



VA# 656-16-284 FEB 2, 2021

BASE BID AND DEDUCT ALTERNATES SUMMARY

NOTE 1: BASE BID INCLUDES ALL WORK SCOPE AS LISTED ON ALL DRAWINGS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR REVIEWIONG ALL NOTES AS THEY VARY 7 BUILDING NOTE 2: BASE BID AND ALTERNATES ARE LISTED IN SUMMARY BELOW. CONTRACTOR RESPONSIBLE TO REVIEW ALL DOCUMENTS FOR FURTHER INFORMATION. NOTE 3: THE ALTERNATES ARE LISTED BELOW IN ORDER OF VA PRIORITY AND ACCEPTANCE. **BASE BID - SYSTEMS:** INVOLVES INSTALLING INCOMING WATER PARAMETER MONITORS AND CONNECTIONS INTO BUILDING AUTOMATION. **BASE BID - FIXTURES**: INCLUDED RETROFITTING SINKS/SHOWERS WITH NEW/UPDATED MIXING VALVES (WHERE APPLICABLE) DEDUCT ALTERNATE #1: UNDER ACCEPTANCE OF THIS DEDUCT ALTERNATE, REMOVE REQUIREMENT TO PROVIDE TEMPERATURE SENSORS FOR ALL RECIRCULATION BALANCING VALVES REPLACED IN BASE BID SCOPE OF WORK DEDUCT ALTERNATE #2: UNDER ACCEPTANCE OF THIS DEDUCT ALTERNATE, REMOVE REQUIREMENT TO REPLACE ALL EXISTING BALANCING VALVES WITH NEW CIRCUIT SETTER VALVES ON HOT WATER RECIRCULATION SYSTEM. DEDUCT ALTERNATE #3: UNDER ACCEPTANCE OF THIS DEDUCT ALTERNATE, REMOVE COLD WATER RECIRCULATION SYSTEM MODIFICATIONS AND ASSOCIATED EQUIPMENT INSTALLATION. DEDUCT ALTERNATE #4: UNDER ACCEPTANCE OF THIS DEDUCT ALTERNATE, REMOVE DELUXE THERMAL FLUSH SYSTEM MODIFICATIONS. NOTE THAT A SIMPLIFIED FLUSHING METHOD WILL BE

REQUIRED FOR INSTALLATION TO REPLACE THIS FUNCTION. SEE BUILDING SPECIFIC DRAWINGS FOR ADDITIONAL INFORMATION.

DEDUCT ALTERNATE #5: UNDER ACCEPTANCE OF THIS DEDUCT ALTERNATE, DELETE SCOPE OF WATER TOWER MODIFICATIONS SHOWN ON DRAWING 86-PL500, TO HELP CIRCULATE SYSTEM AND PROVIDE MORE RELIABLE DEPTH MONITORING.

	CONSULTANTS <u>MECHANICAL, ELECTRICAL, PLUMBING:</u> DUNHAM 50 SOUTH SIXTH STREET SUITE 1100 MINNEAPOLIS, MN 55402 612-465-7550	ARCHITECT OF RECORD <u>A/E:</u> STONE GROUP ARCHITECTS, INC. 1001 TWELVE OAKS CENTER DRIVE, SUITE 1025 WAYZATA, MN 55391 952.476.5850	STAMP I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of Minnesota.	APPROVED: SAFETY MANAGER APPROVED: SERVICE LINE DIRECTOR APPROVED: GEMS COORDINATOR	DATE: DATE: DATE:	APPROVED: F
Date:	DUNHAM	STONE GROUP ARCHITECTS	Typed or Printed Name: <u>JPD Stevite - AIA</u> Date: <u>2/2/21</u> License Number: <u>5/525</u>	APPROVED: CHIEF OF POLICE	DATE:	APPROVED: P
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VA FORM 08 - 6231

