

October 6, 2017

Mr. James B. Campbell, Director Planning and Development Department City of Rochester 31 Wakefield Street Rochester, New Hampshire 03867

Re: Letter of Intent – Application for Site Plan Approval TLR-III Refuse Disposal Facility – South Area Turnkey Recycling and Environmental Enterprise Rochester, New Hampshire

Dear Mr. Campbell:

Waste Management of New Hampshire, Inc. (WMNH) is proposing to expand the Turnkey Recycling & Environmental Enterprise (TREE) Facility by constructing a new disposal area (i.e., TLR-III Refuse Disposal Facility – South Area, hereafter referred to as the TLR-III South Area). The expanded disposal area will provide the TREE Facility with an additional 10 years of operating life. The expansion area was selected by WMNH after reviewing several development options at our facility. The overall scope of the TLR-III South Area project involves multiple components, including the following, which are part of this Site Plan Application: (i) developing the TLR-III South Area (i.e., Phases 15 – 17); (ii) realigning a ¾-mile portion of Rochester Neck Road; (iii) relocating the Residential Drop-Off Facility; (iv) modifying the Isinglass River Park; and (v) expanding the Container Storage Area. Each of these individual projects are critical to the overall operation of the TREE Facility. The TLR-III South Area expansion project was previously reviewed with the Rochester City Manager and City Council. WMNH provided the City of Rochester a Preliminary Site Plan Application on March 8, 2017 for the TLR-III South Area project. WMNH attended and presented this project at the City of Rochester Planning Board Meeting on April 3, 2017.

A solid waste permit application for the TLR-III South Area project was submitted to the New Hampshire Department of Environmental Services (NHDES) on May 19, 2017. In addition, a wetland permit application and an Alteration of Terrain application for the project components was submitted to the NHDES on May 19, 2017. The City of Rochester was provided a copy of each of these applications.

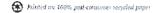
The following information is provided for this Site Plan Review application.

Applicant's Name: Waste Management of New Hampshire, Inc. (property owner)

Property Locations: • TLR-III South Area:

90 Rochester Neck Road, Tax Map 267 Lot 2

From everyday collection to environmental protection, Think Green? Think Waste Management.



TURNKEY RECYCLING & ENVIRONMENTAL ENTERPRISE

30 Rochester Neck Road P.O. Box 7065 Rochester, NH 03839 (603) 330-2197 (603) 330-2130 Fax



October 6, 2017
Letter of Intent

- Rochester Neck Road
- Residential Drop-Off Facility:
 Isinglass Drive, Tax Map 267 Lot 3
- Isinglass River Park:Rochester Neck Road, Tax Map 267 Lot 2
- Container Storage Area:214 Rochester Neck Road, Tax Map 268 Lot 2

Size and Use:

- TLR-III South Area: 58.6-acre disposal site.
- Rochester Neck Road: ~3-mile long, two-lane, 30 mile-per-hour City road.
- Residential Drop-Off Facility: ~3-acre public recycling area.
- Isinglass River Park: ~¼-acre public park providing access to adjacent trails and the Isinglass River.
- Container Storage Area: ~2-acre area for recycling and waste container storage.

Proposed Use:

WMNH is proposing to expand its existing disposal operation so that the TREE Facility may continue to provide the residents of the City of Rochester and New Hampshire with an environmentally protective option for managing municipal solid waste. The proposed 58.6-acre lateral landfill expansion will require realigning a ¾-mile portion of Rochester Neck Road, which in turn requires relocating the existing Residential Drop-Off Facility and modifying the existing Isinglass River Park. In addition, WMNH is proposing to expand its Container Storage Area to allow for a single location for storing its containers.

Previous Use:

The proposed TLR-III South Area includes former residences that are no longer occupied and are not of historic significance. Except for portions of the area that will be developed for the expanded disposal site, the project preserves other previous uses by either relocating their function elsewhere on the property (i.e., Rochester Neck Road, Residential Drop-Off Facility, and the Container Storage Area), or modifying the feature so that the previous use may be continued (i.e., Isinglass River Park). Additionally, there are several other TREE Facility operations, including: (i) the Material Recovery Facility; (ii) the Rochester Hauling Company; (iii) Landfill Gas to Energy Facilities; and (iv) the Leachate Treatment Plant. The landfill gas and leachate treatment facilities will not be impacted by this project. Relocation of the Material Recovery Facility and the Rochester Hauling Company will be subjects of future Site Plan applications.

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Existing Conditions: As indicated above, the TLR-III South Area project development includes parcels that currently support other TREE Facility operations. WMNH owns the properties encumbered by and abutting the parcels. Each of the individual project component sites are located along Rochester Neck Road. The realigned Rochester Neck Road will impact the existing Rochester Hauling Company location, Residential Drop-Off Facility, the Isinglass River Park, and several stormwater management features. Construction of the TLR-III South Area will impact the Materials Recovery Facility and some wetland areas. These existing features will either be relocated. modified, or mitigated as described in this Site Plan Application, or will be relocated as part of a separate future Site Plan Application. The proposed location for the Residential Drop-Off Facility was last used as a parking area for the former location of the Rochester Hauling Company. The area associated with the expanded Container Storage Area consists of a poor-quality drainage feature and undisturbed land.

> WMNH does not anticipate a change in traffic on Rochester Neck Road because of this project. WMNH is not proposing to increase the number of vehicles at this location. Other nearby uses on Rochester Neck Road includes the aggregate operations for Pike Industries and Brox.

Resulting **Employees:**

The proposed project will allow WMNH to maintain its current level of staffing for the life of the proposed disposal area. WMNH is not proposing to increase employees as a result of this project.

- **Hours of Operation:** TLR-III South Area 6:30 AM to 3:30 PM, Mon through Fri, 7 AM to 10:00 AM Sat.
 - Rochester Neck Road 24 hours, 7 days per week.
 - Residential Drop-Off Facility 8 AM to 3 PM, Mon, Wed, Fri, and Sat.
 - Isinglass River Park Dawn to Dusk, 7 days a week.
 - Container Storage Area 7 AM to 5PM, Mon through Fri.

Off-street Parking:

Three parking spaces will be provided for employees at the Residential Drop-Off Area. Six parking spaces will be re-established at the Isinglass River Park. Parking is not needed for Rochester Neck Road or the TLR-III South Disposal Area, and no additional parking is required for the Container Storage Area.

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Proposed Site Changes:

The proposed development involves the following:

- The TLR-III South Area project consists of constructing a 58.6-acre, NHDES-approved, lined landfill over land that was occupied by former residences, the Materials Recovery Facility, and Rochester Neck Road. To allow for the proposed construction of the TLR-III South Area, Rochester Neck Road will need to be realigned (i.e., shifted to the southeast) and other site operations and features will need to be relocated or modified (i.e., Residential Drop-Off Facility, Isinglass River Park, and WMNH's Container Storage Area).
- Realigning a ¾-mile portion of Rochester Neck Road allows for the development of the TLR-III South Area. The road realignment will impact several existing WMNH operations, including the existing Residential Drop-Off Facility and the Rochester Hauling Company as well as the existing Isinglass River Park. The new road will be designed to applicable City and state standards. Following the road realignment and acceptance by the City, WMNH and the City will adjust the property lot lines to define the new property ownership and record the property transfers at the Strafford County Registry of Deeds.
- The Residential Drop-Off Facility is well-used by City residents, and will be relocated closer to Rochester Neck with this proposed development. The new location makes use of the paved parking area associated with the former location of the Rochester Hauling Company. The relocated Residential Drop-Off Facility will provide citizens with one defined location that includes the same recycling and disposal options as currently enjoyed, as well as a centralized leaf and yard waste management area.
- The entrance to the Isinglass River Park will be impacted by the realignment of Rochester Neck Road. Accordingly, a new park entrance will be constructed, and the layout of the existing park will be modified to maintain the park's function.
- The Container Storage Area will become the central repository for recycling and waste containers. At present, WMNH stores containers at numerous locations across the TREE Facility property. These containers are either in a que to be refurbished or to be deployed to customers. The expansion of the disposal area and the associated relocation of the other TREE operations directly impacts the available areas for storing the containers. This project includes expanding the existing WMNH Container Storage Area to allow for a single location for storing containers versus having them at several locations on the TREE property.

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Property Access:

Access to the proposed TLR-III South Area will continue to be through WMNH's controlled entrance located off Rochester Neck Road, a section of road not impacted by the Rochester Neck Road realignment. Access to the Residential Drop-Off Facility will be located off Isinglass Drive, the same road used to access the former facility. No changes are proposed to the intersection of the Isinglass Drive and Rochester Neck Road. Access to the Isinglass River Park will continue to be located off Rochester Neck Road. Access to the Container Storage Area will not change.

Please contact me should you require additional information regarding this proposed development.

Sincerely,

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.

Anne Reichert, P.E.

Construction Project Manager

ESS/EAG:ess

Enclosures: Nonresidential Site Plan Application

Site Plan Checklist Abutters List

Mailing Labels (2 per abutter, provided separately)

Waiver Requests

Narrative

11" x 17" Drawings

22" x 34" Drawings (3 copies, provided separately) Drainage Report (2 copies, provided separately)

Application Fee (provided separately)

Copies to:

Bob Magnusson, WMNH

Timothy Reed, Sanborn Head

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NONRESIDENTIAL SITE PLAN APPLICATION By-

City of Rochester, New Hampshire

	[office use only. Check #	_ Amount \$	Da	ate paid
Date: October 6, 2017	Is a conditional use needed?	Yes: <u>X</u>	No:	_ Unclear:
Property information	(If so, we encourage you to sub	mit an appli	cation as s	soon as possible.)
Tax map #: <u>267 / 268</u> ; Lot #	('s): 2&3 / 2&2-1; Zoning distri	ct: <u>Recycli</u>	ng Industi	rial / Agricultural
Property address/location: 9	90 & 214 Rochester Neck Roa	d and Ising	lass Drive	2
Name of project (if applicable	e): <u>TLR-III Refuse Disposal Fa</u>	acility - So	uth Area_	
Size of site: <u>93.3</u> acres;	overlay zoning district(s)? Co	nservation	Overlay [District
Property owner				
	vidual): Waste Management o		pshire, In	IC.
Telephone #: (603) 330-216	ster Neck Road, Rochester, NF		n@um o	
Telephone #. (003) 330-210	<u>4</u> Email: <u>t</u>	magnussc	TI (WWITI.CO	om
Applicant/developer (if	different from property owner)			
Name (include name of indiv	vidual):			
Mailing address:				
Telephone #:	Email:	-		
Engineer/designer				
Name (include name of indiv	vidual): <u>Sanborn, Head & Asso</u>	ociates, Inc	c. (Eric S.	Steinhauser,
P.E., CPESC, CPSWQ)				
Mailing address: <u>Sanborn, H</u>	ead & Associates, Inc., 20 Fou	ındry Stree	t, Concor	d, NH 03301
Telephone #: (603) 415-613	8Fax #: _	(603) 415-	1919	
Email address: esteinhausei	@sanbornhead.com_Profes	sional lice	nse#:	11494
Proposed activity (check	all that apply)			
New building(s): X	Site development (other structu	ıres, parkiı	ng, utilities	s, etc.): <u>X</u>
Addition(s) onto existing buil	ding(s): Demolition:	<u>X</u>	Change	of use: X
Macintosh HD:Users:jaredrose:Desktop:Site P 4/11/2013	Page 1 (of 4 pages) lan, NonResidential Application			Updated

(Continued Nonresidential Site Plan Application Tax Map: 267 / 268 Lot: 2&3 / 2&2-1 Zone: RI / AG)
Describe proposed activity/use: <u>Disposal area expansion that requires relocating/modifying other facilities and realigning a portion of Rochester Neck Road. See narrative in Application</u>
Describe existing conditions/use (vacant land?): Variety of buildings and site features supporting operations at the TREE Facility
Utility information
City water? yes no_X_; How far is City water from the site? N/A
City sewer? yes no_X ; How far is City sewer from the site? N/A
If City water, what are the estimated total daily needs? <u>0</u> gallons per day
If City water, is it proposed for anything other than domestic purposes? yes No X_
If City sewer, do you plan to discharge anything other than domestic waste? yes no X
Where will stormwater be discharged? <u>Stormwater is fully managed on site in a number of specifically designed conveyance, detention, and retentions systems. Ultimately, stormwater is discharged to wetland areas.</u>
Building information
Type of building(s): <u>There are several structures proposed. Some serve as equipment</u> shelters, open-sided shelters for materials, or employee work space and storage.
Building height: See Drawings Finished floor elevation: See Drawings

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Updated



(Continued Nonresidential Site Plan Application Tax Map: 267 / 268 Lot: 2&3 / 2&2-1 Zone: RI / AG)

Other information

Proposed post-development disposition of site (should total 100%)				
	Square footage	% overall site		
Building footprint(s) – give for each building	88,372 (see Table)	0.3		
Parking and vehicle circulation	1,512,288	5.4		
Planted/landscaped areas (excluding drainage)	6,150,860	21.9		
Natural/undisturbed areas (excluding wetlands)	7,489,629	26.6		
Wetlands	3,235,297	11.5		
Other – drainage structures, outside storage, etc.	9,636,742	34.3		

Table Notes:

- Wetland area should be considered approximate. WMNH owns over 1,200 acres of land and not all wetlands have been surveyed by a wetlands scientist. Within the project area, wetland areas are represented by a compilation of information determined using existing aerial photography, soils information, USFWS National Wetland Inventory Maps, and delineations conducted by Barry H. Keith, NH CWS #087. Please refer to the Wetland Impact Figures attached to the Wetlands Waiver and Conditional Use Request letter enclosed in this application for more wetland information.
- 2. Planted/landscaped areas within the project parcel areas represent the total area not in current use, according to the parcel Current Use Assessment Plans, subtracted by building, parking/vehicle circulation, wetland, and other areas.
- 3. Natural/undisturbed areas within the project parcel areas represent the sum of the parcel areas subtracted by building, parking/vehicle circulation, planted/landscaped, wetland, and other areas.
- 4. The TLR-III limit of waste containment area is considered "other."

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Updated

(Continued Nonresidential Site Plan Application Tax Map: 267 / 268 Lot: 2&3 / 2&2-1 Zone: RI / AG) Comments Please feel free to add any comments, additional information, or requests for waivers here: Requests for waivers are included with the application. Submission of application This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent. I(we) hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the City of Rochester Site Plan Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity. Signature of applicant/developer: Date: Signature of agent: Date: Authorization to enter subject property I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments. boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies

Signature of property owner:

Date: 10/4/17

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specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all

reasonable care, courtesy, and diligence when entering the property.

Building Areas for Post-Development Disposition of Site Nonresidential Site Plan Application TLR-III South Area

Waste Management of New Hampshire, Inc.

Building	Pre-Development Area (square feet)	With This Project (square feet)	Post-Development Area (square feet)		
Tax 267 Lot 3 (Residential Drop Off and Isinglass River Park)					
Equipment Storage Building	3,647		3,647		
Equipment Storage Building	8,880		8,880		
Office/Leachate Equipment Repair	917		917		
Livestock Stable	1,300		1,300		
Homeless Shelter	3,184		3,184		
Equipment Storage Building	2,494		2,494		
Emergency Generator Building	213		213		
Leachate Loadout Canopy	1,077		1,077		
Leachate Treatment Plant	4,593		4,593		
SBR Equipment Building	1,802		1,802		
UF Building	3,721		3,721		
RO Building	3,869		3,869		
Gas Recovery Facility I	3,753		3,753		
Equipment Storage Building	363		363		
Combustion Air Filter House for Enclosed Flare	222		222		
Livestock Shed	39		39		
10' x 14' CRT Storage Shed	1,800		1,800		
Gas Recovery Facility II	6,090		6,090		
Park Pavilion	141	-141	0		
Livestock Shed	655	-655	0		
Existing Scale House	90	-90	0		
Material Recovery Facility (MRF)	27,315	-27,315	0		
MRF Fire Suppression Building	181	-181	0		
MRF Storage Area	4,462	-4,462	0		
Equipment Storage Building	1,308	-1,308	0		
Existing 8' x 10' Attendant Shed	80	-80	0		
Existing RDO Canopies	803	-803	0		
Existing C&D Storage Shed	1,997	-1,997	0		
Rochester Hauling Company	27,905	-27,905	0		
Proposed RDO Canopies		1,579	1,579		
Proposed C&D Storage Shed		4,272	4,272		
Proposed 20' x 20' Attendant Shed		400	400		
Lot 267-3 Total Building Area	112,901	-58,686	54,215		
Lot 268 Lot 2	(Container Storage	Area)			
Container / Compactor Maint. Facility	9,134		9,134		
Office Building	1,125		1,125		
Lot 268-2 Total Building Area	10,259	0	10,259		

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Building Areas for Post-Development Disposition of Site Nonresidential Site Plan Application TLR-III South Area

Waste Management of New Hampshire, Inc.

Building	Pre-Development Area (square feet)	New Construction With This Project (square feet)	Post-Development Area (square feet)
Tax 26	7 Lot 2 (Landfill Area)	
Landfill Staff Office	1,947		1,947
Landfill Storage Garage	3,830		3,830
Scale House	877		877
UNH Gas Processing Facility	12,617		12,617
Triplex Pump Station	538		538
Compressor Shed (Phase 4)	130		130
Compressor Shed (Phase 6)	120		120
Compressor Shed (Phase 14)	216		216
Phase 1 Leachate Vault	278		278
Phase 2 Leachate Vault	251		251
Phase 3 Leachate Vault	319		319
Phase 4 Leachate Vault	324		324
Phase 5 Leachate Vault	309		309
Phase 6 Leachate Vault	309		309
Phase 7 Leachate Vault	309		309
Phase 8 Leachate Vault	309		309
Phase 9 Leachate Vault	135		135
Phase 10 Leachate Vault	135		135
Phase 11 Leachate Vault	135		135
Permitted Phase 12 Leachate Vault	135		135
Permitted Phase 13 Leachate Vault	135		135
Permitted Phase 14 Leachate Vault	135		135
House 1 (116 Rochester Neck Road)	2,178	-2,178	0
House 2 (124 Rochester Neck Road)	1,067	-1,067	0
Res. Barn 1 (136 Rochester Neck Road)	2,318	-2,318	0
House 3 (Rochester Neck Road)	2,696	-2,696	0
Res. Barn 2 (136 Rochester Neck Road)	408	-408	0
Res. Barn 3 (155 Rochester Neck Road)	570	-570	0
House 4 (155 Rochester Neck Road)	1,447	-1,447	0
House 5 (162 Rochester Neck Road)	2,459	-2,459	0
Phase 15 Leachate Vault		135	135
Phase 16 Leachate Vault		135	135
Phase 17 Leachate Vault		135	135
Lot 267-2 Total Building Area	36,636	-12,738	23,898
Total Building Area	159,796	-71,424	88,372

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October 6, 2017

TURNKEY RECYCLING & ENVIRONMENTAL ENTERPRISE

30 Rochester Neck Road P.O. Box 7065 Rochester, NH 03839 (603) 330-2197 (603) 330-2130 Fax

Mr. James B. Campbell, Director Planning and Development Department City of Rochester 31 Wakefield Street Rochester, New Hampshire 03867

Re: Waiver and Conditional Use Request

Site Plan Application – TLR-III Refuse Disposal Facility – South Area

Turnkey Recycling and Environmental Enterprise

Rochester, New Hampshire

Dear Mr. Campbell:

Waste Management of New Hampshire, Inc. (WMNH) is requesting a waiver from the Site Plan Regulations (Regulations) and a Conditional Use Approval for the above referenced project with respect to wetland areas (classified as Conservation Overlay District by the City's Zoning Ordinance). The waiver and Conditional Use requests are related to impacts to delineated jurisdictional wetland areas within or adjacent to the proposed project. Specifically, the waiver request is from Article III, Section 8 (C)(1) of the Regulations, and the Conditional Use Approval is for portions of the project that comply with Chapter 42.12. Paragraph i.1.A of the City Zoning Ordinance (Ordinance). We note that the proposed wetland impacts have been discussed with the City's Conservation Commission (who visited the project site on July 15, 2017), the New Hampshire Department of Environmental Services (NHDES), the US Army Corps, and the United States Environmental Protection Agency (USEPA). A Wetlands Permit Application for this project was submitted to the NHDES Wetlands Bureau on May 19, 2017. The City has been provided a copy of the Wetlands Permit Application, which includes additional information regarding wetland impacts for this proposed project. The Conservation Commission notified the NHDES that they had no comments on this application in correspondence dated September 25, 2017.

BACKGROUND

Section 8 Part (C)(1) of the Regulations requires that applicants adhere to the regulations of the Conservation Overlay District defined in the City's Chapter 42.12 of the Ordinance. For this project, the Conservation Overlay District includes jurisdictional wetland areas and the 50-foot buffer from the edge of the wetland, as defined in the Ordinance. The wetland impacts associated with the TLR-III Refuse Disposal Facility – South Area (TLR-III South Area) project are beyond the 75-foot buffer to the ordinary high water mark of the Cocheco and Isinglass Rivers, as specified in Chapter 42.12(c). Also, wetland areas associated with manmade stormwater conveyance and treatment features are exempt from the Ordinance [see Chapter 42.12(e)(2)].

From everyday collection to environmental protection, Think Green? Think Waste Management.

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Within the proposed TLR-III South Area there are approximately 1.9 acres of isolated naturally occurring (i.e., jurisdictional) wetland areas. The enclosed Wetland Impact Figures illustrate the proposed impacts to wetland areas and wetland buffers. During construction, we anticipate that there may be minor temporary buffer impacts, which will be restored to the preconstruction condition at the completion of construction. The following summarizes the anticipated impacts to the jurisdictional wetland areas and buffers.

- Figure 2 depicts Area G and its associated buffer. As shown, Area G and its associated buffer is located entirely with the limits of the proposed TLR-III South Area project.
- Figure 3 includes several wetland areas to be disturbed. Areas EE, FF, and L are each less than one-half acre in size and are not vernal pools, and are therefore exempt from Conservation Overlay District restrictions [see Chapter 42.12(e)(1)]. Area M is partially disturbed by the TLR-III South Area project (see also Figure 5). Areas GG and HH are in the area currently used by WMNH for storage of construction materials. As noted in a May 3, 2017 letter to the NHDES, WMNH voluntarily reported some inadvertent filling in these areas. Once identified, WMNH ceased its operations in that area. Furthermore, WMNH included disturbing the area in and around Areas GG and HH in its Wetland Permit Application to correct this matter.
- Figure 4 depicts the proposed minor impact to Area W and its associated buffer.
- Figure 5 depicts Areas I and M and their associated buffers. As shown, Area I and its associated buffer is located entirely within the limits of the proposed TLR-III South Area project. Also depicted are wetland buffer impacts associated with Area M resulting from the realignment of Rochester Neck Road.
- Figure 6 includes Area CC and its buffer, all of which is located entirely with the limits of the proposed TLR-III South Area project (specifically the Container Storage Area Expansion component).

WAIVER

This waiver request is for Article III, Section 8 (C)(1) of the Regulations. The impacted wetlands and buffer areas that are the subject of this waiver include Areas G (Figure 2), I (Figure 5), M (Figures 3 and 5), W (Figure 4), CC (Figure 6), HH (Figure 3), and GG (Figure 3). These wetland areas and associated buffers, as defined in Ordinance Chapter 42.12(c), will be disturbed, in whole or in part, as discussed in the Wetland Permit Application (i.e., application for a dredge and fill permit as required by Ordinance Chapter 42.12(j)). For the wetland areas that are partially disturbed, the associated upland buffer is also impacted, and the resulting wetland buffer may be an upland area.

WMNH's proposed expansion of the Turnkey Recycling and Environmental Enterprise (TREE) Facility is needed to allow for continued operation of the facility that provides reliable and environmentally safe waste disposal for the citizens of the City and the State of New Hampshire. The TLR-III South Area development was selected based on an alternatives analysis, which is included in the Wetlands Permit Application. Disturbing the

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aforementioned wetland areas and associated buffers is critical for the development of the TLR-III South Area project, which is the preferred development option based on the goals of limiting environmental impact and optimizing existing site infrastructure. The impacted wetland areas will be mitigated through land preservation as discussed with the NHDES Wetlands Bureau, US Army Corps, USEPA, and the City's Conservation Commission. Specifically, WMNH proposes to place conservation restrictions on approximately 49 acres of Tax Map 267, Lot 62. This lot is located on the north side of the Cocheco River, a New Hampshire Rivers Management and Protection Program "Designated River," and is adjacent to approximately 35.1 acres (Tax Map 263, Lot 63) already protected under a conservation easement held by the Southeast Land Trust. These protected lands also abut the City of Rochester owned lands and are in the vicinity of other conservation lands along the river corridor.

CONDITIONAL USE REQUEST

As specified in Chapter 42.12(i), a conditional use approval may be granted by the Planning Board after proper public notice and public hearing to allow wetland impacts for the use of roads and other access ways, and drainage ways where evidence is submitted that no alternative location is available on the property and the conditions of Chapter 42.12(i)(A)(i) through (iv) have been met.

WMNH is requesting Conditional Use approval for the impacted wetlands and buffer areas associated with the realignment of Rochester Neck Road, construction of access roads, and construction of drainage ways. These wetland areas are designated as Area M, Area W, and a small area along the realigned Rochester Neck Road, as shown on Figures 3, 4, and 5. The impacts to these wetlands will be mitigated as described above and in the Wetland Permit Application. The use of these wetlands meets the conditions of Chapter 42.12(i)(1)(A)(i) through (iv) as follows:

i. The proposed construction is essential to the productive use of land not within the COD.

The proposed development of the TLR-III South Area will allow WMNH to continue to provide waste disposal services beyond 2024, the year that TLR-III is currently expected to reach capacity. Continued use of the TREE Facility for future disposal is consistent with agreements between the City and WMNH.

ii. Design and construction methods will be such as to minimize impact upon the wetlands and will include restoration of the site consistent with the permitted use.

As noted in the alternatives analysis component of the Wetlands Permit Application, the project was designed, and will be constructed, to limit wetland impacts and restore or mitigate impacts that are necessary for the project development.

iii. There is no feasible alternative route on land controlled by the applicant that does not cross the COD nor has less detrimental impact on the wetlands. Nothing in this Section shall limit the applicant from, exploring alternatives with abutting property owners.

As noted above, an alternatives analysis was complete by WMNH to assess options for the proposed waste capacity development (i.e., the proposed TLR-III South Area project) and is

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Waiver & Cond Approval Ltr- Wetlands.docx

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included as Exhibit VIII of the Wetland Permit Application. The current proposed location of the TLR-III South Area, with realignment of Rochester Neck Road, resulted in the least impact to wetlands.

iv. Economic advantage is not the sole reason for the proposed location of the construction.

Development of new disposal areas are expensive propositions, and the TLR-III South Area project makes best use of existing infrastructure and local resources while minimizing wetland and buffer impacts as much as possible. Development of the TLR-III South Area project will be a major financial undertaking for WMNH and will have significant financial benefits to the City and its residents.

