

#### EXISTING CONDITIONS/SURVEY NOTES:

- 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,

#### GENERAL CONSTRUCTION AND DEMOLITION NOTES:

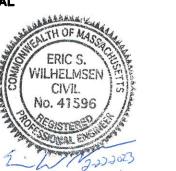
- 1. EXCEPT AS REQUIRED TO PERFORM SPECIFIC WORK ACTIVITIES RELATED TO UTILITY CONNECTIONS, CONTRACT SHALL CONFINE HIS OPERATIONS INCLUDING ALL STOCKPILES, STORAGE, AND STAGING, TO WITHIN THE LIMIT OF WORK.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SITE-RELATED DUST CONTROL.
- 3. THE CONTRACTOR SHALL MAKE ALL NECESSARY APPLICATIONS AND ARRANGEMENTS WITH UTILITIY 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 SWEPT 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
- 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. 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.

UTILITIES IN TH	E SIREEI.	EXISTING	LEGEND	PROPOSED
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CONC HDPE	CONCRETE HIGH—DENSITY POLYETHYLENE		DECIDUOUS TREE	
EOP VGC PCC CCB	EDGE OF PAVEMENT VERTICAL GRANITE CURB PRECAST CONCRETE CURB CAPE COD BERM POLYVINYL CHLORIDE REINFORCED CONCRETE PIPE ROOF DRAIN TYPICAL CLEAN OUT RIM ELEVATION INVERT ELEVATION		CONIFEROUS TREE	
		G	UNDERGROUND GAS LINE	G
PVC		W	UNDERGROUND WATER LINE	w
RCP RD		——Е——	UNDERGROUND ELECTRIC LINE	E
TYP CO		s	UNDERGROUND SEWER LINE	s
RIM INV		D	UNDERGROUND DRAIN LINE	D
R&D R&R	REMOVE AND DISPOSE REMOVE AND REPLACE	(Hr)	SEWER MANHOLE (SMH)	
HC VE	HANDICAP RAMP VERTICAL ELLIPTICAL		SEWER CLEANOUT (CO)	
TC/BC	TOP OF CURB/BOTTOM OF CURB	(MF)	DRAIN MANHOLE (DMH)	D
TW TOS	TOP OF WALL TOP OF STAIRS	$\boxplus$	CATCH BASIN (CB)	
BOS BW	BOTTOM OF STAIRS BOTTOM OF WALL (SURFACE GRADE)	& W	GAS/WATER GATE	W G
BS SSD	BACK OF SIDEWALK SUB SOIL DRAIN	٨	HYDRANT	
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UGI VIF	UNDERGROUND INFILTRATION VERIFY IN FIELD		LOCUS PROPERTY LINE (±)	
OC	ON CENTER		ADJOINERS PROPERTY LINE (±)	
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			MINOR CONTOUR LINE	254
			FENCE	X
		∞ ∘ ∘ ∘ ∘ .	GUARD RAIL	
			PRECAST CONCRETE CURB	
			HANDICAP SPACE	
		□MBX	MAILBOX	
			BORDERING VEGETATED WETLAND	(BVW)
		△WF	WETLAND FLAG	,
			100' WETLAND BUFFER	
		MH	MANHOLE	

1	10/18/2022	CONCOM COMMENTS
2	10/18/2022 02/22/2023	SITE PLAN REVISIONS
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NO DATE REVISIONS

SEAL



DATE :	08/09/2022
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SCALE:	1" = 20'

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WASHINGTON ISTON, 01746

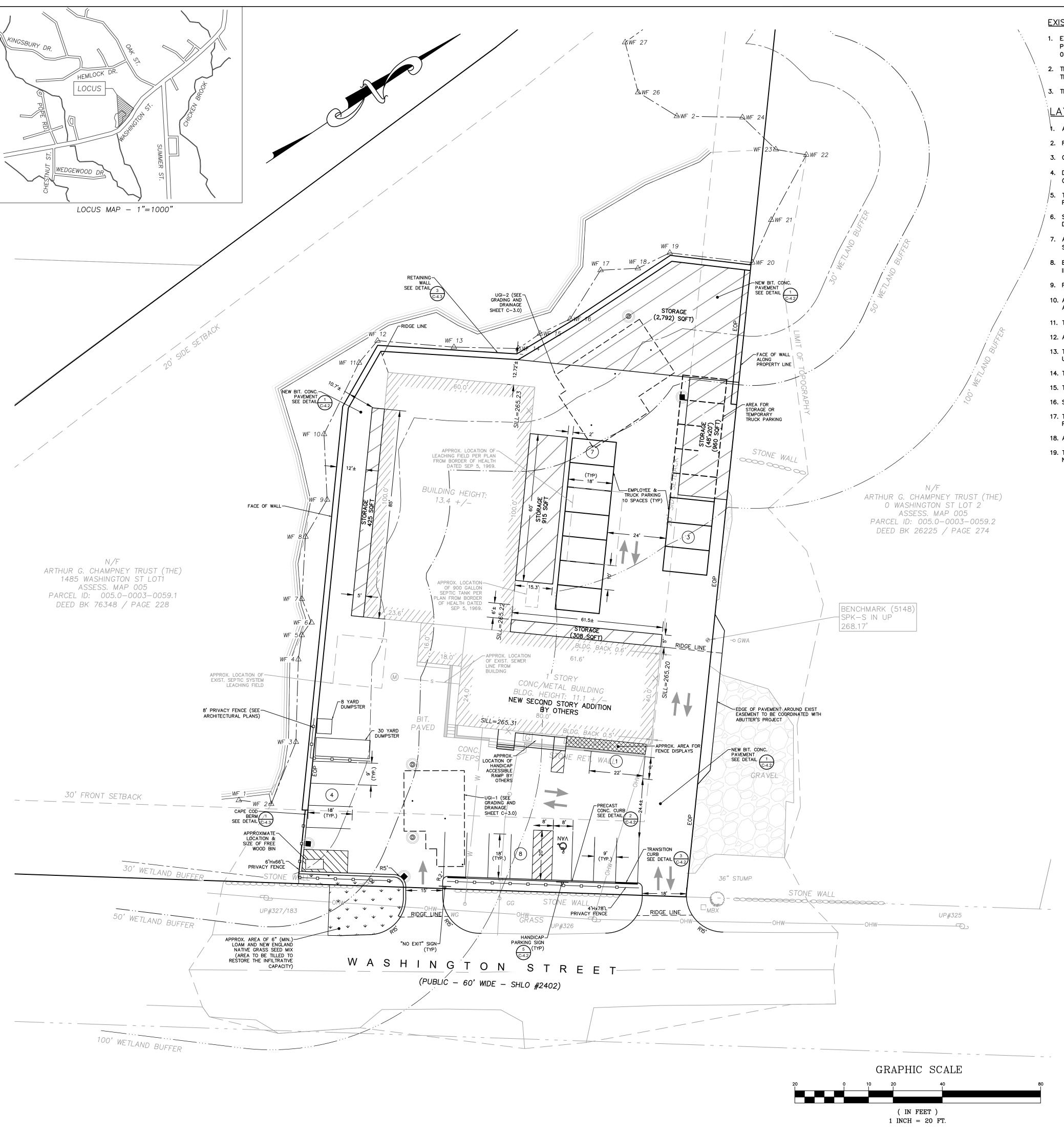
1485 HOLLI\$



DEMOLITION
AND
EROSION
CONTROL
PLAN

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



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- 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.