Revision# Description

ST CLOUD VA HEALTH CARE SYSTEM

INSTALL LEGIONELLA PREVENTION

BUILDING 2, 28, 49, 50, 51, 86 (WATER TOWER) & 115 **4801 VETERANS DRIVE, ST CLOUD MN 56303**

FINAL CONSTRUCTION DOCUMENTS

	SHEET LIST
*1 611 1371	
GI001	COVER SHEET
GI002	SITE, STAGING & PHASING PLAN
GI003	BUILDING 2 - PHASING PLANS
61004 21005	BUILDING 28 - PHASING PLANS
61005 61006	BUILDING 50 - PHASING PLANS
61007	BUILDING 51 - PHASING PLANS
80018	BUILDING 115 - PHASING PLANS
E101	BUILDING 28 - FLOOR PLANS
E102	BUILDING 49 - FLOOR PLANS
E104	BUILDINGS 50 - FLOOR PLAN
E105	BUILDING 51 - FLOOR PLANS
	BUILDING 115 - FLOOR PLAN & FINISHES
2L000	MECHANICAL TITLE SHEET
2-PL100	BUILDING 2 - BASEMENT LEVEL - DOMESTIC WATER PLAN
2-PL101	BUILDING 2 - FIRST LEVEL - DOMESTIC WATER PLAN
2-PL102	BUILDING 2 - SECOND LEVEL - DOMESTIC WATER PLAN
2-FL000 8-PL 100	BUILDING 2 - WI/E/F EQUIPWENT SCHEDULES/DETAILS BUILDING 28 - BASEMENT I FVFL - DOMESTIC WATER PLAN
2	BUILDING 28 - FIRST LEVEL - DOMESTIC WATER PLAN
28-PL102	BUILDING 28 - SECOND LEVEL - DOMESTIC WATER PLAN
28-PL600	BUILDING 28 - M/E/P EQUIPMENT SCHEDULES/DETAILS
9-2100	BUILDING 49 - CRAWLSPACE - DOMESTIC WATER PLAN
9-PL101	BUILDING 49 - FIRST LEVEL - DOMESTIC WATER PLAN
·9-PL102	BUILDING 49 - SECOND LEVEL - DOMESTIC WATER PLAN
9-PL600	BUILDING 49 - M/E/P EQUIPMENT SCHEDULES/DETAILS
0-PL10U	BUILDING 50 - UNDERGROUND - DOMESTIC WATER PLAN
0-PL100	BUILDING 50 - BASEMENT LEVEL - DOMESTIC WATER PLAN BUILDING 50 - FIRST I EVEL - DOMESTIC WATER PLAN
0-PL102	BUILDING 50 - SECOND LEVEL - DOMESTIC WATER PLAN
50-PL600	BUILDING 50 - M/E/P EQUIPMENT SCHEDULES/DETAILS
51-PL10U	BUILDING 51 - UNDERGROUND - DOMESTIC WATER PLAN
51-PL100	BUILDING 51 - BASEMENT LEVEL - DOMESTIC WATER PLAN
51-PL101	BUILDING 51 - FIRST LEVEL - DOMESTIC WATER PLAN
51-PL600	BUILDNG 51 - M/E/P EQUIPMENT SCHEDULES/DETAILS
36-PL500	WATER TOWER DETAILS AND MODIFICATIONS - ADD ALT #2
115-PL100	BUILDING 115 - CRAWLSPACE DOMESTIC WATER PLAN
115-PL101	BUILDING 115 - GROUND FLOOR DOMESTIC WATER PLAN
ELECTRICAL	BOILDING TIS- W/E/F EQUITIMENT SCHEDOLES/DETAILS
Ξ000	ELECTRICAL TITLE SHEET
)2-E100	BUILDING 2 - BASEMENT LEVEL - ELECTRICAL PLAN
)2-E600	BUILDING 2 - ELECTRICAL SCHEDULES
28-E600	BUILDING 20 - BASEIVIENT LEVEL - ELECTRICAL PLAN BUILDING 28 - ELECTRICAL SCHEDULES
19-E100	BUILDING 49 - UNDERGROUND/CRAWLSPACE - ELECTRICAL PLAN
19-E101	BUILDING 49 - BASEMENT LEVEL - ELECTRICAL PLAN
19-E600	BUILDING 49 - ELECTRICAL SCHEDULES
0-E100	BUILDING 50 - UNDERGROUND - ELECTRICAL PLAN
50-E600	BUILDING 50 - ELECTRICAL SCHEDULES
51-E100	BUILDING 51 - UNDERGROUND - ELECTRICAL PLAN
51-E101	BUILDING 51 - BASEMENT LEVEL - ELECTRICAL PLAN
51-E600	BUILDING 51 - ELECTRICAL SCHEDULES
15-E100	BUILDING 113 - CRAWLSPACE - ELECTRICAL PLAN BUILDING 115 - GROUND FLOOR - FLECTRICAL PLAN
15-E600	BUILDING 115 - ELECTRICAL SCHEDULES





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				INSTALL	LEGIONELLA P	REVENTION	VA# 656-16-284	
OJECTS SECTION MANAGER	DATE:	APPROVED: HEALTH CARE DIRECTOR	DATE:	Project Title			Project Number	

