



Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Folsom | Irvine

November 19, 2018

Dr. Jerome Cruz
Washington State Department of Ecology
3190 160th Avenue Southeast
Bellevue, Washington 98008

BY MAIL AND EMAIL

**RE: PRELIMINARY AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM
DESIGN PLAN SET
CHS AUBURN SITE
238 8TH STREET SOUTHEAST
AUBURN, WASHINGTON
FARALLON PN: 301-004**

Dear Dr. Cruz:

Attached please find the CHS Auburn Facility Air Sparge and Soil Vapor Extraction System Design Set (Design Plan Set) issued for permit review for the final cleanup action described in the Cleanup Action Plan, Exhibit B of Consent Decree No. 18-2-15430-8 between the Washington State Department of Ecology (Ecology) and CHS Inc. with an effective date of June 20, 2018. Please note that the Design Plan Set will be submitted to the City of Auburn for review and approval and the plans may be revised, as necessary, to address comments received from the City of Auburn. The final Design Plan Set will be submitted to Ecology once approved by the City of Auburn.

This submittal meets the requirement for the Engineering Design work element listed in Table 3, *Cleanup Action Schedule of Implementation*, of the Cleanup Action Plan. Note that the submittal deadline for the Engineering Design deliverable work element was extended 60 days based on the letter regarding Extension of Schedule Request, CHS Auburn Site, Auburn, Washington dated August 15, 2018, from Mr. Paul Grabau of Farallon Consulting, L.L.C. to Dr. Jerome Cruz of Ecology as approved in the email regarding Extension of Schedule Request – CHS Auburn dated August 15, 2018, from Dr. Cruz of Ecology to Mr. Grabau of Farallon Consulting, L.L.C.



Please call or email if you have any questions or comments on the attached submittal.

Sincerely,

Farallon Consulting, L.L.C.

Paul C. Grabau, L.G., L.H.G.
Principal Hydrogeologist

Attachments: Attachment A, CHS Auburn Facility Air Sparge and Soil Vapor Extraction
System Design Set

cc: Jerry Eide, CHS Inc. (by mail and email)
Javan Ruark, Farallon Consulting, L.L.C. (by email)

PG:cm

**ATTACHMENT A
CHS AUBURN FACILITY AIR SPARGE AND SOIL VAPOR
EXTRACTION SYSTEM DESIGN SET**

PRELIMINARY AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM
DESIGN PLAN SET

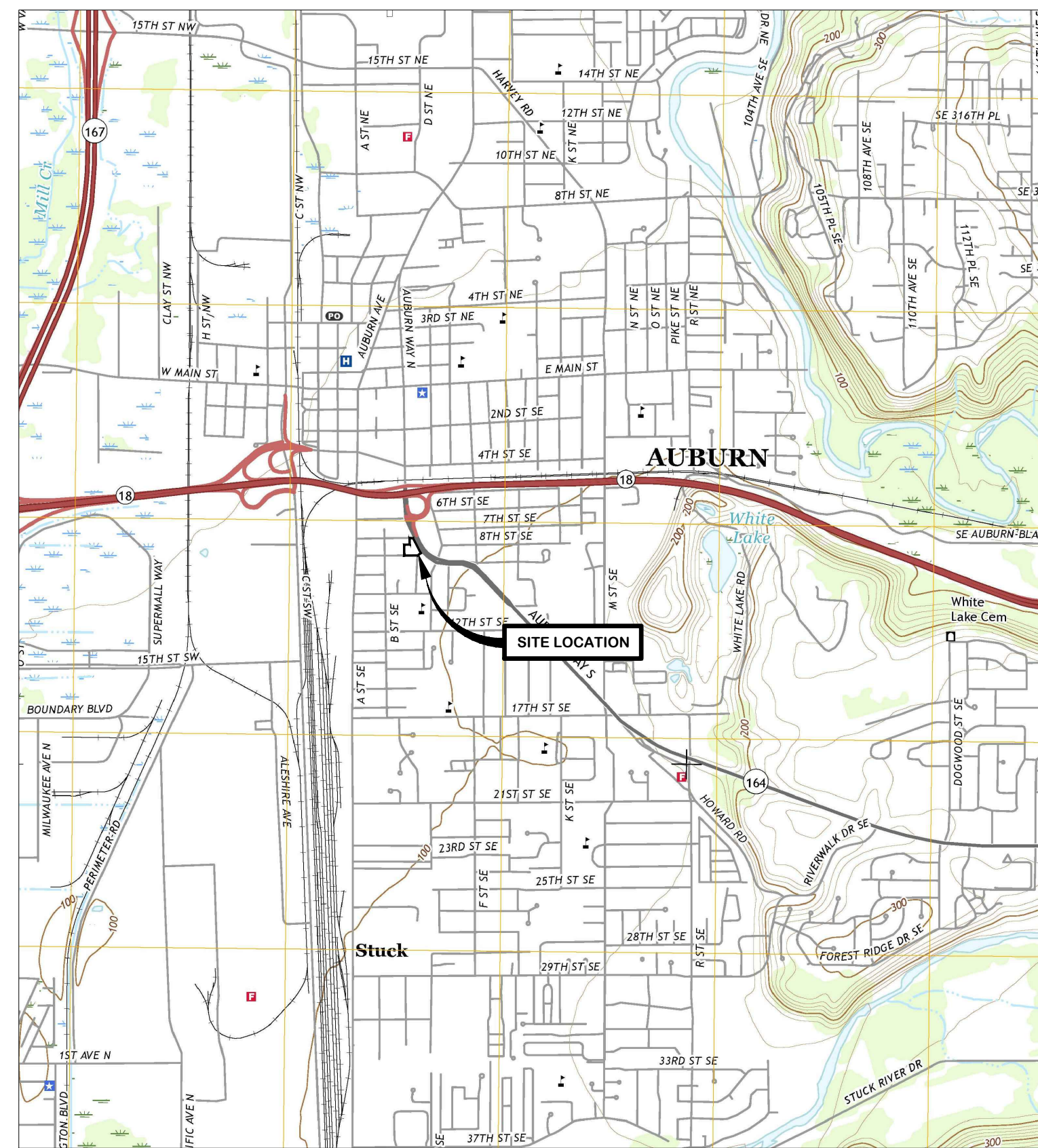
CHS Auburn Site
238 8th Street Southeast
Auburn, Washington

Farallon PN: 0301-004

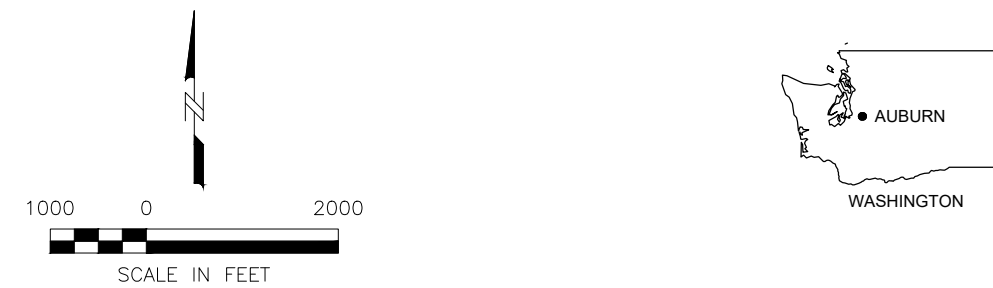
CHS AUBURN FACILITY AIR SPARGE AND SOIL VAPOR EXTRACTION SYSTEM DESIGN SET

238 8TH STREET SOUTHEAST
AUBURN, WASHINGTON

VICINITY MAP



REFERENCE: 7.5 MINUTE USGS QUADRANGLE AUBURN, WASHINGTON, DATED 2017



DIRECTORY

ENVIRONMENTAL CONSULTANT
FARALLON CONSULTING
975 5TH AVENUE NORTHWEST
ISSAQUAH, WASHINGTON 98027
PROJECT MANAGER: PAUL GRABAU, L.G., P.G.
T: (425) 295-0803
E: PGRABAU@FARALLONCONSULTING.COM

PROJECT ENGINEER
FARALLON CONSULTING
975 5TH AVENUE NORTHWEST
ISSAQUAH, WASHINGTON 98027
PROJECT ENGINEER: RUSSELL LUITEN, P.E.
T: (425) 394-4147
E: RLUITEN@FARALLONCONSULTING.COM

SURVEYOR
NORTH PEAK ASSOCIATES
18520 23RD DRIVE SOUTHEAST
KIRKLAND, WASHINGTON 98012
CONTACT: RICHARD VAN MOURIK
T: (206) 601-4682
E: RICHV@NORTHPEAKASSOCIATES.COM

OWNER
EVERED MOTORS, INC.
9251 SOUTHEAST 46TH STREET
MERCER ISLAND, WASHINGTON 98040
CONTACT: TOM EVERED
T: (206) 232-2743

CONTRACTOR
TO BE DETERMINED
SUPERINTENDENT:

DRAWING INDEX

ENVIRONMENTAL

EN0.00	TITLE SHEET, SITE LOCATION MAP, AND DRAWING INDEX
EN0.10	LEGEND, SYMBOLS, AND ABBREVIATIONS
1 OF 2	EXISTING CONDITIONS, SURVEY NOTES
2 OF 2	EXISTING CONDITIONS, SURVEY
EN2.00	SITE PLAN
EN3.00	DETAILS
EN3.10	DETAILS
EN4.00	PROCESS AND INSTRUMENTATION DIAGRAM

ISSUED FOR PERMIT REVIEW	ROL	SS	CRP
REVISION/DESCRIPTION	BY	CHKD	APP
DATE	11.12.18		



PREPARED BY:
FARALLON CONSULTING
975 5TH AVENUE NORTHWEST
ISSAQUAH, WA 98027
(425) 295-0800
farallonconsulting.com

PREPARED FOR:
CHS, INC.
763 WILLOUGHBY LANE
STEVENSVILLE, MONTANA 59870

TITLE SHEET, SITE LOCATION MAP, AND
DRAWING INDEX

CHS AUBURN SITE
AUBURN, WASHINGTON
APN: 03141600800, 3141600810, & 0855000035

811
Know what's below.
Call before you dig.

PROJECT LOCATION (S,T,R):
PORTIONS OF THE NW1/4 OF
SEC. 019 TWP. 021N, RING. 05E, W.M.

JURISDICTION FILE NO.:

FARALLON PROJECT NO.:

301-004
SHEET
1 OF 8

EN0.00

PROJECT REF: _____

THESE PLANS ARE APPROVED FOR
CONFORMANCE WITH THE CITY OF AUBURN'S
ENGINEERING REQUIREMENTS.