#### LAYOUT AND MATERIALS NOTES

- 1. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
- 2. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING LOCATIONS AND DETAILS.
- 3. CONTRACTOR SHALL REPORT SIGNIFICANT CONFLICTS TO THE OWNER AND THE ENGINEER FOR RESOLUTION.
- 4. 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'.
- 5. 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.

  6. 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.

  7. ACCESSIBLE RAMPS SHALL BE PER MASSACHUSETTS STATE CODE AND THE AMERICANS WITH DISABILITIES ACT (ADA) APCCESSIBILITY GUIDELINES (WHICHEVER IS MORE
- STRINGENT).

  8. 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).

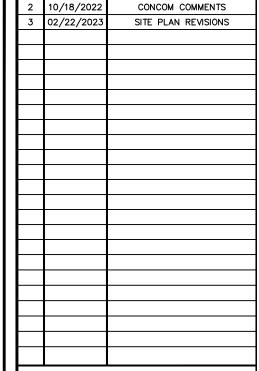
  9. PROTECT EXISTING PROPERTY MONUMENTS AND ABUTTING PROPERTIES DURING CONSTRUCTION ACTIVITIES.
- 10. ALL SITE CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS (DPW) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, AND THE TOWN OF HOLLISTON PUBLIC WORKS.
- 11. THE 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.
- 12. ALL FENCING AND GATES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS DIRECTION.
- 13. 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.
- 14. THE USE OF FILL CONTAINING HAZARDOUS MATERIALS OR WASTE IS FORBIDDEN.
- 15. THE MARKING OF THE LIMITS OF WORK IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING IS REQUIRED.
- 16. SIGNIFICANT TREES, INCLUDING THEIR BRANCHES AND THEIR ROOT SYSTEMS, SHALL BE PROTECTED WITH SHIELDS, FENCES OR BARRIERS.
- 17. THE CLEANING OF CATCH BASIN SUMPS AND STORMWATER BASINS IS REQUIRED FOLLOWING CONSTRUCTION AND ACCORDING TO ANY OPERATIONS AND MAINTENANCE PLAN THEREAFTER.
- 18. ALL AREAS OF RE-VEGETATION IS TO TAKE PLACE NO MORE THAN 7 DAYS AFTER FINAL GRADING.
- 19. 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				
ASSESSORS REFERENCE: MAP 5, BLOCK 3, LOT 59.1 ZONING CLASSIFICATION — INDUST	RIAL DISTRICT:			
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 SIDE YARD (RIGHT) SIDE YARD (LEFT)	30 FT 20 FT 20 FT	61.4 FT 20.5 FT 80.0 FT	61.4 FT 20.5 FT 80.0 FT	
FLOOR AREA RATIO	0.50	0.09 (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) 1 SPACE PER 1.3 EMPLOYEES ON LARGEST SHIFT	10 EMPLOYEES 10/1.3 = 7.7 8 SPACES	UNDEFINED PARKING AREAS	23 SPACES 12+1HC (FRONT) +10 (REAR) TRUCK/EMPLOYEE	

LEGEND

AREA	OF ADD	D PAVEMEN	T = 4,28	2 SF
TOTAL	AREA C	F DISTURBA	NCE = 37	,590 S

		EXISTING	<u>LEGEND</u>	PROPOSED
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CONC HDPE	CONCRETE HIGH—DENSITY POLYETHYLENE	<b>(3</b> )	DECIDUOUS TREE	
EOP VGC	EDGE OF PAVEMENT VERTICAL GRANITE CURB		CONIFEROUS TREE	
PCC CCB	PRECAST CONCRETE CURB CAPE COD BERM	——————————————————————————————————————	UNDERGROUND GAS LINE	G
PVC RCP	POLYVINYL CHLORIDE REINFORCED CONCRETE PIPE	W	UNDERGROUND WATER LINE	———W———
RD TYP	ROOF DRAIN TYPICAL	———E———	UNDERGROUND ELECTRIC LINE	E
CO	CLEAN OUT	S	UNDERGROUND SEWER LINE	S
RIM INV	RIM ELEVATION INVERT ELEVATION	D	UNDERGROUND DRAIN LINE	D
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BW BS	BOTTOM OF WALL (SURFACE GRADE) BACK OF SIDEWALK	& W	GAS/WATER GATE	M G
SSD LA	SUB SOIL DRAIN LANDSCAPE ARCHITECT	<b>©</b>	HYDRANT	
UD UGI	UNDER DRAIN / SUB DRAIN UNDERGROUND INFILTRATION	<b>\$</b>	BUSH	·
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00	ON CENTER		ADJOINERS PROPERTY LINE (±)	
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			HANDICAP SPACE	
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		Δ –	BORDERING VEGETATED WETLAND	(RAM)
		△WF	WETLAND FLAG	
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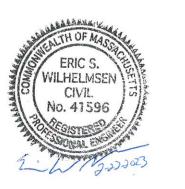


REVISIONS

ADDED 10 REAR PARKING

SEAL

NO DATE



DATE: 08/09/2022

DRAWN: PS

SCALE: 1" = 20'

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CONSULTANTS
Environmental and Civil Engineering

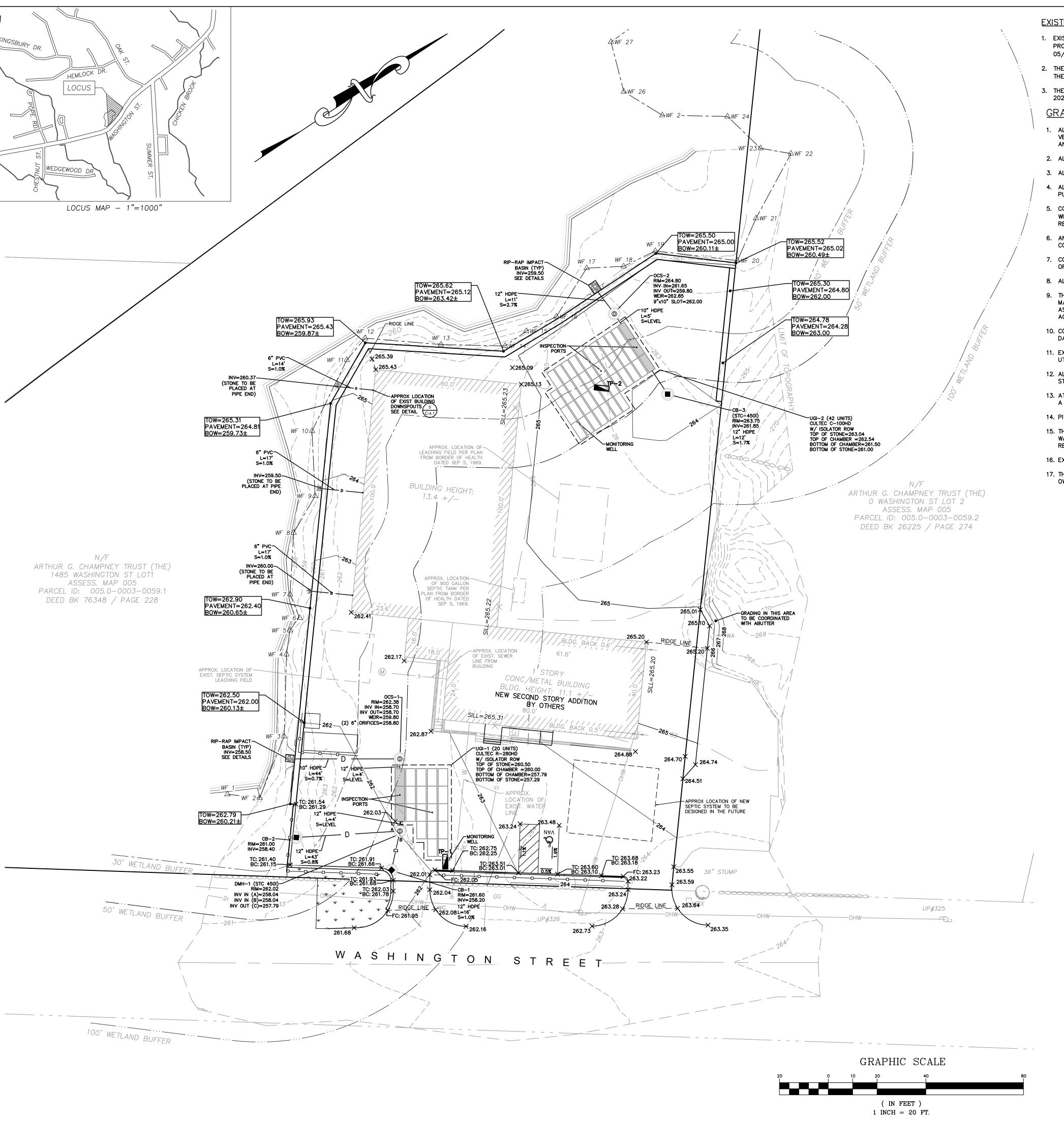
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1485 WASHINGTON HOLLISTON, 01746