NORTH

U.S. Department of Veterans Affairs Veterans Health Administration St. Cloud VA Health Care System

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Project Title		REVENTION	Project Number	
Location			VA# 030-10-204	
S	SAINT CLOUD, I	MN	Building Number	
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U.S. Department of Veterans Affairs Veterans Health Administration St. Cloud VA Health Care System

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2 FIRST LEVEL PHASING PLAN 1/16" = 1'-0"

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SECOND LEVEL PHASING PLAN 1/16" = 1'-0"



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NORTH

2 FIRST LEVEL PHASING PLAN 1/16" = 1'-0"

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DURATION NOTE: <u>COLOR</u> SI CONSTRUCTION DURATION ITEMS. <u>NUMBERS</u> SHOWN R MECHANICAL PLANS FOR D
SHORT DURATION: (TO BE LESS THAN ON
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LONG DURATION: (S ⁻ TO BE 8-14 DAYS)
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-CONTRACTOR SHALL PERFORM **ALL** WORK WITHIN A PHASE AND RECEIVE VA SIGNOFF FOR WORK COMPLETION PRIOR TO COMMENCING WORK ON NEXT PHASE. -CONTRACTOR TO COORDINATE FLOOR TO FLOOR WORK FLOW DAILY WITH VA. -CONTRACTOR TO COORDINATE OUTAGES SCHEDULING WITH VA PRIOR TO ANY SHUTDOWNS. -CONTRACTOR SHALL LIMIT NUMBER OF SINKS WORKED ON PER DAY TO 3. -CONTRACTOR SHALL LIMIT NUMBER OF TOILETS WORKED ON PER DAY TO 2. -CONTRACTOR SHALL LIMIT NUMBER OF SHOWERS WORKED ON AT A TIME TO 1. -CONTRACTOR WILL BE ALLOWED TO PERFORM WORK ON TWO BUILDINGS SIMULTANIOUSLY, ONLY ONE CLC AT A TIME. -CONTRACTOR WILL BE ALLOWED TO PERFORM DRYCOOLER/EXTERIOR WORK INDEPENDANT OF INTERIOR WORK PHASING TO AVOID FALL/WINTER WEATHER CONDITIONS. CONTRACTOR SHALL LIMIT WORK TO TWO BUILDINGS AT A TIME.

Project Title			Project Number
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URATION LEGEND

SHOWN REPRESENT ANTICIPATED N, DESCRIBED BELOW, FOR SPECIFIC WORK I REFERENCE MECHANICAL PLAN NOTES - SEE DESCRIPTION OF WORK.

: (START & COMPLETION OF WORK ANTICIPATED ONE DAY)

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RATION: (WORK TO BE PERFORMED OVER ORK REQUIRING OUTAGES TO BE PERFORMED EEKENDS)

WORK ANTICIPATED TO BE ONGOING FOR THE E NEEDED TO COMPLETE ALL WORK IN BUILDING. E AFTER HOURS/WEEKEND WORK FOR OUTAGES) TO REMAIN UNMODIFIED BY THIS CONTRACT.

ASING NOTES

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3 FIRST LEVEL - PHASING PLAN 1/16" = 1'-0"

ARCHITECT OF RECORD STONE GROUP ARCHITECTS, INC. 1001 TWELVE OAKS CENTER DRIVE, F <u>STONE GROUP</u> ARCHITECTS

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am

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SHUTDOWNS. -CONTRACTOR SHALL LIMIT NUMBER OF SINKS WORKED ON PER DAY TO 3. -CONTRACTOR SHALL LIMIT NUMBER OF TOILETS WORKED ON PER DAY TO 2. -CONTRACTOR SHALL LIMIT NUMBER OF SHOWERS WORKED ON AT A TIME TO 1. -CONTRACTOR WILL BE ALLOWED TO PERFORM WORK ON TWO BUILDINGS SIMULTANIOUSLY, ONLY ONE CLC AT A TIME. -CONTRACTOR WILL BE ALLOWED TO PERFORM DRYCOOLER/EXTERIOR WORK INDEPENDANT OF INTERIOR WORK PHASING TO AVOID FALL/WINTER WEATHER CONDITIONS. CONTRACTOR SHALL LIMIT WORK TO TWO BUILDINGS AT A TIME.

