VETERANS OFFICE ADA REMODEL

COUNTY OF MENDOCINO

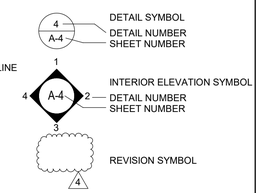
405 OBSERVATORY AVE.
UKIAH, CA 95449

ABBREVIATIONS

A.B.	ANCHOR BOLTS
ACOUS.	ACOUSTICAL
ADM.	ADMINISTRATIVE
ALS	ASSISTIVE LISTENING SYSTEM
ALT.	ALTERNATE
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.N.	BOUNDARY NAIL
BOT.	BOTTOM
BRD.	BOARD
BTR.	BETTER
CAB.	CABINET
CAC.	CALIFORNIA ADMINISTRATIVE CODE
CAT.	CATWALK
CEM. PLAS.	CEMENT PLASTER
CER.	CERAMIC
C.J.	CONSTRUCTION JOINT
CLG.	CEILING
CLR.	CLEAR
C.O.	(GSA) CONTRACTING OFFICER
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
C.M.U.	CONCRETE MASONRY UNIT
CSPE	CHLOROSULFONATED POLYETHYLENE ("HYPALON")
DBL.	DOUBLE
DET.	DETAIL
D.F.	DOUGLAS FIR
DIAG.	DIAGONAL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DP.	DEEP
DR.	DOOR
D.S.	DOWNSPOUT
DSA	DIVISION OF THE STATE ARCHITECT
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
ELEV.	ELEVATION
ELEC.	ELECTRICAL
EMT	ELEC. METALLIC TUBING
E.N.	EDGE NAIL
E.Q.	EQUAL
EQPT.	EQUIPMENT
E.S.	EACH SIDE
E.W.	EACH WAY
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
FDN.	FOUNDATION
FHWS	FLAT HEAD WOOD SCREW
FIN.	FINISH
FIN. FL.	FINISH FLOOR
F.J.	FLOOR JOIST
FL.	FLOOR
FLUOR.	FLUORESCENT
F.N.	FIELD NAIL
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
FRMG.	FRAMING
FT.	FOOT/FEET
GA.	GAUGE
GAL.	GALLON
GALV.	GALVANIZED
GSS	GALVANIZED SHEET STELL
GLB	GLUE LAMINATED BEAM
GRD.	GRADE
GSA	GENERAL SERVICES ADMINISTRATION
G.S.M.	GALVANIZED SHEET METAL
GYP. BD.	GYPSUM BOARD
H.D.	HOLD-DOWN
HMA	HAZARDOUS MATERIALS ABATEMENT
HORIZ.	HORIZONTAL
H.S.B.	HIGH STRENGTH BOLTS
HT.	HEIGHT
HDR.	HEADER
IN.	INCH(ES)
I.D.	INSIDE DIAMETER
INSUL	INSULATION
ISA	INTERNATIONAL SYMBOL OF ACCESS
JT.	JOINT
JST.	JOIST
LVT	LAMINATE VINYL TILE
MAX.	MAXIMUM
M.B.	MACHINE BOLTS
MECH.	MECHANICAL
MET.	METAL
MEZZ.	MEZZANINE
MFR.	MANUFACTURER
MIN.	MINIMUM
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.H.	OPPOSITE HAND
OLA	OFFICE OF LOCAL ASSISTANCE
OPP.	OPPOSITE
PERIM.	PERIMETER
PBS	PUBLIC BUILDINGS SERVICE
P.C.C.	PRECAST CONCRETE
PL.	PLATE
P.L.	PROPERTY LINE
P.LAM.	PLASTIC LAMINATE
PLYWD.	PLYWOOD
P.N.	PLATE NAIL
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PT.	POINT
R.	RISER
RAD.	RADIUS
REINF.	REINFORCEMENT
REQD.	REQUIRED
RES.	RESILIENT
R.O.	ROUGH OPENING
R.S.	ROUGH SAWN
RDWD.	REDWOOD
RO.	ROUGH
R.W.L.	RAIN WATER LEADER
SA	SUSPENDED ACOUSTICAL
SCD	SEE CIVIL DRAWINGS
SHT.	SHEET
S.H.	SINGLE HUNG
SIM.	SIMILAR
SLDR.	SLIDER
SMD	SEE MECHANICAL DRAWINGS
S.O.G.	SLAB ON GRADE
SPEC(S)	SPECIFICATION(S)
SQ.	SQUARE
S.S.	STAINLESS STELL
S.S.D	SEE STRUCTURAL DRAWINGS
S.S.P.	STANDARD STEEL PIPE
STRUC.	STRUCTURAL
SYM.	SYMMETRICAL
T.	TREAD
T.&B.	TOP AND BOTTOM
T.&G.	TONGUE AND GROOVE
T.C.	TOP OF CURB
TEL.	TELEPHONE
TERR.	TERRAZZO
T.O.C.	TOP OF CONCRETE
T.O.PL.	TOP OF PLATE LINE
T.O.S.	TOP OF STEEL
T.O.SF.	TOP OF SUBFLOOR
T.O.W.	TOP OF WALL
T.P.	TOP OF PAVEMENT
TRANSV.	TRANSVERSE
TR.	TREATED
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VERT.	VERTICAL
VG.	VERTICAL GRAIN
W.	WIDE
WASH.	WASHER
W/	WITH
W/C	WATER CLOSET
WD.	WOOD
W/O	WITHOUT
WP.	WATERPROOF
WPF.	WEATHERPROOF
X	CROSS

SYMBOLS

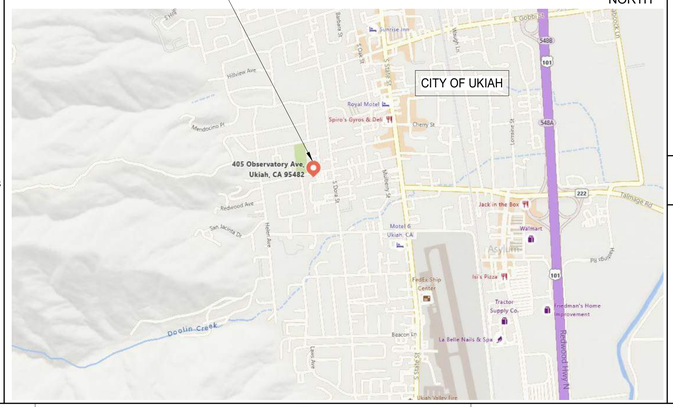
&	AND
@	AT
℄	CENTER LINE
Ø	DIAMETER OR ROUND LINE
(E)	EXISTING
⊥	PERPENDICULAR
#	POUND OR NUMBER
ℙ	PLATE
(N)	NEW
WP	WORK POINT
	NOMINAL FLOOR LEVEL OR MATCH LINE
4	COLUMN GRID
4	LOUVER SYMBOL
4	DOOR SYMBOL
4	WINDOW SYMBOL
4	GATE SYMBOL
4 / A-4	SECTION / EXTERIOR ELEVATION SYMBOL
	SECTION / ELEVATION NUMBER
	SHEET NUMBER



LOCATION MAP

NOT TO SCALE

NORTH



SCOPE OF WORK

- RELOCATE REAR DOOR
- CREATE ON-SITE ACCESSIBLE PARKING
- IMPROVE ACCESSIBLE PATH-OF-TRAVEL TO/FROM ACCESSIBLE ENTRY & PUBLIC SIDEWALK
- NEW INTRUSION DETECTION SYSTEM-ADDITIVE ALTERNATE BID.

GENERAL NOTES

1. NEW CONSTRUCTION, IF SPECIFICALLY NOTED IN THESE DRAWINGS, SHALL BE UNPREFIXED OR PREFIXED BY "NEW" OR "(N)".
2. EXISTING CONSTRUCTION SHALL ALWAYS BE PREFIXED BY "EXIST", "(E)", OR OTHER SIMILIAR DESIGNATION.
3. CONTRACTOR SHALL VERIFY ALL CONDITION AND MEASUREMENTS OF AS-BUILT CONDITIONS AFFECTING PROPOSED WORK. ANY/ALL INCONSISTENCIES SHALL BE COMMUNICATED IN WRITTING TO THE ARCHITECT PRIOR TO START OF WORK.
4. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS SHALL GOVERN.
5. CONSTRUCTION ASSEMBLIES NOT SPECIFICALLY DETAILED SHALL BE SIMILIAR TO DETAIL(S) INDICATED OF ADJACENT CONDITIONS.
6. INFORMATION ON EXISTING CONDITIONS WAS OBTAINED FROM LIMITED OBSERVATIONS BY THE ARCHITECT. NO AS-BUILT DOCUMENTS WERE PROVIDED BY THE OWNER. THESE SOURCES ARE ASSUMED RELIABLE, AND OBSERVED CONDITIONS ARE ASSUMED TO BE REPRESENTATIVE. HOWEVER, ACTUAL CONDITIONS MAY VARY. THE CONTRACTOR SHALL EXERCISE DUE DILIGENCE IN VERIFING ACTUAL CONDITIONS.
7. THIS PROJECT INVOLVES REMOVAL OF PORTIONS OF EXISTING BUILDING SYSTEMS, AND THEIR RECONSTRUCTION TO SUIT PROPOSED DESIGN. THESE DRAWINGS CONTAINED HEREIN INDICATE GENERAL REQUIREMENTS FOR THE PRIMARY INTERFACE OF 'NEW' TO 'EXISTING'. IT SHALL THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND ESTABLISH ALL APPLICALBE INTERFACE CONDITIONS WHICH MAY BE REQUIRED TO THE PROPOSED DESIGN.

APPLICABLE CODES

- 2019 CALIFORNIA BUILDING CODE, PART 1 & 2
- 2019 CALIFORNIA MECHANICAL CODE
- CURRENT EDITION: NATIONAL ELECTRICAL CODE

PROJECT TEAM

OWNER:

COUNTY OF MENDOCINO

MAIN CONTACT:
WALTER KOLON
FACILITY PROJECT SPECIALIST II
MENDOCINO COUNTY EXECUTIVE OFFICE
FACILITY & FLEET DIVISION
DIRECT PH. 707-234-6073
MOBILE PH. 707-510-6942
KOLONW@MENDOCINOCOUNTY.ORG

CIVIL ENGINEER:

SHN ENGINEERING
336 S. MAIN ST.
WILLITS, CA 95490
PH. (707) 459-4518
CONTACT: JASON ISLAND, P.E.

