



Site Plan Application City of Portland, Maine

for

**Kitchen & Dining Hall Addition
The Salvation Army Adult Rehabilitation Center
88 Preble Street
Portland, Maine**

January 18, 2016

Applicant
The Salvation Army
30 Warren Avenue
Portland, Maine 04103

Prepared By
Walsh Engineering Associates, Inc.
1 Karen Drive, Suite 2A
Westbrook, Maine 04092

January 18, 2016

Ms. Barbara Barhydt
Development Review Manager
City of Portland Planning Division
389 Congress Street
Portland, Maine 04101

**RE: Level II Site Plan Application
Salvation Army Building Addition
88 Preble Street
Portland, Maine**

Dear Ms. Barhydt,

Walsh Engineering Associates, Inc. (WEA) is pleased to submit this Level II Site Plan Application on behalf of the Salvation Army (Applicant) for the Kitchen & Dining Hall addition project located at their Adult Rehabilitation Center at 88 Preble Street. The addition will be one story and have a footprint of approximately 3,560± square feet. The Applicant currently owns the subject property, which lies in the City's B-2b Business Community Zoning District. The proposed project complies with the applicable zoning standards.

On behalf of the Applicant, we look forward to working with you to make this project a success. Please find enclosed the required Level II Site Plan application materials, full and reduced plan sets, and a CD with the electronic submission. Please contact us at your earliest convenience if you require any additional information.

Respectfully,



Silas Canavan, PE
Walsh Engineering Associates, Inc.

cc: Major Ronald Bernardi, The Salvation Army
Evan Carroll, Bild Architecture

enc: Letter to Fire Department
Site Plan Application
Site Plans (1 full size, 1 reduced)
CD with electronic submission



Jeff Levine, AICP, Director
Planning & Urban Development Department



Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no Site Plan or Historic Preservation Applications can be reviewed until payment of appropriate application fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

- Within 24-48 hours, once my complete application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- Within 24-48 hours, once my application and corresponding paperwork has been electronically delivered, I intend to **call the Inspections Office** at 207-874-8703 and speak to an administrative representative and provide a credit/debit card over the phone.
- I intend to deliver a payment method through the U.S. Postal Service mail once my application paperwork has been electronically delivered.

 _____ (Agent) _____ 1/19/16
 Applicant Signature: _____ Date:
 _____ (Agent) _____ 1/19/16
 I have provided digital copies and sent them on: _____ Date:

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means i.e. a thumb drive or CD to the Inspections Office, City Hall, 3rd Floor, Room 315.



Level II – Preliminary and Final Site Plans Development Review Application Portland, Maine

Planning and Urban Development Department
Planning Division

Portland's Planning and Urban Development Department coordinates the development review process for site plan, subdivision and other applications under the City's Land Use Code. Attached is the application form for a Level II: Preliminary or Final Site Plan. Please note that Portland has delegated review from the State of Maine for reviews under the Site Location of Development Act, Chapter 500 Stormwater Permits, and Traffic Movement Permits.

Level II: Site Plan Development includes:

- New construction of structures with a total floor area of less than 10,000 sq. ft. in all zones, except in Industrial Zones.
- New construction of structures with a total floor area of less than 20,000 sq. ft. in Industrial Zones.
- Any new temporary or permanent parking area, paving of an existing unpaved surface parking area in excess of 7,500 sq. ft. and serving less than 75 vehicles, or creation of other impervious surface area greater than 7,500 sq. ft.
- Building addition(s) with a total floor area of less than 10,000 sq. ft. (cumulatively within a 3 year period) in any zone, except in Industrial Zones.
- Building addition(s) with a total floor area of less than 20,000 sq. ft. in Industrial Zones.
- Park improvements: New structures or buildings with a total floor area of less than 10,000 sq. ft., facilities encompassing an area of greater than 7,500 sq. ft. and less than 20,000 sq. ft. (excludes rehabilitation or replacement of existing facilities).
- New construction of piers, docks, wharves, bridges, retaining walls, and other structures within the Shoreland Zone.
- Land disturbance between 1 and 3 acres that are stripped, graded, grubbed, filled or excavated.
- A change in the use of a total floor area between 10,000 and 20,000 sq. ft. in any existing building (cumulatively within a 3 year period).
- Lodging house, bed and breakfast facility, emergency shelter or special needs independent living unit.
- Signage subject to approval pursuant to Section 14-526 (d) 8.a. of the Land Use Code.
- Any new major or minor auto service station with less than 10,000 sq. ft. of building area in any permitted zone other than the B-2 or B-5 zones.
- The creation of day care or home babysitting facilities to serve more than 12 children in a residential zone (not permitted as a home occupation under section 14-410) in any principal structure that has not been used as a residence within the 5 years preceding the application.
- Any drive-through facility that is not otherwise reviewed as a conditional use under Article III.

Portland's development review process and requirements are outlined in the Land Use Code (Chapter 14) which is available on our website:

Land Use Code: <http://me-portland.civicplus.com/DocumentCenter/Home/View/1080>

Design Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2355>

Technical Manual: <http://me-portland.civicplus.com/DocumentCenter/View/2356>

Planning Division

Fourth Floor, City Hall
389 Congress Street
(207) 874-8719

Office Hours

Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT NAME: Kitchen & Dining Hall Addition

PROPOSED DEVELOPMENT ADDRESS:

88 Preble Street

PROJECT DESCRIPTION:

Construction of 3,560 sf addition for new kitchen and dining hall for the Salvation Army Adult Rehabilitation Center.

CHART/BLOCK/LOT: 33/D/4-11, 15, 22-26

PRELIMINARY PLAN _____ (date)

FINAL PLAN _____ (date)

CONTACT INFORMATION:

Applicant – must be owner, Lessee or Buyer Name: Major Ronald Bernardi Business Name, if applicable: The Salvation Army Address: 30 Warren Ave City/State : Portland, ME Zip Code: 04103	Applicant Contact Information E-mail: ronald.bernardi@use.salvationarmy.org Home #: Work #: 207-878-8555 Cell #: Fax#:
Owner – (if different from Applicant) Name: Address: City/State : Zip Code:	Owner Contact Information E-mail: Home #: Work #: Cell #: Fax#:
Agent/ Representative Name: Silas Canavan, PE Walsh Engineering Associates, Inc. Address: 1 Karen Drive, Suite 2A City/State : Zip Code: 04092 Westbrook, ME	Agent/Representative Contact information E-mail: silas@walsh-eng.com Home #: Work #: 207-553-9898 Cell #: Fax#:
Billing Information Name: The Salvation Army Attn: Major Ronald Bernardi Address: 30 Warren Ave City/State :Portland, ME Zip Code: 04103	Billing Information E-mail: ronald.bernardi@use.salvationarmy.org Home #: Work #: 207-878-8555 Cell #: Fax#:

<p>Engineer Name: Silas Canavan, PE Walsh Engineering Associates, Inc. Address: 1 Karen Drive, Suite 2A City/State : Westbrook, ME Zip Code: 04092</p>	<p>Engineer Contact Information E-mail: silas@walsh-eng.com Home #: Work #: 207-553-9898 Cell #: Fax#:</p>
<p>Surveyor Name: Mike Hartman, PLS Jones Associates, Inc. Address: 280 Poland Spring Road City/State : Auburn, ME Zip Code: 04210</p>	<p>Surveyor Contact Information E-mail: mhartman@jonesai.com Home #: Work #: 207-241-0235 Cell #: Fax#:</p>
<p>Architect Name: Evan Carroll Bild Architecture Address: PO Box 8235 City/State : Portland, ME Zip Code: 04104</p>	<p>Architect Contact Information E-mail: evan@bildarchitecture.com Home #: Work #: 207-408-0168 Cell #: Fax#:</p>
<p>Attorney Name: Address: City/State : Zip Code:</p>	<p>Attorney Contact Information E-mail: Home #: Work #: Cell #: Fax#:</p>

APPLICATION FEES:

Check all reviews that apply. (Payment may be made by Credit Card, Cash or Check payable to the City of Portland.)

<p>Level II Development (check applicable reviews)</p> <p><input checked="" type="checkbox"/> Less than 10,000 sq. ft. (\$400) <input type="checkbox"/> After-the-fact Review (\$1,000 plus applicable application fee)</p> <hr/> <p>The City invoices separately for the following:</p> <ul style="list-style-type: none"> • Notices (\$.75 each) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) <p>Third party review fees are assessed separately. Any outside reviews or analysis requested from the Applicant as part of the development review, are the responsibility of the Applicant and are separate from any application or invoice fees.</p>	<p>Other Reviews (check applicable reviews)</p> <p><input type="checkbox"/> Traffic Movement (\$1,000) <input type="checkbox"/> Stormwater Quality (\$250) <input type="checkbox"/> Site Location (\$3,000, except for residential projects which shall be \$200/lot) # of Lots ___ x \$200/lot = _____ <input type="checkbox"/> Other _____ <input type="checkbox"/> Change of Use <input type="checkbox"/> Flood Plain <input type="checkbox"/> Shoreland <input type="checkbox"/> Design Review <input type="checkbox"/> Housing Replacement <input type="checkbox"/> Historic Preservation</p>
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APPLICATION SUBMISSION:

1. All site plans and written application materials must be submitted electronically on a CD or thumb drive with each plan submitted as separate files, with individual file which can be found on the **Electronic Plan and Document Submittal** page of the City’s website at <http://me-portland.civicplus.com/764/Electronic-Plan-and-Document-Submittal>
2. In addition, one (1) paper set of the plans (full size), one (1) paper set of plans (11 x 17), paper copy of written materials, and the application fee must be submitted to the Building Inspections Office to start the review process.

The application must be complete, including but not limited to the contact information, project data, application checklists, wastewater capacity, plan for fire department review, and applicant signature. The submissions shall include one (1) paper packet with folded plans containing the following materials:


1. One (1) full size site plans that must be folded.
2. One (1) copy of all written materials or as follows, unless otherwise noted:
 - a. Application form that is completed and signed.
 - b. Cover letter stating the nature of the project.
 - c. All Written Submittals (Sec. 14-527 (c), including evidence of right, title and interest.
3. A stamped standard boundary survey prepared by a registered land surveyor at a scale not less than one inch to 50 feet.
4. Plans and maps based upon the boundary survey and containing the information found in the attached sample plan checklist.
5. One (1) set of plans reduced to 11 x 17.

Please refer to the application checklist (attached) for a detailed list of submission requirements.

APPLICANT SIGNATURE:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Planning Authority and Code Enforcement’s authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for a Level II Site Plan review. It is not a permit to begin construction. An approved site plan, a Performance Guarantee, Inspection Fee, Building Permit, and associated fees will be required prior to construction. Other Federal, State or local permits may be required prior to construction, which are the responsibility of the applicant to obtain.

 (Agent)	Date: 1/19/16
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PROJECT DATA

The following information is required where applicable, in order to complete the application.

