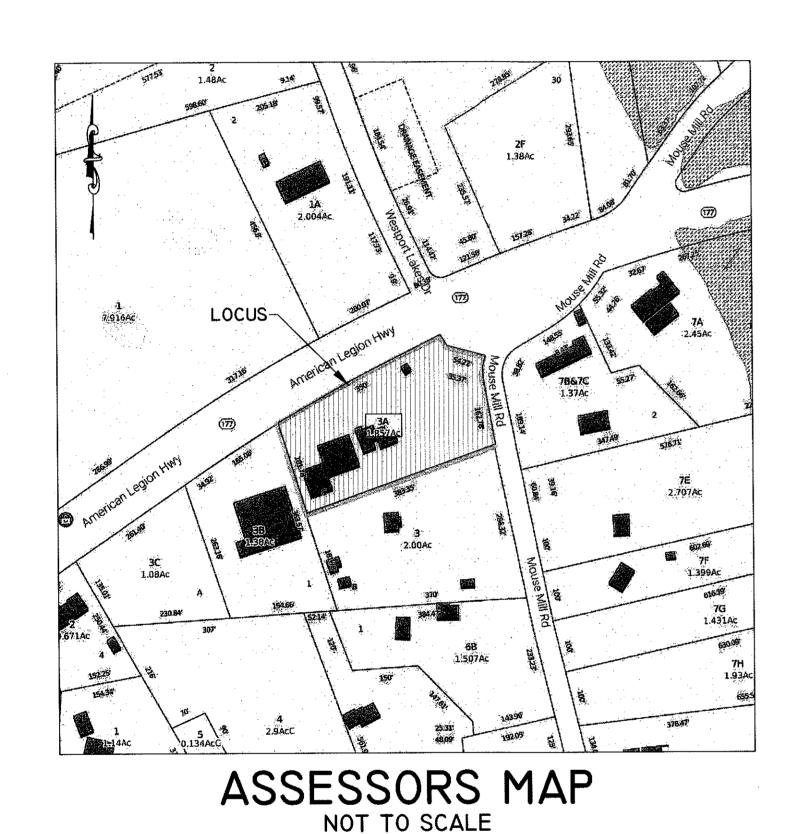
# COMMERCIAL PROJECT - EXPANSION PLAN 5-STAR COLLISION CENTER

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

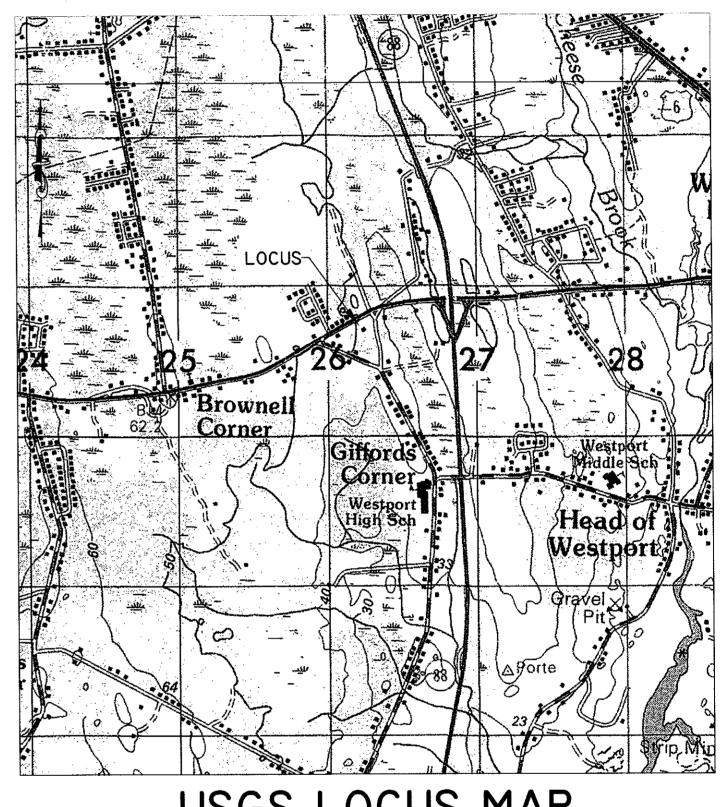
SHEET 3 PROPOSED SITE PLAN - LAYOUT, DESCRIPTIONS, AND

BOARD OF HEALTH CERTIFICATION

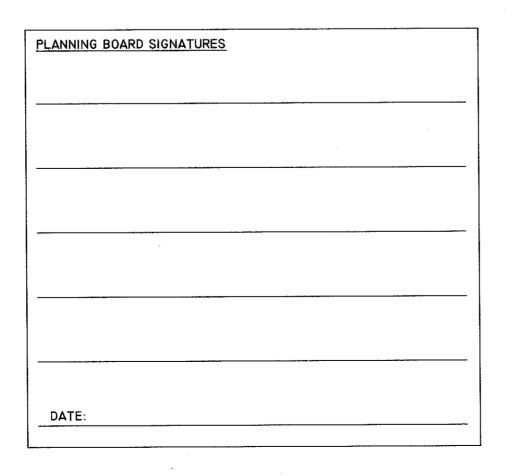
PROPOSED SITE PLAN - GRADING SHEET 4

DETAIL SHEET - SEPTIC SYSTEM AND EROSION CONTROL SHEET 5

DETAIL SHEET - STORM DRAINAGE AND LIGHTING DETAILS SHEET 6



USGS LOCUS MAP  $I'' = 2083' \pm$ 



| 0012131110 | , , , , , _ |
|------------|-------------|
| I) SECTION | IV, P       |
| THE 50'    | SETBA       |

OF WESTPORT PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND: ART D, #II: WAIVER OF UP TO 38' FROM

REQUESTED WAIVERS:

ACK 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.)