LAYOUT AND MATERIALS PLAN

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

#### 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.

LEGEND **EXISTING** PROPOSED GRANITE BOUND FOUND UTILITY POLE **GUY WIRE GUY POLE** POST **ABBREVIATIONS** BOLLARD 0 • BITUMINOUS CONCRETE DECIDUOUS TREE CONCRETE HIGH-DENSITY POLYETHYLENE CONIFEROUS TREE EDGE OF PAVEMENT VERTICAL GRANITE CURB UNDERGROUND GAS LINE PRECAST CONCRETE CURB CAPE COD BERM UNDERGROUND WATER LINE POLYVINYL CHLORIDE UNDERGROUND ELECTRIC LINE REINFORCED CONCRETE PIPE ROOF DRAIN UNDERGROUND SEWER LINE TYPICAL CLEAN OUT UNDERGROUND DRAIN LINE RIM ELEVATION INVERT ELEVATION SEWER MANHOLE (SMH) REMOVE AND DISPOSE REMOVE AND REPLACE SEWER CLEANOUT (CO) HANDICAP RAMP VERTICAL ELLIPTICAL (D) DRAIN MANHOLE (DMH) TOP OF CURB/BOTTOM OF CURB TOP OF WALL CATCH BASIN (CB) TOP OF STAIRS BOTTOM OF STAIRS GAS/WATER GATE BOTTOM OF WALL (SURFACE GRADE) BACK OF SIDEWALK HYDRANT SUB SOIL DRAIN LANDSCAPE ARCHITECT BUSH UNDER DRAIN / SUB DRAIN UNDERGROUND INFILTRATION LOCUS PROPERTY LINE (±) VERIFY IN FIELD ON CENTER ADJOINERS PROPERTY LINE  $(\pm)$ ----- OHW ---- OVERHEAD WIRE . TREELINE HISTORIC UTILITY LINE (G/W/E/S/D) MAJOR CONTOUR LINE <del>-----</del>255----MINOR CONTOUR LINE \_\_\_\_\_254\_\_\_\_\_ \_\_\_\_\_ x \_\_\_\_ **FENCE** GUARD RAIL PRECAST CONCRETE CURB HANDICAP SPACE MAILBOX  $\square$  MBX BORDERING VEGETATED WETLAND (BVW) WETLAND FLAG ----- - - - 100' WETLAND BUFFER

MH

MANHOLE

1 8/30/2022 ADDED 10 REAR PARKING
2 10/18/2022 CONCOM COMMENTS
3 02/22/2023 SITE PLAN REVISIONS

REVISIONS

SEAL

NO DATE



DATE: 08/09/2022

DRAWN: PS

SCALE: 1" = 20'

NYFENCE CO

CONSULTANTS
Environmental and Civil Engineering

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WASHINGTO ISTON, 0174

1485 HOLLI

GRADING AND DRAINAGE PLAN

C-3.0

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

## EROSION & SEDIMENTATION CONTROL NOTES:

### **GENERAL**

- 1. THE PURPOSE OF THESE NOTES IS TO PRESENT A CONSTRUCTION SYSTEM THAT SHOULD MINIMIZE IMPACTS OF EROSION AND SEDIMENTATION RUNOFF DUE TO CONSTRUCTION. THE INFORMATION CONTAINED HEREIN IS TO SUPPLEMENT THE DEVELOPER OR CONTRACTOR'S EXPERTISE AND IS NOT MEANT TO CIRCUMVENT LOGICAL DECISIONS REQUIRED BY A VARIETY OF FIELD CONDITIONS INCLUDING WEATHER AND THE TYPE OF EQUIPMENT
- 2. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, SEDIMENT CONTROL BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE BARRIERS UNTIL ALL WORK IS COMPLETE AND ALL AREAS HAVE BEEN STABILIZED. THE REMOVAL OF SEDIMENT CONTROL DEVICES SHALL BE ONLY UPON THE APPROVAL OF THE DESIGNER AND
- 3. SEDIMENTATION AND EROSION CONTROL DEVICES ARE TO BE INSTALLED AS SHOWN ON THE DRAWING AND SPECIFICATIONS OR AS REQUIRED BY VARYING FIELD CONDITIONS INCLUDING WEATHER AND SPECIFIC CONSTRUCTION REQUIREMENTS. THE EROSION CONTROL AS SHOWN IS A MINIMUM REQUIREMENT, ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BASED ON A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY THE CONTRACTOR FOR THIS PROJECT, OR AS CHANGING SITE CONDITIONS WARRANT.
- 4. THE FUNCTIONING OF TEMPORARY MITIGATIVE MEASURES OR CONSTRUCTION OPERATIONS SHALL NOT CAUSE NOTICEABLE SEDIMENTATION PLUMES. THE CONTRACTOR SHALL STOP WORK AND INSTALL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.
- 5. NO MATERIAL SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF ANY WETLAND AREAS.
- 6. ACCUMULATED SEDIMENT SHALL BE PERIODICALLY REMOVED FROM THE EROSION CONTROL DEVICES AND DISPOSED OF BY THE CONTRACTOR AS REQUIRED OR WHEN DIRECTED BY THE DESIGNER OR OWNER.
- 7. SOIL AND SLOPE STABILIZATION SHALL PRESUMED TO BE ATTAINED WHEN THE VEGETATION HAS ACHIEVED AT LEAST 75% GROUND COVER BY A HEALTHY STAND OF GRASS FOR THE SPECIFIED MIX OF SPECIES.
- 8. THE CONTRACTOR WILL DESIGNATE A PERSON TO BE THE EROSION CONTROL OFFICER FOR THE PROJECT TO INSURE PROPER MAINTENANCE OF MITIGATING MEASURES. THE NAME OF THIS PERSON WILL BE PROVIDED TO THE DESIGNER AND OWNER.

#### DEMARCATION OF AREAS

AVAILABLE TO THE CONTRACTOR.

