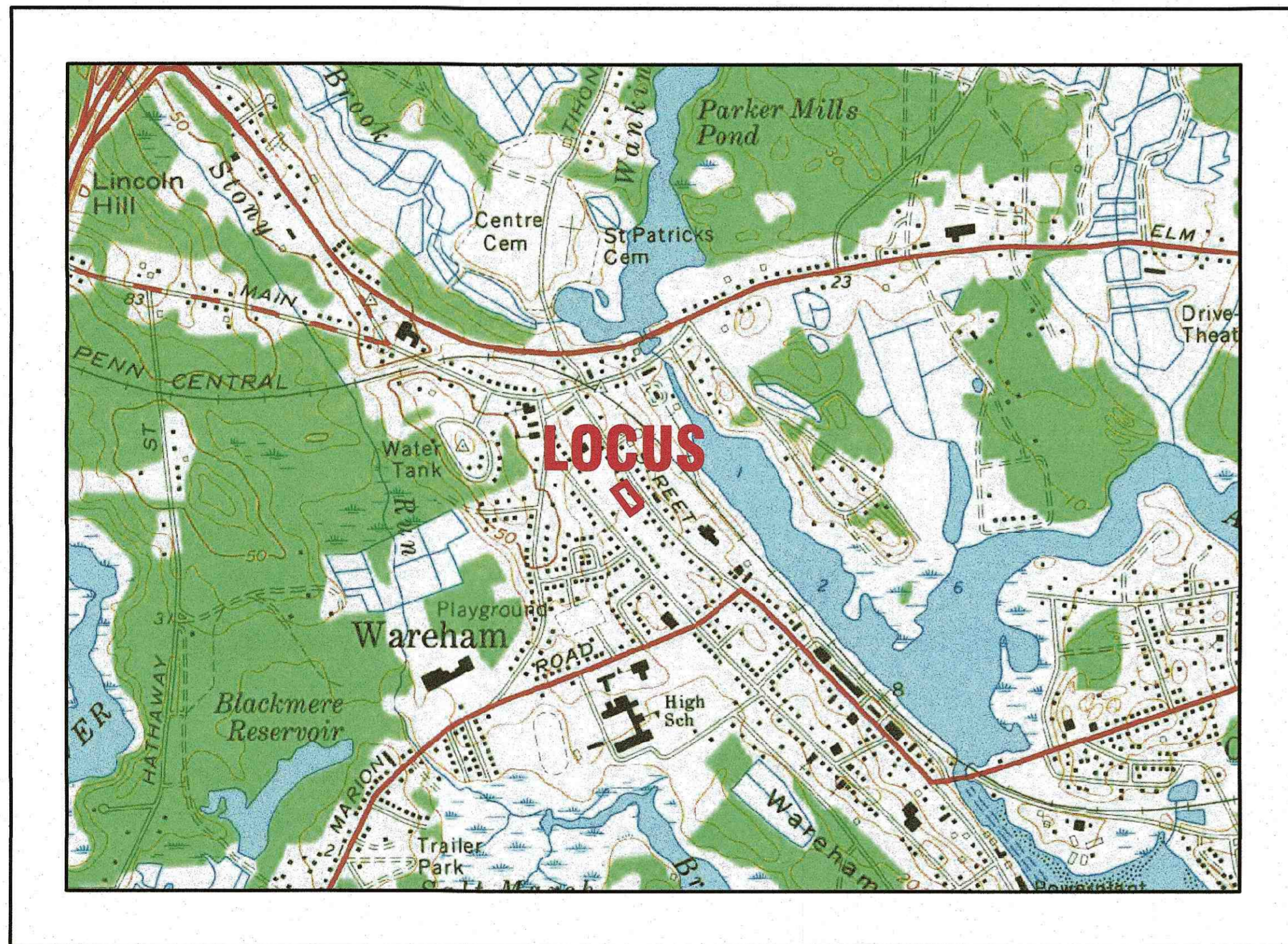


SITE DEVELOPMENT PLAN

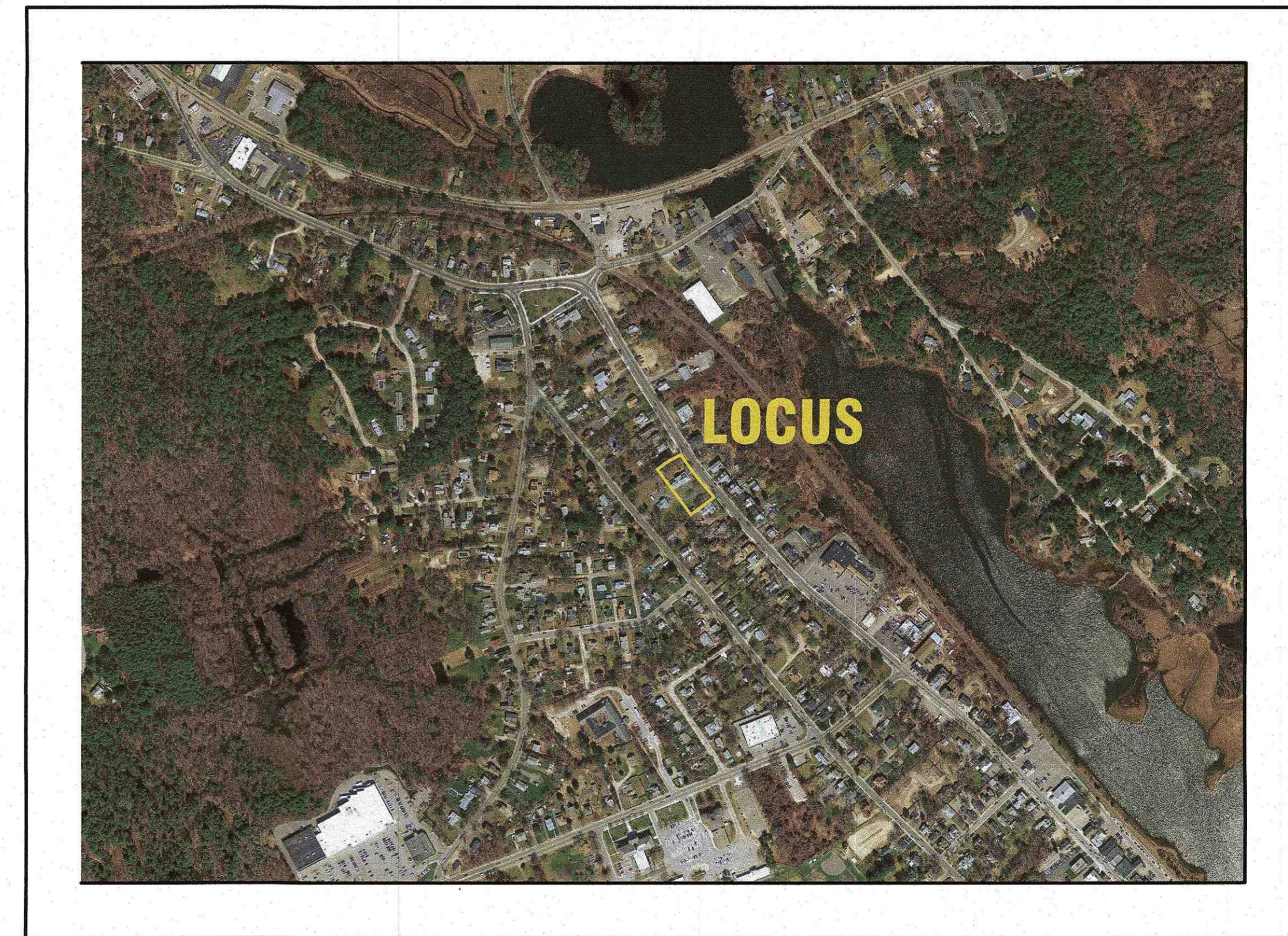
434 MAIN STREET
WAREHAM, MASSACHUSETTS

OWNER: NAZIH B. ELKALLASSI
20 TOWER TERRACE
WAREHAM, MA 02571

APPLICANT: NAZIH B. ELKALLASSI
20 TOWER TERRACE
WAREHAM, MA 02571



— U.S.G.S. LOCUS PLAN —
SCALE: 1"=1000'



— AERIAL OVERVIEW —
SCALE: 1"=500'

SITE DATA

ZONING DISTRICT: WAREHAM VILLAGE 2 (WV 2)
ASSESSOR'S MAP: 61
ASSESSOR'S LOT: 1057
REQUIRED LOT AREA: 15,000 S.F.*
REQUIRED ROAD FRONTAGE: 75'
FRONT SETBACK: **
SIDE & REAR SETBACK: 10'
MAX. BUILDING HEIGHT: 35'
MAX. BUILDING COVERAGE: 20%
MAX. IMPERVIOUS SURFACE: 50%
WATER SUPPLY: TOWN WATER
SANITARY SEWER: TOWN SEWER
LANDSCAPE BUFFER: 10'

ZONING DATA:

ZONING TABLE	ALLOWED	PROPOSED
LOT AREA:	15,000 S.F.*	31,768± S.F.
FRONT SETBACK:	**	58.7'
SIDE SETBACK:	10'	12.0'
REAR SETBACK:	10'	11.0'
MAX. BUILDING COVERAGE:	20%	26.0%
MAX. IMPERVIOUS SURFACE:	50%	53.9%

PARKING DATA:

REQUIRED:
2 PARKING SPACES FOR EACH DWELLING UNIT
8 DWELLING UNITS x 2 = 16 PARKING SPACES
NUMBER OF PARKING SPACES REQUIRED = 16

PROVIDED:
(8) 1 CAR GARAGES = 8 SPACES
(8) DRIVEWAYS = 8 SPACES
TOTAL PROVIDED = 16 PARKING SPACES

* 15,000 S.F. MIN. AND 2,000 S.F. FOR EACH ADDITIONAL UNIT

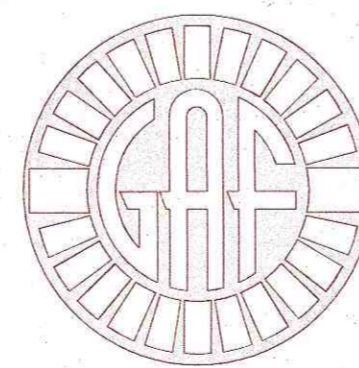
** THE FRONT SETBACKS IN VILLAGE DISTRICTS SHALL BE THE AVERAGE SETBACKS OF FIVE (5) RESIDENTIAL STRUCTURES ON EITHER SIDE OF THE SUBJECT PROPERTY.

PLAN INDEX:

SHEET NO.	DESCRIPTION:
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3	EX. CONDITIONS & DEMOLITION
4	LAYOUT & UTILITIES
5	GRADING & DRAINAGE
6	EROSION CONTROL PLAN
7	DETAIL SHEET 1
8	DETAIL SHEET 2
9	DETAIL SHEET 3

FLOOD ZONE DATA:

THE PROJECT IS WITHIN AREA OF MINIMAL FLOOD HAZARD ZONE X. REFER TO THE F.E.M.A. FLOOD INSURANCE RATE MAP PANEL NUMBER 25023C0488K, DATED: JULY 6, 2021.



G. A. F. ENGINEERING, INC.
PROFESSIONAL ENGINEERS & LAND SURVEYORS

266 MAIN STREET, WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
E-MAIL: info@gafenginc.com

SEPTEMBER 8, 2022

DATE: SEPT. 8, 2022	DRAWN BY: JMP	CHECKED BY: WFM	JOB NO.: 21-9751	SCALE: AS NOTED
APPROVED BY:				
APPROVED BY:				
DATE: 2/14/23	REV: 1	DATE: 2/14/23	BY: JMP	DESCRIPTION: ZONING & PARKING DATA
G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 266 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafenginc.com <small>THIS DOCUMENT IS THE PROPERTY OF G.A.F. ENGINEERING, INC. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE EXPRESS WRITTEN CONSENT OF G.A.F. ENGINEERING, INC. WITH THE EXCEPTION OF ANY REGULATORY AUTHORITY WHICH MAY REPRODUCE THIS DOCUMENT IN CONNECTION WITH THE PERFORMANCE OF REGULATORY DUTIES. G.A.F. ENGINEERING, INC. SHALL BE LIABLE FOR ANY DAMAGE, LOSS, OR INJURY RESULTING FROM THE USE OF THIS DOCUMENT.</small>				
SITE DEVELOPMENT PLAN COVER SHEET		PREPARED FOR: NAZIH B. ELKALLASSI 434 MAIN STREET WAREHAM, MA		
JOB NO.: 21-9751		DWG. 1 OF 9		
PERMIT SET (NOT FOR CONSTRUCTION)				

GENERAL NOTES:

- 1. ALL UNDERGROUND UTILITIES SHOWN OR NOT SHOWN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS AND IN PART FROM FIELD SURVEY AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. BEFORE EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION, OR REPAIRING, ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE MGL CHAPTER 370, ACTS OF 1963. CONTRACTORS MUST CALL DIG-SAFE AT (1-888-DIG-SAFE OR 811) G.A.F. ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.

CONSTRUCTION NOTES:

- 1. IN GENERAL, THE PLANS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW EVERY FITTING, CHANGE IN DIRECTION OR DETAIL OF CONSTRUCTION.
- 2. THE LOCATION OF UTILITIES WERE OBTAINED FROM VARIOUS SOURCES OF INFORMATION. THE EXACT LOCATION AND COMPLETENESS IS NOT GUARANTEED. THE CONTRACTOR MUST NOTIFY DIG SAFE PRIOR TO THE START OF CONSTRUCTION (1-888-DIG-SAFE OR 811). G.A.F. ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
- 3. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF PERSONNEL AND PROTECTION OF PROPERTY AT THE SITE OR ADJACENT THERETO INCLUDING TREES, SHRUBS, LAWNS, PAVEMENTS, ROADWAYS, STRUCTURES AND UNDERGROUND UTILITIES NOT DESIGNED FOR REMOVAL, RELOCATION, OR REPLACEMENT.

EROSION CONTROL NOTES:

- 1. THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENTATION CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT FROM LEAVING THE SITE. SILT WILL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS. ADDITIONAL PROTECTION: ON-SITE PROTECTION MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNFORESEEN CONDITIONS OR ACCIDENTS.
- 2. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION CONTROL DEVICES WHICH BECOME INEFFECTIVE.

DRAINAGE OPERATION AND MAINTENANCE SCHEDULE:

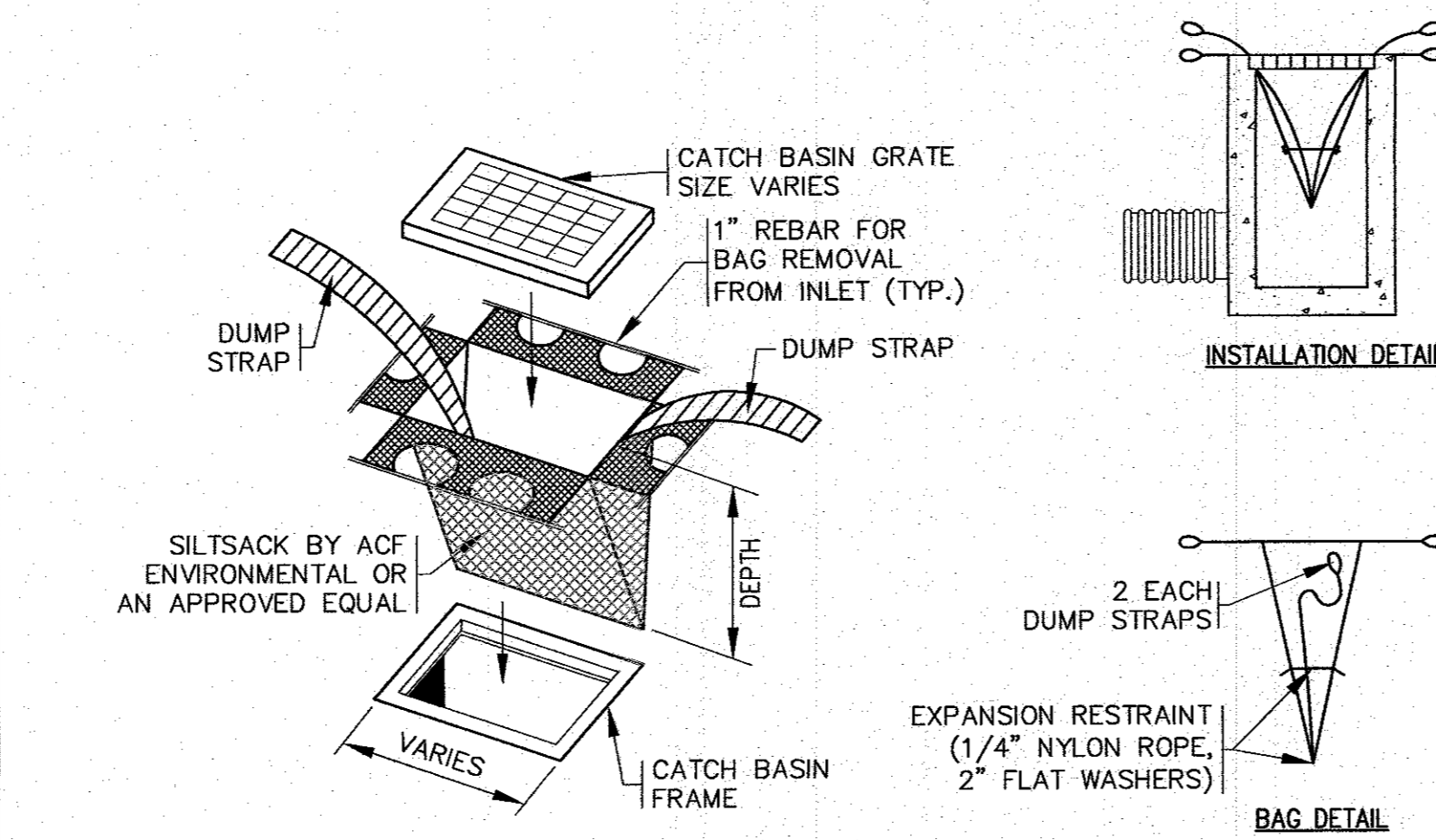
- THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PERIOD IS THE RESPONSIBILITY OF THE CONTRACTOR. THE OUTLINE BELOW SHALL BE FOLLOWED TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE FACILITIES.
- 1. IN CONJUNCTION WITH THE SITE CONSTRUCTION, ALL DRAINAGE STRUCTURES SHALL BE INSTALLED AND THE AFFECTED AREAS STABILIZED (LOAM AND SEED, HYDROSEED, PLANTED, RIP-RAP, ETC.). PERMANENT STABILIZATION OF THESE AREAS SHALL BE STARTED AS SOON AS POSSIBLE.
- 2. EROSION CONTROL SHALL BE PLACED ALONG THE LIMITS OF WORK WHERE SHOWN ON THE PLANS.

POST-CONSTRUCTION OPERATION AND MAINTENANCE PLAN:

- UPON THE COMPLETION OF CONSTRUCTION, MAINTENANCE SHALL BE CONDUCTED BY THE OWNER OR OWNER'S AGENT ON THE SITE. THE FOLLOWING SHALL BE CARRIED OUT BY THE RESPONSIBLE PARTY AND SHALL BE ADHERED TO ENSURE THE PROPER OPERATION OF THE DRAINAGE FACILITIES.
- 1. PARKING LOT SWEEPING IS AN EFFECTIVE NONSTRUCTURAL SOURCE CONTROL THAT WILL REMOVE SEDIMENT FROM PAVED SURFACES. PARKING LOT SWEEPING SHOULD BE DONE BY THE USE OF A HIGH EFFICIENCY VACUUM SWEEPER OR REGENERATIVE AIR SWEEPER. PARKING LOT SWEEPING SHALL BE DONE TWICE PER YEAR. ONCE REMOVED FROM PAVED SURFACES, THE SWEEPINGS MUST BE HANDLED AND DISPOSED OF PROPERLY IN ONE OF THE WAYS APPROVED BY MASSDEP (SEE POLICY # BAW-18-001: REUSE & DISPOSAL OF STREET SWEEPINGS).
- 2. DEEP SUMP CATCH BASINS ARE UNDERGROUND RETENTION SYSTEMS DESIGNED TO REMOVE TRASH, DEBRIS AND COARSE SEDIMENT FROM STORMWATER RUNOFF AND SERVE AS TEMPORARY SPILL CONTAINMENT DEVICES FOR FLOATABLES SUCH AS OILS AND GREASE. INSPECT ALL CATCH BASINS MONTHLY AND CLEAN AT LEAST TWO TIMES PER YEAR AND AT THE END OF THE FOLIAGE AND SNOW-REMOVAL SEASONS. SEDIMENTS MUST ALSO BE REMOVED WHENEVER THE DEPTH OF DEPOSITS IS GREATER THAN OR EQUAL TO ONE HALF THE DEPTH FROM THE BOTTOM OF THE INVERT. SEDIMENT SHALL BE REMOVED THROUGH THE USE OF A VACUUM TRUCK. SEDIMENT MUST BE HANDLED AND DISPOSED OF PROPERLY IN ONE OF THE WAYS ALREADY APPROVED BY MASSDEP (SEE MASSDEP POLICY ON MANAGEMENT OF CATCH BASIN CLEANINGS). IF THERE IS ANY EVIDENCE THAT THEY HAVE BEEN CONTAMINATED BY A SPILL OR OTHER MEANS, THE CLEANINGS MUST BE EVALUATED IN ACCORDANCE WITH THE MASSDEP HAZARDOUS WASTE REGULATIONS, 310 CMR 30.00 AND HANDLED AS HAZARDOUS WASTE.

DRAINAGE INSTALLATION NOTES:

- 1. ALL DRAINAGE PIPES, UNLESS OTHERWISE NOTED, ARE TO BE ADS N-12 PIPE WITH SOIL TIGHT JOINTS AND FITTINGS. REFER TO PLAN FOR LOCATION, SIZES AND SLOPES.
- 2. ALL ROOF DRAIN PIPES, UNLESS OTHERWISE NOTED, ARE TO BE 4" ADS N-12 PIPE WITH SOIL TIGHT JOINTS AND FITTINGS. MINIMUM SLOPE TO BE 1.00%. REFER TO PLAN FOR LOCATIONS.
- 3. MINIMUM COVER ON PIPES SHALL NOT BE LESS THAN 1.5 FEET.
- 4. ALL PERFORATED PIPE SHALL BE ADS HDPE PIPE WITH AASHTO CLASS II PERFORATION PATTERN.
- 5. ALL WORK AND MATERIAL SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.



PERMIT SET (NOT FOR CONSTRUCTION) SILT SACK DETAIL N.T.S.

DEMOLITION NOTES:

- 1. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE HIS/HER OWN DETERMINATION OF SUBSURFACE CONDITIONS, INCLUDING THE LOCATION OF ROCK AND THE ACTUAL LOCATION OF UTILITIES OR OTHER FEATURES WHICH MAY AFFECT HIS/HER WORK. ANY UNSUITABLE MATERIAL ENCOUNTERED DURING CONSTRUCTION WILL BE REPORTED TO THE ENGINEER OF RECORD FOR RESOLUTION AND CONSTRUCTION METHOD.
- 2. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND APPURTENANCES, REMOVAL, AND ALTERATIONS OF EXISTING FACILITIES, INCLUDING PIPING SYSTEMS AND APPURTENANCES, DRAINAGE, PAVEMENT, LANDSCAPE AND SITE FEATURES ENCOUNTERED DURING THE INSTALLATION AS INDICATED ON THE DRAWINGS, AS HEREIN SPECIFIED, AND/OR AS DIRECTED BY THE DESIGN ENGINEER.
- 3. ALL EQUIPMENT, PIPING, AND OTHER MATERIALS THAT ARE NOT TO BE RELOCATED OR TO BE RETURNED TO THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY HIM, AWAY FROM THE SITE OF THE WORK AND AT HIS OWN EXPENSE.

WATER INSTALLATION NOTES:

- 1. ALL WATER MAINS, SERVICES, GATE VALVES/GATE BOX, CURB STOPS, HYDRANTS, FITTINGS, ETC. & METHOD OF INSTALLATION SHALL CONFORM TO THE WAREHAM FIRE DISTRICT RULES & REGULATIONS.
- 2. WATER MAIN SHALL BE TESTED & DISINFECTED IN ACCORDANCE WITH THE WAREHAM FIRE DISTRICT REQUIREMENTS.
- 3. CONTRACTOR TO COORDINATE WITH THE WAREHAM FIRE DISTRICT FOR THE INSPECTIONS OF THE WATER MAIN INSTALLATION.
- 4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO COMPLETE THE INSTALLATION OF THE WATER SERVICE.
- 5. THE CONTRACTOR SHALL OBTAIN A COPY OF THE REGULATIONS FROM THE WAREHAM FIRE DISTRICT BEFORE PROCEEDING WITH THE INSTALLATION OF THE WATER SERVICE.
- 6. ALL WATER MAINS SHALL BE RESTRAINED JOINT 4" CLASS 52 CEMENT LINED DUCTILE IRON PIPE WITH MECHANICAL JOINT FITTINGS OR APPROVED EQUAL.

TEST PIT DATA

DATE OF TESTING: AUGUST 19, 2022 PERFORMED BY: BRIAN GRADY, G.A.F. ENGINEERING INC. REFER TO EXISTING CONDITIONS & DEMOLITION PLAN FOR TEST LOCATIONS

Table with 3 columns for test pits TP-1, TP-2, and TP-3. Each column lists soil layers with descriptions like 'LOAMY SAND W/GRAVEL FILL', 'FRI. FINE-MED. SAND W/TRACE OF GRVL.', and 'MED.-FINE SAND W/5% GRVL., BLDRS. & COBBLES'. Includes elevations and notes like 'NO WATER ENC.'.

NOTE: WHERE REQUIRED THE CONTRACTOR TO REMOVE ALL UNSUITABLE SOILS AND REPLACE WITH CLEAN SAND AND GRAVEL APPROVED BY DESIGN ENGINEER. SEE PLANS FOR DEPTHS AND LOCATIONS.

ABBREVIATIONS

Table of abbreviations including AC (ASBESTIC CONCRETE), ADS (ADVANCED DRAINAGE SYSTEM), APPROX. (APPROXIMATE), BC (BOTTOM OF CURB), BIT. CONC. (BITUMINOUS CONCRETE), BLDRS (BOULDERS), etc.

