



April 22, 2025

Chris Wasia, PE
Genesis Engineering, Inc
204 N 11th Ave
Bozeman, MT 59715

RE: Rabel Minor Subdivision, No 56B
Lot 4A Rewrite
Gallatin County
EQ #24-1778 (Subdivision)
EQ#24-1932 (Public Facilities)

Dear Chris Wasia:

Plans and specifications for the subject project have been reviewed by personnel of the Public Water Supply and Subdivisions Section and were found to be satisfactory. Approval of these plans is hereby given; a copy of the plans bearing the approval stamp of the Department is enclosed. Approval is based on plans and specifications received December 27, 2023 with revisions March 8, 2024, April 15, 2024, May 2, 2024, and January 21, 2025, under the seal of Christopher M. Wasia, #10959PE.

The plans were reviewed in accordance with Department design standards DEQ-1, 2022 edition and DEQ-2, 2018. Construction will be completed in accordance with the Montana Public Works Standard Specifications, and the approved plans and specifications. This project approval includes the construction of a new transient non-community public water supply well, GWIC# 333675 and installation of a 3 hp well pump capable of 33 gpm at 175 TDH, a control building containing VFD controller for the well pump, two Flex2Pro hydropneumatic tanks, Clear Water Systems J-Pro-22 pump proportional feed chlorinator with 35-gallon solution tank, eye wash station, approximately 590 linear feet of new 6-inch C900 water main and appurtenances and approximately 545 linear feet of new 8-inch SDR 35 PVC sewer main, two manholes, and appurtenances.

As a part of the well location approval of this project (EQ#22-1443) a deviation was requested from Circular DEQ-3, Section 3.2.3.1 to allow the sanitary sewer mains and a manhole within the 100-foot control zone of the public water well. It was approved by the DEQ deviation review committee on the condition that full-time 4-log inactivation and/or removal of viruses is required in accordance with Circular DEQ-3, Section 4.1.1 as defined in DEQ Circular 3 Section 1.4, and ARM 17.36.601.

This approval is given with the following conditions:

1. No portion of the project may be placed into operation until the project engineer certifies by letter to the Department that the activated portion of the project was inspected and found to be constructed in accordance with the approved plans and specifications and there are no deviations from the design standards other than those previously approved by the department.
2. Any deviations from the approved plans and specifications must be submitted to the Department for reappraisal and approval prior to modification.

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3. Within 90 days after construction completion, the project engineer must submit a complete set of certified as-built drawings for the project and a final O&M manual for the water treatment system; they must be signed and submitted to the department.
4. Construction of the water and sewer portions of this project must be completed within three years of the date of this letter. If more than three years elapse before completing construction, plans and specifications for the water and/or sewer system(s) must be resubmitted and approved before construction begins. This three-year expiration period does not extend any compliance schedule requirements pursuant to enforcement action against a public water/sewage system.

Failure to abide by the above conditions is considered a significant violation of the Montana Public Water Supply Laws (PWSL), and the administrative rules promulgated there under. The applicant is responsible for compliance with all other applicable federal, state, local, and tribal law, regulations, and ordinances, including but not limited to, the Montana Water Use Act, Mont. Code Ann. Title 85, Chapter 2.

The applicant is responsible for compliance with all applicable federal, state, local, and tribal law, regulations, and ordinances. Approval in this document is limited solely to the matters therein specifically contained and does not constitute approval, implied or otherwise, for the purposes of any other law, regulation, or ordinance.

Department approval of this project covers only those portions of the plans and specifications that are subject to the Department's review authority under the Public Water Supply Laws (MCA 75-6) and the Administrative Rules promulgated thereunder (ARM 17.38). This approval does not cover items found within the plans and specifications that are outside of the Department's review authority, including but not limited to, electrical work, architecture, site grading or water and sewer service connections.

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April 22, 2025

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If I can offer any further information or assistance, please feel free to contact me at (406) 444-6713.

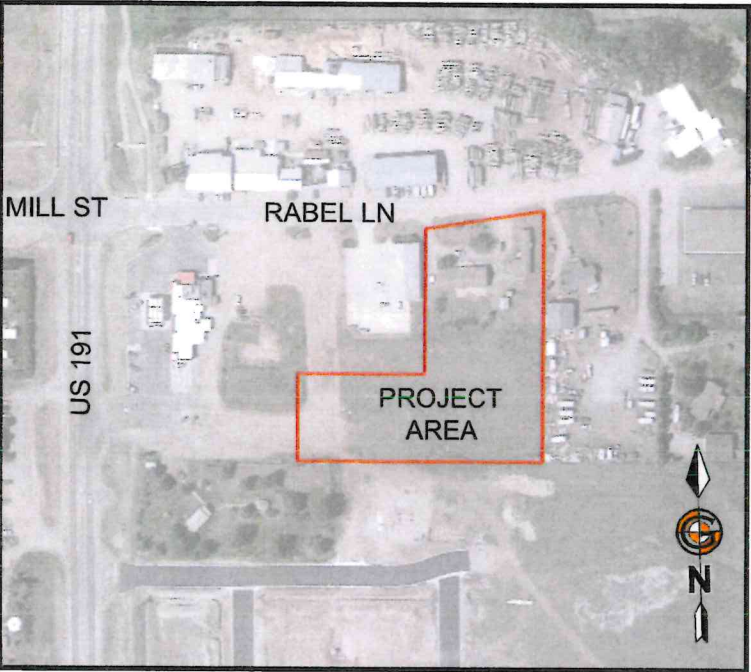
Sincerely,



Jenifer Ramsey, PE
Environmental Engineer
Public Water and Subdivision Section
Engineering Bureau
e-mail – jenifer.ramsey@mt.gov

c: file
Gallatin County Sanitarian
Owner

VICINITY MAP



GATEWAY WAREHOUSES
INFRASTRUCTURE PLANS

GATEWAY, MONTANA

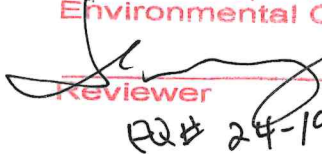
PREPARED FOR: DAN ALEXANDER
1612 GOLD AVENUE
BOZEMAN, MT 59715

PREPARED BY:  GENESIS
ENGINEERING, INC.

PLAN INDEX

SHEET	DESCRIPTION
I-1	COVER SHEET
GD-1	GRADING & DRAINAGE PLAN
UTIL-1	INDEX LAYOUT
S-1	SEWER MAIN
W-1	WATER MAIN
D-1	PWS DETAILS
D-2	WATER & SEWER DETAILS

MINIMUM RESTRAINT LENGTHS @200PSI FS=2 W/SOIL TYPE GP	
FITTING	MIN. LENGTH (FT)
6" 90° HORIZ. BEND	15'-0"
6" 45° HORIZ. BEND	7'-0"
6" 22.5° HORIZ. BEND	3'-0"
6" 11.25° HORIZ. BEND	2'-0"
6" END CAP	45'-0"
6" HORIZ. TEE	7'-0"
6"x6" HORIZ. TEE	1'-0"
6" VERT. SYSTEM 11.25 BEND	5'-0"

APPROVED
Montana Department of
Environmental Quality
 4/22/2024
Reviewer Date
R2# 24-1932

