

LOCUS MAP
N.T.S.

BASIS OF BEARINGS

PLAN BK. 122, PLAN 6

OWNER OF RECORD

STEPHEN J. AND
NANCY C. WHITE, TRUSTEES
2-6 MARKET STREET
NEWBURYPORT, MA
BK. 31262 PG. 553

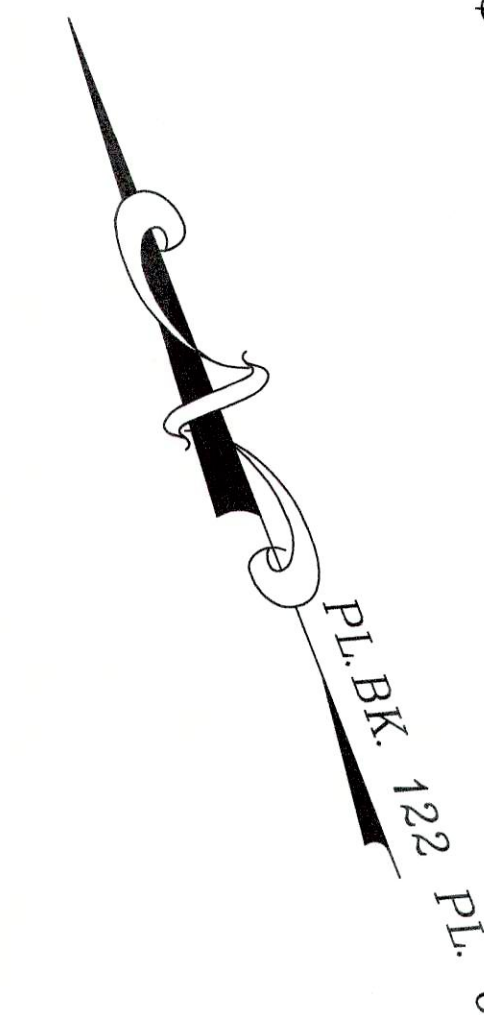
PLAN REFERENCES

PLAN BK. 122 PLAN 6
PLAN BK. 124 PLAN 64

VERTICAL DATUM

N.A.V.D. 1988

T.B.M. #1
MAG NAIL
ELEV. = 18.69



NOTES:
THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
RECORD UTILITY INFORMATION HAS NOT BEEN OBTAINED FOR LOCUS. VISIBLE SURFACE STRUCTURES HAVE BEEN LOCATED AND ARE SHOWN HEREON HOWEVER, SUBSURFACE UTILITY LINES ARE NOT SHOWN.

THE CERTIFICATIONS SHOWN HEREON ARE NOT INTENDED AS CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT CITY OF NEWBURYPORT ASSESSORS RECORDS.

I CERTIFY: THAT THIS ACTUAL SURVEY WAS MADE ON THE GROUND BETWEEN SEPTEMBER 5 AND DECEMBER 11, 2019, AND THAT THE STRUCTURES AND PHYSICAL FEATURES ARE LOCATED AS SHOWN TO THE BEST OF MY ABILITY AND BELIEF.

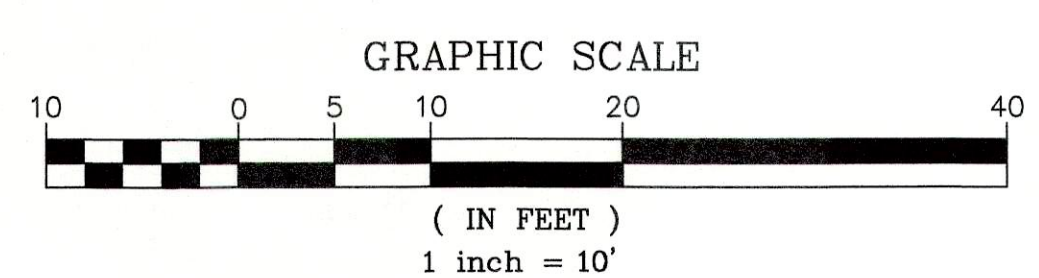
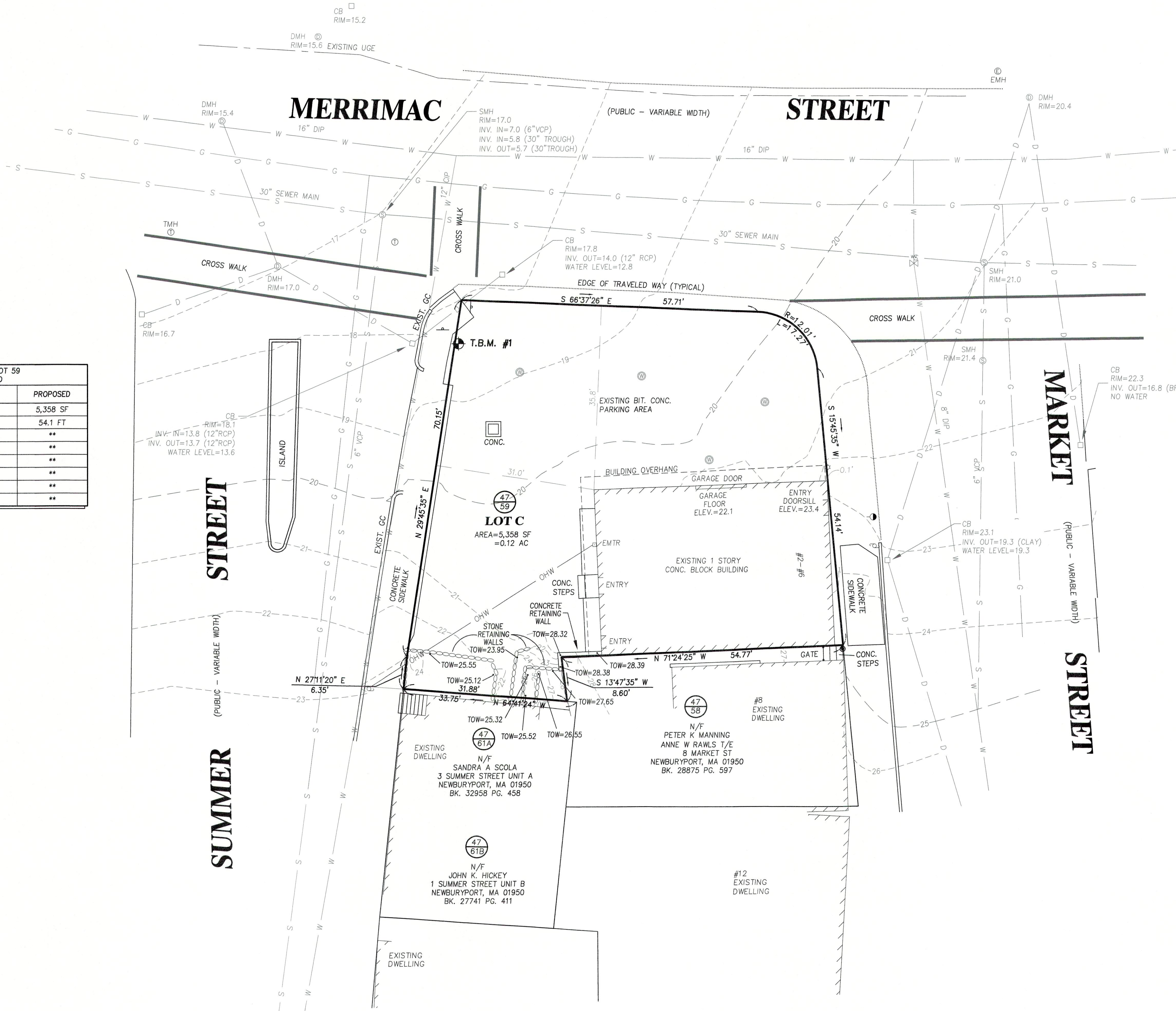
JEFFREY HOFMANN
#636381
PROFESSIONAL LAND SURVEYOR
12/18/19
DATE

ZONING TABLE
ADDRESS - ASSESSORS MAP 47 LOT 59
ZONING DISTRICT: B-2 DCOD

	REQUIRED	EXISTING	PROPOSED
LOT AREA:	5,000 SF	5,358 SF	5,358 SF
LOT FRONTAGE:	60 FT	54.1 FT	54.1 FT
FRONT SETBACK:	0 FT	0.1 FT	**
SIDE SETBACK:	0 FT	0.0 FT	**
REAR SETBACK:	0 FT	31.0 FT	**
LOT COVERAGE:	100%	27%	**
OPEN SPACE:	N/A	1.4%	**
BLDG HEIGHT:	40 FT	12.9'	**

LEGEND

FND.	FOUND
N/F	NOW/FORMERLY
TOW	TOP OF WALL
EMTR	ELECTRIC METER
⊙	MONITORING WELL
⊙	LIGHT POLE
GC	GRANITE CURB
□ CB	CATCH BASIN
⊙ DMH	DRAIN MANHOLE
⊙ SMH	SEWER MANHOLE
⊙ EMH	ELECTRIC MANHOLE
⊙ TMH	TELEPHONE MANHOLE
○ MH	MANHOLE
⊙	WATER VALVE
BIT. CONC.	BITUMINOUS CONCRETE
SIGN	SIGN
⊙	UTILITY POLE
⊙	GUY
-20-	EXISTING CONTOUR ELEVATION
⊙	ASSESSORS MAP#
⊙	PARCEL#



PREPARED FOR
STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

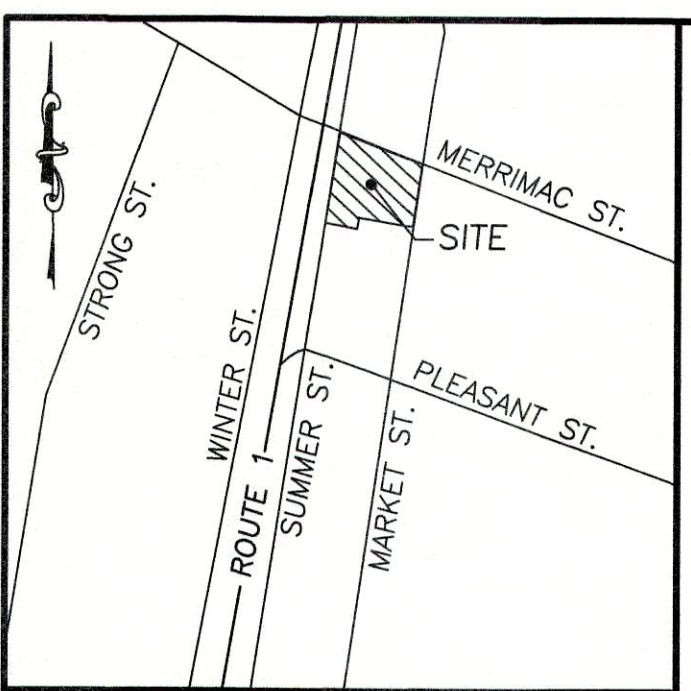
NO.	DATE	DESCRIPTION	BY
4	12/18/19	ADDRESS REVIEWER'S COMMENTS	C.M.Y.
3	12/10/19	ADD UTILITY INFORMATION	PDB
2	11/20/19	ADD UTILITY INFORMATION	ZTJ
1	11/4/19	ADD RET WALL ELEVATIONS	DRB

MEI **MILLENNIUM ENGINEERING, INC.**
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