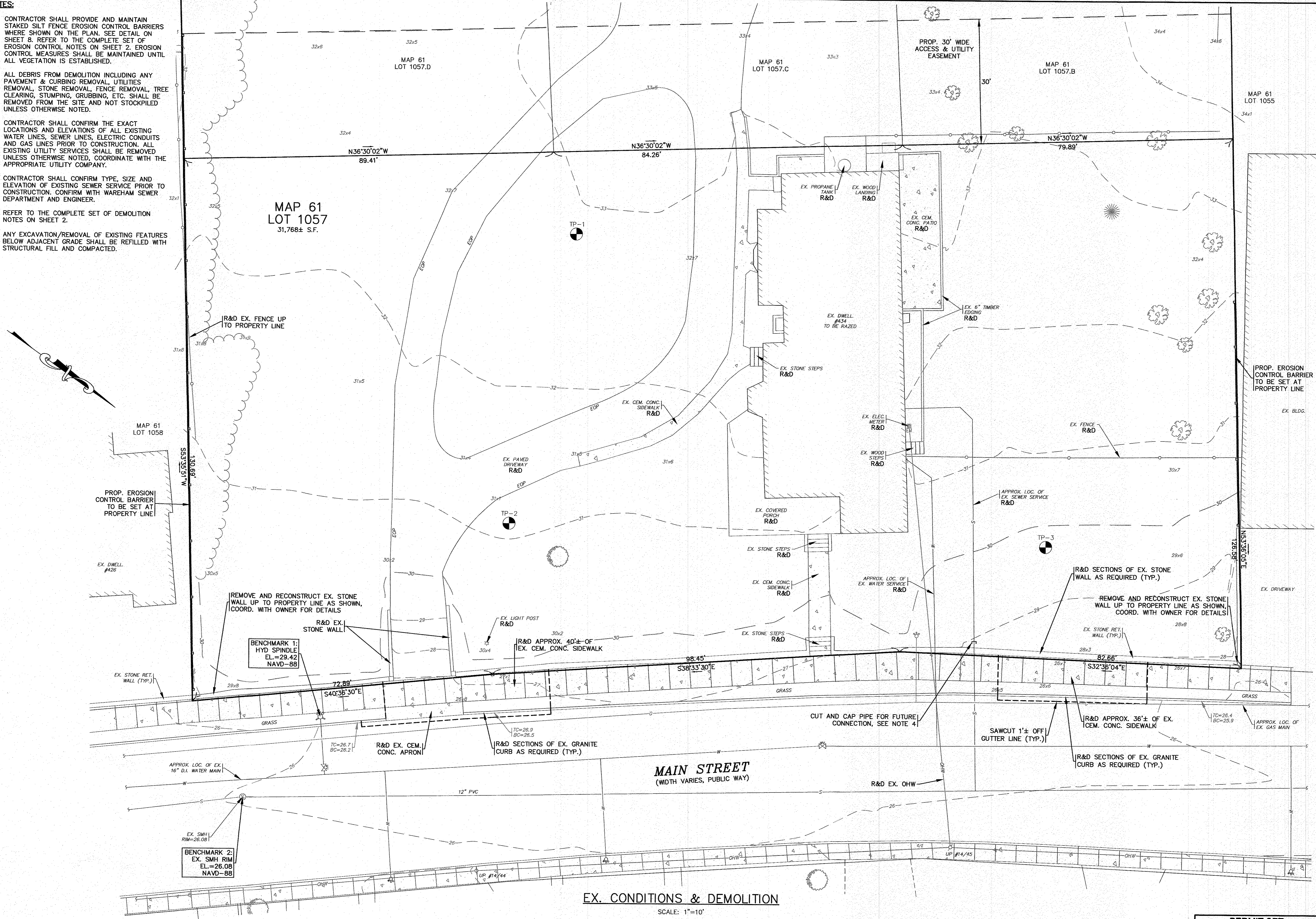
Legend table with columns for EXISTING, DESC., and PROPOSED. Lists symbols for contours, spot grades, wetlands, flood zones, drain lines, catch basins, manholes, utilities, overhead wires, water gate valves, hydrants, valves, fire protection lines, sewer lines, force mains, tree lines, light posts, gas lines, gas valves, gas shutoffs, gas meters, signs, fences, bounds, test pits, guard rails, and flared end sections.

Approval and revision table. Includes 'APPROVED BY:' with a signature, 'DATE: SEPT. 8, 2022', 'DRAWN BY: JMF', 'CHECKED BY: WFM', 'JOB NO.: 21-9751', 'SCALE: N.T.S.', and a revision table with columns for REV., DATE, and DESCRIPTION.

Project information block. Includes 'G.A.F. ENGINEERING, INC.' logo and contact info, 'SITE DEVELOPMENT PLAN GENERAL NOTES & LEGEND', 'PREPARED FOR: NAZIH B. ELKALLASSI', '434 MAIN STREET WAREHAM, MA', '20 TOWER TERRACE WAREHAM, MA', and 'JOB NO.: 21-9751 DWG. 2 OF 9'.

NOTES:

- CONTRACTOR SHALL PROVIDE AND MAINTAIN STAKED SILT FENCE EROSION CONTROL BARRIERS WHERE SHOWN ON THE PLAN. SEE DETAIL ON SHEET 8. REFER TO THE COMPLETE SET OF EROSION CONTROL NOTES ON SHEET 2. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL VEGETATION IS ESTABLISHED.
- ALL DEBRIS FROM DEMOLITION INCLUDING ANY PAVEMENT & CURBING REMOVAL, UTILITIES REMOVAL, STONE REMOVAL, FENCE REMOVAL, TREE REMOVAL, STUMPING, GRUBBING, ETC. SHALL BE REMOVED FROM THE SITE AND NOT STOCKPILED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL CONFIRM THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXISTING WATER LINES, SEWER LINES, ELECTRIC CONDUITS AND GAS LINES PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY SERVICES SHALL BE REMOVED UNLESS OTHERWISE NOTED, COORDINATE WITH THE APPROPRIATE UTILITY COMPANY.
- CONTRACTOR SHALL CONFIRM TYPE, SIZE AND ELEVATION OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. CONFIRM WITH WAREHAM SEWER DEPARTMENT AND ENGINEER.
- REFER TO THE COMPLETE SET OF DEMOLITION NOTES ON SHEET 2.
- ANY EXCAVATION/REMOVAL OF EXISTING FEATURES BELOW ADJACENT GRADE SHALL BE FILLED WITH STRUCTURAL FILL AND COMPACTED.

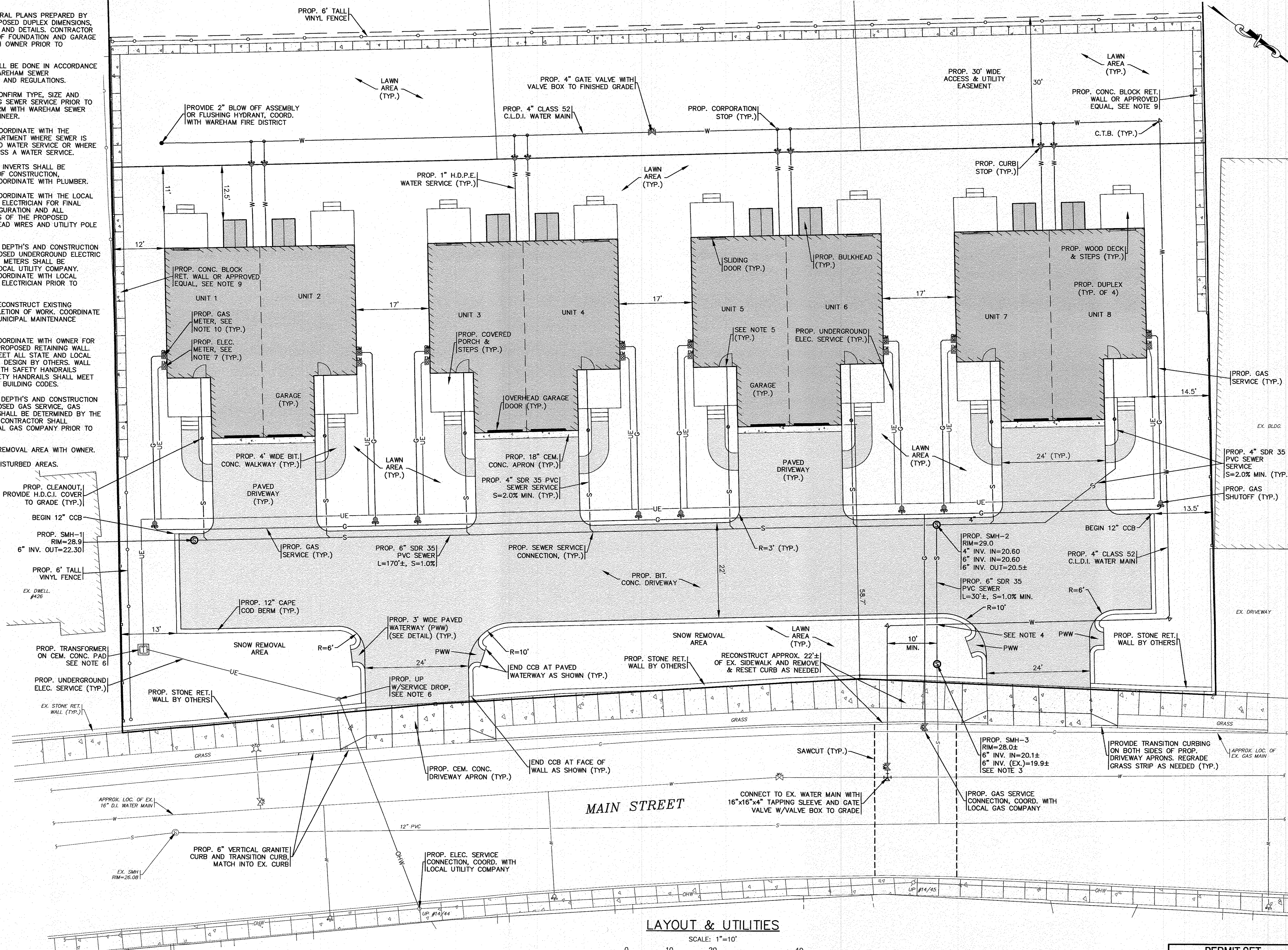


DATE: SEPT. 8, 2022		DRAWN BY: JMP		CHECKED BY: WFM		JOB NO.: 21-9751		SCALE: 1" = 10'	
APPROVED BY:		APPROVED BY:		APPROVED BY:		APPROVED BY:		APPROVED BY:	
G.A.F. ENGINEERING INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 266 MAIN STREET WAREHAM, MA 02571 TEL: (508) 293-6000 FAX: (508) 295-6634 E-MAIL: info@gafengr.com		PREPARED FOR: NAZIH B. ELKALLASSI 20 TOWER TERRACE WAREHAM, MA		SITE DEVELOPMENT PLAN EX. CONDITIONS & DEMOLITION 434 MAIN STREET WAREHAM, MA		JOB NO.: 21-9751 DWG. 3 OF 9		PERMIT SET (NOT FOR CONSTRUCTION)	

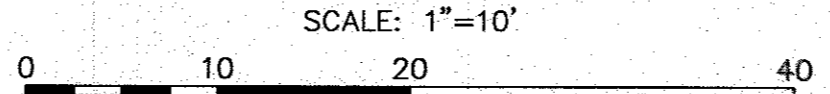
H:\GAF DRAWINGS\2021 DRAWINGS\01-0701 (NAZIH ELKALLASSI)\0701 SITE PLAN 2022.dwg

NOTES:

- REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED DUPLEX DIMENSIONS, CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND GARAGE SLAB ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
- ALL SEWER WORK SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF WAREHAM SEWER COMMISSIONERS RULES AND REGULATIONS.
- CONTRACTOR SHALL CONFIRM TYPE, SIZE AND ELEVATION OF EXISTING SEWER SERVICE PRIOR TO CONSTRUCTION. CONFIRM WITH WAREHAM SEWER DEPARTMENT AND ENGINEER.
- CONTRACTOR SHALL COORDINATE WITH THE WAREHAM WATER DEPARTMENT WHERE SEWER IS LESS THAN 10 FEET TO WATER SERVICE OR WHERE SEWER LINE MUST CROSS A WATER SERVICE.
- FINAL BUILDING SEWER INVERTS SHALL BE DETERMINED AT TIME OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH PLUMBER.
- CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY AND ELECTRICIAN FOR FINAL LOCATION, SIZE, CONFIGURATION AND ALL CONSTRUCTION DETAILS OF THE PROPOSED TRANSFORMER, OVERHEAD WIRES AND UTILITY POLE WITH SERVICE DROP.
- THE FINAL LOCATIONS, DEPTHS AND CONSTRUCTION DETAILS OF THE PROPOSED UNDERGROUND ELECTRIC SERVICE AND ELECTRIC METERS SHALL BE DETERMINED BY THE LOCAL UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY AND ELECTRICIAN PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL RECONSTRUCT EXISTING SIDEWALK UPON COMPLETION OF WORK. COORDINATE WITH THE WAREHAM MUNICIPAL MAINTENANCE DEPARTMENT.
- CONTRACTOR SHALL COORDINATE WITH OWNER FOR ALL DETAILS ON THE PROPOSED RETAINING WALL. WALL DESIGN SHALL MEET ALL STATE AND LOCAL BUILDING CODES, FINAL DESIGN BY OTHERS. WALL SHALL BE PROVIDED WITH SAFETY HANDRAILS WHERE REQUIRED, SAFETY HANDRAILS SHALL MEET ALL STATE AND LOCAL BUILDING CODES.
- THE FINAL LOCATIONS, DEPTHS AND CONSTRUCTION DETAILS OF THE PROPOSED GAS SERVICE, GAS METERS & SHUTOFFS SHALL BE DETERMINED BY THE LOCAL GAS COMPANY. CONTRACTOR SHALL COORDINATE WITH LOCAL GAS COMPANY PRIOR TO CONSTRUCTION.
- CONFIRM FINAL SNOW REMOVAL AREA WITH OWNER.
- LOAM AND SEED ALL DISTURBED AREAS.



LAYOUT & UTILITIES



DATE: SEPT. 8, 2022	APPROVED BY: [Signature]
DRAWN BY: JMP	DATE: 2/14/23
CHECKED BY: WFM	BY: JMP
JOB NO.: 21-9751	REV. 1
SCALE: 1" = 10'	DESCRIPTION: TOWN COMMENTS/REV. BLDG. FOOTPRINTS

G.A.F. ENGINEERING, INC.
 PROFESSIONAL ENGINEERS & LAND SURVEYORS
 266 MAIN STREET - WAREHAM, MA 02571
 TEL: (508) 295-6600 FAX: (508) 295-6634
 E-MAIL: info@gafeng.com

WAREHAM, MA

WAREHAM, MA

PREPARED FOR:
NAZIH B. ELKALLASSI
 20 TOWER TERRACE

WAREHAM, MA

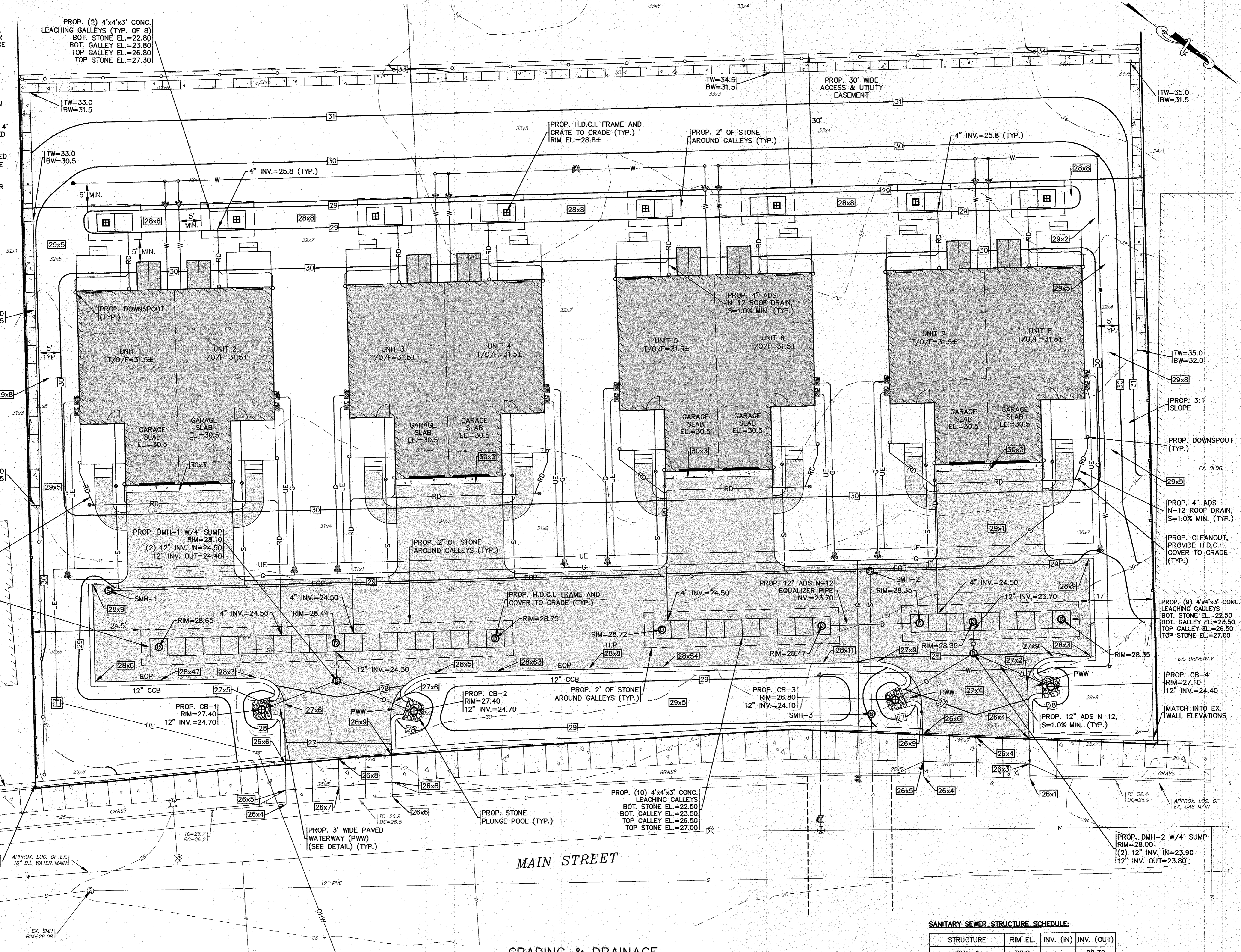
JOB NO.: 21-9751
DWG. NO. 4 OF 9

PERMIT SET (NOT FOR CONSTRUCTION)

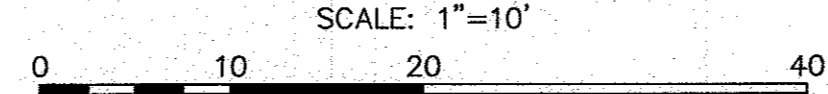
H:\GAF DRAWINGS\2022 DRAWINGS\21-9751 (NAZIH ELKALLASSI)\DWG\SITE PLAN_2022.dwg

NOTES:

1. REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED DUPLEX DIMENSIONS, CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND GARAGE SLAB ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
2. ALL PROPOSED CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL EMPTY WHEN NEEDED AND REMOVE & DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION.
3. ALL PROPOSED DRAIN MANHOLES SHALL HAVE A 4" SUMP AND ALL OUTLET PIPES SHALL BE PROVIDED WITH A NYLOPLAST ENVIROHOOD, SEE DETAIL.
4. ALL PROPOSED CATCH BASINS SHALL BE PROVIDED WITH A 22" DIA. BEEHIVE FRAME AND GRATE, SEE DETAIL.
5. REFER TO ARCHITECTURAL PLANS BY OTHERS FOR FINAL LOCATIONS, SIZES AND COMPLETE DETAILS ON THE PROPOSED DOWNSPOUTS.
6. WATER MAIN/SERVICES SHALL BE INSTALLED A MINIMUM OF 1' BELOW ALL PROPOSED DRAINAGE AND ROOF DRAINAGE PIPES AND 5' MINIMUM BELOW GRADE.
7. LOAM AND SEED ALL DISTURBED AREAS.



GRADING & DRAINAGE



SANITARY SEWER STRUCTURE SCHEDULE:

STRUCTURE	RIM EL.	INV. (IN)	INV. (OUT)
SMH-1	28.9	20.60	22.30
SMH-2	29.0	20.60	20.5±
SMH-3	28.0±	20.1±	19.9±

PERMIT SET
(NOT FOR CONSTRUCTION)

G.A.F. ENGINEERING, INC.
 PROFESSIONAL ENGINEERS & LAND SURVEYORS
 286 MAIN STREET - WAREHAM, MA 02571
 TEL: (508) 295-6600 FAX: (508) 295-6634
 E-MAIL: info@gafinc.com

DATE: SEPT. 8, 2022
 DRAWN BY: JIMP
 CHECKED BY: WFM
 JOB NO.: 21-9751
 SCALE: 1" = 10'

APPROVED BY: *[Signature]*

REVISIONS:

REV.	DATE	BY	DESCRIPTION
1	2/14/23	JIMP	

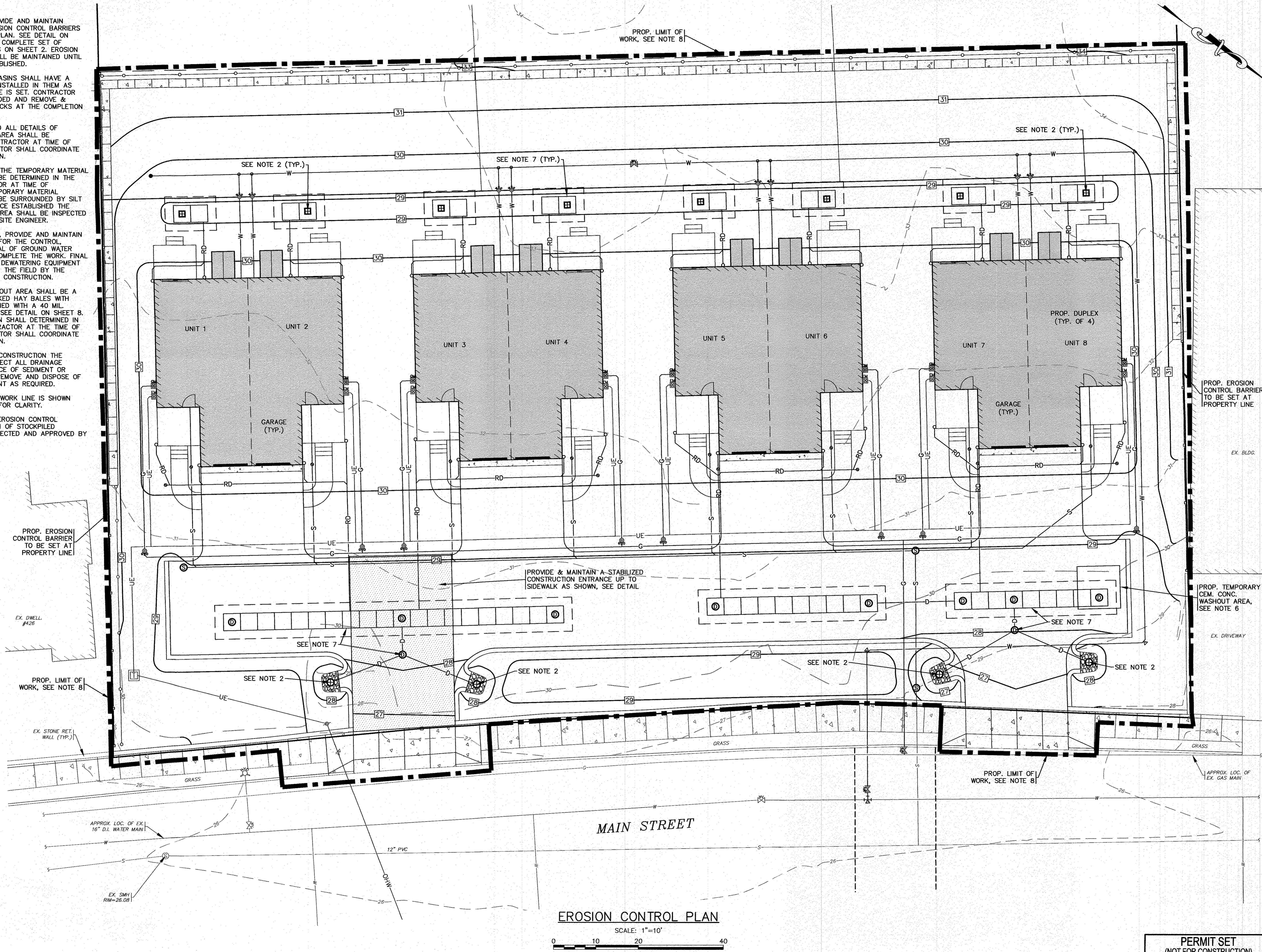
PREPARED FOR:
 NAZIH B. ELKALLASSI
 20 TOWER TERRACE
 WAREHAM, MA

JOB NO.: 21-9751
 DWG. 5 OF 9

G:\GAF\BROWNS\2022\BROWNS-21-9751 (NAZIH ELKALLASSI)\P51\DWG\SITE PLAN 2022.dwg

NOTES:

- CONTRACTOR SHALL PROVIDE AND MAINTAIN STAKED SILT FENCE EROSION CONTROL BARRIERS WHERE SHOWN ON THE PLAN. SEE DETAIL ON SHEET 8. REFER TO THE COMPLETE SET OF EROSION CONTROL NOTES ON SHEET 2. EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL VEGETATION IS ESTABLISHED.
- ALL PROPOSED CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL EMPTY WHEN NEEDED AND REMOVE & DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION.
- THE FINAL LOCATION AND ALL DETAILS OF CONTRACTOR'S STAGING AREA SHALL BE DETERMINED BY THE CONTRACTOR AT TIME OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH OWNER ON LOCATION.
- THE FINAL LOCATION OF THE TEMPORARY MATERIAL STOCKPILE AREA SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT TIME OF CONSTRUCTION. THE TEMPORARY MATERIAL STOCKPILE AREA SHALL BE SURROUNDED BY SILT FENCE AT ALL TIMES. ONCE ESTABLISHED THE TEMPORARY STOCKPILE AREA SHALL BE INSPECTED AND APPROVED BY THE SITE ENGINEER.
- CONTRACTOR SHALL SIZE, PROVIDE AND MAINTAIN DEWATERING EQUIPMENT FOR THE CONTROL, COLLECTION AND DISPOSAL OF GROUND WATER WHERE NECESSARY TO COMPLETE THE WORK. FINAL SIZE AND LOCATION FOR DEWATERING EQUIPMENT SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT TIME OF CONSTRUCTION.
- CEMENT CONCRETE WASHOUT AREA SHALL BE A SQUARE OF DOUBLE STAKED HAY BALES WITH SILTATION FENCE AND LINED WITH A 40 MIL. POLYETHYLENE BARRIER, SEE DETAIL ON SHEET 8. FINAL WASHOUT LOCATION SHALL DETERMINED IN THE FIELD BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH OWNER ON LOCATION.
- AT THE COMPLETION OF CONSTRUCTION THE CONTRACTOR SHALL INSPECT ALL DRAINAGE STRUCTURES FOR EVIDENCE OF SEDIMENT OR DEBRIS ACCUMULATION. REMOVE AND DISPOSE OF ANY DEBRIS AND SEDIMENT AS REQUIRED.
- THE PROPOSED LIMIT OF WORK LINE IS SHOWN OFFSET IN SOME AREAS FOR CLARITY.
- ONCE ESTABLISHED ALL EROSION CONTROL MEASURES AND LOCATION OF STOCKPILED MATERIAL SHALL BE INSPECTED AND APPROVED BY THE SITE ENGINEER.