ABBREVIATIONS

APPROX	APPROXIMATE	MPW	MONTANA PUBLIC WORKS
ASPH	ASPHALT	NTS	NOT TO SCALE
ASS'Y	ASSEMBLY	OC	ON CENTER
AVG	AVERAGE	OD	OUTSIDE DIAMETER
BLDG	BUILDING	OHP	OVERHEAD POWER
BOT	BOTTOM	PC	POINT OF CURVE
CHK	CHECK	PE	POLYETHYLENE
CI	CAST IRON	PERP	PERPENDICULAR
CJ	CONSTRUCTION JOINT, CONTROL JOINT	PI	POINT OF INTERSECTION
CL	CENTER LINE	PL	PLACE
CLR	CLEAR, CLEARANCE	PNT	POINT
CMP	CORRUGATED METAL PIPE	PRELIM	PRELIMINARY
CMU	CONCRETE MASONRY UNITS	PREP	PREPARE, PREPARATION
CO	CLEANOUT	PROP	PROPERTY
COMB	COMBINATION	PRV	PRESSURE REDUCING VALVE
CONC	CONCRETE	PT	POINT OF TANGENCY
CONT	CONTINUE, CONTINUED, CONTINUOUS	PVC	POLYVINYL CHLORIDE
COORD	COORDINATE	PWMT	PAVEMENT
CORR	CORRUGATED	RAD	RADIUS
CTR	CENTER	RCP	REINFORCED-CONCRETE PIPE
CF	CUBIC FEET	RDR	REDUCER
CULV	CULVERT	REBAR	REINFORCEMENT BAR
CYD	CUBIC YARD	REF	REFERENCE
DI	DIAMETER	REINF	REINFORCE
DIA	DIAGONAL	RELOC	RELOCATE, RELOCATION
DIM	DIMENSION	REQD	REQUIRED
DWG	DRAWING	RST	REINFORCING STEEL
EA	EACH	RT	RIGHT
EL ELEV	ELEVATION	R.O.W.	RIGHT-OF-WAY
ENGR	ENGINEER	SAN	SANITARY
EP	EDGE OF PAVEMENT	SCHED	SCHEDULE
EQUIV	EQUIVALENT	SDWK	SIDEWALK
EX	EXISTING	SECT	SECTION
EXT	EXTENSION, EXTERIOR	S	SLOPE
FAB	FABRICATE	SPEC	SPECIFICATION
FDN	FOUNDATION	SQ	SQUARE
FES	FLARED END SECTION	SQ FT	SQUARE FOOT
FET	FLARED END TERMINAL	SQ IN	SQUARE INCH
FFE	FINISHED FLOOR ELEV	STA	STATION
FF	FINISHED FLOOR	SS	SANITARY SEWER
FG	FINISH GRADE	SSMH	SANITARY SEWER MANHOLE
FHYD	FIRE HYDRANT	STD	STANDARD
FLL	FLOW LINE	STL	STRUCTURE
FIN	FINISH	SVC	SERVICE
FLR	FLOOR	SWR	SEWER
FT	FOOT, FEET	TB	THRUST BLOCK
FTG	FOOTING, FITTING	TBC	TOP BACK OF CURB
HDPE	HIGH DENSITY POLYETHYLENE	TEMP	TEMPORARY, TEMPERATURE
HORIZ	HORIZONTAL	THRU	THROUGH
HWD	HIGHWAY	T.O.	TOP OF
HYD	HYDRANT	T.O.P.	OUTSIDE TOP OF PIPE
ID	INSIDE DIAMETER	TOC	TOP OF CONCRETE, TOP OF CURB
IE	INVERT ELEVATION	T.O.W.	TOP OF WALL
INCH	INCH	TYP	TYPICAL
INSTL	INSTALL, INSTALLATION	UG	UNDERGROUND
INSUL	INSULATE	UTIL	UTILITY
JB	JUNCTION BOX	VERT	VERTICAL
LBS	POUNDS	VOL	VOLUME
LF	LINEAR FEET	W/	WITH
LT	LEFT	W/O	WITHOUT
LVL	LEVEL	WL	WATERLINE
MAX	MAXIMUM	WM	WATER MAIN
MR	MANHOLE	WS	WATER SERVICE
MIN	MINIMUM	WTR	WATER
MISC	MISCELLANEOUS	WV	WATER VALVE
MJ	MECHANICAL JOINT		
MPWSS	MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS		

GENERAL NOTES

- ALL CONSTRUCTION WORK ON THIS PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS, SIXTH EDITION, 2010 MPWSS AND GALLATIN GATEWAY WATER & SEWER DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS.
- WATER MAIN PIPE MATERIAL SHALL BE AS SPECIFIED ON THE PLANS. ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6.5 FEET AND MAX COVER OF 10 FEET WITH RESPECT TO FINISHED GRADE.
- MAINTAIN 18" (VERT.) SEPARATION BETWEEN ALL WATER MAIN AND ALL SEWER MAIN OR SEWER FORCEMAIN.
- THE CONTRACTOR SHALL RESTORE ALL ROADWAY SURFACES TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO EXCAVATION, AS DETERMINED BY OWNER AND THE ENGINEER.
- THE LOCATION, DEPTH AND SIZE OF EXISTING UTILITIES SHOWN ON THESE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTENCE, LOCATION, DEPTH, SIZE, LINE AND GRADE OF EXISTING UTILITIES CONNECTIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING FACILITIES DUE TO FAILURE TO LOCATE OR PROVIDE PROPER PROTECTION WHEN LOCATION IS KNOWN.
- A LIST OF REPRESENTATIVES TO CONTACT FOR INFORMATION REGARDING FACILITIES IS AS FOLLOWS:

MONTANA ONE CALL SYSTEM	1-800-424-5555
NORTHWESTERN ENERGY	1-406-582-4608
GALLATIN GATEWAY WATER & SEWER DISTRICT	1-406-595-0951
THREE RIVERS COMMUNICATIONS	1-406-728-9343
- THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, CURB BOXES, AND MANHOLES TO FINAL GRADE UPON COMPLETION OF ALL CONSTRUCTION. ANY BOXES OR MANHOLES DAMAGED OR OTHERWISE DISTURBED BY THE CONTRACTOR OR ANY SUBCONTRACTOR SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR. THIS WORK SHALL BE INCIDENTAL TO THE PROJECT, SEPARATE PAYMENT WILL NOT BE MADE.
- ALL BACKFILL FOR UTILITY TRENCHES SHALL BE TYPE "A", UTILIZING TYPE 1 BEDDING FROM 6" BELOW TO 6" ABOVE PER DETAIL 22-02 UNLESS DIRECTED OTHERWISE BY ENGINEER. THE COST OF THIS BEDDING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR WATER, STORM, AND SEWER MAIN.
- ALL VALVES SHALL BE INSTALLED WITH MECHANICAL RESTRAINTS AND VALVE BOXES IN ACCORDANCE WITH MPWSS AND GGWSO MODIFICATIONS. ~~ANY EXISTING OR NEW VALVES WHICH CONTROL THE BSWSS'S WATER SUPPLY SHALL BE OPERATED BY BSWSS PERSONNEL ONLY.~~
- ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH GGWSO STD DWGS.
- ALL FITTINGS INCLUDING BENDS EQUAL TO OR GREATER THAN 22-1/2 DEGREES, TEES AND PLUGS SHALL HAVE MECHANICALLY RESTRAINED JOINTS AS INDICATED ON SHEET W-1 FOR AS ESTIMATED TESTING PRESSURE OF 200 PSI.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST AND EROSION DURING CONSTRUCTION AT HIS EXPENSE. ROADS SHALL BE WATERED TO CONTROL DUST WHEN ORDERED BY THE ENGINEER. EROSION SHALL BE CONTROLLED IN ACCORDANCE WITH THE SWPPP PERMIT.
- ALL PROFILES REPRESENT EXISTING GROUND (DASHED LINE) AND FINISHED ASPHALT (SOLID LINE) ALONG THE ALIGNMENTS INDICATED ON THE PLANS. ELEVATIONS ARE FINISHED ASPHALT ELEVATIONS UNLESS OTHERWISE NOTED.
- ALL DISTURBED AREAS SHALL BE SEED BY THE CONTRACTOR IN ACCORDANCE WITH SWPPP PERMIT.

- ACCESS FOR OTHER CONTRACTORS WORKING ON THE SITE AND EMERGENCY VEHICLES SHALL BE PRESERVED AT ALL TIMES IN ACCORDANCE WITH THE CONCURRENT CONSTRUCTION PLAN PROVIDED IN THE PROJECT MANUAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF UTILITY (PHONE/POWER) INSTALLATION WITH LOCAL UTILITY COMPANIES.
- THE CONTRACTOR SHALL NOTIFY ONE CALL @ 1-800-424-5555 FOR ONSITE UTILITY LOCATION. ALL EXISTING UTILITIES SHALL BE MARKED BEFORE DIGGING.
- THE CONTRACTOR SHALL MAINTAIN SERVICE OF ALL EXISTING UTILITIES. IF SAID SERVICE IS DAMAGED, THE CONTRACTOR SHALL IMMEDIATELY REPAIR THE DAMAGE AT THE CONTRACTOR'S EXPENSE.
- THE PIPE GRADES SHOWN ARE CALCULATED FROM ACTUAL DISTANCES, EDGE OF MANHOLE TO EDGE OF MANHOLE (DISPLAYED LF-4'). THE DISPLAYED PIPE LF IS FOR ESTIMATING PIPE PAY QUANTITIES, CENTER OF MANHOLE TO CENTER OF MANHOLE. SEE MEASUREMENT AND PAYMENT IN THE SPECIFICATIONS.
- WATER AND SEWER SERVICE LINES SHALL BE EXTENDED TO WITHIN 5 LF OF THE PROPOSED BUILDING UNLESS NOTED OTHERWISE.
- ALL UTILITY CONDUITS FOR IRRIGATION, ELECTRICAL, GAS, PHONE, CATV, ETC... SHALL BE BURIED A MINIMUM 42" FROM FINISHED GRADE WITH TYPE A BACKFILL, UTILIZING TYPE 1 BEDDING UNLESS DIRECTED OTHERWISE BY ENGINEER. ALL LOCATIONS ARE SHOWN APPROXIMATE AND SHALL BE FIELD FIT AS DIRECTED BY ENGINEER.
- VALVE BOXES ARE REQUIRED FOR ALL VALVES IN A BURIED SERVICE.
- TOP ELEVATIONS PROVIDED FOR WATER MAIN CONSTRUCTION REPRESENT THE MINIMUM TOP ELEVATION AT THE LOCATION IDENTIFIED TO ACHIEVE THE REQUIRED 7.0' COVER BASED ON PLANNED STREET ELEVATIONS WITHOUT ALLOWANCES FOR CONSTRUCTION VARIANCES. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE REQUIRED 7.0' COVER OVER THE WATER PIPE IS ACHIEVED.
- PIPE DEFLECTION IN WATER MAIN IS SHOWN USING 3' DEFLECTION AT THE JOINTS.
- SANITARY SEWER MANHOLES SHALL HAVE MINIMUM OF 0.2' OF DROP BETWEEN INVERT IN AND INVERT OUT.
- ~~THE CONTRACTOR SHALL NOTIFY THE BIG SKY WATER & SEWER DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO BEGINNING ANY WORK.~~
- CONTRACTOR SHALL FIELD VERIFY LINE AND GRADE OF EXISTING CONNECTIONS.
- WATER AND SEWER MAINS & SERVICES TO HAVE LOCATE WIRE PER DETAIL 22-02.
- WATER MAIN TO HAVE COPPER CONDUCTIVITY STRAPS NOT BRONZE WEDGES.
- BOLLARDS ARE TO BE PLACED ON ALL NEW HYDRANTS PER DETAIL 26-08.
- WATER & SEWER SERVICES IN JOINT TRENCH SHALL HAVE A MINIMUM OF 12" OF SEPARATION