Project Title INSTALL L	.EGIONELLA PI	REVENTION	Project Number VA# 656-16-284	
Location Phase FINAL CONS Drawing Title	SAINT CLOUD,	Building Number MULTIPLE Drawing Number		
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WORK DURATION LEGEND
DURATION NOTE: <u>COLORS</u> SHOWN REPRESENT ANTICIPATED CONSTRUCTION DURATION, DESCRIBED BELOW, FOR SPECIFIC WORK ITEMS. <u>NUMBERS</u> SHOWN REFERENCE MECHANICAL PLAN NOTES - SEE MECHANICAL PLANS FOR DESCRIPTION OF WORK.
SHORT DURATION: (START & COMPLETION OF WORK ANTICIPATED TO BE LESS THAN ONE DAY)
MEDIUM DURATION: (START & COMPLETION OF WORK ANTICIPATED TO BE 2-7 DAYS)
LONG DURATION: (START & COMPLETION OF WORK ANTICIPATED TO BE 8-14 DAYS)
PROGRESSIVE DURATION: (WORK TO BE PERFORMED OVER MULTIPLE DAYS, WORK REQUIRING OUTAGES TO BE PERFORMED AFTER HOURS & WEEKENDS)
FULL DURATION: (WORK ANTICIPATED TO BE ONGOING FOR THE DURATION OF TIME NEEDED TO COMPLETE ALL WORK IN BUILDING. MAY ALSO REQUIRE AFTER HOURS/WEEKEND WORK FOR OUTAGES)
EXISTING FIXTURE TO REMAIN UNMODIFIED BY THIS CONTRACT.
PHASING NOTES
-CONTRACTOR SHALL PERFORM ALL WORK WITHIN A PHASE AND RECEIVE VA SIGNOFF FOR WORK COMPLETION PRIOR TO COMMENCING WORK ON NEXT PHASE
-CONTRACTOR TO COORDINATE FLOOR TO FLOOR WORK FLOW DAILY WITH VA.
-CONTRACTOR TO COORDINATE OUTAGES SCHEDULING WITH VA PRIOR TO ANY SHUTDOWNS.
-CONTRACTOR SHALL LIMIT NUMBER OF SINKS WORKED ON PER DAY TO 3.
-CONTRACTOR SHALL LIMIT NUMBER OF TOILETS WORKED ON PER DAY TO 2.

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Project Title	Project Number	
INSTALL LEGIONELLA PREVENTION	VA# 656-16-284	
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SAINT CLOUD, MN	Building Number	
Phase FINAL CONSTRUCTION DOCUMENTS		
Drawing Title	Drawing Number	-
BUILDING 50 - PHASING PLANS		
ssue Date Checked Drawn		
FEB 2, 2021		
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TO 2. -CONTRACTOR SHALL LIMIT NUMBER OF SHOWERS WORKED ON AT A TIME TO 1. -CONTRACTOR WILL BE ALLOWED TO PERFORM WORK ON TWO BUILDINGS SIMULTANIOUSLY, ONLY ONE CLC AT A TIME.

-CONTRACTOR WILL BE ALLOWED TO PERFORM DRYCOOLER/EXTERIOR WORK INDEPENDANT OF INTERIOR WORK PHASING TO AVOID FALL/WINTER WEATHER CONDITIONS. CONTRACTOR SHALL LIMIT WORK TO TWO BUILDINGS AT A TIME.





PHASING NOTES -CONTRACTOR SHALL PERFORM ALL WORK WITHIN A PHASE AND RECEIVE VA SIGNOFF FOR WORK COMPLETION PRIOR TO COMMENCING WORK ON NEXT PHASE. -CONTRACTOR TO COORDINATE FLOOR TO FLOOR WORK FLOW DAILY WITH VA. -CONTRACTOR TO COORDINATE OUTAGES SCHEDULING WITH VA PRIOR TO ANY SHUTDOWNS. -CONTRACTOR SHALL LIMIT NUMBER OF SINKS WORKED ON PER DAY TO 3. -CONTRACTOR SHALL LIMIT NUMBER OF TOILETS WORKED ON PER DAY TO 2. -CONTRACTOR SHALL LIMIT NUMBER OF SHOWERS WORKED ON AT A TIME TO 1. -CONTRACTOR WILL BE ALLOWED TO PERFORM WORK ON TWO BUILDINGS SIMULTANIOUSLY, ONLY ONE CLC AT A TIME. -CONTRACTOR WILL BE ALLOWED TO PERFORM DRYCOOLER/EXTERIOR WORK INDEPENDANT OF INTERIOR WORK PHASING TO AVOID FALL/WINTER WEATHER CONDITIONS. CONTRACTOR SHALL LIMIT WORK TO TWO BUILDINGS AT A TIME.

