

# Allenstown Transfer Station Stormwater Improvements

## 104 River Road Allenstown, New Hampshire

Prepared For:  
**Casella Waste Management of Massachusetts, Inc.**  
 53 Pelham Road  
 Salem, New Hampshire  
 Revision 1 - October 21, 2016

**Design Consultants:**

CIVIL ENGINEER  
 WALSH ENGINEERING ASSOCIATES, INC.  
 ONE KAREN DRIVE, SUITE 2A  
 WESTBROOK, MAINE 04092  
 207-553-9898

**Utilities:**

WATER  
 PEMBROKE WATER WORKS  
 346 PEMBROKE STREET  
 PEMBROKE, NEW HAMPSHIRE 03275-3236

ELECTRIC  
 EVERSOURCE ENERGY  
 780 N. COMMERCIAL STREET  
 MANCHESTER, NH 03101  
 866-554-6025

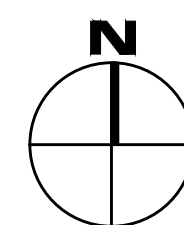
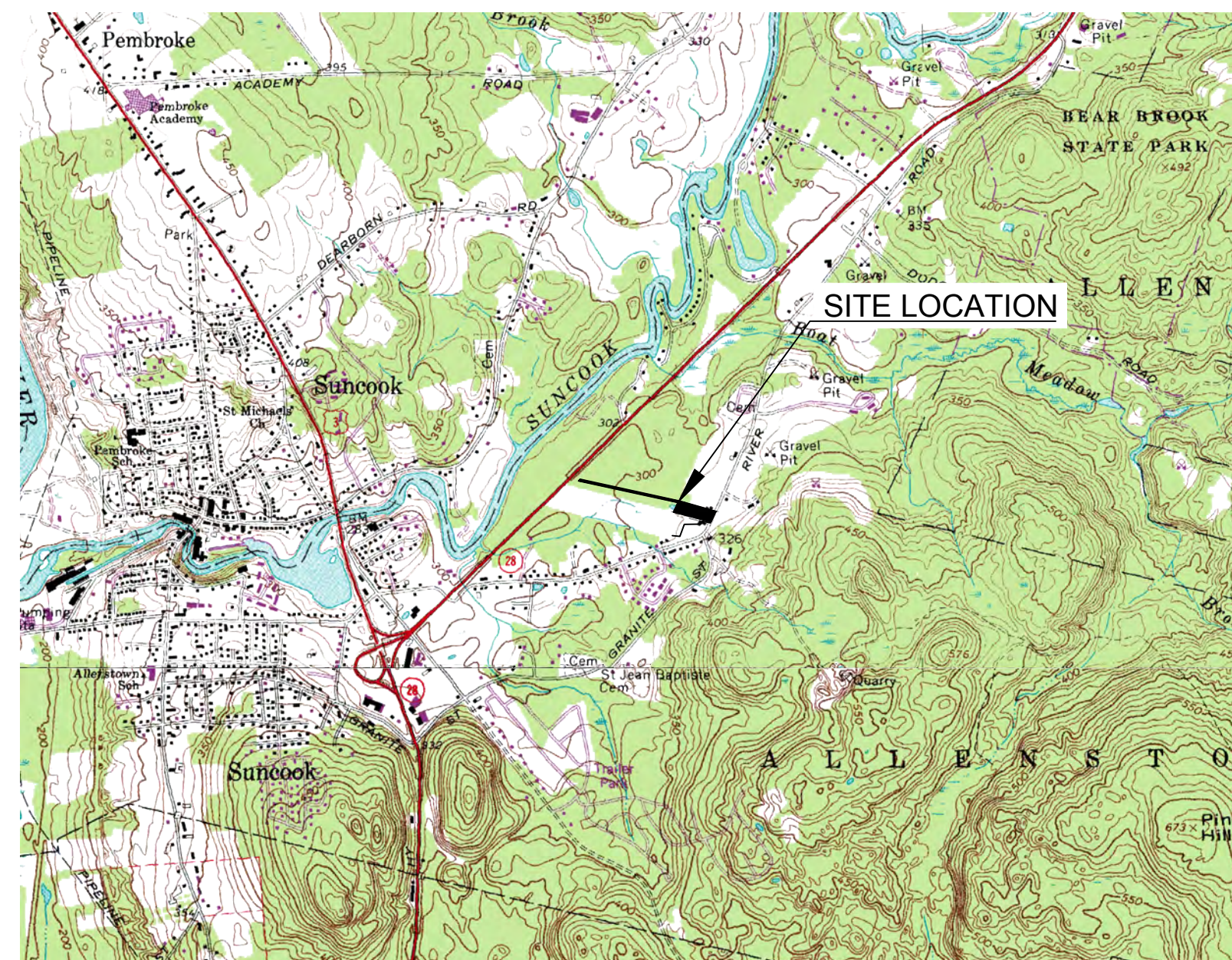
SEWER  
 ALLENSTOWN SEWER DEPARTMENT  
 35 CANAL STREET  
 ALLENSTOWN, NEW HAMPSHIRE 03275  
 603-485-5600



One Karen Dr., Suite 2A | Westbrook, Maine 04092  
 ph: 207.553.9898 | www.walsh-eng.com

**List of Drawings:**

SHEET NO.	SHEET TITLE
	COVER SHEET
	DOUCET SURVEY PLAN
C1.0	EXISTING CONDITIONS AND REMOVAL PLAN
C1.1	EASEMENT AND ABUTTER PLAN
C2.0	TRANSFER BUILDING SITE PLAN
C2.1	NEW BUILDING PLAN
C3.0	PROFILE & DETAILS
C3.1	DETAILS
C3.2	DETAILS



**Permits:**

TYPE	JURISDICTION	STATUS
MINOR SITE PLAN APPLICATION	TOWN OF ALLENSTOWN	SUBMITTED OCTOBER 5, 2016 REVISED OCTOBER 21, 2016

THE PLANNING BOARD ACKNOWLEDGES AND AGREES THAT THE PROPERTY AND IMPROVEMENTS AS DEPICTED ON THIS PLAN ARE IN CONFORMANCE WITH THE MUNICIPAL ZONING REGULATIONS OF THE TOWN OF ALLENSTOWN.

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

\_\_\_\_\_

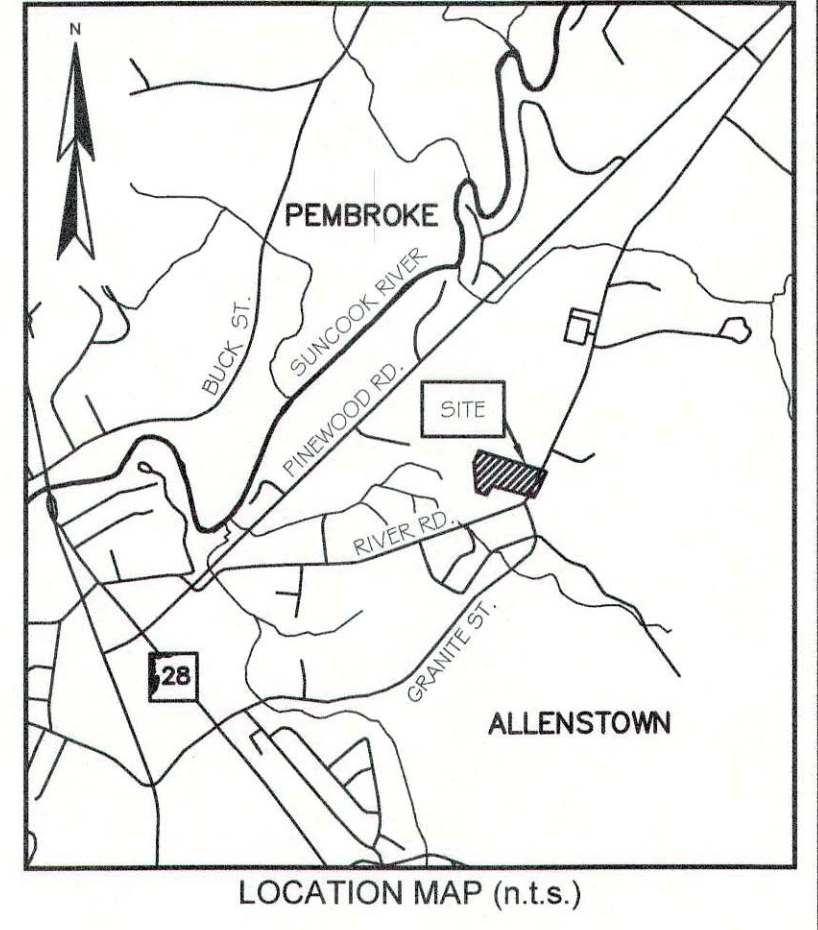
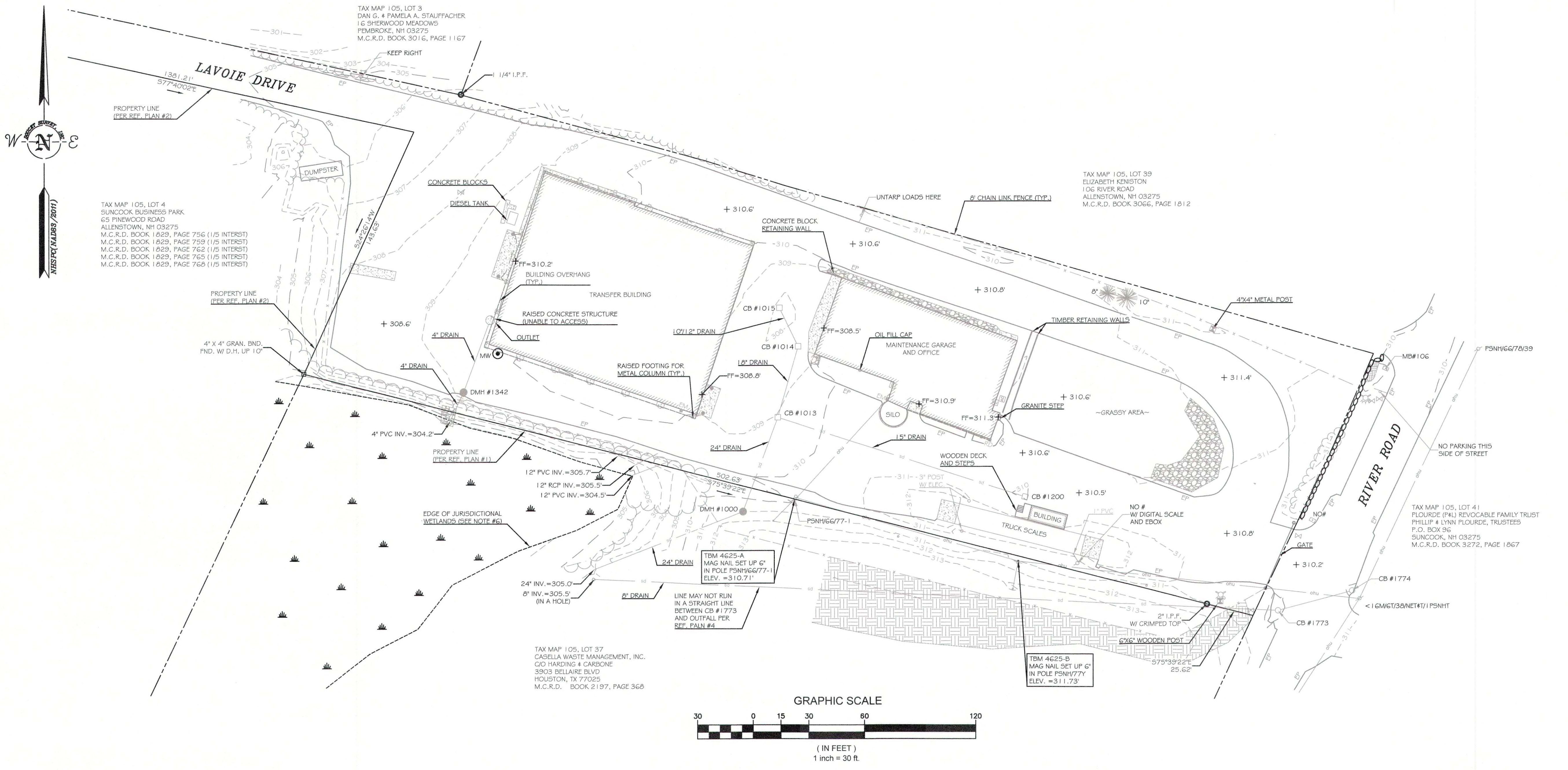
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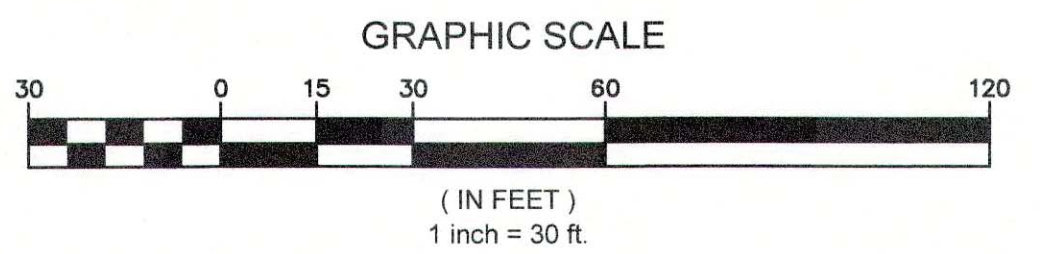
**Record Owner:**  
 CASELLA WASTE MANAGEMENT OF MASSACHUSETTS, INC.  
 104 RIVER ROAD  
 ALLENSTOWN, NH