- 1. BARRIERS SHALL BE PLACED ON THE SITE TO CONTROL THE LIMITS OF DISTURBANCE. AS AN EXAMPLE, STRAW BALE BARRIERS PROVIDE DEMARCATION AND OTHER METHODS SUCH AS LOG BARRIERS, ROPE AND FLAGGING, ETC... MAY BE
- 2. CARE SHOULD BE TAKEN IN THE OPERATION OF EQUIPMENT SUCH THAT ONLY THE MINIMUM AREA NEEDED TO BE ALTERED IS DISTURBED.

# EROSION AND SEDIMENT CONTROL METHODS

- 1. EROSION CONTROL BARRIERS SUCH AS STRAW BALE, SILT FENCES AND MULCH SHALL BE BROUGHT TO THE SITE AND STOCKPILED PRIOR TO INITIATING CONSTRUCTION. A RESERVE STOCKPILE SHALL BE ON SITE AT ALL TIMES FOR USE DURING EMERGENCY SITUATIONS.
- 2. THE PRIMARY EROSION CONTROL METHOD TO BE UTILIZED IS TO LIMIT THE AREA OF DISTURBANCE AND PROMPT STABILIZATION OF DISTURBED AREAS.
- 3. EROSION AND SEDIMENT CONTROL DEVICES SUCH AS STRAW BALES, SILT FENCES, DIVERSION BERMS, ETC... SHALL BE UTILIZED FOR THE PROTECTION OF THE AREAS BEYOND THE LIMITS OF CONSTRUCTION.
- 4. ALL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND GOOD CONSTRUCTION PRACTICE.
- 5. THE CONCENTRATION OF UNCONTROLLED RUNOFF SHALL BE AVOIDED IN ORDER TO PREVENT THE TRANSPORTATION OF
- 6. CONTRACTORS SHALL MAKE EVERY REASONABLE EFFORT TO RETAIN SEDIMENT ON SITE AND PREVENT SEDIMENT MIGRATION
- TO OUTSIDE THE WORK AREA. 7. OFF-SITE MIGRATION OF SEDIMENT THROUGH VEHICLE TRAFFIC IN AND OUT OF SITE SHALL BE ADDRESSED WITH
- CONSTRUCTION SWEEPING AS DIRECTED BY THE LOCAL HIGHWAY SUPERINTENDENT, TOWN ENGINEER, OR OWNER. 8. SEDIMENT SHALL BE REMOVED FROM ANY SEDIMENT TRAPS OR PONDS WHEN DESIGN CAPACITY HAS BEEN REDUCED BY
- 9. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER SHALL BE PREVENTED FROM
- 10. OFF-SITE MATERIAL STORAGE AREAS, INCLUDING SOIL STOCKPILES AND BORROW PITS, USED SOLELY BY THE PERMITTED
- PROJECT, ARE CONSIDERED PART OF THE PROJECT UNDER THIS PERMIT AND ARE THEREFORE SUBJECT TO THE SAME RESTRICTIONS AND CONDITIONS OF A NPDES PERMIT APPLICABLE TO THIS PROJECT (IF ANY).
- 11. CONCRETE WASHOUT LOCATIONS SHALL BE LOCATED OUTSIDE OF RESOURCE AREAS AND THEIR ASSOCIATED BUFFER ZONE SETBACKS.
- 12. SNOW DUMPING AREAS SHALL BE LOCATED MORE THAN 100 FEET FROM WETLAND RESOURCE AREAS.

# STABILIZATION PRACTICES

- 1. ALL SOIL SLOPES OF 2:1 OR GREATER SHALL BE STABILIZED WITH CURLEX BIODEGRADEABLE ENVIRONMENTAL MATTING OR EQUAL UNLESS OTHERWISE SPECIFIED. ALL OTHER SLOPES AND STORMWATER BASINS (TEMPORARY OR PERMANENT) SHALL BE STABILIZED WITH THE APPLICATION OF ECOAEGIS SPRAY MIX OR EQUAL. REMAINING AREAS SHALL BE LOAMED AND SEEDED WITH THE SPECIFIED SEED MIX.
- 2. STABILIZATION PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: ESTABLISHMENT OF TEMPORARY VEGETATION, ESTABLISHMENT OF PERMANENT VEGETATION, MULCHING, GEOTEXTILES, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES AND EXISTING VEGETATION, AND OTHER APPROPRIATE MEASURES.
- 3. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
- 4. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE, INCLUDING THE TIMELY REMOVAL OF SNOW COVER TO ALLOW STABILIZATION MEASURES TO BE PUT DIRECTLY IN CONTACT WITH THE SOIL SURFACE.

# STRUCTURAL PRACTICES

- STRUCTURAL PRACTICES MAY INCLUDE BUT ARE NOT LIMITED TO: SILT FENCES, STRAW BALES, EARTH DIKES, DRAINAGE SWALES, SEDIMENT TRAPS, CHECK DAMS, SUBSURFACE DRAINS, LEVEL SPREADERS, STORM DRAIN INLET PROTECTION, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, AND TEMPORARY AND PERMANENT SEDIMENT BASINS.
- PRIOR TO BEGINNING WORK, CONTRACTOR SHALL INSTALL EROSION CONTROL BARRIERS AS SHOWN ON PLANS IN AREAS WHERE WORK IS PLANNED. PERMANENT STORM WATER MANAGEMENT BASINS SHOWN ON PLANS MAY BE USED AS TEMPORARY SEDIMENTATION BASINS DURING CONSTRUCTION. CONTRACTOR SHALL CONSTRUCT BERMS, SWALES OR OTHER MEASURES TO DIRECT STORM WATER TO TEMPORARY BASINS DURING CONSTRUCTION. WHERE STORM WATER CANNOT BE DIRECTED TO PERMANENT BASIN AREAS, TEMPORARY BASINS SHALL BE CONSTRUCTED WITH A VOLUME OF 3,600 CUBIC FEET PER ACRE OF AREA DIRECTED TO BASIN.

# GENERAL SITE MAINTENANCE

- 1. UNDER NO CONDITIONS SHALL SOLID MATERIALS, INCLUDING BUILDING MATERIALS, BE DISCHARGED TO WATERS OF THE UNITED STATES EXCEPT AS MAY BE AUTHORIZED BY PERMIT UNDER SECTION 404 OF THE CLEAN WATERS ACT.
- 2. DUST SHALL BE CONTROLLED BY WATERING AS SITE CONDITIONS DEMAND.
- 3. STABILIZED STONE CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO BEGINNING EARTHWORK. IF THE VOIDS IN THE STONE OF THE CONSTRUCTION ENTRANCE BECOME COMPLETELY FILLED WITH SEDIMENT, STONE SHALL BE REMOVED AND REPLACED WITH CLEAN STONE.
- 4. ALL EROSION CONTROL MEASURES AND OTHER PROTECTIVE MEASURES USED ON THE SITE MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. IF SITE INSPECTIONS IDENTIFY BMPS THAT ARE NOT FUNCTIONING, MAINTENANCE SHALL BE PERFORMED BEFORE THE NEXT ANTICIPATED STORM EVENT, OR AS NECESSARY TO MAINTAIN THE CONTINUED EFFECTIVENESS OF STORM WATER CONTROLS. IF MAINTENANCE PRIOR TO THE NEXT ANTICIPATED STORM EVENT IS IMPRACTICABLE, MAINTENANCE MUST BE SCHEDULED AND ACCOMPLISHED AS SOON AS PRACTICABLE.

