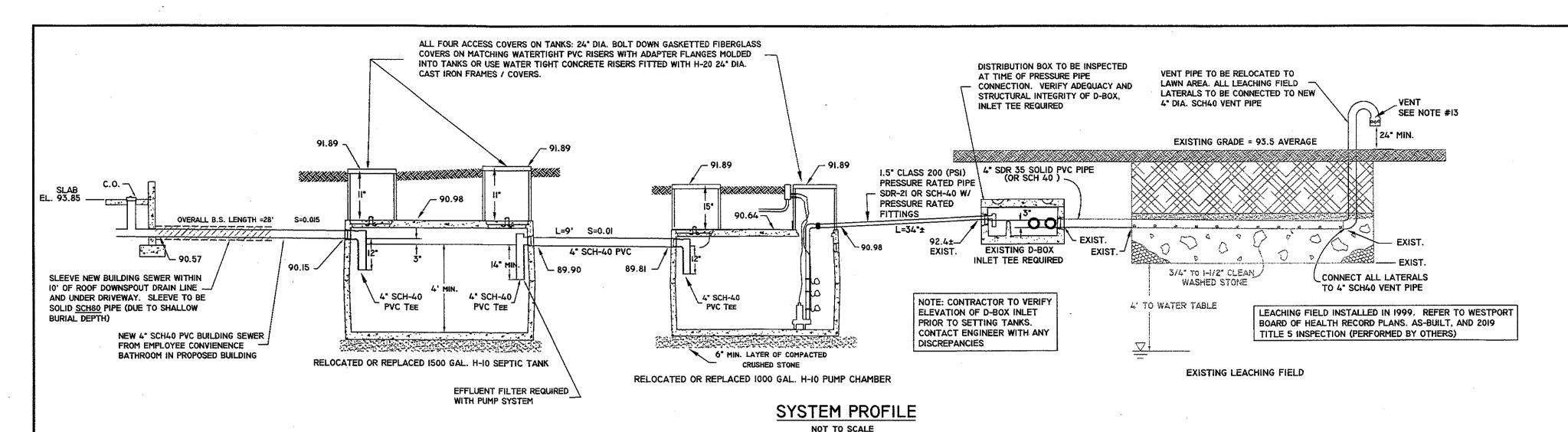
JOB#: 13-139 19-016SPA KeV. 3











ELEVATION SCHEDULE

***** 93.85....PROP. BUILDING SLAB 90.57....PROP. INV. AT FOUNDATION 90.15....PROP. INV. INTO SEPTIC TANK 89.90....PROP. INV. OUT OF SEPTIC TANK 89.81....PROP. INV. INTO PUMP CHAMBER 90.98....PROP. INV OUT OF PUMP CHAMBER 91.75....AVERAGE EXISTING GRADE AT TANKS

88.75....AVERAGE WATER TABLE AT TANKS * 92.4±...EXIST. INV. INTO D-BOX

* HIGHER OF THE FOLLOWING WATER TABLE DETERMINATIONS USED FOR CALCULATIONS:

88.75....AVERAGE WATER TABLE AT TANKS (BASED ON ABUTTING PROPERTIES SOIL EVALUATIONS)

86.50....AVERAGE WATER TABLE AT TANKS (BASED ON 1990 PERC TEST FOR 5-STAR BUILDING

85.75....AVERAGE WATER TABLE AT TANKS (BASED ON 1999 SOIL EVALUATION FOR CURRENT [DWELLING] SYSTEM AND 2019 TITLE 5 INSPECTION)

NOTE: CONTRACTOR TO VERIFY ELEVATION OF D-BOX INLET PRIOR TO SETTING TANKS. CONTACT ENGINEER WITH ANY DISCREPANCIES

BASIS OF SANITARY DESIGN *****************

EXISTING BUILDING USAGE: 3-BEDROOM RESIDENTIAL DWELLING EXISTING TITLE 5 SEWAGE FLOW: 330 GAL/DAY EXISTING SEPTIC SYSTEM DESIGN FOR 396 GAL/DAY (BASED ON WESTPORT

PROPOSED REPLACEMENT BUILDING: 8,000 SF STORAGE / WAREHOUSE w/ EMPLOYEE CONVENIENCE BATHROOM (NO PUBLIC ACCESS)

PROPOSED TITLE 5 SEWAGE FLOW (MAXIMUM USAGE):

200 GAL/DAY...<300 SF OFFICE WORK AREA / w/ CONVENIENCE BATHROOM AT 75 GAL/1,000 SF (200 GPD MIN.) 60 GAL/DAY...MAXIMUM OF 4 EMPLOYEES IN STORAGE WAREHOUSE AT 15 GAL/PERSON/DAY