DEV. REVIEW ENGINEER: _____

APPROVED BY: _____

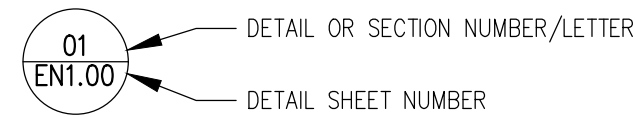
DATE APPROVED: _____

B:\Projects\100624\Engineering\Design\Sheet\EN0.00.dwg, 11/15/2018 10:52 AM

ELECTRICAL ABBREVIATIONS

A/AMP	AMP
AC	ALTERNATING CURRENT
BD	BUS DUCT
C	CURRENT
CB	CIRCUIT BREAKER
CLG	CEILING
DC	DIRECT CURRENT
DIS	DISCONNECT
DP	DOUBLE POLE
DT	DOUBLE THROW
EG	ENCLOSED AND GASKETED ELECTRICAL (OVERHEAD)
E(OH)	ELECTRICAL (UNDERGROUND)
E(UG)	ELECTRICAL (UNDERGROUND)
EMER	EMERGENCY
EPO	EMERGENCY POWER OFF
EMT	ELECTRICAL METALLIC TUBING
EXP	EXPOSED
FBO	FURNISHED BY OTHERS
FLEX	FLEXIBLE METAL CONDUIT
FRN	DUAL ELEMENT FUSE
GEN	GENERATOR
GFIC	GROUND FAULT INTERRUPTER
GND	GROUND
GRC	GALVANIZED RIGID CONDUIT
HOA	HAND-OFF-AUTO SWITCH
IRD	INFRARED DETECTOR
HP	HORSE POWER
HZ	CYCLES PER SECOND
JB	JUNCTION BOX
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
M	MOTOR/MOTOR STARTER COIL
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON-FUSED
NO	NORMALLY OPEN
OL	OVERLOADS
PBS	PUSHBUTTON
PF	POWER FACTOR
PL	PILOT LIGHT
PLC	PROGRAMMABLE LOGIC CONTROLLER
RC	RIGID CONDUIT
RCPT	RECEPTACLE
SN	SOLID NEUTRAL
SP	SINGLE POLE
ST	SINGLE THROW
SW	SWITCH
TF/TRAN	TRANSFORMER
UF	UNDERFLOOR
UG	UNDERGROUND
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VP	VAPOR PROOF
WHT	WHITE
WP	WEATHER PROOF
XP	EXPLOSION PROOF

STANDARD SYMBOLS



STANDARD ABBREVIATIONS

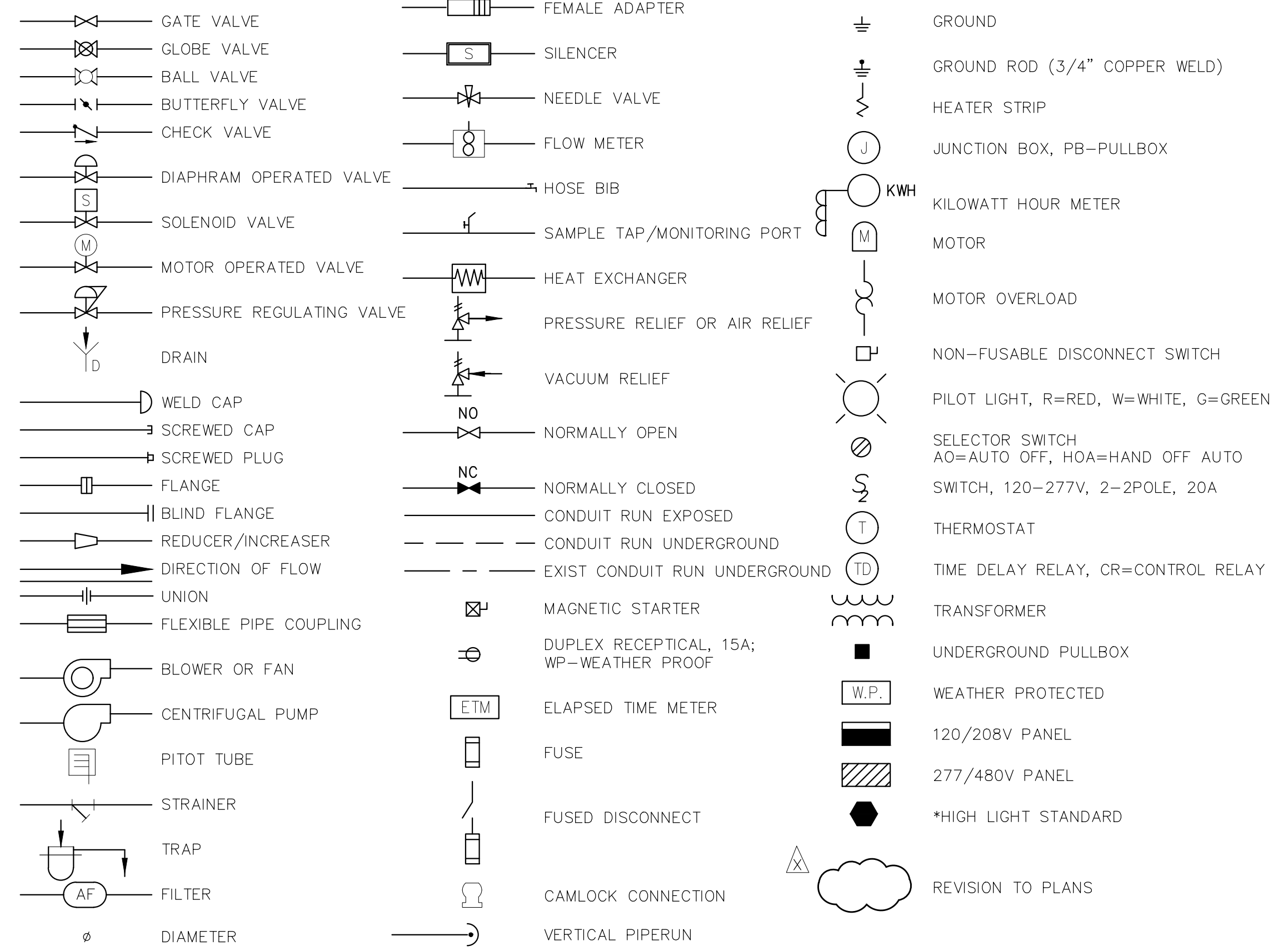
AF	AIR FILTER	HDPE	HIGH DENSITY POLYETHYLENE	PRV	PRESSURE RELEASE VALVE
AB	AGGREGATE BASE	HORIZ	HORIZONTAL	PSI	POUNDS PER SQUARE INCH
AC	ASPHALTIC CONCRETE	HP	HORSEPOWER/HIGH PRESSURE	PSIA	POUNDS PER SQUARE INCH, ABSOLUTE
APPROX	APPROXIMATELY	HR	HOUR	PSIG	POUNDS PER SQUARE INCH, GAUGE
AS	AIR FILTER	HS	HOSE	PTW	PRESSURE TREATMENT
BF	BLIND FLANGE	HYD	HYDRANT	PVC	POLYVINYL CHLORIDE
B.G.S.	BELOW GROUND SURFACE	HOA	HAND OFF AUTOMATIC	PV	PROCESS VARIABLE
BLDG	BUILDING	ID	INSIDE DIAMETER	PR	PAIR
BOB	BOTTOM OF PIPE	IN	INCHES	PUE	PUBLIC UTILITY EASEMENT
BY	BALL VALVE	INV	INVERT	R	RADIUS/RISER
CAS	CENTRAL AREA AIR SPARGE	IPS	IRON PIPE SIZE	RC	REINFORCED CONCRETE
CONC	CONCRETE	JT	JOINT	REQ	REQUIRED
CPLG	COUPLING	JB	JUNCTION BOX	REF	REFERENCE
C/CL	CENTERLINE	KO	KNOCK OUT	SCH	SCHEDULE
CSV	CENTRAL AREA SOIL VAPOR EXTRACTION	LSHH	LEVEL SWITCH	SDR	STANDARD DIMENSION RATIO
CV	CONTROL VALVE/CHECK VALVE	M	MOTOR	SECT	SECTION
DC	DOUBLE CONTAINED	MAX	MAXIMUM	SHT	SHEET
DIA	DIAMETER	MH	MANHOLE	SPEC	SPECIFICATION
DWG	DRAWING	MJ	MECHANICAL JOINT	SQ	SQUARE
DP	DUAL PHASE	MIN	MINUTE/MINIMUM	STA	STATION
DPI	DIFFERENTIAL PRESSURE INDICATOR	MISC	MISCELLANEOUS	STD	STANDARD
EAF	EACH FACE	MNPT	MALE NATIONAL PIPE THREAD	STL	STEEL
ELEV	ELEVATION	MP	METER PUMP	SBO	SUPPLIED BY OWNER
ELEC	ELECTRICAL	MON.PORT	MONITORING PORT	ST	SAMPLE TAP
ELB	ELBOW	MW	MONITORING WELL	STR	STRAINER
EPDM	ETHYLENE PROPYLENE RUBBER	NC	NORMALLY CLOSED	SS	STAINLESS STEEL
EXIST/(E)	EXISTING	NIC	NOT IN CONTRACT	STL	STEEL
EXP	EXPANSION	NO	NORMALLY OPEN	SVE	SOIL VAPOR EXTRACTION SWITCH
EW	EACH WAY	N	NEW	TYP	TYPICAL
EA	EACH	NTS	NOT TO SCALE	TOC	TOP OF CASING/CURB
FC	FAIL CLOSE	NPDES	NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM	TOS	TOP OF STEEL
FO	FAIL OPEN	OVHD	OVERHEAD	TOW	TOP OF WALL
FLXC	FLEXIBLE CONNECTION	OC	ON CENTER	UBC	UNIFORM BUILDING CODE
FM	FLOW METER	OD	OUTSIDE DIAMETER	UGPS	UNDERGROUND PULL SECTION
FL	FLOW LINE	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	UTIL	UTILITY
FNPT	FEMALE NATIONAL PIPE THREAD	P	PRESSURE	V	VALVE /VENT/VOLTS
GA	GAUGE	POUND	POUND	VAC	VACUUM
GAC	GRANULAR ACTIVATED CARBON	PB	PULL BOX	VAR	VARIES/VARIABLE
GALV	GALVANIZED	PBF	PROVIDED BY FARALLON	VERT	VERTICAL
GI	GALVANIZED IRON	PC	PORTLAND CEMENT	VP	VAPOR
GPM	GALLONS PER MINUTE	PCC	PORTLAND CEMENT CONCRETE	VRV	VACUUM RELIEF VALVE
GR	GRADE	PG	PRESSURE GAS	W	WITH
GND	GROUND	PL	PROPERTY LINE/PIPE LINE	W/O	WITHOUT
GSKT	GASKET	PO	PUMP OUT	WS	WATER SURFACE/WATER STOP
GW	GROUNDWATER	P	PRESSURE		
GV	GATE VALVE				

