

TEST PIT ID#	DATE	GROUND ELEV.	ESGHW ELEVATION	HYDROLOGIC SOIL GROUP
TP-1	10/12/22	262.50±	257.29*	A (LOAMY SAND)
TP-2	2/13/22	264.00±	259.00	A (LOAMY SAND)

* THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION (ESHGW) SHOWN ABOVE FOR TP-1 CORRESPOND TO THE BOTTOM OF THE TEST PIT AS NO SIGNS OF GROUNDWATER, WEEPING, OR OTHER INDICATORS WERE OBSERVED.

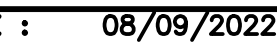
1. EXISTING TOPOGRAPHY INFORMATION, PROPERTY LINES, UTILITY INFORMATION, EDGE OF PAVEMENT AND LOCATIONS OF STRUCTURES WERE TAKEN FROM A PLAN PROVIDED BY ALPHA SURVEY GROUP, LLC ENTITLED "EXISTING CONDITIONS AND BOUNDARY SURVEY 1485 WASHINGTON STREET HOLLISTON, MA 01746, DATED 05/01/2022.
2. THE LOCATION OF THE SEPTIC SYSTEM SHOWN ON THE PLAN IS APPROXIMATE AND BASED ON A SKETCH WITH SWING TIES TO FIXED SITE FEATURES PRESENT IN THE TITLE 5 OFFICIAL INSPECTION FORM DATED 05/15/2019, OBTAINED FROM THE HOLLISTON BOARD OF HEALTH.
3. THE WETLAND DELINEATION WAS PERFORMED BY APPLIED ECOLOGICAL SCIENCES ON APRIL 26, 2022 AND FIELD LOCATED BY ALPHA SURVEY GROUP ON APRIL 28, 2022.

3. EXCEPT AS REQUIRED TO PERFORM SPECIFIC WORK ACTIVITIES RELATED TO UTILITY CONNECTIONS, CONTRACT SHALL DEFINE ITS OPERATIONS INCLUDING ALL STOCKPILES, STORAGE, AND STAGING, TO WITHIN THE LIMIT OF WORK.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE-RELATED DUST CONTROL.
3. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS WITH UTILITY PROVIDERS FOR TEMPORARY ELECTRICAL SERVICE FOR DEMOLITION/CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL PROVIDE AND PAY FOR ALL TEMPORARY WIRING, SWITCHES, CONNECTIONS, METERS AND SERVICE. CONTRACTOR SHALL REMOVE ALL TEMPORARY EQUIPMENT NOTED ABOVE AFTER COMPLETION OF WORK. THE CONTRACTOR MAY, AT HIS OWN EXPENSE, UTILIZE TEMPORARY GENERATORS TO PROVIDE POWER FOR DEMOLITION/CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR SHALL PROVIDE TEMPORARY CHAIN LINK CONSTRUCTION FENCE IN ACCORDANCE WITH THE PLANS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A PLAN CONFIRMING THE LOCATION OF THE CONSTRUCTION FENCE, ACCESS GATES AND CONSTRUCTION ENTRANCES, AND ANY APPLICABLE PHASES, FOR APPROVAL BY THE OWNER.
5. THE CONTRACTOR MAY UTILIZE ALL AREAS WITHIN THE LIMIT OF WORK AS A FIELD OFFICE/STAGING AREA.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR WHEEL CLEANING OF ALL CONSTRUCTION VEHICLES BEFORE EXISTING THE SITE, ANY TRACKED DIRT FROM CONTRACTOR OR SUBCONTRACTOR VEHICLES ONTO THE ACCESS ROAD OR PUBLIC RIGHTS OF WAY SHALL BE SWEEPED UP AT THE CONTRACTORS EXPENSE.
7. THE CONTRACTOR IS ADVISED THAT THE LOCATIONS OF ALL EXISTING UTILITIES ARE APPROXIMATE AND THAT ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO THE START OF CONSTRUCTION AND DEMOLITION ACTIVITIES THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES NOT SCHEDULED FOR DEMOLITION.
8. REMOVAL OF ANY WORK OR ITEM SHALL INCLUDE OFFSITE LEGAL DISPOSAL OF SAME. ALL REMOVAL AND DISPOSAL WORK SHALL BE PERFORMED IN A SAFE AND LEGAL MANNER. THE CONTRACTOR'S DISPOSAL PRACTICE OF ANY EXCESS MATERIAL SHALL COMPLY WITH ALL FEDERAL, STATE, AND MUNICIPAL WASTE MANAGEMENT LAWS AND REGULATION.
9. THE CONTRACTOR SHALL RELOCATE ALL ITEMS SCHEDULED TO REMAIN AWAY FROM THE CONSTRUCTION AREA, AND PROTECT AGAINST DUST AND MOISTURE AS NEEDED. FOLLOWING CONSTRUCTION, THE CONTRACTOR SHALL RETURN THESE ITEMS UNDamAGED TO THEIR ORIGINAL LOCATIONS. ANY ITEM DamAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND, AT NO COST TO THE OWNER.
10. LOCATIONS OF INDIVIDUAL EXISTING TREES 12" AND LARGER AND SHRUBS ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL REMOVE TREES, BUSHES, AND OTHER VEGETATION IN THE WORK AREA ONLY AS REQUIRED TO COMPLETE THE NEW WORK AND SHALL MAKE EVERY EFFORT TO MINIMIZE THE AMOUNT OF VEGETATION DISTURBED. THE CONTRACTOR SHALL REPLACE ALL DamAGED VEGETATION TO REMAIN IN KIND FOLLOWING THE COMPLETION OF THE WORK. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL TREES AND SHRUBS.
11. THE CONTRACTOR SHALL RESTORE ALL LANDSCAPING AND HARDSCAPING Affected BY THE DEMOLITION AND CONSTRUCTION ACTIVITIES IN KIND. THE CONTRACTOR SHALL PROVIDE TREE PROTECTION AS SPECIFIED IN THE DETAILS FOR ALL TREES TO BE PRESERVED IN THE WORK AREA.
12. THE CONTRACTOR IS ADVISED TO DISTURB VEGETATION AND PAVEMENT AS LITTLE AS POSSIBLE.
13. ANY ITEM OR STRUCTURE DamAGED BEYOND THE LIMITS OF WORK SHALL BE REPLACED IN KIND BY THE CONTRACTOR, AT HIS OWN EXPENSE.
14. EXISTING STRUCTURES, LANDSCAPING, AND HARDSCAPING ARE PRESENT IN AND BEYOND THE LIMITS OF WORK BUT NOT NECESSARILY SHOWN HEREON. THE CONTRACTOR SHALL PROTECT ALL EXISTING FEATURES IN PLACE DURING THE ENTIRE DURATION OF THE PROJECT, OR IF ACCEPTABLE TO THE OWNER, HARDSCAPE ITEMS SUCH AS FENCES AND GUARDRAILS MAY BE REMOVED AND RESET, WITHOUT DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES.
15. THE CONTRACTOR TO PROTECT EXISTING SIGNS TO REMAIN, OR IF ACCEPTABLE TO THE OWNER, SIGNS MAY BE REMOVED AND RESET, WITHOUT DAMAGE. AFTER CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES. ADDITIONALLY, ALL EXISTING LIGHT POLES AND FLAG POLES SHALL BE PROTECTED DURING CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
16. ALL MATERIALS STOCKPILED DURING THE WORK SHALL BE PLACED IN A LOCATION THAT PREVENTS EROSION AND SEDIMENTATION. THE CONTRACTOR SHALL STOCKPILE MATERIALS IN AN AREA ON-SITE.
17. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO STATE AND LOCAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO THE TOWN OF HOLLISTON, THE COMMONWEALTH OF MASSACHUSETTS, AND ANY OTHER AGENCIES HAVING JURISDICTION.
18. ALL EXISTING UTILITIES SHALL REMAIN IN SERVICE DURING DEMOLITION AND CONSTRUCTION AT ALL TIMES, UNLESS PRIOR APPROVAL IS GIVEN BY THE TOWN AND/OR THE OWNER. INCLUDING ALL EXISTING UTILITIES/SERVICES ASSOCIATED WITH THE EXISTING BUILDINGS. IF A UTILITY IS DamAGED, TEMPORARY SERVICE MAY BE REQUIRED BY THE CONTRACTOR, AT HIS OWN EXPENSE.
19. AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE LIMITS OF THE DEVELOPMENT AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF DEMOLITION OR CONSTRUCTION OPERATIONS. CONTRACTOR SHALL INSTALL SILT SACKS ON DOWNSTREAM CATCH BASINS AS INDICATED ON THE PLANS. PRIOR TO INSTALLING SILT SACKS THE CONTRACTOR SHALL CLEAN OUT THE SUMPS OF THE CATCH BASINS. THE EROSION CONTROL AS SHOWN IS A MINIMUM REQUIREMENT, ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS CONDITIONS WARRANT.
20. EROSION CONTROL MEASURES ARE TO BE INSTALLED AS NEEDED DURING CONSTRUCTION. CONTRACTOR SHALL ENSURE EROSION CONTROL IS KEPT INTACT AND REPLACED WHEN NECESSARY.
21. ALL ITEMS IN BOLD ON DEMOLITION PLAN TO BE REMOVED/DEMOLISHED UNLESS OTHERWISE NOTED. LOCATIONS OF ALL SAWCUT LINES ARE APPROXIMATE.
22. THE SITE CONTRACTOR SHALL SAW CUT AND MATCH ALL EXISTING ROAD PAVEMENT AS REQUIRED TO SET NEW CURBING, BLEND PAVEMENTS, AND CONSTRUCT NEW UTILITIES IN THE STREET.

EXISTING	LEGEND	PROPOSED
	GRANITE BOUND FOUND	
	UTILITY POLE	
	GUY WIRE	
	GUY POLE	
	SIGN	
	POST	
	BOLLARD	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	UNDERGROUND GAS LINE	G
	UNDERGROUND WATER LINE	W
	UNDERGROUND ELECTRIC LINE	E
	UNDERGROUND SEWER LINE	S
	UNDERGROUND DRAIN LINE	D
	SEWER MANHOLE (SMH)	
	SEWER CLEANOUT (CO)	
	DRAIN MANHOLE (DMH)	
	CATCH BASIN (CB)	
	GAS/WATER GATE	
	HYDRANT	
	BUSH	
	LOCUS PROPERTY LINE (±)	
	ADJOINERS PROPERTY LINE (±)	
	OVERHEAD WIRE	
	TREELINE	
	HISTORIC UTILITY LINE (G/W/E/S/D)	
	MAJOR CONTOUR LINE	255
	MINOR CONTOUR LINE	254
	FENCE	X
	GUARD RAIL	
	PRECAST CONCRETE CURB	
	HANDICAP SPACE	
	MAILBOX	
	BORDERING VEGETATED WETLAND (BVW)	
	WETLAND FLAG	
	100' WETLAND BUFFER	
	MANHOLE	

[illegible]

SEAL



DRAWN : PS

SCALE : 1" = 20'

ANYFENCE CO.

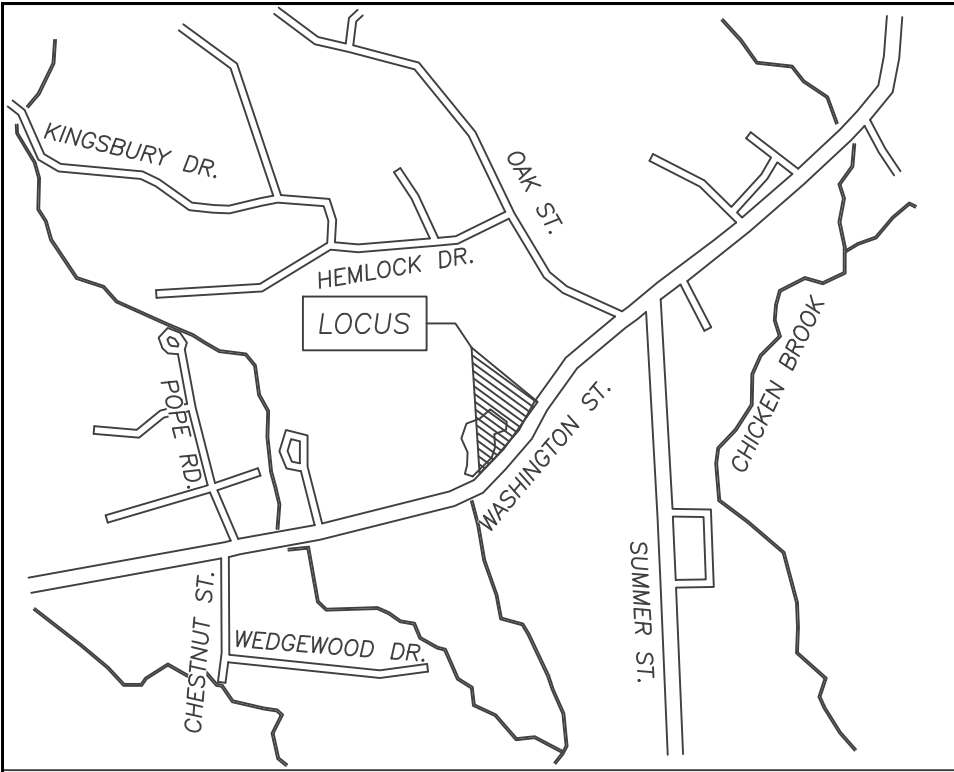
1485 WASHINGTON STREET
HOLLISTON, 01746 MA



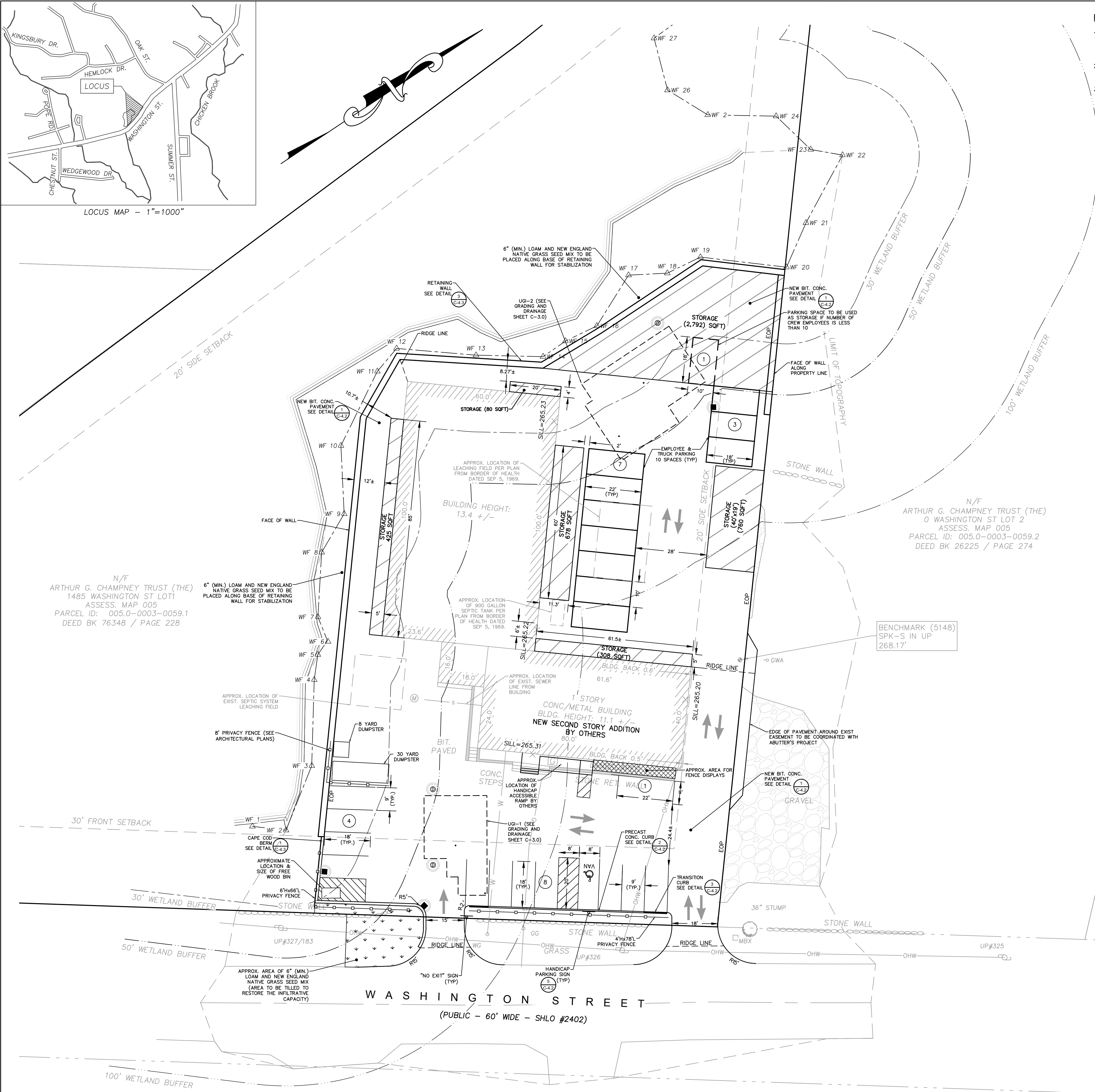
DEMOLITION AND EROSION CONTROL PLAN

C-1.0

SCALE: 1" = 20'	PRJ. NO: 2008.00
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LOCUS MAP - 1"=1000"



EXISTING CONDITIONS/SURVEY NOTES:

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- THE WETLAND DELINEATION WAS PERFORMED BY APPLIED ECOLOGICAL SCIENCES ON APRIL 26, 2022 AND FIELD LOCATED BY ALPHA SURVEY GROUP ON APRIL 28, 2022.

LAYOUT AND MATERIALS NOTES

- ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
- REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING LOCATIONS AND DETAILS.
- CONTRACTOR SHALL REPORT SIGNIFICANT CONFLICTS TO THE OWNER AND THE ENGINEER FOR RESOLUTION.
- DIMENSIONS OF PARKING SPACES AND DRIVEWAYS ARE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT. STANDARD PARKING SPACES ARE 9'x18', UNLESS OTHERWISE NOTED. ALL HANDICAP SPACES ARE 8'x20'.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN SITE PLAN DIMENSIONS AND BUILDING PLANS BEFORE PROCEEDING WITH ANY PORTION OF SITE WORK WHICH MAY BE AFFECTED SO THAT PROPER ADJUSTMENTS TO THE SITE LAYOUT CAN BE MADE IF NECESSARY.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND ALL DETAILS CONTIGUOUS TO THE BUILDING, LIGHTING, ENTRANCES, DOORWAY PADS, LOADING DOCK DETAILS, ETC. THE BUILDING INTERIORS SHOWN ARE FOR REFERENCE ONLY.
- ACCESSIBLE RAMPS SHALL BE PER MASSACHUSETTS STATE CODE AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES (WHICHEVER IS MORE STRINGENT).
- EACH HANDICAP PARKING SPACE SHALL BE PROVIDED WITH A SIGN SIX (6) FEET IN HEIGHT LOCATED AT THE BACK OF THE CURB. THE SIGN SHALL CONTAIN THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AS DESCRIBED IN THE AMERICANS WITH DISABILITIES ACT, PUBLIC LAW 101-336, (SEE DETAILS).
- PROTECT EXISTING PROPERTY MONUMENTS AND ABUTTING PROPERTIES DURING CONSTRUCTION ACTIVITIES.
- ALL SITE CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS (DPW) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, AND THE TOWN OF HOLLISTON PUBLIC WORKS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LEGAL REMOVAL AND DISPOSAL OF ALL DEBRIS FROM THE SITE AND AS MAY BE DIRECTED BY THE A/E.
- ALL FENCING AND GATES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS DIRECTION.
- THE SITE CONTRACTOR SHALL SAW CUT AND MATCH ALL EXISTING ROAD PAVEMENT AS REQUIRED TO SET NEW CURBING, BLEND PAVEMENTS, AND CONSTRUCT NEW UTILITIES IN THE STREET.
- THE USE OF FILL CONTAINING HAZARDOUS MATERIALS OR WASTE IS FORBIDDEN.
- THE MARKING OF THE LIMITS OF WORK IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING IS REQUIRED.
- SIGNIFICANT TREES, INCLUDING THEIR BRANCHES AND THEIR ROOT SYSTEMS, SHALL BE PROTECTED WITH SHIELDS, FENCES OR BARRIERS.
- THE CLEANING OF CATCH BASIN SUMPS AND STORMWATER BASINS IS REQUIRED FOLLOWING CONSTRUCTION AND ACCORDING TO ANY OPERATIONS AND MAINTENANCE PLAN THEREAFTER.
- ALL AREAS OF RE-VEGETATION IS TO TAKE PLACE NO MORE THAN 7 DAYS AFTER FINAL GRADING.
- THE AREAS OF GRAVEL EXPANSION THAT WILL BE REMOVED AND RESTORED TO ITS NATURAL STATE SHALL BE TILLED AND THE SOIL SHOULD BE AMENDED AS NECESSARY TO RESTORE THE INFILTRATIVE CAPACITY OF THE AREA WHICH HAS BEEN LIKELY REDUCED OR ELIMINATED THROUGH COMPACTION.