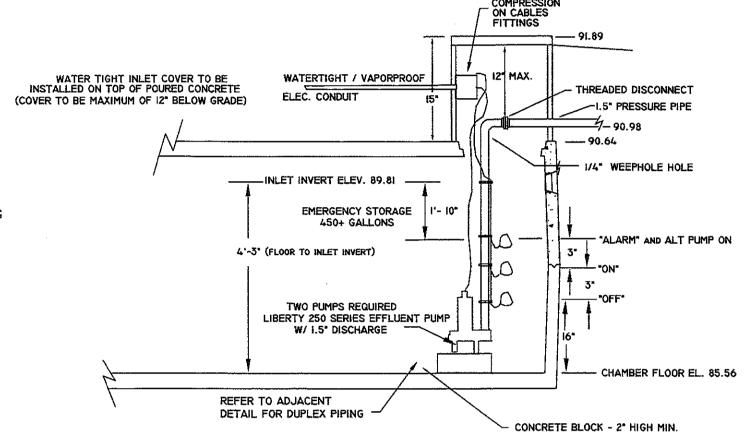
260 GAL/DAY TOTAL (MAX)

SEPTIC TANK SIZE: 1500 GALLON GARBAGE DISPOSAL: NOT PERMITTED

BOARD OF HEALTH RECORD PLANS)

PUMP CHAMBER: 1000 GALLONS

FOR ADDITIONAL INFORMATION PERTAINING TO THE EXISTING SEPTIC SYSTEM, REFER TO TITLE 5 OFFICIAL INSPECTION REPORTS PERFORMED BY OTHERS (ON FILE WITH THE WESTFORT BOARD OF HEALTH)



1000 GALLON PUMP CHAMBER DETAIL -PROFILE VIEW

SEPTIC TANK BUOYANCY CALCS. *******

Tank type: 1500 Gallon H-10 Tank Wt.: 12,400 lbs. Weight of Earth Cover (min. of 9" of soil on tank): 4,234 lbs. Upward lift (neglecting soil friction): 10.5' (length) x 5.66' (width) x 3.5' (max. submerged depth) x 62.4 lbs/c.f. = 12,980 lbs.

Safety factor: 12,400 + 4,23412.980 = 1.28 SEPTIC TANK BUOYANCY CALCS. *******

Tank type: 1000 Gallon H-10 Tank Wt.: 8,900 lbs. Weight of Earth Cover (min. of 12" of soil on tank): 4,572 lbs. Upward lift (neglecting soil friction): 8.75' (length) x 5.25' (width) x 3.5' (max. submerged depth) x 62.4 lbs/c.f. = 10.033 lbs.

THREADED DISCONNECT, OR COMBINED THREADED_

TEE CONNECTION

DISCHARGE PIPE

24" DIA. ACCESS

OPENING WITH 24"

RISER AND COVER

PUMP CHAMBER

AT GRADE

TO SINGLE 1.5"

DISCONNECT / SHUT OFF, ON EACH PIPE

DUPLEX PUMPS -

CHECKVALVE ON EACH

VERTICAL DISCHARGE PIPE

SHUT OFF ON EACH DISCHARGE PIPE TO

REMAINING PUMP OPERATIONAL

ALLOWFOR REMOVAL OF ONE PUMP WITH

DUPLEX PUMP DETAIL - PLAN VIEW

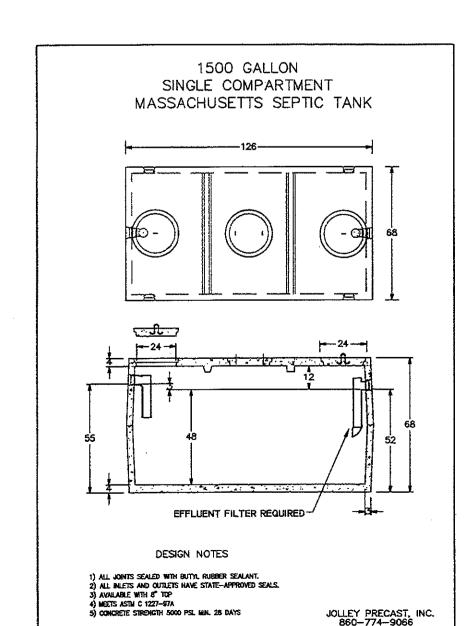
Safety factor: 8,900 + 4,57210,033

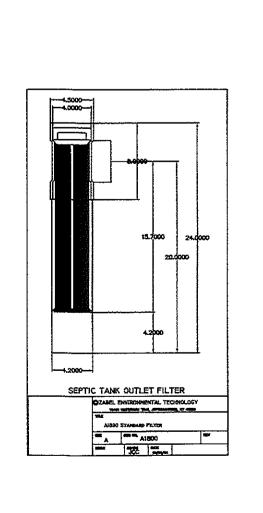
SEPTIC SYSTEM NOTES:

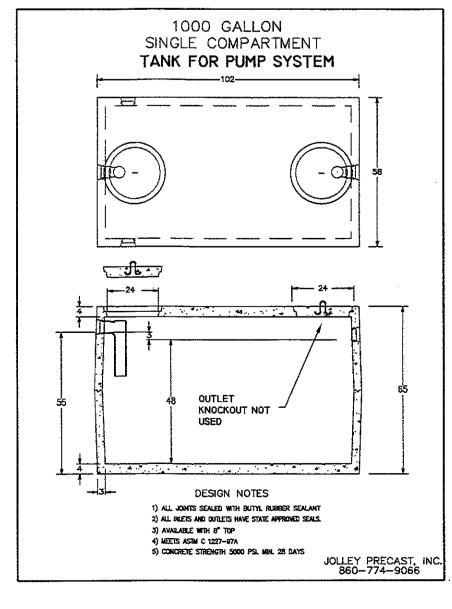
- * Refer to Official Title 5 Septic System Inspection reports, prepared by others and previously submitted to the Westport Board of Health, for additional information relative to existing septic system.
- 1. The proposed modifications to be the existing sanitary sewage disposal system indicated shall be constructed in compliance with all applicable local Board of Health regulations and 310 CMR 15 (TITLE V) of the State Environmental Code, as most recently amended. Any modification to this design must be approved by the engineer and the local Board of Health.
- 2. Benchmark(s), as shown on Existing Conditions Plan, shall be verified by the Contractor prior to construction of the proposed system. Contractor is responsible for notifying Engineer if Benchmark appears disturbed or to have the Benchmark relocated prior to any site disturbance.
- 3. Notify the local Board of Health when the installation of the relocated septic tank and pump chamber are ready for inspection, prior to any backfilling of the tanks or and replaced piping. Design engineer requires 3 day advanced notification for scheduling the necessary survey work as part of the as-built plan (required by the BOH).
- 4. All septic system proposed elevations indicated are minimums. Elevations may be raised but not lowered without the consent of the engineer.
- 5. This system is not designed for use of a garbage disposal or other high water usage devices. Any water treatment / softening units added to the potable well, that generate high volumes of liquid by-product to the septic system, may significantly reduce septic system life expectancy and therefore is not permitted.
- 6. Any components of the proposed system that are specified as heavy duty shall conform to all state and local requirements for AASHTO H-20 loading.
- 7. The existing septic tank may be removed and reused provided the tank is 1500 gallons (min) capacity and is structurally sound and water tight. Any tank having a concrete outlet tee may not be reused. Any replacement septic tank shall be 1500 gallons conforming to 310 CMR 15.223 through 15.228, and fitted with PVC schedule 40 inlet tee and outlet tee with outlet filter. A replacement tank will require a decommissioning permit be obtained from the BOH by the contractor. The Septic Tank inlet and outlet covers shall be built up to finished grade with a water tight riser and cast iron frame/cover or bolt down, gasketted poly/fiberglass cover on matching risers and adapter flanges may be used. An outlet filter is required to be installed due to the existence of a pump chamber. Any knock-out hole (bung hole) in the bottom of the tank shall remain sealed. Tank shall be placed on 6" layer of 3/4" stone.
- 8. The existing pump chamber may be removed and reused provided the tank is 1000 gallons (min) capacity, is structurally sound and water tight, and has an outlet access opening sufficiently sized to accommodate duplex pump system. Any replacement pump chamber shall be 1000 gallons conforming to 310 CMR 15.223 and 15.231. A replacement pump chamber will require a decommissioning permit be obtained from the BOH by the contractor.
- 9. The pump chamber pump access cover shall to built up to finished grade with a water tight POLY / PVC riser and bolt down, gasketted matching poly/fiberglass cover. Proper sized grommet to be used where pressure pipe exits out through the riser. The electrical connection box shall be located inside the riser within 12" of the cover. Poly riser with manufacturer-attached water proof exterior electrical connection box with water tight threaded cover at grade is allowed. Any knock-out hole (bung hole) in the bottom of the tanks shall remain sealed. Tank shall be placed on 6" layer of 1" stone.
- 10. Pump system alarm / control panel shall be mounted on P.T. posts within view of the pump access cover. Panel may only be mounted indoors if adjacent to a door or window (that can be opened) and within clear view of the pump access cover.
- 11. All tank seams, riser connections (if any) and all plumbing joints are to be installed 100% watertight, sealed with suitable gasket material, asphalt cement or other cement suitable for that specific component. The life span of the system would be compromised by the intrusion of any groundwater.
- 12. Heavy equipment shall not be driven over the septic tank or pump chamber.
- 13. The distribution box shall be inspected at the time of connection to the relocated pump chamber. An inlet tee is required on the inlet pressure pipe. D-box shall be replaced if found to be defective. D-box shall be fitted with a riser and cast iron frame / cover at grade. Any replacement D-box shall be H-20 rated due to proximity of the driveway.
- 14. The existing damaged vent pipe located at the end of the leaching field is to be relocated to the lawn area as shown on the site plan. Vent piping to be 4" dia. SCH40 PVC and shall be connected to the ends of all leaching field laterals and sloped up to the vent. Vent to be equipped with insect screen or suitable charcoal filter.