**Parcel ID:**  
 MAP 105  
 LOT 38



**LEGEND**

- PROPERTY LINE
- APPROXIMATE ABUTTERS LOT LINE
- STONE WALL
- CHAIN LINK FENCE
- OVERHEAD UTILITY
- DRAIN LINE
- INTERMEDIATE CONTOUR LINE
- INDEX CONTOUR LINE
- SPOT GRADE
- TREE LINE
- EDGE OF WETLAND
- RETAINING WALL
- EDGE OF CONCRETE
- UTILITY POLE
- UTILITY POLE & GUY WIRE
- SIGN
- BOUND FOUND
- IRON PIPE/ROD FOUND
- POST
- BOLLARD
- FIRE HYDRANT
- WATER GATE VALVE
- ELECTRIC BOX
- ELECTRIC METER
- AIR CONDITIONING UNIT
- CATCH BASIN
- STORM DRAIN MANHOLE
- WETLAND AREA
- CONIFEROUS TREE
- MONITORING WELL
- RIP RAP
- LANDSCAPE
- TYP. TYPICAL
- FF. FINISHED FLOOR
- BND. FND. BOUND FOUND
- I.P.F. I.P.F. FOUND
- I.R.F. IRON ROD FOUND
- CONC. CONCRETE
- EP. EDGE OF PAVEMENT



**NOTES:**

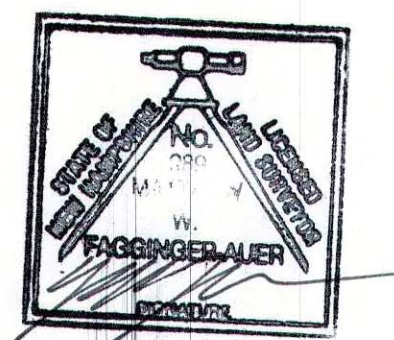
- REFERENCE: TAX MAP 105, LOT 38
- TOTAL PARCEL AREA: 2.74 AC. (PER TAX MAP)
- OWNER OF RECORD: CASELLA WASTE MANAGEMENT, INC. C/O HARDING & CARBONE 3903 BELLAIRE BLVD HOUSTON, TX 77025 M.C.R.D. BOOK 2197, PAGE 368
- ZONE: COMMERCIAL/INDUSTRIAL DIMENSIONAL REQUIREMENTS:
  - MIN. LOT AREA: NO MIN. LOT AREA (PER ALLENSTOWN BUILDING DEPARTMENT)
  - MIN. FRONTAGE: 75 ft.
  - MIN. FRONT SETBACK: 20 ft.
  - MIN. SIDE SETBACK: 15 ft.
  - MIN. REAR SETBACK: 40 ft.
  - MAX. BUILDING HEIGHT: 45 ft. OR 3 STORIES
 WETLAND SETBACKS: REFER TO THE ALLENSTOWN BUILDING DEPARTMENT FOR SETBACKS
- OVERLAY DISTRICTS:
  - AGRICULTURAL CONSERVATION DISTRICT
  - GROUNDWATER PROTECTION DISTRICT

- FLOOD HAZARD ZONE: 'X', PER FIRM MAP #3301360566E, DATED 4/19/10.
- HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- VERTICAL DATUM IS BASED ON APPROXIMATE NAVD83(GEIOD) 2A) (±.2) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
- PROPER FIELD PROCEDURES WERE FOLLOWED IN ORDER TO GENERATE CONTOURS AT 1' INTERVALS. ANY MODIFICATION OF THIS INTERVAL WILL DIMINISH THE INTEGRITY OF THE DATA, AND DOUGET SURVEY, INC. WILL NOT BE RESPONSIBLE FOR ANY SUCH ALTERATION PERFORMED BY THE USER.
- UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVABLE PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
- THE ACCURACY OF MEASURED UTILITY INVERTS AND PIPE SIZES/TYPES IS SUBJECT TO NUMEROUS FIELD CONDITIONS, INCLUDING: THE ABILITY TO MAKE VISUAL OBSERVATIONS, DIRECT ACCESS TO THE VARIOUS ELEMENTS, MANHOLE CONFIGURATION, ETC.
- ALL ELECTRIC, GAS, TEL, WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
- THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT LEGAL DESCRIPTION, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.

**REFERENCE PLANS:**

- 'PLAN OF LAND W/ WILLIAM A. ANDERSON RIVER ROAD ALLENSTOWN, NH', BY R.G. MOYNIHAN CIVIL ENGINEER AND SURVEYOR, DATED SEPTEMBER, 1993, M.C.R.D. PLAN #12795.
- 'SURVEY OF THE LAND OF OSCAR G. & MARY G. FLOURDE ALLENSTOWN, NH', BY HOLDEN ENGINEERING & SURVEYING, INC., DATED NOVEMBER 1984, M.C.R.D. PLAN #10732.
- 'SUBDIVISION PLAN OSCAR FLOURDE ALLENSTOWN, NH', BY T.F. MORAN, INC., DATED JANUARY 10, 1976, M.C.R.D. PLAN #5152.
- 'SITE PLAN FACILITY IMPROVEMENTS, TRANSFER STATION, ALLENSTOWN, NH', BY GEOSIGHT, DATED FEBRUARY 19, 2007, PROVIDED BY WALSH ENGINEERING ASSOCIATES, INC.

DRAINAGE STRUCTURE TABLE	
DMH #1000 RIM ELEV. = 311.0' (OUTFALL) 24" HDPE INV. = 304.8' (#1013) 24" HDPE INV. = 304.8'	CB #1200 ELEV. = 309.9' (#1013 @TOP OF 18" HOOD) 15" HDPE INV. = 307.7' (TOP OF WATER) ELEV. = 306.4' (SUMP) ELEV. = 303.5'
CB #1013 ELEV. = 309.0' (#1000 @TOP OF 24" HOOD) 24" HDPE INV. = 306.5' (#1200) 15" HDPE INV. = 305.8' (#1014) 18" HDPE INV. = 304.9' (TOP OF WATER) ELEV. = 305.6' (SUMP) ELEV. = 302.7'	DMH #1342 ELEV. = 309.3' (OUTFALL @TOP OF PIPE) 4" PVC INV. = 305.5' (CONCRETE STRUCTURE @TOP OF PIPE) 4" PVC INV. = 305.5'
CB #1014 ELEV. = 308.3' (#1013 @TOP OF 18" CAPPED) 18" HDPE INV. = 307.7' (#1015) 12" PVC INV. = 305.9' (TOP OF WATER) ELEV. = 305.7' (SUMP) ELEV. = 302.7'	CBR #1773 ELEV. = 309.7' (#1774) 12" PVC INV. = 307.2' (OUTFALL) 8" PVC INV. = 306.9'
CB #1015 ELEV. = 307.9' (#1014) 10" PVC INV. = 306.1' (TOP OF WATER) ELEV. = 306.1' (SUMP) ELEV. = 305.0'	CBR #1774 ELEV. = 309.8' (#1773) 12" PVC INV. = 308.2'



OWNERS SIGNATURE

I CERTIFY THAT THIS SURVEY PLAN IS NOT A SUBDIVISION PURSUANT TO THIS TITLE (NH RSA TITLE LXV) AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY ME OR BY THOSE UNDER MY DIRECT SUPERVISION AND FALLS UNDER THE URBAN SURVEY CLASSIFICATION OF THE NH CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. I CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. RANDOM TRAVERSE SURVEY BY TOTAL STATION, WITH A PRECISION GREATER THAN 1:15,000.

*[Signature]* L.L.S. #824  
10-14-16 DATE

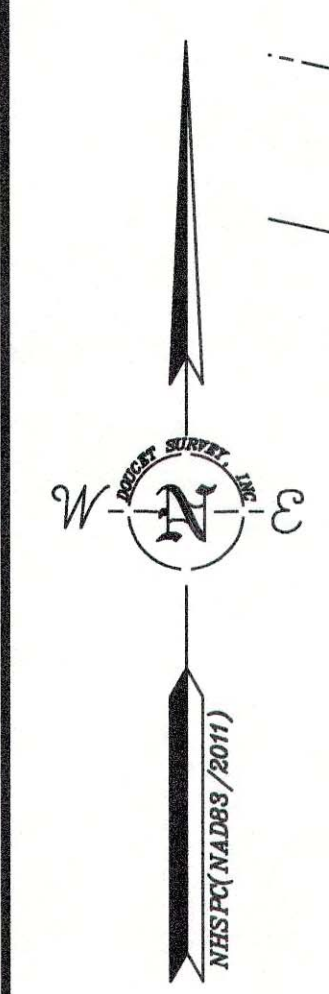
THE CERTIFICATIONS SHOWN HEREON ARE INTENDED TO MEET REGISTRY OF DEED REQUIREMENTS AND ARE NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.

**TOPOGRAPHIC & BOUNDARY LINE VERIFICATION PLAN FOR WALSH ENGINEERING ASSOCIATES, INC. OF CASELLA ALLENSTOWN TRANSFER STATION 104 RIVER ROAD ALLENSTOWN, NEW HAMPSHIRE**

NO.	DATE	DESCRIPTION	BY

DRAWN BY: W.D.C.	DATE: AUGUST 2016
CHECKED BY: M.W.F.	DRAWING NO.: 4625A
JOB NO.: 4625	SHEET 1 OF 1

**DOUCET SURVEY**  
 Serving Your Professional Surveying & Mapping Needs  
 102 Kent Place, Newmarket, NH 03857 (803) 659-6560  
 10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005  
<http://www.doucetsurvey.com>



TAX MAP 105, LOT 4  
SUNCOCK BUSINESS PARK  
65 PINEWOOD ROAD  
ALLENSTOWN, NH 03275  
M.C.R.D. BOOK 1829, PAGE 756 (1/5 INTERST)  
M.C.R.D. BOOK 1829, PAGE 759 (1/5 INTERST)  
M.C.R.D. BOOK 1829, PAGE 762 (1/5 INTERST)  
M.C.R.D. BOOK 1829, PAGE 765 (1/5 INTERST)  
M.C.R.D. BOOK 1829, PAGE 768 (1/5 INTERST)

TAX MAP 105, LOT 3  
DAN G. & PAMELA A. STAUFFACHER  
16 SHERWOOD MEADOWS  
PEMBROKE, NH 03275  
M.C.R.D. BOOK 3016, PAGE 1167

TAX MAP 105, LOT 39  
ELIZABETH KENISTON  
106 RIVER ROAD  
ALLENSTOWN, NH 03275  
M.C.R.D. BOOK 3066, PAGE 1812

TAX MAP 105, LOT 41  
FLOURDE (P4) REVOCABLE FAMILY TRUST  
PHILLIP & LYNN FLOURDE, TRUSTEES  
P.O. BOX 96  
SUNCOCK, NH 03275  
M.C.R.D. BOOK 3272, PAGE 1067

TAX MAP 105, LOT 37  
CASELLA WASTE MANAGEMENT, INC.  
C/O HARDING & CARBONE  
3903 BELLAIRE BLVD  
HOUSTON, TX 77025  
M.C.R.D. BOOK 2197, PAGE 368

FILE NAME: W:\PROJECTS\4625 CASELLA WASTE MGMT. CO\DWG\4625 WALSH.dwg PLOTTED: Tuesday, October 18, 2016 11:15am

**PLAN REFERENCES:**

- TOPOGRAPHIC AND PROPERTY BOUNDARY INFORMATION TAKEN FROM A COMPILATION OF THE FOLLOWING:
  - A SET OF SITE PLANS TITLED "TRANSFER STATION ALLENSTOWN, NEW HAMPSHIRE" PREPARED BY GEONISIGHT, INC. OF 186 GRANITE ST., 3RD FLOOR, SUITE A, MANCHESTER, NH DATED JANUARY 13, 2007
  - A PLAN TITLED "TOPOGRAPHIC AND BOUNDARY LINE VERIFICATION PLAN FOR WALSH ENGINEERING ASSOCIATES" PREPARED BY DOUCET SURVEY, INC. OF 104 RIVER ROAD, ALLENSTOWN, NH AND DATED AUGUST 2016.

**GENERAL NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "DIG SAFE" AND LOCAL UTILITY COMPANIES AT LEAST THREE (3) BUSINESS DAYS, BUT NOT MORE THAN 30 CALENDAR DAYS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, IN ACCORDANCE WITH NEW HAMPSHIRE STATE LAW. "DIG SAFE" TELEPHONE NUMBER IS 1-888-344-7233.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL AND ANY MEANS, METHODS, AND TECHNIQUES EMPLOYED TO PERFORM THE WORK SHOWN ON THE PLANS.
- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS INCLUDING ALL SAFETY REGULATIONS (OSHA).
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THE WORK SHOWN ON THESE PLANS PRIOR TO CONSTRUCTION.
- ALL PAVEMENT/CONCRETE CUTS SHALL BE SAW CUT OR GROUND TO RESULT IN CLEAN EDGES. A TACK COAT SHALL BE APPLIED ALONG THE PAVEMENT CUT EDGES AND THE NEW PAVEMENT BUTTED TO IT, UNLESS OTHERWISE DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO NEW HAMPSHIRE DOT STANDARD DETAILS AND SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS. IF ANY DISCREPANCIES ARE FOUND, THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY.

