ONSITE SANITATION City of Portland – Bureau of Development Services

1900 SW 4th Avenue, Portland, Oregon 97201 – 503-823-6892 – TTY 503-823-6868 – www.portlandoregon.gov/bds

SEPTIC REVIEW CERTIFICATION (Land Use/Planning)

Land Use/Planning and Zoning approval involving new construction or addition to any building(s), any change in use, and the creation of a new parcel or property line adjustment requires approval by the Sanitarian.

STEP 1- Complete the following:

Address of Proposed Work: 31520 E Woodard Rd, Troutdale, OR 97060

Property Map & Tax Lot #: 1S4E05AB-00200 Alternate Acct #: R R994050530

Description of proposed work for this Septic Planning Review: Septic system upgrade with more primary tank volume, new treatment system, and drainfield expansion.

Change in number of bedrooms? ☐ Yes ☒ No # of existing bedrooms 0 # of bedrooms at completion 0

Applicant's Name: Matt Alexander

Applicant E-mail: matt@lowercolumbiaengr.com

Mailing Address: 58640 McNulty Way Phone:

City: St. Helens State: Oregon ZIP: 97051

Permit No.: 21-058812-SE

Date: 8/3/2021

STEP 2- Submit with current **Sanitation Evaluation application**, for each lot affected along with all required checklist items listed on the application. Refer to the current Sanitation Evaluation application for current fee for Septic Planning Review "with site visit".

Sanitation Evaluation Application available for download at ***www.portlandoregon.gov/bds/*** ***Septic – Sanitation Evaluation Application*** *or* ***Multnomah County Land Use Planning Office*****

Mail or deliver completed Sanitation Evaluation Submittal package to:
City of Portland, Bureau of Development Services, Trade Permits
1900 SW 4th Ave., First Floor, Portland, OR 97201
For questions please call 503-823-6892

STEP 3- Review: After submittal, allow up to 20 business days for submittal application package review

STEP 4- Site Visit: Sanitarian will contact you with any questions and/or time of site visit

STEP 5- Sign Off: Based on present knowledge of the area, and current regulations of the State of Oregon Department of Environmental Quality (DEQ), the Sanitarian hereby finds that the above proposal is:

☒ Approved – will not impact the existing system. The following is **REQUIRED** prior to Building Permit issuance:

☒ Septic Installation Permit ☐ Authorization Notice

Conditions/Comments:
Proposed Woodard School with a maximum occupancy of 175 total occupants (150 students + 25 staff) poses no concern to septic. No showers, gymnasium, or cafeteria are proposed. Primary + replacement drainfield areas must be fenced + protected from demolition + construction activities.

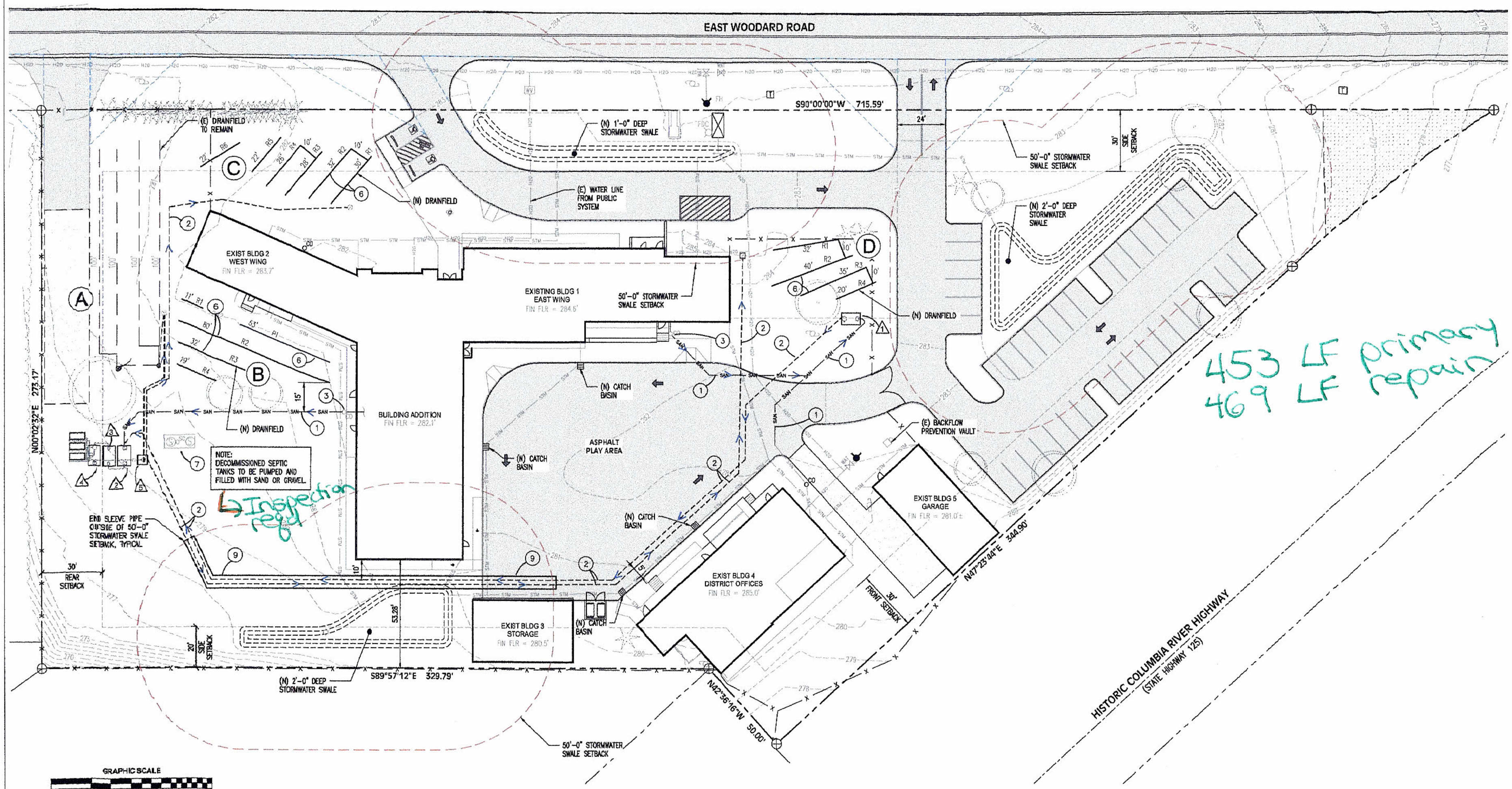
Lindsey Reschke — *Multnomah County Sanitarian*