EROSION CONTROL PLAN
SCALE: 1" = 10'

REV.	DATE	BY	APP'D	DESCRIPTION
1	2/14/23	JMP	WFM	TOWN COMMENTS/REV. BLDG. FOOTPRINTS

DATE: SEPT. 8, 2022	DRAWN BY: JMP	CHECKED BY: WFM	JOB NO.: 21-9751	SCALE: 1" = 10'
---------------------	---------------	-----------------	------------------	-----------------

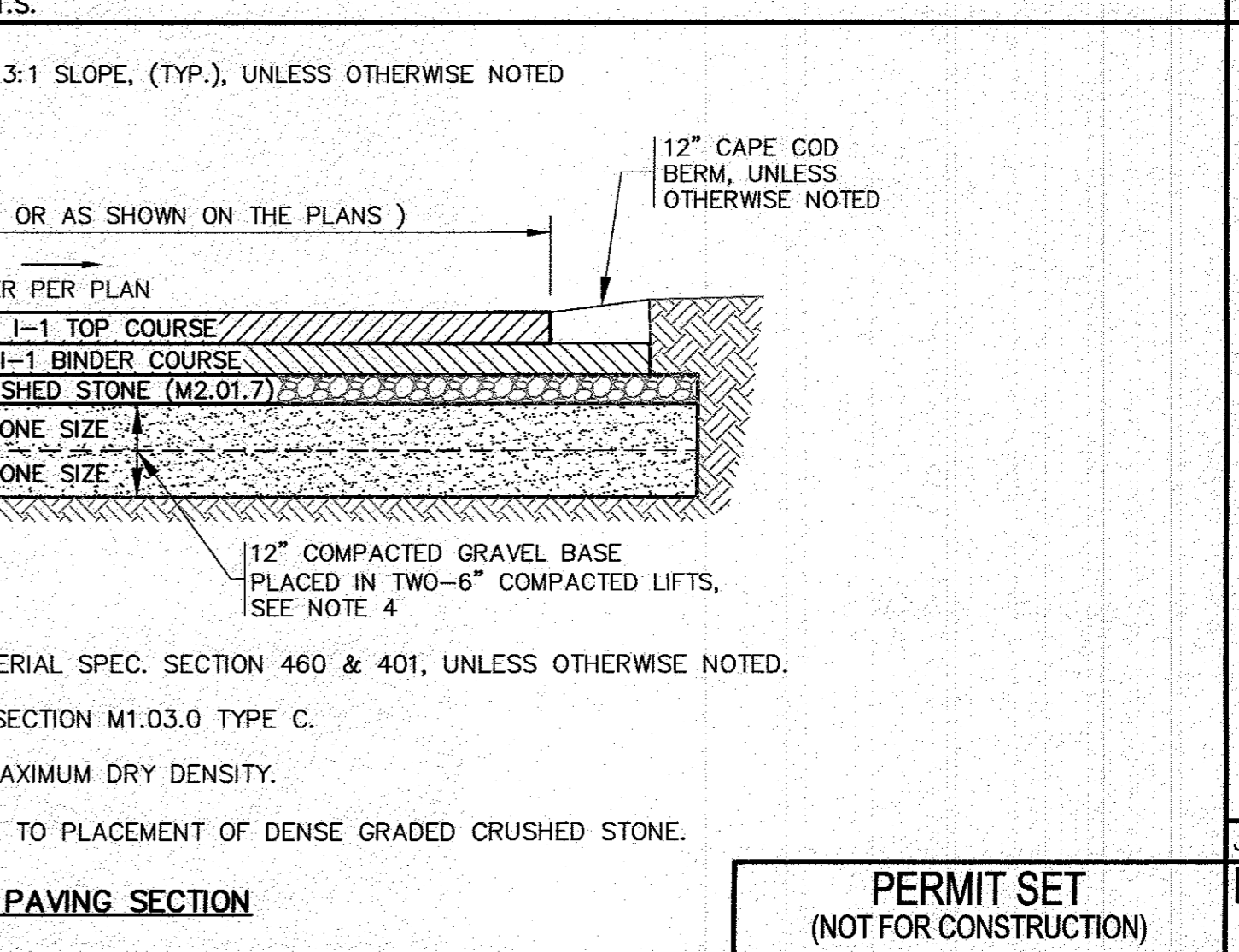
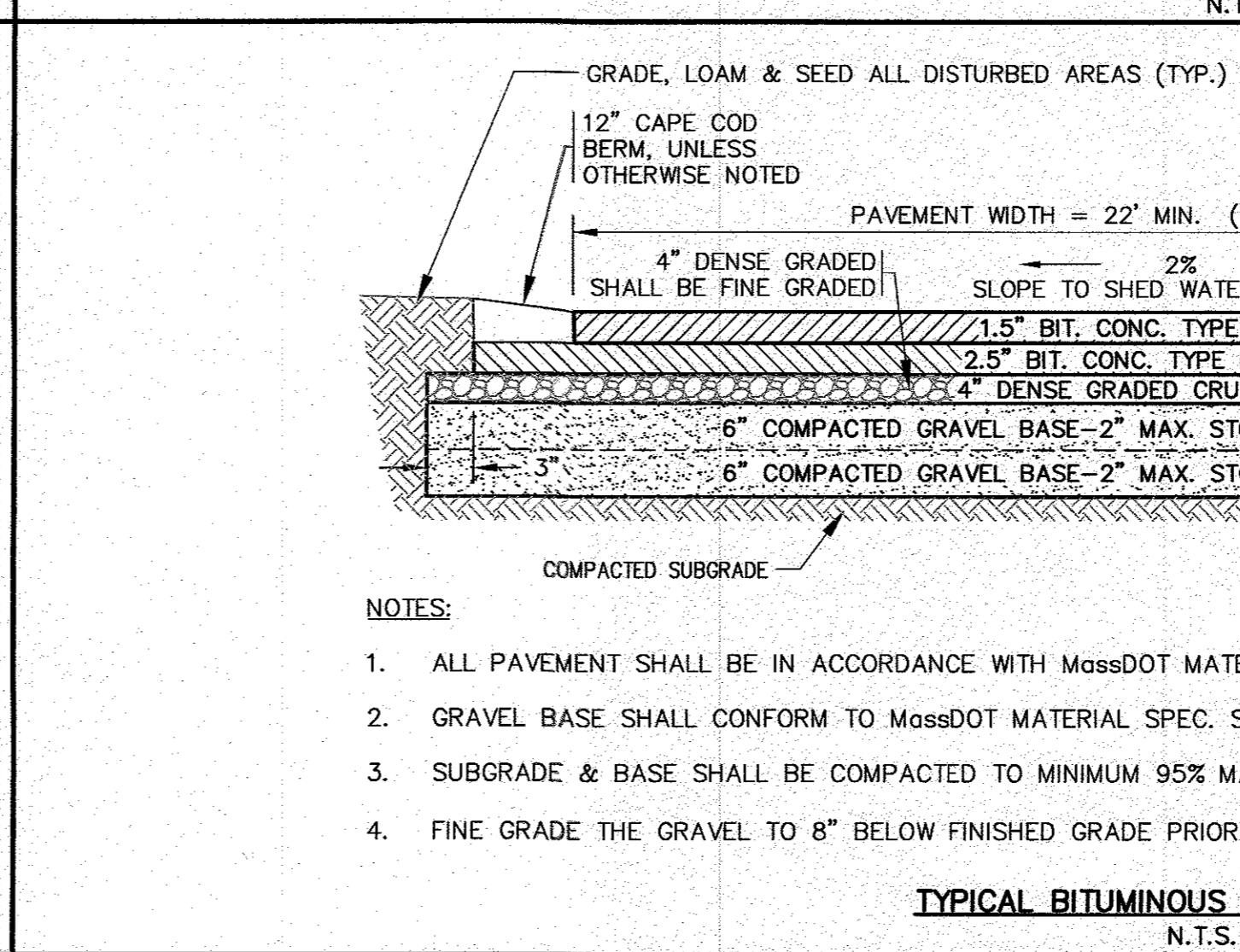
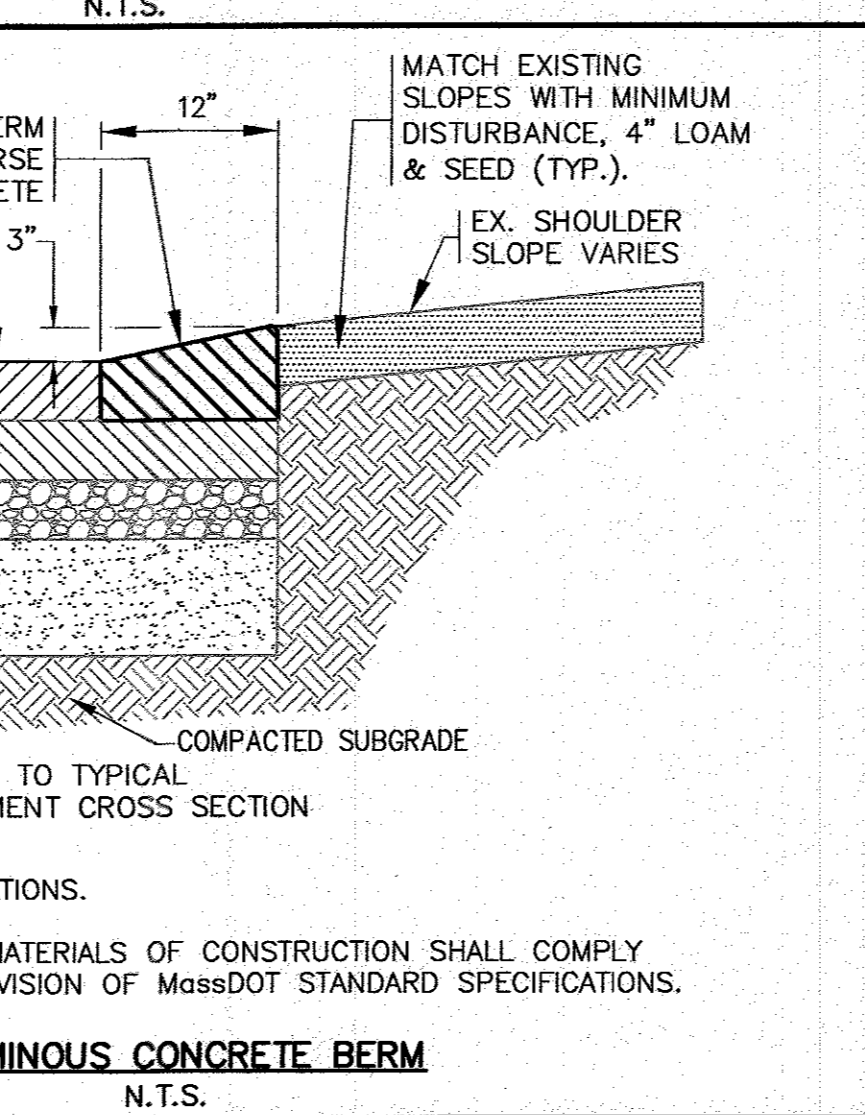
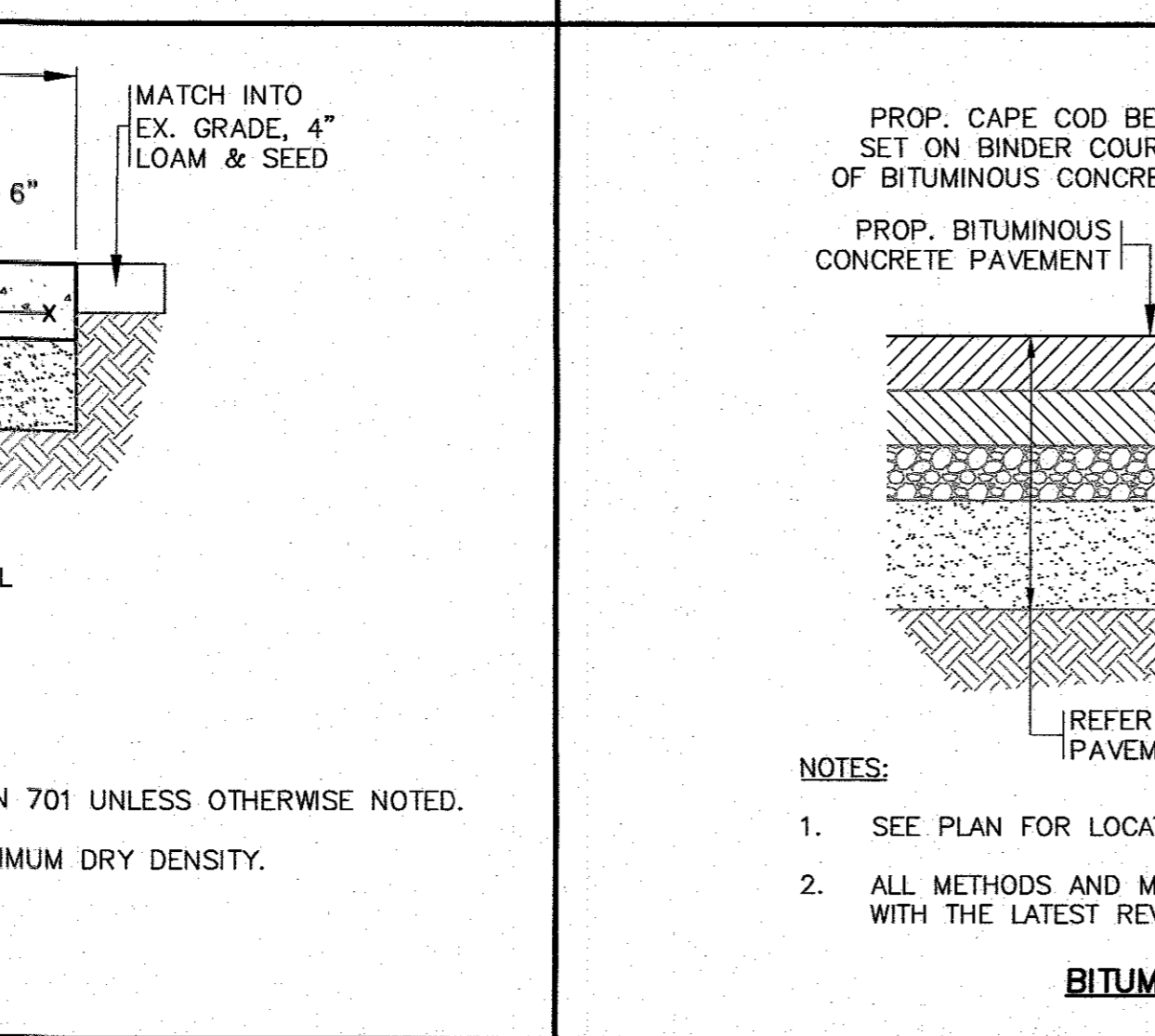
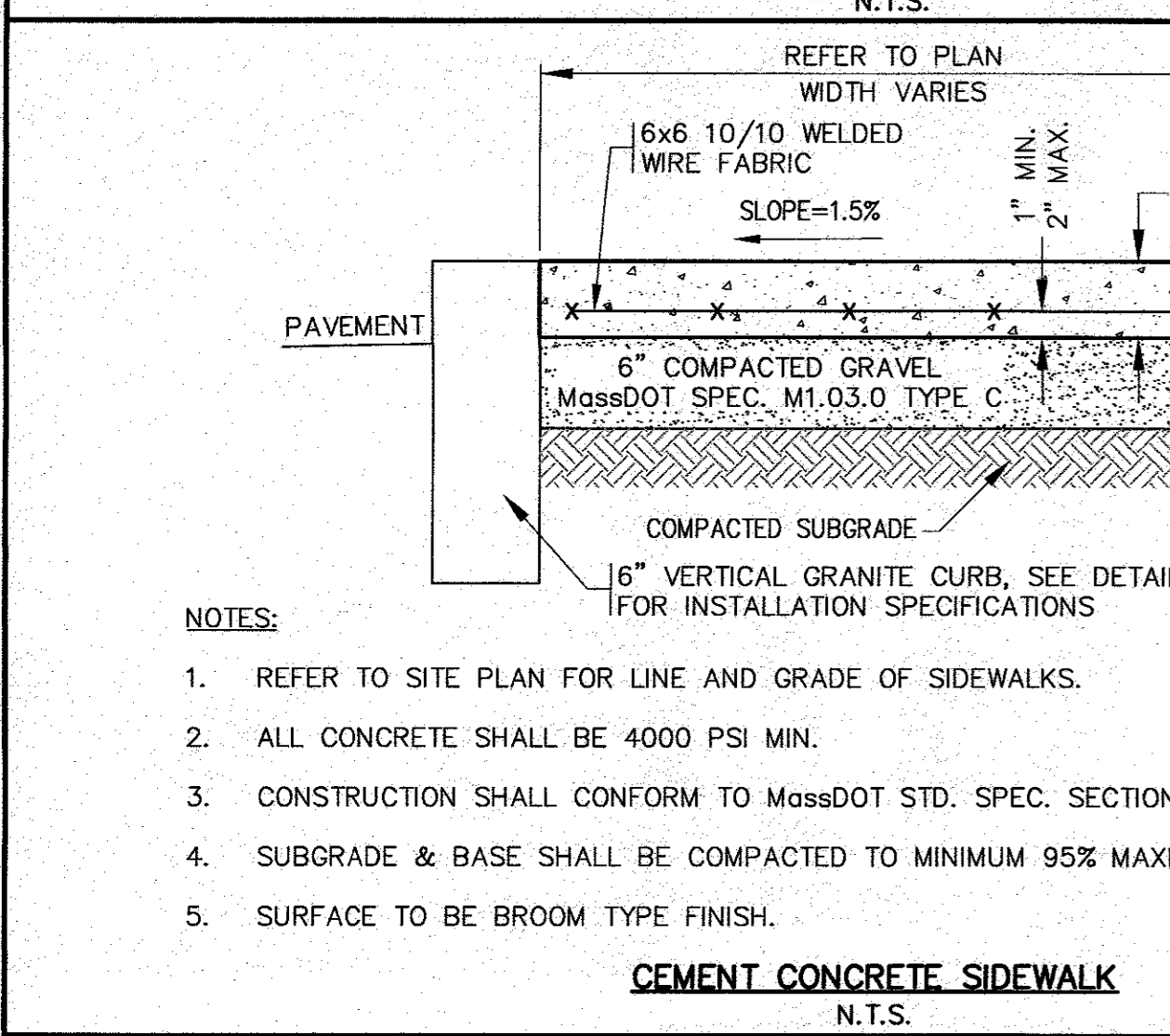