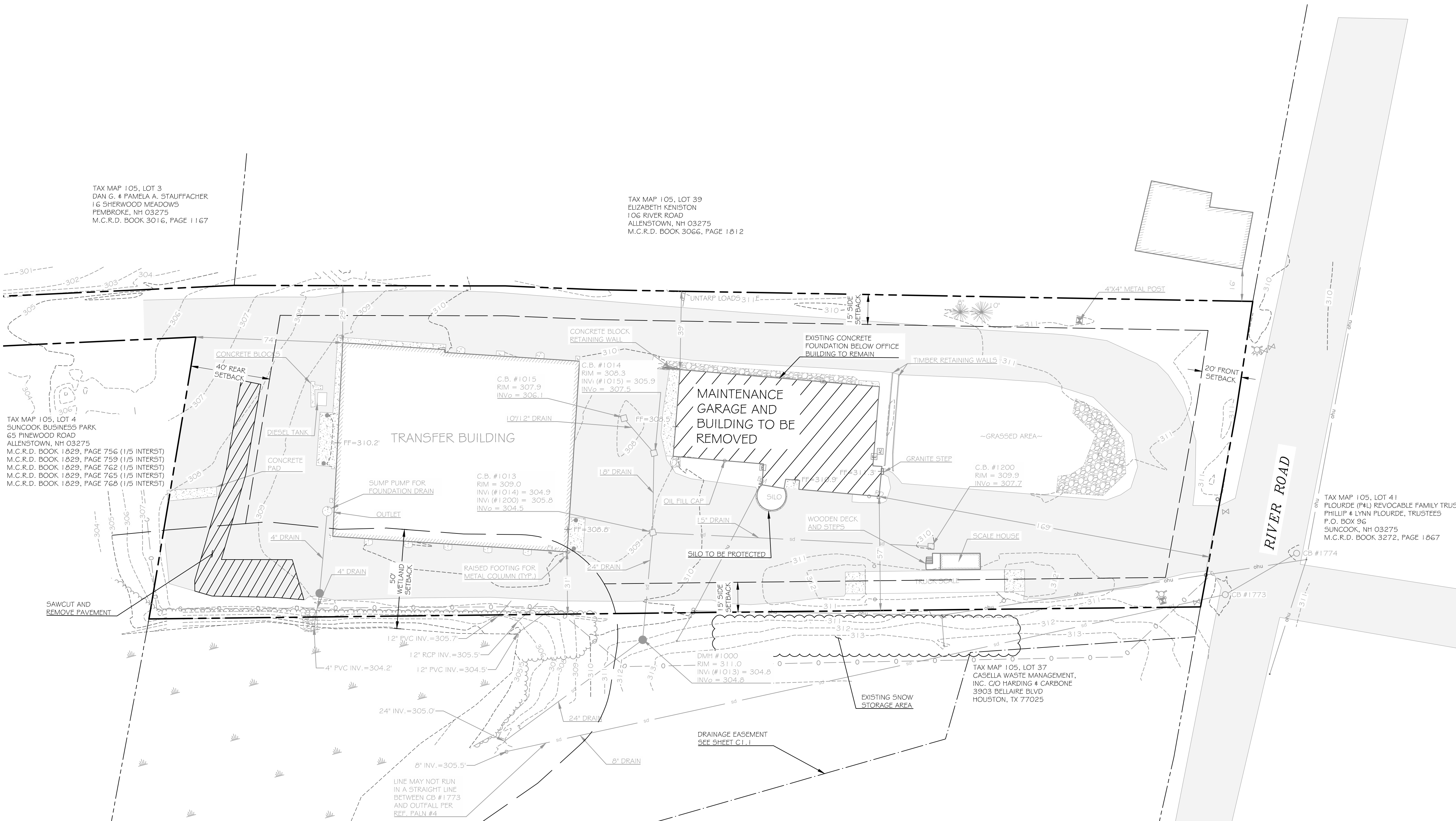
**ZONING INFORMATION:**

- REFERENCE: TAX MAP 105, LOT 38
- TOTAL PARCEL AREA: 2.74 AC. (110,354 S.F.) (PER TAX MAP)
- OWNER OF RECORD: CASELLA WASTE MANAGEMENT, INC. C/O HARDING & CARBONE 3903 BELLAIRE BLVD. HOUSTON, TX 77025 M.C.R.D. BOOK 2197, PAGE 368
- ZONE: COMMERCIAL/LIGHT INDUSTRIAL DIMENSIONAL REQUIREMENTS:
 

	REQUIRED:	EXISTING:
MIN. LOT AREA	N/A	
MIN. FRONTAGE	75'	156'
MIN. FRONT SETBACK	20'	169'
MIN. SIDE SETBACK	15'	29'
MIN. REAR SETBACK	40'	74'
WETLANDS SETBACK	50'	0'

**LEGEND**

EXISTING	
⊙	STORM DRAIN MANHOLE
■	STORM DRAIN CATCH BASIN
—	STORM DRAIN LINE
⊙	SANITARY SEWER MANHOLE
—	SANITARY SEWER LINE
—	SANITARY FORCE MAIN
●	BOLLARD
▨	BUILDING
— x — x — x —	FENCE METAL
▨	RIPRAP
▨	EDGE OF PAVEMENT
▨	EDGE OF CONCRETE
—	CURB
—	TREELINE
—	INTERMEDIATE CONTOUR
—	INDEX CONTOUR
—	WETLANDS
—	WETLAND BUFFER



**WALSH**  
ENGINEERING ASSOCIATES, INC.  
One Karen Dr., Suite 2A | Westbrook, Maine 04092  
ph: 207.553.9898 | www.walsh-eng.com  
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STATE OF NEW HAMPSHIRE  
WILLIAM R. WALSH III  
No. 14352  
LICENSED PROFESSIONAL ENGINEER  
10/21/16

Allenstown Transfer Station Stormwater Improvements  
104 River Road  
Allenstown, NH 03275  
Tax Map: 105-38

Casella Waste Management of Massachusetts, Inc.  
58 Pelham Road  
Salem, New Hampshire, 03079

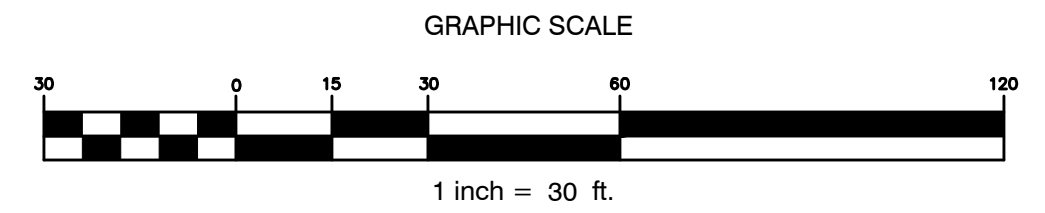
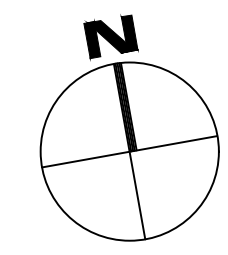
ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION

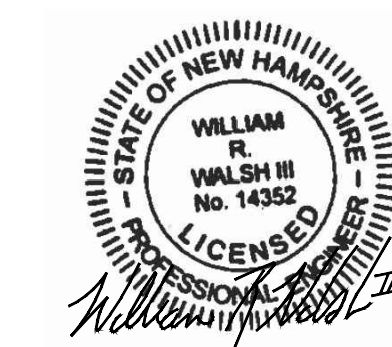
Rev.	Date	Description	Drawn	Check
1	10/21/16	Revised per CNHRPC comments	DPL	WRW

Sheet Title:  
**Existing Conditions and Removals Plan**

Job No.: 226A      Sheet No.:  
Date: Oct. 3, 2016  
Scale: 1" = 30'  
Drawn: DPL  
Checked: WRW

**C1.0**





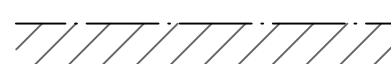


10/21/16

PLAN REFERENCES:

1. PROPERTY BOUNDARY INFORMATION TAKEN FROM A COMPILATION OF THE FOLLOWING:
  - 1.1. A SET OF SITE PLANS TITLED "TRANSFER STATION ALLENSTOWN, NEW HAMPSHIRE" PREPARED BY GEINSIGHT, INC. OF 186 GRANITE ST., 3RD FLOOR, SUITE A, MANCHESTER, NH DATED JANUARY 19, 2007 AND PLAN 19205 RECORDED MARCH 16, 2009
  - 1.2. A PLAN TITLED "TOPOGRAPHIC AND BOUNDARY LINE VERIFICATION PLAN FOR WALSH ENGINEERING ASSOCIATES" PREPARED BY DOUCET SURVEY, INC. OF 104 RIVER ROAD, ALLENSTOWN, NH AND DATED AUGUST 2016.
  - 1.3. TOWN OF ALLENSTOWN ELECTRONIC TAX MAP INFORMATION AT WWW.AXISGIS.COM/ALLENSTOWNNH
2. DRAINAGE, GRADING, LANDSCAPE AND ACCESS EASEMENT SHOWN IS APPROXIMATE BASED ON PLAN REFERENCES 1.1 AND 1.2 ABOVE AND DEED RECORDED IN M.C.R.D. BOOK 3116, PAGE 617.
3. PERMANENT EASEMENT SHOWN IS APPROXIMATE BASED ON PLAN REFERENCES 1.1 AND 1.2 ABOVE AND DEED RECORDED IN M.C.R.D. BOOK 3116, PAGE 332

LEGEND

	EXISTING	PROPERTY LINE
		ABUTTER LINE
		EASEMENT



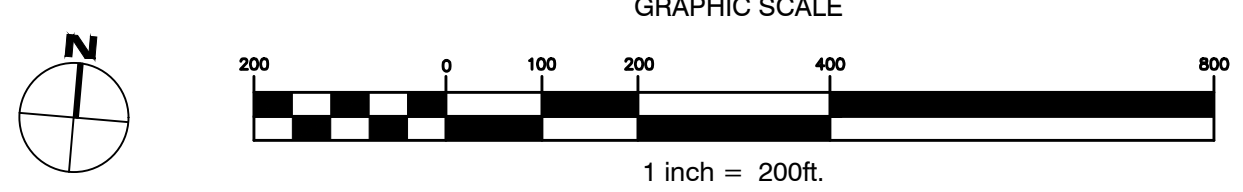
TAX MAP 105, LOT 1  
RICHARD & ANN BOISSONNEAULT  
21 CONCORD ST, CHICOPEE MA

TAX MAP 105, LOT 3  
DAN & PAMELA STAUFFACHER  
16 SHERWOOD MEADOWS, FEMBRIDGE, NH

TAX MAP 105, LOT 4  
SUNCOOK BUSINESS PARK  
65 PINEWOOD RD, ALLENSTOWN NH

TAX MAP 105, LOT 41  
FLOURDE REVOCABLE FAMILY  
PO BOX 96, SUNCOOK NH

TAX MAP	LOT NUMBER	OWNER:	ADDRESS:
105	36	ELIZABETH MALTAIS	70 RIVER RD, ALLENSTOWN, NH
105	37	CASELLA WASTE MANAGEMENT, INC.	3903 BELLAIRE BLVD, HOUSTON, TX
105	39	ELIZABETH KENISTON	106 RIVER RD, ALLENSTOWN, NH
105	63	PAULA & JAMES POWERS	73 RIVER RD, ALLENSTOWN, NH
105	64	CAROL BERTAU	71 RIVER RD, ALLENSTOWN, NH
105	65	CHARLES & SHEILA SPAULDING	69 RIVER RD, ALLENSTOWN, NH
105	66	JAMES & VICTORIA VANDYNE	67 RIVER RD, ALLENSTOWN, NH
105	67	CAROL ANGOWSKI	65 RIVER RD, ALLENSTOWN, NH



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**ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION**

Allenstown Transfer Station Stormwater Improvements  
104 River Road  
Allenstown, NH 03275  
Tax Map: 105-38

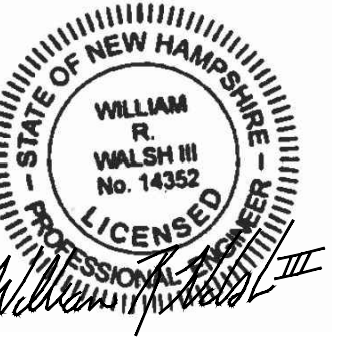
Casella Waste Management of Massachusetts, Inc.  
53 Pelham Road  
Salem, New Hampshire, 03079

Rev.	Date	Description	Drawn	Check
1	10/21/16	Revised per CNHRPC comments	DPL	WRW

Sheet Title:  
**Easement and Abutter Plan**

Job No.: 226A      Sheet No.:  
Date: Oct. 3, 2016  
Scale: 1" = 200'  
Drawn: DPL  
Checked: WRW

C1.1



LEGEND

EXISTING	PROPOSED
- - - - -	PROPERTY LINE
- - - - -	BUILDING SETBACK LINE
(D)	STORM DRAIN MANHOLE
▀	STORM DRAIN CATCH BASIN
---	STORM DRAIN LINE
(S)	SANITARY SEWER MANHOLE
---	SANITARY SEWER LINE
---	SANITARY FORCE MAIN
●	BOLLARD
▭	BUILDING
- x - x - x - x -	FENCE METAL
▭	RIPRAP
▭	EDGE OF PAVEMENT
▭	EDGE OF CONCRETE
▭	CURB
▭	TREELINE
---	INTERMEDIATE CONTOUR
---	INDEX CONTOUR
---	CL OR THREAD OF STREAM OR BROOK
▭	WETLANDS
▭	WETLAND BUFFER
---	SILT FENCE
---	EROSION CONTROL BERM

LAYOUT, MATERIALS, AND UTILITY NOTES:

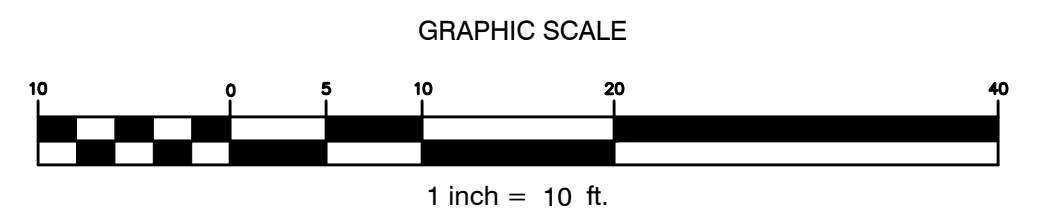
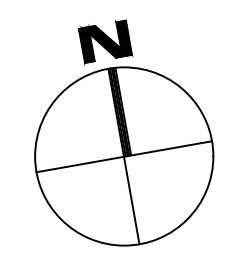
1. ALL DIMENSIONS, LOCATIONS AND CONTROLS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
2. DO NOT SCALE THE DRAWINGS FOR REQUIRED DIMENSIONS. ANY DISCREPANCIES IN DIMENSIONING SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE.
3. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE SHOWN.
4. ALL LIMITS OF WORK SHALL BE MARKED OUT BY THE CONTRACTOR AND REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
5. THE LONGITUDINAL SLOPE AND CROSS SLOPE OF THE TRENCH DRAIN SHALL MATCH EXISTING PAVEMENT GRADE IN BOTH DIRECTIONS IN ORDER TO MINIMIZE ROCKING OF TRUCKS WHEN THEY DRIVE ACROSS IT.
6. PROVIDE A SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING.
7. ALL DISTURBED AREAS NOT OTHERWISE TREATED SHALL BE LOAMED AND SEEDDED.