8/3/2021 — *Date*

STEP 6- Return: to Multnomah County Land Use Office with this signed form and site plan (floor plans if applicable)

See page 2 for requirements

21-058812-SE
Rev 2



PROPOSED SANITARY LAYOUT

SCALE: 1"=20'

LEGEND

PROPERTY LINE	
SANITARY SEWER LINE (EXISTING)	— SAN — SAN — SAN —
SANITARY SEWER GRAVITY LINE	— SAN — SAN — SAN —
SANITARY SEWER PRESSURE LINE	
STORM LINE	— STM — STM — STM —
WATER LINE	— H2O — H2O — H2O —
DRAINFIELD LATERAL (PRIMARY)	53' P1
DRAINFIELD LATERAL (EXISTING PRIMARY)	
DRAINFIELD LATERAL (REPLACEMENT)	32' R3
EXISTING TREE	
FIRE HYDRANT	
WATER VALVE	
WATER VAULT	
TEST PITS	
GUY WIRE ANCHOR	
UTILITY POLE	
POWER VAULT	
ELECTRICAL METER	
POWER JUNCTION BOX	
POWER TRANSFORMER	
FOUND SURVEY MONUMENT	

DESIGN CRITERIA

FLOW

150 STUDENTS + 25 STAFF = 175 TOTAL OCCUPANTS

175 X 8.57 GPD/PERSON = 1500 GPD

SEPTIC TANK

MIN SEPTIC TANK VOLUME = 2 x 1,500 = 3000 GALLONS MINIMUM VOLUME.

TREATMENT

1500 GPD / 500 = 3 AX-20'S

DRAINFIELD

1500 GPD X 45 / 150 = 450 LF

PRIMARY = 450 MIN
REPLACEMENT = 450 MIN

PROPOSED:

PRIMARY = 450 LF
REPLACEMENT = 472 LF

DRAINFIELD

Ⓐ = 400' (Existing), Primary
Ⓑ = 195' (50' Primary, 145' replacement)
Ⓒ = 180' Replacement
Ⓓ = 147' Replacement

TOTAL = 922 LF

CONSTRUCTION NOTES

1. CONST NEW 4" PVC GRAVITY LINE
2. CONST NEW 1-1/4" PVC PRESSURE LINE
3. CONST NEW SS PVC CLEANOUT PER DETAIL SHEET 4
4. CONST CONTROL PANEL AND STAND PER DETAIL SHEET 4
5. AX-20 TEXTILE TREATMENT POD (3'X8') PER DETAIL SHEET 2
6. DRAINFIELD TRENCH (ROCK)
7. EXISTING 3,000 GAL. 2 COMPARTMENT SEPTIC TANK TO BE DECOMMISSIONED UNDER SEPTIC INSTALLATION PERMIT.
8. CONST FROST FREE HYDRANT PER DETAIL SHEET 4
9. SLEEVE 1 1/4" SS PVC WITH 6" PVC D-3034 PIPE WITHIN 50'-0" OF STORMWATER SWALES.