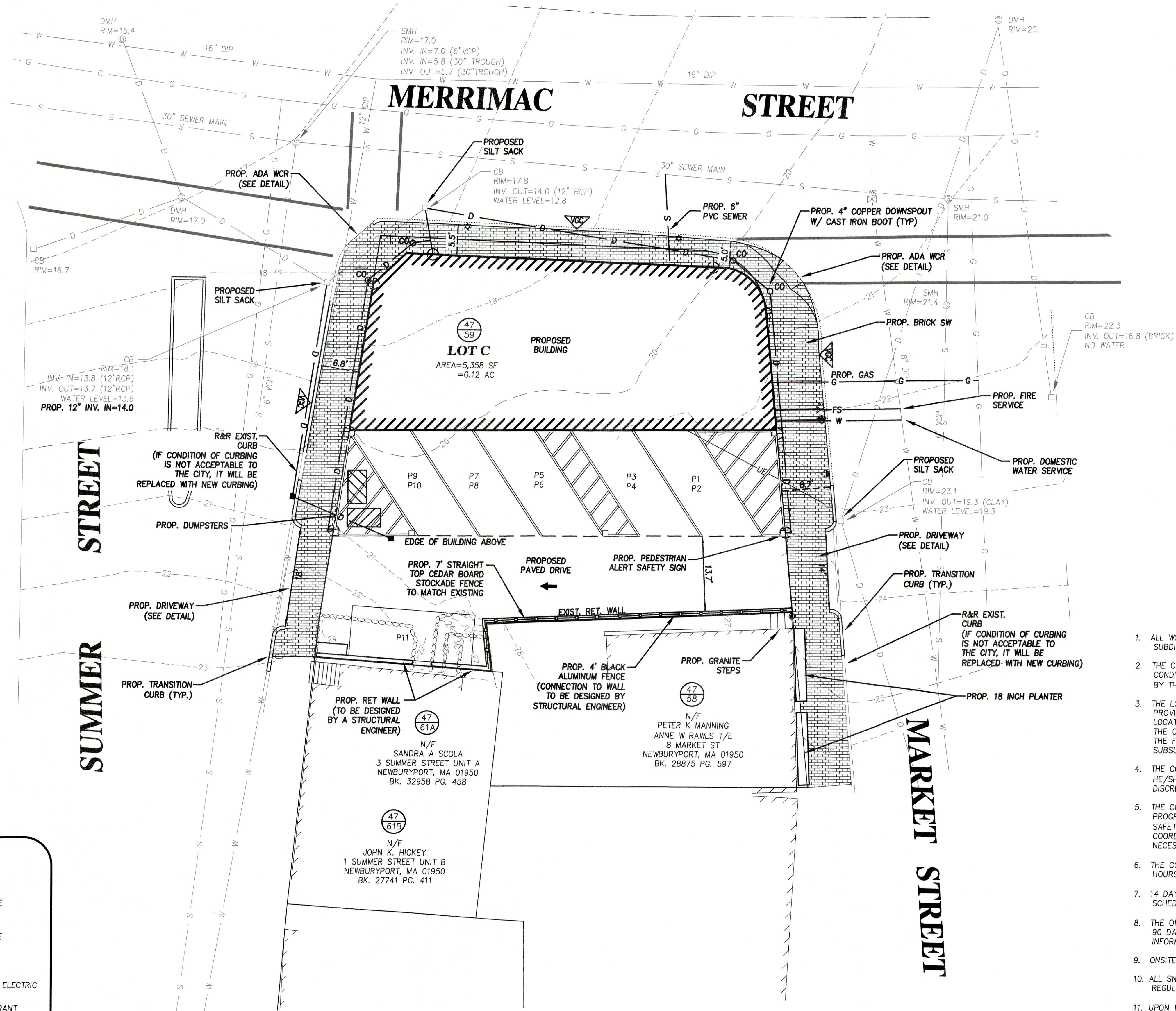
SCALE: 1"=10'
DATE: OCT. 23, 2019
CALC. BY: D.R.B.
CHKD. BY: J.S.H.
PROJECT: M193613

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
2-6 MARKET STREET
(MAP 47 - LOT 59)

EXISTING CONDITIONS
SHEET: C-1



ZONING TABLE			
ADDRESS - ASSESSORS MAP 47 LOT 59			
ZONING DISTRICT: B-2 DCOD			
	REQUIRED	EXISTING	PROPOSED
LOT AREA:	5,000 SF	5,358 SF	5,358 SF
LOT FRONTAGE:	60 FT	54.1 FT	54.1 FT
FRONT SETBACK:	0 FT	0.1'	0.0 FT
SIDE SETBACK:	0 FT	0.1 FT	0.0 FT, 14.04 FT
REAR SETBACK:	0 FT	NA	0.0 FT
LOT COVERAGE:	100%	27%	69.7%
OPEN SPACE:	N/A	1.4%	4% +/-
BLDG HEIGHT:	40 FT	12.9'	39.5'

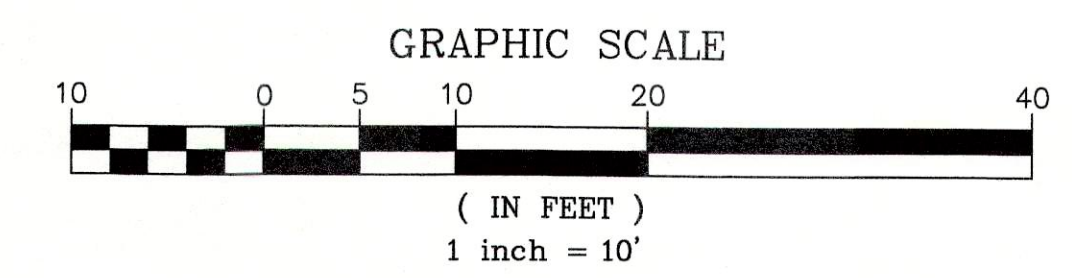


LEGEND

— W —	EXISTING WATER MAIN	⊗	EXISTING FIRE HYDRANT
— S —	EXISTING SEWER MAIN	⊕	PROPOSED WATER SHUTOFF
— W —	PROPOSED WATER SERVICE	⊗	PROPOSED WATER GATE
— S —	PROPOSED SEWER MAIN	⊕	PROPOSED SEWER SERVICE
— GS —	PROPOSED GAS MAIN	⊗	PROPOSED STREET LIGHT
— GS —	PROPOSED GAS SERVICE	⊕	
— UE —	PROPOSED UNDERGROUND ELECTRIC		

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE NEWBURYPORT PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, AND THESE PLANS.
- THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS. ANY PROPOSED REVISIONS TO THE WORK SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND REGULATING MUNICIPAL AND/OR STATE AGENCIES.
- THE LOCATION OF ALL UTILITIES, AS SHOWN ON THESE PLANS, ARE BASED UPON PLANS AND RECORD INFORMATION PROVIDED BY MUNICIPAL AND PRIVATE UTILITY COMPANIES AND ARE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION. NO WARRANTY IS MADE TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL NOT RELY ON THESE PLANS FOR SUCH INFORMATION AND SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS, UTILITY COMPANIES AND INDIVIDUALS, AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
- THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE NEW WORK. HE/SHE SHALL EXCAVATE TO VERIFY PERTINENT DRAINAGE INVERTS AND POTENTIAL UTILITY CONFLICTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER IMMEDIATELY.
- THE CONTRACTOR IS RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PUBLIC, EMPLOYEES, AND ALL OTHER PERSONS ASSOCIATED WITH THE PROJECT. HE/SHE SHALL COORDINATE AND BE RESPONSIBLE FOR ALL SAFETY SIGNING, BARRIERS AND TEMPORARY PAVEMENT MARKINGS NECESSARY TO PROVIDE A SMOOTH AND PROPER TRANSITION FOR TRAFFIC FLOW.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING "DIG-SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. DIG-SAFE TELEPHONE NUMBER: 1-888-344-7233.
- 14 DAYS PRIOR TO COMMENCING CONSTRUCTION, THE OWNER/DEVELOPER SHALL PRESENT A CONSTRUCTION SCHEDULE TO THE PLANNING DEPARTMENT.
- THE OWNER/DEVELOPER SHALL SUBMIT TWO HARD COPIES OF AS-BUILT DRAWINGS TO THE PLANNING BOARD WITHIN 90 DAYS OF ISSUANCE OF OCCUPANCY PERMIT. AS-BUILTS SHALL INCLUDE ALL LANDBASE AND UTILITIES INFORMATION.
- ONSITE BURIAL OF STUMPS OR ANY OTHER DEBRIS IS PROHIBITED.
- ALL SNOW SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- UPON REMOVAL OF THE EXISTING BUILDING, THE EXPOSED SOIL SHALL BE STABILIZED WITH A 2" THICK LAYER OF STRAW MULCH.
- REFERENCE SHALL BE MADE TO THE ARCHITECTURAL PLANS FOR PARKING LIGHTING.
- THE PROPERTY DOES NOT LIE WITHIN THE 100-YEAR FLOOD PLAIN ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 25009C01176.
- ELEVATIONS ARE BASED ON NAVD 1988 DATUM.



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PLAN OF LAND
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AT
2-6 MARKET STREET
(MAP 47 - LOT 59)

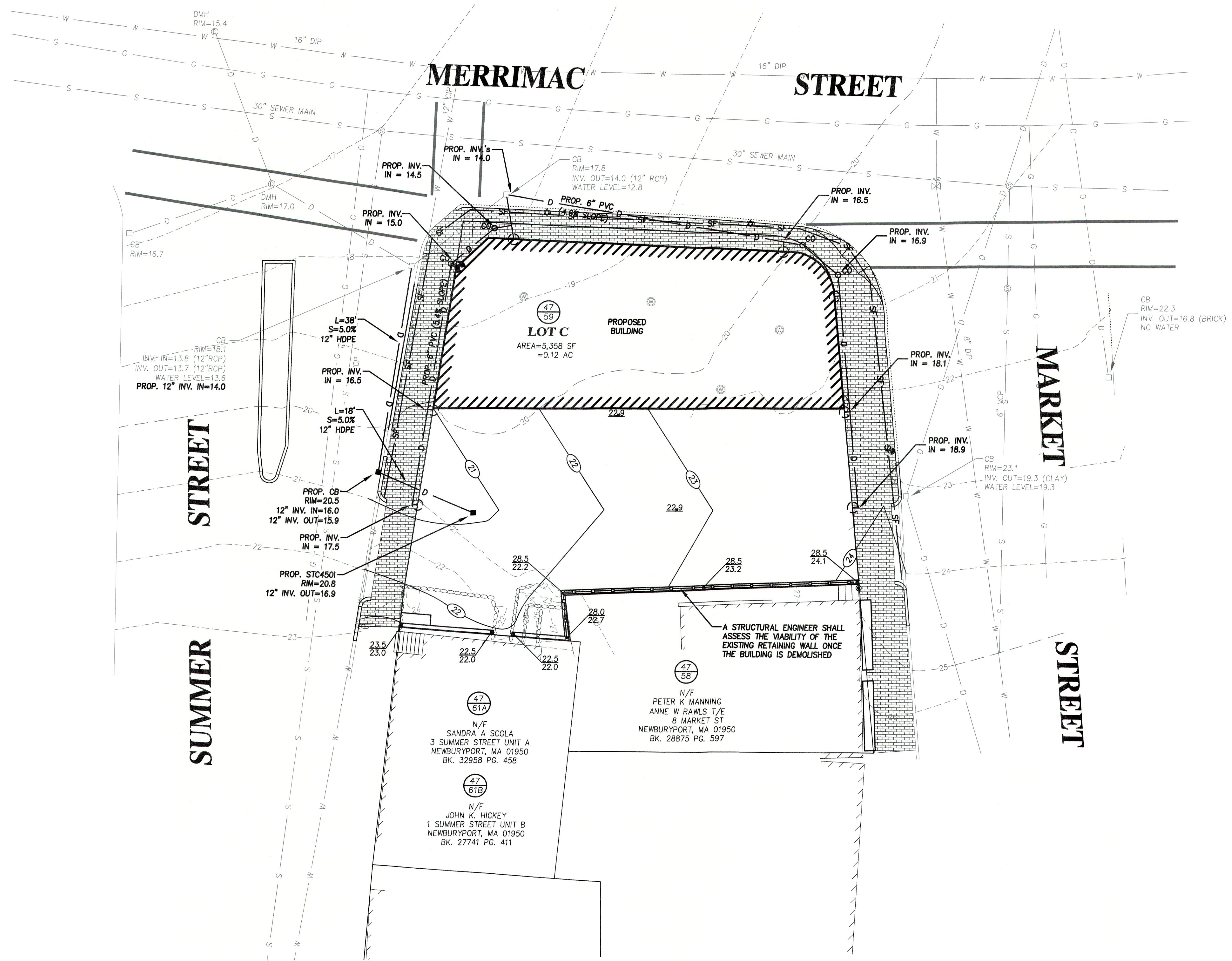
SITE PLAN
SHEET: C-2

NO.	DATE	DESCRIPTION	BY
2	12/18/19	ADDRESS REVIEWER'S COMMENTS	C.M.Y.
1	12/10/19	ADDRESS REVIEWER'S COMMENTS	C.M.Y.