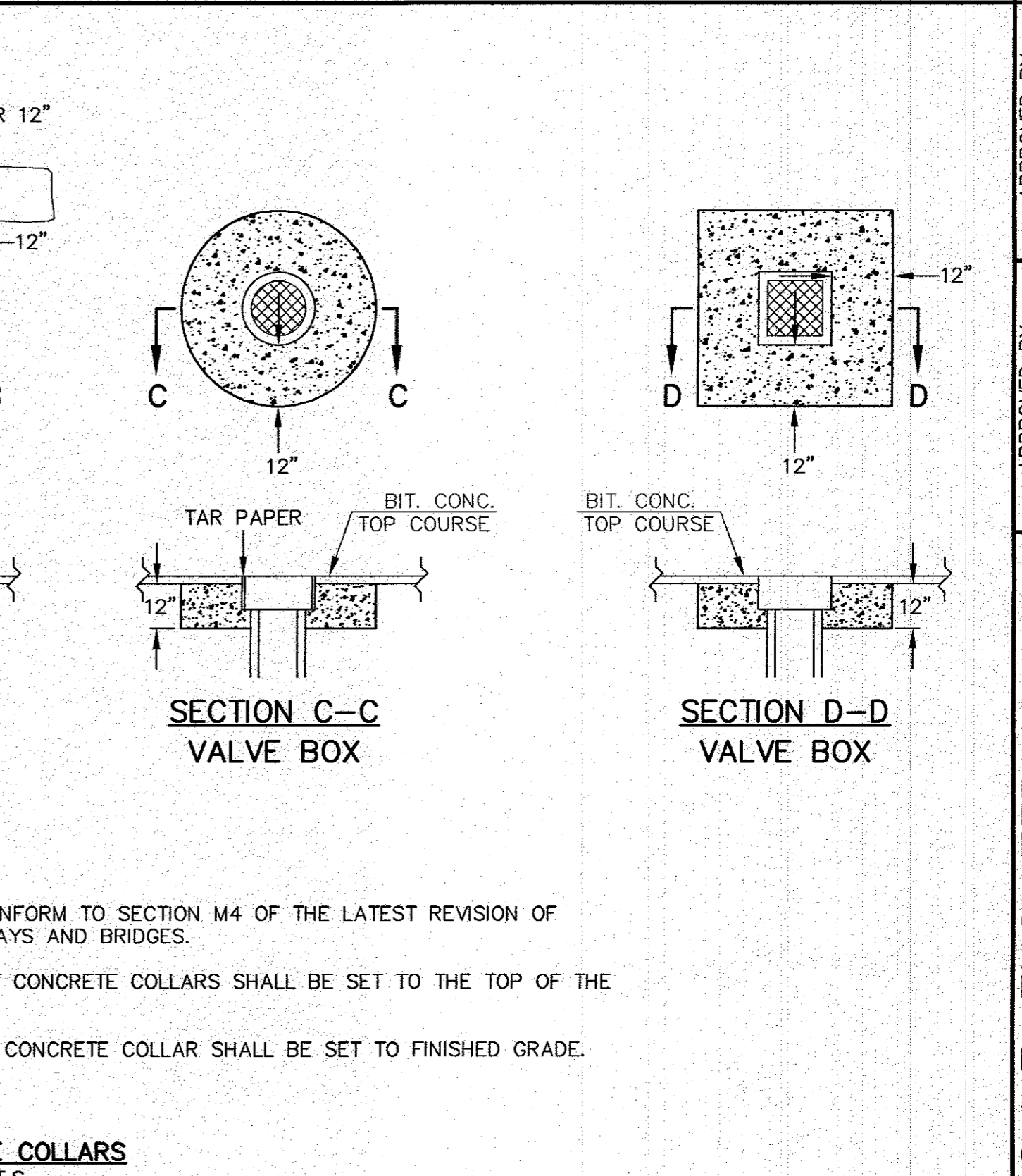
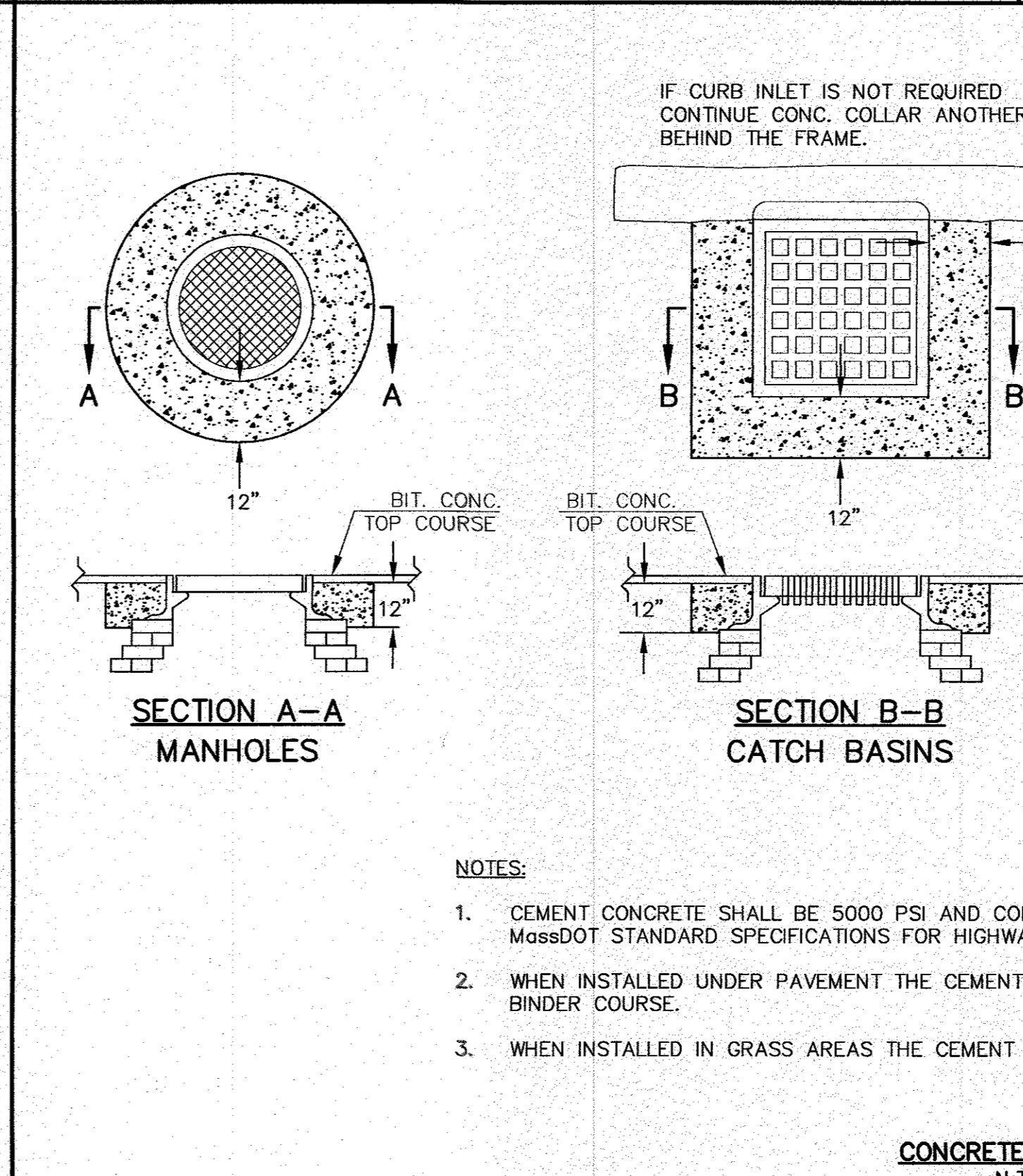
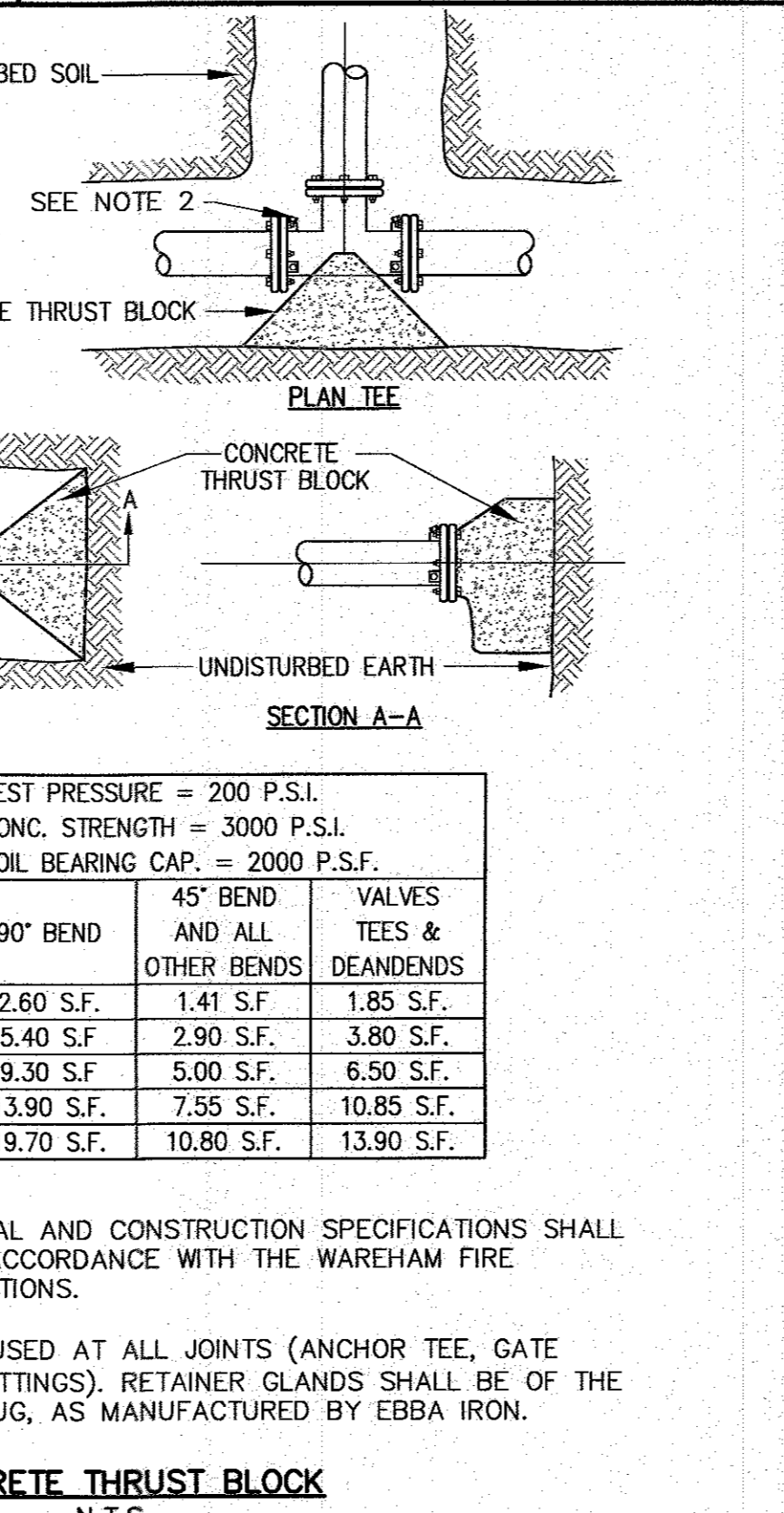
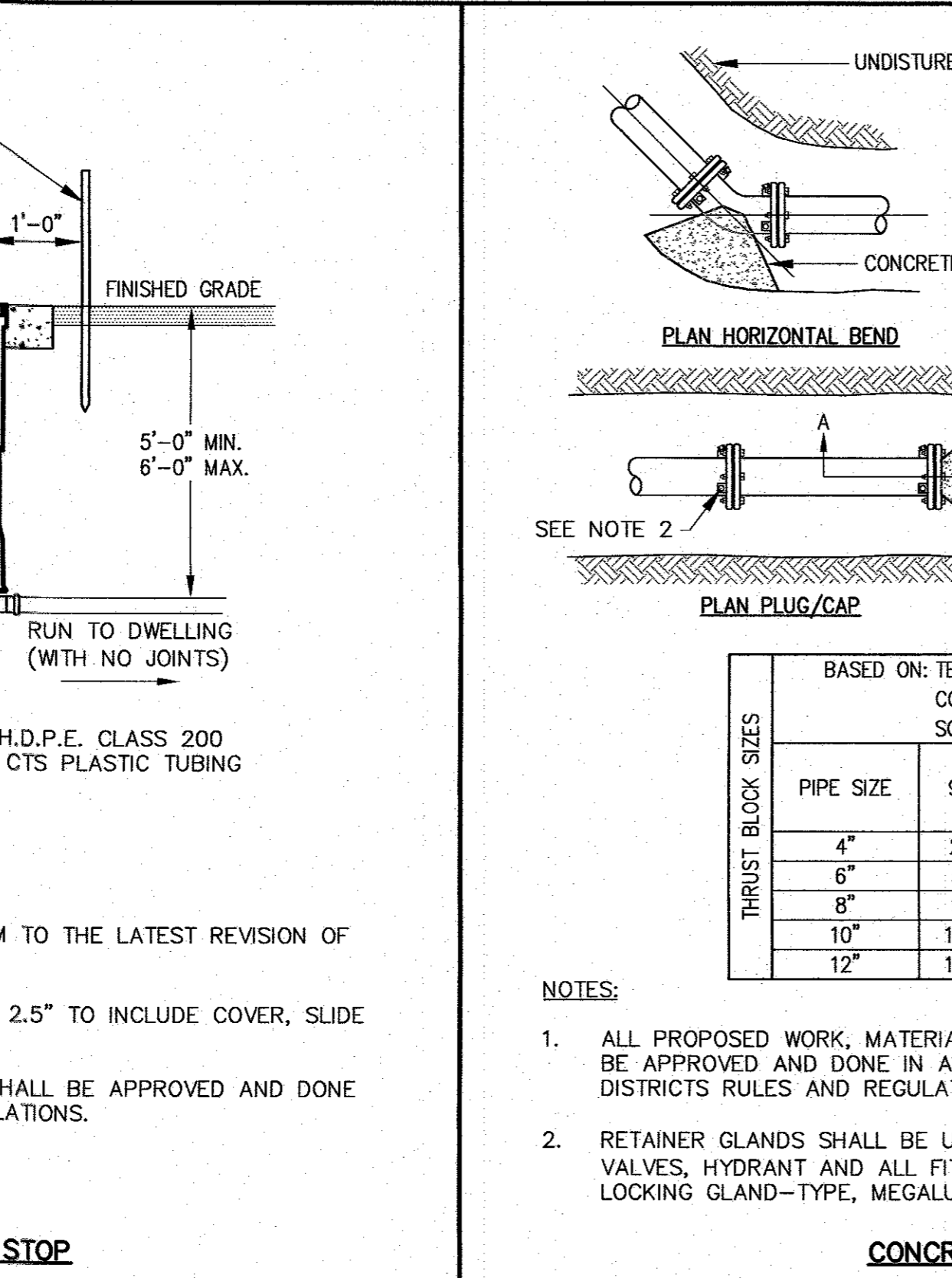
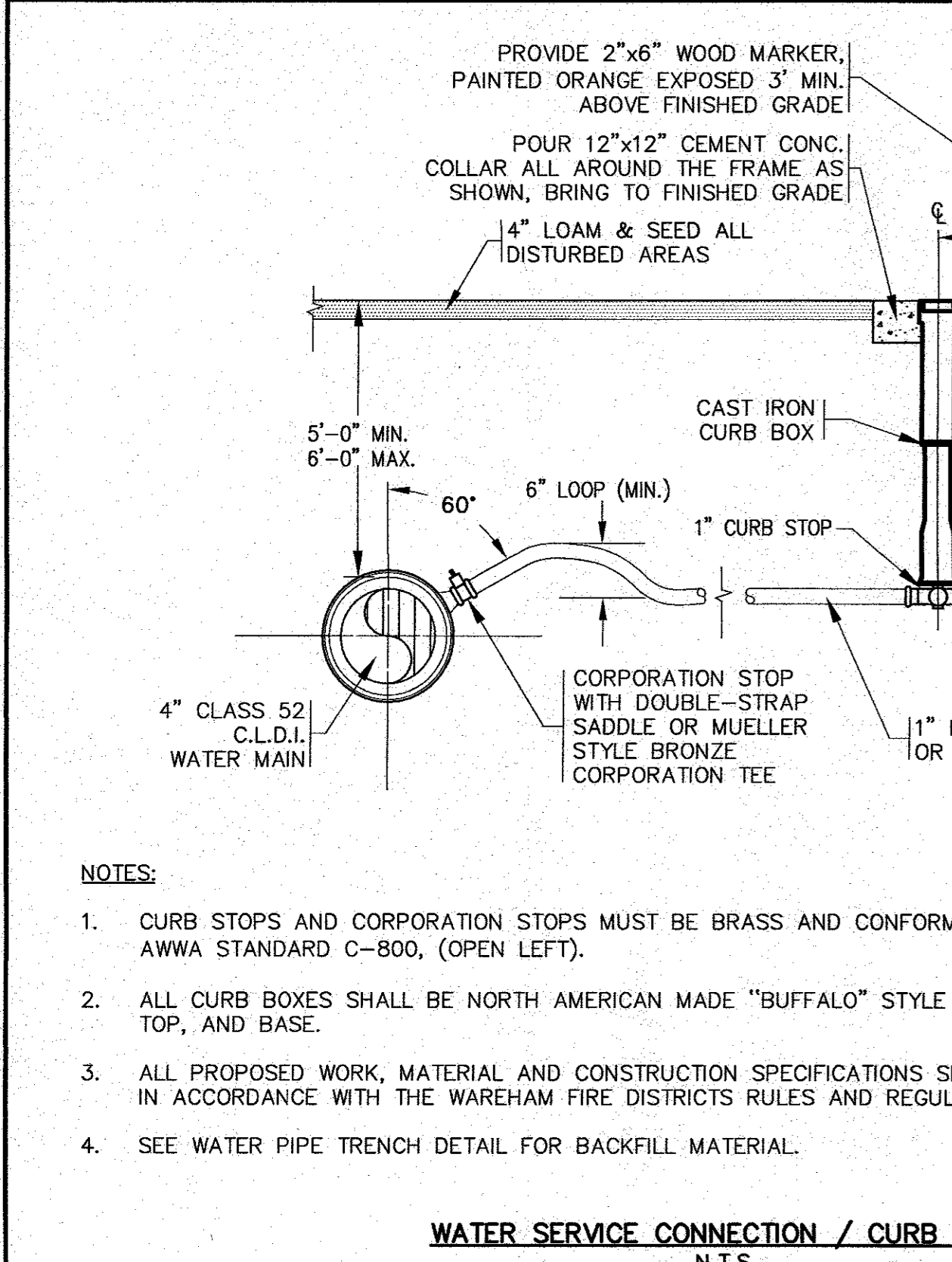
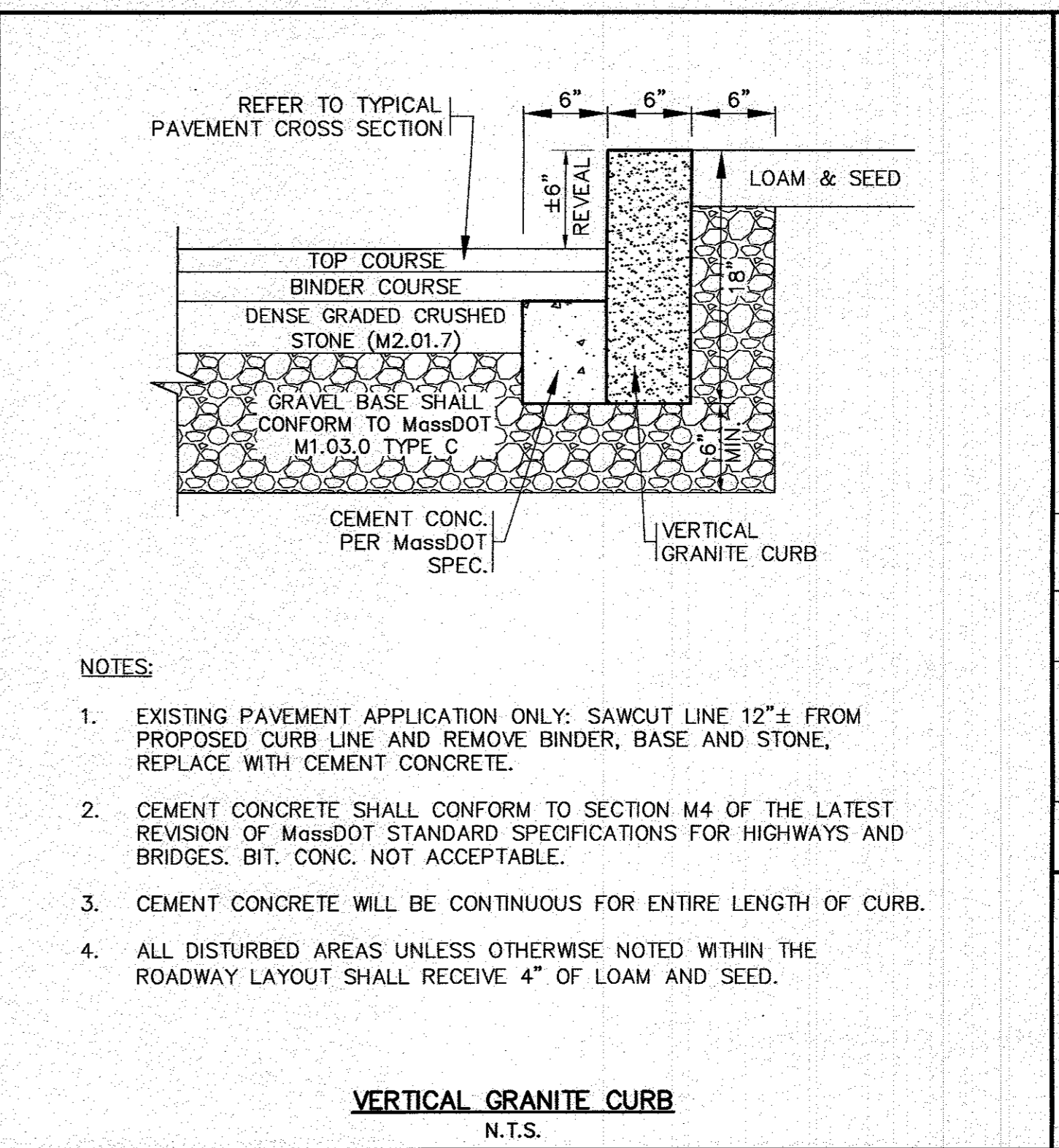
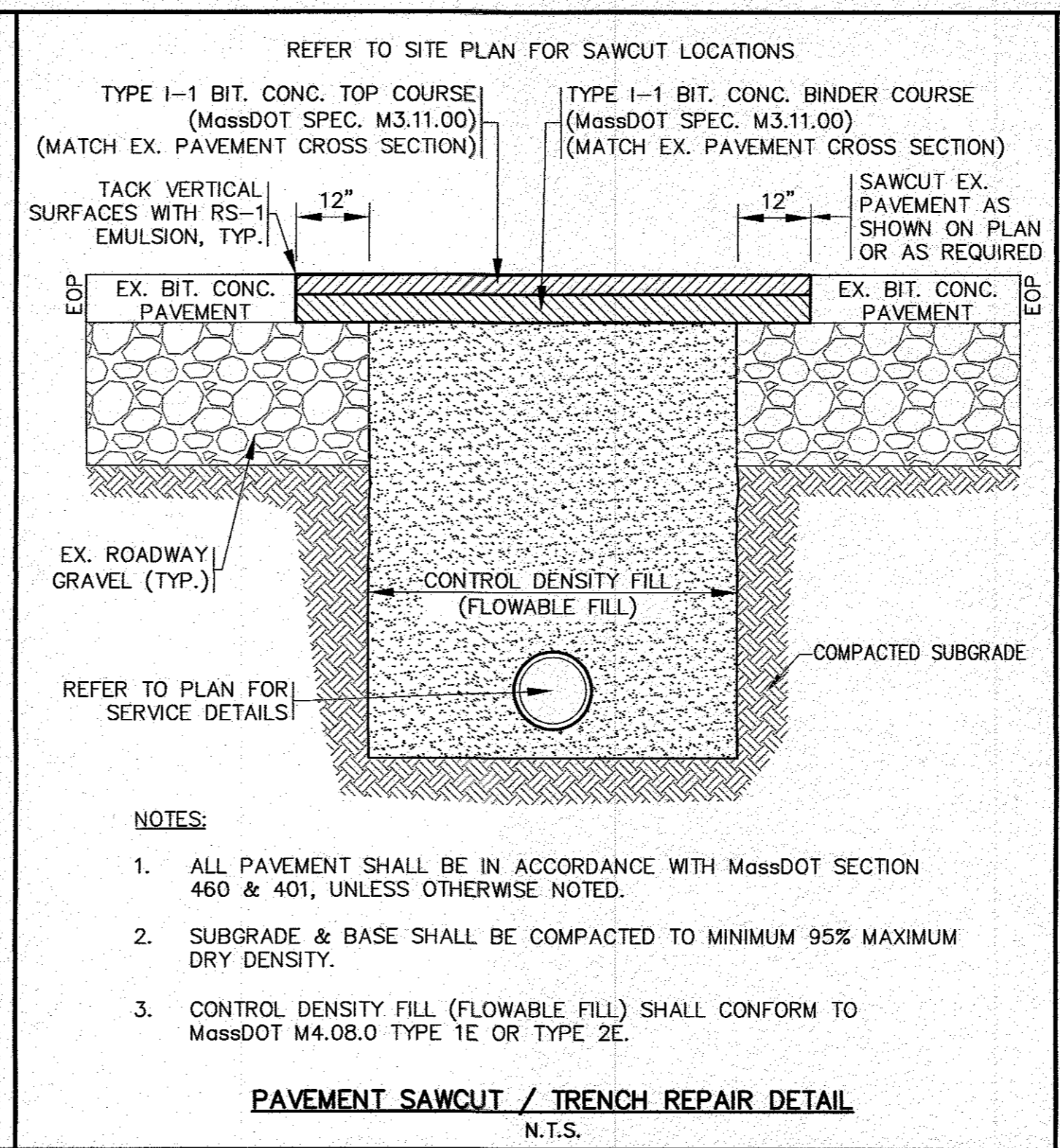
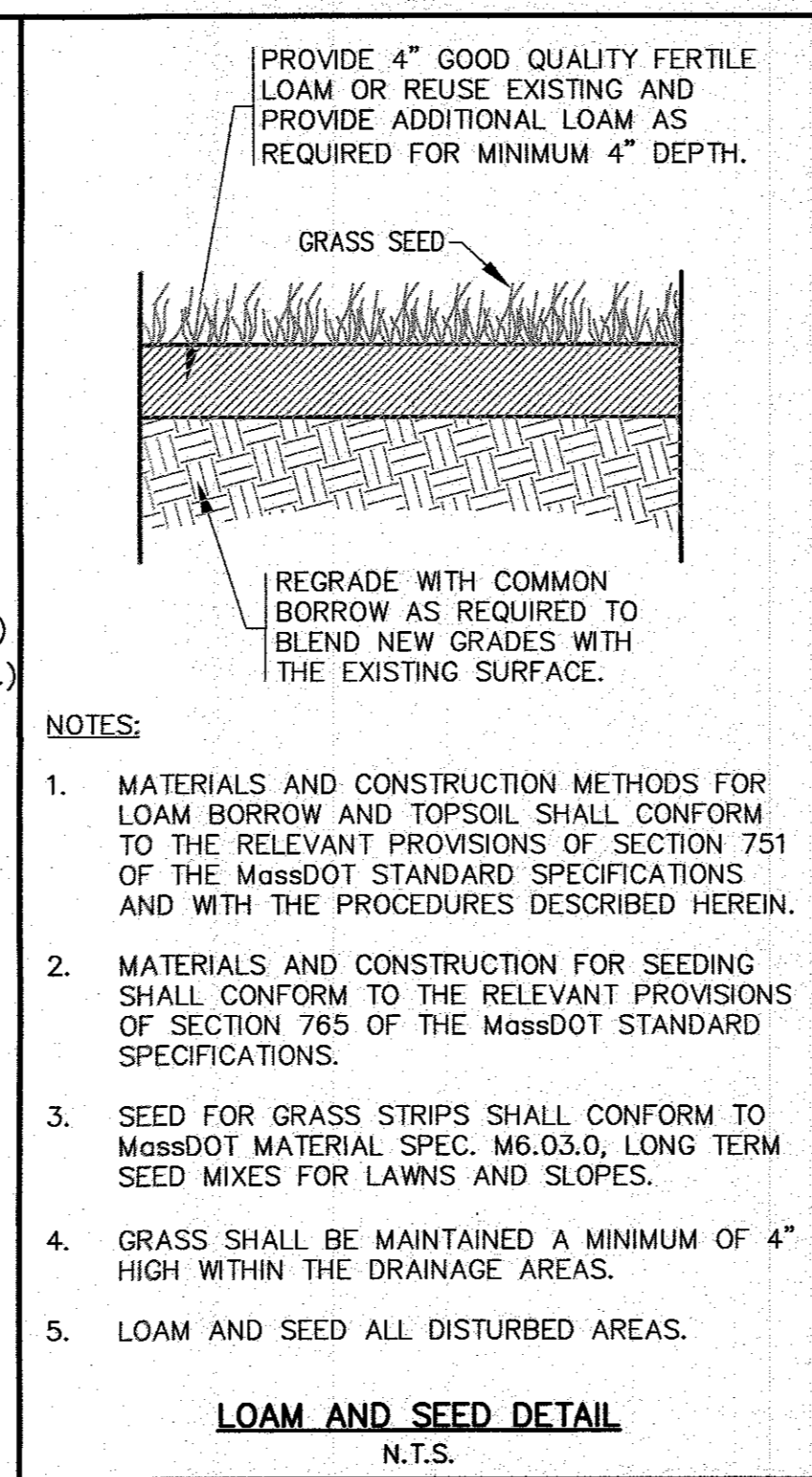
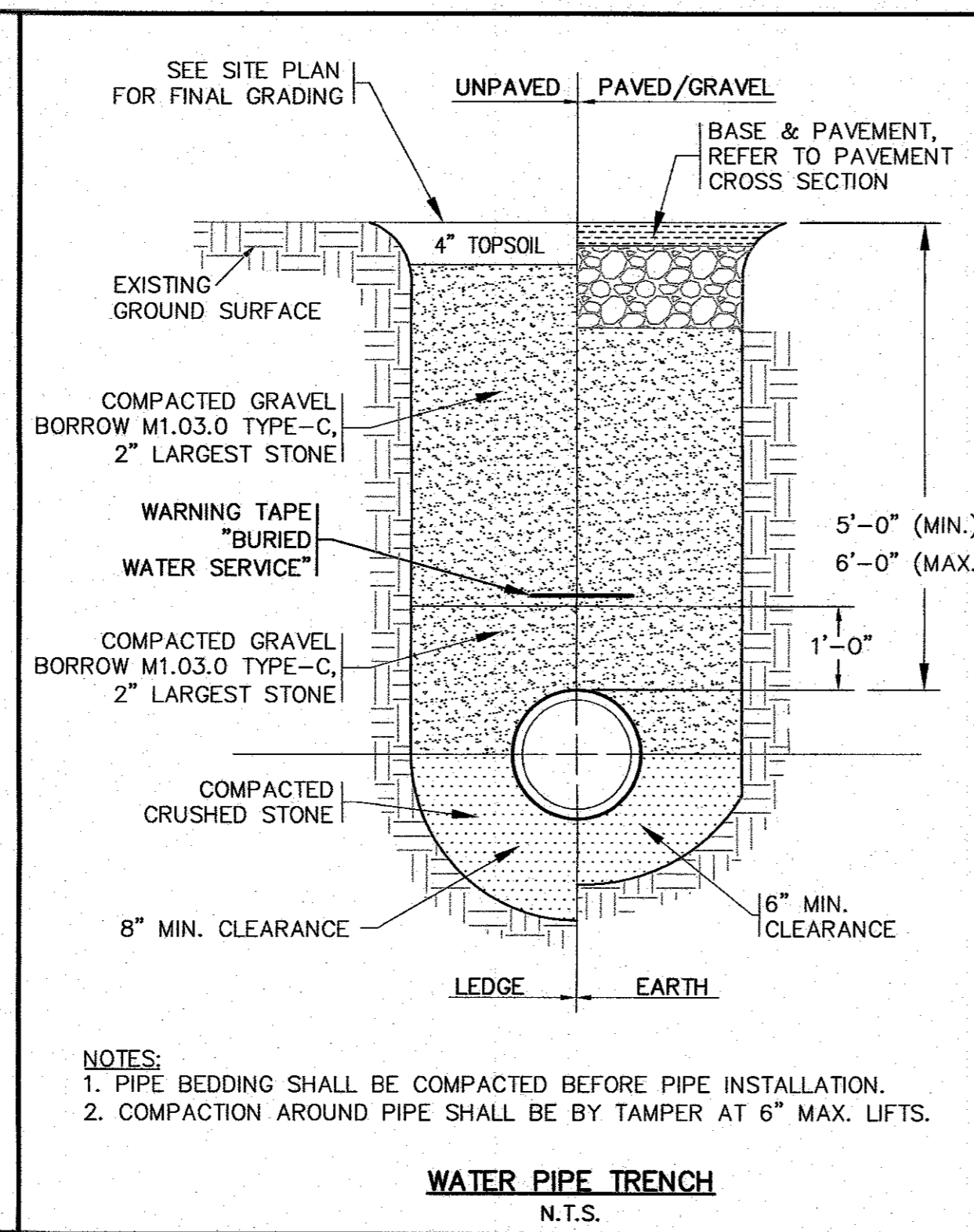
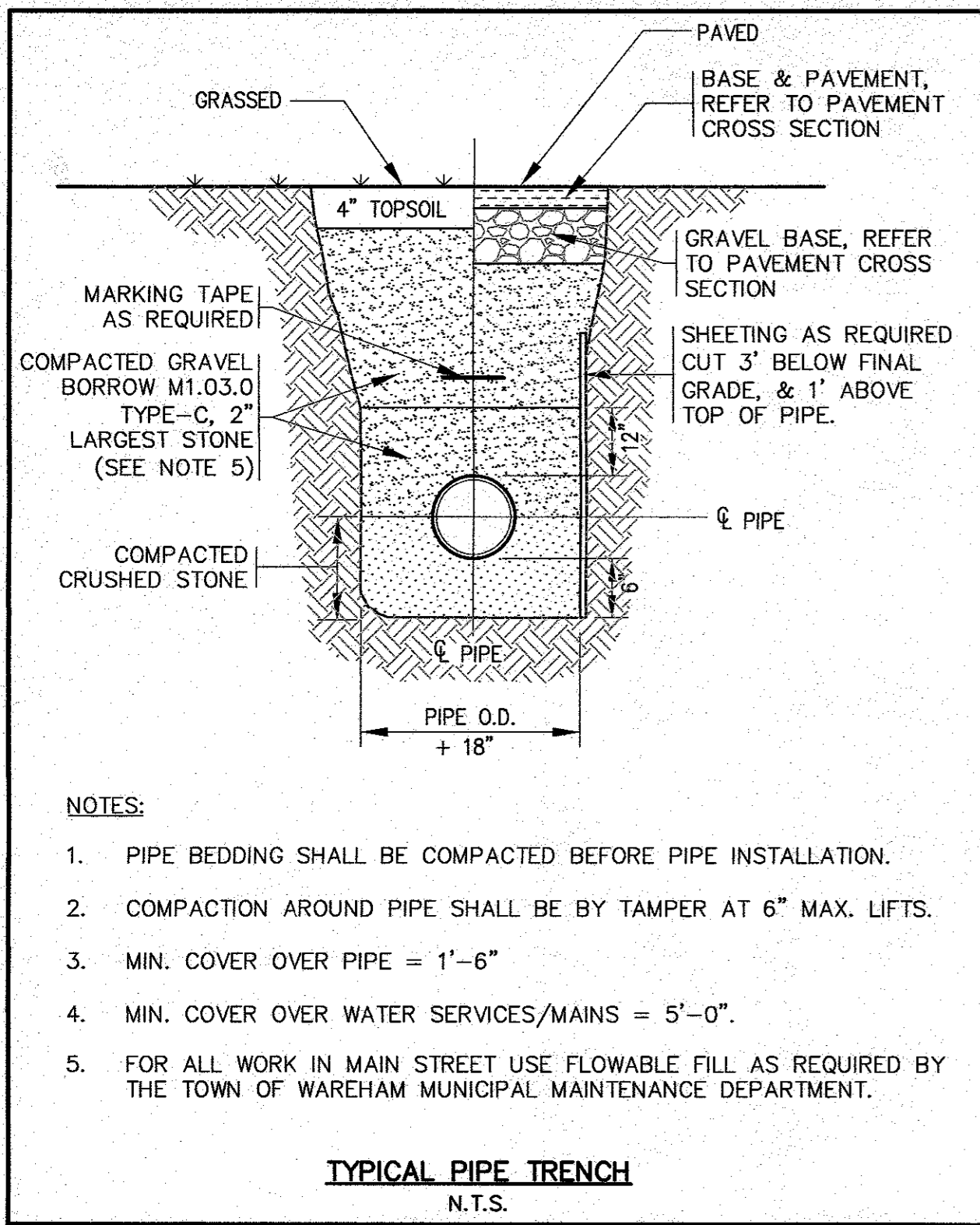
APPROVED BY:	DATE: 2/14/23	PROFESSIONAL SEAL
WILLIAM W. WILSON		
REGISTERED PROFESSIONAL ENGINEER		
NO. 3388		
STATE OF MASSACHUSETTS		

