

Spruhan Engineering, P.C.

> 80 JEWETT ST, (SUITE 1) NEWTON, MA 02458

Tel: 617-816-0722 Email:espruhan@gmail.com

383-387 BOYLSTON STREET NEWTON MASSACHUSETTS

SURVEY PLAN

#### REVISION BLOCK

DATE

DESCRIPTION

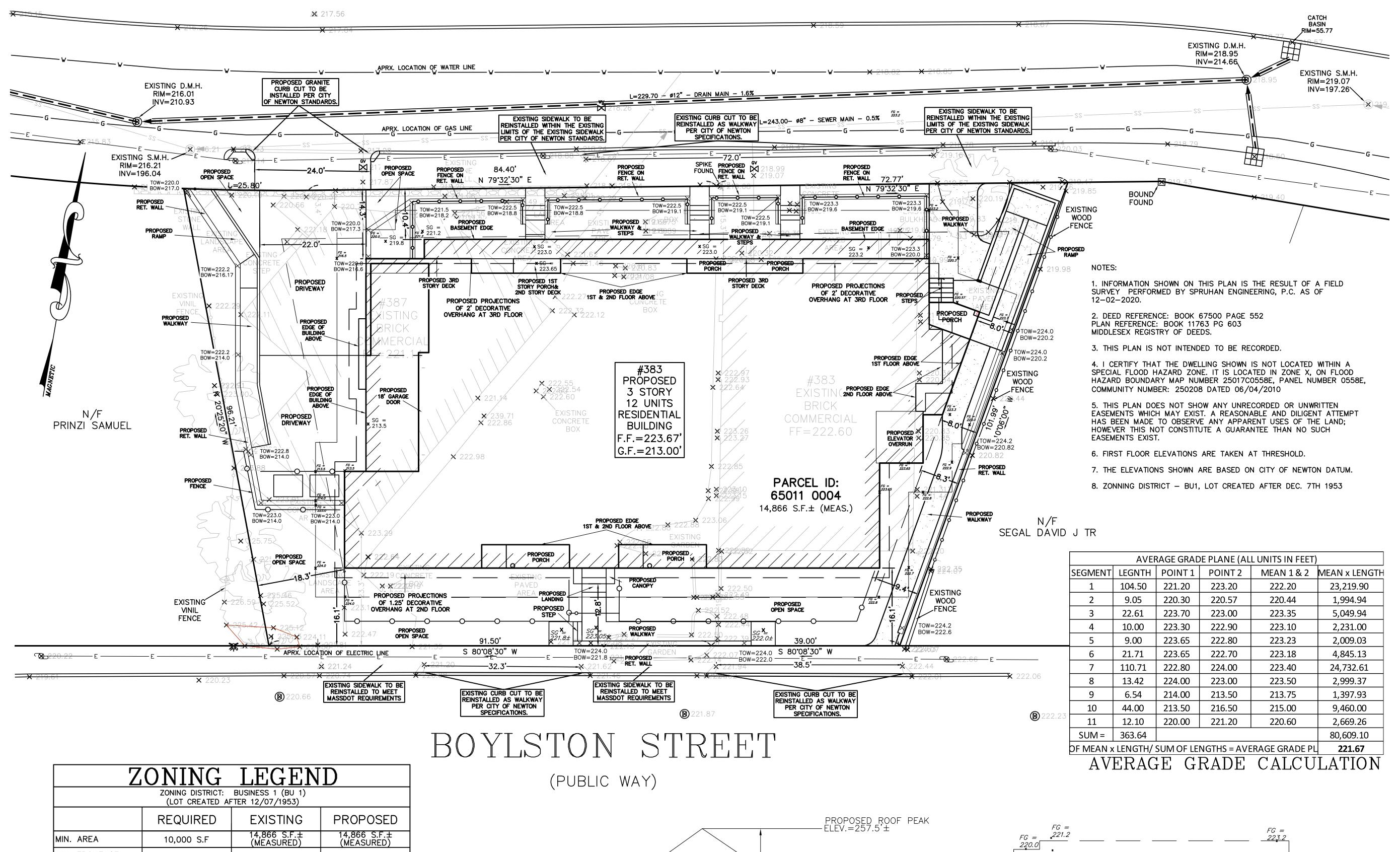
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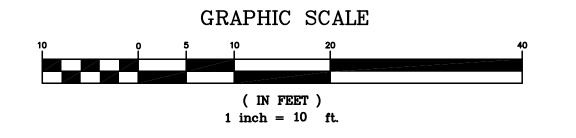
-		
ı	DATE:	12/04/2020
ı	DRAWN BY:	A.G.
ı	CHECKED BY:	E.S
ı	APPROVED BY:	E.S
н		