### **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 4. NO EXCAVATION WITHIN THE BASIN SHALL COMMENCE UNTIL THE BERM IS IN PLACE. 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

- 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 RIP 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
- 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

# 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,

- 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.

STRAW BALE BARRIERS SHALL BE PLACED TO PROTECT THE INTEGRITY OF THE STRUCTURES.

# 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

- THE PRIMARY EROSION CONTROL METHOD FOR BASIN CONSTRUCTION, AS WELL AS THE SITE, IS THE RAPID STABILIZATION OF ALL SURFACES. SECONDARY IN 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 NOT BE SLOPED TOWARDS THE WETLAND OR SENSITIVE AREA, BUT RATHER BACK INTO THE FILL MATERIAL.
- 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.
- 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.

TO ACCOMMODATE THIS DUAL USE, DURING CONSTRUCTION THE FOLLOWING MEASURES SHALL BE USED:

- 8. ADDITIONAL NOTES REGARDING THE STORMWATER BASIN CONSTRUCTION ARE SHOWN ON THE BASIN CONSTRUCTION DETAILS.
- 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 REPLACED 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

ENTRENCHED EROSION

STABILIZE STOCKPILE WITH ANNUAL RYEGRASS, MULCH OR EROSION

UTILIZED AND BE FREE FROM DEFECTS OR TRANSPORTATION DAMAGE.

3. WATTLES ARE TO BE INSTALLED PERPENDICULAR TO WATER FLOW.

6:1 - 4:1

4:1 - 2:1

2:1 - 1:1

>1:1

3-4' SPACING (TYP

CONTINUOUS ALONG

GROUND

WOOD STAKES

CONTROL BARRIER

CONTROL BLANKETS

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.

1 SOIL STOCKPILE - EROSION CONTROL

1. STRAW WATTLES MUST MEET THE CRITERIA OUTLINED IN THE SPECIFICATIONS BEFORE BEING

5. THE WATTLES 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

EXPOSED WATTLE. REFER TO THE MANUFACTURERS RECOMMENDATIONS FOR OTHER STAKING

A MINIMUM OF 2 FEET INTO THE GROUND LEAVING LESS THAN 6 INCHES OF THE STAKE ABOVE THE

6. SELECT PROPER LENGTH OF WATTLES TO MINIMIZE THE NUMBER NEEDED TO SPAN THE WIDTH OF AREA. IF NECESSARY, WATTLES CAN BE LAPPED A MINIMUM OF 6 INCHES TO PREVENT PASSAGE OF FLOW AND SEDIMENT THROUGH FIELD JOINT.

7. INSTALL WATTLES FOR DITCH CHECKS OVER BARE SOIL, MULCHED AREAS, OR EROSION CONTROL BLANKETS. KEEP WATTLES FOR DITCH CHECKS IN PLACE UNTIL FULLY ESTABLISHED VEGETATION

8. REMOVE AND/OR REPLACE INSTALLED WATTLES AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS. REMOVE WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS

10. PRIOR TO FINAL STABILIZATION, BACKFILL ALL TRENCHES, DEPRESSIONS, AND OTHER GROUND DISTURBANCES CAUSED BY THE REMOVAL OF THE WATTLES.

SLOPE ON SLOPE SPACING (FT) MIN DIAMETER (INCH)

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20

20

— STRAW WATTLE

(18"-24" DIA)

STRAW WATTLE

20% OF TUBE DIA

TO BE TRENCHED

DETERMINED BY THE ENGINEER, INSPECTOR, OR MANUFACTURERS REPRESENTATIVE. GATHER

WATTLES AND DISPOSE OF THEM IN REGULAR MEANS AS NON-HAZARDOUS INERT MATERIAL.

AND ROOT SYSTEMS HAVE COMPLETELY DEVELOPED AND CAN SURVIVE ON THEIR OWN.

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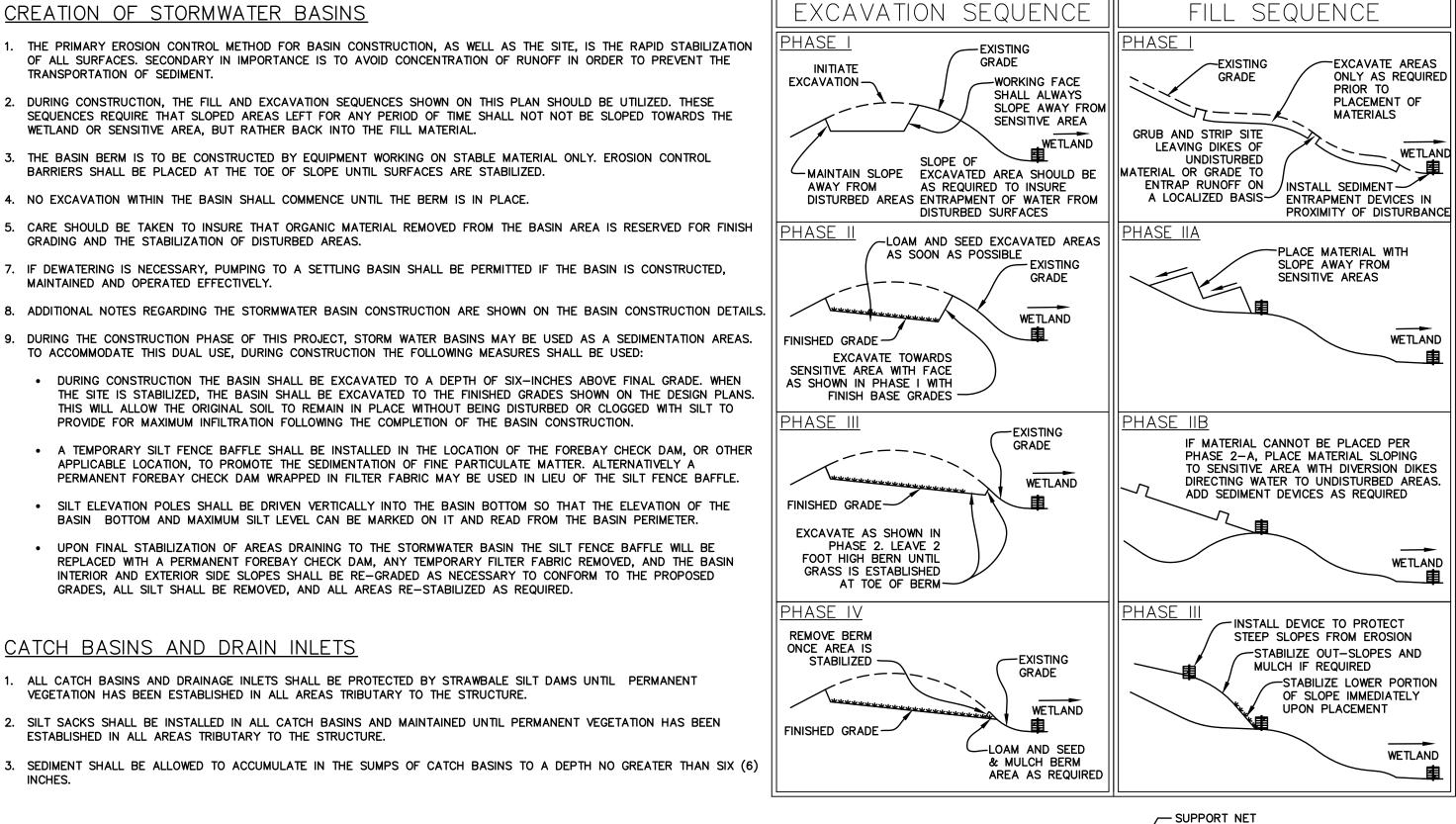
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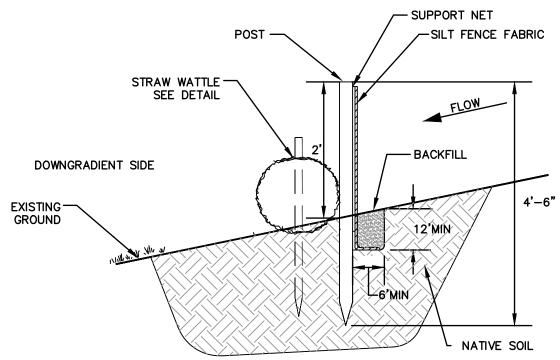
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2. PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE WATTLES ARE IN COMPLETE CONTACT WITH

