

Technical Memorandum

Project: Washington State Fair -
International Village Redevelopment
RE: Site Soil Composition

From: Justin Jones, PE
Date: September 19, 2024



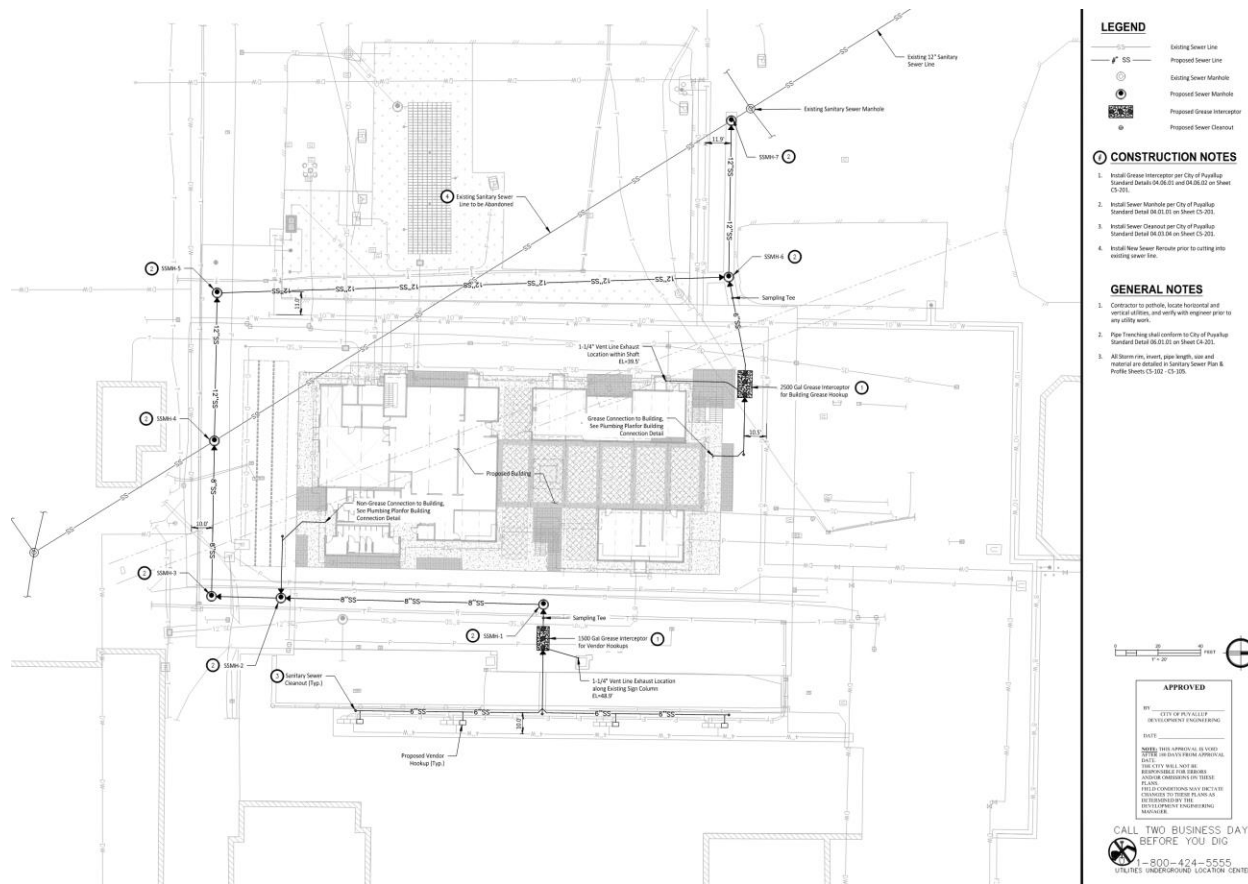
09/19/2024

Introduction

This memo presents the sizing of the proposed grease interceptor for the new International village restaurant building. The existing project site is located in the Washington State Fairgrounds on TPN: 0420331121.

The International Village Redevelopment project site proposes the construction of a 14,460 SF two and a half story Restaurant Building with site improvements such as utility connections. This will result in 21,515 SF of impervious surfaces within the project area.

Site improvements include the construction of 29,350 SF of new permeable asphalt pavement, 7,055 SF of new concrete pavement, 9,770 SF of new hydroseeding. The building will also have utility service connections for sewer, water, power, gas, and communications. Specifically, a new grease interceptor will be installed to manage the wastewater from the vendors in the new Internation Village Restaurant building, see proposed site layout below.



Proposed Conditions

Two grease interceptors are proposed for the WSF International Village Redevelopment project. One grease interceptor shall manage all the wastewater from proposed exterior vendor hookups and has been sized per previous fair projects.

The other grease interceptor will manage all the wastewater from the proposed restaurant building vendors. Proposed building fixtures were counted to determine the minimum size of the grease interceptor. The total number of fixtures equates to 25 DFUs and a grease interceptor size of 2,500 gallons. Therefore, the project proposes a 2,500 gallon grease interceptor for the building grease hookup. See next page for calculation of building grease interceptor size.

GREASE INTERCEPTOR SIZING

PROJECT NAME: International Village

JOB NUMBER: 2024-023

PROJECT LOCATION: Puyallup

DATE: 9/19/2024

FILE NAME: _____

ENGINEER: Reggie Christor

Calculations per 2021 Uniform Plumbing Code, Sections 1014, 1015 and Table 702.1.

Only list fixtures that directly connect to the grease waste pipe system.

Do not list fixtures that drain indirectly to a floor sink.

FIXTURE/DRAIN TYPE	DRAIN SIZE	DFUs	QUANTITY	TOTAL	DFUs
FLOOR DRAIN	2"	4	20	=	80
FLOOR DRAIN	3"	6		=	0
FLOOR DRAIN	4"	8		=	0
FLOOR SINK	2"	4	15	=	60
FLOOR SINK	3"	6		=	0
FLOOR SINK	4"	8		=	0
MOP SINK	2"	3		=	0
MOP SINK	3"	3	1	=	3
LAVATORY	1-1/2"	1		=	0
GENERIC SINK	1-1/2"	2	15	=	30
POT SINK/ GENERIC SINK	2"	4	15	=	60
WASTE DISPOSAL	3"	6		=	0
	GPM				
DISHWASHER	9	12	1	=	12
DISHWASHER				=	0
				=	0
				=	0
				=	0

TOTAL DFUs: 245

GREASE INTERCEPTOR SIZE: 2500 GALLONS