LEGEND

GENERAL NOTES

1. READ ALL NOTES AND REVIEW ENTIRE PLAN SET PRIOR TO COMMENCEMENT OF WORK ACTIVITIES.
2. ESTABLISH EXACT PROJECT BOUNDARIES PRIOR TO COMMENCEMENT OF WORK, AND RECONFIRM BOUNDARY LINES WHEN COORDINATING WITH NEIGHBORING PROPERTY OWNERS.
3. VERIFY SITE CONTROL POINTS PROVIDED ON PLANS. VERIFY DIMENSIONS AND ORIENTATION PRIOR TO STAKING OF SITE POINTS.
4. A COPY OF THE PROJECT DESIGN DRAWINGS AND SPECIFICATIONS SHALL BE MAINTAINED ON THE JOB SITE AT ALL TIMES.
5. COPIES OF ALL PERMITS SHALL BE MAINTAINED ON THE JOB SITE AT ALL TIMES. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL LOCATIONS, DIMENSIONS AND QUANTITIES.
7. UTILITIES SHOWN IN THIS DRAWING SET ARE BASED ON INFORMATION PROVIDED BY OTHERS. INFORMATION SHOWN SHALL BE CONSIDERED APPROXIMATE AND INCOMPLETE. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF WORK ACTIVITIES.
8. THE CONTRACTOR SHALL HAVE A PRIVATE UTILITY LOCATE SERVICE VERIFY ALL UTILITIES AND/OR OTHERWISE FIELD VERIFY EXACT LOCATIONS AND MARK THEIR LOCATIONS ON THE GROUND PRIOR TO STARTING CONSTRUCTION. FARALLON SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT IS FOUND BETWEEN EXISTING UTILITIES AND THE PROJECT DESIGN.
9. ENGINEER SHALL BE NOTIFIED OF DISCREPANCIES BETWEEN CONTRACT DRAWINGS AND ACTUAL SITE CONDITIONS.
10. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE JOB SITE CONDITIONS AND ENSURE THE SAFETY OF ALL PERSONS AND PROPERTY FOR THE DURATION OF ON-SITE PROJECT WORK. THE CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, AND PAVING FROM DAMAGE, DIRECT OR INDIRECT, RESULTING FROM THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY OVER THE DURATION OF ON-SITE ACTIVITIES AND NOT BE LIMITED TO NORMAL WORKING HOURS.
11. MAINTAIN FULL OPERATION OF PUBLIC ROADWAYS. KEEP CLEAN AND FREE OF DEBRIS, DIRT, AND OTHER PROJECT RELATED ITEMS. SWEEP AS NEEDED TO MEET PROJECT REQUIREMENTS. COORDINATE WITH OWNER AND PIERCE COUNTY ALL DISRUPTIONS TO SERVICES. REPAIR ALL DAMAGE TO MATCH EXISTING CONDITIONS.
12. GENERAL CONTRACTOR AND, IF SUBCONTRACTED, THE EARTHWORK SUBCONTRACTOR ARE RESPONSIBLE FOR ANY EARTHWORK QUANTITY ESTIMATES.
13. ONSITE SOILS MAY ONLY BE USED IN ACCORDANCE WITH PROJECT REQUIREMENTS AND SUBJECT TO APPROVAL OF PROPER COMPLIANCE BY THE PROJECT ENGINEER.
14. REVIEW AND PROPERLY COORDINATE ALL WORK OF ALL DISCIPLINES PRIOR TO CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO, IRRIGATION LINES, SLEEVES, AND UTILITY CONDUITS.
15. ALL EXCAVATIONS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH APPLICABLE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE WASHINGTON INDUSTRIAL SAFETY AND HEALTH ACT (WISHA) REGULATIONS. THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE SAFETY OF ALL CONSTRUCTION OPERATIONS.
16. NO TRENCHES SHALL BE LEFT OPEN WHEN WORK IS NOT IN PROGRESS. ALL OPEN EXCAVATIONS SHALL BE SECURELY FENCED AND COVERED IF SO REQUIRED.
17. THE CONTRACTOR SHALL DISPOSE OF MATERIALS REMOVED FROM THIS SITE AT APPROPRIATE AND PERMITTED RECEIVING FACILITIES.
18. CONFIRM ALL UTILITY ALIGNMENTS AND CROSSINGS PRIOR TO ORDERING MATERIALS AND PRIOR TO STAKING.
19. UPON COMPLETION OF SITE WORK, CLEAN ALL SITE SURFACES (PAVEMENTS, CURBS, STAIRS, WALKS, ETC.).

PIPING, ELECTRICAL AND EQUIPMENT SYMBOLS



INSTRUMENTATION ABBREVIATIONS AND SYMBOLS

INSTRUMENT LEGEND		INSTRUMENT SYMBOLS	
FIRST LETTER INITIATING VARIABLE	SUCCEEDING LETTERS OUTPUT FUNCTIONS	SYMBOL	DESCRIPTION
A	ANALYSIS	M	MOTOR
B	BURNER	HOA	HAND-OFF-AUTO SELECTOR SWITCH
C	CONDUCTIVITY		
D	DENSITY		
E	POTENTIAL (VOLTS)		
F	FLOW RATE		
G	FIRE ALARM		
H	HAND (MANUALLY)		
I	CURRENT (AMPERES)		
J	POWER		
K	TIME		
L	LEVEL		
M	MOISTURE/HUMIDITY		
N	EQUIPMENT STATUS		
P	PRESSURE/VACUUM		
Q	QUANTITY		
R	SPEED		
S	TEMPERATURE		
T	MULTIVARIABLE		
U	VIBRATION/VOLUME		
V	WEIGHT/FORCE/TORQUE		
X	UNCLASSIFIED		
Y	UNCLASSIFIED		
Z	POSITION		
			PLC SHUTDOWN ALARM

PROJECT REF: _____

THESE PLANS ARE APPROVED FOR CONFORMANCE WITH THE CITY OF AUBURN'S ENGINEERING REQUIREMENTS.

DEV. REVIEW ENGINEER: _____

APPROVED BY: _____

DATE APPROVED: _____

ISSUED FOR PERMIT REVIEW

REVISION DESCRIPTION

11.12.18 DATE

PREPARED BY: FARALLON CONSULTING

763 WILLOUGHBY LANE
STEVENSVILLE, MONTANA 59870
(426) 295-0800
farallonconsulting.com

CHS AUBURN SITE
AUBURN, WASHINGTON

APN: 03141600800, 3141600810, & 0855000035

PROJECT LOCATION (S,T,R):

PORTIONS OF THE NW1/4 OF SEC. 019 TWP. 021N, R10E, US&E, W.M.

JURISDICTION FILE NO.:

FARALLON PROJECT NO.:

301-004

SHEET

2 OF 7

EN.10

SITE NOTES

ADDRESS:
707 & 709 AUBURN WAY SOUTH
AUBURN, WA 98002

PARCEL NOS.:
083500-0035, 314160-0810 AND 314160-0800.

ZONING AGENCY:
CITY OF AUBURN
25 W MAIN STREET
AUBURN, WA 98001
(253) 931-3000

ZONING:
C3 HEAVY COMMERCIAL DISTRICT

FLOOD_ZONE:
THIS SITE APPEARS ON NATIONAL FLOOD INSURANCE RATE MAP, DATED MAY 16, 1995, COMMUNITY PANEL NO. 53033C1261F, AND IS SITUATED IN ZONE "X", AREA DETERMINED TO BE OUTSIDE OF THE 500-YEAR FLOODPLAIN.

HORIZONTAL DATUM:
CITY OF AUBURN - NAD 83/91

BASIS OF BEARINGS:
N89°54'37"W BETWEEN THE NORTHWEST CORNER AND THE NORTH QUARTER CORNER OF SECTION 19-21N-5E.

VERTICAL DATUM:
NAVD88

VERTICAL BENCHMARK:
CITY OF AUBURN BENCHMARK: 809-004
4"x4" CONCRETE MONUMENT IN ALLEY BETWEEN 7TH AND 8TH STREET SE
ELEVATION = 93.40'

AREA:
PARCEL A:
SITE AREA AS SHOWN CONTAINS 9,111 SQUARE FEET OR 0.2092 ACRES, MORE OR LESS.

PARCEL B:
SITE AREA AS SHOWN CONTAINS 13,201 SQUARE FEET OR 0.3031 ACRES, MORE OR LESS.

PARCEL C:
SITE AREA AS SHOWN CONTAINS 5,998 SQUARE FEET OR 0.1377 ACRES, MORE OR LESS.

TOTAL:
SITE AREA AS SHOWN CONTAINS 28,310 SQUARE FEET OR 0.6500 ACRES, MORE OR LESS.

SUBSTRUCTURES:
BURIED UTILITIES ARE SHOWN AS INDICATED ON RECORDS MAPS FURNISHED BY OTHERS AND VERIFIED WHERE POSSIBLE BY FEATURES LOCATED IN THE FIELD. WE ASSUME NO LIABILITY FOR THE ACCURACY OF THOSE RECORDS. FOR THE FINAL LOCATION OF EXISTING UTILITIES CRITICAL TO DESIGN, CONTACT THE UTILITY OWNER/AGENCY.

TELECOMMUNICATIONS/FIBER OPTIC DISCLAIMER:
RECORDS OF UNDERGROUND TELECOMMUNICATIONS AND/OR FIBER LINES ARE NOT ALWAYS AVAILABLE TO THE PUBLIC. NORTH PEAK ASSOCIATES LLC HAS NOT CONTACTED EACH OF THE MANY COMPANIES IN THE COURSE OF THIS SURVEY WHICH MAY HAVE UNDERGROUND LINES WITHIN THE ADJACENT RIGHTS-OF-WAY. NORTH PEAK ASSOCIATES LLC, DOES NOT ACCEPT RESPONSIBILITY FOR THE EXISTENCE OF UNDERGROUND TELECOMMUNICATIONS/FIBER OPTIC LINES WHICH ARE NOT MADE PUBLIC RECORD WITH THE LOCAL JURISDICTION.