We trust that the above information fully addresses the City's need for a waiver and Conditional Use request from COD requirements for this project. Should you require additional information, please contact me at areichert@wm.com.

Very truly yours,

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.

Anne Reichert, P.E.

Construction Project Manager

LLD/ESS:lld

Enclosures Wetland Impact Figures

Copies to: Bob Magnusson, WMNH

Eric Steinhauser, Sanborn Head



October 6 2017

TURNKEY RECYCLING & ENVIRONMENTAL ENTERPRISE

30 Rochester Neck Road P.O. Box 7065 Rochester, NH 03839 (603) 330-2197 (603) 330-2130 Fax

Mr. James B. Campbell, Director Planning and Development Department City of Rochester 31 Wakefield Street Rochester, New Hampshire 03867

Re: Waivers from Site Plan Regulations

Site Plan Application – TLR-III Refuse Disposal Facility – South Area

Turnkey Recycling and Environmental Enterprise

Rochester, New Hampshire

Dear Mr. Campbell:

Waste Management of New Hampshire, Inc. (WMNH) is requesting three waivers from the Site Plan Regulations (Regulations) for the above referenced project. The waiver requests are for: (i) the requirement to provide site development plans at a scale no less than one inch equals 50 feet [Article II, Section 5 (2)]; (ii) the requirement to provide the plans on mylar and blue or black line prints [Article II, Section 5 (3)]; and (iii) the requirement of underground utilities for a project in the Recycling Industrial zone [Article III, Section 15 (D)(1)].

SCALE WAIVER

Article II, Section 5 (2) of the Regulations requires that "The scale of said plan shall not be less than one inch equals 50 feet."

WMNH is requesting a waiver from this requirement for select drawings in the Site Plan Application and offers the following justification. The proposed TLR-III Refuse Disposal Facility – South Area (TLR-III South Area) is an expansive project that includes the construction of a new 58.6-acre disposal area as well as: (i) realigning a ¾-mile portion of Rochester Neck Road; (ii) relocating the Residential Drop-Off Facility; (iii) modifying the Isinglass River Park; and (iv) expanding WMNH's Container Storage Area. As such, a scale greater than one inch equals 50 feet was utilized on select drawings to depict the entire project area on one sheet and/or limit the number of sheets necessary to depict portions of the project. For these select sheets, using the required scale would limit the ability to depict the overall project, its context, connection between the various project components, and likely cause confusion when reviewing the plan set. The drawing scales used were selected to best present the proposed project.

From everyday collection to environmental protection, Think Green? Think Waste Management.

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PRINTING WAIVER

Article II, Section 5 (3) of the Regulations requires that "The original of said plan shall be on mylar, and there shall also be submitted three blue or black line prints of any such plan."

WMNH is requesting a waiver from this requirement as the use of mylar, blue line, and black line prints is outdated. As part of the application, WMNH provided 22 copies of the reduced drawings along with three full-size copies of the drawings, some of which contain color. Upon request, WMNH will provide the City with an electronic version of the drawings in Portable Document Format (*.pdf).

UNDERGROUND UTILITIES WAIVER

Article III, Section 15 Part (D)(1) of the Regulations requires that "All electric, telephone, television and other communication lines and structures shall be placed underground throughout the site including utilities extended onto the site from existing poles near the site."

As noted in Article III, Section 15 Part (D)(3), WMNH understands that the City may waive this requirement on the basis of impracticality and cost relative to the scale of the project. To that end, WMNH reviewed the applicable sections of the Regulations with respect to the proposed project, and offers the following justification for a waiver from the underground utilities requirements of the Regulations.

- 1. Some of the proposed utilities are located along and down a 3H:1V cut slope. Underground utilities in these areas would be impractical because it would require a significant amount of over-excavation, at times near existing buildings, to properly bury the proposed lines.
- 2. The site currently has above ground high voltage utilities in the area of the Turnkey Recycling & Environmental Enterprise (TREE) Facility. The installation of overhead utilities in this area will not create unnecessary visual impact or detract from a favorable view or landscape, and would be keeping with the commercial/industrial development theme of WMNH's property in the area of the TREE Facility.
- 3. Burying excessive lengths of high voltage underground utilities can pose a safety concern as familiarity with their buried location becomes vague with time. Even with diligent efforts to locate and mark utilities with survey, not having installations being clear from a given utility pole to a known location, puts this knowledge at risk and raises the potential for accidents. Many of the proposed utilities will occur on private property, and utility locating services such as DigSafe do not cover private property such as the TREE Facility, resulting in dependence on a third-party locator when as-builts are not available. Typically, responsiveness by these service providers is not prompt, increasing the potential for work to begin before locating the utilities is completed.

Similarly, the nature of the construction requires that it be completed in multiple stages of construction over multiple years. The prolonged construction period increases the potential for accidents as markings are lost over time.

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4. Burying the electrical utilities along the realigned ¾ miles of Rochester Neck Road would need to be approved by the local electric utility and will likely be cost prohibitive. In addition to the trenching costs, we anticipate that the switch from overhead to below ground would increase the complexity of the project as electrical conductors would need to be upsized to provide the same transmission capacity.

5. Understanding that the City desires to improve the aesthetics of developing and developed areas, given the scale and type of the proposed redevelopment, its location in a rural area, and the lack of nearby residences, the little aesthetic value gained by burying the electrical utilities is not worth the significant cost to bury the utilities.

We trust that the above information fully addresses the City's need for a waiver request from the site development plan scale, printing, and underground utilities requirements for this project. Should you require additional information, please contact me at areichert@wm.com.

Very truly yours,

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.

Anne Reichert, P.E.

Construction Project Manager

LLD/ESS:lld/lct

Copies to: Bob Magnusson, WMNH

Eric Steinhauser, Sanborn Head

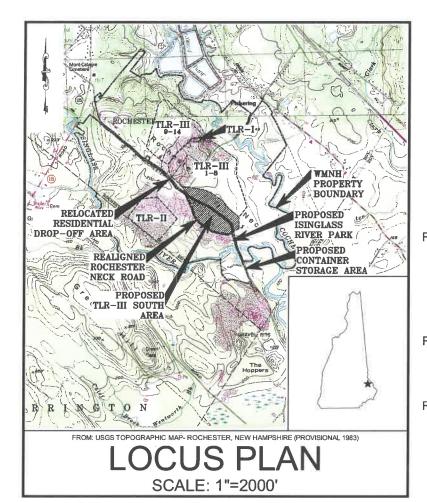
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TLR-III SOUTH AREA SITE PLAN APPLICATION DRAWINGS TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.

ROCHESTER, NEW HAMPSHIRE OCTOBER 2017



SHEET INDEX



SHEET NO.	TITLE	SHEET NO.	TITLE
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SP-1	OVERALL SITE PLAN		PLAN
SP-2	OVERALL SITE DEVELOPMENT AND INDEX PLAN	IRP-2	ISINGLASS RIVER PARK - PROPOSED SITE PLAN
RDO-1	RESIDENTIAL DROP-OFF - EXISTING CONDITIONS AND	IRP-3	ISINGLASS RIVER PARK - DETAILS
NBO-1	DEMOLITION PLAN	TLR3S-1	TLR-III SOUTH AREA - ANTICIPATED EXISTING CONDITIONS
RDO-2	RESIDENTIAL DROP-OFF - PROPOSED SITE PLAN	TLR3S-2	TLR-III SOUTH AREA - PHASE AND CELL PLAN
RDO-3	RESIDENTIAL DROP OFF - SIGNAGE PLAN	TLR3S-3 - TLR3S-5	TLR-III SOUTH AREA - INITIAL DEVELOPMENT PLAN AND PROFILES
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RNR-1	ROCHESTER NECK ROAD - ANTICIPATED EXISTING	TLR3S-6	TLR-III SOUTH AREA - FINAL GRADING PLAN
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RNR-2	ROCHESTER NECK ROAD - OVERALL PROPOSED SITE PLAN	TLR3S-8	TLR-III SOUTH AREA - PERIMETER ROADWAY DETAILS
DUD 0 DUD 5		TLR3S-9	TLR-III SOUTH AREA - POND 3 PLAN AND PROFILE
RNR-3 - RNR-5	ROCHESTER NECK ROAD - PROPOSED CONDITIONS	TLR3S-10 - TLR3S-11	TLR-III SOUTH AREA - STORMWATER MANAGEMENT DETAILS
RNR-6	ROCHESTER NECK ROAD - PONDS 1 AND 2 AREA PLAN AND PROFILE	CSA-1	CONTAINER STORAGE AREA - EXISTING CONDITIONS PLAN
RNR-7 - RNR-8	ROCHESTER NECK ROAD - DETAILS	CSA-2	CONTAINER STORAGE AREA - PROPOSED SITE PLAN
		CSA-3 - CSA-4	STORMWATER MANAGEMENT DETAILS
		E&S - 1	EROSION & SEDIMENTATION CONTROL DETAILS

PREPARED FOR:



PREPARED BY

SANBORN HEAD

L-1 - L-4

LANDSCAPING PLANS (BY OTHERS)

WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.

ROCHESTER, NEW HAMPSHIRE

20 FOUNDRY STREET, CONCORD, NEW HAMPSHIRE 03301 (603) 229-1900 FAX (603) 229-1919

2. VERTICAL DATUM IS BASED ON NGVD 1929, GRID IS BASED ON NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD 1983.

3. TLR-I LIMIT OF WASTE WAS TAKEN FROM A PLAN TITLED "TLR I PHASING PLAN" PREPARED BY RICHARD F, KAMINSKI & ASSOCIATES, INC. OF LAWRENCE, MASSACHUSETTS DATED MAY 27, 1998 AT A SCALE OF 1" = 100".

4 TER-III PHASES 1-8 LIMIT OF WASTE CONTAINMENT WAS TAKEN FROM DRAWINGS PREPARED FOR WMNH TITLED "MECHANICALLY STABILIZED EARTH (MSE) BERM EXPANSION", BY GOLDER ASSOCIATES OF MANCHESTER NEW HAMPSHIRE. DATED AUGUST 2001, ORIGINAL SCALE OF 1" =

5. TLR-III PHASES 9-14 LIMIT OF WASTE CONTAINMENT WAS TAKEN FROM SHEET 3 OF DRAWINGS PREPARED FOR WMNH TITLED "TLR-III REFUSE DISPOSAL FACILITY PHASES 9-14", BY SANBORN HEAD DATED DECEMBER 2003, REVISED JUNE 2004, ORIGINAL SCALE OF 1" = 120".

6. WETLAND AREAS REPRESENT A COMPILATION OF INFORMATION DETERMINED USING EXISTING AERIAL PHOTOGRAPHY, SOILS INFORMATION, U.S.F.W.S. NATIONAL WETLAND INVENTORY MAPS, AND DELINEATIONS WITHIN THE PROJECT AREA CONDUCTED IN OCTOBER AND DECEMBER 2014 AND SUPPLEMENTED WITH ADDITIONAL DELINEATIONS PERFORMED BETWEEN SEPTEMBER 2010 AND JUNE 2015 BY BARRY H. KEITH, NH CWS 4087, IN ACCORDANCE WITH NHWB ADMINISTRATIVE RULE WT 30.10 (1,4C.) USING THE METHODS OUTLINED IN THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 (JANUARY 1987) AND FIELD IDENTIFYING HYDRIC SOILS IN NEW ENGLAND (VERSION II) PUBLISHED BY THE N.E. INTERSTATE WATER POLLUTION CONTROL COMMISSION. WETLAND AREAS WERE CLASSIFIED IN ACCORDANCE WITH NHWB ADMINISTRATIVE RULE WT 301.02 USING THE USFWS/OBS-79/31 MANUAL CLASSIFICATION OF WETLANDS AND DEEPWATER HABITATS OF THE UNITED STATES (COWARDIN ET AL. 1979).

7. LIMIT OF WETLANDS PERTINENT TO THE TLR-III SOUTH AREA WERE MAPPED BY WSP TRANSPORTATION AND INFRASTRUCTURE, INC. USING TOTAL STATION SURVEY METHODS AND PROVIDED ELECTRONICALLY ON NOVEMBER 7, 2014 AND FEBRUARY 3, 2015, AND SUPPLEMENTED WITH LIMIT OF WETLANDS PREVIOUSLY DELINEATED IN 2000 AND 2008.

8. EXISTING MONITORING WELL AND GAS PROBE LOCATIONS WERE PROVIDED TO SANBORN HEAD BY WMNH,

9. PROPERTY LINE INFORMATION WAS TAKEN FROM A PLAN TITLED "BOUNDARY COMPILATION AND FOOTPRINT COMPILATION OF TLR-I AND TIR-III, ROCHESTER NECK ROAD, GONIC, NEW HAMPSHIRE" PREPARED FOR WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. BY CHAS. H. SELLS, NO. OF NASHUA, NEW HAMPSHIRE DATED JANUARY 29, 2002 AT A SCALE OF 1" - 20, SCALE OF 1" - 20.

10. THE 100-YEAR FLOODPLAIN IS BASED ON INFORMATION PROVIDED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) "FLOOD INSURANCE RATE MAP, STRAFFORD COUNTY, NEW HAMPSHIRE" PANEL 302 OF 405, EFFECTIVE DATE SEPTEMBER 30, 2015.

11. PROPOSED GRADING SHOWN WITHIN TLR-III PHASES 1-14 FOOTPRINT REPRESENTS THE PERMITTED FINAL GRADES FOR THE TLR-III REFUSE DISPOSAL FACILITY AS DEPICTED IN THE PHASES 9-14 TYPE I-A PERMIT MODIFICATION APPLICATION DRAWINGS.

MATERIAL SPECIFICATIONS

1. ORDINARY FILL SHALL BE NATURAL SOIL WITH NO PARTICLES LARGER THAN 8 INCHES

2. GRANULAR FILL SHALL BE NATURAL SOIL WITH NO PARTICLES LARGER THAN 1 INCH.

3. CRUSHED STONE SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1-1/2 INCHES

4. TYPE I RIPRAP SHALL CONSIST OF STONE RANGING IN SIZE FROM 4 TO 10 INCHES

5. TYPE II RIPRAP SHALL CONSIST OF STONE RANGING IN SIZE FROM 6 TO 8 INCHES.

ROCK REMOVAL

1. IF MORE THAN 5,000 CUBIC YARDS ARE TO BE BLASTED, WMNH SHALL DEVELOP A GROUNDWATER QUALITY SAMPLING PROGRAM TO MONITOR FOR NITRATE AND NITRITE IN DRINKING WATER SUPPLY WELLS OR OTHER WELLS REPRESENTATIVE OF DRINKING WATER SUPPLY WELLS IN THE AREA. BASED ON A REVIEW OF THE NHDES ONESTOP DATABASE, THERE ARE FOUR DRINKING WATER WELLS LOCATED WITHIN 2,000 FEET OF THE PROPOSED BLASTING ACTIVITIES: WRB #203.0420 CITY OF ROCHESTER; WRB #203.0303 FLEMING; WRB #203.0126 BOUGIE & LABBE CONSTRUCTION, INC.; AND WRB #203.0005 DESMARDES.

2. THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:

A. LOADING PRACTICES. THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:

DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS

ii. EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL.

SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL.

LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.

LOADING EQUIPMENT SHALL BE CLEANED OFF-SITE WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A

MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT

vi. EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.

B. EXPLOSIVE SELECTION. THE FOLLOWING BMPS SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION

EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION

EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.

C. PREVENTION OF MISFIRES, APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES

D. MUCK PILE MANAGEMENT, MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE HE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:

REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE.

ii. MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.

DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCK REMOVAL (CONT.)

E. SPILL PREVENTION MEASURES AND SPILL MITIGATION, SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE AT A

THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE
 STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE;

SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY: LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY; INSPECT STORAGE AREAS WEEKLY:

INSPECT STORAGE AREAS WEEKLY;
COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE
WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS; AND
SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE,
EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS
OTHERWISE REGULATED.

MC METAL COVER

THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:

1. EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED; PACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT REDILLY AVAILABLE IN ALL WORK AREAS;
USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES; AND

PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.

iii. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.

FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT WILL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES (NOTE THESE REQUIREMENTS ARE SUMMARIZED IN WOD-WIGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT OR ITS SUCCESSOR DOCUMENT, (SEE HTTP://DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/

ABBREVIATIONS

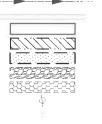
Ø	DIAMETER	MH	MANHOLE
A, ASPH	ASPHALT	MIN.	MINIMUM
AST	ABOVE-GROUND STORAGE TANK	MSE	MECHANICALLY STABILIZED EARTH
СВ	CATCH BASIN	MW	MONITORING WELL
CEM.	CEMETERY	N	NORTHING
CFM	CUBIC FEET PER MINUTE	O.C.	ON CENTER
CONC.	CONCRETE	OD	OUTER DIAMETER
CMP	CORRUGATED METAL PIPE	P	PRIMARY
CPP	CORRUGATED POLYETHYLENE PIPE	PC	PERIMETER CHANNEL
CW	CHANNEL WIDTH	PE	POLYETHYLENE
DI	DROP INLET	PROJ.	PROJECTING
DMH	DRAIN MANHOLE	PT	POINT OF TANGENCY
E	EASTING	PVC	POLYVINYL CHLORIDE
EL.	ELEVATION	RCP	REINFORCED CONCRETE PIPE
ENDWL	ENDWALL	RMC	RIGID METAL CONDUIT
FES	FLARED END SECTION	s	SECONDARY
FRP	FIBERGLASS REINFORCED PLASTIC	SCH	SCHEDULE
GCL	GEOSYNTHETIC CLAY LINER	SDR	STANDARD DIMENSION RATIO
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SS	STAINLESS STEEL
GP	GAS PROBE	TC	TEMPORARY CULVERT
HDPE	HIGH DENSITY POLYETHYLENE	TP	TEST PIT
HDWL	HEAD WALL	TLR	TURNKEY LANDFILL OF ROCHESTER
HP	HIGH POINT, HORSEPOWER	TRANS	TRANSFORMER
INV.	INVERT	TYP	TYPICAL
LCS	LEACHATE COLLECTION SYSTEM	UST	UNDER-GROUND STORAGE TANK
LMH	LEACHATE MANHOLE	w	WELL, GAS WELL
LFĠ	LANDFILL GAS	WD	WOOD
MAX.	MAXIMUM	WH	WELLHEAD

LEGEND

EXISTING CONDITIONS

TOWN LINE

LIMIT OF WASTE CONTAINMENT • • • • • • • • • • • • • • • • • TLR-I LIMIT OF WASTE CONTAINMENT 2-FOOT ELEVATION CONTOUR 10-FOOT ELEVATION CONTOUR EDGE OF ROAD UNPAVED ROAD LIMIT OF WETLANDS EDGE OF WATER LIMIT OF 100-YEAR FLOODPLAIN FORCE MAIN TREE LINE



UTILITY PÔLE

-**♦**- 1/F11-08

GUARDRAIL EXISTING SWALE & FLOW DIRECTION DRAINAGE CULVER

RIPRAP-LINED SWALE

GAS PROBE AND DESIGNATION

GABION-LINED SWALE POS1 MISC. OBJECT

SIGN LIGHT POST TREE/BUSH

MONITORING WELL AND DESIGNATION

PROPOSED CONDITIONS

SWALE & FLOW DIRECTION — 182 — 2-FOOT ELEVATION CONTOUR 10-FOOT ELEVATION CONTOUR LANDFILL GAS—— SOLID LFG HDPE PIPE FORCE MAIN ----- FORCE MAIN PIPE OE OE OVERHEAD ELECTRIC ---- UE ----- UNDERGROUND ELECTRIC ----- GAS ----- NATURAL GAS PIPELINE ____ EDGE OF ROAD TREE LINE STORMWATER DIVISION BERM PERIMETER DRAINAGE CHANNEL C-1 GABION-LINED SWALE CONCRETE VEGETATED STORMWATER FEATURE COORDINATES SPOT ELEVATION HIGH POINT UTILITY POLE TRAFFIC FLOW ARROW 8% SLOPE SLOPE DIRECTION ARROW CATCH BASIN AND DESIGNATION

ROOF AREA

LARGE BOULDER

CONCRETE PAD

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

SANBORN HEAD

SCALE: AS NOTED

DATE

DRAWN BY: A. MATTHEWS DESIGNED BY: T. REED REVIEWED BY: E. GALVIN PROJECT MGR: T. REED

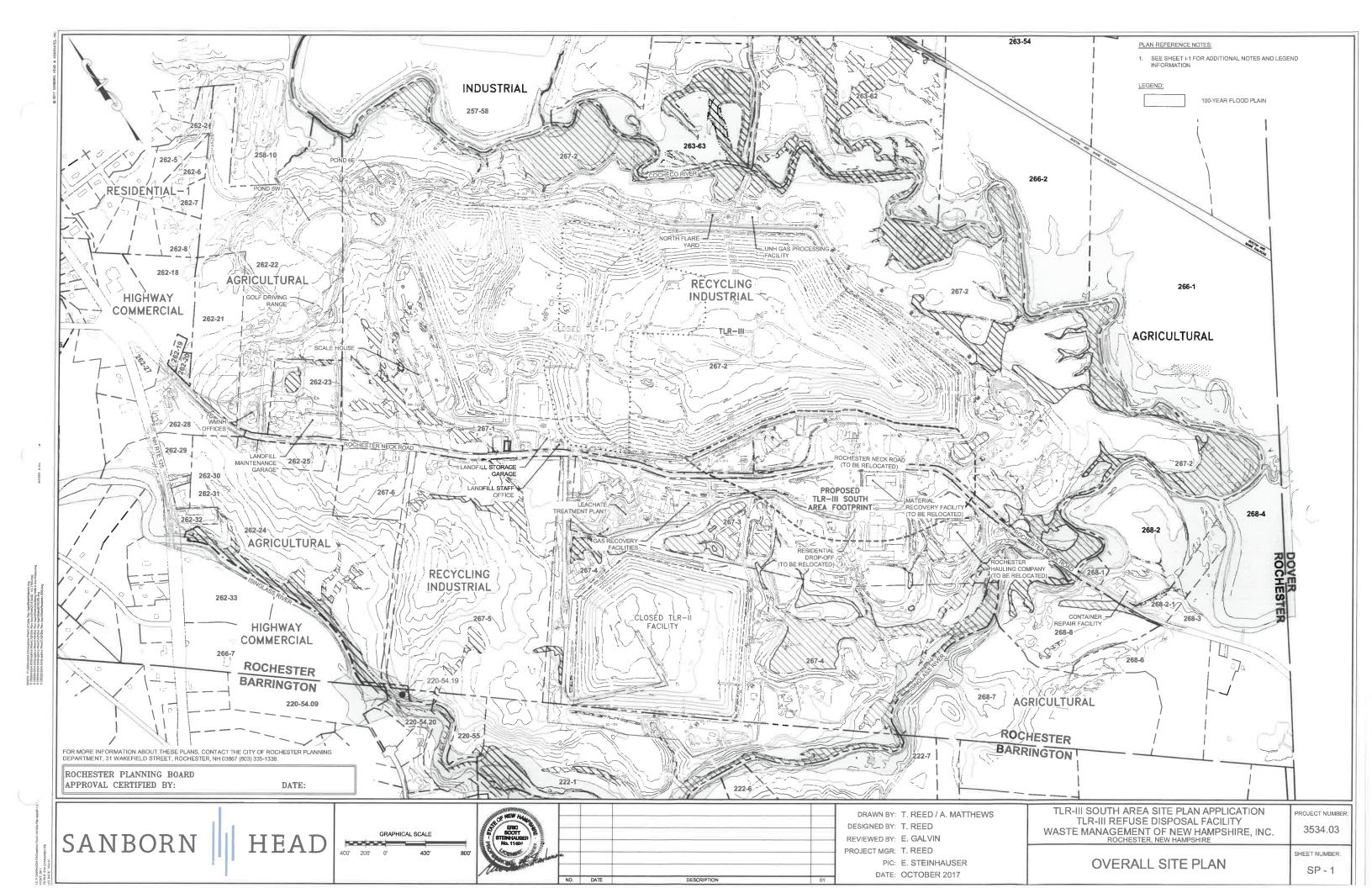
> PIC: E. STEINHAUSER DATE: OCTOBER 2017

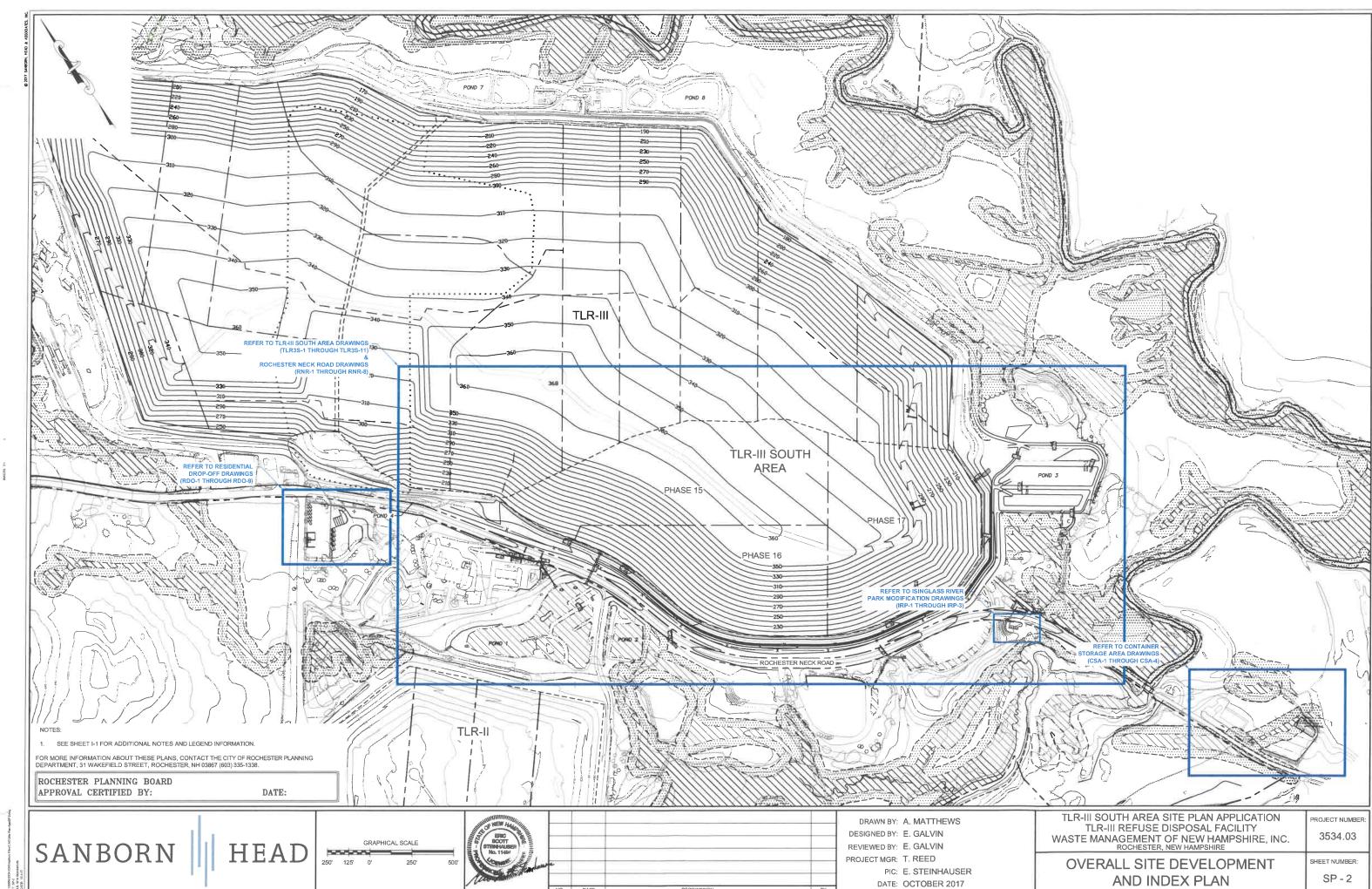
TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.