NOTE:
THE PUMP SYSTEM SHALL INCLUDE A TRIPLE SIMPLEX PUMP SYSTEM BASED ON INDIVIDUAL TIMER SETTINGS FOR EACH PUMP SO AN EXACT PROPORTIONATE FLOW WILL BE SENT TO ALL DRAIN FIELD FOOTAGE. EACH PUMP SHALL HAVE CURRENT SENSORS AND A PUMP FAIL ALARM.

NEW TANK INDEX

1	1,500 GAL 2 COMP SEPTIC-DOSE TANK
2	1,500 GAL SINGLE COMP SEPTIC TANK
3	1,500 GAL SINGLE COMP SEPTIC TANK
4	1,500 GAL DRAINFIELD DOSE TANK W/ DUPLEX PUMPS
5	500 GAL DRAINFIELD DOSE TANK W/ DUPLEX PUMPS

SEE SHEET 3 FOR TANK DETAILS

Proposed Woodard School w/ no showers, gym, or cafeteria poses no concern to septic. Max occupancy of property 175. Primary + replacement drainfields must be fenced + protected from demolition activities. 8/13/2021
L. Raschke

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Corbett School District
Woodard Road Middle School
31520 East Woodard Road,
Troutdale, OR 97060

Project

Consultant

Revisions
No. Description Date

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Issuance
SEPTIC REVIEW

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07/28/2021

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Drawing Title
PROPOSED SEPTIC LAYOUT

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C4.01S

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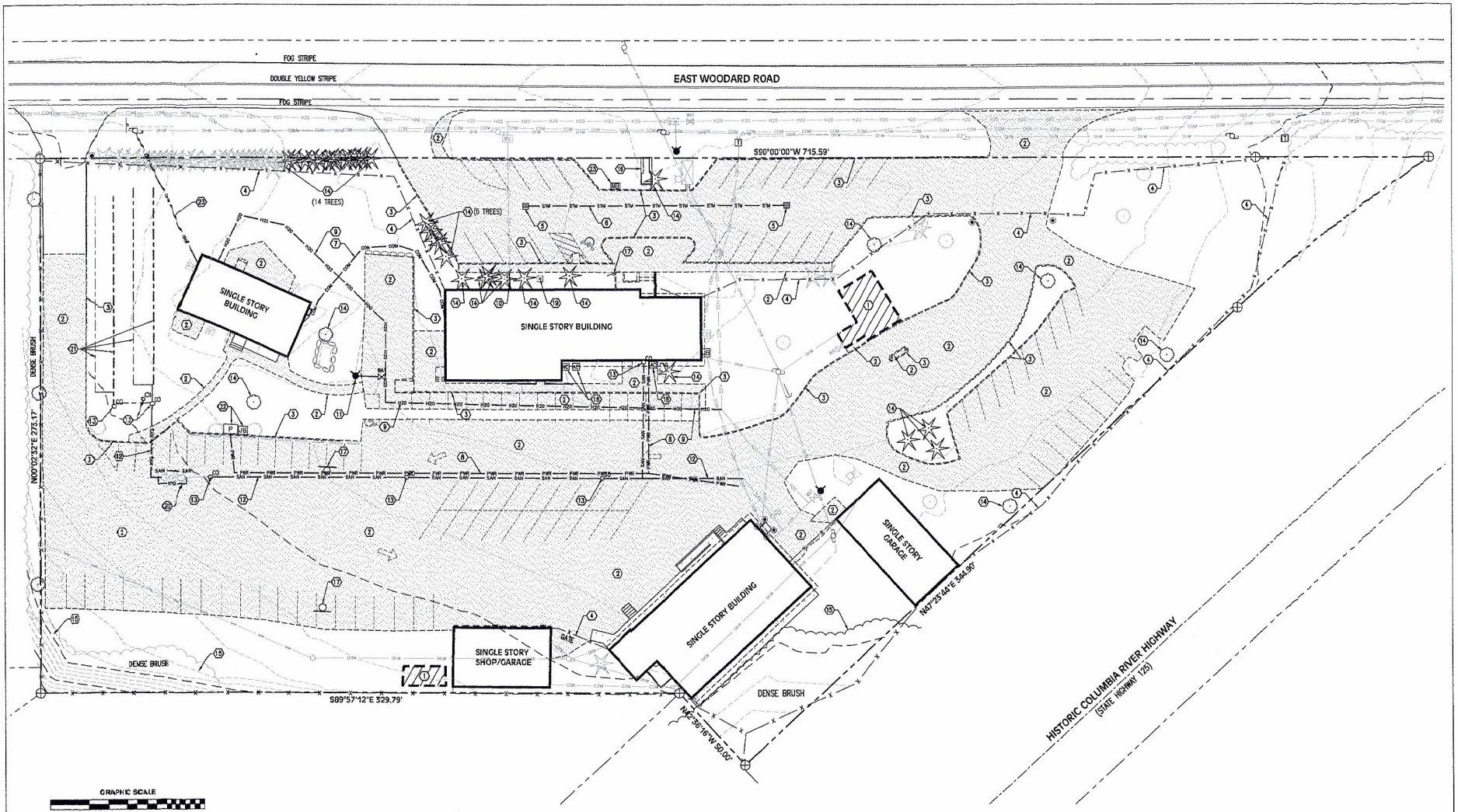