LEGAL DESCRIPTION:

PARCEL A:
LOT 1, BLOCK 2, BITZER'S ADDITION TO THE CITY OF AUBURN, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 45 OF PLATS, PAGE 10, IN KING COUNTY, WASHINGTON; TOGETHER WITH A PORTION DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE CENTER LINE OF "C" STREET SOUTHEAST IN THE CITY OF AUBURN (STATE ROAD NO. 5) AND THE SOUTH LINE OF SECTION 18, TOWNSHIP 21 NORTH, RANGE 5 EAST, WILLAMETTE MERIDIAN, SAID LINE BEING THE NORTH LINE OF THE ALLEY LYING BETWEEN 7TH AND 8TH STREET SOUTHEAST; THENCE SOUTH 89°23'19" WEST 55.86 FEET ALONG SAID SECTION LINE TO THE WESTERLY LINE OF "C" STREET SOUTHEAST AND THE TRUE POINT OF BEGINNING; THENCE CONTINUING SOUTH 89°23'19" WEST 62.20 FEET; THENCE NORTH 00°36'41" WEST 124.80 FEET TO THE WESTERLY BOUNDARY OF "C" STREET SOUTHEAST; THENCE SOUTH 27°06'11" EAST 139.44 FEET ALONG THE WESTERLY BOUNDARY OF "C" STREET SOUTHEAST TO THE TRUE POINT OF BEGINNING; EXCEPT THAT PORTION LYING WITHIN RIGHT OF WAY FOR 7TH STREET SOUTHEAST.

PARCEL B:
LOTS 13, 14 AND 15 IN BLOCK 8 OF HARTS FIRST ADDITION TO THE TOWN OF AUBURN, AS PER PLAT RECORDED IN VOLUME 29 OF PLATS, PAGE 23, RECORDS OF KING COUNTY.

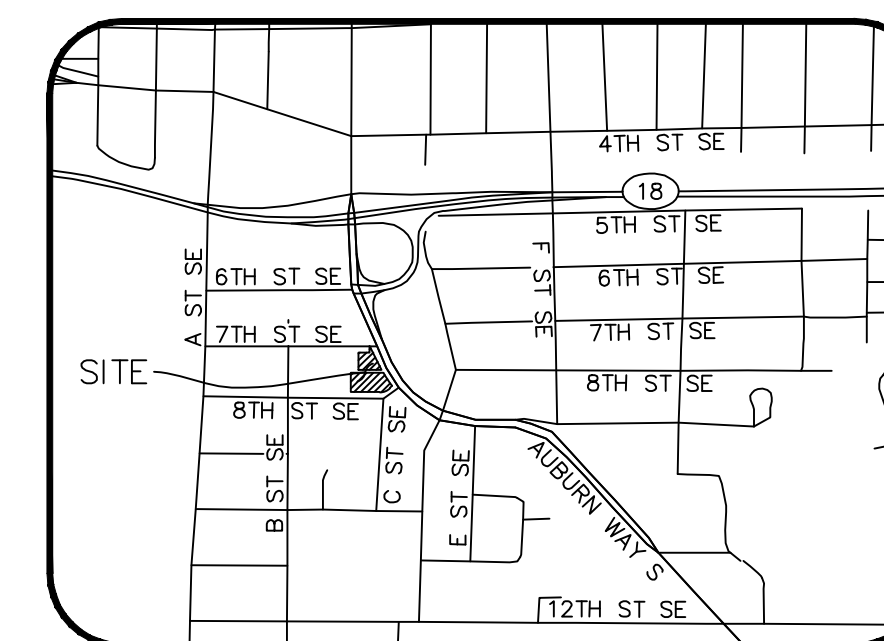
TOGETHER WITH PORTION OF "C" STREET S.E. ADJOINING, AS VACATED UNDER CITY OF AUBURN ORDINANCE NO. 2600 AND ORDINANCE NO. 2658 UNDER RECORDING NOS. 7301120386 AND 7301120392 WHICH, UPON VACATION, ATTACHES TO SAID PROPERTY BY OPERATION OF LAW;

SITUATE IN CITY OF AUBURN, COUNTY OF KING, STATE OF WASHINGTON.

PARCEL C:
LOTS 11 AND 12 IN BLOCK 8 OF HARTS FIRST ADDITION TO THE TOWN OF AUBURN, AS PER PLAT RECORDED IN VOLUME 29 OF PLATS, PAGE 23, RECORDS OF KING COUNTY.

- REFERENCES:
- SR 164 CONSTRUCTION MONUMENT EXHIBIT MAP, ON FILE UNDER DRAWER 500, SEQUENCE 54, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION.
 - RECORD OF SURVEY PERFORMED WARREN T. LAY, P.L.S., RECORDED UNDER KING COUNTY RECORDING NO. 8912139005.

- GENERAL NOTES:
- PRECISION OF CONTROL TRAVERSE IS AT HIGHER LEVEL THAN MINIMUM STANDARDS REQUIRED BY WAC 332-130-090.
 - FIELD SURVEY CONDUCTED USING A COMBINATION OF GPS USING THE WASHINGTON STATE REFERENCE NETWORK (WSRN) AND/OR A 5 SECOND DIRECT READING TOTAL STATION. METHOD: GPS, TRAVERSE AND RADIAL SURVEY.
 - THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ALL ENCUMBRANCES OR EASEMENTS THAT MAY BURDEN THE SUBJECT PROPERTY.
 - ALL DISTANCES ARE IN FEET.
 - THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON SEPTEMBER 24, 2018. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN SEPTEMBER OF 2018.



VICINITY MAP
NOT TO SCALE

No.	Date	Revisions	By

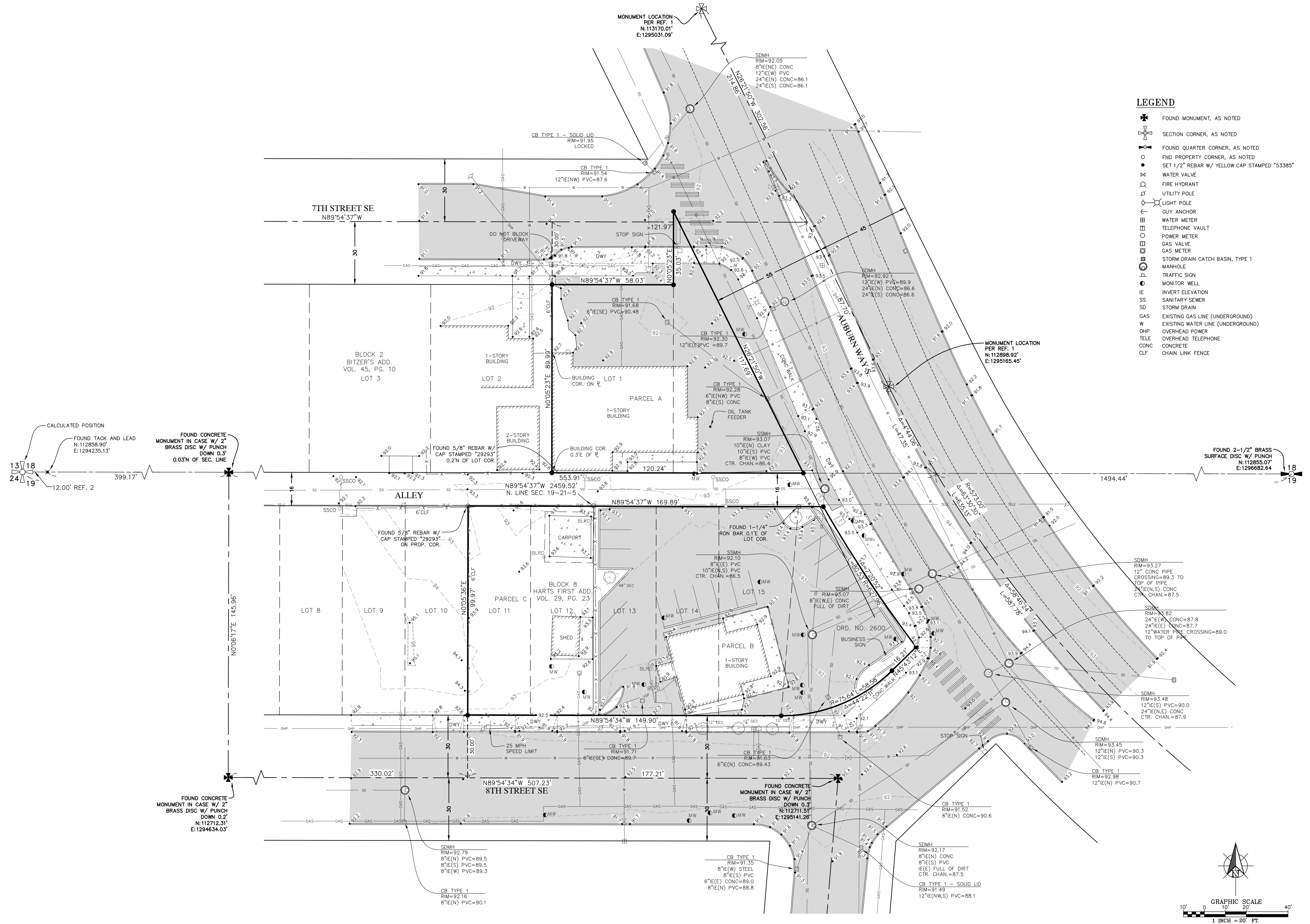
NORTH PEAK ASSOCIATES LLC
PROFESSIONAL LAND SURVEYORS
10512 NE 140TH STREET
KIRKLAND, WA 98034
Phone (206) 601-4662
File path & Name