G.A.F. ENGINEERING, INC.	WAREHAM, MA
PROFESSIONAL ENGINEERS & LAND SURVEYORS	
266 MAIN STREET - WAREHAM, MA 02571	
TEL: (508) 295-6600 FAX: (508) 295-6634	
E-MAIL: info@gafeng.com	

PREPARED FOR:	WAREHAM, MA
NAZH B. ELKALLASSI	
434 MAIN STREET	
20 TOWER TERRACE	

JOB NO.: 21-9751	DWG. 6 OF 9
------------------	-------------

H:\DWG\DRAWINGS\2021\DRAWINGS\21-9751\NAZH ELKALLASSI\9751 SITE PLAN 2022.dwg



DATE: SEPT. 8, 2022
 DRAWN BY: J.M.P.
 CHECKED BY: W.F.M.
 JOB NO.: 21-9751
 SCALE: N.T.S.

DATE: 2/14/23
 REV. 1
 BY: J.M.P.
 DESCRIPTION: PER TOWN COMMENTS

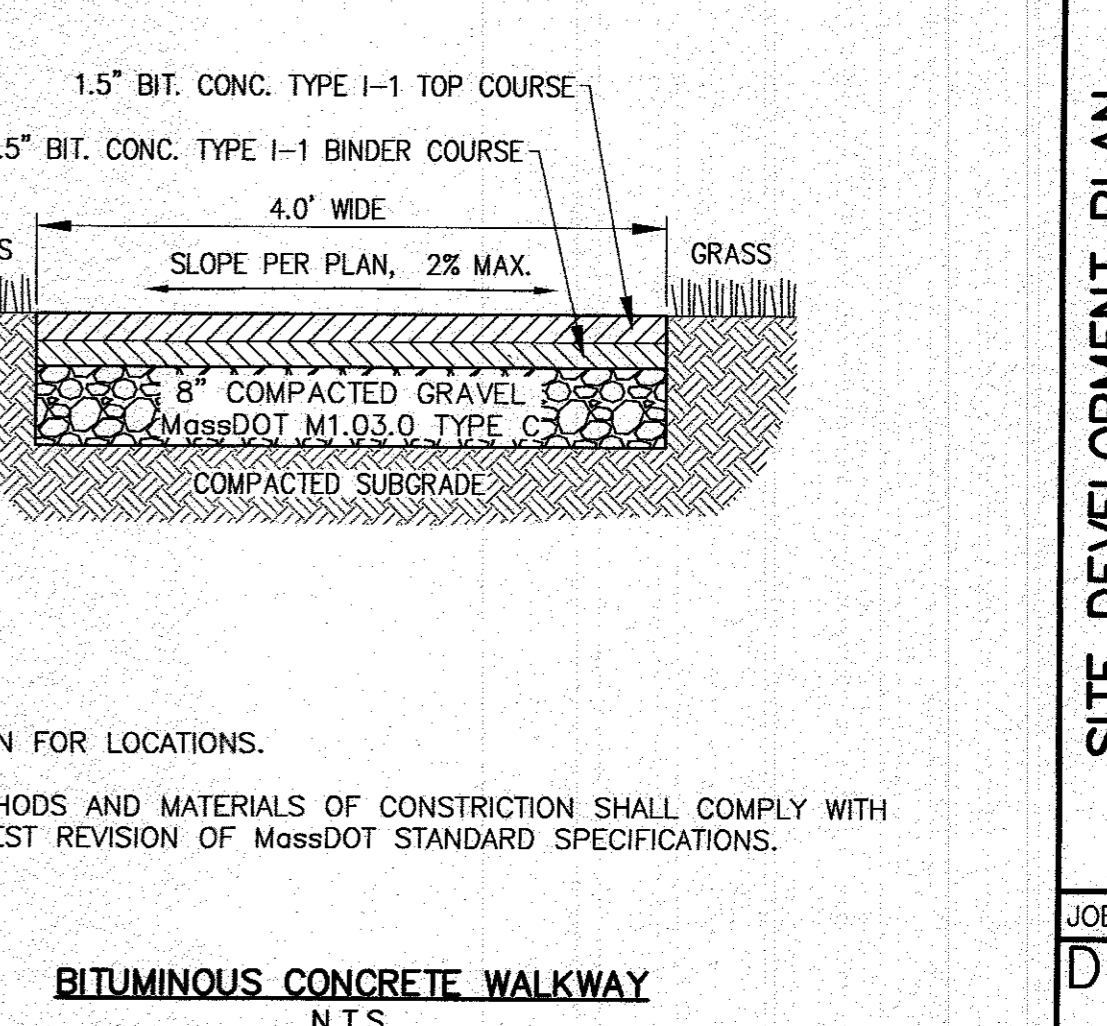
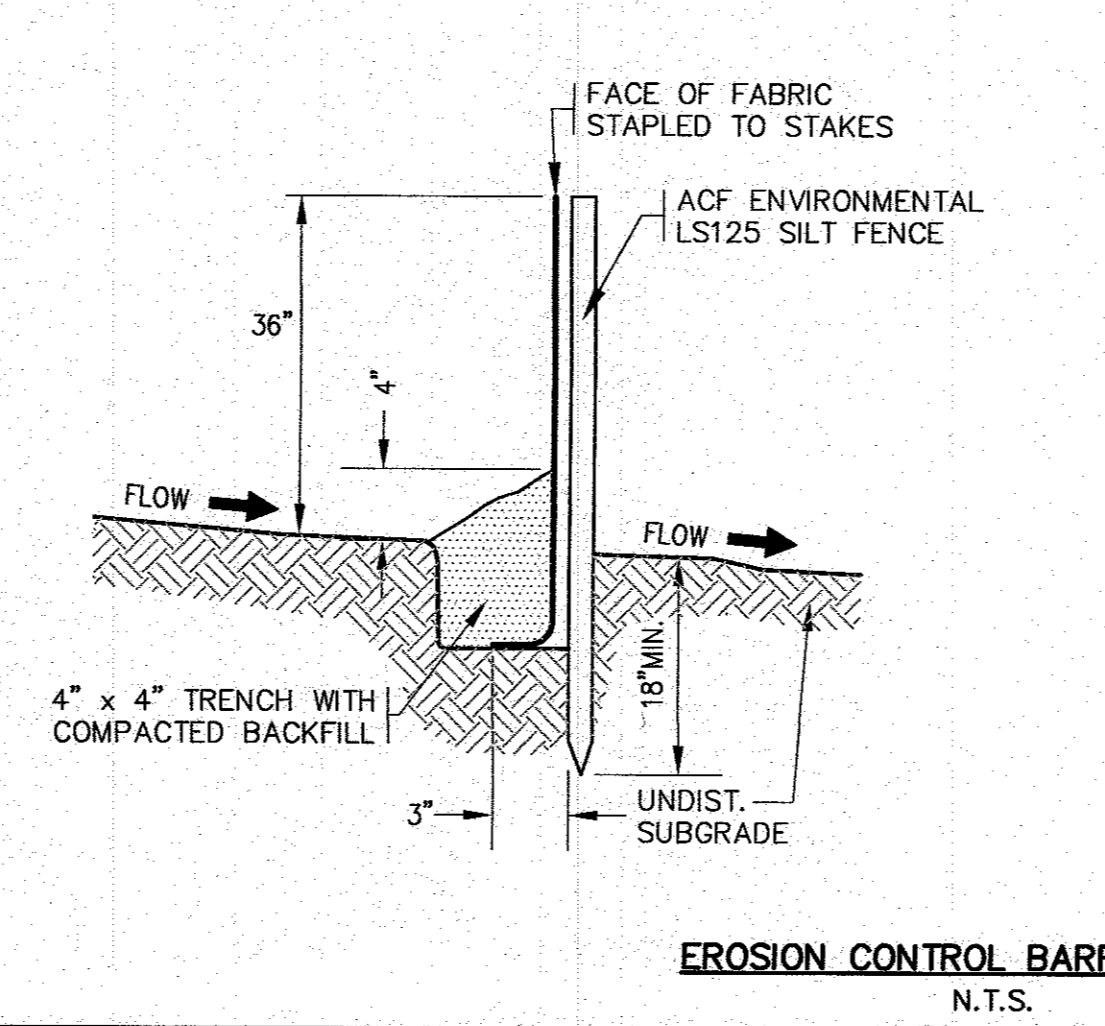
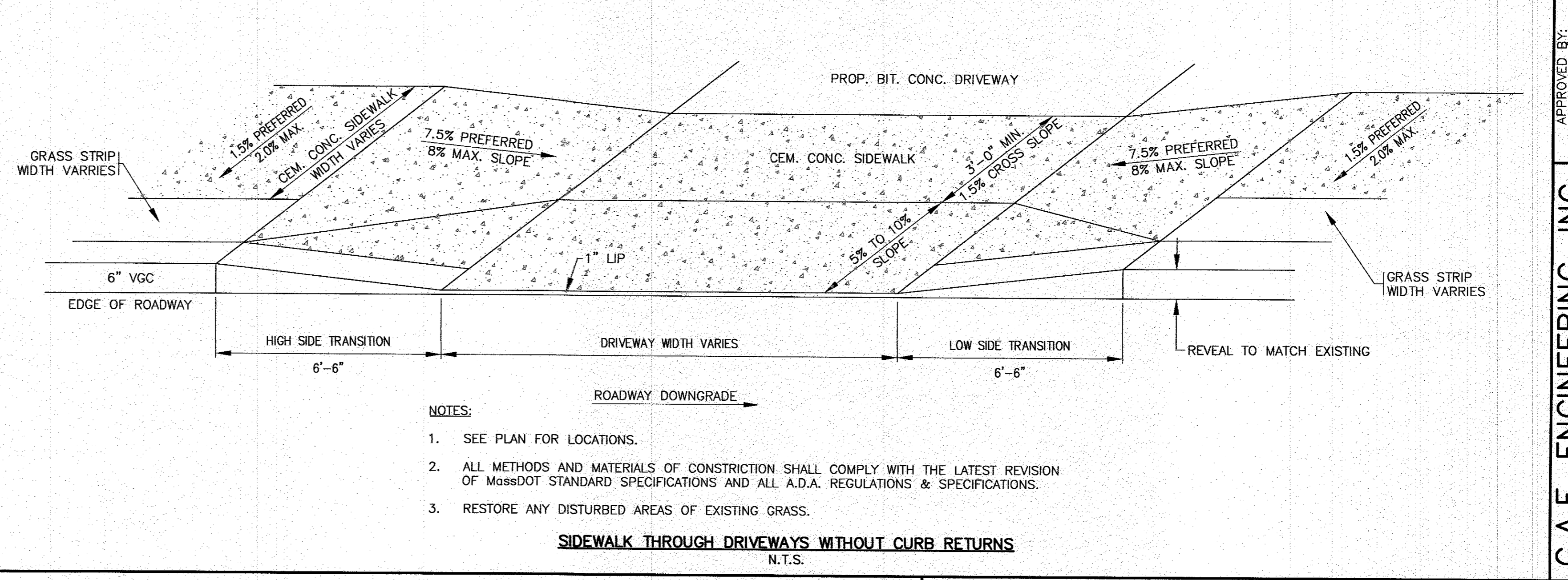
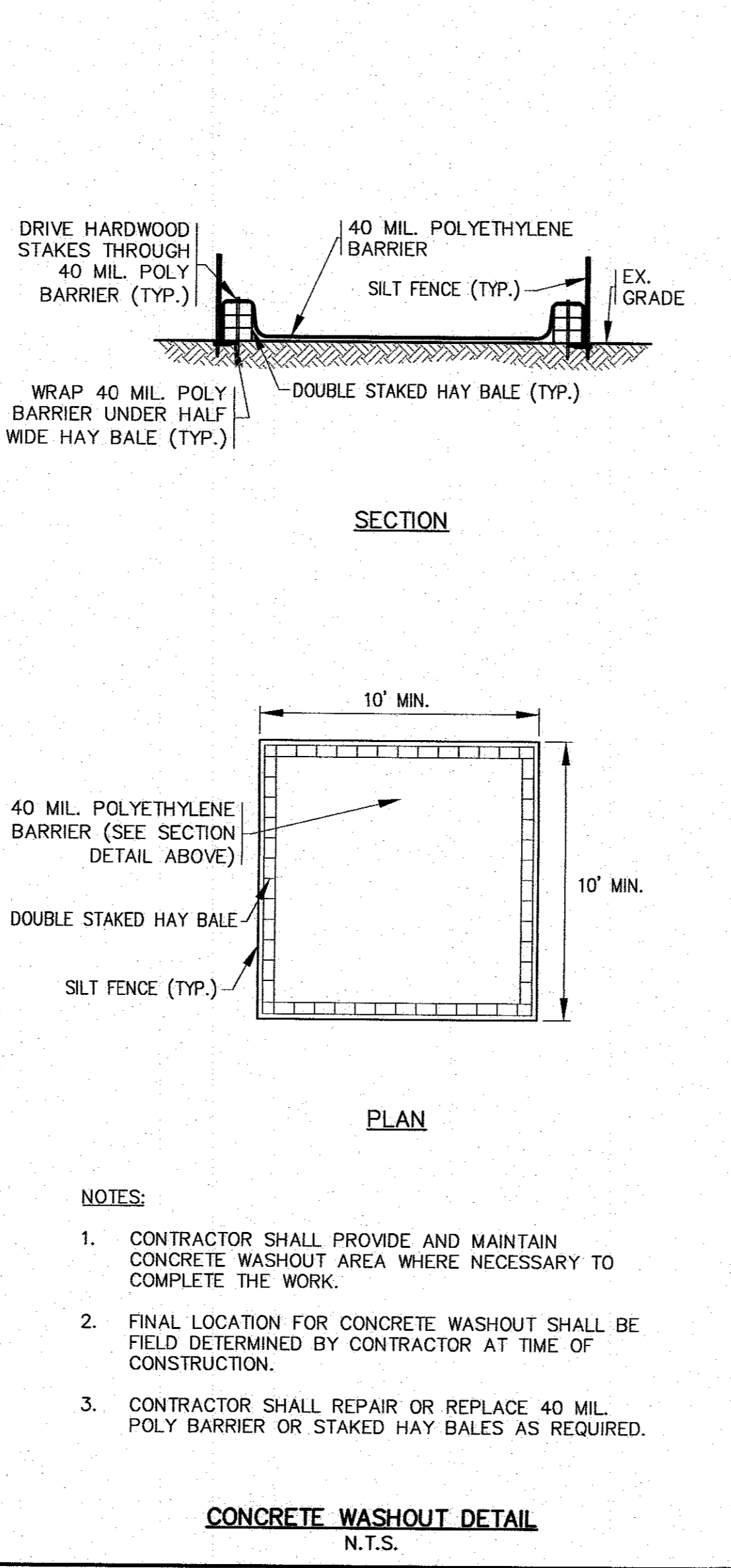
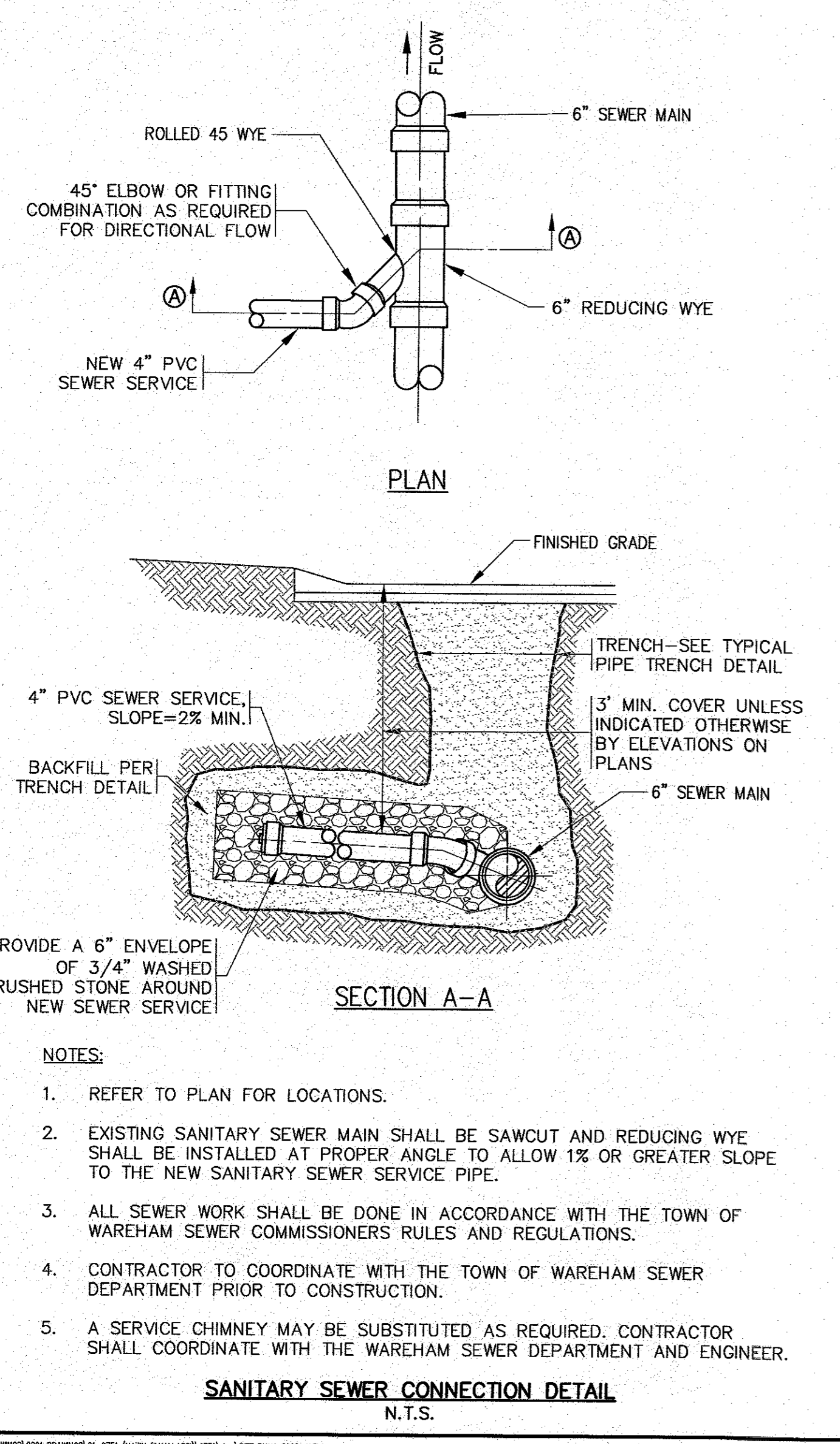
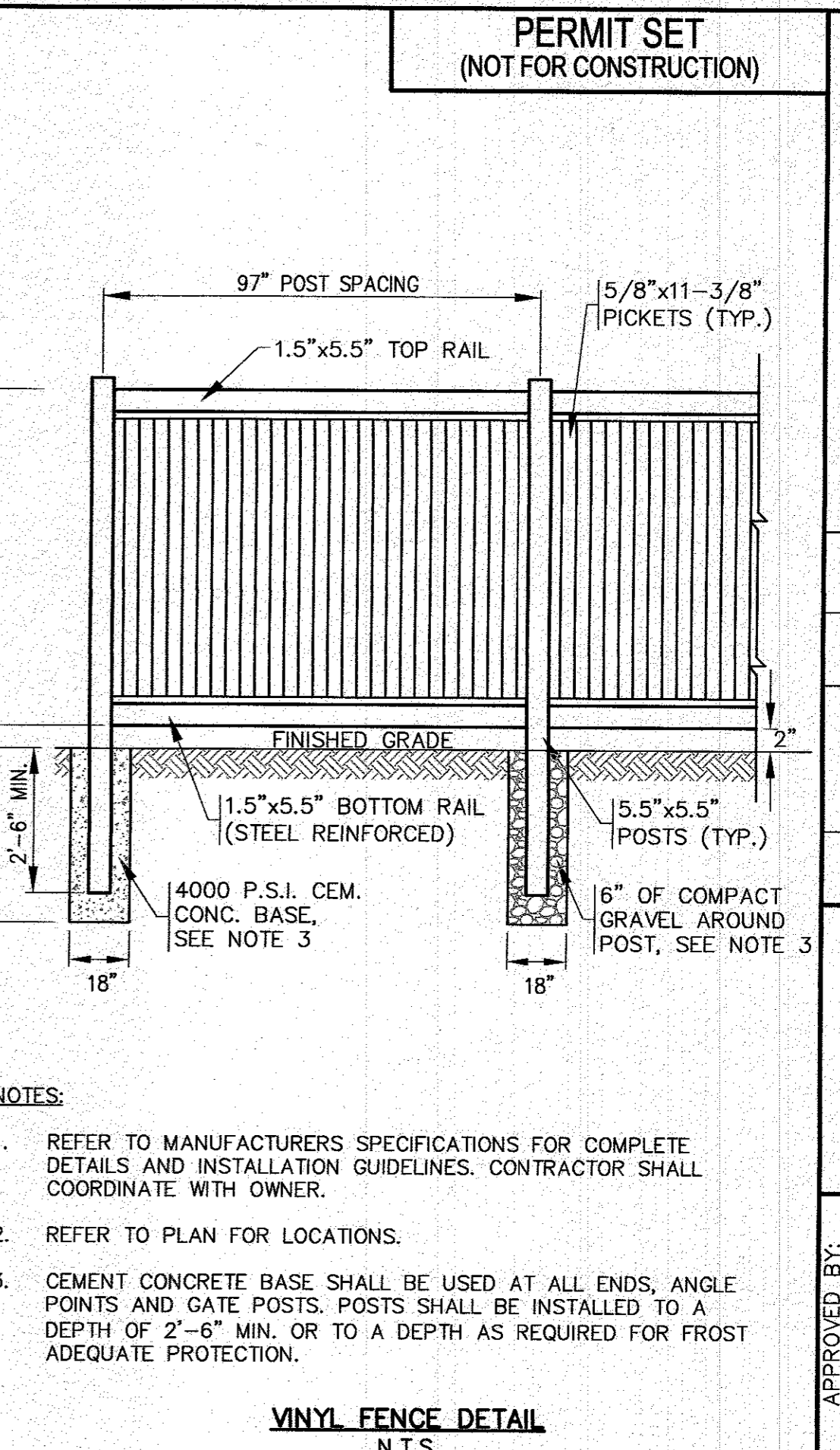
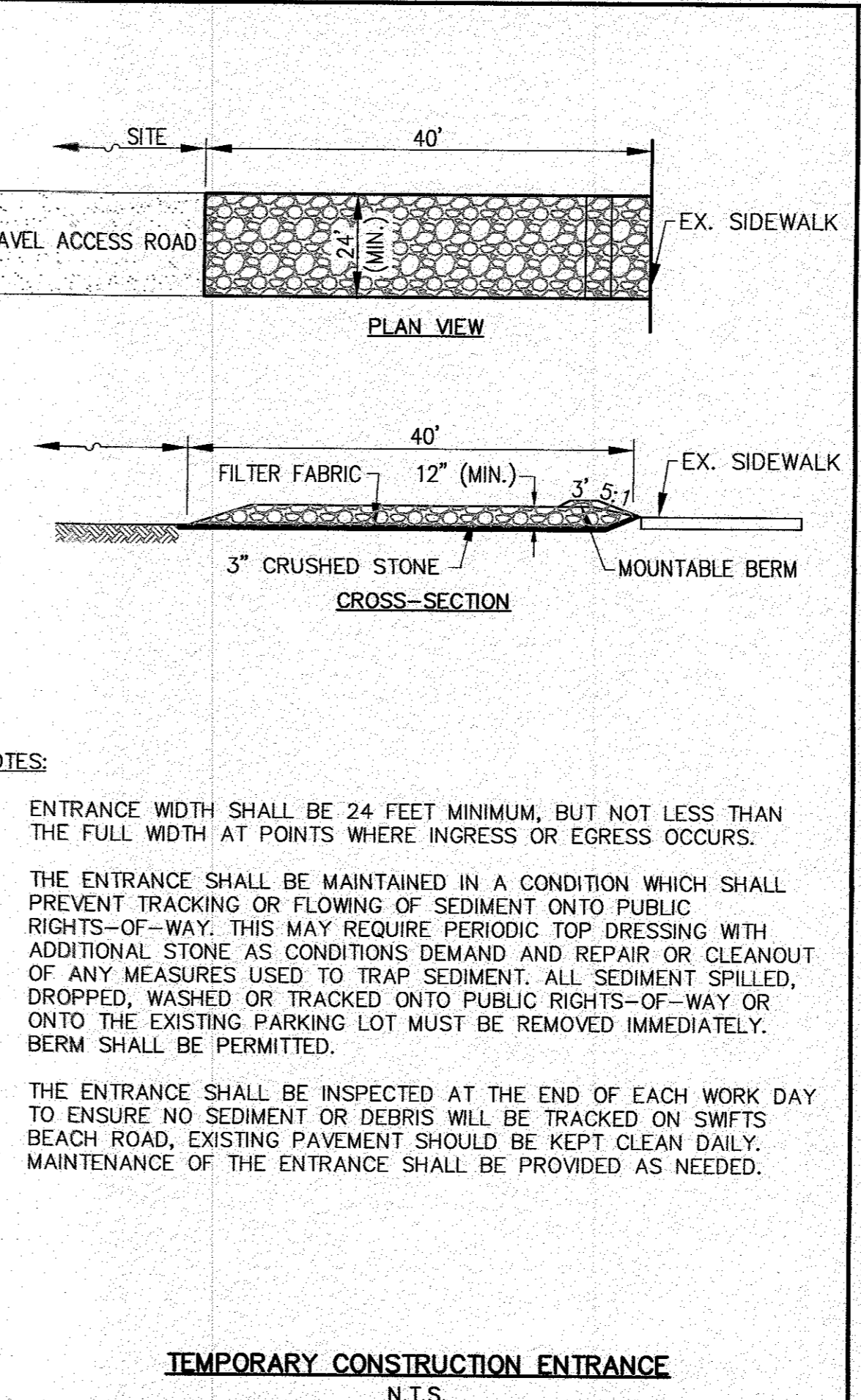
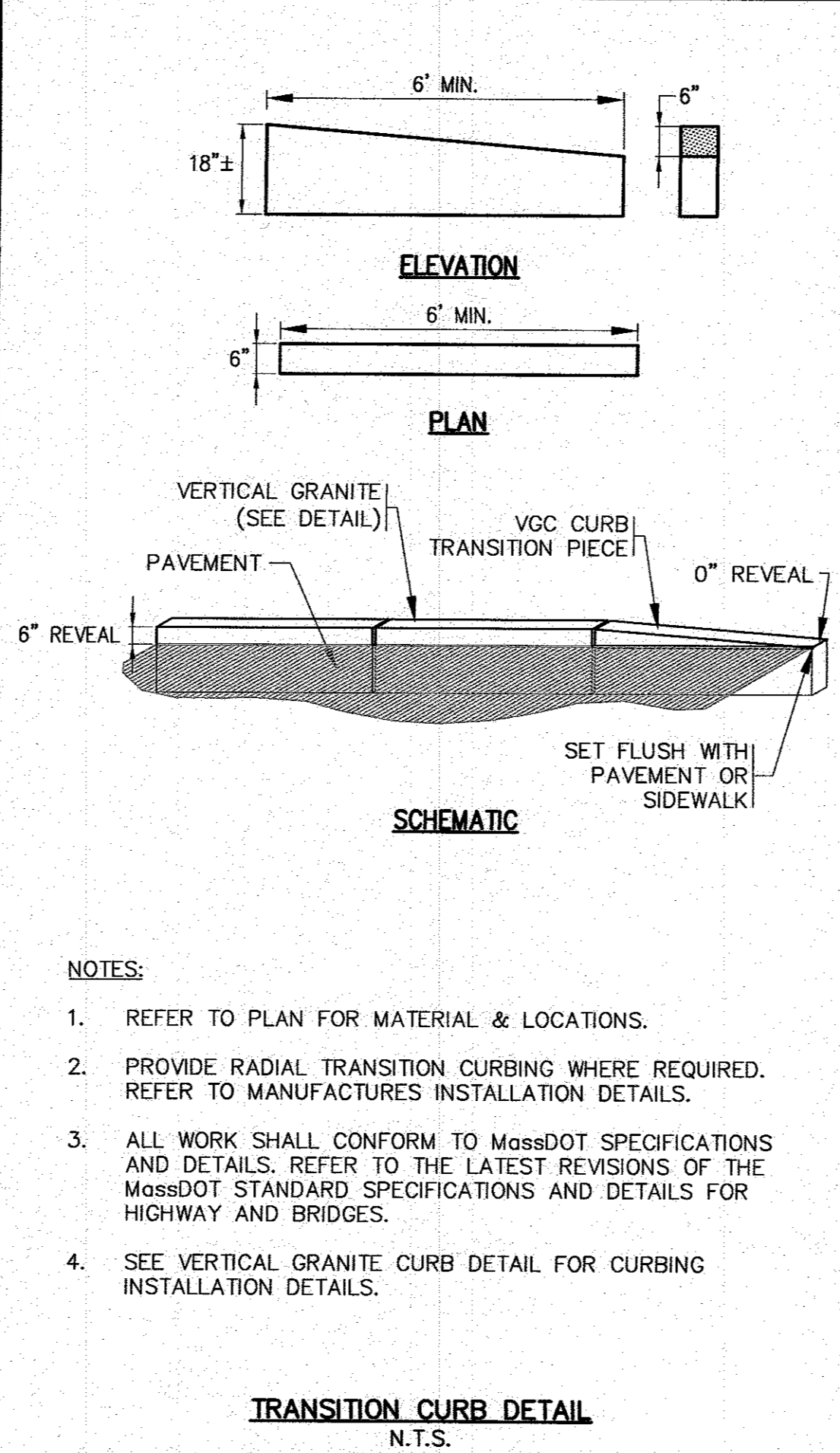
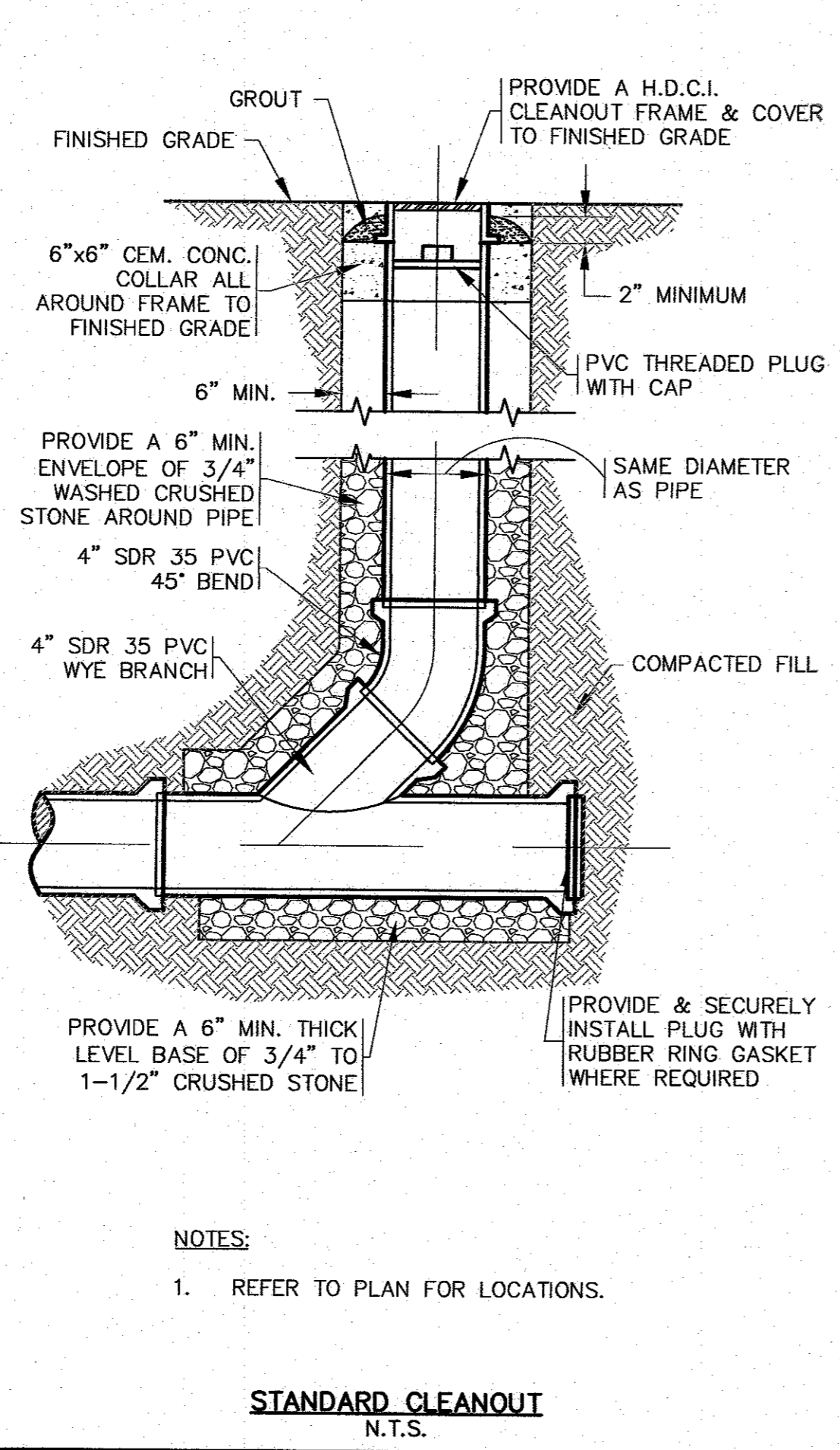
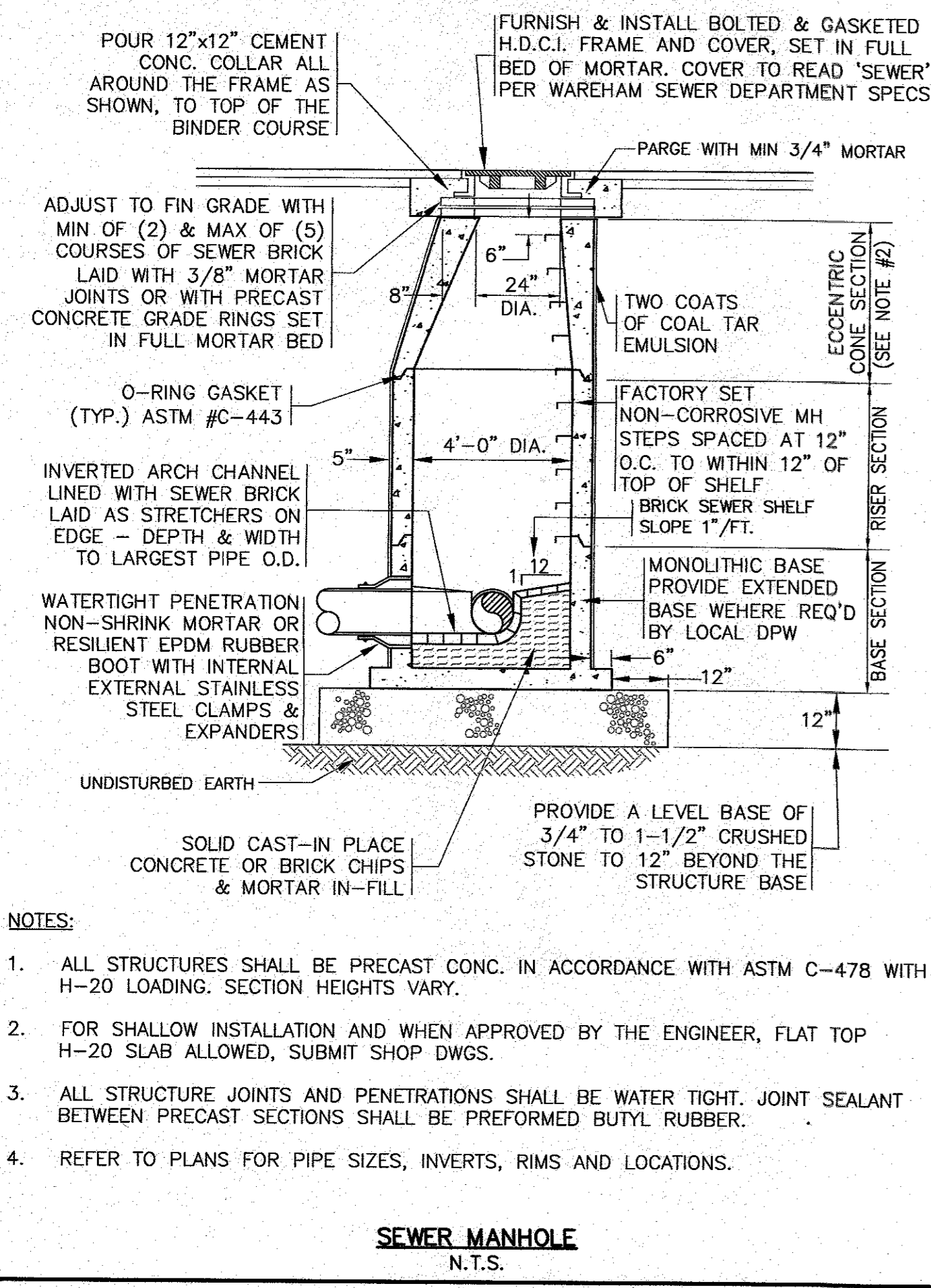
APPROVED BY: *[Signature]*
 WILLIAM MOORE
 LICENSE NO. 0288