Total Area of Site	42,700± sq. ft.
Proposed Total Disturbed Area of the Site	5,100 sq. ft.
If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with DEP and a Stormwater Management Permit, Chapter 500, with the City of Portland	
Impervious Surface Area	
Impervious Area (Total Existing)	5,100 (w/in development. area) sq. ft.
Impervious Area (Total Proposed)	4,956 (w/in development. area) sq. ft.
Building Ground Floor Area and Total Floor Area	
Building Footprint (Total Existing)	13,300± sq. ft.
Building Footprint (Total Proposed)	3,560 sq. ft.
Building Floor Area (Total Existing)	unknown sq. ft.
Building Floor Area (Total Proposed)	3,560 sq. ft.
Zoning	
Existing	B2-b
Proposed, if applicable	No Change
Land Use	
Existing	Sheltered Group Home
Proposed	No Change
Residential, If applicable	
# of Residential Units (Total Existing)	N/A
# of Residential Units (Total Proposed)	
# of Lots (Total Proposed)	
# of Affordable Housing Units (Total Proposed)	
Proposed Bedroom Mix	
# of Efficiency Units (Total Proposed)	N/A
# of One-Bedroom Units (Total Proposed)	
# of Two-Bedroom Units (Total Proposed)	
# of Three-Bedroom Units (Total Proposed)	
Parking Spaces	
# of Parking Spaces (Total Existing)	29
# of Parking Spaces (Total Proposed)	0
# of Handicapped Spaces (Total Proposed)	0
Bicycle Parking Spaces	
# of Bicycle Spaces (Total Existing)	0
# of Bicycle Spaces (Total Proposed)	0
Estimated Cost of Project	
	\$1,000,000±

PRELIMINARY PLAN (Optional) - Level II Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST
		1	Completed Application form
		1	Application fees
		1	Written description of project
		1	Evidence of right, title and interest
		1	Evidence of state and/or federal approvals, if applicable
		1	Written assessment of proposed project's compliance with applicable zoning requirements
		1	Summary of existing and/or proposed easement, covenants, public or private rights-of-way, or other burdens on the site
		1	Written requests for waivers from site plan or technical standards, if applicable.
		1	Evidence of financial and technical capacity
		1	Traffic Analysis (may be preliminary, in nature, during the preliminary plan phase)
Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST
		1	Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
		1	Preliminary Site Plan including the following: (information provided may be preliminary in nature during preliminary plan phase)
			Proposed grading and contours;
			Existing structures with distances from property line;
			Proposed site layout and dimensions for all proposed structures (including piers, docks or wharves in Shoreland Zone), paved areas, and pedestrian and vehicle access ways;
			Preliminary design of proposed stormwater management system in accordance with Section 5 of the Technical Manual (note that Portland has a separate applicability section);
			Preliminary infrastructure improvements;
			Preliminary Landscape Plan in accordance with Section 4 of the Technical Manual;
			Location of significant natural features (including wetlands, ponds, watercourses, floodplains, significant wildlife habitats and fisheries or other important natural features) located on the site as defined in Section 14-526 (b) (1);
			Proposed buffers and preservation measures for significant natural features, as defined in Section 14-526 (b) (1);
			Location , dimensions and ownership of easements, public or private rights of way, both existing and proposed;
			Exterior building elevations.

FINAL PLAN - Level II Site Plan			
Applicant Checklist	Planner Checklist	# of Copies	GENERAL WRITTEN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Completed Application form
X		1	* Application fees
X		1	* Written description of project
X		1	* Evidence of right, title and interest
X		1	* Evidence of state and/or federal permits
X		1	* Written assessment of proposed project's specific compliance with applicable Zoning requirements
X		1	* Summary of existing and/or proposed easements, covenants, public or private rights-of-way, or other burdens on the site
X		1	* Evidence of financial and technical capacity
X		1	Construction Management Plan
N/A		1	A traffic study and other applicable transportation plans in accordance with Section 1 of the technical Manual, where applicable.
X		1	Written summary of significant natural features located on the site (Section 14-526 (b) (a))
X		1	Stormwater management plan and stormwater calculations, including description of project, hydrology and impervious area.
X		1	Written summary of project's consistency with related city master plans
X		1	Evidence of utility capacity to serve
X		1	Written summary of solid waste generation and proposed management of solid waste
X		1	A code summary referencing NFPA 1 and all Fire Department technical standards
X		1	Where applicable, an assessment of the development's consistency with any applicable design standards contained in Section 14-526 and in City of Portland Design Manual
X		1	Manufacturer's verification that all proposed HVAC and manufacturing equipment meets applicable state and federal emissions requirements.

Applicant Checklist	Planner Checklist	# of Copies	SITE PLAN SUBMISSIONS CHECKLIST (* If applicant chooses to submit a Preliminary Plan, then the * items were submitted for that phase and only updates are required)
X		1	* Boundary Survey meeting the requirements of Section 13 of the City of Portland's Technical Manual
X		1	Final Site Plans including the following:
X			Existing and proposed structures, as applicable, and distance from property line (including location of proposed piers, docks or wharves if in Shoreland Zone);
X			Existing and proposed structures on parcels abutting site;
X			All streets and intersections adjacent to the site and any proposed geometric modifications to those streets or intersections;
X			Location, dimensions and materials of all existing and proposed driveways, vehicle and pedestrian access ways, and bicycle access ways, with corresponding curb lines;
X			Engineered construction specifications and cross-sectional drawings for all proposed driveways, paved areas, sidewalks;
X			Location and dimensions of all proposed loading areas including turning templates for applicable design delivery vehicles;
X			Existing and proposed public transit infrastructure with applicable dimensions and engineering specifications;
X			Location of existing and proposed vehicle and bicycle parking spaces with applicable dimensional and engineering information;
X			Location of all snow storage areas and/or a snow removal plan;
X			A traffic control plan as detailed in Section 1 of the Technical Manual;
X			Proposed buffers and preservation measures for significant natural features, where applicable, as defined in Section 14-526(b)(1);
X			Location and proposed alteration to any watercourse;
N/A			A delineation of wetlands boundaries prepared by a qualified professional as detailed in Section 8 of the Technical Manual;
N/A			Proposed buffers and preservation measures for wetlands;
N/A			Existing soil conditions and location of test pits and test borings;
N/A			Existing vegetation to be preserved, proposed site landscaping, screening and proposed street trees, as applicable;
X			A stormwater management and drainage plan, in accordance with Section 5 of the Technical Manual;
X			Grading plan;
N/A			Ground water protection measures;
X			Existing and proposed sewer mains and connections;
X			Location of all existing and proposed fire hydrants and a life safety plan in accordance with Section 3 of the Technical Manual;
X			Location, sizing, and directional flows of all existing and proposed utilities within the project site and on all abutting streets;

- Continued on next page -

X		Location and dimensions of off-premises public or publicly accessible infrastructure immediately adjacent to the site;
X		Location and size of all on site solid waste receptacles, including on site storage containers for recyclable materials for any commercial or industrial property;
X		Plans showing the location, ground floor area, floor plans and grade elevations for all buildings;
N/A		A shadow analysis as described in Section 11 of the Technical Manual, if applicable;
N/A		A note on the plan identifying the Historic Preservation designation and a copy of the Application for Certificate of Appropriateness, if applicable, as specified in Section Article IX, the Historic Preservation Ordinance;
X		Location and dimensions of all existing and proposed HVAC and mechanical equipment and all proposed screening, where applicable;
X		An exterior lighting plan in accordance with Section 12 of the Technical Manual;
X		A signage plan showing the location, dimensions, height and setback of all existing and proposed signs;
X		Location, dimensions and ownership of easements, public or private rights of way, both existing and proposed.



PORTLAND FIRE DEPARTMENT SITE REVIEW FIRE DEPARTMENT CHECKLIST



A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant
2. Name address, telephone number of architect
3. Proposed uses of any structures [NFPA and IBC classification]
4. Square footage of all structures [total and per story]
5. Elevation of all structures
6. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
7. Hydrant locations
8. Water main[s] size and location
9. Access to all structures [min. 2 sides]
10. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards.

Some structures may require Fire flows using annex H of NFPA 1



January 18, 2016

Captain Chris Pirone
City of Portland Fire Department
380 Congress Street
Portland, ME 04101

**RE: Level II Site Plan Application
Salvation Army Building Addition
88 Preble Street
Portland, Maine**

Dear Captain Pirone,

In accordance with the requirements of the City's Site Plan review application, we have provided the enclosed drawing necessary for your review of the Salvation Army Building Addition located at 88 Preble Street in Portland. We have also provided the necessary information in the narrative below.

1. Name, address and telephone number of applicant
*Salvation Army
30 Warren Avenue
Portland, Maine 04103
207-878-8555*
2. Name address and telephone number of architect.
*Evan Carroll, Bild Architecture
PO Box 8235
Portland, Maine 04104
207-408-0168*
3. Proposed use of any structures.
The project consists of the construction of a 3,560± square foot addition to the existing building at 88 Preble Street. The new addition will house a replacement kitchen and dining hall for use by the residents of the Adult Rehabilitation Center.
4. Square footage of all structures
The new building will be one story and have a footprint of approximately 3,560± square feet.
5. Elevations of all structures
The building finish floor elevation will be set approximately 2.5 feet above grade. The building will be one story and the roof height will be approximately 17' above grade.

6. Proposed fire protection of all structures.
The building will be sprinkled.
7. Hydrant locations
An existing fire hydrant is located approximately 270 feet southeast of the building at the corner of Alder and Oxford streets.
8. Water mains and sizes
A 6" cast iron water main exists in the Alder Street ROW. A new 1" domestic water service line and a separate 6" fire suppression line are proposed to be constructed to the building.
9. Access to structures (min. 2 sides)
The building will be constructed with two sides adjacent to the existing building. The exterior of the building can be accessed from the Alder Street frontage and a 3' wide alley between the proposed addition and the abutting building to the southeast.
10. Code summary shall be included referencing NFPA and all fire department technical standards.
The architectural design is not yet completed. The design will conform to all NFPA code requirements. A code summary will be provided by the architect during the building permit process.

We trust that we have provided sufficient information for your review. Please contact us if you have any comments or questions.

Respectfully,



Silas Canavan, PE
Walsh Engineering Associates, Inc.

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Attachments

Section 2

Attachment A: Quitclaim Deed

Section 4

Attachment B : Utility 'Ability to Serve' Letters

1 Development Description

1.1 Project Overview

The Salvation Army (Applicant) currently owns the subject property described by the City of Portland Tax Assessor as Map 33, Block D, Lots 4 thru 11, 15, and 22 thru 26, which contains their Adult Rehabilitation Center (ARC) and Thrift Store. The Applicant intends to construct an addition to the ARC on lot 10, which will house a replacement kitchen and dining hall for use by the residents of the ARC. The applicant is also proposing to reconstruct a portion of the sidewalk along their Alder Street and Lancaster Street frontage. The project requires Level II Site Plan approval from the City of Portland Planning Department.

1.2 Existing Conditions

The site consists of approximately 0.98 acres which lies within the B2b Business Community Zone. The parcel has frontage along Preble Street, Lancaster Street, Oxford Street, and Alder Street. The majority of the lot is covered with buildings, walkways, and parking lots. Parking lots are located at the corner of Alder Street and Lancaster Street and the Corner of Preble Street and Oxford Street. The proposed development area on Lot 10 is also paved, but it is currently blocked with a locked gate and is not used for vehicular parking.

The proposed development is primarily confined to Lot 10. The development area is 100% impervious and currently consists of pavement and a concrete loading dock with stairs and small shed. One catch basin is located within the paved area which collects stormwater runoff from a portion of the development area prior to discharging to the stormdrain system in Alder Street. The remainder of the development area drains via overland flow directly to Alder Street. There are currently no other utilities serving the development area.

The applicant also proposes to reconstruct a portion of the sidewalk along their Alder Street and Lancaster Street frontage. The existing sidewalks consist of concrete and asphalt pavement, which are in relatively poor condition and do not meet the current zoning standard for brick sidewalks in the area.

1.3 Proposed Development

The Applicant intends to build a one-story 3,560 square foot addition to house a new kitchen and dining hall for use by the residents of the ARC. The new dining hall will seat 100 people and will replace the existing, smaller dining hall and kitchen in the existing building. An ADA ramp in the front of the building, and associated walkways, landscaping and utilities will also be installed.

Utilities

New sewer, water, and gas services will be installed to the addition from Alder Street. Separate domestic and fire suppression water services will be provided to the addition, which will have sprinklers. The Portland Water District has indicated that they have record of three existing ¾" water services near the development area that are currently not in service and has requested that

they be removed. The exact locations of these services are not known; therefore, location and removal will be performed during construction activities.

