

# CROSSROADS CARE CENTER

238 & 240 SANDWICH ROAD (ROUTE 6)

WAREHAM, MASSACHUSETTS

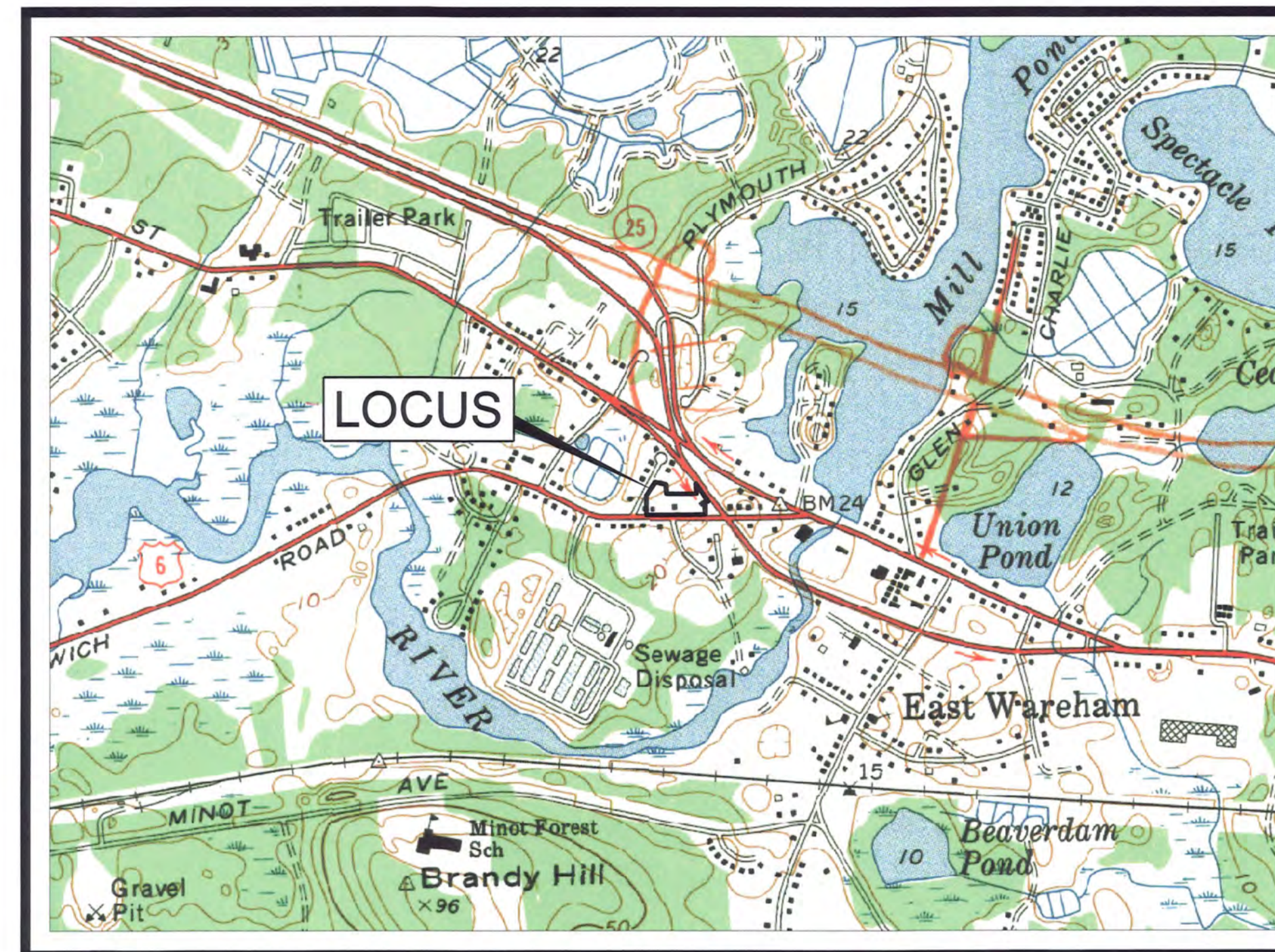
DATE: MAY 25, 2021

## LEGEND

EXISTING	DESCRIPTION	PROPOSED
□	CONCRETE BOUND	□
UP # 0	UTILITY POLE	0
■	CATCH BASIN	■
⊙	DRAIN MANHOLE	⊙
—D—D—	DRAIN LINE	—D—D—
—RD—RD—	ROOF DRAIN	—RD—RD—
—W—W—	WATER LINE	—W—W—
⊗	WATER GATE	⊗
⊙	HYDRANT	⊙
—E/T/C—	UNDERGROUND ELEC. UTILITIES	—E/T/C—
—D/H/W—	OVERHEAD ELEC. UTILITIES	—D/H/W—
—GAS—	UNDERGROUND GAS UTILITIES	—GAS—
—11—	CONTOUR	—11—
x11.0	SPOT GRADE	11x0
⊙	SEWER MANHOLE	⊙
—S—S—	SEWER PIPE	—S—S—
—FM—FM—	SEWER FORCE MAIN	—FM—FM—
—X—X—X—X—X—	FENCE	—X—X—X—X—X—

## LIST OF DRAWINGS

SHEET NO.	TITLE
1 OF 10	COVER SHEET
2 OF 10	EXISTING CONDITIONS & SITE PREP.
3 OF 10	LAYOUT PLAN
4 OF 10	GRADING & DRAINAGE PLAN
5 OF 10	UTILITIES PLAN
6 OF 10	LANDSCAPE PLAN
7 OF 10	LIGHTING PLAN
8 OF 10	DETAILS
9 OF 10	DETAILS
10 OF 10	DETAILS



LOCUS MAP  
SCALE 1" = 1000'



AERIAL MAP  
SCALE 1" = 500'

### APPLICANT & OWNER:

F.C. MANNIX  
P.O. BOX 85  
BOSTON, MA 02113

### ENGINEERING & SURVEYING BY:

JC ENGINEERING, INC.  
2854 CRANBERRY HIGHWAY  
EAST WAREHAM, MA 02538

### LANDSCAPE DESIGN BY:

EA FULLER ASSOCIATES  
LANDSCAPE ARCHITECTURE  
PO BOX 48  
NORTH CARVER, MA 02355



JOHN L. CHURCHILL JR., P.L.S. DATE 5/25/21



JOHN L. CHURCHILL JR., P.E. DATE 5/25/21

## CROSSROADS CARE CENTER

AT  
238 & 240 SANDWICH ROAD  
(ROUTE 6)  
IN  
WAREHAM,  
MASSACHUSETTS  
(PLYMOUTH COUNTY)

## COVER SHEET

### REVISIONS:

No.	DATE	DESC.

### PREPARED FOR:

F.C. MANNIX  
P.O. BOX 85  
BOSTON, MA 02113

### PREPARED BY:

JC ENGINEERING, INC.  
2854 CRANBERRY HIGHWAY  
EAST WAREHAM, MA 02538  
508-273-0377

DATE: MAY 25, 2021

CALC./DESIGN: BJW

DRAWN: BJW

CHECK: JLC

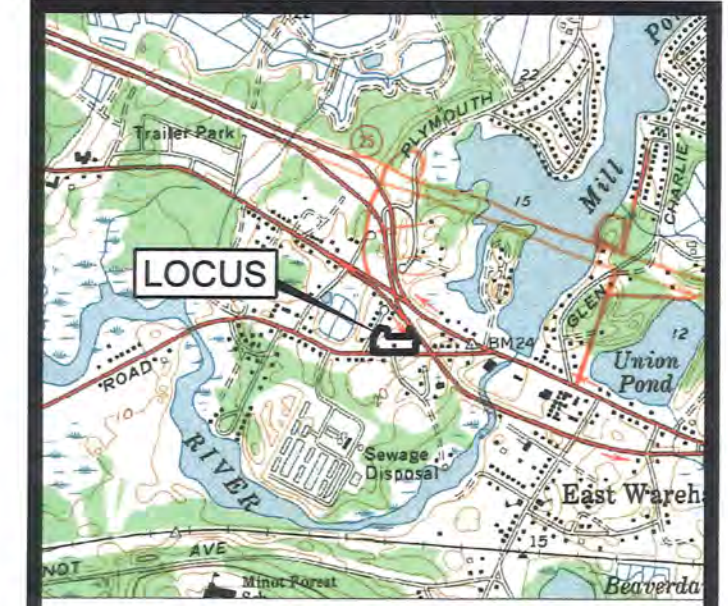
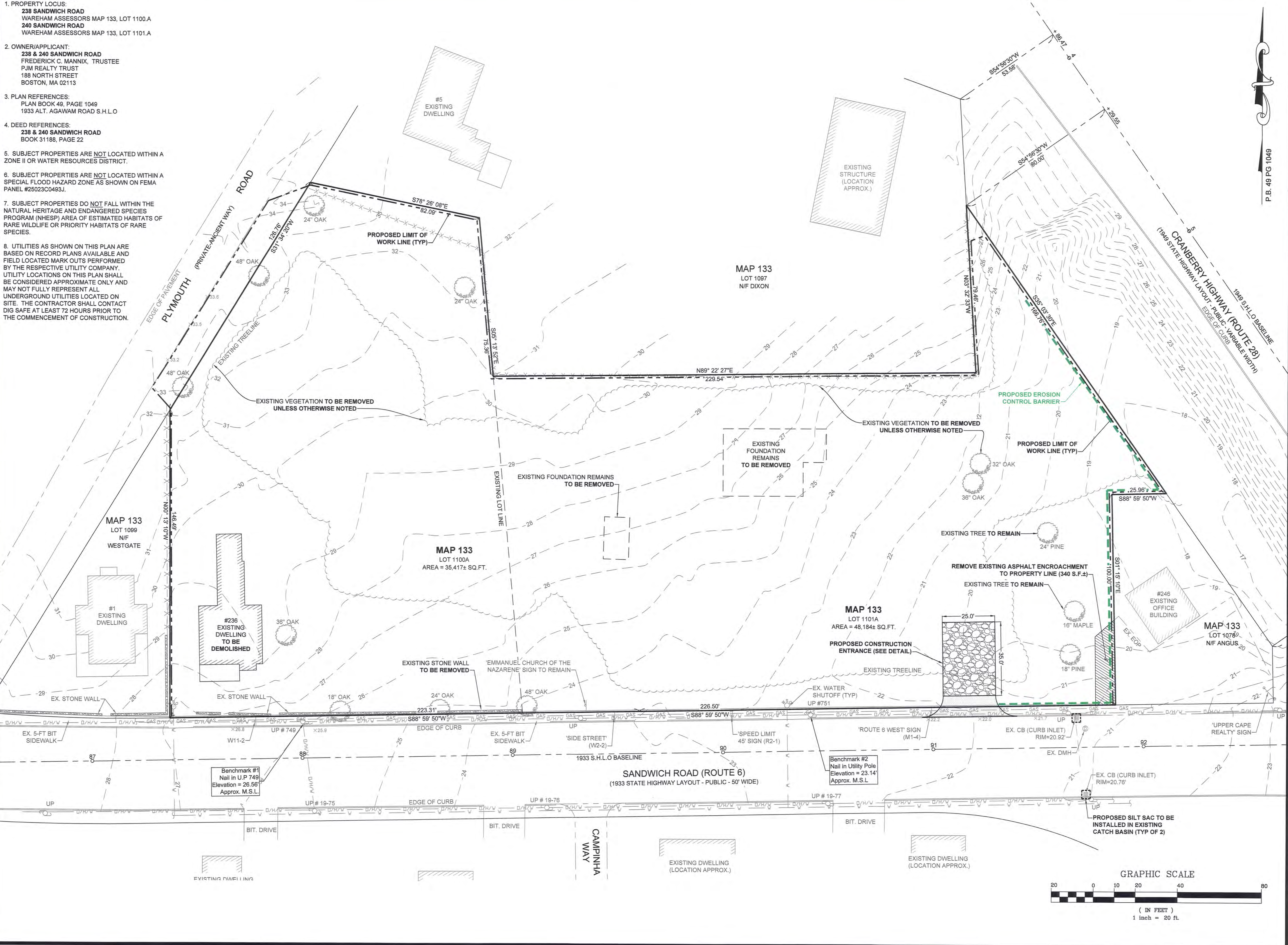
JOB NO: 435

SHEET 1 OF 10



**GENERAL NOTES:**

- PROPERTY LOCUS:  
238 SANDWICH ROAD  
WAREHAM ASSESSORS MAP 133, LOT 1100.A  
240 SANDWICH ROAD  
WAREHAM ASSESSORS MAP 133, LOT 1101.A
- OWNER/APPLICANT:  
238 & 240 SANDWICH ROAD  
FREDERICK C. MANNIX, TRUSTEE  
PJM REALTY TRUST  
188 NORTH STREET  
BOSTON, MA 02113
- PLAN REFERENCES:  
PLAN BOOK 49, PAGE 1049  
1933 ALT. AGAWAM ROAD S.H.L.O
- DEED REFERENCES:  
238 & 240 SANDWICH ROAD  
BOOK 31188, PAGE 22
- SUBJECT PROPERTIES ARE NOT LOCATED WITHIN A ZONE II OR WATER RESOURCES DISTRICT.
- SUBJECT PROPERTIES ARE NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD ZONE AS SHOWN ON FEMA PANEL #25023C0483J.
- SUBJECT PROPERTIES DO NOT FALL WITHIN THE NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM (NHESP) AREA OF ESTIMATED HABITATS OF RARE WILDLIFE OR PRIORITY HABITATS OF RARE SPECIES.
- UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD PLANS AVAILABLE AND FIELD LOCATED MARK OUTS PERFORMED BY THE RESPECTIVE UTILITY COMPANY. UTILITY LOCATIONS ON THIS PLAN SHALL BE CONSIDERED APPROXIMATE ONLY AND MAY NOT FULLY REPRESENT ALL UNDERGROUND UTILITIES LOCATED ON SITE. THE CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.



LOCUS MAP  
SCALE 1" = 2000'

JOHN L. CHURCHILL JR.  
No. 46068  
REGISTERED PROFESSIONAL ENGINEER  
5/25/21  
JOHN L. CHURCHILL JR., P.L.S. DATE

JOHN L. CHURCHILL JR.  
CIVIL  
No. 41807  
REGISTERED PROFESSIONAL ENGINEER  
5/25/21  
JOHN L. CHURCHILL JR., P.E. DATE

**CROSSROADS CARE CENTER**  
AT  
238 & 240 SANDWICH ROAD  
(ROUTE 6)  
IN  
WAREHAM,  
MASSACHUSETTS  
(PLYMOUTH COUNTY)

**EXISTING CONDITIONS & SITE PREP.**

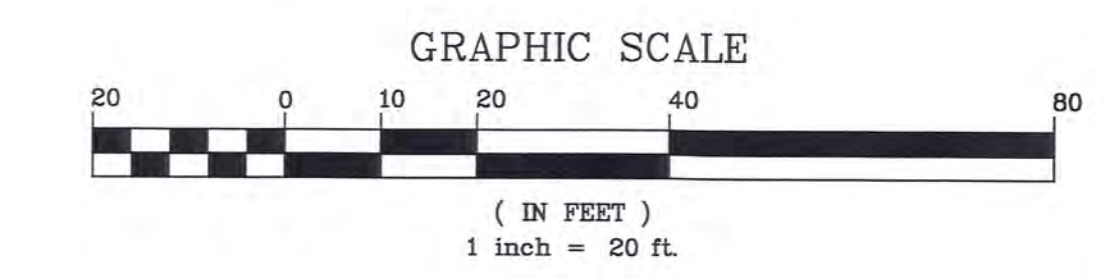
REVISIONS:

No.	DATE	DESC.

PREPARED FOR:  
F.C. MANNIX  
P.O. BOX 85  
BOSTON, MA 02113

PREPARED BY:  
JC ENGINEERING, INC.  
2854 CRANBERRY HIGHWAY  
EAST WAREHAM, MA 02538  
508-273-0377

DATE:	MAY 25, 2021
CALC./DESIGN:	BJW
DRAWN:	BJW
CHECK:	JLC
JOB NO.:	435





**ZONING SCHEDULE**  
 ZONING DISTRICT: CS  
 TOTAL LOT AREA = 83,601 S.F. (MAP 133, LOTS 1100A & 1101A)  
 TOTAL FRONTAGE = 449.81' (MAP 133, LOTS 1100A & 1101A)

**PARKING SCHEDULE**

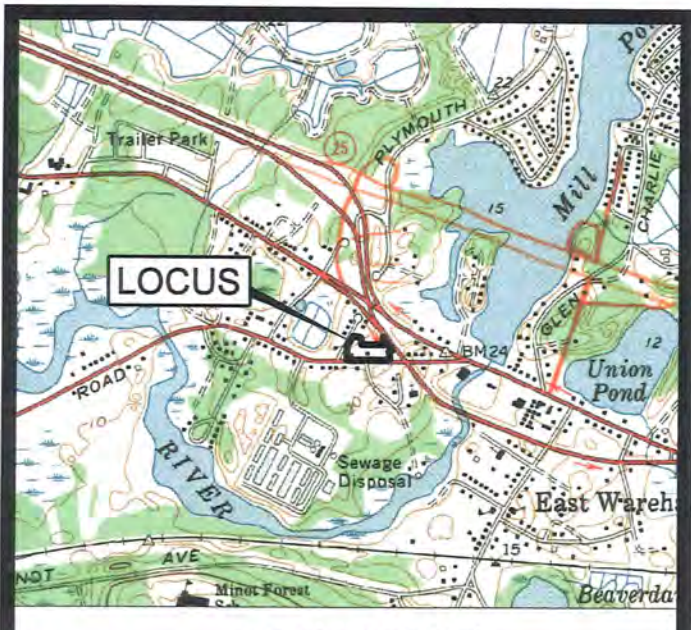
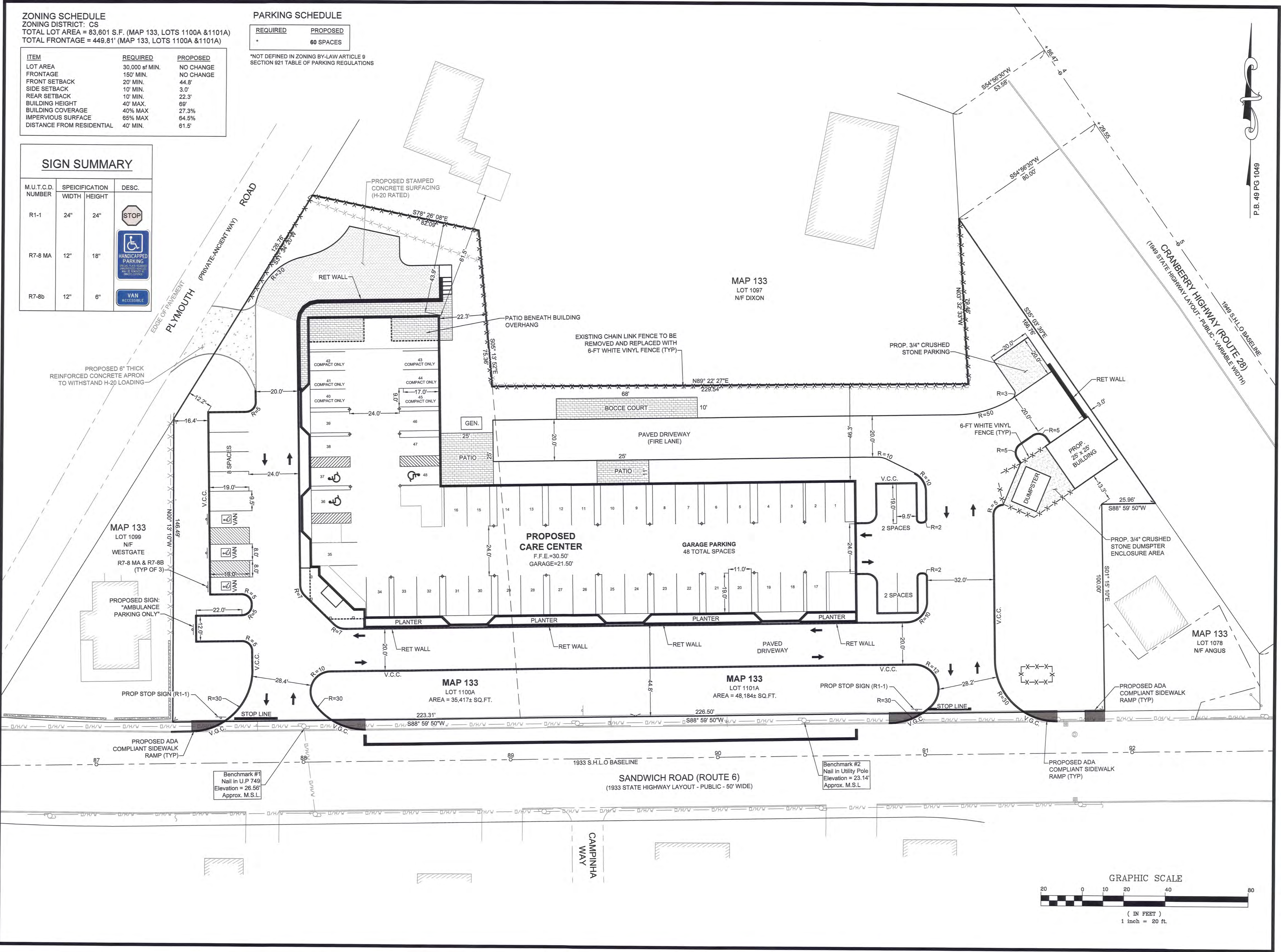
REQUIRED	PROPOSED
*	60 SPACES

\*NOT DEFINED IN ZONING BY-LAW ARTICLE 9 SECTION 921 TABLE OF PARKING REGULATIONS

ITEM	REQUIRED	PROPOSED
LOT AREA	30,000 sf MIN.	NO CHANGE
FRONTAGE	150' MIN.	NO CHANGE
FRONT SETBACK	20' MIN.	44.8'
SIDE SETBACK	10' MIN.	3.0'
REAR SETBACK	10' MIN.	22.3'
BUILDING HEIGHT	40' MAX.	69'
BUILDING COVERAGE	40% MAX.	27.3%
IMPERVIOUS SURFACE	65% MAX.	64.5%
DISTANCE FROM RESIDENTIAL	40' MIN.	61.5'

**SIGN SUMMARY**

M.U.T.C.D. NUMBER	SPECIFICATION WIDTH	HEIGHT	DESC.
R1-1	24"	24"	STOP
R7-8 MA	12"	18"	HANDICAPPED PARKING
R7-8b	12"	6"	VAN ACCESSIBLE



LOCUS MAP  
 SCALE 1" = 2000'

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**SITE LAYOUT & PARKING**

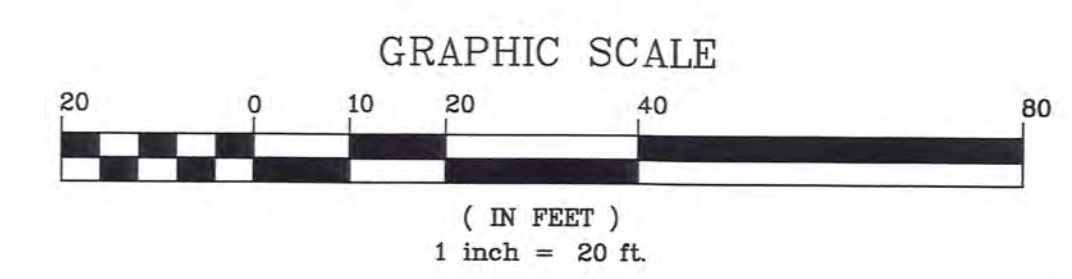
**REVISIONS:**

No.	DATE	DESC.