G.A.F. ENGINEERING, INC.
 PROFESSIONAL ENGINEERS & LAND SURVEYORS
 266 MAIN STREET WAREHAM, MA 02571
 TEL: (508) 295-6600 FAX: (508) 295-6634
 MAIL: P.O. BOX 100 WAREHAM, MA 02571

SITE DEVELOPMENT PLAN
 DETAIL SHEET 1
 434 MAIN STREET WAREHAM, MA
 PREPARED FOR:
 NAZIH B. ELKALLASSI
 20 TOWER TERRACE WAREHAM, MA

JOB NO.: 21-9751
 DWG. 7 OF 9

PERMIT SET
 (NOT FOR CONSTRUCTION)



PERMIT SET
(NOT FOR CONSTRUCTION)

DATE: SEPT. 8, 2022	DRAWN BY: JMP	CHECKED BY: WFM	JOB NO.: 21-9751	SCALE: N.T.S.	REV. DATE	BY	APP'D	DESCRIPTION
					1	2/14/23	JMP	WFM

APPROVED BY:

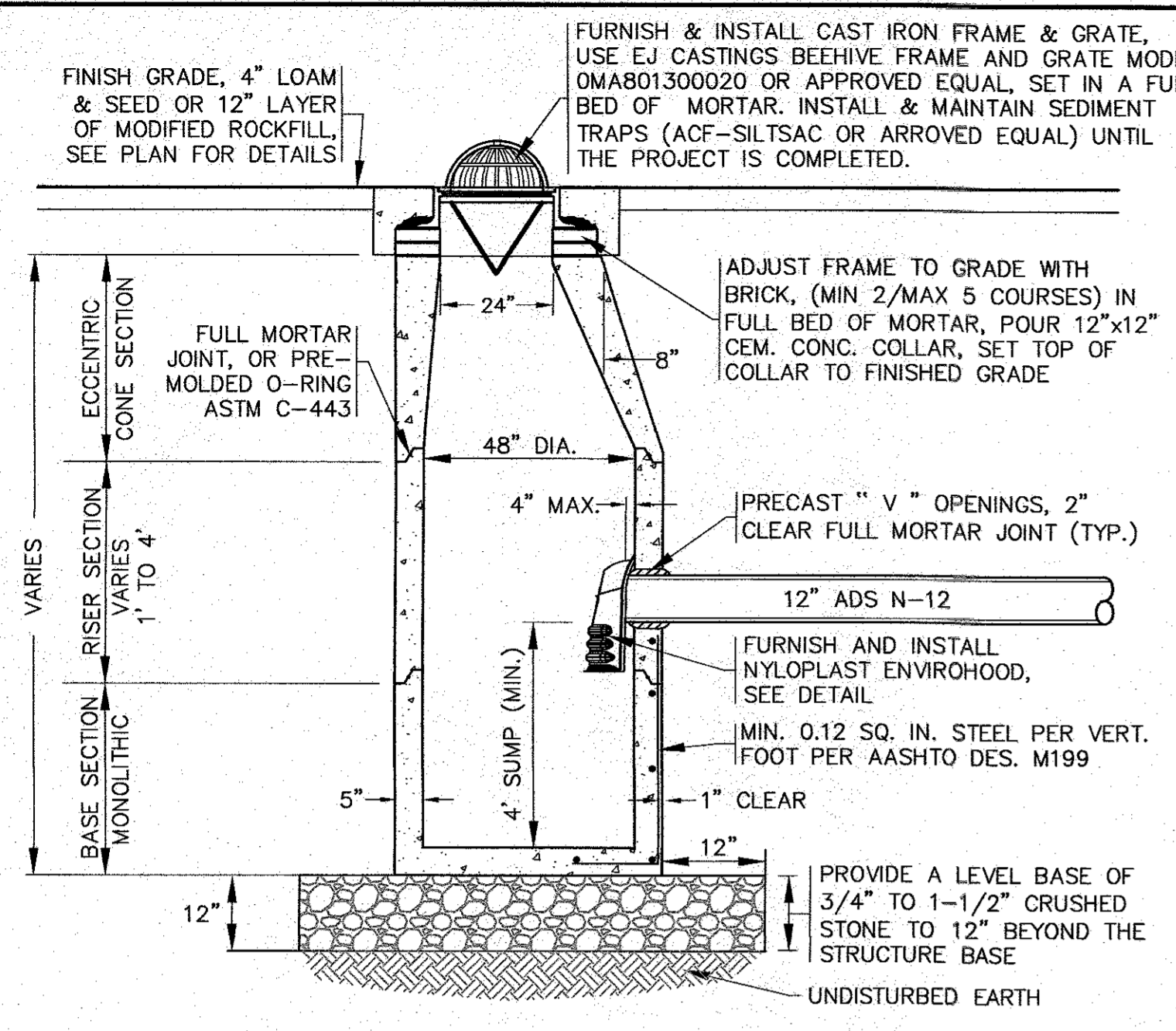
G.A.F. ENGINEERING, INC.
PROFESSIONAL ENGINEERS & LAND SURVEYORS
266 MAIN STREET - WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
E-MAIL: info@gafenginc.com

REGISTERED PROFESSIONAL ENGINEER
STATE OF MASSACHUSETTS
LICENSE NO. 10123
WALTER W. WALKER
CIVIL
10123

PREPARED FOR:
NAZIH B. ELKALLASSI
WAREHAM, MA
20 TOWER TERRACE

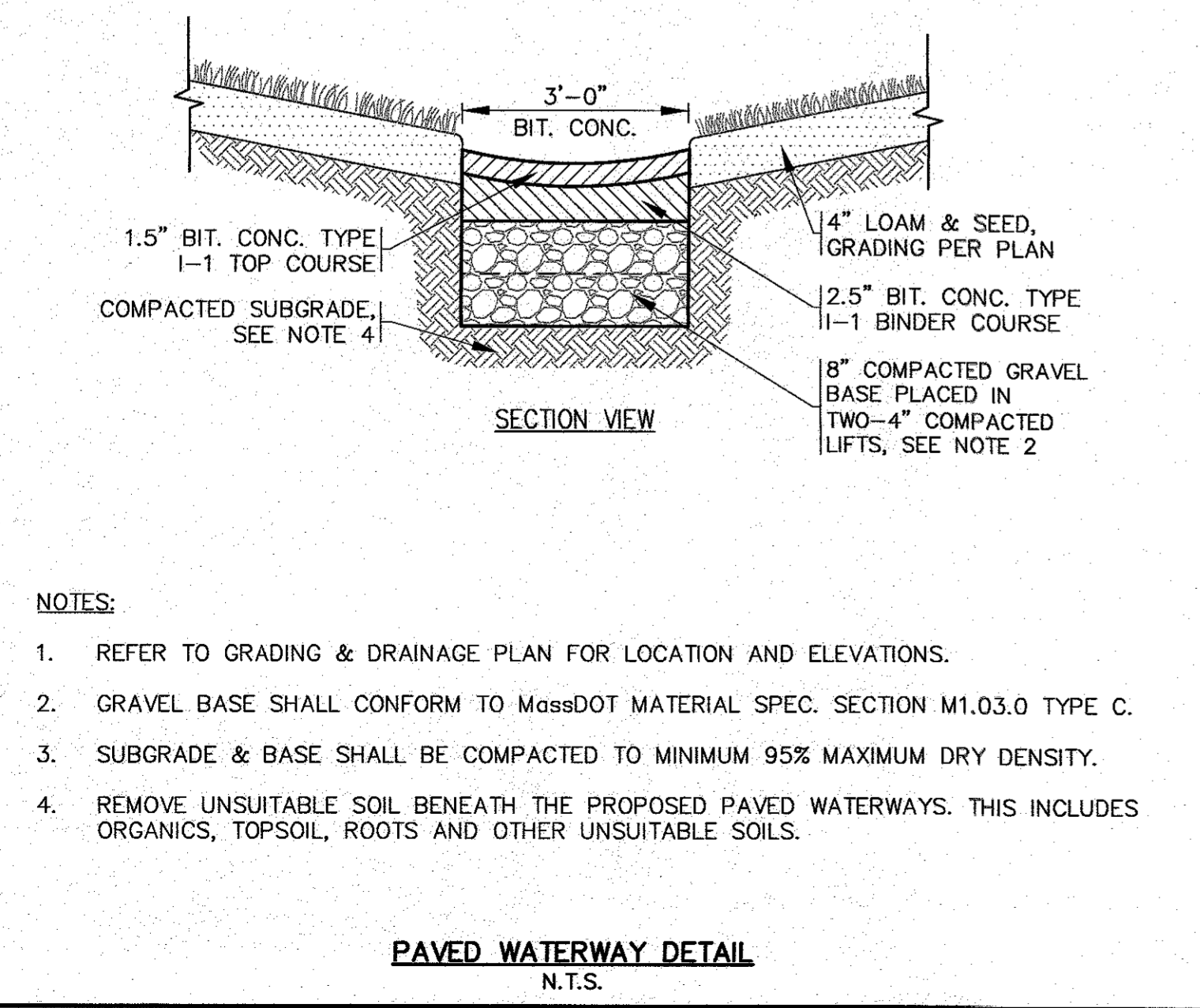
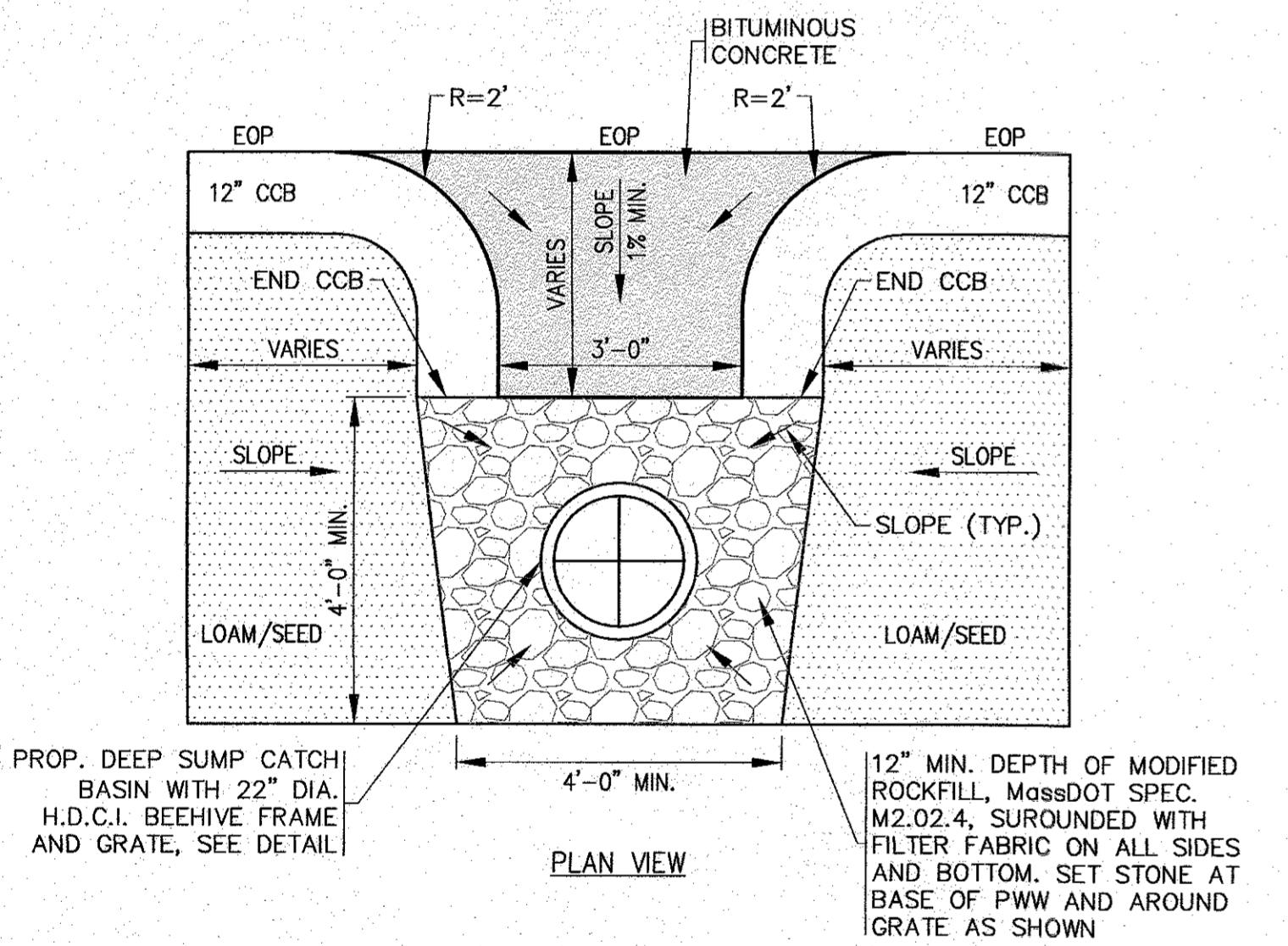
SITE DEVELOPMENT PLAN
DETAIL SHEET 2

JOB NO.: 21-9751
DWG. 8 OF 9

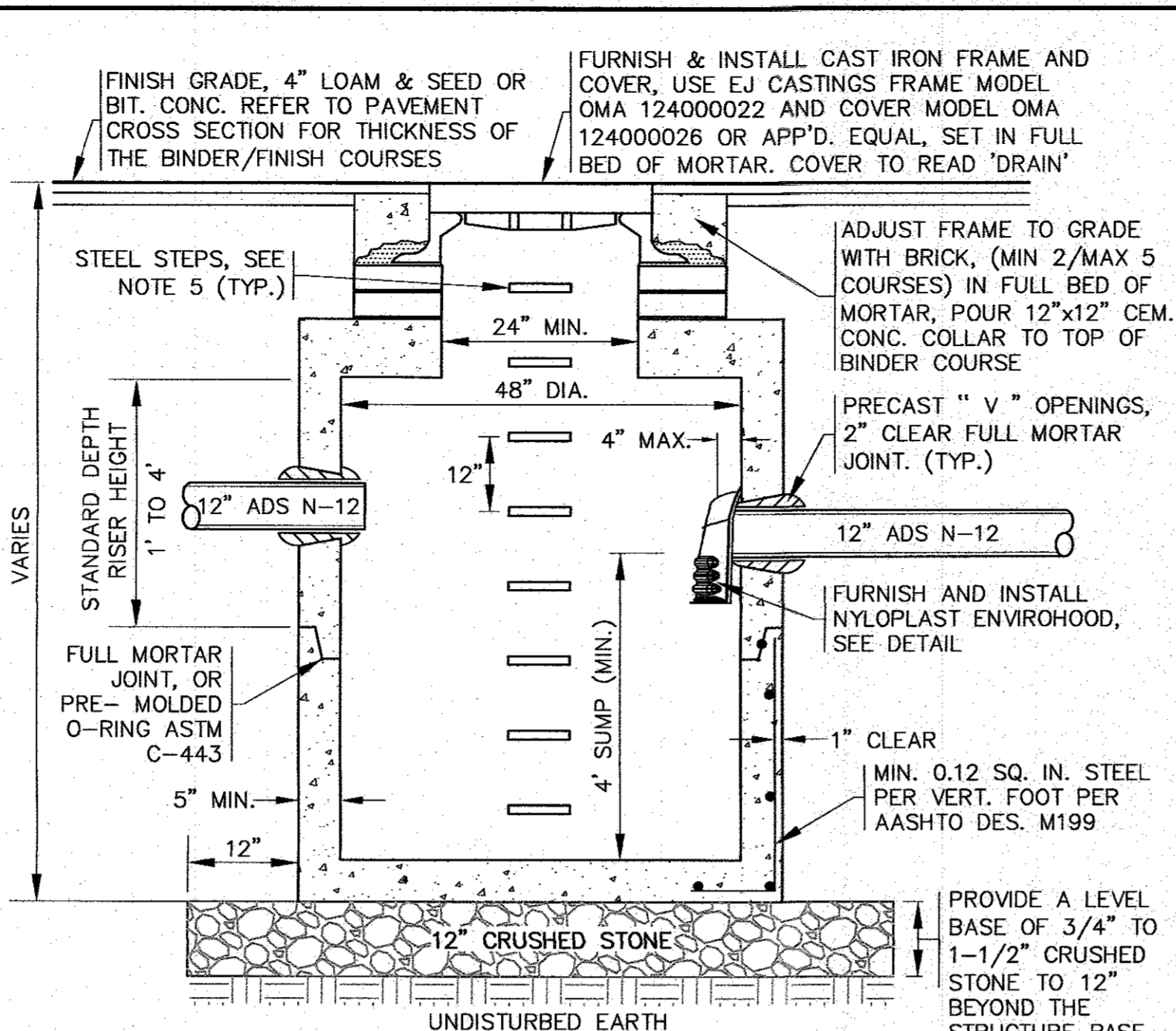


- NOTES:**
- STRUCTURES SHALL BE PRECAST CONCRETE IN ACCORDANCE WITH ASTM C-478, WITH H-20 LOADING, SECTION HEIGHTS VARY. CONCRETE STRENGTH 4000 PSI @ 28 DAYS.
 - FOR SHALLOW INSTALLATION AND WHEN APPROVED BY THE ENGINEER, A FLAT TOP H-20 SLAB WITH A 24" OPENING CAST ECCENTRICALLY MAY BE USED. CONTRACTOR TO SUBMIT SHOP DRAWINGS.
 - ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT.
 - REFER TO PLANS FOR PIPE SIZES, INVERTS, RIMS AND LOCATIONS.

PRECAST CONCRETE CATCH BASIN
N.T.S.