RECEIVED
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Divisions & Public Works

VERIFY SCALE		REVISIONS		
THESE PRINTS MAY BE REDUCED. LINE BELOW MEASURES ONE INCH ON ORIGINAL DRAWING.		NO.	DESCRIPTION	DATE
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The Beginning of a New Standard of Commitment

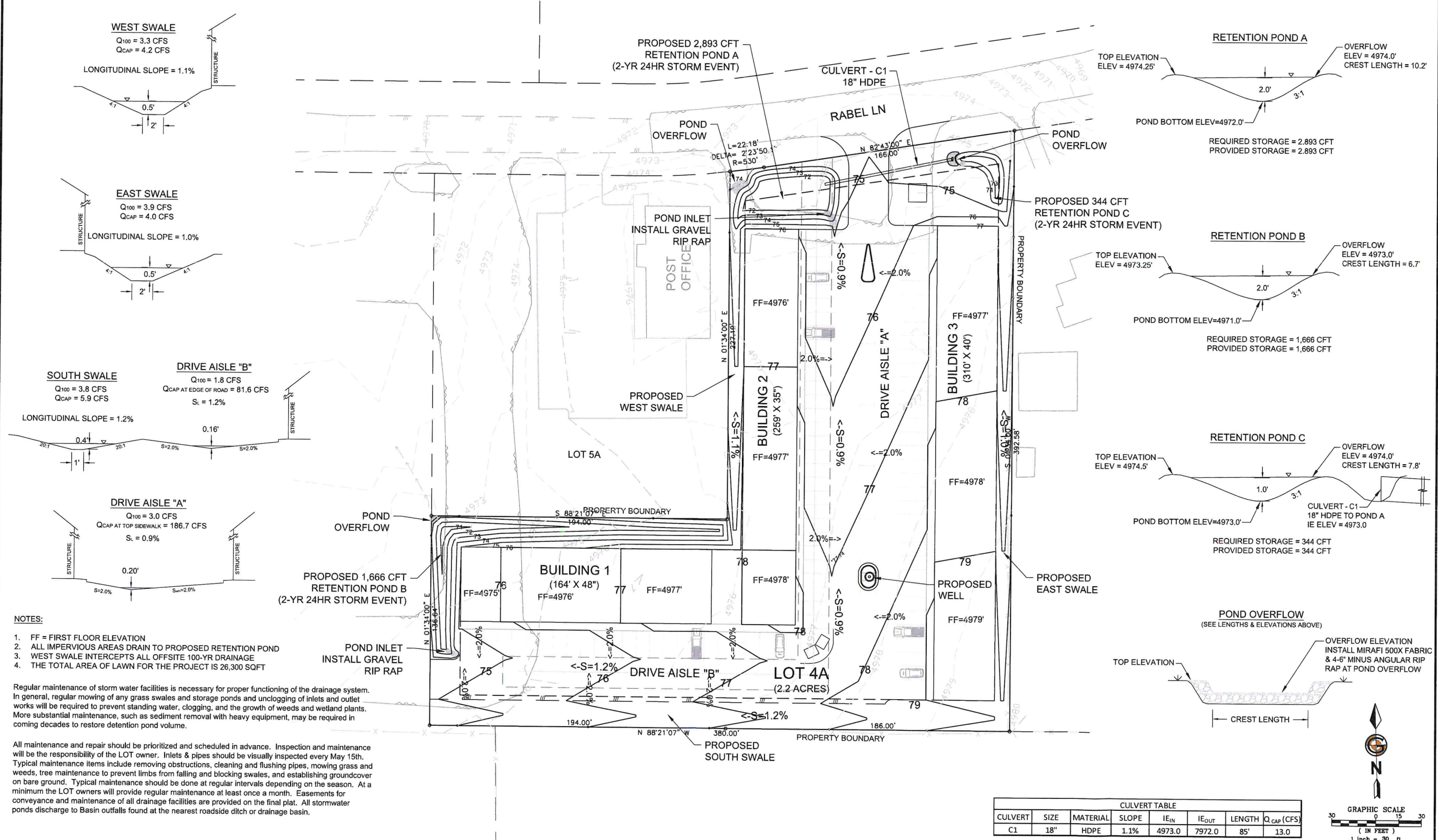
Engineering Consulting Design Planning
204 N. 11th Ave.
Bozeman, MT 59715
Phone: (406) 581-3319

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 MONTANA
PROFESSIONAL ENGINEER
CHRISTOPHER M. WASIA
10955 PE
3/26/24

DRAWN BY: CMW
CHKD. BY: CMW
APPR. BY: CMW
DATE: 2/16/24
Q.A. REVIEW BY: DATE:

GATEWAY WAREHOUSES LOT 4A OF MINOR SUB 56B, S11, T3S, R4E		PROJECT NUMBER 1001.030
GALLATIN GATEWAY		SHEET NUMBER
COVER SHEET		DRAWING NUMBER I-1



- NOTES:
- FF = FIRST FLOOR ELEVATION
 - ALL IMPERVIOUS AREAS DRAIN TO PROPOSED RETENTION POND
 - WEST SWALE INTERCEPTS ALL OFFSITE 100-YR DRAINAGE
 - THE TOTAL AREA OF LAWN FOR THE PROJECT IS 26,300 SQFT

Regular maintenance of storm water facilities is necessary for proper functioning of the drainage system. In general, regular mowing of any grass swales and storage ponds and unclogging of inlets and outlet works will be required to prevent standing water, clogging, and the growth of weeds and wetland plants. More substantial maintenance, such as sediment removal with heavy equipment, may be required in coming decades to restore detention pond volume.

All maintenance and repair should be prioritized and scheduled in advance. Inspection and maintenance will be the responsibility of the LOT owner. Inlets & pipes should be visually inspected every May 15th. Typical maintenance items include removing obstructions, cleaning and flushing pipes, mowing grass and weeds, tree maintenance to prevent limbs from falling and blocking swales, and establishing groundcover on bare ground. Typical maintenance should be done at regular intervals depending on the season. At a minimum the LOT owners will provide regular maintenance at least once a month. Easements for conveyance and maintenance of all drainage facilities are provided on the final plat. All stormwater ponds discharge to Basin outfalls found at the nearest roadside ditch or drainage basin.

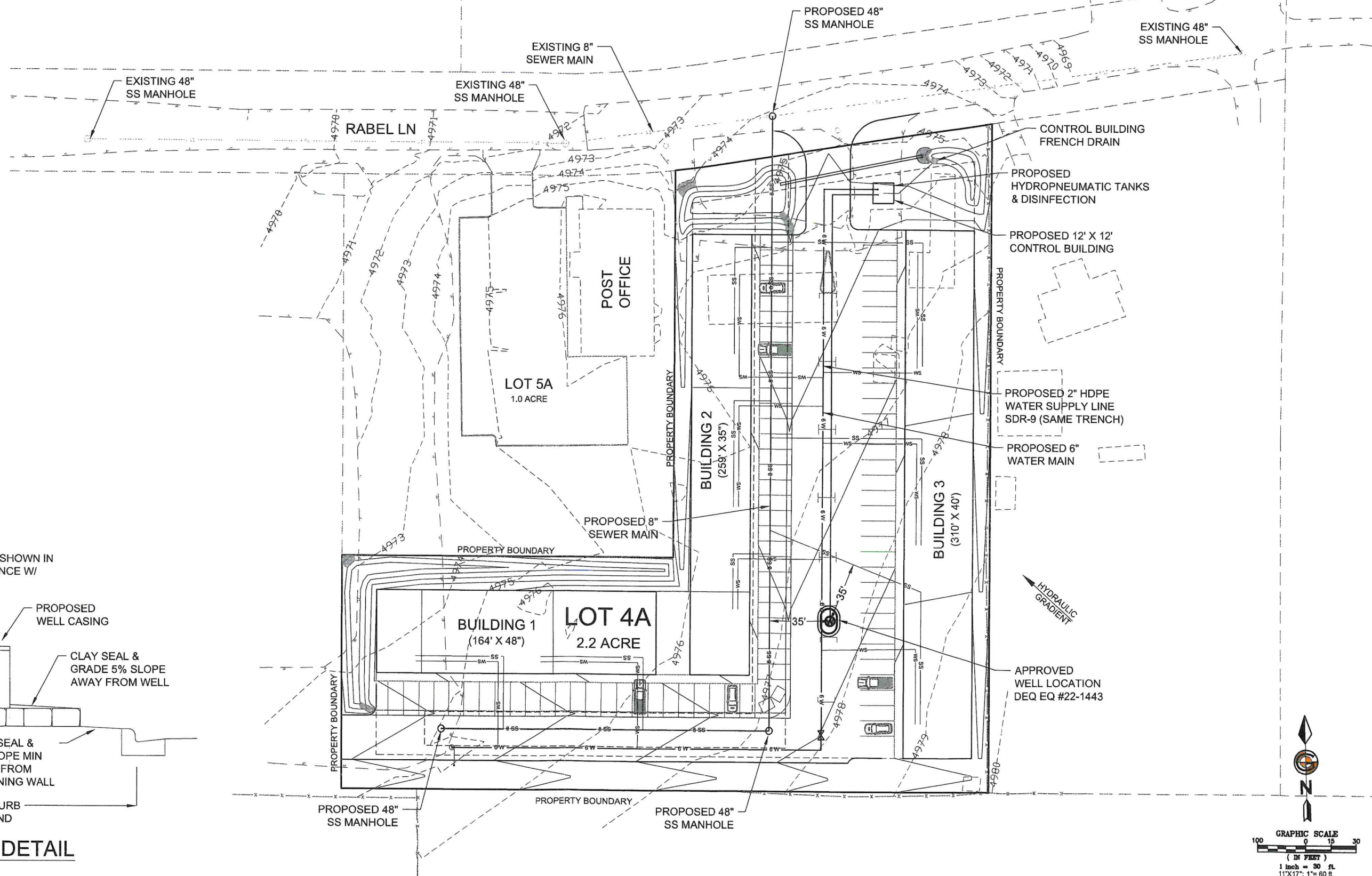
CULVERT TABLE							
CULVERT	SIZE	MATERIAL	SLOPE	IE _{IN}	IE _{OUT}	LENGTH	Q _{CAP} (CFS)
C1	18"	HDPE	1.1%	4973.0	7972.0	85'	13.0