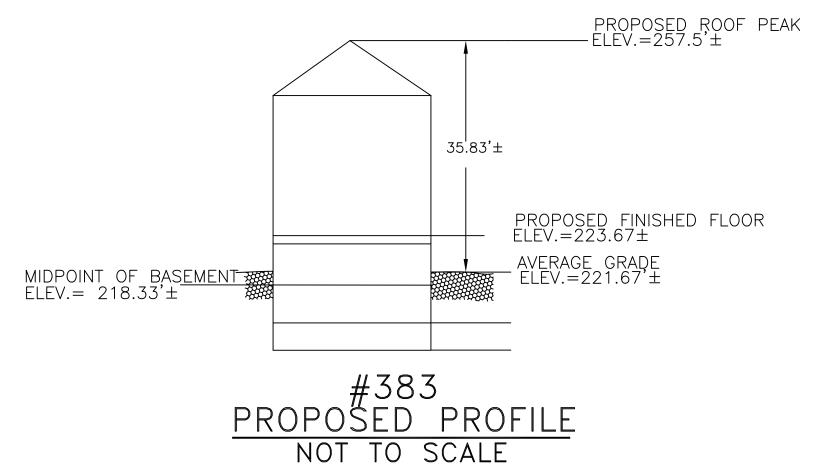
EXISTING CONDITIONS

SHEET 1 OF 6

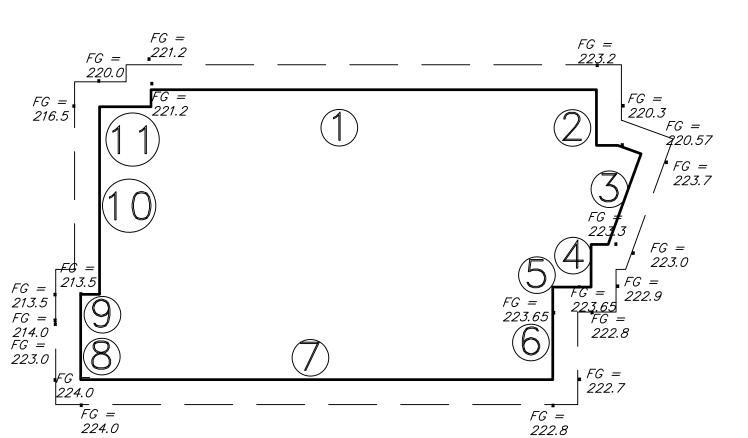


MIN. FRONTAGE MIN. YARD FRONT 10' 3.4' 10.4 1/2 BLDG HEIGHT 2.7 18.3 EAST SIDE 1/2 BLDG HEIGHT 4.2' 1/2 BLDG HEIGHT 53.2% MAX. LOT COV. 37.69% MIN. OPEN SPACE MAX. BLDG. HEIGHT 36' 19.73**'**± 35.83°±





\* MIDPOINT OF BASEMENT ELEVATION LOWER THAN AVERAGE GRADE ELEVATION THEREFORE PROPOSED BASEMENT MEETS DEFINITION OF BASEMENT



AVERAGE GRADE PLANE



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DESCRIPTION	DATE
UPDATED PER COMMENTS	10/17/21
UPDATED PER ARCHITECT REQUEST	11/3/21
UPDATED PER ARCHITECT REQUEST	11/10/21
UPDATED PER ARCHITECT REQUEST	12/10/21

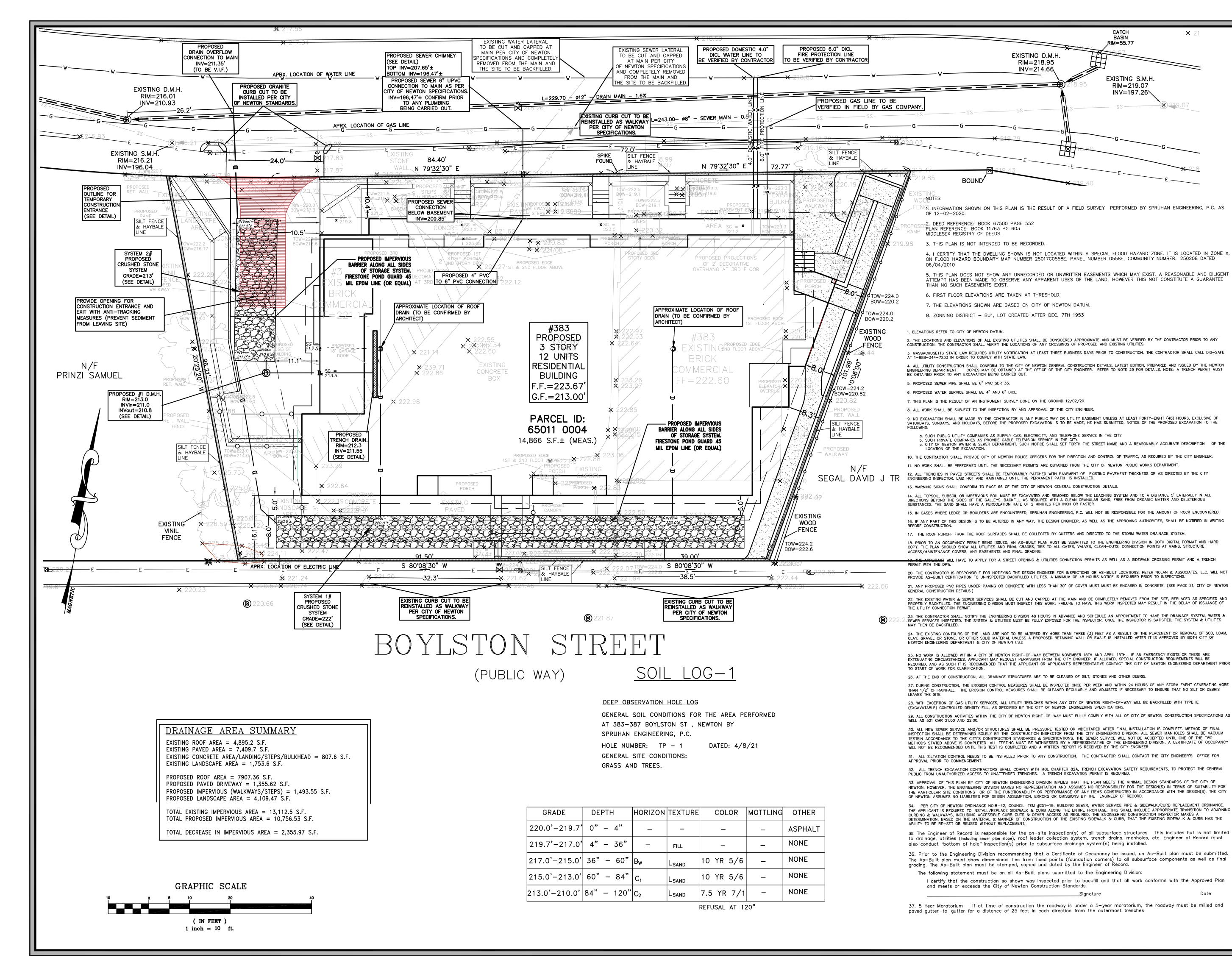
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DRAFT