**PREPARED FOR:**  
 F.C. MANNIX  
 P.O. BOX 85  
 BOSTON, MA 02113

**PREPARED BY:**  
 JC ENGINEERING, INC.  
 2854 CRANBERRY HIGHWAY  
 EAST WAREHAM, MA 02538  
 508-273-0377

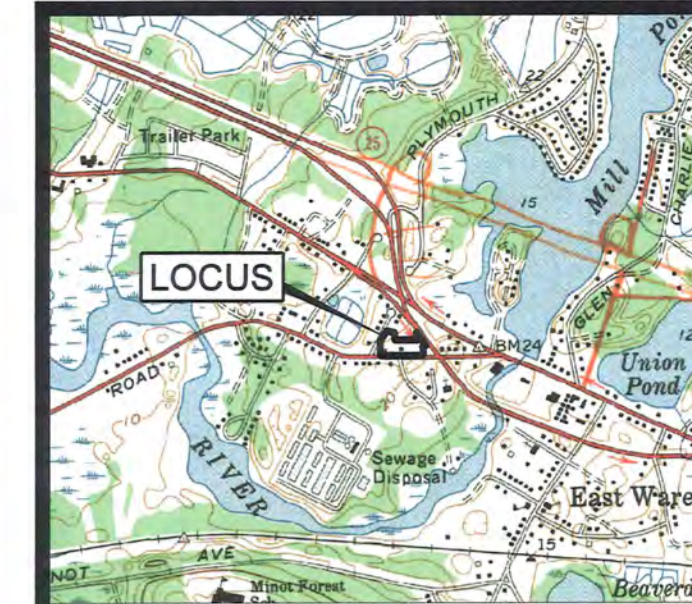
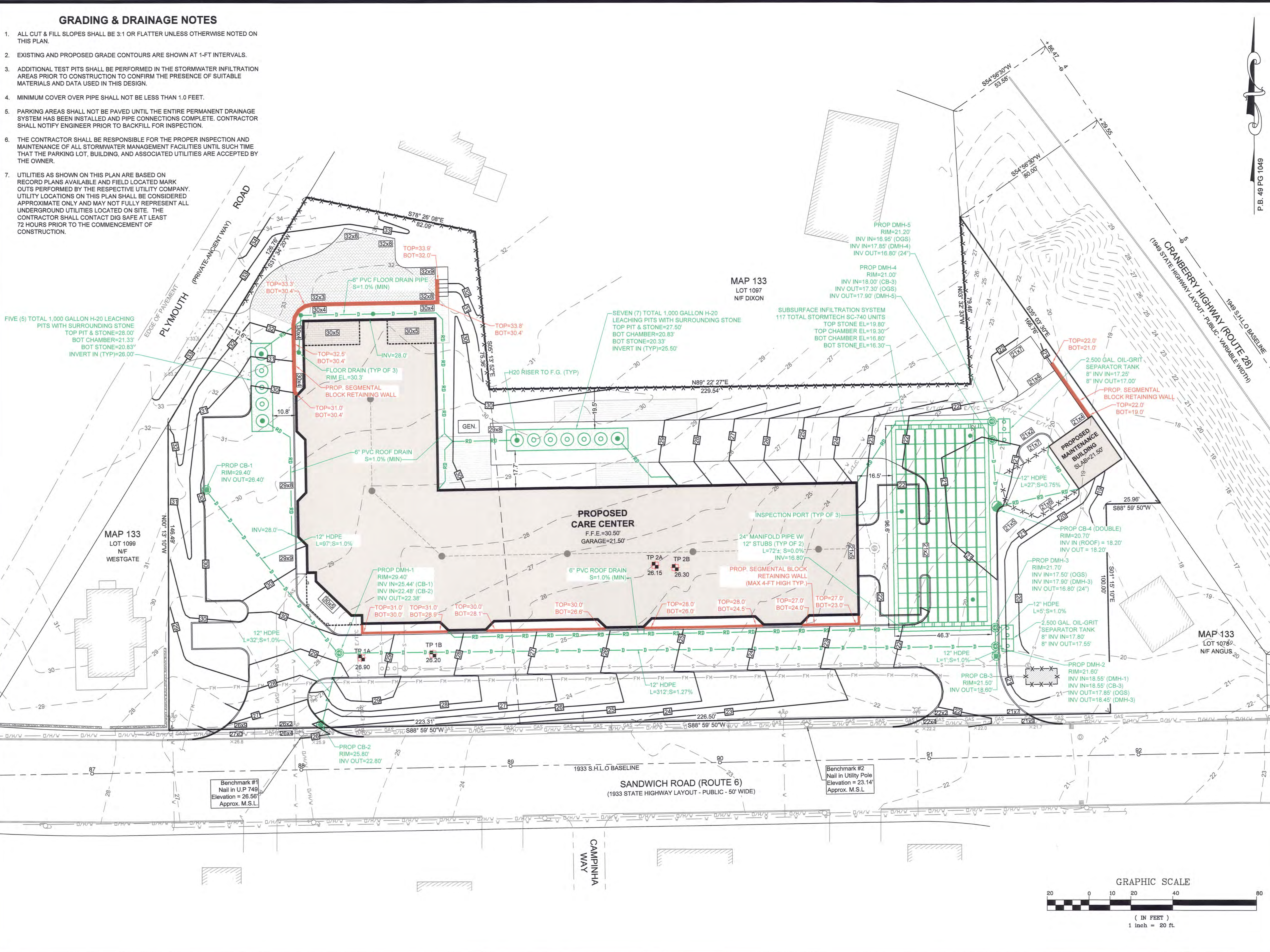
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**GRADING & DRAINAGE NOTES**

1. ALL CUT & FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED ON THIS PLAN.
2. EXISTING AND PROPOSED GRADE CONTOURS ARE SHOWN AT 1-FT INTERVALS.
3. ADDITIONAL TEST PITS SHALL BE PERFORMED IN THE STORMWATER INFILTRATION AREAS PRIOR TO CONSTRUCTION TO CONFIRM THE PRESENCE OF SUITABLE MATERIALS AND DATA USED IN THIS DESIGN.
4. MINIMUM COVER OVER PIPE SHALL NOT BE LESS THAN 1.0 FEET.
5. PARKING AREAS SHALL NOT BE PAVED UNTIL THE ENTIRE PERMANENT DRAINAGE SYSTEM HAS BEEN INSTALLED AND PIPE CONNECTIONS COMPLETE. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO BACKFILL FOR INSPECTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSPECTION AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES UNTIL SUCH TIME THAT THE PARKING LOT, BUILDING, AND ASSOCIATED UTILITIES ARE ACCEPTED BY THE OWNER.
7. UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD PLANS AVAILABLE AND FIELD LOCATED MARK OUTS PERFORMED BY THE RESPECTIVE UTILITY COMPANY. UTILITY LOCATIONS ON THIS PLAN SHALL BE CONSIDERED APPROXIMATE ONLY AND MAY NOT FULLY REPRESENT ALL UNDERGROUND UTILITIES LOCATED ON SITE. THE CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.



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**GRADING & DRAINAGE**

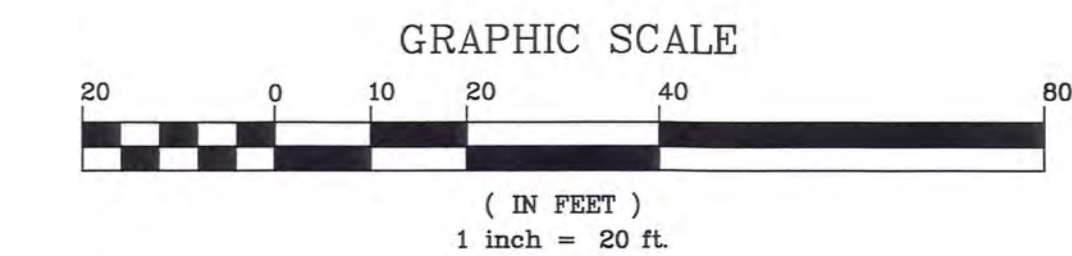
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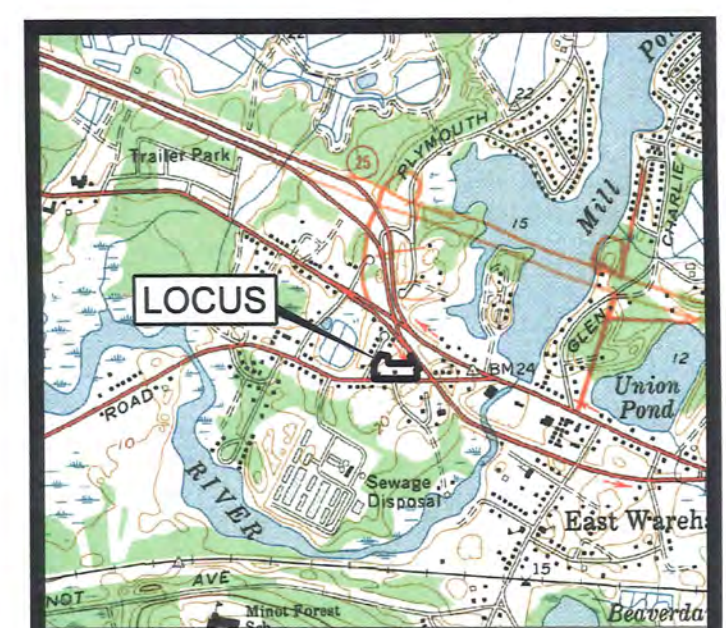
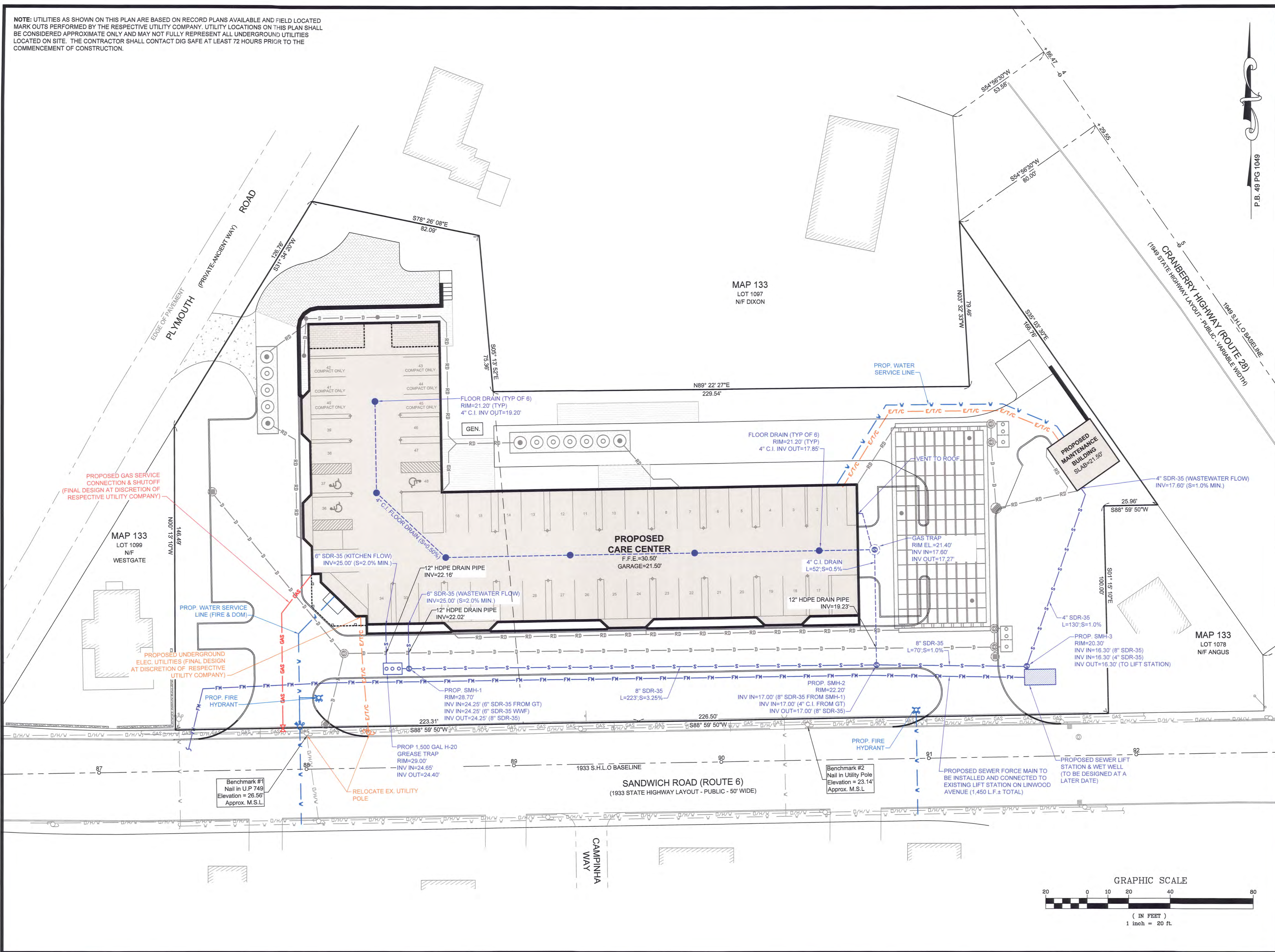
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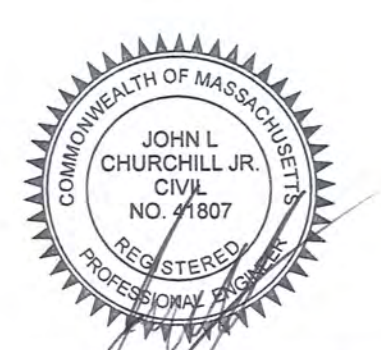
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**UTILITIES PLAN**