ARCHITECT:

CHARLES L. BEAVERS, AIA
BROKAW DESIGN
P.O. BOX 3103
ROHNERT PARK, CA 94927
CHARLES.BEAVERS@BROKAWDESIGN.COM
(415) 860-5043

ELECTRICAL ENGINEER:

MIKE BURKE
BROKAW DESIGN
P.O. BOX 3103
ROHNERT PARK, CA 94927
MIKE.BURKE@BROKAWDESIGN.COM
(707) 536-6635

ACCESSIBLE PATH-OF-TRAVEL STATEMENT

Design Professional in General Responsible Charge Statement:

The Path of Travel (POT) identified in these construction documents is compliant with the current applicable California Building Code accessibility provisions for path of travel requirements for alterations, additions and structural repairs. As part of the design of this project, the POT was examined and any elements, components or portions of the POT that were determined to be noncompliant

1) have been identified; and

2) the corrective work necessary to bring them into compliance has been included within the scope of this project's work through details, drawings and specifications incorporated into these construction documents.

Any noncompliant elements, components, or portions of the POT that will not be corrected by this project based on valuation threshold limitations or a finding of unreasonable hardship are so indicated in these construction documents.

During construction, if POT items within the scope of the project represented as code compliant are found to be nonconforming beyond reasonable construction tolerances, they shall be brought into compliance with the CBC as a part of this project. Any revision to the current permitted scope of work shall be submitted to Permit Sonoma as a revision to the permit.

1 SITE PLAN
1/16" = 1'-0"

DRAWING INDEX

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

SEAL:

LICENSED ARCHITECT
CHARLES L. BEAVERS
No. C 9,601
CHARLES BEAVERS
REN. 4-30-23
STATE OF CALIFORNIA

CONSULTANT:

BrokawDesign
P.O. BOX 3103
ROHNERT PARK, CA 94927
WWW.BROKAWDESIGN.COM

PROJECT:

VETERANS OFFICE ADA REMODEL

405 OBSERVATORY AVE.
UKIAH, CA 95449

SHEET NAME:

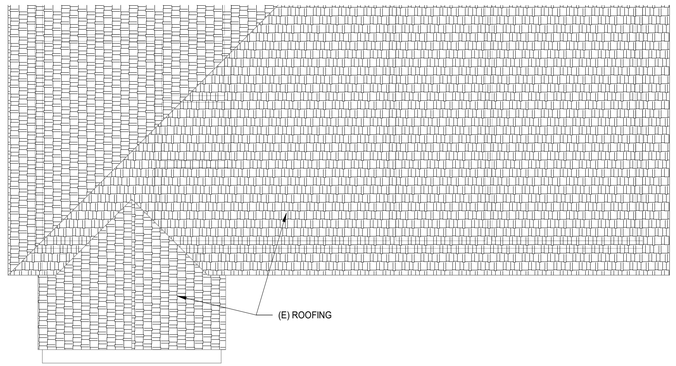
COVER

ISSUE DATE:	7/20/2021
PREPARATION AND REVIEW	
DRAWN BY:	Author
DESIGNER:	Designer
PROJ MGR:	
PEER REVIEW:	Checker

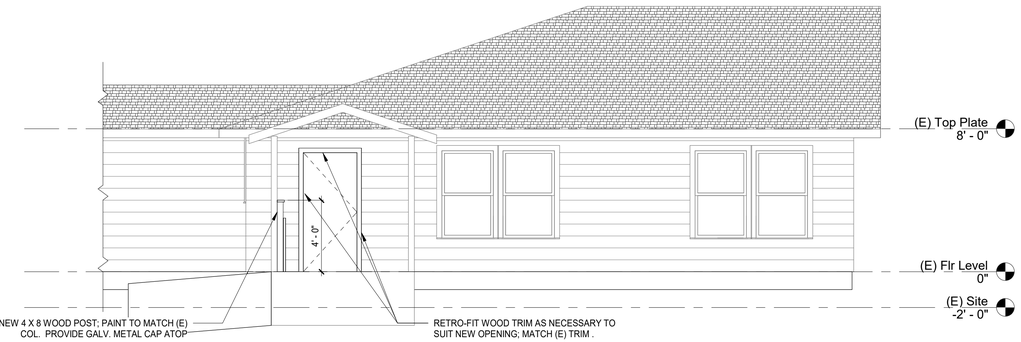
SHEET NUMBER:

A001

1 2 3 4 5

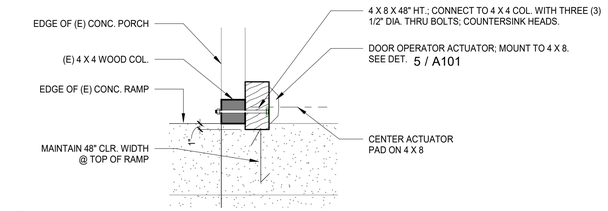


2 ROOF PLAN
1/4" = 1'-0"

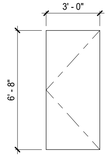


4 SOUTH EXTERIOR
1/4" = 1'-0"

5 ACTUATOR PAD(S) @ DOOR
1" = 1'-0"



7 ACTUATOR PAD @ POST
1" = 1'-0"



DOOR TYPE = SOLID PANEL
CONSTRUCTION = SOLID CORE WOOD.
FINISH = TRANSPARENT
FRAME = WOOD / PAINT.

DOOR HARDWARE:

HANGING: 3 EA. 4" X 4" BUTT HINGES WITH SATIN NICKEL FINISH.

LOCK:
- SCHLAGE MODEL #ND92PD WITH STAIN NICKEL FINISH.
- COMPATIBLE WITH DOOR CONTROLLER.
- CYLINDER PER BUILDING STANDARD; VERIFY KEYING WITH BUILDING MANAGMENT.

LATCH:
- ELECTRIFIED
- COMPATIBLE WITH DOOR OPERATOR

SECURITY: N/A = UNMONITORED

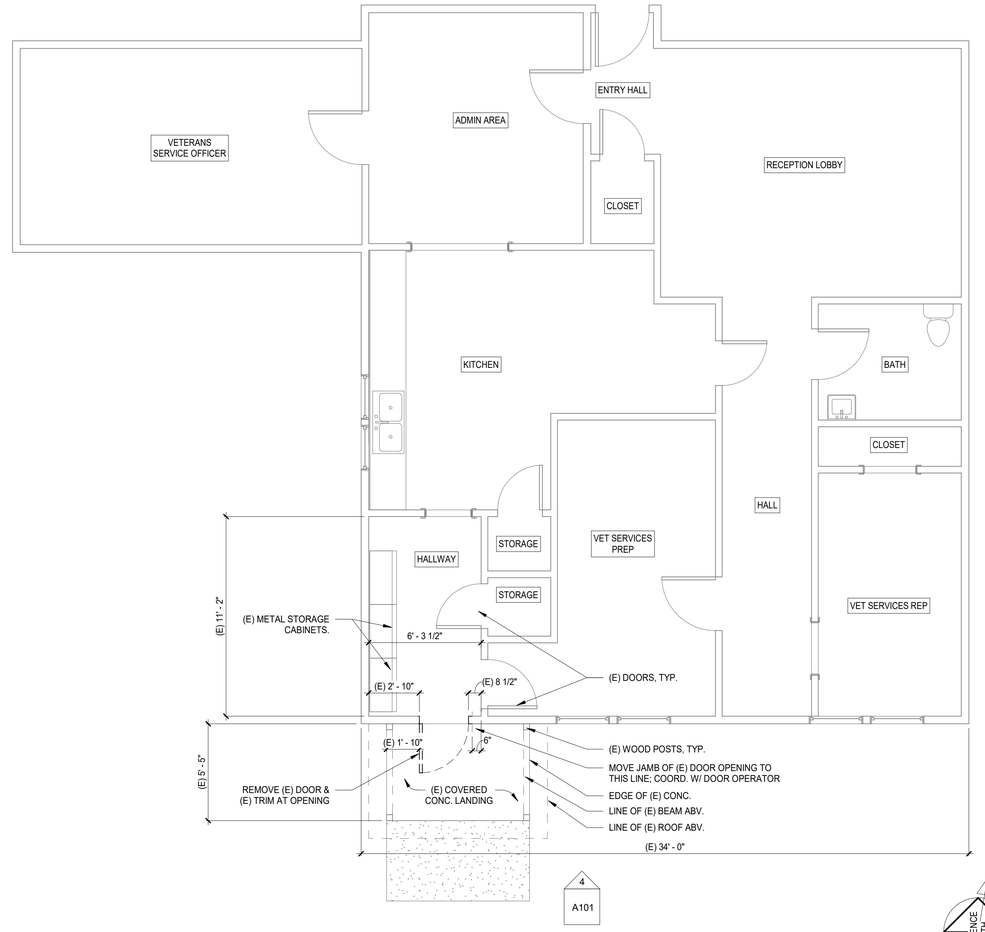
OPERATOR: MOTORIZED OVERHEAD DEVICE
("GT-710" OUTSWING OPERATOR BY 'NABCO ENTRANCES, INC. OR EQUAL)
PROVIDE NEW CIRCUIT AT EXISTING PANEL, WIRE TO DEVICE AND CONNECT.

CONTROL: WIRELESS TOUCH-ACTUATOR PAD(S)
(MODEL = "INGRESS-R" VERTICAL PAD BY 'WIKK' INDUSTRIES, OR EQUAL).
COORDINATE FUNCTION WITH OVERHEAD DOOR OPERATOR.