THE FOLLOWING WAIVERS ARE REQUESTED FROM THE TOWN

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

# 0/28/20: DELETE SHEET 7, DELETE RUNOFF VARIANC

7/21/20: NO REVISIONS THIS SHEET PH: (401) 592-0177 FAX: (401) 592-0178 6/9/20; ADD SHEET 7 SHEET | OF 6

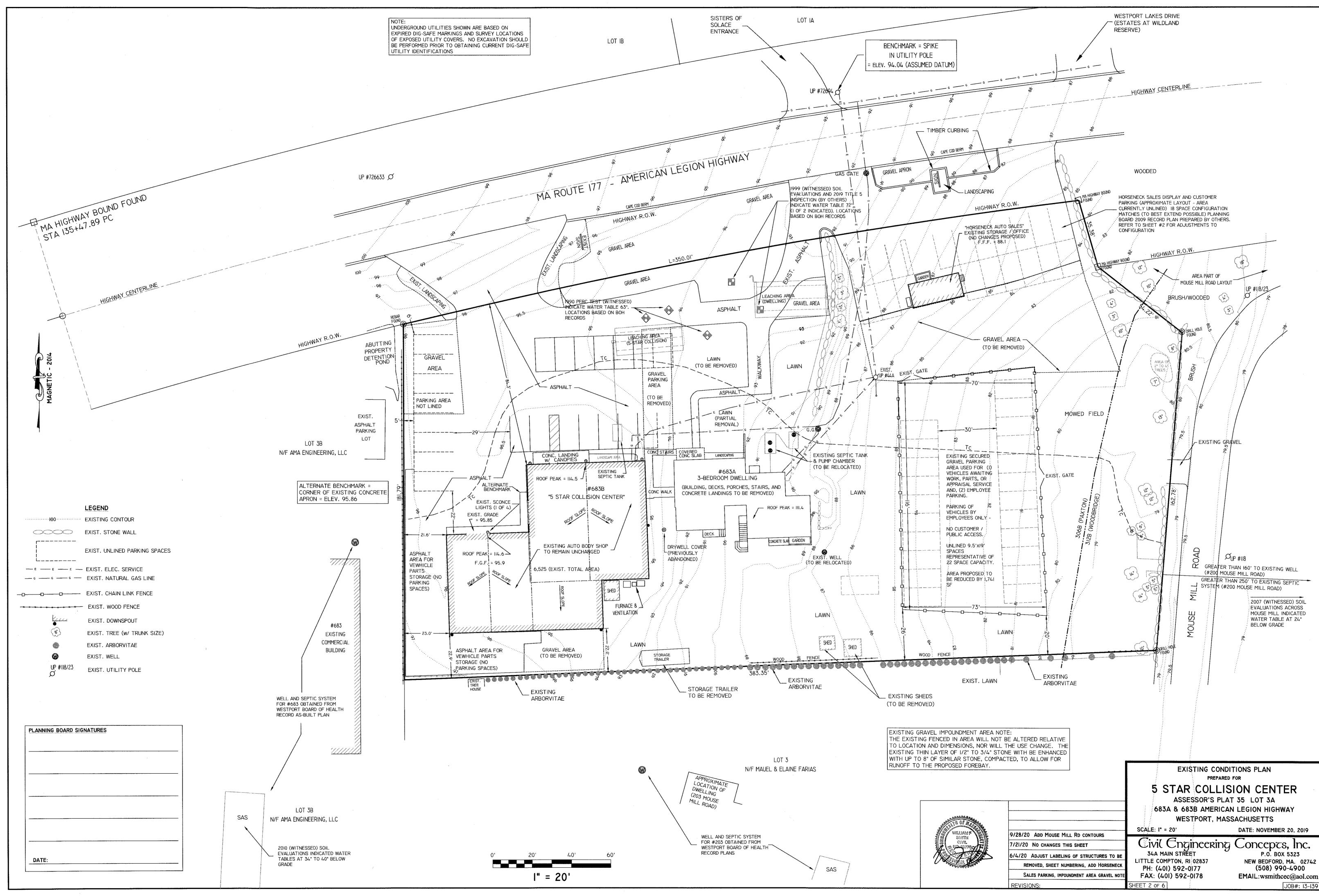
PREPARED FOR 5 STAR COLLISION CENTER ASSESSOR'S PLAT 35 LOT 3A 683A & 683B AMERICAN LEGION HIGHWAY