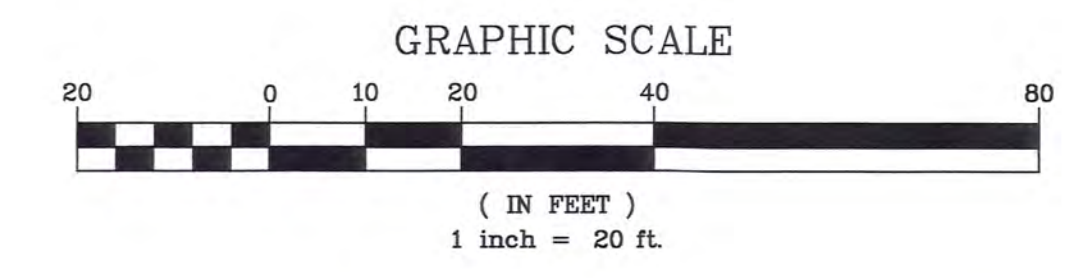
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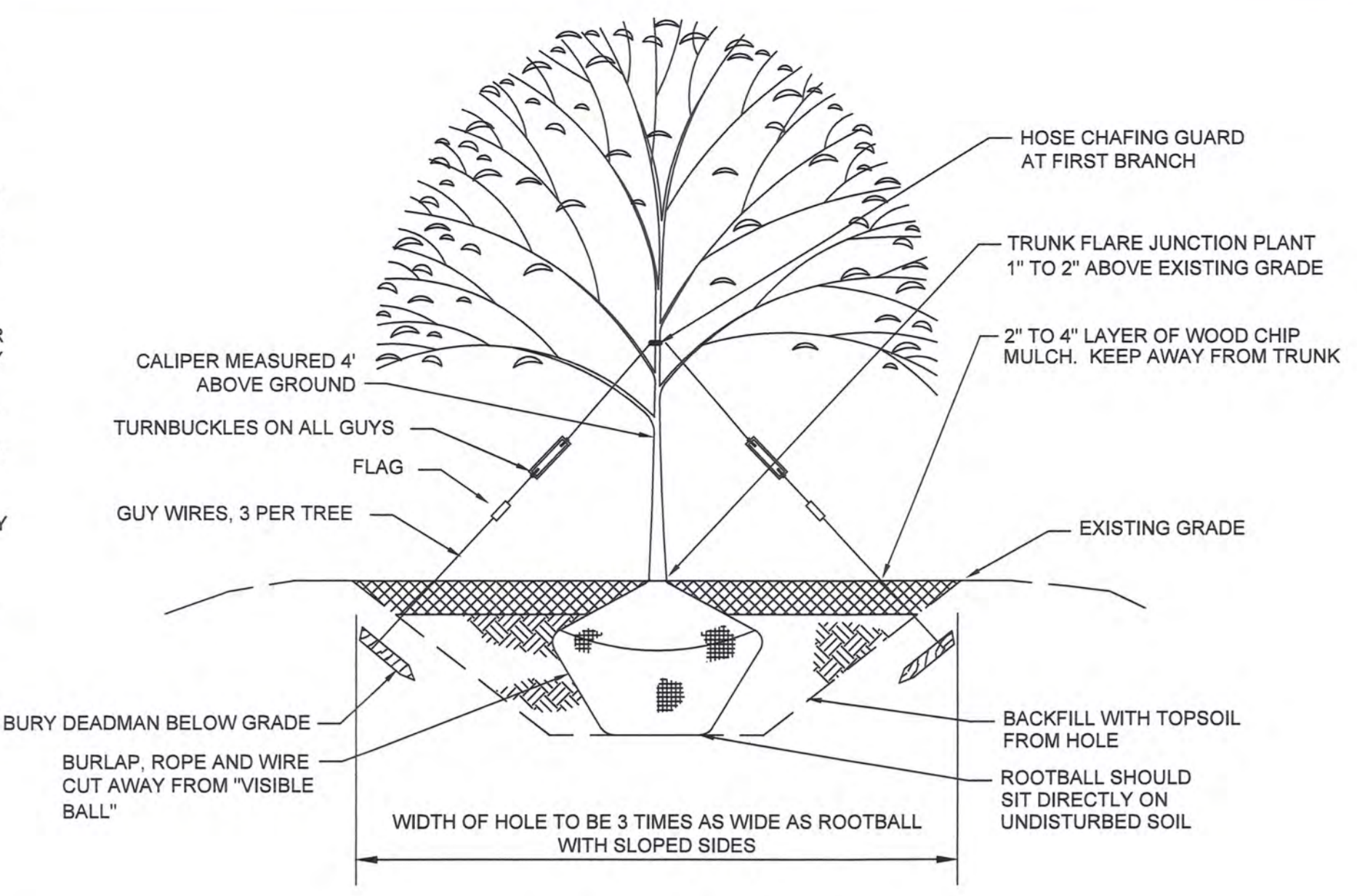
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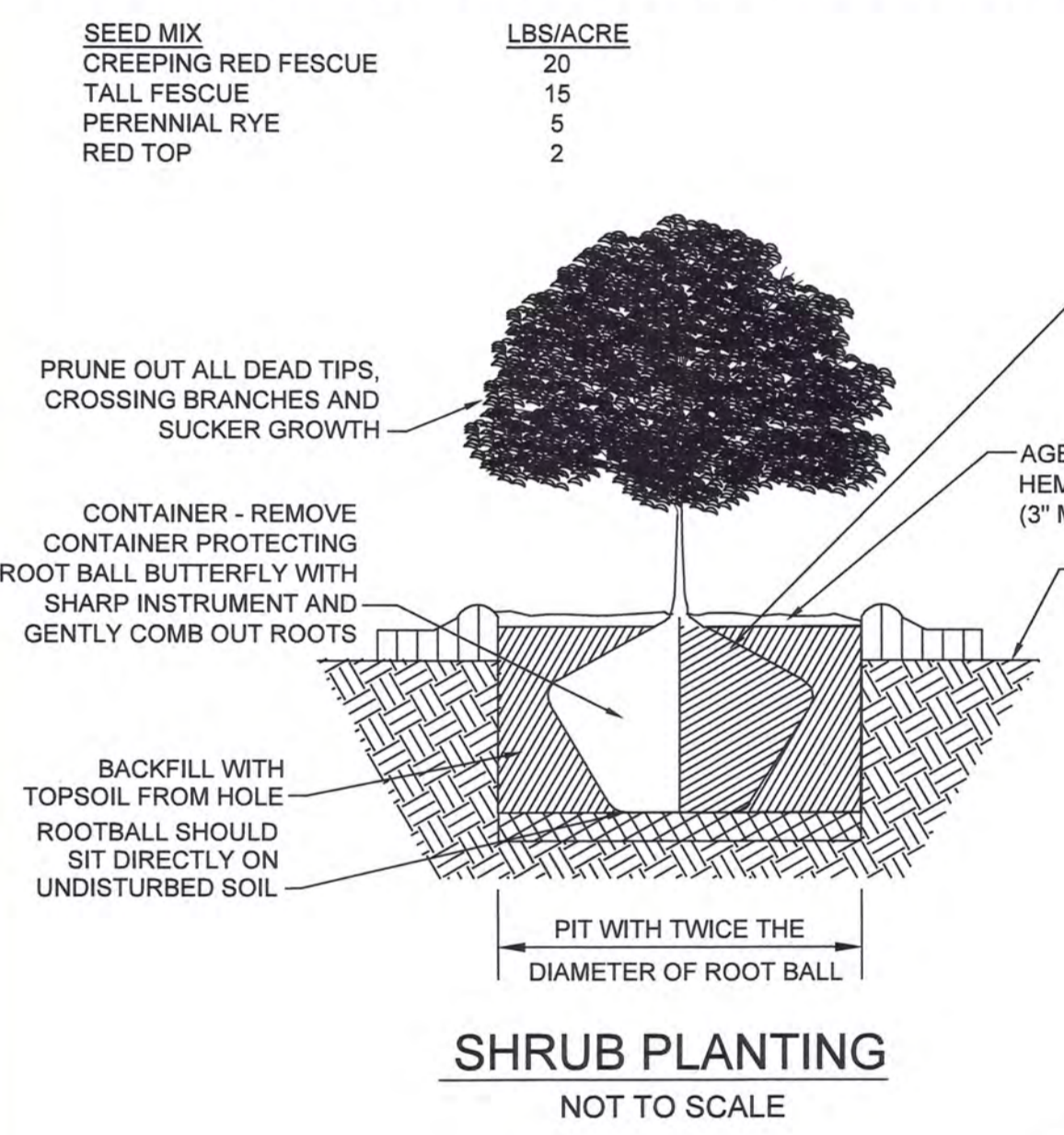
**PLANTING NOTES:**

- ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN ANSI Z260.1 OR THE LATEST EDITION. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY AND SIZE AND SHALL BE CERTIFIED DISEASE AND INSECT FREE AT THE TIME OF DELIVERY TO THE SITE. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE OR REJECT THE PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
- THE LANDSCAPE ARCHITECT SHALL SPECIFY AN ACCEPTABLE REPLACEMENT SHOULD ANY PLANT MATERIAL BE UNAVAILABLE AT TIME OF DELIVERY.
- ALL PLANT MATERIAL SHALL BE PROPERLY PLANTED AND STAKED IN CONFORMANCE WITH THE DETAILS PROVIDED. PROVIDE THREE (3) STAKES PER TREE UNLESS OTHERWISE NOTED. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE OR GRADES THAT HAVE BEEN ESTABLISHED DURING CONSTRUCTION AND APPROVED BY THE LANDSCAPE ARCHITECT. FURNISH ALL PLANT MATERIAL IN APPROVED CONTAINERS OR BALLED AND BURLAPPED. CUT AND REMOVE BURLAP FROM THE TOP ONE-THIRD (1/3) OF THE ROOT BALL. ENTIRELY REMOVE ALL WIRE ROOT BALL BASKETS FROM THE PLANTING PIT PRIOR TO FINAL BACKFILLING OF PLANTING PIT.
- PROVIDE PLANTING PITS AS INDICATED ON THE PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, ONE PART PEAT MOSS OR COMPOSTED LEAF MATTER (TWO YEARS OLD), AND ONE PART EXISTING SOILS ON THE SITE. IF IN THE OPINION OF THE LANDSCAPE ARCHITECT EXCESSIVELY WET SOIL CONDITIONS EXIST, THEN PLANTING PITS SHALL BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH SAND TO THE BOTTOM OF THE PLANT PIT. A SLOW RELEASE FERTILIZER SHALL BE ADDED TO THE BACKFILL MIX IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR NEW TRANSPLANTS.
- NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF THE INSTALLATION AND AGAIN WITHIN 24 HOURS OF THE INSTALLATION. REGULAR WATERING SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR TO ENSURE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS.
- ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER THE DATE OF FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT. ANY PLANT THAT DIES WITHIN THE GUARANTEE PERIOD SHALL BE REMOVED (INCLUDING THE ROOT BALL) AND REPLACED WITH A SPECIMEN OF THE SAME VARIETY AND SIZE AS THE ORIGINALLY SPECIFIED PLANT, AT THE EXPENSE OF THE LANDSCAPE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL FURNISH A MINIMUM OF 24" OF TOPSOIL IN ALL PLANTING BEDS. A COMPLETE SOIL ANALYSIS SHALL BE CONDUCTED BY THE LANDSCAPE CONTRACTOR PRIOR TO PLANTING TO DETERMINE THE EXTENT OF MODIFICATIONS NECESSARY TO THE PH AND NUTRIENT LEVELS OF THE PLANTING SOIL TO ENSURE SURVIVAL OF THE PLANTS. THE CONTRACTOR SHALL FURNISH THE TEST RESULTS TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO PLANTING.
- ALL PLANTING BEDS AND TREE WELLS SHALL RECEIVE A 3" MINIMUM LAYER OF FINELY SHREDDED PINE BARK. THE LANDSCAPE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE MULCH TO THE LANDSCAPE ARCHITECT PRIOR TO DELIVERY OF THE MULCH TO THE SITE.
- ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
- IN THE CASE OF A DISCREPANCY BETWEEN THE QUANTITIES LISTED IN THE PLANT SCHEDULE AND THOSE ILLUSTRATED IN THE PLAN, THE PLAN SHALL RULE.
- ALL LANDSCAPE AREAS NOT PLANTED WITH TREES, SHRUBS, GROUND COVER OR SOD SHALL BE RESTORED WITH 6" OF TOPSOIL AND SHALL BE SEEDED AS INDICATED ON THE PLANS. (T & S)
- APPLICATION OF GRASS SEED FERTILIZER AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST OR HYDRO SEEDING AT THE RATES OUTLINED BELOW:  
LIMESTONE: 100 LBS / 1000 SF  
FERTILIZER: USE LOW PHOSPHATE AND SLOW RELEASE NITROGEN FERTILIZER 1000 LBS/ACRE

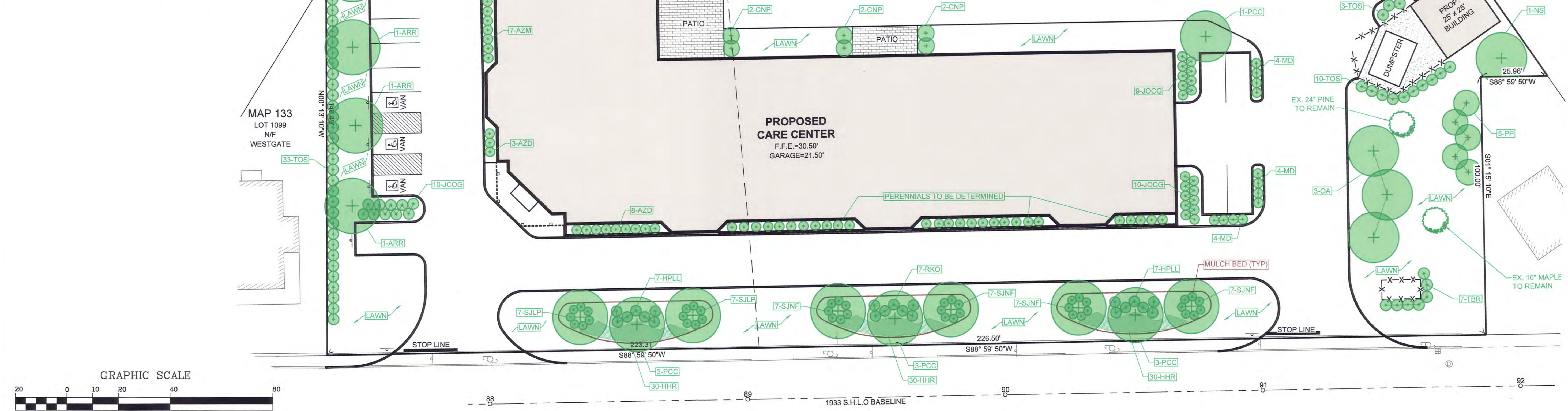


**TREE PLANTING**  
NOT TO SCALE

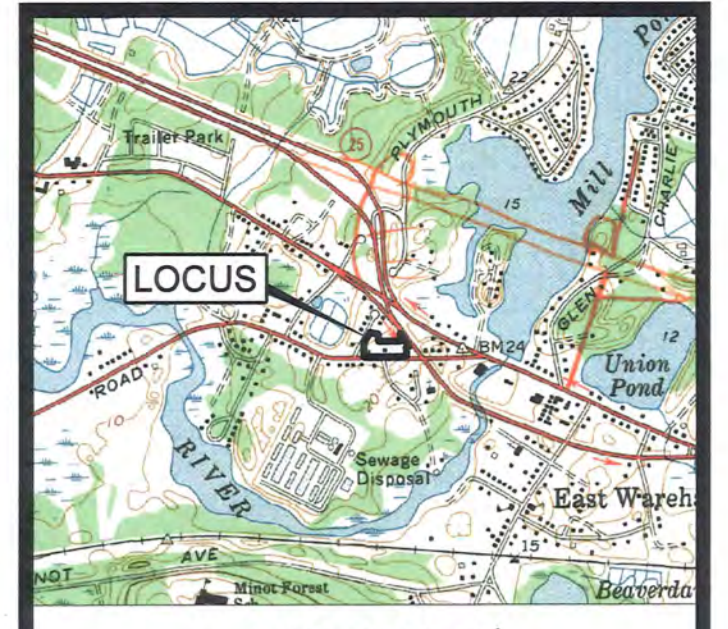
Plant Schedule					
SYMB.	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS	QUANTITY
<b>Shrubs</b>					
AZD	Azalea hyb. ' Delaware Valley '	Delaware Valley White Evergreen Azalea	18" - 24" ht.	3 gal. - 3" o.c.	11
AZM	Azalea hyb. ' Mothers Day '	Mothers Day Red Evergreen Azalea	18" - 24" ht.	4 gal. - 3" o.c.	7
HPLL	Hydrangea paniculata ' Little Limelight '	Compact Limelight Hydrangea	18" - 24" ht.	3 gal. - 4" o.c.	14
JOOG	Juniperus chinensis ' Old Gold '	Old Gold Compact Juniper	18" - 24" spr.	4 gal. - 4" o.c.	29
MD	Microbiota decussata	Siberian Carpet ground cover	18" - 24" spr.	3 gal. - 4" o.c.	12
RKO	Rosa hybrid ' Knockout '	Red Knockout Shrub Rose	18" - 24" ht.	4 gal. - 4" o.c.	7
SJLP	Spiraea japonica ' Little Princess '	Little Princess Spiraea - Dwarf Pink	15" - 18" spr.	3 gal. - 24" o.c.	14
SJNF	Spiraea japonica ' Neon Flash '	Red Dwarf Mounded Spiraea	18" - 24" ht.	3 gal. - 3" o.c.	28
TBR	Taxus baccata Repandens	English Spreading Yew	24" - 30" spr.	5 gal/ B & B - 4" o.c.	7
TOS	Thuja occidentalis ' Smaragd '	Emerald Arborvitae	6" - 7" ht.	B & B - 4" o.c.	46
VPTS	Viburnum plicatum tomentosum ' Shoshoni '	Shoshoni Compact Doublefile Viburnum	18" - 24" ht.	3 gal. - 5" o.c.	15
<b>Perennials</b>					
HHR	Heemerocallis ' Happy Returns '	Dwarf Pale Yellow Daylily	18" ht.	1 gal. - 24" o.c.	120
PAH	Pennisetum alopecuroides ' Hamelin '	Dwarf Fountain Grass	18" - 24" ht.	1 gal. - 24" o.c.	18
<b>General Site Trees</b>					
ARO	Acer rubrum ' October Glory '	October Glory Red Maple	3" cal.	B & B - as shown	3
ARR	Acer rubrum ' Franksred '	Red Sunset Red Maple	3" cal.	B & B - as shown	5
CNP	Chamaecyparis nootkantisensis Pendula	Weeping Alaskan Cedar	6" - 7" ht.	B & B - as shown	6
NS	Nyssa sylvatica	Black Tupelo	3" cal.	B & B - as shown	8
OA	Oxydendrum arboreum	Sourwood Tree	3" cal.	B & B - as shown	3
PA	Picea abies	Norway Spruce	7" - 8" ht.	B & B 12" o.c.	9
PCC	Pyrus calleryana ' Chanticleer '	Cleveland Select Callery Pear	3" cal.	B & B - as shown	10
PP	Picea pungens	Colorado Blue Spruce	7" - 8" ht.	B & B 12" o.c.	8



**SHRUB PLANTING**  
NOT TO SCALE



P.B. 49 PG 1049



**LOCUS MAP**  
SCALE 1" = 2000'

MASSACHUSETTS REGISTERED LANDSCAPE ARCHITECT  
EDWARD A. FULLER, R.L.A. DATE 5/25/21

**CROSSROADS CARE CENTER**  
AT  
238 & 240 SANDWICH ROAD (ROUTE 6)  
IN  
WAREHAM, MASSACHUSETTS (PLYMOUTH COUNTY)

**LANDSCAPE PLAN**

**REVISIONS:**

No.	DATE	DESC.

**PREPARED FOR:**  
F.C. MANNIX  
P.O. BOX 85  
BOSTON, MA 02113

**PREPARED BY:**  
EA FULLER ASSOCIATES  
LANDSCAPE ARCHITECTURE  
PO BOX 48  
NORTH CARVER, MA 02355

DATE:	MAY 25, 2021
CALC./DESIGN:	BJW
DRAWN:	BJW
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JOB NO.:	435



**Stonco**

by @ignify

Wall mount

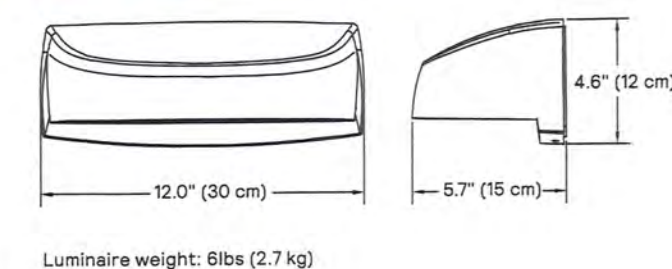
LytePro

LPW16 medium wall sconce



**LPW16 LytePro**  
LED medium wall sconce

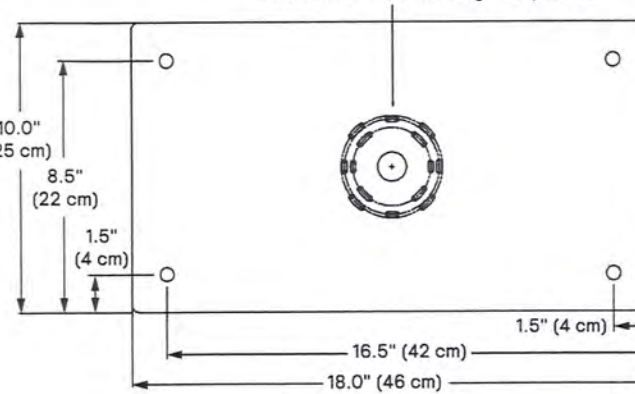
Dimensions



Luminaire weight: 6lbs (2.7 kg)

Accessory dimensions (ordered separately)

LPWCVRPLT-BZ LPW Universal wall cover mounting plate, 0.08" aluminum, bronze textured paint (used to cover larger pre-existing opening or surfaces, field installed). Offers same J-Box pattern as luminaire or may lagged to wall using (4) knockouts.