DATE:	3/15/2021
DRAWN BY:	D.K.
CHECKED BY:	E.S
APPROVED BY:	E.S

PROPOSED GRADING PLAN

SHEET 2 OF 6



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80 JEWETT ST, (SUITE 1)

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SURVEY PLAN

#### REVISION BLOCK

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UPDATED PER ARCHITECT REQUEST	11/3/21
UPDATED PER ARCHITECT REQUEST	11/10/21
UPDATED PER ARCHITECT REQUEST	12/10/21

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DRAFT

itted.	DATE:	3/15/2021
final	DRAWN BY:	D.K.
	CHECKED BY:	E.S
Plan	APPROVED BY:	E.S

PROPOSED DRAINAGE AND UTILITIES PLAN

SHEET 3 OF 6

PVC PIPE -INV=220.0'±

UNDISTURBED MATERIAL

**SCALE: NOT TO SCALE** 

LOWEST GRADE 222.0'

||ICOVER =|| |=|18"\_MIN∫E

### PLAN VIEW DRAINAGE SYSTEM DETAIL

SYSTEM #1 REAR - 3/4"-1½" DRAIN ROCK - PERFORATED EQUALISER 3" OF PEASTONE 6" OVERFLOW PIPE COTG I NV=220'± - PROPOSED IMPERVIOUS
BARRIER ALONG ALL
SIDES OF STORAGE
SYSTEM. FIRESTONE
POND GUARD 45 MIL
EPDM LINE (OR EQUAL) 3/4- 1 1/2" DRAIN ROCK

PERFORATED -EQUALISER PIPEWORK

6" OVERFLOW PIPE: INV=220.8' (TO THE CRUSHED STONE SYSTEM1)

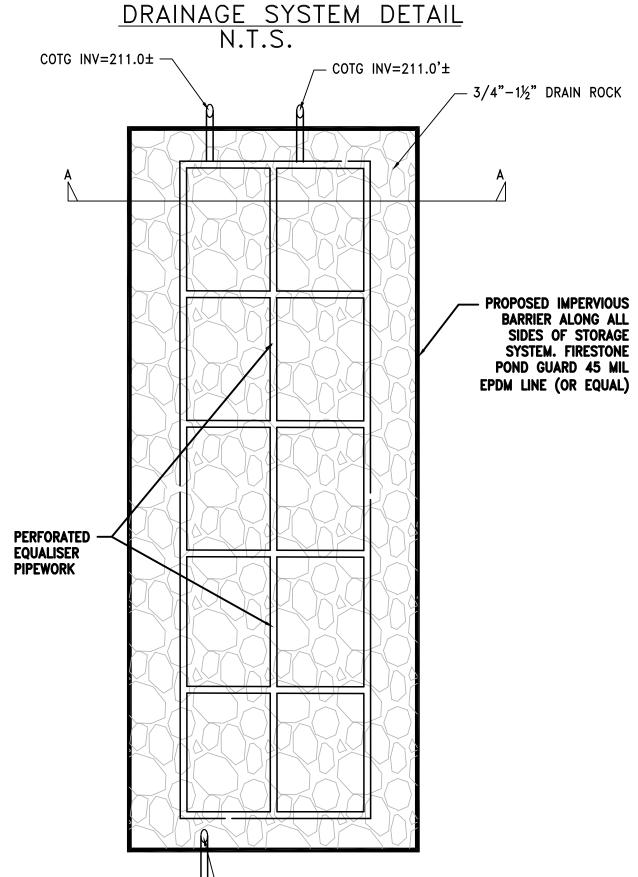
#### DRAINAGE SYSTEM NOTES:

TOP OF STONE=221.0' |||

BOTTOM OF STONE.=216.0'==

- 1. TOP OF SYSTEM SHALL BE ENCASED IN FILTER FABRIC.
- 2. LOCATION OF SYSTEM PER PLANS.
- 3. DESIGN ENGINEER WILL INSPECT AND CERTIFY IN WRITING THAT ALL DRAINAGE WORK WAS INSTALLED IN ACCORDANCE WITH APPROVED PLANS. CONTRACTOR TO NOTIFY ENGINEER AT LEAST 72 HOURS IN ADVANCE FOR DRAINAGE SYSTEM INSPECTION PRIOR TO BACKFILLING.