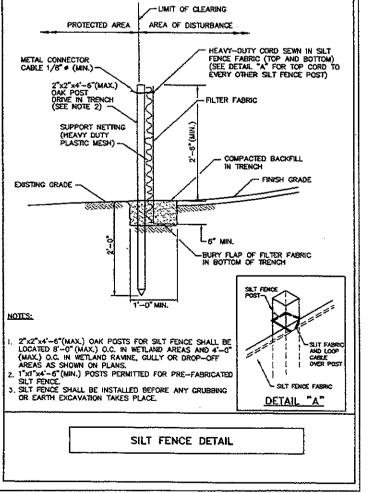
GENERAL CONSTRUCTION NOTES:

- 15. No activity is proposed within the Highway layout.
- 16. Erosion control shall be installed prior to any site activity and shall remain in place and be maintained until all activities are completed, inspections performed, and vegetation established.
- 17. Any substantial silt accumulation against the erosion control is to be removed by hand labor.
- 18. All construction litter and debris is to be removed from the vicinity of the erosion control line daily.
- 19. Proposed Handicap parking spaces shall comply with MA. DOT and all applicable Federal requirements as to signage, painted linework, and accessibility into the existing building. 20. "DO NOT ENTER" and "HANDICAP PARKING" signage shall conform with US DOT FHA manual on Uniform Traffic Control Devices. Two handicap parking signs and two do not enter signs are required for the project.
- 21. Any relocation of the underground gas line and electric line to the proposed building shall have suitable tracing wire or tape placed above the replacement utilities to facilitate future identification. Contractor is responsible for securing the necessary permits for the utility work.
- 22. Any existing underground utilities shown are approximate only and are based on previous Dig-Safe marking or visual evidence of utilities. Contractor is responsible for obtaining current Dig-Safe mark-out prior to any excavation.
- 23. Composition of the proposed additional asphalt parking area shall conform to Westport Planning Board requirements for Rural Residential Lane.

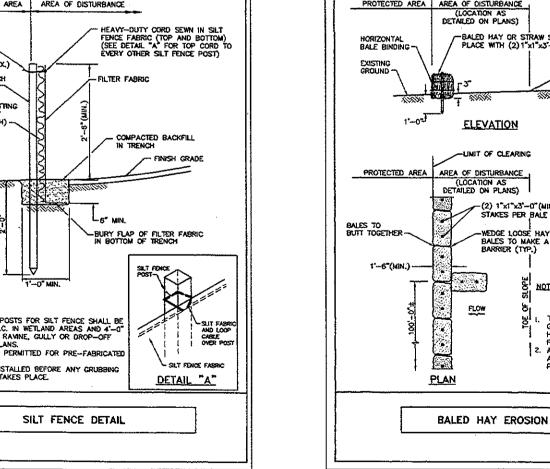




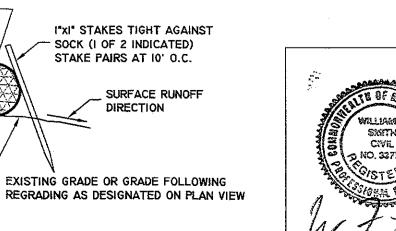




COMPOST FILTER SOCK COMPOST FILTER SOCK MATERIAL SHALL BE IN - SOCK (I OF 2 INDICATED) ACCORDANCE WITH AASHTO DESIGNATION: MP 9-06 STAKE PAIRS AT 10' O.C. (2007 OR LATEST EDITION). COMPOST FILTER MATERIAL SHALL BE IN ACCORDANCÉ WITH AASHTO DESIGNATION: MP9-06 (2007 OR LATEST REVISION). COMPOST MATERIAL SHALL ALSO MEET ALL APPLICABLE FEDERAL AND STATE REGULATIONS. FOR COMPOST FILTER SOCKS 18 INCHES OR LESS IN DIAMETER, WOODEN STAKES SHALL BE 1 INCH BY 1 INCH, AT 10 FOOT INTERVALS ON CENTER, AND OF A LENGTH THAT SHALL PROJECT INTO THE SOIL 1 FOOT LEAVING 3 INCHES TO 4 INCHES EXISTING GRADE OR GRADE FOLLOWING PROTRUDING ABOVE THE TOP OF THE FILTER SOCK.