Project Title			Project Number
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MEDIUM DURATION: (START & COMPLETION OF WORK ANTICIPATED

MAY ALSO REQUIRE AFTER HOURS/WEEKEND WORK FOR OUTAGES)

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-CONTRACTOR SHALL PERFORM ALL WORK WITHIN A PHASE AND RECEIVE VA SIGNOFF FOR WORK COMPLETION PRIOR TO COMMENCING WORK ON NEXT PHASE. -CONTRACTOR TO COORDINATE FLOOR TO FLOOR WORK FLOW DAILY WITH VA. -CONTRACTOR TO COORDINATE OUTAGES SCHEDULING WITH VA PRIOR TO ANY SHUTDOWNS. -CONTRACTOR SHALL LIMIT NUMBER OF SINKS WORKED ON PER DAY TO 3. -CONTRACTOR SHALL LIMIT NUMBER OF TOILETS WORKED ON PER DAY TO 2. -CONTRACTOR SHALL LIMIT NUMBER OF SHOWERS WORKED ON AT A TIME TO 1. RACTOR WILL BE ALLOWED TO PERFORM WORK ON TWO BUILDINGS SIMULTANIOUSLY, ONLY ONE CLC AT A TIME. -CONTRACTOR WILL BE ALLOWED TO PERFORM DRYCOOLER/EXTERIOR WORK INDEPENDANT OF INTERIOR WORK PHASING TO AVOID FALL/WINTER WEATHER CONDITIONS. CONTRACTOR SHALL LIMIT WORK TO TWO BUILDINGS AT A TIME.

WORK DURATION LEGEND

WORK ITEMS. <u>NUMBERS</u> SHOWN REFERENCE MECHANICAL PLAN

SHORT DURATION: (START & COMPLETION OF WORK ANTICIPATED

LONG DURATION: (START & COMPLETION OF WORK ANTICIPATED TO BE 8-14 DAYS)

PROGRESSIVE DURATION: (WORK TO BE PERFORMED OVER MULTIPLE DAYS, WORK REQUIRING OUTAGES TO BE PERFORMED

FULL DURATION: (WORK ANTICIPATED TO BE ONGOING FOR THE UURATION OF TIME NEEDED TO COMPLETE ALL WORK IN BUILDING. MAY ALSO REQUIRE AFTER HOURS/WEEKEND WORK FOR OUTAGES)

PHASING NOTES

KEY NOTES: BASE BID WORK TO BE DELETED UNDER ACCEPTING OF DEDUCT ALTERNATE #4

- 20 ENSURE THAT THE BUILDING'S HOT WATER SYSTEM CAN GENERATE UP TO 180F WATER. THE EXISTING DIGITAL MIXING VALVE IS CAPABLE OF BEING SET TO MAINTAIN ENTIRE LOOP ABOVE 134F AT ALL TIMES, AND BYPASS 100% HOT WATER AT 160F DURING THERMAL ERADICATION CYCLES (ON HOT SIDE OF WATER ONLY).
- PROVIDE 2" CROSS-CONNECT VALVE FROM HOT TO COLD SIDE OF SYSTEM, FOR THERMAL ERADICATION OF COLD WATER SIDE OF THE SYSTEM. ALSO INCLUDE DRAIN VALVE PRIOR TO RECIRCULATION PUMP INSTALLED FOR COLD WATER PIPING. PROVIDE LOCKABLE VALVES AND TAG-OUT SYSTEM DUE TO POTENTIAL DAMAGE TO PLUMBING FIXTURES AND SCALED RISK TO STAFF/PATIENTS.
- 22 PROVIDE TEMPERATURE SENSORS NEARBY EACH CIRC. PUMP INLET (FOR BOTH HOT AND COLD CIRC. PUMPS) AND AT MAIN HOT WATER SERVICE DOWNSTREAM OF MIXING VALVE. INTEGRATE INTO BUILDING AUTOMATION, REFER TO SEQUENCE OF OPERATION FOR MONITORING AND ALARM CONDITIONS.
- 23 PROVIDE 1" RPZ BACKFLOW PREVENTOR FOR BOTH CONDENSATE COOLER CONNECTION AND FOR GLYCOL FEED PUMP MAKE-UP WATER. MOUNT RPZ TO WALL AND ROUTE DISCHARGE DRAIN TO EXISTING FLOOR DRAIN IN THIS AREA.
- NOTE: UNDER ACCEPTANCE OF DEDUCT ALTERNATE #4 THE FOLLOWING SIMPLIFIED FLUSH SYSTEM SHALL REPLACE WHAT IS SHOW ON BASE BID DRAWINGS PROVIDE 2" CROSS-VOER PIPING FROM HOT WATER GENERATOR TO COLD WATER SIDE OF SYSTEM NEAR MAIN SERVICE, SIMILART TO T HAT SHOWN ON KEYNOTE #21 UNDER DELUXE THERMAL FLUSH SYSTEM OPTION. FINAL CONNECTIONS SHALL BE TERMINATED WITH THREADED UNIONS THAT CAN BE DISCONNECTED WHILE NOT IN SERVICE. BALL VALVES ON EITHER END SHALL BE LOCKED AND TAGGED OUT PER VA SAFETY REQUIREMENTS. NOTE: UNDER THIS SIMPLIFIED THERMAL FLUSHING OPTION THE
- 160 DEGREE WATER UTILIZED WILL BE DISCHARGED INTO INDIVIDUAL FIXTURES. MN PLUMBING CODE PROHIBITS DRAINING FLUIDS IN EXCESS OF 140 DEGREES DIRECTLY INTO SANITARY SERVICE. VA WILL BE REQUIRED TO PROVIDE THEIR OWN PROVISIONS OF FURNISHING ICE OR COLD MAKE-UP WATER AT EACH FIXTURE BEING FLUSHED TO COOL DISCHARGE WATER BELOW THIS REQUIREMENT.