ZONING SCHEDULE

REQUIREMENTS	REQUIRED	EXISTING	PROVIDED
MINIMUM AREA	20,000 SF	111,344 SF	111,344 SF
MINIMUM LOT FRONTAGE	100 FT	482.70 FT	482.70 FT
SETBACKS			
FRONT YARD	30 FT	61.4 FT	61.4 FT
SIDE YARD (RIGHT)	20 FT	20.5 FT	20.5 FT
SIDE YARD (LEFT)	20 FT	80.0 FT	80.0 FT
FLOOR AREA RATIO	0.50	0.99 (9,488 sq.ft.)	0.12 (12,976 sq.ft.)
LOT COVERAGE	40.0%	8.5% (9,488 sq.ft.)	8.5% (9,488 sq.ft.)
PARKING (INDUSTRIAL USE)	10 EMPLOYEES 1 SPACE PER 1.3 EMPLOYEES ON LARGEST SHIFT	UNDEFINED PARKING AREAS	24 SPACES 12+1HC (FRONT) +11 (REAR) TRUCK/EMPLOYEE

AREA OF ADDED PAVEMENT = 4,282 SF
TOTAL AREA OF DISTURBANCE = 37,590 SF

LEGEND

EXISTING	PROPOSED
□	GRANITE BOUND FOUND
○	UTILITY POLE
○	GUY WIRE
○	GUY POLE
○	SIGN
○	POST
○	BOLLARD
○	DECIDUOUS TREE
○	CONIFEROUS TREE
—	UNDERGROUND GAS LINE
—	UNDERGROUND WATER LINE
—	UNDERGROUND ELECTRIC LINE
—	UNDERGROUND SEWER LINE
—	UNDERGROUND DRAIN LINE
○	SEWER MANHOLE (SMH)
○	SEWER CLEANOUT (CO)
○	DRAIN MANHOLE (DMH)
○	CATCH BASIN (CB)
○	GAS/WATER GATE
○	HYDRANT
○	BUSH
—	LOCUS PROPERTY LINE (±)
—	ADJOINERS PROPERTY LINE (±)
—	OVERHEAD WIRE
—	TREELINE
—	HISTORIC UTILITY LINE (G/W/E/S/D)
—	MAJOR CONTOUR LINE
—	MINOR CONTOUR LINE
—	FENCE
—	GUARD RAIL
—	PRECAST CONCRETE CURB
—	HANDICAP SPACE
—	MAILBOX
—	BORDERING VEGETATED WETLAND (BVW)
—	WETLAND FLAG
—	100' WETLAND BUFFER
—	MANHOLE

ABBREVIATIONS

BIT CONC	BITUMINOUS CONCRETE
CONC	CONCRETE
HDP	HIGH-DENSITY POLYETHYLENE
EOP	EDGE OF PAVEMENT
VCC	VERTICAL GRANITE CURB
PCC	PRECAST CONCRETE CURB
CCB	CAPE COD BERM
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
TYP	TYPICAL
CO	CLEAN OUT
RIM	RIM ELEVATION
INV	INVERT ELEVATION
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND REPLACE
HC	HANDICAP RAMP
VE	VERTICAL ELLIPTICAL
TC/BC	TOP OF CURB/BOTTOM OF CURB
TW	TOP OF WALL
TOS	TOP OF STAIRS
BOS	BOTTOM OF STAIRS
BW	BOTTOM OF WALL (SURFACE GRADE)
BS	BACK OF SIDEWALK
SSD	SUB SOIL DRAIN
LA	LANDSCAPE ARCHITECT
UD	UNDER DRAIN / SUB DRAIN
UGI	UNDERGROUND INFILTRATION
VF	VERIFY IN FIELD
OC	ON CENTER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 INCH = 20 FT.

ANYFENCE CO.

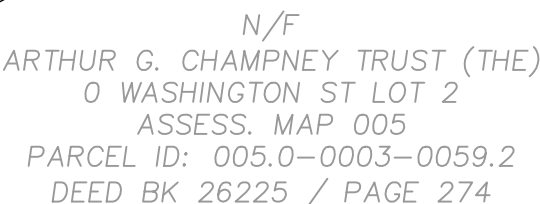
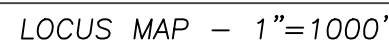
1485 WASHINGTON STREET
HOLLISTON, 01746 MA

CDW CONSULTANTS
Environmental and Civil Engineering

LAYOUT AND MATERIALS PLAN

C-2.0

SCALE: 1"= 20' PRJ. NO.: 2008.00



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GRADING AND DRAINAGE NOTES

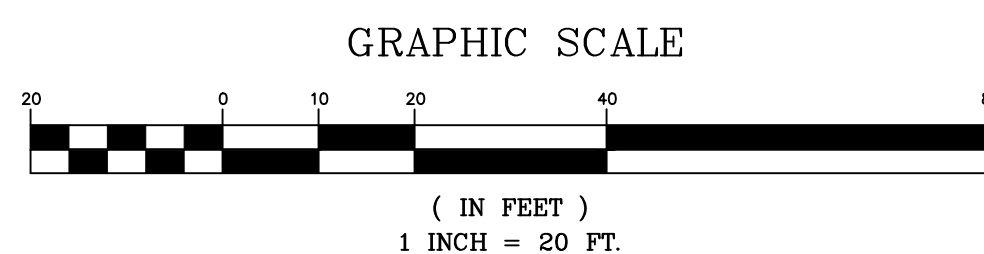
1. ALL SITE WORK SHALL MEET OR EXCEED THE SITE WORK SPECIFICATIONS PREPARED FOR THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND THE DESIGNER PRIOR TO ANY SITE WORK WHICH WOULD BE AFFECTED.
2. ALL DRAINAGE PIPES SHALL BE HDPE, EXCEPT WHERE NOTED OTHERWISE.
3. ALL EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
4. ALL SITE CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, AND THE TOWN OF HOLLISTON PUBLIC WORKS.
5. CONTRACTOR SHALL GRADE AND CONSTRUCT ALL ACCESSIBLE HANDICAP RAMPS IN ACCORDANCE WITH THE MASSACHUSETTS STATE CODE AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES (WHICHEVER IS MORE STRINGENT). SEE CONSTRUCTION DETAILS FOR SLOPE AND DIMENSIONAL REQUIREMENTS.
6. AN EROSION CONTROL BARRIER SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT AS SHOWN ON THE PLAN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OPERATIONS.
7. CONTRACTOR SHALL INSTALL SILT SACKS ON DOWN STREAM CATCH BASINS. PRIOR TO INSTALLING A SILT SACK THE CONTRACTOR SHALL CLEAN OUT THE SUMP OF THE CATCH BASIN.
8. ALL NEW CATCH BASINS TO BE PROVIDED WITH SILT SACKS FOR THE DURATION OF CONSTRUCTION ACTIVITIES.
9. THE CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE DESIGNER. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE OWNER AND ENGINEER FOR RESOLUTION.
10. CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO ORIGINAL CONDITION.
11. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
12. ALL UTILITY COVERS, GRATES, ETC. TO REMAIN SHALL BE ADJUSTED TO BE FLUSH WITH THE FINISH GRADE UNLESS OTHERWISE NOTED. RIM ELEVATIONS FOR STRUCTURES AND MANHOLES ARE APPROXIMATE.
13. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT, CURBS AND EARTHWORK SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
14. PITCH EVENLY BETWEEN SPOT GRADES. GRADE ALL AREAS TO DRAIN.
15. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PUDDLING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF THE FINISH SUBGRADE. PROVIDE TEMPORARY POSITIVE DRAINAGE AS REQUIRED.
16. EXISTING TREES AND SHRUBS OUTSIDE THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON PRIOR APPROVAL OF THE OWNER.
17. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL BARRIERS AFTER REVEGETATION OF DISTURBED AREAS AND AFTER APPROVAL OF THE DESIGNER AND OWNER. SEE ADDITIONAL EROSION CONTROL NOTES ON DEMOLITION & EROSION CONTROL SHEET C-1.0 AND DETAIL SHEET C-4.0.

SOIL TESTING INFORMATION

TEST PIT ID#	DATE	GROUND ELEV.	ESHW ELEVATION	HYDROLOGIC SOIL GROUP
TP-1	10/12/22	262.50±	257.29*	A (LOAMY SAND)
TP-2	2/13/22	264.00±	259.00	A (LOAMY SAND)

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		GRANITE BOUND FOUND	
		UTILITY POLE	
		GUY WIRE	
		GUY POLE	
		SIGN	
		POST	
		BOLLARD	
		DECIDUOUS TREE	
		CONIFEROUS TREE	
		UNDERGROUND GAS LINE	
		UNDERGROUND WATER LINE	
		UNDERGROUND ELECTRIC LINE	
		UNDERGROUND SEWER LINE	
		UNDERGROUND DRAIN LINE	
		SEWER MANHOLE (SMH)	
		SEWER CLEANOUT (CO)	
		DRAIN MANHOLE (DMH)	
		CATCH BASIN (CB)	
		GAS/WATER GATE	
		HYDRANT	
		BUSH	
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		HANDICAP SPACE	
		MAILBOX	
		BORDERING VEGETATED WETLAND (BVW)	
		WETLAND FLAG	
		100' WETLAND BUFFER	
		MANHOLE	

[illegible]

SEAL



DATE : 08/09/2022

DRAWN :	PS
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SCALE : 1" = 20'

ANYFENCE CO.

1485 WASHINGTON STREET
HOLLISTON, 01746 MA



GRADING AND DRAINAGE PLAN

C-3.0

SCALE: 1" = 20'	PRJ. NO: 2008.00
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GENERAL

- ## DEMARCATIION OF AREAS

- ## EROSION AND SEDIMENT CONTROL METHODS

- ## STABILIZATION PRACTICES

- ## STRUCTURAL PRACTICES

- ## GENERAL SITE MAINTENANCE

- ## INSPECTIONS

1. INSPECTIONS MUST BE CONDUCTED AT LEAST ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
2. INSPECTIONS MAY BE REDUCED TO ONCE A MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED OR IF THE GROUND SURFACE IS STABILIZED BY SNOW, ICE OR FROZEN GROUND.
3. INSPECTIONS MUST BE CONDUCTED BY A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICE OF EROSION AND SEDIMENT CONTROLS WHO POSSESSES THE SKILLS TO ASSESS CONDITION AT THE CONSTRUCTION SITE THAT COULD IMPACT STORM WATER QUALITY AND TO ASSESS THE EFFECTIVENESS OF ANY SEDIMENT AND EROSION CONTROL MEASURES SELECTED TO CONTROL THE QUALITY OF STORM WATER DISCHARGES FROM THE CONSTRUCTION ACTIVITY.
4. FOR EACH INSPECTION PERFORMED, AN INSPECTION REPORT MUST BE COMPLETED AND RETAINED AS PART OF THE SWPPP FOR AT LEAST THREE YEARS FROM THE DATE THAT PERMIT COVERAGE EXPIRES OR IS TERMINATED.

SEQUENCE OF CONSTRUCTION

1. THE CONTRACTOR SHALL PERFORM MAJOR SITE CONSTRUCTION ACTIVITIES IN A MANNER WHICH WILL INSURE THE STABILIZATION OF AREAS AS SOON AS POSSIBLE AS OUTLINED BELOW.
 - INSTALL EROSION CONTROL BARRIER ALONG AREAS TO BE DISTURBED
 - INSTALL CONSTRUCTION ENTRANCE(S)
 - SOIL STABILIZATION
 - CLEAR AND GRUB SITE
 - EXCAVATE AND CONSTRUCT STORM WATER MANAGEMENT BASINS
 - INSTALL UTILITIES
 - EXCAVATION AND GRADING FOR BUILDING SITE
 - INSTALL PAVEMENT BASE
 - FINAL GRADING AND SOIL TREATMENT WITH LOAM AND SEED
- ACCESS
1. ACCESS TO THE SITE SHALL BE MADE IN THE AREA OF A PERMANENT DRIVEWAY OR ROADWAY UNLESS DOING SO WOULD RESULT IN A TRAFFIC HAZARD.
 2. PRIOR TO CONSTRUCTION, AN AREA OF CRUSHED STONE SHALL BE PLACED AT THE DRIVEWAY ENTRANCE TO INSURE THAT MUD IS NOT TRACKED ONTO THE EXISTING ROAD (SEE CONSTRUCTION ENTRANCE). IF MUD IS INADVERTENTLY TRACKED ONTO THE ROAD IT SHOULD BE REMOVED BEFORE THE END OF THE WORK DAY.
 3. LABORERS VEHICLES SHALL BE PARKED IN A DESIGNATED AREA AS TO MINIMIZE DISTURBED SURFACES AND TO INSURE THAT RUTS ARE NOT CREATED AND WHICH COULD CARRY WATER TO A WETLAND OR SENSITIVE AREA.
 4. SUITABLE MEASURES SHALL BE TAKEN TO INSURE THAT LARGE DELIVERY TRUCKS SERVICING THE SITE DO NOT DAMAGE AREAS OF EXISTING VEGETATION OR CAUSE DISTURBANCE TO STABILIZED AREAS.

CLEARING

1. LAND CLEARING SHALL BE PERFORMED IN PHASES CONSISTENT WITH ACTUAL CONSTRUCTION REQUIREMENTS. FINAL LAND CLEARING SHALL BE LIMITED TO RETURN TO GRADE SLOPES.
2. TREES SHALL BE CUT AND STUMPS GROUND IN PLACE TO EXISTING GRADE TO MAINTAIN SOIL STABILIZATION.
3. BRUSH AND BRANCHES SHOULD BE CHIPPED AND UTILIZED FOR WOOD MULCH IF PRACTICAL.

GRUBBING AND STRIPPING

1. TOP SOIL SHALL BE RETAINED FOR LANDSCAPING PURPOSES.
2. GRUBBING AND STRIPPING OF STEEP SLOPES SHOULD NOT BE UNDERTAKEN DURING PERIODS OF INTENSE RAINFALL.
3. TOP SOIL SATURATED WITH WATER SHALL BE REMOVED AND CONTAINED PRIOR TO BEING USED.
4. DURING PERIODS OF INTENSE RAINFALL, OR IF THE PROJECT IS TO BE LEFT FOR A PERIOD OF TIME, CONSIDERATION SHOULD BE GIVEN TO SUPPLEMENT EXISTING EROSION CONTROL DEVICES WITH CRUSHED STONE OR ARMORED BARRIERS. CONSIDERATION SHOULD ALSO BE GIVEN TO DIVERTING RUNOFF INTO TEMPORARY SEDIMENTATION CONTROL AREAS.
5. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED.

ROUGH GRADING

1. THE ROUGH GRADING OF THE PAVEMENT AREAS SHALL FOLLOW STANDARD FILL AND EXCAVATION SEQUENCES, RESULTING IN SLOPES BEING MAINTAINED AS MUCH AS IS PRACTICAL.
2. DURING THIS PROCESS THE EROSION POTENTIAL IS HIGH AND SUFFICIENT EROSION CONTROL BARRIERS SHOULD BE KEPT ON SITE TO INSURE THAT NO SEDIMENT IS DISCHARGED FROM THE SITE.
3. IN EXTENSIVE AREAS OF CUT, OR WHEN TOES OF FILL COULD DIVERT WATER, METHODS SHOULD BE TAKEN TO DIVERT WATER AWAY FROM EXCAVATED OR FILLED AREAS.
4. STEEP SIDE SLOPES IN EXCAVATION OR FILL SHOULD BE AVOIDED AS MUCH AS IS PRACTICAL.
5. DISTURBED AREAS SHALL BE STABILIZED BY LOAMING AND SEEDING OR RUP RAPPED IMMEDIATELY AFTER THE FINISHED GRADE HAS BEEN MET. IF FINAL GRADING DOES NOT OCCUR DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED BY STRAW SECURED BY WEIGHTED SNOW FENCE, CHICKEN WIRE MESH OR JUTE MATTING WITH APPROPRIATE SECURING DEVICES.
6. A GROUND COVER SUFFICIENT TO RETAIN EROSION MUST BE PLANTED OR OTHERWISE PROVIDED WITHIN 30 WORKING DAYS, SEASON PERMITTING, ON ANY PORTION OF THE SITE UPON WHICH FURTHER ACTIVE CONSTRUCTION IS NOT BEING UNDERTAKEN.

DRAINAGE

1. DRAINAGE PIPES AND SWALES ARE TO BE CONSTRUCTED FROM THE DOWNSTREAM END UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF OUTFALL RIP RAP AND OTHER MITIGATION MEASURES SHOWN ON THE PLAN.
2. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION STRAW BALES OR OTHER SUITABLE METHODS TO ENTRAP SEDIMENT SHALL BE PLACED DOWNSTREAM.
3. THE TOE OF EMBANKMENTS SHALL BE STABILIZED IMMEDIATELY, MULCHED AND TACKED DOWN BY SUITABLE MEANS.
4. IF THE PROPOSED PAVED AREAS ARE NOT PAVED IMMEDIATELY AFTER THE INSTALLATION OF DRAINAGE STRUCTURES, STRAW BALE BARRIERS SHALL BE PLACED TO PROTECT THE INTEGRITY OF THE STRUCTURES.

LANDSCAPING

1. LANDSCAPING OF AREAS SHOULD OCCUR AS SOON AS POSSIBLE.
2. IF THE SEASON OR ADVERSE WEATHER CONDITIONS DO NOT PERMIT THE ESTABLISHMENT OF VEGETATION, TEMPORARY STRAW MULCH, OR OTHER MEANS OF STABILIZATION, SHALL BE PERFORMED.
3. THE USE OF HERBICIDES MAY BE SUBJECT TO LOCAL OR STATE REGULATIONS.
4. CARE SHOULD BE TAKEN WITH FERTILIZERS SUCH THAT THEY ARE NOT CARRIED TO A WETLAND OR SENSITIVE AREA.
5. TRUNKS OF TREES SHOULD NOT BE COVERED WITH MORE THAN TWO (2) INCHES OF SOIL.
6. STUMPS MAY BE GROUND DOWN INTO A WOOD MULCH AND UTILIZED OR REMOVED FROM THE SITE.

