

HIGHLAND VIEWS

A 24 UNIT MANUFACTURED HOUSING PARK & 10 UNIT MIXED USE DEVELOPMENT

19 ROOSEVELT TRAIL - WINDHAM, MAINE

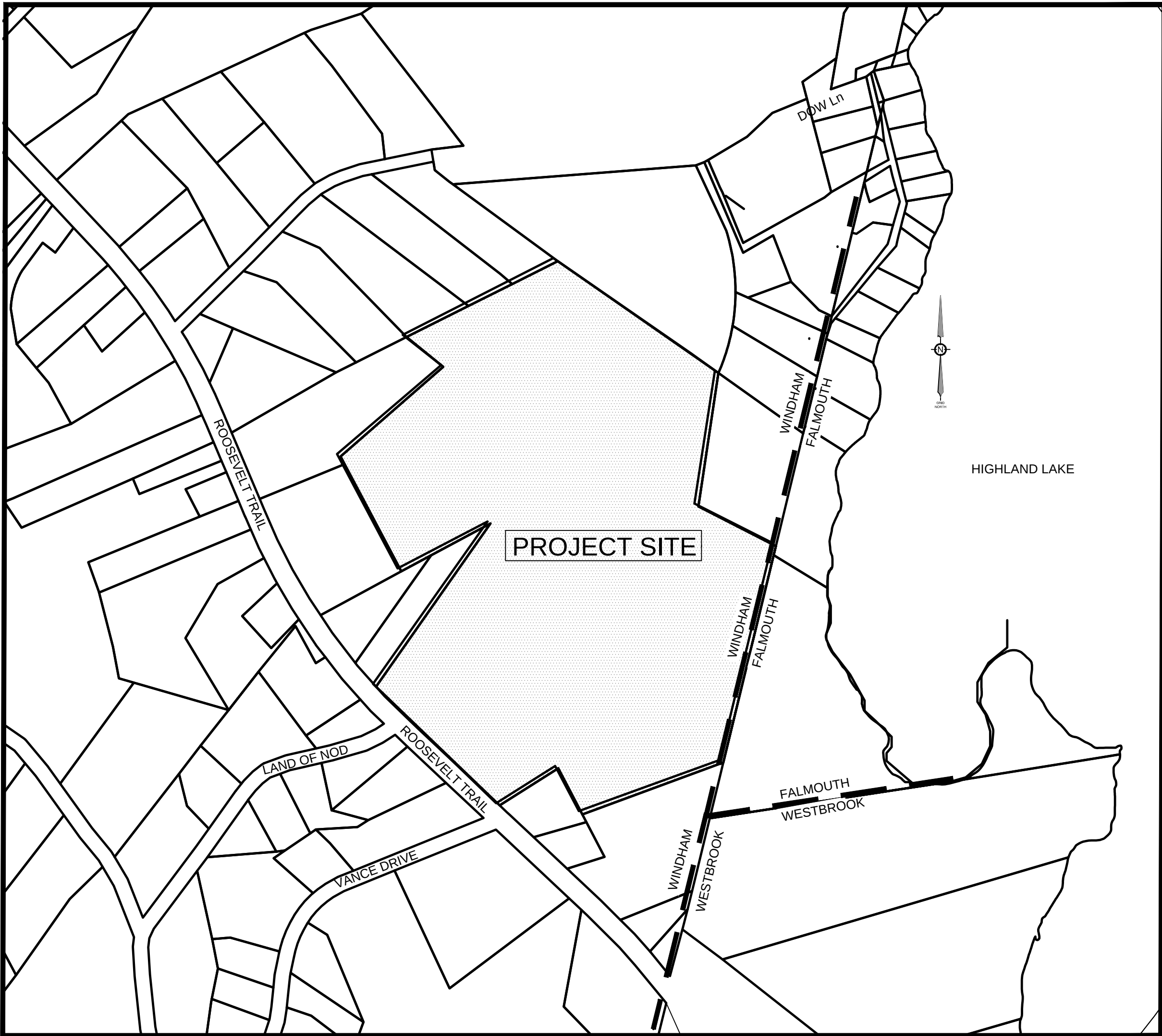
APPLICANT:
CHASE CUSTOM HOMES & FINANCE
290 BRIDGTON ROAD
WESTBROOK, MAINE 04092

OWNER:
CHASE CUSTOM HOMES & FINANCE
290 BRIDGTON ROAD
WESTBROOK, MAINE 04092

PROJECT PARCEL SITE
TOWN OF WINDHAM TAX ASSESSOR'S MAP & LOT NUMBERS

MAP
7

LOTS
63 & 66



LOCATION MAP
SCALE: 1"=300'

PERMITS

TYPE OF PERMIT	GOVERNING BODY	STATUS
SITE PLAN & SUBDIVISION APPROVAL	TOWN OF WINDHAM, MAINE PLANNING DEPARTMENT 8 SCHOOL ROAD WINDHAM, ME 04062 TEL. 207-892-1900	SUBMITTED: 12/19/2016 APPROVED:
BUILDING PERMIT	TOWN OF WINDHAM, MAINE CODE ENFORCEMENT OFFICER 8 SCHOOL ROAD WINDHAM, ME 04062 TEL. 207-892-1900	TO BE SUBMITTED BY OWNER/CONTRACTOR

SHEET INDEX

C-0.0	COVER SHEET & LOCATION MAP
C-1.0	SUBDIVISION PLAN
C-1.1	SUBDIVISION PLAN
C-2.0	SITE PLAN
C-2.1	MIXED USE SITE PLAN
C-3.0	GRADING & EROSION CONTROL PLAN
C-3.1	GRADING & EROSION CONTROL PLAN
C-4.0	UTILITY PLAN
C-5.0	DEMOLITION PLAN
C-6.0	PROFILES
C-7.0	DETAILS & NOTES
C-7.1	DETAILS & NOTES
C-7.2	DETAILS & NOTES
C-7.3	DETAILS & NOTES
C-7.4	STORMWATER DETAILS & NOTES

LEGEND

---	EXISTING PROPERTY LINE
---	PROJECT SITE BOUNDARY
---	EXISTING SETBACK LINE
- - -	PROPOSED EASEMENT
---124---	EXISTING MINOR CONTOUR
---124---	EXISTING MAJOR CONTOUR
---124---	PROPOSED CONTOUR
SD	EXISTING STORMDRAIN
SD	PROPOSED STORMDRAIN
S	EXISTING SANITARY SEWER
S	PROPOSED SANITARY SEWER
W	EXISTING WATER LINE
W	PROPOSED WATER LINE
UD	EXISTING UNDERDRAIN
UD	PROPOSED UNDERDRAIN
OHE	EXISTING OVERHEAD ELECTRIC & TELEPHONE
OHE	PROPOSED OVERHEAD ELECTRIC & TELEPHONE
UGE	EXISTING UNDERGROUND ELECTRIC & TELEPHONE
UGE	PROPOSED UNDERGROUND ELECTRIC & TELEPHONE
---	EXISTING EDGE OF PAVEMENT
---	PROPOSED EDGE OF PAVEMENT
---	EXISTING EDGE OF GRAVEL
---	PROPOSED EDGE OF GRAVEL
---	EXISTING CURB
---	PROPOSED CURB
SF	PROPOSED FENCE
TP-A	SILT FENCE
TP-A	TEST PIT
+	EXISTING VALVE
+	PROPOSED VALVE
+	EXISTING HYDRANT
+	EXISTING LIGHT POLE
+	PROPOSED LIGHT POLE
+	EXISTING UTILITY POLE
+	EXISTING CATCH BASIN
+	PROPOSED CATCH BASIN
+	EXISTING DRAIN MANHOLE
+	PROPOSED DRAIN MANHOLE
+	EXISTING SEWER MANHOLE
+	PROPOSED SEWER MANHOLE
+	EXISTING SPOT GRADE
+	PROPOSED SPOT GRADE
+	SURVEY CONTROL POINT
+	EXISTING MONUMENT
+	EXISTING IRON PIPE
+	EXISTING SIGN
+	PROPOSED SIGN
+	EXISTING BUILDING
+	PROPOSED BUILDING
+	PROPOSED CONCRETE PAD
+	PROPOSED PAVEMENT
+	PROPOSED FORESTED BUFFER
+	PROPOSED M.H.P. LANDSCAPING BUFFER
+	TURF REINFORCEMENT BLANKET
+	RIPRAP

PREPARED BY:

CIVIL ENGINEER:
TERRADYN CONSULTANTS, LLC
P.O. BOX 339
NEW GLOUCESTER, MAINE 04260
(207) 632-9010

SURVEYOR:
WAYNE WOOD & CO.
30 WOOD DRIVE
GRAY MAINE 04039
207-657-3330

SEPTIC DESIGN & SOIL EVALUATION:
MARK CENCI GELOGIC
93 MILL ROAD
NORTH YARMOUTH, MAINE 04097

SIGNATURE DATE: 7/3/2017

APP'D BY

REVISIONS

DATE

NO.

P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradyconsultants.com

TERRADYN
CONSULTANTS, LLC

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
HIGHLAND VIEWS
19 ROOSEVELT TRAIL, WINDHAM ME.
COVER SHEET & LOCATION MAP

PREPARED FOR
CHASE CUSTOM HOMES & FINANCE
290 BRIDGTON ROAD
WESTBROOK, MAINE 04092

DATE: 7/3/2017
SCALE: AS SHOWN
DESIGNED: JDA
JOB NO: 1636
FILE: 1636 COVER.DWG
SHEET C-0.0

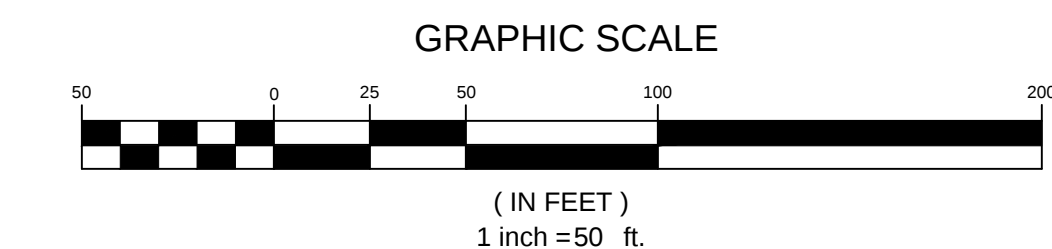


--	--

**TEHRAN IN
CONSULTANTS, LLC**
Fax: (207) 221-1317
www.terradynconsultants.com

DATE:	7/3/2017
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1636
FILE: 1636 SB.DWG	

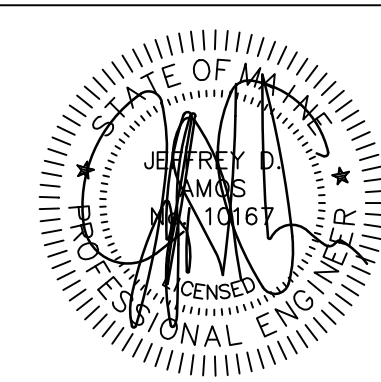
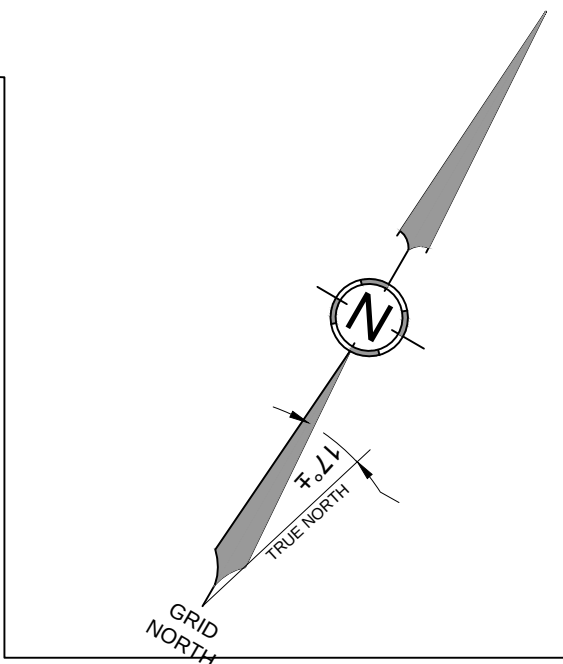
SHEET C-1.0



APPROVED: TOWN OF WINDHAM
PLANNING BOARD

DATE _____

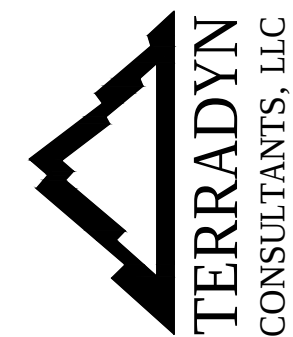
STATE OF MAINE
____ COUNTY SS REGISTRY OF DEEDS
RECEIVED _____, 20____
AT ____h ____m ____M. AND RECORDED IN
PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTRAR _____



SIGNATURE DATE: 7/3/2017

[illegible]

P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradync consultants.com



Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

DATE

____ COUNTY SS REGISTRY OF DEEDS
RECEIVED _____, 20____
AT ____h ____m ____M. AND RECORDED IN
PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTRAR _____

TOTAL PARCEL AREA WITHIN MHP		734,939 SF (16.87 AC)
MINIMUM N.R.A. PER LOT		20,000 SF
TOTAL PERMITTED LOTS/UNITS		36.75
TOTAL PROPOSED LOTS/UNITS		24

TOTAL PARCEL AREA OUTSIDE OF MHPO.	.	.	.	.	932,710 SF (21.41 AC)
------------------------------------	---	---	---	---	-----------------------

NET RESIDENTIAL AREA	
RIGHTS OF WAY	17.852 SF
SLOPES > 25% (NOT LOCATED WITHIN RP DISTRICT)	0 SF
FLOOD PLAIN (NOT LOCATED WITHIN RP DISTRICT)	0 SF
RESOURCE PROTECTION DISTRICT	14.730 SF
SURFACE WATER	0 SF
POORLY DRAINED SOILS	287,598 SF
MDIF&W SIGNIFICANT HABITAT	0 SF
MDOC ENDANGERED SPECIES AREA	0 SF

NET RESIDENTIAL AREA (N.R.A.)	.	.	.	.	.	612,530 SF
MINIMUM N.R.A. PER LOT	.	.	.	.	.	60,000 SF
TOTAL PERMITTED LOTS/UNITS	.	.	.	.	.	10.2
TOTAL PROPOSED LOTS/UNITS	.	.	.	.	.	10

1. THE RECORD OWNER OF THE PARCEL IS CHASE CUSTOM HOMES & FINANCE BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 33,226, PAGE 279.
2. THE PROPERTY IS SHOWN AS LOTS 68 & 69 ON THE TOWN OF WINDHAM TAX MAP 7 AND IS LOCATED IN THE COMMERCIAL III (C3) ZONE. A PORTION OF THE PROPERTY IS ALSO LOCATED WITHIN THE MANUFACTURED HOUSING PARK OVERLAY ZONE.
3. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON A STANDARD BOUNDARY BY WAYNE WOOD & CO. LOCATED AT 30 WOOD DRIVE, GRAY MAINE 04039, DATED AUGUST 2016.
4. TOPOGRAPHIC INFORMATION SHOWN HEREON IN ALL DEVELOPMENT IS BASED UPON A TOPOGRAPHIC SURVEY PERFORMED BY WAYNE T. WOOD & COMPANY, INC. IN JUNE 2016. ALL OTHER TOPOGRAPHY IS BASED UPON LIDAR DERIVED INFORMATION OBTAINED FROM THE STATE OF MAINE DEPARTMENT OF GIS.

5. SPACE AND BULK CRITERIA:

COMMERCIAL III STANDARDS	
MIN. LOT SIZE :	80,000 SF (DWELLING MIXED USE)
NET RESIDENTIAL DENSITY :	60,000 SF/LOT
MIN. FRONTAGE :	200' (DWELLING)
MIN. FRONTAGE :	100' (NON RESIDENTIAL)
MIN. FRONT SETBACK :	60' (ON ARTERIAL)
MIN. FRONT SETBACK :	40' (NON-ARTERIAL)
MIN. FRONT LANDSCAPED BUFFER :	20'
MIN. SIDE SETBACK :	10'
MIN. REAR SETBACK :	10'
MAX. BUILDING HEIGHT :	35'

MANUFACTURED HOUSING PARK OVERLAY ZONE (MHPO) STANDARDS

MIN LOT SIZE	12,000 SF (WITH CENTRAL SEWAGE SYSTEM)
NET RESIDENTIAL DENSITY	20,000 SF/UNIT
MIN. FRONTAGE	75' (WITH CENTRAL SEWAGE SYSTEM)
MIN. FRONT SETBACK	30'
MIN. SIDE SETBACK	15'
MIN. REAR SETBACK	15'

- THE PROPERTY DOES NOT CONTAIN ANY FLOOD HAZARD AREAS ACCORDING TO FLOOD INSURANCE RATE MAPS 230045 0006 B, 230045 0010 B, 230054 0001 B & 230189 0003 B.
7. THE WETLANDS ON THIS PLAN WERE DELINEATED BY MARK CENCI OF MARK CENCI GEOLOGIC, INC.
8. THESE LOTS ARE TO BE SERVICED BY PUBLIC WATER, A COMMON PRIVATE SEPTIC SYSTEM AND UNDERGROUND UTILITIES.
9. ALL MONUMENTS WITHIN THIS SUBDIVISION SHALL BE SET IN ACCORDANCE WITH THE TOWN OF WINDHAM LAND USE ORDINANCE SECTION 911.A.3.
10. ANY HOUSE WITHIN THIS SUBDIVISION SHALL BE CONSTRUCTED WITH A POSITIVE FREE OUTLET FOUNDATION DRAIN.
11. STORMWATER RESTRICTIONS:
- THE MAXIMUM IMPERVIOUS SURFACE COVERAGE FOR ALL LOTS IS 3.00 SF.
 - ROOF DRAIN FILTER STRIPS SHALL BE INSTALLED ON EACH MANUFACTURED HOUSING UNIT UNLESS SUITABLE ALTERNATIVE MEASURES ARE APPROVED BY THE TOWN PLANNING DEPARTMENT.
12. ANY NEED FOR ADDITIONAL UNDERDRAIN / GEOTEXTILE FABRIC WILL BE ADDRESSED DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 911.5.M.8.B.II OF THE LAND USE ORDINANCE.
13. THE FORESTED BUFFERS SHOWN ON THIS PLAN ARE INTENDED TO REMAIN IN A NATURAL VEGETATIVE STATE. ONLY DEAD OR DISEASED TREES MAY BE REMOVED. THESE BUFFERS SHALL BE MARKED OUT WITH PERMANENT SIGNAGE AND MAINTAINED BY THE SUBDIVISION IN ACCORDANCE WITH THE MAINE DEP CHAPTER 500 SUGGESTED TEMPLATES FOR DEED RESTRICTIONS PRIOR TO CONSTRUCTION.
14. REFERENCE IS MADE TO THE ENGINEERING PLANS AS PREPARED BY TERRADYN CONSULTANTS, LLC SUBMITTED AS PART OF THIS APPROVAL.