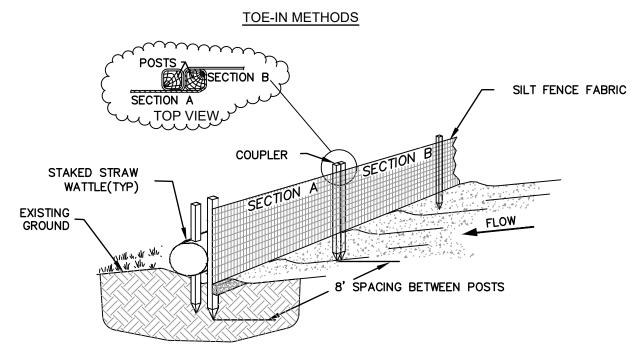
UNDERLYING SOIL. SEDIMENT TUBES ARE TO BE 18"-24" IN DIAMETER AND ARE TO BE TRENCHED 3 TO 5 INCHES.

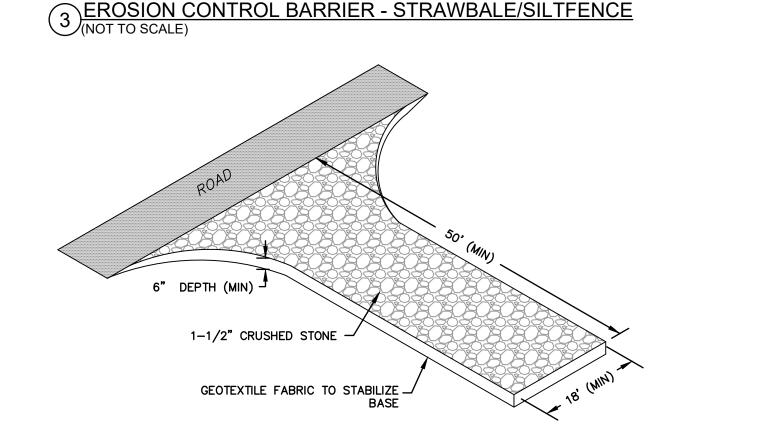
- 2. SILT SACKS SHALL BE INSTALLED IN ALL CATCH BASINS AND MAINTAINED UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED IN ALL AREAS TRIBUTARY TO THE STRUCTURE.
- 3. SEDIMENT SHALL BE ALLOWED TO ACCUMULATE IN THE SUMPS OF CATCH BASINS TO A DEPTH NO GREATER THAN SIX (6)



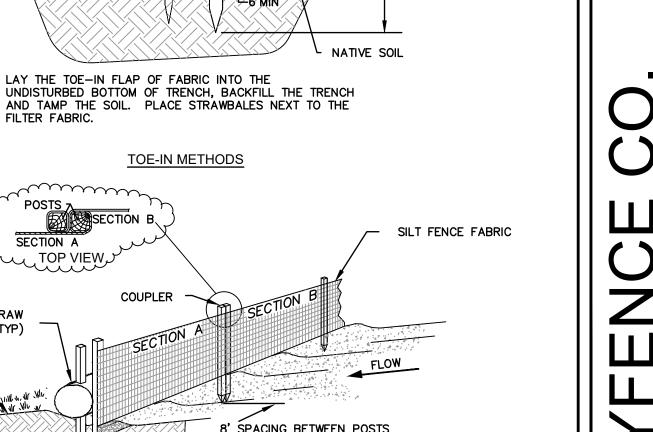


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<u>CONSTRUCTION ENTRANCE / EXIT PAD</u>