SCALE: 1"=10'
DATE: NOV. 20, 2019
CALC. BY: Z.T.J.
CHKD. BY: E.W.B.
PROJECT: M193613



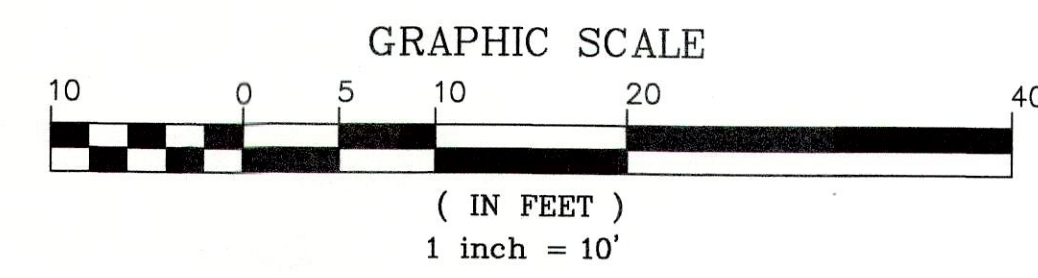
T.B.M. #1
MAG NAIL
ELEV. = 18.69



PLBK 122 PL. 6

LEGEND

- 28 — EXIST. CONTOUR
- (23) — PROP. CONTOUR
- SF — PROP. SILTATION BARRIER
- — PROP. TREELINE/LIMIT OF WORK
- — PROP. BRICK SIDEWALK
- PROP. CATCH BASIN
- EXIST. CATCH BASIN
- 22.3 PROP. SPOT GRADE
- EXIST. UTILITY POLE
- PROP. OUTLET STRUCTURE
- WETLANDS



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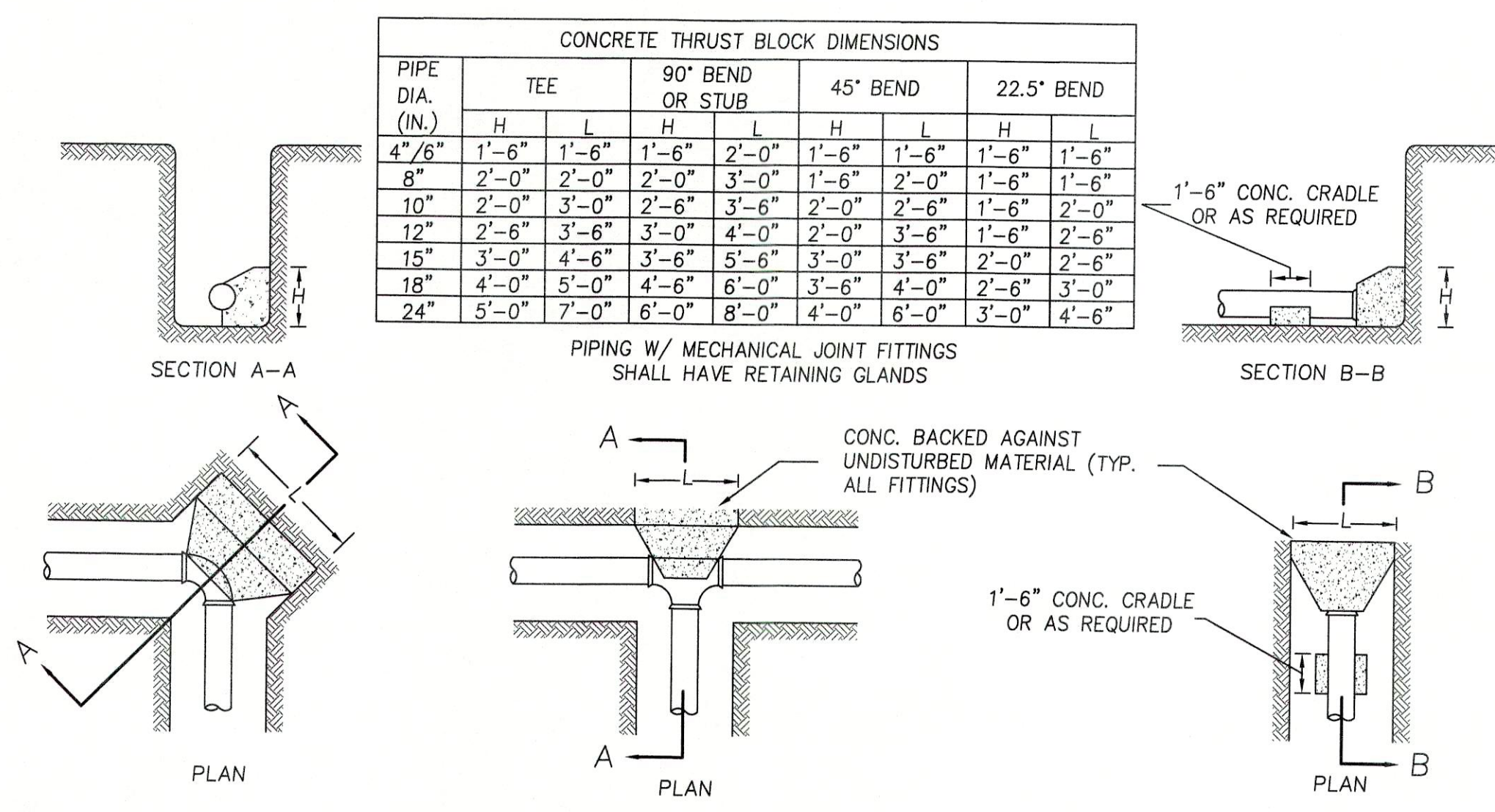
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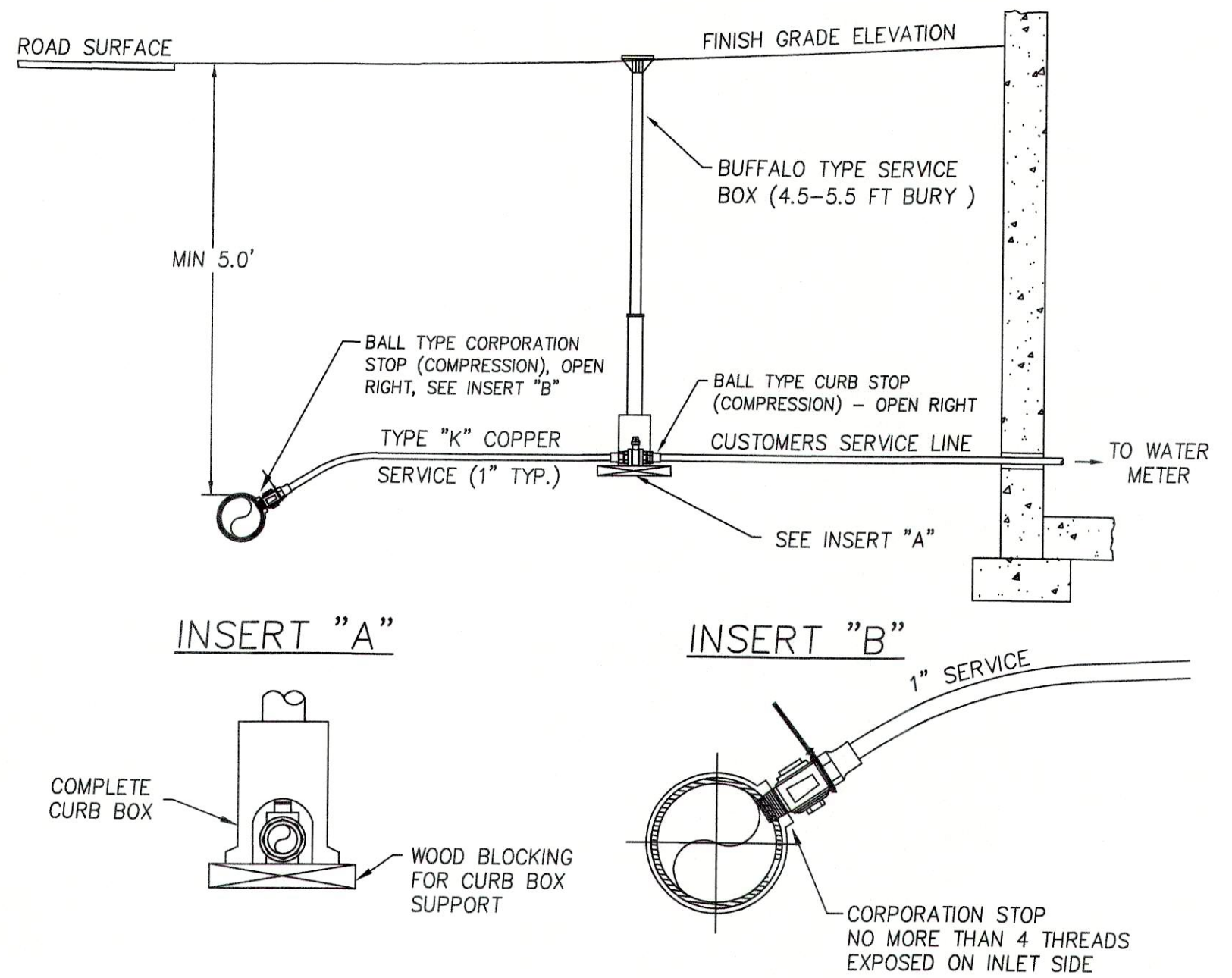
GRADING PLAN

SHEET: C-3

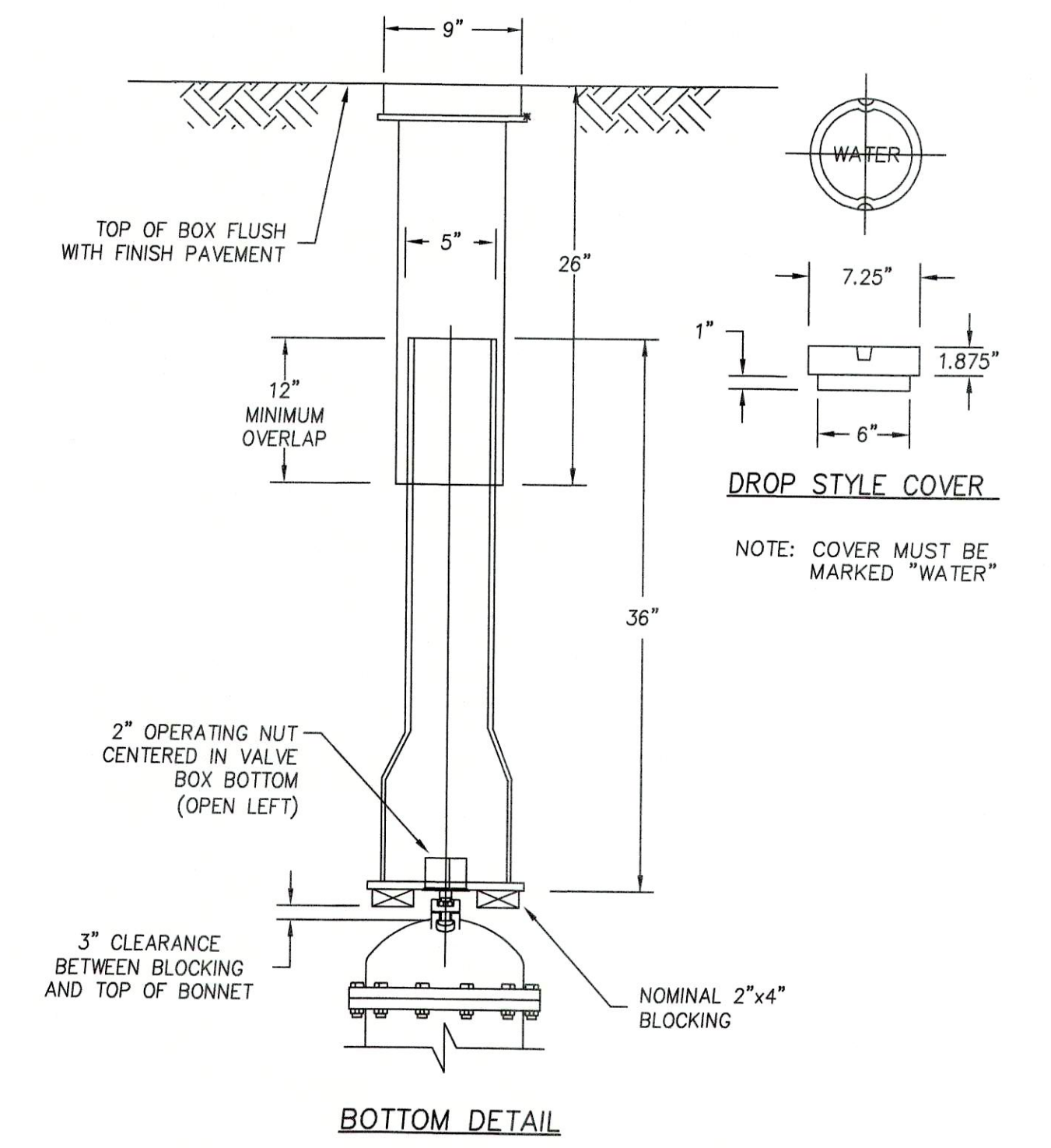


- NOTES**
- VALUES SHOWN ARE FOR TEST PRESSURE OF 150 PSI WITH A 100 PSI SURGE ALLOWANCE.
 - THRUST BLOCKS SHALL NOT BE PLACED AGAINST THE FOLLOWING SOILS: PEAT, ORGANIC SILT AND ORGANIC SOILS, SOFT CLAY, RUBBISH FILL AND OTHER UNSUITABLE ARTIFICIAL FILL, SHATTERED SHALE, INORGANIC SILT AND VERY FINE SANDS.
 - POURED CONCRETE THRUST BLOCKS SHALL NOT COVER ANY JOINTS, CLAMPS, NUTS, BOLTS, ETC.