SHEET DESCRIPTION

STREET DESCRIPTION
HIGHLAND VIEWS
19 ROOSEVELT TRAIL, WINDHAM, ME
SUBDIVISION PLAN

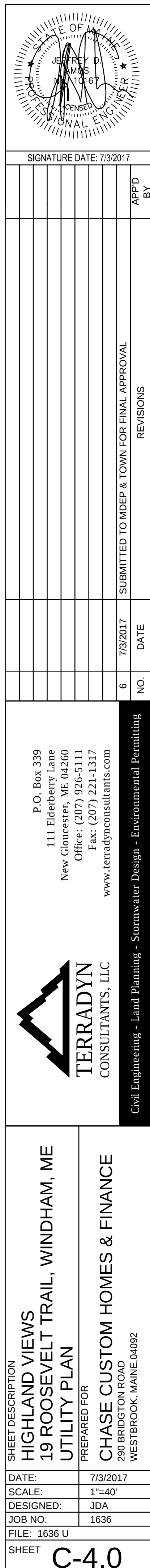
PREPARED FOR

CHASE CUSTOM HOMES & FINANCE

WESTBROOK, MAINE 04092

DATE:	7/3/2017
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1636
FILE: 1636 SB.DWG	

SHEET C-1.1

[illegible][illegible][illegible]

Submitting	6	NO.	

11
New Glou
Office
Fax
www.terrady
nwater Design - E



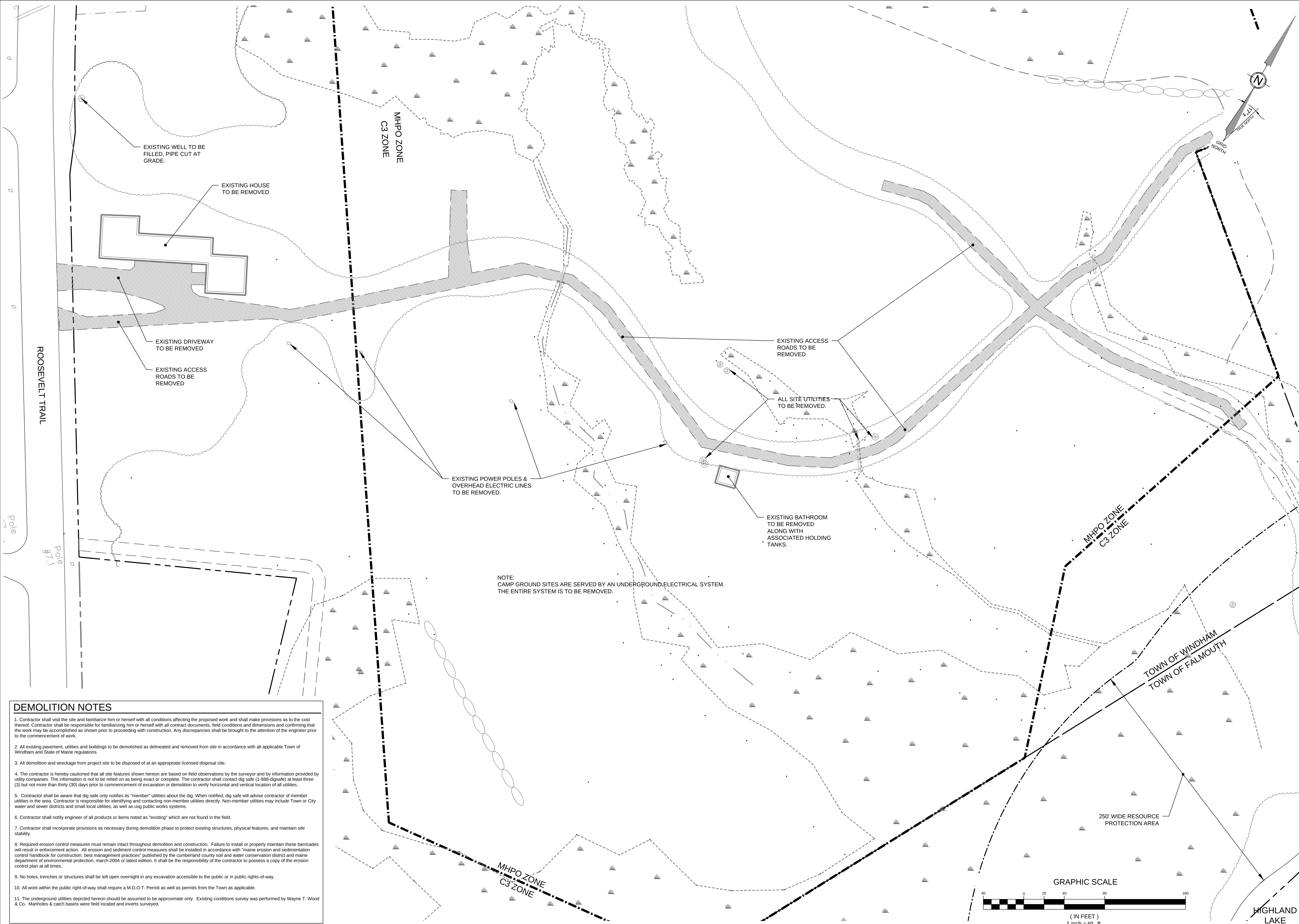
TERRAIN
CONSULTANT

Engineering - Land

INDHAM, I
& FINANC

DESCRIPTION
LAND VIEW
DOSEVELT
ITY PLAN
ED FOR
SE CUSTO
STON ROAD
OOK, MAINE, 04092

DESIGNED:	JDA
JOB NO:	1636
FILE: 1636 U	
SHEET	C-4.0



DEMOLITION NOTES

1. Contractor shall visit the site and familiarize him or herself with all conditions affecting the proposed work and shall make provisions as to the cost thereof. Contractor shall be responsible for familiarizing him or herself with all contract documents, field conditions and dimensions and confirming that the work may be accomplished as shown prior to proceeding with construction. Any discrepancies shall be brought to the attention of the engineer prior to the commencement of work.
2. All existing pavement, utilities and buildings to be demolished as delineated and removed from site in accordance with all applicable Town of Windham and State of Maine regulations.
3. All demolition and wreckage from project site to be disposed of at an appropriate licensed disposal site.
4. The contractor is hereby cautioned that all site features shown hereon are based on field observations by the surveyor and by information provided by utility companies. The information is not to be relied on as being exact or complete. The contractor shall contact dig safe (1-888-digsafe) at least three (3) but not more than thirty (30) days prior to commencement of excavation or demolition to verify horizontal and vertical location of all utilities.
5. Contractor shall be aware that dig safe only notifies its "member" utilities about the dig. When notified, dig safe will advise contractor of member utilities in the area. Contractor is responsible for identifying and contacting non-member utilities directly. Non-member utilities may include Town or City water and sewer districts and small local utilities, as well as usg public works systems.
6. Contractor shall notify engineer of all products or items noted as "existing" which are not found in the field.
7. Contractor shall incorporate provisions as necessary during demolition phase to protect existing structures, physical features, and maintain site stability.
8. Required erosion control measures must remain intact throughout demolition and construction. Failure to install or properly maintain these barricades will result in enforcement action. All erosion and sediment control measures shall be installed in accordance with "maine erosion and sedimentation control handbook for construction: best management practices" published by the cumberland county soil and water conservation district and maine department of environmental protection, march 2004 or latest edition. It shall be the responsibility of the contractor to possess a copy of the erosion control plan at all times.
9. No holes, trenches or structures shall be left open overnight in any excavation accessible to the public or in public rights-of-way.
10. All work within the public right-of-way shall require a M.D.O.T. Permit as well as permits from the Town as applicable.
11. The underground utilities depicted hereon should be assumed to be approximate only. Existing conditions survey was performed by Wayne T. Wood & Co. Manholes & catch basins were field located and inverts surveyed.

SIGNATURE DATE: 7/3/2017

NO.	DATE	REVISIONS	APPROVED BY
6	7/3/2017	SUBMITTED TO MDEP & TOWN FOR FINAL APPROVAL	

P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradyconsultants.com

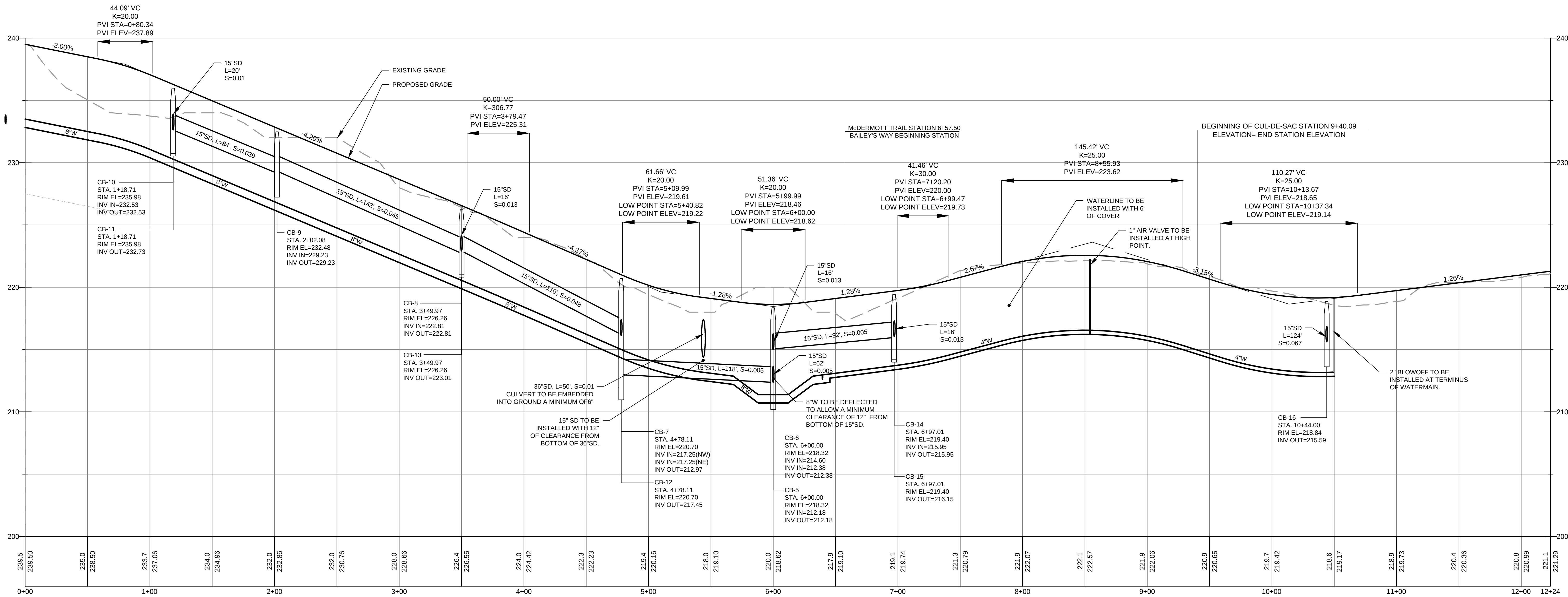
TERRADYN
CONSULTANTS, LLC

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
**HIGHLAND VIEWS
19 ROOSEVELT TRAIL, WINDHAM, ME
DEMOLITION PLAN**
PREPARED FOR
CHASE CUSTOM HOMES & FINANCE
290 BRINGTON ROAD
WESTBROOK, MAINE 04092

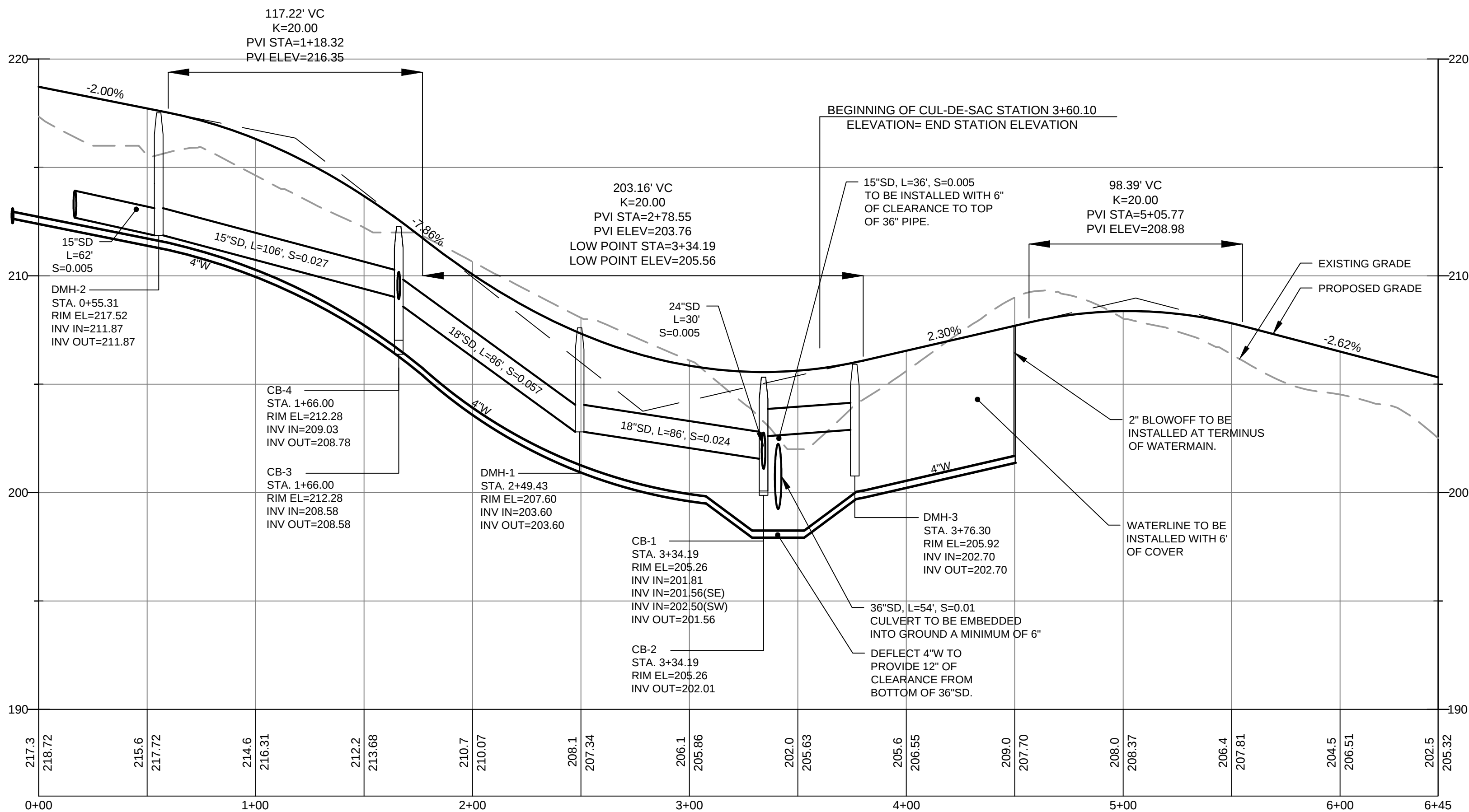
DATE:	7/3/2017
SCALE:	1"=40'
DESIGNED:	JDA
JOB NO:	1636
FILE:	1636 DEMO

SHEET **C-5.0**



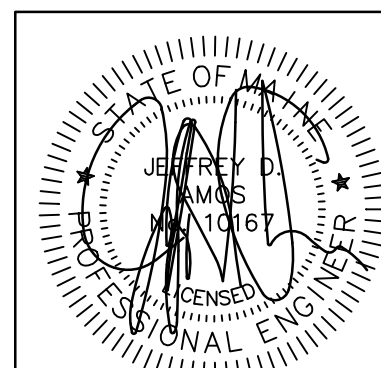
PROFILE OF McDERMOTT'S TRAIL

SCALE: 1"=40' HORIZONTAL
1"=4' VERTICAL



PROFILE OF BAILEY'S WAY

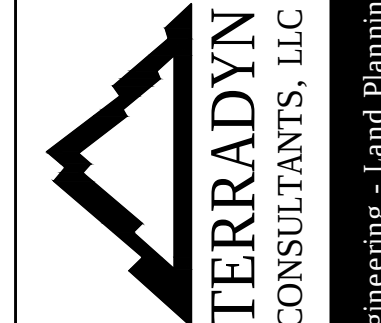
SCALE: 1"=40' HORIZONTAL
1"=4' VERTICAL



SIGNATURE DATE: 7/3/2017

NO.	DATE	REVISIONS	APP'D BY
6	7/3/2017	SUBMITTED TO MDEP & TOWN FOR FINAL APPROVAL	

P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradyndesign.com



Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

SHEET DESCRIPTION
HIGHLAND VIEWS
19 ROOSEVELT TRAIL, WINDHAM, ME
PROFILES
PREPARED FOR
CHASE CUSTOM HOMES & FINANCE
280 BRIDGTON ROAD
WESTBROOK, MAINE 04092

DATE:	7/3/2017
SCALE:	AS SHOWN
DESIGNED:	JDA
JOB NO:	1636
FILE:	1636 B
SHEET	C-6.0

Pre-Construction Phase

BMP Construction Phase

B. Construction entrance: Prior to any clearing or grubbing, a construction entrance shall be constructed at the intersection with the proposed access drive and the existing roadway to avoid tracking of mud, dust and debris from the site.

D. Temporary stabilization. Stabilize with temporary seeding, mulch, or other non-erodible cover any exposed soils that will remain unworked for more than 14 days except, stabilize areas within 100 feet of a wetland or waterbody within 7 days or prior to a predicted storm event, whichever comes first. If hay or straw mulch is used, the application rate must be 2 bales (70-90 pounds) per 1000 sf or 1.5 to 2 tons (90-100 lbs) per acre to cover 75 to 90% of the ground surface. Hay mulch must be applied in a windward direction. An erosion control blanket may be used at the base of embankments, along riparian areas, grassed waterways, steep slopes (15% or greater) and on any disturbed soil within 100 feet of lakes, streams and wetlands. Grading shall be planned so as to minimize the length of time between initial soil exposure and final grading. On large projects this should be accomplished by phasing the operation and completing the first phase up to final grading and seeding before starting the second phase, and so on.

Permanent stabilization defined

C. Permanent mulch. For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.

F. Paved areas. For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.

General Construction Phase

The following erosion control measures shall be followed by the contractor throughout construction of this project:

G. Areas shall be scarified to a minimum depth of 3 inches prior to placement of topsoil.

1. All fills shall be placed and compacted in layers not to exceed 8 inches in thickness

K. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills

L. Fill shall not be placed on a frozen foundation.

M. Seeps or springs encountered during construction shall be handled appropriately.

N. All graded areas shall be permanently stabilized immediately following finished grading

O. Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

Permanent vegetation

Permanent vegetative cover should be established on disturbed areas where permanent, long lived vegetative cover is needed to stabilize the soil, to reduce damages from sediment and runoff, and to enhance the environment.

Seedbed preparation

A. Grade as feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance.

E. Inspect seedbed just before seeding. If traffic has left the soil compacted; the area must be tilled and firmed as above.

I. Areas which have been temporarily or permanently seeded shall be mulched immediately following seeding.

J. Areas which cannot be seeded within the growing season shall be mulched for over-winter protection and the area should be seeded at the beginning of the growing season.

Winter construction phase

If an area is not stabilized with temporary or permanent measures by November 15, then the site must be protected with additional stabilization measures.