Electric service will be provided to the addition through the existing building. The existing overhead electrical service to the existing building from Preble Street will be maintained, but will be upgraded as necessary to provide adequate capacity.

Ability to serve letters from the applicable utility companies are provided in Section 4 of this application.

Stormwater

Stormwater from the roof of the proposed building addition will be collected in a gutter along the southeast side of the building. Gutter downspouts will be connected to a subsurface 6" header pipe. The header pipe will increase to a 12" pipe at the corner of the building where space allows and will be tied into the stormwater collection system in Alder Street. The development site is currently 100% impervious. The proposed project will result in a net decrease of 144 square feet of impervious area and general drainage patterns will remain the same. Therefore, the project will not have an adverse impact on the surrounding stormwater systems.

Sanitary Sewer

Due to the food preparation activities associated with the proposed project, installation of a grease interceptor is required. WEA has coordinated with the Shier Products, and is proposing the installation of a Shier GB-250 grease interceptor. The GB-250 has the capacity to handle 3 meals/day for 88 people, assuming a 90-day pump-out schedule. The ARC currently has 70 residents. If the number of residents increases above 88 people in the future, then the pump-out schedule will be reduced to 75 days. Calculations are provided in Section 4 of this application.

The building will be constructed with a slab foundation and will not have a basement. Therefore, the grease interceptor will have to be installed outside. Given the limited space available outside of the building, we have proposed the installation of the grease interceptor under the sidewalk in the ROW. This appears to be the only practical location of the unit given the location of the retaining wall and landings required to provide ADA access at the front of the building.

Sidewalks

Approximately 200 feet of sidewalk along the Alder Street and Lancaster Street frontage will be reconstructed. Sidewalks will consist of brick and granite curbing per City standards. New crosswalk striping is also proposed across Lancaster Street at the northwesterly intersection.



2 Evidence of Right, Title, and Interest

The Applicant currently owns the subject property. The applicable deed is attached.

Attachment A
Quitclaim Deed

Know All Men by These Presents,

That I, William A. Holland, of Portland in the County of Cumberland and State of Maine

Holland

in consideration of One dollar and other valuable considerations

to

paid by The Salvation Army, a New York corporation having a place of business in Portland, County of Cumberland and State of Maine

Salvation Army

War

the receipt whereof I **do hereby acknowledge, do hereby give, grant, bargain, sell and convey** unto the said The Salvation Army, its successors

owns and assigns forever, a certain lot or parcel of land with the buildings thereon situated on the Easterly side of Alder Street in said Portland bounded and described as follows:

Beginning on said street at the southerly corner of land of James M. Ross; thence northeasterly by the land of James M. Ross Seventy-five (75) feet to a post; thence southeasterly parallel with said Alder Street thirty-seven (37) feet to a post; thence southwesterly seventy-five (75) feet to said Alder Street; thence by said Alder Street thirty-seven (37) feet to the point of beginning and being same premises conveyed to Glenn A. Smith and Hazel E. Smith by Louis J. DeLorge and Hilda A. DeLorge.

Also another lot or parcel of land directly in the rear of and adjoining the lot above described, and bounded and described as follows:

Beginning at the northeasterly corner of the lot above described; thence northeasterly on a line which is a direct continuation of the northerly side line of the lot above described and by land of James M. Ross, twenty-seven (27) feet, more or less, to the "Preble Line" so called; thence southeasterly by said "Preble Line" thirty-seven (37) feet to land now or formerly of the heirs of Henry G. Ross; thence southwesterly by land now or formerly of the heirs of Henry G. Ross, twenty-seven (27) feet, more or less, to the southeasterly corner of said lot above described; thence northwesterly by the rear line of the lot above described thirty-seven (37) feet to the point of beginning.

Being the same property conveyed to Glenn A. Smith and Hazel E. Smith by Louis J. DeLorge and Hilda A. DeLorge by Warranty Deed recorded in Cumberland County Registry of Deeds, Book 2060, Page 191.

Being the same premises Glenn A. Smith and Hazel E. Smith conveyed to William A. Holland by warranty deed dated June 4, 1956 and recorded in said Registry Book 2432, Page 427.



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To have and to hold the aforegranted and bargained premises with all the privileges and appurtenances thereof, to the said

The Salvation Army, its successors

~~heirs~~ and assigns, to it and ~~their~~ ^{its} use and behoof forever.

And I do covenant with the said Grantee, its ^{successors} ~~heirs~~ and assigns, that I am lawfully seized in fee of the premises, that they are free of all incumbrances;

that I have good right to sell and convey the same to the said Grantee to hold as aforesaid; and that I and my heirs shall and will warrant and defend the same to the said Grantee, its ^{successors} ~~heirs~~ and assigns forever, against the lawful claims and demands of all persons.

In Witness Whereof, I the said William A. Holland

and Mary A. Holland

wife of the said William A. Holland

joining in this deed as Grantor, and relinquishing and conveying all right by descent and all other rights in the above described premises, have hereunto set our hands and seals this second day of November in the year of our Lord one thousand nine hundred and sixty-two

Signed, Sealed and Delivered in presence of

Samuel M. Edwards
To book

William A. Holland
Mary A. Holland

State of Maine. Cumberland ss. November 2, 19 62.

Personally appeared the above named William A. Holland

and acknowledged the foregoing instrument to be his free act and deed.

Before me, Samuel M. Edwards
Justice of the Peace
Notary Public

NOV 2 1962

REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE

Received at 1 H 58 P.M. and recorded in

BOOK 2711 PAGE 341 Samuel P. Thayer Register



3 Evidence of State and/or Federal Approvals

No state or federal approvals are required for this project.

4 Assessment of Compliance with Zoning Requirements

The following narrative demonstrates that the project conforms to the applicable design standards of Section 14-526 of the City of Portland Zoning Ordinance.

a) Transportation Standards

1. Impact on surrounding Street Systems

The project consists of a building addition housing a kitchen and dining hall that will be used by residents of the Adult Rehabilitation Center. The project will not generate any additional trips or changes in circulation patterns. Therefore, the project is not anticipated to have an adverse impact on the surrounding street system.

2. Access and Circulation

a. Site Access and Circulation

- i. No internal circulation is proposed for the site.*
- ii. No vehicular access is proposed.*
- iii. No drive up features are proposed.*

b. Loading and Servicing

- i. The proposed building addition is a replacement for the kitchen and dining room in the ARC. Delivery vehicles will continue to have access to the ARC's parking lots at the corner of Alder and Lancaster streets and the corner of Preble and Oxford Streets.*

c. Sidewalks

- i. Concrete sidewalk exists along the Alder Street frontage and bituminous sidewalks exist along the Lancaster Street frontage. These sidewalks will be reconstructed to City standards. See below.*
- ii. Approximately 200 feet of concrete and bituminous sidewalks will be reconstructed with brick sidewalks and granite curb along portions of the Alder Street and Lancaster Street frontages. Sidewalks will be constructed to City standards.*
- iii. Brick sidewalk will be extended into the site to the bottom of the ADA ramp up to the building entrance. The ADA ramp and upper landing will be constructed of concrete. No other internal walkways are necessary.*

3. Public Transit Access

- a. N/A:*

4. Parking

- a. Location and required number of parking spaces

- i. *The project consists of a kitchen and dining hall addition for residents of the ARC. Therefore, the project will not result in an increased demand for parking spaces. The site currently has 29 parking spaces available, which is significantly more than the ordinance requires for the existing use.*
- ii. *A parking study is not required for this project*
- iii. *N/A*
- iv. *N/A*
- v. *N/A*

b. Location and required number of bicycle parking spaces

- i. The site plan shall provide secure bicycle parking in conformance with Section 1 of the Technical Manual and shall meet the following Requirements:
 - a. *No additional parking demand will be generated by this project. Therefore, no bicycle parking is proposed.*
 - b. *Not Applicable (see above)*
 - c. *Not Applicable (see above)*
- ii. *No waivers requested.*
- c. Motorcycle and scooter parking
 - i. *No additional parking demand will be generated by this project. Therefore, no motorcycle parking is proposed.*
- d. Snow Storage
 - i. *Snow will be removed from the front walkway by the Owner. Snow will be stored in the landscaped areas.*
 - ii. *N/A*

5. Transportation demand management (TDM)

- a. *Not Applicable.*

b) Environmental Quality Standards

1. Preservation of Significant Natural Features:

- a. *No significant natural features are located on the site.*
- b. *Not applicable*
- c. *No waivers are being requested for the project.*

2. Landscaping and Landscaping Preservation

- a. Landscaping preservation

- i. There is currently no landscaping on the property. The site is 100% impervious.*
- ii. Not Applicable (see above)*
- iii. Not Applicable (see above)*
- iv. No waivers are being requested.*
- v. Not applicable. The site is not located within the Shoreland Zone.*

b. Site Landscaping

i. Landscaped Buffers

- a. No buffering is required for this project.*
- b. The property has approximately 40.92' of frontage along the development area. Therefore, 6 shrubs will be required for understory plantings. A total of 15 shrubs are proposed in the front of the building. See sheet C3.0 for a planting list.*
- c. Not Applicable.*
- d. Not Applicable.*

ii. Parking lot landscaping

- a. Not Applicable. No new parking spaces are proposed.*

iii. Street Trees

- a. Site constraints do not allow for planting of street trees. Therefore, if any street trees are required, the Applicant will pay into the City's tree fund.*
- b. Site constraints do not allow for planting of street trees. Therefore, if any street trees are required, the Applicant will pay into the City's tree fund.*

3. Water Quality, Stormwater Management, and Erosion Control

- a. The site is 100% impervious in its existing condition. The proposed project will result in a net decrease of 144 square feet of impervious area. Therefore, stormwater runoff from the site will not be increased.*
- b. The overall impervious area on the site will not be decreased. Therefore, the volume and rate of stormwater runoff will not increase.*
- c. The project is not located within an Urban Impaired Stream watershed.*
- d. Not Applicable.*
- e. The project will not pose a risk of groundwater contamination.*
- f. The proposed development will discharge wastewater to the City of Portland wastewater collection system. A copy of the sewer capacity application is included with this submission.*

c) Public Infrastructure and Community Safety Standards

1. Consistency with Master Plans

- a. *The development has been designed in accordance with the City Zoning Ordinance, Technical Manual, Master Plan, and off-premises infrastructure.*
- b. *There are no existing or proposed easements associated with the development area of the site.*

2. Public Safety and Fire Prevention

- a. *The site has been designed to promote safe and comfortable access by the public.*
- b. *Adequate emergency vehicle access to the site is provided from Alder Street.*
- c. *The entire addition will be sprinkled. A new separate fire suppression service will be installed to the building from the water main on Alder Street. An existing fire hydrant connected to the Portland Water District system is located approximately 260 feet from the building at the corner of the intersection of Alder Street and Oxford Street.*

3. Availability and Adequate Capacity of Public Utilities

- a. *The applicable utility companies have been notified of the project and 'Ability to Serve' letters have been provided. The proposed utility services have been designed to provide adequate capacity for the proposed project.*
- b. *The overhead electrical and communication service connections to the building will be maintained.*
- c. *Utility installations within the Alder Street right-of-way meet the requirements of Sections 2 and 9 of the Technical Manual.*
- d. *The project will be connected to the public sanitary sewer collection system. A grease interceptor will also be installed.*
- e. *Sewer and stormwater installations within the Alder Street right-of-way meet the requirements of Sections 2 and 4 of the Technical Manual.*
- f. *Trash is currently and will continue to be stored in the dumpster in the parking lot at the corner of Preble and Oxford Streets. The Applicant will maintain their existing private waste disposal contract.*

ci) Site Design Standards

1. Massing, Ventilation, and Wind Impact:

- a. *The building will not have an adverse effect on the ventilation or wind climate of the site or abutting properties.*
- b. *The building's bulk, location, and height will not have an adverse effect on the value of the abutting structures.*

c. *HVAC equipment will be located on the roof and will be vented away from existing buildings.*