DIRECTION



PROTECTED AREA AREA OF DISTURBANCE TO BE USED WHERE THE EXISTING GROUND SLOPES AWAY FROM THE HIGHWAY EMBANICAENT AS CALLED FOR ON PLANS.

AT APPROXIMATE 100"—0" INTERVALS A BALE OF HAY IS TO BUTT DEPOPLY IN A BALE OF HAY IS TO BUTT BALED HAY EROSION CHECK

SEPTIC SYSTEM DETAIL SHEET

RECEIVED

NOV - 3 2020

WESTPORT

PLANNING BOARD

PLANNING BOARD SIGNATURES

PREPARED FOR 5 STAR COLLISION CENTER ASSESSOR'S PLAT 35 LOT 3A 683A & 683B AMERICAN LEGION HIGHWAY

WESTPORT, MASSACHUSETTS SCALE: NONE

SHEET 5 OF 7

DATE: NOVEMBER 20, 2019 Civil Engineering Concepts, Inc.

34A MAIN STRÉET P.O. BOX 5323 LITTLE COMPTON, RI 02837 PH: (401) 592-0177 FAX: (401) 592-0178

NEW BEDFORD, MA. 02742 (508) 990-4900 EMAIL:wsmithcec@aol.com JOB#: 13-139

CIVIL

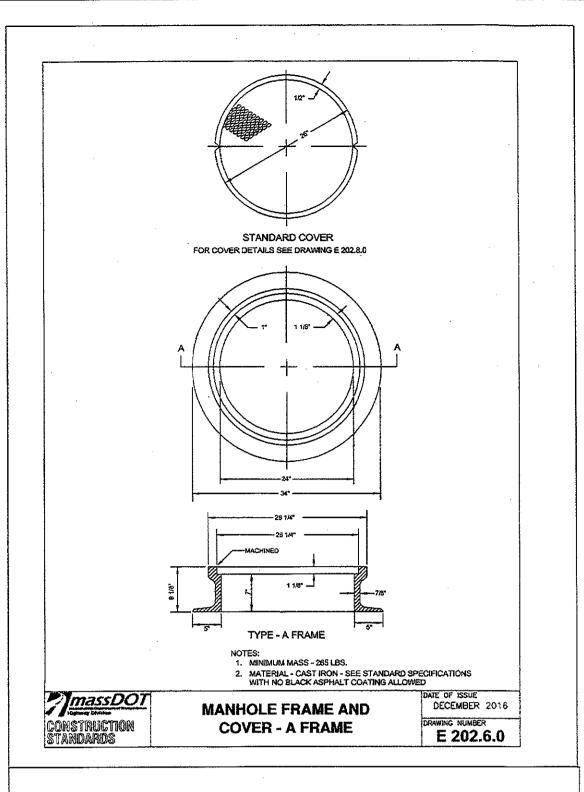
11/2/20 No CHANGES THIS SHEET

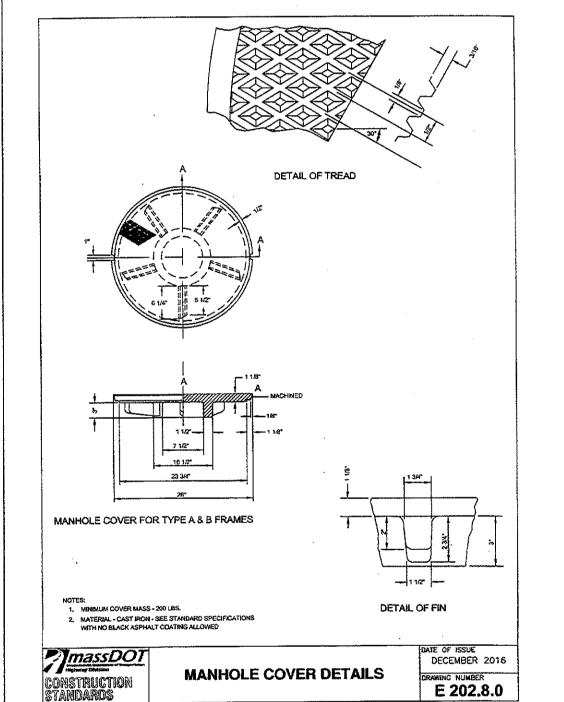
9/28/20 No changes this sheet

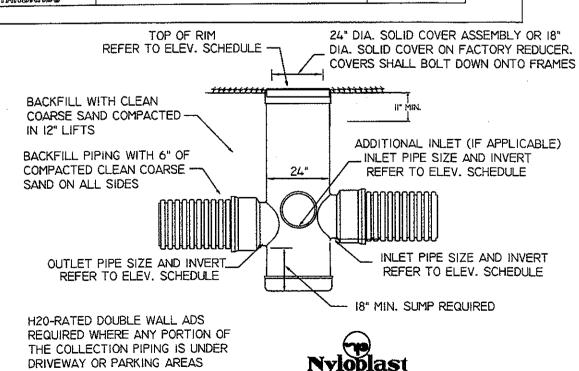
7/21/20 No CHANGES THIS SHEET

6/4/20 PLAN NUMBERING

REVISIONS:

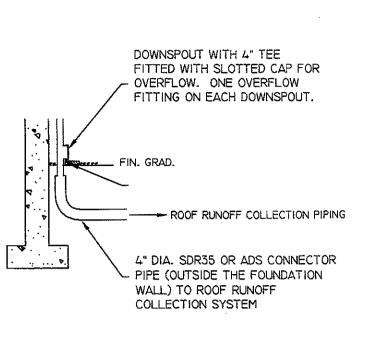






A 24" MINIMUM DIAMETER NYLOPLAST MANHOLE MAY BE USED FOR ROOF RUNOFF COLLECTION MANHOLES #1 - #3. ALTERNATELY, STANDARD 4' DIA. CONCRETE MANHOLES MAY BE USED

ROOF RUNOFF COLLECTION MANHOLE - NON-TRAFFIC AREAS NOT TO SCALE



DOWNSPOUT CONNECTOR DETAIL

MANHOLE #3:

92.75.....RIM

90.68.....INV. 6" INLET

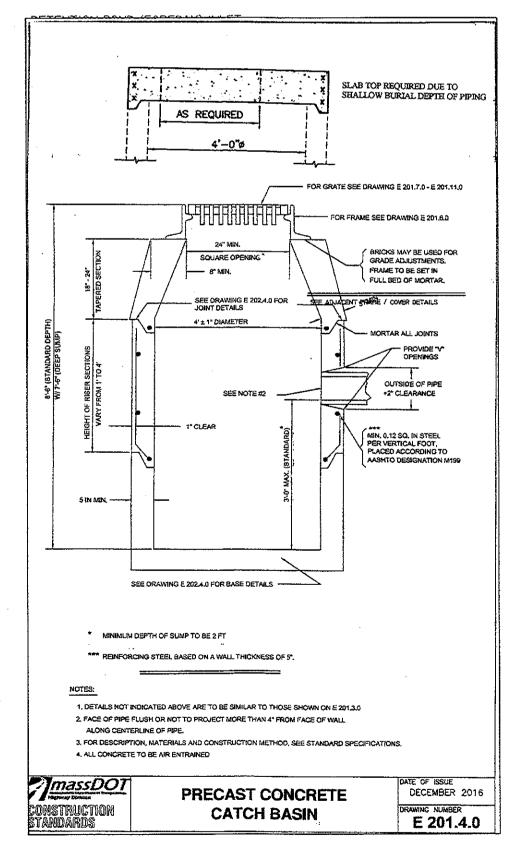
90.35......INV. 8" OUTLET

88.85.....BOTTOM OF SUMP

90.85.....INV. 4" INLET FROM DOWNSPOUT

NOT TO SCALE

ROOF RUNOFF COLLECTION PIPING / MANHOLE ELEVATION SCHEDULE NOTE: ALL ADS PIPING EXCEPT IZ" DISCHARGE TO FOREBAY WHICH SHALL BE SCH40 PVC DUE TO SHALLOW BURIAL DEPTH MANHOLE #1: 91.64INV. 6" INLET (BOTH) 91.30INV. 8" OUTLET 89.80BOTTOM OF SUMP MANHOLE #2: 87.15RIM 85.28INV. 8" INLET (BOTH) 84.78.....INV. I2" OUTLET 83.28.....BOTTOM OF SUMP