AUBURN WAY
BOUNDARY & TOPOGRAPHIC SURVEY
FOR
FARALLON CONSULTING, L.L.C.
WASHINGTON
KING COUNTY

JOB NO.
18-56

SHEET
1 OF 2



LEGEND

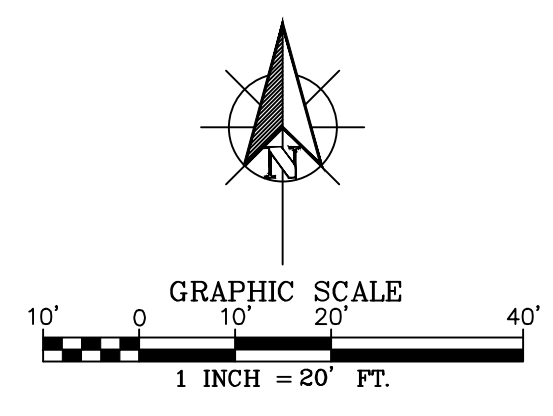
- ✱ FOUND MONUMENT, AS NOTED
- ⊕ SECTION CORNER, AS NOTED
- ⊕ FOUND QUARTER CORNER, AS NOTED
- FND PROPERTY CORNER, AS NOTED
- SET 1/2" REBAR W/ YELLOW CAP STAMPED "53385"
- ⊕ WATER VALVE
- ⊕ FIRE HYDRANT
- ⊕ UTILITY POLE
- ⊕ LIGHT POLE
- ⊕ GUY ANCHOR
- ⊕ WATER METER
- ⊕ TELEPHONE VAULT
- ⊕ POWER METER
- ⊕ GAS VALVE
- ⊕ GAS METER
- ⊕ STORM DRAIN CATCH BASIN, TYPE 1
- ⊕ MANHOLE
- ⊕ TRAFFIC SIGN
- ⊕ MONITOR WELL
- ⊕ INVERT ELEVATION
- ⊕ SANITARY SEWER
- ⊕ SD STORM DRAIN
- ⊕ GAS EXISTING GAS LINE (UNDERGROUND)
- ⊕ W EXISTING WATER LINE (UNDERGROUND)
- ⊕ OHP OVERHEAD POWER
- ⊕ TELE OVERHEAD TELEPHONE
- ⊕ CONC CONCRETE
- ⊕ CLF CHAIN LINK FENCE

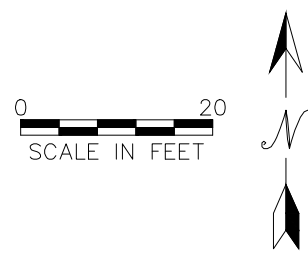
No.	Date	Revisions

NORTH PEAK ASSOCIATES LLC
 PROFESSIONAL LAND SURVEYORS
 10512 NE 140TH STREET
 KIRKLAND, WA 98034
 Phone (206) 601-4662
 File path & Name



AUBURN WAY
BOUNDARY & TOPOGRAPHIC SURVEY
 FOR
FARALLON CONSULTING, L.L.C.
WASHINGTON
KING COUNTY





SITE PLAN LEGEND

- NEW CONVEYANCE PIPE TRENCH
APPROXIMATE EXISTING CONVEYANCE PIPE TRENCH

SITE PLAN NOTES

- 1. READ ALL NOTES AND REVIEW ENTIRE PLAN SET PRIOR TO COMMENCEMENT OF WORK ACTIVITIES.
2. UTILITIES AND FEATURES SHOWN IN THIS DRAWING SET ARE BASED ON INFORMATION PROVIDED BY OTHERS...

PROJECT DEMOLITION NOTES

- 1. ALL UTILITIES SHOWN IN THIS DRAWING SET ARE BASED ON INFORMATION PROVIDED BY OTHERS, INCLUDING RECORD INFORMATION.
2. PROTECT NEIGHBOR PROPERTY AND ITEMS FROM DAMAGE DUE TO PROJECT RELATED ACTIVITIES.

CITY OF AUBURN GENERAL NOTES

- 1. THIS DEVELOPMENT PROJECT SHALL CONFORM TO THE CITY OF AUBURN'S REQUIREMENTS AND BE IN ACCORDANCE WITH THE APPROVED PLANS.
2. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION...

CITY OF AUBURN GRADING AND EROSION CONTROL NOTES

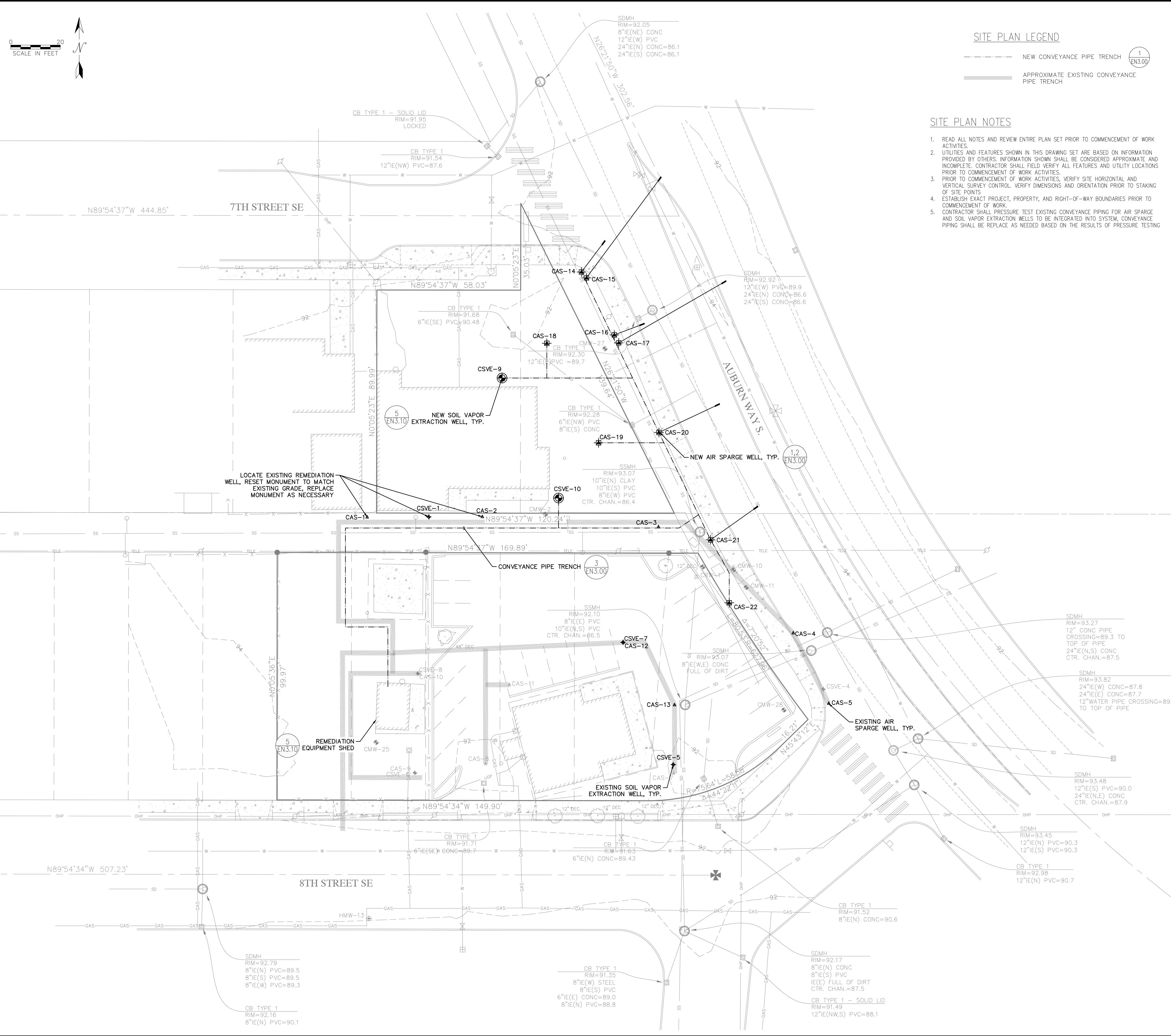
- 1. WITHIN THE CITY OF AUBURN, ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES INDICATED ON THE PLANS MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO LAND CLEARING AND/OR OTHER CONSTRUCTION ACTIVITIES.
2. THE SOURCES FOR ALL MATERIAL IMPORTED TO THE SITE SHALL BE APPROVED BY THE CITY.

AS/SVE WELL SCHEDULE

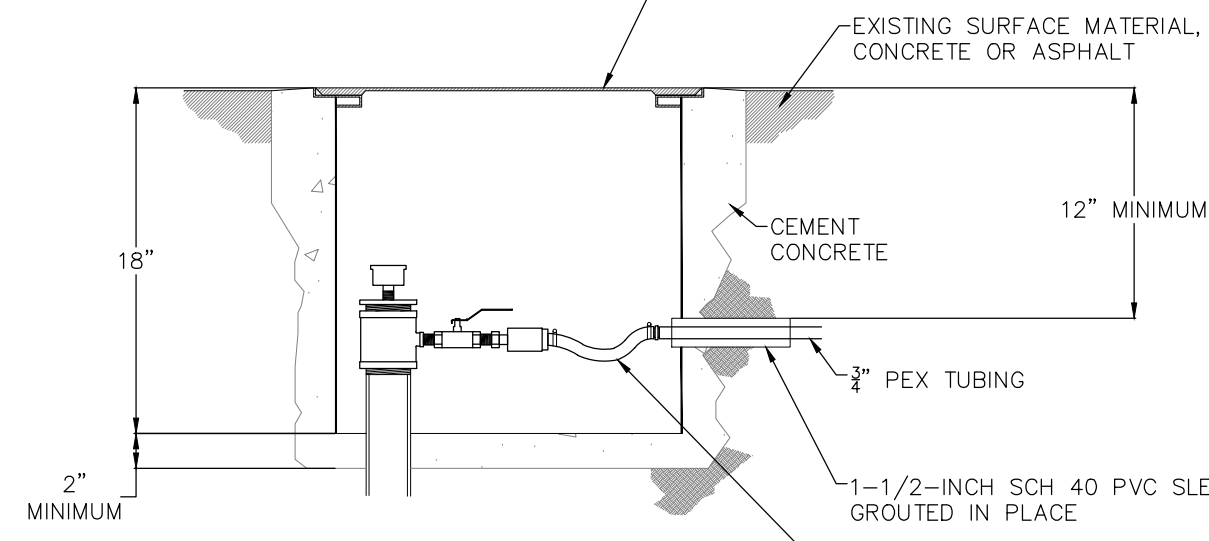
Table with columns: WELL ID, APPROXIMATE WELL HEAD LOCATION (NORTHING, EASTING), TARGET DEPTH (FEET BGS), APPROXIMATE WELL ANGLE (DEG FROM VERT.), APPROX. TOTAL WELL LENGTH (FEET), SCREEN INTERVAL (FEET TOC). Rows include CAS-1 through CAS-22 and CSVE-1 through CSVE-10.