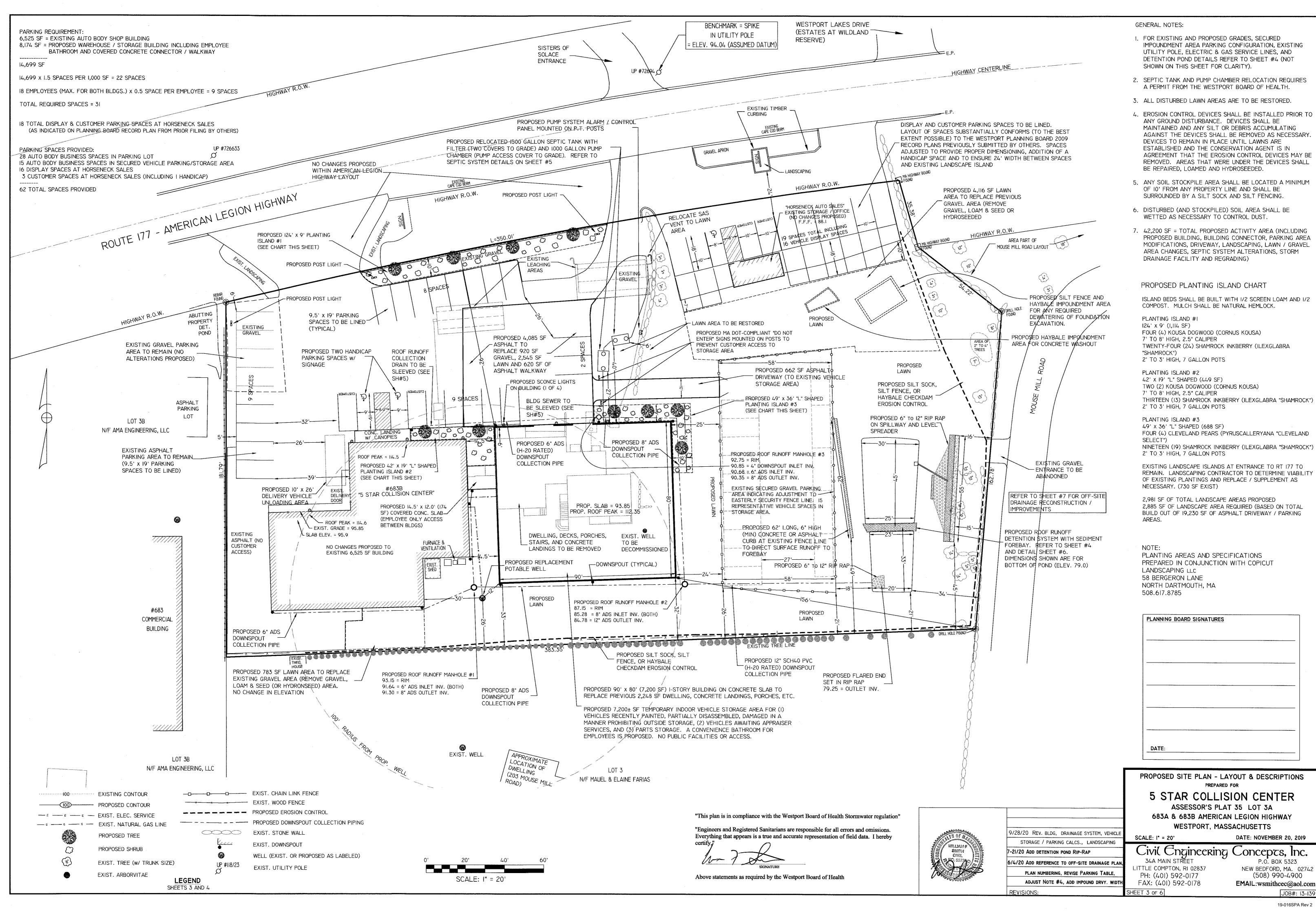
COVER SHEET

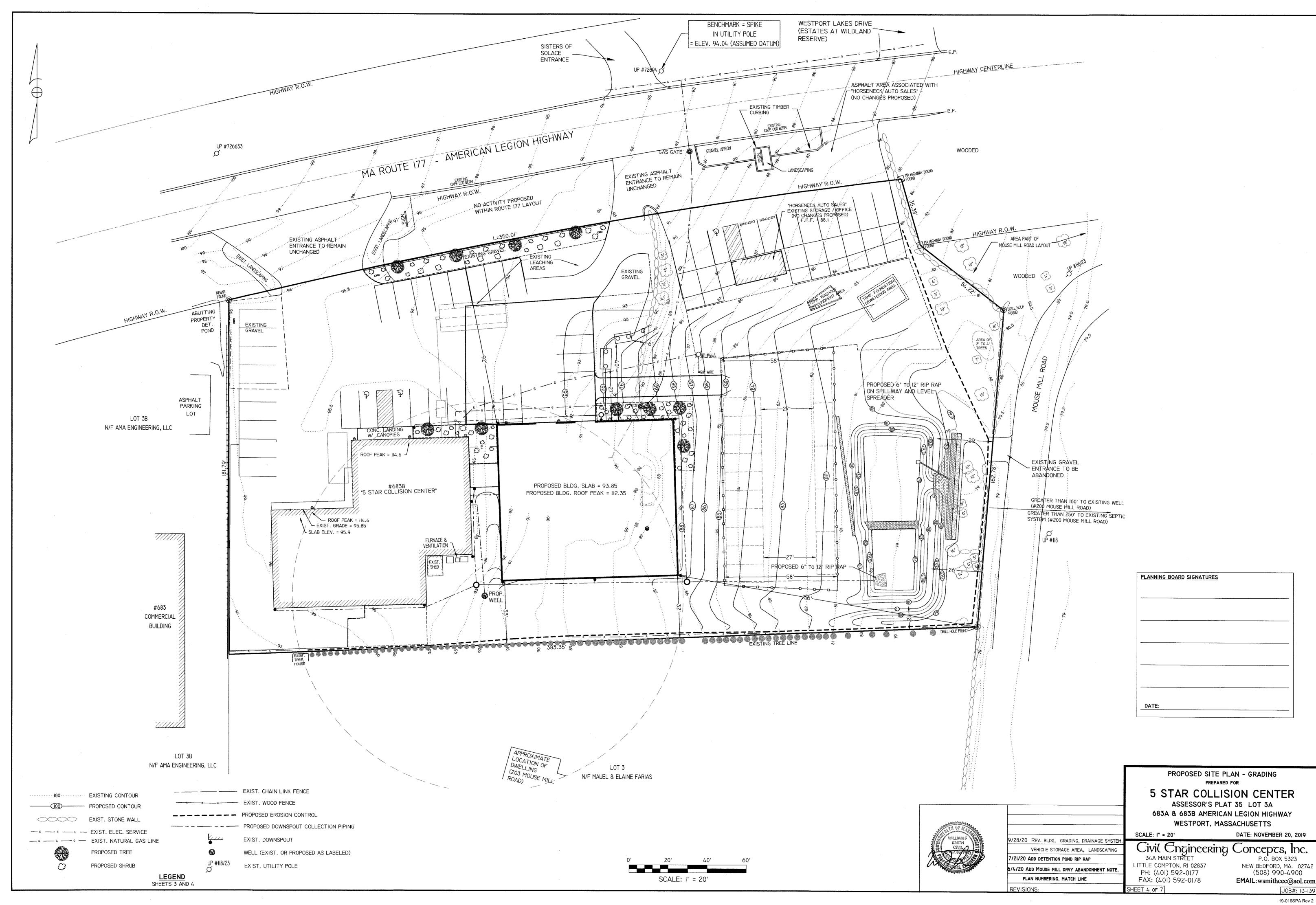
DATE: NOVEMBER 20, 2019 Civil Engineering Concepts, Inc. 34A MAIN STREET P.O. BOX 5323 LITTLE COMPTON, RI 02837