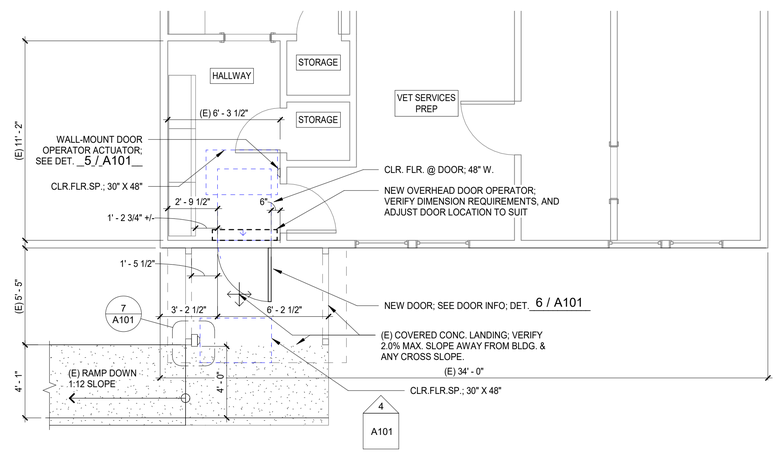
PERIMETER SEALS: HEAD & JAMBS
DOOR BOTTOM: SURFACE SHOE
THRESHOLD: ALUM. SADDLE TO SUIT (BLACK)
DOOR PROTECTION: 10" HT. X 34" S.S. KICKPLATE

- INSTALL ALL HARDWARE PER MANUFACTURER'S SPECIFICATIONS.
- MANUAL SWING EFFORT SHALL NOT EXCEED 5 LBS.
- HEIGHT @ DOOR SILL SHALL NOT EXCEED 1/2".
- ALL DOOR HARDWARE SHALL MEET STANDARDS OF COUNTY OF MENDOCINO.
- COMPATIBILITY OF ALL DOOR HARDWARE WITH INTENDED DOOR FUNCTION AND (E) CONDITIONS SHALL BE VERIFIED BY GENERAL CONTRACTOR PRIOR TO MATERIAL ORDER OR INSTALLATION.

6 DOOR TYPE & HARDWARE
1/4" = 1'-0"



1 FLOOR PLAN - DEMO
1/4" = 1'-0"



3 FLOOR PLAN - NEW
1/4" = 1'-0"

REVISION SCHEDULE

NO.	DESCRIPTION	DATE

SEAL:

LICENSED ARCHITECT
CHARLES L. BEAVERS
No. C 9,601
CHARLES BEAVERS
REN. 4-30-2023
STATE OF CALIFORNIA

CONSULTANT:

BrokawDesign
P.O. BOX 3103
ROHNERT PARK, CA 94927
WWW.BROKAWDESIGN.COM

PROJECT:

VETERANS OFFICE ADA REMODEL

405 OBSERVATORY AVE.
UKIAH, CA 95449

SHEET NAME:

PLAN VIEWS & DETAILS

ISSUE DATE:	7/20/2021
PREPARATION AND REVIEW	
DRAWN BY:	mck
DESIGNER:	mck
PROJ MGR:	
PEER REVIEW:	--

SHEET NUMBER:

A101

PROJECT STATUS

ABBREVIATIONS

A

ABN — ABANDON
ABS — ACRYLONITRILE–BUTADIENE–STYRENE
AB — ANCHOR BOLT, AGGREGATE BASE
AC — ASPHALTIC CONCRETE
ACP — ASBESTOS CEMENT PIPE
ACI — AMERICAN CONCRETE INSTITUTE
ADJ — ADJUSTABLE
AGGR — AGGREGATE
AISC — AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AL — ALUMINUM
ALT — ALTERNATE
AP — ANGLE POINT
APPROX — APPROXIMATELY
ARCH — ARCHITECTURAL
ASTM — AMERICAN SOCIETY FOR TESTING & MATERIALS
AUTO — AUTOMATIC
AUX — AUXILIARY
@ — AT

B

BC — BEGIN CURVE
BCR — BEGIN CURB RETURN
BD — BOARD
BF — BLIND FLANGE
BFV — BUTTERFLY VALVE
BK — BOOK OR BACK
BLDG — BUILDING
BM — BENCH MARK, BEAM
BMP — BEST MANAGEMENT PRACTICE
BO — BLOW OFF
BOT — BOTTOM
BRG — BEARING
BTWN — BETWEEN
BV — BALL VALVE
BVC — BEGINNING OF VERTICAL CURVE
BW — BACK OF WALK
BWV — BACKWATER VALVE

C

C — CHANNEL (STRUCTURAL SHAPE)
CARV — COMBINATION AIR AND VACUUM RELEASE VALVE
CATV — CABLE TELEVISION
CB — CATCH BASIN
CEIL — CEILING
CFM — CUBIC FEET PER MINUTE
CFS — CUBIC FEET PER SECOND
CHEM — CHEMICAL
CI — CAST IRON
CIP — CAST IRON PIPE
C.I.P. — CAST IN PLACE
CJ — CONSTRUCTION JOINT
CLR — CLEAR
℄ — CENTERLINE
CMP — CORRUGATED METAL PIPE
CMU — CONCRETE MASONRY UNIT
CTSK — COUNTERSINK
CO — CLEANOUT
COL — COLUMN
CONC — CONCRETE
CONT — CONTINUOUS OR CONTINUED
COORD — COORDINATE
CPLG — COUPLING
CRS — COLD ROLLED STEEL
CTR — CENTER
CTS — COPPER TUBE SIZE
CU — CUBIC
CU FT — CUBIC FEET
CV — CHECK VALVE
CW — COLD WATER
CY — CUBIC YARD

D

° — DEGREE (ANGLE)
d — PENNY (NAIL SIZE)
D — STORM DRAIN
DB — DISTRIBUTION BOX
DBL — DOUBLE
DF — DOUGLAS FIR
DI — DROP INLET OR DUCTILE IRON
DIA — DIAMETER
DIAG — DIAGONAL
DIM — DIMENSION
DIMJ — DUCTILE IRON MECHANICAL JOINT
DIP — DUCTILE IRON PIPE
DET — DETAIL
DWG — DRAWING
DW — DRIVEWAY

E

(E) — EXISTING
E — EASTING OR EAST
EA — EACH
EC — END CURVE
ECR — END CURB RETURN
EF — EACH FACE
EFL — EFFLUENT
EG — EXISTING GRADE/GROUND
EL — ELBOW
ELEC — ELECTRIC OR ELECTRICAL
ELEV — ELEVATION
ENGR — ENGINEER
EP — EDGE OF PAVING
EQ — EQUAL
EQUIP — EQUIPMENT
ER — EDGE OF ROAD
EVC — END OF VERTICAL CURVE
EW — EACH WAY
EWEF — EACH WAY, EACH FACE
EXC — EXCAVATE
EXP — EXPOSED OR EXPANSION
EXP JT — EXPANSION JOINT
EXST — EXISTING
EXT — EXTERIOR

F

F — FLANGE
FC — FLEXIBLE COUPLING OR FACE OF CURB
FCA — FLANGED COUPLING ADAPTER
FD — FLOOR DRAIN
FDC — FIRE DEPARTMENT CONNECTION
FDN — FOUNDATION
FF — FINISH FLOOR
FG — FINISHED GRADE
FH — FIRE HYDRANT
FIG — FIGURE
FIN — FINISH
FIP — FEMALE IRON PIPE
FL — FLOW LINE
FLG — FLANGE
FLR — FLOOR
FLTR — FILTER
FO — FIBER OPTIC
FOC — FACE OF CONCRETE
FT — FOOT OR FEET
FT² — SQUARE FEET
FT³ — CUBIC FEET
FTG — FOOTING
FUT — FUTURE

G

G — GAS
GA — GAGE
GALV — GALVANIZED
GIP — GALVANIZED IRON PIPE
GM — GAS METER
GPD — GALLONS PER DAY
GPH — GALLONS PER HOUR
GPM — GALLONS PER MINUTE
GRD — GRADE OR GROUND
GSP — GALVANIZED STEEL PIPE
GV — GATE VALVE
GYP — GYPSUM

H

HB — HOSE BIBB
HDPE — HIGH DENSITY POLYETHYLENE
HDR — HEADER
HDW — HARDWARE
HMA — HOT MIX ASPHALT
HOR — HORIZONTAL
HP — HORSEPOWER, HIGH POINT
HR — HOUR
HT — HEIGHT
HW — HOT WATER
HWR — HOT WATER RETURN
HWS — HOT WATER SUPPLY

I

ID — INSIDE DIAMETER
IN — INCH
INFL — INFLUENT
INSUL — INSULATE OR INSULATION
INT — INTERIOR
INV — INVERT
IPS — IRON PIPE SIZE

J

JT — JOINT
JP — JOINT POLE

K

KIP — THOUSAND POUNDS
KW — KILOWATT

L

∠ — ANGLE (DEGREES)
L — ANGLE (STRUCTURAL SHAPE)
LAT — LATERAL
LB — POUND
LF — LINEAR FEET
LG — LONG
LH — LEFT HAND
LONG — LONGITUDINAL
LP — LOW POINT
LPG — LIQUIFIED PETROLEUM GAS
LRP — LEGALLY RESPONSIBLE PARTY
LR — LONG RADIUS
LT — LEFT
LVC — LENGTH OF VERTICAL CURVE

M

MATL — MATERIAL
MAX — MAXIMUM
MECH — MECHANICAL
MF — MEGA–FLANGE PIPE JOINT
MFR — MANUFACTURER
MGD — MILLION GALLONS PER DAY
MH — MANHOLE
MIN — MINIMUM OR MINUTE
MIP — MALE IRON PIPE
MISC — MISCELLANEOUS
MJ — MECHANICAL JOINT
MNPT — MALE NATIONAL PIPE THREAD
MTL — METAL
MWS — MAXIMUM WATER SURFACE

N

(N) — NEW
N — NORTHING OR NORTH
NC — NORMALLY CLOSED
NIC — NOT IN CONTRACT
NF — NON–FREEZE
NO — NUMBER OR NORMALLY OPEN
NOM — NOMINAL
NP — NEW PAVEMENT
NPT — NATIONAL PIPE THREAD
NTS — NOT TO SCALE
— NUMBER

O

OC — ON CENTER
OD — OUTSIDE DIAMETER
OG — ORIGINAL GROUND
OVFL — OVERFLOW
OZ — OUNCE
OH — OVERHEAD

P

PC — POINT OF CURVE
PCC — PORTLAND CEMENT CONCRETE
PCF — POUNDS PER CUBIC FOOT
PE — PLAIN END
PERF — PERFORATED
PEP — POLYETHELENE PIPE
PI — POINT OF INTERSECTION
PL — PLATE
℄ — PROPERTY LINE
PLCS — PLACES
PLYWD — PLYWOOD
PMP — PERFORATED METAL PIPE
POC — POINT ON CURVE
POT — POINT OF TANGENT
PP — POWER POLE
PRC — POINT OF REVERSE CURVE
PREFAB — PREFABRICATED
PRELIM — PRELIMINARY
PRESS — PRESSURE
PROP — PROPERTY
PSF — POUNDS PER SQUARE FOOT
PSI — POUNDS PER SQUARE INCH
PSIG — POUNDS PER SQUARE INCH, GAUGE
PT — POINT OF TANGENCY, POINT
PUE — PUBLIC UTILITY EASEMENT
PV — PLUG VALVE
PVC — POLYVINYL CHLORIDE PLASTIC
PVI — POINT OF VERTICAL INTERSECTION
PVMT — PAVEMENT