THRUST BLOCK DETAILS N.T.S.

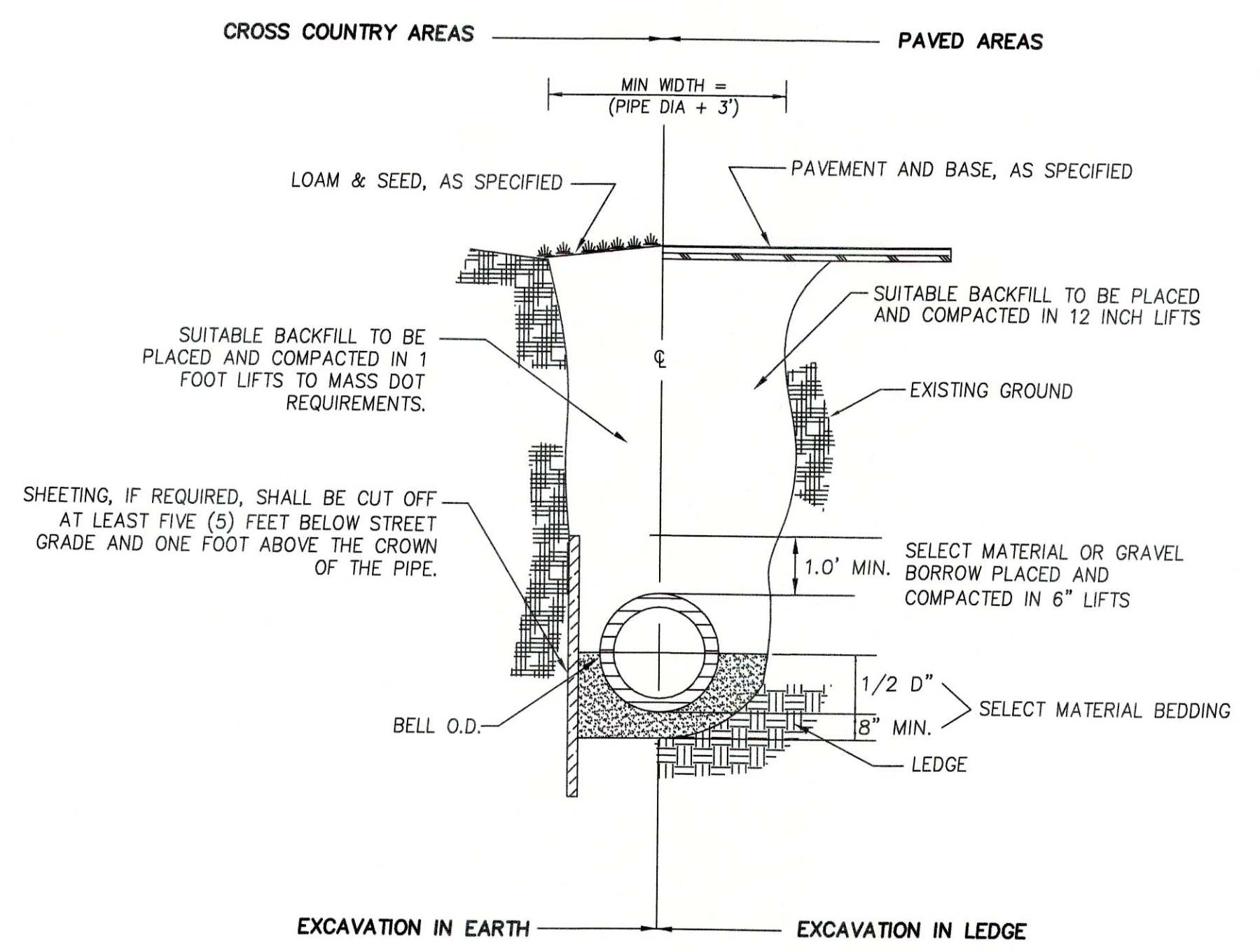


TYPICAL COPPER SERVICE CONNECTION N.T.S.

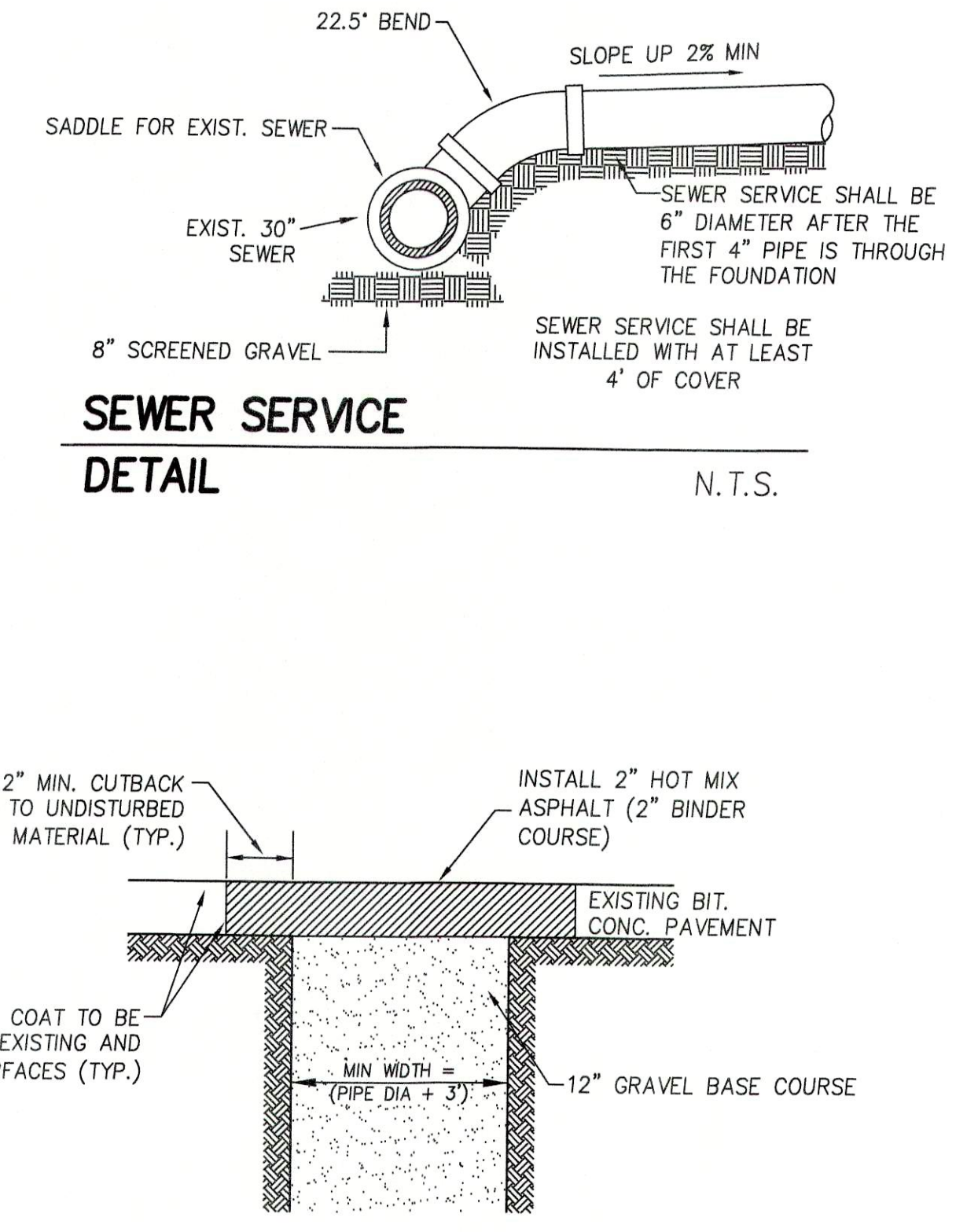


TYPICAL VALVE BOX DETAIL N.T.S.