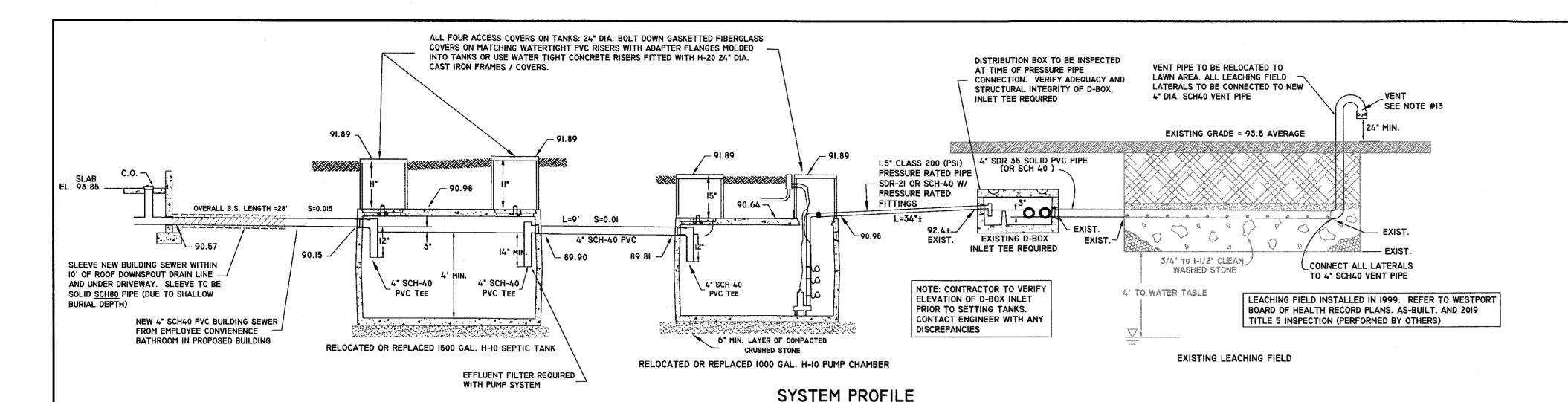
WESTPORT, MASSACHUSETTS

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









NOT TO SCALE

### **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

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)

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

### 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

BOARD OF HEALTH RECORD PLANS)

## 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 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 WESTPORT BOARD OF HEALTH)

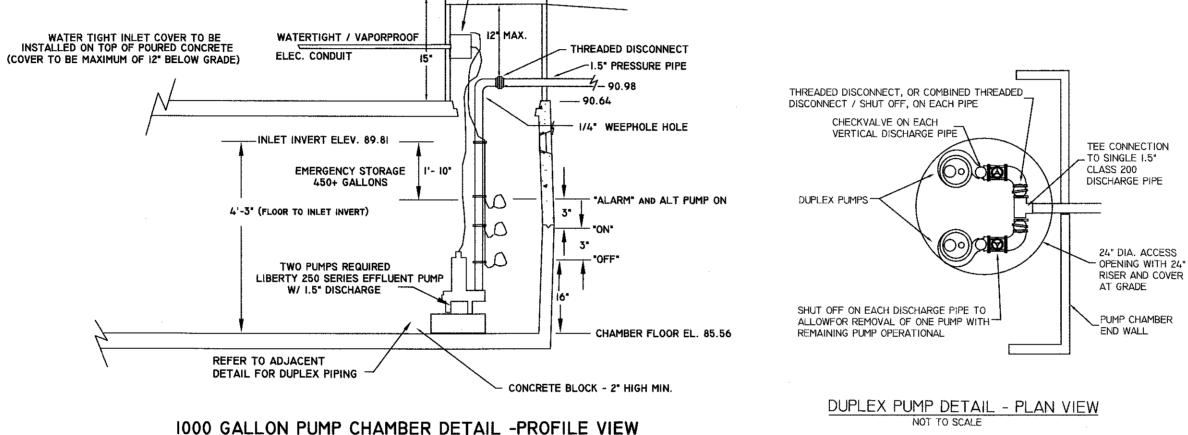
SEPTIC TANK BUOYANCY CALCS. \*\*\*\*\*\*\*

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.

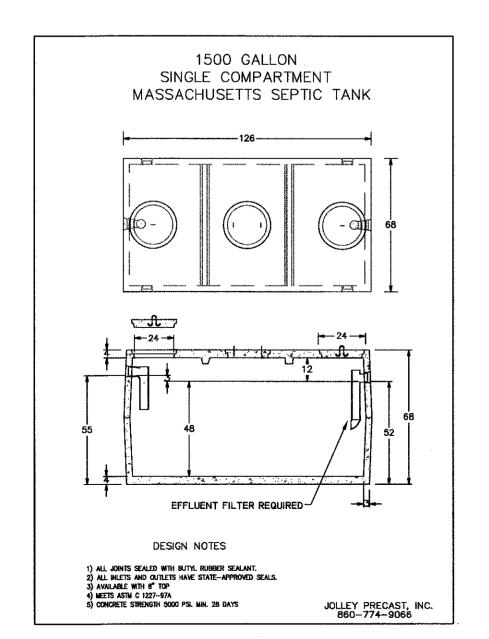
Safety factor: 12,400 + 4.23412,980 = 1.28