DEMOLITION PLAN
SCALE: 1" = 20'

DEMOLITION KEYNOTES

1. DEMOLISH AND DISPOSE OF EXISTING STRUCTURES AND FOUNDATIONS. REMOVE ALL EXISTING CONSTRUCTION MATERIALS TO A POINT SUITABLE FOR SITE AND/OR NEW STRUCTURE FOUNDATION CONSTRUCTION.
2. DEMOLISH AND DISPOSE OF EXISTING CONCRETE AND ASPHALT SIDEWALKS, PAVEMENT, GRAVEL PATHS AND SIMILAR SITE FEATURES WITHIN SHADED DEMOLITION ZONES.
3. REMOVE AND DISPOSE OF EXISTING CONCRETE CURBS.
4. REMOVE AND DISPOSE OF EXISTING CHAIN LINK FENCE, POSTS AND FOOTINGS.
5. REMOVE AND DISPOSE OF EXISTING STORMWATER CATCH BASIN.
6. ABANDON EXISTING STORM DRAIN PIPE. REMOVE LINES IN CONFLICT WITH NEW CONSTRUCTION. WHERE REMOVAL TERMINATES, PLUG END OF ABANDONED PIPE.
7. REMOVE AND DISPOSE OF EXISTING COMMUNICATIONS LINE.
8. REMOVE AND DISPOSE OF EXISTING POWER LINE.
9. ABANDON EXISTING WATER LINE. REMOVE LINES IN CONFLICT WITH NEW CONTRUCTION.
10. REMOVE AND DISPOSE OF EXISTING WATER LINE.
11. REMOVE AND DISPOSE OF EXISTING HYDRANT.
12. ABANDON EXISTING SANITARY SEWER LINE. REMOVE PORTIONS OF LINE IN CONFLICT WITH NEW CONSTRUCTION. WHERE REMOVAL TERMINATES, PLUG END OF ABANDONED PIPE.
13. REMOVE EXISTING SANITARY OR STORM CLEANOUT.
14. REMOVE EXISTING TREE(S).
15. REMOVE EXISTING SHRUBS/BRUSH.
16. EXISTING CONCRETE/ROCK SIGNAGE BASE TO REMAIN (NEW SIGNAGE TO BE ADDED).
17. REMOVE AND DISPOSE OF EXISTING SIGN, SIGN POLE AND FOOTING.
18. REMOVE AND DISPOSE OF EXISTING HVAC UNIT.
19. REMOVE AND RELOCATE OR REPLACE EXISTING FLAG POLE.
20. EXISTING SEPTIC TANK TO BE ABANDONED.
21. PRESERVE EXISTING DRAINFIELD LATERALS FOR USE WITH NEW SEPTIC SYSTEM.
22. COORDINATE REMOVAL OF EXISTING ELECTRICAL PANELS WITH PGE.
23. REMOVE EXISTING OVERHEAD POWER LINE.
24. REMOVE AND DISPOSE OF EXISTING MAIL BOX.

LEGEND

EDG	EDGE OF GRAVEL		SUBJECT PROPERTY LINE
EOP	EDGE OF PAVEMENT		ADJACENT PROPERTY LINE
EOC	EDGE OF CONCRETE	STM STM	STORM LINE
TOP	TOP OF PAVEMENT	SAN SAN	SANITARY SEWER LINE
TOC	TOP OF CONCRETE		SEPTIC DRAINFIELD LINE
TC/CURB	TOP OF CURB	H2O H2O	WATER LINE
(E)	EXISTING	COM COM	COMMUNICATIONS LINE
(N)	NEW	P&B P&B	BURIED POWER LINE
CO	CLEAN OUT	OHW OHW	OVERHEAD POWER LINE
	STORM SEWER MANHOLE	X X	FENCE
	SANITARY SEWER MANHOLE	100	MAJOR CONTOUR (EXISTING)
FH	FIRE HYDRANT	103	MINOR CONTOUR (EXISTING)
FDC	FIRE DEPARTMENT CONNECTION	100	MAJOR CONTOUR (NEW)
WAT	WATER VALVE	103	MINOR CONTOUR (NEW)
	UTILITY POLE		CONCRETE
M	WATER METER		AC PAVING
T	TELCO PEDESTAL/RISER		PAVING TO BE REMOVED