2. Shadows

a. *The height of the proposed addition will be 17 feet, which is less than the 45-foot height threshold that triggers a preliminary shadow analysis. It is not anticipated that the project will have an adverse impact on publicly accessible open space or other important natural features.*

3. Snow and Ice Loading

a. *The roof will be slightly pitched to the southeast side of the building. Snow and ice falling from the roof will fall in the alley between the proposed and abutting building and will not cause an adverse impact to the adjacent property. No snow or ice will accumulate within the public way as a result of the project.*

4. View Corridors

a. *The height of the building is 17 feet from grade, which is lower than 2 of 3 three adjacent buildings. Therefore, it will not have an adverse impact on views.*

5. Historic Resources

a. *The project is not located within a historic district or within 100' of a historic district.*

b. *The project is not located within 100' of a historic structure.*

c. *There are no known archaeological resources on the site.*

6. Exterior Lighting

a. Site Lighting

i. *One exterior light fixture is proposed above the building entrance. The light fixture will be RAB SLIM LED fixture which is full cutoff. The maximum illumination level from the fixture will be 4.7 fc. Additional lighting along the ADA ramp will be provided by the existing street lights.*

ii. *The light is directed towards the street and not towards any residential structures.*

b. Architectural and Specialty Lighting

i. *No architectural or specialty lighting is proposed*

ii. *No up-lighting is proposed*

c. Street Lighting

i. *No street lighting is proposed.*

7. Noise and Vibration

a. HVAC and Mechanical Equipment

- i. *HVAC equipment will be located on the roof in a location that is away from the abutting properties.*
- ii. *No emergency generators are proposed.*

8. Signage and Wayfinding

- a. *No Street or wayfinding signage is proposed. Lettering is proposed on the front of the building as indicated on the architectural elevations.*

9. Zoning Related Design Standards

- a. *A street wall with an entrance to the building accessible from the street will be provided along the Alder Street frontage. The building is in scale with the surrounding buildings.*

e) Conditions

1. *No conditions have been imposed by the Planning Authority or Planning Board*

f) General Waivers

1. *The applicant is requesting a waiver for planting of street trees because there is not sufficient room within the development area. The applicant intends to pay into the tree fund.*
2. *The applicant is requesting a waiver from the lighting standard of 0.1 fc at the property line. Due to the proximity of the building to the street and the need to provide sufficient lighting at the building entrance, illumination levels above 0.1 fc will cross the property line into the Alder Street ROW. There are no light trespass exceedances with abutting properties.*



Attachment B
Utility Ability to Serve Letters



CENTRAL MAINE POWER

November 25, 2015

Silas Canavan, P.E.
Walsh Engineering Associates, Inc.
One Karen Drive, Suite 2A
Westbrook, ME 04092

Subject: Request for Letter of Ability to Serve for 88 Preble Street in Portland

Good morning Silas;

This letter serves to confirm that Central Maine Power will be able to service the property located at 88 Preble Street in Portland. Currently there is single phase and three phase 12.4kV available on the mainline poles of this street.

If you have any questions, please contact me at (207) 242-7715 or at Jeffrey.lagueux@cmpco.com.

Sincerely,

Jeff Lagueux
Supervisor of Field Design

740 Main Street, Lewiston, ME 04240
Telephone 800.750.4000



IBERDROLA
USA

An equal opportunity employer



Portland Water District

FROM SEBAGO LAKE TO CASCO BAY

January 7, 2016

Walsh Engineering Associates, Inc.
1 Karen Drive, Suite 2A
Westbrook, ME 04092

Attn: Silas Canavan
Re: Alder Street - Portland
Ability to Serve with PWD Water

Dear Mr. Canavan:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on November 24, 2015. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter.

Conditions of Service

The following conditions of service apply:

- New services may be installed from the water main in Alder Street as proposed on the Concept Plan dated November 5, 2015. As a condition of allowing new water services, any existing services that are not in use, or will not longer be used as a result of the development must be terminated per District standards. This includes shutting the corporation valve and cutting the pipe from the main for the three 3/4-inch domestic services (none of which are currently in use).
- Water District approval of water infrastructure plans will be required for the project prior to construction. As your project progresses, we advise that you submit any preliminary design plans to MEANS for review of the water main and water service line configuration. We will work with you to ensure that the design meets our current standards.

Existing Site Service

According to District records, the project site does currently have existing water service. A 6-inch diameter cast iron fire service line, a 2-inch diameter cast iron water service line, and three 3/4-inch diameter copper water service lines located as shown on the attached water service cards, provide water service to this site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of these services.



Water System Characteristics

According to District records, there is a 6-inch diameter cast iron water main on the east side of Alder Street, a 16-inch cast iron water main on the northeast side of Preble Street and a public fire hydrant located across Preble Street from the site. Recent flow data is not available in this area. The most recent static pressure reading was 110 psi on August 18, 2015.

Public Fire Protection

It is not anticipated that this project will include the installation of new public hydrants to be accepted into the District water system. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

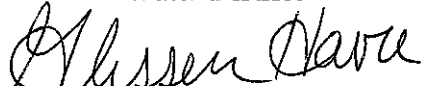
The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact MEANS to request a hydrant flow test and we will work with you to get more complete data.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District



Glissen Havu, E.I.

Design Engineer



November 24, 2015

Unitil
ME Gas Operations
1075 Forest Avenue
Portland, ME 04103-3586

**RE: Ability to Serve
88 Preble Street
Portland, Maine
Tax Map 31, Block D, Lot 10**

To Whom It May Concern,

Walsh Engineering Associates, Inc. (WEA) is requesting an "Ability to Serve" letter from Unitil for a 3,000± square foot kitchen and dining hall addition to the Salvation Army Adult Rehabilitation Center located at 88 Preble Street in Portland, Maine. The kitchen and dining hall addition will be located on the parcel identified as Map 31, Block D, Lot 10, which abuts Alder Street.

The existing kitchen and dining hall, which has seating capacity for 66 people, will be decommissioned after the addition is constructed. The new dining hall will have seating capacity for 100 people.

Can you please verify that Unitil can provide service to this parcel from Alder Street and/or if the existing building at 88 Preble Street currently has a gas service?

A site plan is attached showing the conceptual location of the proposed building. A copy of the City of Portland Tax Map is also attached.

Please contact me if you require any additional information.

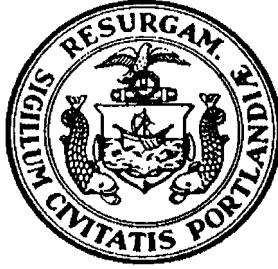
Thank you,

A handwritten signature in black ink that reads "Silas Canavan".

Silas Canavan, PE
Walsh Engineering Associates, Inc.

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Department of Public Services,
55 Portland Street,
Portland, Maine 04101-2991



Mr. Frank J. Brancelly,
Senior Engineering Technician,
Phone #: (207) 874-8832,
Fax #: (207) 874-8852,
E-mail: fjb@portlandmaine.gov

Date: January 18, 2016

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 88 Preble Street Street, Portland, Maine Chart Block Lot Number: 33/D/10

Proposed Use: Kitchen & Dining Hall

Previous Use: Kitchen & Dining Hall

Existing Sanitary Flows: 2,342 GPD GPD

Existing Process Flows: _____ GPD

Description and location of City sewer that is to receive the proposed building sewer lateral.
New 6" sewer service to Alder Street.

Site Category	Commercial (see part 4 below)	<input type="checkbox"/>
	Industrial (complete part 5 below)	<input type="checkbox"/>
	Governmental	<input type="checkbox"/>
	Residential	<input type="checkbox"/>
	Other (specify)	<input checked="" type="checkbox"/>

Institutional

(Clearly, indicate the proposed connections, on the submitted plans)

2. Please, Submit Contact Information.

City Planner's Name: T.B.D Phone: _____

Owner/Developer Name: The Salvation Army - Attn: Major Ronald Bernardi

Owner/Developer Address: 30 Warren Ave, Portland, ME 04103

Phone: 207-878-8555 Fax: _____ E-mail: ronald.bernardi@use.salvationarmy.org

Engineering Consultant Name: Silas Canavan, PE, Walsh Engineering Associates, Inc.

Engineering Consultant Address: 1 Karen Drive, Suite 2A, Westbrook, Maine 04092

Phone: 207-553-9898 Fax: _____ E-mail: silas@walsh-eng.com

(Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review)

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: Qave = 2,852, Qmax = 6,274 GPD

Peaking Factor/ Peak Times: PF = 2.2

Specify the source of design guidelines: (i.e. "Handbook of Subsurface Wastewater Disposal in Maine,"
"Plumbers and Pipe Fitters Calculation Manual," Portland Water District Records, Other (specify)
Maine Subsurface Wastewater Disposal Rules

(Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet)

See attached design flow calculations.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: See attached.
Size of External Grease Interceptor: _____
Retention Time: _____
Peaking Factor/ Peak Times: _____

(Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet)

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: N/A GPD
Do you currently hold Federal or State discharge permits? Yes No
Is the process wastewater termed categorical under CFR 40? Yes No
OSHA Standard Industrial Code (SIC): <http://www.osha.gov/oshstats/sicser.html>
Peaking Factor/Peak Process Times: _____

(Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps)

(Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided below, or attached, as a separate sheet)

Notes, Comments or Calculation

See attached design flow calculations.



Wastewater Design Flow Calculations

Kitchen & Dining Hall Addition
The Salvation Army Adult Rehabilitation Center
88 Preble Street
Portland, Maine

The project consists of the construction of an addition to house a new dining hall and kitchen to serve the residents of the Adult Rehabilitation Center. The existing kitchen and dining hall, which has seating capacity for 66 people, will be decommissioned after the addition is constructed. The new dining hall will have seating capacity for 100 people. Analysis of the past year's water and sewer bills indicates that existing water use is approximately 2,342 GPD, which currently discharges to the Preble Street sewer main. It is anticipated that the additional seating capacity in the new dining hall will result in an increase in wastewater flow of approximately 510 GPD. Adding the additional wastewater flow to the current wastewater flow results in a total wastewater demand of 2,852 GPD for the site.

A new sewer service will be installed from the building addition to Alder Street. This sewer service will only handle wastewater flows from the new kitchen and dining hall. Therefore, it is anticipated that the flow directed to Alder Street will be 1,500 GPD and the flow directed to Preble Street will be reduced to 1,352 GPD.

Wastewater Flow Calculations

Existing Conditions:

- Dining hall seating capacity of 66 people
- Existing wastewater flow = 2,342 GPD (from previous year's water bills)

Proposed conditions:

- Additional dining hall seating capacity = 34 seats

Design flows from Maine Subsurface Wastewater Disposal Rules, Table 4C

- 5 GPD/seat/meal (dining hall)

Increase in Average Daily Flow $Q_{ave} = (5 \text{ GPD})(34 \text{ seats})(3 \text{ meals}) = \mathbf{510 \text{ GPD}}$

Total Average Daily Flow $Q_{ave} = 2,342 \text{ GPD} + 510 \text{ GPD} = \mathbf{2,852 \text{ GPD}}$

Average Daily Flow directed to Alder Street = $(5 \text{ GPD})(100 \text{ seats})(3 \text{ meals}) = \mathbf{1,500 \text{ GPD}}$

Average Daily Flow directed to Preble Street = $2,852 \text{ GPD} - 1,500 \text{ GPD} = \mathbf{1,352 \text{ GPD}}$

Peaking Factor = 2.2

Per TR-16 Guides for the Design of Wastewater Treatment Works, Figure 1, pop. = 70,000

Maximum Daily Flow $Q_{max} = 2,852 \text{ GPD} (2.2) = \mathbf{6,274 \text{ GPD}}$

Grease Interceptor Sizing

Due to the food preparation use onsite, a grease interceptor will be installed. Two sewer services will be installed from the building. All of the drains and appliances that will discharge grease to the sewer system will be directed to the grease interceptor (i.e. sink drains, dishwasher, food grinder, etc.). A separate service from the building will handle the remaining domestic wastewater flows from the addition. The two services will tie together downgradient of the grease interceptor.