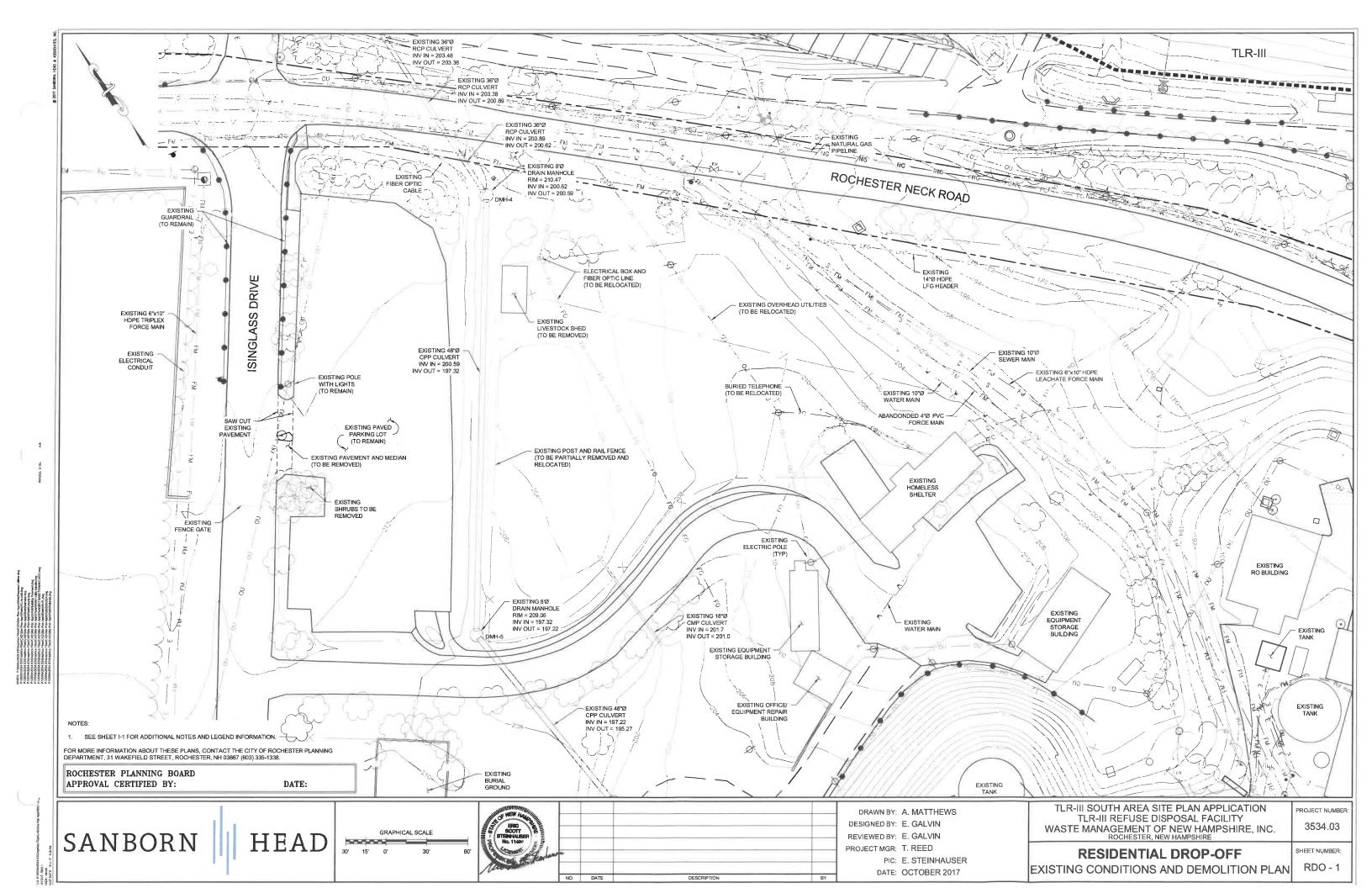
> NOTES, LEGEND, AND **ABBREVIATIONS**

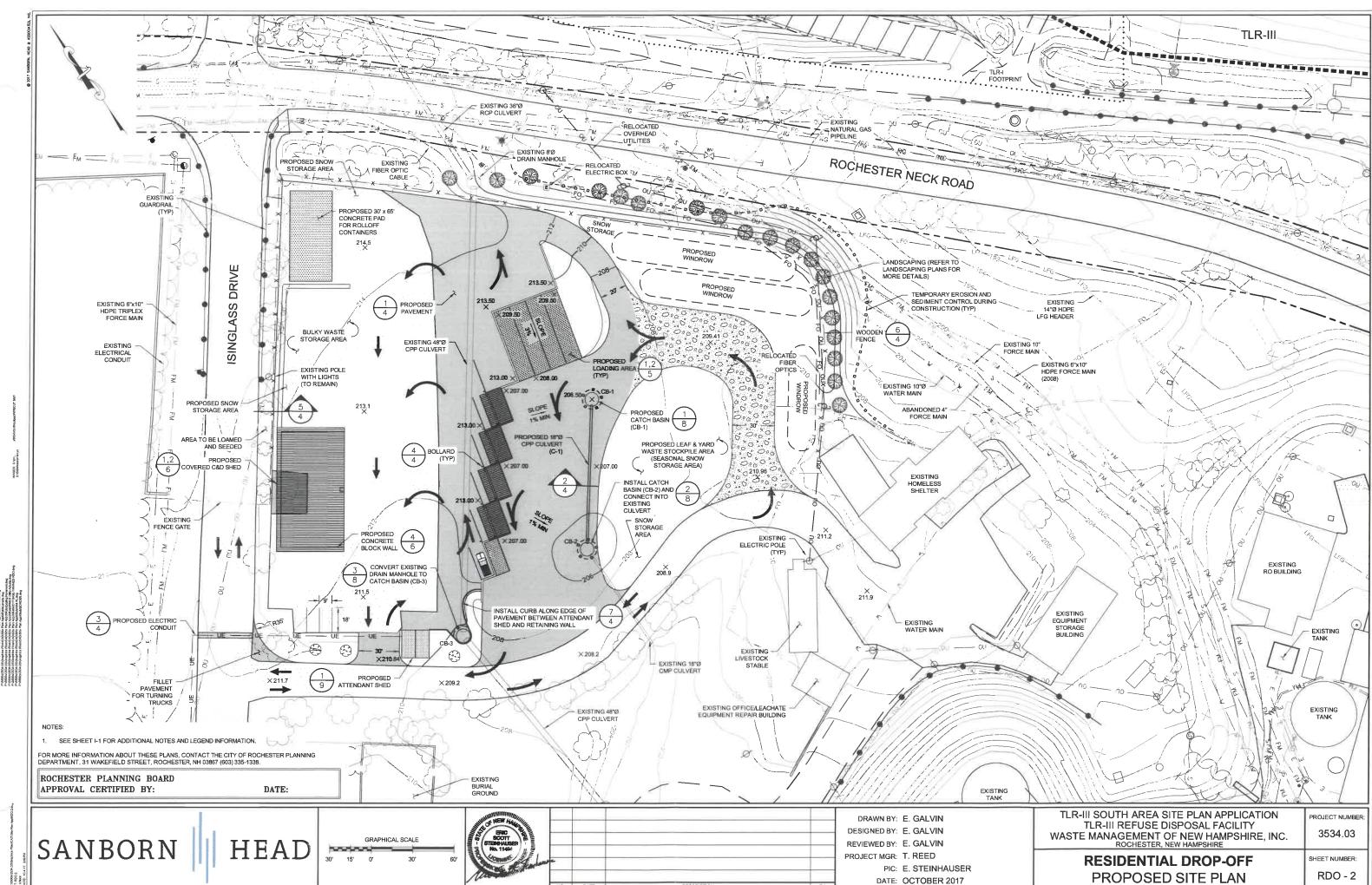
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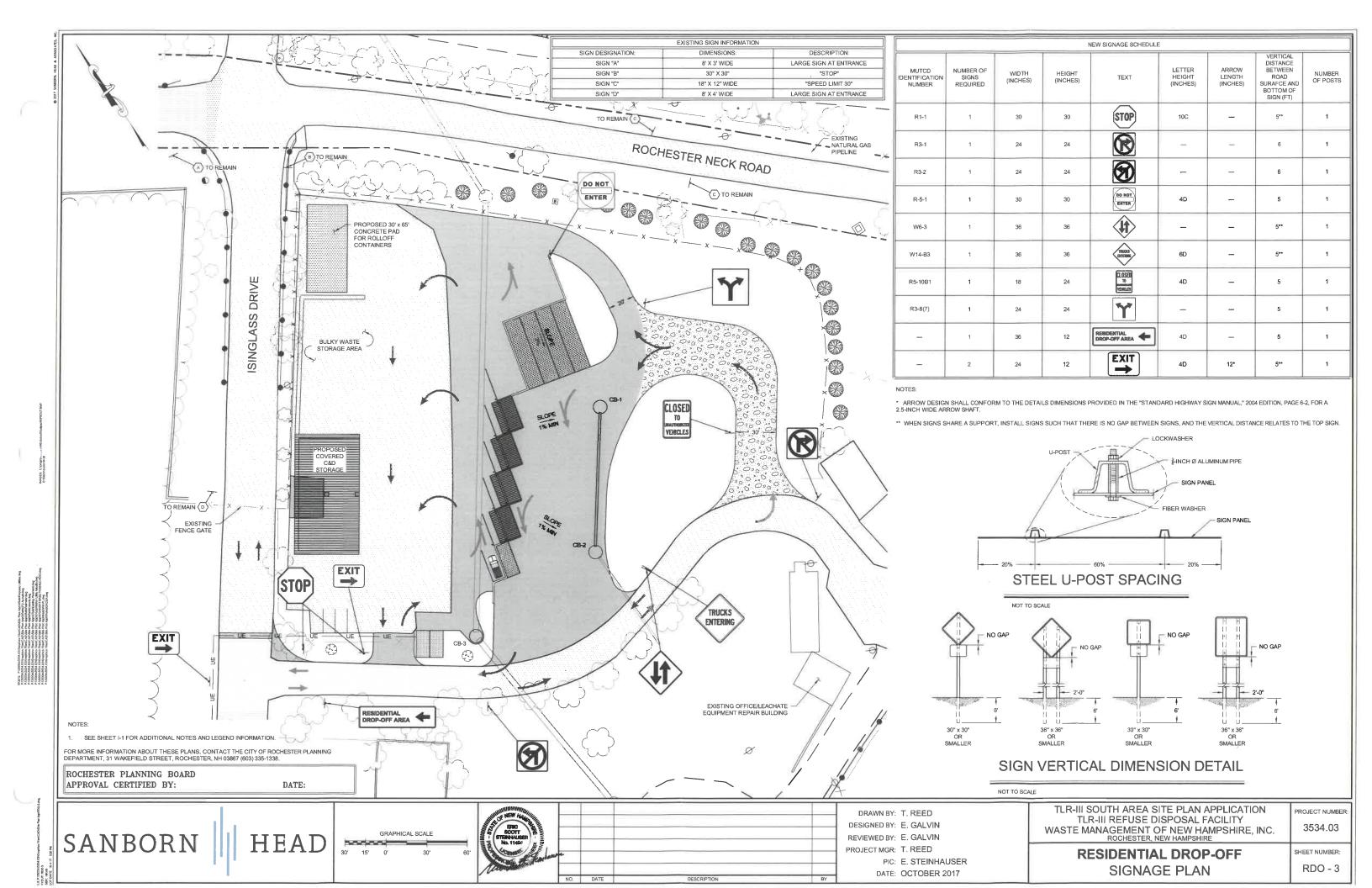
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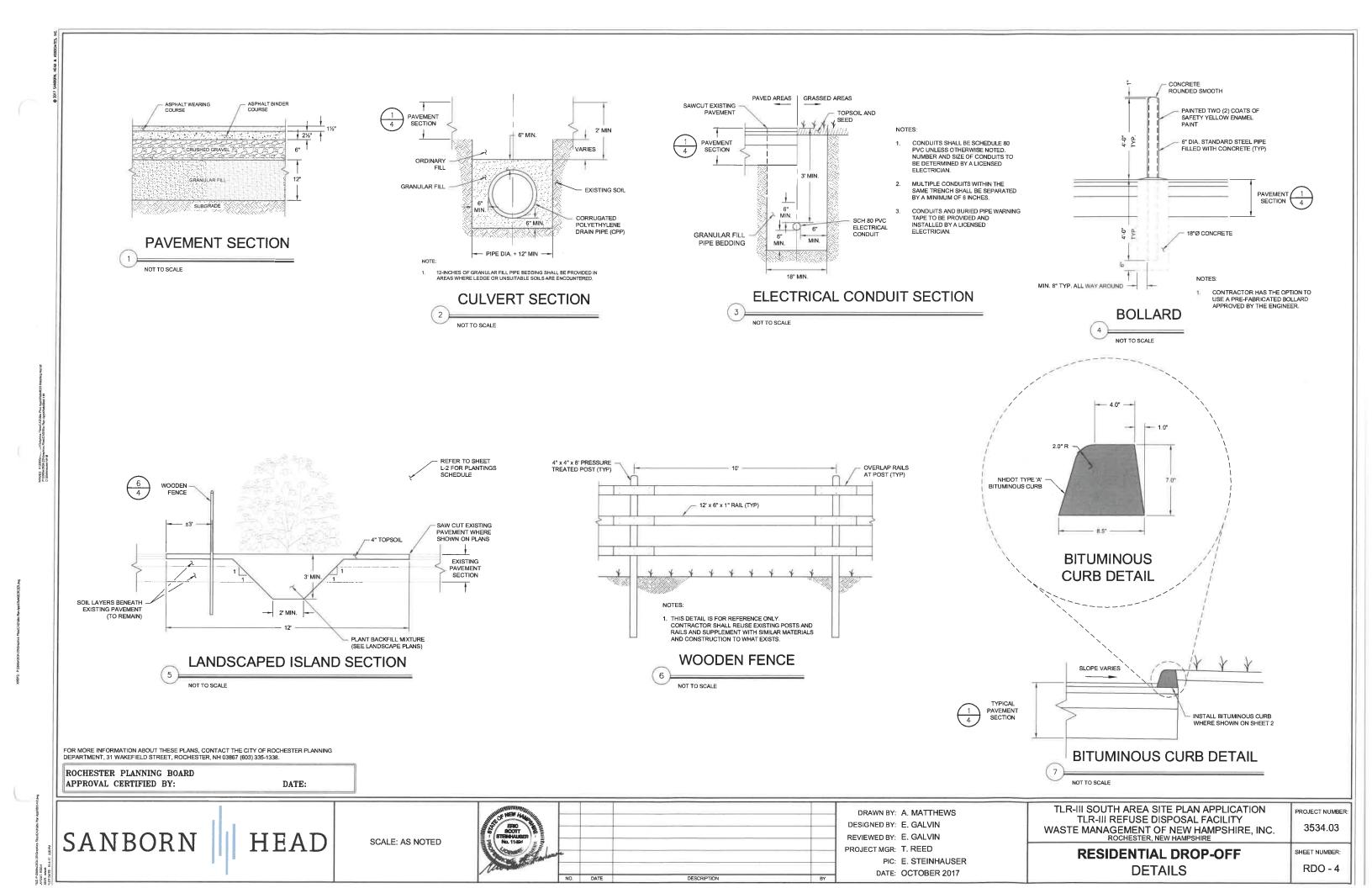


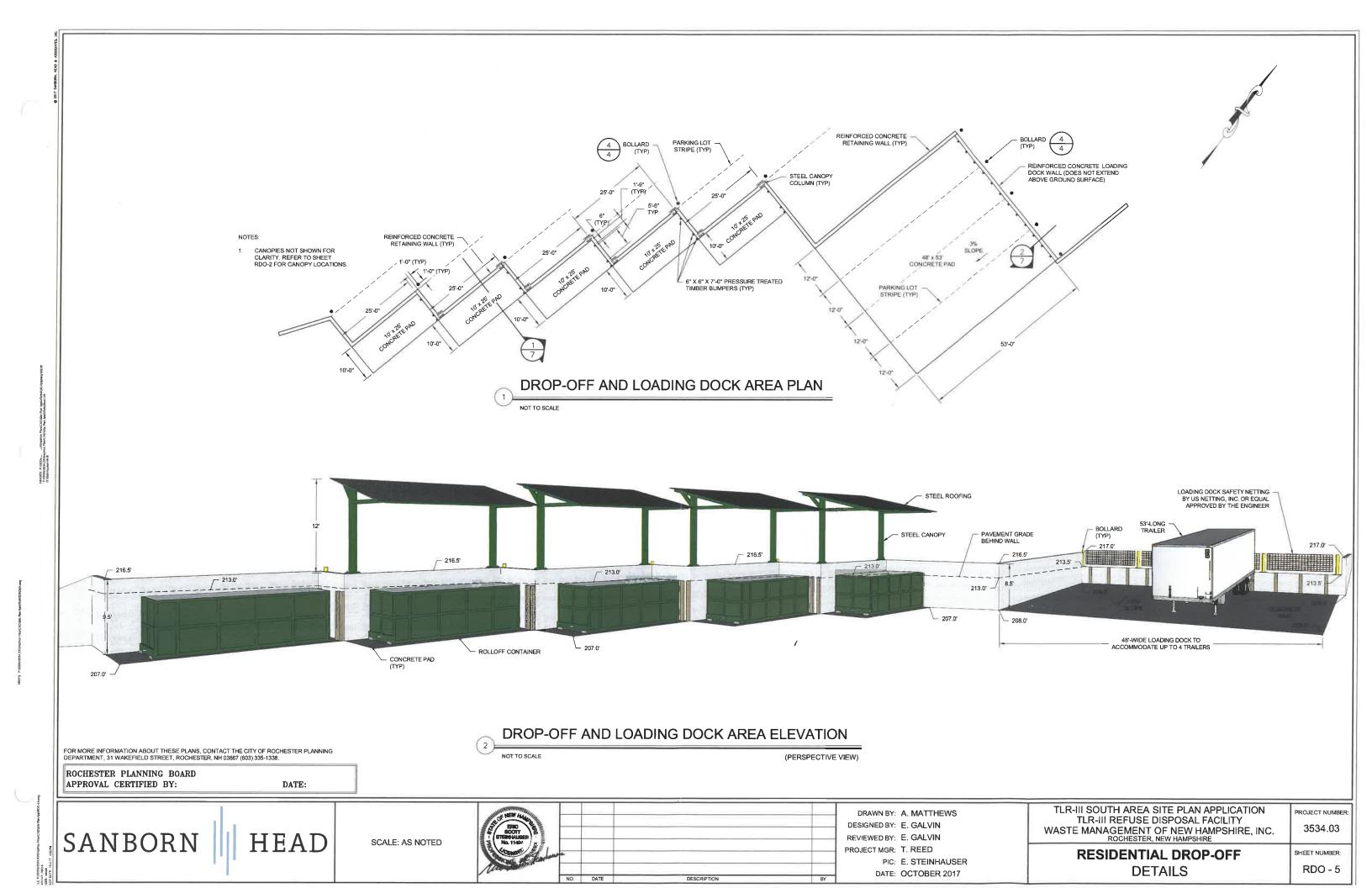


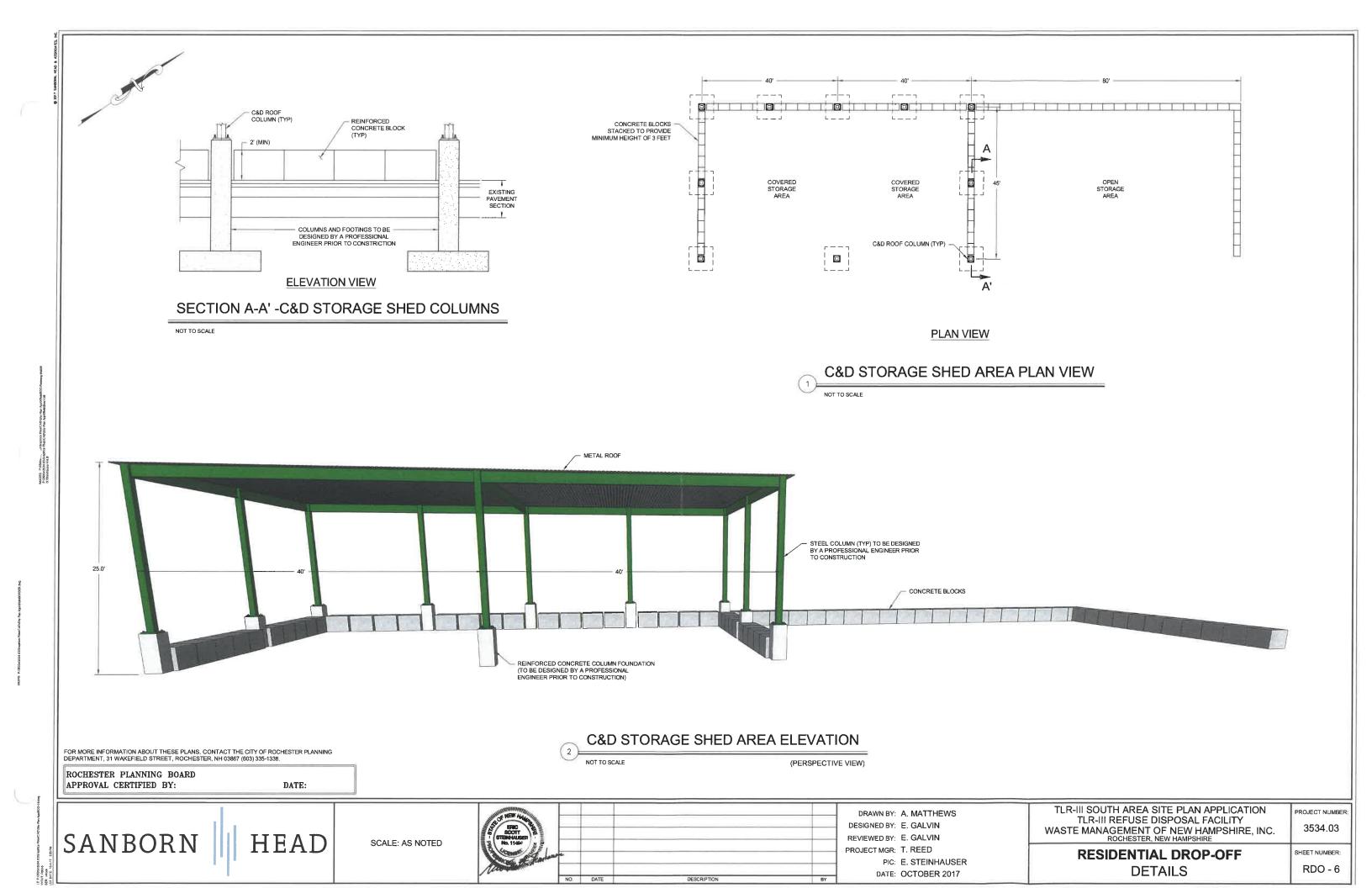


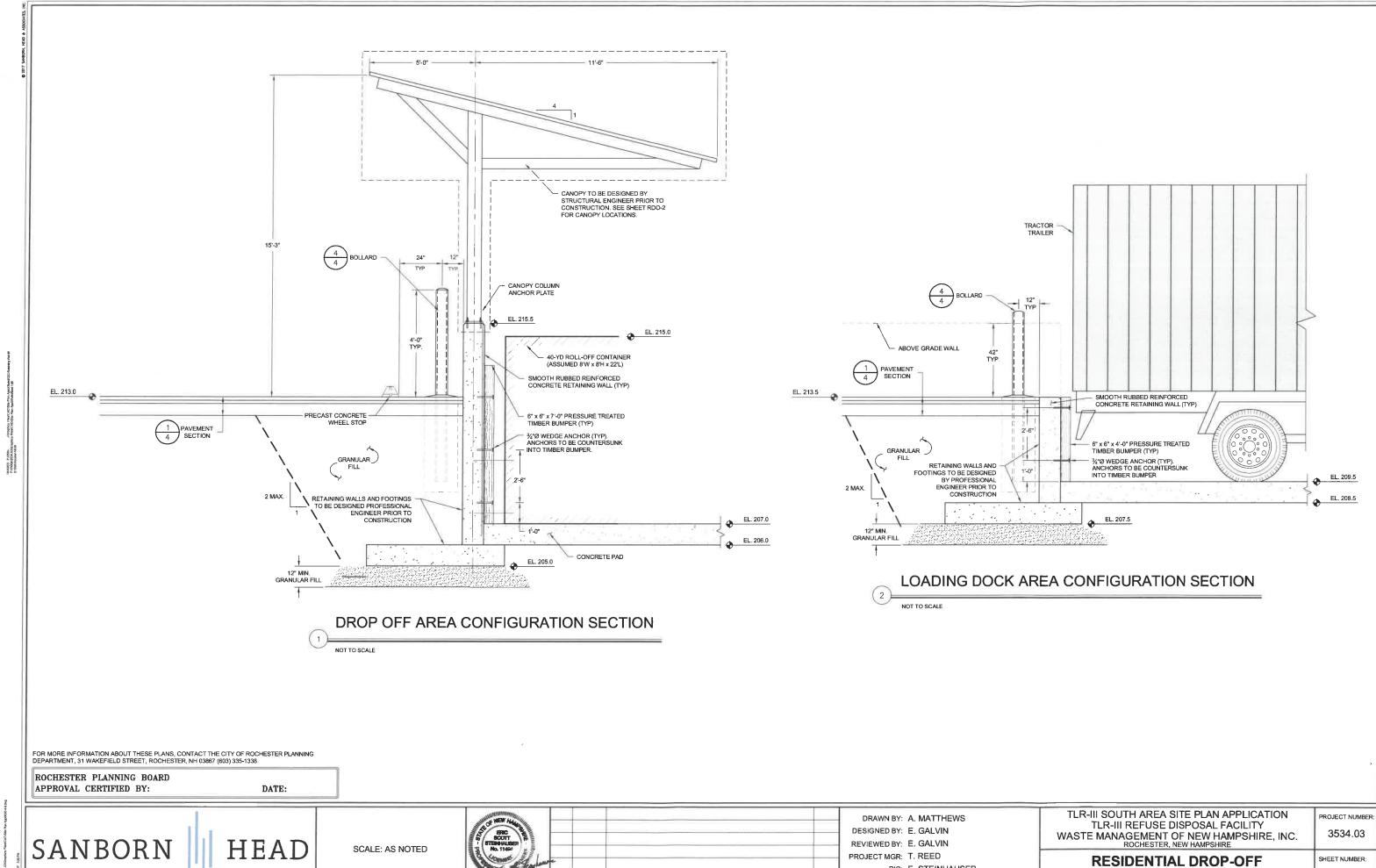










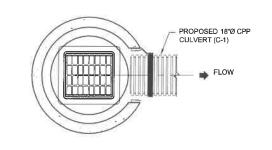


PIC: E. STEINHAUSER

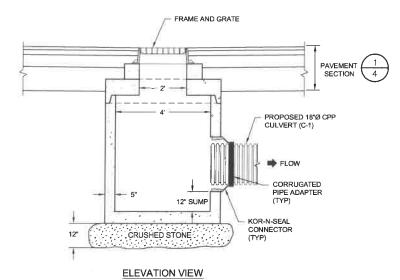
DATE: OCTOBER 2017

RDO - 7

DETAILS

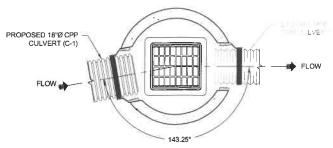


PLAN VIEW

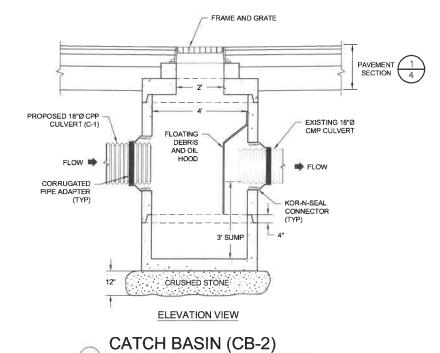


CATCH BASIN (CB-1)