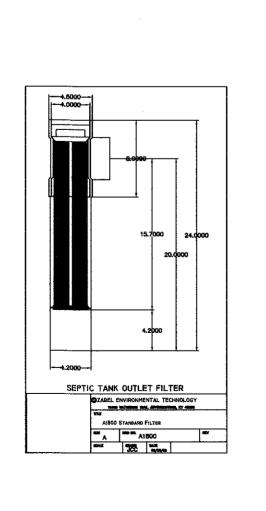
### SEPTIC TANK BUOYANCY CALCS. \*\*\*\*\*\*

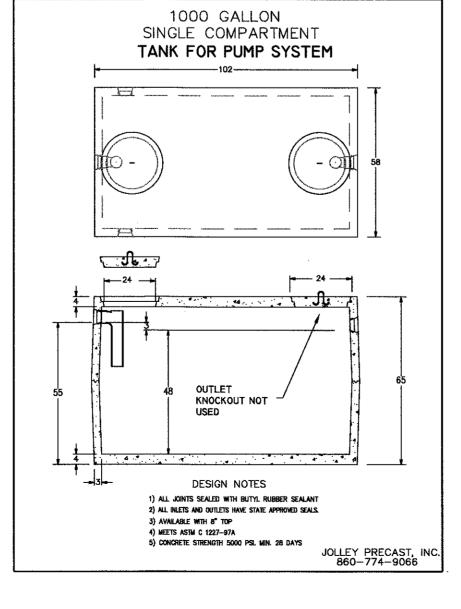
Safety factor: 8,900 + 4,57210,033

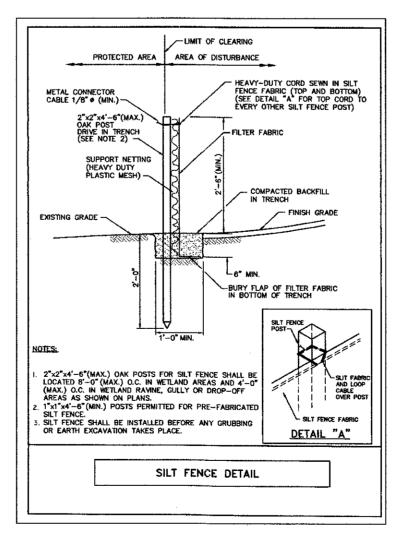


Tank type: 1000 Gallon H-10 Tank Wt.: 8,900 lbs. Weight of Earth Cover (min. of 12" of soil on tank): 4,572 lbs. Upward lift (neglecting soil friction): 8.75' (length) x 5.25' (width) x 3.5' (max. submerged depth) x 62.4 lbs/c.f. = 10.033 lbs.









SEPTIC SYSTEM NOTES

permit be obtained from the BOH by the contractor.

and within clear view of the pump access cover.

**GENERAL CONSTRUCTION NOTES:** 

are required for the project.

15. No activity is proposed within the Highway layout.

appears disturbed or to have the Benchmark relocated prior to any site disturbance.

\* 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

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

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

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

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

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

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

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

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

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)

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

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.

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

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.

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

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.

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

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.

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

(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.

engineer requires 3 day advanced notification for scheduling the necessary survey work as part of the as-built plan (required by the BOH).

by-product to the septic system, may significantly reduce septic system life expectancy and therefore is not permitted.

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.

component. The life span of the system would be compromised by the intrusion of any groundwater.

17. Any substantial silt accumulation against the erosion control is to be removed by hand labor.

Contractor is responsible for securing the necessary permits for the utility work.

18. All construction litter and debris is to be removed from the vicinity of the erosion control line daily.

12. Heavy equipment shall not be driven over the septic tank or pump chamber

4. All septic system proposed elevations indicated are minimums. Elevations may be raised but not lowered without the consent of the engineer.

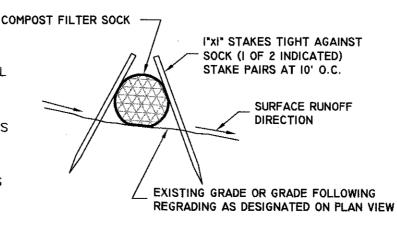
6. Any components of the proposed system that are specified as heavy duty shall conform to all state and local requirements for AASHTO H-20 loading.

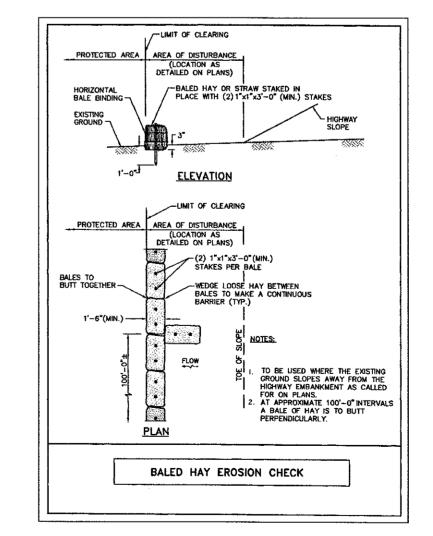
D-box shall be fitted with a riser and cast iron frame / cover at grade. Any replacement D-box shall be H-20 rated due to proximity of the driveway.

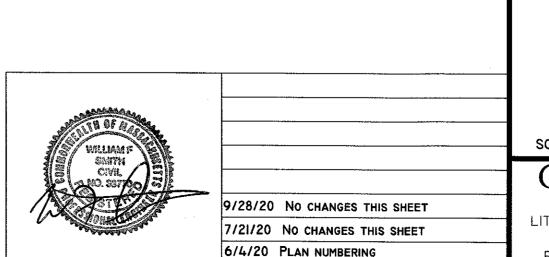
23. Composition of the proposed additional asphalt parking area shall conform to Westport Planning Board requirements for Rural Residential Lane.

the ends of all leaching field laterals and sloped up to the vent. Vent to be equipped with insect screen or suitable charcoal filter.

COMPOST FILTER SOCK MATERIAL SHALL BE IN ACCORDANCE WITH AASHTO DESIGNATION: MP 9-06 (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 PROTRUDING ABOVE THE TOP OF THE FILTER SOCK.