The building will be constructed with a slab foundation and will not have a basement. Therefore, the grease interceptor will have to be installed outside. Given the limited space available outside of the building, we have proposed the installation of the grease interceptor under the sidewalk in the ROW. This appears to be the only practical location of the unit given the location of the retaining wall and landings required to provide ADA access at the front of the building.

WEA has coordinated with the Shier Products, and is proposing the installation of a Shier GB-250 grease interceptor. The GB-250 has the capacity to handle 3 meals/day for 88 people (264 meals/day), assuming a 90-day pump-out schedule. The ARC currently has 70 residents. If the number of residents increases above 88 people in the future, then the pump-out schedule will be reduced to 75 days. Calculations are provided below.

Grease Interceptor Calculations

Capacity with 90-day pump-out

Grease capacity of GB-250 @ 100 GPM = 1,076 lbs

Capacity per day @ 90-day pump-out schedule = 1,076 lbs/90 days = 11.96 lbs/day

Grease production of facility = 0.0455 lbs/meal (cafeteria with flatware washing)

Meal capacity per day = 11.96 lbs/day / 0.0455 lbs/meal = 263 meals/day

Person capacity per day = 263 meals/day / 3 meals/person = 88 people

**If the number of meals per day served increases above 263, then the pump-out schedule shall be reduced to 75 days.

Capacity with 75-day pump-out

Grease capacity of GB-250 @ 100 GPM = 1,076 lbs

Capacity per day @ 75-day pump-out schedule = 1,076 lbs/75 days = 14.35 lbs/day

Grease production of facility = 0.0455 lbs/meal (cafeteria with flatware washing)

Meal capacity per day = 14.35 lbs/day / 0.0455 lbs/meal = 315 meals/day

Person capacity per day = 315 meals/day / 3 meals/person = 105 people

Step 1: size by flow rate

Hydromechanical Grease Interceptor Sizing Using Gravity Flow Rates (Per Ch. 10 of the Uniform Plumbing Code)

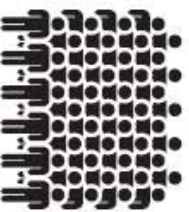
Diameter of Grease Waste Pipe	Maximum Full Pipe Flow*	Size of Grease Interceptor	
		One-minute Drainage Period	Two-minute Drainage Period
2" (51 mm)	20 GPM (1.3 L/s)	20 GPM (1.3 L/s)	10 GPM (0.6 L/s)
3" (76 mm)	60 GPM (3.8 L/s)	75 GPM (4.7 L/s)	35 GPM (2.2 L/s)
4" (102 mm)	125 GPM (7.9 L/s)	150 GPM (9.5 L/s)	75 GPM (4.7 L/s)
5" (127 mm)	230 GPM (14.5 L/s)	250 GPM (15.8 L/s)	125 GPM (7.9 L/s)
6" (152 mm)	375 GPM (23.6 L/s)	500 GPM (31.5 L/s)	250 GPM (15.8 L/s)

*1/4 inch slope per foot (20.8mm/m) based on Manning's formula with friction factor N = 0.012.

▶ **Recommended**

Step 2: calculate grease capacity

Meals Per Day **×** Grease Production Values (see **A B C D E F** below)



× Days Per Pump-Out Cycle



= Grease Capacity Needed



Restaurant Type **Grease Production Values**

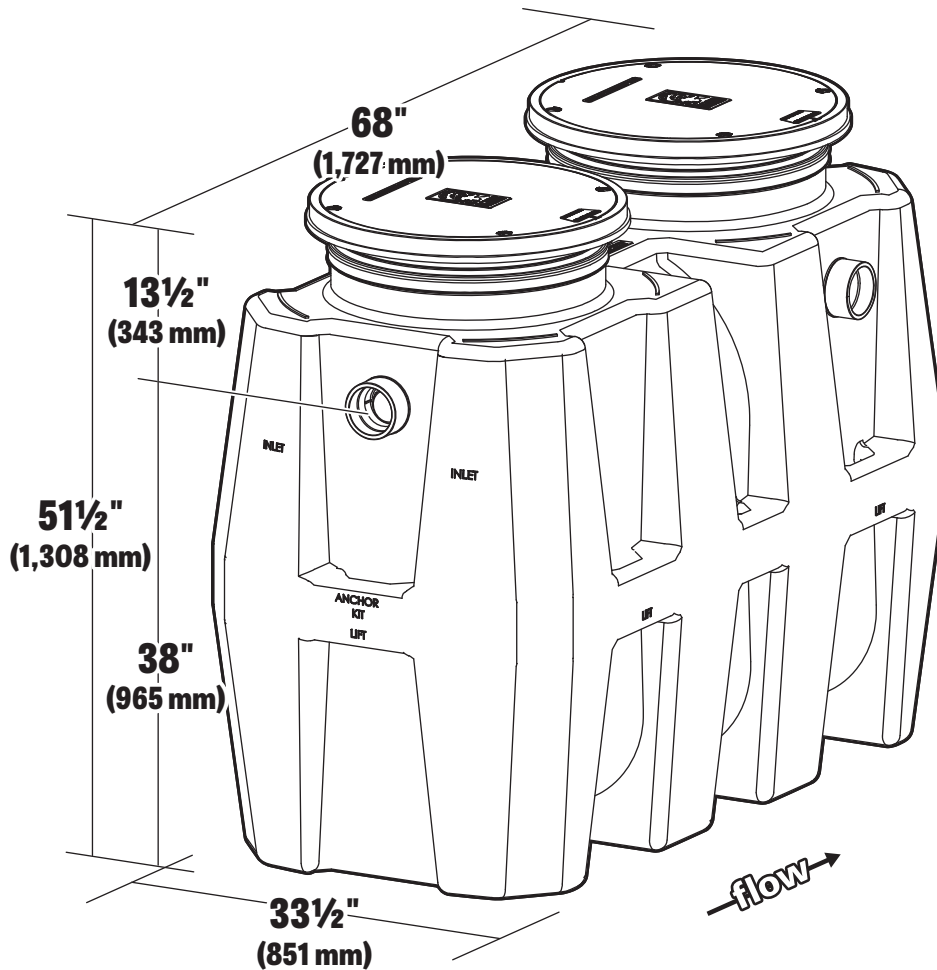
Examples

Low Grease Production	A 0.005 lbs (2.268 g) / meal (no flatware)	Sandwich Shop, Convenience Store, Bar, Sushi Bar, Delicatessen,
	B 0.0065 lbs (2.948 g) / meal (with flatware)	Snack Bar, Frozen Yogurt, Hotel Breakfast Bar, Residential
Medium Grease Production	C 0.025 lbs (11.340 g) / meal (no flatware)	Coffee House, Pizza, Grocery Store (no fryer), Ice Cream Parlor,
	D 0.0325 lbs (14.742 g) / meal (with flatware)	Fast Food, Greek, Indian, Low Grease Output FSE (w/fryer)
High Grease Production	E 0.035 lbs (15.876 g) / meal (no flatware)	Cafeteria, Family Restaurant, Italian, Steak House, Bakery, Chinese,
	F 0.0455 lbs (20.638 g) / meal (with flatware)	Buffet, Mexican, Seafood, Fried Chicken, Grocery Store (w/fryer)

GB-250

Great Basin™ GREASE INTERCEPTOR TECHNICAL DATA

Submittal | Specifications | Installation | Application Specific Details



SUBMITTAL

STANDARD: 4" plain end inlet/outlet | Capacities - Liquid: 275 gal.; Grease: 1,076 lbs. (147.4 gal.); Solids: 105 gal.
Highway traffic load rated, bolted, gas/water tight composite covers. (16,000 lbs.)

OPTIONS:

- 4" Male Thread Inlet/Outlet
- 6" Plain End Inlet/Outlet
- 6" Male Thread Inlet/Outlet (stainless steel)
- Pedestrian Rated Covers - 2,000 lbs.
- H2O Load Rated Pickable Cast Iron Covers
- Integral Membrane Clamping Collar Kit
- Pumpout Port (Large)
- AK1** High Water Anchor Kit
- TeleGlide Risers**
- SR24** (x2) >6" - 24"
- LR24** (x2) >24" - 39"
- SR24** (x4) >39" - 43"
- SR24** (x2) + **LR24** (x2) >43" - 58"
- LR24** (x4) >58" - 72"

APPROVAL:

Signature:
Date:
Company:
Specifying Engineer:
Engineering Firm:



SCHIER
LIFETIME GUARANTEED
GREASE INTERCEPTORS

MODEL NUMBER:
GB-250

DESCRIPTION: Polyethylene Grease Interceptor
100 GPM - 275 gallon capacity

PART #: 4055-001-XX

DWG BY: C. O'Boyle

DATE: 10/08/2015

REV: 0 / / /201_

ECO:

SPECIFICATIONS

NOTES

- 4" plain end inlet/outlet
- Unit weight - w/composite covers: 230 lbs.; w/cast iron covers: 340 lbs.
- Maximum operating temperature: 190° F continuous
- Capacities - Liquid: 275 gal.; Grease: 1,076 lbs. (147.4 gal.); Solids: 105 gal.
- Built-in Flow control.
- For gravity drainage applications only.
- Do not use for pressure applications.
- Cover placement allows full access to tank for proper maintenance.
- Vent not required unless per local code.
- Engineered inlet and outlet diffusers are removable to inspect/clean piping.
- Integral air relief / Anti-siphon / Sampling access.

DIFFUSION FLOW TECHNOLOGY

The inlet diffuser splits influent into three paths, creating laminar flow and utilizing the entire liquid volume of the tank for efficient grease separation. The calibrated openings greatly reduce effluent turbulence. The effluent enters the main chamber without disturbing the existing grease or sediment layers.