BUILDING CONSTRUCTION

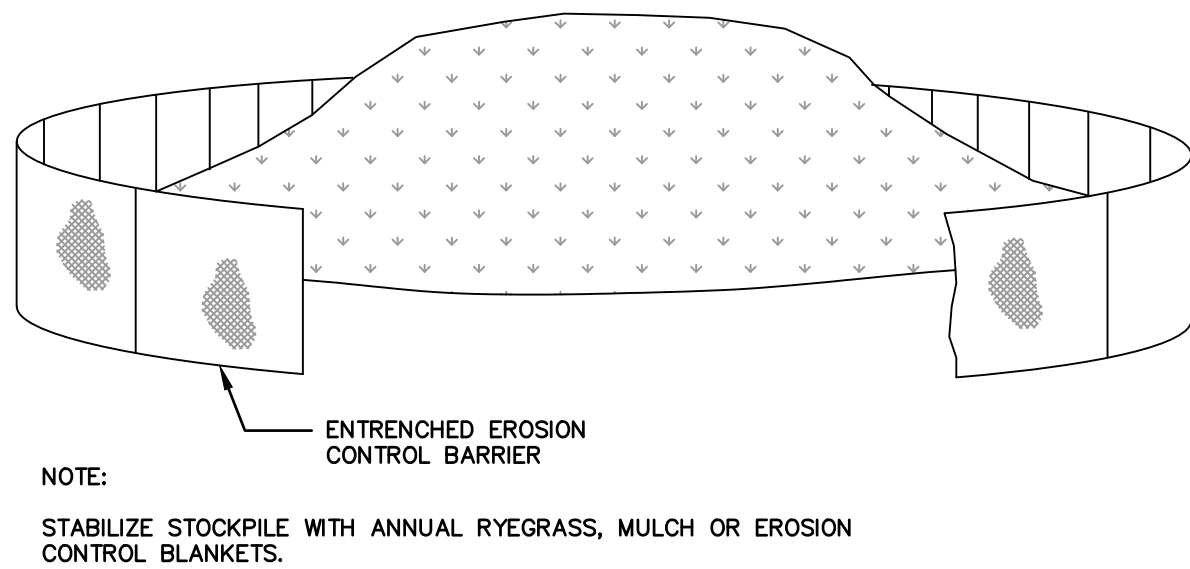
1. DURING BUILDING CONSTRUCTION MATERIALS SHALL BE STOCKPILED IN A MANNER AS TO NOT DIVERT OR CONCENTRATE RUNOFF IN ORDER TO PREVENT THE TRANSPORTATION OF SEDIMENT.
2. THE LOT SHOULD BE KEPT LITTER FREE.
3. NO FUELS, SOLVENTS, PAINTS, ETC. SHALL BE STORED ON SITE. THESE PRODUCTS SHALL BE REMOVED FROM THE SITE EACH EVENING AND RETURNED THE FOLLOWING DAY.
4. BURIAL OF CONSTRUCTION DEBRIS AND RELATED MATERIALS IS PROHIBITED.
5. PLASTERERS AND PAINTERS SHALL BE INFORMED THAT THE DISCHARGE OF LIQUIDS INTO A THE DRAINAGE SYSTEM OR WETLAND OR OTHER RESOURCE AREA IS PROHIBITED.

CREATION OF STORMWATER BASINS

1. THE PRIMARY EROSION CONTROL METHOD FOR BASIN CONSTRUCTION, AS WELL AS THE SITE, IS THE RAPID STABILIZATION OF ALL SURFACES. SECONDARY IMPORTANCE IS TO AVOID CONCENTRATION OF RUNOFF IN ORDER TO PREVENT THE TRANSPORTATION OF SEDIMENT.
2. DURING CONSTRUCTION, THE FILL AND EXCAVATION SEQUENCES SHOWN ON THIS PLAN SHOULD BE UTILIZED. THESE SEQUENCES REQUIRE THAT SLOPED AREAS LEFT FOR ANY PERIOD OF TIME SHALL NOT BE SLOPED TOWARDS THE WETLAND OR SENSITIVE AREA, BUT RATHER BACK INTO THE FILL MATERIAL.
3. THE BASIN BERM IS TO BE CONSTRUCTED BY EQUIPMENT WORKING ON STABLE MATERIAL ONLY. EROSION CONTROL BARRIERS SHALL BE PLACED AT THE TOE OF SLOPE UNTIL SURFACES ARE STABILIZED.
4. NO EXCAVATION WITHIN THE BASIN SHALL COMMENCE UNTIL THE BERM IS IN PLACE.
5. CARE SHOULD BE TAKEN TO INSURE THAT ORGANIC MATERIAL REMOVED FROM THE BASIN AREA IS RESERVED FOR FINISH GRADING AND THE STABILIZATION OF DISTURBED AREAS.
7. IF DEWATERING IS NECESSARY, PUMPING TO A SETTLING BASIN SHALL BE PERMITTED IF THE BASIN IS CONSTRUCTED, MAINTAINED AND OPERATED EFFECTIVELY.
8. ADDITIONAL NOTES REGARDING THE STORMWATER BASIN CONSTRUCTION ARE SHOWN ON THE BASIN CONSTRUCTION DETAILS.
9. DURING THE CONSTRUCTION PHASE OF THIS PROJECT, STORM WATER BASINS MAY BE USED AS A SEDIMENTATION AREAS. TO ACCOMMODATE THIS DUAL USE, DURING CONSTRUCTION THE FOLLOWING MEASURES SHALL BE USED:
 - DURING CONSTRUCTION THE BASIN SHALL BE EXCAVATED TO A DEPTH OF SIX-INCHES ABOVE FINAL GRADE. WHEN THE SITE IS STABILIZED, THE BASIN SHALL BE EXCAVATED TO THE FINISHED GRADES SHOWN ON THE DESIGN PLANS. THIS WILL ALLOW THE ORIGINAL SOIL TO REMAIN IN PLACE WITHOUT BEING DISTURBED OR CLOGGED WITH SILT TO PROVIDE FOR MAXIMUM INFILTRATION FOLLOWING THE COMPLETION OF THE BASIN CONSTRUCTION.
 - A TEMPORARY SILT FENCE BAFFLE SHALL BE INSTALLED IN THE LOCATION OF THE FOREBAY CHECK DAM, OR OTHER APPLICABLE LOCATION, TO PROMOTE THE SEDIMENTATION OF FINE PARTICULATE MATTER. ALTERNATIVELY A PERMANENT FOREBAY CHECK DAM WRAPPED IN FILTER FABRIC MAY BE USED IN LIEU OF THE SILT FENCE BAFFLE.
 - SILT ELEVATION POLES SHALL BE DRIVEN VERTICALLY INTO THE BASIN BOTTOM SO THAT THE ELEVATION OF THE BASIN BOTTOM AND MAXIMUM SILT LEVEL CAN BE MARKED ON IT AND READ FROM THE BASIN PERIMETER.
 - UPON FINAL STABILIZATION OF AREAS DRAINING TO THE STORMWATER BASIN THE SILT FENCE BAFFLE WILL BE REMOVED WITH A PERMANENT FOREBAY CHECK DAM, ANY TEMPORARY FILTER FABRIC REMOVED, AND THE BASIN INTERIOR AND EXTERIOR SIDE SLOPES SHALL BE RE-GRADED AS NECESSARY TO CONFORM TO THE PROPOSED GRADES, ALL SILT SHALL BE REMOVED, AND ALL AREAS RE-STABILIZED AS REQUIRED.

CATCH BASINS AND DRAIN INLETS

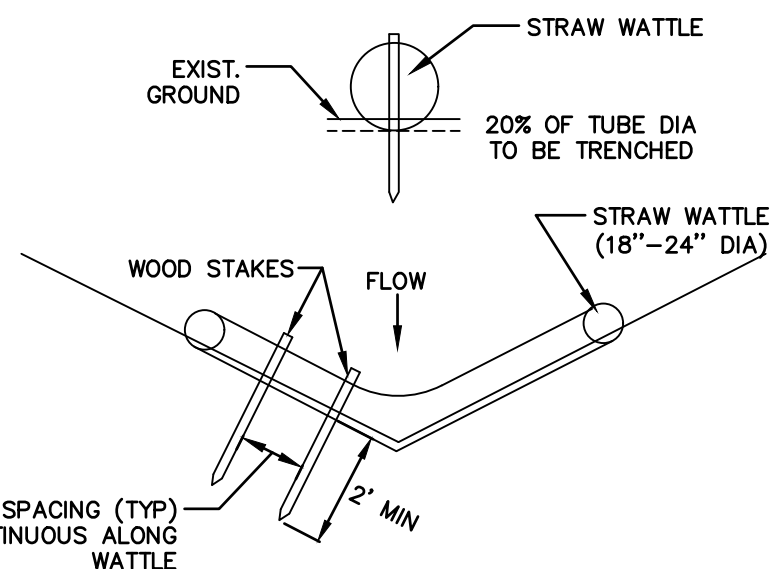
1. ALL CATCH BASINS AND DRAINAGE INLETS SHALL BE PROTECTED BY STRAWBALE SILT DAMS UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED IN ALL AREAS TRIBUTARY TO THE STRUCTURE.
2. SILT SACKS SHALL BE INSTALLED IN ALL CATCH BASINS AND MAINTAINED UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED IN ALL AREAS TRIBUTARY TO THE STRUCTURE.
3. SEDIMENT SHALL BE ALLOWED TO ACCUMULATE IN THE SUMPS OF CATCH BASINS TO A DEPTH NO GREATER THAN SIX (6) INCHES.



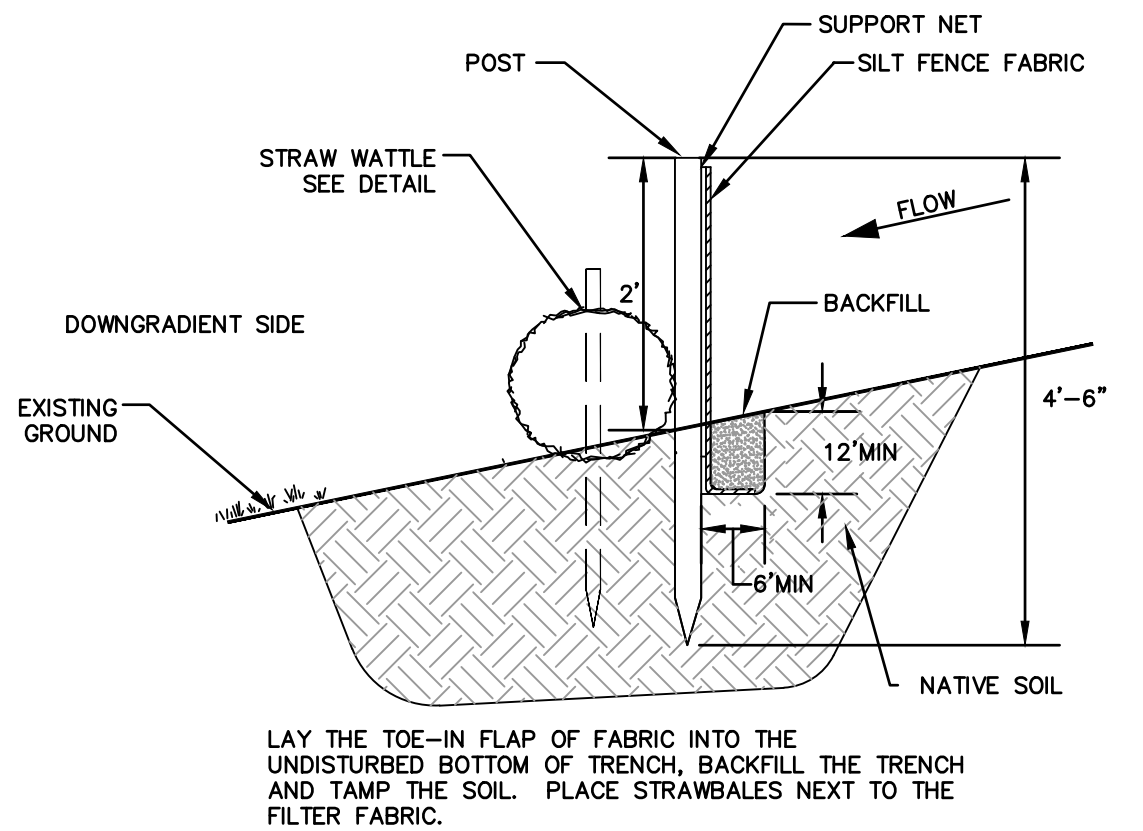
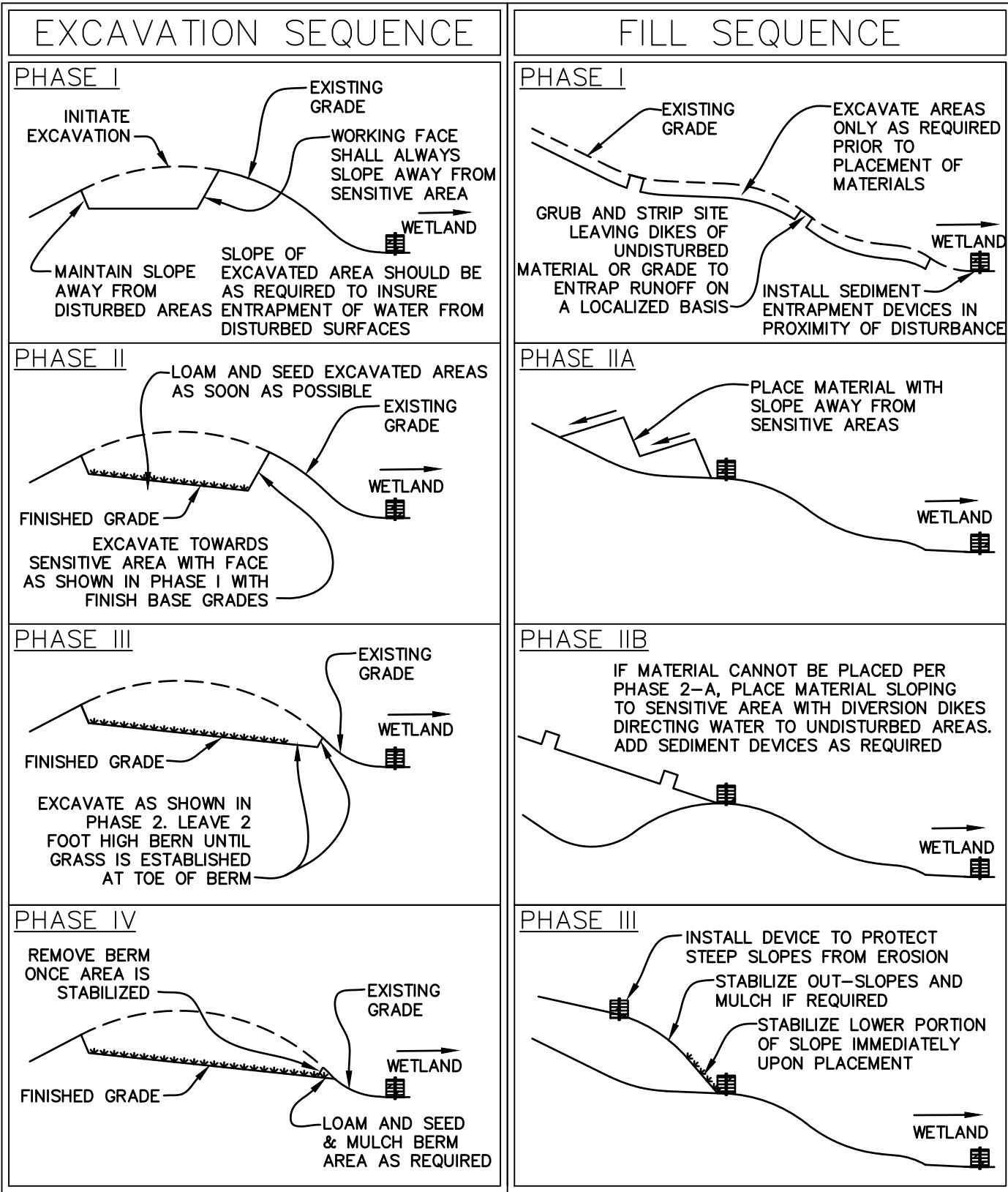
1 SOIL STOCKPILE - EROSION CONTROL

- NOTES:
1. STRAW WALLS MUST MEET THE CRITERIA OUTLINED IN THE SPECIFICATIONS BEFORE BEING UTILIZED AND BE FREE FROM DEFECTS OR TRANSPORTATION DAMAGE.
2. PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE WALLS ARE IN COMPLETE CONTACT WITH UNDERLYING SOIL. SEDIMENT TUBES ARE TO BE 18"-24" IN DIAMETER AND ARE TO BE TRENCED 3 TO 5 INCHES.
3. WALLS ARE TO BE INSTALLED PERPENDICULAR TO WATER FLOW.
4. THE WALLS SHALL BE STAKED DOWN WITH 1 INCH BY 1 INCH WOOD STAKES OR 1.25 LBS/LINEAR FOOT STEEL POSTS EVERY 3 TO 4 FEET ALONG ITS LENGTH. THE STAKES SHALL BE A MINIMUM OF 2 FEET INTO THE GROUND LEAVING LESS THAN 6 INCHES OF THE STAKE ABOVE THE GROUND SURFACE. REFER TO THE MANUFACTURERS RECOMMENDATIONS FOR OTHER STAKING DETAILS.
5. SELECT PROPER LENGTH OF WALLS TO MINIMIZE THE NUMBER NEEDED TO SPAN THE WIDTH OF AREA. IF NECESSARY, WALLS CAN BE LAPPED A MINIMUM OF 6 INCHES TO PREVENT PASSAGE OF FLOW AND SEDIMENT THROUGH FIELD JOINT.
7. INSTALL WALLS FOR DITCH CHECKS OVER BARE SOIL, MULCHED AREAS, OR EROSION CONTROL. TO KEEP WALLS FOR DITCH CHECKS IN PLACE UNTIL FULLY ESTABLISHED VEGETATION AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.
8. REMOVE AND/OR REPLACE INSTALLED WALLS AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS. REMOVE WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS DETERMINED BY THE ENGINEER, INSPECTOR, OR MANUFACTURERS REPRESENTATIVE. GATHER REMOVED MATERIAL IN REUSE OR RECYCLE DEGRADABLE NEXT MATERIAL.
10. PRIOR TO FINAL STABILIZATION, BACKFILL ALL TRENCHES, DEPRESSIONS, AND OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE WALLS.