PG 3&9

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Plan

Consultant
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DEMOLITION PLAN

Sheet No.
C3.01

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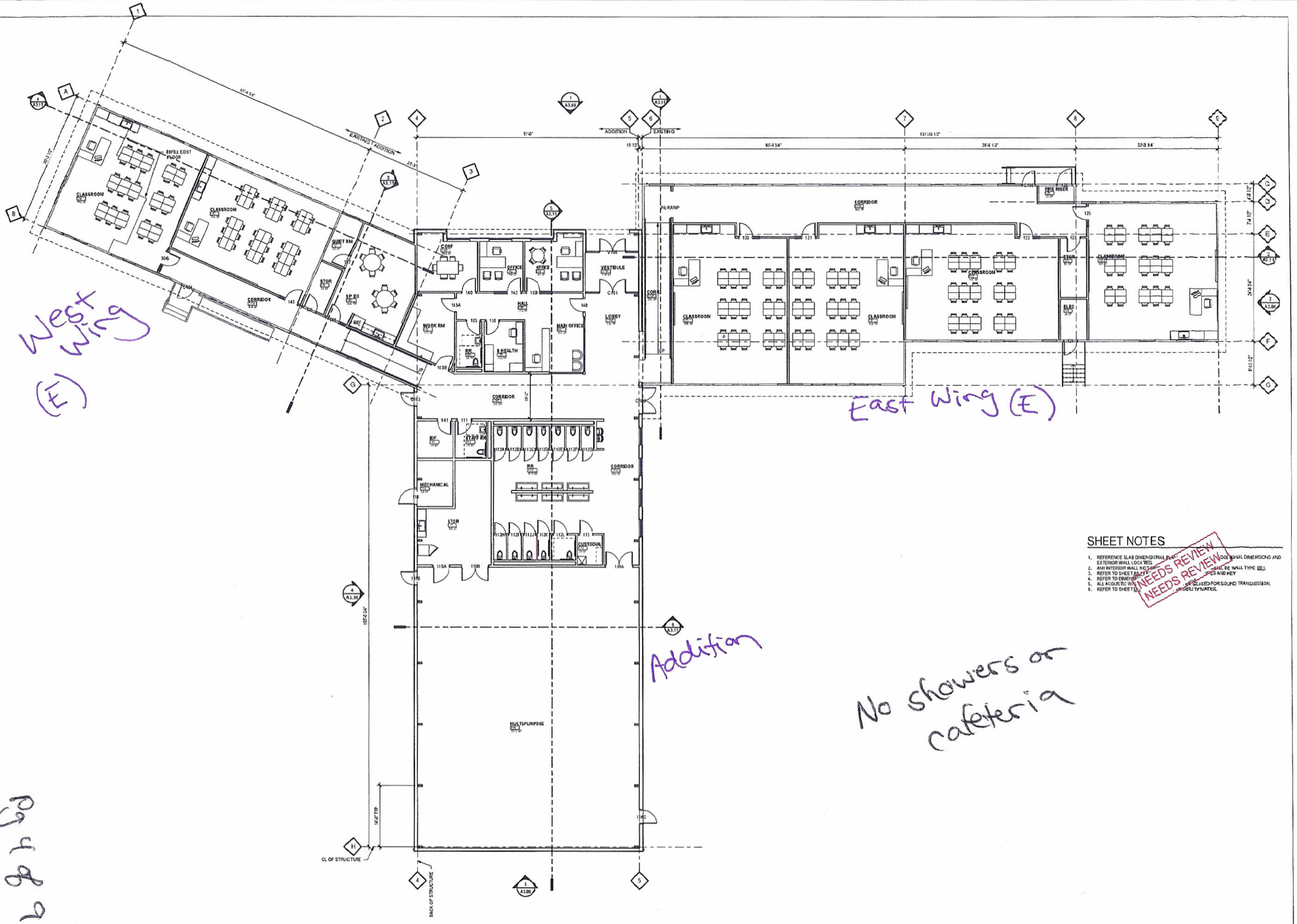

SHEET NOTES

1. REFERENCE SLAB DIMENSIONAL PLAN ... DDITIONAL DIMENSIONS AND EXTERIOR WALL LOCATES.
2. ANY INTERIOR WALL NOT ... SHALL BE WALL TYPE: B01.
3. REFER TO SHEET A0.11 ... PES AND KEY
4. REFER TO DIMENSIO...
5. ALL ACOUSTIC WAL... BE SEALED FOR SOUND TRANSMISSION.
6. REFER TO SHEET ... ...SIBILITY MATRIX.