Q

QTY — QUANTITY

R

R — RADIUS
RC — RELATIVE COMPACTION
RCP — REINFORCED CONCRETE PIPE
RD — ROAD
RDCR — REDUCER
RWD — REDWOOD
REF — REFER OR REFERENCE
REINF — REINFORCED, REINFORCING OR REINFORCE
REQD — REQUIRED
RET — RETURN
RH — RIGHT HAND
RM — ROOM
RO — ROUGH OPENING
RSP — ROCK SLOPE PROTECTION
RT — RIGHT OR RING TIGHT
R/W — RIGHT OF WAY
RWL — RAIN WATER LEADER

S

S — SEWER
SL — SLOPE
SCHED — SCHEDULE
SCSD — SCOTIA COMMUNITY SERVICES DISTRICT
SD — STORM DRAIN
SDMH — STORM DRAIN MANHOLE
SECT — SECTION
SF — SQUARE FOOT/FEET
SHT — SHEET
SIM — SIMILAR
SP — SPACE OR SPACES
SPEC — SPECIFICATIONS
SQ — SQUARE
SQ FT — SQUARE FOOT
SQ IN — SQUARE INCH
SS — SANITARY SEWER
SSCO — SANITARY SEWER CLEAN OUT
SSMH — SANITARY SEWER MANHOLE
SST — STAINLESS STEEL
STA — STATION
STD — STANDARD
STL — STEEL
STR — STRUCTURAL
STRUCT — STRUCTURE
SUSP — SUSPENDED
SW — SIDEWALK
SWPPP — STORM WATER POLLUTION PREVENTION PLAN
SYMM — SYMMETRICAL

T

TAN — TANGENT
T&B — TOP AND BOTTOM
T&G — TONGUE AND GROOVE
TBC — TOP BACK CURB
TBM — TEMPORARY BENCH MARK
TBW — TOP BACK WALK
TC — TOP OF CURB
TCE — TEMPORARY CONSTRUCTION EASEMENT
TEL — TELEPHONE
TELEM — TELEMETRY
TEMP — TEMPERATURE OR TEMPORARY
TFC — TOP FACE CURB
THD — THREAD
TOC — TOP OF CONCRETE
TOG — TOP OF GRATE
TOS — TOWN OF SCOTIA
TOW — TOP OF WALL
TP — TURNING POINT, TOP OF PAVEMENT OR TELEPHONE POLE
TRANSV — TRANSVERSE
TS — TUBE, STRUCTURAL
TYP — TYPICAL

U

UBC — UNIFORM BUILDING CODE
UOS — UNLESS OTHERWISE SPECIFIED
UG — UNDERGROUND
UTIL — UTILITY

V

V — VOLT
VAC — VACUUM
VAR — VARIES
VC — VERTICAL CURVE
VCP — VITRIFIED CLAY PIPE
VERT — VERTICAL
VG — VALLEY GUTTER
VPI — VERTICAL POINT OF INTERSECTION

W

W — WATER OR WIDE FLANGE
W/ — WITH
W/O — WITHOUT
WM — WATER METER
WP — WORK POINT
WS — WATER SURFACE, WATER STOP
WWF — WELDED WIRE FABRIC

X

XFMR — TRANSFORMER

Y

YD — YARD
YD² — SQUARE YARD
YD³ — CUBIC YARD

UTILITIES LEGEND

PROPOSED	EXISTING	
	⊗	GATE VALVE
	⊗ PV	PLUG VALVE
	⊗ BV	BALL VALVE
	⊗ BFV	BUTTERFLY VALVE
P	P	AUTOMATICALLY OPERATED VALVE (P= PNEUMATIC, E= ELECTRIC, S= SOLENOID, H= HYDRAULIC, D= DIAPHRAGM ACTUATOR)
		3–WAY VALVE
		GLOBE VALVE
		ANGLE VALVE
		PRESSURE REGULATING VALVE
		PRESSURE RELIEF VALVE
		CHECK VALVE
		AIR OR VACUUM RELEASE VALVE
AV	AV	AIR AND VACUUM VALVE
CA	CA	COMBINATION AIR VALVE
		FLOW METER
NF		HOSE BIBB (NF= NON–FREEZE)
		REDUCER
		FIRE HYDRANT
		DROP INLET
		MANHOLE
		SEWER CLEAN OUT OR SEWER LATERAL
E	E	UNDERGROUND ELECTRICAL
OH E	OH E	OVERHEAD ELECTRICAL
FO	FO	FIBER OPTIC LINE
TV	TV	CABLE TELEVISION
J	J	JOINT UTILITIES
TM	TM	UNDERGROUND TELEMETRY LINE
OH TM	OH TM	OVERHEAD TELEMETRY LINE
T	T	UNDERGROUND TELEPHONE LINE
OH T	OH T	OVERHEAD TELEPHONE LINE
FW	FW	FIRE WATER LINE
ST	ST	STEAM LINE
W	W	WATER LINE
SS	SS	SANITARY SEWER LINE
SD	SD	STORM DRAIN LINE
G	G	GAS LINE
FM	FM	FORCE MAIN AND DIRECTION OF FLOW

SIZE AND MATERIAL OF EXISTING PIPING MAY BE SHOWN WHEN KNOWN.

SIZE AND MATERIAL OF NEW PIPING MAY BE SHOWN ON PLAN OR IN PROFILE.

		CULVERT
		POLE MOUNTED ROADWAY LUMINAIRE
	NOT USED	ITEM TO BE REMOVED
		ITEM TO BE ABANDONED IN PLACE
		WATER SERVICE– WM–1= SINGLE, WM–2= DUAL
3	PB	PULL BOX AND DESIGNATION
R4–4		SIGN AND DESIGNATION

TOPOGRAPHIC LEGEND

PROPOSED	EXISTING	
		P.I. (POINT OF INTERSECTION)
NOT USED		TEMPORARY BENCH MARK
47.55	NOT USED	FINISH GRADE ELEVATON
NOT USED	42.6 X	ELEVATION OF ORIGINAL GROUND
		RADIAL POINT
		FLOW LINE AND DIRECTION
		TOP OF CUT
		TOP OF FILL
		TOE OF CUT OR FILL
200	180	CONTOUR LINE
		CONCRETE (IN PLAN)
		CONCRETE (IN SECTION)
		PAVEMENT
NOT USED		ROCKS
NOT USED		STUMPS
		TREES
		ROADS
	TP	UTILITY POLE (PP=POWER POLE, TP= TEL POLE, JP=JOINT POLE)
		GUY WIRE
		FENCE
℄	℄	BOUNDARY LIMITS, W/DESIGNATION
		CENTERLINE
NOT USED		MARSH
		WETLAND
NOT USED		SPRING
TP–4	TP–4	TEST PIT AND DESIGNATION
		EXPLORATION BORE HOLE
		PROPERTY CORNER
		SURVEY MONUMENT
		CONTROL POINT
		DRIVEWAY

DETAIL AND SECTION DESIGNATION

SECTION (LETTER) OR DETAIL (NUMERAL) DESIGNATION — A

INDICATES SECTION OR DETAIL TAKEN AND SHOWN ON SAME SHEET — C–5

ON DRAWING WHERE SECTION OR DETAIL IS TAKEN: SHEET NUMBER WHERE SHOWN

ON DRAWING WHERE SECTION OR DETAIL IS SHOWN: SHEET NUMBER WHERE TAKEN

STANDARD DETAIL NUMBER (DETAIL MAY BE SHOWN ON ANY SHEET WITHIN THE DRAWING SET) — 006

CURVE DATA

R (RADIUS)
L (LENGTH)
△ (DELTA)
T (TANGENT)

NOTES

1. CONTACT THE ENGINEER FOR SYMBOLS NOT LISTED.
2. THIS IS A STANDARD SHEET, THEREFORE, SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET WHICH DO NOT APPEAR ON THE PLANS.
3. SITE AND UTILITY SYMBOLS SHOWN ON THIS SHEET ARE NOT INTENDED TO REPRESENT THE PHYSICAL SCALE OR SHAPE OF ANY ITEMS. WHERE LARGE–SCALE PLANS ARE PRESENTED, THE SYMBOLS SHOWN HEREON MAY BE REPLACED BY DETAILS MORE SUITED TO THE DRAWING SCALE.

REGISTERED PROFESSIONAL ENGINEER — JASON G. ISLAND — NO. 64809 — Exp. 06/30/23 — CIVIL — STATE OF CALIFORNIA

VERIFY SCALES — BAR IS ONE INCH ON ORIGINAL DRAWING — 0 1" — IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

335 S. MAIN ST.
WILLITS, CA. 95490
WWW.SHN–ENGR.COM
707–459–4518

BY | REVISION | DATE | NO.