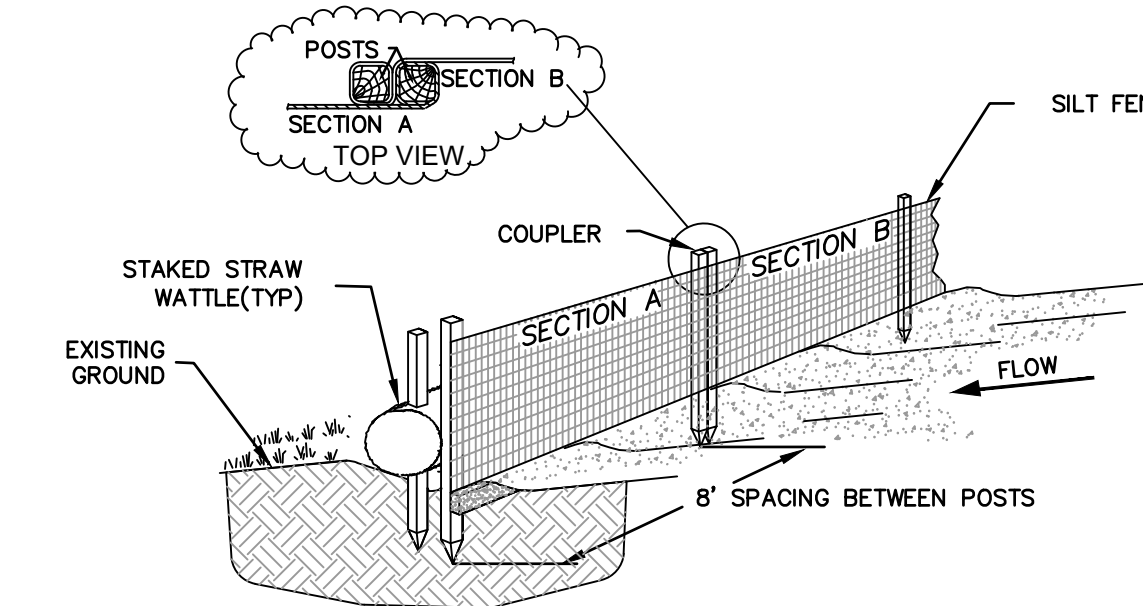
SLOPE	ON SLOPE SPACING (FT)	MIN DIAMETER (INCH)
<6:1	50	12
6:1 – 4:1	25	20
4:1 – 2:1	20	20
2:1 – 1:1	10	20
>1:1	5	20



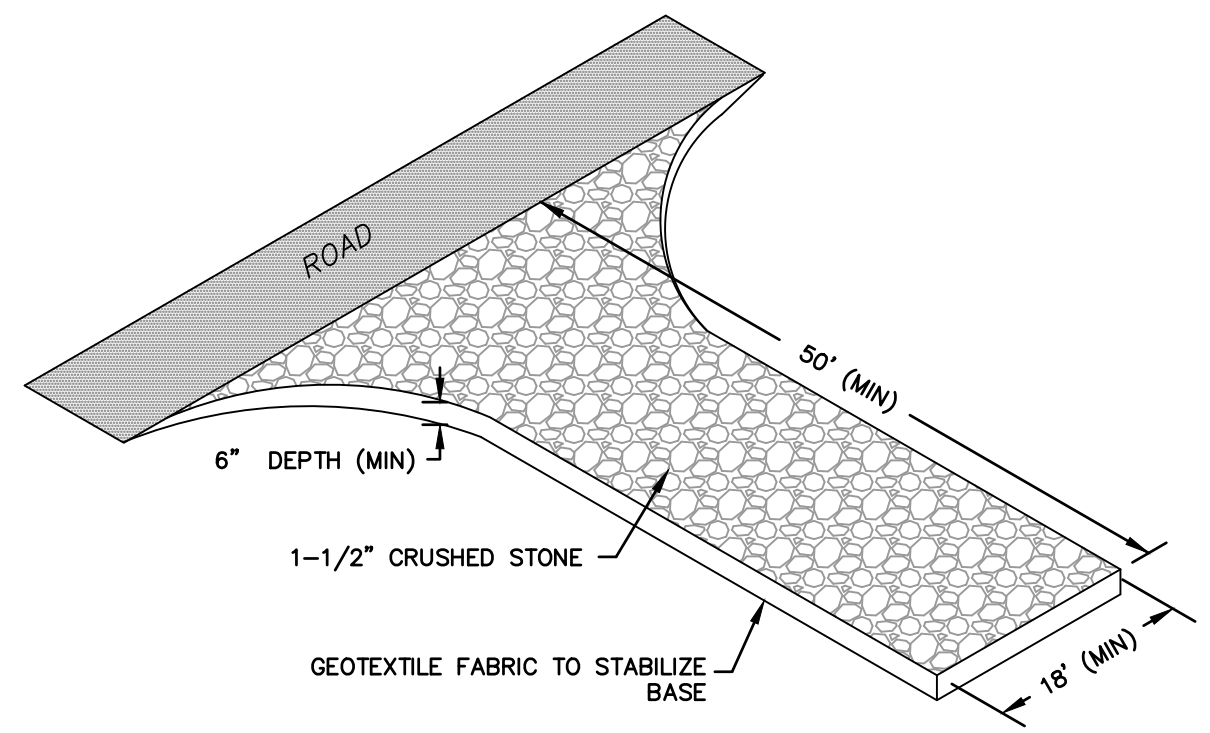
2 EROSION CONTROL BARRIER, STRAW WATTLES (TYP)
(NOT TO SCALE)



TOE-IN METHODS



3 EROSION CONTROL BARRIER - STRAWBALE/SILTFENCE
(NOT TO SCALE)



4 CONSTRUCTION ENTRANCE / EXIT PAD
(NOT TO SCALE)

[illegible]

SEAL



DATE :	08/09/2022
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SCALE :	AS SHOWN

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1485 WASHINGTON STREET
HOLLISTON, 01746 MA



CONSTRUCTION DETAILS

C-4.0

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1. INSTALL SILT SACK IN EXISTING CATCH BASINS, BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL BINDER COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. REMOVE CATCH BASIN GRATE AND INSTALL POLYPROPYLENE FABRIC OVER CATCH BASIN FRAME. REPLACE CATCH BASIN GRATE TO SECURE POLYPROPYLENE FABRIC IN PLACE, GRATE TO BE PLACED OVER SILT SACK.
3. INSTALL CATCH BASIN INLET PROTECTION PER MANUFACTURER'S SPECIFICATIONS.
4. LENGTH AND WIDTH WILL BE MANUFACTURED TO FIT THE OPENING OF THE CATCH BASIN OR DROP INLET.
5. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED. REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND WASH DOWN EAST SIDE OF CATCH BASIN INLET. REMOVE ALL ACCUMULATED WASH WATER FROM THE CONTAINMENT AREA OF THE CATCH BASIN INLET PROTECTION SACK AS NEEDED.

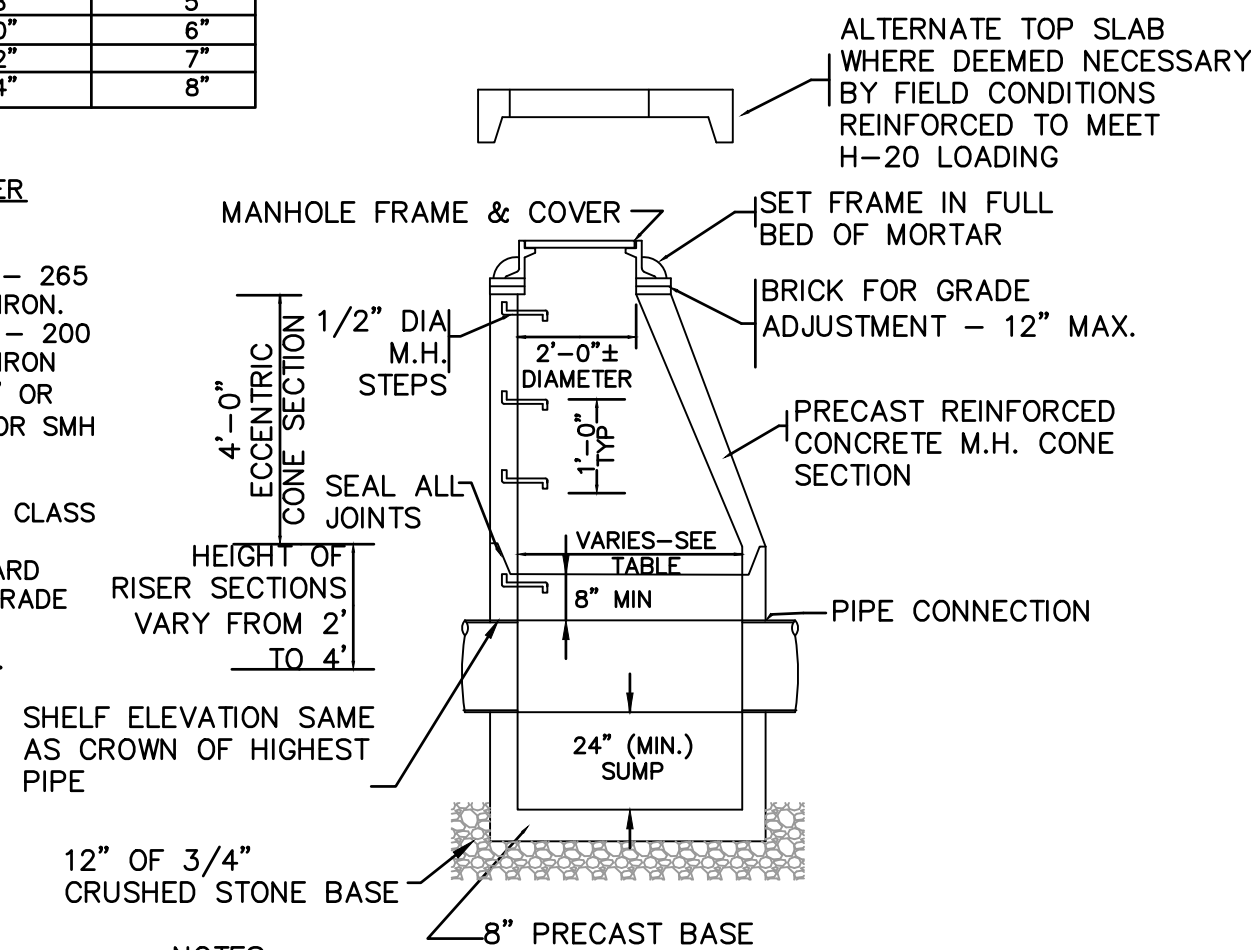
1 CATCH BASIN INLET PROTECTION



PIPE SIZE	MANHOLE DIAMETER	WALL THICKNESS
≤ 21"	48"	5"
24"–27"	60"	6"
30"–36"	72"	7"
42"–48"	84"	8"

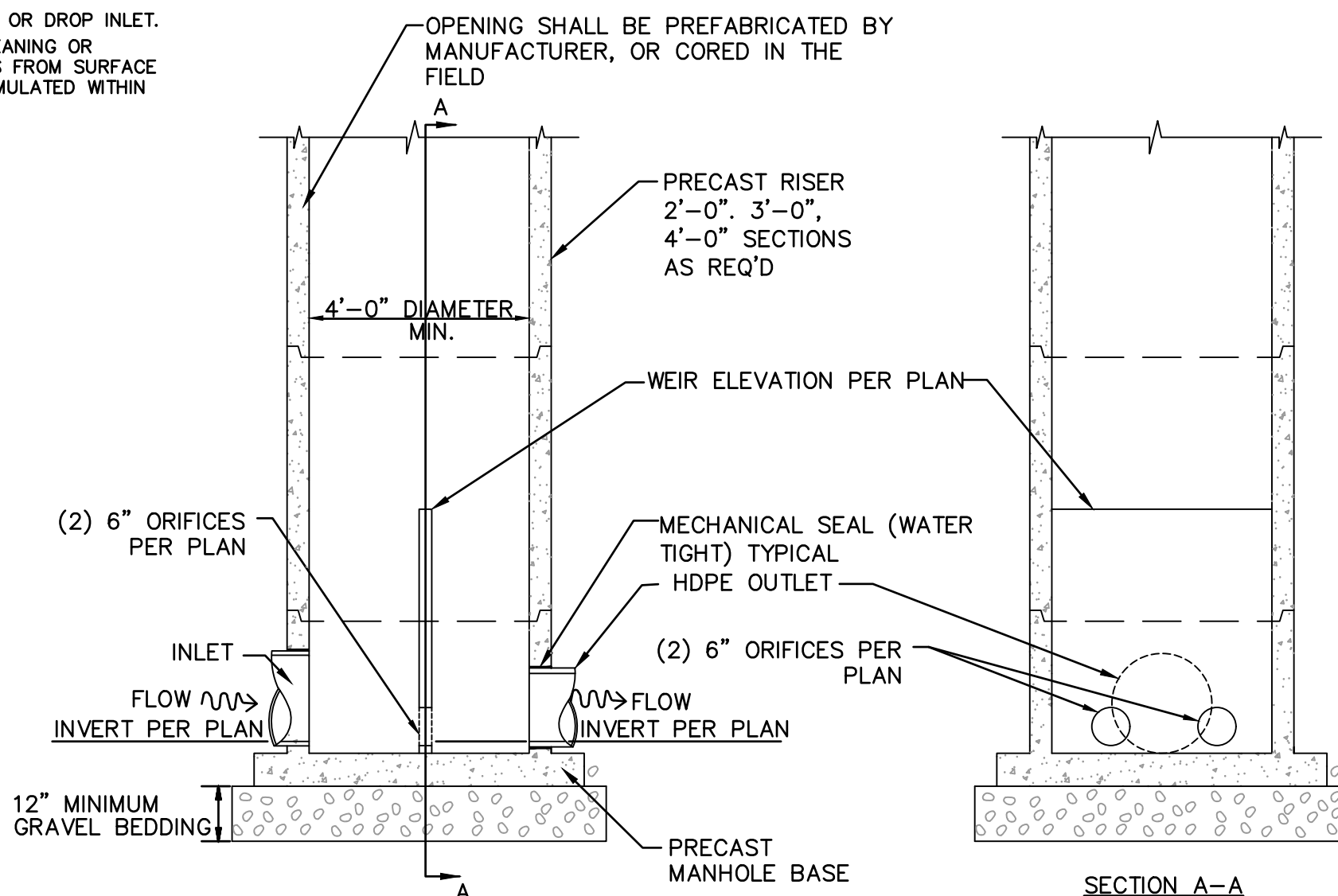
MANHOLE FRAME AND COVER
NOTES:

1. MINIMUM FRAME WEIGHT - 265 LBS, MATERIAL - CAST IRON.
2. MINIMUM COVER WEIGHT - 200 LBS, MATERIAL - CAST IRON WITH THE WORD "SEWER" OR "DRAIN" CAST INTO IT FOR SMH OR DMH RESPECTIVELY.
3. ALL CAST IRON SHALL CONFORM TO ASTM A48, CLASS 30.
4. ALL BRICK SHALL BE HARD RED BRICK ASTM C32, GRADE SS, ADJUSTMENT - 12" MAX.



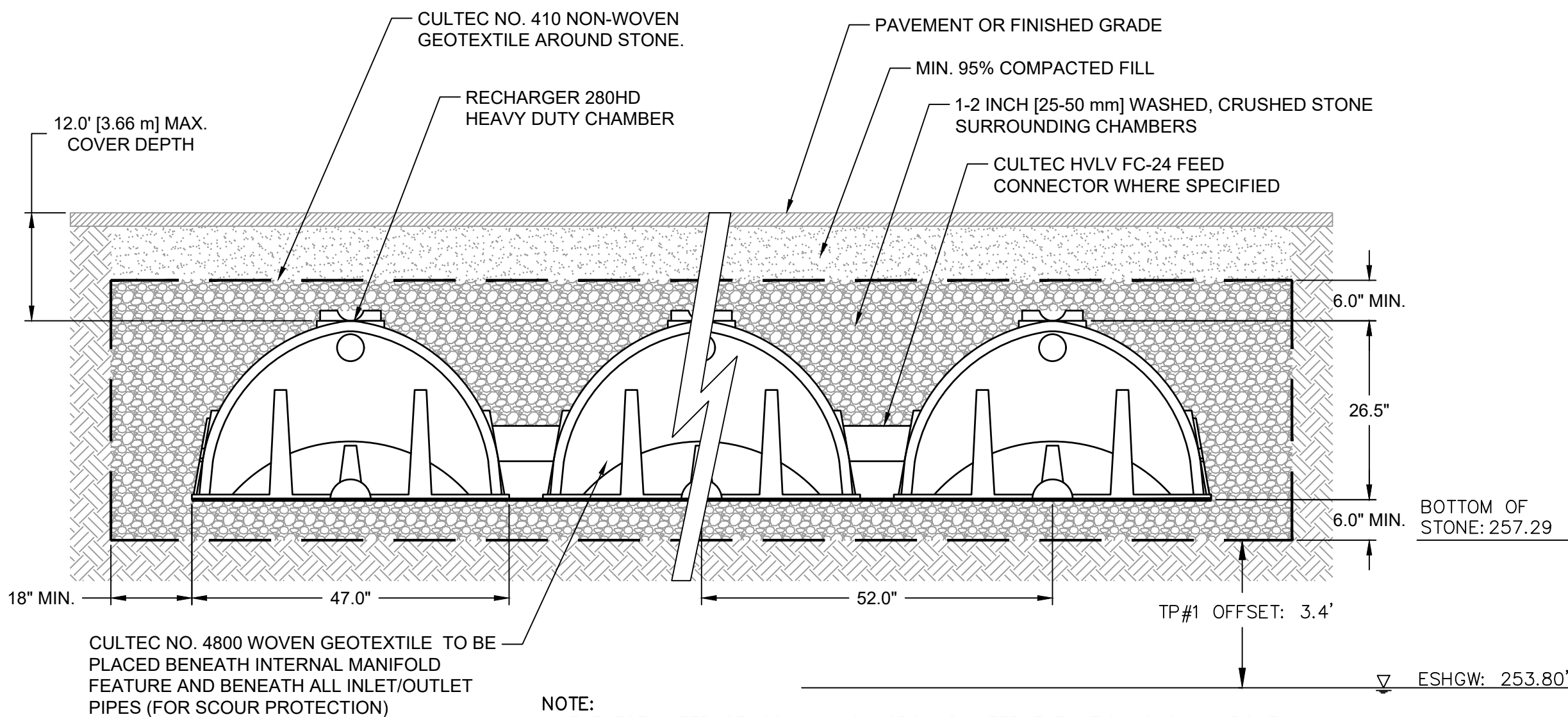
- NOTES:
1. STRUCTURE DESIGN TO LATEST ASTM C478.
 2. REINFORCING STEEL CONFORMS TO LATEST ASTM A 185.
 3. CONCRETE COMPRESSIVE STRENGTH - 4,000 PSI @ 28 DAYS.
 4. PRECAST SECTIONS TO BE H=20 LOADING.
 5. ONE POUR MONOLITHIC BASE.
 6. MANHOLES WITH MULTIPLE INCOMING PIPES MAY REQUIRE A LARGER DIAMETER STRUCTURE.