NEEDS REVIEW
NEEDS REVIEW

GRAPHIC SCALE
0 8 16 24 32

1 MAIN BLDG FLOOR PLAN
1/8" = 1'-0"

NORTH

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MAIN BUILDING FLOOR PLAN

Sheet No.
A2.01

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Pg 4 of 9

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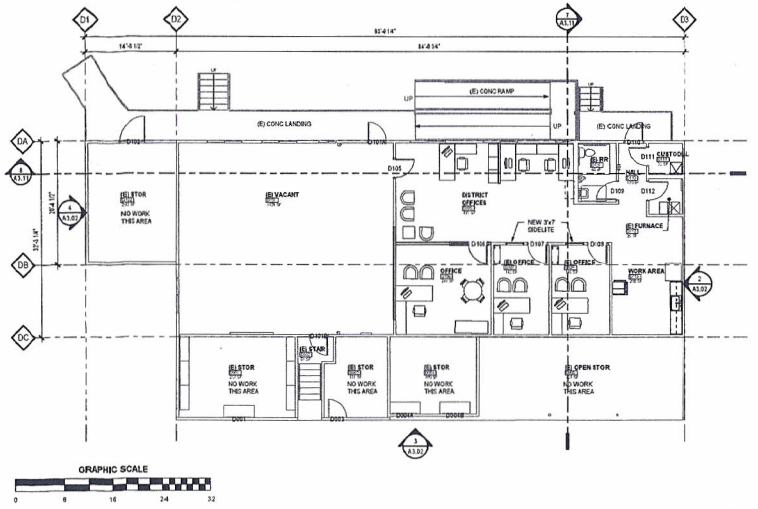

1 BLDG 4 FLOOR PLAN

NORTH

No showers or cafeteria

D5-88

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Project

Consultant

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BUILDING 4 FLOOR PLAN

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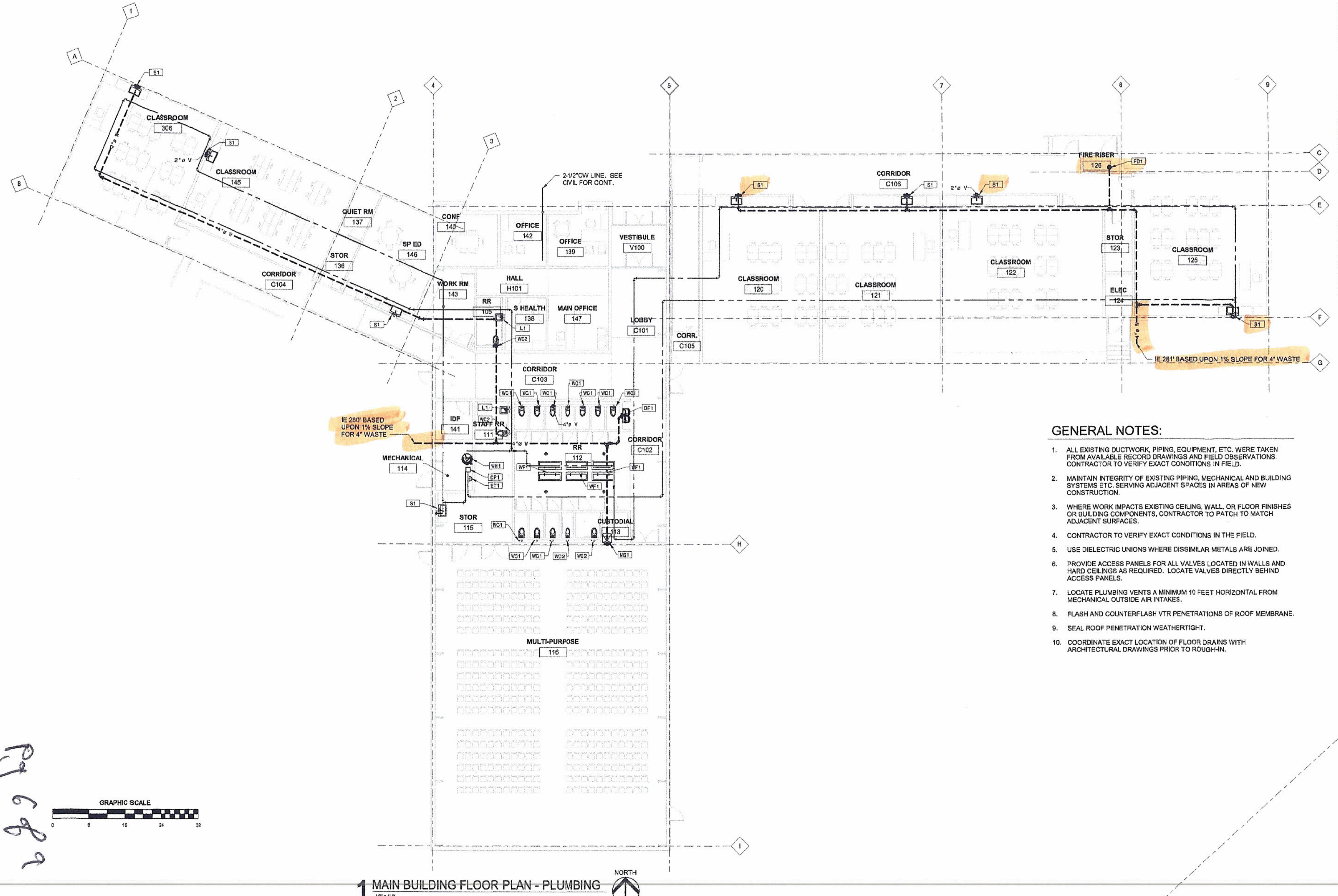