A. Permanent stabilization consists of at least 90% vegetation, pavement/gravel base or riprap.

B. Do not expose slopes or leave slopes exposed over the winter or for any other extended time of work suspension unless fully protected with mulch.

C. Apply hay mulch at twice the standard rate (150 lbs. Per 1,000 sf). The mulch must be thick enough such that the ground surface will not be visible and must be anchored.

D. Use mulch and mulch netting or an erosion control mulch blanket or all slopes greater than 8 % or other areas exposed to direct wind.

E. Install an erosion control blanket in all drainageways (bottom and sides) with a slope greater than 3 %.

F. See the vegetation measures for more information on seeding dates and types.

G. Winter excavation and earthwork shall be completed so that no more than 1 acre of the site is without stabilization at any one time.

H. An area within 100 feet of a protected natural resource must be protected with a double row of sediment barrier.

1. Temporary mulch must be applied within 7 days of soil exposure or prior to any storm event, but after every workday in areas within 100 feet from a protected natural resource.

J. Areas that have been brought to final grade must be permanently mulched that same day.

K. If snowfall is greater than 1 inch (fresh or cumulative), the snow shall be removed from the areas due to be seeded and mulched.

L. Loam shall be free of frozen clumps before it is applied.

M. All vegetated ditch lines that have not been stabilized by november 1, or will be worked during the winter construction period, must be stabilized with an appropriate stone lining backed by an appropriate gravel bed or geotextile unless specifically released from this standard by the department.

Maintenance and inspection phase

A. Contractor shall inspect disturbed and impervious areas, and erosion and stormwater control measures, areas used for storage that are exposed to precipitation, and locations where vehicles enter or exit the parcel at least once a week and before and after a storm event, prior to completion of permanent stabilization. A person with knowledge of erosion and stormwater must conduct the inspection. This person must be identified in the inspection log. If best management practices (bmps) need to be modified or if additional bmps are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). All measures must be maintained in effective operating condition until areas are permanently stabilized.

B. A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the personnel making the inspection, the date(s) of the inspection, and major observations relating to operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include: bmps that need to be maintained; location(s) of bmps that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional bmps are needed that did not exist at the time of inspection. Follow-up to correct deficiencies or enhance controls must also be indicated in the log and dated, including what action was taken and when.

NOT TO SCALE

NOT TO SCALE

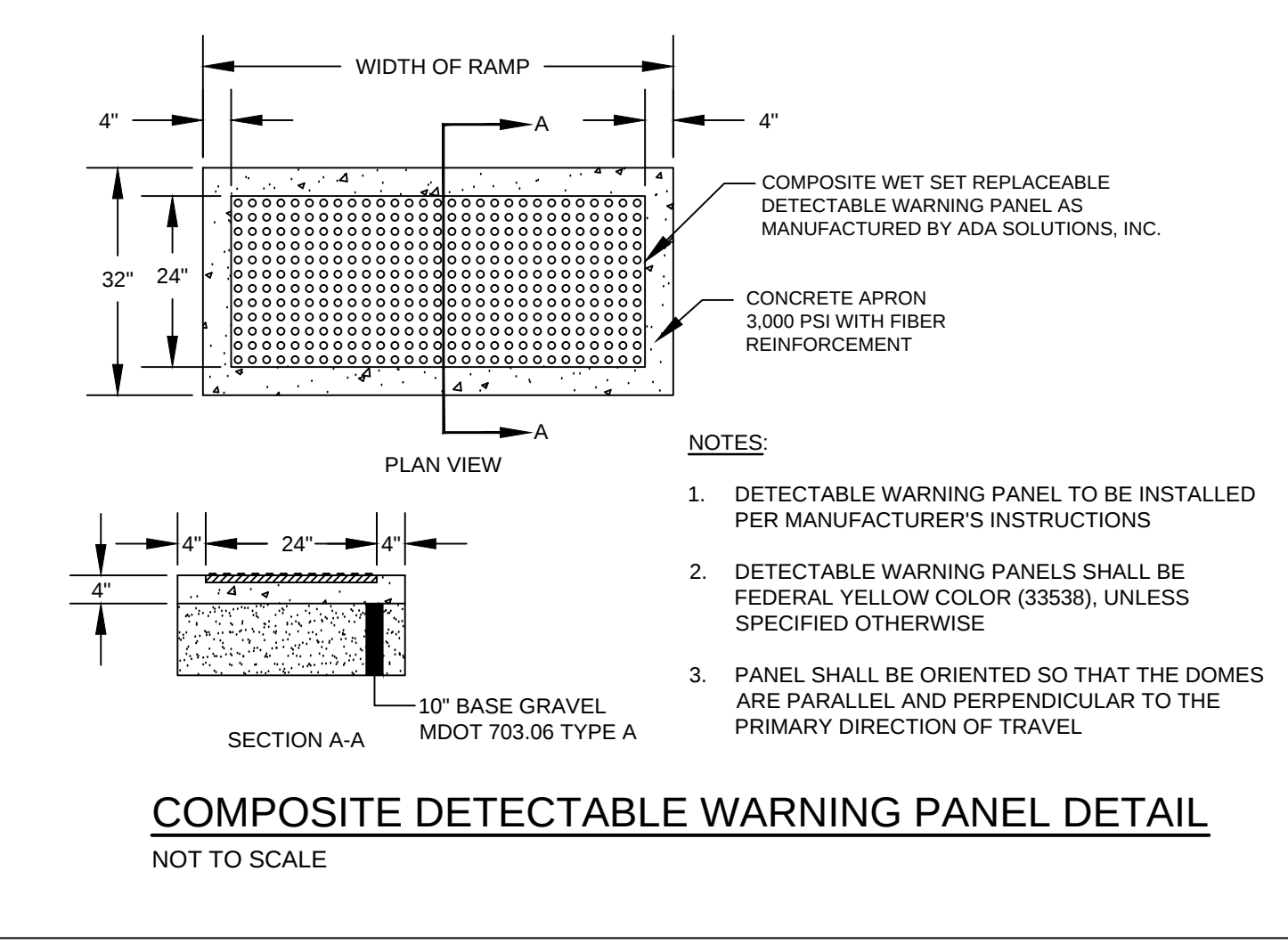
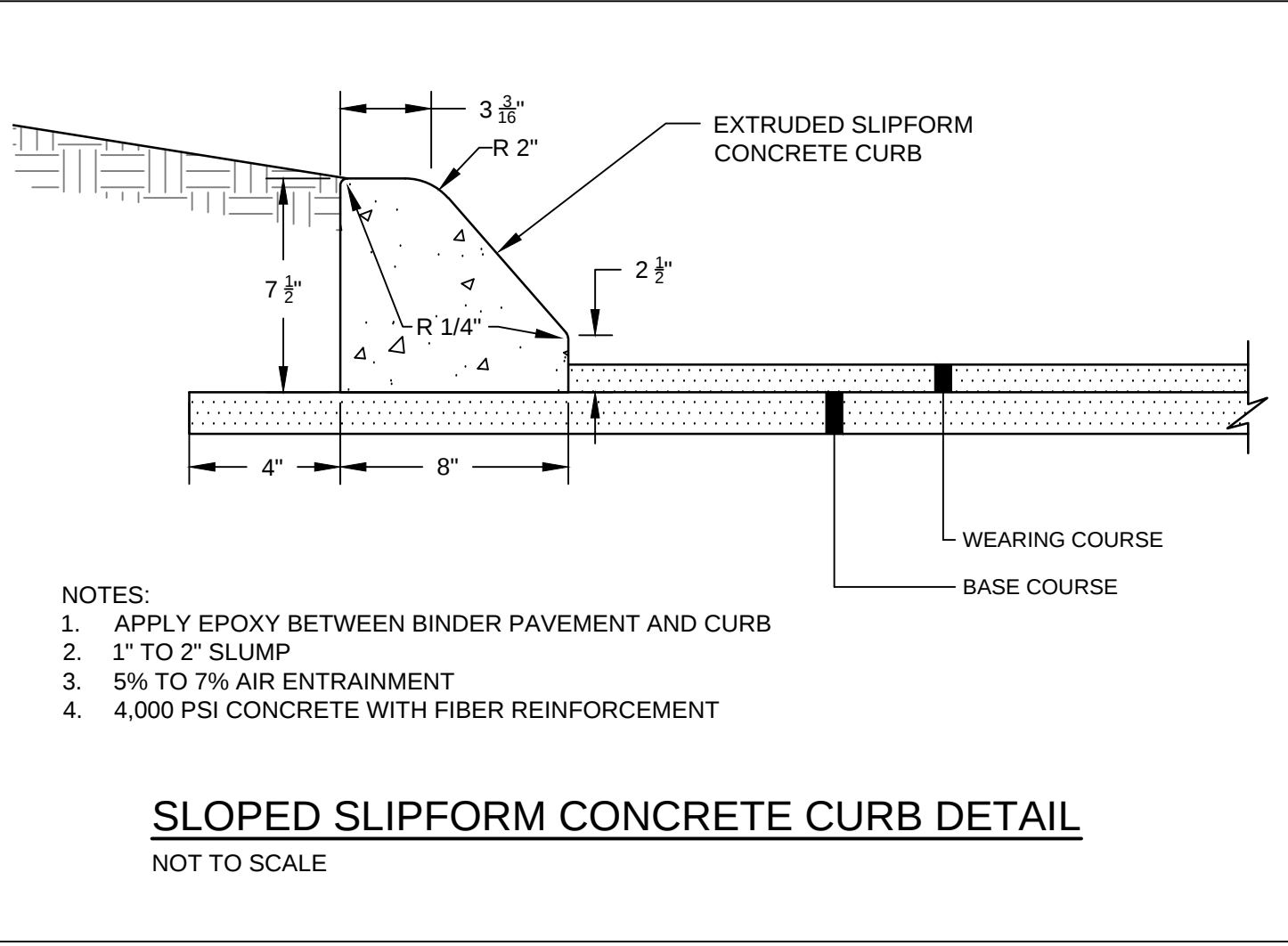
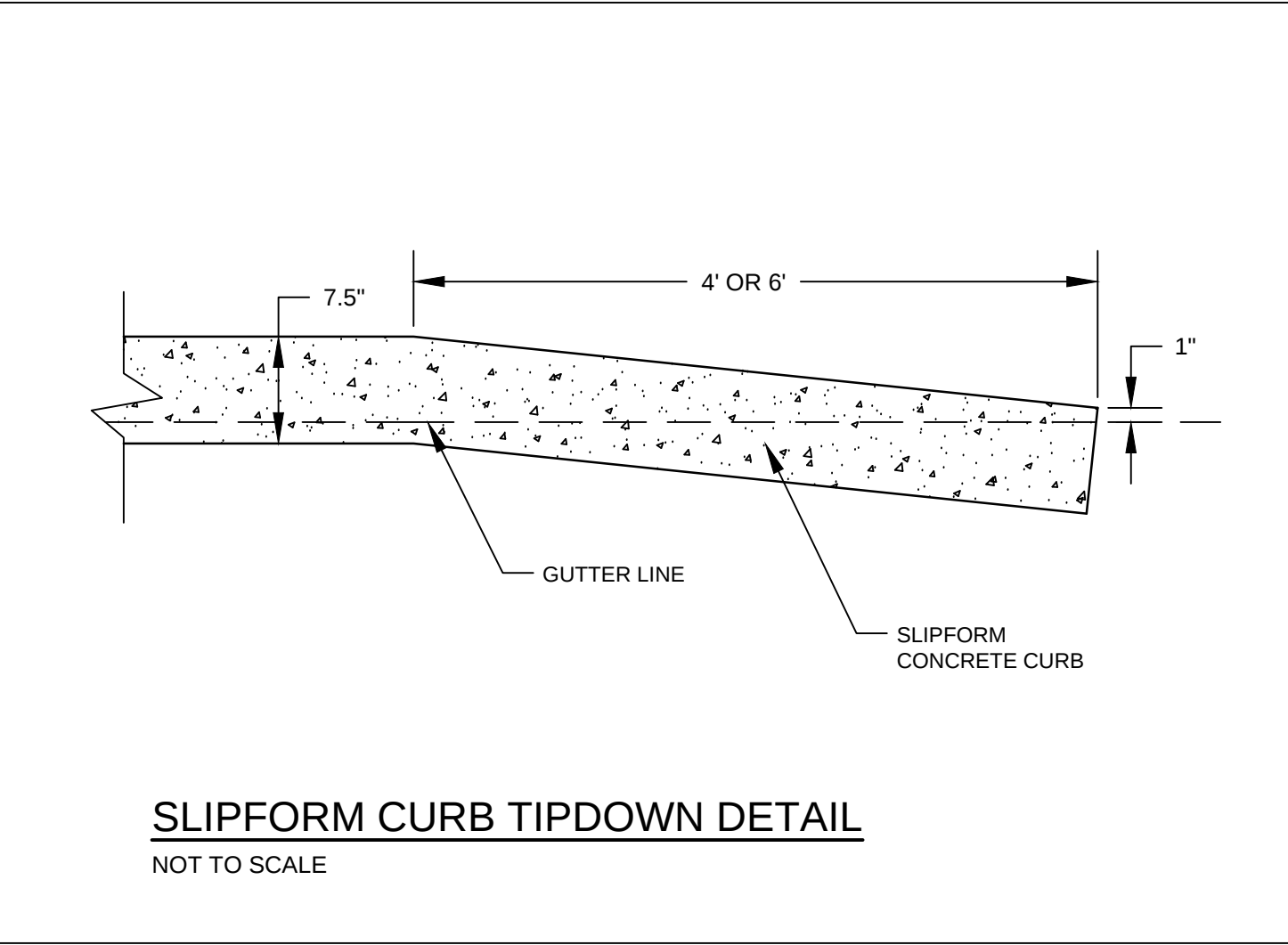
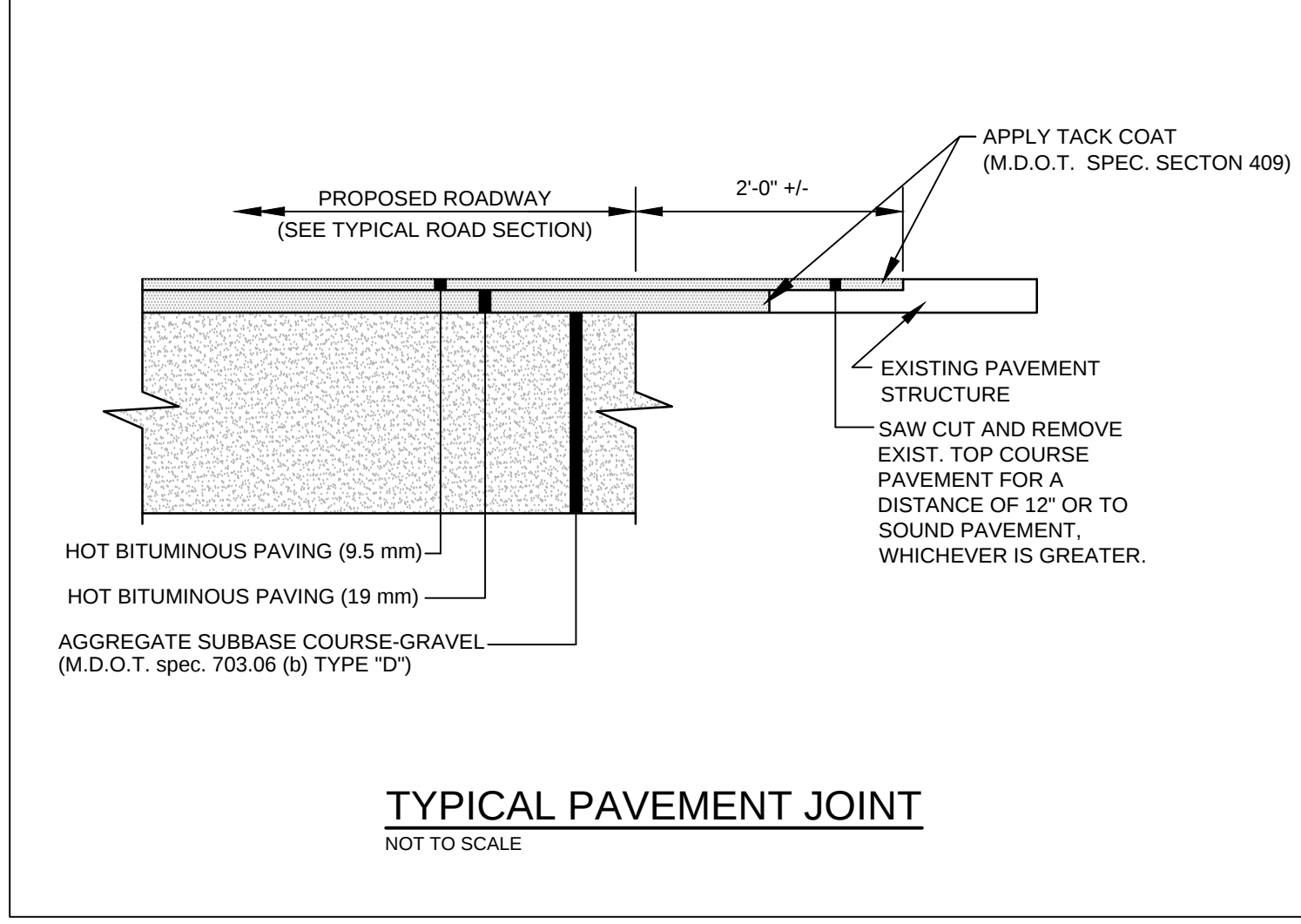
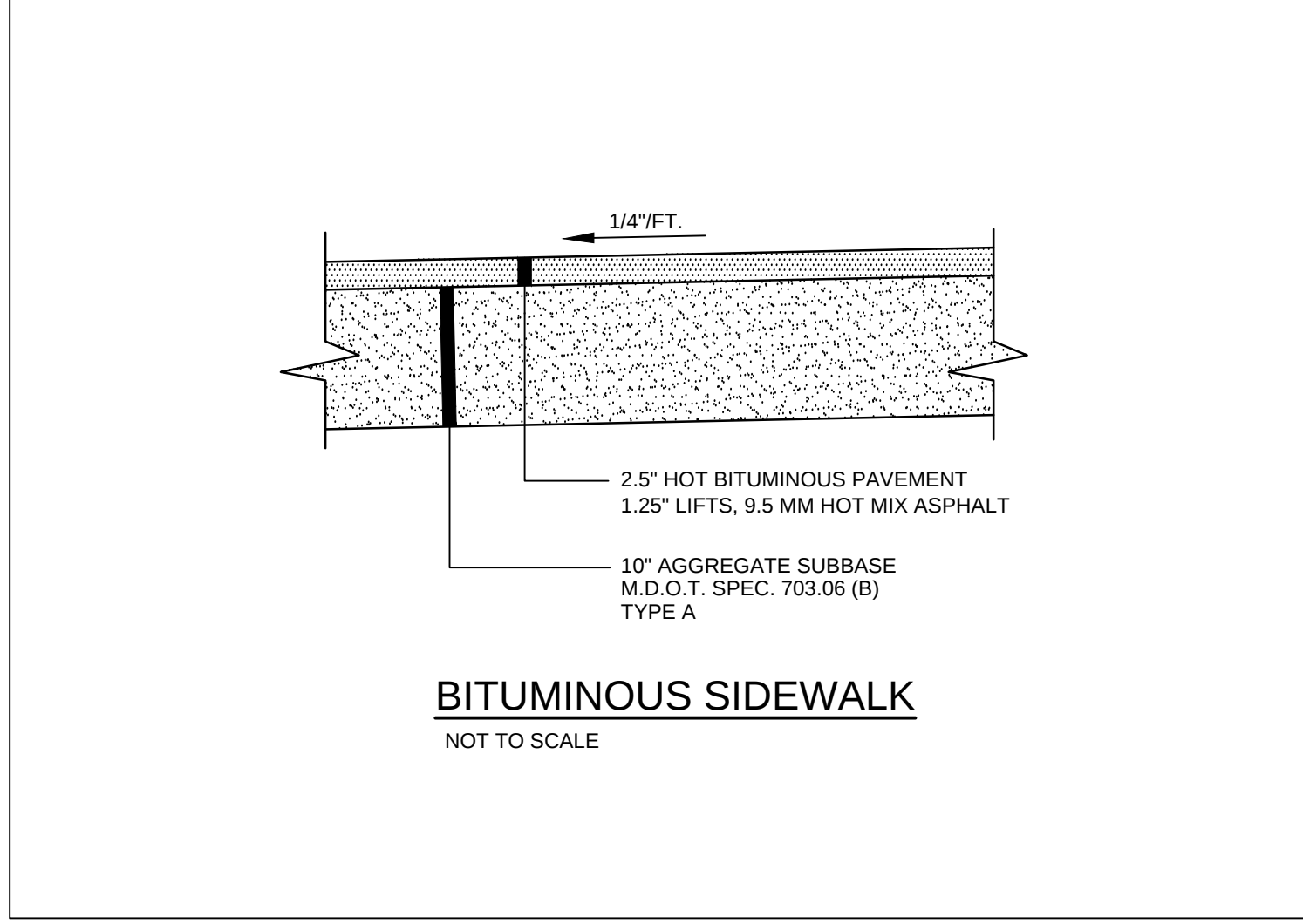
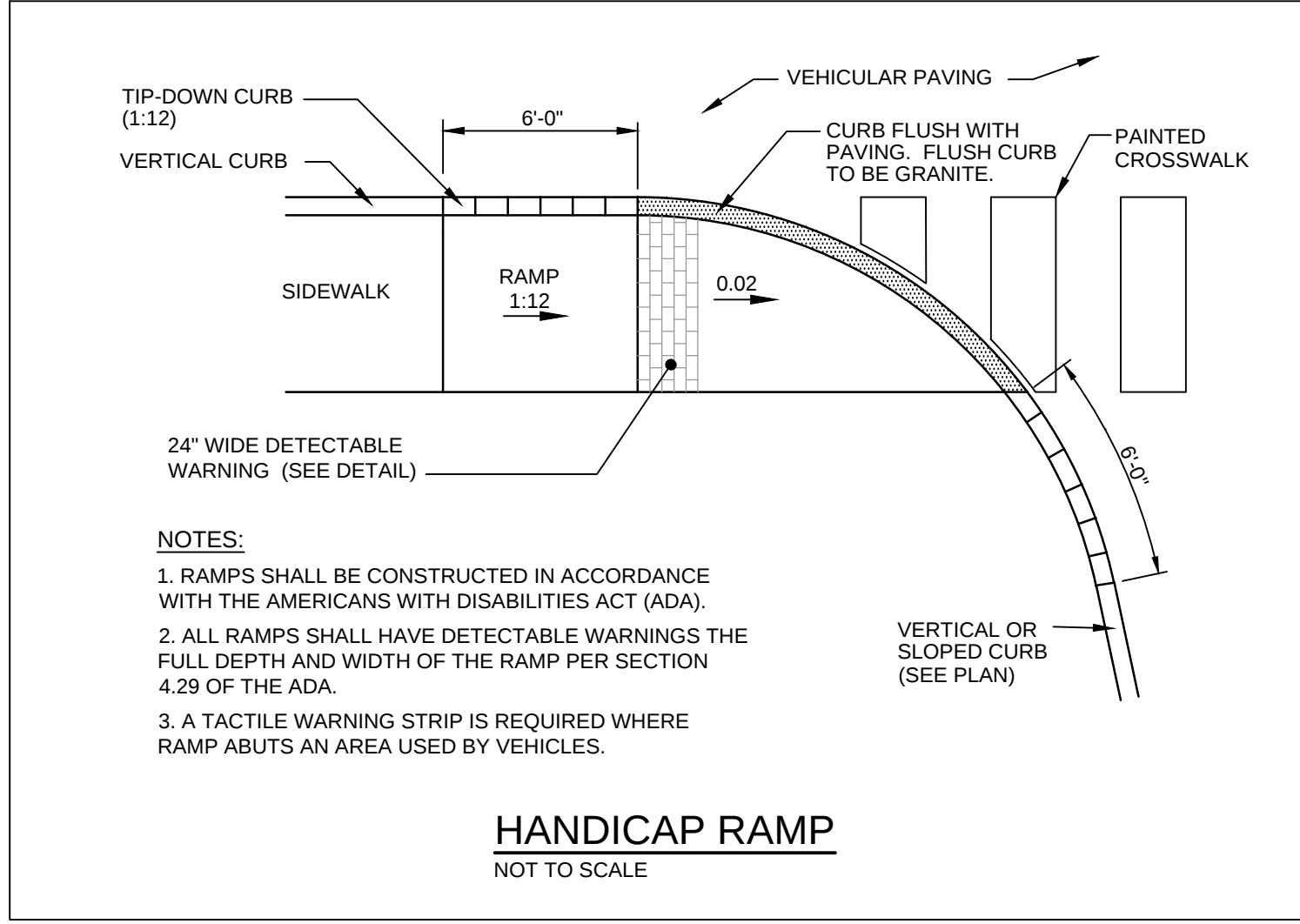
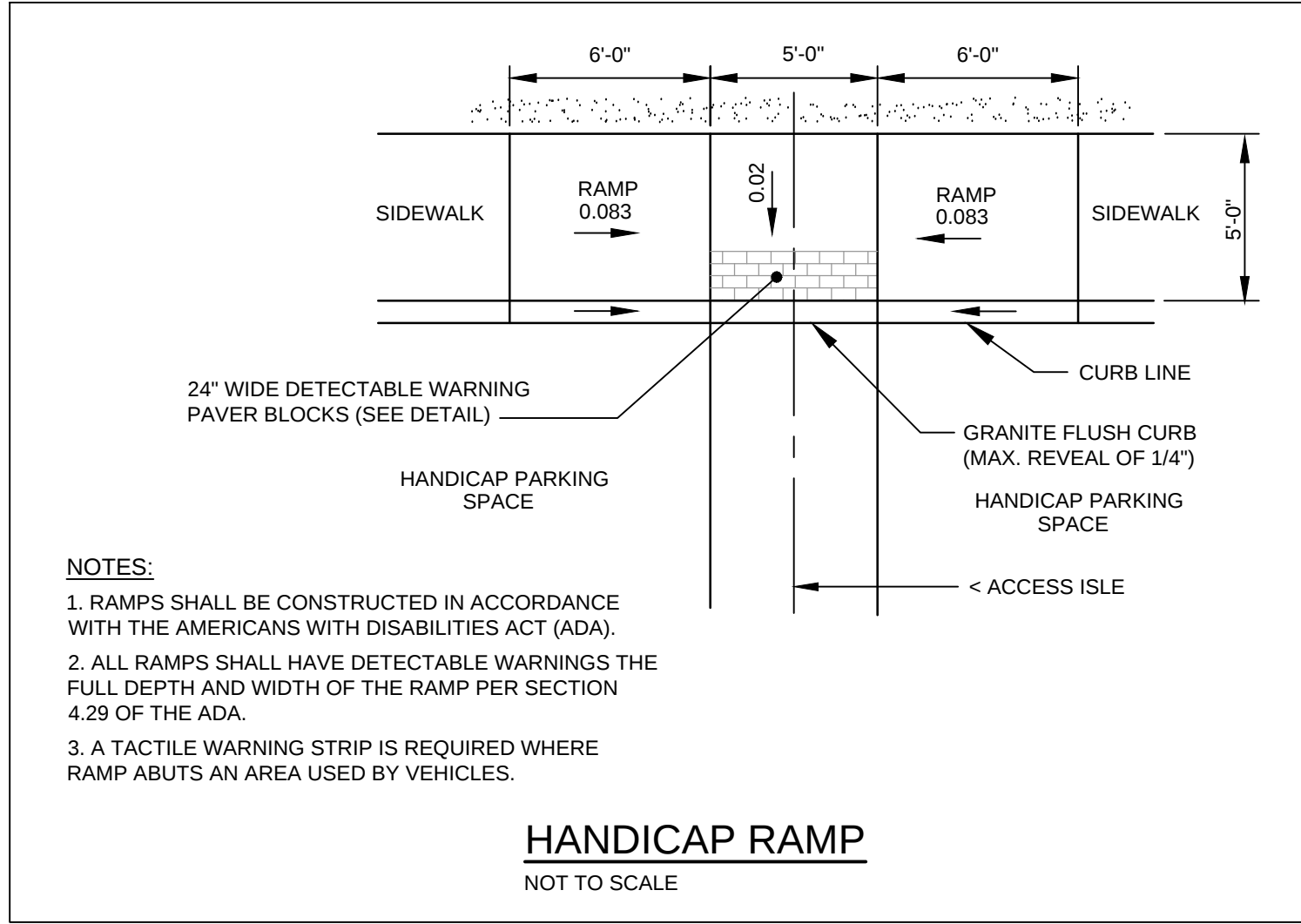
NOT TO SCALE