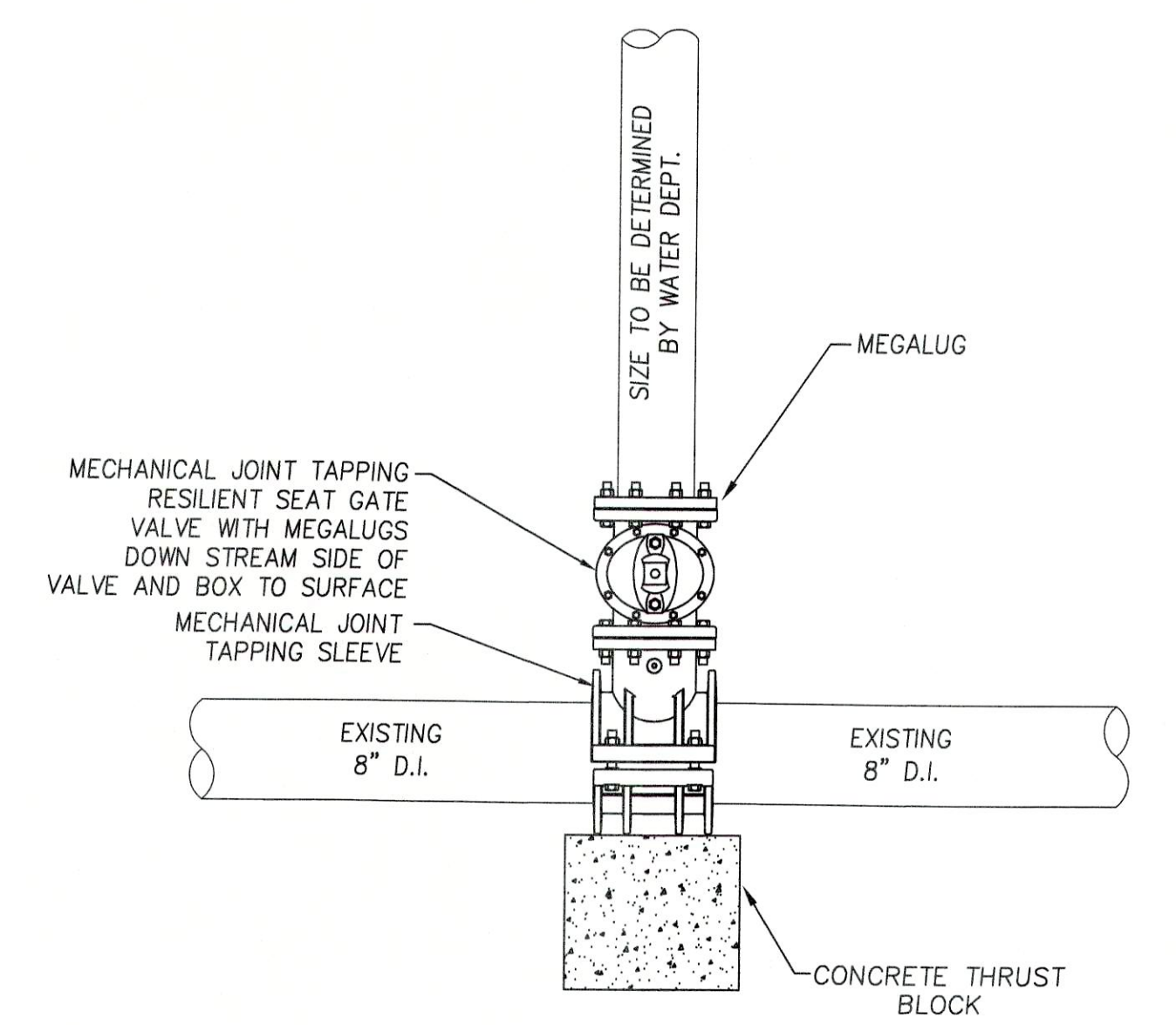
- WATER NOTES:**
- ALL WATER MAIN AND SERVICE COMPONENTS SHALL MEET AWWA STANDARDS.
 - ALL MECHANICAL JOINT COMPONENTS SHALL BE INSTALLED USING APPROVED RETAINING GLANDS (GRIP RING, MEGA LUG, STAR GRIP).
 - METAL WEDGES SHALL BE USED AT ALL BELL JOINTS TO ENSURE CONTINUITY FOR TRACING.
 - GATE VALVES SHALL BE DUCTILE IRON EPOXY COATED (AWWA C550), WITH O-RING SEALS, URETHANE COATED WEDGE, STAINLESS STEEL NUTS AND BOLTS, AND ANTIROTATION SEATS TO PREVENT T-BOLTS FROM TURNING. VALVES SHALL OPEN RIGHT USING 2-INCH OPERATING NUT WITH ARROW CAST IN THE METAL.
 - WATER MAINS SHALL BE PRESSURE TESTED TO 150 PSI AND WITNESSED BY THE NEWBURYPORT WATER WORKS CONSTRUCTION FOREMAN OR HIS DESIGNEE. ALL INSTALLATIONS MUST BE INSPECTED BY THE CONSTRUCTION FOREMAN OR HIS DESIGNEE.
 - CHLORINATION SHALL MEET AWWA STANDARDS (ANSI/AWWA C651-05). BACTERIA SAMPLES SHALL BE TESTED BY AN APPROVED LAB WITH RESULTS SENT DIRECTLY TO NEWBURYPORT WATER WORKS THROUGH CERTIFIED MAIL, AND RECEIVED WITHIN 5 WORKING DAYS OR RESAMPLING MUST BE DONE. IF BACTERIA TEST IS POSITIVE THE WATER MAIN SHALL BE FLUSHED AND RECHLORINATED PRIOR TO RESAMPLING.
 - NEWBURYPORT WATER WORKS PERSONNEL SHALL OPERATE ALL GATE VALVES AND HYDRANTS AND SHALL WITNESS AND INSPECT THE WATER MAIN AND APPURTENANCES PRIOR TO BURIAL. THEY SHALL ALSO PERFORM ALL TAPS UNLESS OTHERWISE APPROVED BY THE CONSTRUCTION FOREMAN. IF CONSENT IS GIVEN, AN APPROVED CONTRACTOR MUST DO THE TAPPING, AND THE CITY'S CONSTRUCTION FOREMAN OR HIS DESIGNEE MUST BE PRESENT DURING THE TAP.
 - WATER MAINS AND SERVICES SHALL HAVE A MINIMUM 6" CLEARANCE FROM UNDERGROUND ROCK/LEDGE.
 - NO WATER SHALL BE SUPPLIED TO THE CONTRACTOR OR BUILDER THROUGH A WATER SERVICE THAT HAS NOT BEEN PLACED "IN-SERVICE" BY THE NEWBURYPORT WATER DEPT.
 - ALL WATERMANS, VALVES, AND EXPOSED IRON SHALL BE ENCASED IN POLYETHYLENE FOR CORROSION RESISTANCE. A MIN. 4 MIL THICK EPOXY LAYER SHALL BE APPLIED IN ACCORDANCE WITH ANSI/AWWA C105/A21.5
 - ALL BOLTS USED FOR INSTALLATION OF THE WATERMANS, HYDRANTS, WATER GATES, WATER SHUTOFFS, AND OTHER WATER ASSOCIATED STRUCTURES SHALL BE STAINLESS STEEL



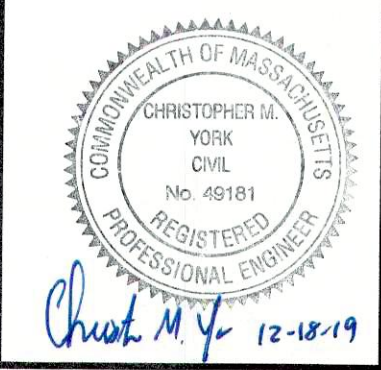
TYPICAL TRENCH DETAIL N.T.S.



TRENCH PATCH DETAIL (IF REQ'D) N.T.S.

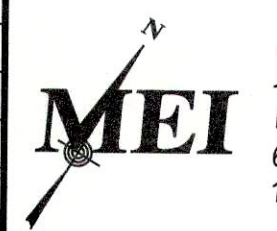


TAPPING SLEEVE DETAIL N.T.S.



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1	12/10/19	ADDRESS REVIEWER'S COMMENTS	C.M.Y.

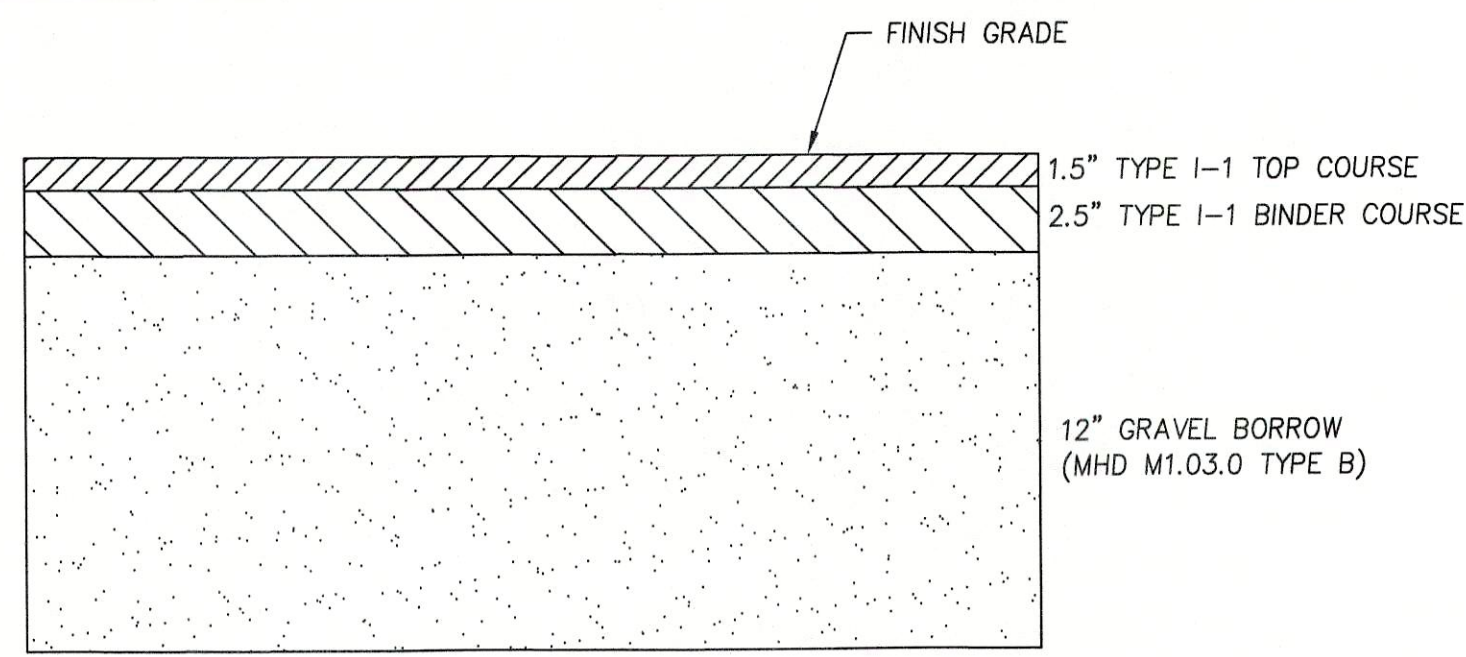


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SCALE: AS NOTED	CALC. BY: Z.T.J.	PROJECT: M193613
DATE: NOV. 20, 2019	CHKD. BY: E.W.B.	

PLAN OF LAND
IN
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SHOWING
PROPOSED SITE IMPROVEMENTS
AT
2-6 MARKET STREET
(MAP 47 - LOT 59)

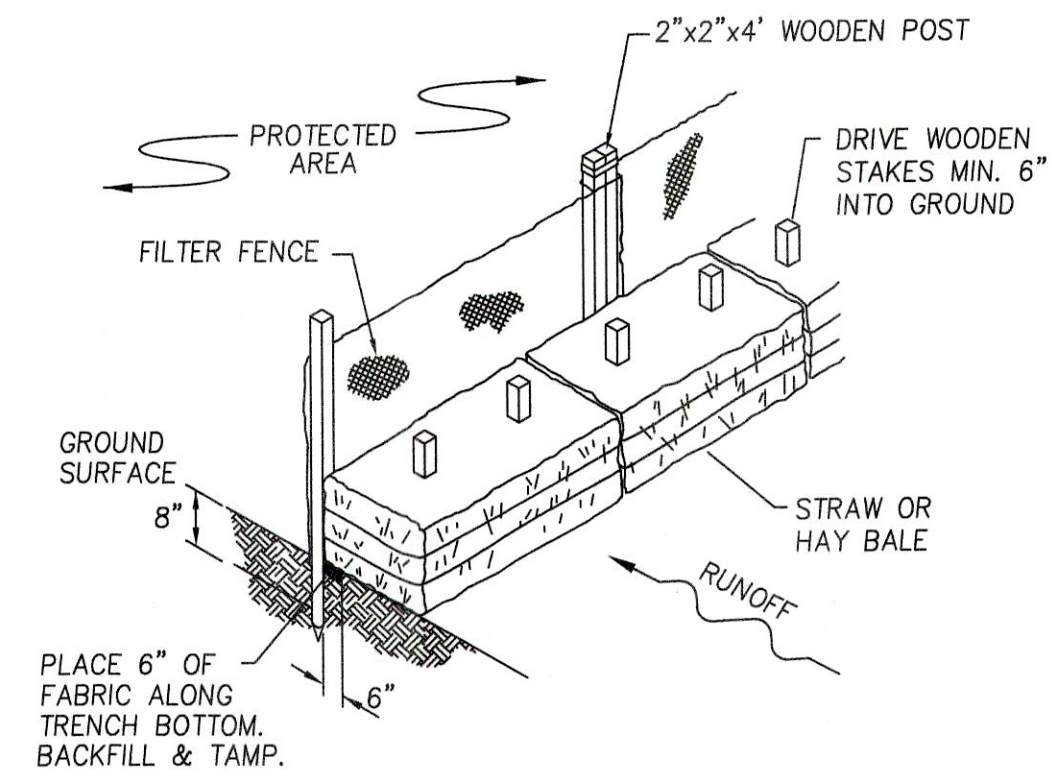
WATER AND SEWER DETAILS
SHEET: C-4



PAVED PARKING LOT DETAIL N.T.S.

PAVEMENT NOTES

- 1.) ALL STUMPS, ROCKS AND LEDGE WITHIN THE LIMITS OF THE PROPOSED PAVED WAY SHALL BE REMOVED. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 2' BELOW FINISHED PAVEMENT GRADE.
- 2.) ROADWAY SHALL NOT BE CONSTRUCTED DURING FREEZING WEATHER OR ON WET OR FROZEN SUBGRADE.
- 3.) GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.
- 4.) ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SATISFACTORY MATERIAL AND BROUGHT UP TO GRADE WITH GRAVEL BORROW CONTAINING NO STONES GREATER THAN 6" DIAMETER.
- 5.) AT ALL TIMES DURING CONSTRUCTION, THE SUB-GRADE AND ALL DITCHES SHALL BE CONSTRUCTED AND MAINTAINED SO THAT THE ROADWAY WILL EFFECTIVELY BE DRAINED.
- 6.) THE CONTRACTOR SHALL REFER TO THE NEWBURYPORT RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND SECTION 6 AND APPENDIX I.
- 7.) IF NECESSARY, SNOW WILL BE REMOVED FROM THE SITE.



NOTES

1. POSTS SHALL BE DOUBLED AND COUPLED AT FILTER CLOTH SEAMS.
2. FILTER CLOTH TO BE FASTENED SECURELY TO SUPPORT NETTING WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.