1 MAIN BUILDING FLOOR PLAN - PLUMBING

1/8" = 1'-0"

GENERAL NOTES:

1. ALL EXISTING DUCTWORK, PIPING, EQUIPMENT, ETC. WERE TAKEN FROM AVAILABLE RECORD DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR TO VERIFY EXACT CONDITIONS IN FIELD.
2. MAINTAIN INTEGRITY OF EXISTING PIPING, MECHANICAL AND BUILDING SYSTEMS ETC. SERVING ADJACENT SPACES IN AREAS OF NEW CONSTRUCTION.
3. WHERE WORK IMPACTS EXISTING CEILING, WALL, OR FLOOR FINISHES OR BUILDING COMPONENTS, CONTRACTOR TO PATCH TO MATCH ADJACENT SURFACES.
4. CONTRACTOR TO VERIFY EXACT CONDITIONS IN THE FIELD.
5. USE DIELECTRIC UNIONS WHERE DISSIMILAR METALS ARE JOINED.
6. PROVIDE ACCESS PANELS FOR ALL VALVES LOCATED IN WALLS AND HARD CEILINGS AS REQUIRED. LOCATE VALVES DIRECTLY BEHIND ACCESS PANELS.
7. LOCATE PLUMBING VENTS A MINIMUM 10 FEET HORIZONTAL FROM MECHANICAL OUTSIDE AIR INTAKES.
8. FLASH AND COUNTERFLASH VTR PENETRATIONS OF ROOF MEMBRANE.
9. SEAL ROOF PENETRATION WEATHERTIGHT.
10. COORDINATE EXACT LOCATION OF FLOOR DRAINS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.

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Sheet No: P2.0

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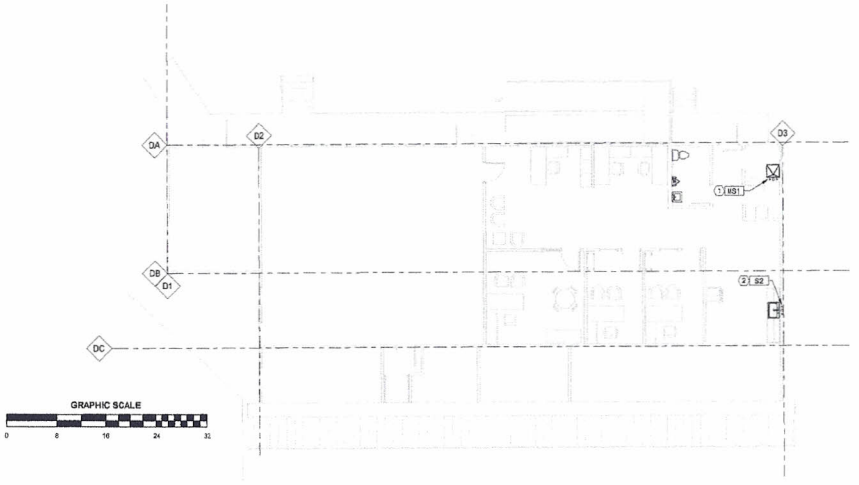

1 DISTRICT OFFICES FLOOR PLAN - PLUMBING
1/8" = 1'-0"

GENERAL NOTES:

1. ALL EXISTING DUCTWORK, PIPING, EQUIPMENT, ETC. WERE TAKEN FROM AVAILABLE RECORD DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR TO VERIFY EXACT CONDITIONS IN FIELD.
2. MAINTAIN INTEGRITY OF EXISTING PIPING, MECHANICAL AND BUILDING SYSTEMS ETC. SERVING ADJACENT SPACES IN AREAS OF NEW CONSTRUCTION.
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9. SEAL ROOF PENETRATION WEATHERTIGHT.
10. COORDINATE EXACT LOCATION OF FLOOR DRAINS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.