# N.T.S.



6" OVERFLOW PIPE: INV=211.3"

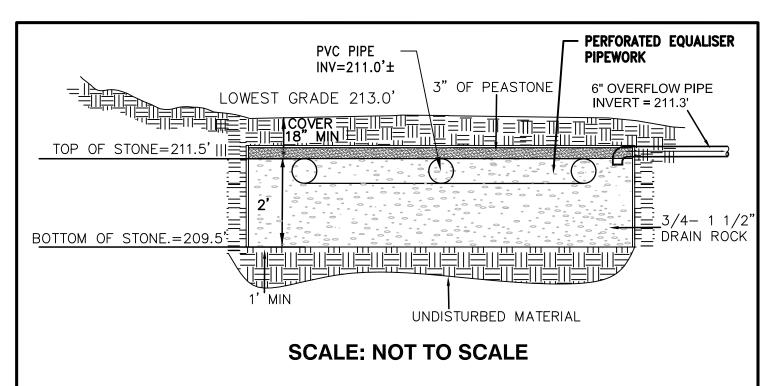
(TO THE CRUSHED STONE SYSTEM1)

PLAN VIEW

## DRAINAGE SYSTEM-2

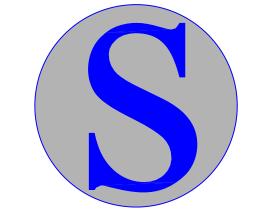
CONTRACTOR TO REMOVEPEAT LAYER FROM BELOW DRAINAGE SYSTEM & REPLACE WITH DRAINAGE STONE

#### SYSTEM #2 DRIVEWAY



#### **DRAINAGE SYSTEM NOTES:**

- 1. TOP OF SYSTEM SHALL BE ENCASED IN FILTER FABRIC.
- 2. LOCATION OF SYSTEM PER PLANS.
- 3. DESIGN ENGINEER WILL INSPECT AND CERTIFY IN WRITING THAT ALL DRAINAGE WORK WAS INSTALLED IN ACCORDANCE WITH APPROVED PLANS. CONTRACTOR TO NOTIFY ENGINEER AT LEAST 72 HOURS IN ADVANCE FOR DRAINAGE SYSTEM INSPECTION PRIOR TO BACKFILLING.



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	UPDATED	PER	ARCHITECT	REQUEST	11/3/21

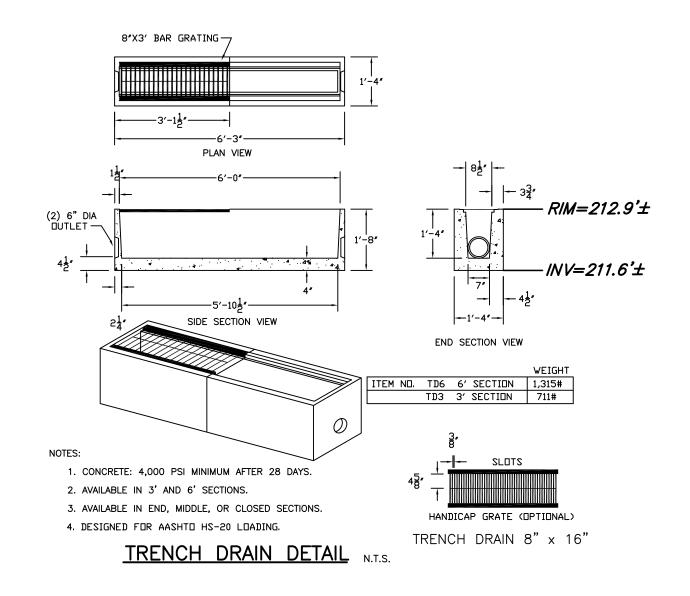
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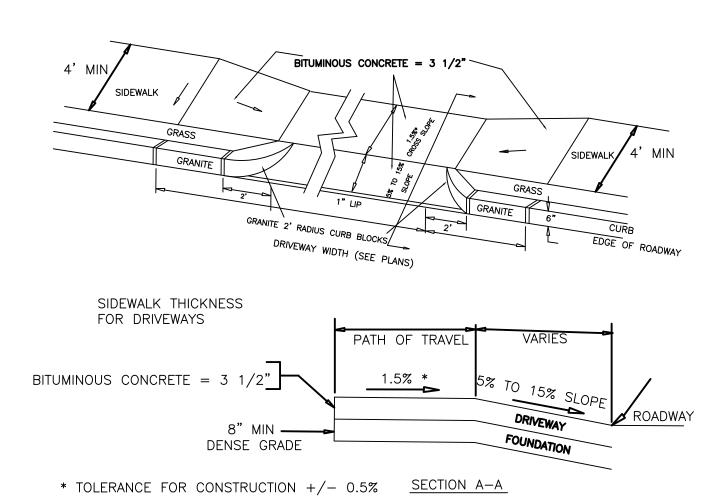
DRAFT