PLANNING BOARD SIGNATURES

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

SEPTIC SYSTEM DETAIL SHEET

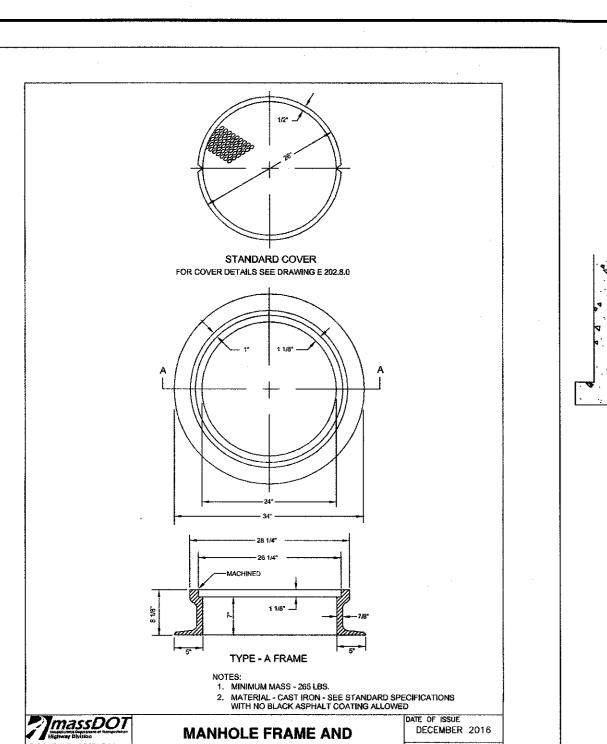
WESTPORT, MASSACHUSETTS SCALE: NONE

DATE: NOVEMBER 20, 2019

34A MAIN STREET LITTLE COMPTON, RI 02837 PH: (40I) 592-0177 FAX: (401) 592-0178

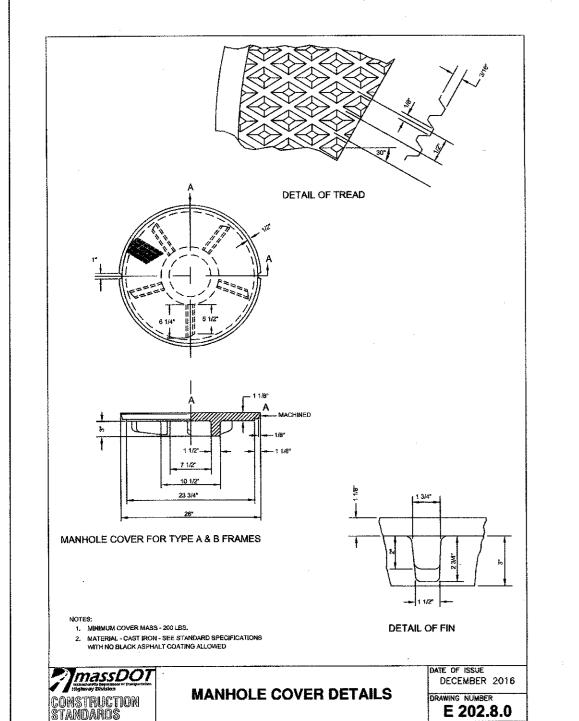
SHEET 5 OF 6

P.O. BOX 5323 NEW BEDFORD, MA. 02742 (508) 990-4900 EMAIL:wsmithcec@aol.com JOB#: 13-139



DECEMBER 2016

E 202.6.0

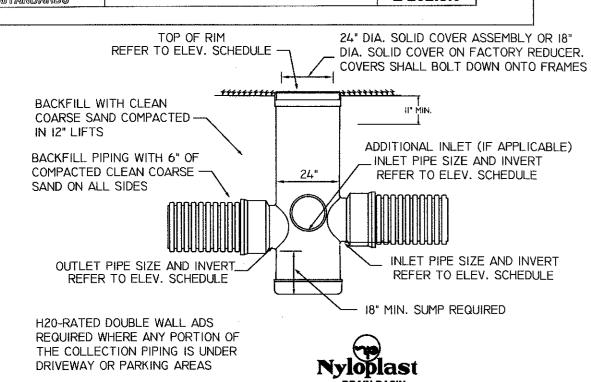


MANHOLE FRAME AND

**COVER - A FRAME** 

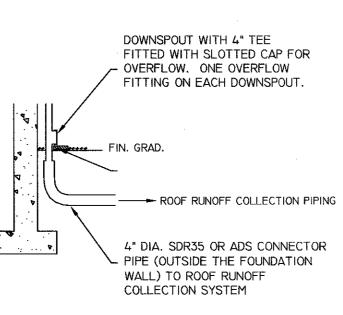
CONSTRUCTION

STANDARDS



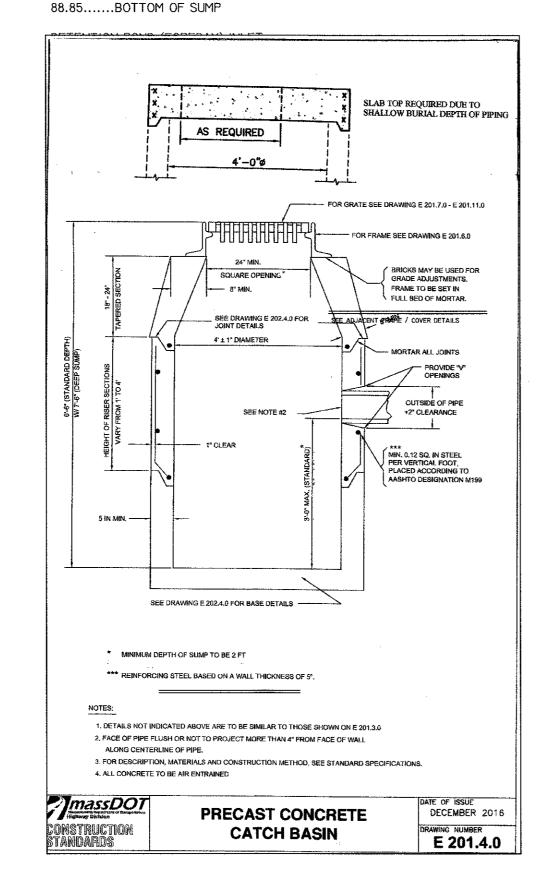
A 24" MINIMUM DIAMETER NYLOPLAST MANHOLE MAY BE USED FOR ROOF RUNOFF COLLECTION MANHOLES #1 - #3. ALTERNATELY, STANDARD 4' DIA. CONCRETE MANHOLES MAY BE USED