VERIFY SCALE THESE PRINTS MAY BE REDUCED. LINE BELOW MEASURES ONE INCH ON ORIGINAL DRAWING.	REVISIONS			
	NO.	DESCRIPTION	DATE	BY
MODIFY SCALE ACCORDINGLY				

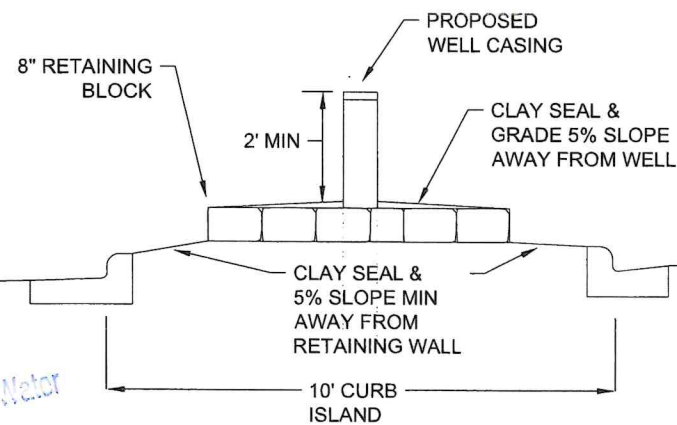


DRAWN BY: DCD
CHK'D. BY: CMW
APPR. BY: CMW
DATE: 3/26/24
Q.A. REVIEW BY:
DATE:
MONTANA PROFESSIONAL ENGINEER
CHRISTOPHER M. WASIA
10959 PE
3/26/24

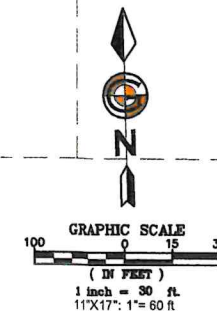
GATEWAY WAREHOUSES		PROJECT NUMBER 1001.030
GALLATIN GATEWAY	LOT 4A OF MINOR SUB 56B, S11, T3S, R4E	
MT		SHEET NUMBER
GRADING AND DRAINAGE PLAN		DRAWING NUMBER GD-1



NOTES: WELL TO BE DESIGNED AS SHOWN IN
DEQ DESIGN REPORT IN ACCORDANCE W/
DEVIATION SPECIFICATIONS..



WELL DETAIL




NO.	DESCRIPTION	REVISIONS		
		DATE	BY	



GENESIS ENGINEERING, INC.
The Beginning of a New Standard of Commitment

Engineering
Consulting
Design
Planning

204 N. 11th Ave.
Bozeman, MT 59715
Phone: (406) 581-3319



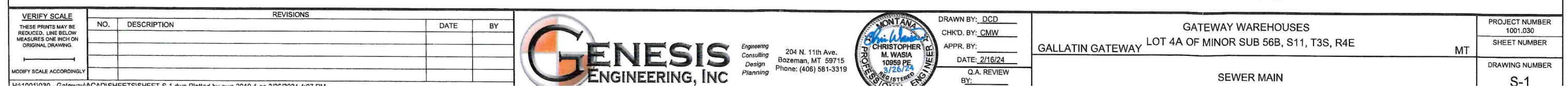
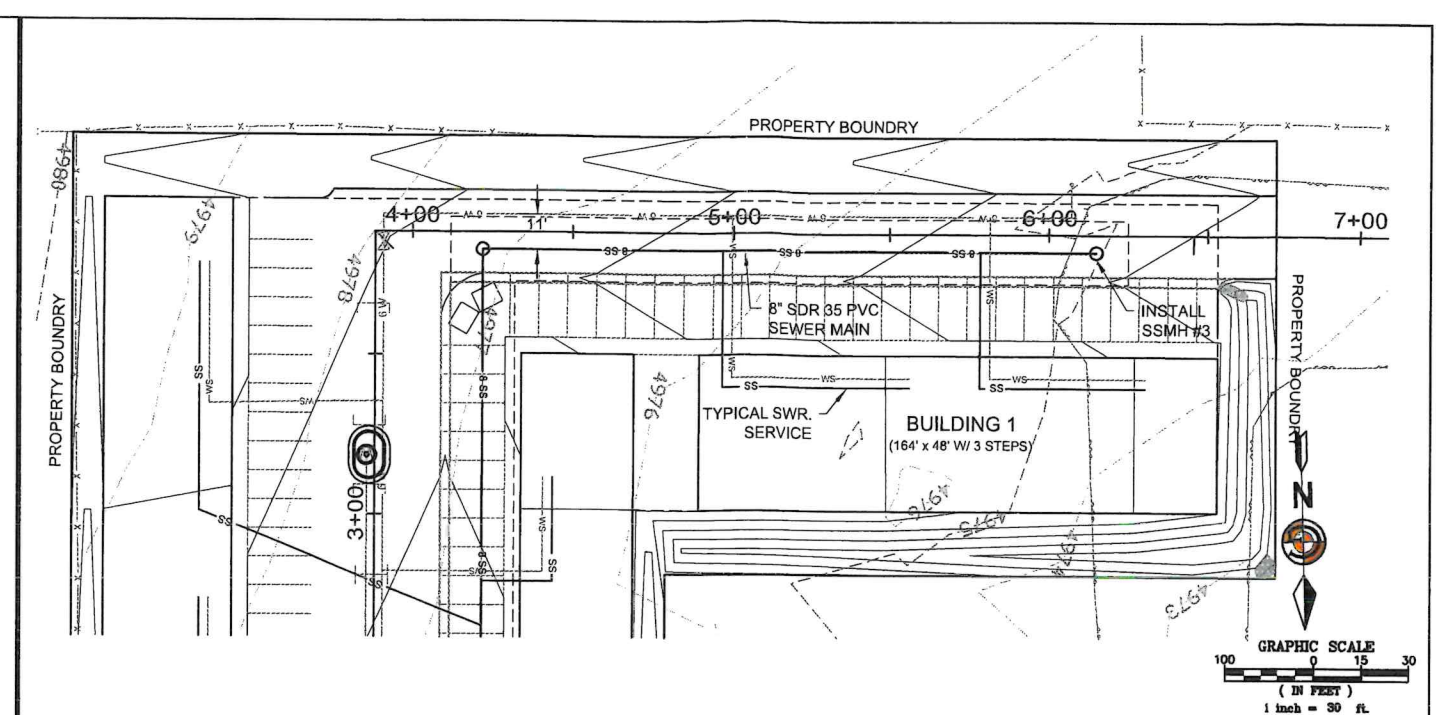
CHRISTOPHER M. WASIA
PROFESSIONAL ENGINEER