3/15/2021 DRAWN BY: CHECKED BY: E.S APPROVED BY: F.S

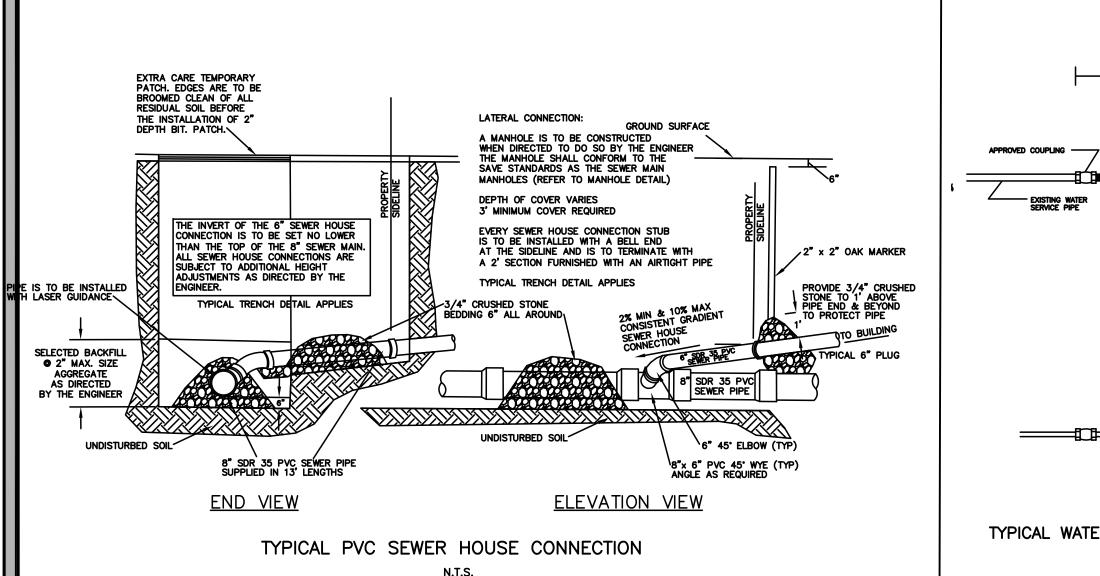
DETAILS

SHEET 4 OF 6





DRIVEWAY APRON WITH CORNER BLOCKS



SEE PLANS FOR FINAL GRADING

EXISTING GROUND - SURFACE

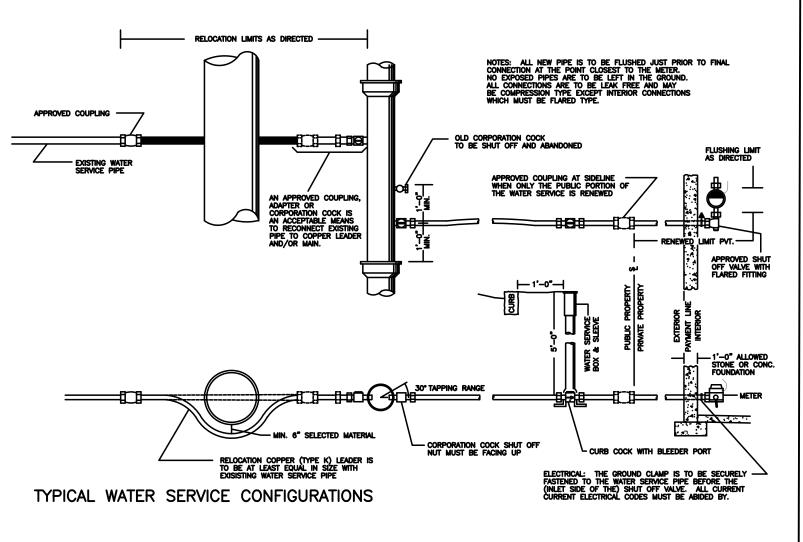
TYPE IE (EXCAVATABLE)

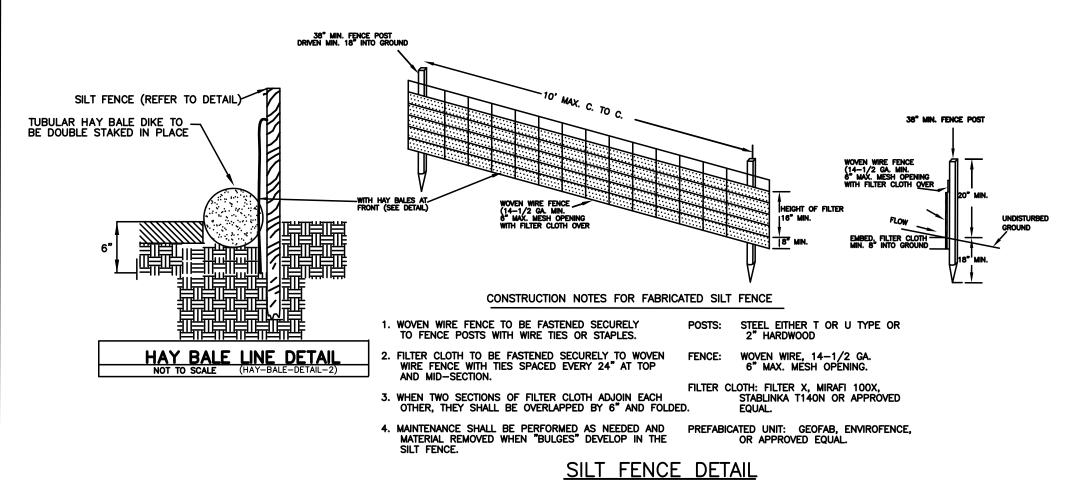
BEDDING & PROTECTION ZONE PER SPECIFIC UTILITY