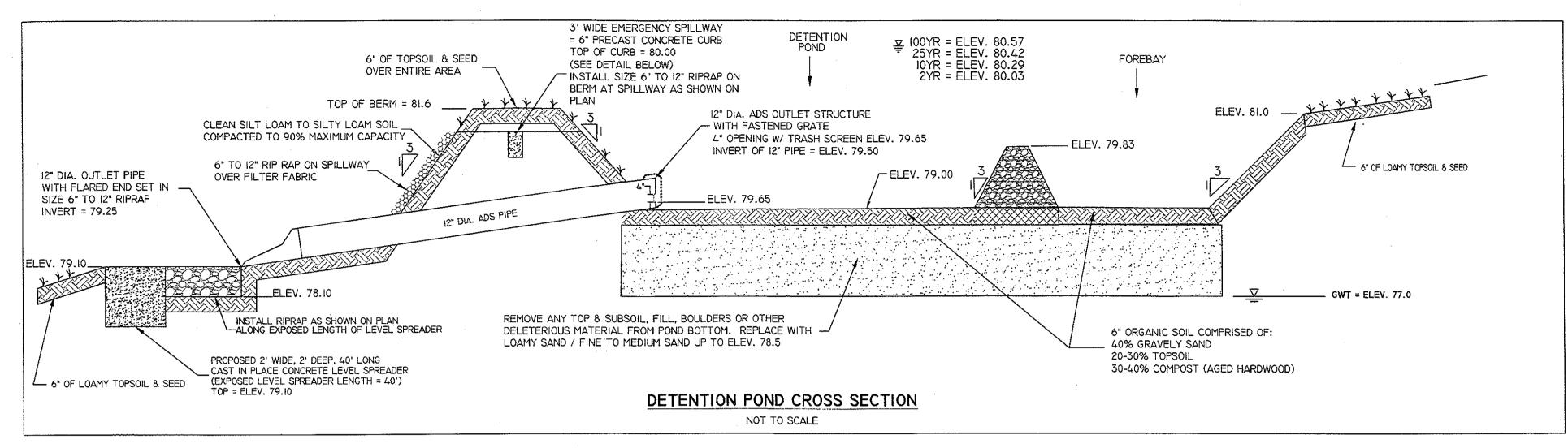
CONCRETE MANHOLE DETAIL

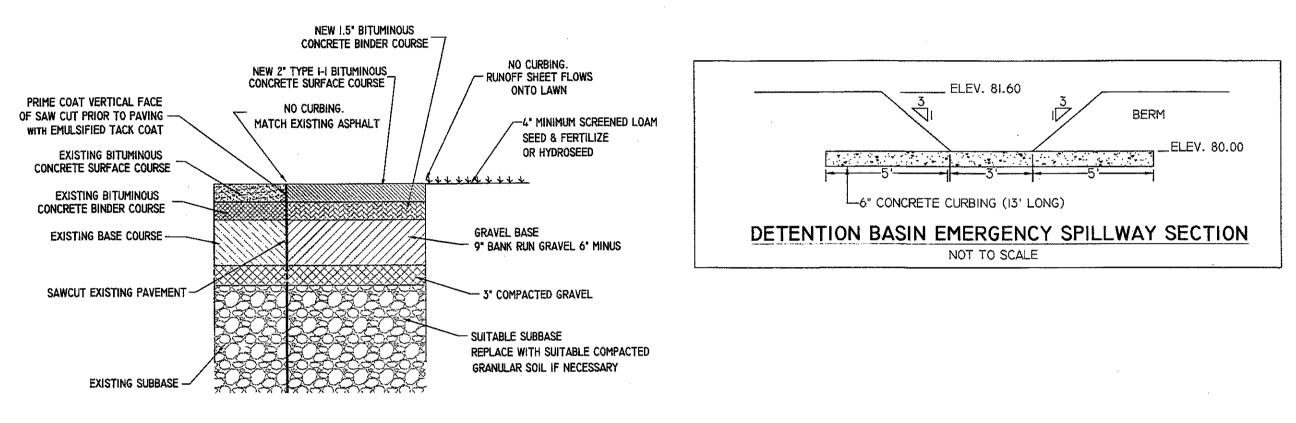
OPTIONAL ALLOWABLE SUBSTITUTION - MAY BE USED IN PLACE OF THE DESIGNATED NYLOPLAST MANHOLES WHERE RIM AND INVERT ELEVATIONS PERMIT

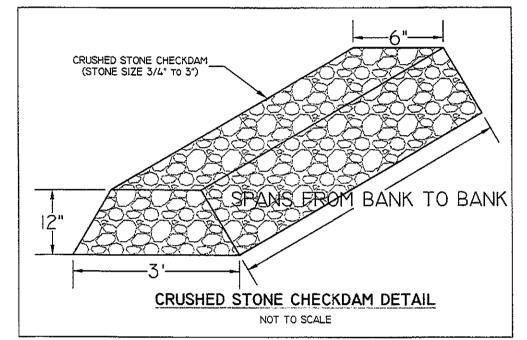
E 201.4.0 CATCH BASIN-STYLE MANHOLE WITH A SOLID COVER AND SUMP, USED AS AN INTERCEPTOR MANHOLE (IN PLACE OF THE SPECIFIED NYLOPLAST BASIN) IN THE ROOF RUNOFF COLLECTION PIPING SYSTEM.

FOR ROOF RUNOFF COLLECTION SYSTEM, A 12" MINIMUM SUMP IN EACH ROOF RUNOFF MANHOLE MAY BE USED.

A SOLID COVER MUST BE USED. GRATE NOT PERMITTED.