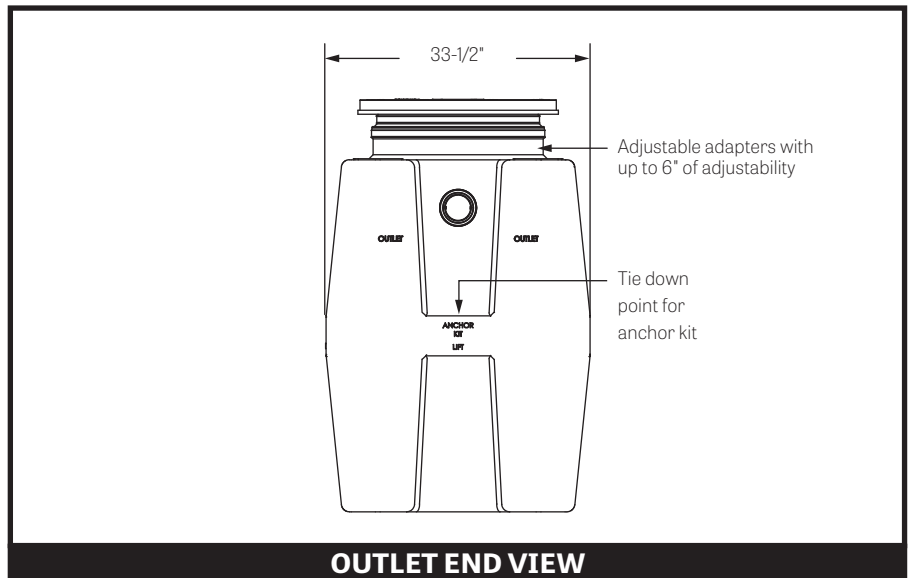
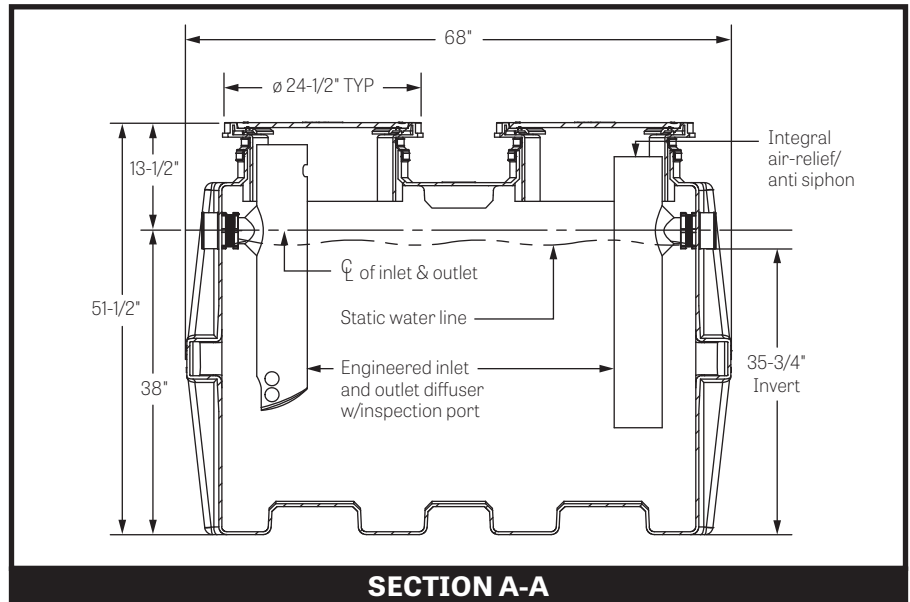
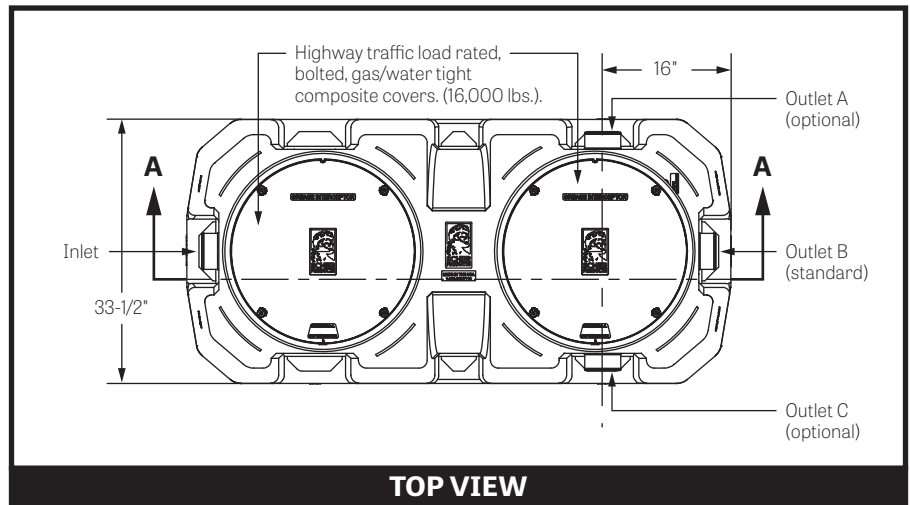
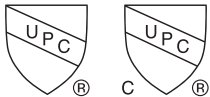
The integral air relief / anti-siphon in the top of the outlet diffuser allows pressure stabilization within the unit during operation. The bottom of the outlet diffuser allows only effluent which is free of grease to exit the tank. It can easily be attached to any of the three outlets provided to ease job site piping layouts.

ENGINEER SPECIFICATION GUIDE

Schier Great Basin™ grease interceptor model # GB-250 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene. Interceptor shall be furnished for above or below grade installation. Interceptor shall be certified to ASME A112.14.3 (type C) and CSA B481.1, with field adjustable riser system, built-in flow control, built-in test caps and three outlet options. Interceptor flow rate shall be 100 GPM. Interceptor grease capacity shall be 1,076 lbs. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

CERTIFIED PERFORMANCE

Great Basin hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.



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REV: 0 / / 201_

ECO:

INSTALLATION (1 of 3)

WARNING! DO NOT AIR TEST UNIT OR TELEGLIDE RISER SYSTEM! Doing so may result in property damage, personal injury or death.

LEAK/SEAL TESTING

Cap/plug all base unit plumbing connections and remove covers. **For base unit testing**, fill with water to just above the highest connection. **For riser system testing** (if required) fill with water to finished grade level. **CAUTION: Risers must be supported before filling with water to prevent tipping.** Inspect unit, connections and all gaskets and clamps (if applicable) for leaks. Check water level at specific time intervals per local code.

GENERAL INSTALLATION INSTRUCTIONS

Schier grease interceptors are manufactured with an internal flow control system. They do not require an external flow control system or air intake vent. Schier grease interceptors are not to be installed in any other manner except as shown. Consult local codes for separate trapping requirements, cleanout locations and additional installation instructions.

1. The **flow control plate is not installed** on this unit. When the unit is installed 13 feet or more below the fixtures that flow into the unit, or a high flow/increased head pressure condition exists (causing a flow rate above 100 GPM), install the inlet diffuser flow control plate to maintain proper flow rate.
2. Set unit on level solid surface as close as possible to fixtures.
3. Connect outlet diffuser to the desired outlet (A,B,C). Unit is shipped with the outlet diffuser in location B and sealing caps on locations A and C.
4. Connect inlet and outlet drainage lines to unit. Mechanically couple pipes to unit. **Do not solvent weld.**
5. For units with cast iron covers, remove retainer clips prior to burial.

NOTE: Do not install below a hydrostatic slab.

BELOW GRADE INSTALLATION INSTRUCTIONS

EXCAVATION

1. Surrounding soil must be undisturbed soil or well compacted engineering fill.
2. Width and length of excavation shall be a minimum of 12" greater than the tank on all sides and depth shall be 6" deeper than tank bottom.
3. Set the tank level on a 6" deep layer of well-packed crushed aggregate material and connect waste piping per General Installation Instructions.

BACKFILL

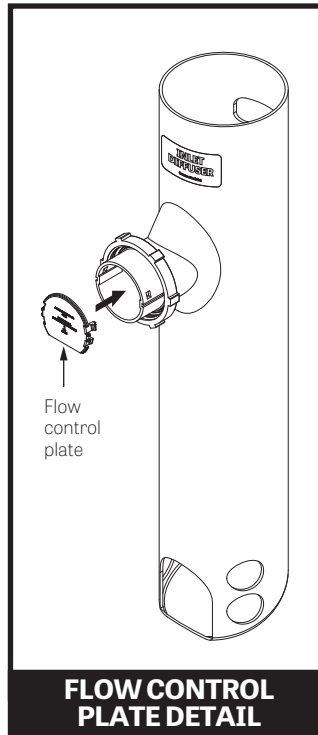
1. Preparation of sub grade per geotech recommendations.
2. Stabilize and compact sub grade to 95% proctor.
3. Fill unit with water before backfilling to stabilize unit and prevent float-out during backfilling. Secure covers and risers (if necessary) to the unit.
4. Backfill evenly around tank using crushed aggregate (approximately 3/4" size rock or sand, with no fines), or flowable fill. **Do not compact backfill around unit.**

FINISHED CONCRETE SLAB

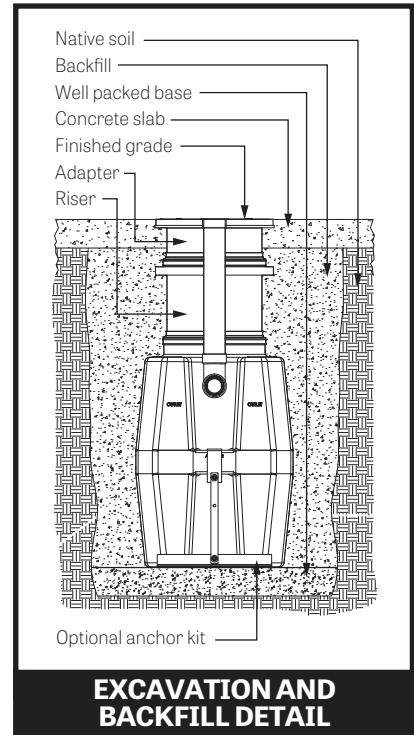
Slab must extend 18" minimum outside the unit footprint.

Pedestrian traffic or greenspace areas: 4" Thick reinforced concrete slab required.

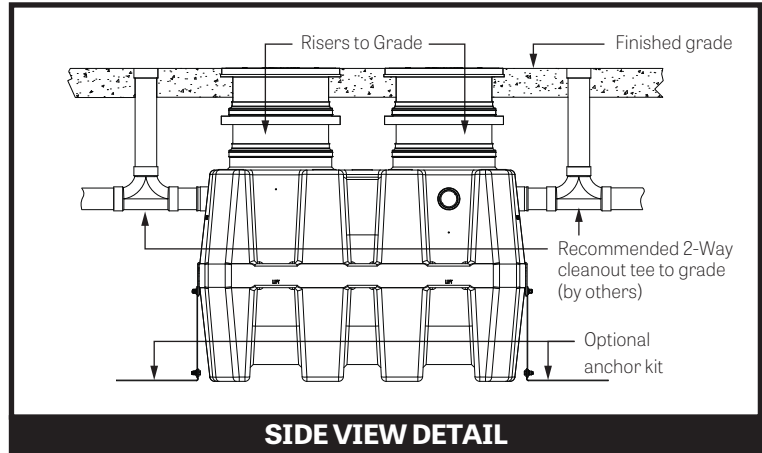
Vehicular traffic areas: Minimum 8" Thick concrete slab with rebar required; final thickness of concrete around cover to be determined by specifying engineer. If traffic loading is required the concrete slab dimensions shown are for guideline purposes only. Concrete to be 28 day compressive strength to 4,000 PSI. Use NO. 4 rebar (ø 1/2") grade 60 steel per ASTM A615: connected with tie wire. Rebar to be 2-1/2" from edge of concrete and spaced in a 12" grid with 4" spacing around access openings.



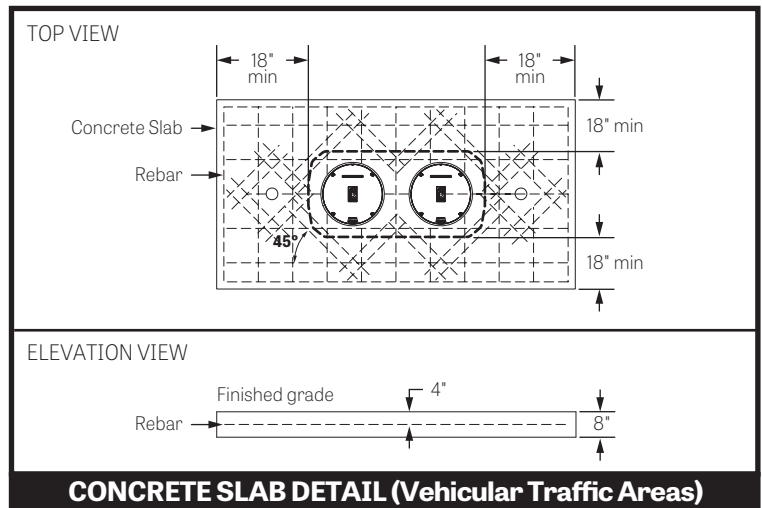
FLOW CONTROL PLATE DETAIL



EXCAVATION AND BACKFILL DETAIL



SIDE VIEW DETAIL



CONCRETE SLAB DETAIL (Vehicular Traffic Areas)



SCHIER
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ECO:

INSTALLATION (2 of 3)

TELEGLIDE RISER (24 SERIES) INSTALLATION GUIDELINES

Tools needed: 7/16" Nut driver tool/bit (included), marker (included), tape measure and drill with 1/2" chuck. Jigsaw, circular saw or reciprocating saw will be needed if risers need to be cut.