**HADCO**  
by @ignify

Urban

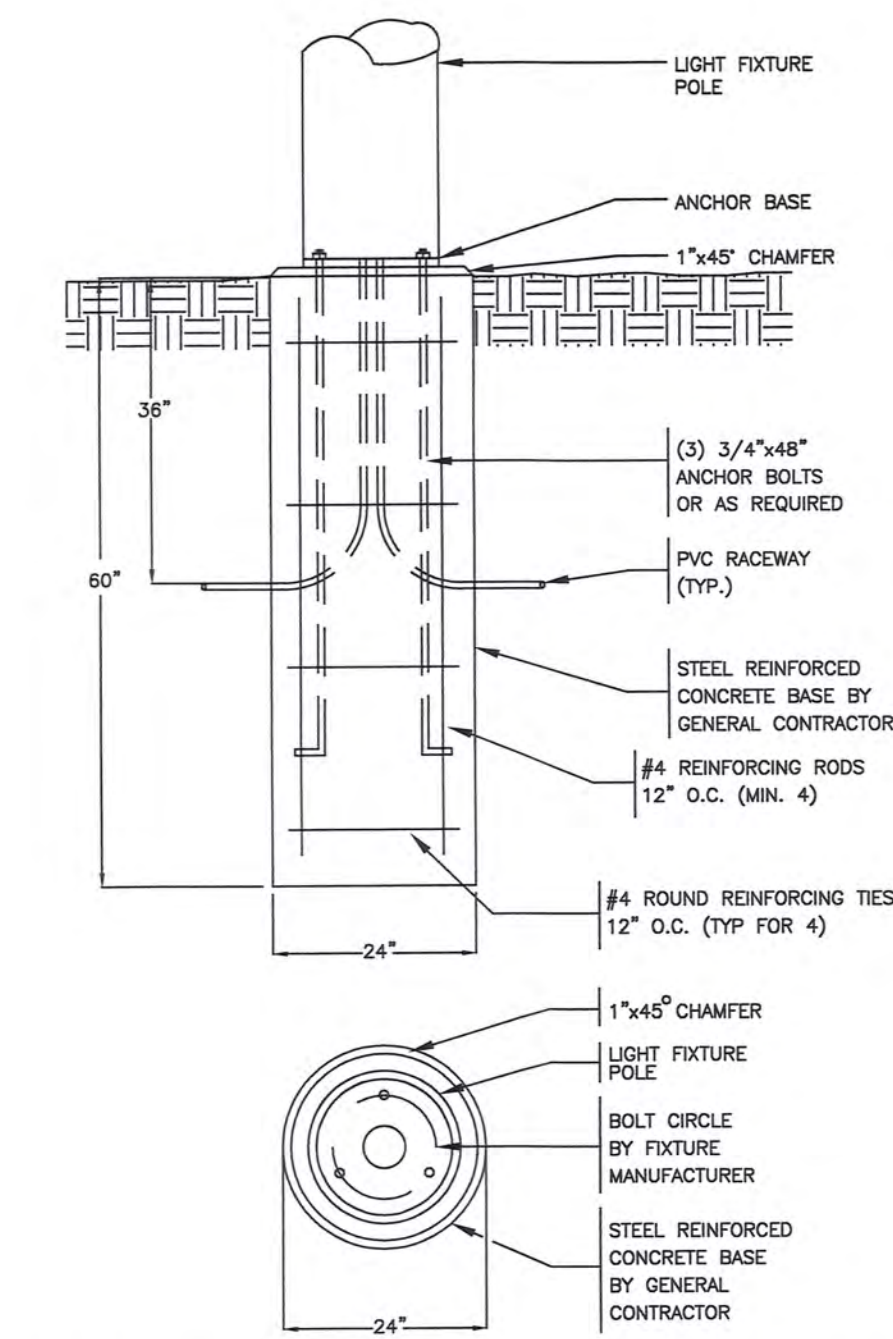
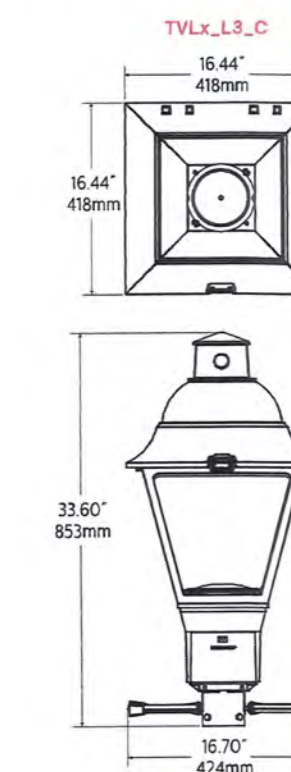
TownView

TVLC/TVLN  
Post top and arm mount luminaire



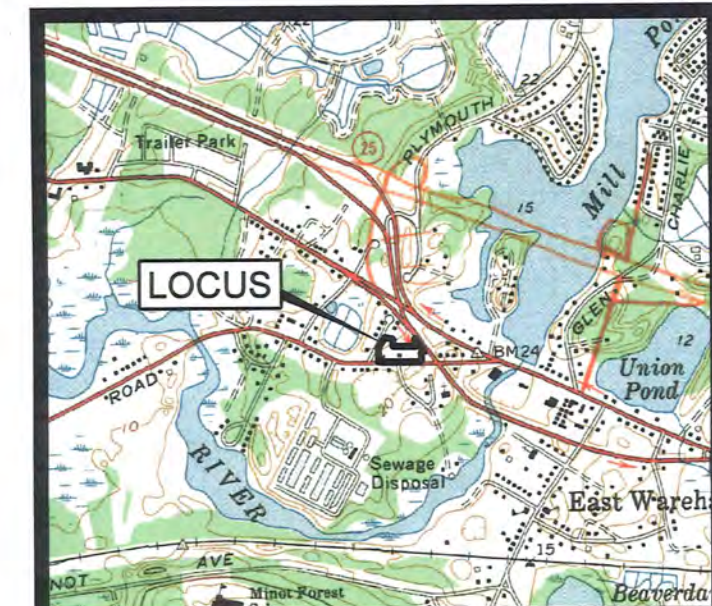
The HADCO TownView LED post top luminaires were designed to eliminate the compromises of performance, comfort, style options and value when choosing the right lighting solution for residential street and pedestrian area. The horizontal lens option reduces glare to enhance a sense of security with increased visual comfort. TownView offers design flexibility with a variety of style options, lumen packages, a range of control options and more at exceptional value.

**TVLC/TVLN TownView**  
Post top and arm mount luminaire

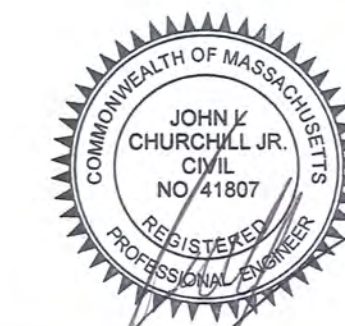


POLE BASE DETAIL FOR LIGHT FIXTURE

SCALE: N.T.S.



LOCUS MAP  
SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.E. DATE

**CROSSROADS CARE CENTER**  
AT  
238 & 240 SANDWICH ROAD (ROUTE 6)  
IN  
WAREHAM, MASSACHUSETTS (PLYMOUTH COUNTY)

**LIGHTING PLAN**

**REVISIONS:**

No.	DATE	DESC.

**PREPARED FOR:**  
F.C. MANNIX  
P.O. BOX 85  
BOSTON, MA 02113

**PREPARED BY:**  
JC ENGINEERING, INC.  
2854 CRANBERRY HIGHWAY  
EAST WAREHAM, MA 02538  
508-273-0377

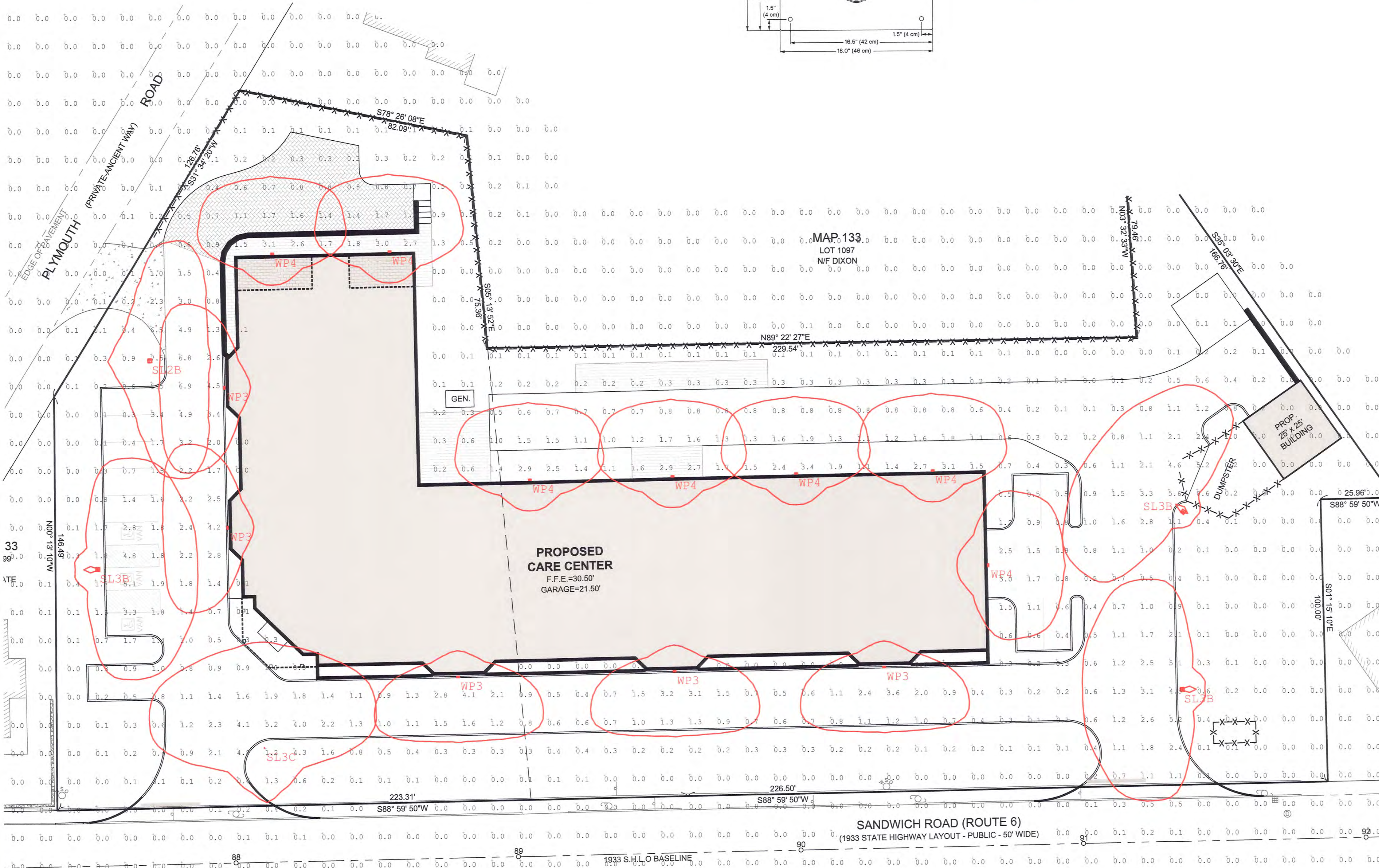
DATE: MAY 25, 2021

CALC./DESIGN: BJW

DRAWN: BJW

CHECK: JLC

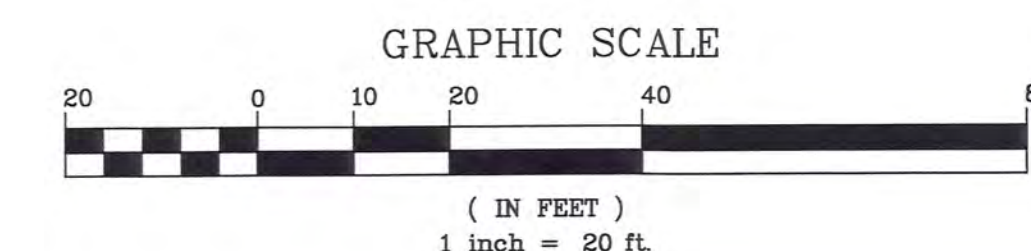
JOB NO: 435



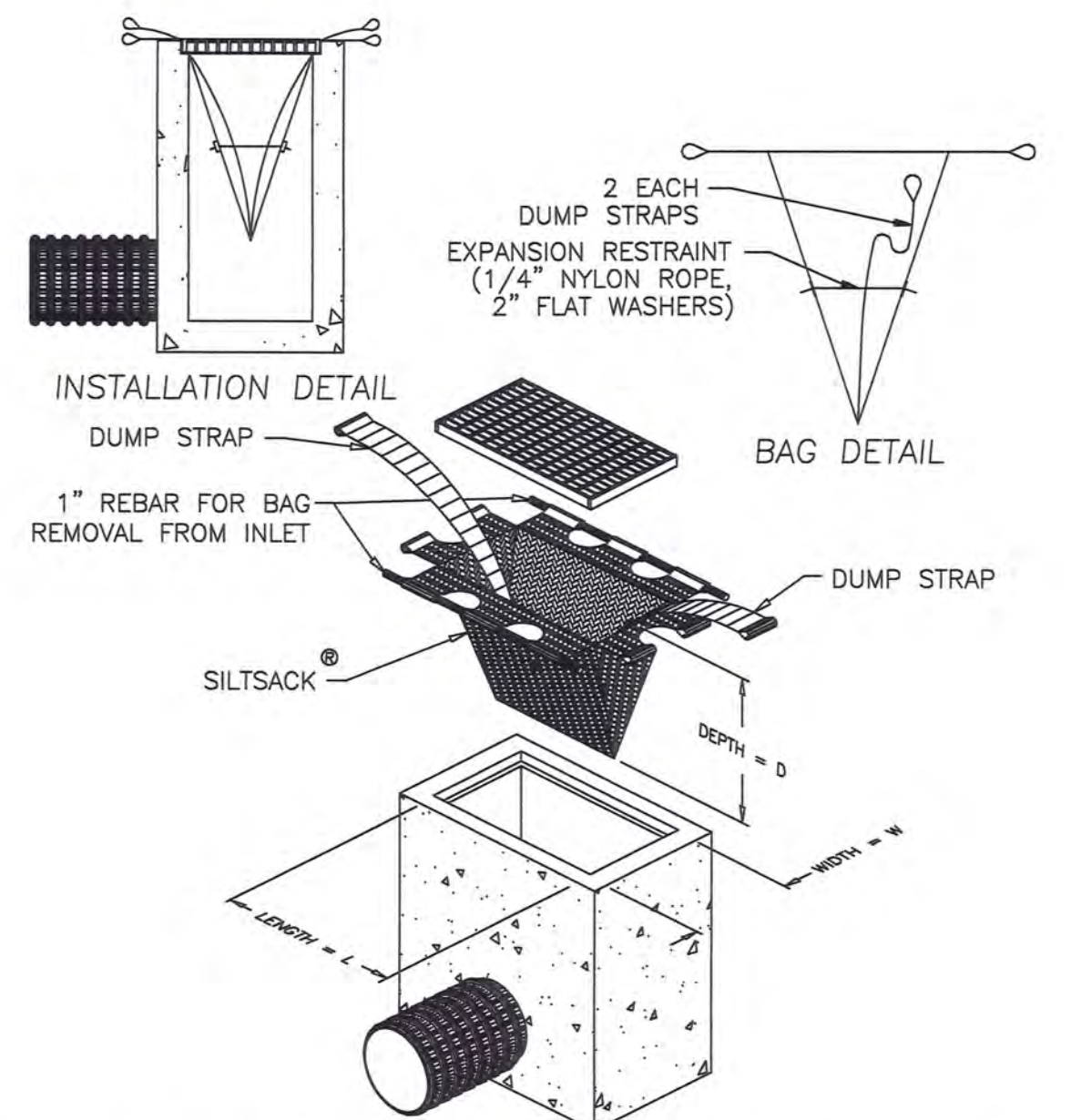
Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
1	SL2B	SINGLE	7128	70.2	0.850	B1-U0-G1	HADCO TVLN-X-X-32-G1-7-2S-730-X-XX-XX-XXX-X-X-X / MOUNTED TO 12FT POLE WITH OPTICAL CENTER @ 13FT AFG
3	SL3B	SINGLE	6039	70.2	0.850	B1-U0-G2	HADCO TVLN-X-X-32-G1-7-3SH-730-X-XX-XX-XXX-X-X-X / MOUNTED TO 12FT POLE WITH OPTICAL CENTER @ 13FT AFG
1	SL3C	SINGLE	7350	70.2	0.850	B1-U0-G2	HADCO TVLN-X-X-32-G1-7-3S-730-X-XX-XX-XXX-X-X-X / MOUNTED TO 12FT POLE WITH OPTICAL CENTER @ 13FT AFG
5	WP3	SINGLE	3200	34.3	0.850	B1-U0-G1	STONCO LPW16-30-WW-G3-3-UNV-FINISH / WALL MOUNTED @ 13FT AFG TO BOF
7	WP4	SINGLE	3098	34.3	0.850	B1-U0-G1	STONCO LPW16-30-WW-G3-4-UNV-FINISH / WALL MOUNTED @ 13FT AFG TO BOF

Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
CalcPts_1	0	0.22	7.5	0.0	N.A.	N.A.
PARKING & DRIVE LANE		1.42	6.9	0.0	N.A.	N.A.

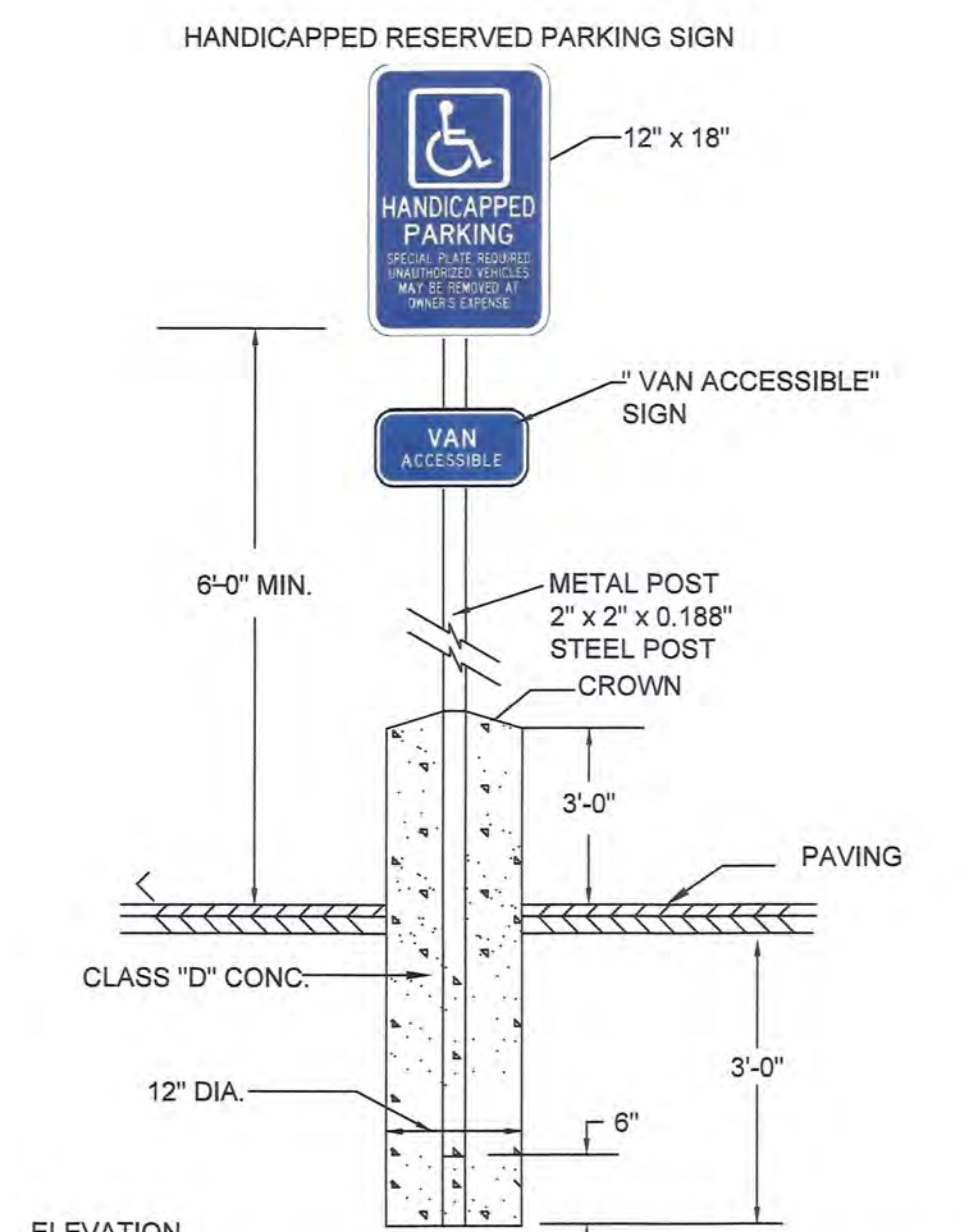
**NOTES:**  
1. PHOTOMETRIC PLAN PREPARED BY APEX LIGHTING SOLUTIONS.