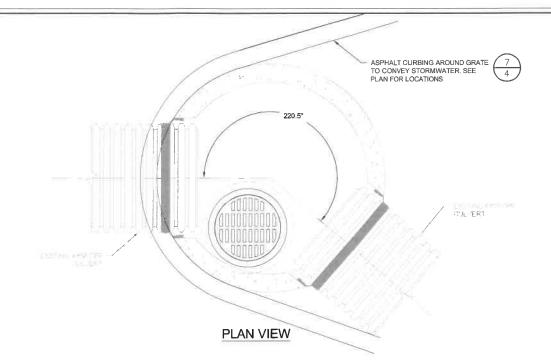
NOT TO SCALE

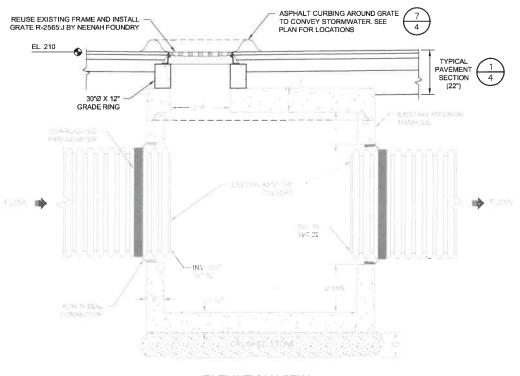


PLAN VIEW



NOT TO SCALE





ELEVATION VIEW

DRAINAGE MANHOLE TO CATCH BASIN (CB-3)

NOT TO SCALE

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

SANBORN HEAD

SCALE: AS NOTED

NO. DATE

DRAWN BY: A. MATTHEWS DESIGNED BY: E. GALVIN

REVIEWED BY: E. GALVIN PROJECT MGR: T. REED

PIC: E. STEINHAUSER DATE: OCTOBER 2017

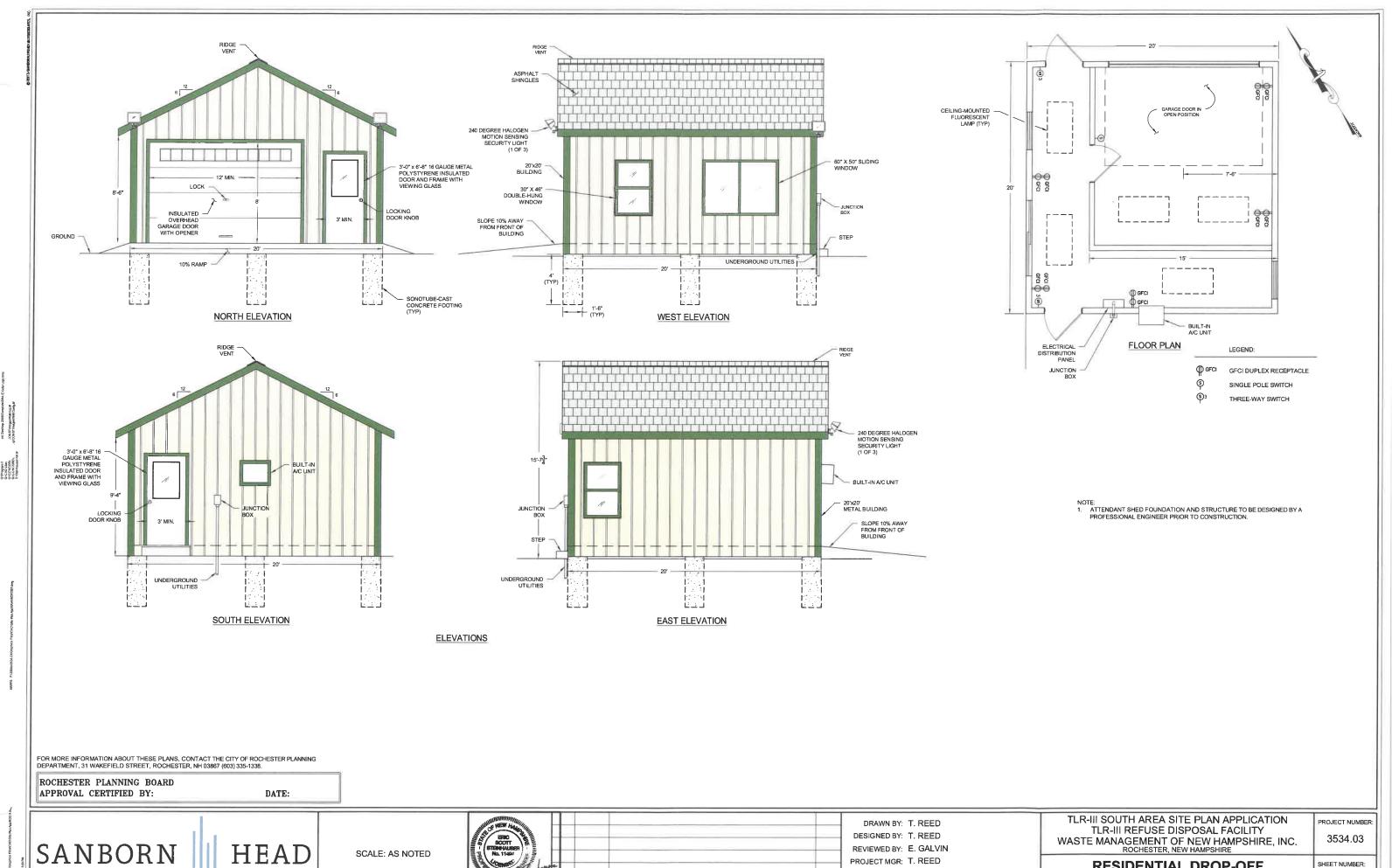
TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY
WASTE MANAGEMENT OF NEW HAMPSHIRE, INC.
ROCHESTER, NEW HAMPSHIRE

DETAILS

PROJECT NUMBER

3534.03

RESIDENTIAL DROP-OFF RDO - 8



PROJECT MGR: T. REED

PIC: E. STEINHAUSER

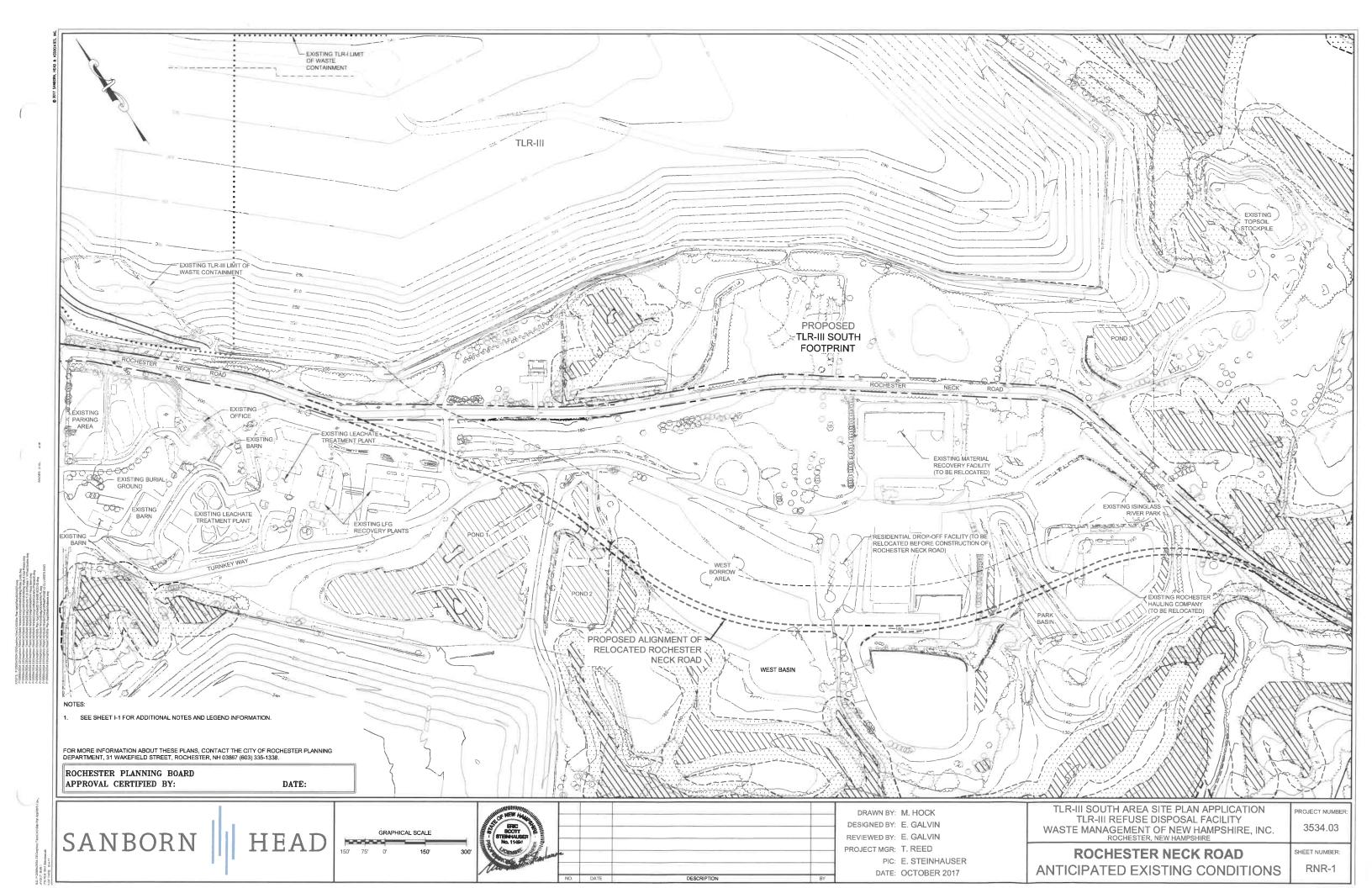
DATE: OCTOBER 2017

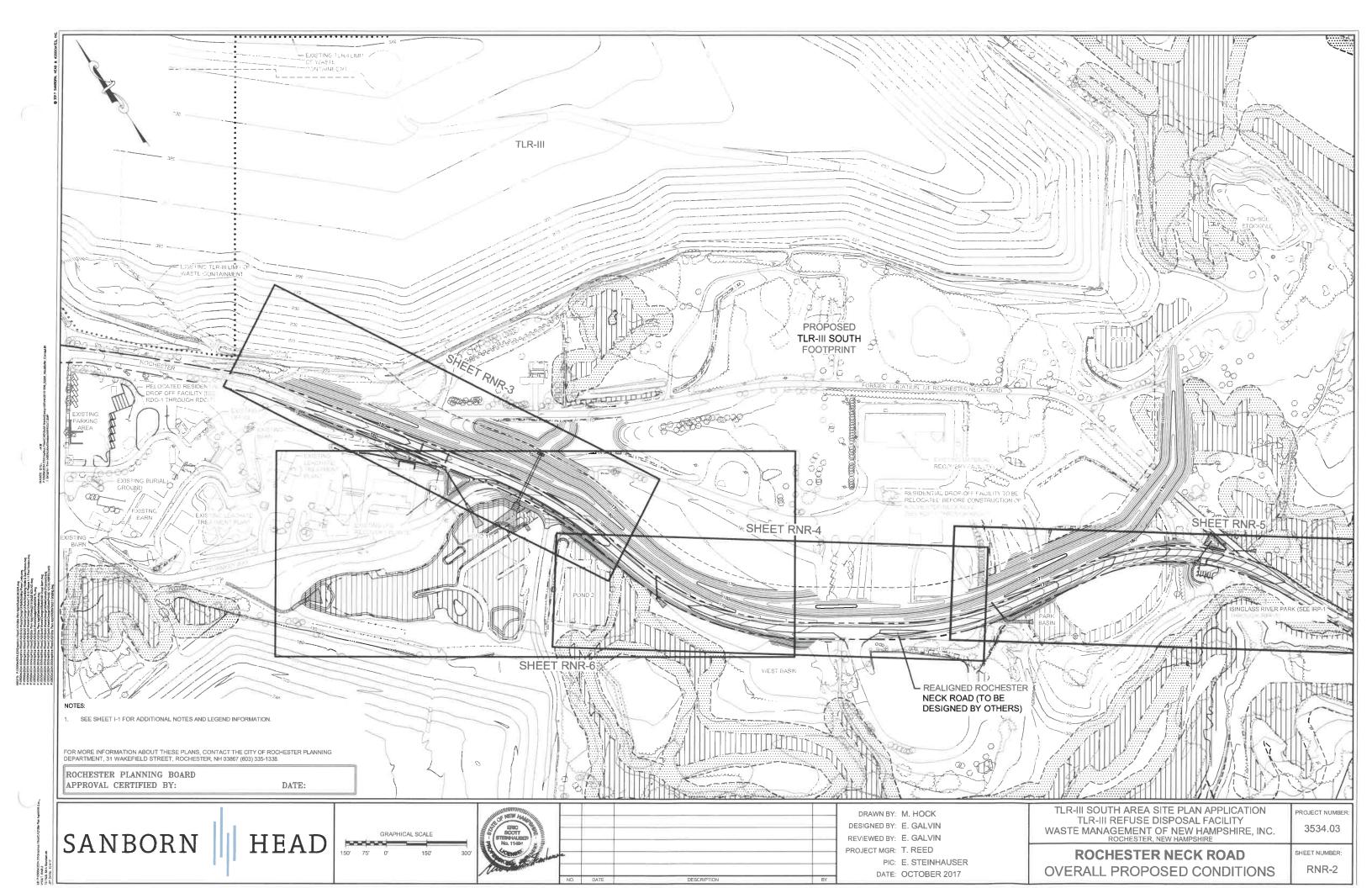
RESIDENTIAL DROP-OFF

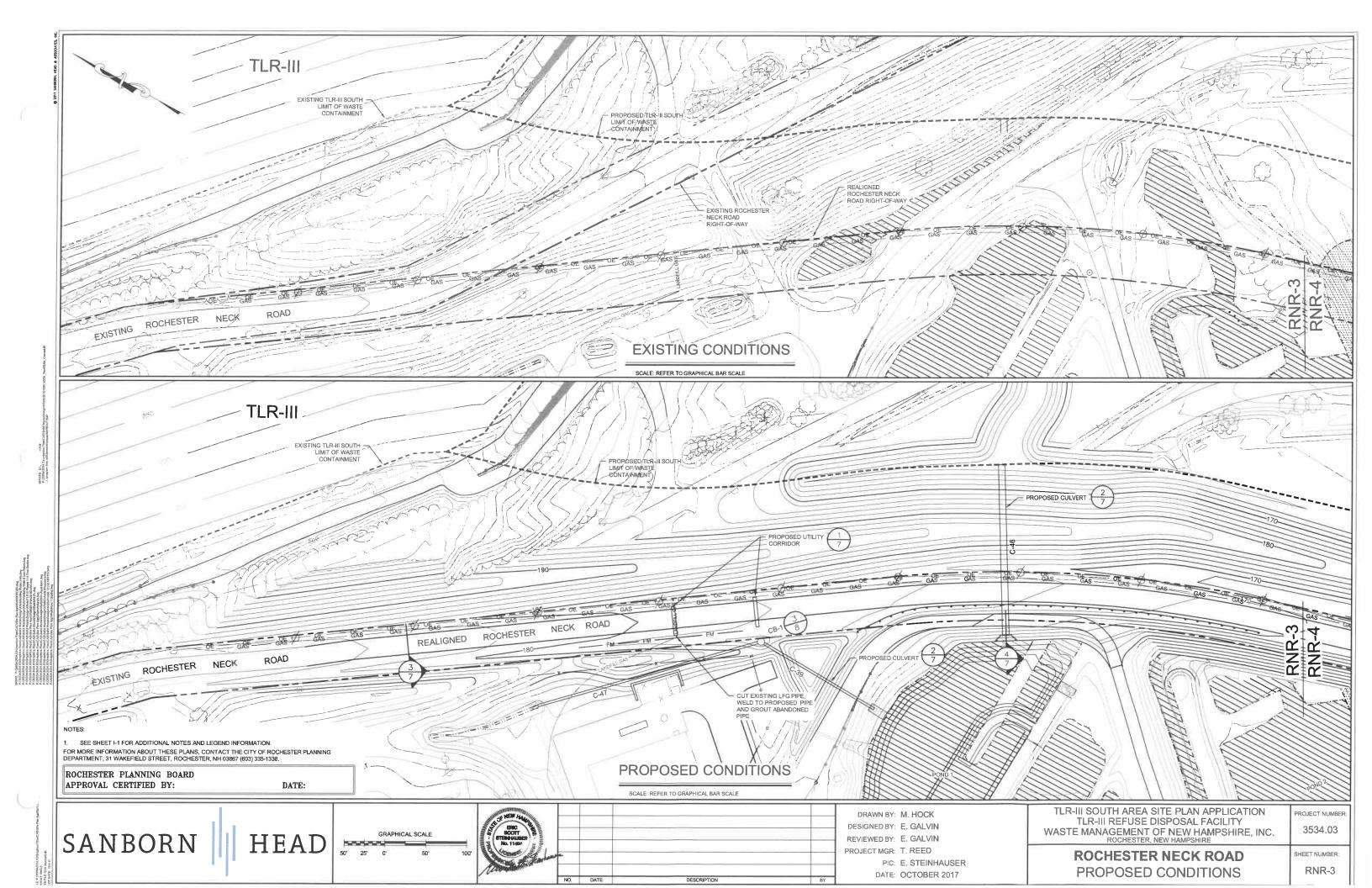
DETAILS

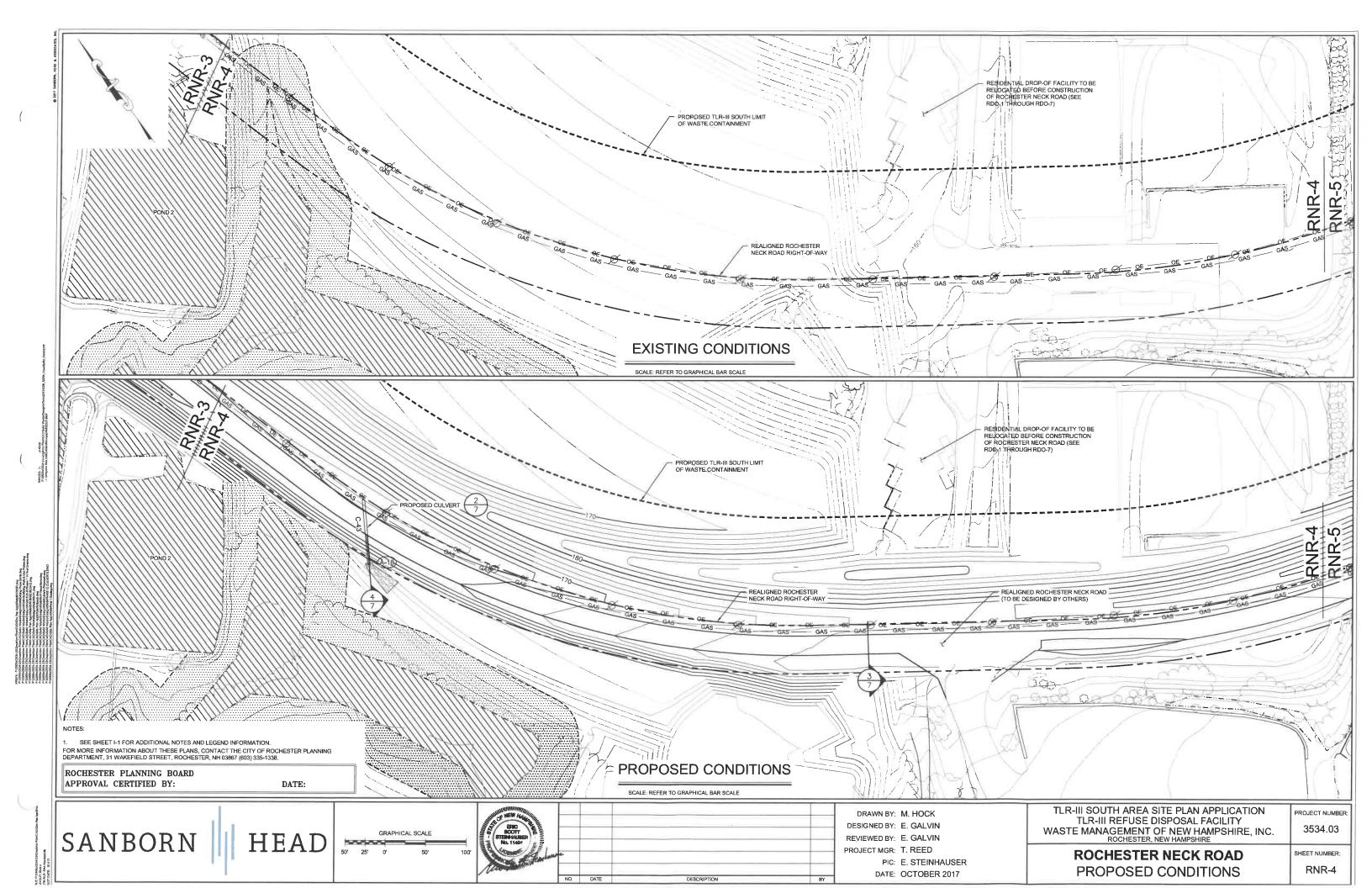
SHEET NUMBER:

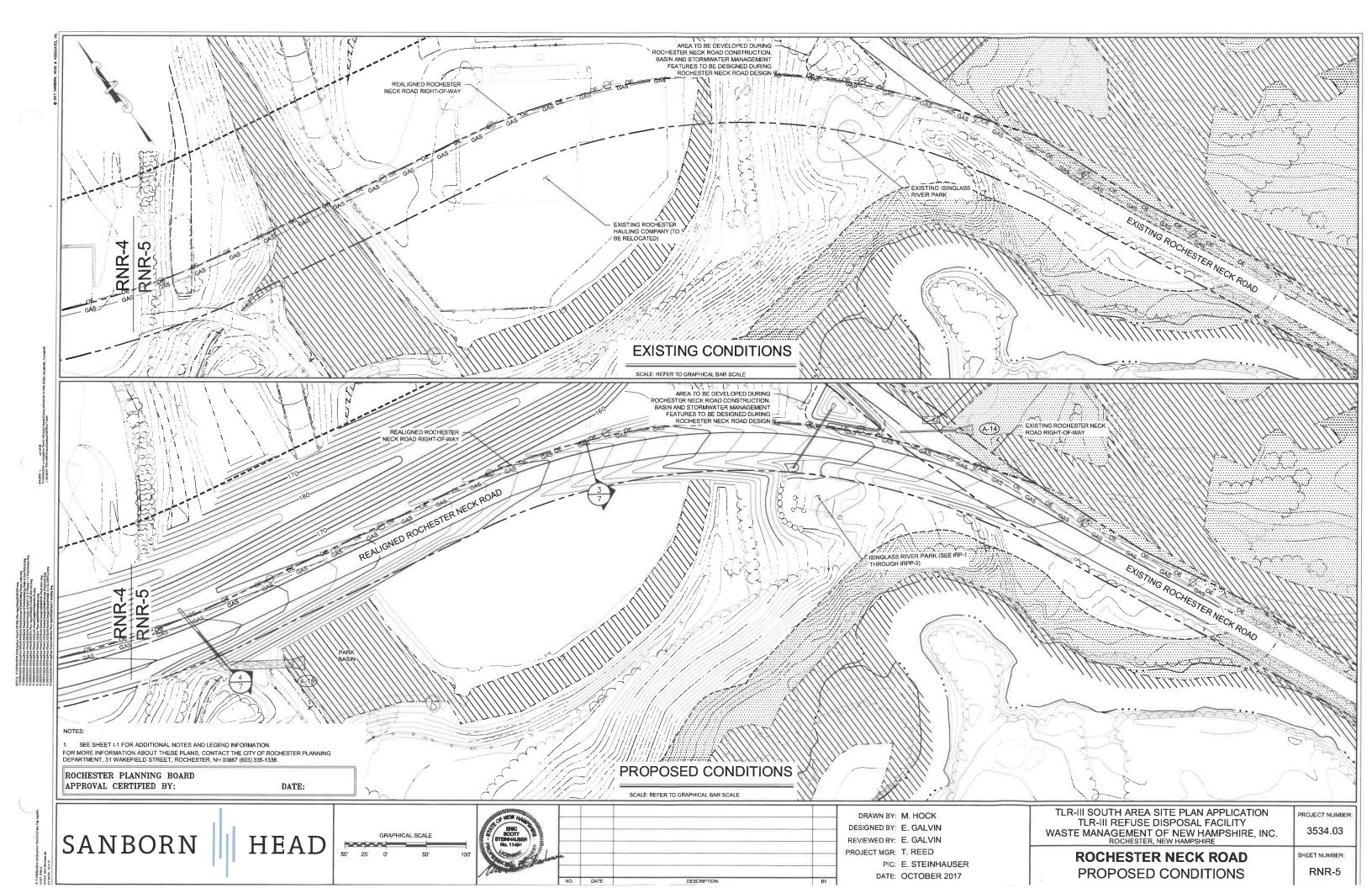
RDO - 9

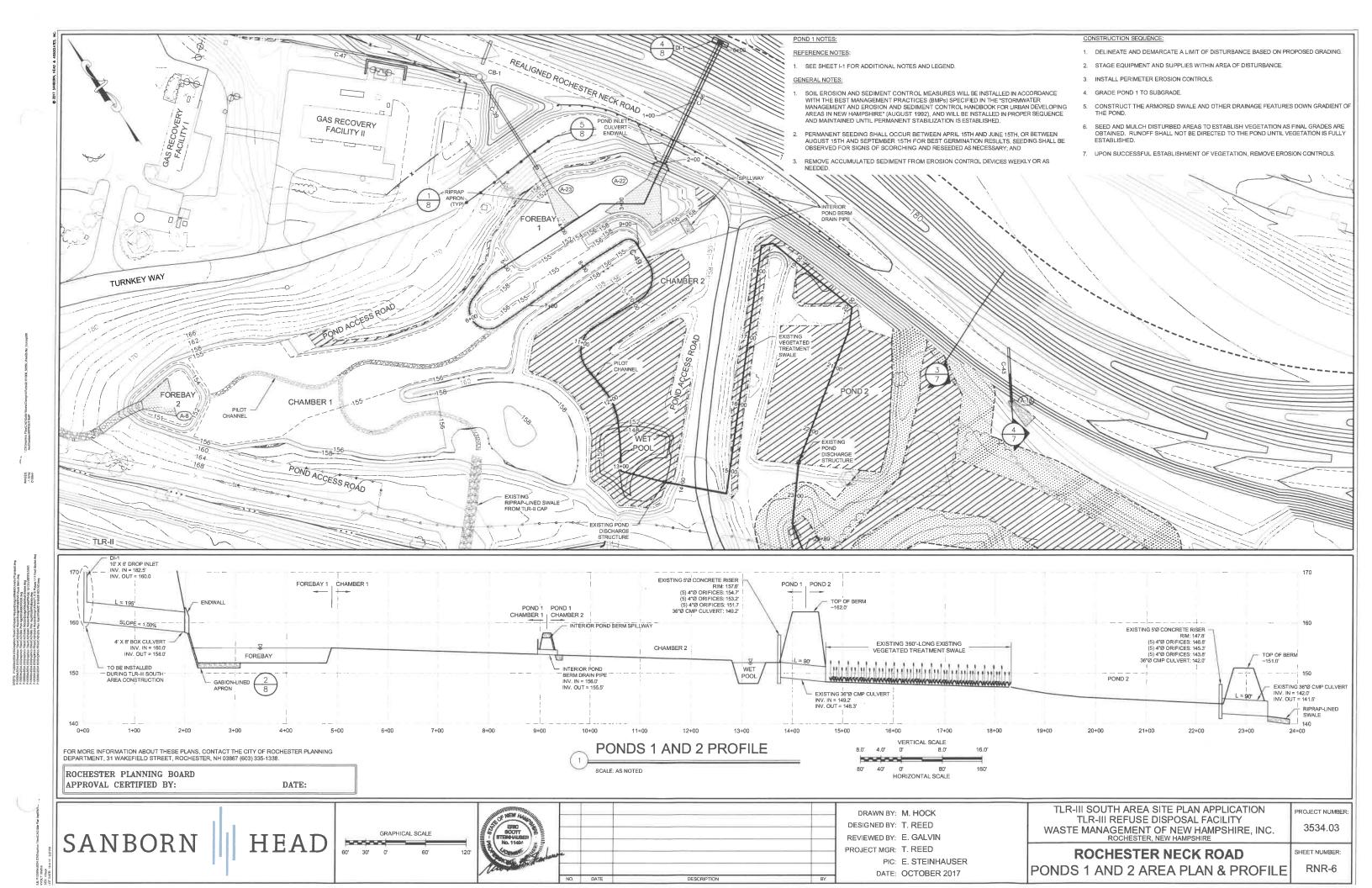


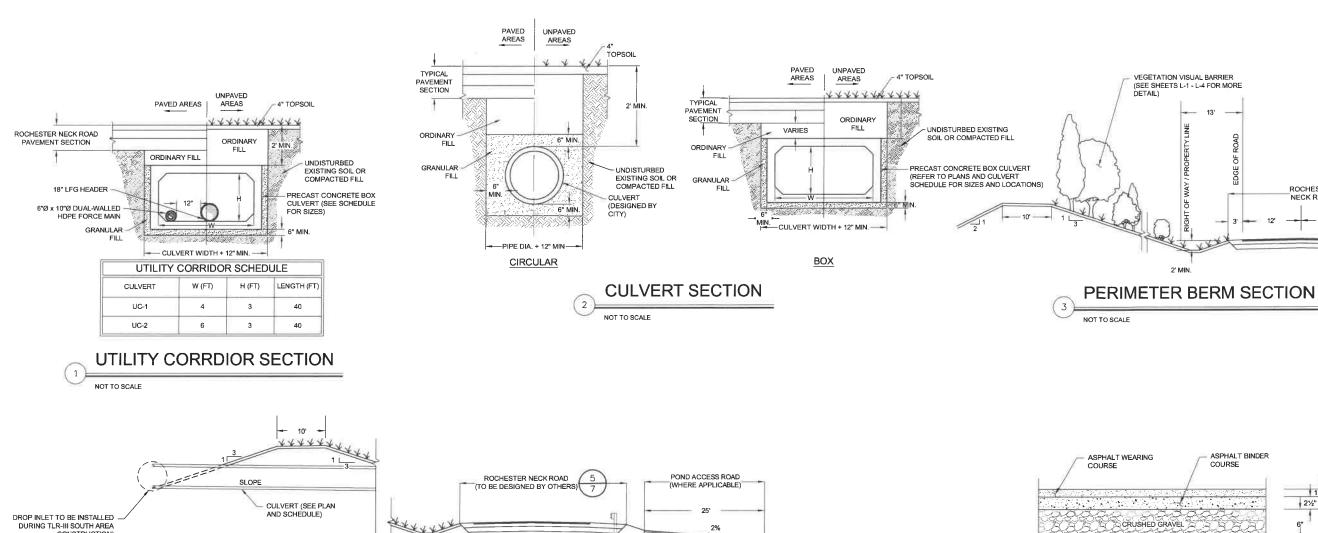


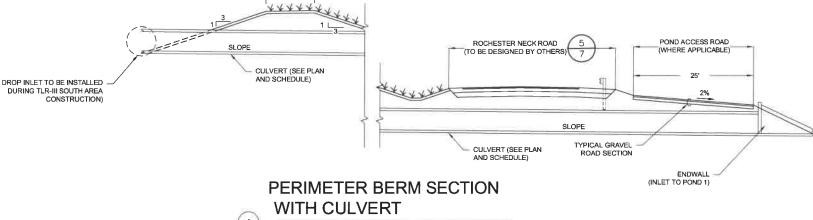




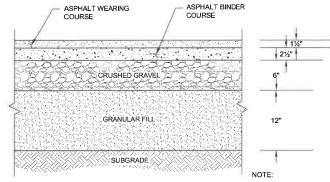








SCALE AS NOTED



PAVEMENT SECTION

NOT TO SCALE

PIC: E. STEINHAUSER

DATE: OCTOBER 2017

ACTUAL SUBBASE AND PAVEMENT LAYER THICKNESS WILL BE CONFIRMED BASED ON CORE SAMPLES TAKEN FROM EXISTING ROAD PRIOR TO CONSTRUCTION.

1. SEE SHEET I-1 FOR ADDITIONAL NOTES AND LEGEND INFORMATION.

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

NOT TO SCALE

SANBORN HEAD

PROJECT MGR: T. REED NO. DATE

TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY DRAWN BY: M. HOCK DESIGNED BY: E. GALVIN WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE REVIEWED BY: E. GALVIN

ROCHESTER NECK ROAD

ROCHESTER

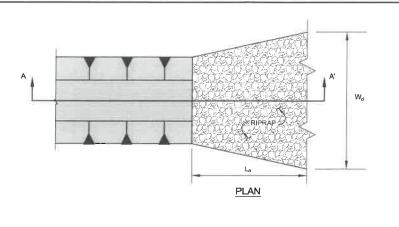
NECK ROAD

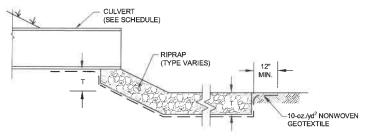
SHEET NUMBER: RNR-7

PROJECT NUMBER

3534.03

DETAILS





SECTION A-A' - PROFILE

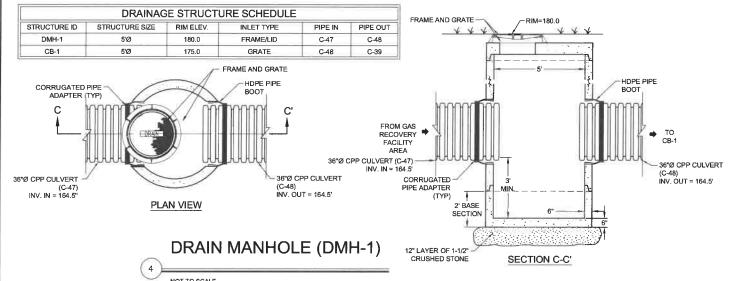
RIPRAP APRON

RIPRAP IN APRON AREAS RIPRAP GARION 3' MIN GABION GABION **GABION-LINED APRON** NOT TO SCALE

- GABION BASKETS SHALL BE 12 INCHES HIGH BY 3 FEET WIDE BY 6 FEET LONG. THE STONE SIZE SHALL MEET THE REQUIREMENTS OF TYPE I RIPRAP.
- 2. REFER TO THE APRON SCHEDULE FOR DIMENSIONS AND TYPE OF RIPRAP

		APRON SCHEDU	JLE			
APRON	CULVERT	DESCRIPTION	La (FT)	W _d (FT)	T (FT)	RIPRAP TYPE
A-8	-	INLET TO POND 1	46	58	N/A	GABION
A-14	C-42	CULVERT UNDER ABANDONED RNR	21	13	12"	1
A-16	C-40	INLET TO PARK BASIN	15	9	12"	1
A-18	C-43	CULVERT UNDER ROAD LEADING TO WEST BASIN	34	CW	18"	II
A-22	C-46	INLET TO POND 1	70	94	N/A	GABION
A-23	C-39	INLET TO POND 1	58	32	N/A	GABION

CW = CHANNEL WIDTH RNR = ROCHESTER NECK ROAD



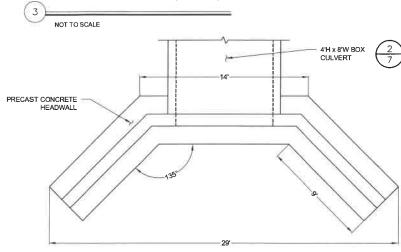
CULVERT SCHEDULE INV. OUT (FT) DIAMETER LENGTH CULVERT DESCRIPTION INLET END OUTLET END (FT/FT) C-39 161 TO POND 1 0.01 CB-1 GABION 163.0 161.3 TO PARK BASIN CPP FES 168.0 C-42 FORMER ROCHESTER NECK ROAD (RNR) CPP 0.01 PROJ. PROJ. 131.5 130.9 C-43 164.0 C-46 195 BOX 48 x 96 **ENDWL** C-47 GAS RECOVERY FACILITY CPP 36 280 0.01 PROJ. CB-1 165.9 163.0

CATCH BASIN (CB-1)

(C-39) INV. OUT = 163.0'

36"Ø CPP CULVERT

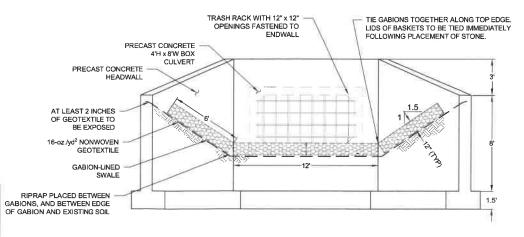
(C-48) INV. IN = 163.0'



ROUND BALLAST

PIPE ADAPTER (TYP)

PLAN VIEW



ELEVATION VIEW

POND INLET CULVERT ENDWALL

NOT TO SCALE

SANBORN

DRAWN BY: M. HOCK DESIGNED BY: E. GALVIN REVIEWED BY: E. GALVIN PROJECT MGR: T. REED

FRAME AND GRATE

ROUND BALLAST SCREEN

CORRUGATED PIPE ADAPTER (TYP)

36"Ø CPP CULVERT

DATE: OCTOBER 2017

TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE

ROCHESTER NECK ROAD

PROJECT NUMBER

3534.03

RNR-8

1. SEE SHEET I-1 FOR ADDITIONAL NOTES AND LEGEND INFORMATION

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

SCALE AS NOTED

PIC: E. STEINHAUSER

DETAILS

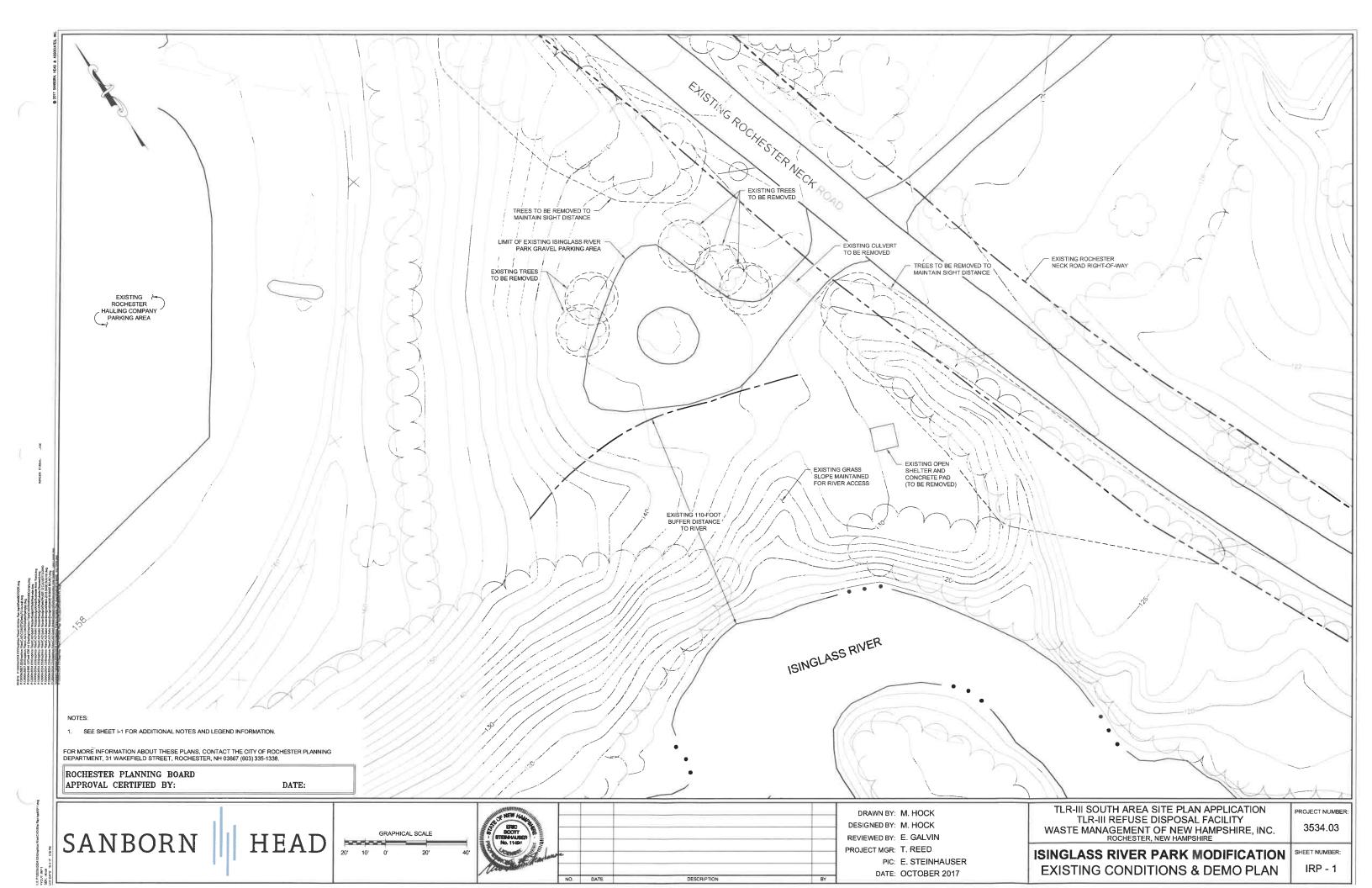
12' TYPE I RIPRAF

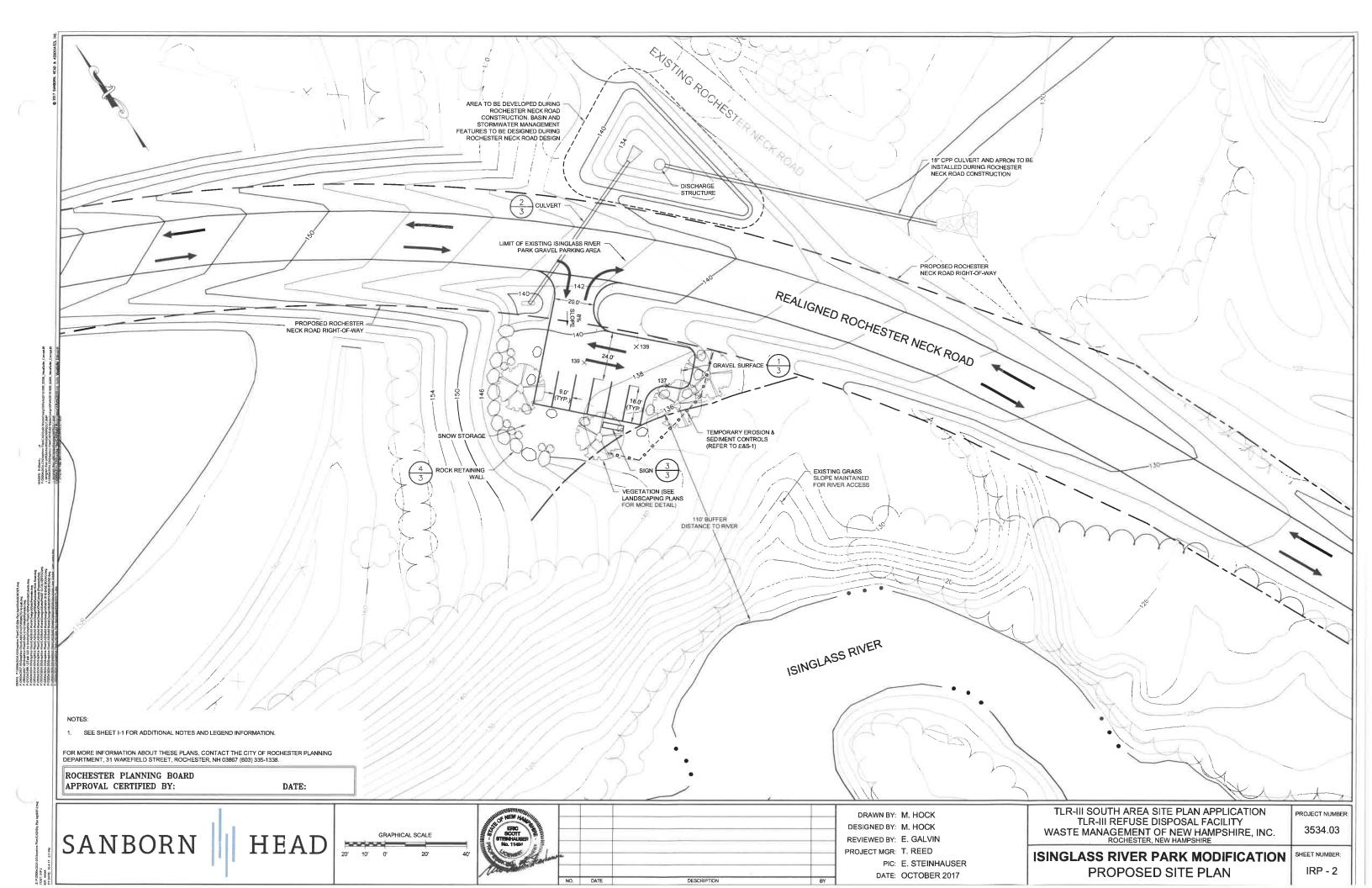
GEOTÉXTILE

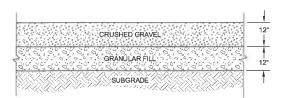
BOOT

POND 1

- 36"Ø CPP CULVERT

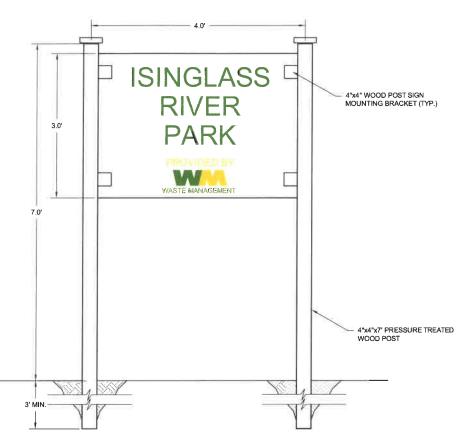






GRAVEL SURFACE SECTION

NOT TO SCAL



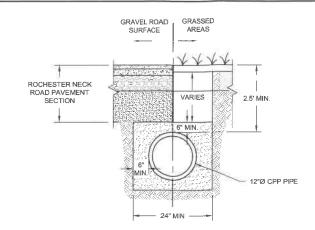
ISINGLASS RIVER PARK SIGN

SCALE AS NOTED

NOT TO SCALE

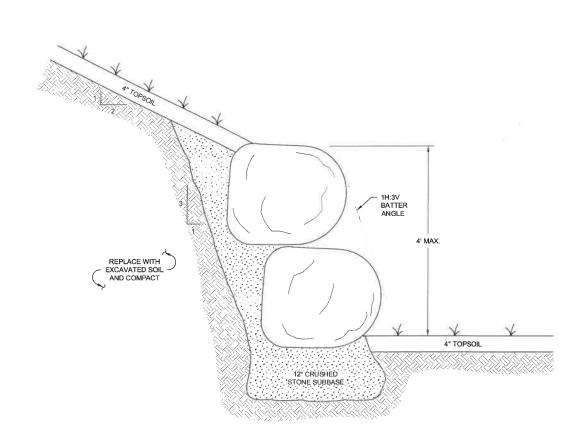
NOTE:

NEW SIGN TO BE PROVIDED AT PROPOSED LOCATION.