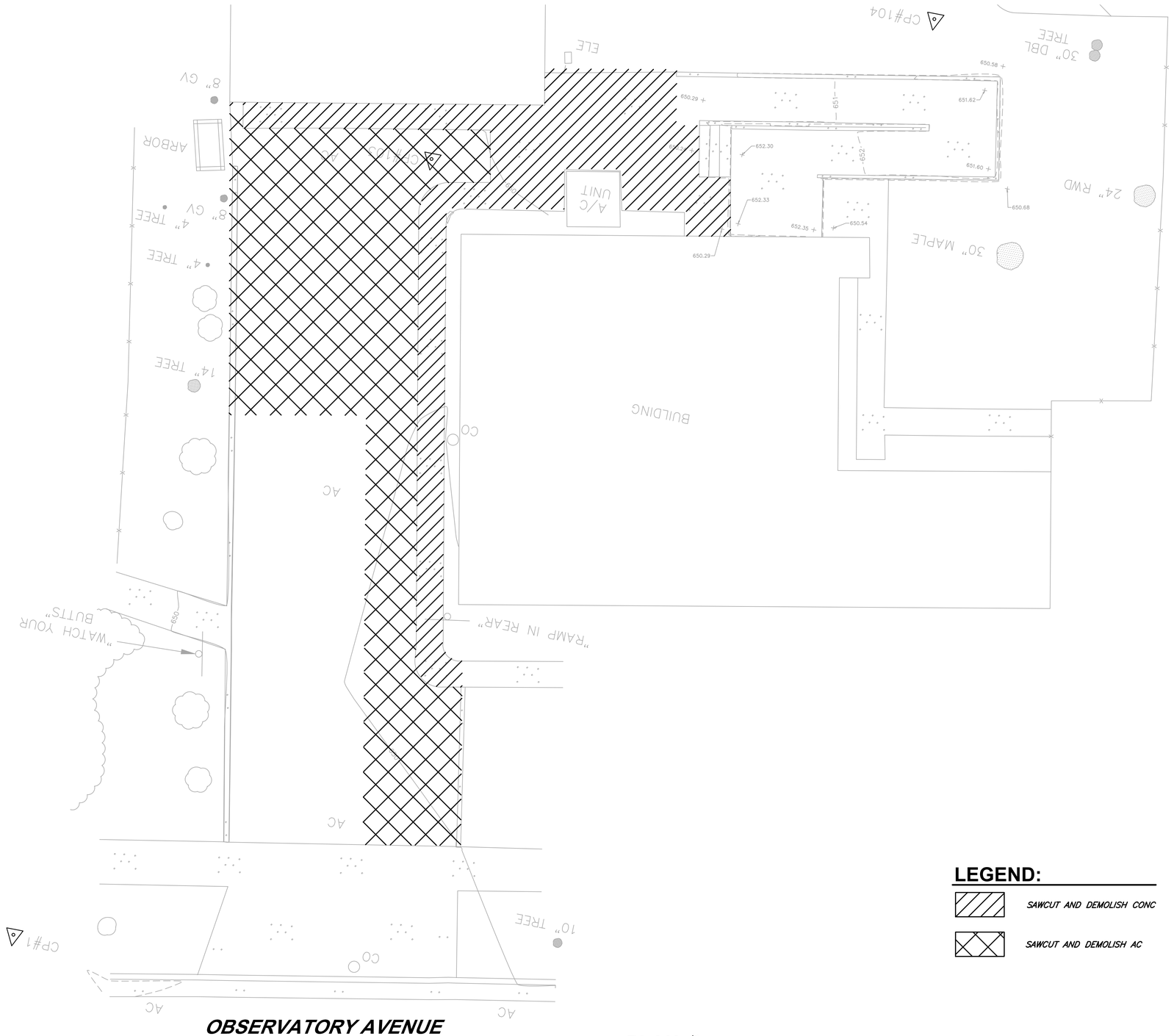
DSGN JGI | DR JGI | CHK JGI | APVD

BROKAW DESIGN
VETERANS SERVICES BUILDING ADA IMPROVEMENTS
405 OBSERVATORY AVENUE, UKIAH, CALIFORNIA

STANDARD ABBREVIATIONS AND LEGENDS

SHEET G–1
SEQ 1
DATE 11/2020
PROJ. NO. 420079

SAVED: 11/24/2020 1:41 PM SHEATH, PLOTTED: 7/20/2021 5:33 PM ISLAND, JASON
\\willits\projects\Closed\JobFiles\2020\420079–VetServiceADA\Dwgs\420079–STND–ABBR.dwg



OBSERVATORY AVENUE

PLAN
1"=5'

LEGEND:

SAWCUT AND DEMOLISH CONC

SAWCUT AND DEMOLISH AC

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

Contractor shall call Underground Service Alert at 811 two working days prior to excavation.
Landline: 1-800-227-2600

REGISTERED PROFESSIONAL ENGINEER
JASON G. ISLAND
NO. 64809
Exp. 06/30/23
CIVIL
STATE OF CALIFORNIA

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

335 S. MAIN ST.
WILLITS, CA. 95490
WWW.SHN-ENGR.COM
707-459-4518

NO.	DATE	REVISION	BY

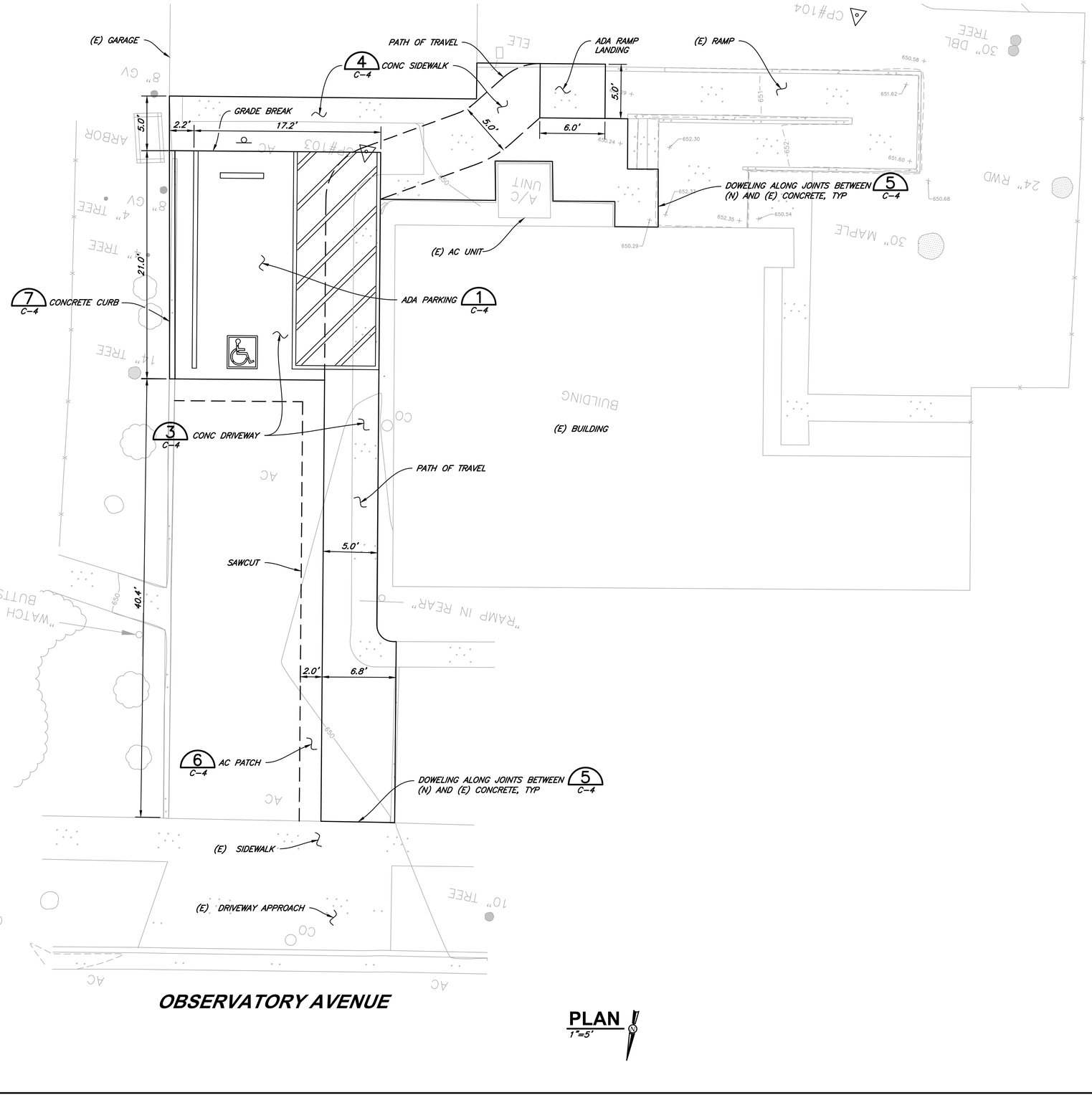
DSGN JGI
DR MAC
CHK SRH
APVD

BROKAW DESIGN
VETERANS SERVICES BUILDING ADA IMPROVEMENTS
405 OBSERVATORY AVENUE, UKIAH, CALIFORNIA

DEMOLITION PLAN

SHEET C-1
SEQ 2
DATE 11/2020
PROJ. NO. 420079

SAVED: 7/19/2021 4:17 PM JISLAND, PLOTTED: 7/20/2021 1:18 PM ISLAND, JASON
\\willits\projects\ClosedJobFiles\2020\420079-VetServices4DA\Dwgs\420079-CIVIL.dwg



PLAN
1"=5'

SAVED: 7/19/2021 4:17 PM JISLAND, PLOTTED: 7/20/2021 1:19 PM ISLAND, JASON
\\willits\projects\ClosedJobFiles\2020\420079-VetServiceADA\Dwgs\420079-CIVIL.dwg