NOTE: To remove a component or adjust its position, the Upper Band Clamp needs to be loosened or removed using nut driver bit. Loosened clamps should be re-tightened to 5 - 8 ft lbs. of torque (same as a rubber no-hub coupling). The Lower Band Clamp is factory set and should not be adjusted or removed.

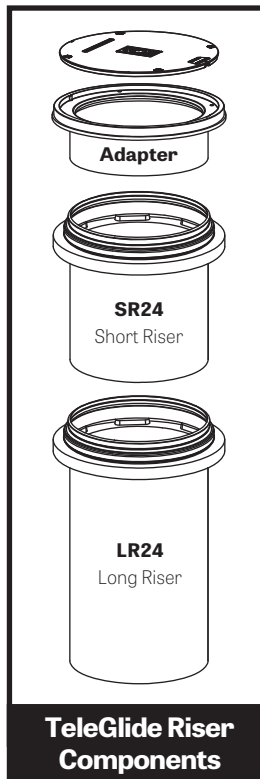
Riser Assembly Instructions/Steps

1. Set unit so the pipe connections line up with job site piping and measure riser height needed from top of cover to finished grade. See Table 1 to select risers needed.
2. Remove covers from adapters. Remove adapters from main unit. On a level surface, pre-assemble the risers and adapters, adjusting the components upwards or downwards to achieve the riser height needed. Make sure to maintain minimum and maximum insertion depths as shown in Figure 2. If components are too long, make a circular line around the sidewall with marker and cut with a power saw. The lowest cut line on the riser assembly will be 6" beyond the riser height needed to allow for ideal insertion depth (See Figure 1). An alignment mark should be drawn 2" beyond the riser height needed which will align with the top of the base unit gasket. **DO NOT** cut the alignment mark. The Adapters and risers should sit level with each other. Tighten upper clamps to keep riser/adaptor assembly from shifting. Make alignment marks on the sidewalls at the top of all riser gaskets to aid final assembly.
3. **IMPORTANT:** Before the next step, make sure both diffusers are installed inside the main unit at the appropriate locations. Check if there needs to be any flow control adjustment at the inlet diffuser (see general installation instructions).
4. Take apart riser assembly and clean all sidewalls and insides of gaskets to remove dust/debris. Install components into the main unit starting from the lowest riser and work your way up to finished grade. Maintain minimum and maximum insertion depths for all components (see Figure 2). Tighten Upper Clamps to specified torque after correctly positioning components. Riser assembly may need to be supported during backfill.
5. If tilting of the adapter is required to be flush with grade, do so **AFTER** all clamps have been tightened with riser(s)/adapter in a vertical and level position. Tilting is done using gasket flexibility. Tilting before tightening clamps may ruin a perfect gasket seal. Schier recommends tilting only the adapter versus the entire riser assembly to make sure your riser height and proper tank access is maintained.
6. If riser height conditions change after completing above steps, there may be room for adjustment. As long as minimum and maximum insertion depths are maintained (see Figure 2), the adapters/risers can be adjusted/cut as many times as necessary. When riser system installation is complete, see Leak/Seal Testing procedure if required (pg 3 of 6).

ANCHOR KIT INSTALLATION

Stainless steel anchor kit is recommended for installation in high water table conditions to prevent float out. Necessity to be determined by specifying engineer. Hold down force achieved by backfill weight acting on Anchor Plate.

Slide Anchor Hook over tie down point on end wall and bolt to Anchor Strap. Bolt Anchor Strap to Anchor Plate using provided stainless steel hardware. If required, Anchor Plate may be bolted to concrete slab using provided holes.



TeleGlide Riser Components

Table 1

Riser Height Needed	Risers Required
0 - 6"	None (use adapter)
>6" - 24"	SR24 (x2)
>24" - 39"	LR24 (x2)
>39" - 43"	SR24 (x4)
>43" - 58"	SR24 (x2) + LR24 (x2)
>58" - 72"	LR24 (x4)

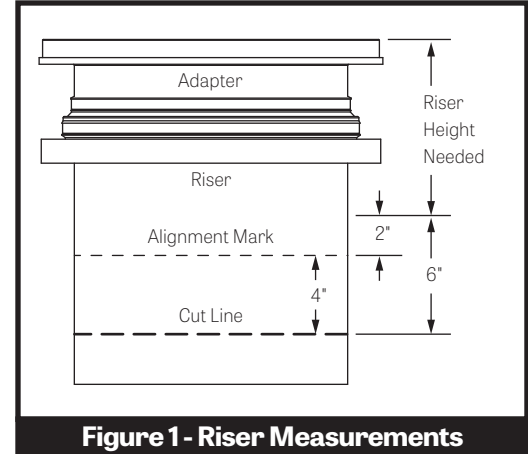


Figure 1 - Riser Measurements

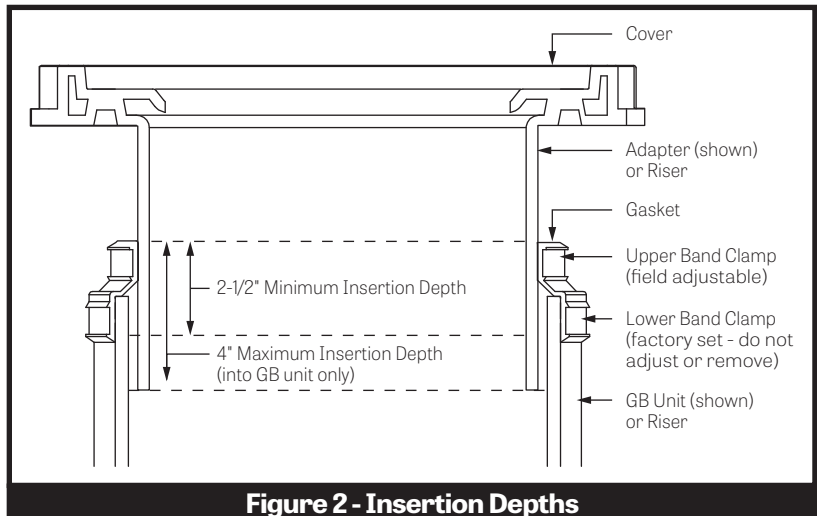


Figure 2 - Insertion Depths



ANCHOR KIT INSTALLATION DETAIL



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INSTALLATION (3 of 3)

EXPANDING GREASE CAPACITY

Multiple grease interceptor configurations must be piped as shown to ensure the system works properly as designed. For below grade installations, all units must be level in the excavation pit. Hybrid systems combining parallel and series installations are available per written approval from Schier.

All inlet manifolds, outlet manifolds, piping between units and two-way cleanout tees by others.

Series Installation of Multiple Grease Interceptors

For lower flow rates and higher grease storage requirements.

For below grade installations it is recommended to install a two-way cleanout tee extended to finished grade before the inlet of the first unit, after the outlet of the last unit and in between units (if there is a long run of pipe between units) for line cleaning purposes.

NOTE: When the flow control plate is required, it should only be installed on the first unit in the series.

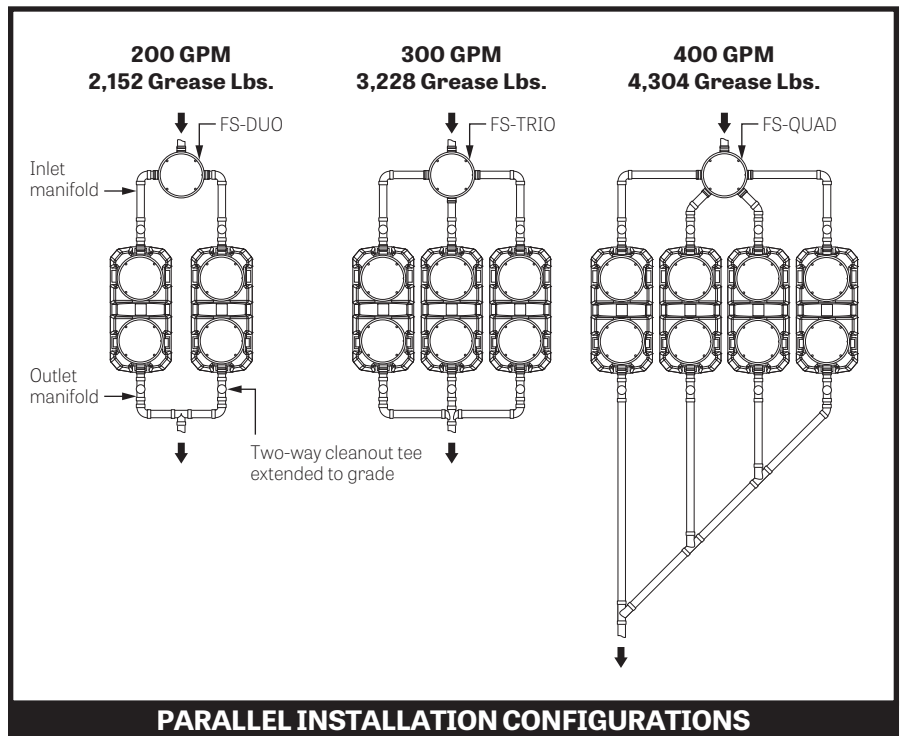
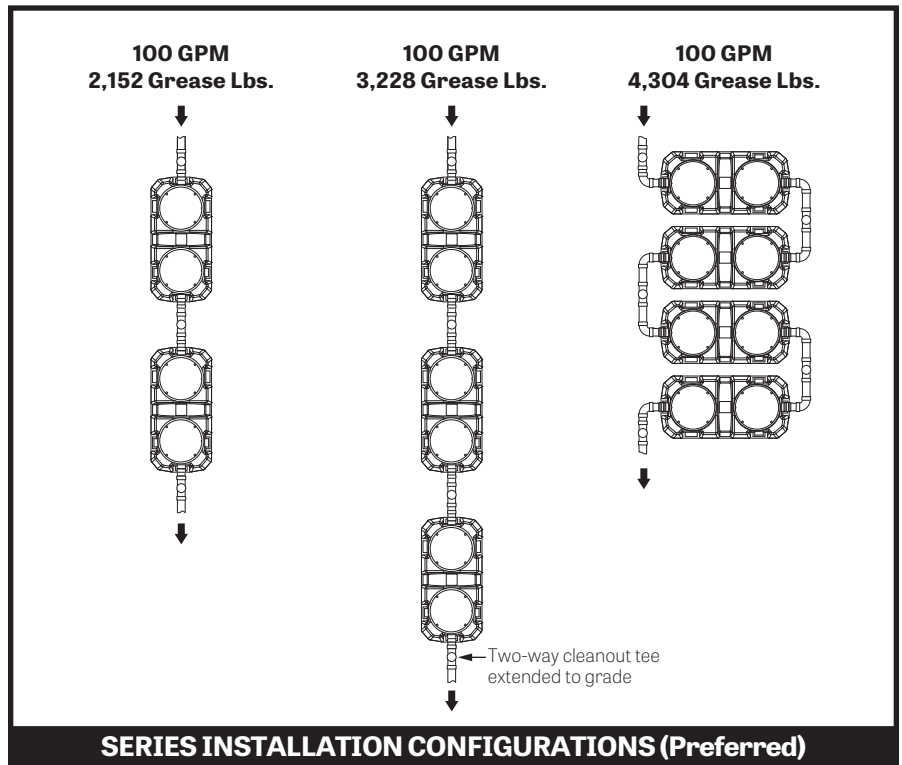
Parallel Installation of Multiple Grease Interceptors

For flow rates above 100 GPM and higher grease storage requirements.