EXISTING WELLS INDICATED BY GRAY TEXT
* DICTATES WELL NOT LOCATED DURING SURVEY, LOCATION APPROXIMATE

Professional Engineer seal for Russell Olin Jensen. Project information: PROJECT LOCATION (S.T.R.), JURISDICTION FILE NO., FARALLON PROJECT NO., SHEET, 4 OF 7, EN2.00. Prepared by Farallon Consulting.

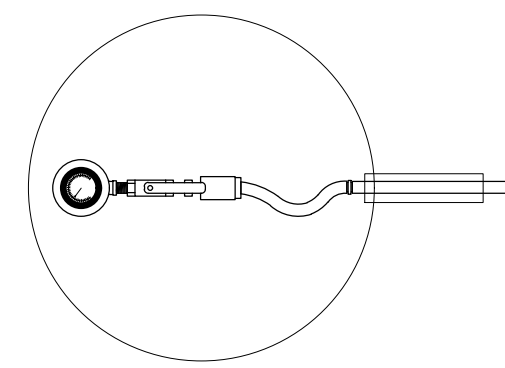


- EMCO WHEATON MONUMENT MODEL # A0721-118, 18-INCH DIAMETER WITH 18 INCH SKIRT. INCLUDED VALVES AND EQUIPMENT:
 - (1) 2"x2"x3/4" GALV. STEEL REDUCING TEE (FNPT)
 - (1) 2"x3/4" GALV. STEEL BUSHING(S) (MNPT TO FNPT)
 - (1) PRESSURE GAUGE, 0-40 PSI, 1/2" MNPT BACK MOUNT
 - (2) 3/4" GALV. STEEL NIPPLE (MNPT)
 - (1) 3/4" BRASS BALL VALVE (FNPT)
 - (1) 3/4" QUICK CONNECT NIPPLE (MNPT TO INDUSTRIAL INTERCHANGE)
 - (1) 3/4" QUICK CONNECT COUPLER (INDUSTRIAL INTERCHANGE TO HOSE BARB)
 - (1) 3/4" PEX TUBING TO HOSE COUPLER (HOSE BARB)



PROFILE VIEW

3/4" PNEUMATIC HOSE, PROVIDE SLACK TO DISCONNECT INDUSTRIAL INTERCHANGE

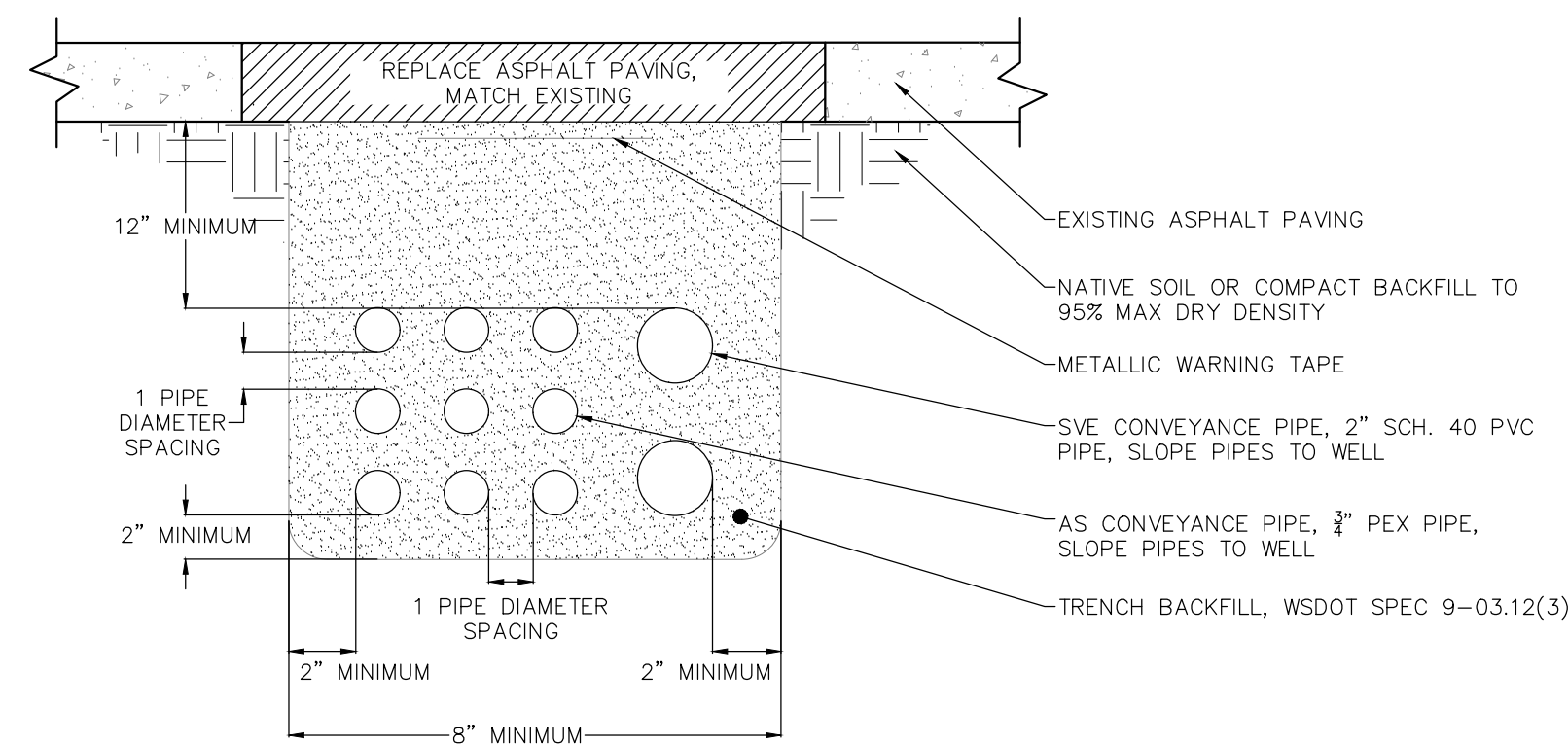


PLAN VIEW

NOTES:

- IF MONUMENT DOES NOT MEET SPECIFICATION, CONTRACTOR SHALL REMOVE EXISTING WELL MONUMENT(S) PRIOR TO INSTALLATION OF NEW MONUMENT(S). CONTRACTOR SHALL PROTECT EXISTING WELL FROM DAMAGE.
- MONUMENT SHALL BE PLACED MINIMUM OF 2" AND MAXIMUM OF 6" FROM THE MONUMENT WALL
- CONTRACTOR SHALL INSTALL MONUMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND GUIDELINES. MONUMENT SHALL BE SET WITH CEMENT CONCRETE AND MINIMUM 2" THICKNESS BOTTOM.
- MONUMENT TO BE SET 1" ABOVE EXISTING GRADE AND CEMENT SLOPED TO PROVIDE A SMOOTH TRANSITION.

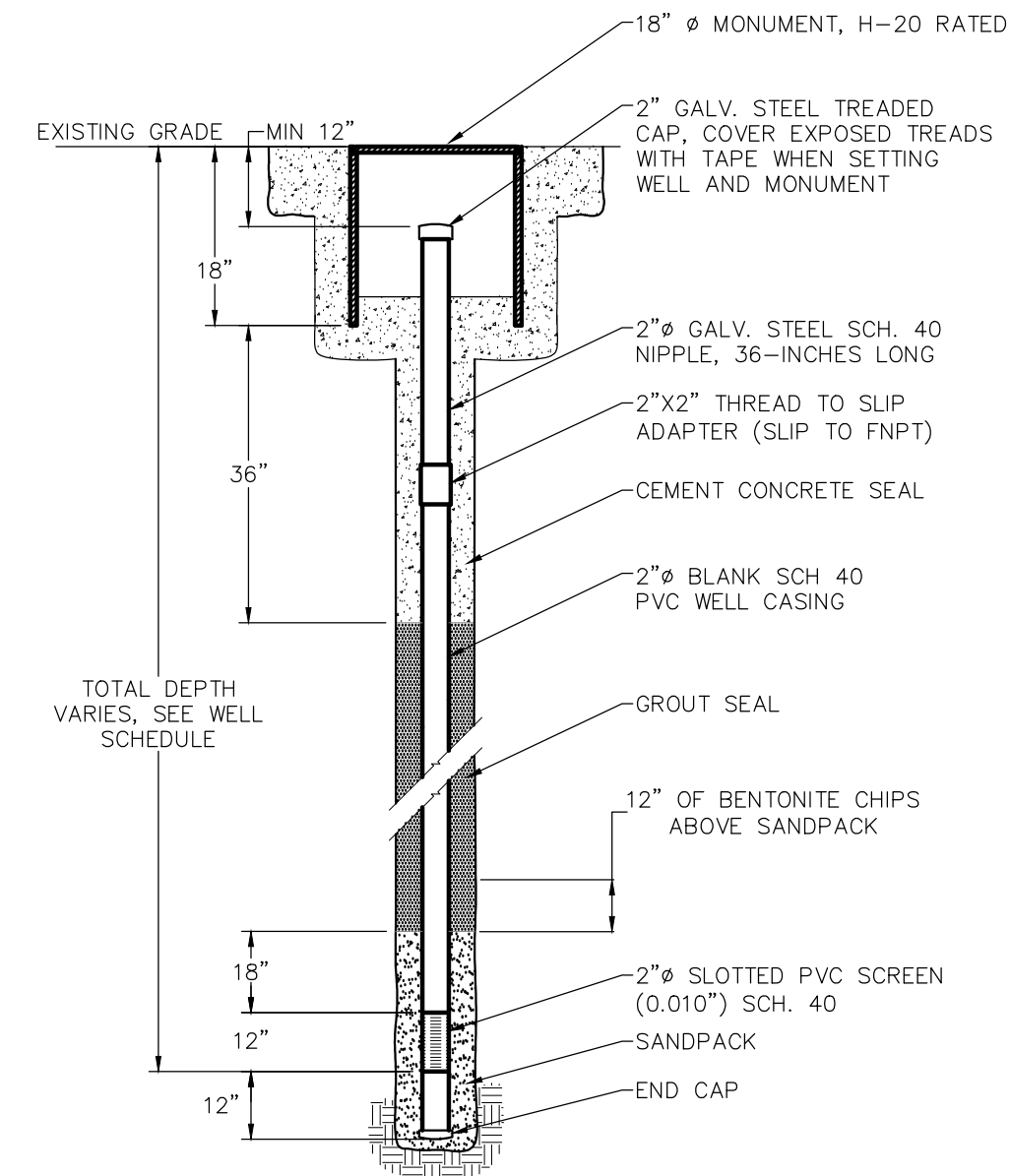
1 AIR SPARGE WELL HEAD CONNECTION DETAIL
EN2.00 NOT TO SCALE