GRADING, DRAINAGE AND UTILITIES NOTES:

1. PRIOR TO ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL VERIFY ALL AFFECTED GRADES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
2. ALL AREAS NOT REQUIRING GRADING SHALL BE LEFT UNDISTURBED. CONTRACTOR SHALL NOT DISTURB THESE AREAS AND PRESERVE EXISTING VEGETATION.
3. OWNER AND PROJECT ENGINEER WILL BE CLOSELY MONITORING FINISH GRADING IN THE FIELD. CONTRACTOR SHALL PERFORM FINISH WORK AS DIRECTED BY THE OWNER OR PROJECT ENGINEER TO ACHIEVE THE FINISH GRADE CONDITIONS SHOWN ON THE PLANS.
4. ALL EXCAVATED MATERIALS NOT TO BE USED ON SITE SHALL BE DISPOSED OF PROPERLY.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO CONSTRUCTION. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS.
2. THE CONTRACTOR SHALL COMPLY WITH THE NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION AS PUBLISHED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES' BUREAU OF RESOURCE PROTECTION, DECEMBER 2006 OR LATEST EDITION.
3. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR REGRADING. ALL DISTURBED AREAS ON SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL BE STABILIZED WITH LOAM AND SEED, OR BY OTHER METHODS AS REQUIRED BY THE WRITTEN EROSION CONTROL PLAN.
4. DISTURBED AREAS SHALL BE LIMITED TO ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION. FOR DISTURBED AREAS THAT ARE NOT UNDER ACTIVE CONSTRUCTION AND THAT CAN NOT YET UNDERGO FINAL GRADING, INSTALL TEMPORARY SEEDING AND MULCHING.
5. PERMANENT SEEDING OR STABILIZATION SHALL BE CARRIED OUT IMMEDIATELY AFTER FINAL GRADING IS COMPLETED, OR TEMPORARY MEASURES SHALL BE APPLIED SUCH AS MULCHING OR SEEDING UNTIL PERMANENT STABILIZATION MEASURES ARE IN PLACE.
6. ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED AND REPAIRED FOR THE DURATION OF THE PROJECT UNTIL ALL AREAS ARE STABILIZED. REMOVE ACCUMULATED SILT AND SEDIMENT AS NEEDED AND MAINTAIN BMPs IN GOOD, OPERABLE CONDITION.



ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION

Allenstown Transfer Station Stormwater Improvements

104 River Road  
Allenstown, NH 03275  
Tel: 603-852-1058  
Fax: 603-852-1058

Casella Waste Management of Massachusetts, Inc.  
53 Pelham Road  
Salem, New Hampshire, 03079

Rev.	Date	Description	Drawn	Check
1	10/21/16	Revised per CNHRPC comments	DPL	WRW

Sheet Title:  
**Transfer Building Site Plan**

Job No.:	226A	Sheet No.:	
Date:	Oct. 3, 2016		
Scale:	1" = 10'		
Drawn:	DPL		
Checked:	WRW		

**C2.0**

**LAYOUT, MATERIALS, AND UTILITY NOTES:**

1. ALL DIMENSIONS, LOCATIONS AND CONTROLS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
2. DO NOT SCALE THE DRAWINGS FOR REQUIRED DIMENSIONS. ANY DISCREPANCIES IN DIMENSIONING SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE.
3. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE SHOWN.
4. ALL LIMITS OF WORK SHALL BE MARKED OUT BY THE CONTRACTOR AND REVIEWED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
5. THE LONGITUDINAL SLOPE AND CROSS SLOPE OF THE TRENCH DRAIN SHALL MATCH EXISTING PAVEMENT GRADE IN BOTH DIRECTIONS IN ORDER TO MINIMIZE ROCKING OF TRUCKS WHEN THEY DRIVE ACROSS IT.
6. PROVIDE A SMOOTH TRANSITION WHERE NEW WORK MEETS EXISTING.
7. ALL DISTURBED AREAS NOT OTHERWISE TREATED SHALL BE LOAMED AND SEEDED.

**GRADING, DRAINAGE AND UTILITIES NOTES:**

1. PRIOR TO ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL VERIFY ALL AFFECTED GRADES. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER OR OWNER'S REPRESENTATIVE.
2. ALL AREAS NOT REQUIRING GRADING SHALL BE LEFT UNDISTURBED. CONTRACTOR SHALL NOT DISTURB THESE AREAS AND PRESERVE EXISTING VEGETATION.
3. OWNER AND PROJECT ENGINEER WILL BE CLOSELY MONITORING FINISH GRADING IN THE FIELD. CONTRACTOR SHALL PERFORM FINISH WORK AS DIRECTED BY THE OWNER OR PROJECT ENGINEER TO ACHIEVE THE FINISH GRADE CONDITIONS SHOWN ON THE PLANS.
4. ALL EXCAVATED MATERIALS NOT TO BE USED ON SITE SHALL BE DISPOSED OF PROPERLY.

**EROSION CONTROL NOTES:**

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6. ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED AND REPAIRED FOR THE DURATION OF THE PROJECT UNTIL ALL AREAS ARE STABILIZED. REMOVE ACCUMULATED SILT AND SEDIMENT AS NEEDED AND MAINTAIN BMPs IN GOOD, OPERABLE CONDITION.

EXISTING	PROPOSED	LEGEND
---	---	PROPERTY LINE
---	---	BUILDING SETBACK LINE
⊙	⊙	STORM DRAIN MANHOLE
■	■	STORM DRAIN CATCH BASIN
---	---	STORM DRAIN LINE
⊙	⊙	SANITARY SEWER MANHOLE
---	---	SANITARY SEWER LINE
ss	ss	SANITARY FORCE MAIN
•	•	BOLLARD
▨	▨	BUILDING
▨	▨	FENCE METAL
▨	▨	RIPRAP
▨	▨	EDGE OF PAVEMENT
▨	▨	EDGE OF CONCRETE
---	---	CURB
---	---	TREELINE
---	---	INTERMEDIATE CONTOUR
---	---	INDEX CONTOUR
---	---	WETLANDS
---	---	WETLAND BUFFER

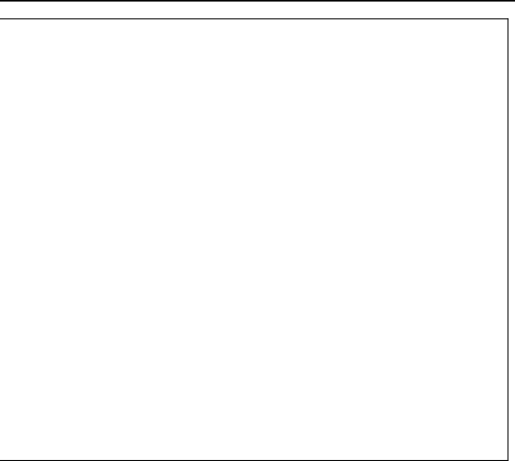


**WALSH**  
ENGINEERING ASSOCIATES, INC.

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ph: 207.553.9898 | www.walsh-eng.com

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STATE OF NEW HAMPSHIRE  
WILLIAM R. WALSH III  
No. 14352  
LICENSED PROFESSIONAL ENGINEER  
10/21/16



**Allenstown Transfer Station Stormwater Improvements**  
104 River Road  
Allenstown, NH 03275  
Tex. Map: 105-38

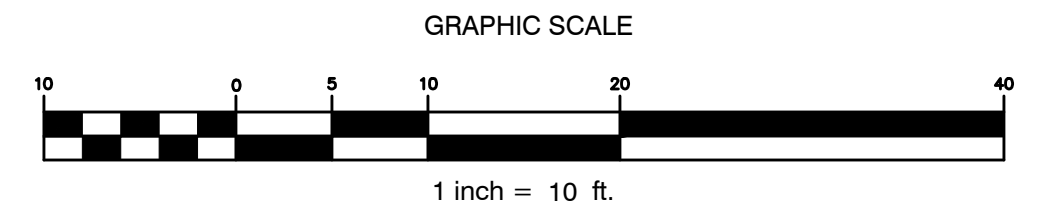
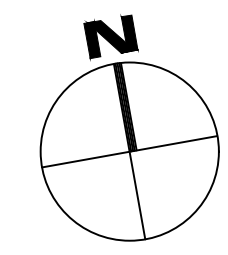
**Casella Waste Management of Massachusetts, Inc.**  
53 Pelham Road  
Salem, New Hampshire, 03079

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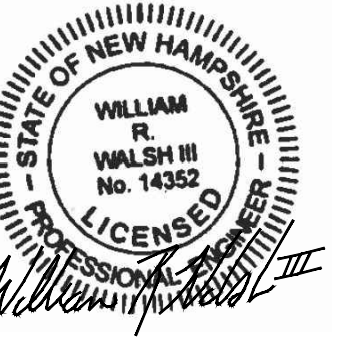
Rev.	Date	Description	Drawn	Check
1	10/2/16	Revised per CNHRPC comments	DPL	WRW

Sheet Title:  
**Office Trailer and Shed Site Plan**

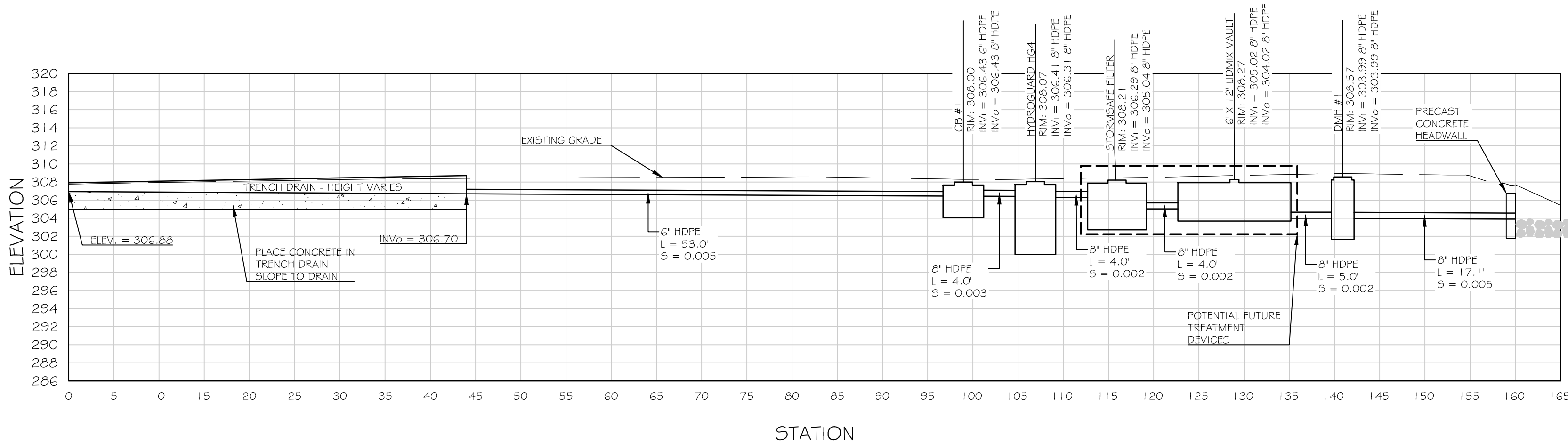
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Date:	Oct. 3, 2016		
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Checked:	WRW		