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



DOWNSPOUT CONNECTOR DETAIL NOT TO SCALE

> ROOF RUNOFF COLLECTION PIPING / MANHOLE ELEVATION SCHEDULE NOTE: ALL ADS PIPING EXCEPT 12" DISCHARGE TO FOREBAY WHICH SHALL BE SCH40 PVC DUE TO SHALLOW BURIAL DEPTH MANHOLE #1: 93.I5 .....RIM 91.64 .....INV. 6" INLET (BOTH) 91.30 .....INV. 8" OUTLET 89.80 .....BOTTOM OF SUMP MANHOLE #2: 87.I5 .....RIM 85.28 .....INV. 8" INLET (BOTH) 84.78.....INV. 12" OUTLET 83.28.....BOTTOM OF SUMP MANHOLE #3: 92.75.....RIM 90.85.....INV. 4" INLET FROM DOWNSPOUT 90.68.....INV. 6" INLET 90.35.....INV. 8" OUTLET



CONCRETE MANHOLE DETAIL OPTIONAL ALLOWABLE SUBSTITUTION - MAY BE USED IN PLACE

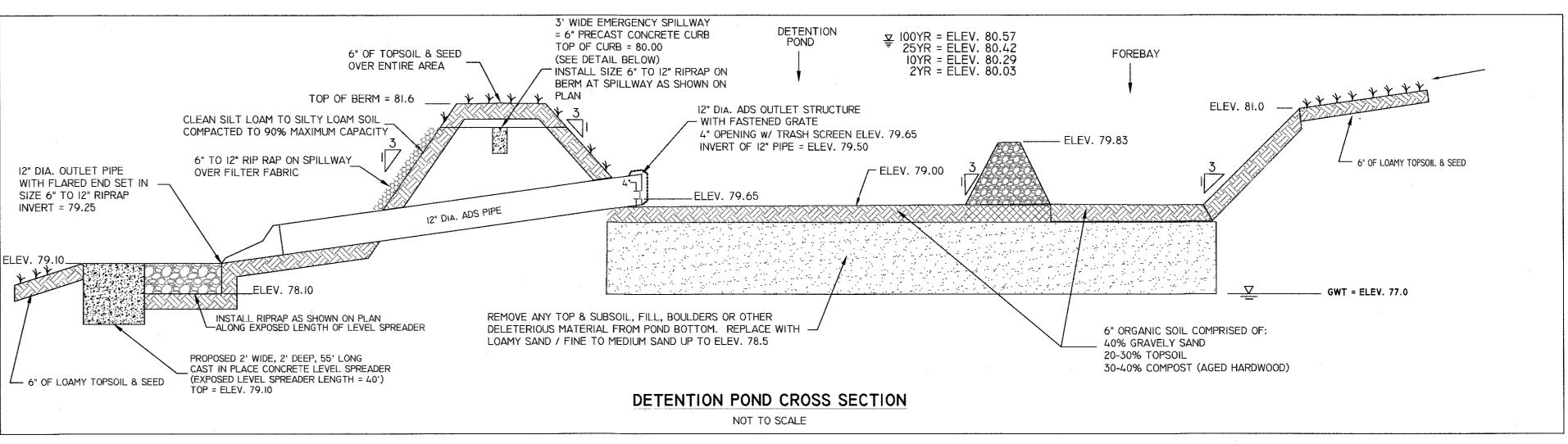
E 201.4.0 CATCH BASIN-STYLE MANHOLE WITH A SOLID COVER AND SUMP, USED AS AN INTERCEPTOR MANHOLE (IN PLACE OF THE SPECIFIED NYLOPLAST BASIN) IN THE ROOF RUNOFF COLLECTION PIPING SYSTEM.

OF THE DESIGNATED NYLOPLAST MANHOLES

WHERE RIM AND INVERT ELEVATIONS PERMIT

A SOLID COVER MUST BE USED. GRATE NOT PERMITTED.

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



——— ELEV. 79.33

FAB Outdoor

Color Accuracy 71 GRI

L70 Lifespan 100,000

120.6 LPW

Lumens . 9,263

Efficacy

Formulated for high durability and long-lasting color

Die-cast aluminum housing, lens frame and

Universal mounting arm compatible for hole

spacing patterns from 1" to 5 1/2" center to center

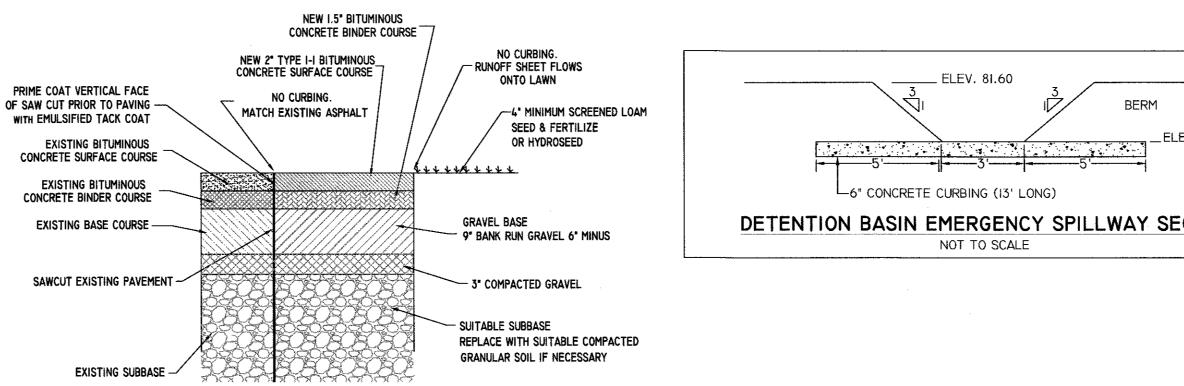
Round Pole Adaptor plate included as a standard