CULVERT SECTION

NOT TO SCALE



ROCK RETAINING WALL

NOT TO SCALE

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

DATE:

SANBORN | HEAD

NO. DATE DESCRIPTION BY

DRAWN BY: M. HOCK

DESIGNED BY: E. GALVIN
REVIEWED BY: E. GALVIN

PROJECT MGR: T. REED

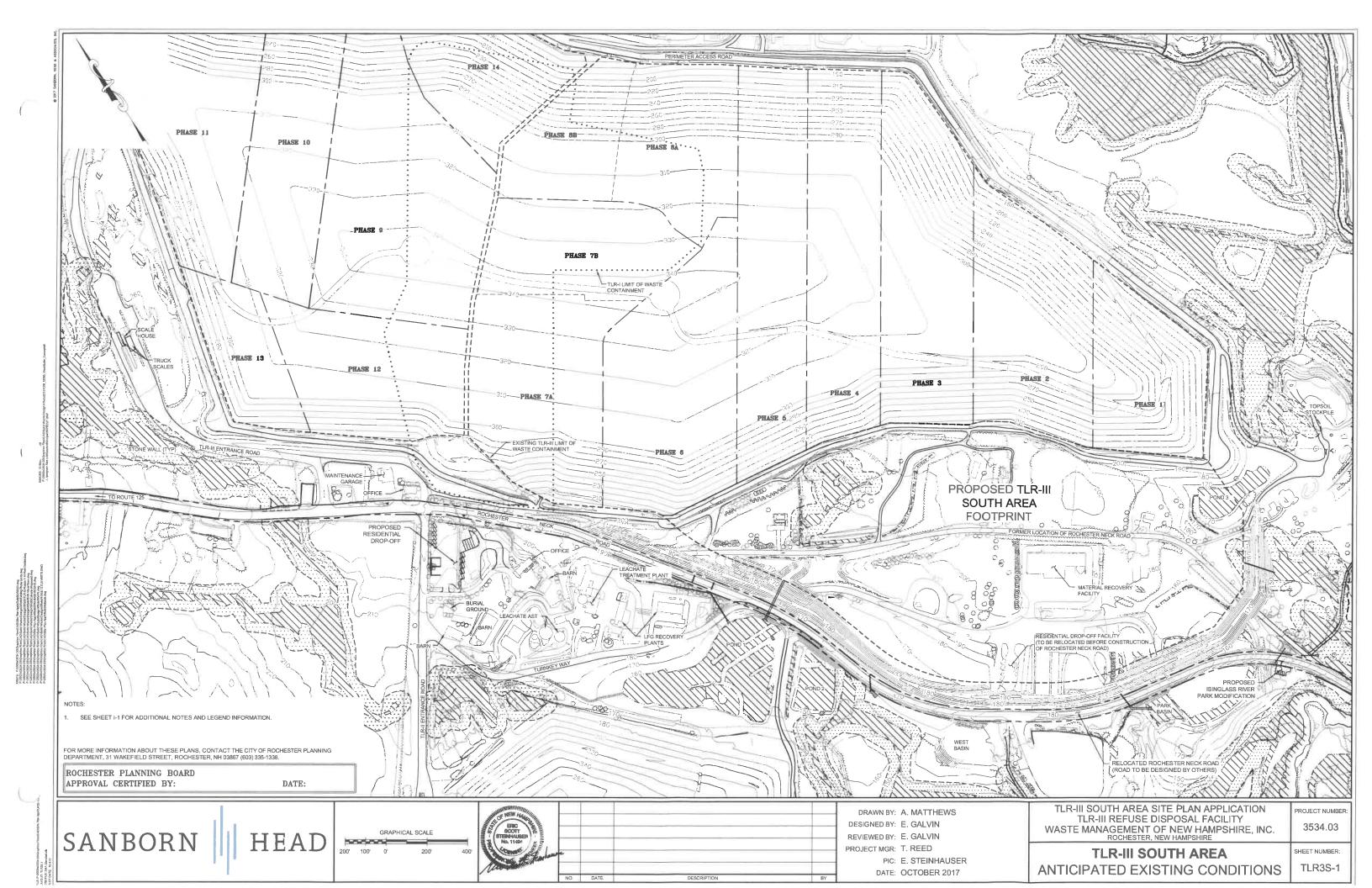
PIC: E. STEINHAUSER DATE: OCTOBER 2017 TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE

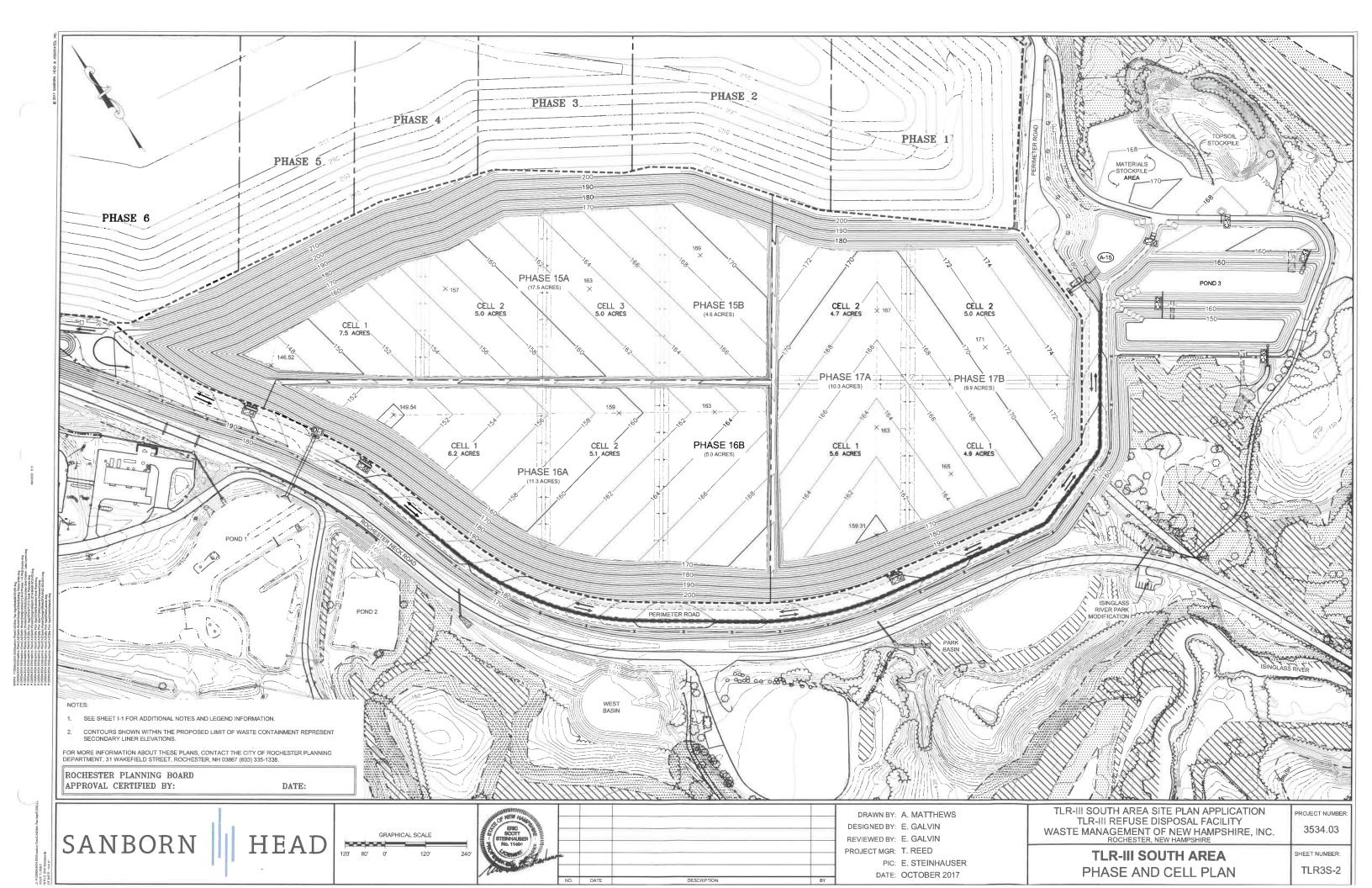
ISINGLASS RIVER PARK MODIFICATION SHEET NO

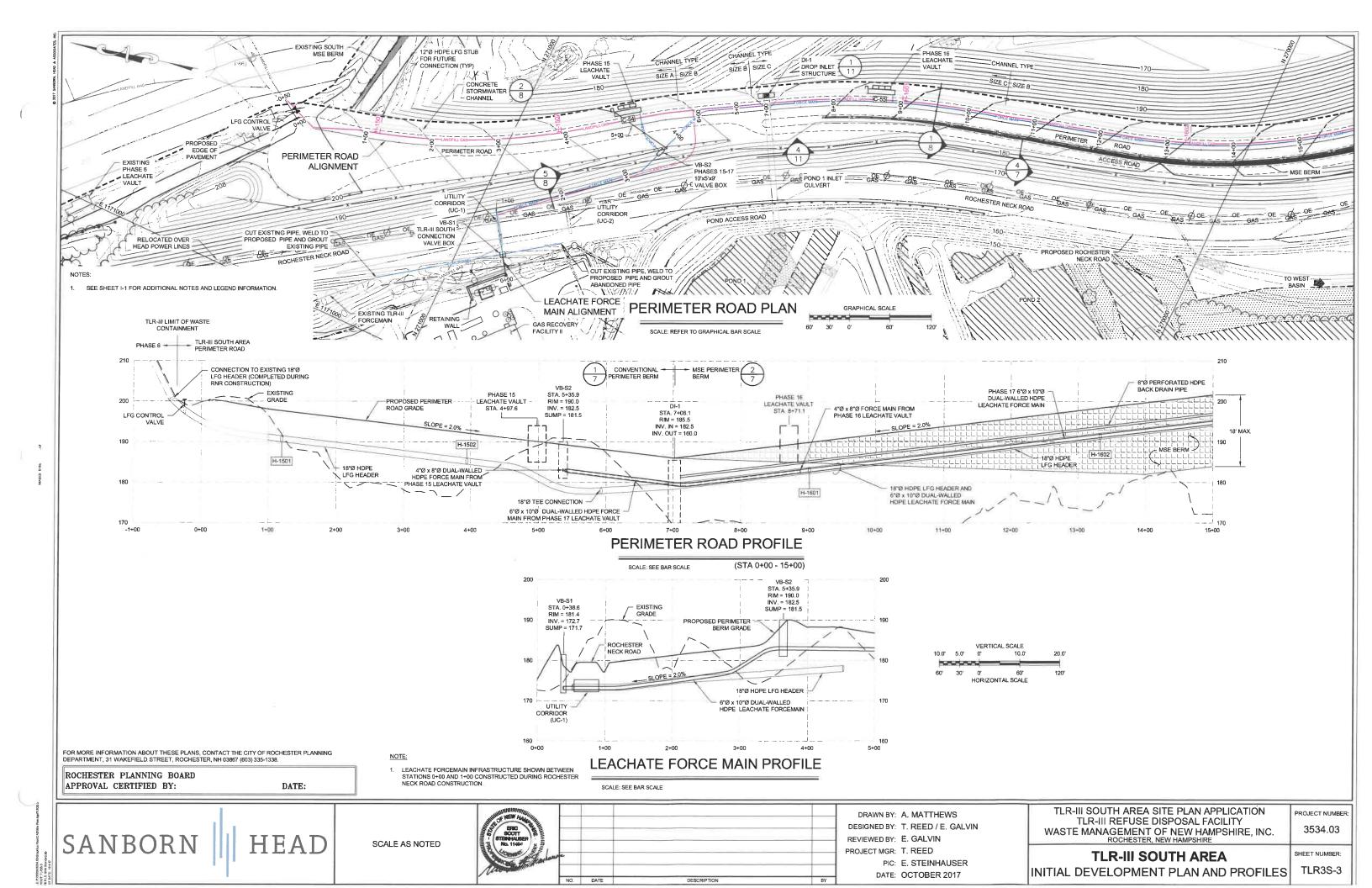
IRP - 3

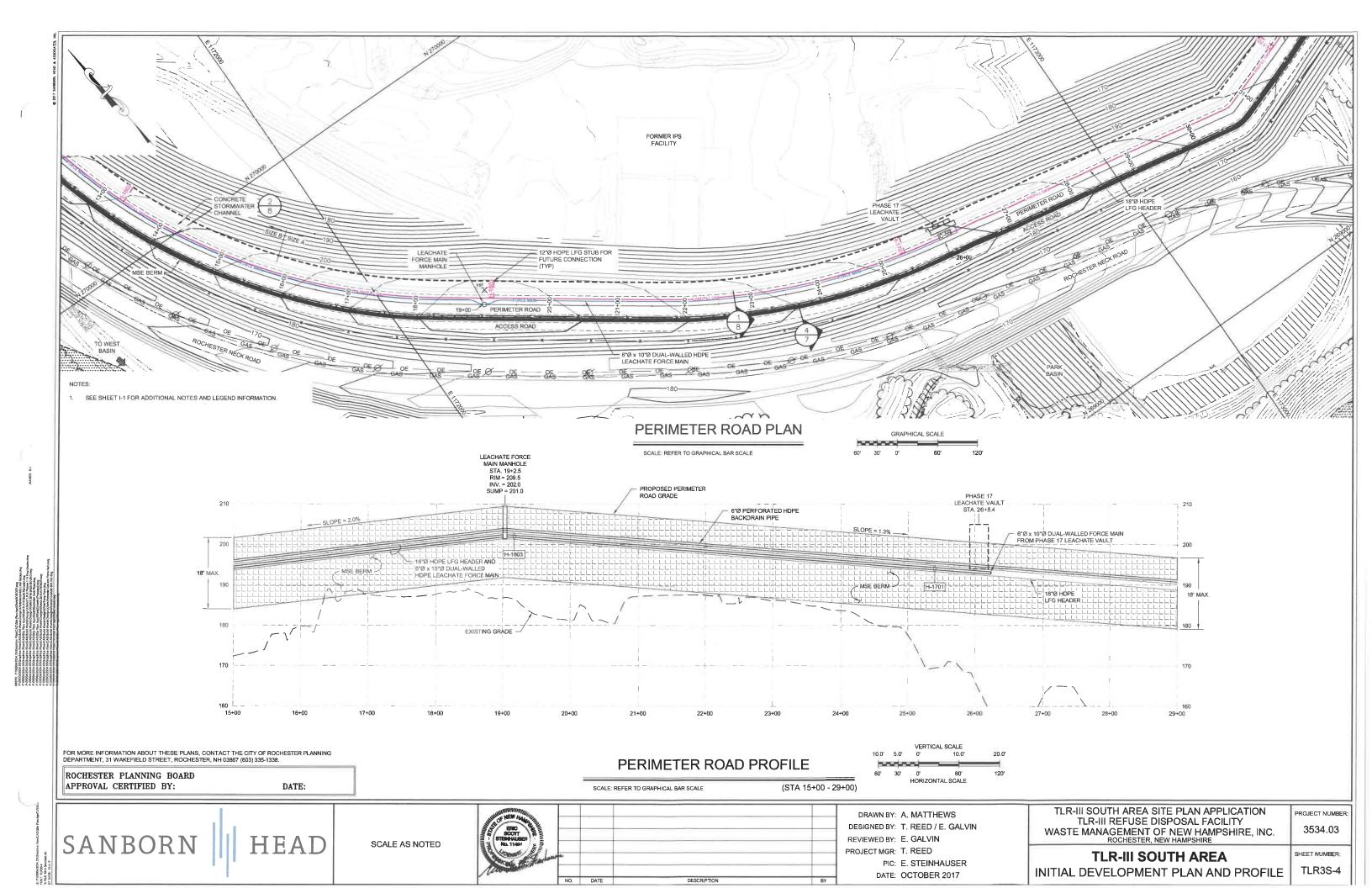
3534.03

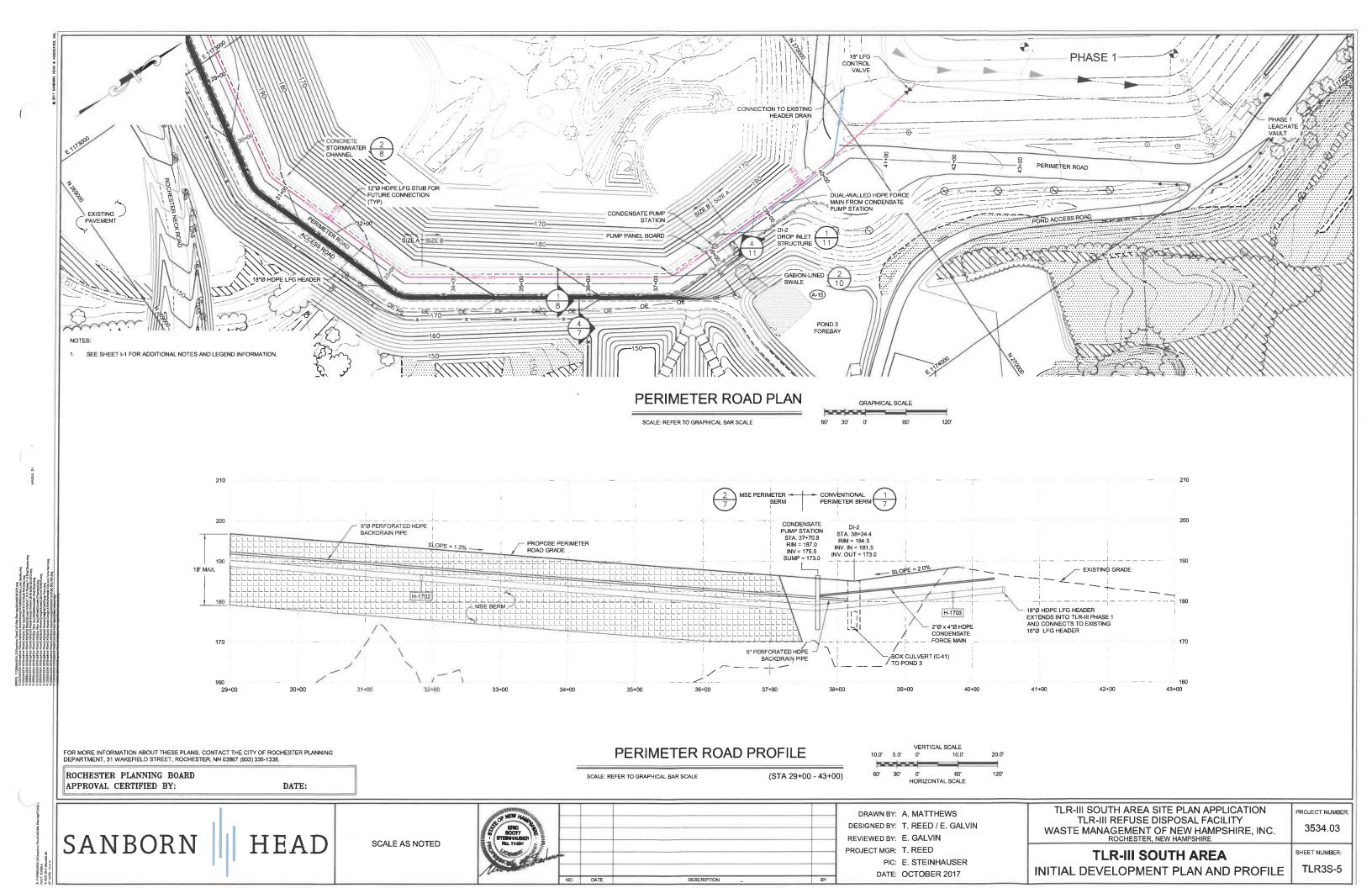
DETAILS IRP - 3

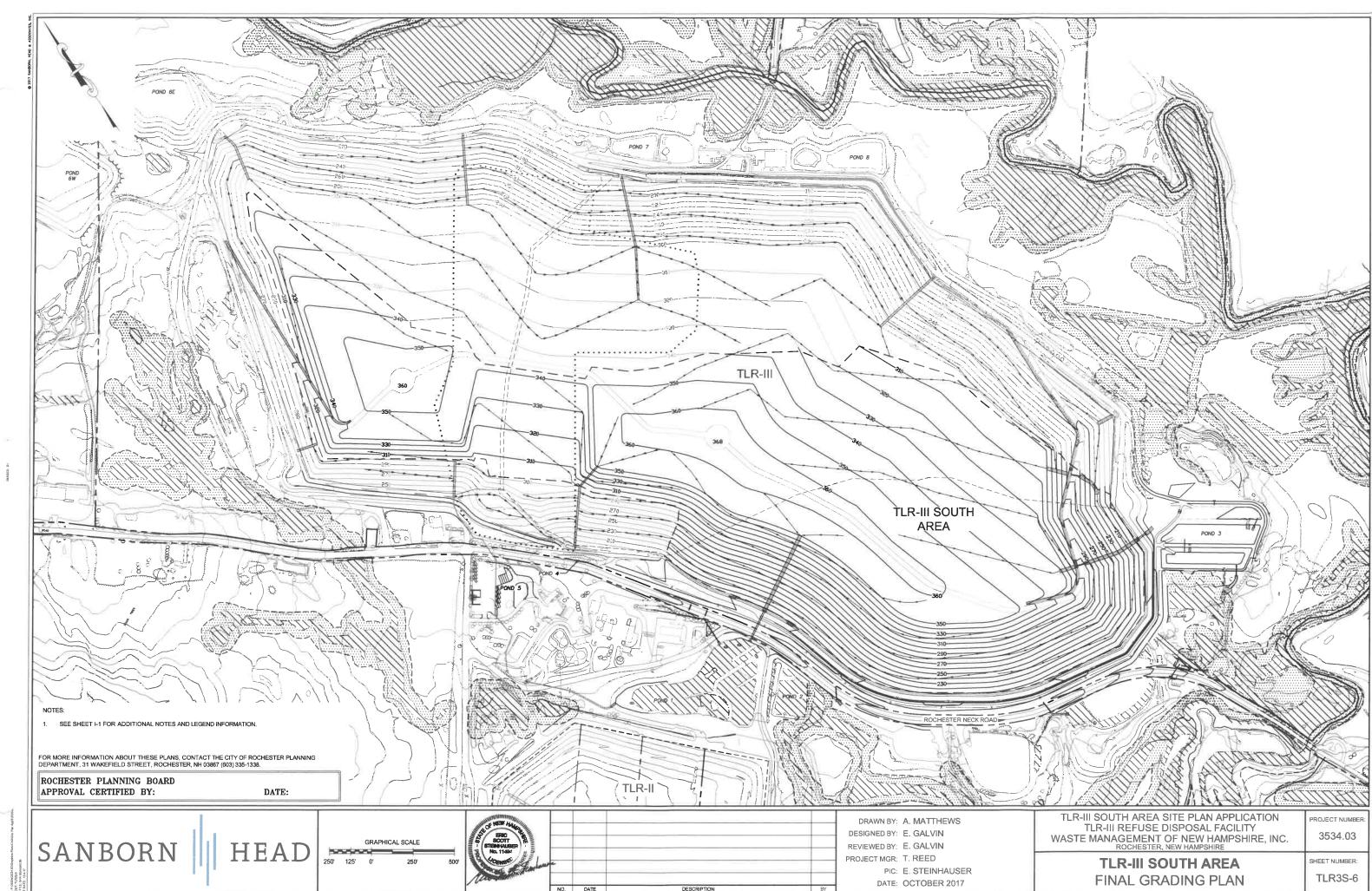


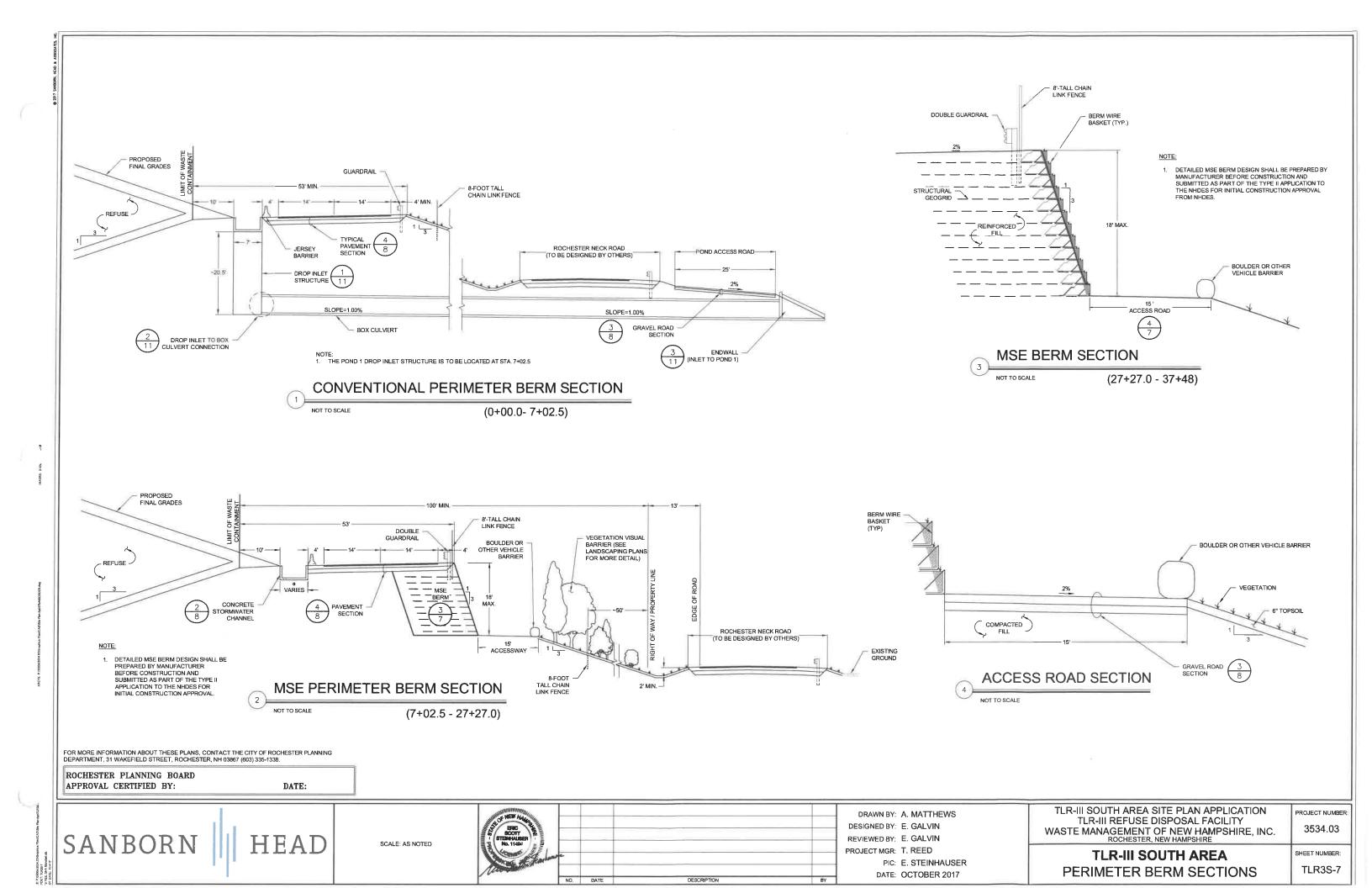


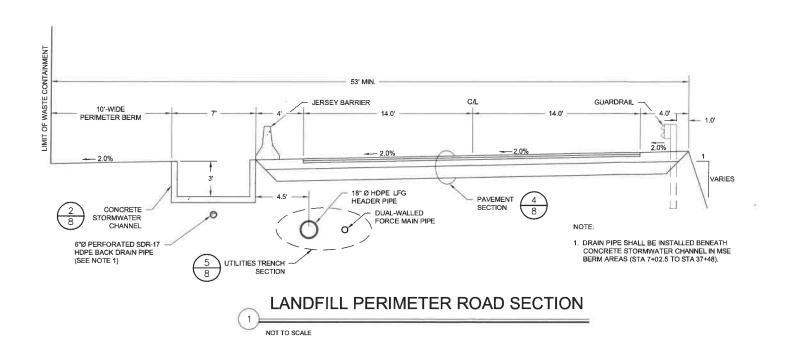


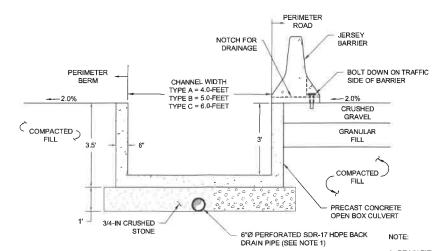








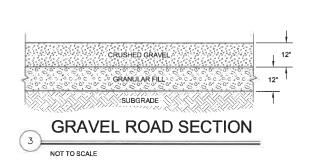




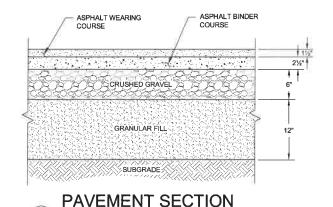
SECTION VIEW

 DRAIN PIPE SHALL BE INSTALLED BENEATH CONCRETE STORMWATER CHANNEL IN MSE BERM AREAS (STA 7+02.5 TO STA 37+48).