NO DATE

SEAL

DRAWN: PS

SCALE : AS SHOWN

WILHELMSEN

CIVIL

No. 41596

08/09/2022

REVISIONS

CONCOM COMMENTS SITE PLAN REVISION

**CONSULTANTS** 

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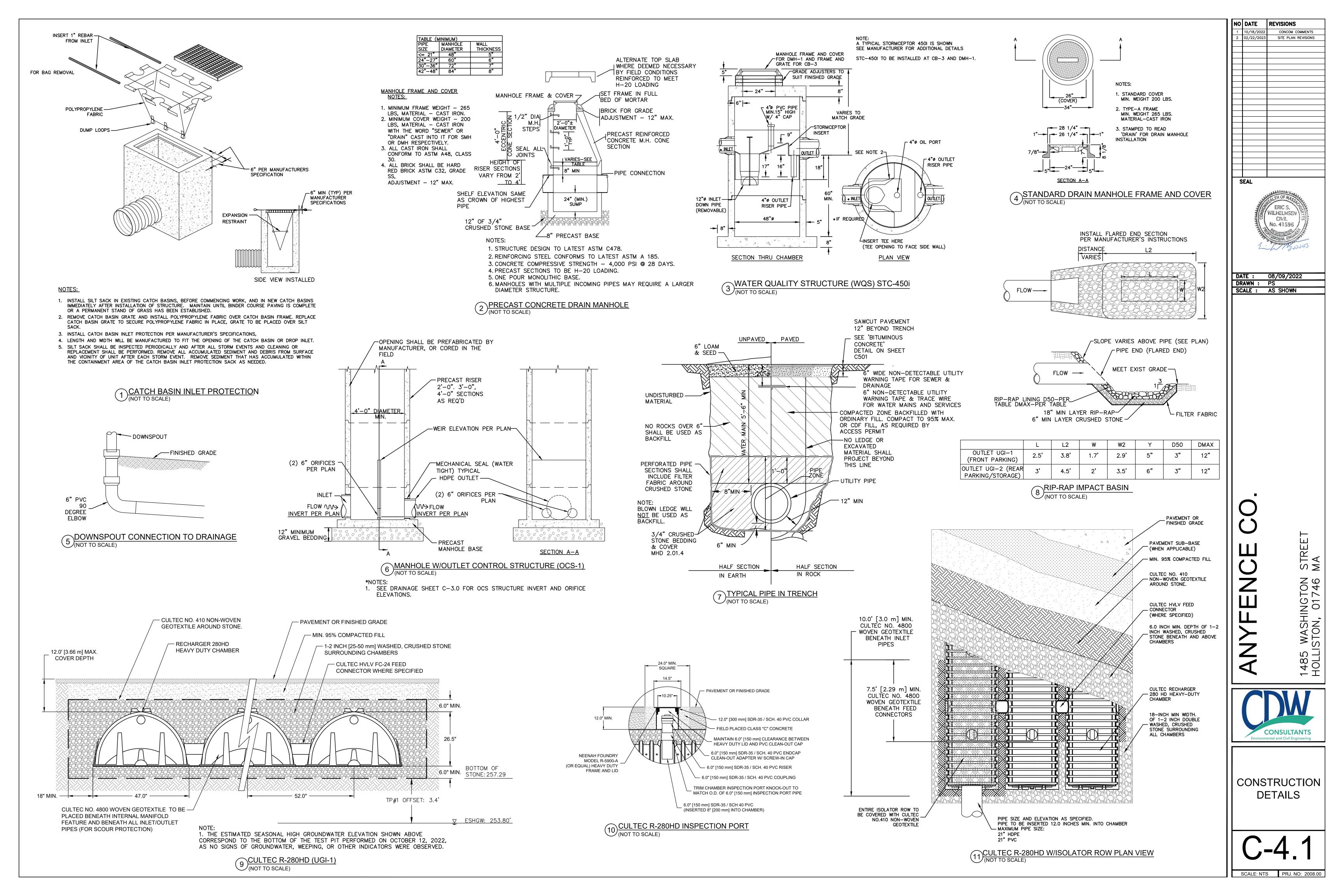
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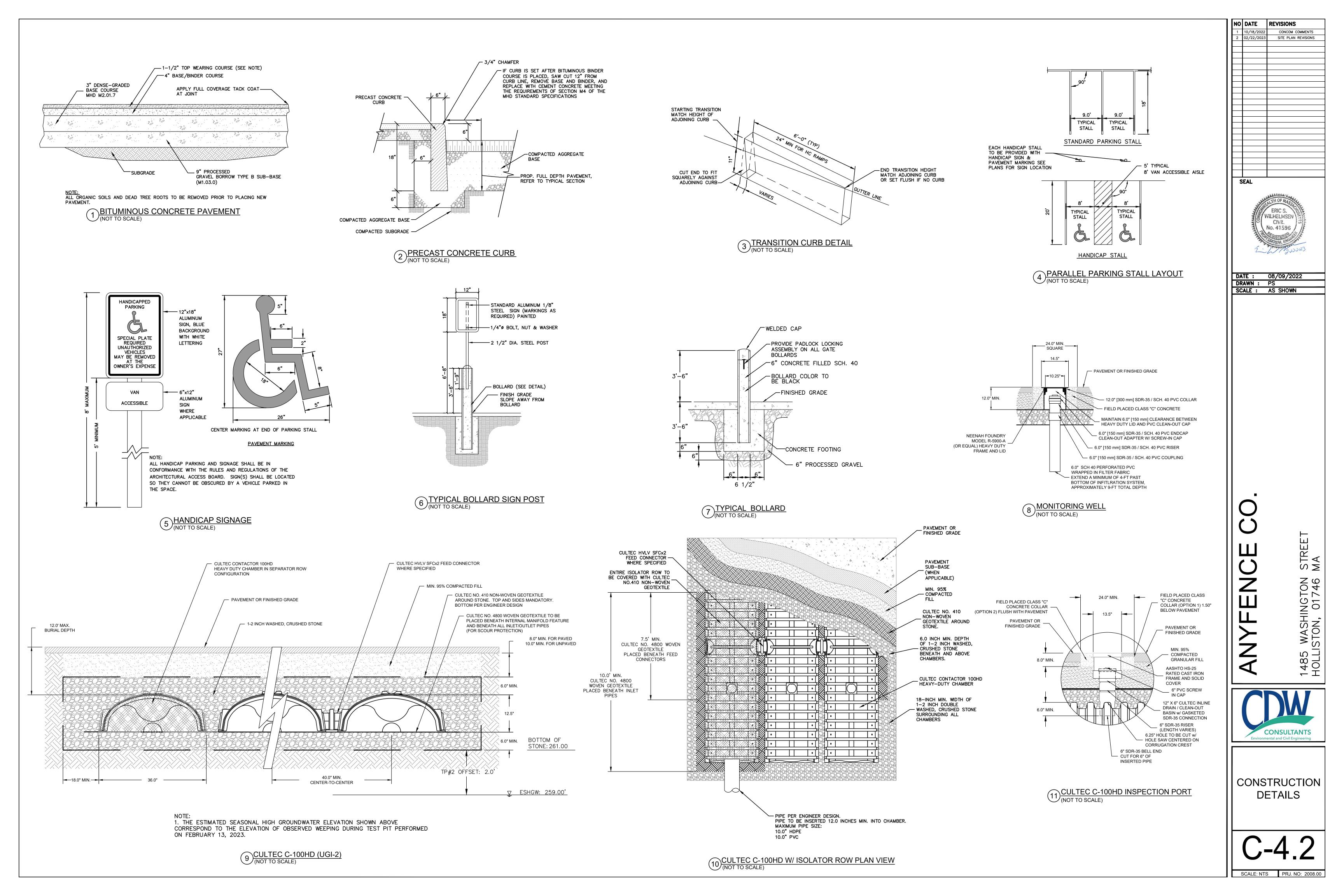
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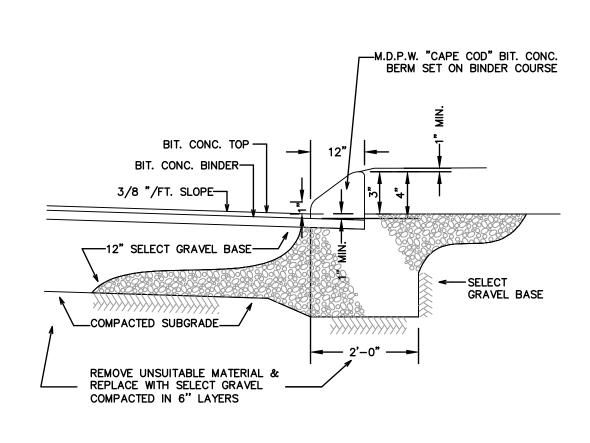
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CONSTRUCTION DETAILS