2 PRECAST CONCRETE DRAIN MANHOLE
(NOT TO SCALE)



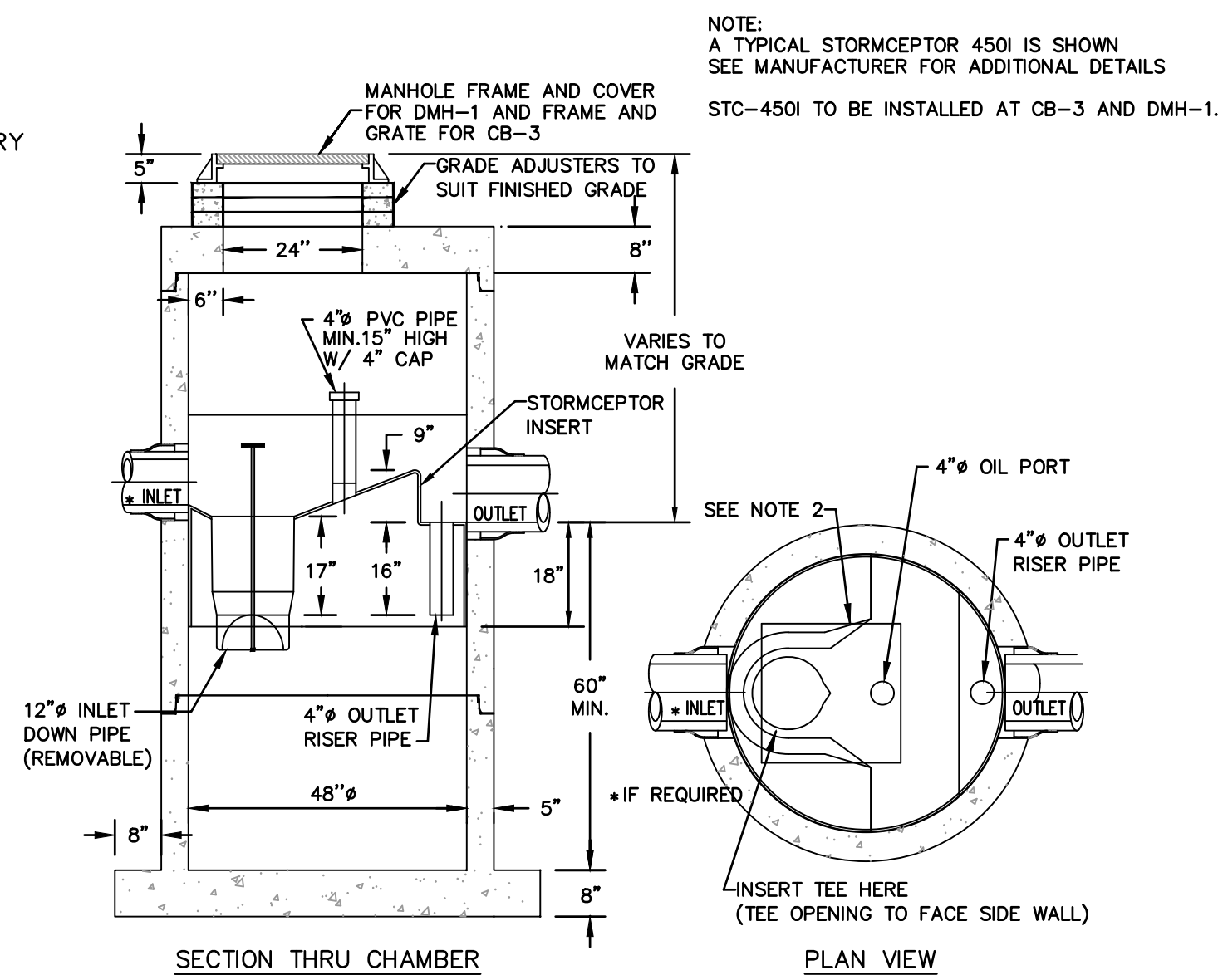
6 MANHOLE W/OUTLET CONTROL STRUCTURE (OCS-1)
(NOT TO SCALE)

- *NOTES:
1. SEE DRAINAGE SHEET C-3.0 FOR OCS STRUCTURE INVERT AND ORIFICE ELEVATIONS.

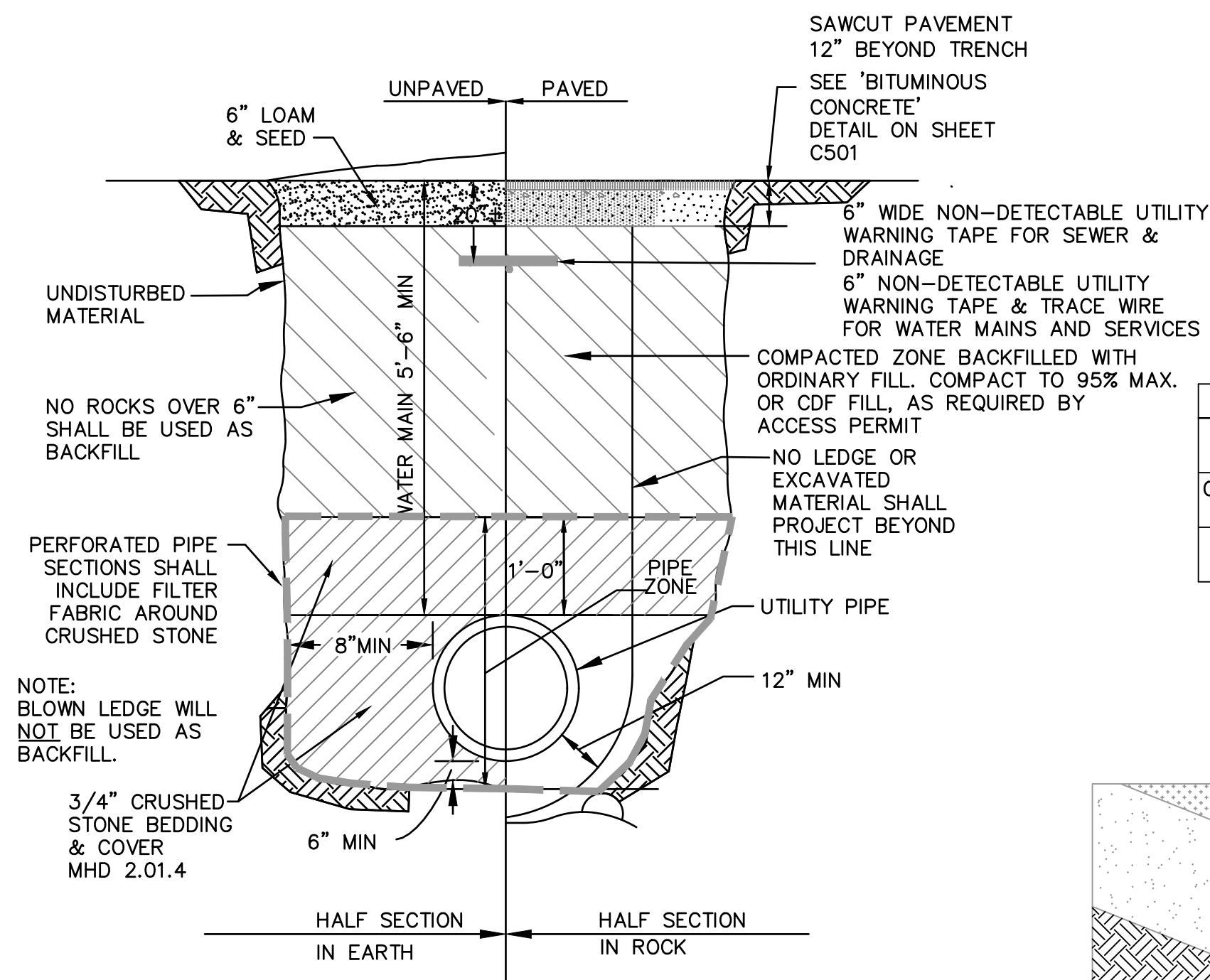


- NOTE:
1. THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION SHOWN ABOVE
CORRESPOND TO THE BOTTOM OF THE TEST PIT PERFORMED ON OCTOBER 12, 2022
AS NO SIGNS OF GROUNDWATER, WEEPING, OR OTHER INDICATORS WERE OBSERVED.

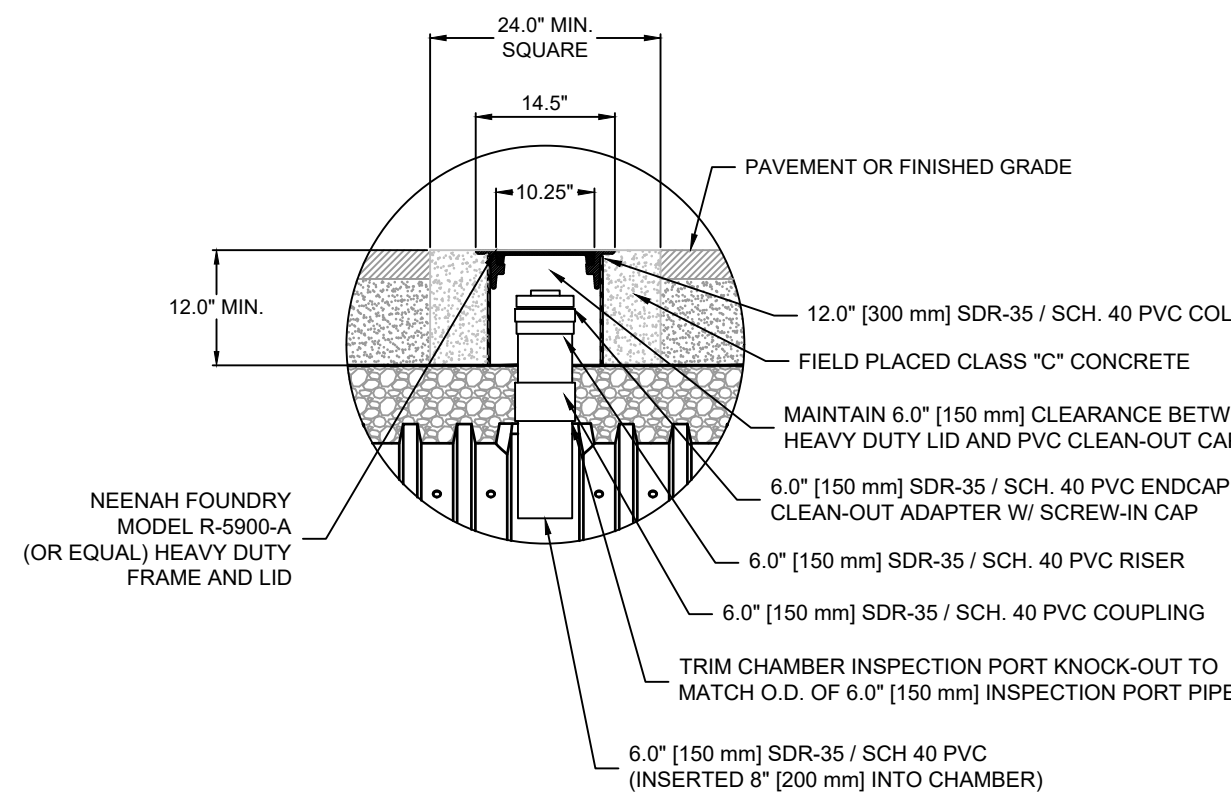
9 CULTEC R-280HD (UGI-1)
(NOT TO SCALE)



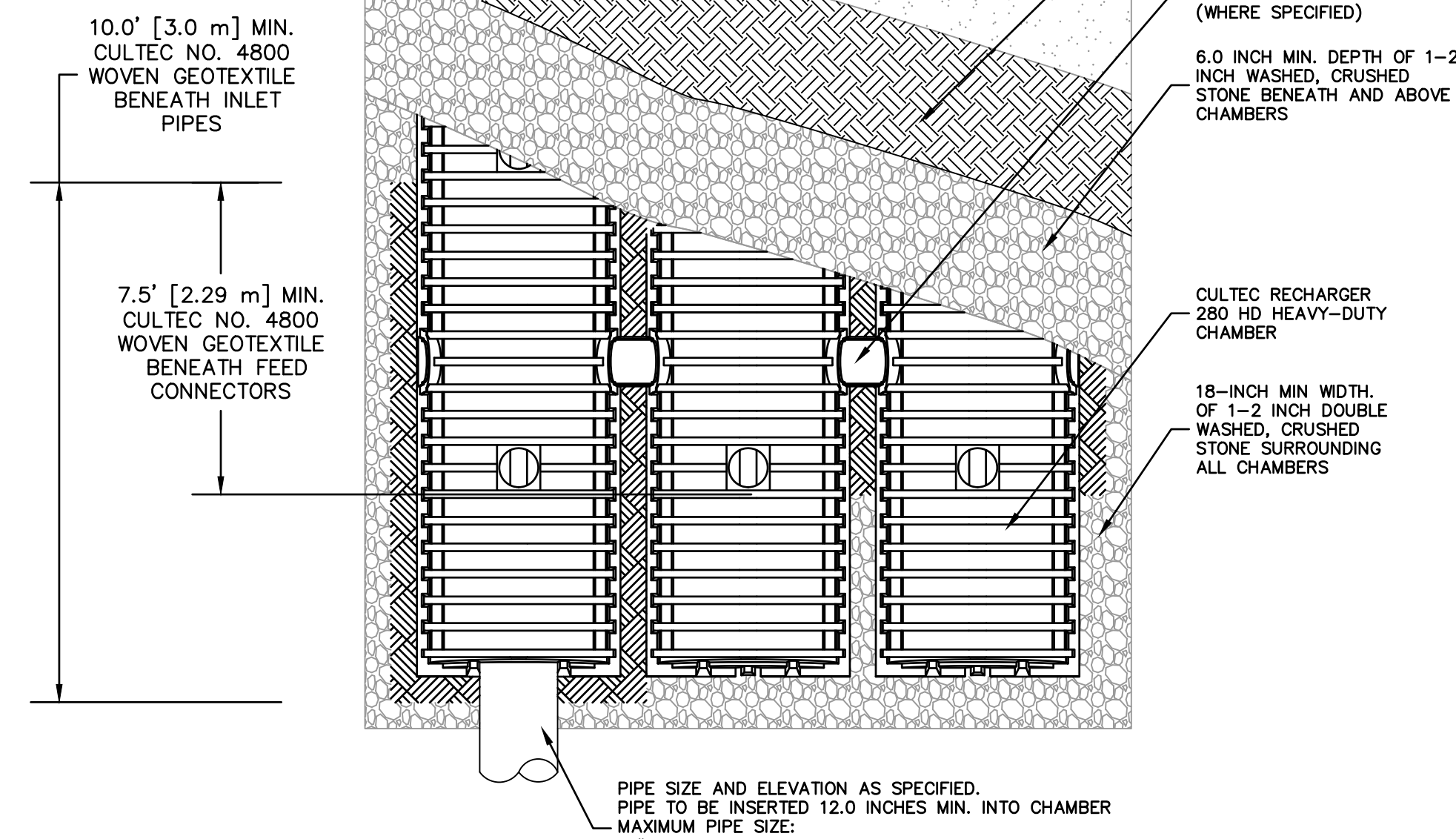
3 WATER QUALITY STRUCTURE (WQS) STC-450i
(NOT TO SCALE)



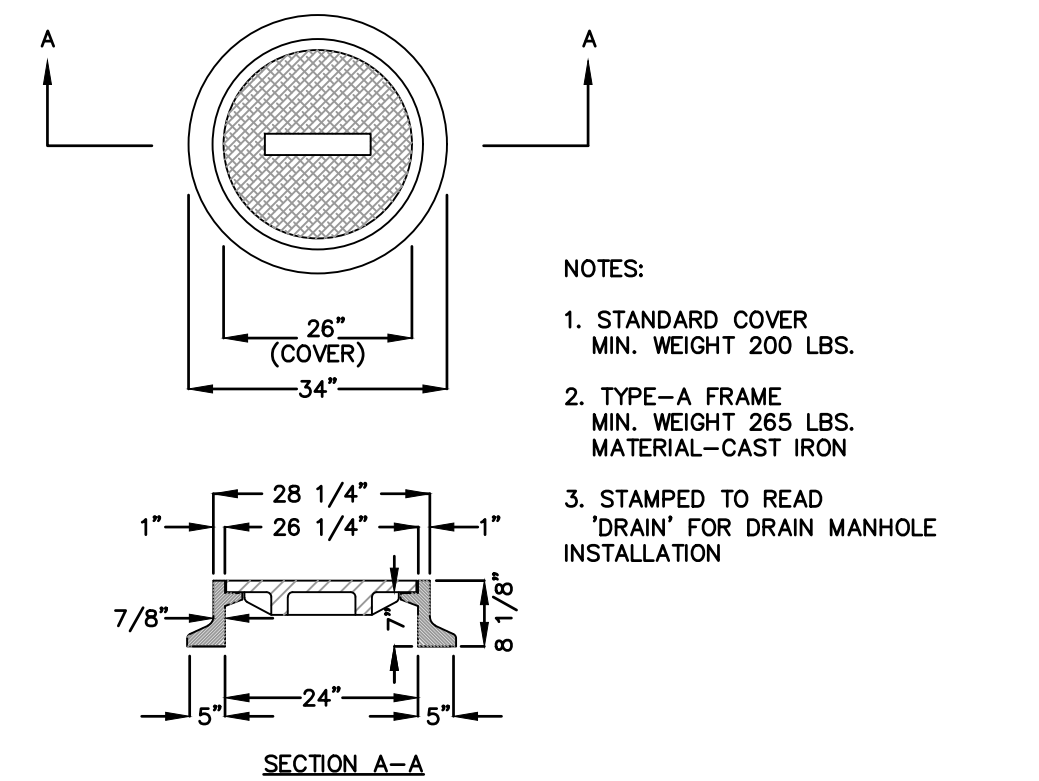
7 TYPICAL PIPE IN TRENCH
(NOT TO SCALE)



10 CULTEC R-280HD INSPECTION PORT
(NOT TO SCALE)

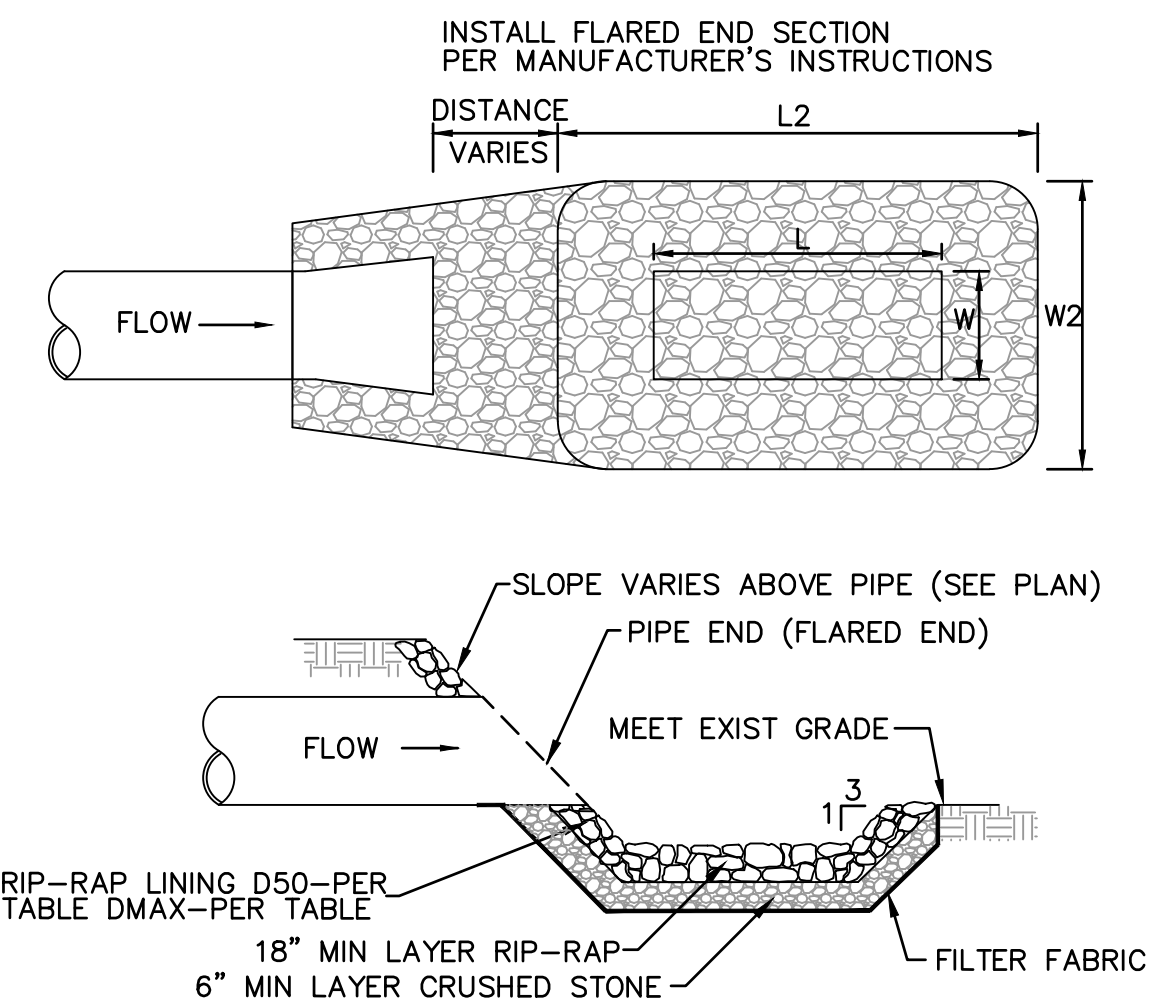


11 CULTEC R-280HD W/ISOLATOR ROW PLAN VIEW
(NOT TO SCALE)



4 STANDARD DRAIN MANHOLE FRAME AND COVER

- NOTES:
1. STANDARD COVER
MIN. WEIGHT 200 LBS.
 2. TYPE-A FRAME
MIN. WEIGHT 265 LBS.
MATERIAL-CAST IRON
 3. STAMPED TO READ
'DRAIN' FOR DRAIN MANHOLE
INSTALLATION