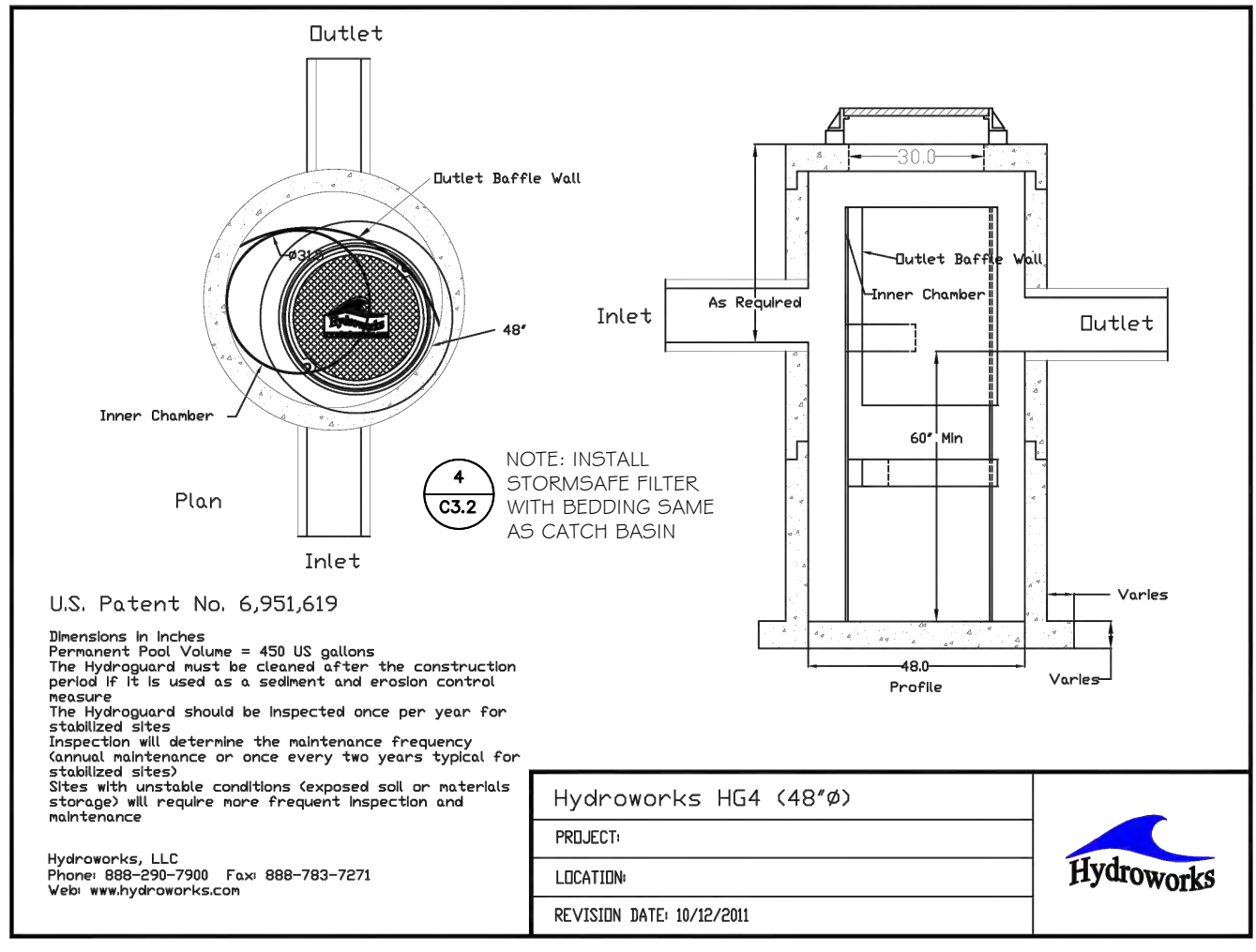
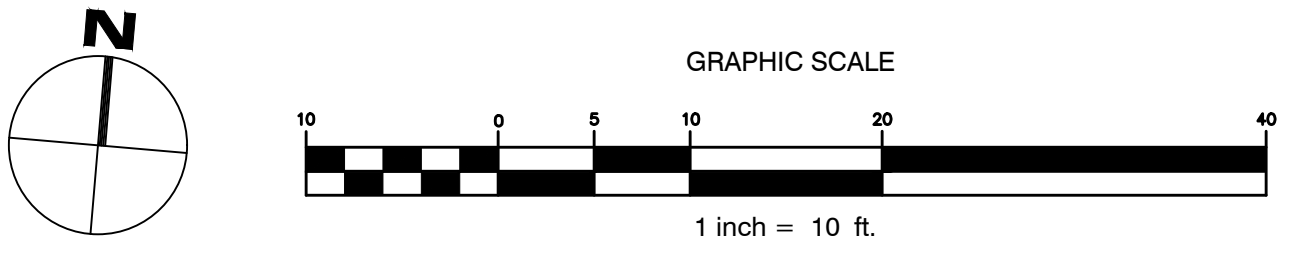
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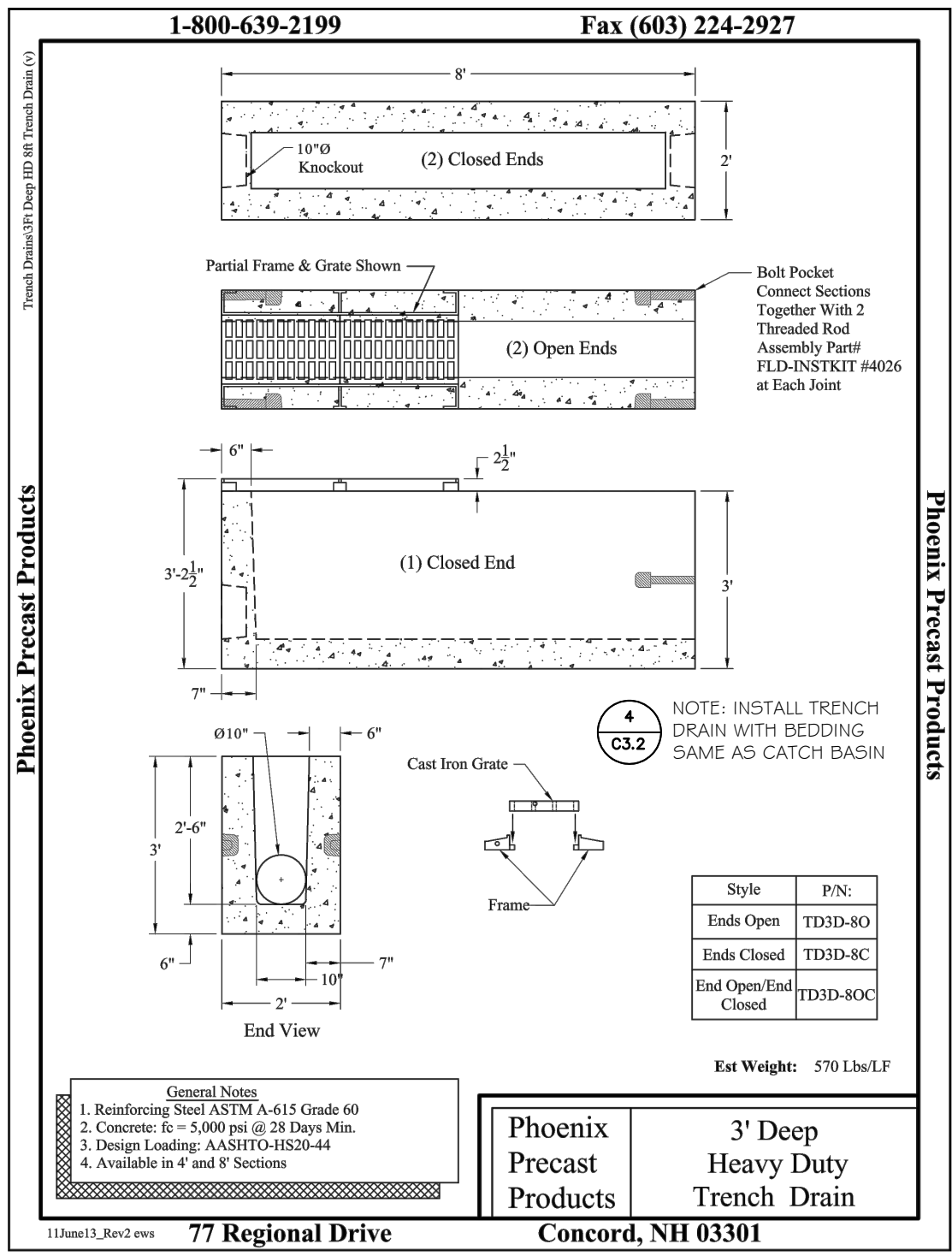
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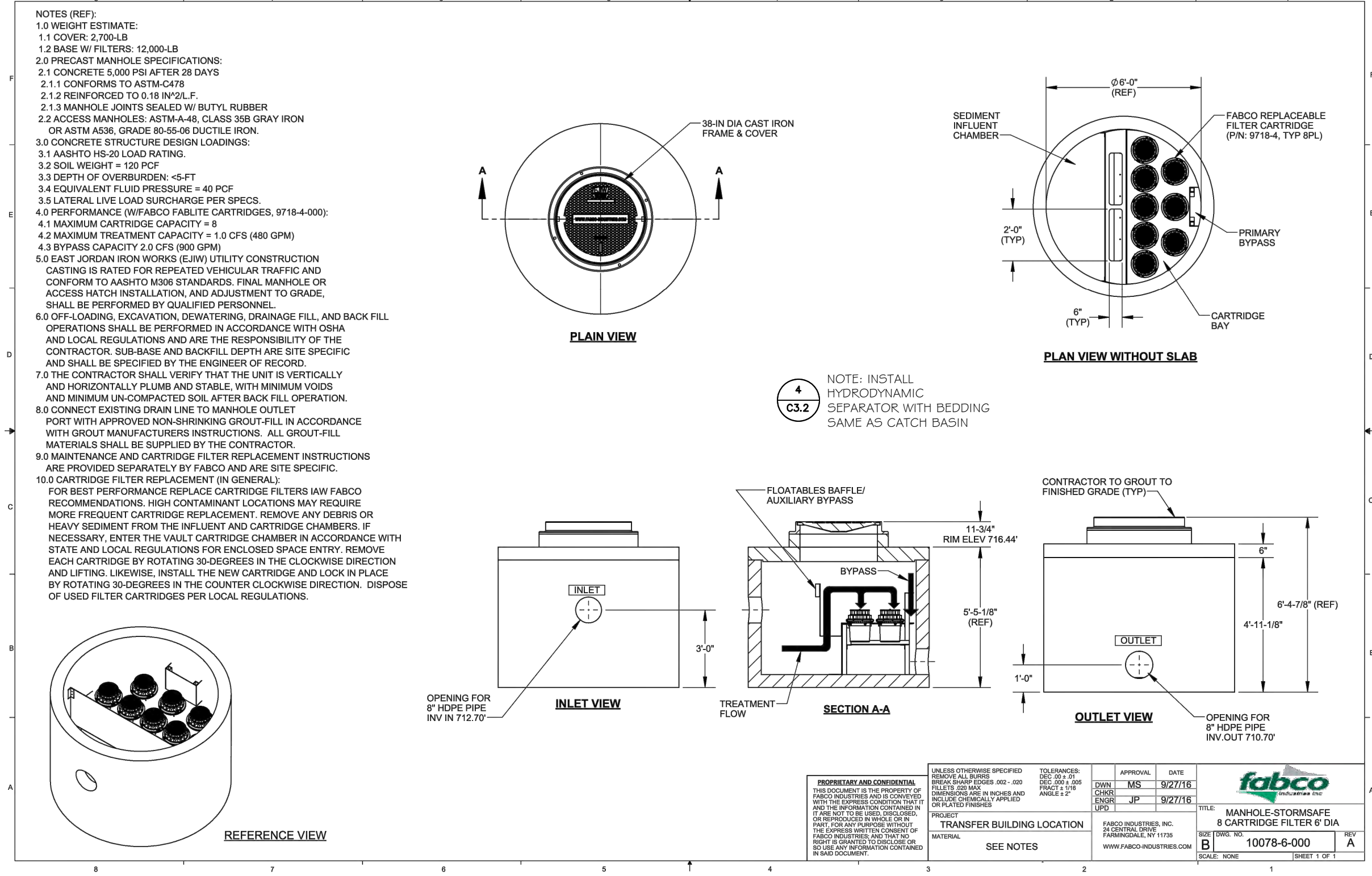
TRENCH DRAIN NETWORK PROFILE



1  
C3.0 HYDROGUARD HG4 HYDRODYNAMIC SEPARATOR  
NOT TO SCALE



2  
C3.0 TRENCH DRAIN DETAIL  
NOT TO SCALE



3  
C3.0 STORMSAFE 8-CARTRIDGE FILTER  
NOT TO SCALE

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Allenstown Transfer Station Stormwater Improvements  
104 River Road  
Allenstown, NH 03275  
Tax Map: 105-38  
Casella Waste Management of Massachusetts, Inc.  
53 Pelham Road  
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Rev.	Date	Description	Drawn	Check
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Sheet Title:  
Profile and Details

Job No.:	226A	Sheet No.:	
Date:	Oct. 3, 2016	Scale:	1" = 10'
Drawn:	DPL	Checked:	WRW

C3.0

**EROSION AND SEDIMENTATION CONTROL NOTES:**

**INTRODUCTION**

THE FOLLOWING PLAN FOR CONTROLLING SEDIMENTATION AND EROSION IN THIS PROJECT IS BASED ON CONSERVATION PRACTICES FOUND IN THE NEW HAMPSHIRE EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION, NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, DECEMBER 2008, OR LATEST EDITION. THE CONTRACTOR WHO IMPLEMENTS THIS PLAN SHALL BE FAMILIAR WITH THIS PUBLICATION AND ADHERE TO IT AND THE PRACTICES PRESENTED HEREIN.

REFERENCE IS MADE TO THE TRANSFER STATION SITE PLAN (C2.0) WITHIN THE PLAN SET, SHOWING THE LOCATIONS AND TYPES OF PROPOSED MEASURES TO BE IMPLEMENTED.

**GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES**

THE FOLLOWING IS A LIST OF GENERAL EROSION CONTROL PRACTICES THAT WILL BE USED TO PREVENT EROSION AND SEDIMENTATION BEFORE, DURING AND AFTER THE CONSTRUCTION OF THIS PROJECT. IN ADDITION, SPECIAL CARE SHALL BE USED AT ALL TIMES TO:

- 1) LIMIT DISTURBANCE AND, HENCE, EROSION
- 2) CORRECT ANY EROSION PROBLEMS IMMEDIATELY
- 3) REGULARLY MONITOR THE IMPLEMENTED PRACTICES, ESPECIALLY AFTER EVERY RAINFALL
- 4) REVEGETATE DISTURBED AREAS AS SOON AS POSSIBLE AFTER CONSTRUCTION
- 5) CONFORM TO ALL REQUIREMENTS/STANDARDS OF THE MASSACHUSETTS EROSION AND SEDIMENTATION CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS.

**SILT FENCE AND/OR SILT/SOXX SEDIMENT BARRIERS**

SILT FENCE AND/OR SILT/SOXX SEDIMENT BARRIERS WILL BE INSTALLED ALONG THE DOWNGRADIENT SIDE OF THE PROPOSED GROUND DISTURBANCE AREAS AND STOCKPILE AREAS PRIOR TO ANY CONSTRUCTION ACTIVITIES.

**CATCH BASIN PROTECTION**

CATCH BASIN PROTECTION WILL BE INSTALLED AT THE FIRST DOWNGRADIENT CATCH BASIN IN STREET ADJACENT TO ANY CONSTRUCTION ACTIVITIES.