NOT TO SCALE

NOT TO SCALE

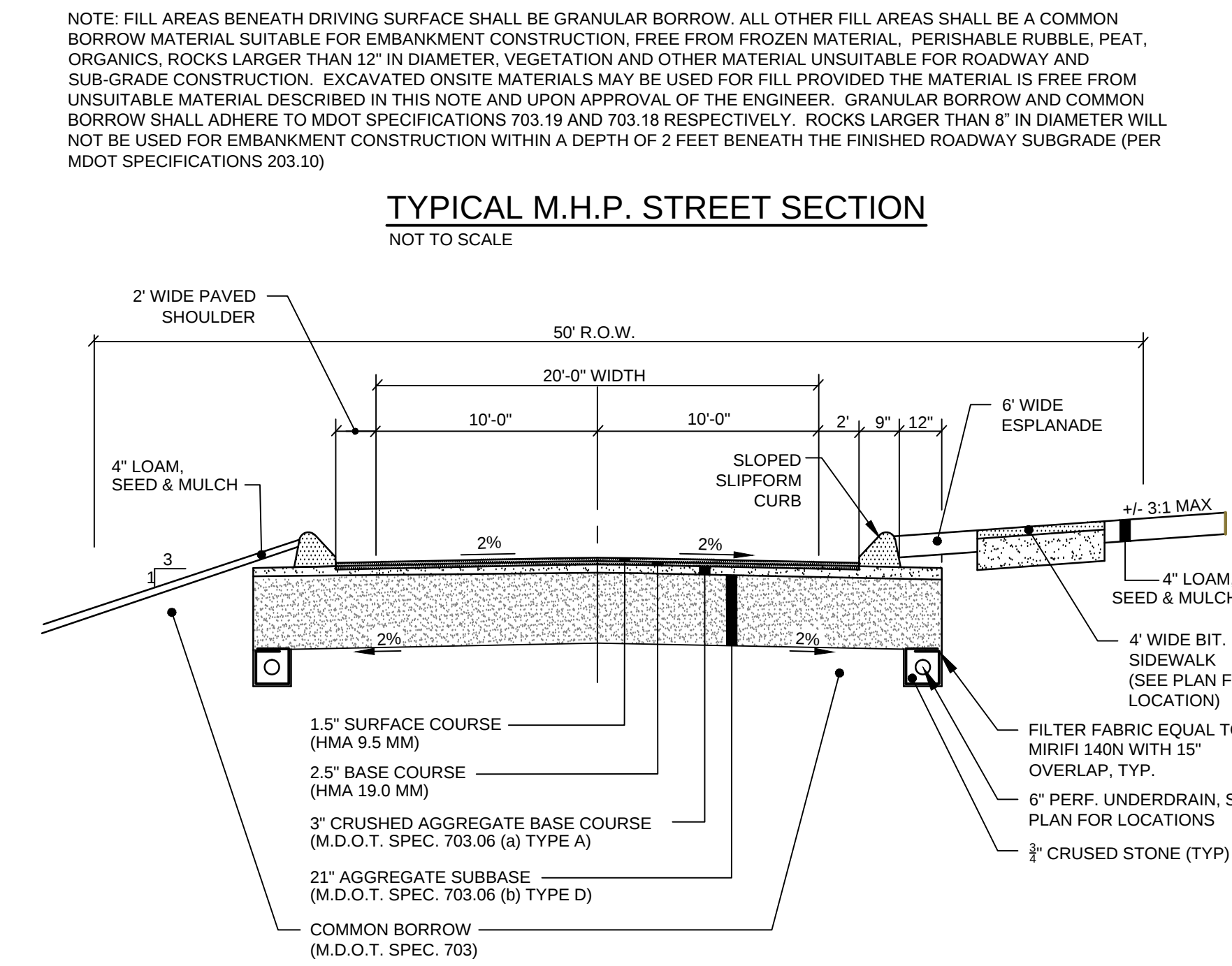
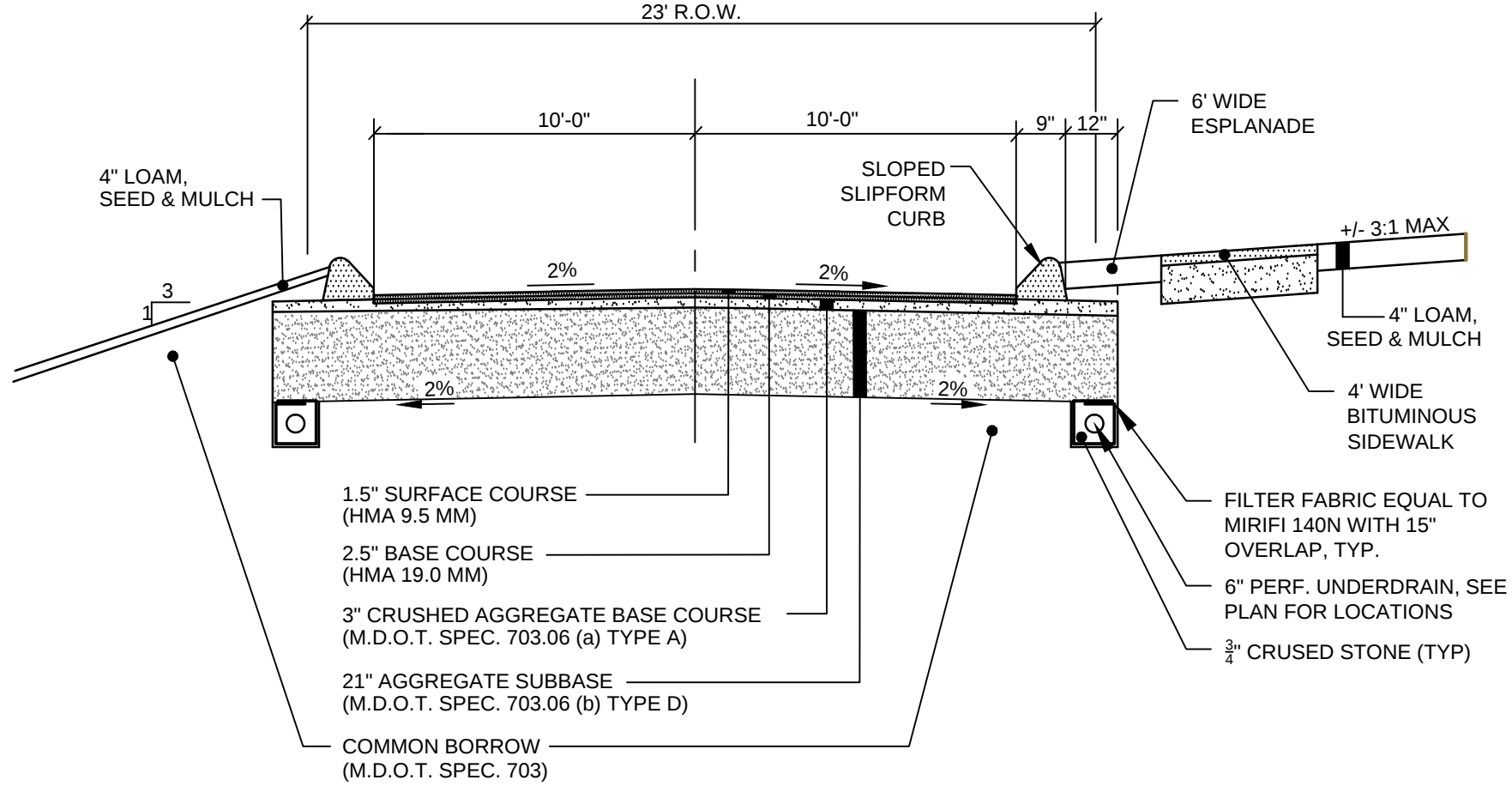
NOT TO SCALE

SHEET DESCRIPTION					
HIGHLAND VIEWS 19 ROOSEVELT TRAIL, WINDHAM, ME DETAILS & NOTES					
PREPARED FOR					
CHASE CUSTOM HOMES & FINANCE					
208 BRADDOCK AVENUE WESTBROOK, MAINE 04092					
DATE:	7/3/2017				
SCALE:	AS SHOWN				
DESIGNED:	JDA				
JOB NO:	1636				
FILE: 1636 D					
SHEET	C-7.0				
					
P.O. Box 339 111 Elderberry Lane New Gloucester, ME 04260 Office: (207) 926-5111 Fax: (207) 221-1317 www.terradynconsultants.com					
Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting					
NO.					
DATE					
SUBMITTED TO MDEP & TOWN FOR FINAL APPROVAL					
REVISIONS					
APPROVED BY					
SIGNATURE DATE: 7/3/2017					
					