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

335 S. MAIN ST.
WILLITS, CA. 95490
WWW.SHN-ENGR.COM
707-459-4518

NO.	REVISION	BY	DATE

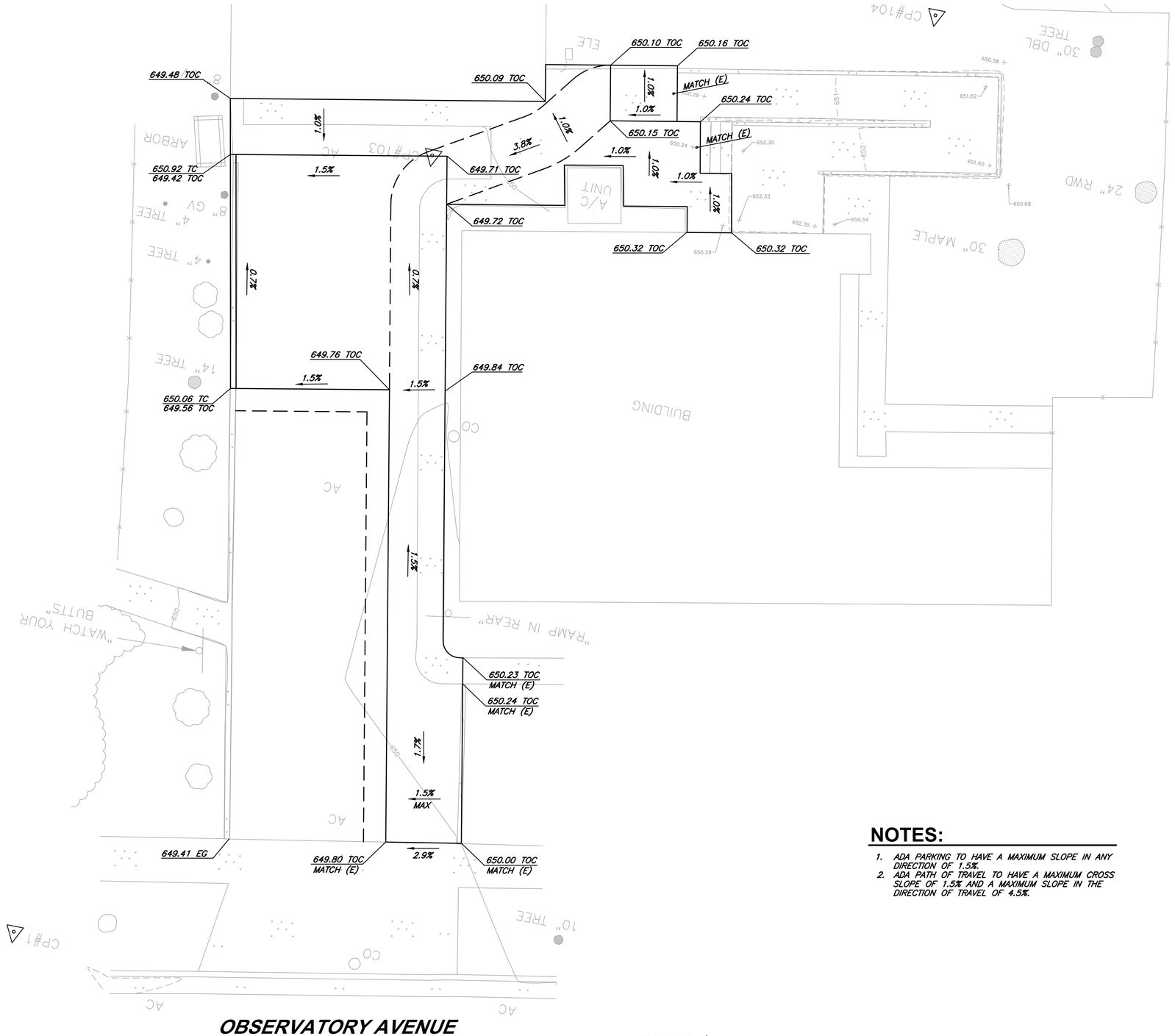
DSGN JGI
DR MAC
CHK SRH
APVD

BROKAW DESIGN
VETERANS SERVICES BUILDING ADA IMPROVEMENTS
405 OBSERVATORY AVENUE, UKIAH, CALIFORNIA

SITE PLAN

REGISTERED PROFESSIONAL ENGINEER
JASON G. ISLAND
NO. 64809
Exp. 06/30/23
CIVIL
STATE OF CALIFORNIA

SHEET C-2
SEQ 3
DATE 11/2020
PROJ. NO. 420079



PLAN
1"=5'

NOTES:

1. ADA PARKING TO HAVE A MAXIMUM SLOPE IN ANY DIRECTION OF 1.5%.
2. ADA PATH OF TRAVEL TO HAVE A MAXIMUM CROSS SLOPE OF 1.5% AND A MAXIMUM SLOPE IN THE DIRECTION OF TRAVEL OF 4.5%.

REGISTERED PROFESSIONAL ENGINEER
JASON G. ISLAND
NO. 64809
Exp. 06/30/23
CIVIL
STATE OF CALIFORNIA

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
335 S. MAIN ST.
WILLITS, CA. 95490
WWW.SHN-ENGR.COM
707-459-4518

NO.	REVISION	BY	DATE

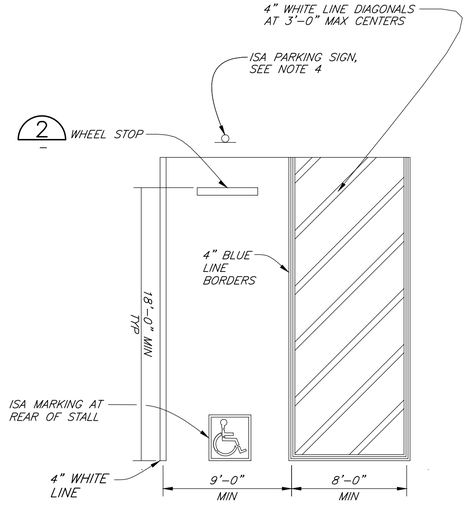
DSGN JGI
DR MAC
CHK SRH
APVD

BROKAW DESIGN
VETERANS SERVICES BUILDING ADA IMPROVEMENTS
405 OBSERVATORY AVENUE, UKIAH, CALIFORNIA

GRADING PLAN

SHEET C-3
SEQ 4
DATE 11/2020
PROJ. NO. 420079

SAVED: 7/19/2021 4:17 PM JISLAND, PLOTTED: 7/20/2021 1:21 PM ISLAND, JASON
\\willits\projects\ClosedJobFiles\2020\420079-VetServiceADA\Dwgs\420079-CIVIL.dwg



CONCRETE NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19A OF THE CBC AND WITH THE PROVISIONS OF ACI 318.
2. UNLESS OTHERWISE STATED, CONCRETE SHALL BE HARD ROCK CONCRETE AND SHALL MEET THE FOLLOWING DESIGN CRITERIA:
   - MINIMUM 28-DAY COMPRESSIVE STRENGTH = 4,000 PSI
   - MINIMUM CEMENT CONTENT = 6 SACKS/CUYD
   - MAXIMUM AGGREGATE SIZE = 3/4"
   - SLUMP = 4"±1"
   - MINIMUM 2" COVER OVER REBAR

ADA PARKING NOTES:

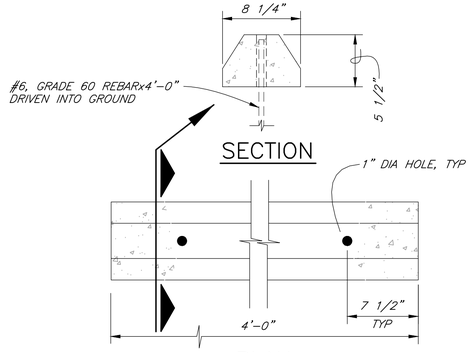
1. ACCESSIBLE PARKING SPACES SERVING A PARTICULAR BUILDING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE ENTRANCE. IN PARKING FACILITIES THAT DO NOT SERVE A PARTICULAR BUILDING, ACCESSIBLE PARKING SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE PEDESTRIAN ENTRANCE OF THE PARKING FACILITY.
2. ONE IN EVERY SIX ACCESSIBLE OFF-STREET PARKING STALLS, BUT NOT LESS THAN ONE, SHALL BE SERVED BY AN ACCESSIBLE AISLE OF 8'-0" MINIMUM WIDTH AND SHALL BE SIGNED VAN ACCESSIBLE. THE R7-8B SIGN SHALL BE MOUNTED BELOW THE R99B (CA) PLAQUE OR THE R99C (CA) SIGN.
3. PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1.5% IN ALL DIRECTIONS.
4. WHERE PLAQUE R99B (CA), SIGN R99C (CA) OR SIGN R7-8B ARE INSTALLED, THE BOTTOM OF THE SIGN OR PLAQUE PANEL SHALL BE A MINIMUM OF 7'-0" ABOVE THE SURROUNDING SURFACE.
5. BLUE PAINT, INSTEAD OF WHITE MAY BE USED FOR MARKING ACCESSIBILITY AISLES IN AREAS WHERE SNOW MAY CAUSE WHITE MARKINGS TO NOT BE VISIBLE.
6. THE WORDS "NO PARKING", SHALL BE PAINTED IN WHITE LETTERS NO LESS THAN 1'-0" HIGH AND LOCATED SO THAT IT IS VISIBLE TO TRAFFIC ENFORCEMENT OFFICIALS. SEE REVISED STANDARD PLAN RSP A90B FOR DETAILS OF THE "NO PARKING" PAVEMENT MARKING.
7. A R100B (CA) SIGN SHALL BE POSTED IN A CONSPICUOUS PLACE AT EACH ENTRANCE TO OFF-STREET PARKING FACILITIES OR IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH STALL. THE SIGN SHALL INCLUDE THE ADDRESS WHERE THE TOWED VEHICLE MAY BE RECLAIMED AND THE TELEPHONE NUMBER OF THE LOCAL TRAFFIC LAW ENFORCEMENT AGENCY.
8. WHERE A SINGLE (NON-VAN) ACCESSIBLE PARKING SPACE IS PROVIDED, THE LOADING AND UNLOADING ACCESS AISLE SHALL BE ON THE PASSENGER SIDE OF THE VEHICLE AS THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE.
9. WHERE A VAN ACCESSIBLE PARKING SPACE IS PROVIDED, THE LOADING AND UNLOADING ACCESS AISLE SHALL BE 8'-0" WIDE MINIMUM, AND SHALL BE ON THE PASSENGER SIDE OF THE VEHICLE AS THE VEHICLE IS GOING FORWARD INTO THE PARKING SPACE.
10. ACCESSIBLE PARKING ONLY SIGN SHALL BE SIGN R99C (CA) OR SIGN R99 (CA) WITH PLAQUE R99B (CA).