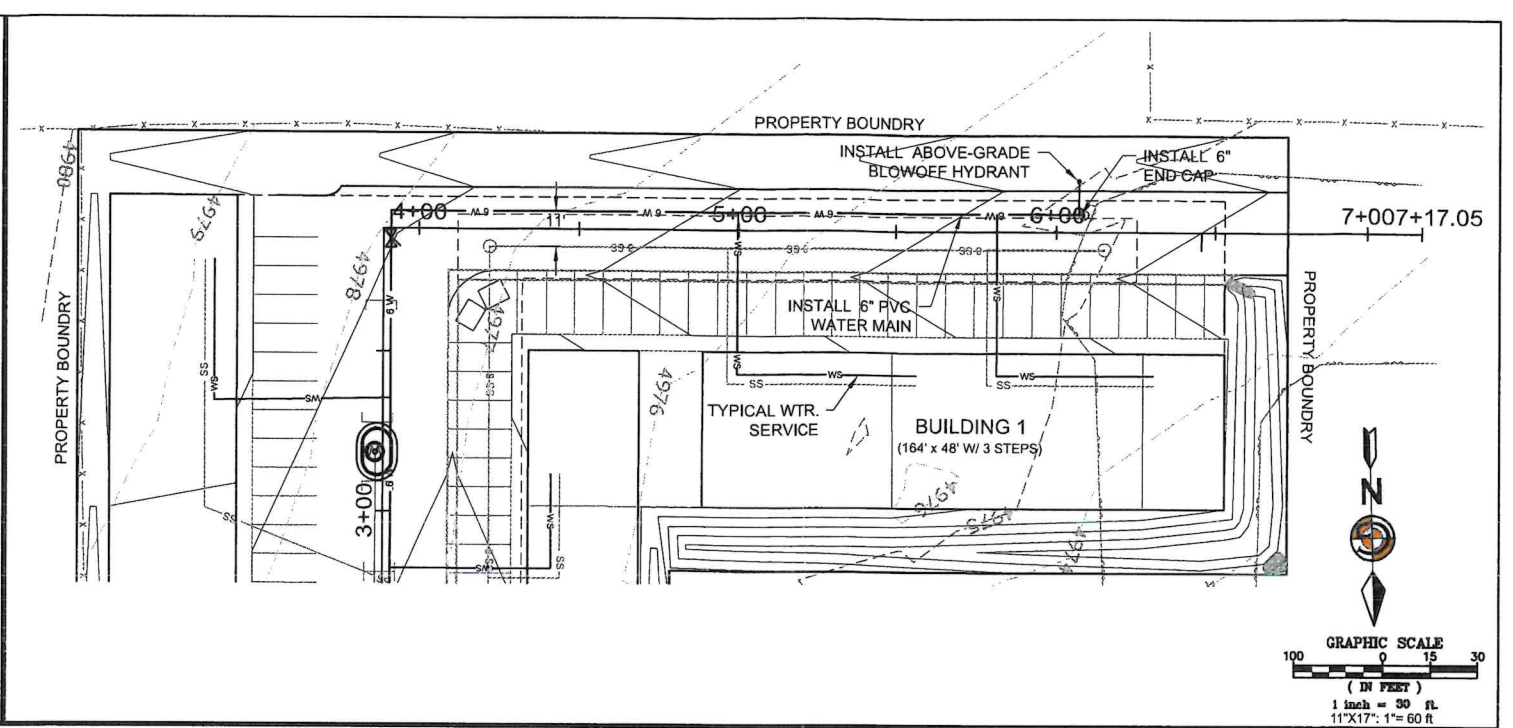
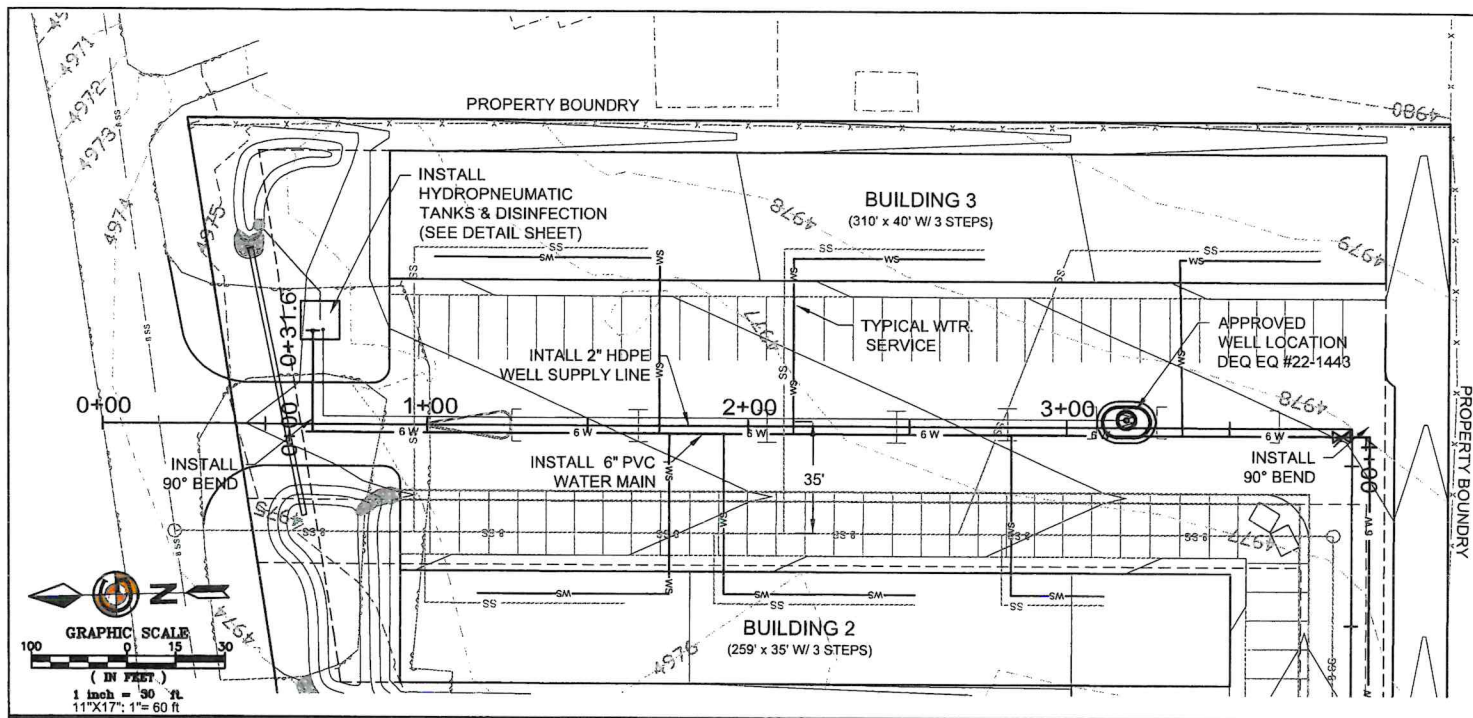
DRAWN BY: DCD
CHKD. BY: CMW
APPR. BY:
DATE: 2/16/24
Q.A. REVIEW
BY:
DATE:

GATEWAY WAREHOUSES
LOT 4A OF MINOR SUB 56B, S11, T3S, R4E
GALLATIN GATEWAY

INDEX LAYOUT

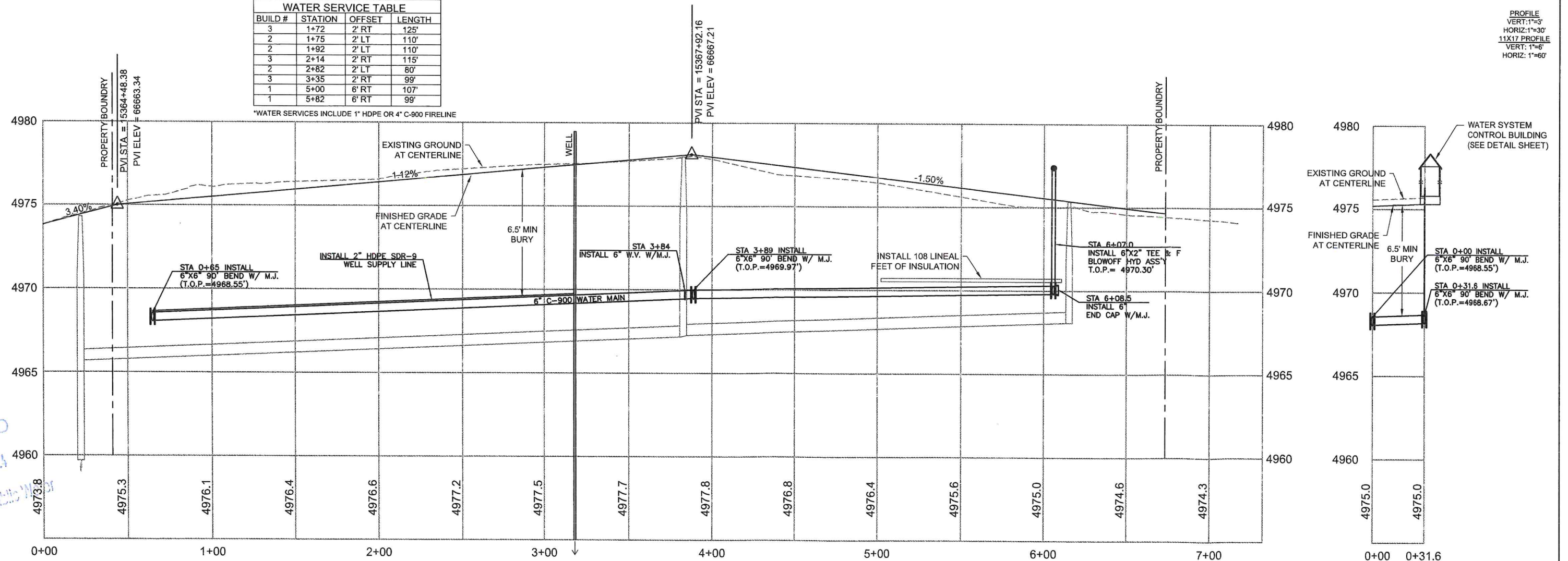
PROJECT NUMBER
1001.030
SHEET NUMBER
DRAWING NUMBER
UTIL-1