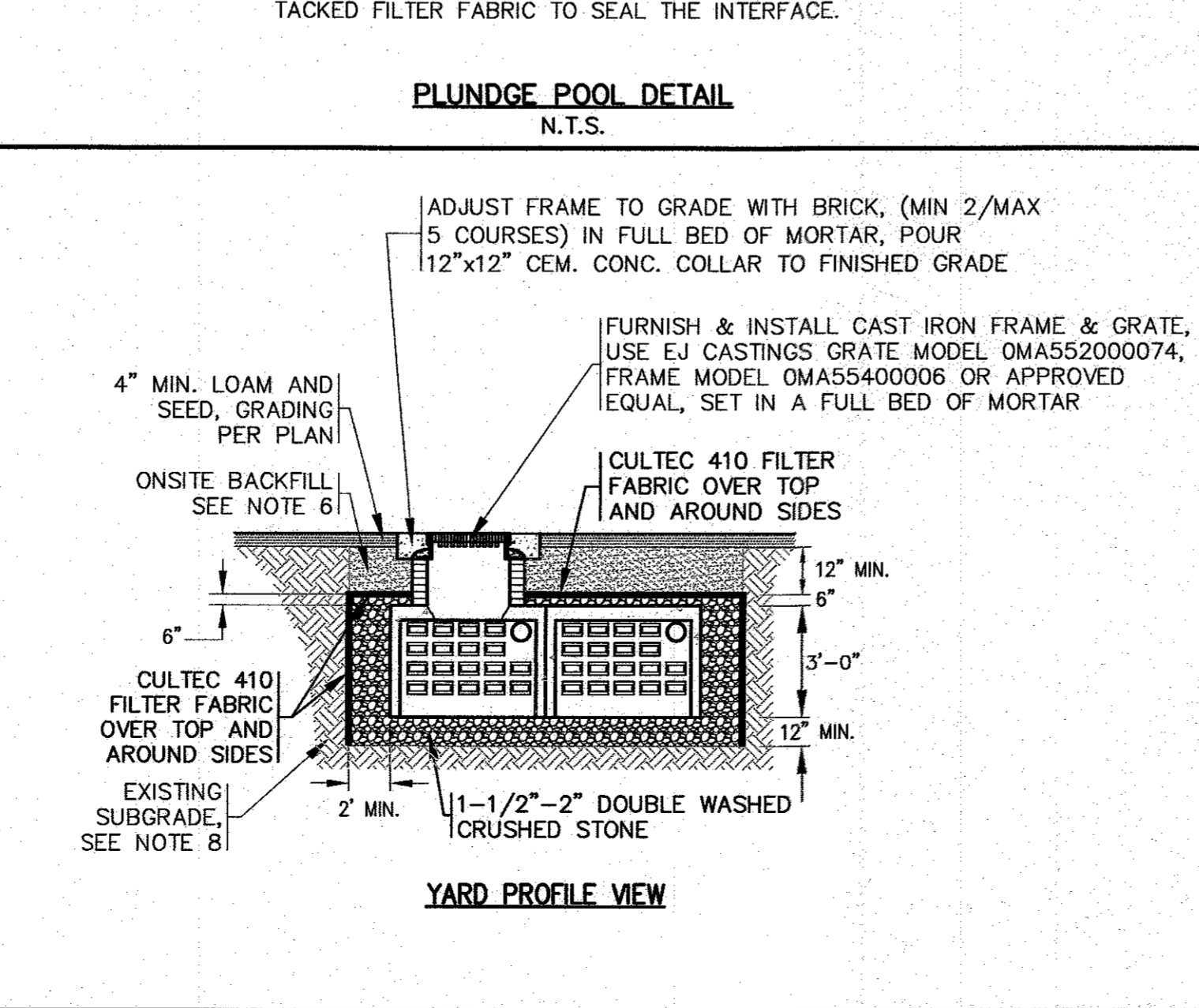
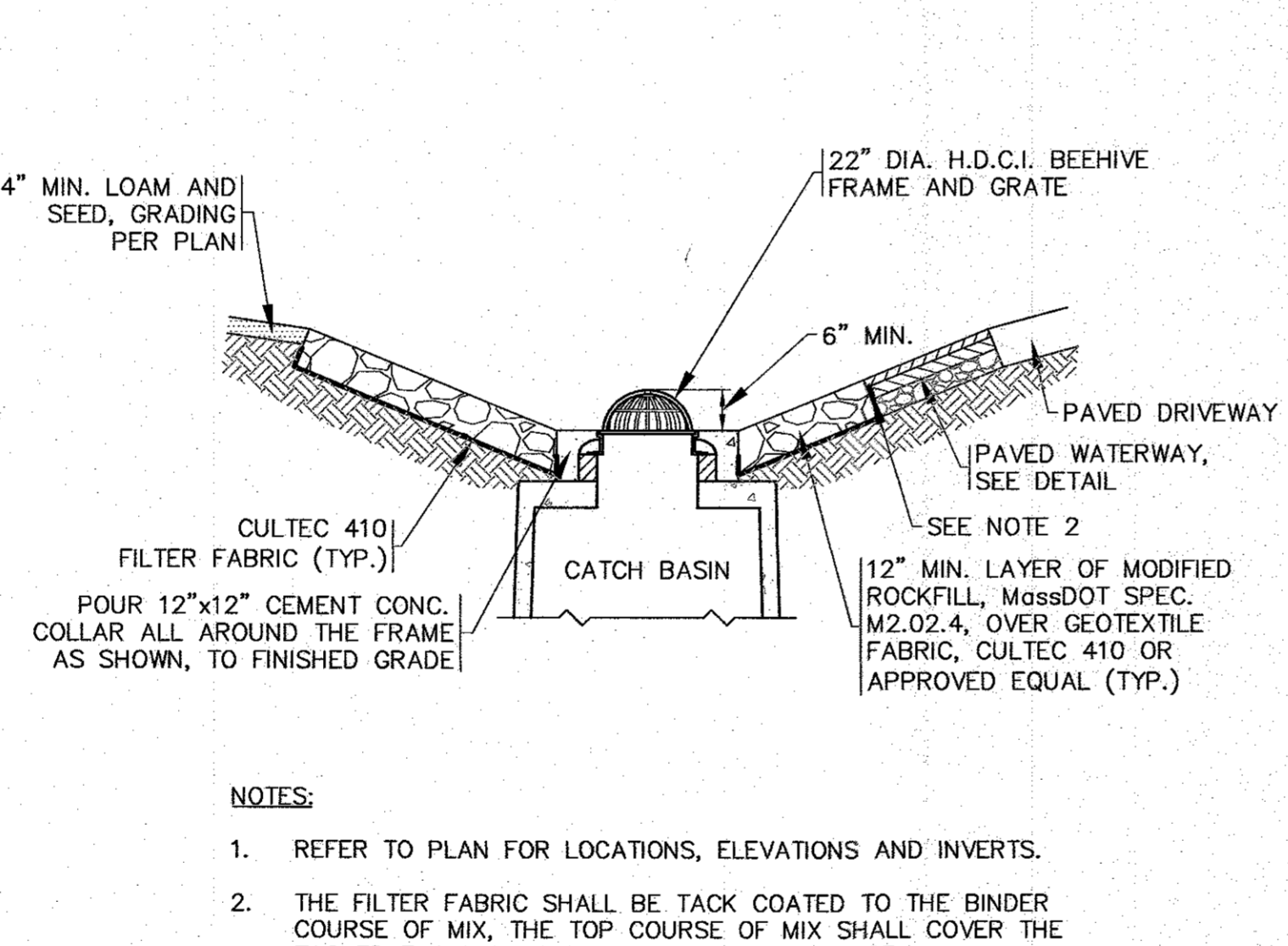


PAVED WATERWAY DETAIL
N.T.S.

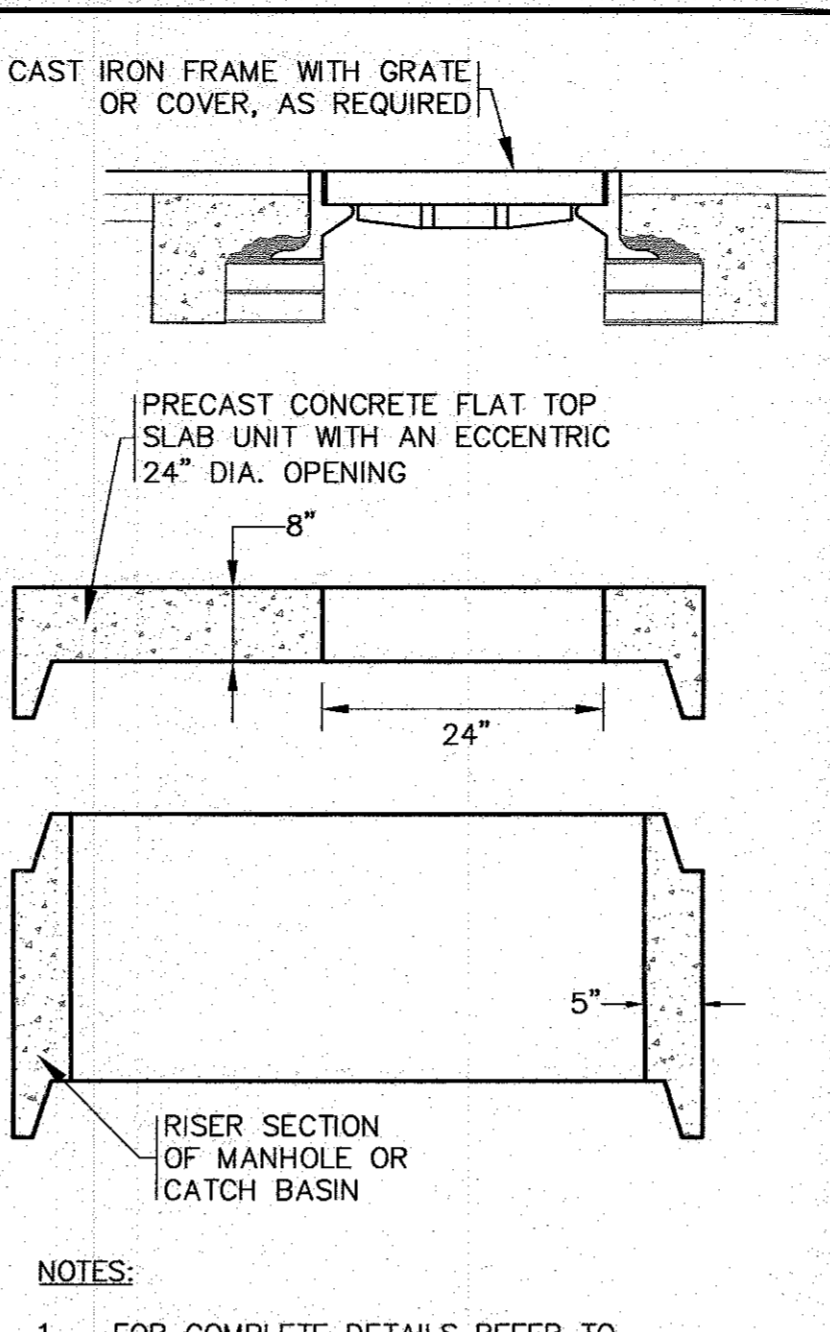


- NOTES:**
- STRUCTURES SHALL BE PRECAST CONCRETE IN ACCORDANCE WITH ASTM C478, WITH H-20 LOADING, SECTION HEIGHTS VARY. CONCRETE STRENGTH 4000 PSI @ 28 DAYS.
 - FOR SHALLOW INSTALLATION AND WHEN APPROVED BY THE ENGINEER, A FLAT TOP H-20 SLAB WITH A 24" OPENING CAST ECCENTRICALLY MAY BE USED, REFER TO MANUFACTURES DETAILS.
 - ALL STRUCTURE JOINTS AND PENETRATIONS SHALL BE WATER TIGHT.
 - REFER TO PLANS FOR PIPE SIZES, INVERTS, RIMS AND LOCATIONS.
 - ALL STEPS SHALL BE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP AND CONFORM TO ASTM C478 SPEC.

PRECAST CONCRETE DEEP SUMP DRAIN MANHOLE
N.T.S.

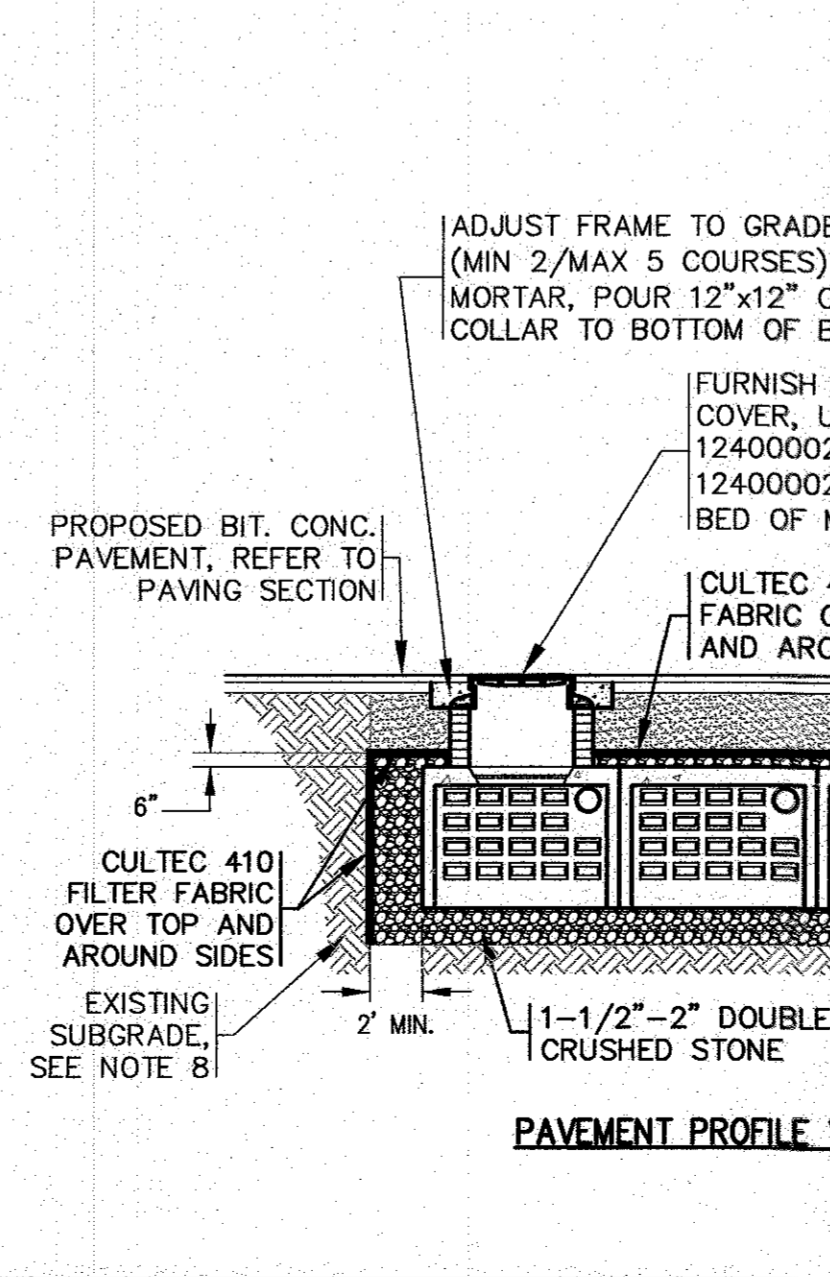
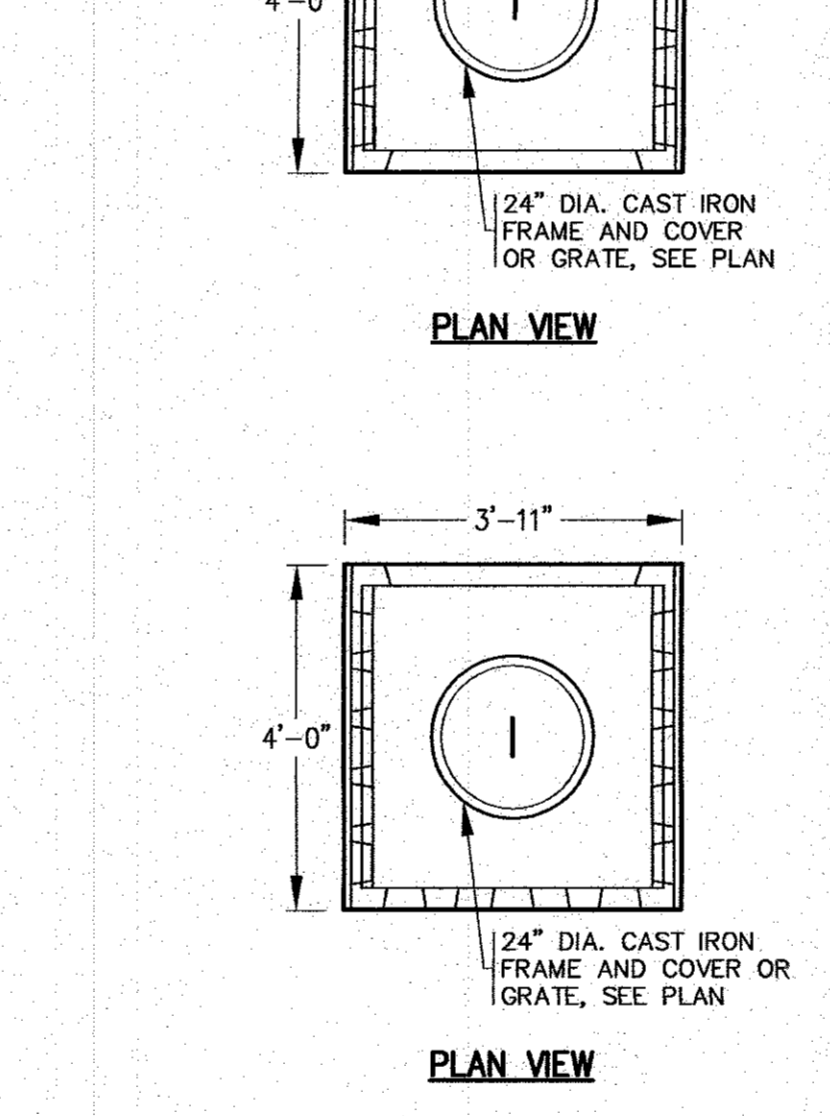


YARD PROFILE VIEW
N.T.S.

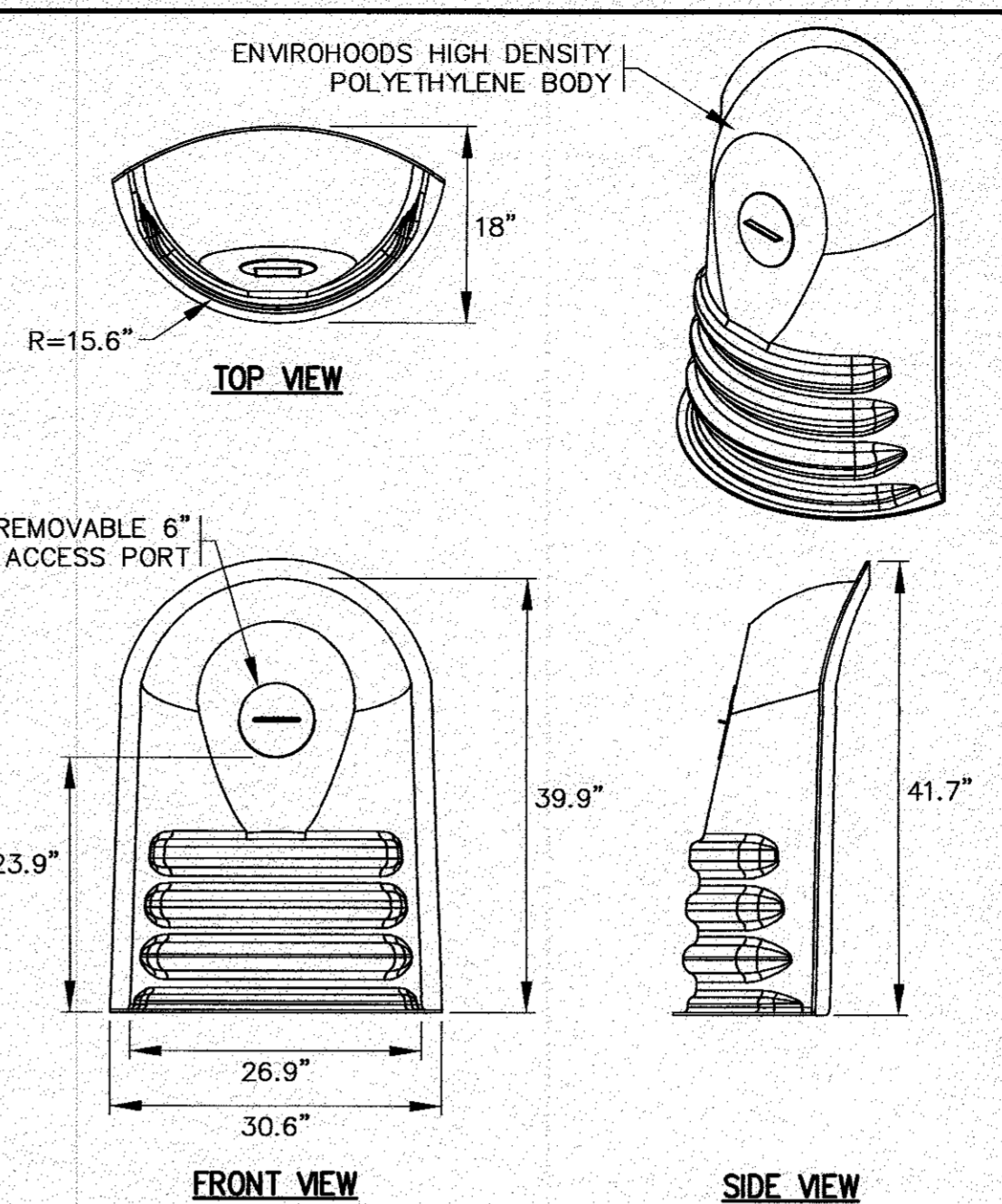


- NOTES:**
- FOR COMPLETE DETAILS REFER TO MANUFACTURERS SPECIFICATIONS.
 - CONTRACTOR TO SUBMIT SHOP DRAWINGS.

FLAT TOP SLAB
N.T.S.

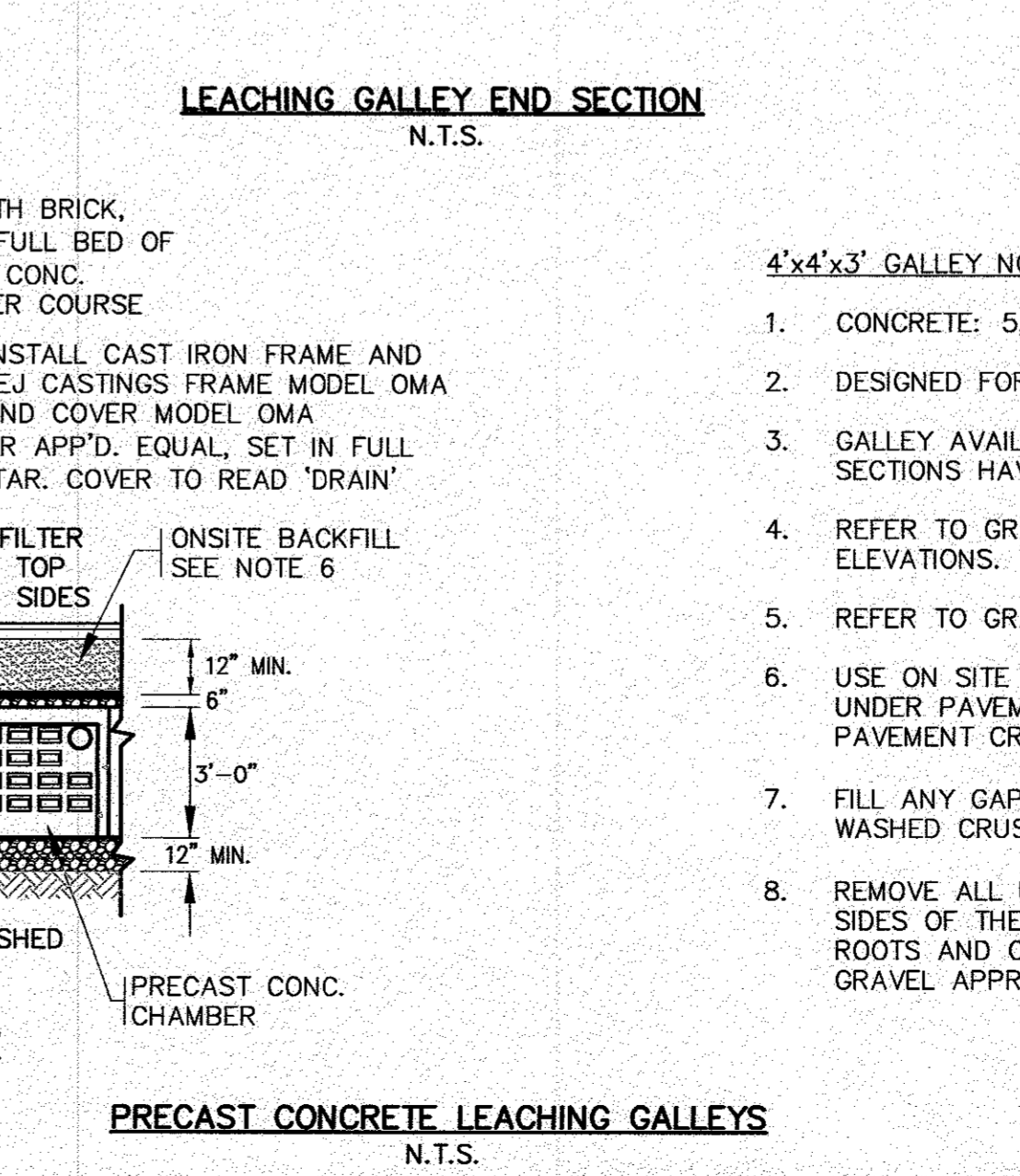
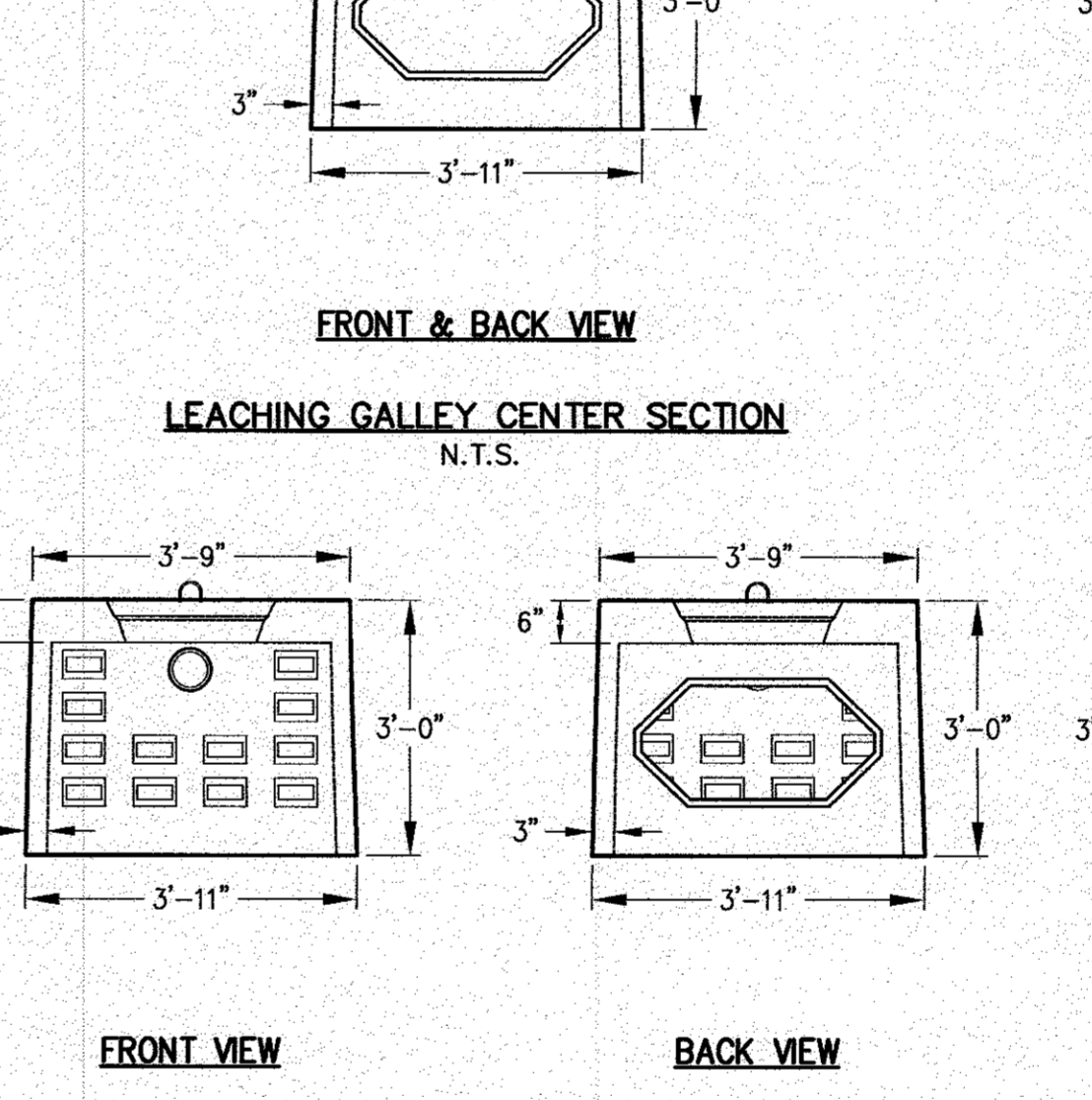


PAVEMENT PROFILE VIEW
N.T.S.