	L	L2	W	W2	Y	D50	DMAX
OUTLET UGI-1 (FRONT PARKING)	2.5'	3.8'	1.7'	2.9'	5"	3"	12"
OUTLET UGI-2 (REAR PARKING/STORAGE)	3'	4.5'	2'	3.5'	6"	3"	12"
WAREHOUSE DOWNSPOUTS (3)	1.5'	2.3'	1'	1.8'	3"	0.5"	12"

8 RIP-RAP IMPACT BASIN
(NOT TO SCALE)



DATE :	08/09/2022
DRAWN :	PS
SCALE :	AS SHOWN

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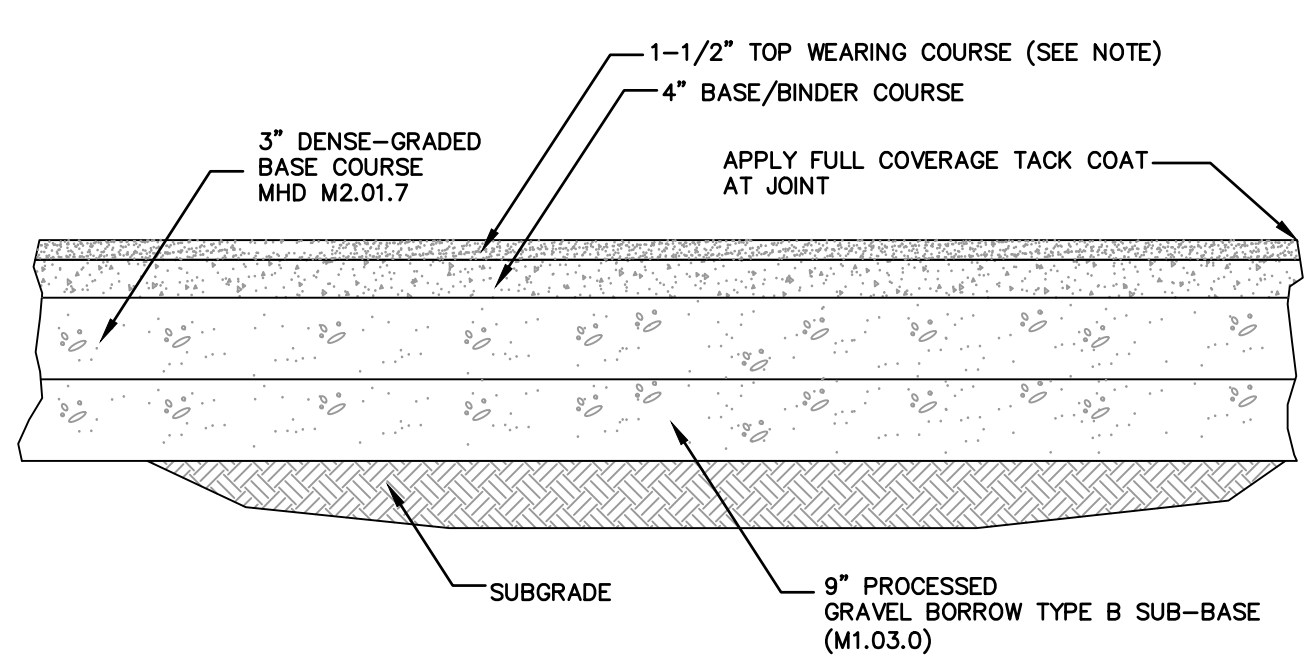
1485 WASHINGTON STREET
HOLLISTON, 01746 MA



CONSTRUCTION DETAILS

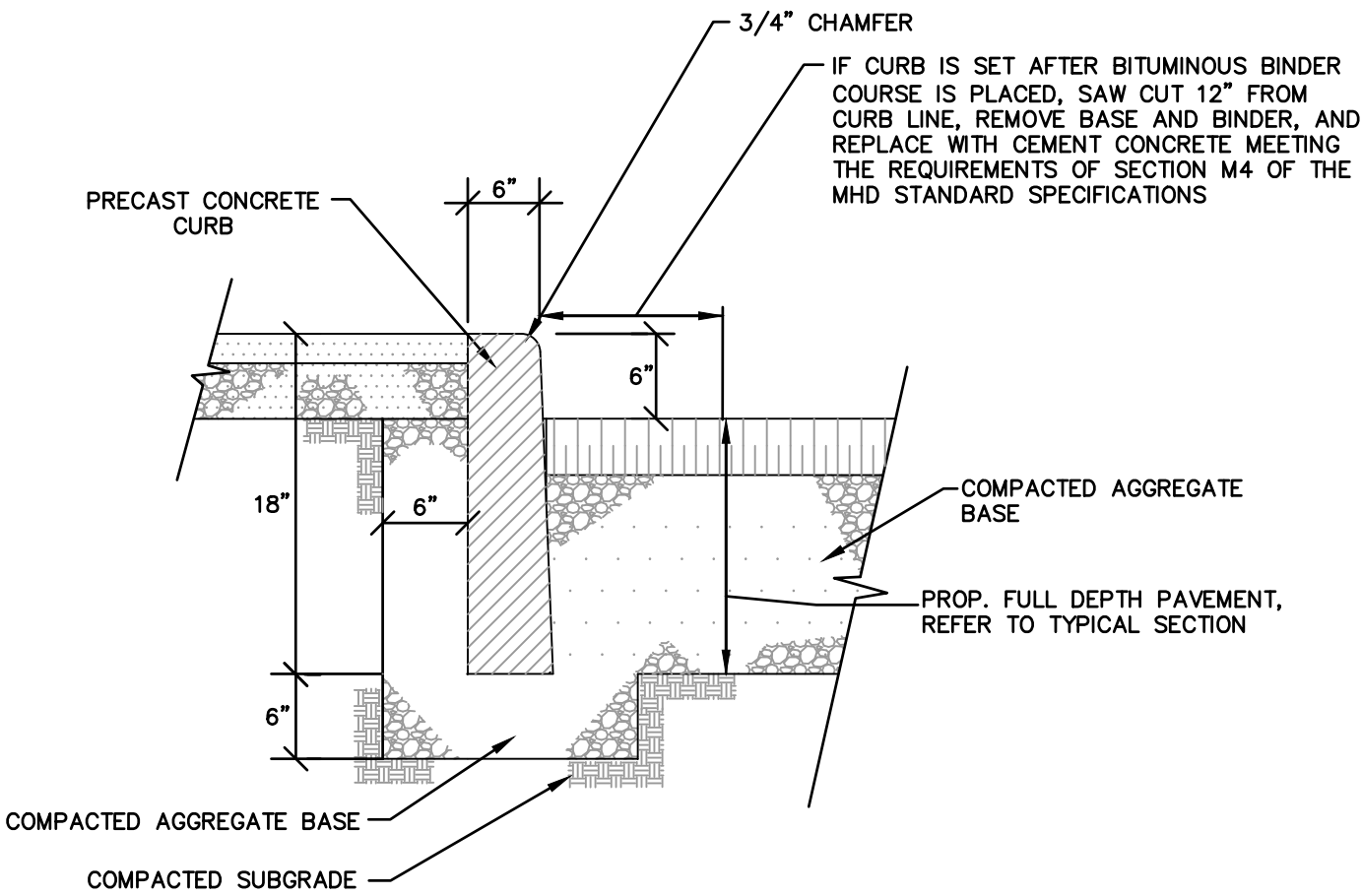
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SCALE: NTS	PRJ. NO: 2008.00
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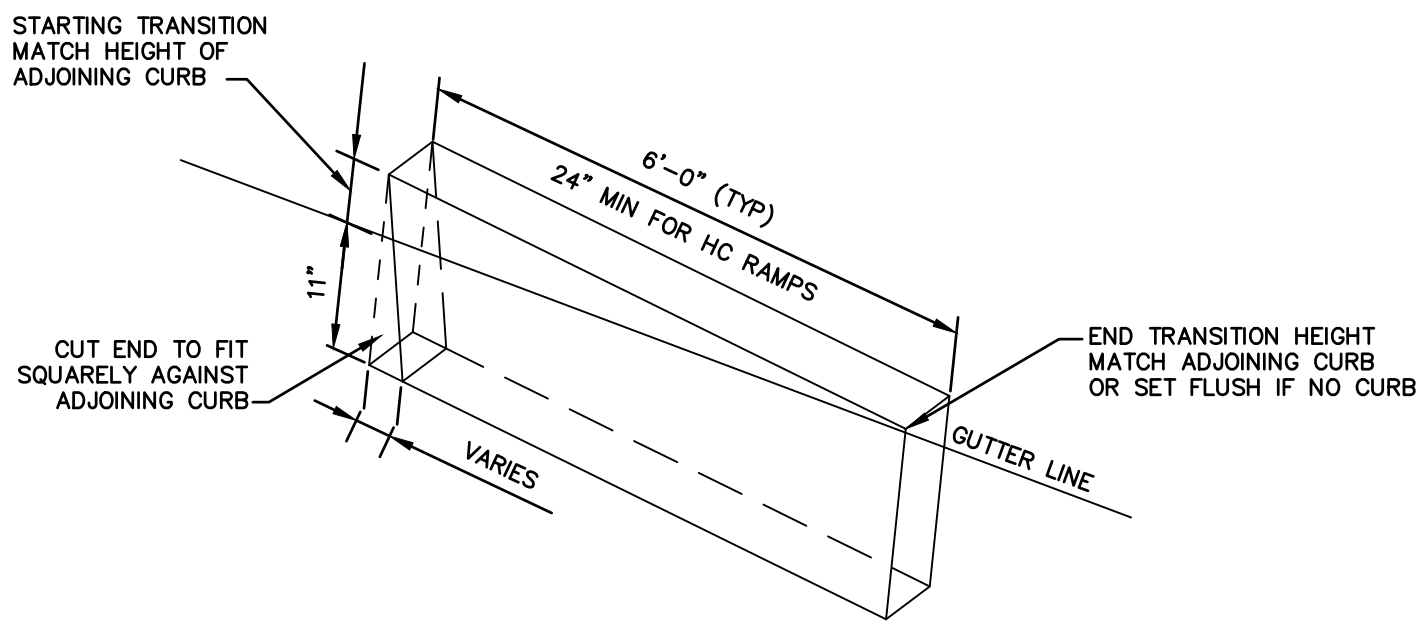


NOTE:
ALL ORGANIC SOILS AND DEAD TREE ROOTS TO BE REMOVED PRIOR TO PLACING NEW PAVEMENT.

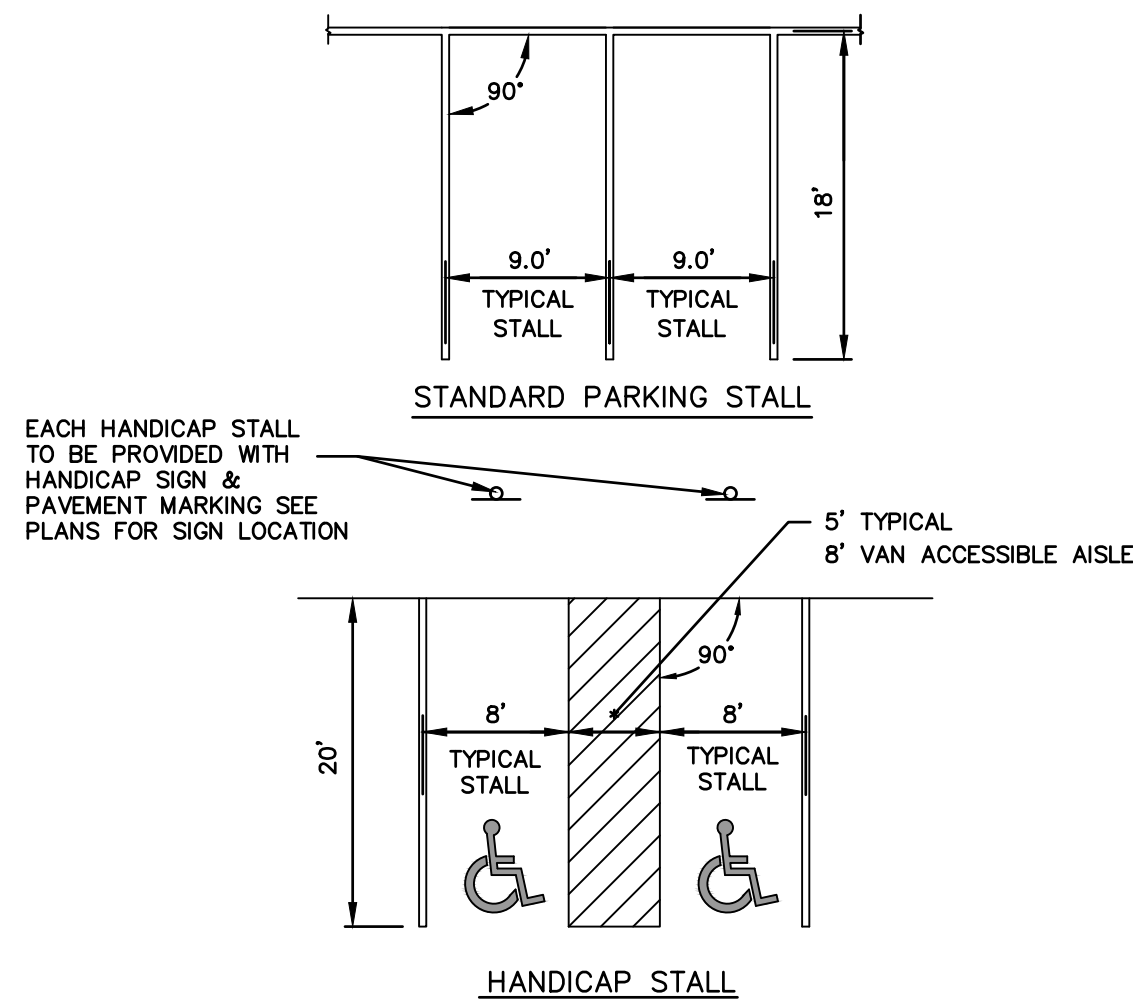
1 BITUMINOUS CONCRETE PAVEMENT
(NOT TO SCALE)



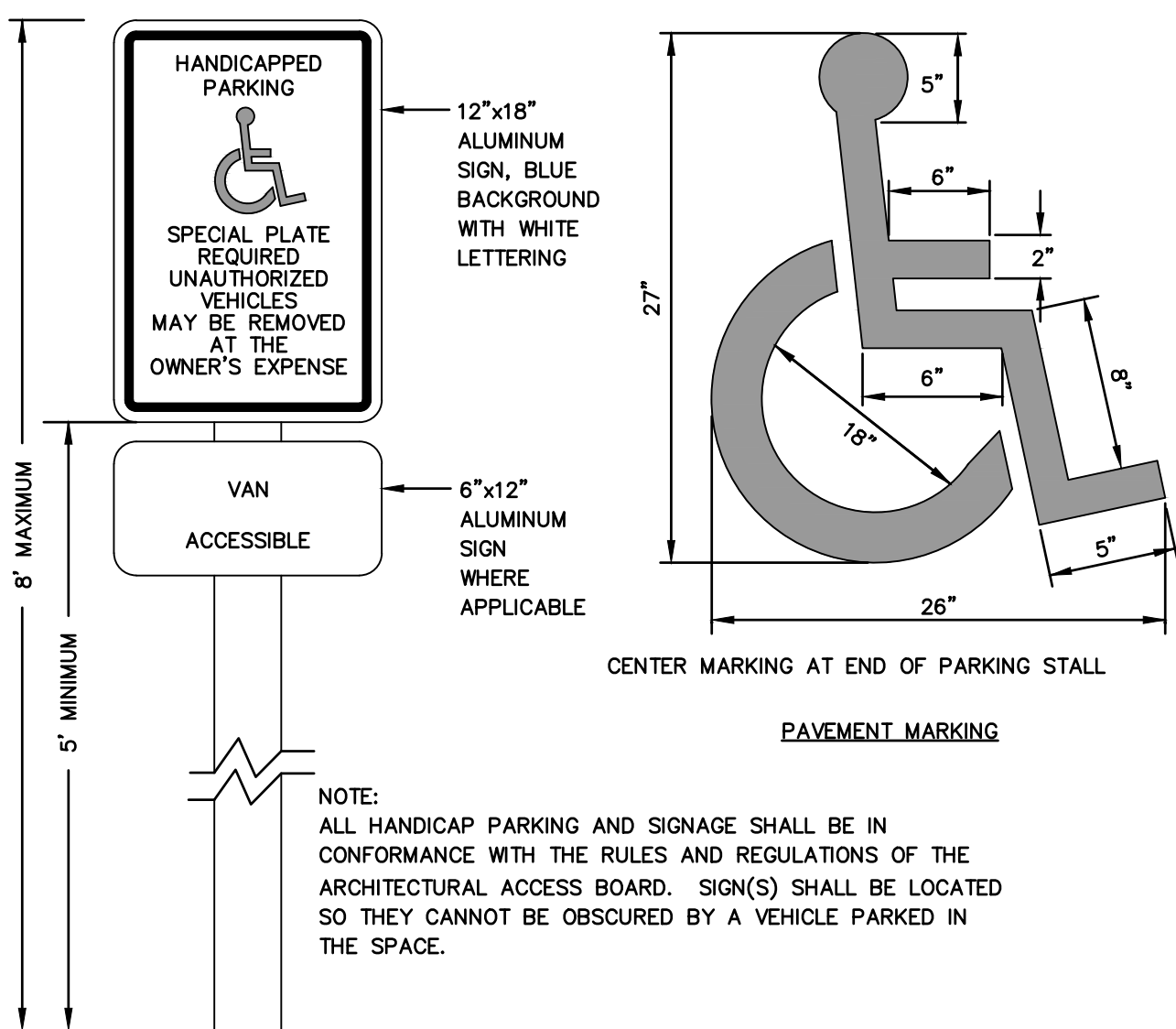
2 PRECAST CONCRETE CURB
(NOT TO SCALE)