**CONSTRUCTION PHASE**

THE FOLLOWING GENERAL PRACTICES WILL BE IMPLEMENTED TO PREVENT EROSION DURING CONSTRUCTION ON THIS PROJECT:

1. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. ONCE CONSTRUCTION OF AN AREA IS COMPLETE, FINAL GRADING, LOAMING AND SEEDING SHALL OCCUR IMMEDIATELY (REFER TO "POST CONSTRUCTION REVEGETATION" SECTION). IF DURING FINAL GRADING, LOAMING AND SEEDING CAN NOT OCCUR IMMEDIATELY, IT SHALL BE DONE PRIOR TO ANY STORM EVENT AND WITHIN 14 DAYS OF COMPLETING CONSTRUCTION IN THE AREA. IF FINAL GRADING, LOAMING AND SEEDING CANNOT OCCUR WITHIN 7 DAYS, OR IF THE AREA IS NOT UNDER ACTIVE CONSTRUCTION FOR A PERIOD LONGER THAN 7 DAYS, SEE ITEM NO. 4 BELOW.
2. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING SHALL BE INSTALLED ON DOWNGRADIENT PORTIONS OF THE SITE AS LOCATED ON THE PLANS TO PROTECT AGAINST ANY CONSTRUCTION RELATED EROSION.
3. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM EXISTING DRAINAGE AREAS AND WETLANDS. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE:
  - A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
  - B. SEEDED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
 STOCKPILES SHALL BE EITHER PLACED UPHILL OF AN EXISTING SEDIMENT BARRIER ON THE SITE OR ENCLOSED BY A HAY BALE OR SILT FENCE BARRIER THE FIRST DAY THAT STOCKPILING COMMENCES.
4. ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE:
  - A. TREATED WITH STRAW AT A RATE OF 70-90 LBS. PER 1000 SQUARE FEET FROM 4/16 TO 1/0/1, OR AT A RATE OF 150-200 LBS. PER 1000 SQUARE FEET FROM 1/0/1 TO 4/15.
  - B. SEEDED WITH CONSERVATION MIX OF PERENNIAL RYE GRASS (1.0 LBS/1000 SQ.FT.) AND MULCHED IMMEDIATELY. FROM 1/0/1 TO 4/15, FOLLOW THE SEEDING RATES AS OUTLINED BELOW IN SECTION 5 OF THE "POST CONSTRUCTION REVEGETATION" SECTION.
  - C. MONITORED EVERY TWO WEEKS UNTIL SEEDING CAN OCCUR AND REMULCHED AS NEEDED TO PROTECT SLOPES.
5. ALL GRADING WILL BE HELD TO A MAXIMUM 3:1 SLOPE WHERE PRACTICAL. GREATER SLOPES MAY BE USED WHERE THE BANKS ARE PROTECTED WITH SOFT ARMOUR MATTING, EROSION CONTROL MATTING, OR RIPRAP. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY AFTER FINAL GRADING IS COMPLETE. (IT IS UNDERSTOOD THAT IMMEDIATELY MEANS WITHIN 5 DAYS OF THE COMPLETION OF WORK. SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.)
6. CONSTRUCTION TRAFFIC WILL BE DIRECTED OVER THE EXISTING SITE ENTRANCE. THE ROAD SHALL BE SWEEP DAILY SHOULD SEDIMENT BE TRACKED ONTO IT.

**DEWATERING**

ALL DEWATERING DISCHARGE LOCATIONS SHALL BE LOCATED ON RELATIVELY FLAT GROUND AT LEAST 100' FROM STREAMS AND WETLANDS. THE CONTRACTOR SHALL UTILIZE DIRTBAGS, EROSION CONTROL MIX BERMS, OR SIMILAR METHODS FOR FILTRATION OF DEWATERING. THE FLOW FROM DEWATERING PUMPS SHALL BE DISCHARGED TO A SEDIMENTATION BASIN.

**POST CONSTRUCTION REVEGETATION**

THE FOLLOWING GENERAL PRACTICES WILL BE IMPLEMENTED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING:

1. A MINIMUM OF 6" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE.
2. LAWN AREAS: REFER TO SEED MIXTURES FOR PERMANENT COVER, DRY CONDITIONS MIX, NEW HAMPSHIRE EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION, OR APPROVED EQUAL.
3. MULCH SHALL BE HAY OR STRAW MULCHES THAT ARE DRY AND FREE FROM UNDESIRABLE SEEDS AND COARSE MATERIALS.
  - A. APPLICATION RATE MUST BE 2 BALES (70-90 LBS.) PER 1,000 SQUARE FEET OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE.
  - B. DRIVE OVER WITH TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
  - C. BLANKET WITH TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING ON GRADES GREATER THAN 5%.
4. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF ASPHALT, WOOD FIBRE OR PAPER FIBRE AND WATER, WHICH IS SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 1/0/1 AND 4/15.
5. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN OCTOBER 1ST AND APRIL 15TH. SHOULD SEEDING BE NECESSARY BETWEEN THESE DATES, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:
  - A. ONLY UNFROZEN LOAM SHALL BE USED.
  - B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
  - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 S.F.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
  - D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.5 LBS/1000 S.F.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
  - E. FERTILIZING, SEEDING AND MULCHING SHALL BE DONE ON LOAM THE DAY THE LOAM IS SPREAD.
  - F. HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE. WINTER MULCHING RATES, AS SPECIFIED ABOVE IN SUBSECTION 5.A. OF THE "CONSTRUCTION PHASE" SECTION, SHOULD BE APPLIED DURING THIS PERIOD.
6. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 80% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE DESIGN PROFESSIONAL THAT THE EXISTING CATCH IS INADEQUATE.

**MONITORING SCHEDULE**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO.

MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL (0.5" OR GREATER), AND AT LEAST ONCE A WEEK, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. SILT FENCE SHALL BE INSPECTED AND REPAIRED. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING.

**STANDARDS FOR STABILIZING SITES FOR THE WINTER**

THE FOLLOWING STANDARDS AND METHODOLOGIES SHALL BE USED FOR STABILIZING THE SITE DURING THE WINTER CONSTRUCTION PERIOD

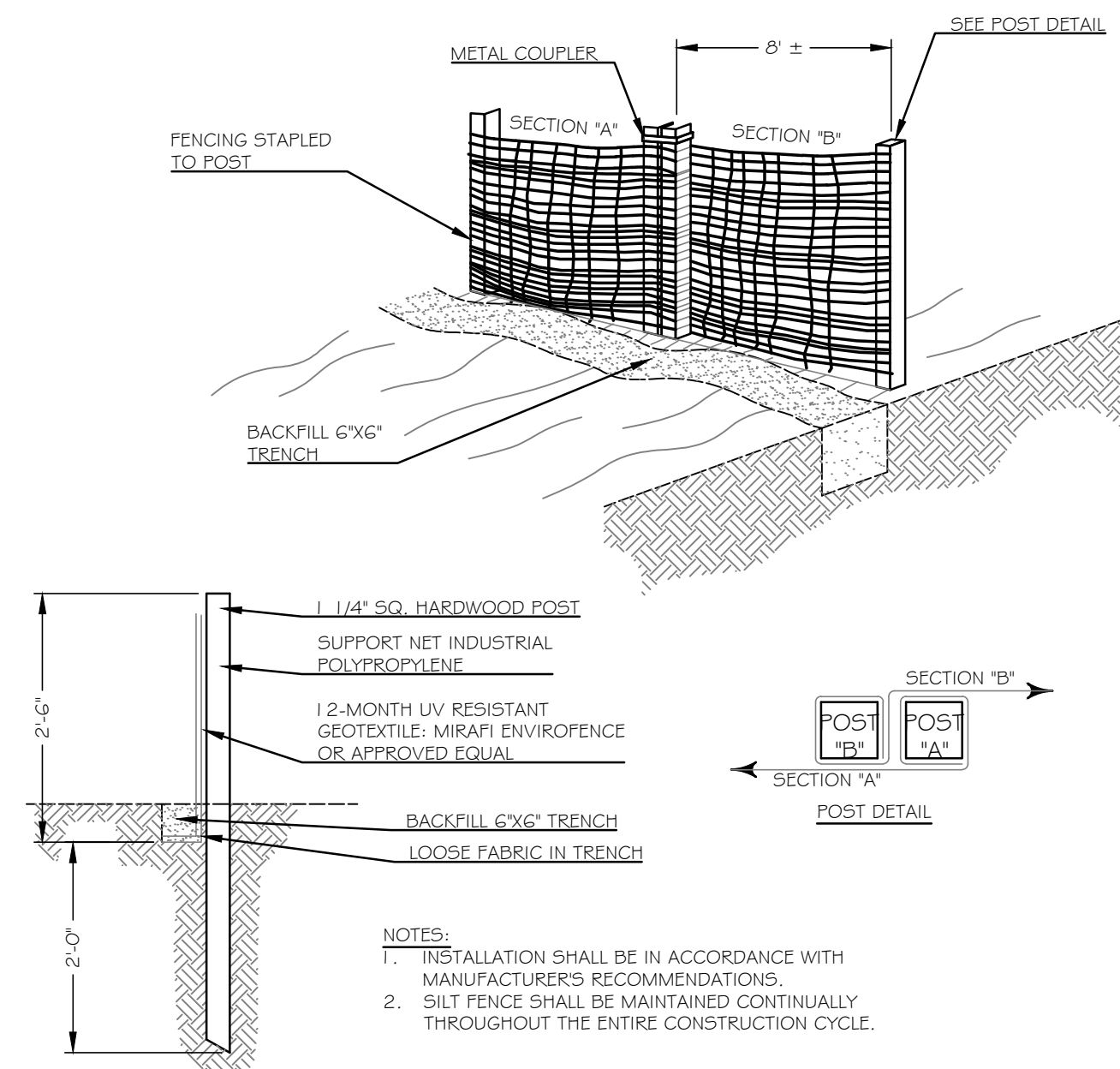
1. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES (ANY AREA HAVING A GRADE GREATER THAN 25%) - THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15TH. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15TH, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.
  - A. **STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS** - BY OCTOBER 1ST THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A RATE OF 3 POUNDS PER 1000 SQUARE FEET AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED HAY MULCH OVER THE SEEDING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS.
  - B. **STABILIZE THE SLOPE WITH WOOD-WASTE COMPOST** - THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD-WASTE COMPOST ON THE SLOPE BY NOVEMBER 15TH. THE CONTRACTOR WILL NOT USE WOOD-WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
  - C. **STABILIZE THE SLOPE WITH STONE RIPRAP** - THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. THE DEVELOPER'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.
2. STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS - BY SEPTEMBER 15TH THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON THE SITE. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ON OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.
  - A. **STABILIZE THE SOIL WITH TEMPORARY VEGETATION** - BY OCTOBER 1ST THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET. LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM III OF THIS STANDARD.
  - B. **STABILIZE THE SOIL WITH SOD** - THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR FINING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
  - C. **STABILIZE THE SOIL WITH MULCH** - BY NOVEMBER 15TH THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH NETTING OR OTHER METHOD TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.
3. INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH UNDER FROZEN CONDITIONS.

**EROSION CONTROL REMOVAL**

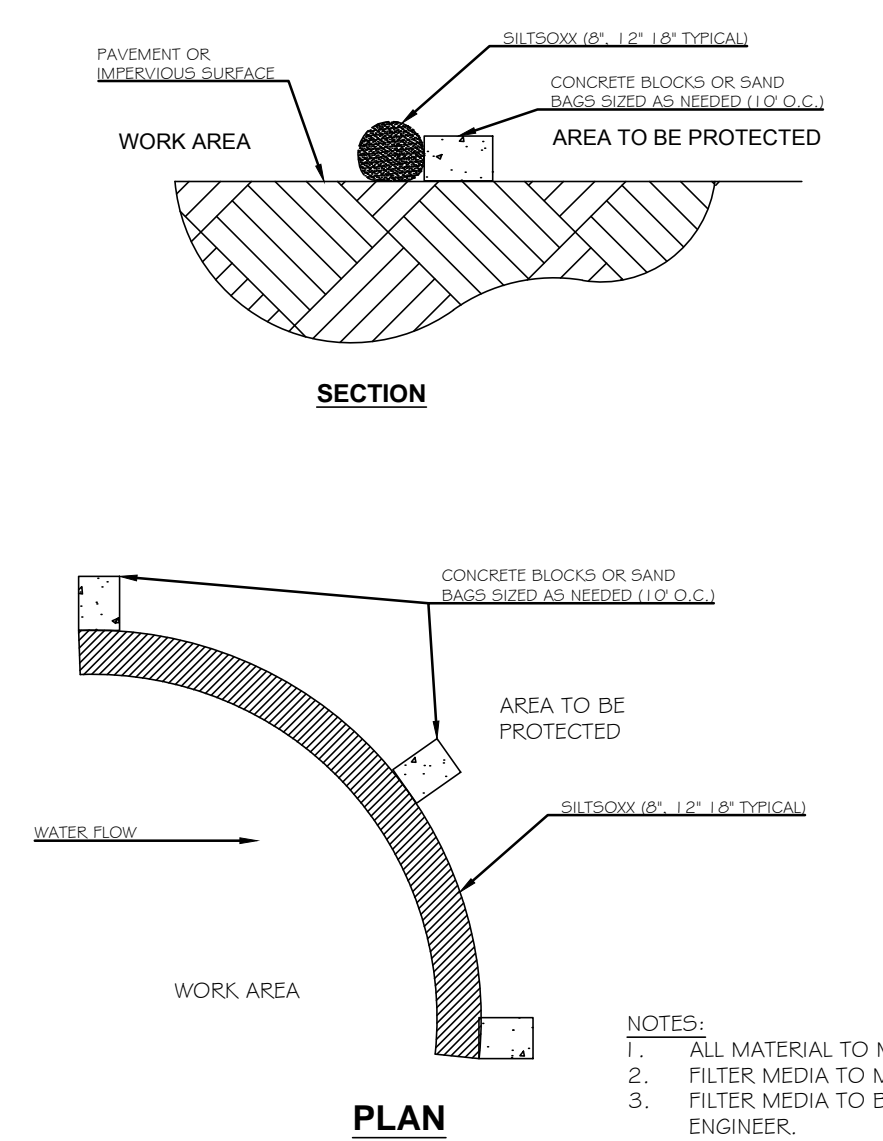
AN AREA IS CONSIDERED STABLE IF IT IS PAVED OR IF 80% GROWTH OF PLANTED SEEDS IS ESTABLISHED. ONCE AN AREA IS CONSIDERED STABLE, THE EROSION CONTROL MEASURES CAN BE REMOVED AS FOLLOWS:

1. **SILT FENCE/BERM**  
SILT FENCE SHALL BE DISPOSED OF LEGALLY AND PROPERLY OFF-SITE. ALL SEDIMENT TRAPPED BEHIND THESE CONTROLS SHALL BE DISTRIBUTED TO AN AREA UNDERGOING FINAL GRADING OR REMOVED AND RELOCATED OFF-SITE.
2. **CATCH BASIN PROTECTION**  
CATCH BASIN INLET PROTECTION SHALL BE REMOVED FOLLOWING PERMANENT STABILIZATION OF UPGRADIENT AREAS. SEDIMENT SHALL BE REMOVED FROM THE SACK AND LEGALLY DISPOSED. SEDIMENT SHALL NOT BE WASHED INTO THE CATCH BASIN.
3. **MISCELLANEOUS**  
ONCE ALL THE TRAPPED SEDIMENTS HAVE BEEN REMOVED FROM THE TEMPORARY SEDIMENTATION DEVICES THE DISTURBED AREAS MUST BE REGRADED IN AN AESTHETIC MANNER TO CONFORM TO THE SURROUNDING TOPOGRAPHY. ONCE GRADED THESE DISTURBED AREAS MUST BE LOAMED (IF NECESSARY), FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE RATES PREVIOUSLY STATED.