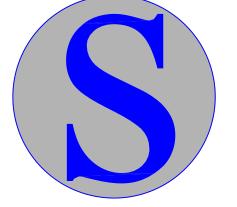
CONTROLLED DENSITY FILL (C.D.F.) -

1 1/2" BITUMINOUS FINISH

CONTROLLED DENSITY FILL (C.D.F.) TYPICAL TRENCH DETAIL







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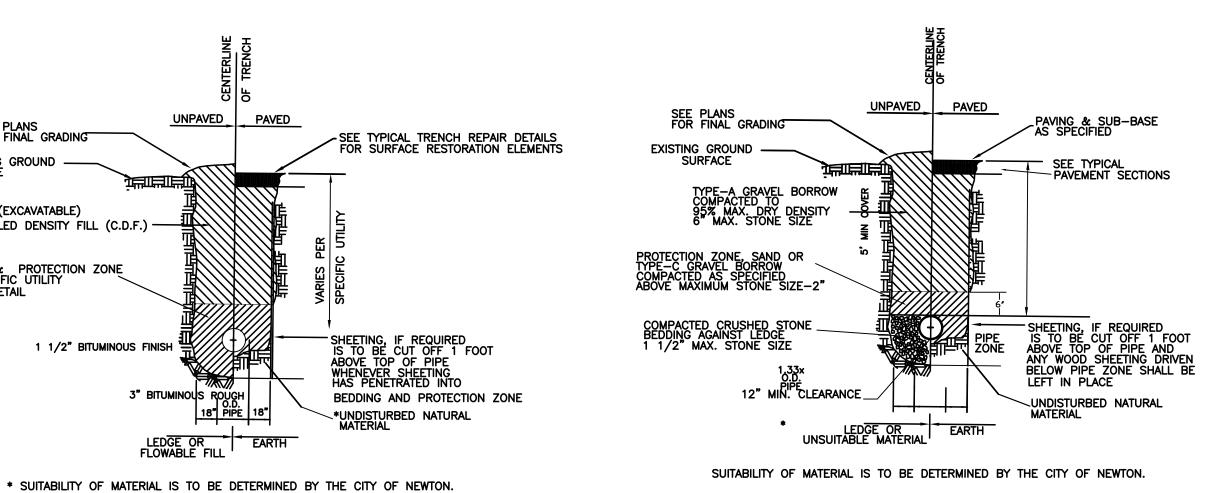
DRAFT

drawings.

3/15/2021 DRAWN BY: CHECKED BY: E.S APPROVED BY: E.S

DETAILS

SHEET 5 OF 6



TYPICAL WATER TRENCH DETAIL
N.T.S.

1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0 2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.01.1

TYPICAL TRENCH DETAIL

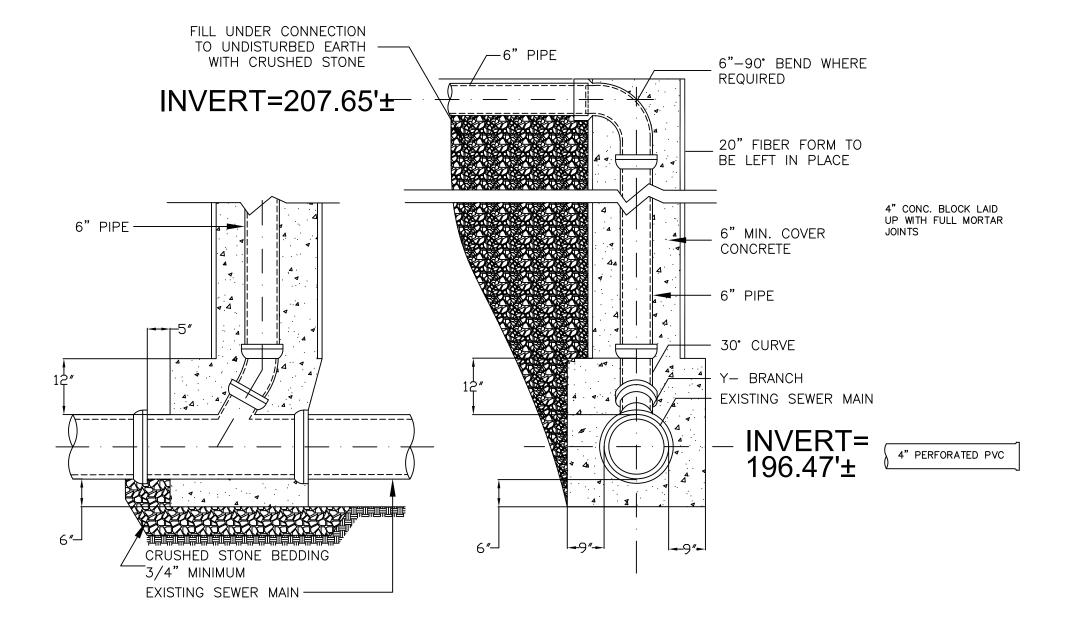
N.T.S.