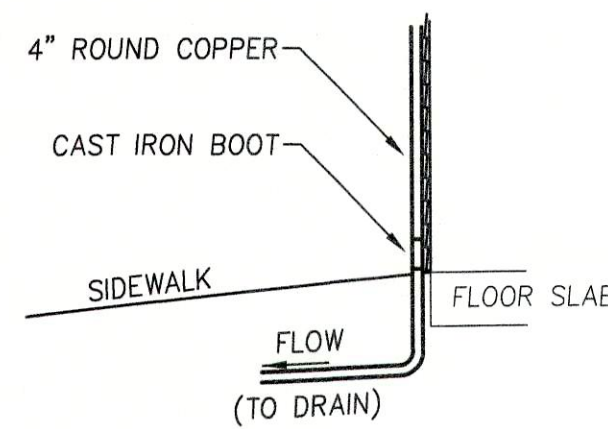
MAINTENANCE

1. SILT FENCE SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
2. IF THE FABRIC ON THE SILT FENCE SHALL DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHALL BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

NOTES

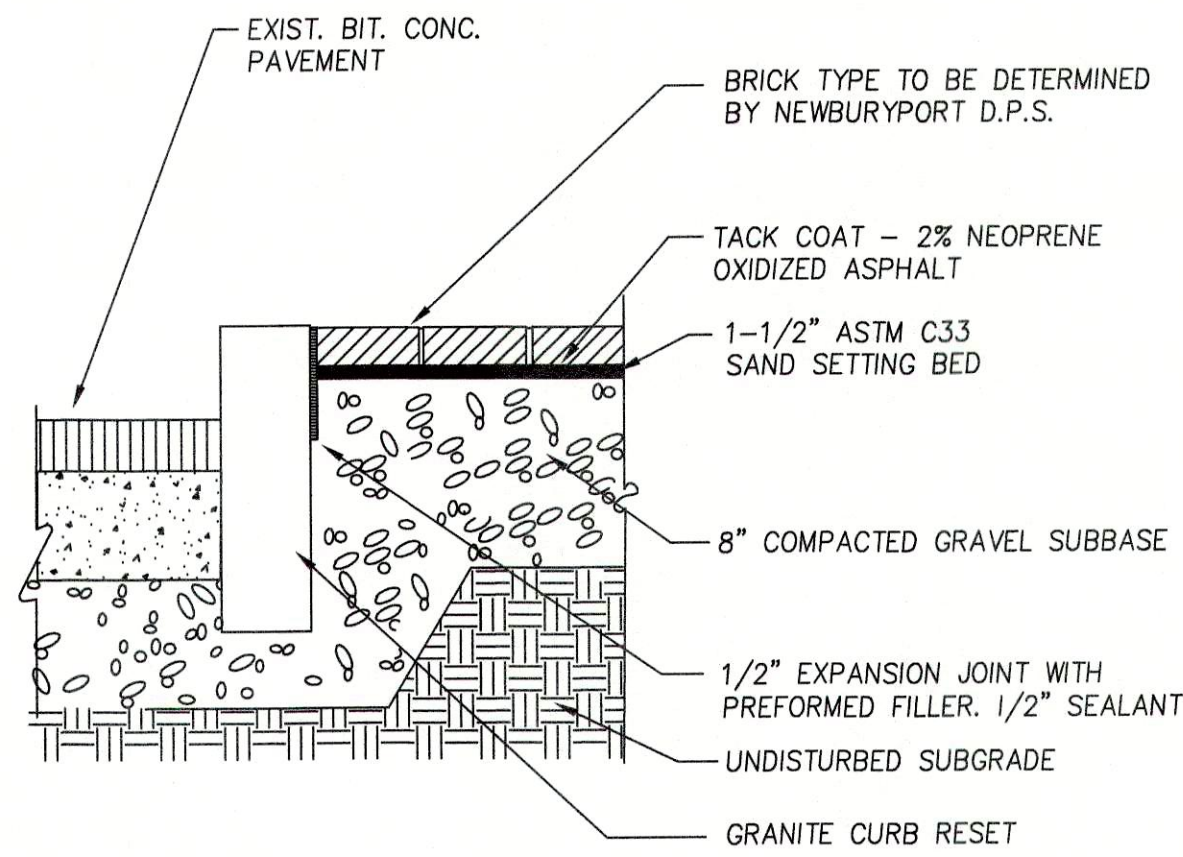
1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
3. TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
4. TO EMPTY SILTSACK, PLACE UNIT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL LIFT SILTSACK FROM THE BOTTOM AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF SUNLIGHT UNTIL NEXT USE.

SILT SACK DETAIL N.T.S.

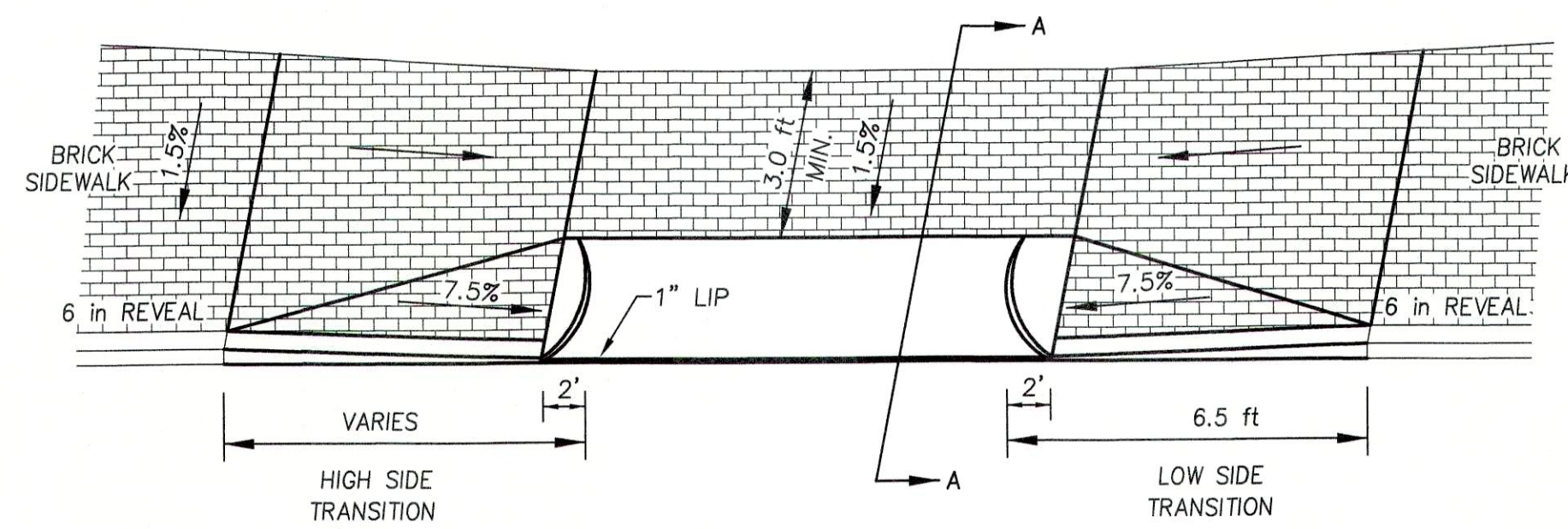


GUTTER DOWN SPOUT DETAIL N.T.S.

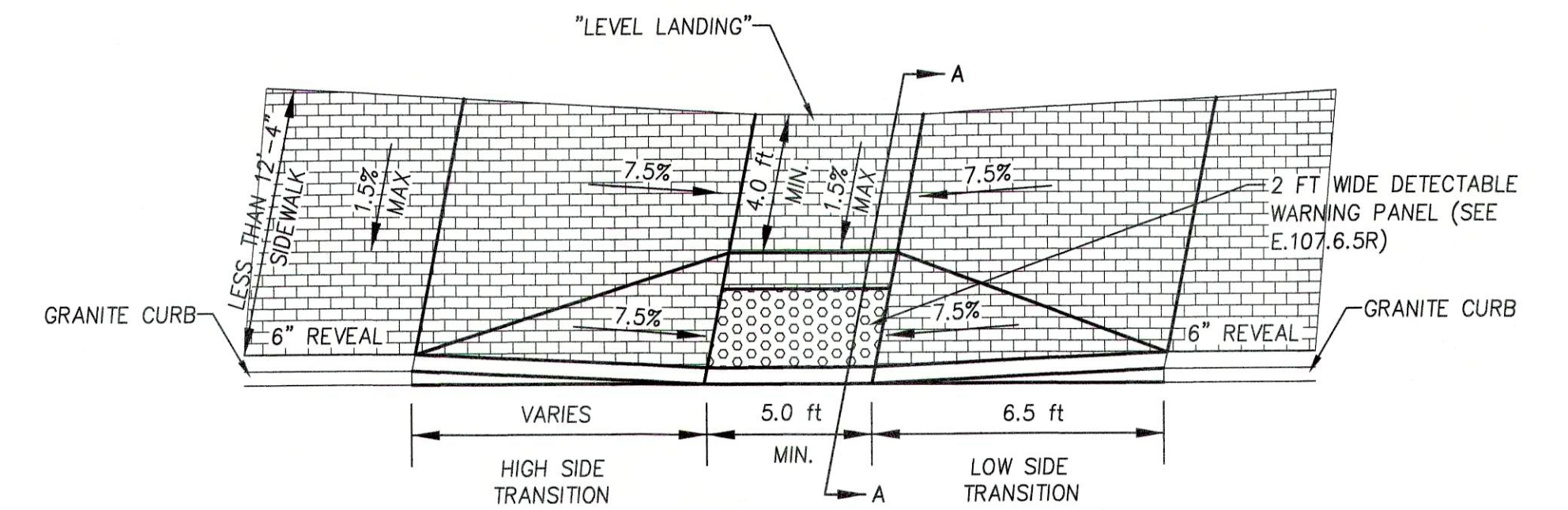
SILT FENCE/HAYBALE INSTALLATION N.T.S.



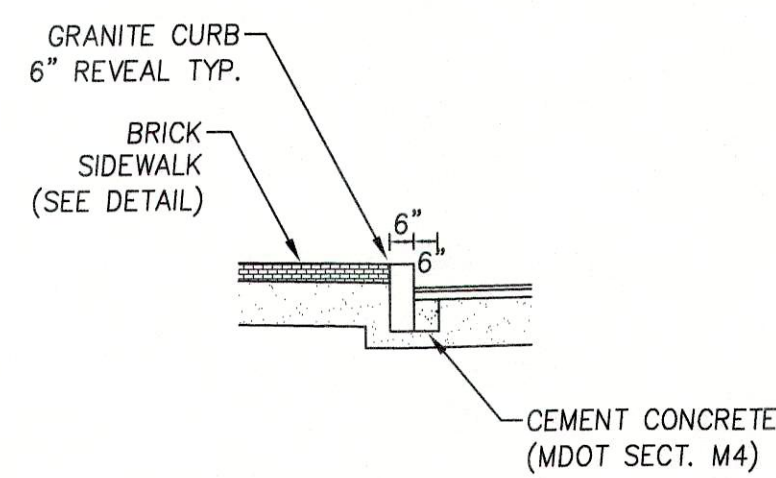
BRICK SIDEWALK DETAIL N.T.S.



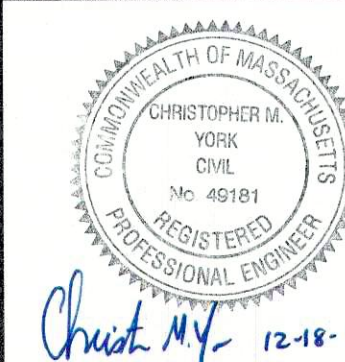
BRICK/CONC. DRIVEWAY RAMP DETAIL N.T.S.



BRICK WHEELCHAIR RAMP DETAIL N.T.S.



TYPICAL GRANITE CURB INSTALLATION N.T.S.