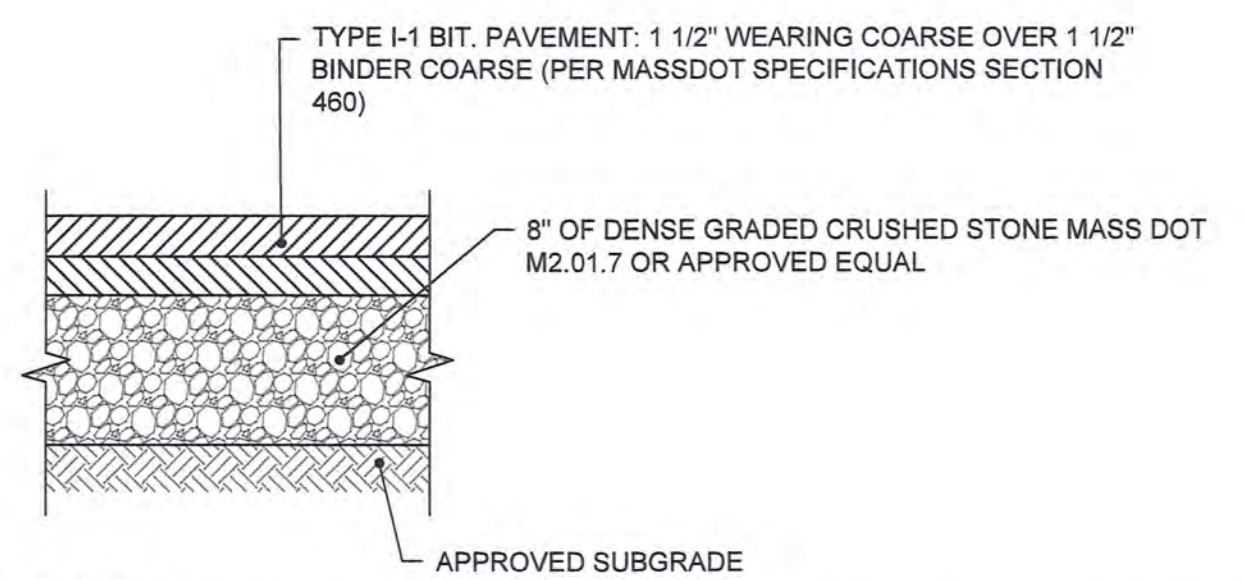


**DETAIL OF SILT SACK SEDIMENT CONTROL DEVICE**  
NOT TO SCALE



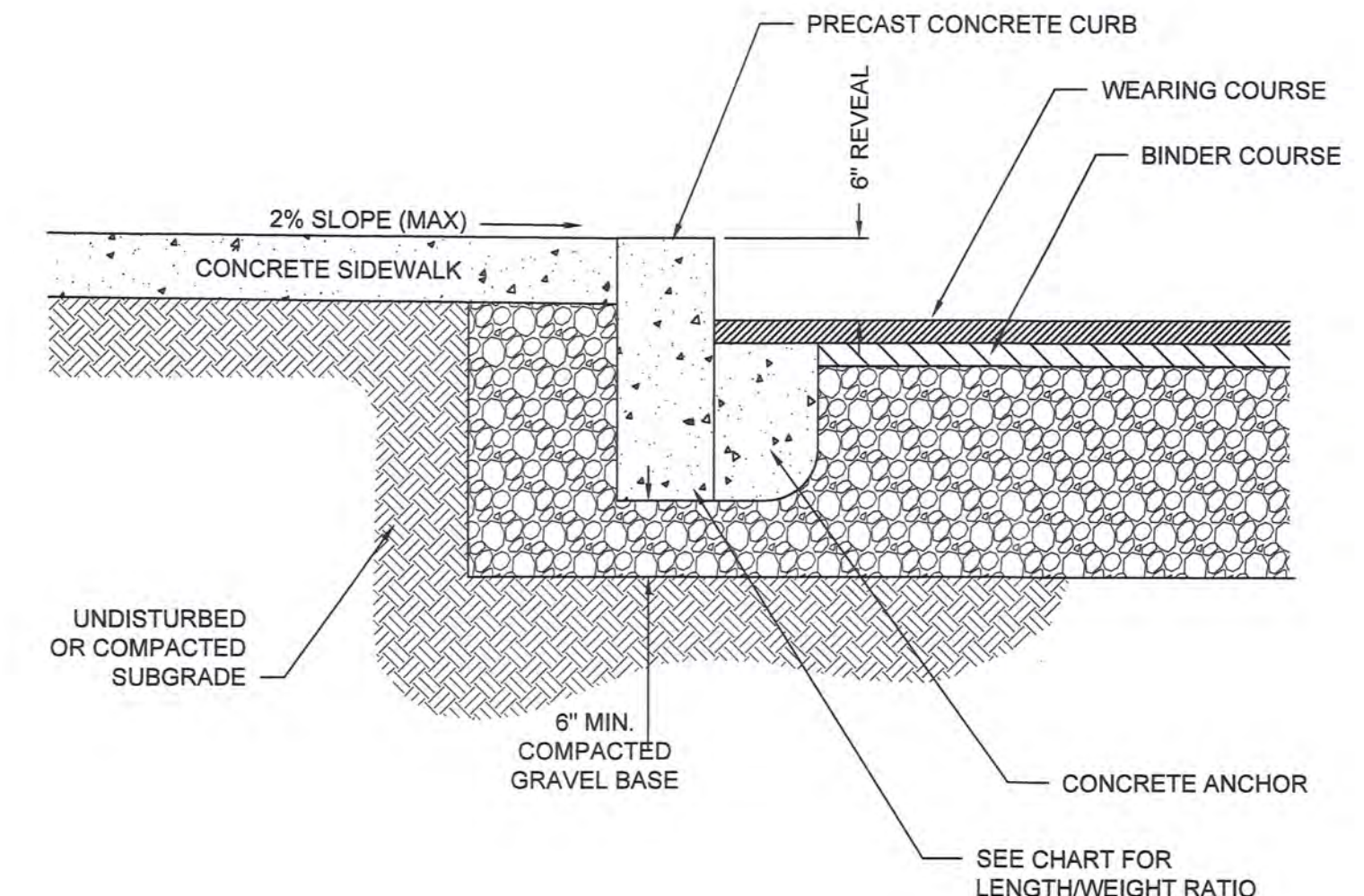
**ELEVATION**  
NOTE: 1. SIGN LAYOUT, COLORS, SYMBOL AND LETTERING SHALL BE STANDARD.  
2. TO BE LOCATED ON SITE AS DIRECTED.  
3. METAL POST TO BE PAINTED 2 COATS OF EXTERIOR GREEN ENAMEL.  
4. TO BE LOCATED AT APPROPRIATE SPACES.

**HANDICAP SIGN DETAIL**  
NOT TO SCALE



**PAVEMENT NOTES:**  
1. SUBGRADE MATERIAL SHALL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND/OR COARSE SAND, FREE FROM LOAM AND CLAY TO A DEPTH NOT LESS THAN 4-FT BELOW FINISHED GRADE ELEVATION. ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REMOVED PRIOR TO SUBGRADE INSTALLATION.  
2. SUBGRADE SHALL BE PLACED IN MAXIMUM 8\"/>

**TYPICAL PAVEMENT SECTION**  
NOT TO SCALE



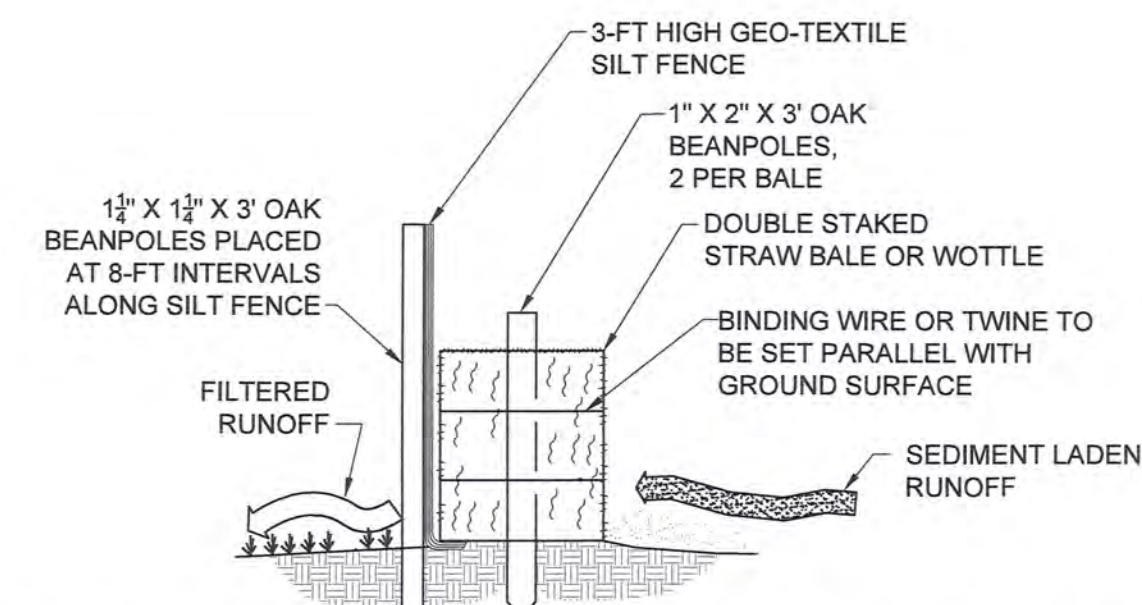
**DESIGN DATA & GENERAL NOTES**

- (1) CONCRETE STRENGTH F'c 4,000 PSI @ 28 DAYS. DENSITY 150 PCF.
- (2) CEMENT, PORTLAND TYPE I OR III PER ASTM C150-81.
- (3) ADMIXTURES, OIR & PLASTICIZERS PER ASTM C233-82.
- (4) AIR ENTRAINMENT 5%-7%

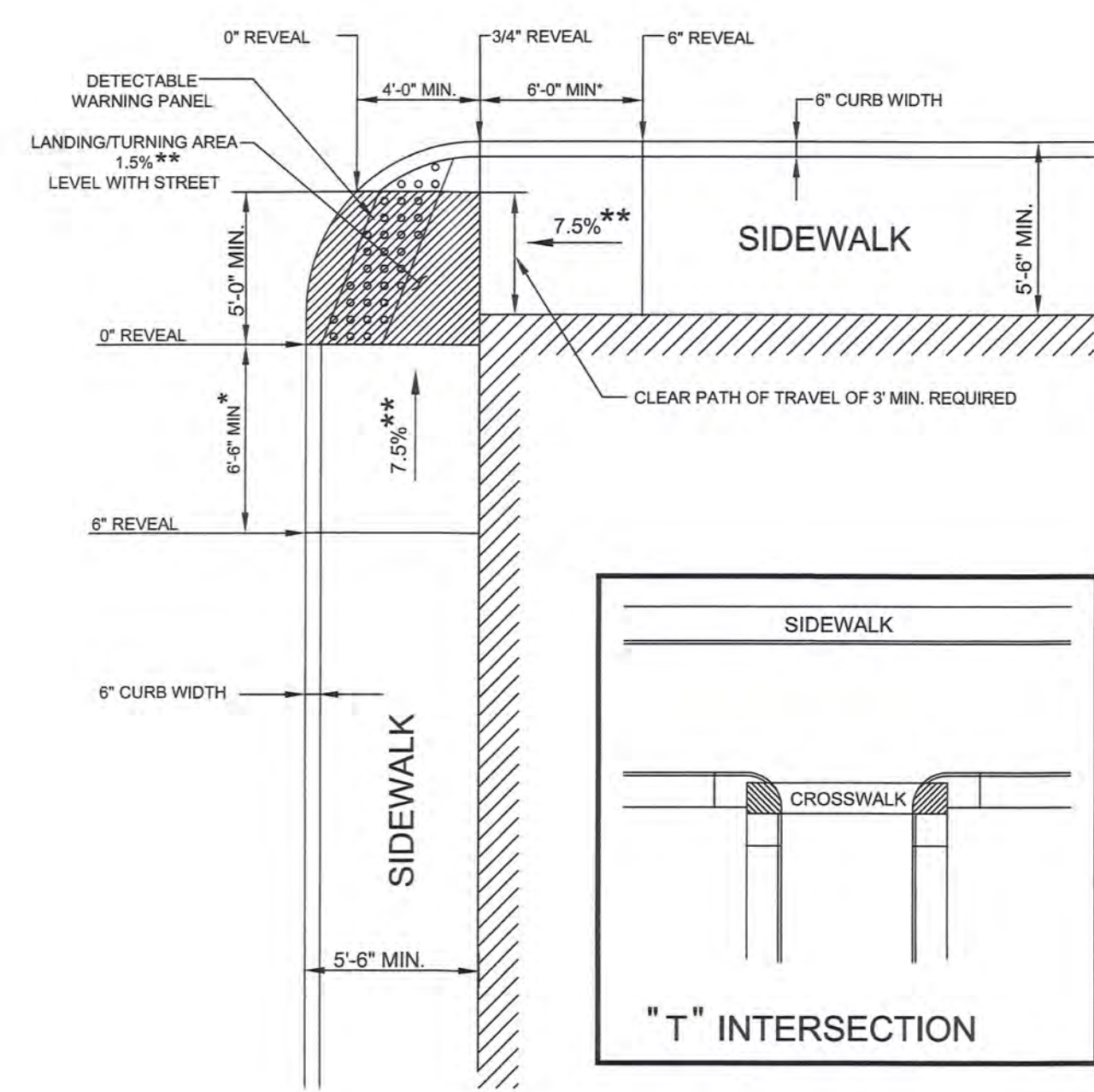
**DATA CHARTS**

LENGTH	APPROX. WEIGHT
3'-0"	365 LBS
4'-0"	487 LBS
5'-0"	609 LBS
6'-0"	731 LBS

**PRECAST CONCRETE CURB**  
NOT TO SCALE



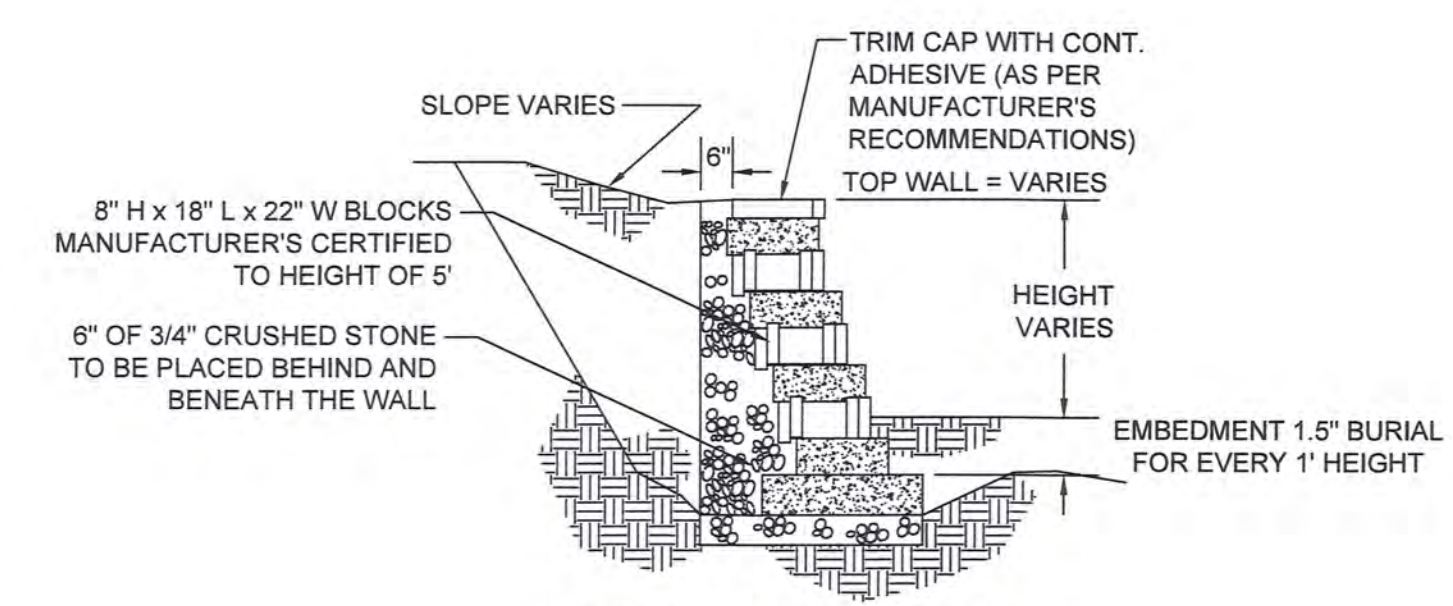
**CROSS SECTION OF HAYBALE/SILT FENCE LINE**  
NOT TO SCALE



**LEGEND**  
[Symbol] BUILDING OR OTHER UNALTERABLE CONDITION  
\* TRANSITION LENGTH SHOWN IS MINIMUM (SEE E 107.9.0)  
\*\* TOLERANCE FOR CONSTRUCTION ±0.5%

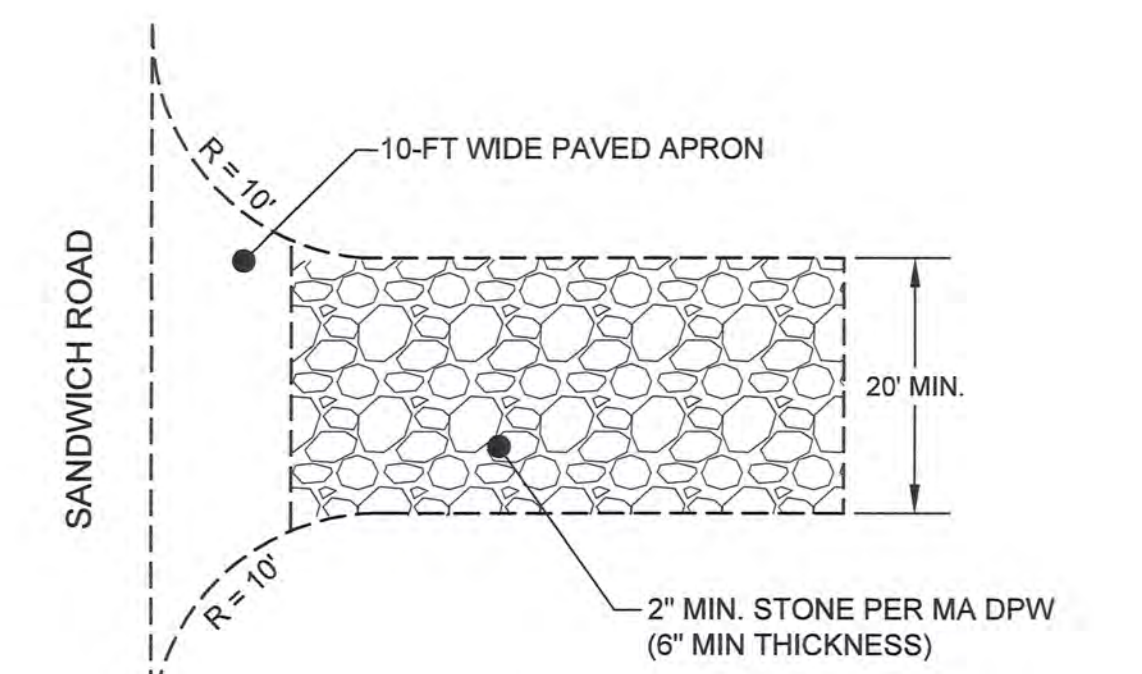
**NOTE:**  
ROADWAY, GUTTER, AND FIRST 6\"/>

**HANDICAP RAMP DETAIL**  
NOT TO SCALE

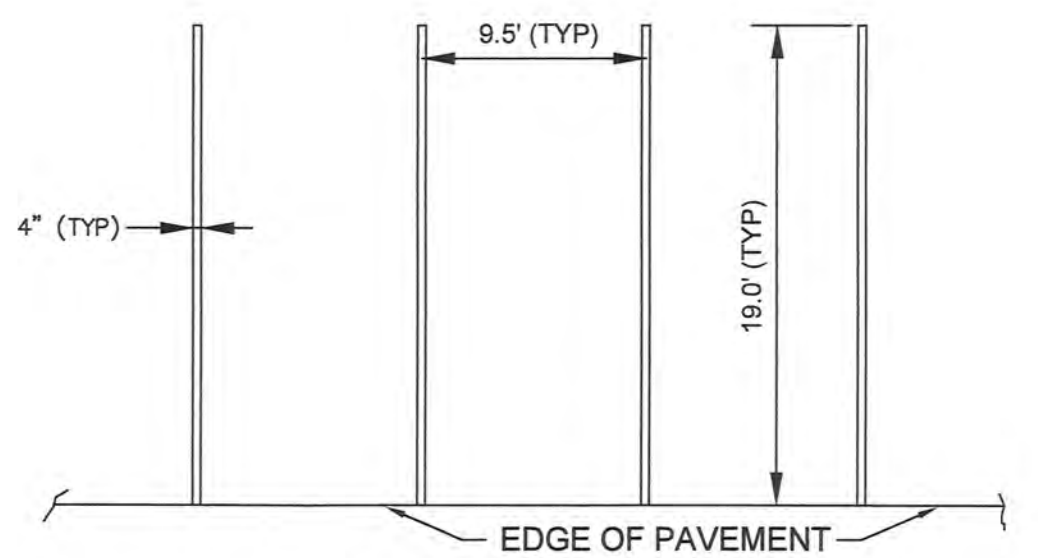


**MODULAR BLOCK WALL DETAIL**  
NOT TO SCALE

NOTE: FINAL WALL DESIGN TO BE COMPLETED PRIOR TO CONSTRUCTION.