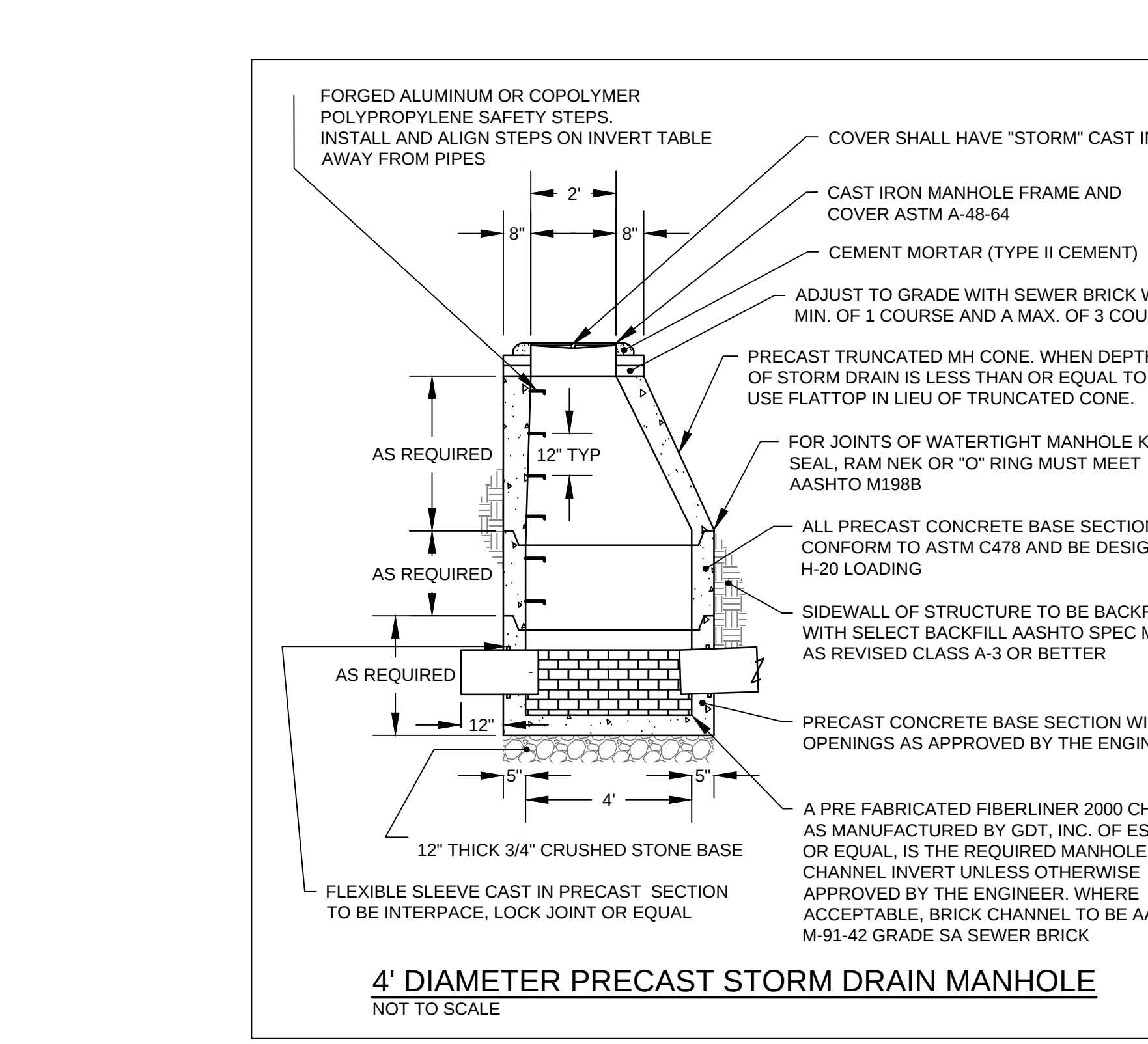
CONSTRUCTION NOTES

1. All work shall conform to the applicable codes and ordinances.
2. Contractor shall visit the site and familiarize him or herself with all conditions affecting the proposed work and shall make provisions as to the cost thereof. Contractor shall be responsible for familiarizing him or herself with all contract documents, field conditions and dimensions and confirming that the work may be accomplished as shown prior to proceeding with construction. Any discrepancies shall be brought to the attention of the engineer prior to the commencement of work.
3. Contractor shall notify engineer of all products or items noted as "existing" which are not found in the field.
4. Install all equipment and materials in accordance with manufacturer's recommendations and owner's requirements unless specifically otherwise indicated or where local codes or regulations take precedence.
5. Contractor shall verify all dimensions and conditions in the field prior to fabrication and erection of any material. Any unusual conditions shall be reported to the attention of the engineer.
6. Contractor shall clean and remove debris and sediment deposited on public streets, sidewalks, adjacent areas, or other public ways due to construction.
7. Contractor shall incorporate provisions as necessary in construction to protect existing structures, physical features, and maintain site stability during construction. Contractor shall restore all areas to original condition and as directed by design drawings.
8. Site contractor shall obtain all required permits prior to construction.
9. All erosion and sediment control measures shall be installed in accordance with "Maine Erosion and Sedimentation Control BMP's" published by the Maine DEP in 2003.. A copy of the manual can be found at <http://maine.gov/dep/blwq/docstand/escbmps/index.htm>. It shall be the responsibility of the contractor to possess a copy of the erosion control plan at all times.
10. The contractor is hereby cautioned that all site features shown hereon are based on field observations by the surveyor and by information provided by utility companies. The information is not to be relied on as being exact or complete. The contractor shall contact dig safe (1-888-digsafe) at least three (3) but not more than thirty (30) days prior to commencement of excavation or demolition to verify horizontal and vertical location of all utilities. Contractor shall be aware that dig safe only notifies its "member" utilities about the dig. When notified, dig safe will advise contractor of member utilities in the area. Contractor is responsible for identifying and contacting non-member utilities directly. Non-member utilities may include town or city water and sewer districts and small local utilities, as well as usg public works systems.
11. Contractors shall be responsible for compliance with the requirements of 23 mrsa 3360-a. It shall be the responsibility of the contractor to coordinate with the appropriate utilities to obtain authorization prior to relocation of any existing utilities which conflict with the proposed improvements shown on these plans. If a utility conflict arises, the contractor shall immediately notify the owner, the municipality and appropriate utility company prior to proceeding with any relocation.
12. All pavement markings and directional signage shown on the plan shall conform to the manual of uniform traffic control devices (mutcd) standards.
13. All pavement joints shall be sawcut prior to paving to provide a durable and uniform joint.
14. No holes, trenches or structures shall be left open overnight in any excavation accessible to the public or in public rights-of-way.
15. All work within the public right-of-way shall require a M.D.O.T. Permit as well as permits from the town as applicable.
16. The proposed limits of clearing shown hereon are approximate based upon the proposed limits of site grading. The applicant reserves the right to perform normal forest management activities outside of the clearing limit as shown. Tree removal outside of the limits of clearing may be necessary to remove dead or dying trees or tree limbs. This removal is due to potential safety hazards and to promote proper forest growth.
17. Immediately upon completion of cuts/fills, the contractor shall stabilize disturbed areas in accordance with erosion control notes and as specified on plans.
18. The contractor shall be fully and solely responsible for the removal, replacement and rectification of all damaged and defective material and workmanship in connection with the contract work. The contractor shall replace or repair as directed by the owner all such damaged or defective materials which appear within a period of one year from the date of substantial completion.
19. All work performed by the general contractor and/or trade subcontractor shall conform to the requirements of local, state or federal laws, as well as any other governing requirements, whether or not specified on the drawings.
20. Where the terms "approved equal", "other approved", "equal to", "acceptable" or other general qualifying terms are used in these notes, it shall be understood that reference is made to the ruling and judgment of Terradyn Consultants, LLC.
21. The general contractor shall provide all necessary protection for the work until turned over to the owner. Before the final acceptance of the project, the contractor shall remove all equipment and materials, repair or replace private or public property which may have been damaged or destroyed during construction, clean the areas within and adjacent to the project which have been obstructed by his/her operations, and leave the project area neat and presentable.
22. The general contractor shall maintain a current and complete set of construction drawings on site during all phases of construction for use of all trades.
23. The contractor shall take full responsibility for any changes and deviation of approved plans not authorized by the architect/engineer and/or client/owner.
24. Details are intended to show end result of design. Any modification to suit field dimension and condition shall be submitted to the engineer for review and approval prior to any work.
25. The applicant will retain the services of a professional engineer to inspect the construction and stabilization of all stormwater management structures. If necessary, the inspecting engineer will interpret the pond's construction plan for the contractor. Once all stormwater management structures are constructed and stabilized, the inspecting engineer will notify the department in writing within 30 days to state that the pond has been completed. Accompanying the engineer's notification must be a log of the engineer's inspections giving the date of each inspection, the time of each inspection, and the items inspected on each visit, and include any testing data or sieve analysis data of every mineral soil and soil media specified in the plans and used on site.



NOTE: FILL AREAS BENEATH DRIVING SURFACE SHALL BE GRANULAR BORROW. ALL OTHER FILL AREAS SHALL BE A COMMON BORROW MATERIAL SUITABLE FOR EMBANKMENT CONSTRUCTION, FREE FROM FROZEN MATERIAL, PERISHABLE RUBBLE, PEAT, ORGANICS, ROCKS LARGER THAN 12" IN DIAMETER, VEGETATION AND OTHER MATERIAL UNSUITABLE FOR ROADWAY AND SUB-GRADE CONSTRUCTION. EXCAVATED ONSITE MATERIALS MAY BE USED FOR FILL PROVIDED THE MATERIAL IS FREE FROM UNSUITABLE MATERIAL DESCRIBED IN THIS NOTE AND UPON APPROVAL OF THE ENGINEER. GRANULAR BORROW AND COMMON BORROW SHALL ADHERE TO MDOT SPECIFICATIONS 703.19 AND 703.18 RESPECTIVELY. ROCKS LARGER THAN 8" IN DIAMETER WILL NOT BE USED FOR EMBANKMENT CONSTRUCTION WITHIN A DEPTH OF 2 FEET BENEATH THE FINISHED ROADWAY SUBGRADE (PER MDOT SPECIFICATIONS 203.10)

TYPICAL MAJOR PRIVATE ROAD SECTION



TERRADYN
CONSULTANTS, LLC

Civil Engineering - Land Planning - Stormwater Design - Environmental Permitting

P.O. Box 339
111 Elderberry Lane
New Gloucester, ME 04260
Office: (207) 926-5111
Fax: (207) 221-1317
www.terradyconsultants.com

HIGHLAND VIEWS
19 ROOSEVELT TRAIL, WINDHAM, ME
DETAILS & NOTES

PREPARED FOR
CHASE CUSTOM HOMES & FINANCE
290 BRIDGTON ROAD
WESTBROOK, MAINE 04092

SHEET DESCRIPTION

DATE: 7/3/2017
SCALE: AS SHOWN
DESIGNED: JDA
JOB NO: 1636
FILE: 1636 D
SHEET

C-7.2

SIGNATURE DATE: 7/3/2017

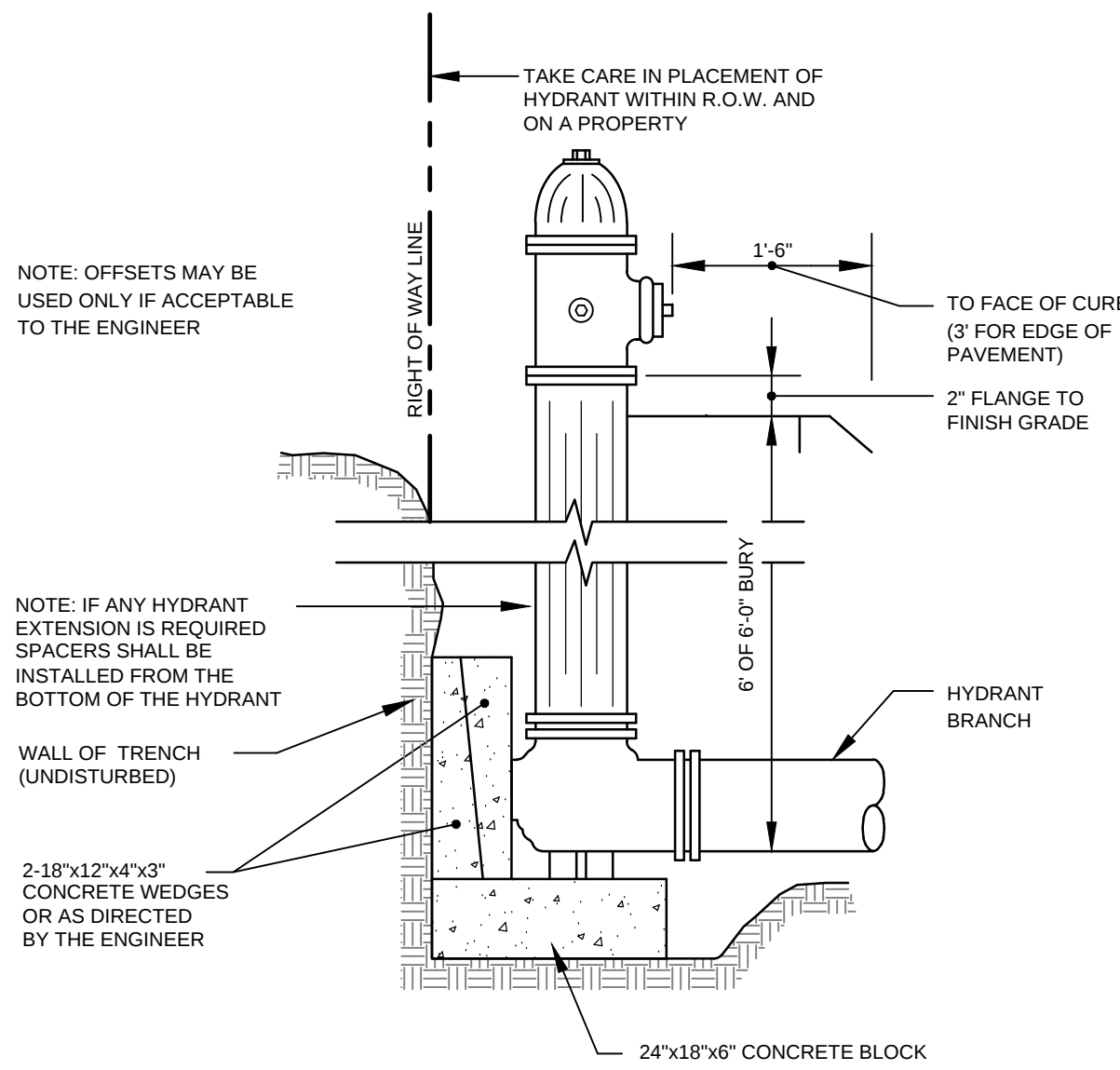
APPROVED BY

6 7/3/2017 DATE

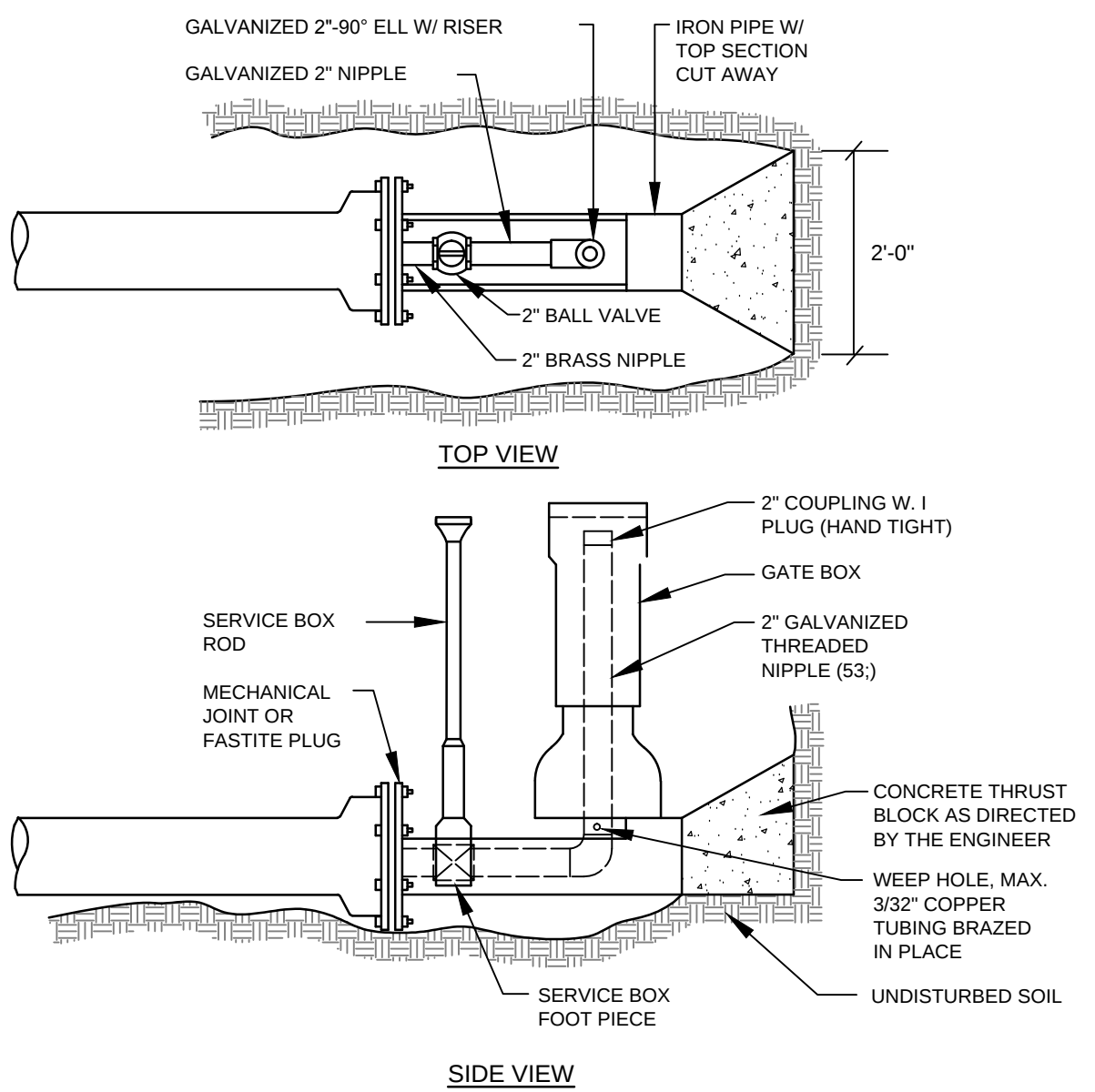
NO.