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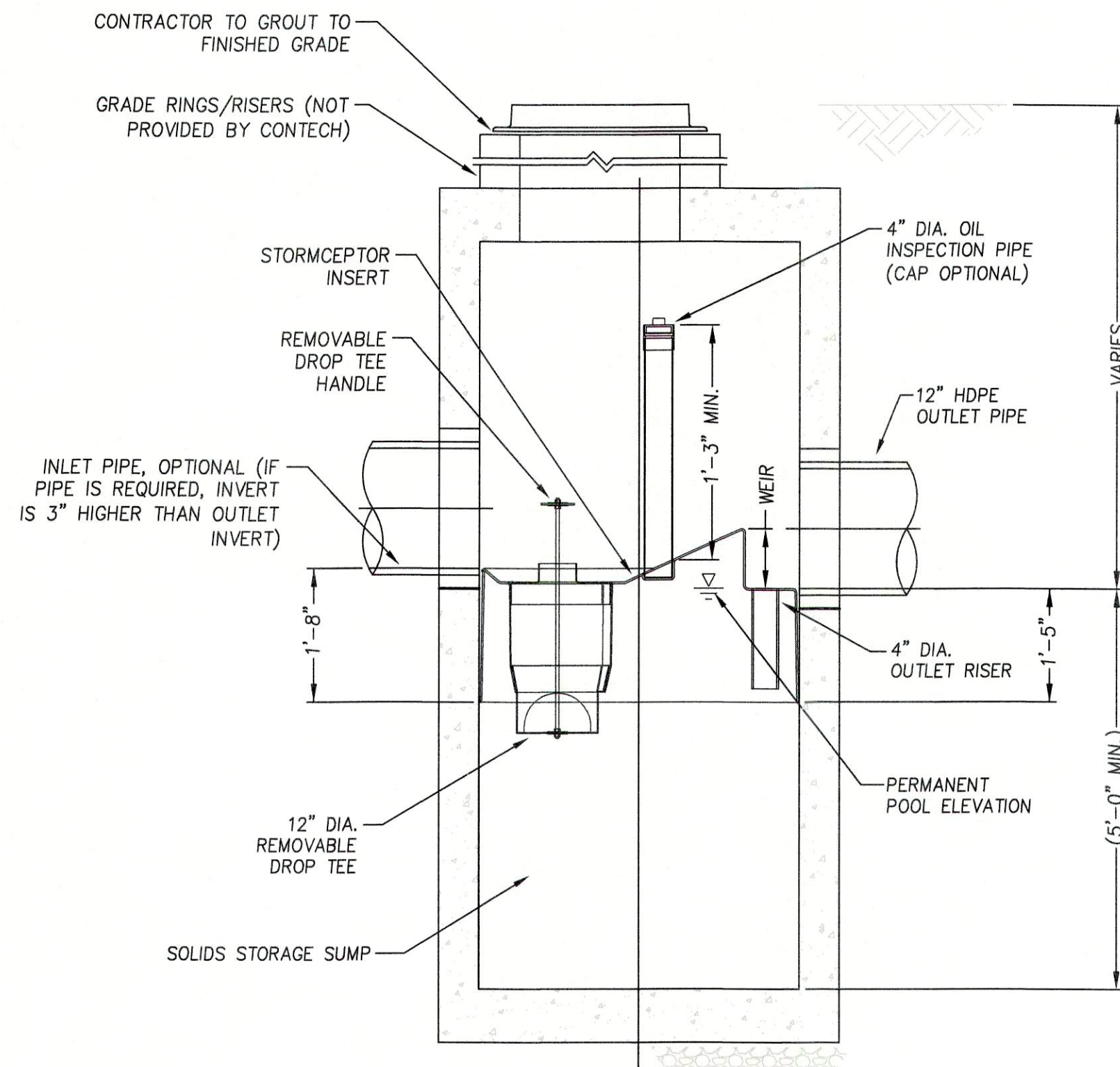
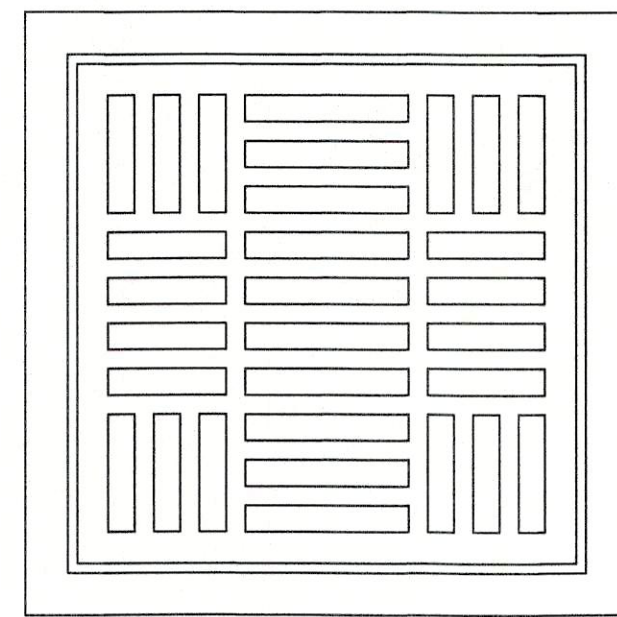
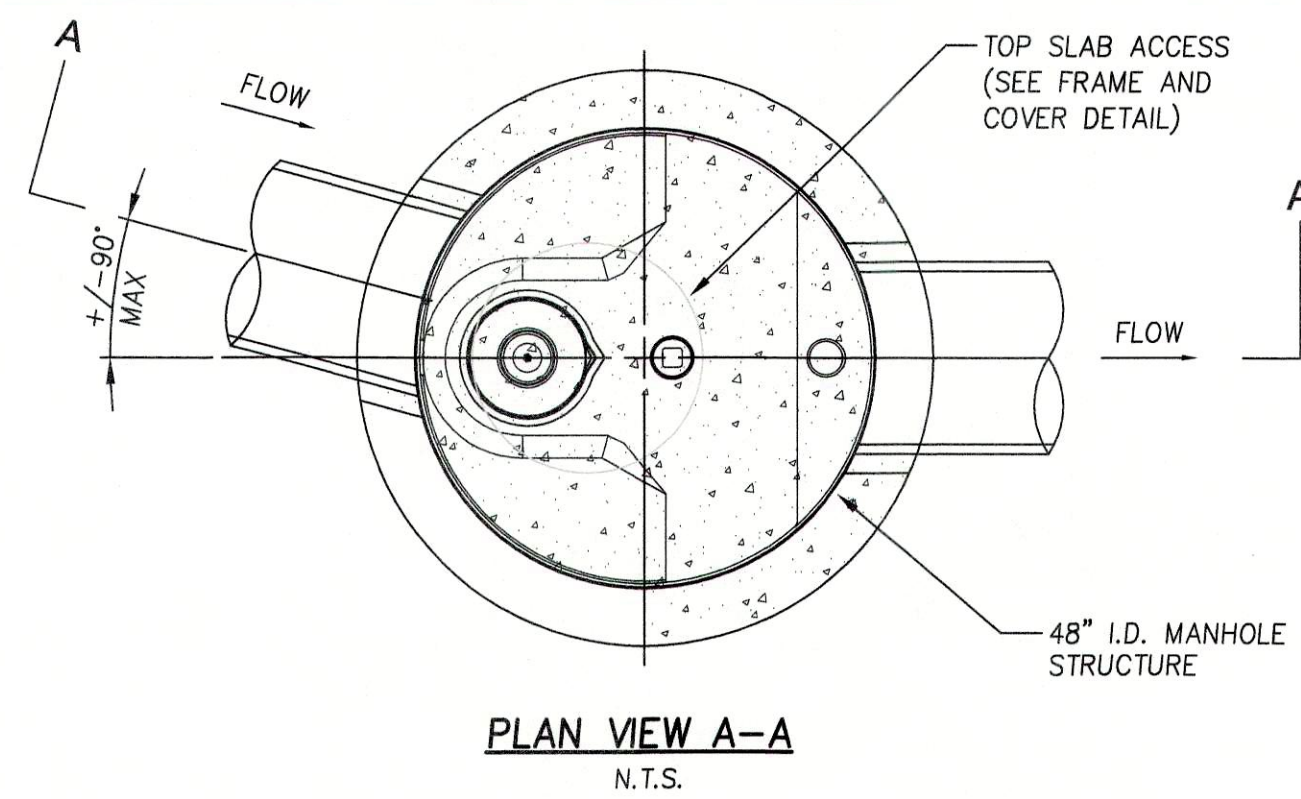
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NEWBURYPORT, MA
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
2-6 MARKET STREET
(MAP 47 - LOT 59)

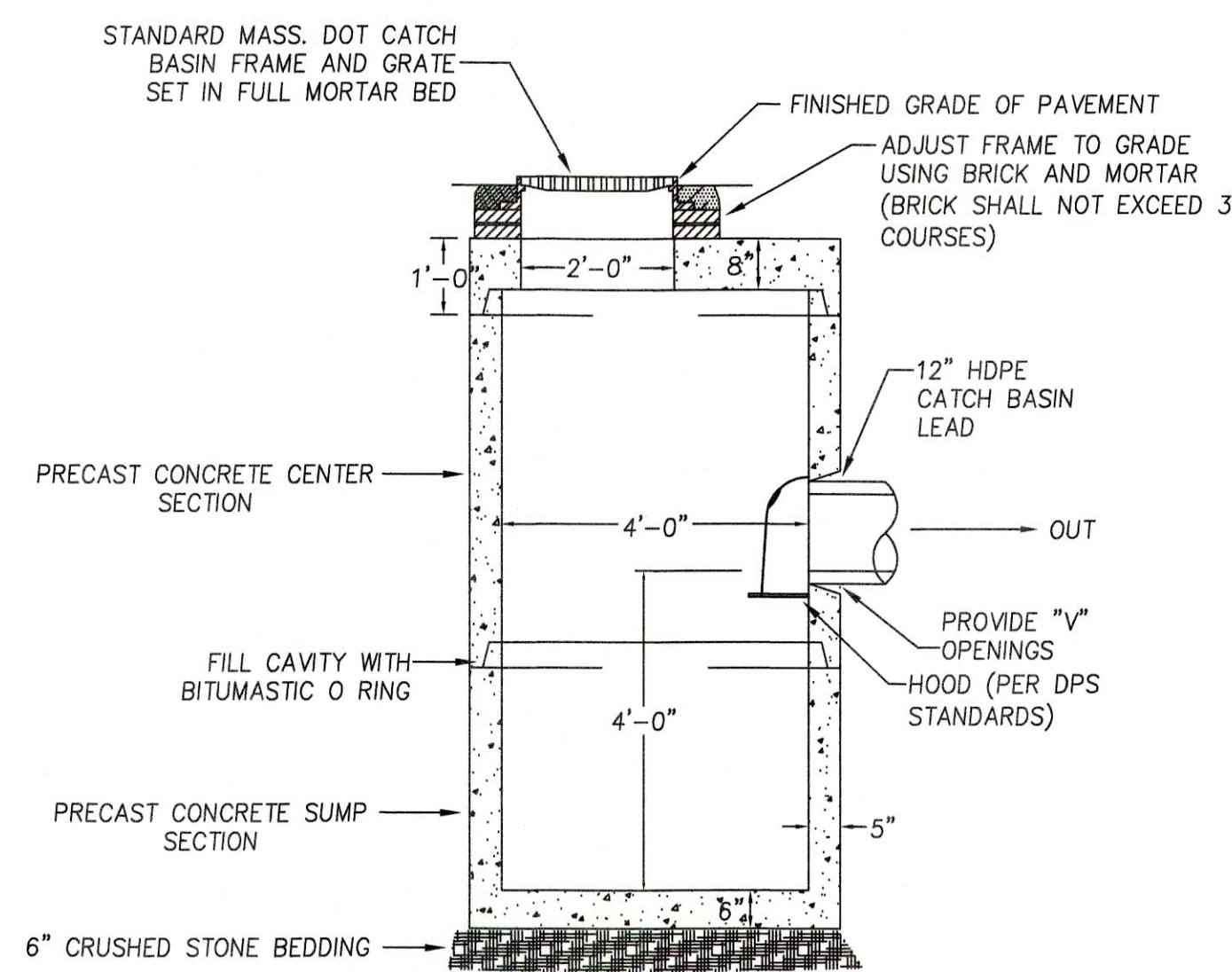
ROADWAY AND DRAINAGE DETAILS
SHEET: C-5



STC450i STORMCEPTOR
DETAIL N.T.S.