WATER SERVICE TABLE			
BUILD #	STATION	OFFSET	LENGTH
3	1+72	2' RT	125'
2	1+75	2' LT	110'
2	1+92	2' LT	110'
3	2+14	2' RT	115'
2	2+82	2' LT	80'
3	3+35	2' RT	99'
1	5+00	6' RT	107'
1	5+82	6' RT	99'

*WATER SERVICES INCLUDE 1\"/>



REVISIONS			
NO.	DESCRIPTION	DATE	BY



Engineering
Consulting
Design
Planning

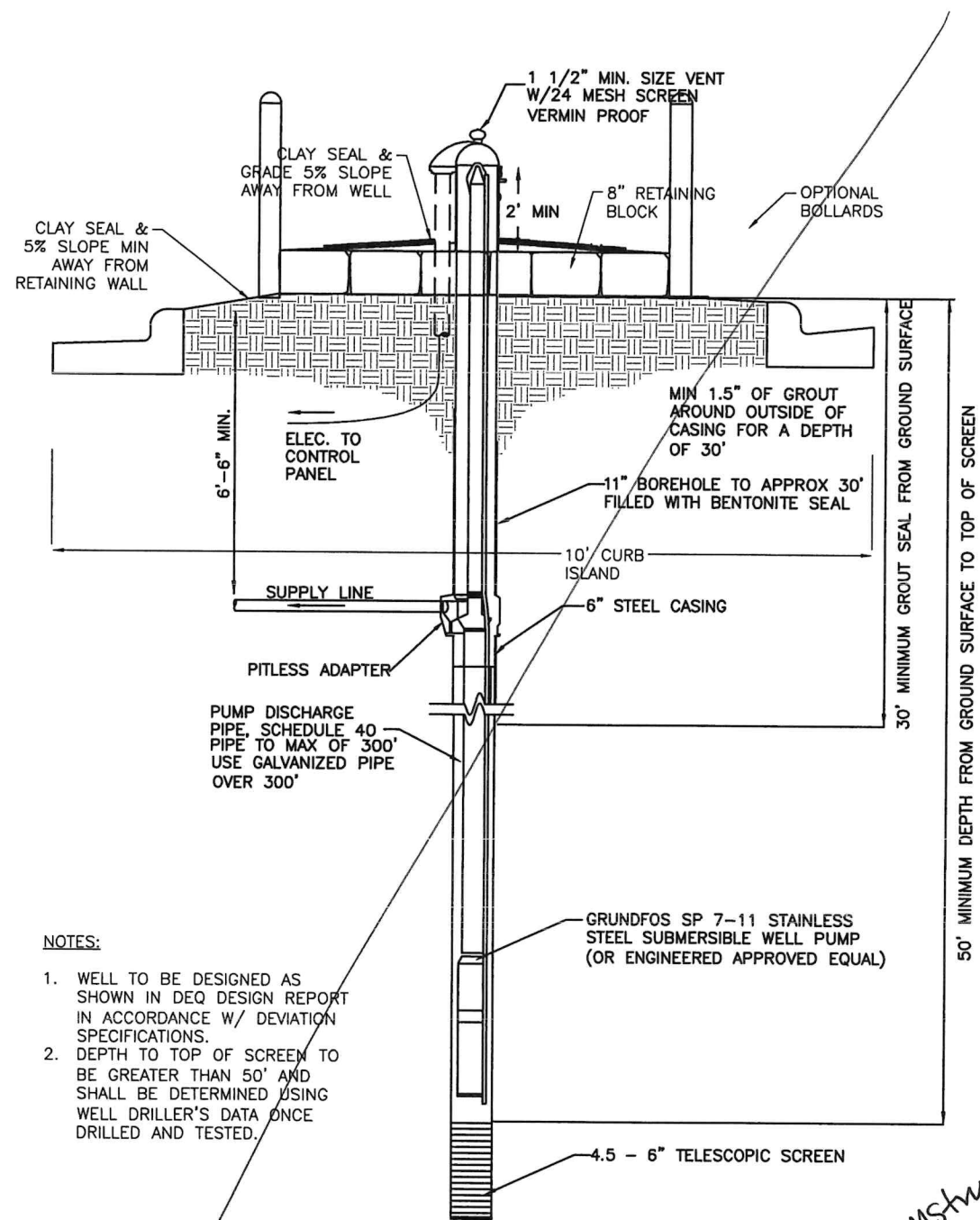


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APPR. BY:
DATE: 2/16/24
Q.A. REVIEW
BY:

GATEWAY WAREHOUSES
LOT 4A OF MINOR SUB 56B, S11, T3S, R4E
GALLATIN GATEWAY

WATER MAIN

PROJECT NUMBER
1001.030
SHEET NUMBER
DRAWING NUMBER
W-1

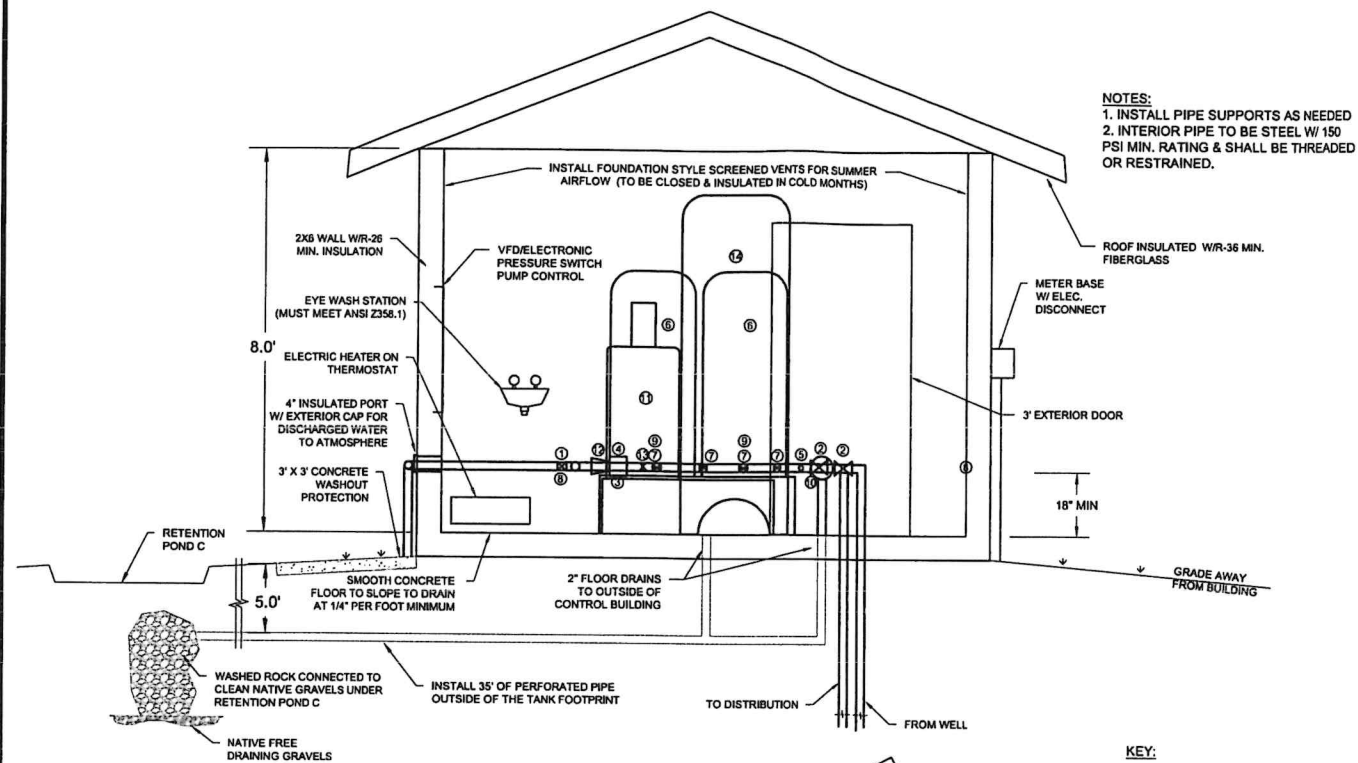


NOTES:

1. WELL TO BE DESIGNED AS SHOWN IN DEQ DESIGN REPORT IN ACCORDANCE W/ DEVIATION SPECIFICATIONS.
2. DEPTH TO TOP OF SCREEN TO BE GREATER THAN 50' AND SHALL BE DETERMINED USING WELL DRILLER'S DATA ONCE DRILLED AND TESTED.