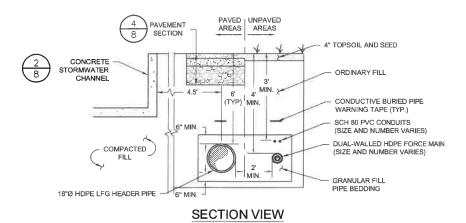
CONCRETE STORMWATER CHANNEL



SCALE: AS NOTED



NOT TO SCALE



UTILITIES TRENCH NOT TO SCALE

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

SANBORN HEAD



DRAWN BY: A. MATTHEWS DESIGNED BY: E. GALVIN REVIEWED BY: E. GALVIN

PROJECT MGR: T. REED PIC: E. STEINHAUSER

DATE: OCTOBER 2017

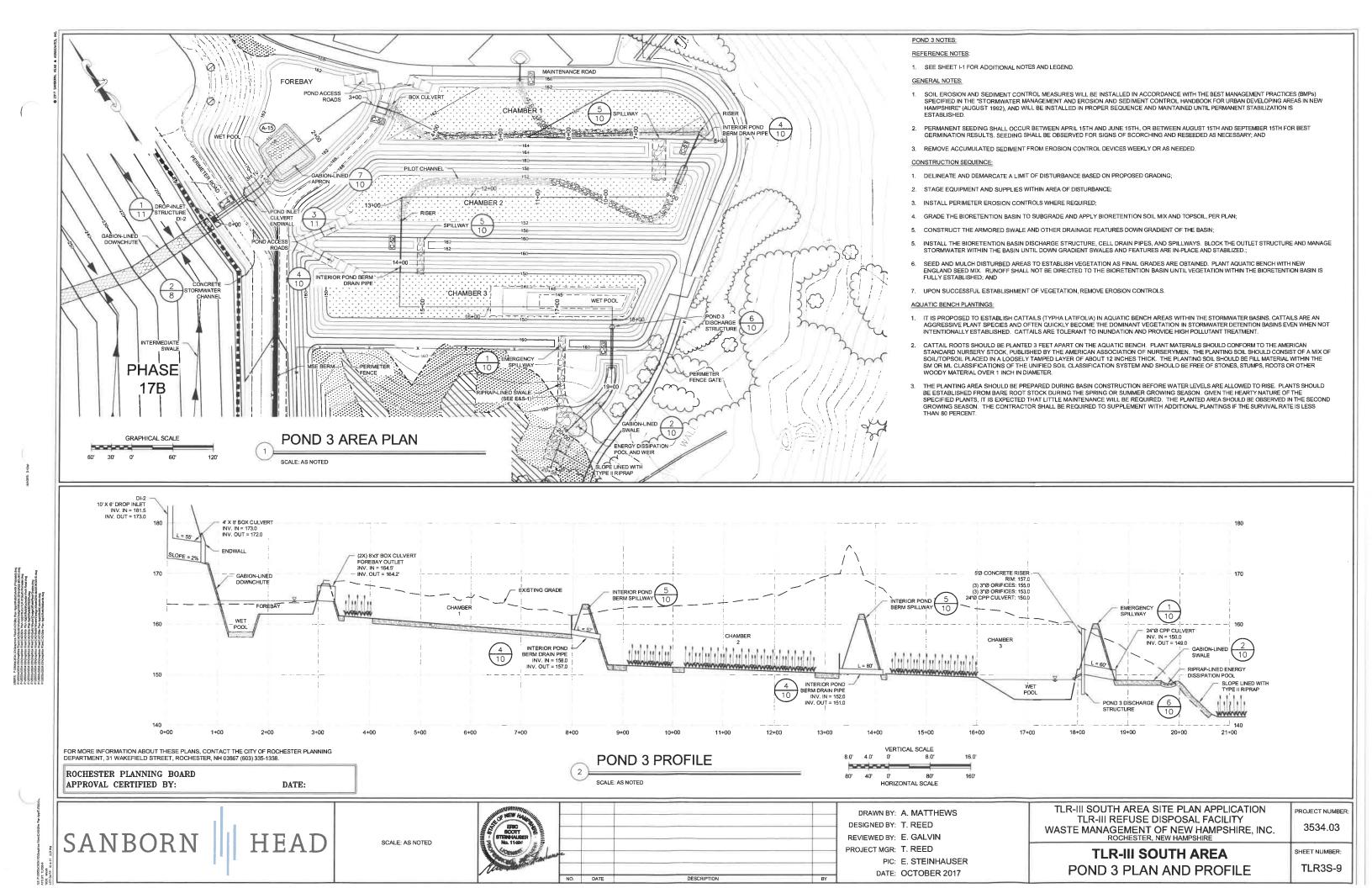
TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE

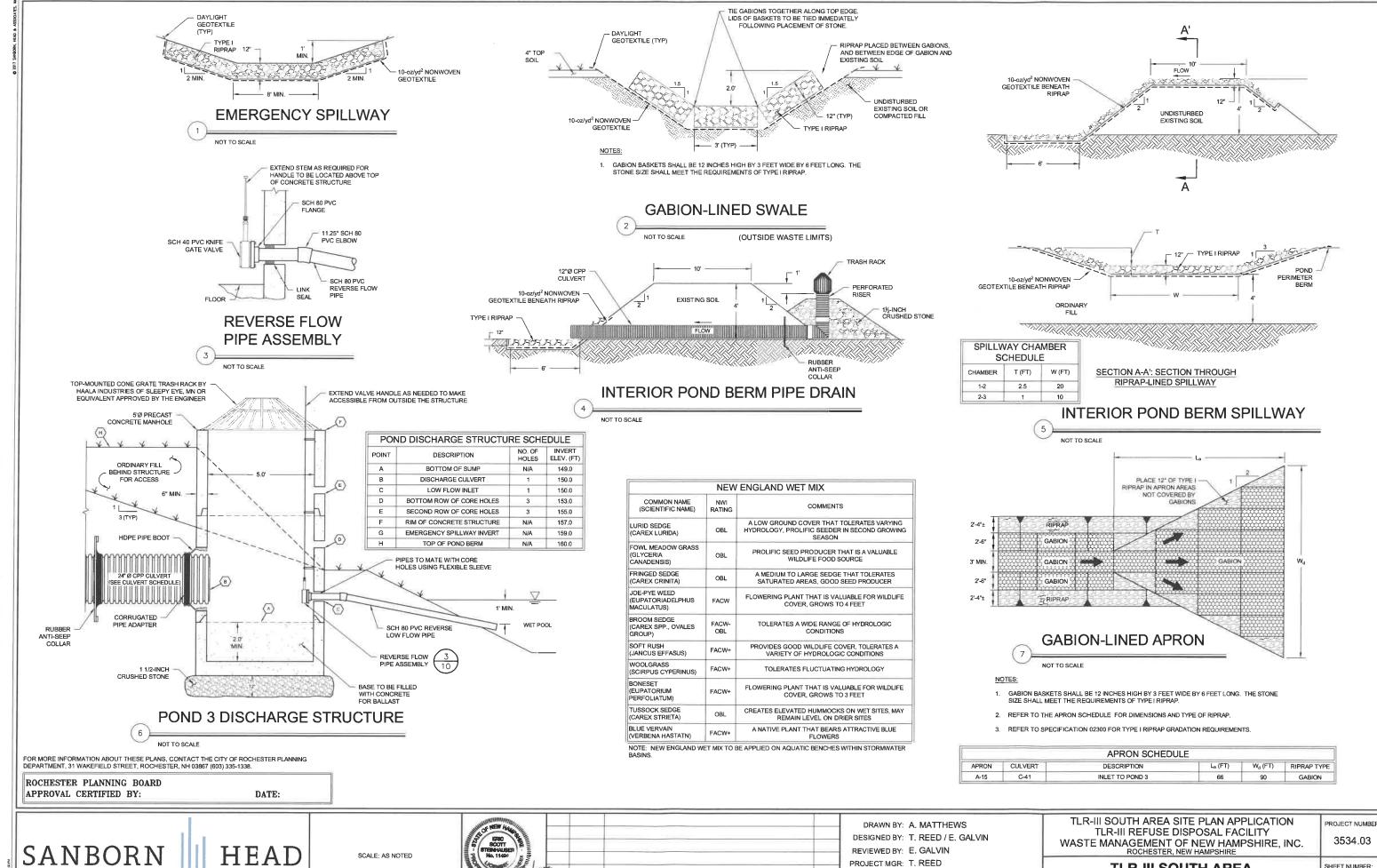
PERIMETER ROADWAY DETAILS

3534.03 SHEET NUMBER: **TLR-III SOUTH AREA**

TLR3S-8

PROJECT NUMBER





DATE

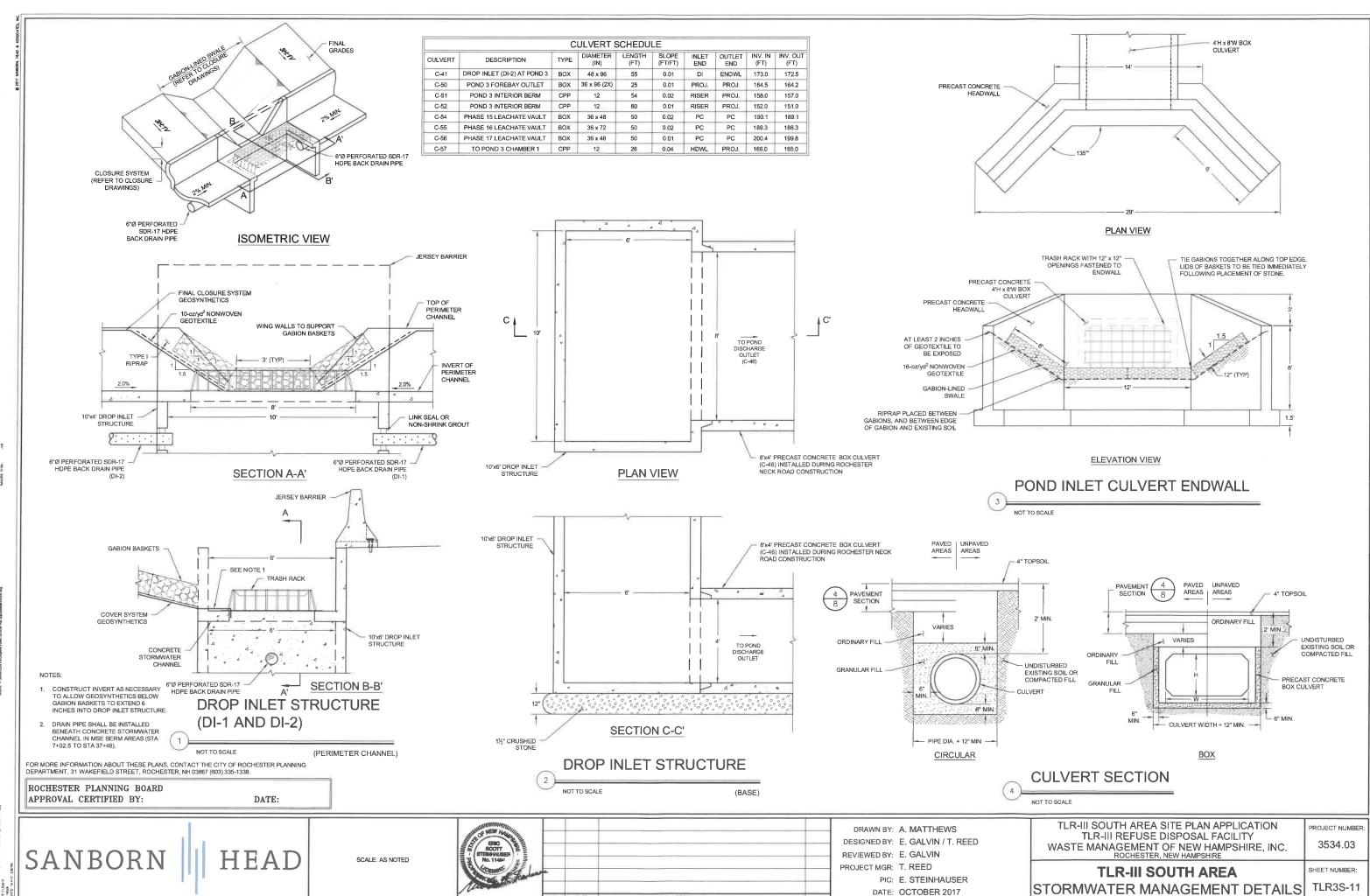
TLR-III SOUTH AREA

STORMWATER MANAGEMENT DETAILS

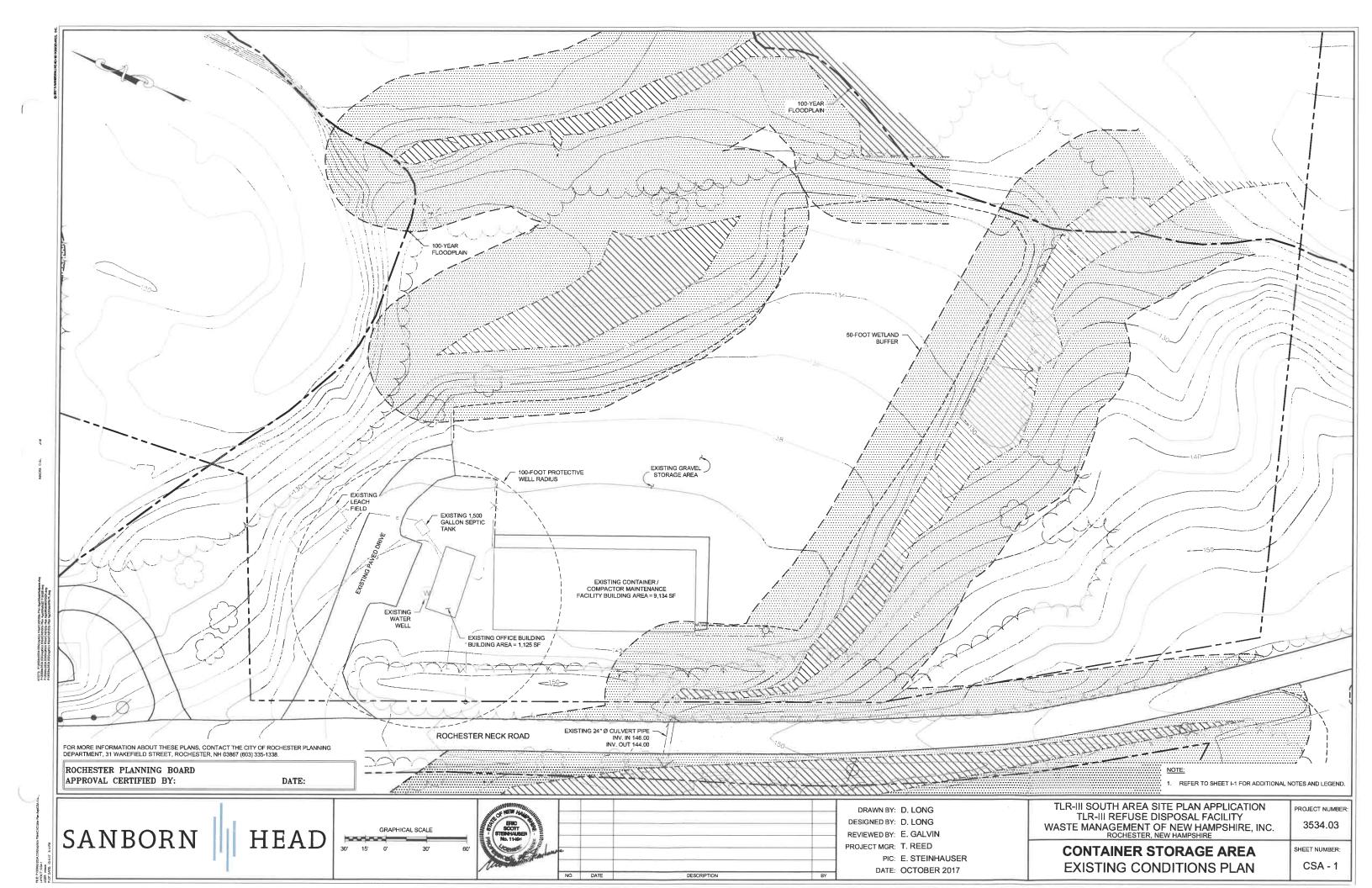
TLR3S-10

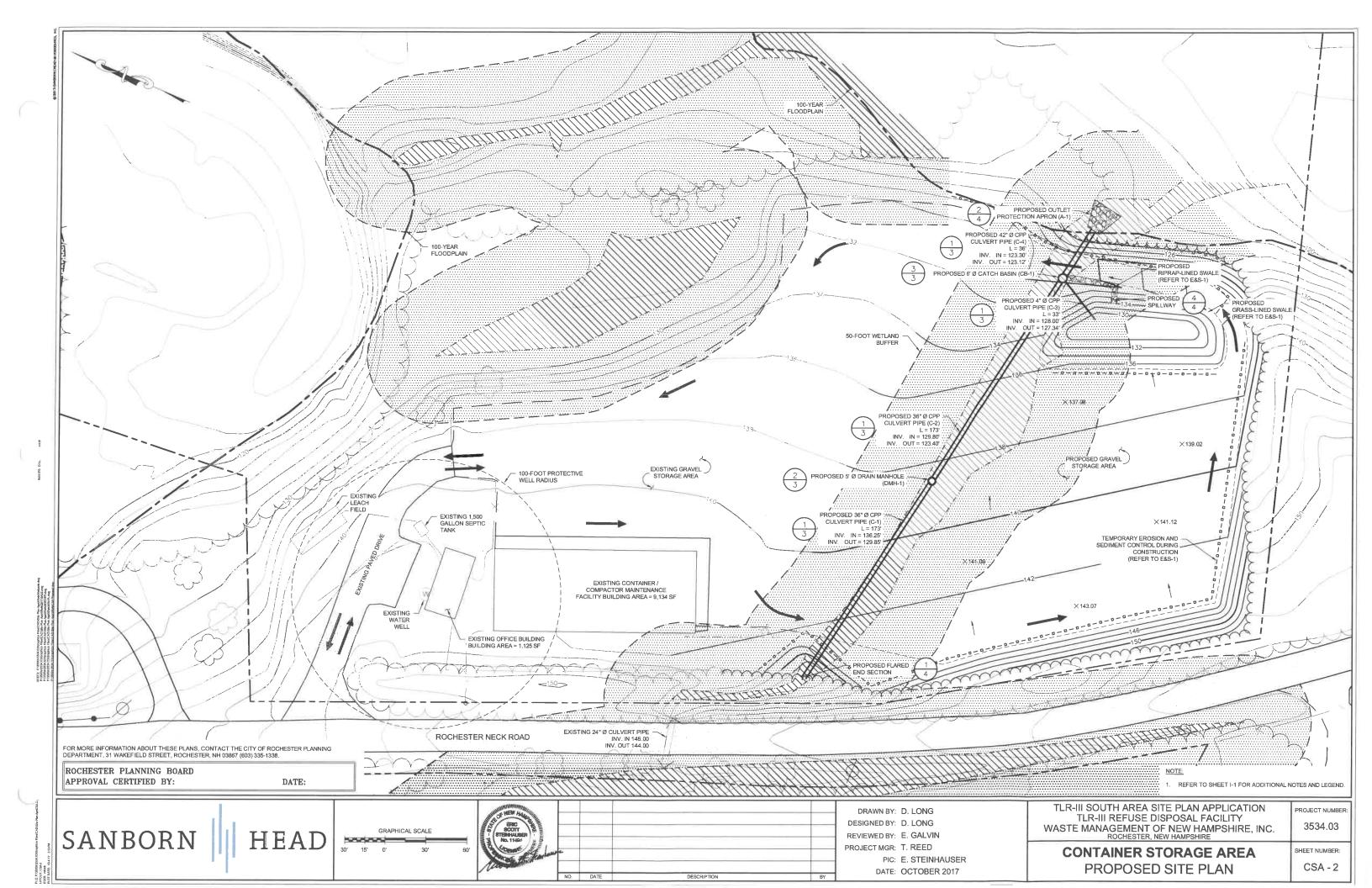
PIC: E. STEINHAUSER

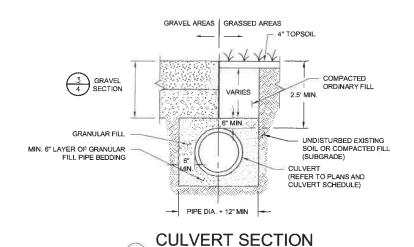
DATE: OCTOBER 2017



E. P. (9500)4(3594 (09)Graphics F







CULVERT SCHEDULE

CULVERT	TYPE	DIAMETER (IN)	LENGTH (FT)	SLOPE (FT/FT)	INLET END	OUTLET	INV. IN (FT)	INV. OUT (FT)
C-1	CPP	36	173	0.0371	FES	DMH-1	136.25	129.85
C-2	CPP	36	173	0.0371	DMH-1	CB-1	129.80	123.40
C-3	CPP	48	33	0.0200	PROJ	CB-1	128.00	127.34
C-4	CPP	42	36	0.0050	CB-1	PROJ	123.30	123.12

- THE PROPOSED INVERTIGEVATIONS SHOWN IN THE SCHEDULE ABOVE REPRESENT DESIGN ELEVATIONS THAT ARE BASED ON DESIGN OR EXISTING SWALE INVERT ELEVATIONS INTERPOLATED FROM AERIAL TOPOGRAPHY. THE INTENT IS THAT THE CULVERTS WILL BE INSTALLED WITH THE PROPOSED SLOPE AND ELEVATIONS AT THE INVERTS OF CORRESPONDING EXISTING SWALES OR CHANNELS. IF THE ACTUAL SWALE INVERT ELEVATIONS DIFFER SIGNIFICANTY DURING INSTALLATION FROM THOSE INDICATED, OBTAIN APPROVAL FROM ENGINEER PRIOR TO BACKFILLING OVER THE PIPES, GRADES SHALL BE CONFIRMED FOR SHOP DRAWING APPROVAL BY
- 2. THE LIST BELOW CONTAINS ABBREVIATIONS SHOWN SPECIFICALLY IN THIS SCHEDULE.

CB=CATCH BASIN
CPP = CORRUGATED POLYETHYLENE PIPE

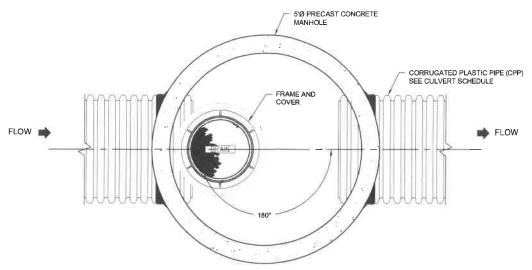
PROJ = PROJECTING

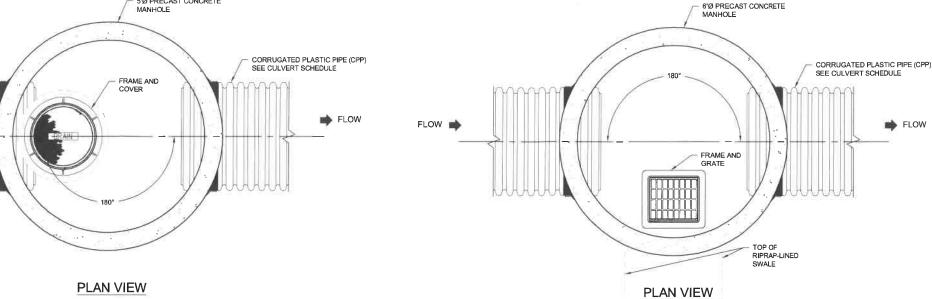
FES = FLARED END SECTION DMH = DRAIN MANHOLE

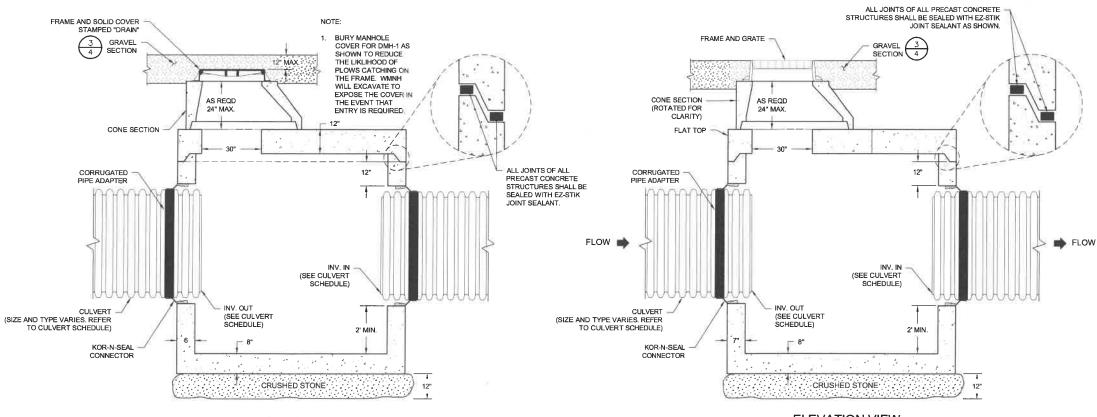
DRAINAGE STRUCTURE SCHEDULE

	STRUCTURE	SIZE	RIM ELEV.	INLET	OUTLET
Ī	CB-1	6'Ø	129.15	C-2/C-3/SWALE	C-4
Ī	DMH-1	5'Ø	138.55	C-1	C-2

- PROVIDE FRAME AND SOLID COVER ON DRAIN MANHOLES AND FRAME AND GRATE ON CATCH BASINS. SEE DRAINAGE STRUCTURE PARTS LIST.
- WALL THICKNESSES SHOWN ARE FOR REFERENCE ONLY. ACTUAL WALL THICKNESSES SHALL BE DETERMINED BY THE PRECAST CONCRETE MANUFACTURER AT TIME OF CONSTRUCTION.







ELEVATION VIEW

DRAINAGE MANHOLE DMH-1

NOT TO SCALE

ELEVATION VIEW

CATCH BASIN CB-1

NOT TO SCALE

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

DATE:

SANBORN

SCALE: AS NOTED

NO. DATE

DRAWN BY: D. LONG DESIGNED BY: D. LONG REVIEWED BY: E. GALVIN

PROJECT MGR: T. REED PIC: E. STEINHAUSER

DATE: OCTOBER 2017

TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE

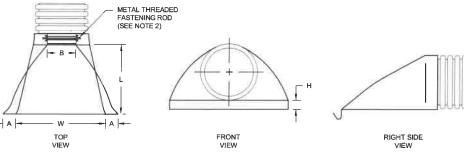
CONTAINER STORAGE AREA STORMWATER MANAGEMENT DETAILS

SHEET NUMBER: CSA - 3

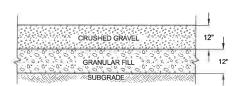
PROJECT NUMBER

3534.03

- THE INVERT OF THE PIPE AND THE END SECTION SHALL BE INSTALLED AT THE SAME
- METAL THREADED FASTENING ROD SHALL BE STAINLESS STEEL.