3/4" CRUSHED STONE BEDDING— (SEE NOTE 2) \*UNDISTURBED NATURAL

1. GRAVEL BORROW SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M1.03.0
2. CRUSHED STONE BEDDING SHALL CONFORM TO MASS HIGHWAY SPECIFICATION M2.01.1 GRAVITY SEWER TRENCH DETAIL

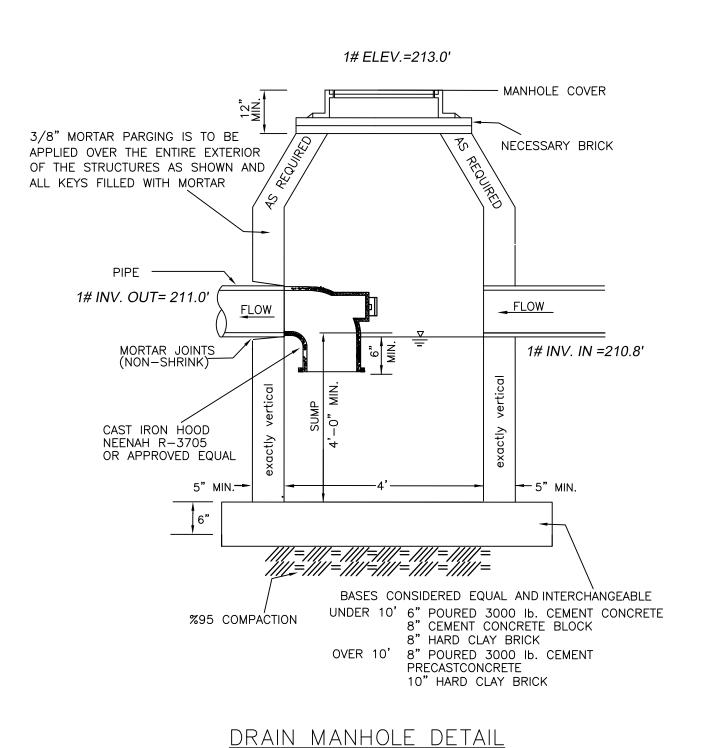
CRUSHED STONE BEDDING 3/4" MINIMUM EXISTING SEWER MAIN -

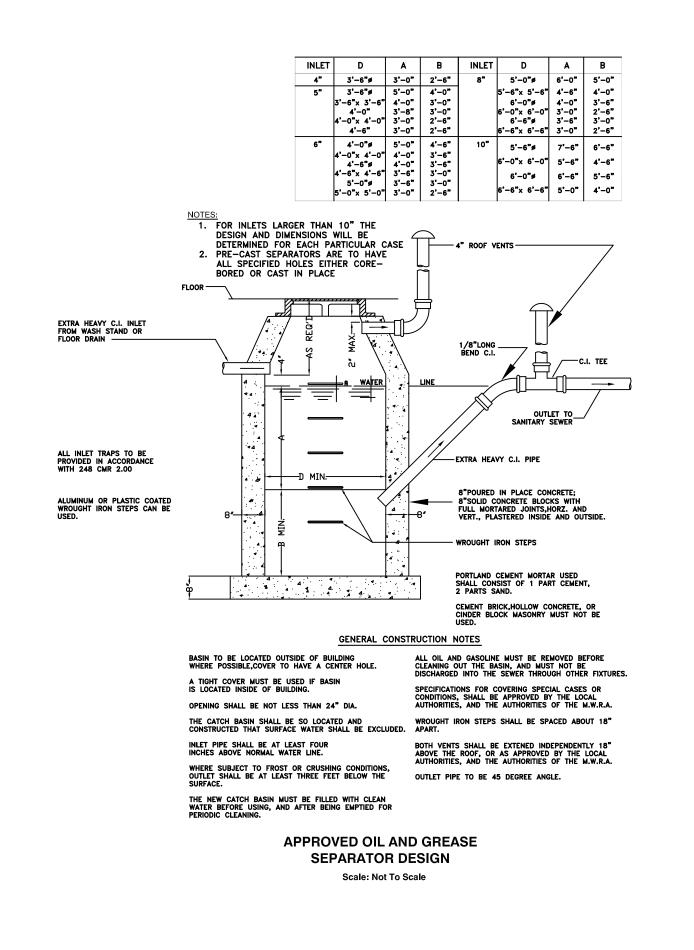
TYPICAL SEWER CONFIGURATION

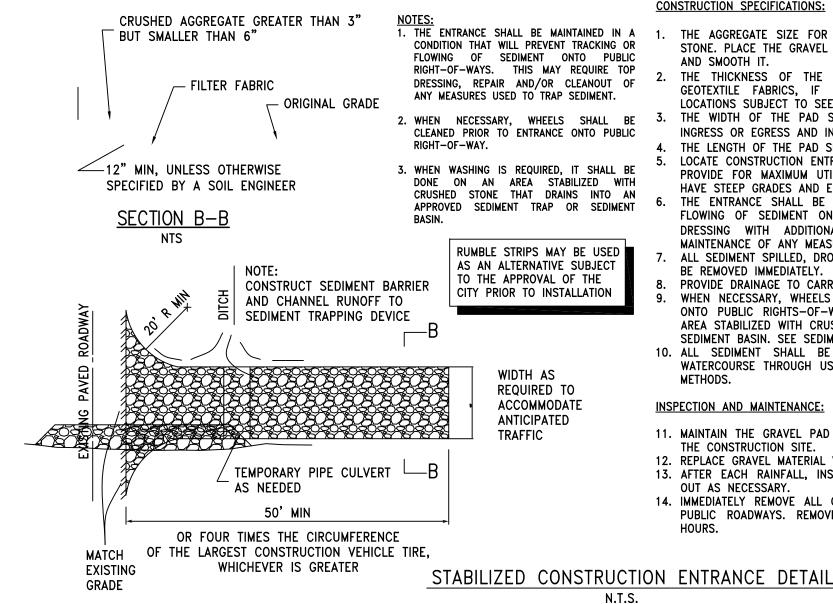


TYPICAL SEWER CHIMNEY

Scale: Not To Scale







#### **CONSTRUCTION SPECIFICATIONS:**

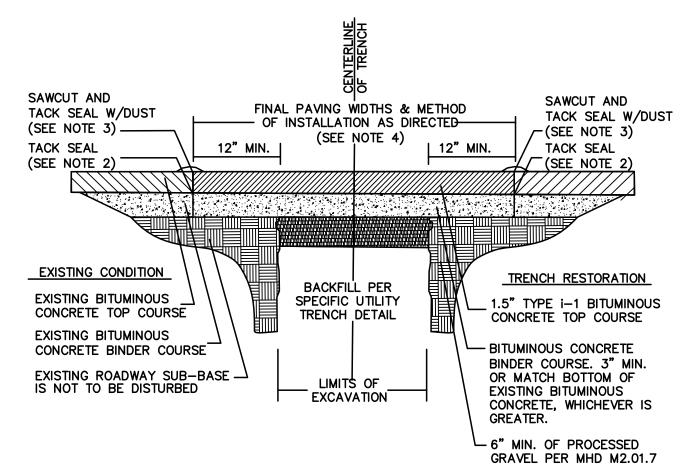
- NOTES:

  1. THE ENTRANCE SHALL BE MAINTAINED IN A

  1. THE AGGREGATE SIZE FOR CONSTRUCTION OF THE PAD SHALL BE 2-3 INCH (50-75 MM) STONE. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS,
  - AND SMOOTH IT. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 6 INCHES (152 MM). USE GEOTEXTILE FABRICS, IF NECESSARY, TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.
  - THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS AND IN ANY CASE SHALL NOT BE LESS THAN 12 FEET (3.6 M) WIDE. 4. THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET (15.2 M). 5. LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT LEAVING THE SITE AND TO
  - PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES WHICH HAVE STEEP GRADES AND ENTRANCES AT CURVES IN PUBLIC ROADS. 6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP
  - DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY. 8. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
  - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. SEE SEDIMENT BASIN BMP. 10. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR
  - WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED

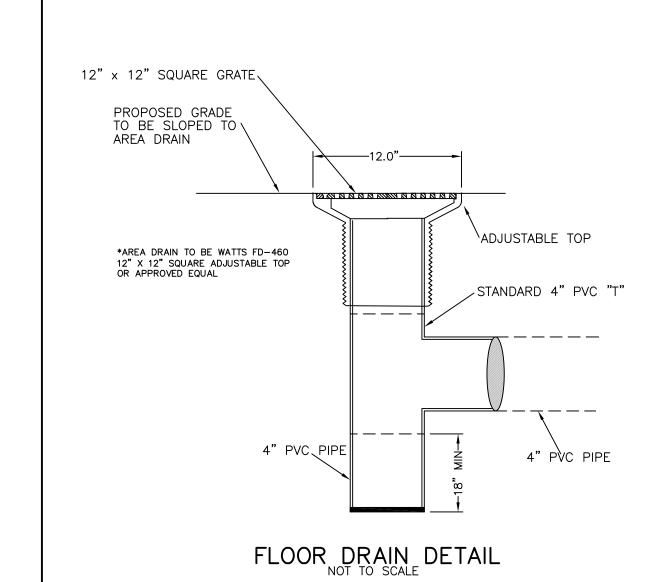
#### **INSPECTION AND MAINTENANCE:**

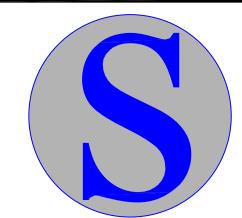
- 11. MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.
- 12. REPLACE GRAVEL MATERIAL WHEN SURFACE VOIDS ARE NOT VISIBLE. 13. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT
- OUT AS NECESSARY. 14. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO
- PUBLIC ROADWAYS. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS WITHIN 24



TYPICAL TRENCH REPAIR & PAVEMENT SECTION DETAIL

- 1. ALL INSTALLATION AND MATERIAL SPECIFICATIONS PER MASS. HIGHWAY DEPARTMENT
- STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, 1988 AS AMENDED.
  2. ALL EXPOSED BITUMINOUS CONCRETE IS TO BE TACKED PER MHD PRIOR TO
- NEW BITUMINOUS CONCRETE INSTALLATIONS. 3. ALL EXPOSED JOINTS ARE TO BE SEALED WITH TACK AND STONE DUST.
- 4. ANY TOP COURSE APPLIED AT A WIDTH OF 6' WIDE OR GREATER IS TO BE 5. PLACED BY MACHINE/BAX SPREADER WHEN & AS DIRECTED BY THE CITY OF NEWTON.





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ı	DATE:	3/15/2021
ı	DRAWN BY:	D.K.
ı	CHECKED BY:	E.S
ı	APPROVED BY:	E.S

DETAILS

SHEET 6 OF 6