SIGN R99C (CA)
SEE NOTE 4

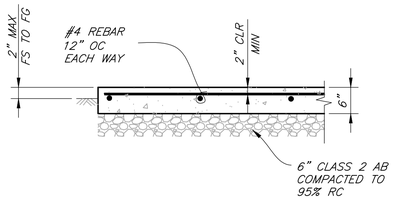
SIGN R7-8b
SEE NOTES 2 AND 4

SIGN R100B (CA)
SEE NOTE 7

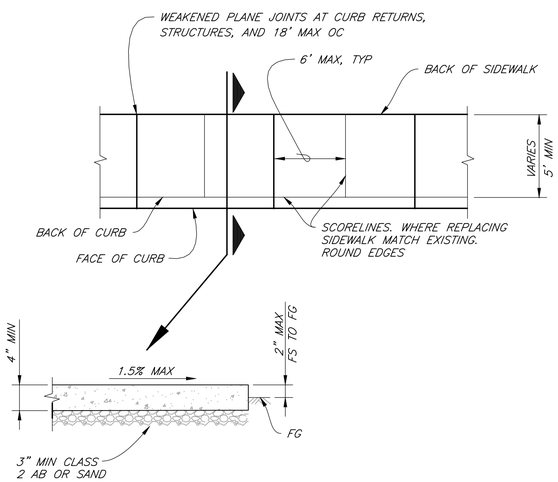
DETAIL 1
NTS C-2
(VAN ACCESSIBLE ADA PARKING SIGNAGE, STRIPING AND LAYOUT)



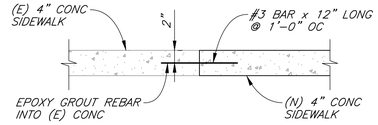
DETAIL 2
NTS -
(WHEEL STOP)



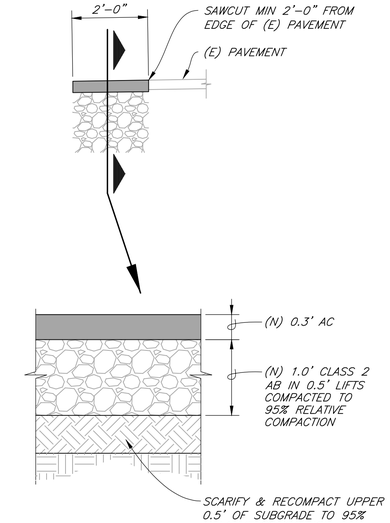
DETAIL 3
NTS C-2
(CONCRETE DRIVEWAY)



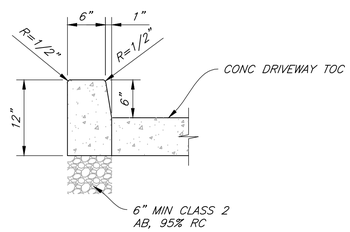
DETAIL 4
NTS C-2
(CONCRETE SIDEWALK)



DETAIL 5
NTS C-2
(DOWELING)



DETAIL 6
NTS C-2
(AC PATCH)



DETAIL 7
NTS C-2
(CONCRETE CURB)

REGISTERED PROFESSIONAL ENGINEER
JASON G. ISLAND
NO. 64809
Exp. 06/30/23
CIVIL
STATE OF CALIFORNIA

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHN
335 S. MAIN ST.
WILLITS, CA. 95490
WWW.SHN-ENGR.COM
707-459-4518

NO.	DATE	REVISION	BY

DSGN	JGI	DR	MAC	CHK	SRH	APVD	

BROKAW DESIGN
VETERANS SERVICES BUILDING ADA IMPROVEMENTS
405 OBSERVATORY AVENUE, UKIAH, CALIFORNIA

ADA DETAILS

SHEET C-4
SEQ 5
DATE 11/20/2020
PROJ. NO. 420079

SAVED: 7/19/2021 4:17 PM JISLAND, PLOTTED: 7/20/2021 1:23 PM ISLAND, JASON
\\willits\projects\Closed\JobFiles\2020\420079-VetServiceADA\Dwgs\420079-CIVIL.dwg

SHEET SPECIFICATION

SECTION 281600 - INTRUSION DETECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY
A. Section Includes:
1. Intrusion detection with communication links to perform monitoring, alarm, and control functions.

1.3 DEFINITIONS
A. PIR: Passive infrared.
B. RFI: Radio-frequency interference.
C. UPS: Uninterruptible power supply.
D. Control Unit: System component that monitors inputs and controls outputs through various circuits.
E. Master Control Unit: System component that accepts inputs from other control units and may also perform control-unit functions. The unit has limited capacity for the number of protected zones and is installed at an unattended location or at a location where it is not the attendant's primary function to monitor the security system.
F. Monitoring Station: Facility that receives signals and has personnel in attendance at all times to respond to signals. A central station is a monitoring station that is listed.
G. Standard Intruder: A person who weighs 100 lb (45 kg) or less and whose height is 60 inches (1525 mm) or less; dressed in a long-sleeved shirt, slacks, and shoes.
H. Standard-Intruder Movement: Any movement, such as walking, running, crawling, rolling, or jumping, of a "standard intruder" in a protected zone.
I. Zone. A defined area within a protected premises. It is a space or area for which an intrusion must be detected and uniquely identified. The sensor or group of sensors must then be assigned to perform the detection, and any interface equipment between sensors and communication must link to master control unit.

1.4 ACTION SUBMITTALS
A. Product Data: Components for sensing, detecting, and control, including dimensions and data on features, performance, electrical characteristics, ratings, and finishes.
B. Shop Drawings: Contractor shall submit complete shop drawings for the intrusion detection system:
1. Raceway Riser Diagrams: Detail raceway runs required for intrusion detection. Include designation of devices connected by raceway, raceway type and size, and type and size of wire and cable fill for each raceway run.
2. Battery\UPS: Sizing calculations.
3. Site and Floor Plans: Indicate final outlet and device locations, routing of raceways, and cables inside and outside the building.
4. Device Address List when system is addressable: Coordinate with final system programming.
5. System Wiring Diagrams: Include system diagrams unique to Project. Show connections for all devices, components, and auxiliary equipment. Include diagrams for equipment and for system with all terminals and interconnections identified.
6. Details of surge-protection devices and their installation.
7. Sensor detection patterns and adjustment ranges.
C. Design Data: Include method of operation and supervision of each component and each type of circuit. Show sequence of operations for manually and automatically initiated system or equipment inputs. Description must cover this specific Project; manufacturer's standard descriptions for generic systems are unacceptable.

1.5 INFORMATIONAL SUBMITTALS
A. Qualification Data: For installer and testing agency.
B. Field quality-control reports.
1. Anchor inspection reports documenting inspections of built-in and cast-in anchors.
C. Product Warranty: Sample of special warranty.
D. Field Test Reports: Test plan and report defining all tests required to ensure that system meets technical, operational, and performance specifications within 60 days of date of Contract award.
E. Evaluation Reports: Examination reports documenting inspections of substrates, areas, and conditions.

1.6 CLOSEOUT SUBMITTALS
A. Operation and Maintenance Data: For intrusion detection system to include in emergency, operation, and maintenance manuals. Include the following:
1. Data for each type of product, including features and operating sequences, both automatic and manual.
2. Master control-unit hardware and software data.

1.7 QUALITY ASSURANCE
A. Installer Qualifications:
1. An employer of workers, at least one of whom is a Certified Alarm Technician, Level 1.
2. Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
3. Installation Supervision: Installation shall be under the direct supervision of Technician who shall be present at all times when Work of this Section is performed at Project site.

1.8 PROJECT CONDITIONS
A. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
1. Altitude: Sea level to 4000 feet (1220 m).
2. Master Control Unit: Rated for continuous operation in an ambient of 60 to 85 deg F (16 to 29 deg C) and a relative humidity of 20 to 80 percent, noncondensing.
3. Interior, Controlled Environment: System components, except master control unit, installed in temperature-controlled interior environments shall be rated for continuous operation in ambients of 36 to 122 deg F (2 to 50 deg C) dry bulb and 20 to 90 percent relative humidity, noncondensing.
4. Interior, Uncontrolled Environment: System components installed in non-temperature-controlled interior environments shall be rated for continuous operation in ambients of **0 to** 122 deg F (minus 18 to plus 50 deg C) dry bulb and 20 to 90 percent relative humidity, noncondensing.
5. Exterior Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambients of minus 30 to plus 122 deg F (minus 34 to plus 50 deg C) dry bulb and 20 to 90 percent relative humidity, condensing. Comply with UL 294 and UL 639 for outdoor-use equipment. Rate for continuous operation when exposed to rain as specified in NEMA 250, winds up to 85 mph (137 km/h).
6. Hazardous Environment: System components located in areas where fire or explosion hazards may exist because of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers or flyings shall be rated, listed, and installed according to NFPA 70.

1.9 WARRANTY
A. Special Warranty: Manufacturer's standard form in which manufacturer and Installer agree to repair or replace components of intrusion detection devices and equipment that fail in materials or workmanship within specified warranty period.
1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 FUNCTIONAL DESCRIPTION OF SYSTEM
A. Description: Hard-wired, modular, microprocessor-based controls, intrusion sensors and detection devices, and communication links to perform monitoring, alarm, and control functions.
B. Supervision: System components shall be continuously monitored for normal, alarm, **supervisory,** and trouble conditions. Indicate deviations from normal conditions at any location in system. Indication includes identification of device or circuit in which deviation has occurred and whether deviation is an alarm or malfunction.
1. Alarm Signal: Display at master control unit and actuate audible and visual alarm devices.
2. Trouble Condition Signal: Distinct from other signals, indicating that system is not fully functional. Trouble signal shall indicate system problems such as battery failure, open or shorted transmission line conductors, or control-unit failure.
3. Supervisory Condition Signal: Distinct from other signals, indicating an abnormal condition as specified for the particular device or control unit.
C. System Control: Master control unit shall directly monitor intrusion detection units and connecting wiring.
D. System shall automatically reboot program without error or loss of status or alarm data after any system disturbance.
E. Operator Commands:
1. Help with System Operation: Display all commands available to operator. Help command, followed by a specific command, shall produce a short explanation of the purpose, use, and system reaction to that command.
2. Acknowledge Alarm: To indicate that alarm message has been observed by operator.
3. System Test: Initiate system-wide operational test.
4. Print reports.
F. Timed Control at Master Control Unit: Allow automatically timed "secure" and "access" functions of selected protected zones.

Retain first paragraph below if alarm signals control lights, elevators, intercom, sound, or CCTV components. Revise to suit Project design and systems integration specifications. Coordinate with Drawings.

G. Automatic Control of Related Systems: Alarm or supervisory signals from certain intrusion detection devices control the following functions in related systems:
1.
2. Switch signal to selected monitor from CCTV camera in vicinity of sensor signaling an alarm.
H. Response Time: Two seconds between actuation of any alarm and its indication at master control unit.
I. Circuit Supervision: Supervise all signal and data transmission lines, links with other systems, and sensors from master control unit. Indicate circuit and detection device faults with both protected zone and trouble signals, sound a distinctive audible tone, and illuminate an LED. Maximum permissible elapsed time between occurrence of a trouble condition and indication at master control unit is 20 seconds. Initiate an alarm in response to opening, closing, shorting, or grounding of a signal or data transmission line.

2.2 SYSTEM COMPONENT REQUIREMENTS
A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
B. Control Units, Devices, and Communications with Monitoring Station: Listed and labeled by a qualified testing agency for compliance with SIA CP-01.
C. Comply with NFPA 70.
D. Surge Protection: Protect components from voltage surges originating external to equipment housing and entering through power, communication, signal, control, or sensing leads. Include surge protection for external wiring of each conductor entry connection to components.
1. Minimum Protection for Communication, Signal, Control, and Low-Voltage Power Lines: Listed and labeled by a qualified testing agency for compliance with NFPA 731.
E. Intrusion Detection Units: Listed and labeled by a qualified testing agency for compliance with UL 639.
F. Interference Protection: Components shall be unaffected by radiated RFI and electrical induction of 15 V/m over a frequency range of 10 to 10,000 MHz and conducted interference signals up to 0.25-V rms injected into power supply lines at 10 to 10,000 MHz.