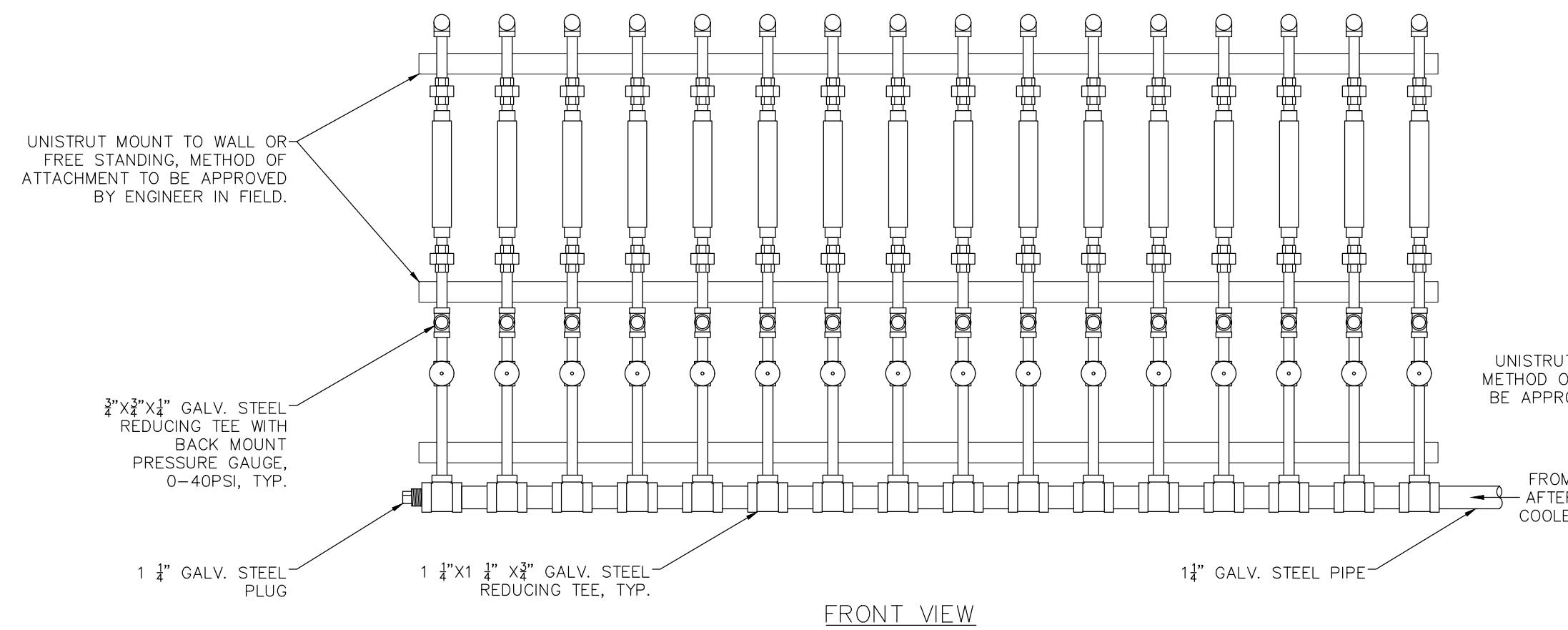
NOTES:

- PIPES SHALL HAVE ONE PIPE DIAMETER SPACING BETWEEN PIPES OF THE LARGEST PIPE DIAMETER IN TRENCH SECTION.
- PIPES SHALL HAVE ONE PIPE DIAMETER SPACING FROM EDGE AND BOTTOM OF TRENCH, PIPE DIAMETER SHALL BE THE LARGEST PIPE DIAMETER IN TRENCH SECTION.
- NEW CONVEYANCE LINES SHALL BE INSTALLED WITH MINIMUM PIPE SLOPE OF 0.2% (2.4 INCH PER 100 FEET) FROM REMEDIATION SHED TO WELL CONNECTION.

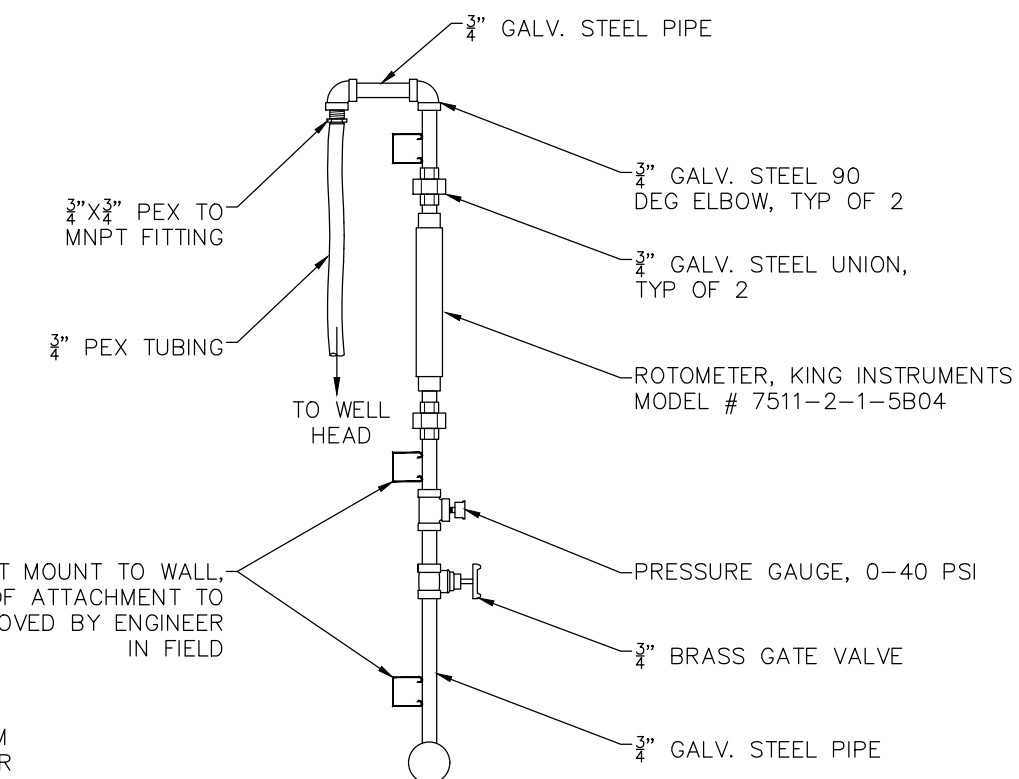
3 CONVEYANCE PIPE TRENCH DETAIL
EN2.00 NOT TO SCALE



2 AIR SPARGE WELL DETAIL
EN2.00 NOT TO SCALE



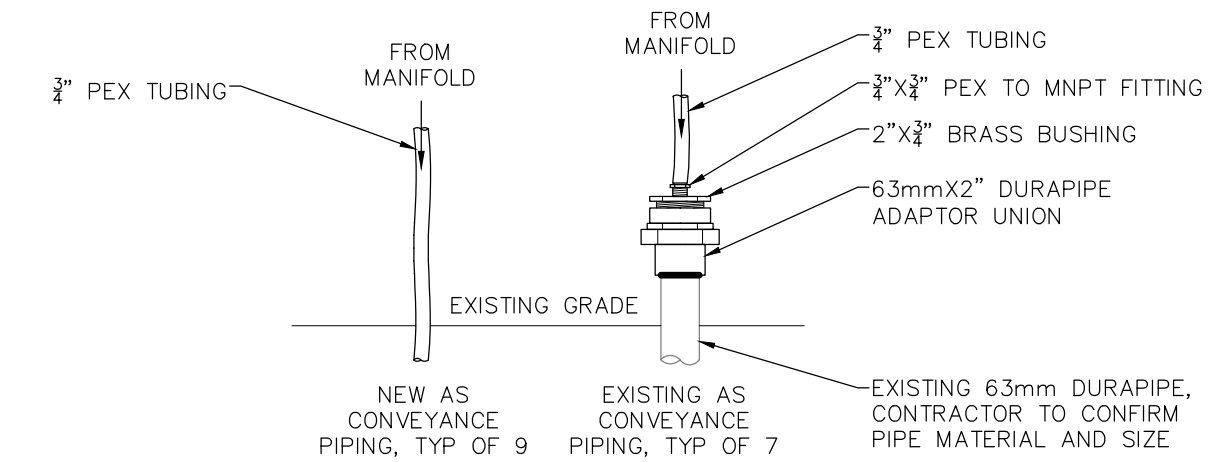
FRONT VIEW



SIDE VIEW

NOTES:

- SPACE AS RISER TO MINIMUM NECESSARY TO FABRICATE, OPERATE, AND MAINTAIN CONSIDERING THE SIZE OF TEES, NIPPLES, ELBOWS, UNIONS, AND VALVES.
- CONTRACTOR SHALL USE AND INSTALL FITTINGS TO MANUFACTURE RECOMMENDATIONS FOR ASSOCIATED PIPE MATERIALS.
- CONTRACTOR SHALL CONFIRM EXISTING CONVEYANCE PIPING MATERIAL AND SIZING PRIOR TO ACQUIRING FITTINGS



FLOOR PENETRATION

4 AIR SPARGE MANIFOLD DETAIL
EN3.10 NOT TO SCALE

PROJECT REF: _____

THESE PLANS ARE APPROVED FOR CONFORMANCE WITH THE CITY OF AUBURN'S ENGINEERING REQUIREMENTS.