KEY NOTES: BASE BID WORK TO BE DELETED UNDER ACCEPTING OF DEDUCT ALTERNATE #3

- 30 PROVIDE CENTRALIZED CHILLER/PURIFIER SYSTEM FOR COOLING WATER ON COLD WATER SIDE BY CONTINUOUSLY CIRCULATING THROUGH THIS SYSTEM. SYSTEM SHALL HAVE AN INTEGRATED PUMP FOR CONTINUAL FLOW, COOLING TANK AND EVAPORATOR, INLINE UV STERILIZER, PHOSPHATE FEEDER, AND 5 MICRON PRE-FILTER AND CARBON BLOCK. BUILDING SHALL HAVE AN AUTOMATED DRAIN/FLUSH VALVE FOR USE IN THERMAL ERADICATION (SIMILAR ON HOT SIDE). CHILLER TO BE SUPPLIED IS THE FILTRINE MODEL ES-40-RFC WHICH PERFORMS AT 8 GPM CIRCULATION AT 15 PSI.
- PROVIDE WATER COOLED COMPRESSOR OPTION ON CHILLERS AND PAIR THAT WITH A DRY COOLER SYSTEM TO REJECT HEAT TO EXTERIOR OF BUILDING. DRY COOLER SHALL INCLUDE PUMPING PACKAGE AND EXPANSION TANK WITH WEATHER PROOF ENCLOSURE, REFER TO EQUIPMENT SCHEDULE.
- TEMPORARILY REMOVE METAL STAIRS TO MAKE CLEARANCE TO INSTALL WATER CHILLER UNIT UNDER STAIR LANDING. CONTRACTOR TO VERIFY SIZE OF 4" CONCRETE EQUIPOMENT PAD NECESSARY WITH SHOP DRAWINGS.
- 33 CLEAR OUT ANY LANDSCAPING AS REQUIRED TO POUR AN 8" CONCRETE SLAB TO INSTALL DRY COOLER. VERIFY DRY COOLER IS AT LEAST 60" FROM BUILDING AND/OR CLEAR OF POTENTIAL FALLING ICE/SNOW DAMAGE FROM OVERHANGING STRUCTURE.
- 34 PROVIDE A GLYCOL FILL STATION PER EQUIPMENT SCHEDULE VERIFY OPTIMAL PLACEMENT FOR ACCESSIBILITY AND COORDINATE ELECTRICAL CONNECTIONS. ALSO PROVIDE A 3/4" RPZ BACKFLOW PREVENTER TIED INTO COLD WATER SERVICE FOR MAKE-UP WATER TO CLOSED SYSTEM, REFER TO DETAIL 1/PL600.
- PROVIDE COLD WATER RECIRCULATION BALANCING VALVE ASSEMBLY WITH 3/4" CIRCUIT SETTER, CHECK VALVE, AND ISOLATION VALVES ON BOTH SIDE FOR MAINTENANCE. ADJUST TO 1 GPM FLOW ON COMPLETION ON INSTALL. ALSO INCLUDE A TEMPERATURE SENSOR DOWNSTREAM OF BALANCING VALVE AND INTEGREATE INTO BUILDING AUTOMATION TO HELP IN BOTH TROUBLESHOOTING ISSUES, AND SETTING UP PROPER BALANCING OF COLD WATER CIRCULATION SYSTEM.
- PENETRATE EXTERIOR WALL APPROXIMATELY 24"-48" BELOW GRADE THROUGH LINKSEAL ASSEMBLY. ALL UNDERGROUND PIPING INSULATION TO BE COVERED WITH ALUMINUM JACKETING PER SPECIFICATIONS. ANY PIPING BURIED ABOVE FROST LINE SHALL BE COVERED WITH 2" OF FIBERBOARD INSULATON AS REQUIRED WHILE INFILLING. PIPING SHALL OFFSET UP TO DRYCOOLER AS CLOSE AS POSSIBLE TO LIMIT LENGTH OF EXPOSED PIPING.