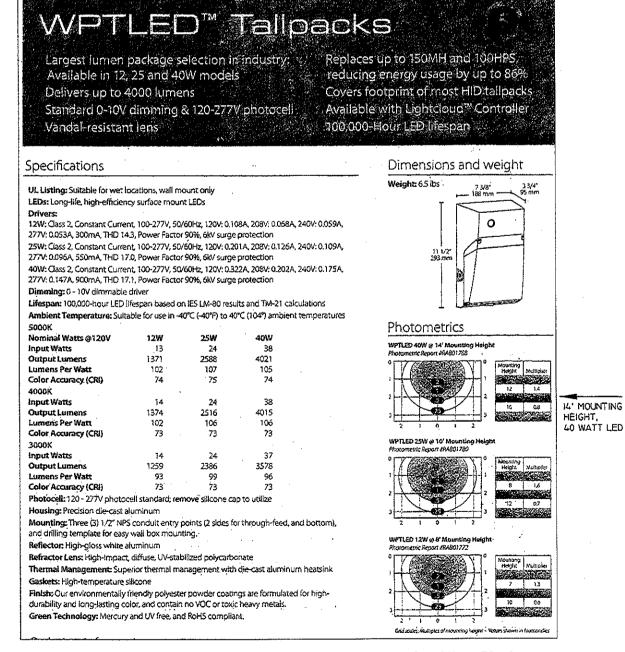




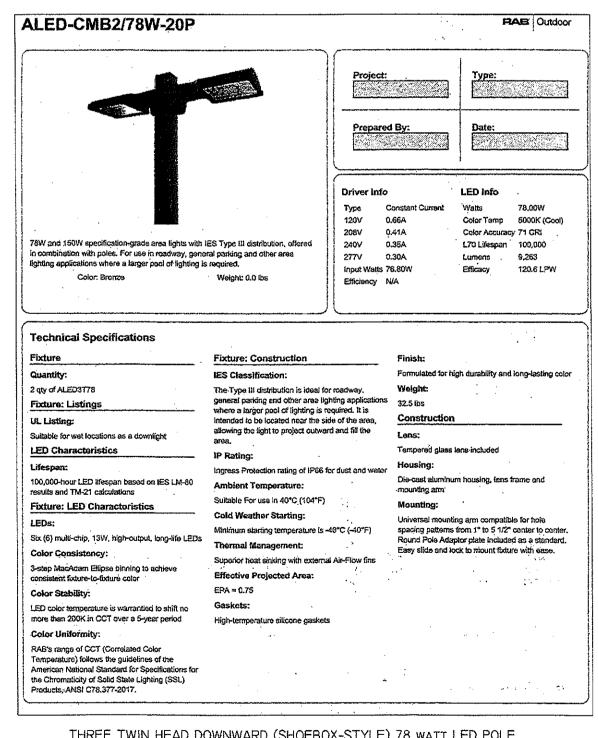


STAKED SILTATION FENCING

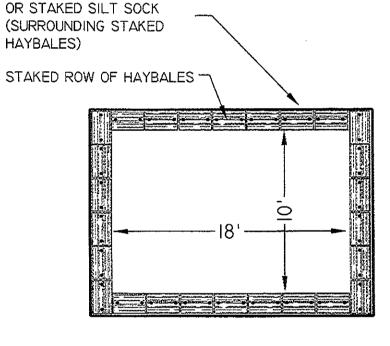
PARKING LOT ASPHALT DETAIL (NOT TO SCALE)



FOUR 40 WATT LED SCONCE-TYPE WALL MOUNT LIGHTS INSTALLED 12' ABOVE BUILDING FLOOR ELEVATION (14'+/- ABOVE AVERAGE OUTSIDE FINISHED GRADE). LOCATIONS AS SHOWN ON SHEET #3



THREE TWIN HEAD DOWNWARD (SHOEBOX-STYLE) 78 WATT LED POLE LIGHTS. LOCATIONS AS SHOWN ON SHEET #3



DEWATERING AREA DETAIL NOT TO SCALE

•			<u></u>	
		 ·		
DATE:				

DRAINAGE SYSTEM AND LIGHTING DETAILS

5 STAR COLLISION CENTER

ASSESSOR'S PLAT 35 LOT 3A 683A & 683B AMERICAN LEGION HIGHWAY WESTPORT, MASSACHUSETTS

PREPARED FOR

SCALE: NONE DATE: NOVEMBER 20, 2019 Civil Chaineering 34A MAIN STRÉET

SHEET 6 OF 7

Concepts, Inc. P.O. BOX 5323 LITTLE COMPTON, RI 02837 NEW BEDFORD, MA. 02742 (508) 990-4900 PH: (401) 592-0177 FAX: (401) 592-0178 EMAIL:wsmithcec@aol.com JOB#: 13-139

SMITH CIVIL

11/2/20 REVISE SPILLWAY, LEVEL SPREADER 9/28/20 REVISE STORM DRAINAGE DETAILS 7/21/20 REVISE DETENTION POND DETAIL 6/4/20 ADD PAVEMENT DETAIL, PLAN NUMBERIN

RECEIVED

NOV - 3 2020

WESTPORT PLANNING BOARD