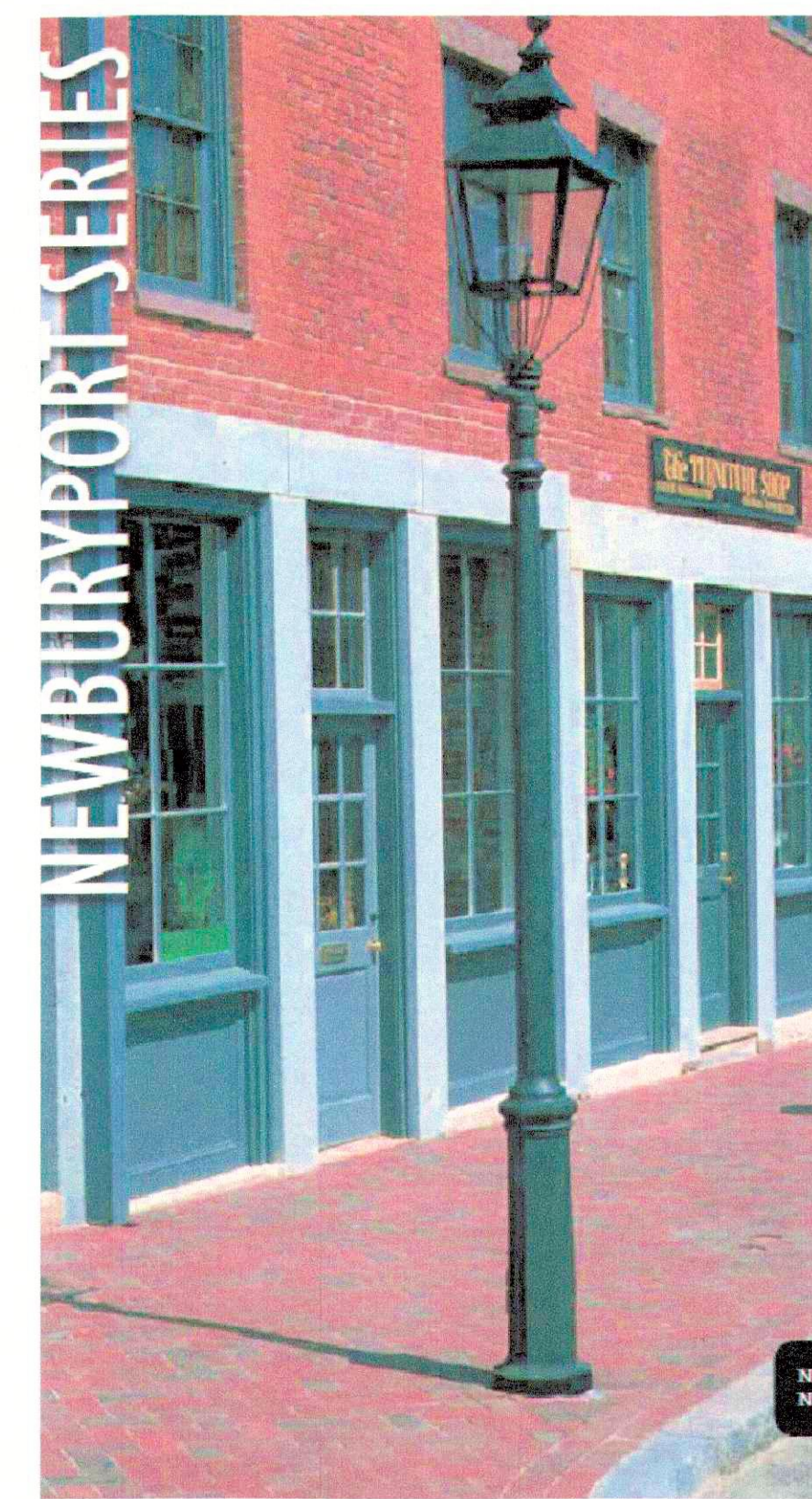
- GENERAL NOTES**
1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 3. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
 4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

- INSTALLATION NOTES**
1. CONTRACTOR SHALL PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 2. STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 3. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 4. STORMCEPTOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [610] AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
 5. STORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.



- NOTES:**
- 1) CATCH BASINS SHALL CONFORM TO ASTM C478 AND ASTM C185
 - 2) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
 - 3) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

PRECAST CATCH BASIN DETAIL N.T.S.

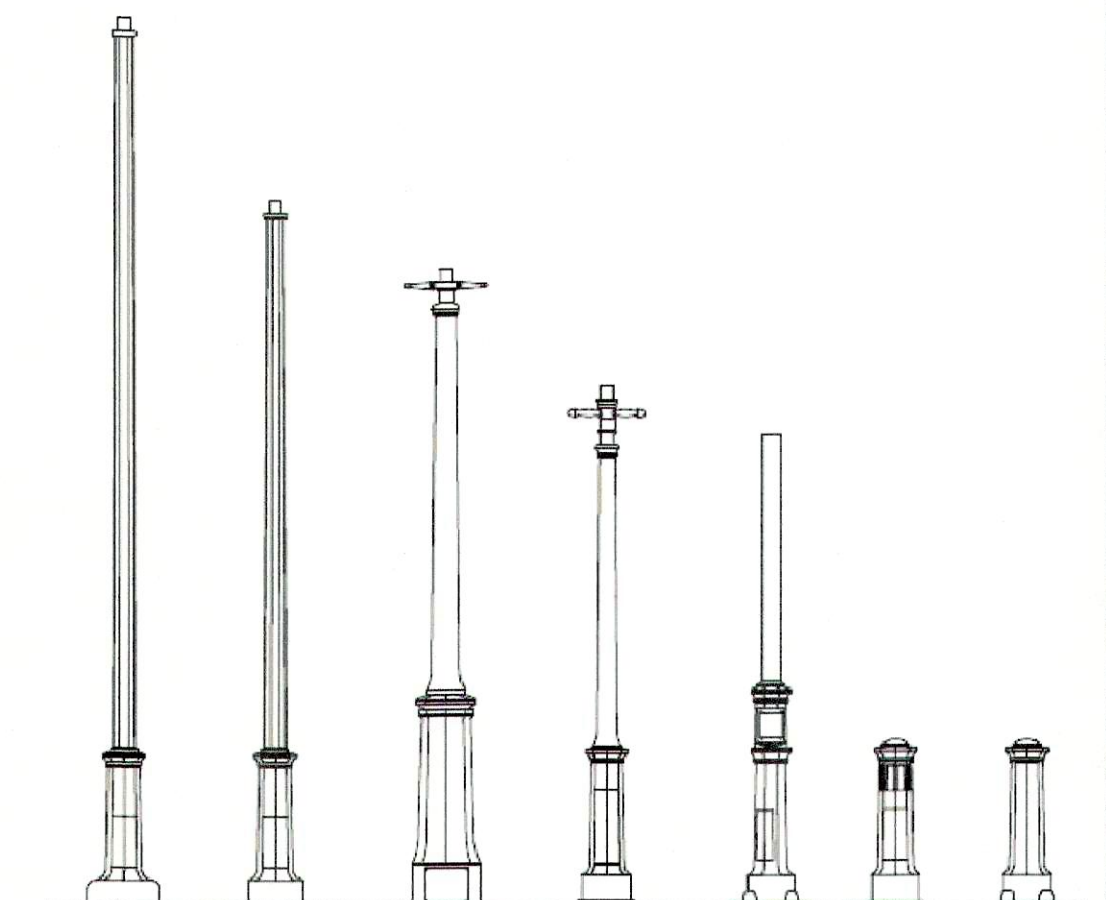


ONE-PIECE CAST	BY METAL		
Base Diam.	Height	Base Diam.	Min. Weight
12"	9' 3"	12"	18'
16"	12' 13"	17"	18'
18 1/2"	9' 2"		

Material: Ductile Iron, Grey Iron, Aluminum

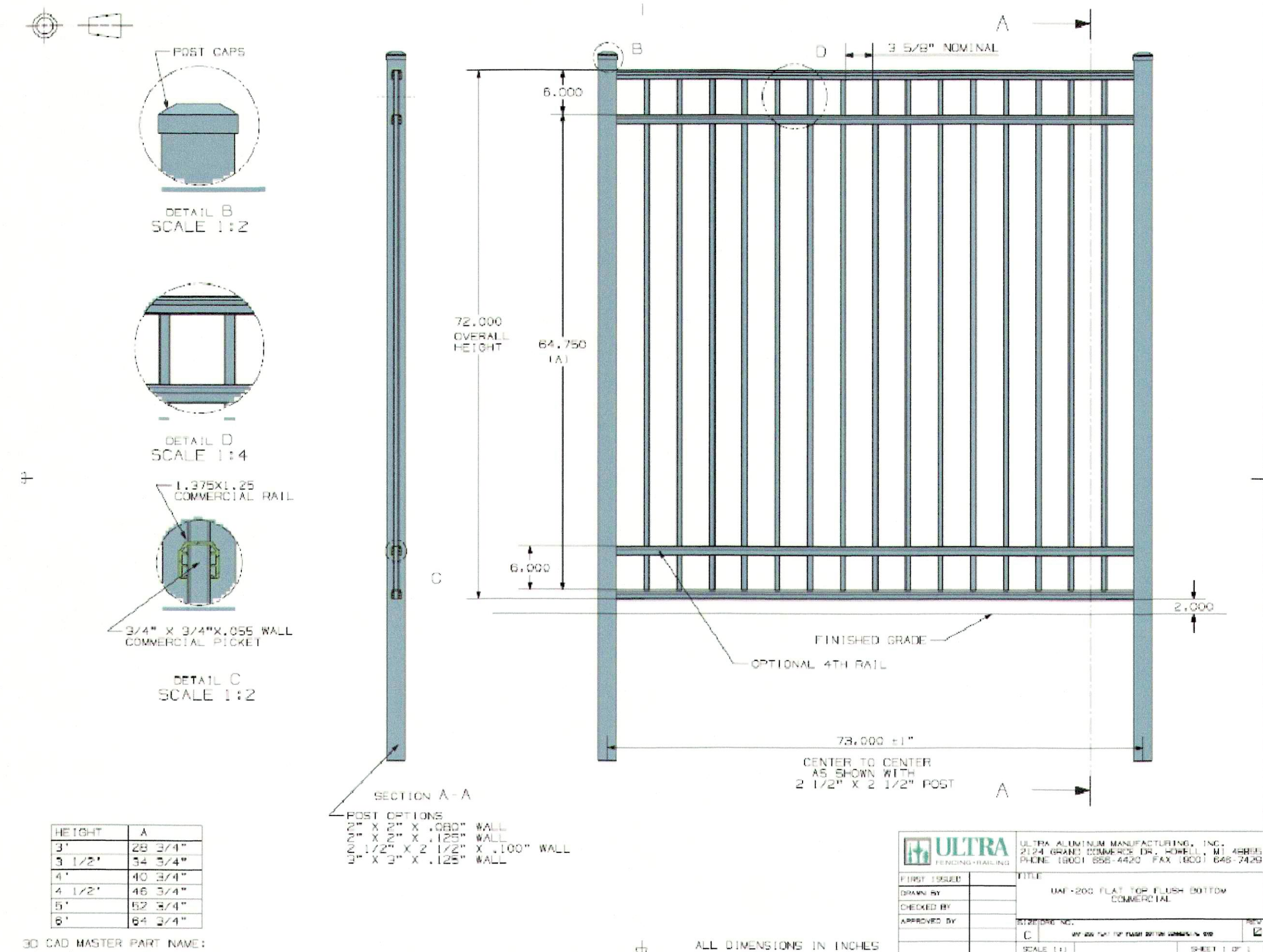
HISTORY

The Newburyport was first installed as a gas light pole in the 1850s. Since then, the design has become popular throughout New England. The Newburyport lamppost is distinguished by its octagonal middle and upper base sections and its round column and pedestal sections.



SERIES PRODUCTS: Ballards
POPULAR CONFIGURATIONS: Luminaires - Sonnet

STREET LIGHT DETAIL N.T.S.



HEIGHT	A
3'	45 3/4"
3 1/2'	54 3/4"
4'	60 3/4"
4 1/2'	66 3/4"
5'	72 3/4"
6'	84 3/4"

3D CAD MASTER PART NAME:

ALUMINUM FENCE DETAIL N.T.S.



PREPARED FOR
STEVEN LEWIS
11 WINDWARD DRIVE
NEWBURYPORT, MA 01950

NO.	DATE	DESCRIPTION	BY
2	12/18/19	ADDRESS REVIEWER'S COMMENTS	C.M.Y.
1	12/10/19	ADDRESS REVIEWER'S COMMENTS	C.M.Y.

MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: AS NOTED CALC. BY: Z.T.J.
DATE: NOV. 20, 2019 CHKD. BY: E.W.B. PROJECT: M193613

PLAN OF LAND
IN
NEWBURYPORT, MA
SHOWING
PROPOSED SITE IMPROVEMENTS
AT
2-6 MARKET STREET
(MAP 47 - LOT 59)

ROADWAY AND DRAINAGE DETAILS
SHEET: C-6