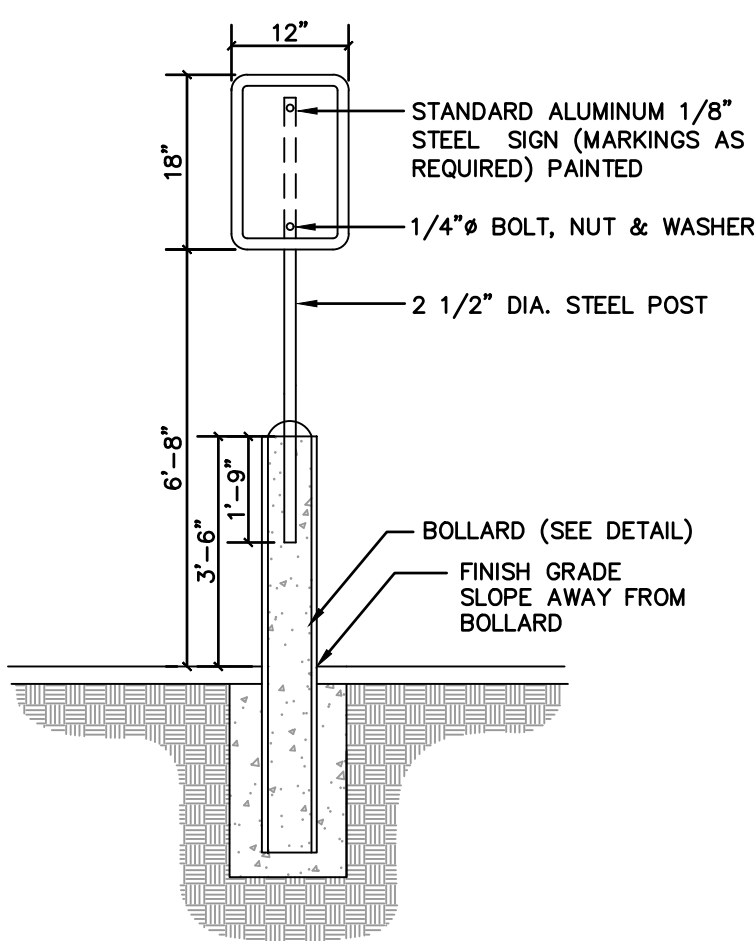
3 TRANSITION CURB DETAIL
(NOT TO SCALE)



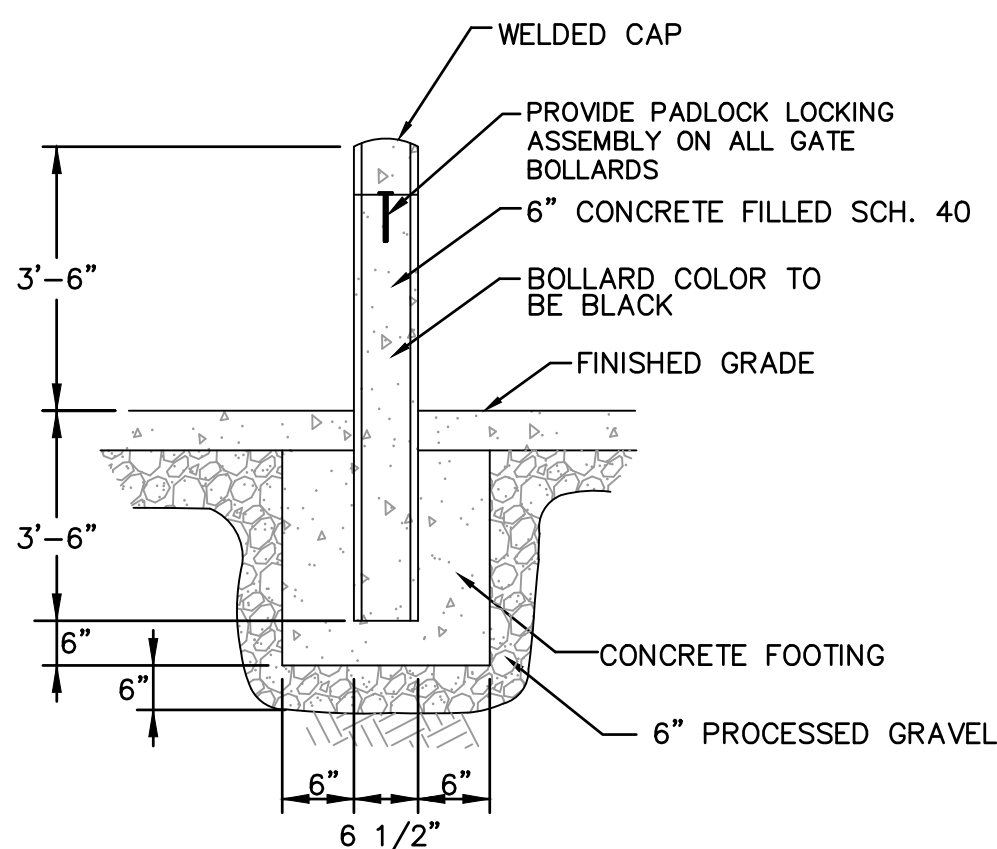
4 PARALLEL PARKING STALL LAYOUT
(NOT TO SCALE)



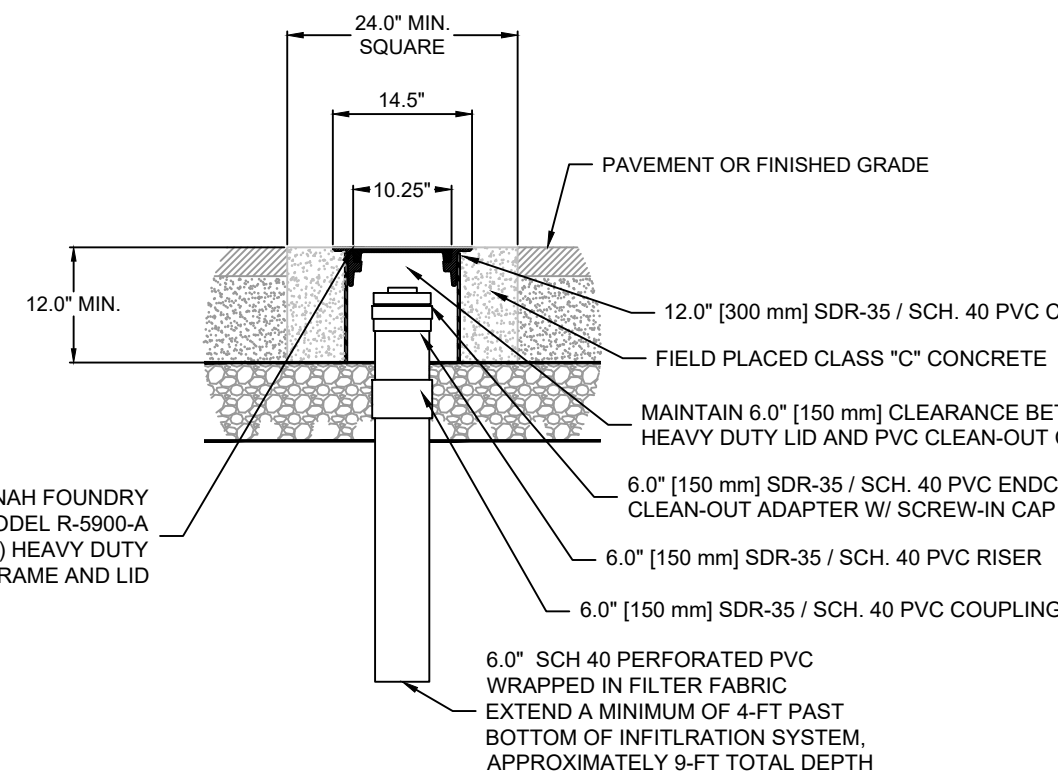
5 HANDICAP SIGNAGE
(NOT TO SCALE)



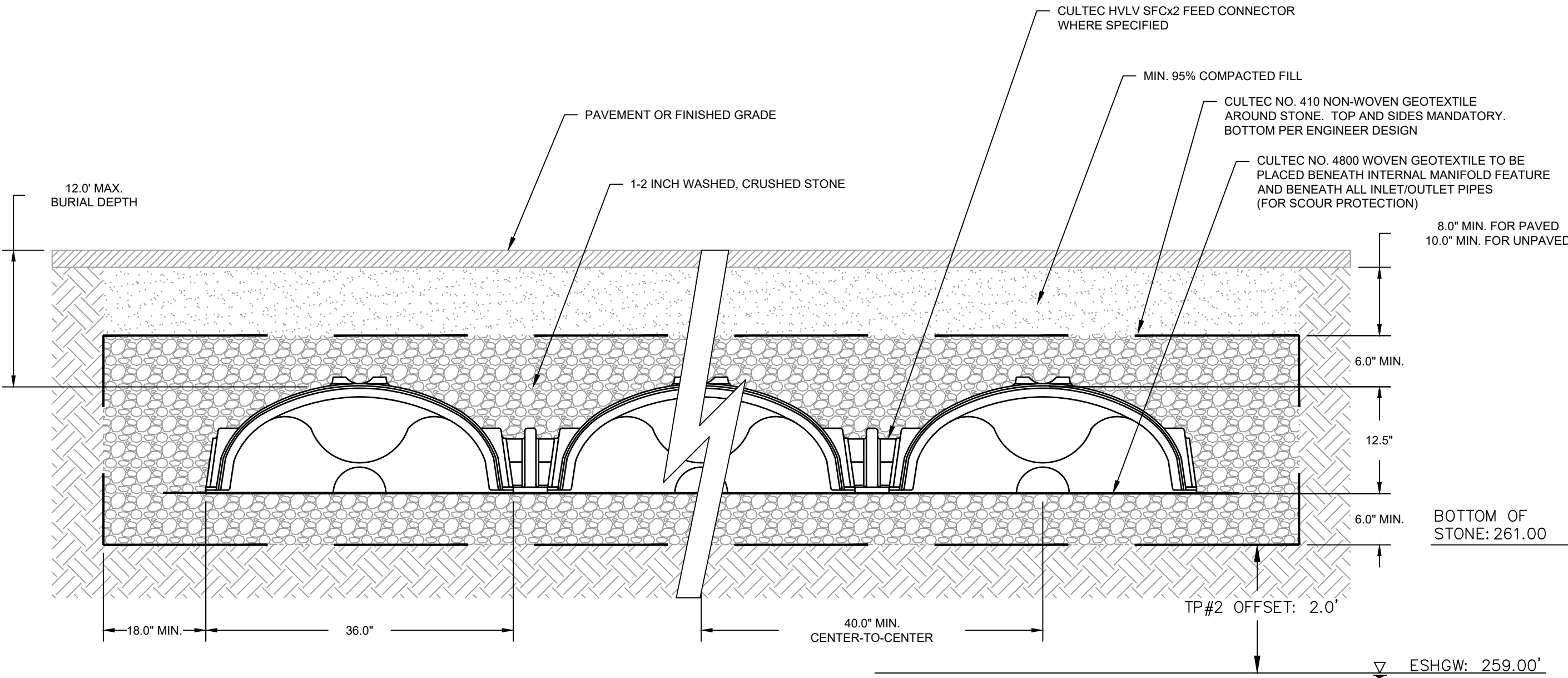
6 TYPICAL BOLLARD SIGN POST
(NOT TO SCALE)



7 TYPICAL BOLLARD
(NOT TO SCALE)

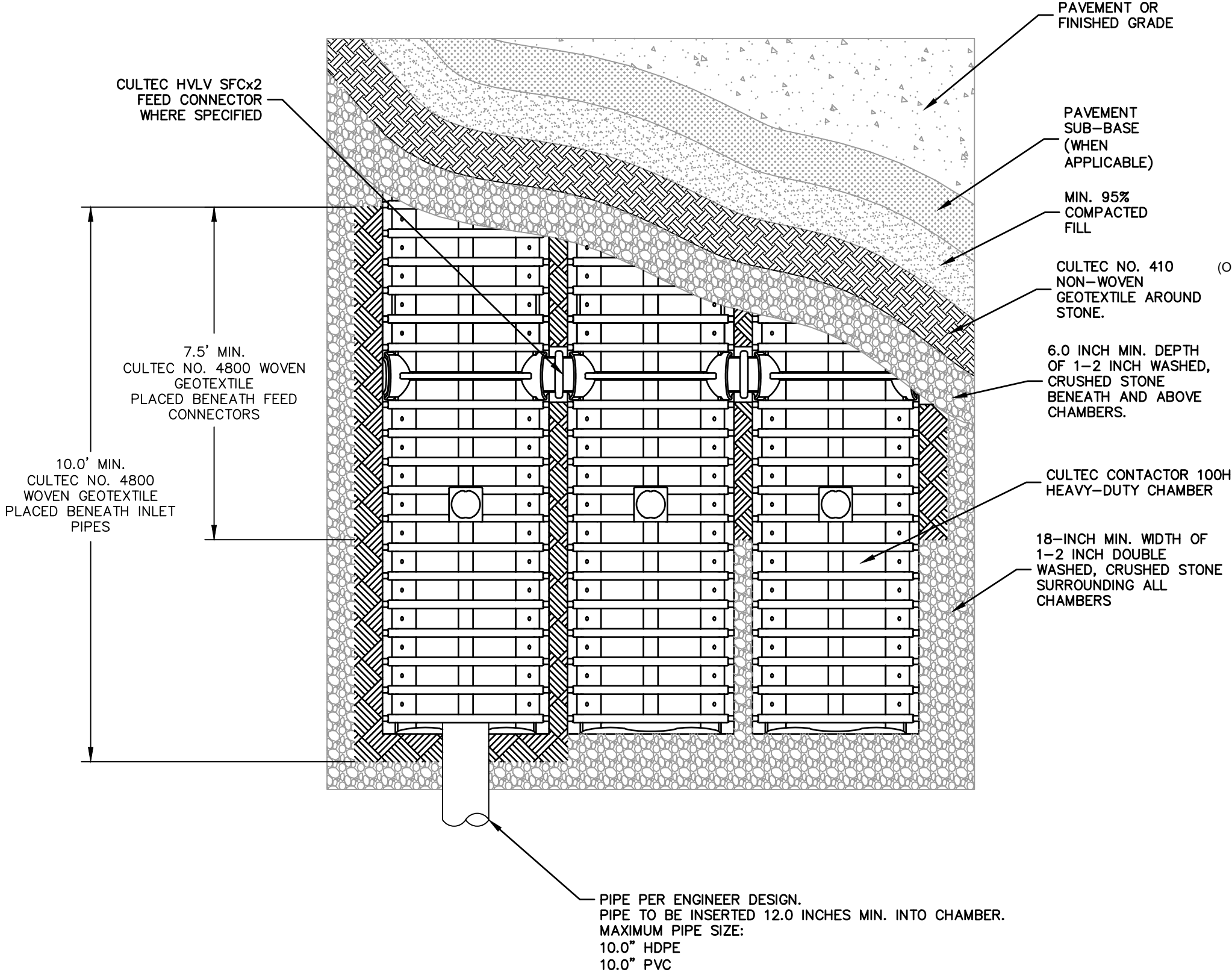


8 MONITORING WELL
(NOT TO SCALE)

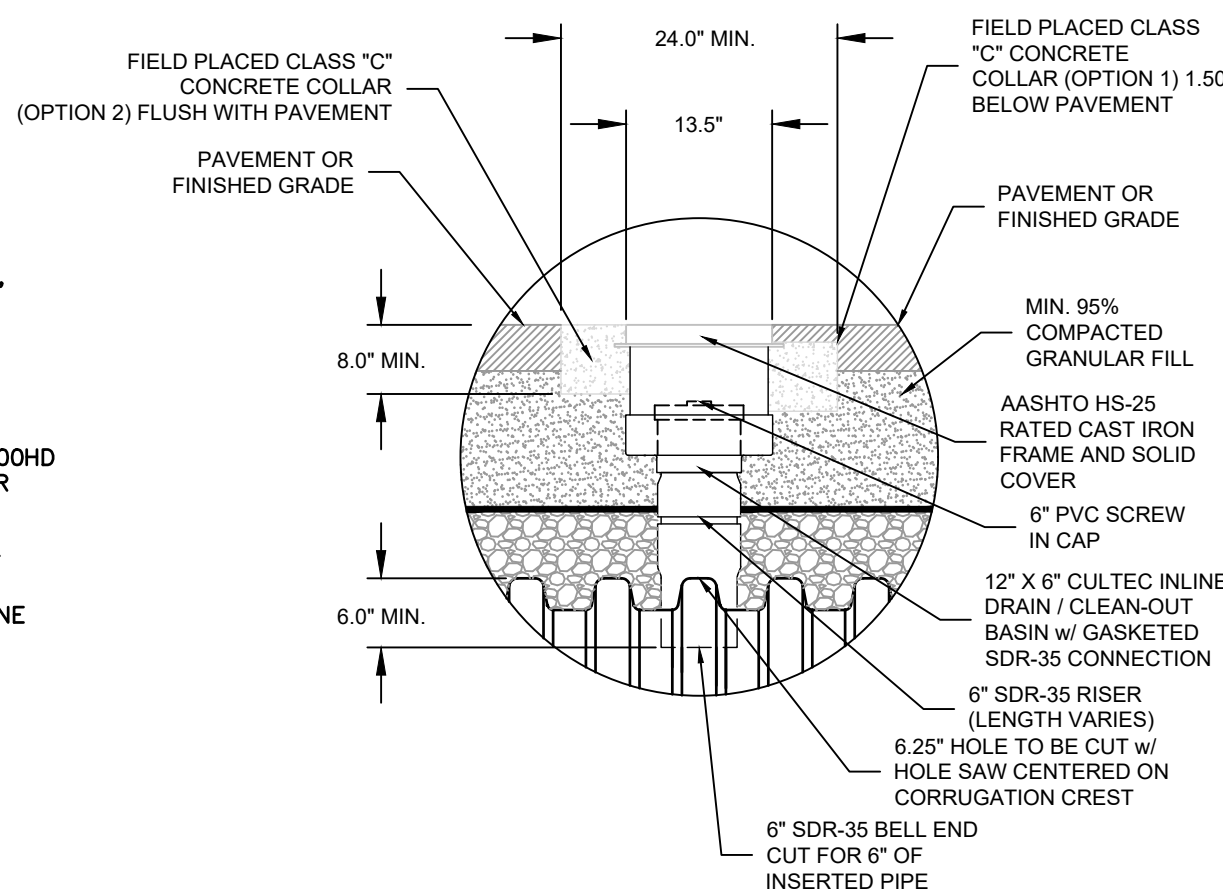


NOTE:
1. THE ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION SHOWN ABOVE CORRESPOND TO THE ELEVATION OF OBSERVED WEeping DURING TEST PIT PERFORMED ON FEBRUARY 13, 2023.