Units must be equally spaced to ensure equal effluent flow distribution.

For below grade installations it is recommended to install a two-way cleanout tee extended to finished grade before and after each unit for line cleaning purposes.

Flow Splitter™ (FS-DUO, FS-TRIO, FS-QUAD) sold separately.



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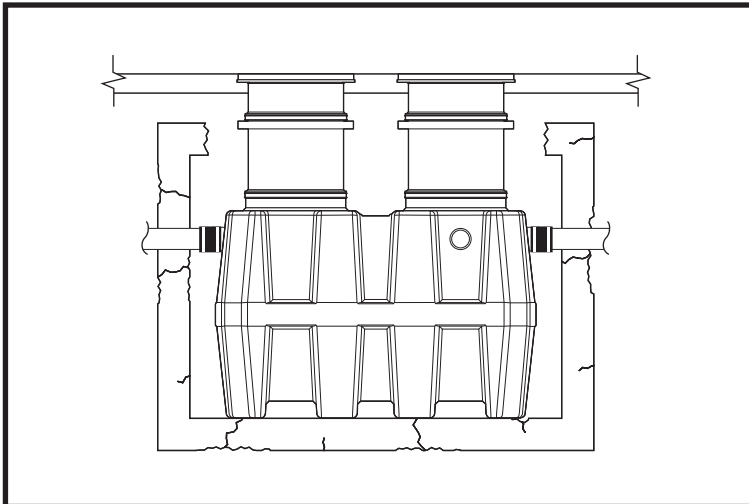
DWG BY: C. O'Boyle

DATE: 10/08/2015

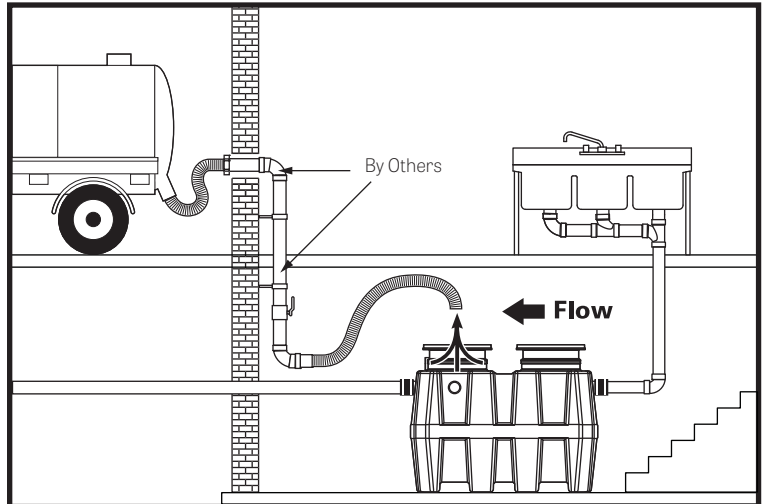
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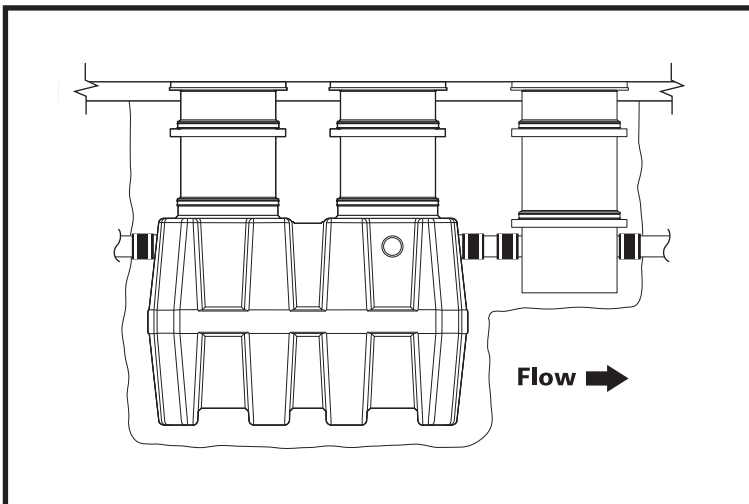
APPLICATION SPECIFIC DETAILS



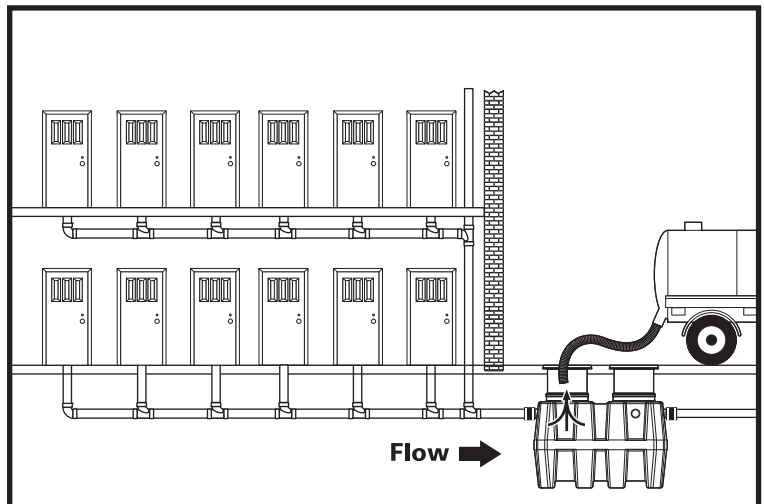
Inside a Corroded Concrete Unit



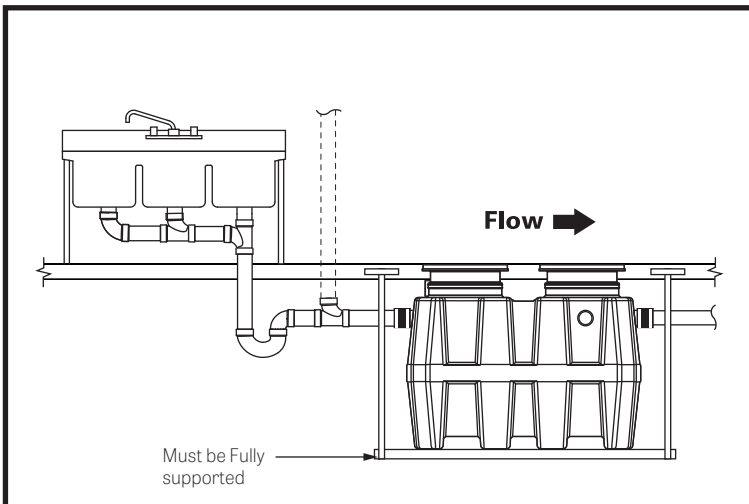
Basement Installation with Remote Pump-out



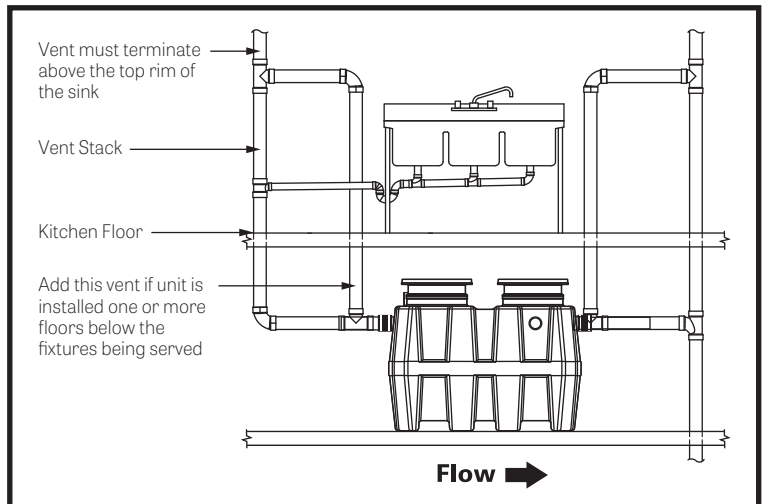
Installation with Sampling Port SV24-L4



Serving an Apartment Complex



Recessed and Suspended



Additional Venting for Floor-Below Installations



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5 Summary of Existing and/or Proposed Easements, Covenants, Right-of-Way, or other Burdens on the Site

There are no existing or proposed easement, covenants, right-of-ways or other burdens associated with the development portion of the site.

6 Written Requests for Waivers

The applicant is respectfully requesting a waiver from the street tree planting requirement because there is not adequate space for planting of trees in the development area. The applicant intends to pay into the tree fund.

The applicant is respectfully requesting a waiver from the light trespass standard due to proximity of the building entrance to the Alter Street ROW.

The applicant respectfully requests a waiver from the boundary survey requirements per section 13.4.1 of the Technical Manual because:

1. The proposed project is on an already improved lot of record
2. The project comprises less than 1 acre of said improved lot of record.

7 Evidence of Financial and Technical Capacity

7.1 Financial Capacity

The applicant has the necessary financing for the project. The Salvation Army is a well-funded national organization conducting many similar construction projects nation-wide. The estimated construction cost for the project is approximately \$1,000,000.

7.2 Technical Capacity

The Applicant has assembled a team of qualified professionals for the design and permitting of the project. Each team member has extensive experience in the design and permitting of project in Portland and throughout the State of Maine. The consultant team consists of the following members:

Civil Engineer: Silas Canavan, PE
Walsh Engineering Associates, Inc.
1 Karen Drive, Suite 2A
Westbrook, Maine 04092
207-553-9898
silas@walsh-eng.com

Architect: Evan Carroll, AIA
bild ARCHITECTURE
PO Box 8235
Portland, Maine 04104
207-408-0168
evan@bildarchitecture.com

Surveyor: Mike Hartman, PLS
Jones Associates, Inc.
280 Poland Spring Road
Auburn, Maine 04210
207-241-0235
mhartman@jonesai.com

8 Construction Management Plan

The Applicant intends to begin construction immediately following approval of all applicable permit applications.

The project consists of the construction of a single-story 3,560 square foot kitchen and dining hall addition. It is anticipated that construction sequencing will be similar to the following schedule

- Installation of erosion controls
- Remove existing site features as necessary
- Prepare existing buildings for addition attachment
- Excavation for foundation
- Installation of foundation
- Installation of site utilities from Alder Street
- Building construction
- Removal of existing sidewalk to be reconstructed
- Reconstruction of sidewalk
- Installation of landscaping and site stabilization
- Removal of temporary erosion and sedimentation control devices
- Project closeout

Due to the proximity of the front of the building to the Alder Street sidewalk and the sidewalk reconstruction, pedestrian traffic may be temporarily redirected by signage. This will be accomplished using methods such as crosswalks, signage, education, coordination, and temporary surfaces.

The installation of new sewer, gas, and water service lines will require street openings within Alder Street. Associated lane closures and traffic management will be coordinated with the City by the selected contractor. Lane closures shall be performed during off-peak hours and/or at night.

The contractor selected to perform the work will submit a detailed construction and traffic management plan to the department of public works for approval prior to any street or sidewalk closings.



9 Boundary Survey

A partial Boundary and Topographic survey was performed by Jones Associates, Inc. and is enclosed with the Plan Set in Section 10. The applicant respectfully requests a waiver from the boundary survey requirements per section 13.4.1 of the Technical Manual because:

1. The proposed project is on an already improved lot of record
2. The project comprises less than 1 acre of said improved lot of record.

10 Site Plans

The following plans are included with this submission.

Cover Sheet

Partial Boundary Survey

C1.0 Existing Conditions and Removals Plan

C2.0 Site Layout and Utility Plan

C3.0 Grading and Drainage Plan

C4.0 Site Details

C4.1 Site Details

C4.2 Site Details

P1.0 Photometric Plan

A100 Floor Plan

A200 Elevations