SUBMITTED TO MDEP & TOWN FOR FINAL APPROVAL

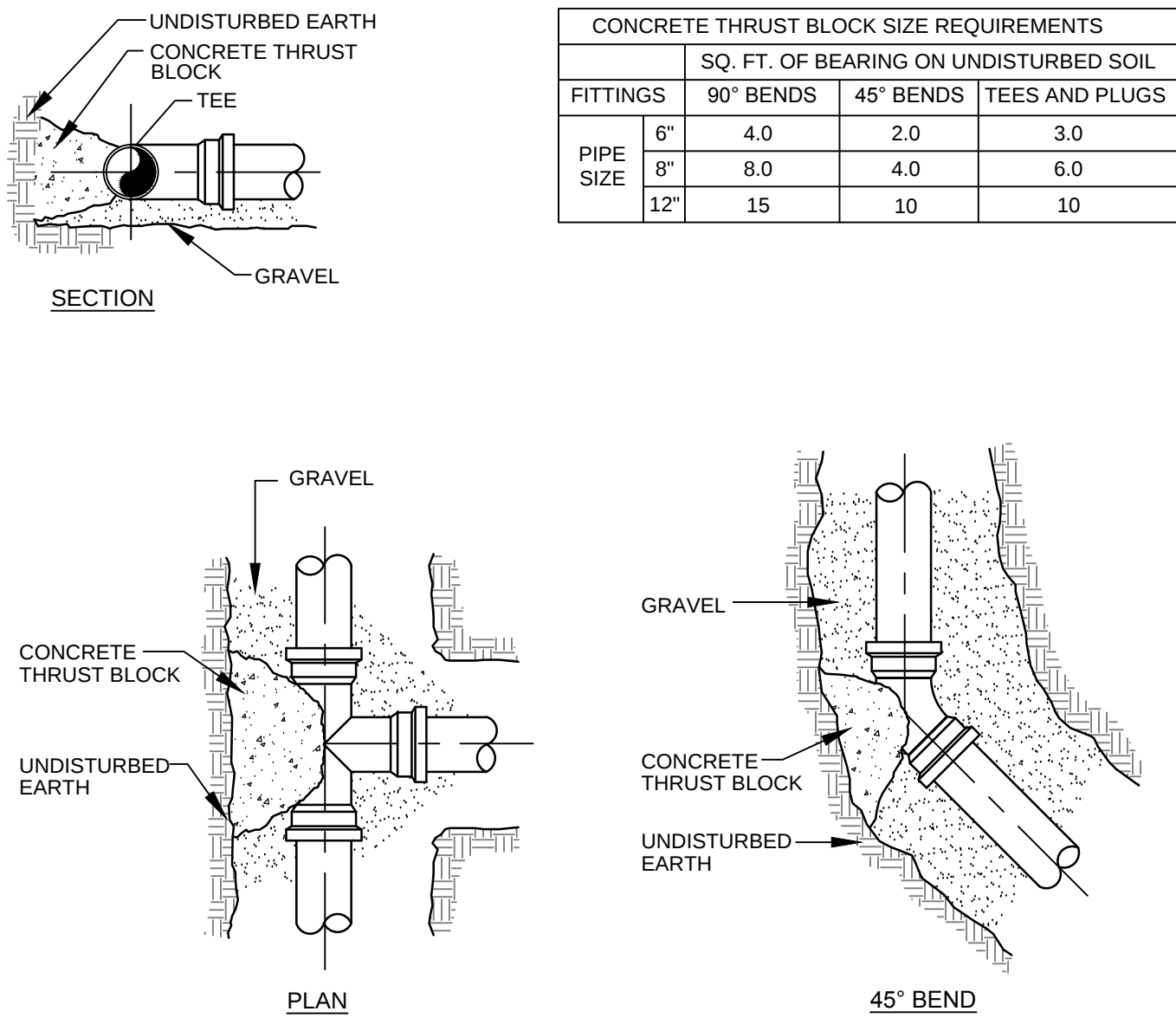
REVISIONS



TYP. HYDRANT BLOCKING & REPLACEMENT
NOT TO SCALE

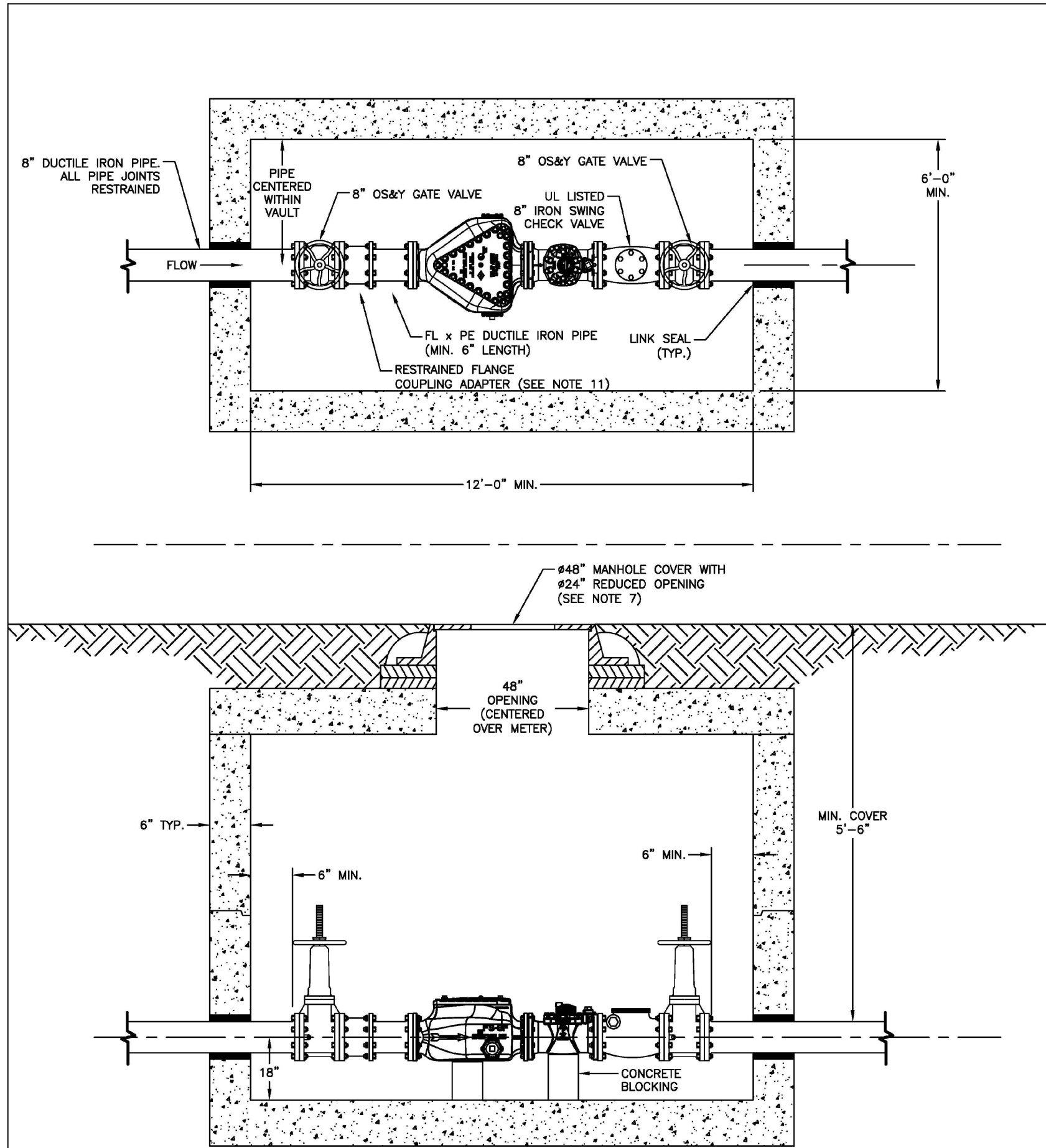


STANDARD 2" BLOW-OFF
NOT TO SCALE

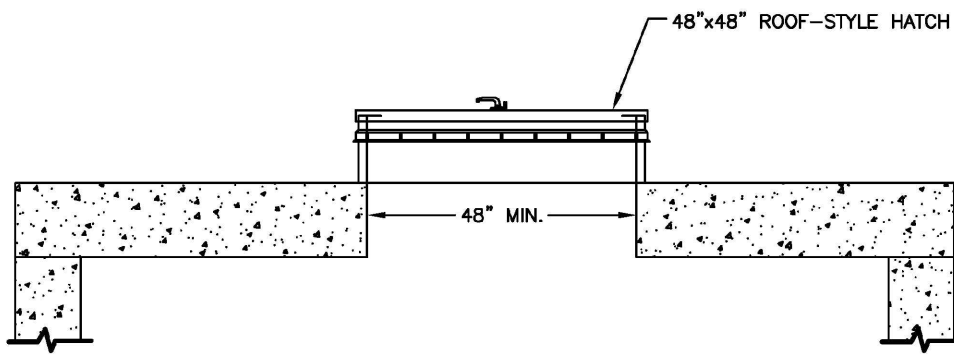


TEE & BEND DETAIL
NOT TO SCALE

CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
FITTINGS	90° BENDS	45° BENDS	TEES AND PLUGS	
PIPE SIZE				
6"	4.0	2.0	3.0	
8"	8.0	4.0	6.0	
12"	15	10	10	



**ALTERNATE OPENING
(NON-PAVED SURFACES ONLY)**



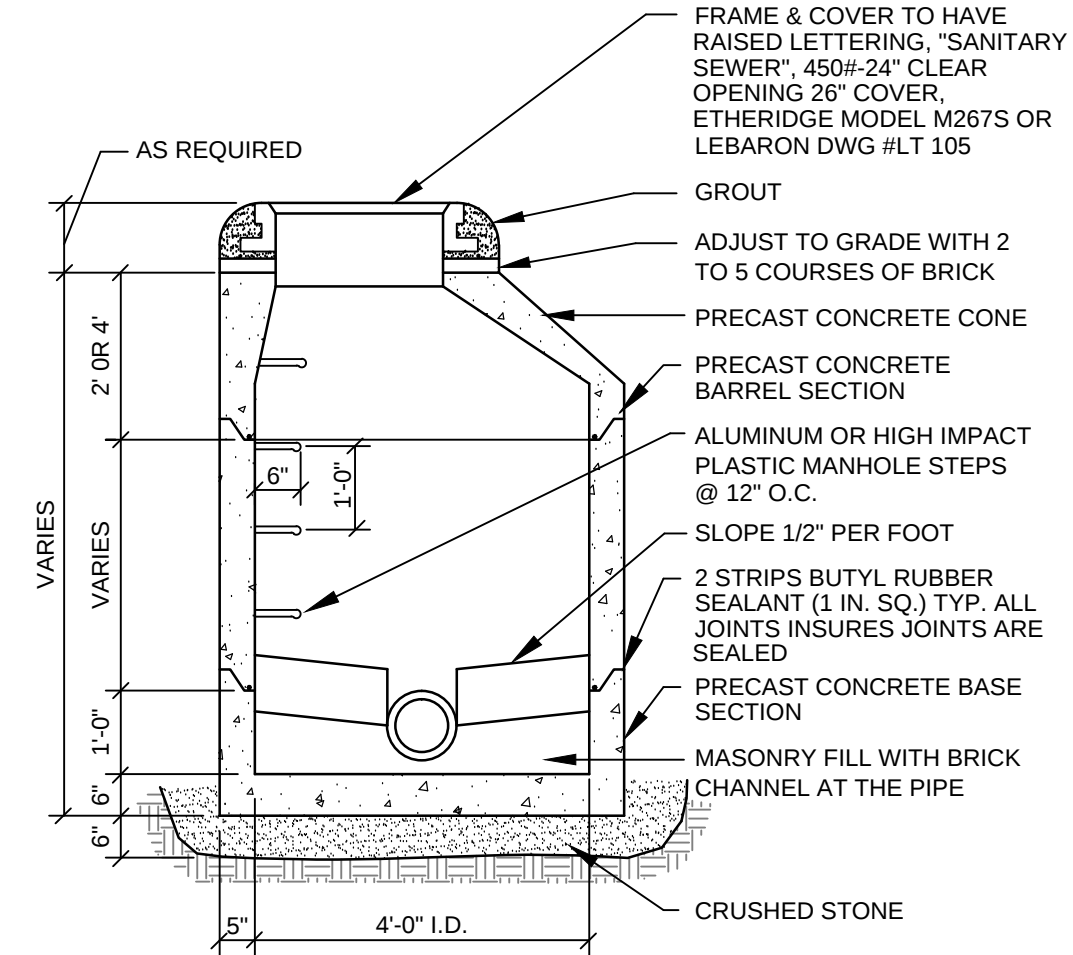
METER PIT AND COVER

- SPECIAL APPROVAL BY PWD IS REQUIRED FOR ALL PROPOSED METER VAULT INSTALLATIONS. PROPOSED CONFIGURATION SHALL BE SUBMITTED FOR PWD REVIEW PRIOR TO CONSTRUCTION.
- METER VAULT SHALL BE LOCATED ON PRIVATE PROPERTY BETWEEN 10' AND 20' FROM THE PROPERTY LINE UNLESS OTHERWISE APPROVED BY PWD.
- THE VAULT SHALL BE MADE OF PRECAST CONCRETE OF SUFFICIENT SIZE TO PROVIDE 5'-6" MINIMUM GROUND COVER FROM FINISHED GRADE TO THE TOP OF THE SERVICE PIPE.
- ALL PIPE JOINTS BETWEEN THE SERVICE VALVE AND THE METER SHALL BE RESTRAINED.
- TESTABLE BACKFLOW PREVENTION DEVICES MAY NOT BE INSTALLED WITHIN METER PITS.
- ALL SEAMS BETWEEN CONCRETE SECTIONS SHALL BE SEALED WITH MASTIC JOINT. ALL OPENINGS IN THE CONCRETE FOR SERVICE PIPING SHALL BE SEALED WITH A MODULAR SEAL (LINK-SEAL OR SIMILAR).
- ENTRY COVER SHALL BE EAST JORDAN IRON WORKS MODEL V7048-2 OR EQUAL. THE COVER SHALL BE CAST IRON OR STEEL AND SHALL BE EITHER PERMANENTLY LABELED "WATER" OR HAVE NO LABEL. STEEL PLATE MATERIAL SHALL BE COATED WITH A RUST INHIBITOR PAINT.
- FOR NON-PAVED SURFACES, A 48"x48" ROOF STYLE HATCH MAY BE USED.
- WALL-MOUNTED LADDER RUNGS ARE NOT TO BE INSTALLED WITHIN METER VAULT.
- CUSTOMER SHALL ENSURE THE METER VAULT AND COVER ARE PROPERLY RATED FOR TRAFFIC FLOW, IF APPLICABLE.
- RESTRAINED FLANGE COUPLING ADAPTER SHALL BE FORD MODEL RFAD UNLESS OTHERWISE APPROVED BY PWD.

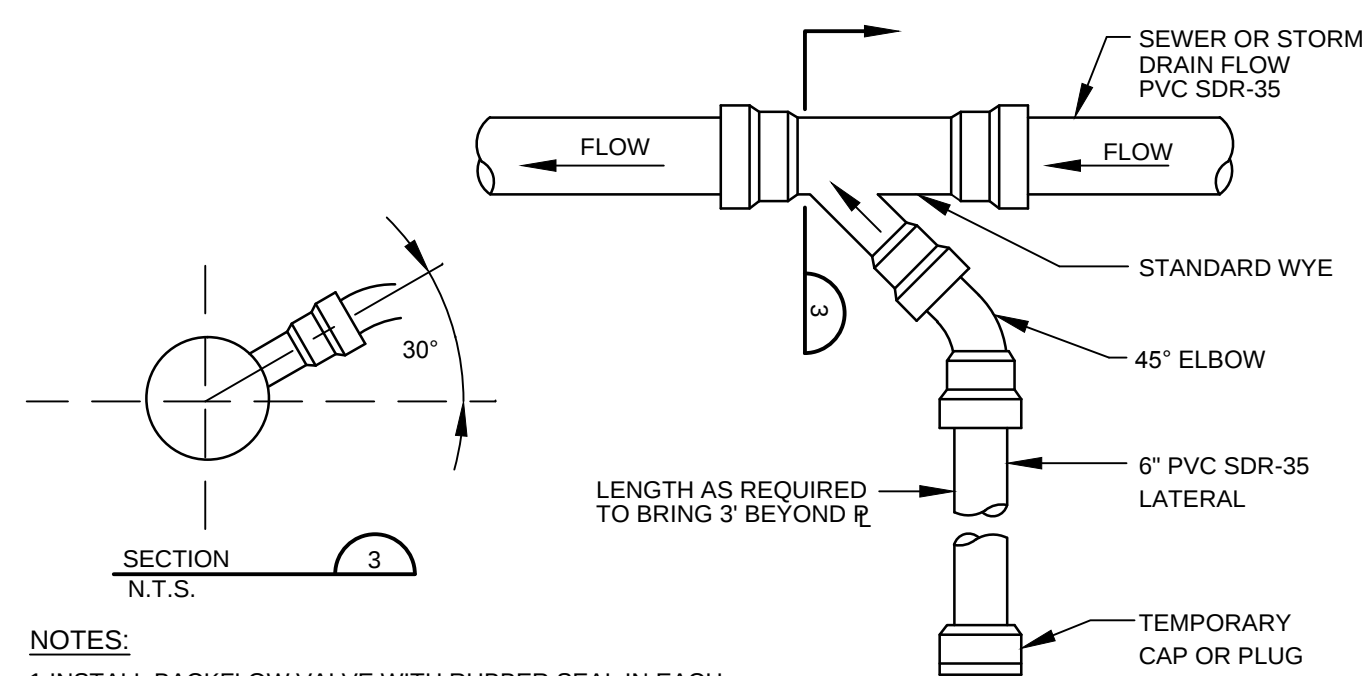
METER INSTALLATION

- ONLY PWD PERSONNEL ARE AUTHORIZED TO INSTALL WATER METERS. PWD PERSONNEL ARE ADDITIONALLY AUTHORIZED TO OPERATE METER VALVES AS NEEDED FOR INSTALLATION AND MAINTENANCE.
- PWD WILL SUPPLY THE WATER METER. ALL OTHER FITTINGS SHALL BE SUPPLIED AND INSTALLED BY CUSTOMER.
- METER LAYING LENGTH SHOULD BE CONFIRMED WITH PWD PRIOR TO SETTING PIPE. PWD MAY REQUIRE THAT A FLANGED METER SPOOL BE INSTALLED PRIOR TO METER SET TO ENSURE PROPER SPACING. IF SO, THE METER SPOOL WILL BE PROVIDED BY PWD AND CAN BE PICKED UP AT PWD CUSTOMER SERVICE, 225 DOUGLASS STREET, PORTLAND DURING NORMAL BUSINESS HOURS.