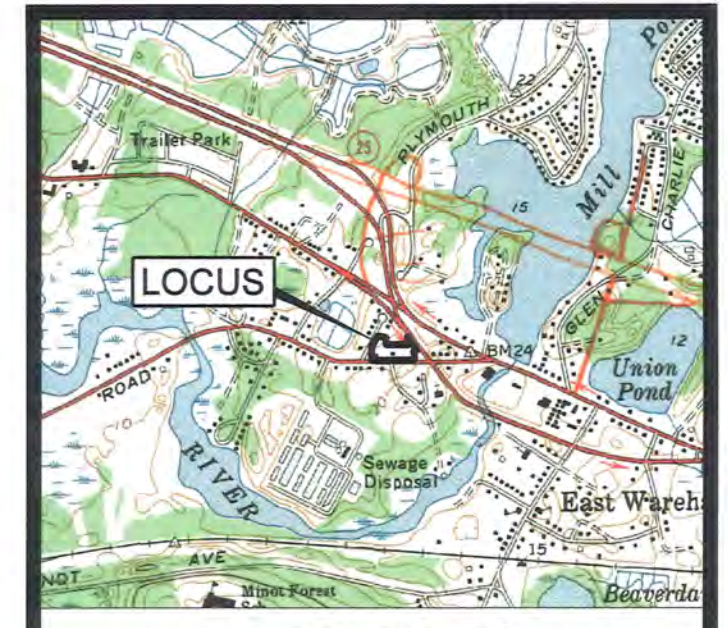


**TEMPORARY CONSTRUCTION ENTRANCE DETAIL**  
NOT TO SCALE



**TYPICAL STRIPING DETAIL**  
NOT TO SCALE

STRIPING SHALL BE 4\"/>



**LOCUS MAP**  
SCALE 1\"/>



JOHN L. CHURCHILL JR., P.E. DATE

**CROSSROADS CARE CENTER**  
AT  
238 & 240 SANDWICH ROAD  
(ROUTE 6)  
IN  
WAREHAM,  
MASSACHUSETTS  
(PLYMOUTH COUNTY)

**DETAIL SHEET**

**REVISIONS:**

No.	DATE	DESC.

**PREPARED FOR:**  
F.C. MANNIX  
P.O. BOX 85  
BOSTON, MA 02113

**PREPARED BY:**  
JC ENGINEERING, INC.  
2854 CRANBERRY HIGHWAY  
EAST WAREHAM, MA 02538  
508-273-0377

DATE: MAY 25, 2021

CALC./DESIGN: BJW

DRAWN: BJW

CHECK: JLC

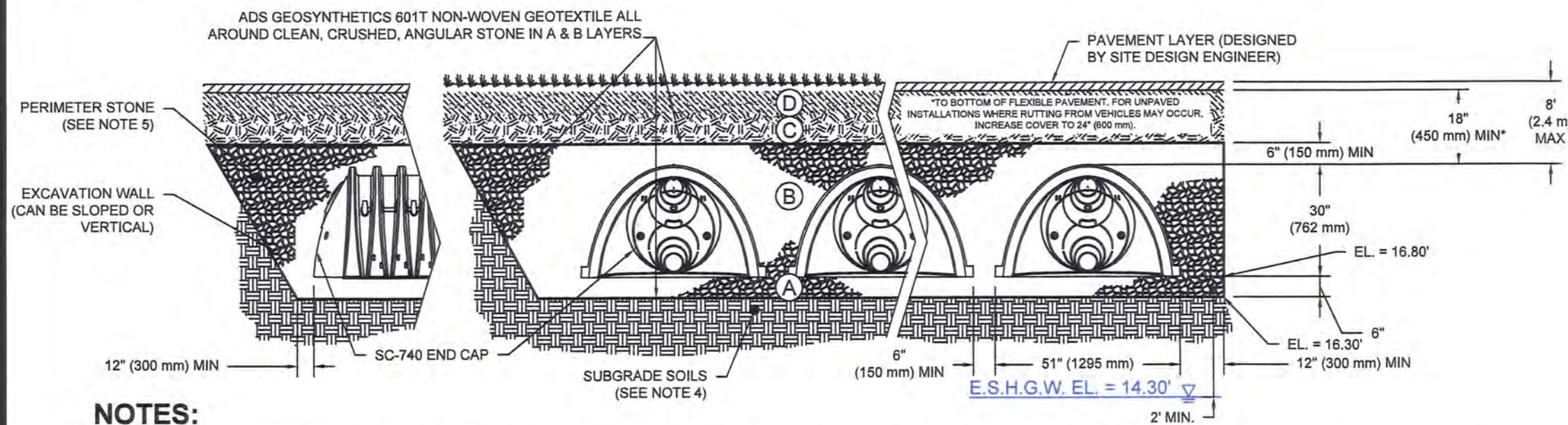
JOB NO: 435



**ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D <b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C <b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3 OR AASHTO M43 <sup>2</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B <b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>3</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A <b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>3</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

PLEASE NOTE:  
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."  
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

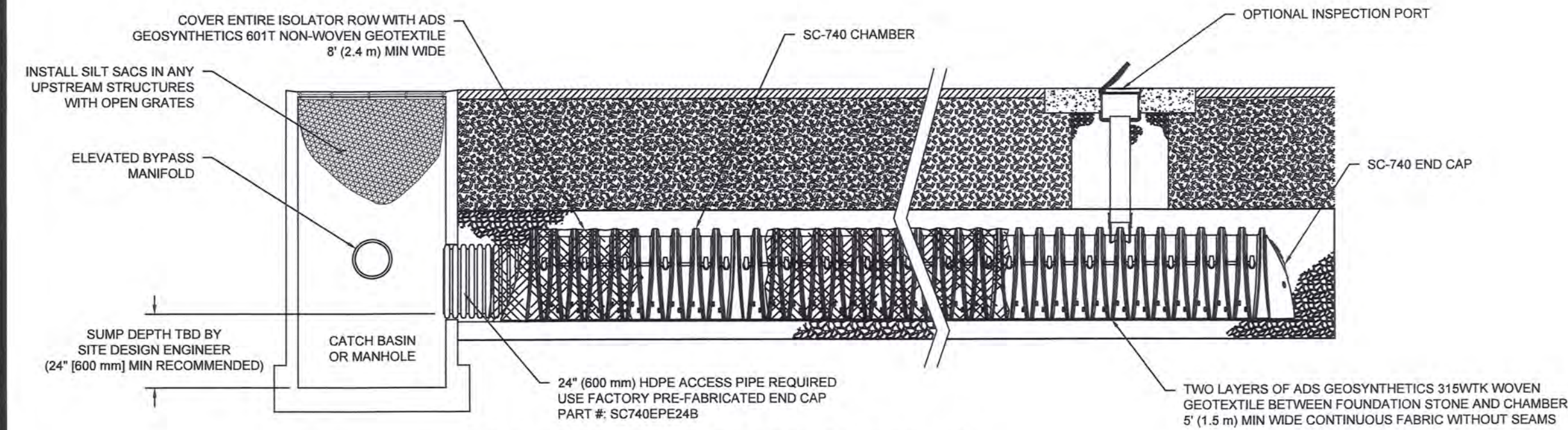


**NOTES:**

- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

**SC-740 CROSS SECTION DETAIL**

NOT TO SCALE



**SC-740 ISOLATOR ROW DETAIL**

NOT TO SCALE

**TEST PIT DATA**

SOIL EVALUATOR: John L. Churchill Jr., P.E.  
 DATE: May 21, 2003  
 TEST PIT #: 1A  
 ELEV TOP = 26.90'  
 ELEV WATER = >10.5' BGS  
 PERC RATE = 10 Sec/In  
 DEPTH OF PERC = 40"-58"  
 TEXTURAL CLASS: 1

0	26.90'
A	24.90'
B	23.57'
58"	22.07'
C	16.40'

Loamy Sand 10YR 3/2  
 Loamy Sand 10YR 5/6  
 Medium Sand 2.5Y 6/3  
 No Groundwater or Weeping Observed

**TEST PIT DATA**

SOIL EVALUATOR: John L. Churchill Jr., P.E.  
 DATE: May 21, 2003  
 TEST PIT #: 1B  
 ELEV TOP = 28.20'  
 ELEV WATER = 14.87'  
 PERC RATE = Min/In  
 DEPTH OF PERC =  
 TEXTURAL CLASS: 1

0	28.20'
A/FILL	23.70'
B	24.20'
48"	24.20'
C	14.87'

Loamy Sand 10YR 5/6  
 F-M Sand 2.5Y 6/3  
 Weeping @ 136"

**TEST PIT DATA**

SOIL EVALUATOR: John L. Churchill Jr., P.E.  
 DATE: May 21, 2003  
 TEST PIT #: 2A  
 ELEV TOP = 28.15'  
 ELEV WATER = > 10' BGS  
 PERC RATE = 15 Sec/In  
 DEPTH OF PERC = 30"-48"  
 TEXTURAL CLASS: 1

0	28.15'
A	25.32'
B	24.15'
30"	23.85'
48"	22.15'
C	16.15'

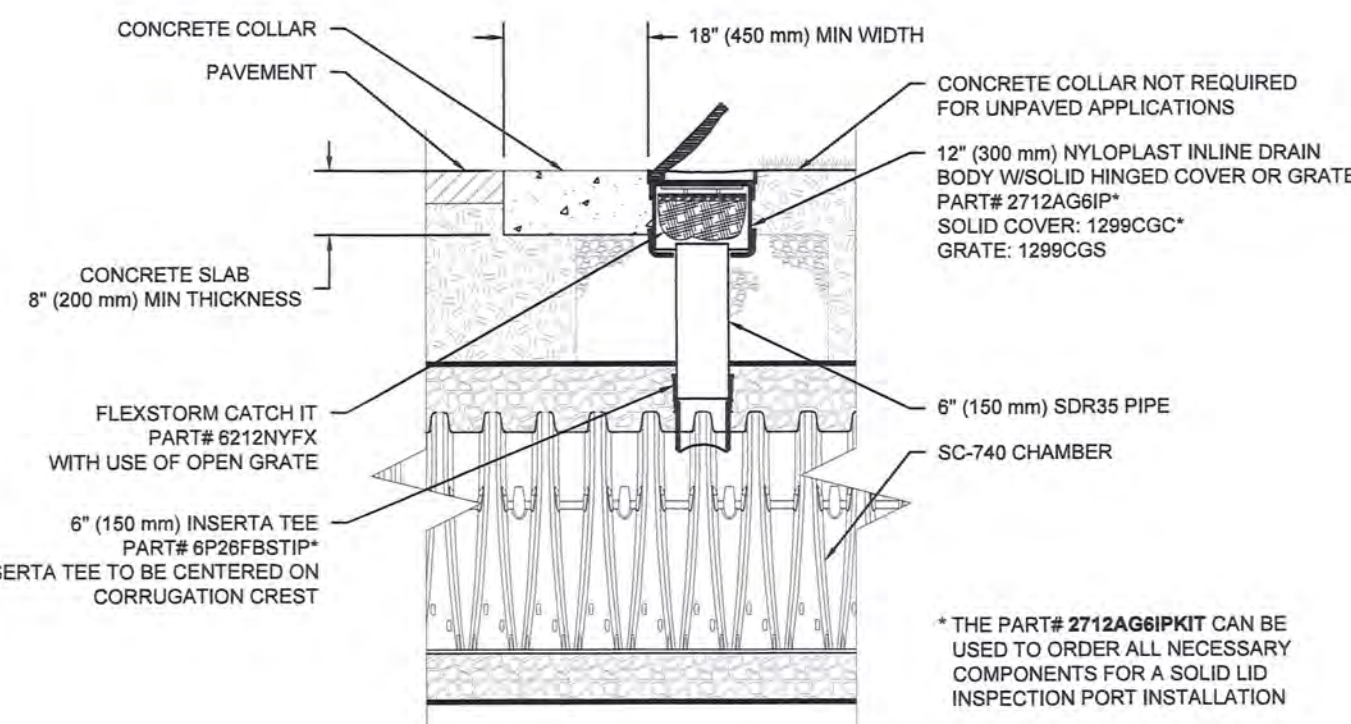
Loamy Sand 10YR 3/2  
 Loamy Sand 10YR 5/6  
 F-M Sand 2.5Y 6/3  
 No Groundwater or Weeping Observed

**TEST PIT DATA**

SOIL EVALUATOR: John L. Churchill Jr., P.E.  
 DATE: May 21, 2003  
 TEST PIT #: 2B  
 ELEV TOP = 26.30'  
 ELEV WATER = 14.30' BGS  
 PERC RATE = Min/In  
 DEPTH OF PERC =  
 TEXTURAL CLASS: 1

0	26.30'
A	25.47'
B	24.30'
48"	22.15'
C	14.30'

Loamy Sand 10YR 3/2  
 Loamy Sand 10YR 5/6  
 F-M Sand 2.5Y 6/3  
 Weeping @ 144"



**INSPECTION PORT DETAIL**

NOT TO SCALE

**STORMTECH CHAMBER SPECIFICATIONS**

- CHAMBERS SHALL BE STORMTECH SC-740 OR SC-310.
- CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN POLYPROPYLENE OR POLYETHYLENE RESINS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET ASTM F2922 (POLYETHYLENE) OR ASTM F2418-16 (POLYPROPYLENE). "STANDARD SPECIFICATION FOR THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE:
  - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
  - A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 OR ASTM F2922 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE.
  - STRUCTURAL CROSS SECTION DETAIL, ON WHICH THE STRUCTURAL EVALUATION IS BASED.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

**STORMTECH INSPECTION & MAINTENANCE**

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
    - REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
    - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
    - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
    - LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
    - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
  - ALL ISOLATOR ROWS
    - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
    - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
      - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
      - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
    - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
  - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

**NOTES**

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

**NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM**

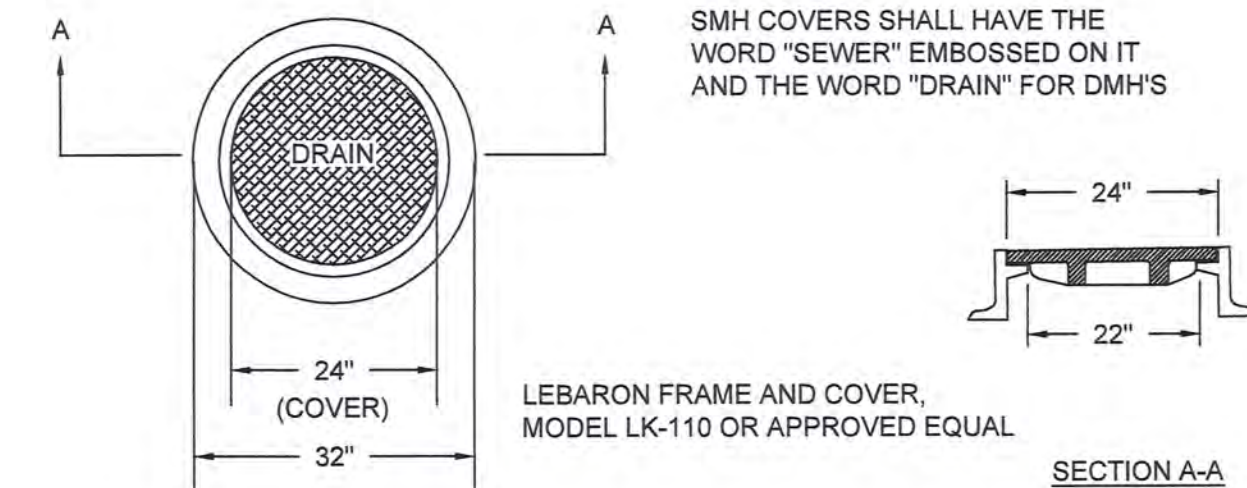
- STORMTECH SC-310 & SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
  - STONESHOOTER LOCATED OFF THE CHAMBER BED.
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4"-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

**NOTES FOR CONSTRUCTION EQUIPMENT**

- STORMTECH SC-310 & SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
  - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

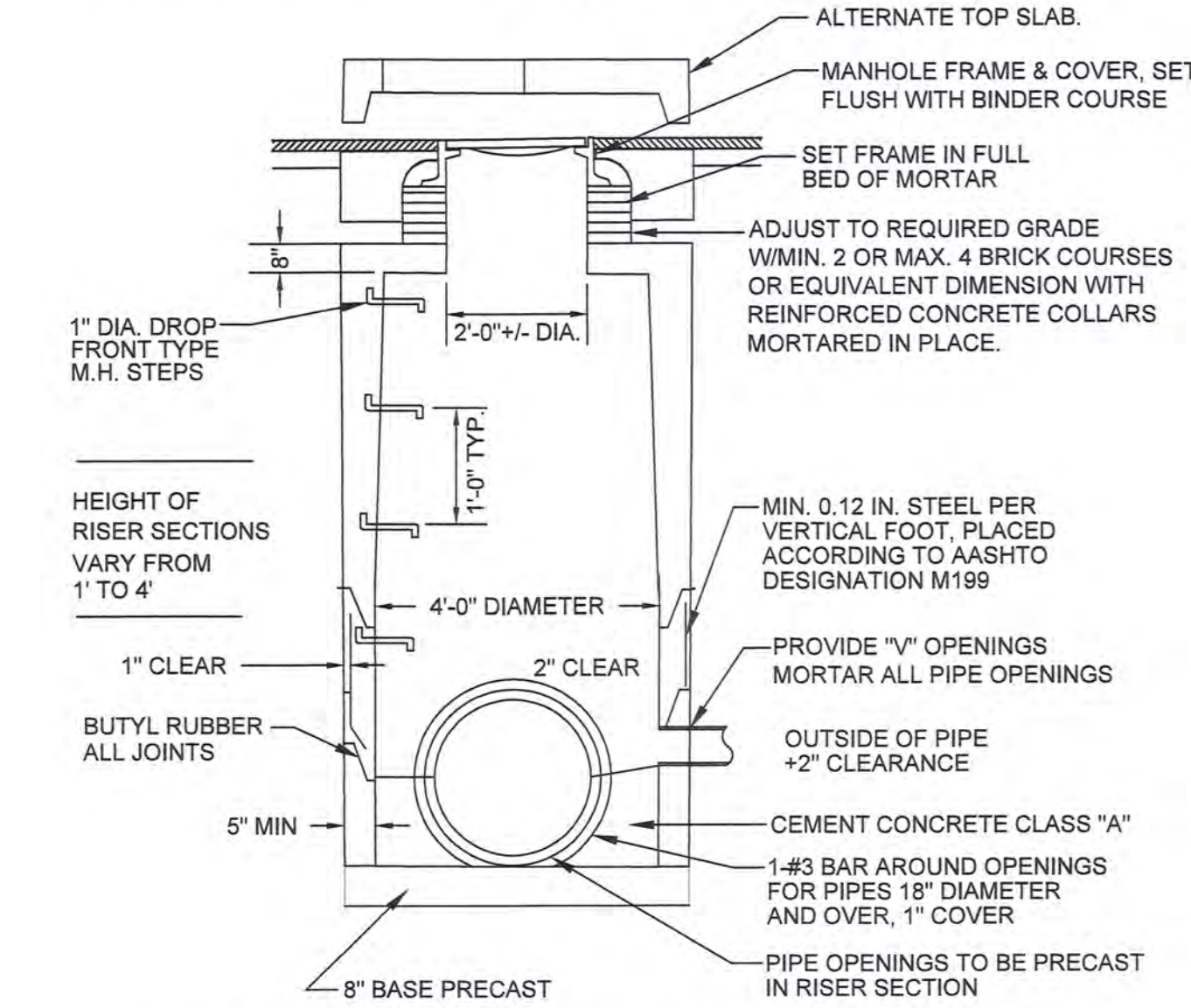
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



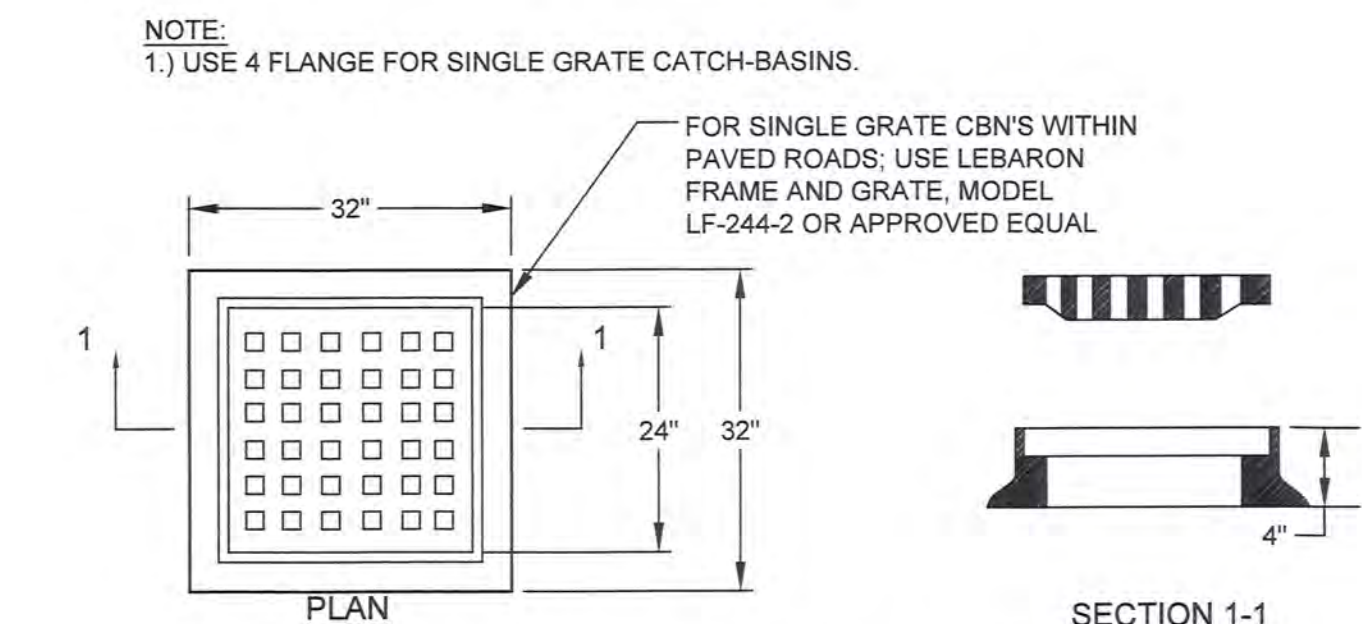
**STANDARD MANHOLE FRAME & COVER (H-20)**