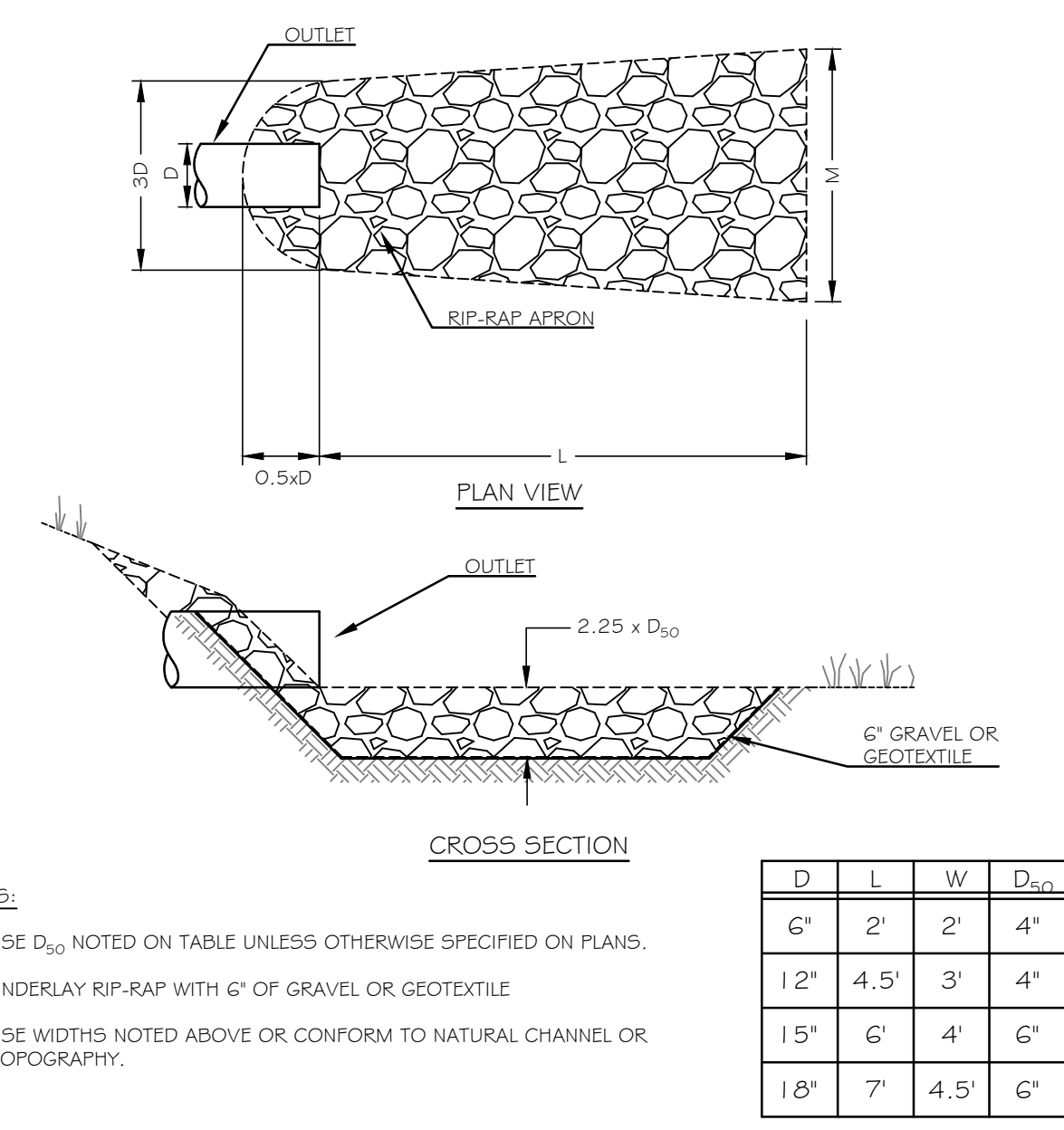
THE ABOVE EROSION CONTROLS MUST BE REMOVED WITHIN 30 DAYS OF FINAL STABILIZATION OF THE SITE. CONFORMANCE WITH THIS PLAN AND FOLLOWING THESE PRACTICES WILL RESULT IN A PROJECT THAT COMPLIES WITH THE STATE REGULATIONS, AND WILL PROTECT WATER QUALITY IN AREAS DOWNSTREAM FROM THE PROJECT.



**1**  
**C3.1** **PREFABRICATED SILT FENCE**  
NOT TO SCALE



**2**  
**C3.1** **SiltSoxx™ FOR SEDIMENT ON PAVEMENT**  
NOT TO SCALE



**3**  
**C3.1** **RIP-RAP OUTLET PROTECTION**  
NOT TO SCALE

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**WALSH**  
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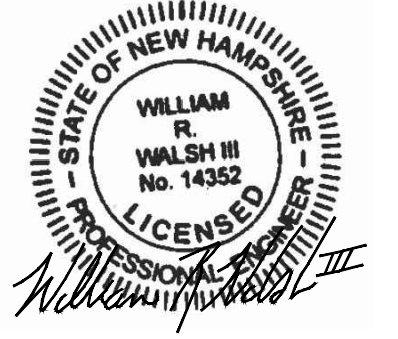
STATE OF NEW HAMPSHIRE  
WILLIAM R. WALSH III  
No. 14352  
LICENSED PROFESSIONAL ENGINEER  
10/21/16

**Allenstown Transfer Station Stormwater Improvements**  
104 River Road  
Allenstown, NH 03275  
Tax Map: 105-98  
**Casella Waste Management of Massachusetts, Inc.**  
53 Pelham Road  
Salem, New Hampshire, 03079

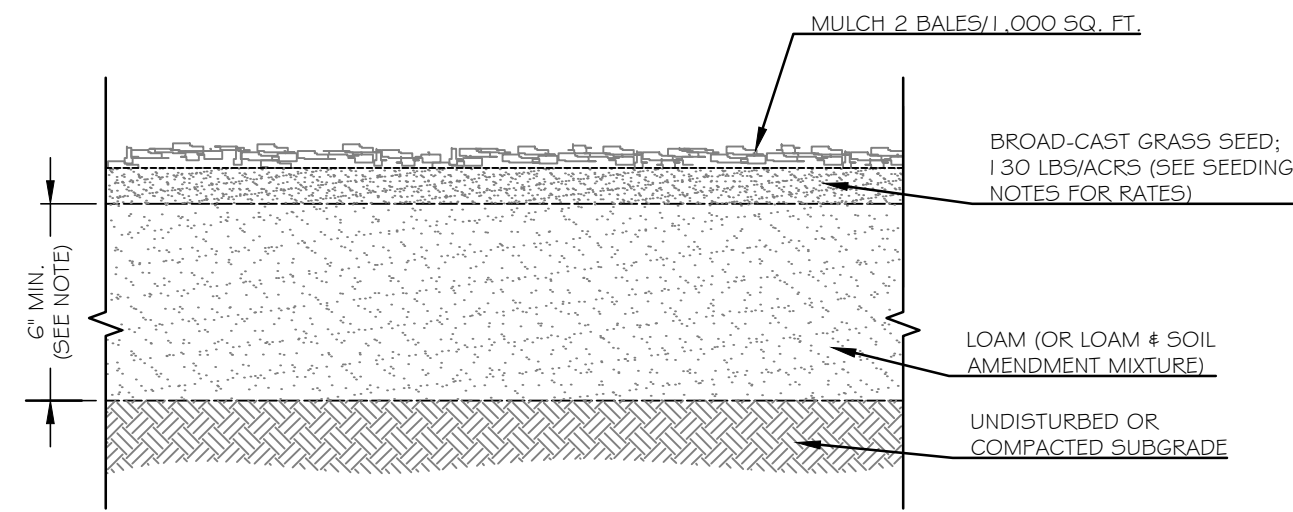
Rev.	Date	Description	Drawn	Check
1	10/21/16	Revised per CNHRPC comments	DPL	WRW

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**Details**  
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Date: Oct. 3, 2016  
Scale: N.T.S.  
Drawn: DPL  
Checked: WRW  
**C3.1**