9 CULTEC C-100HD (UGI-2)
(NOT TO SCALE)



10 CULTEC C-100HD W/ ISOLATOR ROW PLAN VIEW
(NOT TO SCALE)



11 CULTEC C-100HD INSPECTION PORT
(NOT TO SCALE)

NO	DATE	REVISIONS
1	10/18/2022	CONCOM COMMENTS
2	02/22/2023	SITE PLAN REVISIONS
3	03/27/2023	PEER REVIEW COMMENTS

SEAL



DATE : 08/09/2022
DRAWN : PS
SCALE : AS SHOWN

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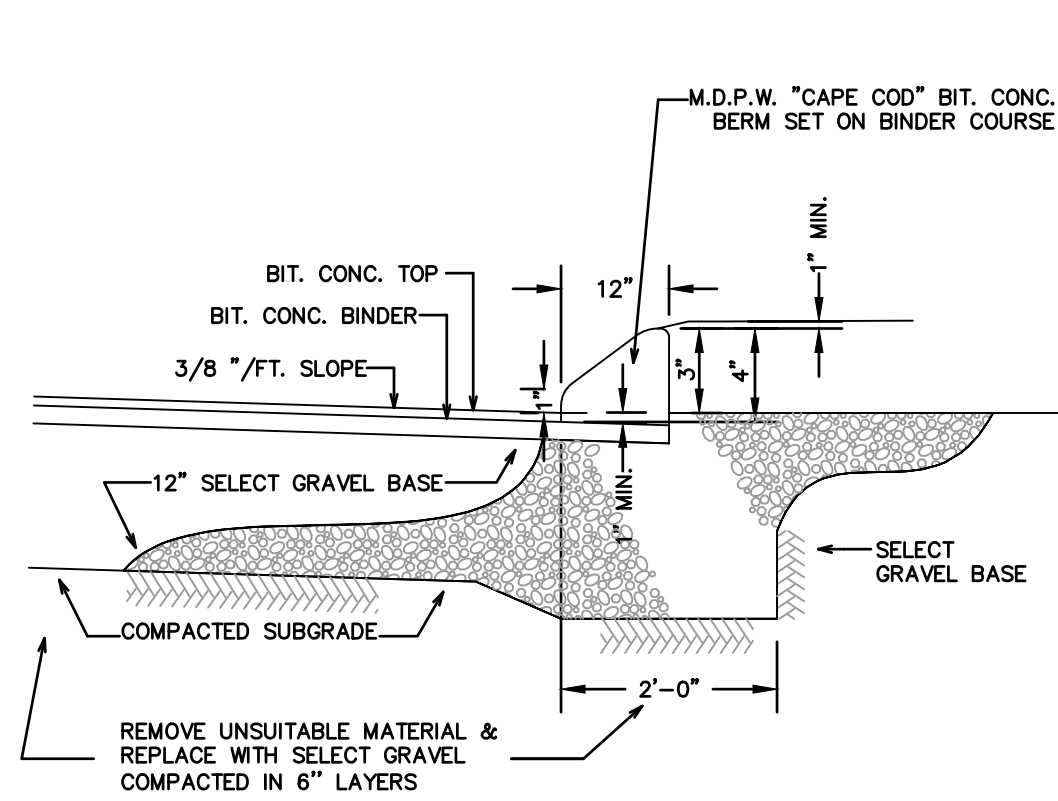
1485 WASHINGTON STREET
HOLLISTON, 01746 MA



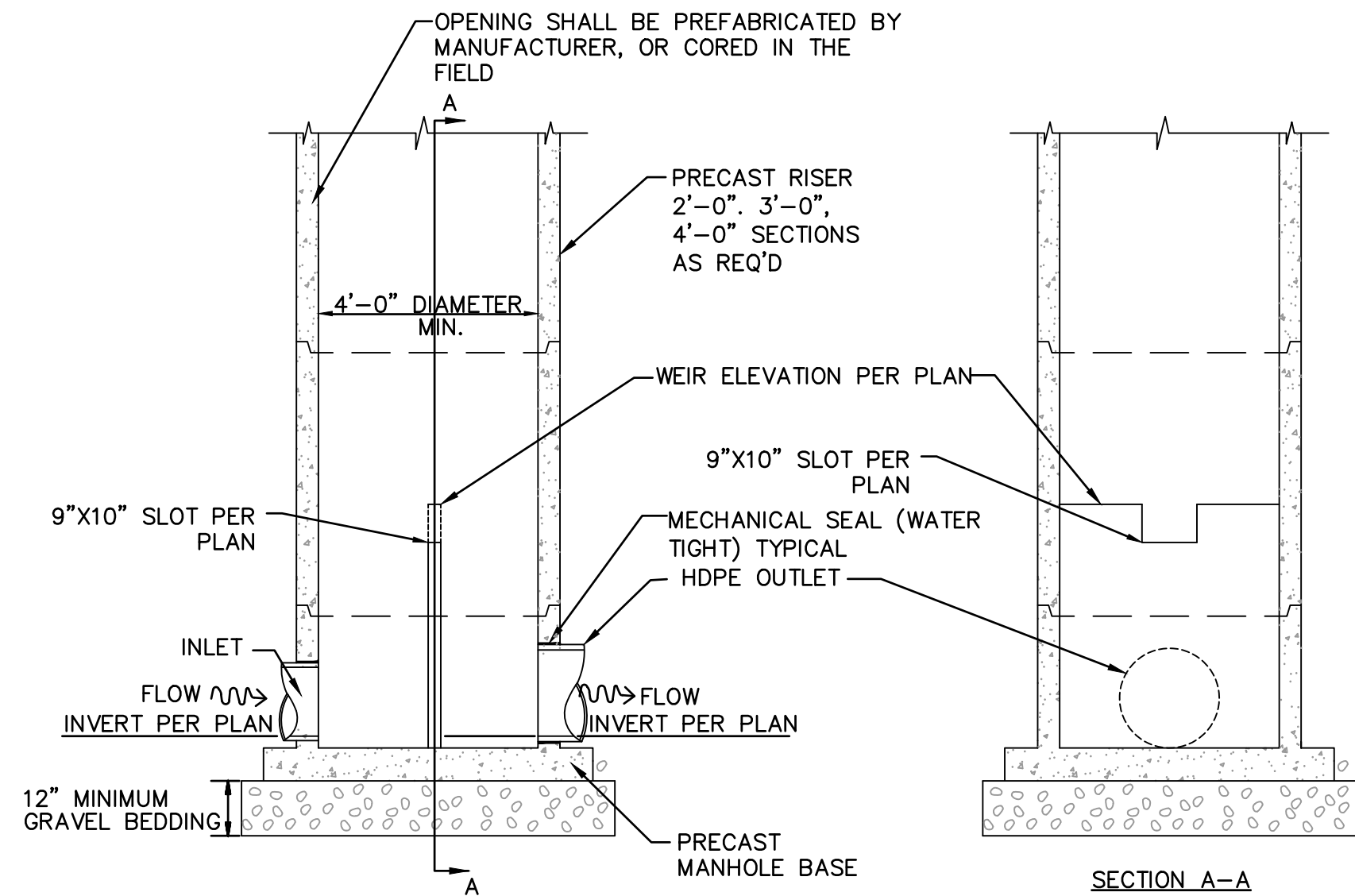
CONSTRUCTION
DETAILS

C-4.2

SCALE: NTS PRJ. NO.: 2008.00

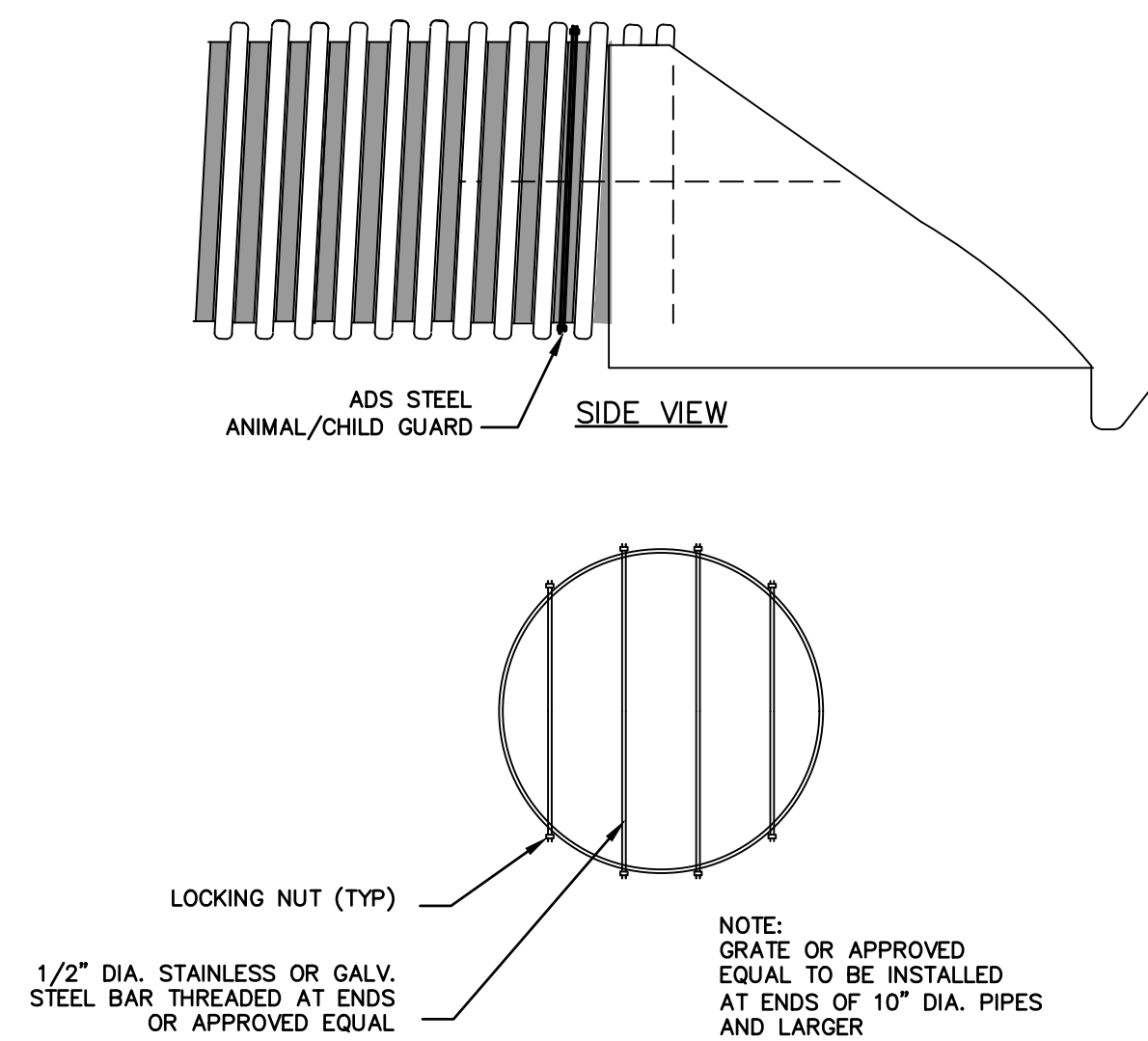


1 CAPE COD BERM
(NOT TO SCALE)

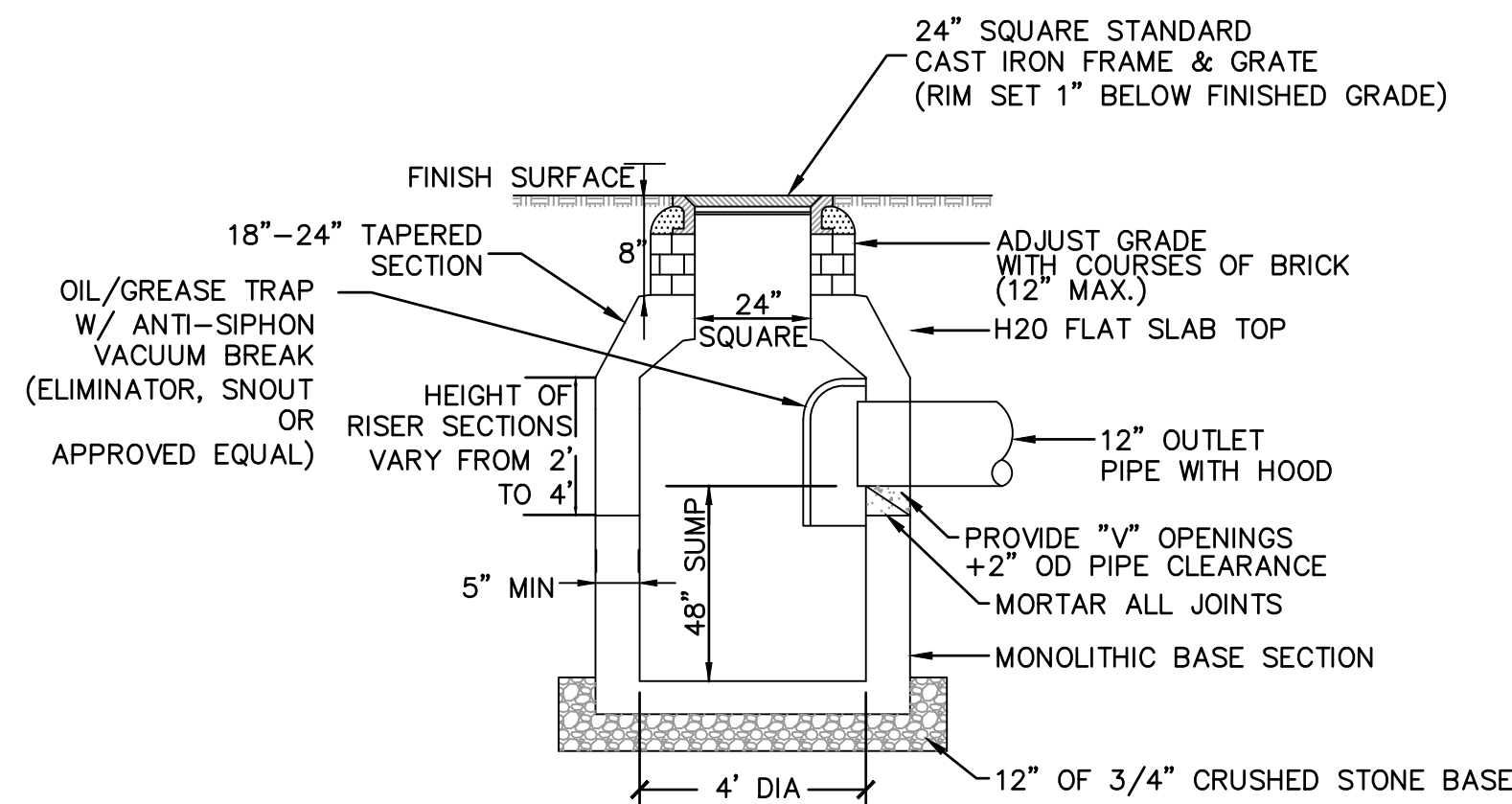


4 MANHOLE W/OUTLET CONTROL STRUCTURE (OCS-2)
(NOT TO SCALE)

*NOTES:
1. SEE DRAINAGE SHEET C-3.0 FOR OCS STRUCTURE INVERT AND ORIFICE ELEVATIONS.

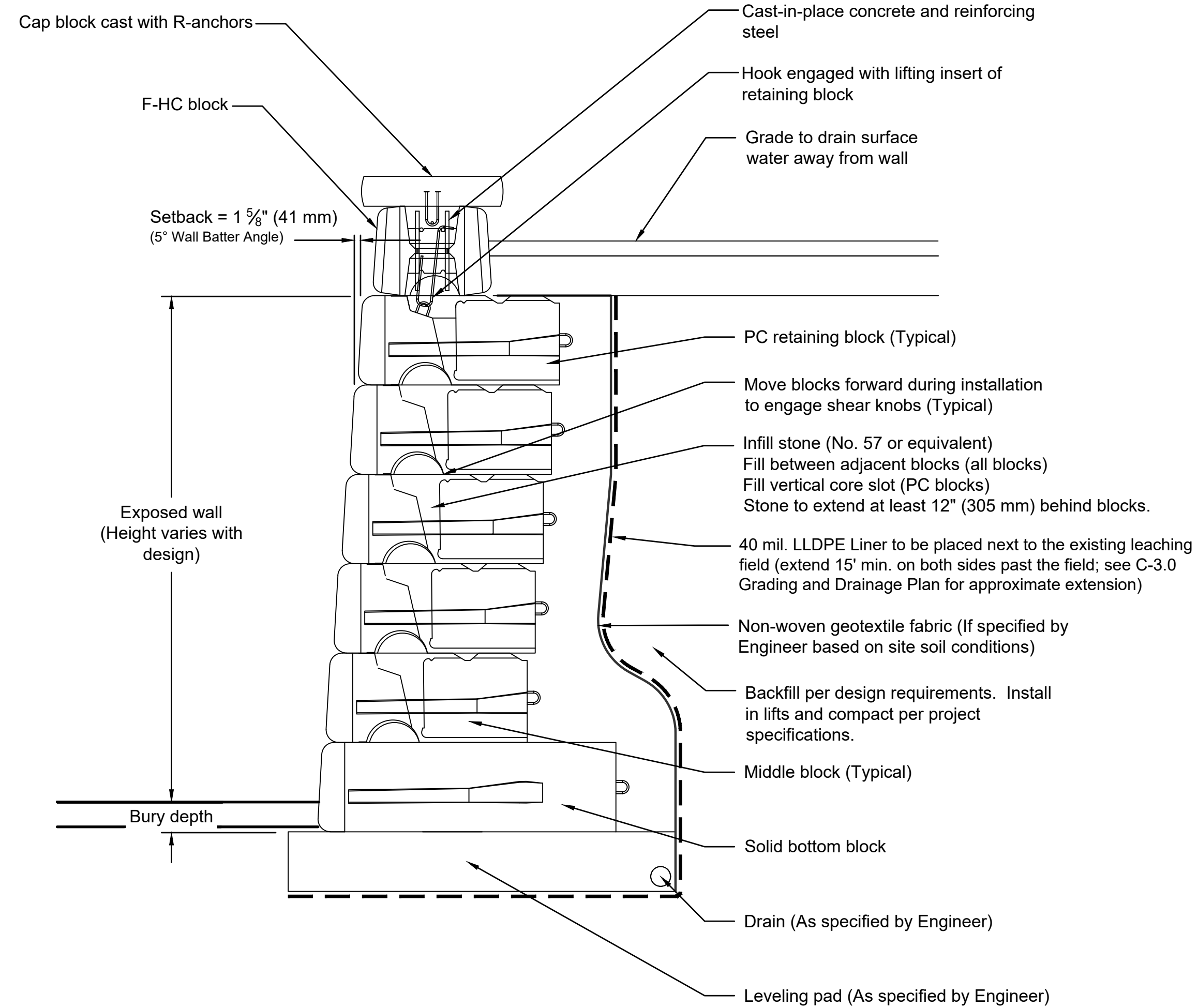


2 GUARD/FLARED END AT PIPE ENDS
(NOT TO SCALE)



NOTES:
1. STRUCTURE DESIGN TO LATEST ASTM C478.
2. REINFORCING STEEL CONFORMS TO LATEST ASTM A 185.
3. CONCRETE COMPRESSIVE STRENGTH - 4,000 PSI @ 28 DAYS.
4. FLAT SLAB TOP AASHTO H-20
5. ONE POUR MONOLITHIC BASE.
6. MIN. FRAME WEIGHT 265 LBS, CAST IRON CONFORMING TO ASTM A48 - CLASS 30

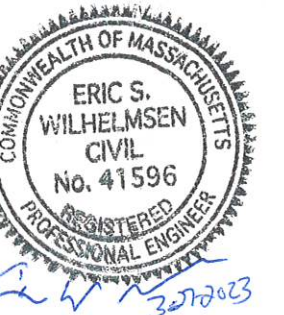
5 PRECAST CONCRETE CATCH BASIN W/TRAP
(NOT TO SCALE)



3 TYPICAL GRAVITY WALL DETAIL
(NOT TO SCALE)

NO	DATE	REVISIONS
1	10/18/2022	CONCOM COMMENTS
2	02/22/2023	SITE PLAN REVISIONS
3	03/27/2023	PEER REVIEW COMMENTS

SEAL



DATE : 08/09/2022
DRAWN : PS
SCALE : AS SHOWN

ANYFENCE CO.

1485 WASHINGTON STREET
HOLLISTON, 01746 MA



CONSTRUCTION
DETAILS

C-4.3

SCALE: NTS PRJ. NO: 2008.00