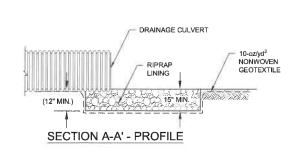


FLARED END SECTION





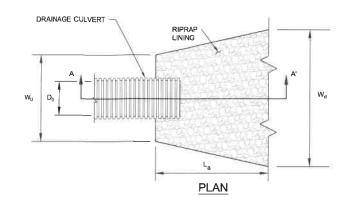
SCALE: AS NOTED



WHERE:

 $\begin{array}{l} D_0 = \text{CHANNEL DEPTH} \\ W_u = \text{UPGRADIENT APRON WIDTH} \\ L_u = \text{APRON LENGTH} \\ W_d = \text{DOWNGRADIENT APRON WIDTH} \\ d_{00} = \text{REQUIRED SIZE OF 50\% (BY WEIGHT) OF THE} \\ \text{RIPRAP STONE} \end{array}$

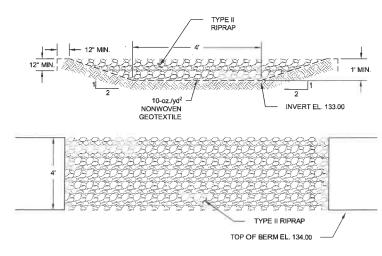
h = MINIMUM RIPRAP BLANKET THICKNESS



	RIPRAP	OUTLET PR	ROTECTION	APRON SC	HEDULE	
APRON	D ₀ (ft)	W _u (ft)	L _e (ft)	W _d (ft)	d ₅₀ (in)	h (in)
A-1	3.50	10.50	20	23.50	8	15

OUTLET PROTECTION APRON DETAIL

NOT TO SCALE



SPILLWAY DETAIL

FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD APPROVAL CERTIFIED BY:

DATE:

SANBORN

NO. DATE

DRAWN BY: D. LONG DESIGNED BY: D. LONG REVIEWED BY: E. GALVIN PROJECT MGR: T. REED PIC: E. STEINHAUSER DATE: OCTOBER 2017

TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE

TLR-III SOUTH AREA SITE PLAN APPLICATION

CONTAINER STORAGE AREA STORMWATER MANAGEMENT DETAILS

SHEET NUMBER: CSA-4

PROJECT NUMBER

3534.03

GENERAL NOTES:

- CONDUCT EARTHWORK ACTIVITIES SO THAT THE SMALLEST PRACTICAL AREA IS EXPOSED AT ANY ONE TIME PRIOR TO FINAL GRADING AND STABILIZING WITH SEED AND MULCH. UNSTABILIZED AREA NOT WITHIN THE LANDFILL FOOTPRINT SHALL BE LIMITED TO NOT MORE THAN 2 CONTIGUOUS ACRES AT ANY ONE TIME. THE TERM "STABLE" IS DEFINED AS MEETING ONE OF THE FOLLOWING CRITERIA:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED; A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE RIPRAP HAS BEEN INSTALLED: OR
- APPLY SEED, LIME, FERTILIZER, AND HAY MULCH TO DISTURBED AREAS, NEWLY-PLACED FILL SLOPES, AND GRASS-LINED SWALES WITHIN 7 DAYS OF ACHIEVING FINAL GRADE. ALSO APPLY SEED AND HAY MULCH TO THOSE AREAS OUTSIDE OF THE LANDFILL FOOTPRINT WHICH WILL NOT BE RE-DISTURBED FOR A PERIOD OF 30 DAYS OR MORE. HAY MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE.
- EROSION CONTROL STRUCTURES SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS AND AT THE DISCRETION OF THE ENGINEER AND OWNER. FILTER LOGS SHALL BE INSTALLED ALONG THE CONTOUR AND TOED UPSLOPE AND ARE TO BE MAINTAINED AND CLEANED UNTIL VEGETATIVE COVER IS ESTABLISHED.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM EVENT WHICH PRODUCES 0.25 INCHES OF RAINFALL. ALL DAMAGED EROSION CONTROL BARRIERS SHALL BE REPAIRED PROMPTLY.
- TRACK UP AND DOWN REGRADED SLOPES (GROUSER TRACKS PERPENDICULAR TO THE SLOPE) WITH A BULLDOZER TO LIMIT EROSION.
- REMOVE SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITY AS NEEDED FROM DETENTION PONDS TO MAINTAIN STORAGE CAPACITY AND AT THE DIRECTION OF THE ENGINEER OF OWNER. DISPOSE SEDIMENT IN A SECURE LOCATION SO AS TO PREVENT SILTATION OF NATURAL WATERWAYS.
- REMOVE SEDIMENT BUILD UP FROM BEHIND EROSION AND SEDIMENT CONTROL DEVICES. MAINTAIN TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES UNTIL FULL ESTABLISHMENT OF PERMANENT GROUND COVER.
- DITCHES, SWALES, AND PONDS SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE (BEFORE ROUGH GRADING OF THE SITE) AND STABILIZED BEFORE RUNOFF IS DIRECTED TO THEM.
- CONDUCT SOIL BORROW EXCAVATION ACTIVITIES IN SUCH A MANNER THAT ALL RUNOFF FROM THE EXCAVATION AREAS IS CONTAINED WITHIN THE EXCAVATION.
- 10. THE PROJECT SHALL BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER Agr 3800 RELATIVE TO INVASIVE SPECIES.

- TOPSOIL SHALL BE FERTILE SOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, FREE FROM ROOTS, STICKS, PEAT, WEEDS, AND SOD. IT SHALL NOT CONTAIN MATERIAL HARMFUL TO PLANT GROWTH.
- FERTILIZER (10-10-10) SHALL BE LOW PHOSPHATE AND SLOW RELEASE NITROGEN AND APPLIED UNIFORMLY OVER THE DISTURBED AREA AT A RATE OF TWENTY (20) POUNDS PER 1,000 SQUARE FEET (APPROXIMATELY 875 POUNDS PER ACRE).
- GRASS SEED SHALL BE FROM THE SAME OR PREVIOUS YEAR'S CROP; EACH VARIETY OF SEED SHALL HAVE A PERCENTAGE OF GERMINATION NOT LESS THAN NINETY (90), A PERCENTAGE OF PURITY NOT LESS THAN EIGHTY-FIVE (85), AND SHALL HAVE NOT MORE THAN ONE PERCENT (1%) WEED
- MULCH SHALL CONSIST OF DRY HAY OR STRAW AND BE FREE OF NOXIOUS WEEDS OR MOLD.
- APPLICATION OF FERTILIZER, LIME, SEED, AND MULCH SHALL ONLY BE PERFORMED DURING THOSE PERIODS WITHIN THE SEASONS WHICH ARE NORMAL FOR SUCH WORK AS DETERMINED BY THE WEATHER AND LOCALLY ACCEPTED PRACTICE, AND AS APPROVED BY THE ENGINEER.
- ANY PART OF THE SEEDED AREA WHICH FAILS TO YIELD AN ACCEPTABLE STAND OF GRASS AS DETERMINED BY THE ENGINEER OR OWNER SHALL BE

	GENERAL SEED	MIX
MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10

NOTE: GENERAL SEED MIXTURE TO BE APPLIED TO AREAS OTHERWISE NOT SPECIFIED TO

- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; AND
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

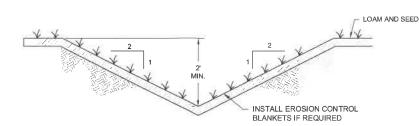
TEMPORARY EROSION CONTROL MEASURES:

- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME.
- EROSION CONTROL STRUCTURES SHALL BE INSTALLED ALONG THE EXISTING CONTOUR IN LOCATIONS SHOWN ON THE PLANS AND ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE BEEN ADEQUATELY STABILIZED
- ALL DISTURBED AREAS SHALL BE FINE GRADED BEFORE BEING SEEDED AND MULCHED.
- FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL STRUCTURES ARE TO BE REMOVED AND ACCUMULATED
- EROSION CONTROL STRUCTURES SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED.

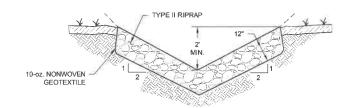
FOR MORE INFORMATION ABOUT THESE PLANS, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 31 WAKEFIELD STREET, ROCHESTER, NH 03867 (603) 335-1338.

ROCHESTER PLANNING BOARD

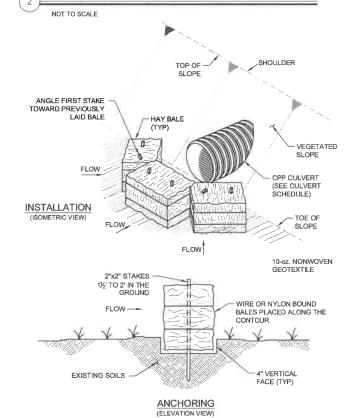
APPROVAL CERTIFIED BY:



GRASS-LINED SWALE SWALE



RIPRAP-LINED SWALE SECTION



TEMPORARY HAY BALE INLET PROTECTION



SLOPE INSTALLATION

DRAWN BY: A. MATTHEWS

PIC: E. STEINHAUSER

DATE: OCTOBER 2017

DESIGNED BY: T. REED

REVIEWED BY: E. GALVIN

- DIMENSIONS GIVEN IN THE DRAWINGS ARE EXAMPLES; MATERIAL SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
- APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS
- LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

CHANNEL INSTALLATION NOTES:

DIMENSIONS GIVEN IN THE DRAWINGS ARE EXAMPLES; MATERIAL SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

CHANNEL INSTALLATION

CHECK SLOTS TO BE CONSTRUCTED PER MANUFACTURER'S SPECIFICATIONS.

CHECK SLOT AT 25'

STAKING OR STAPLING LAYOUT PER MANUFACTURER'S SPECIFICATIONS.

SOURCE: "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3 EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" REVISION 1.0, DECEMBER 2008, PAGES 74 AND 75.

EROSION CONTROL BLANKET INSTALLATION

12" WEIGHTED 2"X 2"X 4' GRADE STAKES COMPOST FILTER LOG WHERE NECESSARY EXISTING GRADE **FILTER LOG**

> INSTALL EROSION CONTROL BLANKETS IF REQUIRED PER WINTER NOTES ON THIS SHEET 4" TOPSOIL MIN. COMPACTED OR -UNDISTURBED

LOAM AND SEED

NOT TO SCALE

TLR-III SOUTH AREA SITE PLAN APPLICATION TLR-III REFUSE DISPOSAL FACILITY WASTE MANAGEMENT OF NEW HAMPSHIRE, INC. ROCHESTER, NEW HAMPSHIRE

EROSION & SEDIMENTATION

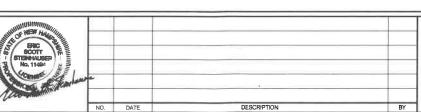
CONTROL DETAILS

SHEET NUMBER E&S - 1

3534.03

SANBORN HEAD

SCALE: AS NOTED



NOT TO SCALE

2 Bedford Farms Drive Suite 200 Bedford, NH 03110 603.391.3900

Planting Notes

- ALL PROPOSED PLANTING LOCATIONS SHALL BE STAKED AS SHOWN ON THE PLANS FOR FIELD REVIEW AND APPROVA
- 2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL BELOW GRADE AND ABOVE GROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
- NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA. CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICT
- 4. A 3-INCH DEEP MULCH PER SPECIFICATION SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, UNLESS OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
- ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED IN THE DRAWINGS OR SPECIFICATION, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
- 6. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE REVIEWED AND
- ALL PLANT MATERIALS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND CONTRACT DOCUMENTS.
- 8. ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF FINAL ACCEPTANCE.
- AREAS DESIGNATED "LOAM & SEED" SHALL RECEIVE MINIMUM 4" OF LOAM AND SPECIFIED SEED MIX. LAWNS OVER 2:1 SLOPE SHALL BE PROTECTED WITH EROSION CONTROL FABRIC.
- 10. ALL DISTURBED AREAS NOT OTHERWISE NOTED ON CONTRACT DOCUMENTS SHALL BE LOAM AND SEEDED OR MULCHED AS DIRECTED BY OWNER'S
- 11. THIS PLAN IS INTENDED FOR PLANTING PURPOSES, REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION

Plant Maintenance Notes

- CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE LAWNS AND PLANTINGS. NO IRRIGATION SYSTEM IS PROPOSED FOR THIS SITE.

 THE CONTRACTOR SHALL SUPPLY SUPPLEMENTAL WATERING FOR NEW
 LAWNS AND PLANTINGS DURING THE ONE YEAR PLANT GUARANTEE
- CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER SHALL BE PROVIDED BY WASTE MANAGEMENT OF NH.
- WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK DURING THE GUARANTEE PERIOD.
- 4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT DURING THE GUARANTEE PERIOD.
- CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS AT THE END OF THE ONE YEAR GUARANTEE PERIOD. CONTRACTOR SHALL TURN OVER MAINTENANCE TO THE FACILITY MAINTENANCE STAFF AT THAT TIME.

Tree Protection

- 1. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY CONSTRUCTION FENCE. ERECT FENCE AT EDGE OF THE TREE DRIPLINE PRIOR TO START OF CONSTRUCTION.
- 2. CONTRACTOR SHALL NOT OPERATE VEHICLES WITHIN THE TREE PROTECTION AREA CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS, OR DISPOSE OF ANY WASTE MATERIALS, WITHIN THE TREE
- DAMAGE TO EXISTING TREES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY A CERTIFIED ARBORIST AT THE CONTRACTOR'S EXPENSE.

Evergreen Tree Planting

Notes

- THERE ARE A TOTAL OF 82 STREET TREES, SEE SHEET L-4 FOR TYPICAL SPACING, SPECIES AND APPROXIMATE SIZE.
- 2 AREA RETWEEN STREET TREES ON THE NORTH SIDE OF REALIGNED AREA BETWEEN STREET TREES ON THE NORTH SIDE OF REALISINED

 CONSERVATION WILDLIFE SEED MITH NEW ENGLAND

 CONSERVATION WILDLIFE SEED MIX W/SHRUB & TREE SEEDS ADDED AS

 PROVIDED BY NEW ENGLAND WETLAND PLANTS, INC. @ 1 LB/250 SF.

HARDWOOD STAKES OR DEADMEN (TYP.) 1. STAKING IS NOT REQUIRED FOR NYLON TREE TIE WEBBING (LOOSELY TIED) 3" BARK MULCH, DO NOT PLACE MULCH WITHIN 3" OF TRUNK DEADMEN (2 STAKES PER TREE) TIGHTEN AS SHOWN PLANT BACKFILL MIXTURE NTIE AND CUT AWAY BURLAP FROM & OF ROOTBALL (MIN.); IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY - SIT ROOTBALL ON EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADI

LD 604

Tree Planting (For Trees Under 4" Caliper)

NOTES

STAKING IS NOT REQUIRED FOR TREES UNDER 3" CALIPER.

PAINT TOP 6° OF STAKES ORANGE OR REFLECTIVE RED TAPE

2"X2"X8" HARDWOOD STAKE
(2 STAKES PER TREE)
(PLACE WITHIN 6" OF ROOTBALL)

TREE SHALL BE SET PLUMB, AFTER SETTLEMENT

3" BARK MULCH, DO NOT PLACE MULCH WITHIN 3" OF TRUNK

UNTIE AND CUT AWAY BURLAP

FROM /3 OF ROOTBALL (MIN.); IF SYNTHETIC WRAP IS USED, REMOVE COMPLETELY

SLOPE TO FORM 3" HIGH SAUCER

N.T.S.

TOP OF ROOT BALL 1 INCH ABOVE FINISH GRADE

3" PINE BARK MULCH, DO NOT COVER STEMS OR TRUNK. UNTIE AND CUT AWAY BURLAP FROM ½ (MIN.) OF ROOT BALL; IF SYNTHETIC WRAP IS USED,

SLOPE TO FORM SAUCER. PLANT BACKFILL MIXTURE

SIT ROOT BALL ON

LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER

EXISTING UNDISTURBED SOIL OR ON COMPACTED SUBGRADE

TLR-III South Area

Waste Management of N.H., Inc. Rochester, New Hampshire

Site Plan Application	October, 201
Issued for	Date
Company of the Compan	Checkeling

Not Approved for Construction

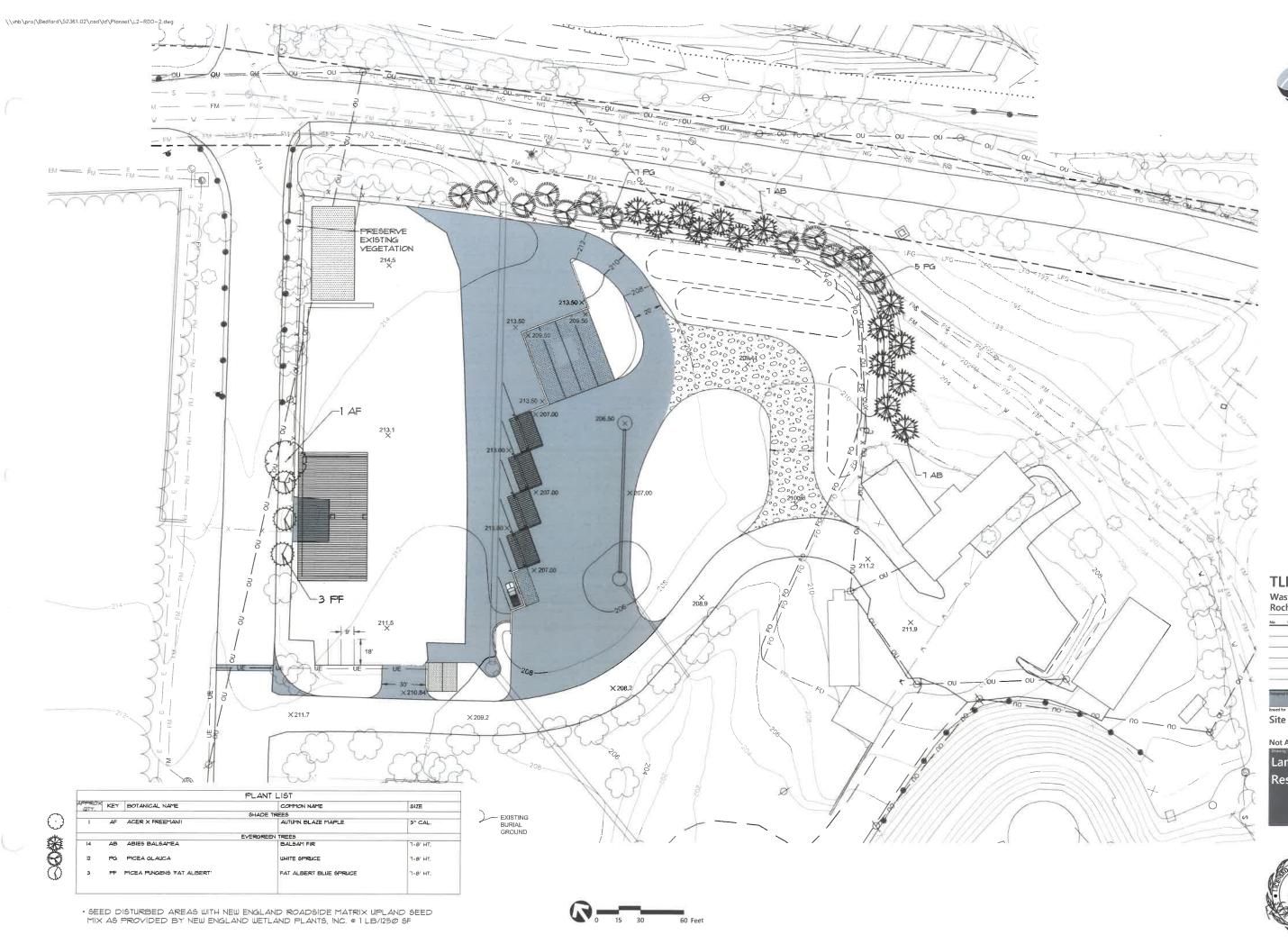
Overall Landscape Index Plan



52361.02

Shrub Planting

HOLE - THREE TIMES ROOT BALL DIAMETER

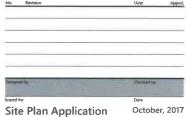




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TLR-III South Area

Waste Management of N.H., Inc. Rochester, New Hampshire



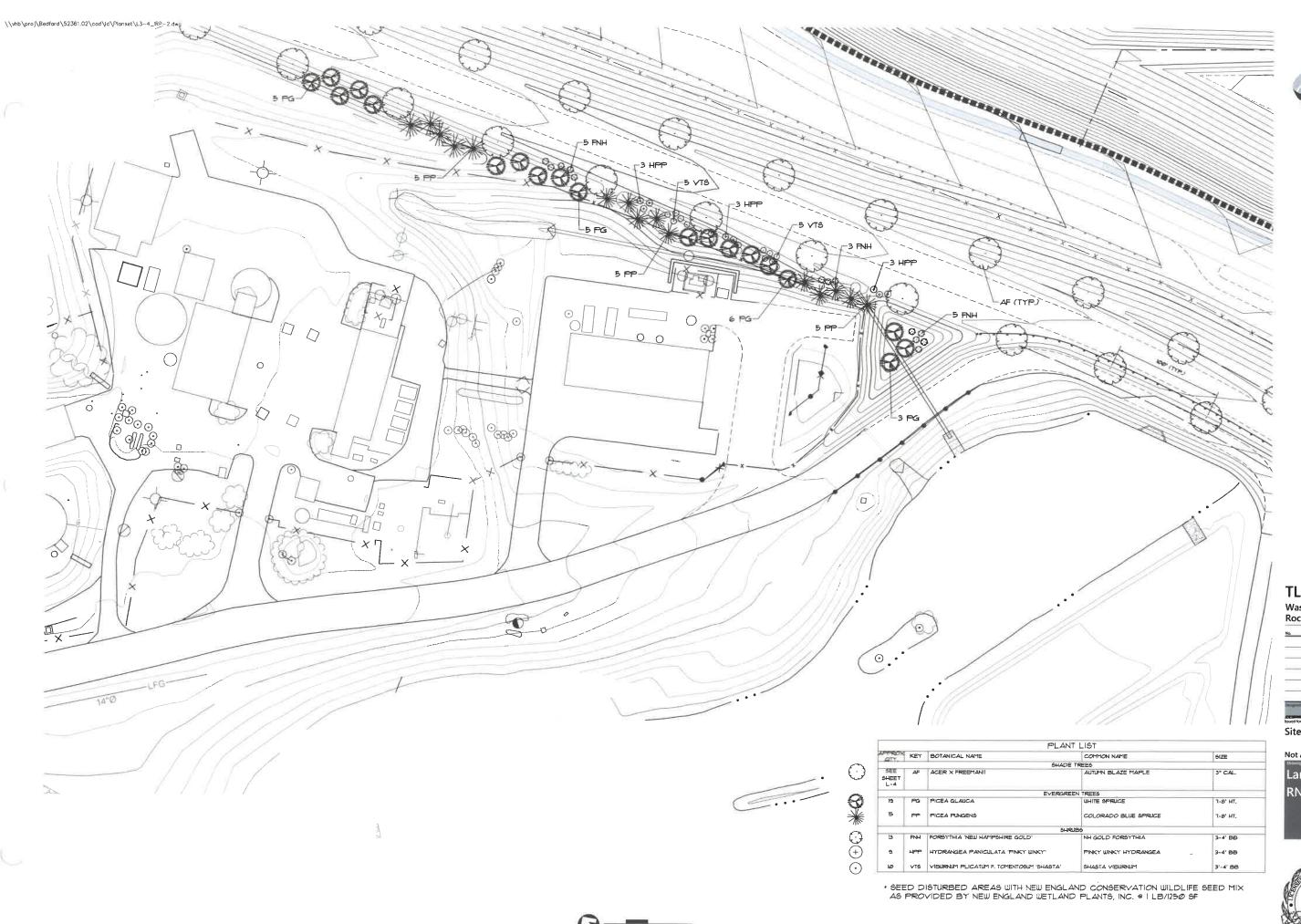
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Not Approved for Construction

Landscape Plan Residential Drop-Off

Drawing Mun



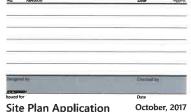




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TLR-III South Area

Waste Management of N.H., Inc. Rochester, New Hampshire

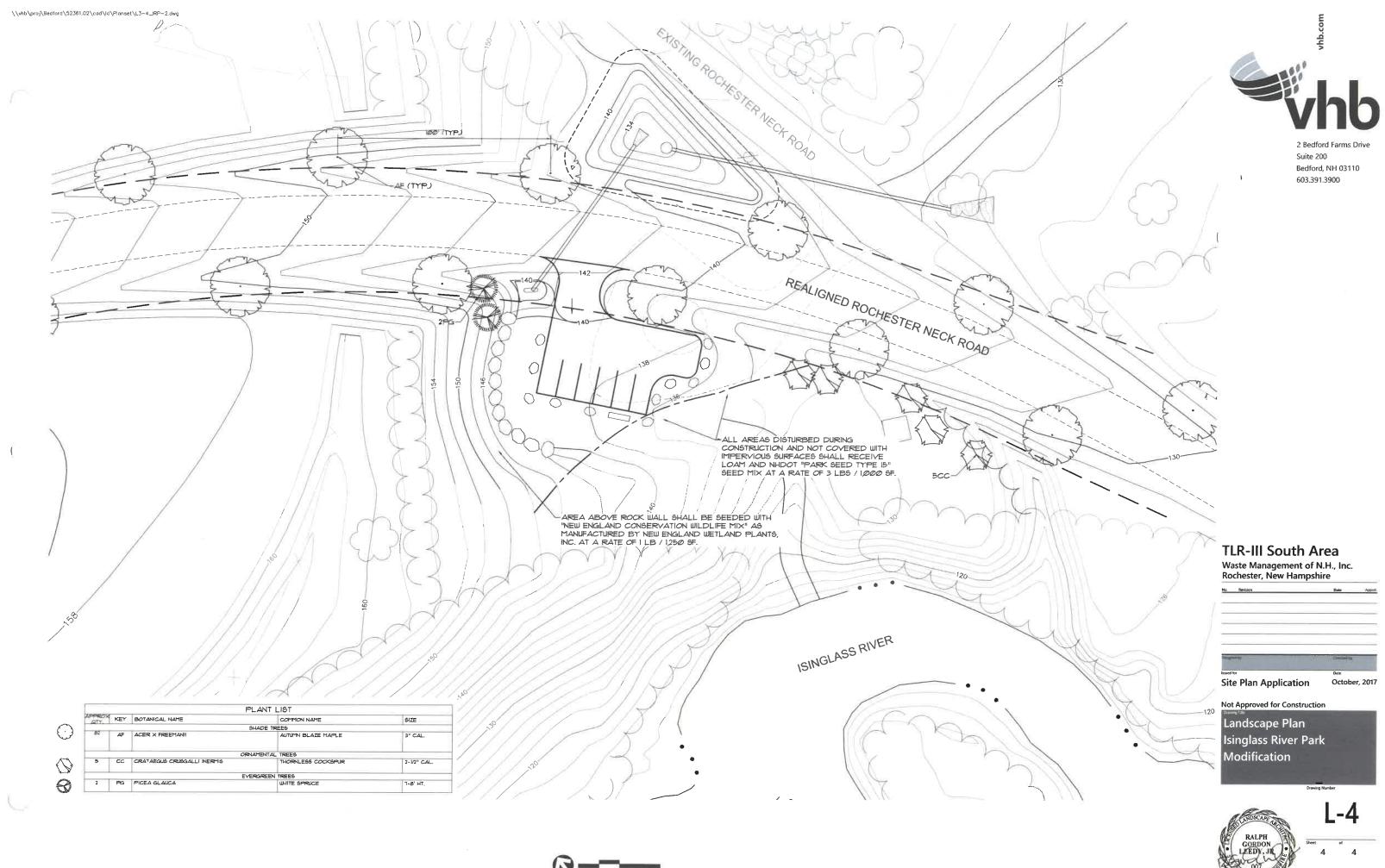


Site Plan Application

Not Approved for Construction

Landscape Plan RNR Visual Berm Vegetation





Project Number 52361.02