TYPICAL DRILLED WELL DETAIL
NOT TO SCALE

Well constructed
As built provided
for RD

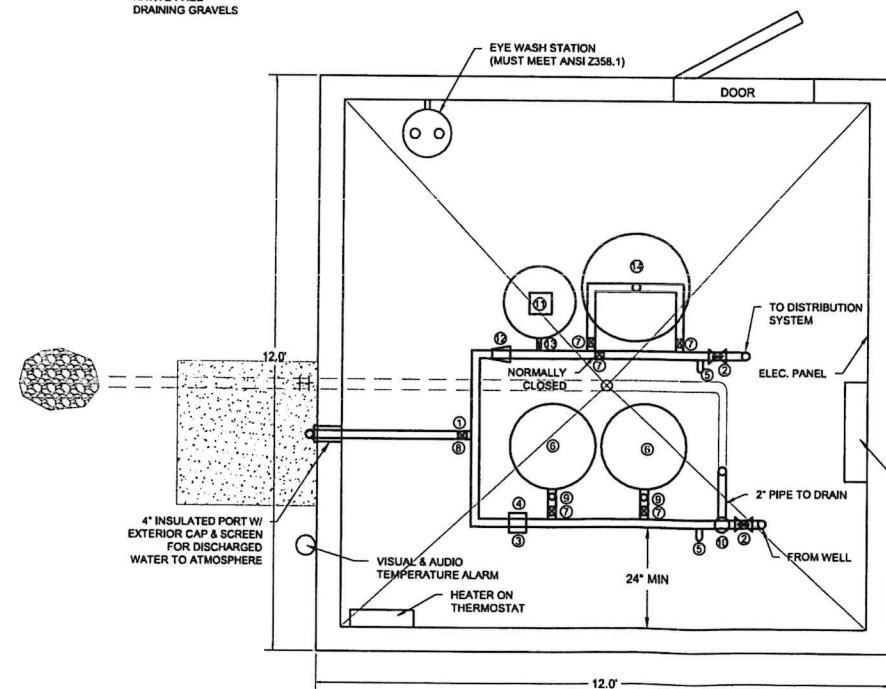


NOTES:

1. INSTALL PIPE SUPPORTS AS NEEDED
2. INTERIOR PIPE TO BE STEEL W/ 150 PSI MIN. RATING & SHALL BE THREADED OR RESTRAINED.

KEY:

- ① 2" TEE W/CAP FOR WASTE MATERIAL
- ② 2" CHECK VALVE/ BACK FLOW PREVENTOR
- ③ PRESSURE SWITCH ADJUSTABLE TO 0.5 PSI
- ④ MIN. 125 PSI PRESSURE GAUGE
- ⑤ SMOOTH NOSED SAMPLE TAP
- ⑥ FLEXCON H2PL 65 GALLON FIBER WOUND PRESSURE TANK W/ CONNECTIONS TO ALLOW INDIVIDUAL REMOVAL
- ⑦ TANK ISOLATION VALVE
- ⑧ 2" VALVE FOR DISCHARGE WATER TO ATMOSPHERE
- ⑨ FAUCET FOR DRAINING
- ⑩ 2" PRV - 65PSI - W/24-MESH SCREEN
- ⑪ CLEAN WATER SYSTEMS J-PHO-22 PUMP PROPORTIONAL FEED CHLORINATOR W/ 35-GALLON SOLUTION TANK (OR ENGINEERED APPROVED EQUAL)
- ⑫ 2" FLOW METER
- ⑬ INJECTION CHECK VALVE
- ⑭ CONTACT TANK - CLEAN WATER SYSTEMS CWS 2465 110-GALLON



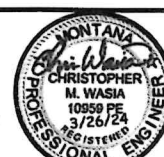
CONTROL BUILDING DETAILS
NOT TO SCALE

VERIFY SCALE

THESE PRINTS MAY BE REDUCED. LINE BELOW MEASURES ONE INCH ON ORIGINAL DRAWING.

H:\11001\030 - Gateway\ACAD\SHEETS\SHEET-PWS-DETAILS.dwg Plotted by christopher wasla on 3/29/2024 4:12 PM

NO.	DESCRIPTION	REVISIONS	DATE	BY



DRAWN BY: DCD
CHK'D BY: CMW
APPR. BY:
DATE: 2/16/24
O.A. REVIEW BY:
DATE:

GATEWAY WAREHOUSES
LOT 4A OF MINOR SUB 56B, S11, T3S, R4E
GALLATIN GATEWAY

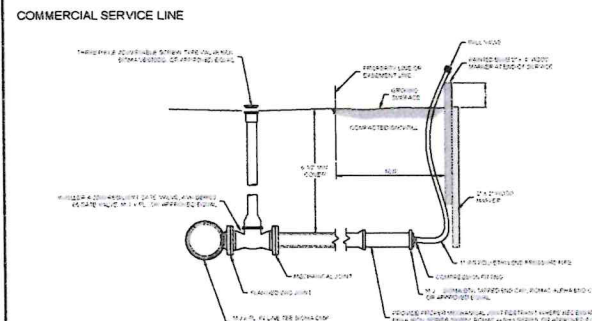
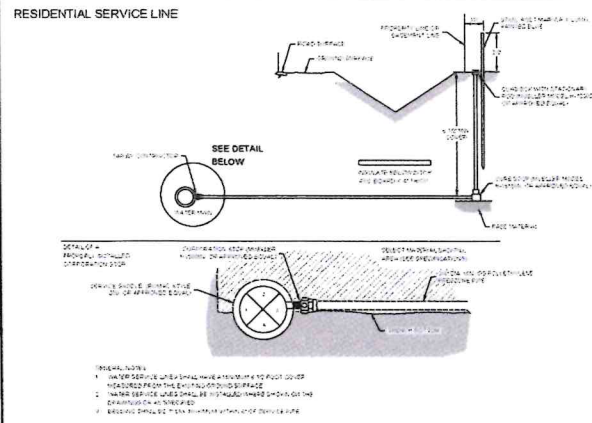
PWS DETAILS

PROJECT NUMBER
1001.030

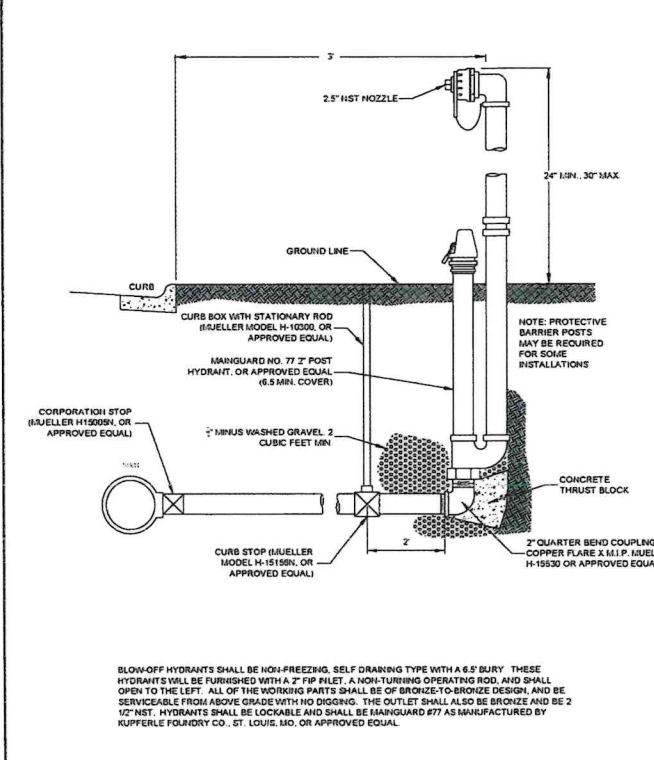
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DRAWING NUMBER