9/28/20 REVISE STORM DRAINAGE DETAILS

7/21/20 REVISE DETENTION POND DETAIL

REVISIONS:

Tempered glass lens included



\_\_\_\_ELEV. 80.00 DETENTION BASIN EMERGENCY SPILLWAY SECTION

ALED-CMB2/78W-20P

78W and 150W specification-grade area lights with IES Type III distribution, offere

Fixture: Construction

IP Rating:

EPA = 0.75

Ambient Temperature:

Suitable For use in 40°C (104°F)

Cold Weather Starting:

Thermal Management:

Effective Projected Area:

High-temperature silicone gasket

The Type III distribution is ideal for roadway,

intended to be located near the side of the area, allowing the light to project outward and fill the

Ingress Protection rating of IP66 for dust and water

Minimum starting temperature is -40°C (-40°F)

Superior heat sinking with external Air-Flow fin-

general parking and other area lighting applications 32.5 lbs

in combination with poles. For use in roadway, general parking and other area

lighting applications where a larger pool of lighting is required.

Color: Bronze

**Technical Specifications** 

Suitable for wet locations as a downlight

100,000-hour LED lifespan based on IES LM-80

Six (6) multi-chip, 13W, high-output, long-life LEDs

3-step MacAdam Ellipse binning to achieve

LED color temperature is warrantied to shift no

more than 200K in CCT over a 5-year period

2 qty of ALED3T78

UL Listing:

Fixture: Listings

LED Characteristics

Color Consistency:

Color Stability:

Color Uniformity:

results and TM-21 calculations

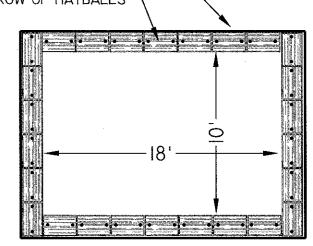
Fixture: LED Characteristics

consistent fixture-to-fixture color

CRUSHED STONE CHECKDAM SPANS FROM BANK TO BANK CRUSHED STONE CHECKDAM DETAIL NOT TO SCALE

> STAKED SILTATION FENCING OR STAKED SILT SOCK (SURROUNDING STAKED HAYBALES)

STAKED ROW OF HAYBALES

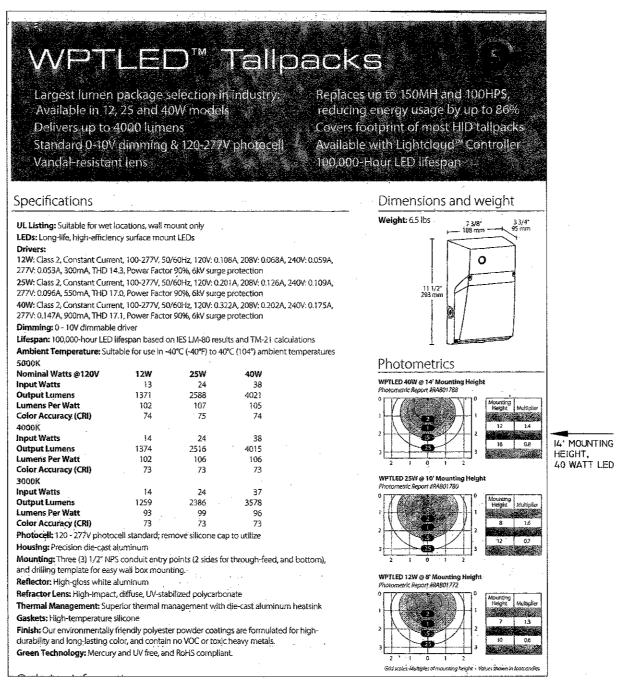


**DEWATERING AREA DETAIL** NOT TO SCALE

PLANNING BOARD SIGNATURES DATE:

DRAINAGE SYSTEM AND LIGHTING DETAILS

PREPARED FOR

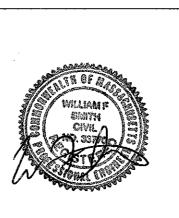


PARKING LOT ASPHALT DETAIL

(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

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the the Chromaticity of Solid State Lighting (SSL) THREE TWIN HEAD DOWNWARD (SHOEBOX-STYLE) 78 WATT LED POLE LIGHTS. LOCATIONS AS SHOWN ON SHEET #3



Driver Info

240V 0.35A

277V 0.30A

Input Watts 76.80W

Efficiency N/A

5 STAR COLLISION CENTER ASSESSOR'S PLAT 35 LOT 3A 683A & 683B AMERICAN LEGION HIGHWAY WESTPORT, MASSACHUSETTS SCALE: NONE DATE: NOVEMBER 20, 2019 Civil Engineering Concepts, Inc.

34A MAIN STRÉET P.O. BOX 5323 LITTLE COMPTON, RI 02837 NEW BEDFORD, MA. 02742 PH: (40I) 592-0177 (508) 990-4900

6/4/20 ADD PAVEMENT DETAIL, PLAN NUMBERIN FAX: (40I) 592-0178 EMAIL:wsmithcec@aol.com SHEET 6 OF 6

JOB#: 13-139 19-016SPA Rev 2