DEV. REVIEW ENGINEER: _____

APPROVED BY: _____

DATE APPROVED: _____

NO.	DATE	ISSUED FOR PERMIT REVIEW	REVISION/DESCRIPTION
	11.12.18		



PREPARED BY:
FARALLON CONSULTING
975 5TH AVENUE NORTHWEST
ISSASQUAH, WA 98027
(253) 295-0800
farallonconsulting.com

PREPARED FOR:
CHS INC.
763 WILLOUGHBY LANE
STEVENSVILLE, MONTANA 59870

DETAILS
CHS AUBURN SITE
AUBURN, WASHINGTON
APN: 03141600800, 3141600810, & 08350000035

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Know what's below.
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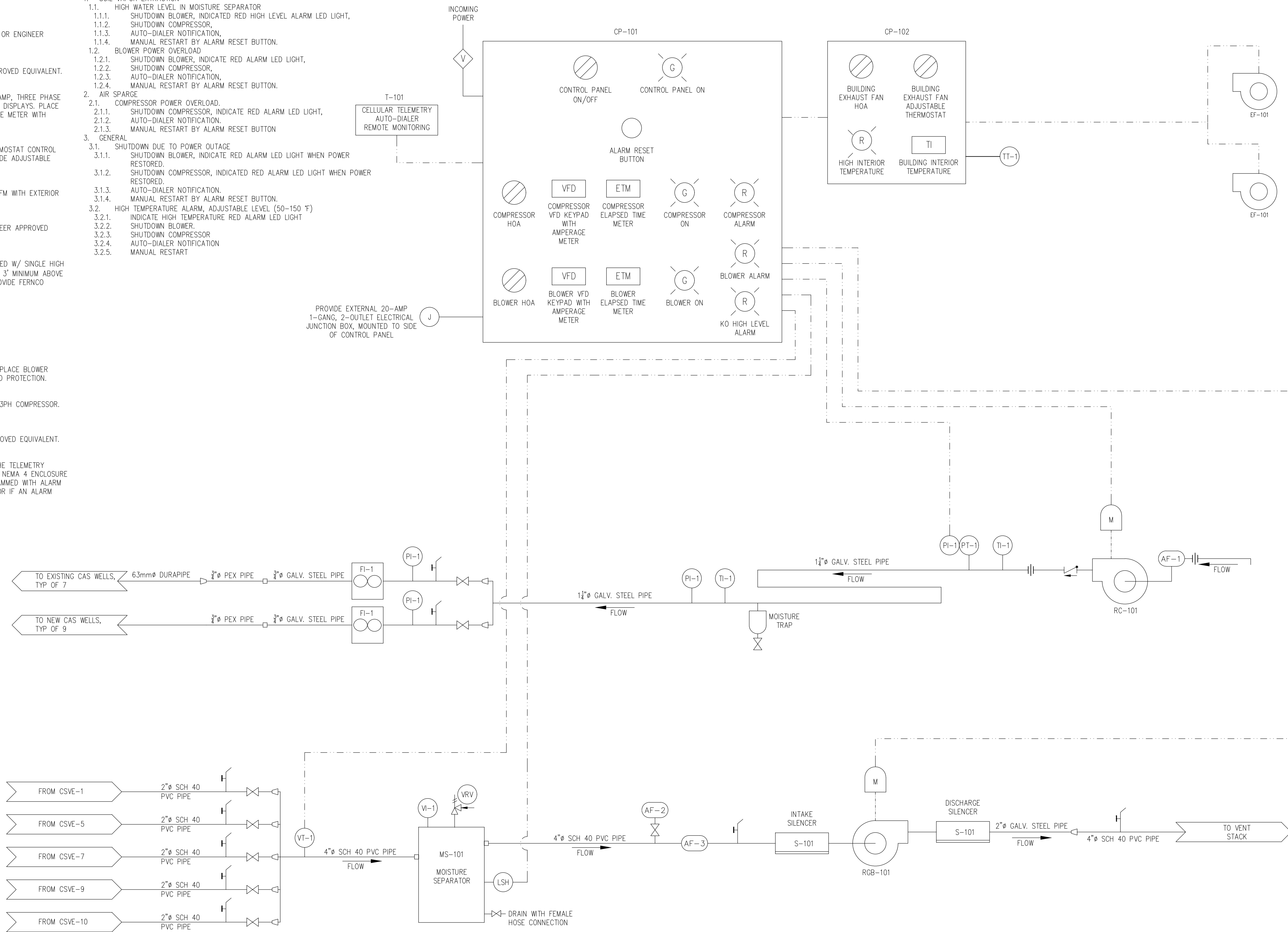
PROJECT LOCATION (S,T,R): PORTIONS OF THE N W 1/4 OF SEC. 019 TWP. 021N. RING. 06E. W.M.
JURISDICTION FILE NO.:
FARALLON PROJECT NO.: 301-004
SHEET 5 OF 7
EN3.00

EQUIPMENT LIST

- AF-1
INLINE AIR FILTER, BUSCH MINK
- AF-2
2" Ø FILTERED SILENCER AIR INLET SOLBERG MODEL NO. FS-231P-300 OR ENGINEER APPROVED EQUIVALENT WITH 2" Ø BRASS GATE VALVE.
- AF-3
4" Ø INLINE AIR FILTER, ROTRON MODEL NO. 516465 OR ENGINEER APPROVED EQUIVALENT.
- CP-101
BLOWER AND COMPRESSOR CONTROL PANEL. OWNER TO SUPPLY 200 AMP, THREE PHASE ELECTRICAL SERVICE. PROVIDE 7.1hp AND 3.0hp VFDs WITH AMPERAGE DISPLAYS. PLACE VFD DISPLAYS ON OUTSIDE OF CONTROL PANEL. PROVIDE ELAPSED TIME METER WITH DISPLAYS ON OUTSIDE OF CONTROL PANEL.
- CP-102
EXHAUST FAN CONTROL PANEL, INTERLOCK TO CP-101. PROVIDE THERMOSTAT CONTROL AND TEMPERATURE INDICATOR ON OUTSIDE OF CONTROL PANEL. PROVIDE ADJUSTABLE ALARM RELAY, 50-200 F.
- EF-101
WALL MOUNTED SHUTTER EXHAUST FAN CAPABLE OF AT LEAST 450 CFM WITH EXTERIOR CLOSING SHUTTERS.
- FI-1
KING INSTRUMENTS ROTOMETER MODEL MO. 7511-2-1-5B04 OR ENGINEER APPROVED EQUIVALENT.
- MS-101
ROTRON CYCLONIC MOISTURE SEPARATOR MODEL NO. MS350BS EQUIPPED W/ SINGLE HIGH LEVEL SWITCH, VACUUM GAUGE, VACUUM RELIEF VALVE; ELEVATE UNIT 3' MINIMUM ABOVE CONCRETE FLOOR ON STAND TO BE APPROVED BY THE ENGINEER; PROVIDE FERNCO CONNECTIONS ON INLET AND DISCHARGE.
- PI-1
PRESSURE INDICATOR RANGE AND UNITS: 0-40 PSI
- PT-1
PRESSURE TRANSDUCER RANGE AND UNITS: 0-40 PSI
- RGB-101
ROTRON REGENERATIVE BLOWER, MODEL NO. DR555K58: 3.0 Hp, 1PH. PLACE BLOWER WITHIN SOUND ENCLOSURE WITH COOLING FAN. INSTALL WITH OVERLOAD PROTECTION.
- RC-101
BUSCH MINK ROTARY CLAW COMPRESSOR, MODEL NO. 1144BP: 7.1hp, 3PH COMPRESSOR. INSTALL WITH OVERLOAD PROTECTION.
- S-101
DISCHARGE SILENCER, ROTRON MODEL NO. 550888 OR ENGINEER APPROVED EQUIVALENT.
- T-101
PROVIDE A SENSAPHONE SENTINEL MONITORING TELEMETRY SYSTEM. THE TELEMETRY SYSTEM SHALL BE INSTALLED WITHIN THE MAIN CONTROL PANEL OR A NEMA 4 ENCLOSURE TO PROVIDE WEATHER PROTECTION. THE TELEMETRY SHALL BE PROGRAMMED WITH ALARM CONDITIONS AND TRANSDUCER DATA, SYSTEM TO NOTIFY THE OPERATOR IF AN ALARM CONDITION EXISTS.
- TI-1
TEMPERATURE INDICATOR RANGE AND UNITS: 50-200 F
- TT-1
TEMPERATURE TRANSMITTER RANGE AND UNITS: 50-200 F
- VI-1
VACUUM INDICATOR RANGE AND UNITS: 0-100 IOW
- VT-1
VACUUM TRANSDUCER RANGE AND UNITS: 0-100 IOW

CONTROL LOGIC:

1. SOIL VAPOR EXTRACTION
 - 1.1. HIGH WATER LEVEL IN MOISTURE SEPARATOR
 - 1.1.1. SHUTDOWN BLOWER, INDICATED RED HIGH LEVEL ALARM LED LIGHT,
 - 1.1.2. SHUTDOWN COMPRESSOR,
 - 1.1.3. AUTO-DIALER NOTIFICATION,
 - 1.1.4. MANUAL RESTART BY ALARM RESET BUTTON.
 - 1.2. BLOWER POWER OVERLOAD
 - 1.2.1. SHUTDOWN BLOWER, INDICATE RED ALARM LED LIGHT,
 - 1.2.2. SHUTDOWN COMPRESSOR,
 - 1.2.3. AUTO-DIALER NOTIFICATION,
 - 1.2.4. MANUAL RESTART BY ALARM RESET BUTTON.
2. AIR SPARGE
 - 2.1. COMPRESSOR POWER OVERLOAD,
 - 2.1.1. SHUTDOWN COMPRESSOR, INDICATE RED ALARM LED LIGHT,
 - 2.1.2. AUTO-DIALER NOTIFICATION,
 - 2.1.3. MANUAL RESTART BY ALARM RESET BUTTON
3. GENERAL
 - 3.1. SHUTDOWN DUE TO POWER OUTAGE
 - 3.1.1. SHUTDOWN BLOWER, INDICATE RED ALARM LED LIGHT WHEN POWER RESTORED.
 - 3.1.2. SHUTDOWN COMPRESSOR, INDICATED RED ALARM LED LIGHT WHEN POWER RESTORED.
 - 3.1.3. AUTO-DIALER NOTIFICATION,
 - 3.1.4. MANUAL RESTART BY ALARM RESET BUTTON.
 - 3.2. HIGH TEMPERATURE ALARM, ADJUSTABLE LEVEL (50-150 F)
 - 3.2.1. INDICATE HIGH TEMPERATURE RED ALARM LED LIGHT
 - 3.2.2. SHUTDOWN BLOWER,
 - 3.2.3. SHUTDOWN COMPRESSOR
 - 3.2.4. AUTO-DIALER NOTIFICATION
 - 3.2.5. MANUAL RESTART



ISSUED FOR PERMIT REVIEW	REVISION DESCRIPTION
11.12.18	DATE
ROL BY	CRP
SS	CHK
APP	



PREPARED BY:
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975 5TH AVENUE NORTHWEST
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PROCESS AND INSTRUMENTATION DIAGRAM
CHS AUBURN SITE
AUBURN, WASHINGTON
APN: 03141600800, 3141600810, & 0855000035

811
Know what's below.
Call before you dig.
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301-004
SHEET
7 OF 7
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APPROVED BY: _____
DATE APPROVED: _____

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