NOT TO SCALE



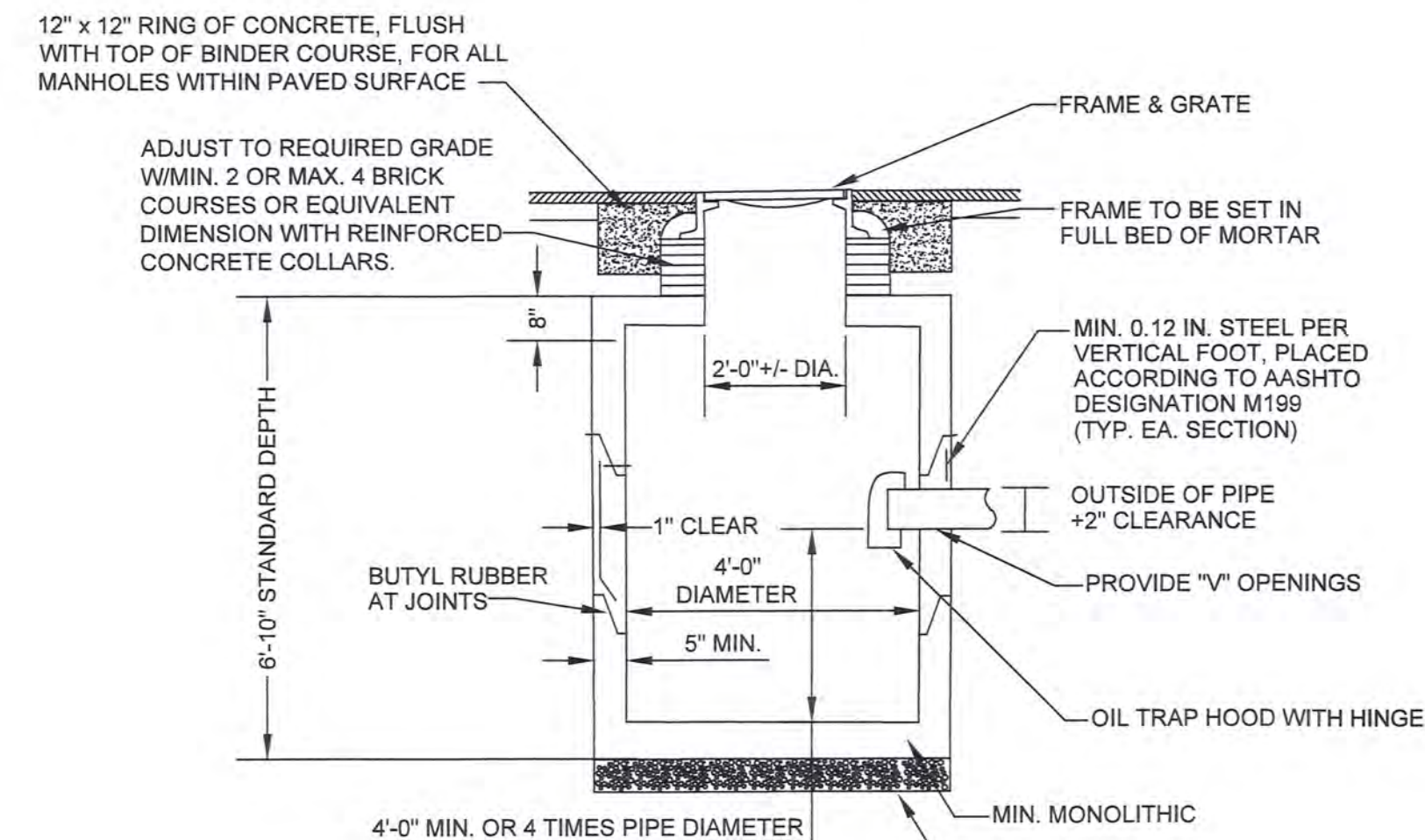
**PRECAST DRAIN MANHOLE (H-20)**

NOT TO SCALE



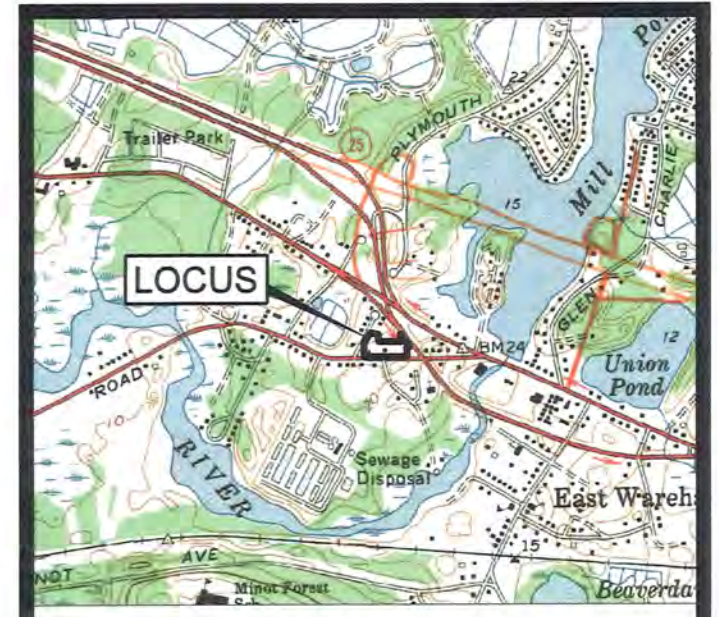
**CATCH BASIN FRAME & GRATE (H-20)**

NOT TO SCALE

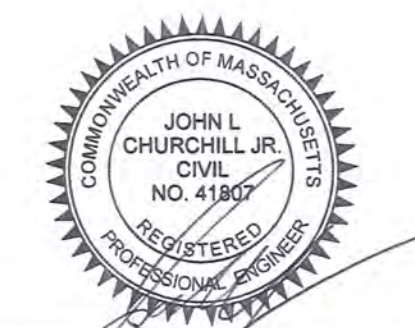


**PRECAST CONCRETE CATCH BASIN (H-20)**

NOT TO SCALE



LOCUS MAP  
 SCALE 1" = 2000'



JOHN L. CHURCHILL JR., P.E. DATE

**CROSSROADS CARE CENTER**  
 AT  
 238 & 240 SANDWICH ROAD (ROUTE 6)  
 IN  
 WAREHAM, MASSACHUSETTS (PLYMOUTH COUNTY)

**DETAIL SHEET**

**REVISIONS:**

No.	DATE	DESC.

**PREPARED FOR:**

F.C. MANNIX  
 P.O. BOX 85  
 BOSTON, MA 02113

**PREPARED BY:**

JC ENGINEERING, INC.  
 2854 CRANBERRY HIGHWAY  
 EAST WAREHAM, MA 02538  
 508-273-0377

DATE: MAY 25, 2021

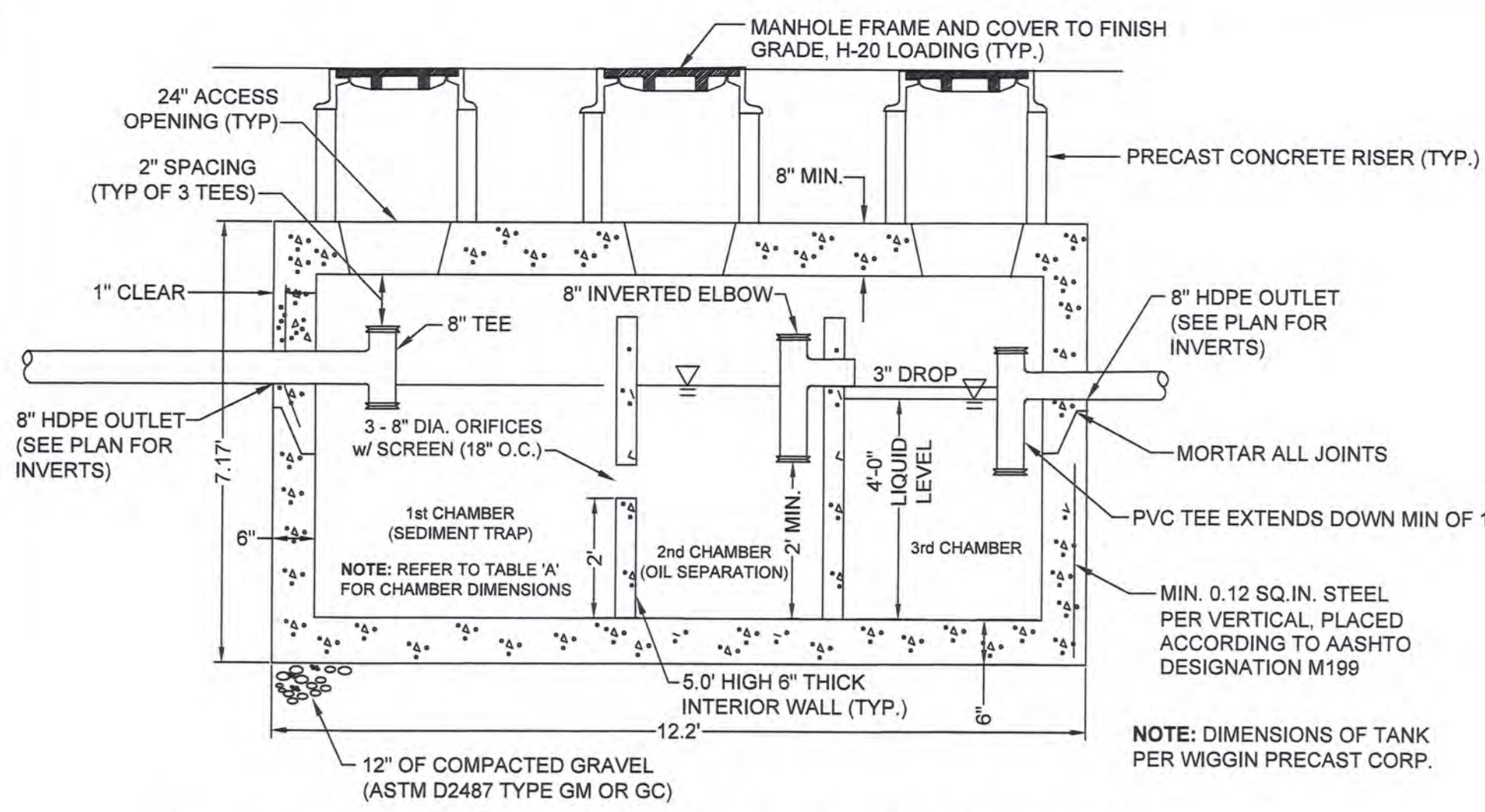
CALC./DESIGN: BJW

DRAWN: BJW

CHECK: JLC

JOB NO: 435

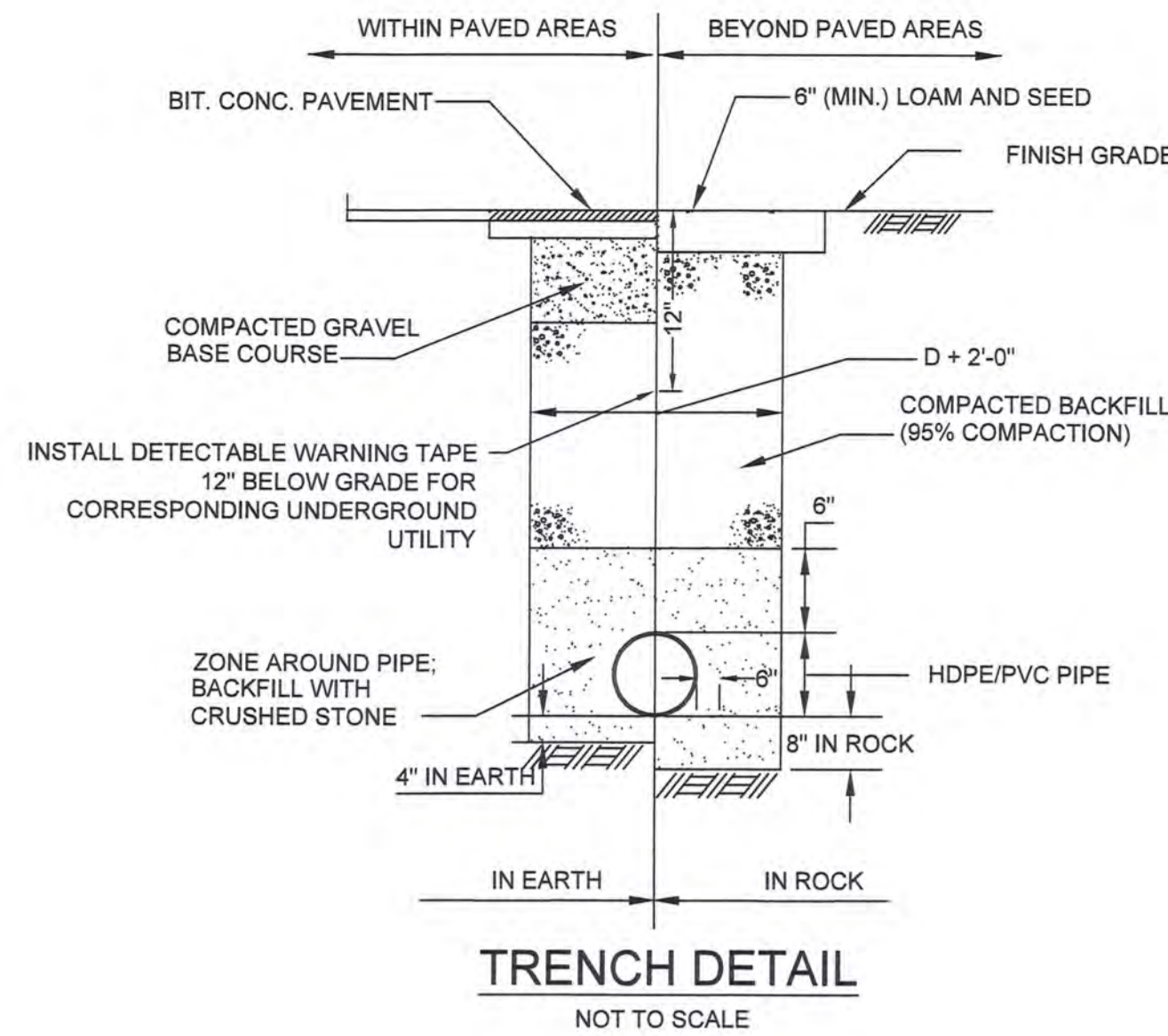




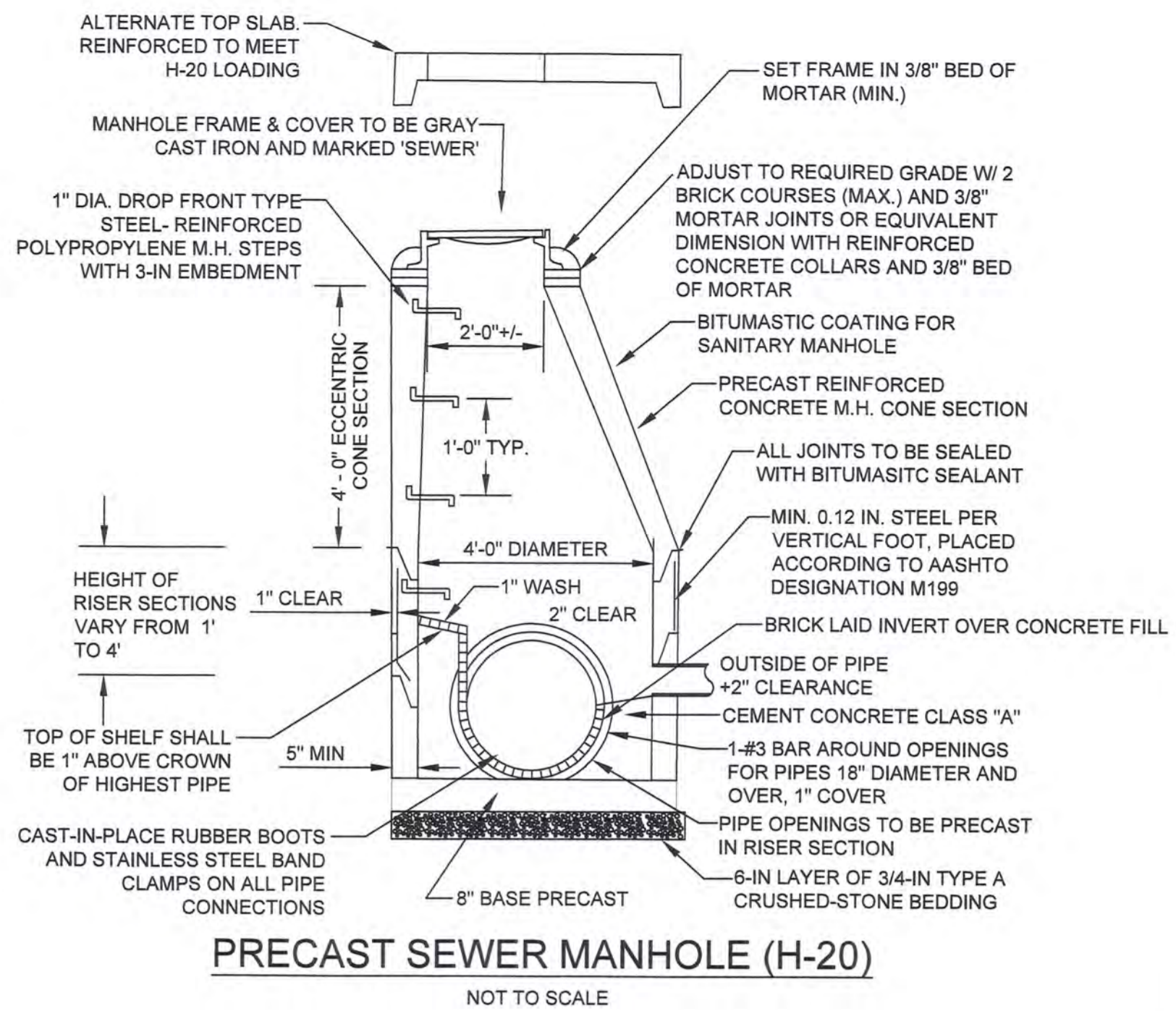
**TABLE A**

TANK	CHAMBER #1 LENGTH	CHAMBER #2 LENGTH	CHAMBER #3 LENGTH
1	3.50'	3.35'	3.35'
2	5.70'	2.25'	2.25'