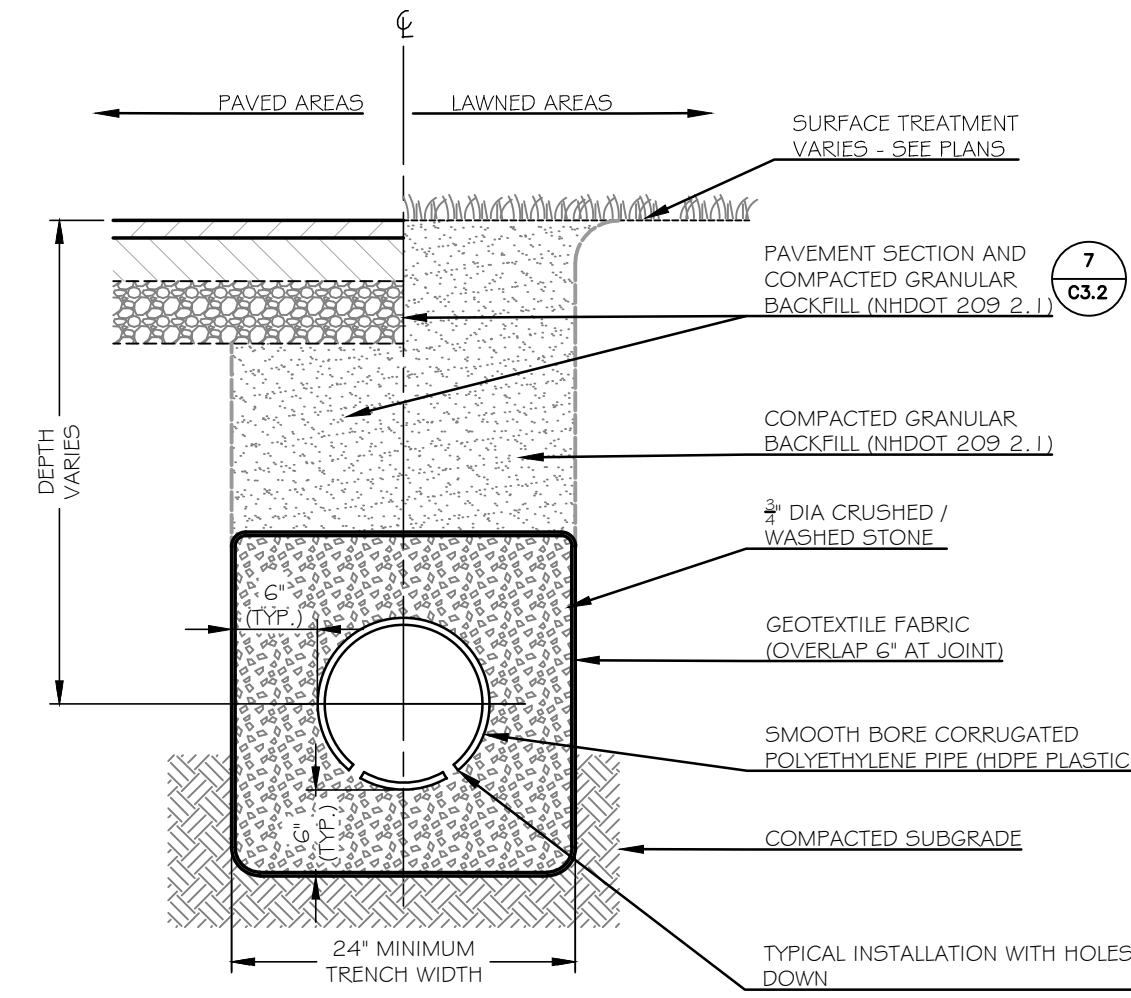




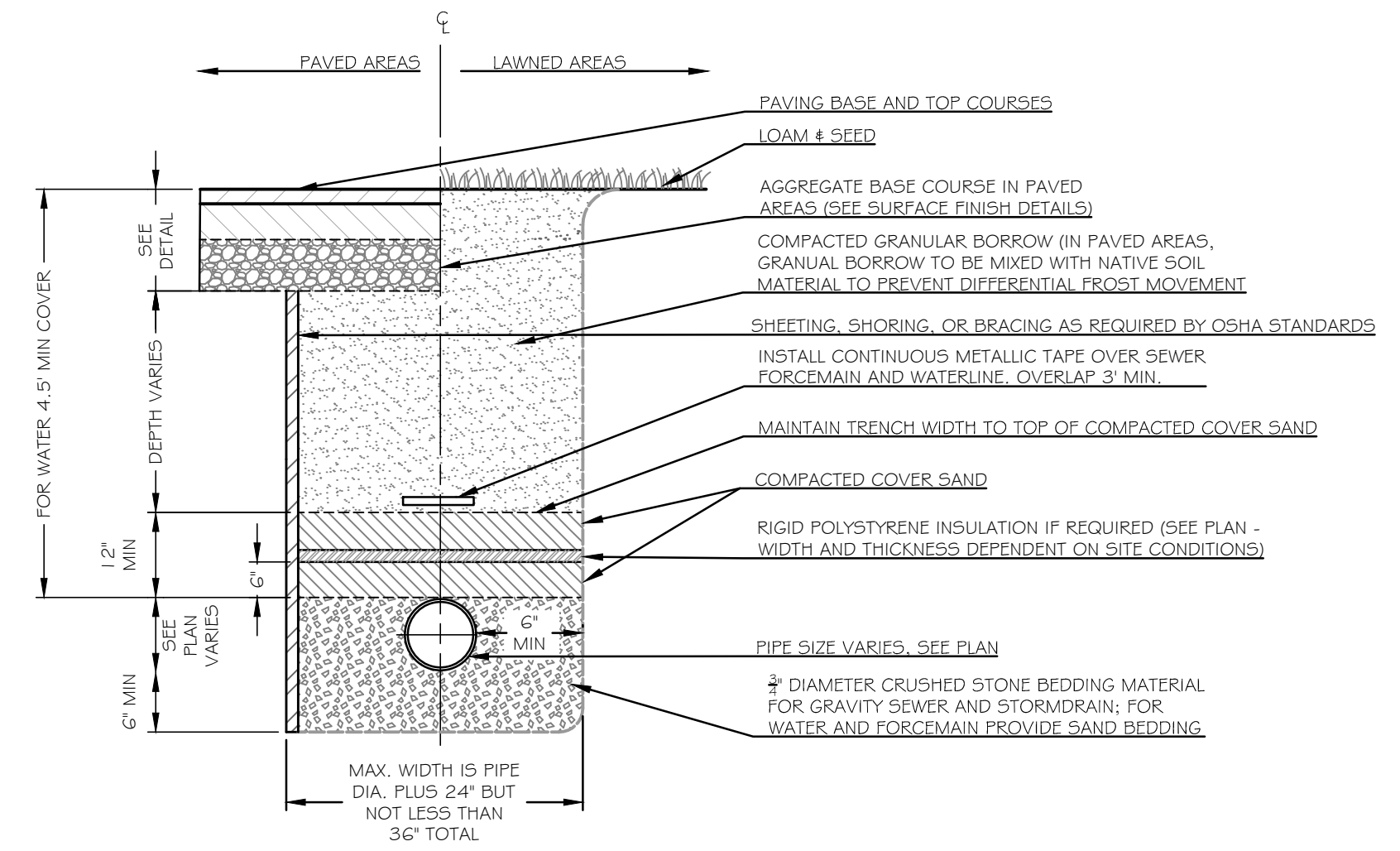
10/21/16



**1**  
C3.2 **LOAM AND SEED DETAIL**  
NOT TO SCALE

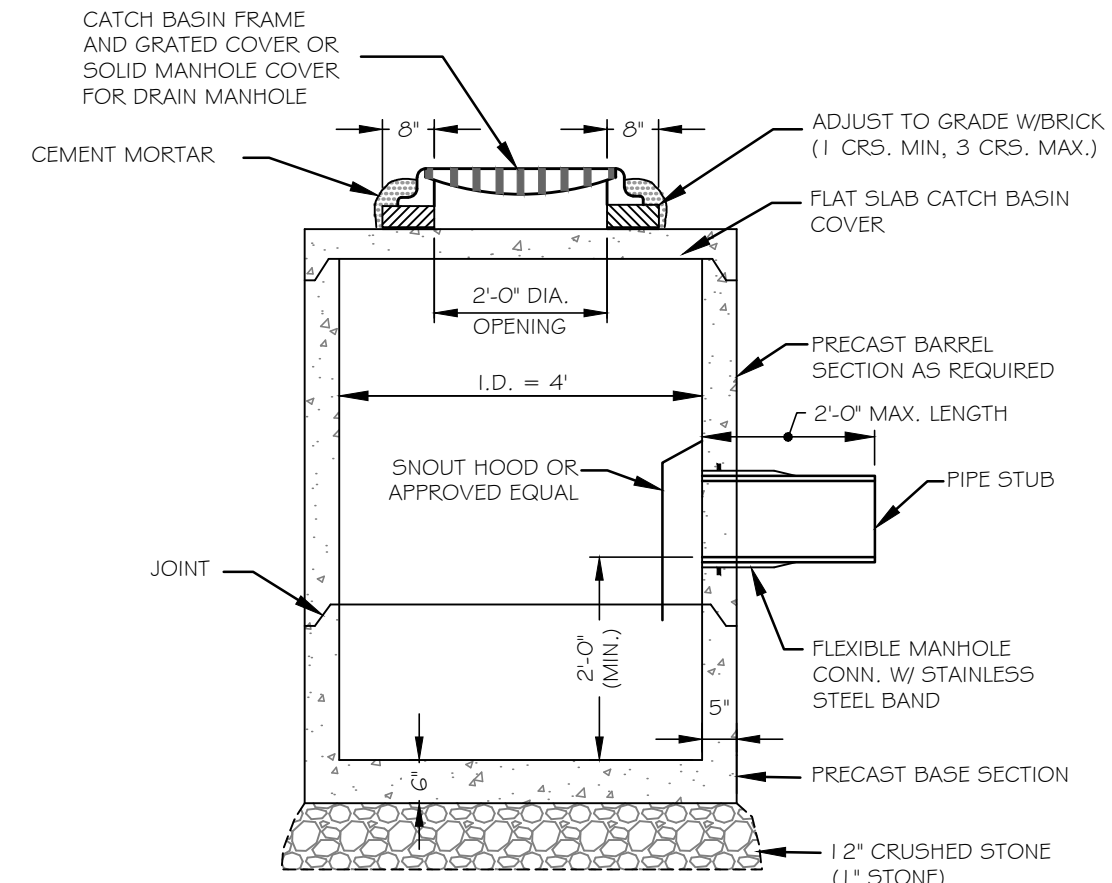


**2**  
C3.2 **UNDERDRAIN TRENCH DETAIL**  
NOT TO SCALE



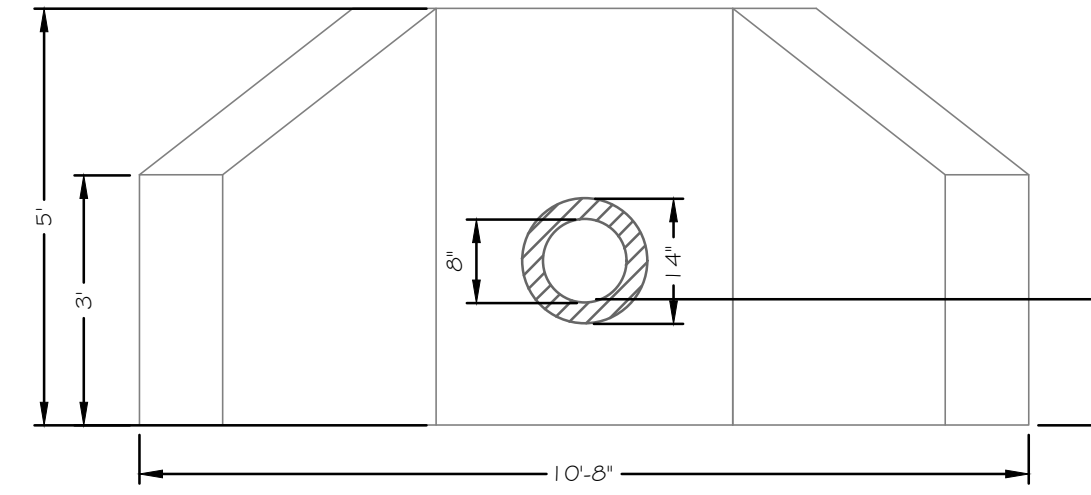
**3**  
C3.2 **TYPICAL PIPE TRENCHING DETAIL**  
NOT TO SCALE

NOTES:  
1. BACKFILL MATERIAL WITHIN TRENCH BEYOND UNDERDRAIN LATERAL LIMITS SHALL, AS A MINIMUM, CONFORM TO THE REQUIREMENTS OF GRANULAR BORROW.  
2. OUTLETS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM AS SHOWN ON THE PLANS, OR GRADED BY GRAVITY TO A SUITABLE DISCHARGE POINT.

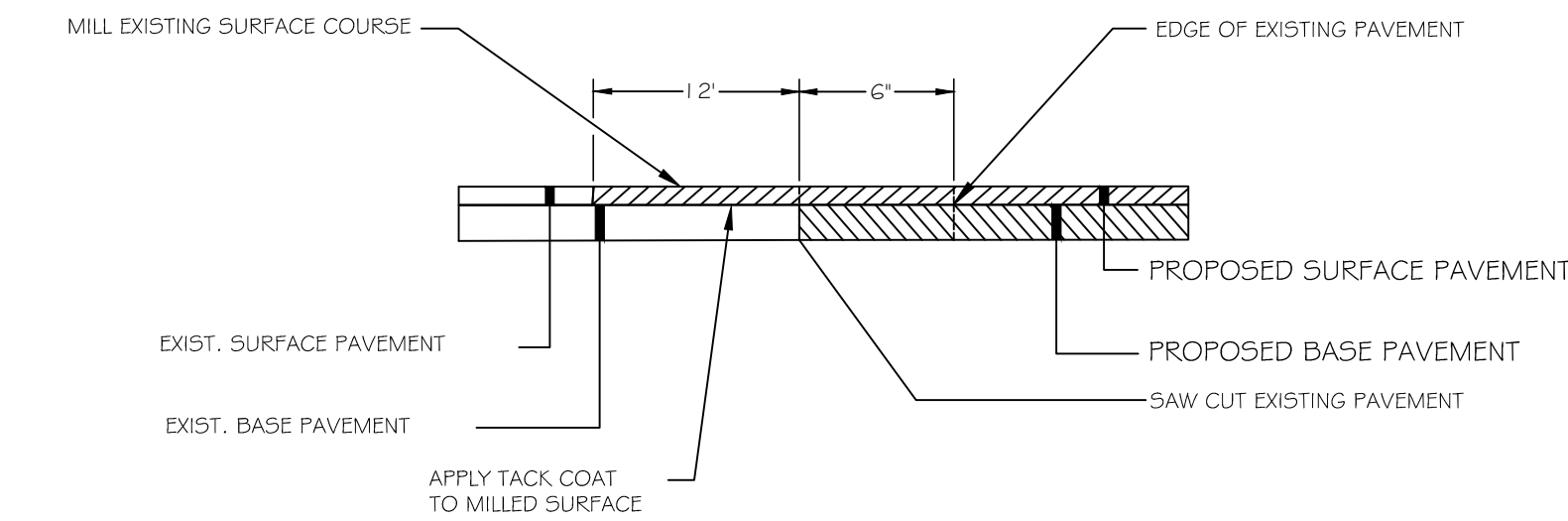
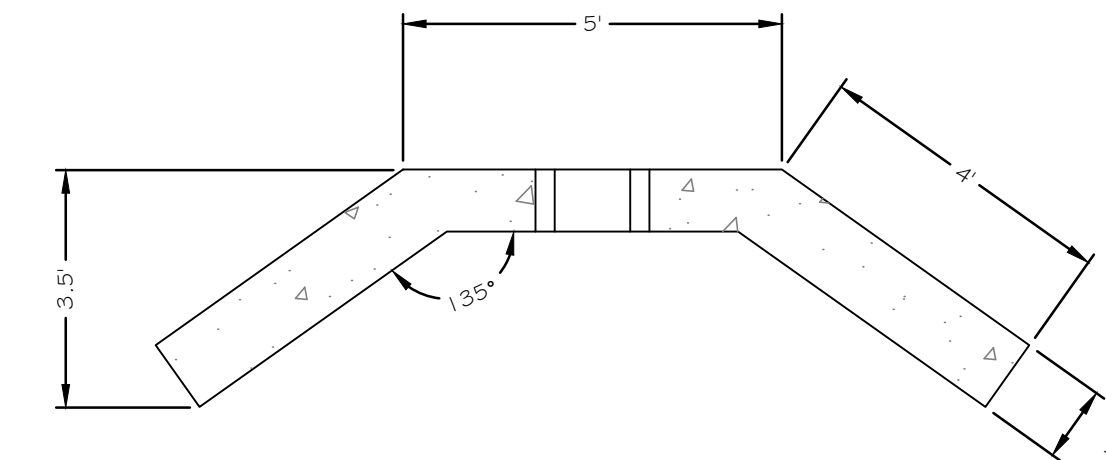


**4**  
C3.2 **PRECAST CONCRETE FLAT TOP CATCH BASIN AND DRAINAGE MANHOLE**  
NOT TO SCALE

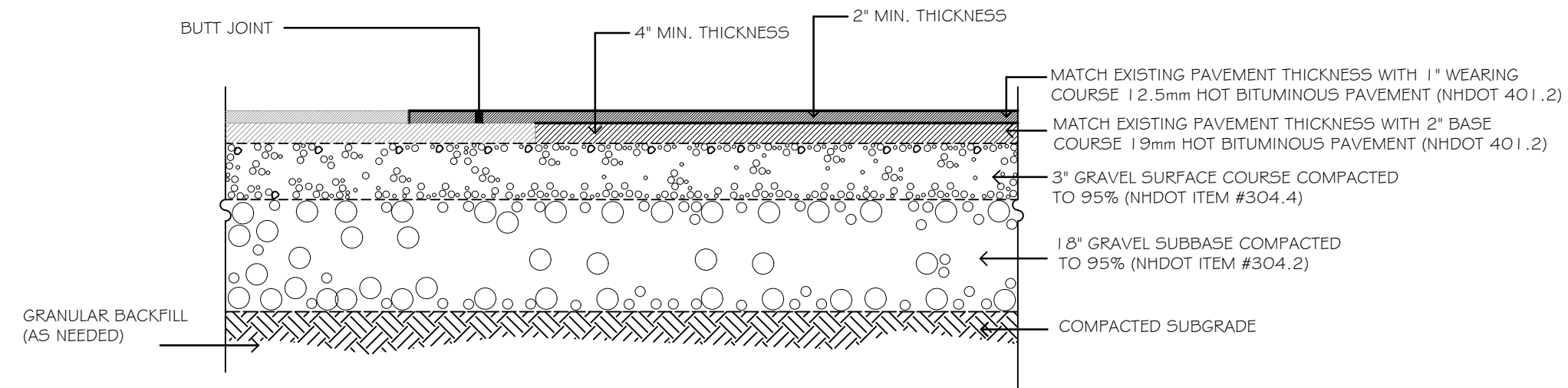
NOTES:  
1. CONCRETE 4000 PSI AFTER 28 DAYS.  
2. REINFORCING H-20 LOADING 4x4 / 4x4 WWM. SLAB TOP - NO. 5 BARS.  
3. EACH CASTING TO HAVE LIFTING HOLES TO BE FILLED WITH NON-SHRINK MORTAR.  
4. USE STRUCTURAL BACKFILL COMPACTED TO 95% MODIFIED PROCTOR AROUND STRUCTURE.  
5. STRUCTURES AND INSTALLATION IN ACCORDANCE WITH NH DOT STANDARDS.



**5**  
C3.2 **PRECAST CONCRETE WING HEADWALL**  
NOT TO SCALE



**6**  
C3.2 **PAVEMENT BUTT JOINT**  
NOT TO SCALE



**7**  
C3.2 **REPLACEMENT PAVEMENT SECTION**  
NOT TO SCALE

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Sheet No.:  
**C3.2**