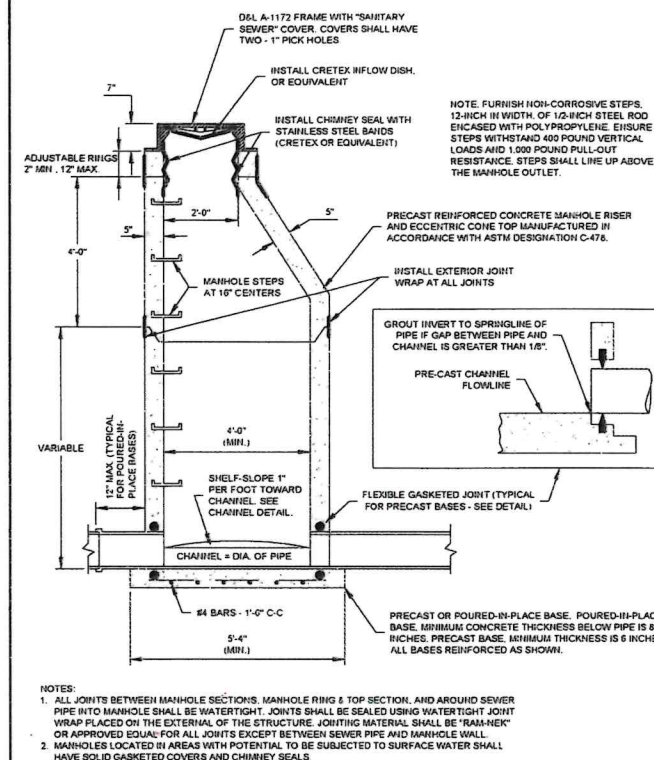
D-1



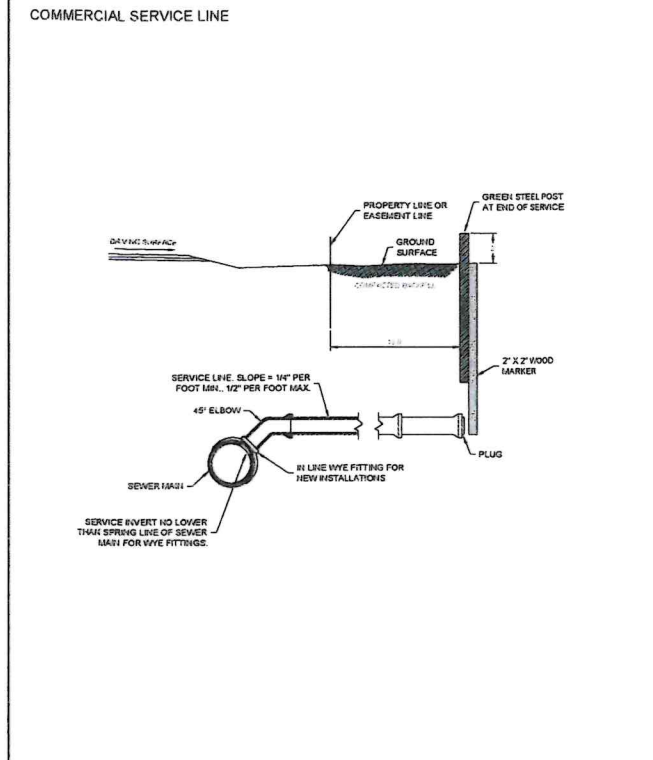
Morrison Maierle	2000 North Main Street Bozeman, MT 59717 406.591.1122 www.morrisonmaierle.com	PROJECT NO. 02660-1	PROJECT NAME FOUR CORNERS WATER AND SEWER DISTRICT STANDARD DETAILS RESIDENTIAL AND COMMERCIAL WATER SERVICE LINE DETAIL	PROJECT NO. 02660-1
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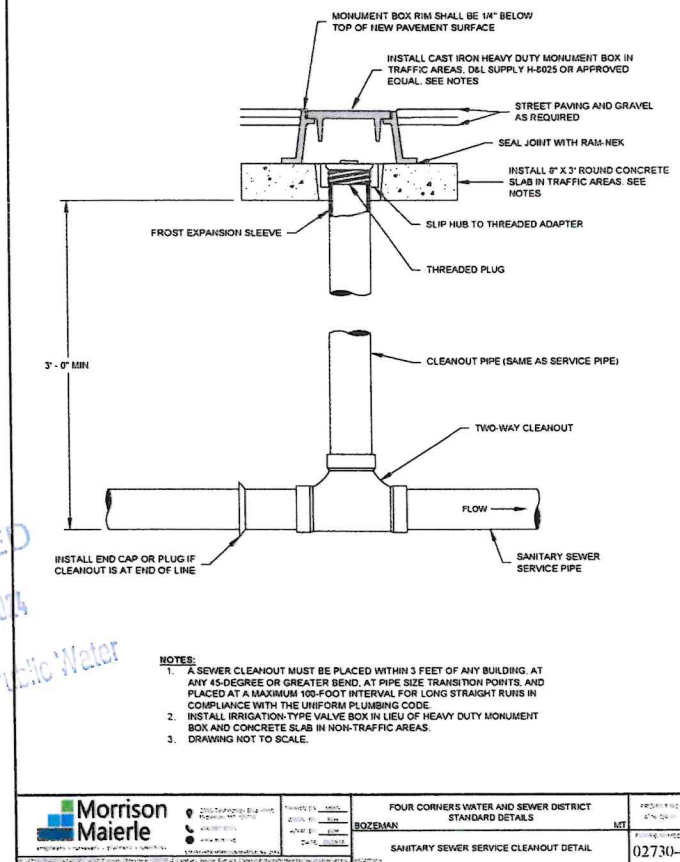
Morrison Maierle	2000 North Main Street Bozeman, MT 59717 406.591.1122 www.morrisonmaierle.com	PROJECT NO. 02660-6	PROJECT NAME FOUR CORNERS WATER AND SEWER DISTRICT STANDARD DETAILS ABOVE-GRADE BLOW-OFF HYDRANT	PROJECT NO. 02660-6
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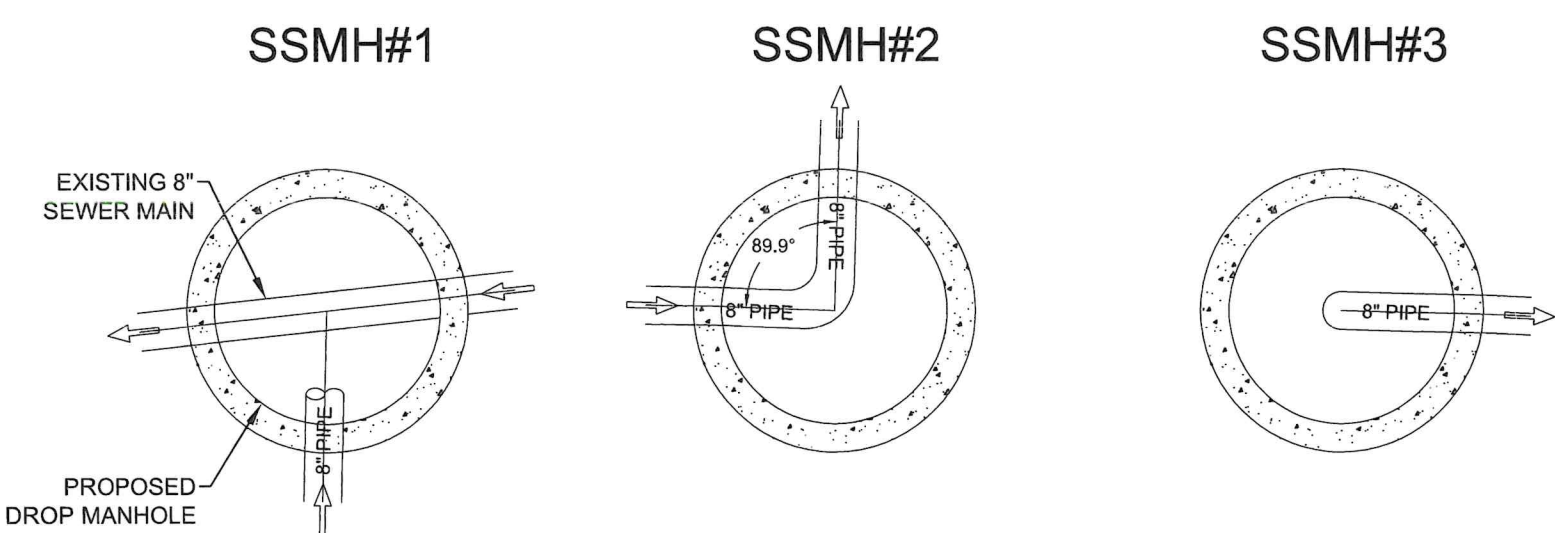
Morrison Maierle	2000 North Main Street Bozeman, MT 59717 406.591.1122 www.morrisonmaierle.com	PROJECT NO. 02730-1	PROJECT NAME FOUR CORNERS WATER AND SEWER DISTRICT STANDARD DETAILS ECCENTRIC MANHOLE DETAIL	PROJECT NO. 02730-1
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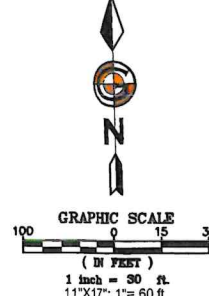
Morrison Maierle	2000 North Main Street Bozeman, MT 59717 406.591.1122 www.morrisonmaierle.com	PROJECT NO. 02730-3	PROJECT NAME FOUR CORNERS WATER AND SEWER DISTRICT STANDARD DETAILS SANITARY SEWER SERVICE LINE	PROJECT NO. 02730-3
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Morrison Maierle	2000 North Main Street Bozeman, MT 59717 406.591.1122 www.morrisonmaierle.com	PROJECT NO. 02730-4	PROJECT NAME FOUR CORNERS WATER AND SEWER DISTRICT STANDARD DETAILS SANITARY SEWER SERVICE CLEANOUT DETAIL	PROJECT NO. 02730-4
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- NOTES:
- 1) ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE SHOWN
 - 2) ALL MANHOLES SHALL HAVE ATLEAST 6 INCHES OF ADJUSTMENT RINGS INCLUDED
 - 3) ALL MANHOLES SHALL CONSTRUCTED IN ACCORDANCE WITH DEQ-2 AND SHALL BE EITHER HYDROSTATICALLY TESTED OR AIR TESTED.
 - 4) WATER TEST- THE LEAKAGE EXFILTRATION OR INFILTRATION MAY NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. AN EXFILTRATION OR INFILTRATION TEST MUST BE PERFORMED WITH A MINIMUM 25 POSITIVE HEAD OF 2 FEET.
 - 5) AIR TEST- THE AIR TEST MUST, AT A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828-86 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, UNI-B-690 LOW PRESSURE TEST FOR PVC PIPE.



NO.	DESCRIPTION	DATE	BY



Engineering
Consulting
Design
Planning

204 N. 11th Ave.
Bozeman, MT 59715
Phone: (406) 581-3319



DRAWN BY: DCD
CHKD. BY: CMW
APPR. BY:
DATE: 2/16/24
Q.A. REVIEW
BY:
DATE:

GATEWAY WAREHOUSES LOT 4A OF MINOR SUB 56B, S11, T3S, R4E GALLATIN GATEWAY	MT	PROJECT NUMBER 1001.030 SHEET NUMBER DRAWING NUMBER D-2
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