**8" FIRELINE METER
IN METER VAULT**

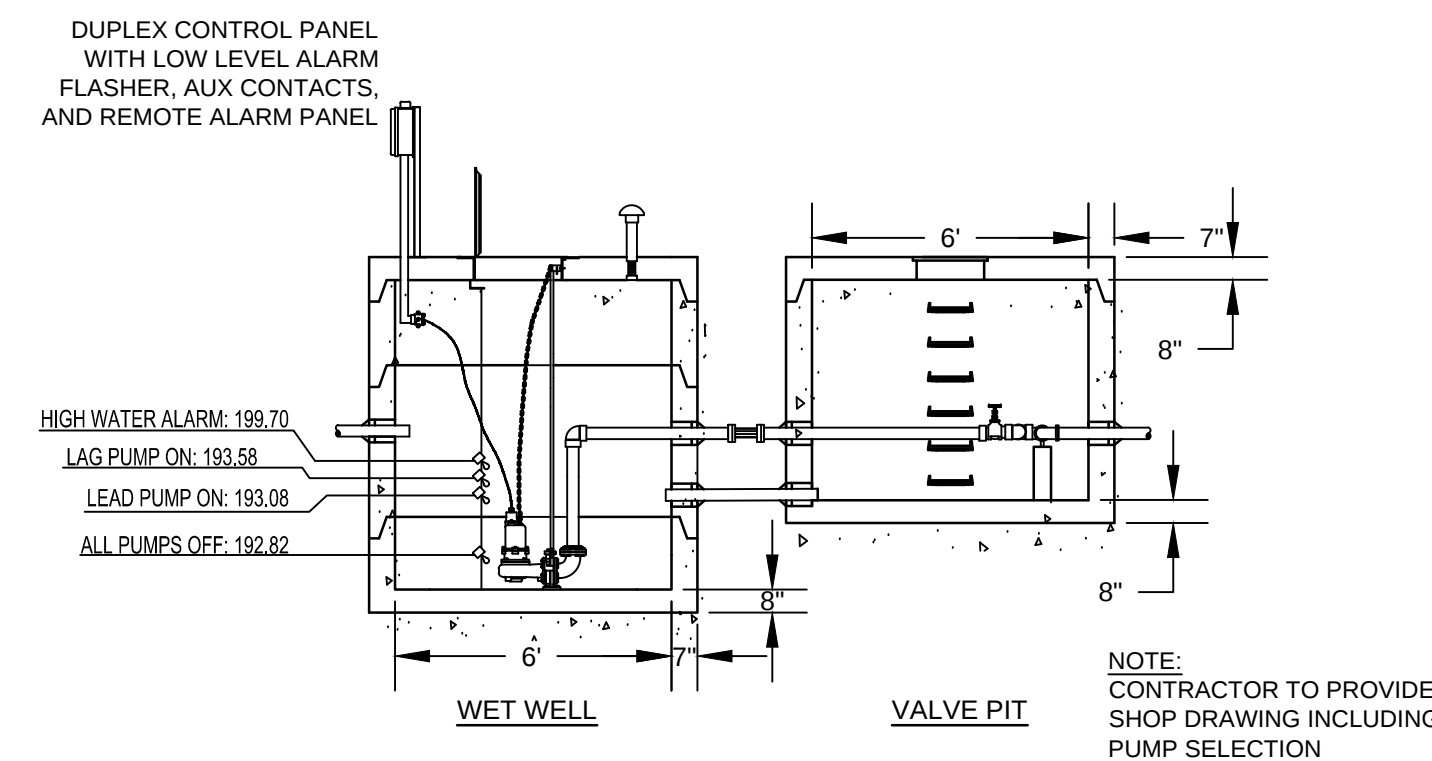


PRECAST SEWER MANHOLE
NOT TO SCALE

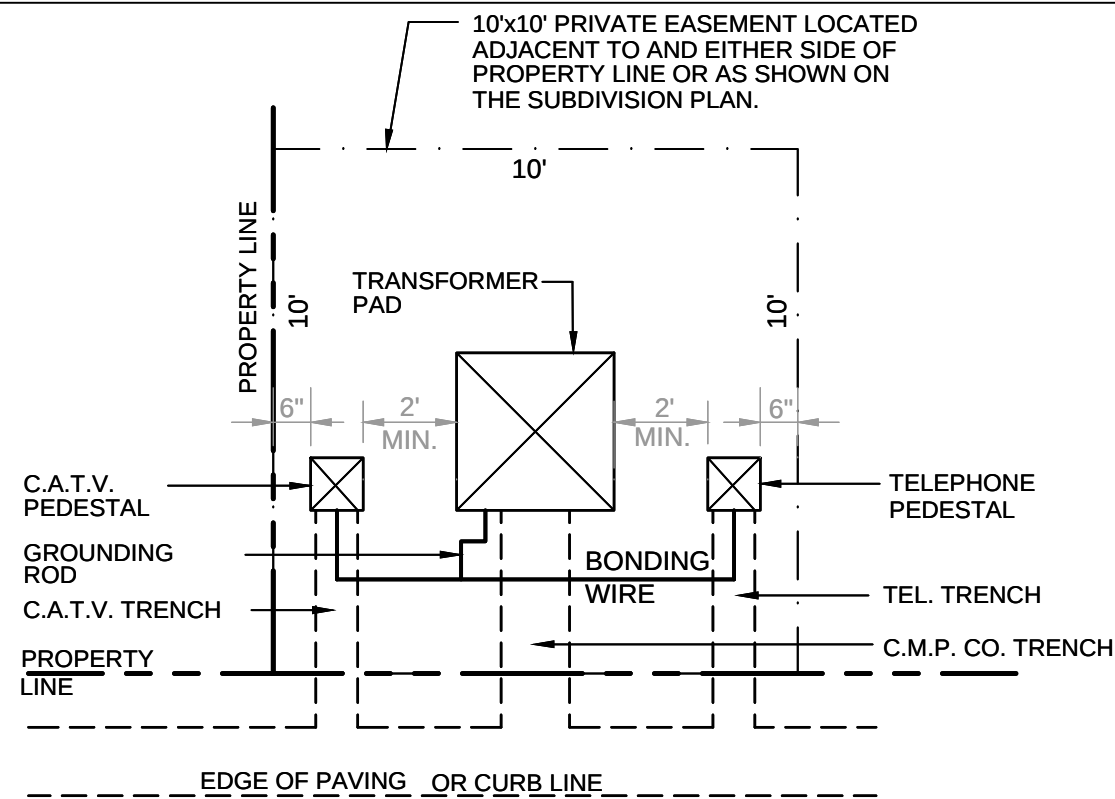


- NOTES:**
- INSTALL BACKFLOW VALVE WITH RUBBER SEAL IN EACH FOUNDATION DRAIN SERVICE.
 - IF SUMP PUMP IS UTILIZED INSTALL CHECK VALVE AT SUMP PUMP.

**SEWER / FOUNDATION DRAIN
SERVICE CONNECTION**
NOT TO SCALE

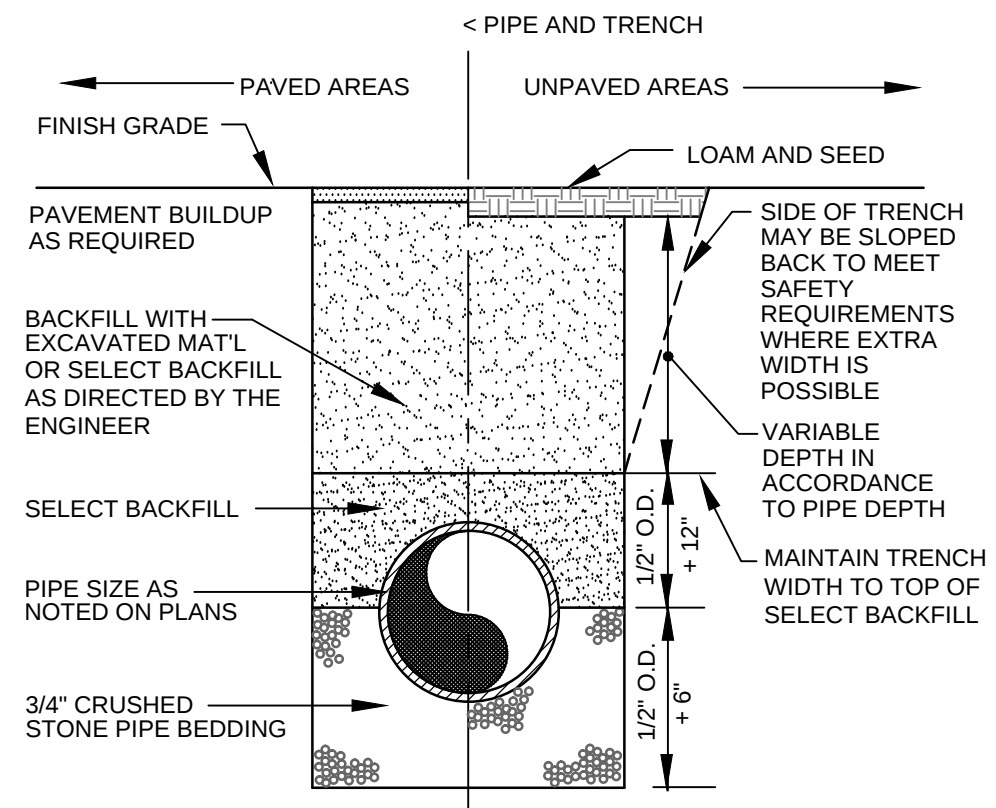


PUMP STATION AND VALVE PIT DETAIL
NOT TO SCALE

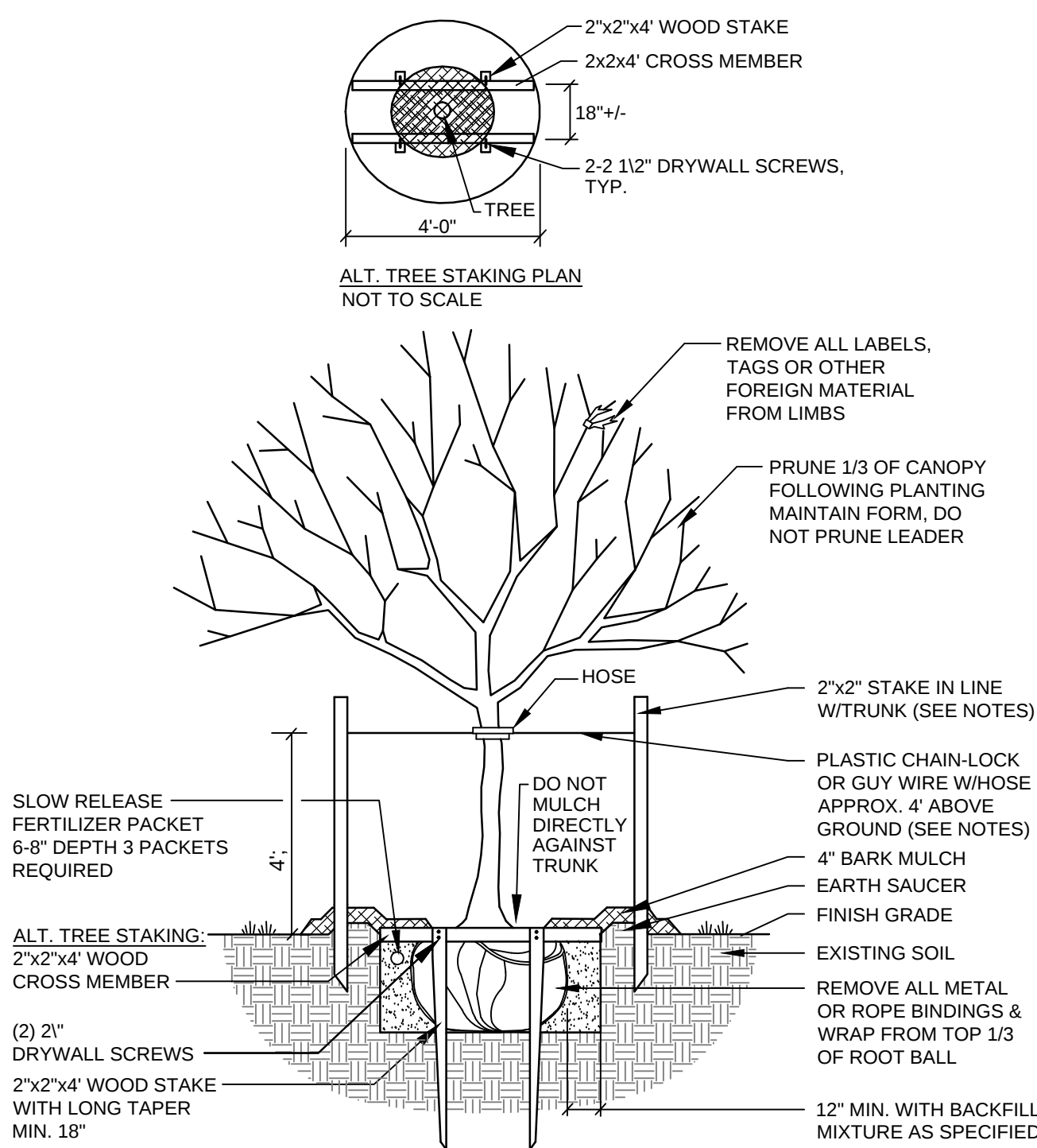


- NOTE:**
TRANSFORMER PAD AND COVER TO BE FIBERGLASS MEETING CENTRAL MAINE POWER SPECIFICATIONS.

TRANSFORMER DETAIL
NOT TO SCALE

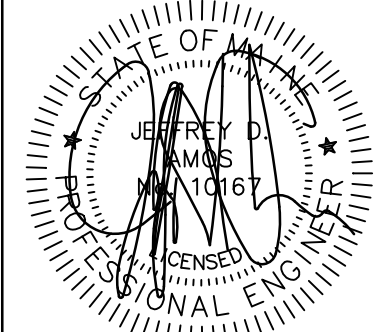


TYPICAL TRENCH SECTION
NOT TO SCALE



- NOTES:**
INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:
1. THE TREE IS OF SUBSTANTIAL SIZE.
2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

DECIDUOUS TREES 2" TO 4" CALIPER
NOT TO SCALE



SIGNATURE DATE: 7/3/2017

APPROVED BY

SUBMITTED TO MDEP & TOWN FOR FINAL APPROVAL

REVISIONS

DATE

NO.