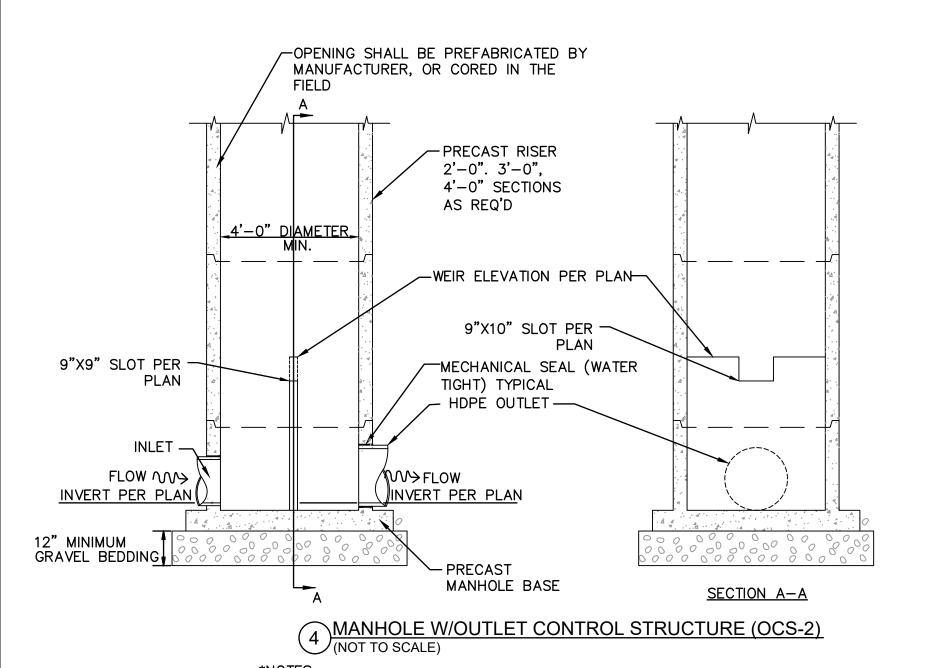
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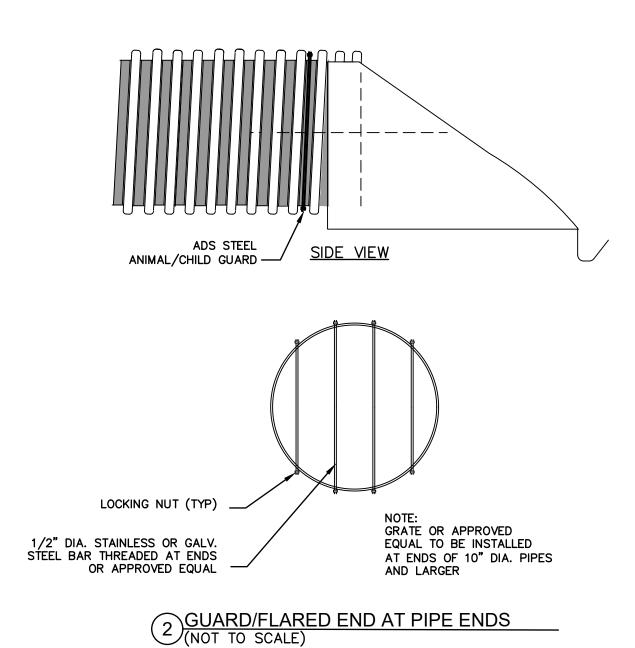


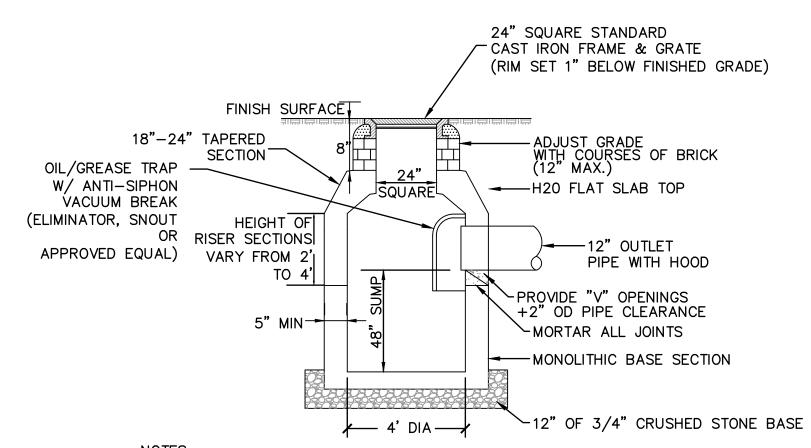


# 1 CAPE COD BERM NOT TO SCALE



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





NOTES:
1. STRUCTURE DESIGN TO LATEST ASTM C478.

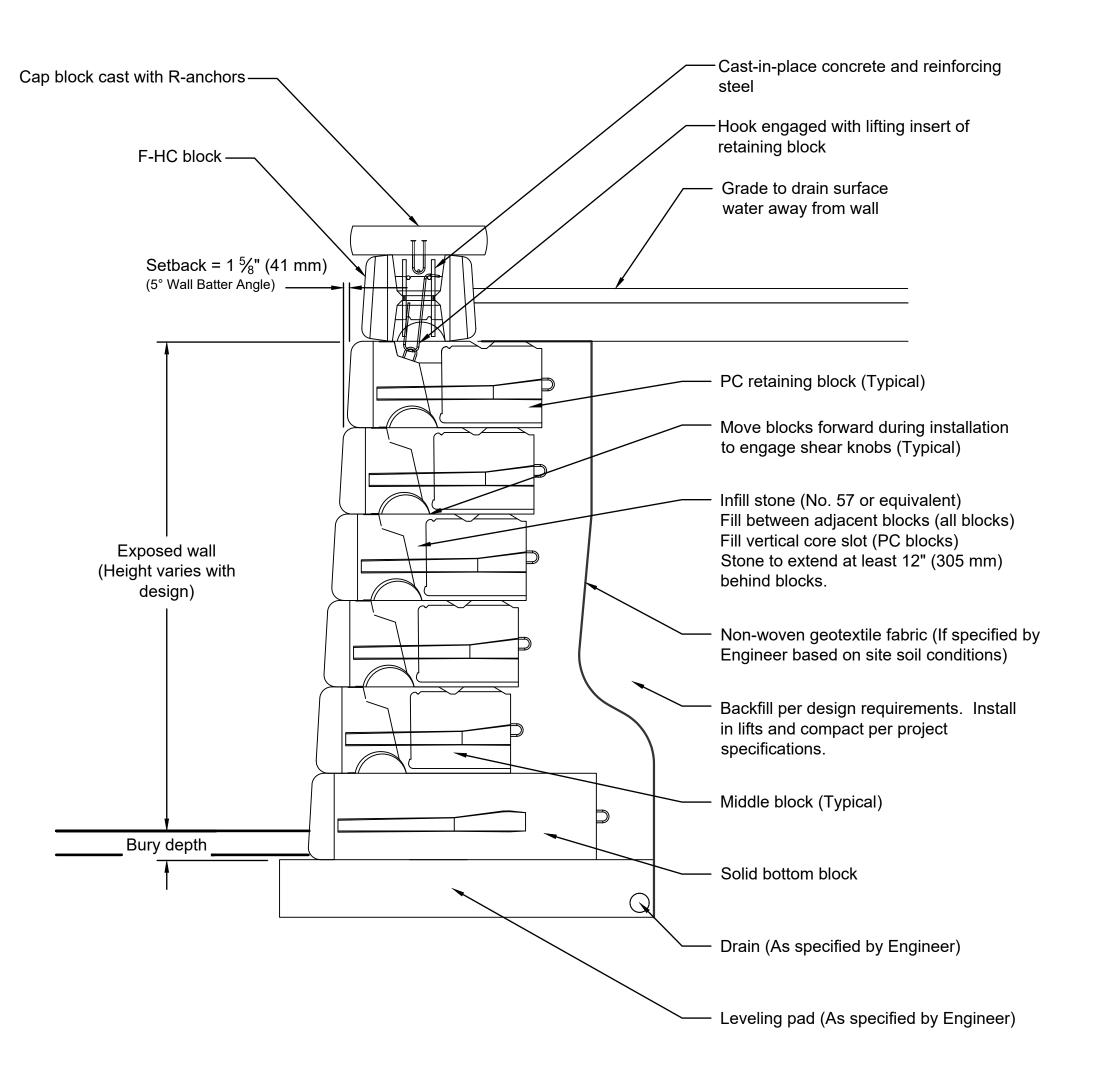
2. REINFORCING STEEL CONFORMS TO LATEST ASTM A 185.

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)

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

NO DATE REVISIONS

SEAL

CONCOM COMMENTS
SITE PLAN REVISIONS

AND LISTON, 01746

HOLLISTON, 01746

STREE MA

CONSTRUCTION DETAILS

C-4.3

SCALE: NTS PRJ. NO: 2008.00