KEY NOTES: BASE BID WORK TO BE DELETED UNDER ACCEPTING OF DEDUCT ALTERNATE #2

- REPLACE ALL EXISTING BALANCING VALVES WITH NEW MANUAL CIRCUIT SETTERS ASSEMBLIES.
- KEY NOTES: BASE BID WORK TO BE DELETED UNDER ACCEPTING OF DEDUCT ALTERNATE #1 PROVIDE TEMPERATURE SENSORS AT EACH NEW CIRCUIT SETTER ASSEMBLY DESCRIBED IN CLIN 2101. THESE TEMPERATURE SENSORS SHALL BE TIED INTO BUILDING AUTOMATION BY JCI AND HELP IN BOTH

TROUBLESHOOTING ISSUES, AND TO SET UP PROPER BALANCING OF

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41>	TC CC DL	DILETS DNTRA JRING	S ANE ACT. THE	D/OR U VA SH RMAL	JRINA IALL ERA	ALS TO DEVEL DICAT) RE .OP ION	main Plan Proc	UNM TO P ESS	odifi Rote	ED B ECT F	Y THI LUSH	S IOME
42	PA LIC VA MI UN CC SE SIE	TIENT GATUF LVES IGLE \ THST der alt ONTRA AMLE DE WI	T LAN RE FI WALI AND #3). ACTC SS T TH Q	ATOF XTUR REMA STO 180F 180F ANY S OR SH UBE E	RIES / ES W P VAL THEF SINKS ALL T 3YPA ER T	ALL HA /ITH EX PLACE _VES V RMAL F S WITH EST E SS AR URN V	VE F KISTI E. AT VITH LUS LUS LEXI XIST OUN ALV	RECE NG A I EVE I CHIC H (del STINC TING N ID BO E, SEI	NTLY SSE AGO ete in G MIX MIXIN TH H E DR	INST. 1070 (NK, R MOD tegral ING V G VAL OT AN AWING	ALLE COMF EL 10 chec ALVE VE A ND CO G DE	D AN PLIAN ACE E 017-C k on c ES, ND IN DLD V TAILS	TI- T MIX STAE STAE cold s NSTA VATE
43	FC 13 EX LO AC CF UN	OR SH 1-CFM ISTIN CATIO CESS AWLS IDER	OWE IAB M G SH ON S S PAN SPAC ALT ;	ERS W MIXINO IOWEI ERVIO NELS T CE BEI #3, SE	ITH A R MIX EABI TO CO _OW) E DR	NTI-LI VE SH (ING V LE FR(ONCEA . INCL AWIN(Gat Iall Alve DM F Al (C UDE G DE	URE H PROT E. VE LOOF R IS S 3/8" (TAILS	HAND FECT RIFY WIT SERV CROS	LES, HOT THAT HIN S ICEAE SS-OV	A CH WATI IT IS ECUI BLE F 'ER C	ICAG ER SI INST RE/LC ROM	O MC DE O ALLE OCKA ECTI
44	CL MI UF RE 10 WI MI DE	INIC/E XING ` TO 1 PLAC 17-CS TH E> XING ` DTH H TAIL.	EXAM VAL\ SIDE 80F ⁻ E EX TAB((ISTII VAL\ OT A	I ROO (ES IN I. MIXI TO AV (ISTIN (ISTIN (ISTIN (ISTIN (ISTIN (ISTIN (ISTIN) (ISTIN)	M SIN Com Ng V Oid E G An With Xing D Ins DLD V	NKS TO IPLIAN ALVES DAMAC GLE W HSTAN VALVI TALL 3 WATEF	D UT S SH SE D ALL ID 18 E, C 8/8" S R SID	ILIZE WITH OULD URING STOF 30F TH ONTR SEAMI DE WIT	EXIS ASSE BE A G ER/ VAL IERM ACTC LESS TH QI	TING (E 1070 BLE 1 ADICA VE W IAL FL DR SH TUBE JARTI	JNDE O HA TION ITH C USH ALL T E BYF ER TU	ER CC PROT ANDL I. EVE CHICA . ALL FEST PASS JRN A	DUNT E WA ERY S GO N SINK EXIS ARO /ALV
45	NC	DT US	ED										
46	DF UN CC RE 10 WI MI BC DE	Rop-In Ider Ider Iplac Iplac Ithes Thes Xing Ithe Tail.	I STA COU ANCI E EX TAB((ISTII VAL\ OT A	AINLES NTER E, CHI (ISTIN CP TO NG MI (E ANI ND CO	es st Mixii Cago G An With Xing D Ins DLD V	TEEL, (NG VA O MOE GLE W HSTAN VALVI TALL 3 WATEF	DR IN LVES DEL 1 /ALL ID 18 E, CO 3/8" S R SID	NTEGI S LIST STOF STOF 30F TH ONTR SEAMI DE WIT	RAL E FMAB VAL IERM ACTO LESS TH QU	Bowl Or A Or E Ve W Ial Fl Dr Sh Tube Jarti	, SINI SSE ITH C USH ALL 1 E BYF ER TL	KS, P 1070 L. EV CHICA . ALL FEST PASS JRN \	ROVI GO I SINK EXIS ARO /ALV
47	FC FI) TH TH	R MC (TURE ERM/	P SII E CAI AL EF	NKS, F N HAN RADIC	REVIE IDLE ATIOI	EW LEN THE E N PRO SINK F	/EL (LEV/ CES	OF RIS ATED IS IT IS ACE F	SK W TEMI S AC(= XIST	ITH TI PERA CEPTA	HE V/ TURE ABLE	A. WH ES OF TO K F WA	IERE THE EEP