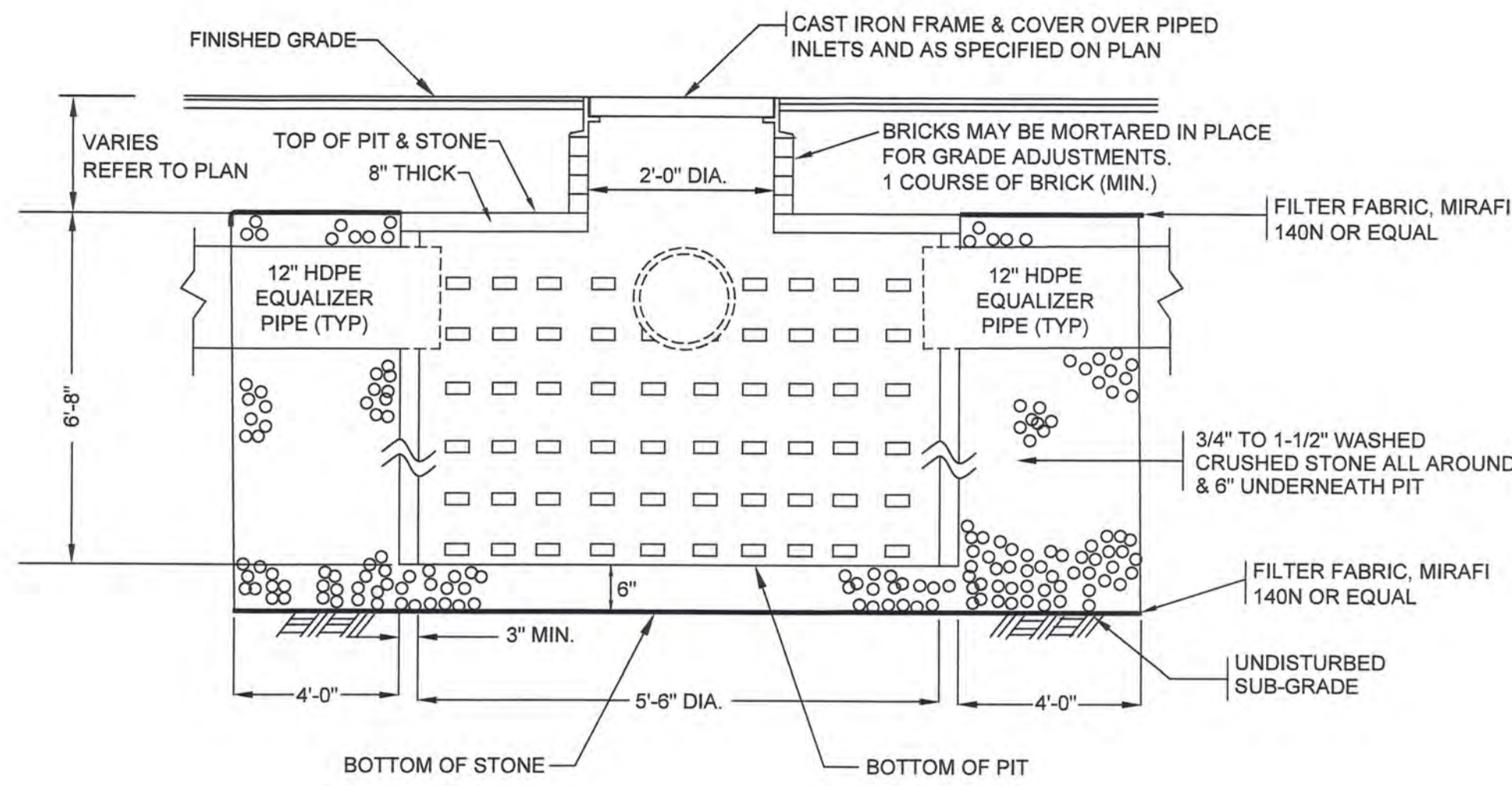
**2,500 GALLON OIL / GRIT SEPARATOR TANK (H-20)**  
 INSIDE DIMS: LENGTH = 11.2' WIDTH = 6.5' EFF. DEPTH = 5.08'  
 NOT TO SCALE



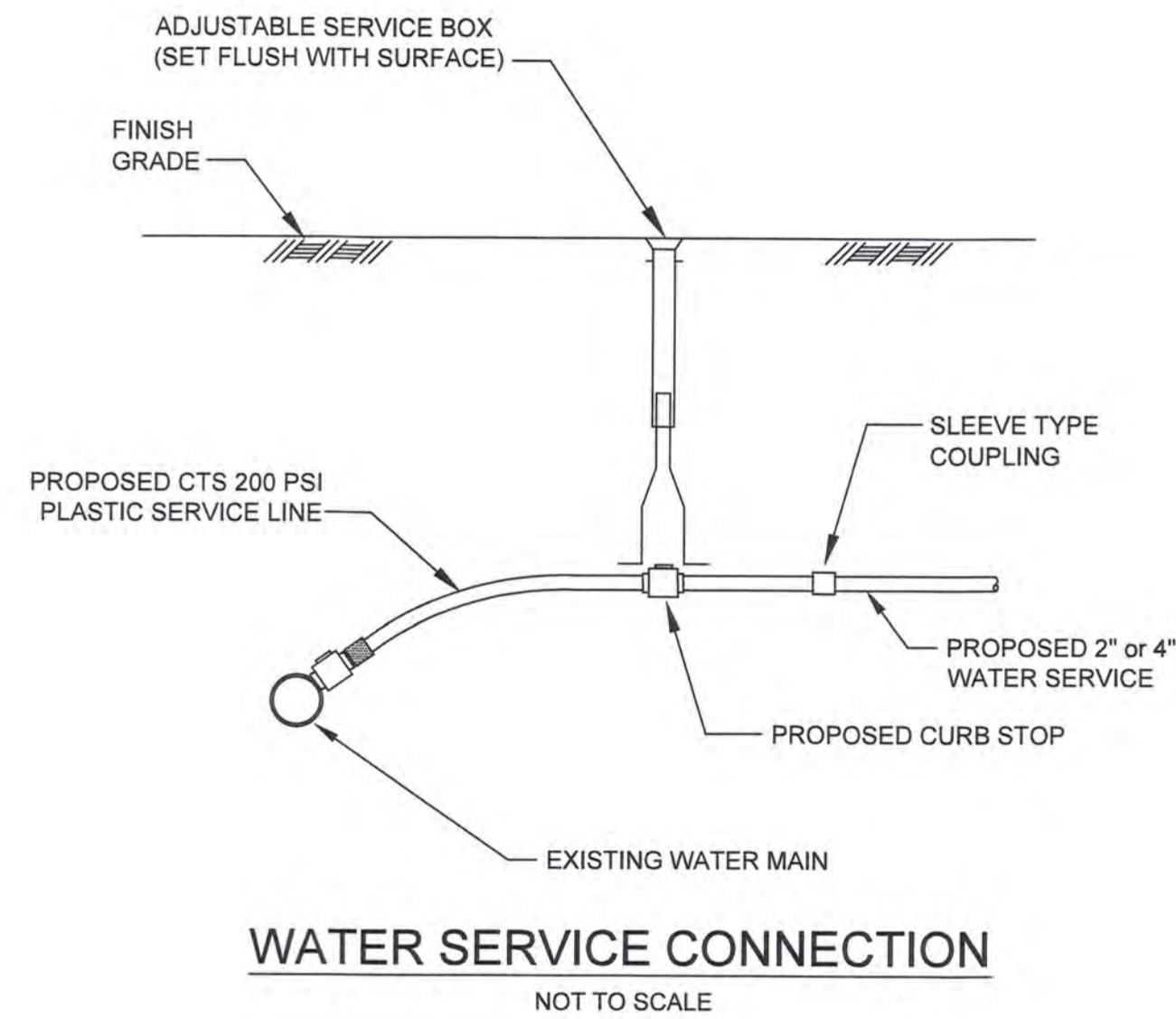
**TRENCH DETAIL**  
 NOT TO SCALE



**PRECAST SEWER MANHOLE (H-20)**  
 NOT TO SCALE

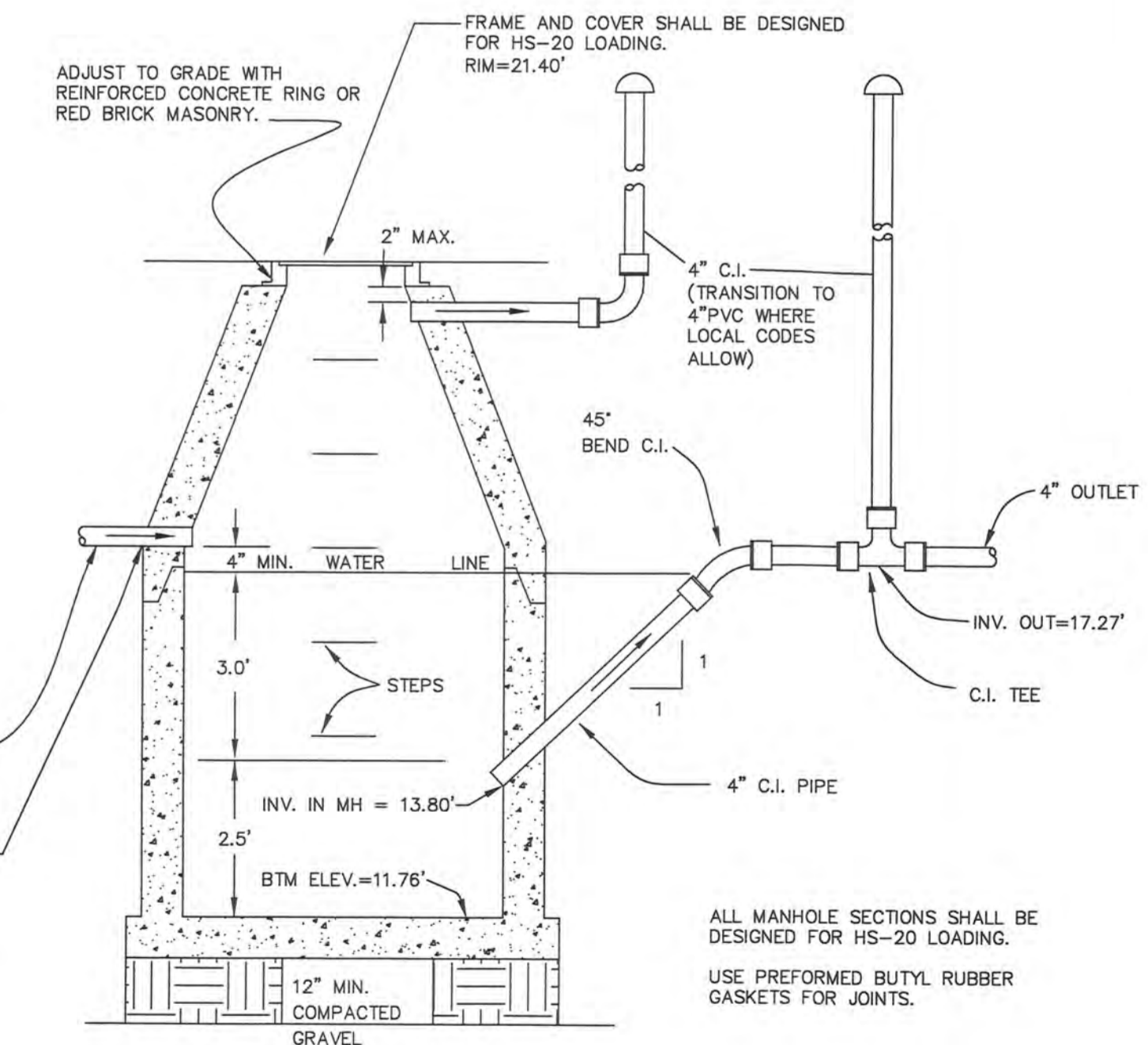


**PRECAST CONCRETE 1,000 GALLON LEACHING PIT (H-20)**  
 IN FIELD CONFIGURATION (REFER TO PLAN)  
 NOT TO SCALE

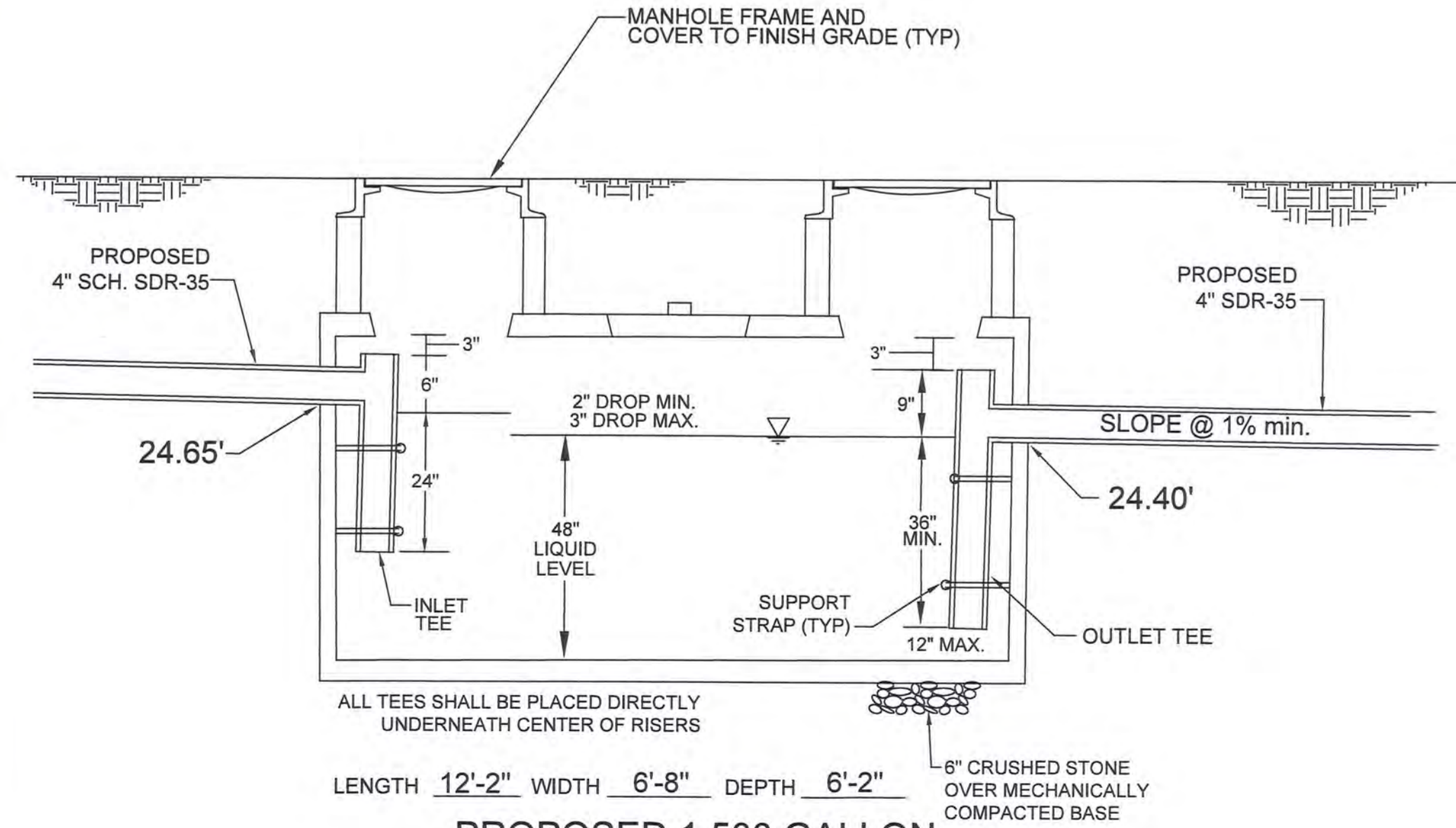


**WATER SERVICE CONNECTION**  
 NOT TO SCALE

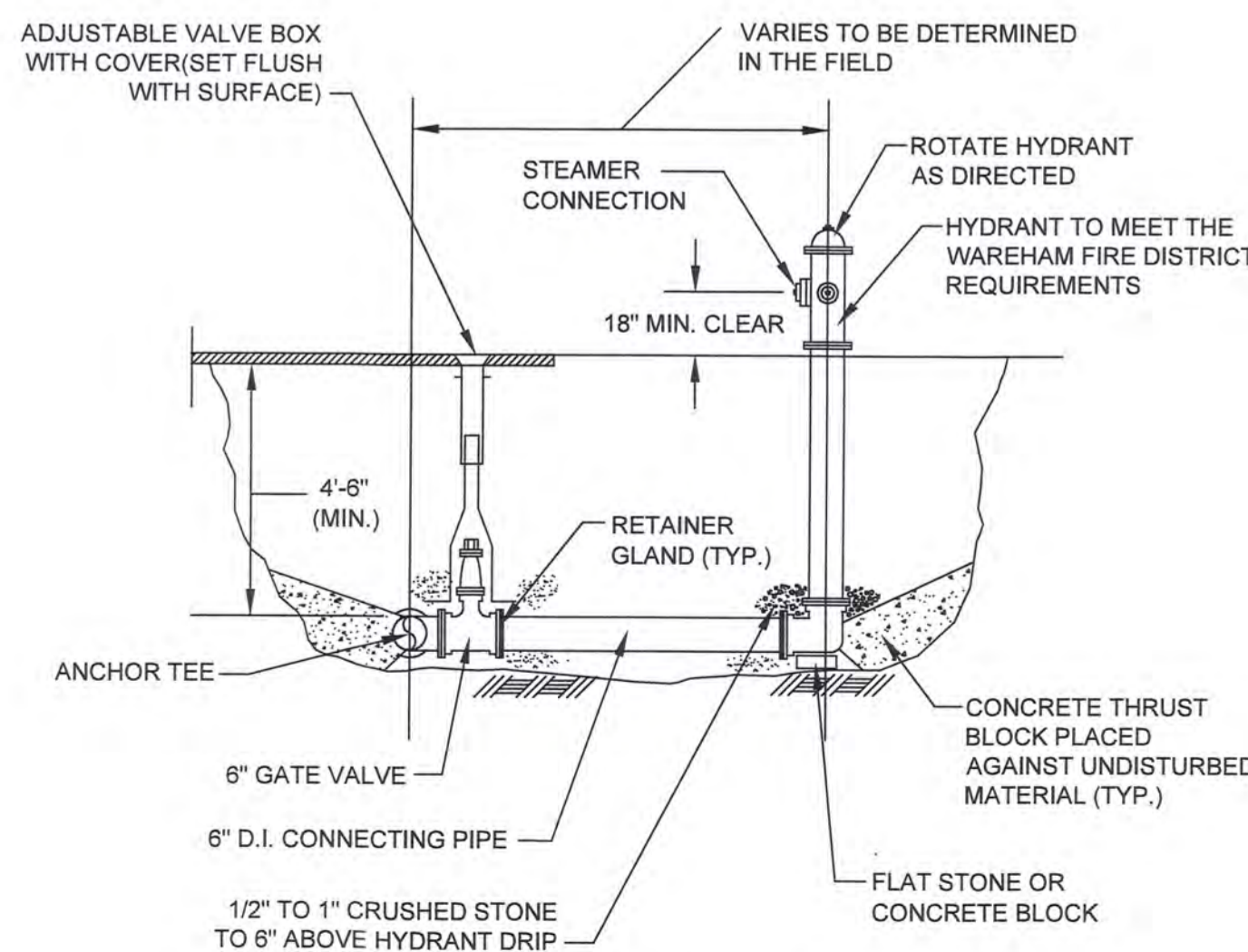
OPENING SHALL BE NOT LESS THAN 24" DIAMETER.  
 INLET PIPE SHALL BE AT LEAST FOUR INCHES ABOVE NORMAL WATER LINE.  
 THE NEW MANHOLE MUST BE FILLED WITH CLEAN WATER BEFORE USING, AND AFTER BEING EMPTIED FOR PERIODIC CLEANING.  
 ALL OIL AND GASOLINE MUST BE REMOVED BEFORE CLEANING OUT THE BASIN, AND MUST NOT BE DISCHARGED INTO THE SEWER THROUGH OTHER FIXTURES.  
 POLYPROPYLENE STEPS SHALL BE SPACED 12" APART FOR DEPTH OF STRUCTURE.



**GAS TRAP DETAIL (5' DIAMETER H-20)**  
 NOT TO SCALE

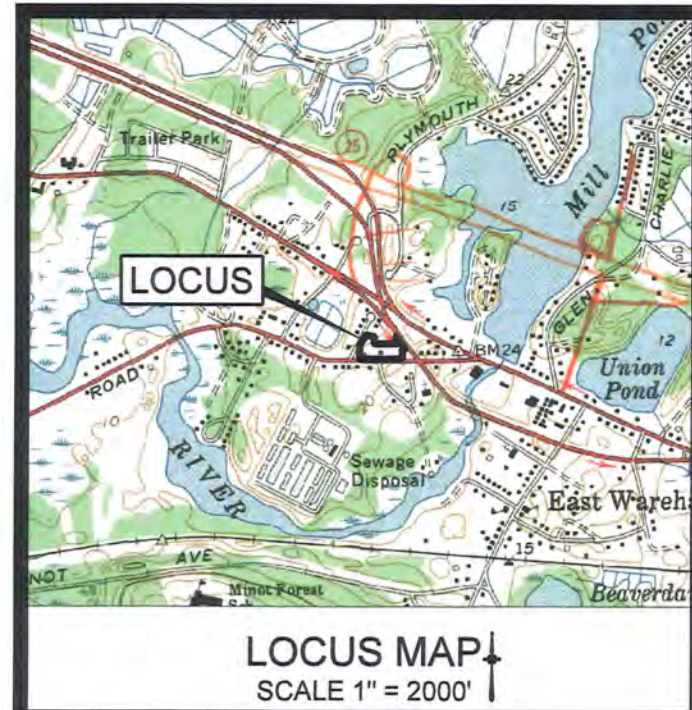


**PROPOSED 1,500 GALLON H-20 GREASE TRAP**  
 NOT TO SCALE



NOTE: DEPTH OF HYDRANT BURY TO SUIT INSTALLED DEPTH OF COVER OVER WATERMAIN.

**HYDRANT ASSEMBLY DETAIL**  
 NOT TO SCALE



**LOCUS MAP**  
 SCALE 1" = 2000'

JOHN L. CHURCHILL, JR., P.E. DATE 5/25/21

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