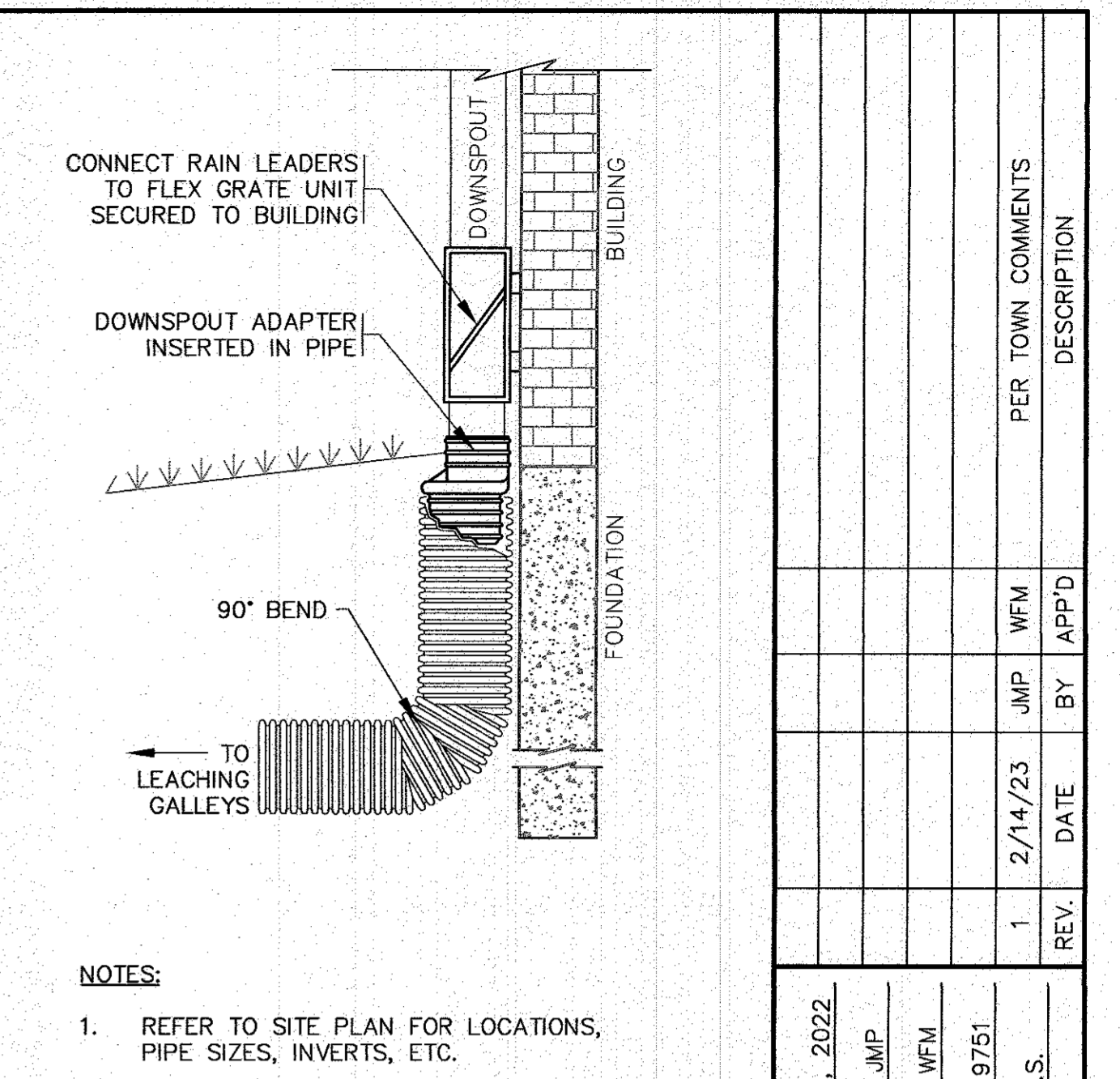


- NOTES:**
- FOR COMPLETE DETAILS REFER TO MANUFACTURERS SPECIFICATIONS.
 - CONTRACTOR TO SUBMIT SHOP DRAWINGS.

NYLOPLAST ENVIROHOOD
N.T.S.

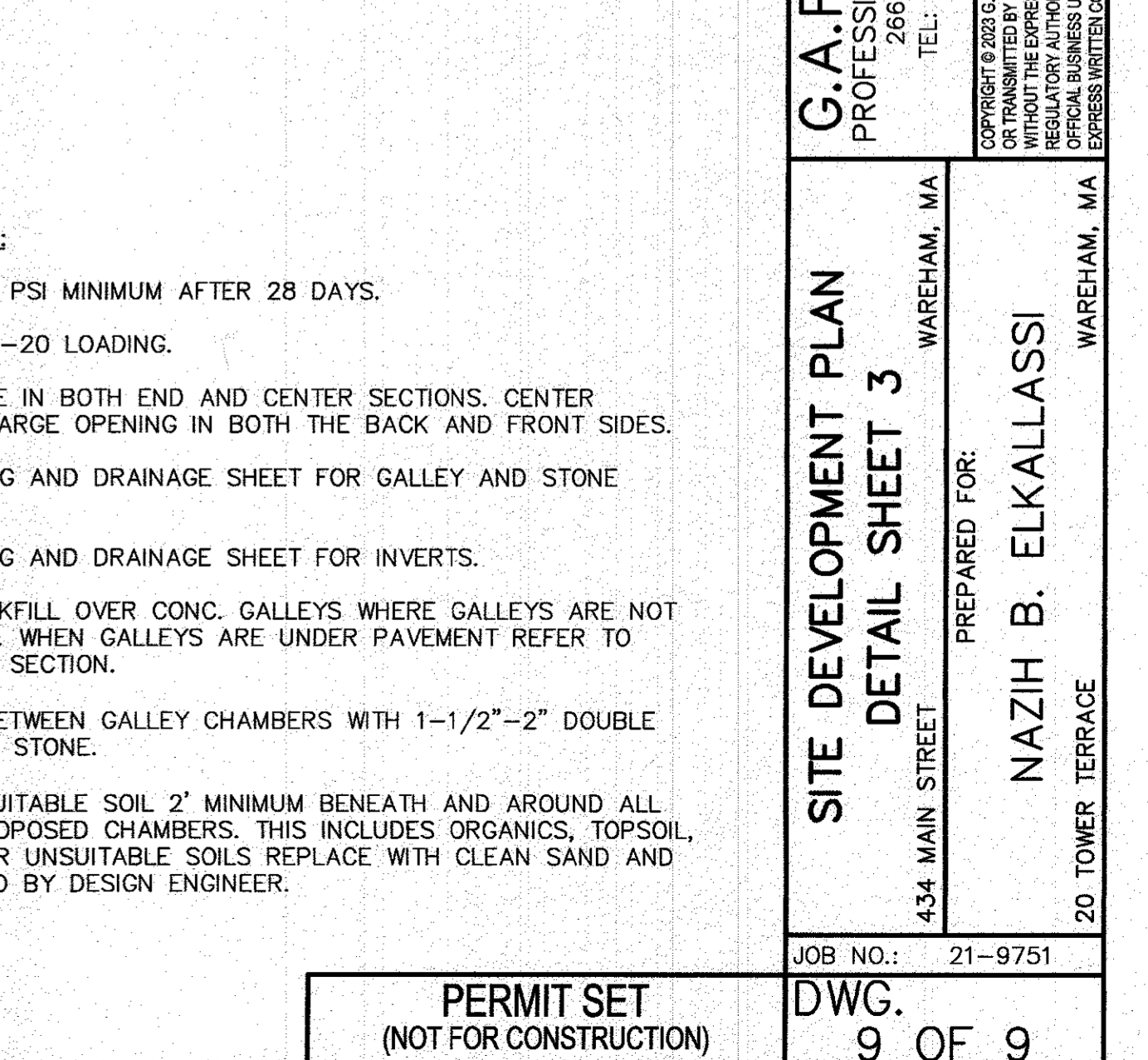
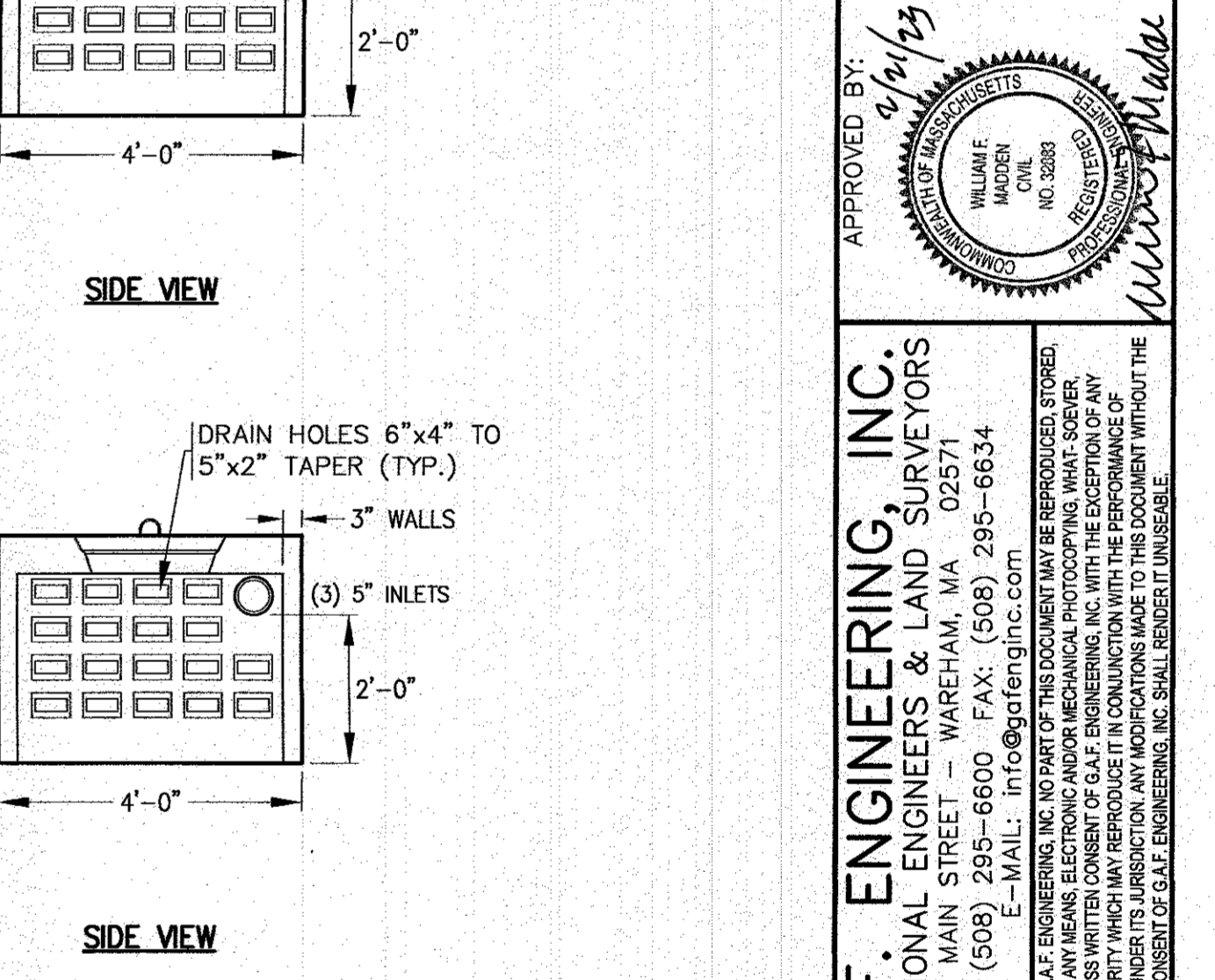


PRECAST CONCRETE LEACHING GALLEYS
N.T.S.



- NOTES:**
- REFER TO SITE PLAN FOR LOCATIONS, PIPE SIZES, INVERTS, ETC.
 - REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT SIZES AND LOCATIONS.

DOWNSPOUT DETAIL
N.T.S.



PERMIT SET (NOT FOR CONSTRUCTION)

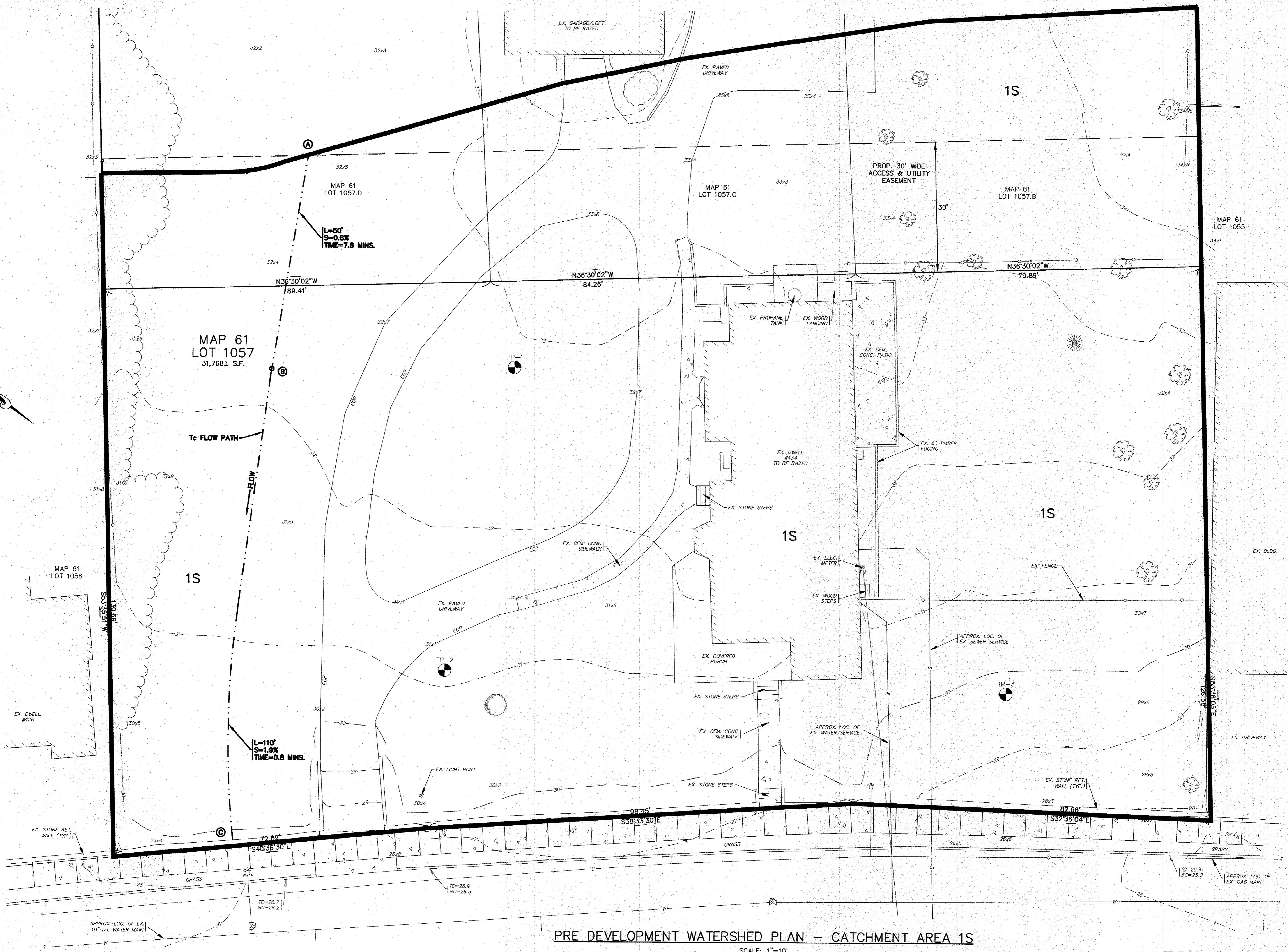
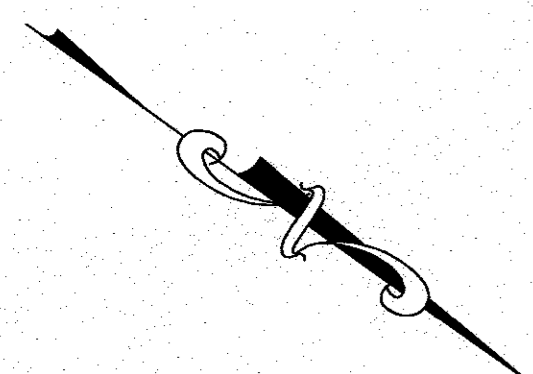
DATE: SEPT. 8, 2022	REV. BY	DATE	APP'D	DESCRIPTION
DRAWN BY: JMP				
CHECKED BY: WFM				
JOB NO.: 21-9751		2/14/23	JMP	WFM
SCALE: N.T.S.				

APPROVED BY: *[Signature]*

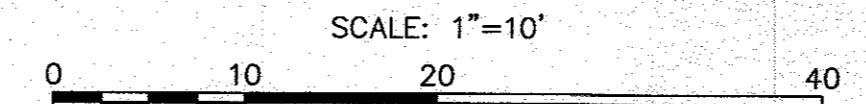
G.A.F. ENGINEERING, INC.
PROFESSIONAL ENGINEERS & LAND SURVEYORS
266 MAIN STREET - WAREHAM, MA 02571
TEL: (508) 295-6600 FAX: (508) 295-6634
E-MAIL: info@gafeng.com

PREPARED FOR:
434 MAIN STREET WAREHAM, MA
NAZH B. ELKALASSI
20 TOWER TERRACE WAREHAM, MA

JOB NO.: 21-9751
DWG. 9 OF 9



PRE DEVELOPMENT WATERSHED PLAN – CATCHMENT AREA 1S



PERMIT SET
(NOT FOR CONSTRUCTION)

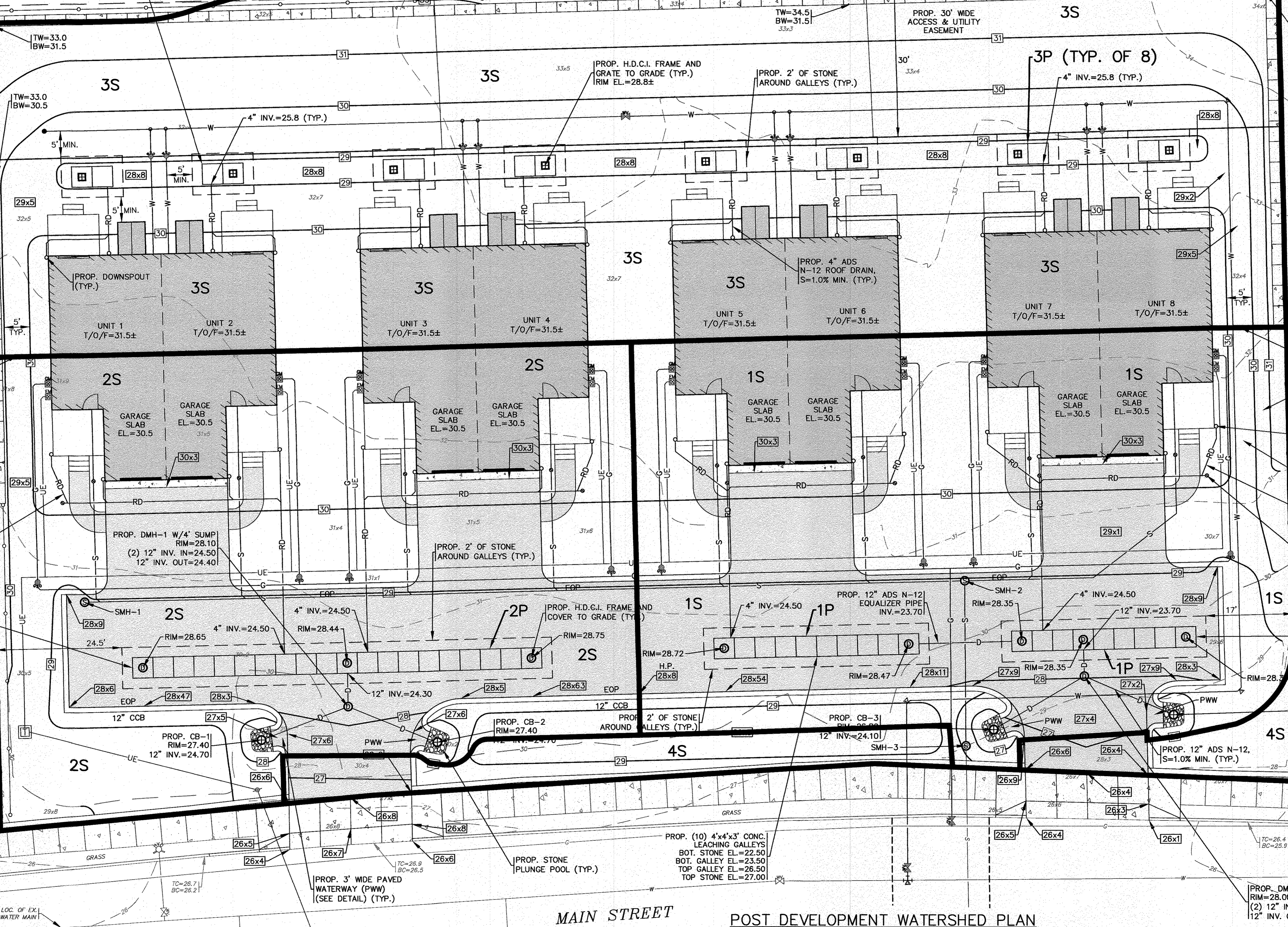
DATE: SEPT. 8, 2022		APPROVED BY:	
DRAWN BY: JMP			
CHECKED BY: WFM		PRE DEVELOPMENT WATERSHED PLAN CATCHMENT AREA 1S 434 MAIN STREET WAREHAM, MA PREPARED FOR: NAZIH B. ELKALLASSI 20 TOWER TERRACE WAREHAM, MA	
JOB NO.: 21-9751		G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 266 MAIN STREET - WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 E-MAIL: info@gafenginc.com	
SCALE: 1" = 10'		COPYRIGHT © 2022 G.A.F. ENGINEERING, INC. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED, TRANSMITTED, OR DISTRIBUTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE EXPRESS WRITTEN CONSENT OF G.A.F. ENGINEERING, INC. WITH THE EXCEPTION OF ANY REGULATORY AUTHORITY WHICH MAY REPRODUCE IT IN CONNECTION WITH THE PERFORMANCE OF ANY SERVICE PROVIDED BY G.A.F. ENGINEERING, INC. FOR THE EXCLUSIVE USE OF THE CLIENT.	
REV. 1	DATE 2/14/23	BY WFM	DESCRIPTION NO CHANGE THIS SHEET
JOB NO.: 21-9751		PRE DEVELOPMENT WATERSHED PLAN CATCHMENT AREA 1S 434 MAIN STREET WAREHAM, MA PREPARED FOR: NAZIH B. ELKALLASSI 20 TOWER TERRACE WAREHAM, MA	
DWG. 1 OF 2		PERMIT SET (NOT FOR CONSTRUCTION)	

H:\GAF DRAWINGS\2022 DRAWINGS\21-9751 (NAZIH ELKALLASSI)\9751.dwg SITE PLAN 2022_A1.dwg

NOTES:

- REFER TO ARCHITECTURAL PLANS PREPARED BY OTHERS FOR ALL PROPOSED DUPLEX DIMENSIONS, CONSTRUCTION NOTES AND DETAILS. CONTRACTOR SHALL CONFIRM TOP OF FOUNDATION AND GARAGE SLAB ELEVATIONS WITH OWNER PRIOR TO CONSTRUCTION.
- ALL PROPOSED CATCH BASINS SHALL HAVE A TEMPORARY SILT SACK INSTALLED IN THEM AS SOON AS THE STRUCTURE IS SET. CONTRACTOR SHALL EMPTY WHEN NEEDED AND REMOVE & DISPOSE OF THE SILT SACKS AT THE COMPLETION OF CONSTRUCTION.
- ALL PROPOSED DRAIN MANHOLES SHALL HAVE A 4" SUMP AND ALL OUTLET PIPES SHALL BE PROVIDED WITH A NYLOPLAST ENVIROHOOD, SEE DETAIL.
- ALL PROPOSED CATCH BASINS SHALL BE PROVIDED WITH A 22" DIA. BEEHIVE FRAME AND GRATE, SEE DETAIL.
- REFER TO ARCHITECTURAL PLANS BY OTHERS FOR FINAL LOCATIONS, SIZES AND COMPLETE DETAILS ON THE PROPOSED DOWNSPOUTS.
- WATER MAIN/SERVICES SHALL BE INSTALLED A MINIMUM OF 1' BELOW ALL PROPOSED DRAINAGE AND ROOF DRAINAGE PIPES AND 5' MINIMUM BELOW GRADE.
- LOAM AND SEED ALL DISTURBED AREAS.

PROP. (2) 4'x4'x3' CONC. LEACHING GALLEYS (TYP. OF 9)
 BOT. STONE EL.=22.80
 BOT. GALLEY EL.=23.80
 TOP GALLEY EL.=26.80
 TOP STONE EL.=27.30



MAIN STREET

POST DEVELOPMENT WATERSHED PLAN

SCALE: 1"=10'

PERMIT SET
 (NOT FOR CONSTRUCTION)

DATE: SEPT. 8, 2022	DRAWN BY: J.M.P.	CHECKED BY: W.F.M.	JOB NO.: 21-9751	SCALE: 1"=10'
APPROVED BY:				
<p>G.A.F. ENGINEERING, INC. PROFESSIONAL ENGINEERS & LAND SURVEYORS 266 MAIN STREET WAREHAM, MA 02571 TEL: (508) 295-6600 FAX: (508) 295-6634 PLO: (508) 295-6600</p>				
<p>PRE DEVELOPMENT WATERSHED PLAN</p>				
<p>PREPARED FOR: NAZH B. ELKALASSI 434 MAIN STREET WAREHAM, MA 20 TOWER TERRACE WAREHAM, MA</p>				
JOB NO.:	21-9751			
DWG.:	2 OF 2			
REV.	DATE	BY	APP'D	DESCRIPTION
1	2/14/23	J.M.P.	W.F.M.	TOWN COMMENTS/REV. BLDG. FOOTPRINTS