THERMAL FLUSH. ALL SINKS WITH EXISTING MIXING VALVE, SIDE WITH QUARTER TURN VALVE, SEE DETAIL.

CRAWLSPACE & GROUND LEVEL KEYNOTES

HOT WATER RECIRCULATION SYSTEM.

NO SCALE

Giudo
awing Number
MULTIPLE
Iding Number
VA# 050-10-204
VA# 656 46 204
ject Number

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10

of Veterans Affairs Health Care System

Drawing Title

FEB 2, 2021

FINAL CONSTRUCTION DOCUMENTS

BUILDING 49 - FLOOR PLANS

Issue Date Checked Drawn

Drawing Number

AE103

U.S. Department of Veterans Affairs Veterans Health Administration St. Cloud VA Health Care System

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VA FORM 08 - 6231

	7		

Project Title			Project Number	
INSTALL LEGIONELLA PREVENTION			VA# 656-16-284	
Location			Building Number	
SAINT CLOUD, MN				
Phase FINAL CONS	TRUCTION [DOCUMENTS		
Drawing Title			Drawing Number	
BUILDIN	GS 50 - FLC	OR PLAN		
Issue Date	Checked	Drawn		
FEB 2, 2021				
8			9	

С

8			9	
Issue Date FEB 2, 2021	Checked	Drawn		
			AF105	
BUILDING	G 51 - FLOO	OR PLANS		
Drawing Title			Drawing Number	
Phase FINAL CONST	TRUCTION I	DOCUMENTS		
SA	AINT CLOUD,	MN		
Location]	
INSTALL LE	GIONELLA P	REVENTION	VA# 656-16-284	
Project Title			Project Number	

1/16" = 1'-0"

BUILDING 51 - FIRST LEVEL

1/16" = 1'-0"

NORTH

NORTH

U.S. Department of Veterans Affairs Veterans Health Administration St. Cloud VA Health Care System

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ERAL NOTES	LIFE SAFETY LEGEND
	2FW 2HR FIRE WALL
CONTROL AND TO	1FW 1HR FIRE WALL
E FOR LOCATION,	ST SMOKETIGHT WALL
NER TO ALLOW FOR	
JMBING WITH	VERT. OPG. (EXIT ENCLSR) FIRE BARRIER (2 HR = 4 OR MORE STORIE
VILL OCCUR TO	HAZ./INCIDENTAL USE
TION 01 35 26, ORMATION	

С