NOTES THIS SHEET:

① REMOVE EXISTING WATER CLOSET AND LAVATORY. REVISE EXISTING WASTE, VENT, HOT WATER AND COLD WATER AS REQUIRED TO ACCOMMODATE INSTALLATION OF NEW MOP SINK.

② REMOVE EXISTING UTILITY SINK AND REVISE EXISTING WASTE, VENT, HOT WATER AND COLD WATER TO ACCOMMODATE INSTALLATION OF NEW SINK.

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DISTRICT OFFICES FLOOR PLAN - PLUMBING

Sheet No
P2.1

P2.1

21-058862-SE

Reschke, Lindsey Buildings 3+5: Open floor plan, no interior plumbing

From: Matt <matt@lowercolumbiaengr.com>
Sent: Tuesday, June 29, 2021 12:11 PM
To: Reschke, Lindsey
Subject: RE: Woodard Middle School Septic

Hey Lindsey,

Those buildings are open floor plans and they do not have any interior plumbing. They are used for storage and maintenance equipment. The only thing that is underground in either of them is an existing trench drain outside of building 3 which drains (and will continue to drain) into the stormwater system (not septic).

Thanks,

Matt Alexander
Project Manager/Designer

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MOBILE **971.404.4110**
WEB **www.lowercolumbiaengr.com**
EMAIL **matt@lowercolumbiaengr.com**

From: Reschke, Lindsey <Lindsey.Reschke@portlandoregon.gov>
Sent: Tuesday, June 29, 2021 11:50 AM
To: Matt <matt@lowercolumbiaengr.com>
Subject: RE: Woodard Middle School Septic

Hi Matt,

Quick question – are buildings 3 and 5 open floor plan with no interior plumbing? If they will have rooms and interior plumbing, I will need floor plans for them.

More soon,

Lindsey Reschke, WWS | Senior Multnomah County Septic Sanitarian
City of Portland | Bureau of Development Services
Site Development Section | Plan Review Services Division
1900 SW 4th Ave., Suite 5000
Portland, OR 97201

lindsey.reschke@portlandoregon.gov
503-823-8786

Work Hours: Monday-Friday, 7:00AM - 3:30PM

Thank you for your patience during this State of Emergency. For the most current information on the Bureau of Development Services' operations during the COVID-19 pandemic, please visit: https://www.portland.gov/bds

21-05881Q-SE

Boeger & Associates, LLC
Civil and Environmental - Engineering and Planning

DESIGN FLOW EVALUATION
Woodard School – Corbett School District
July 9, 2021

The peak design flow for the Woodard School septic system is based on a combination of the potential number of students/staff, the available area for drain field, and the loading rate of the soils. The evaluated area that meets all criteria for primary or replacement drain field will support a design flow is 1,500 gallons per day (gpd). The methodology for this value is presented below.

The maximum number of students was set at 150 for this project. Staff was set at 25, for a total of 175 occupancy. Due to limited area on site that meets the drain field criteria, an existing school in the Corbett School District was evaluated for flow and occupancy.

Springdale School

Springdale School is a middle school in the Corbett School District. It has no showers, gymnasium, or cafeteria. It is therefore a very close approximation to the proposed Woodard School. A discharge monitoring report (DMR) form was obtained for the most recent school year not impacted by Covid 19. The attached DMR form therefore shows average daily flows from January 30th through December 2nd.

A review of this form indicates a peak flow of 334 gpd in the month of November of 2019. The average daily flow over the 9 month school year (does not include 3 months of summer) is calculated to be 227 gpd. The school occupancy over the 2019 school season was 173 students and 13 staff, for a total of 186 people/day.

227 x 2 = 454 gpd max
(avg x 2) 454 / 186 = 2.44 gal per occupant per day

Flow Calculations

multiply by 2 peak design flow

The most conservative approach to determine an average flow/person/day is to use the highest daily flow value of 334 gpd. This results in 334 people/day/186 people/day = 1.8 gpd/person. This value is then doubled to arrive at a theoretical peak design flow value for new system sizing purposes. Therefore, 1.8 gpd x 2 = 3.6 gpd peak design flow.

Given a value of 3.6 gpd is lower than what Table 2 in the onsite rules would typically apply, it is proposed to raise this value up to a level that meets the proposed peak design flow of 1,500 gpd. We therefore divide the design flow by the proposed occupancy of the school, which yields:

8.57 x 175 = 1499.75

1,500 gpd/175 students/staff = **8.6 gal/person/day.** This value is more than twice what the calculated flow/person is by using the highest recorded average daily flows for any month in 2019, and is therefore proposed to be a conservative sizing for the new drain field system.

- Conservative
- Any possible proposed increases would have data from this facility

1450 LF / 1500 gpd = 45 LF / 150 gpd
↳ 1° + repair OF req'd LF

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