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

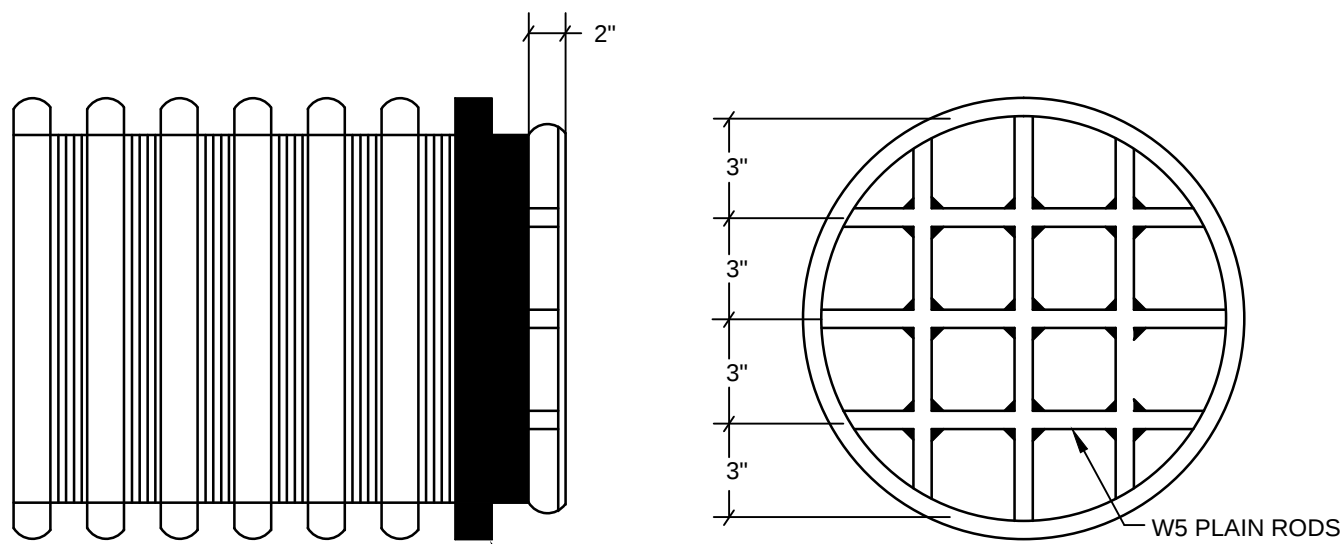
DATE

DATE

DATE

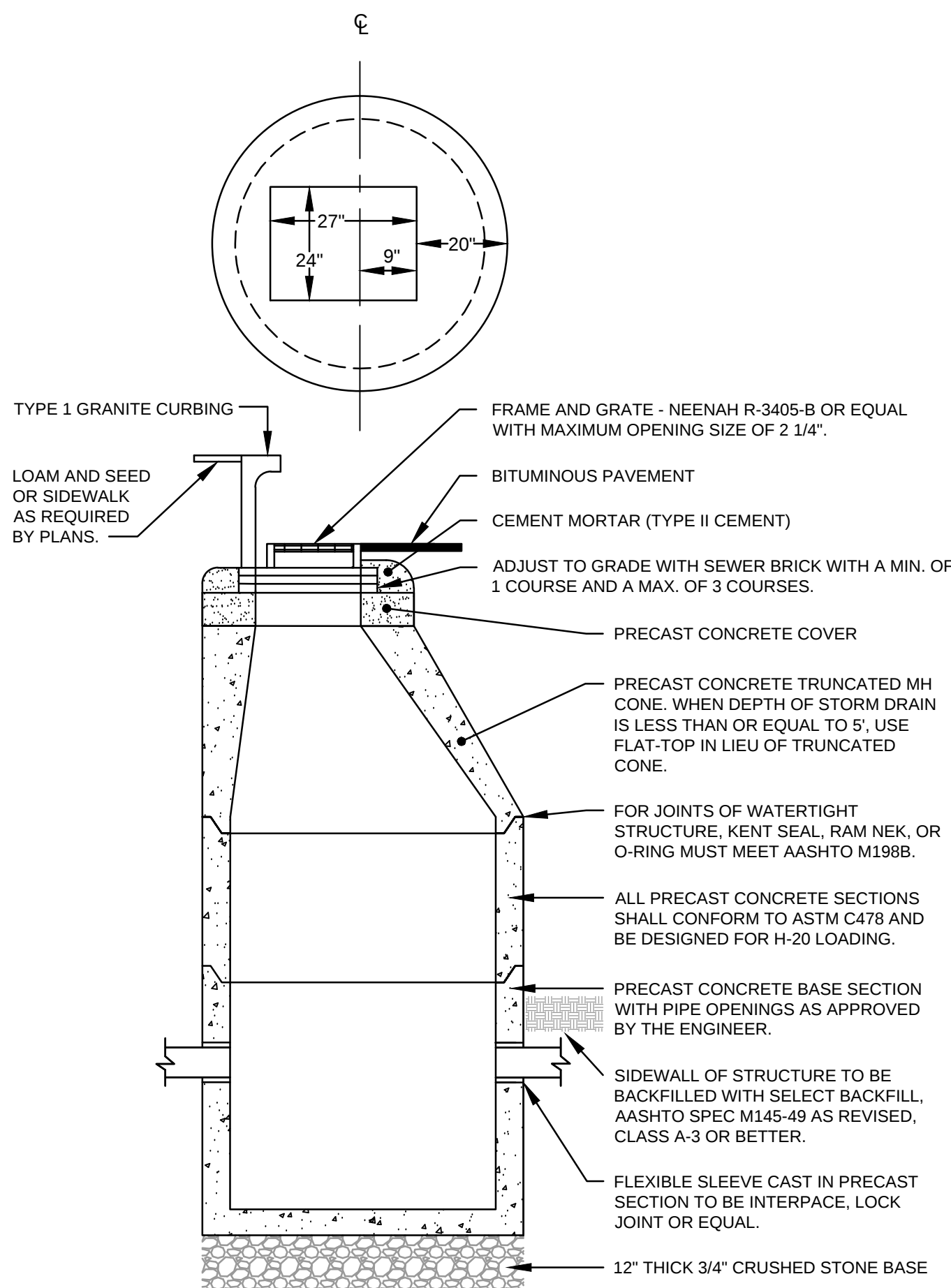
DATE

DATE



INLET GRATE DETAIL

NOT TO SCALE

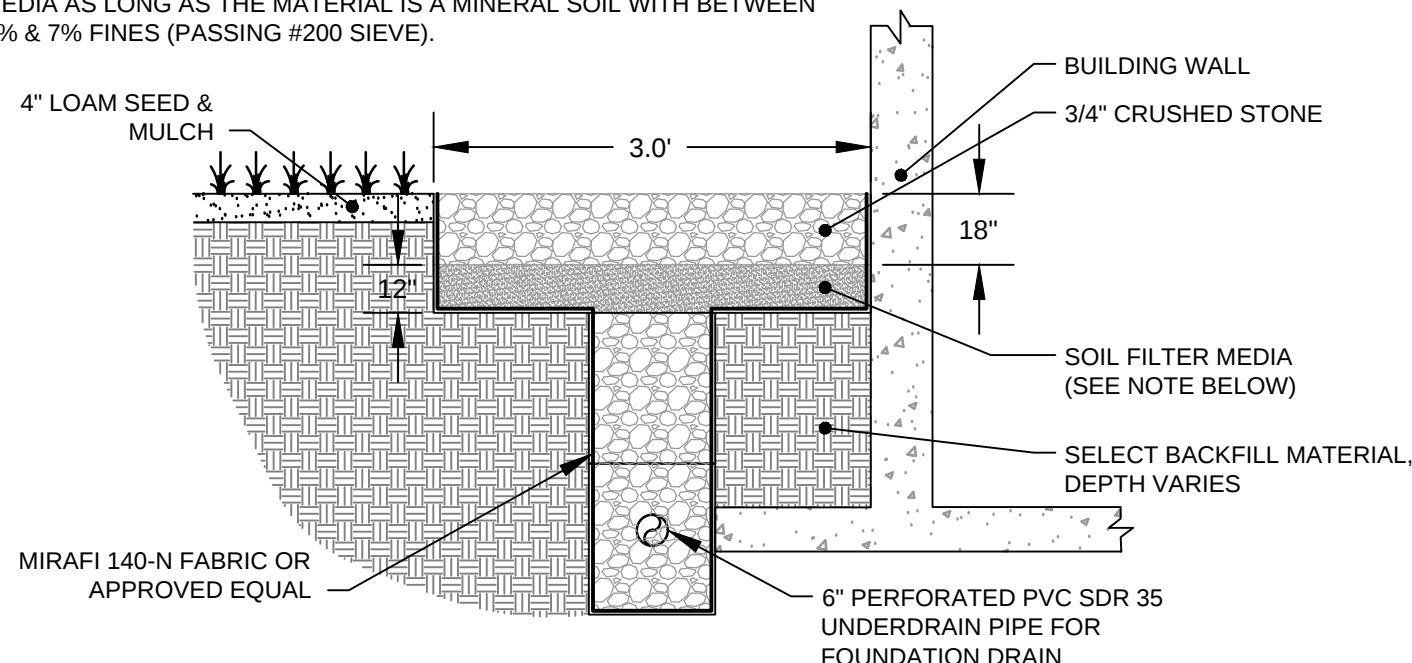


SECTION VIEW

CATCH BASIN - CURB INLET

NOT TO SCALE

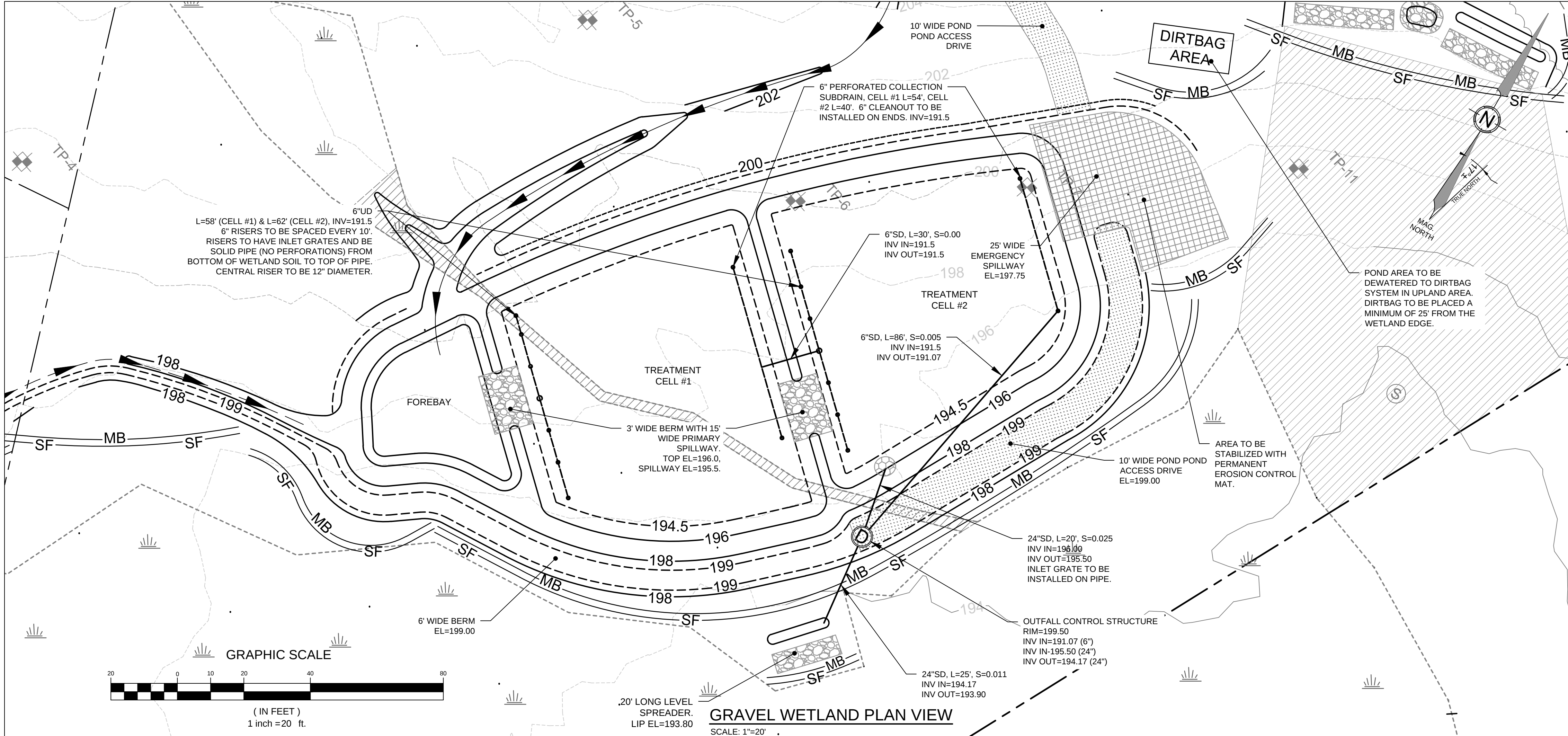
NOTE:
THE BACKFILL FOR THE FOUNDATION MAY BE USED AS THE FILTER MEDIA AS LONG AS THE MATERIAL IS A MINERAL SOIL WITH BETWEEN 4% & 7% FINES (PASSING #200 SIEVE).



CONSTRUCTION INSPECTION NOTES:
Inspections by a professional engineer shall consist of weekly visits to the site to inspect each the roof drip edge filter's underdrain construction, filter material placement, and overflow from initial ground disturbance to final stabilization of the filter.

ROOF DRIPLINE FILTER BED

NOT TO SCALE



ORGANIC WETLAND SOIL MIXTURE:

The wetland soil should have a low hydraulic conductivity (0.1-0.01 ft/day). This soil can be manufactured using compost, sand and find soils, into a blend with more than 15% organic matter. It should contain more than 15% silt (passing the #200 sieve); but with a clay size portion that is less than 2%. Do not use geotextiles between the horizontal layers of this system as they will clog due to fines and may restrict root growth.

POND CONSTRUCTION NOTES:

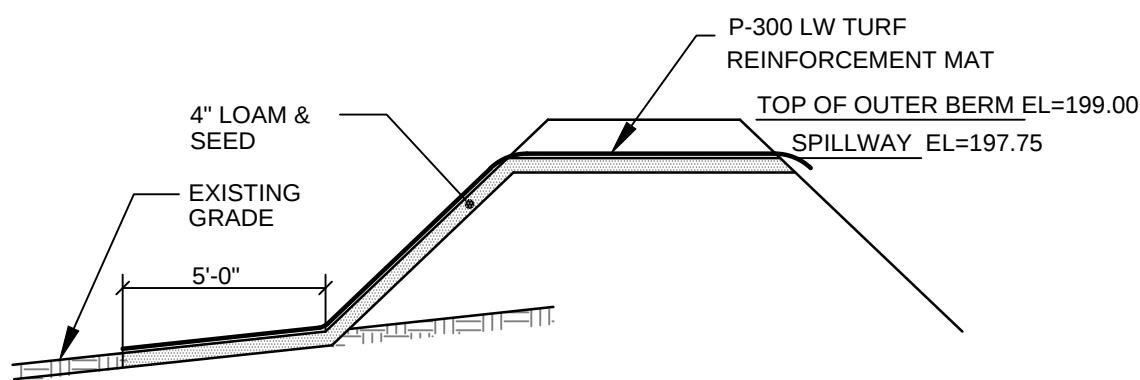
1. CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ORGANIC MATERIAL FROM EMBANKMENT AND POND CONSTRUCTION AREA.
2. SCARIFY SUBGRADE TO ESTABLISH INTERFACE FOR ALL FILLS.
3. CONSTRUCTION MATERIAL SHALL MEET M.D.O.T. SPEC 703.18
4. COMPACT IN 12" LIFTS TO 92% OF MAXIMUM DRY DENSITY.
5. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED.
6. LOAM, SEED & STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN & NOTES.

GRAVEL WETLAND INSTALLATION NOTES:

1. THE MINIMUM SPACING BETWEEN THE SUBSURFACE PERFORATED DISTRIBUTION LINE AND THE SUBSURFACE PERFORATED COLLECTION DRAIN AT EITHER END OF THE GRAVEL IN EACH TREATMENT CELL IS 15 FT.
2. THERE SHOULD BE A MINIMUM HORIZONTAL TRAVEL DISTANCE OF 15 FT WITHIN THE GRAVEL LAYER IN EACH CELL.
3. VERTICAL PERFORATED OR SLOTTED RISER PIPES DELIVER WATER FROM THE SURFACE DOWN TO THE SUBSURFACE, PERFORATED OR SLOTTED DISTRIBUTION LINES. THESE RISERS SHALL HAVE A MAXIMUM SPACING OF 15 FEET.
4. SLOTTED VERTICAL RISERS SHALL HAVE A MINIMUM DIAMETER OF 12" FOR THE CENTRAL RISER AND 6" FOR END RISERS. THE VERTICAL RISERS SHALL NOT BE CAPPED, BUT RATHER COVERED WITH AN INLET GRATE.
5. VERTICAL CLEANOUTS CONNECTED TO THE DISTRIBUTION AND COLLECTION SUBDRAINS, AT EACH END, SHALL BE PERFORATED OR SLOTTED ONLY WITHIN THE GRAVEL LAYER, AND SOLID WITHIN THE WETLAND SOIL AND STORAGE AREA ABOVE.
6. TREATMENT CELL FLOOR TO BE GRADED FLAT.
7. BERMS AND WEIRS SEPARATING THE FOREBAY AND TREATMENT CELLS SHOULD BE CONSTRUCTED WITH CLAY, OR NON-CONDUCTIVE SOILS, AND/OR A FINE GEOTEXTILE, OR SOME COMBINATION THEREOF, TO AVOID WATER SEEPAGE AND SOIL PIPING THROUGH THESE EARTHEN DIVIDERS.
8. THE SYSTEM SHOULD BE PLANTED TO ACHIEVE A RIGOROUS ROOT MAT WITH GRASSES, FORBS, AND SHRUBS WITH OBLIGATE AND FACULTATIVE WETLAND SPECIES.
9. THE SUBAREA DRAINING TO A CREATED WETLAND MUST BE COMPLETELY STABLE BEFORE RUNOFF IS DIRECTED TO THE BASIN TO PREVENT SEDIMENTATION OF THE DRAINAGE LAYER, OR ALL RUNOFF SHOULD BE RE-DIRECTED UNTIL CONSTRUCTION IS FINALIZED. THE VEGETATION WITHIN THE STRUCTURE IS EQUALLY IMPORTANT AND MUST BE WELL ESTABLISHED BEFORE IT CAN ACCEPT ANY RUNOFF. CONSTRUCTION SHOULD BE STARTED NO LATER THAN SEPTEMBER 1 OR EARLIER THAN JUNE 1; AND IF VEGETATION CANNOT BE ESTABLISHED BY THE END OF THE GROWING SEASON, CONSTRUCTION SHOULD BE DELAYED TO THE FOLLOWING YEAR. SEEDING OR STABILIZATION MUST OCCUR BY SEPTEMBER 15 IN PREPARATION FOR THE WINTER SEASON.
10. THE POND CONSTRUCTION SHOULD BE ONLY CONSTRUCTED UNDER THE SUPERVISION OF THE DESIGN ENGINEER.

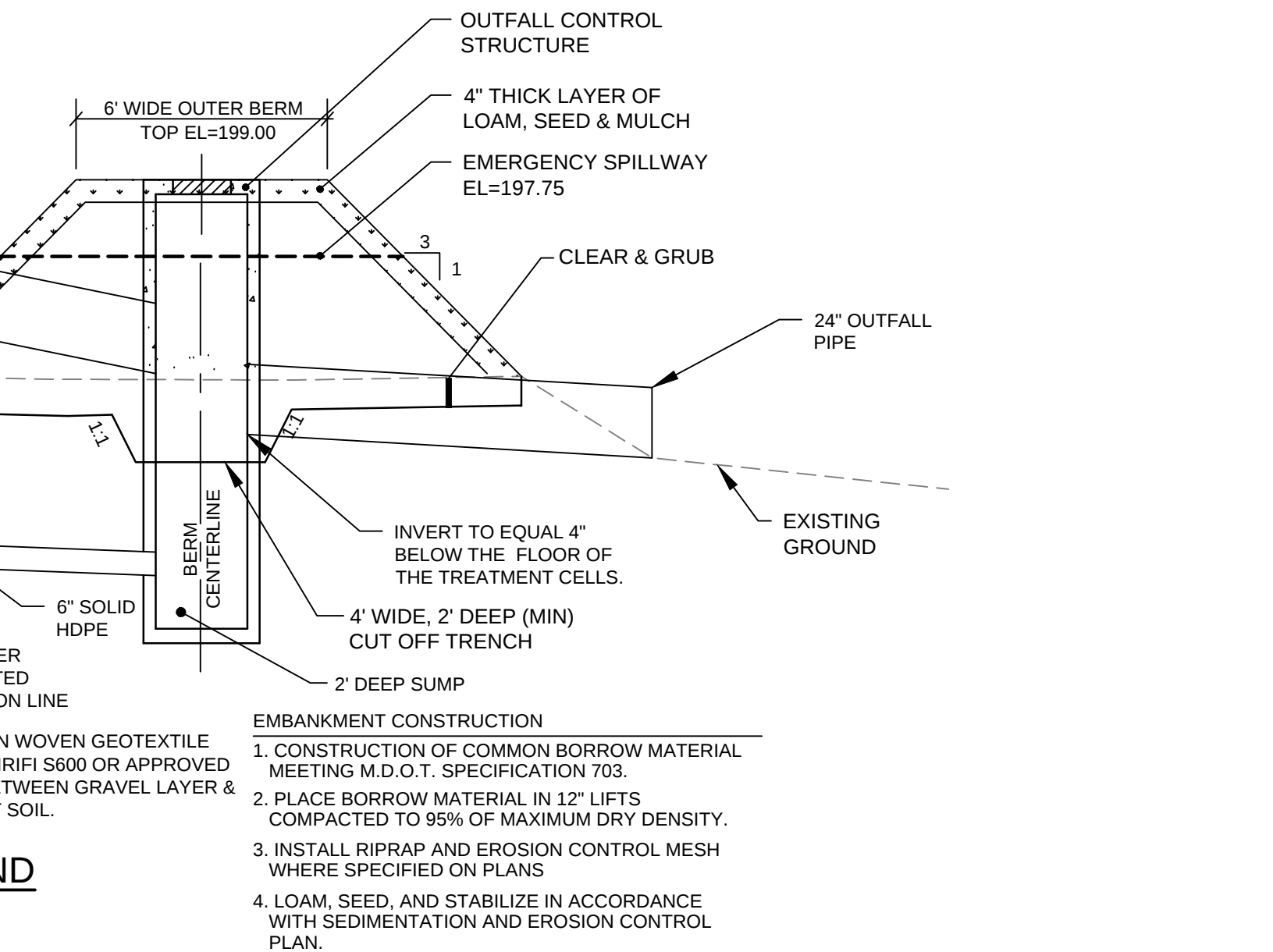
CROSS SECTION VIEW - GRAVEL WETLAND

NOT TO SCALE

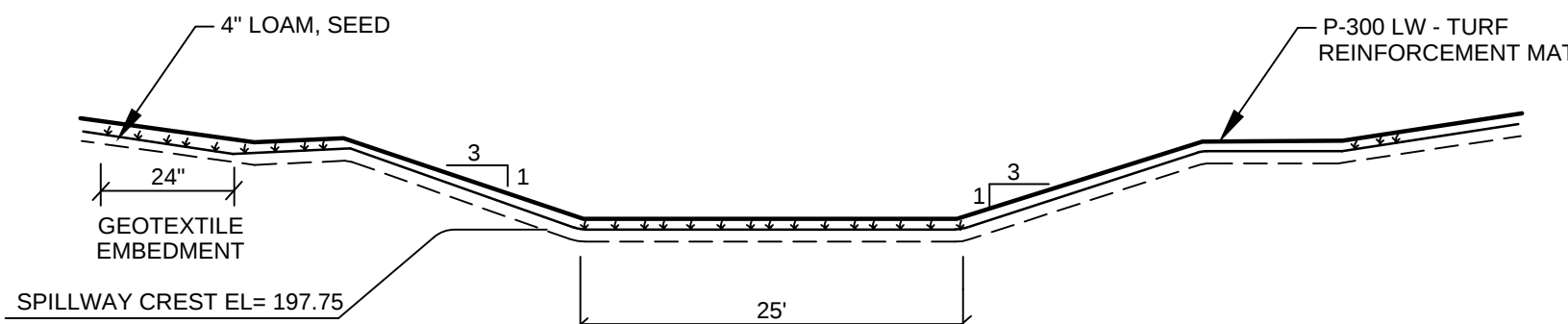


SPILLWAY EMBANKMENT SECTION

NOT TO SCALE



CONSTRUCTION INSPECTION NOTES:
Inspection by a professional engineer will consist of weekly visits to the site to inspect the installation of each pond's embankment construction, stormwater inlet, underdrains, filter material makeup and placement, outlet control structure, clay liner (if applicable), and emergency spillway construction from initial ground disturbance to final stabilization of the pond. An inspection of the underdrained gravel outlet shall also be performed one year after the final stabilization of the pond.

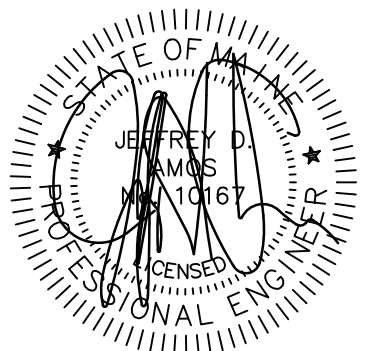


SPILLWAY CROSS-SECTIONS - GRAVEL WETLAND

NOT TO SCALE

GRAVEL WETLAND DETAILS

NOT TO SCALE



SIGNATURE DATE: 7/3/2017

APPROVED BY:

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.

DATE:

NO.