2.3 ENCLOSURES
A. Interior Sensors: Enclosures that protect against dust, falling dirt, and dripping noncorrosive liquids.
B. Interior Electronics: NEMA 250, Type 12.
C. Exterior Electronics: NEMA 250, **fiberglass or stainless steel**.
D. Screw Covers: Where enclosures are readily accessible, secure with security fasteners of type appropriate for enclosure.

2.4 SECURE AND ACCESS DEVICES
A. Keypad and Display Module: Arranged for entering and executing commands for system-status changes and for displaying system-status and command-related data.

2.5 DOOR AND WINDOW SWITCHES
A. Description: Balanced-magnetic switch, complying with UL 634, installed on frame with integral overcurrent device to limit current to 80 percent of switch capacity. Bias magnet and minimum of two encapsulated reed switches shall resist compromise from introduction of foreign magnetic fields.
B. Flush-Mounted Switches: Unobtrusive and flush with surface of door and window frame.
C. Overhead Door Switch: Balanced-magnetic type, listed for outdoor locations, and having door-mounted magnet and floor-mounted switch unit.

2.6 PIR SENSORS
A. Listed and labeled by a qualified testing agency for compliance with SIA PIR-01.
B. Description: Sensors detect intrusion by monitoring infrared wavelengths emitted from a human body within their protected zone and by being insensitive to general thermal variations.
1. Wall-Mounted Unit Maximum Detection Range: 125 percent of indicated distance for individual units and not less than 50 feet (15 m).
2. Ceiling-Mounted Unit Spot-Detection Pattern: Full 360-degree conical.
3. Ceiling-Mounted Unit Pattern Size: 84-inch (2135-mm) diameter at floor level for units mounted 96 inches (2440 mm) above floor; 18-foot (5.5-m) diameter at floor level for units mounted 25 feet (7.6 m) above floor.
C. Device Performance:
1. Sensitivity: Adjustable pattern coverage to detect a change in temperature of 2 deg F (1 deg C) or less, and standard-intruder movement within sensor's detection patterns at any speed between 0.3 to 7.5 fps (0.09 to 2.3 m/s) across two adjacent segments of detector's field of view.
2. Test Indicator: LED test indicator that is not visible during normal operation. When visible, indicator shall light when sensor detects an intruder. Locate test enabling switch under sensor housing cover.

2.7 ACOUSTIC-TYPE, GLASS-BREAK SENSORS
A. Listed and labeled by a qualified testing agency for compliance with SIA GB-01.
B. Device Performance: Detect unique, airborne acoustic energy spectrum caused by breaking glass.
1. Sensor Element: Microprocessor-based, digital device to detect breakage of plate, laminate, tempered, and wired glass while rejecting common causes of false alarms. Detection pattern shall be at least a 20-foot (6-m) range.
2. Hookup Cable: Factory installed, not less than 72 inches (1830 mm).
3. Activation Indicator: LED on sensor housing that lights when responding to vibrations, remaining on until manually reset at master control unit].
4. Control Unit: Integral with sensor housing or in a separate assembly, locally adjustable by control under housing cover.
5. Glass-Break Simulator: A device to induce frequencies into protected glass pane that simulate breaking glass without causing damage to glass.

2.8 VIBRATION SENSORS
A. Listed and labeled by a qualified testing agency for compliance with SIA GB-01.
B. Description: A sensor control unit and piezoelectric crystal sensor elements that are designed to be rigidly mounted to structure being protected.
C. Device Performance: Detects high-frequency vibrations generated by use of such tools as oxyacetylene torches, oxygen lances, high-speed drills and saws, and explosives that penetrate a structure while not responding to any other mechanical vibration.
1. Circular detection pattern, with at least a 72-inch (1830-mm) radius on protected structure.
2. Hookup Cable: Factory installed, not less than 72 inches (1830 mm).
3. Control Unit: Integral with sensor housing or in a separate assembly, locally adjustable by control under housing cover.
4. Glass-Break Simulator: A device to induce frequencies to protected glass pane that simulate breaking glass without causing damage to glass.

2.9 MICROWAVE-PIR DUAL-TECHNOLOGY SENSORS
A. Description: Single unit combining a sensor that detects changes in microwave signals and a PIR sensor that detects changes in ambient level of infrared emissions caused by standard-intruder movement within detection pattern.
B. Listed and labeled by a qualified testing agency for compliance with SIA PIR-01.
C. Device Performance: An alarm is transmitted when either sensor detects a standard intruder within a period of three to eight seconds from when the other sensor detects a standard intruder.
1. Minimum Detection Pattern: A room 20 by 30 feet (6 by 9 m).
2. PIR Sensor Sensitivity: Adjustable pattern coverage to detect a change in temperature of 2 deg F (1 deg C) or less, and standard-intruder movement within sensor's detection patterns at any speed between 0.3 to 7.5 fps (0.09 to 2.3 m/s) across two adjacent segments of detector's field of view.
3. Microwave Sensor Sensitivity: Adjustable, able to detect standard-intruder movement within sensor's detection pattern at any speed between 0.3 to 7.5 fps (0.09 to 2.3 m/s). Sensor sensitivity adjustments shall be accessible only when sensor housing is removed, and sensors shall comply with 47 CFR 15.
4. Activation Indicator: LED indicator shall not be visible during normal operation. Indicator shall light when sensor detects a standard intruder. Locate test enabling switch under sensor housing cover.

2.10 DURESS-ALARM SWITCHES
A. Description: A switch with a shroud over the activating lever that allows an individual to covertly send a duress signal to master control unit, with no visible or audible indication when activated. Switch shall lock in activated position until reset with a key.
1. Minimum Switch Rating: 50,000 operations.
2. Foot Rail: Foot activated, floor mounting.
3. Push Button: Finger activated, suitable for mounting on horizontal or vertical surface.

2.11 MASTER CONTROL UNIT
A. Description: Supervise sensors and detection subsystems and their connecting communication links, status control (secure or access) of sensors and detector subsystems, activation of alarms and supervisory and trouble signals, and other indicated functions.
1. System software and programs shall be held in flash electrically erasable programmable read-only memory (EEPROM), retaining the information through failure of primary and secondary power supplies.
2. Include a real-time clock for time annotation of events on the event recorder and printer.
3. Addressable initiation devices that communicate device identity and status.
B. Console Controls and Displays: Arranged for interface between human operator at master control unit and addressable system components including annunciation and supervision. Display alarm, supervisory, and component status messages and the programming and control menu.
1. Annunciator and Display: LCD, three line(s) of 40 characters, minimum.
2. Keypad: Arranged to permit entry and execution of programming, display, and control commands.
3. Control-Unit Network: Automatic communication of alarm, status changes, commands, and other communications required for system operation. Communication shall return to normal after partial or total network interruption such as power loss or transient event. Total or partial signaling network failures shall identify the failure and record the failure at the annunciator display and at the system printer.
4. Field Device Network: Communicate between the control unit and field devices of the system. Communications shall consist of alarm, network status, and status and control of field-mounted processors. Each field-mounted device shall be interrogated during each interrogation cycle.
5. Operator Controls: Manual switches and push-to-test buttons that do not require a key to operate. Prevent resetting of alarm, supervisory, or trouble signals while alarm or trouble condition persists. Include the following:
a. Acknowledge alarm.
b. Silence alarm.
c. System reset.
d. LED test.
6. Timing Unit: Solid state, programmable, 365 days.
7. Confirmation: Relays, contactors, and other control devices shall have auxiliary contacts that provide confirmation signals to system for their on or off status. Software shall interpret such signals, display equipment status, and initiate failure signals.
8. Alarm Indication: Audible signal sounds and an LED lights at master control unit identifying the addressable detector originating the alarm.
9. Alarm activation sounds a bell or siren and strobe.
C. Power Supply Circuits: Master control units shall provide power for remote power-consuming detection devices. Circuit capacity shall be adequate for at least a 25 percent increase in load.
D. UPS: UPS shall be sized to provide a minimum of six hours of master control-unit operation.
E. Cabinet: Lockable, steel enclosure arranged so operations required for testing, normal operation, and maintenance are performed from front of enclosure. If more than a single cabinet is required to form a complete control unit, provide exactly matching modular enclosures. Accommodate all components and allow ample gutter space for field wiring. Identify each enclosure by an engraved, laminated, phenolic-resin nameplate. Lettering on enclosure nameplate shall not be less than 1 inch (25 mm) high. Identify, with permanent labels, individual components and modules within cabinets.
F. Transmission to Monitoring Station: A communications device to automatically transmit alarm, supervisory, and trouble signals to the monitoring station, operating over a standard voice grade telephone leased line. Comply with UL 1635.

2.12 AUDIBLE AND VISUAL ALARM DEVICES
A. Bell: 10 inches (254 mm) in diameter, rated to produce a minimum sound output of 84 dB at 10 feet (3 m) from master control unit.
1. Enclosure: Weather-resistant steel box equipped with tamper switches on cover and on back of box.
B. Klaxon Weatherproof Motor-Driven Hooter: UL listed, rated to produce a minimum sound output of 120 dB at 3 feet (1 m), plus or minus 3 dB, at a frequency of 470 Hz. Rated for intermittent use: two minutes on and five minutes off.
1. Designed for use in industrial areas and in high-noise, severe-weather marine environments.
C. Siren: 30-W speaker with siren driver, rated to produce a minimum sound output of 103 dB at 10 feet (3 m) from master control unit.
1. Enclosure: Weather-resistant steel box with tamper switches on cover and on back of box.
D. Strobe: Xenon light complying with UL 1638, with a clear polycarbonate lens.
1. Light Output: 115 cd, minimum.
2. Flash Rate: 60 per minute.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of intrusion detection.
B. Examine roughing-in for embedded and built-in anchors to verify actual locations of intrusion detection connections before intrusion detection installation.
C. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of intrusion detection.
D. Inspect built-in and cast-in anchor installations, before installing intrusion detection, to verify that anchor installations comply with requirements. Prepare inspection reports.
1. Remove and replace anchors where inspections indicate that they do not comply with requirements. Reinspect after repairs or replacements are made.
2. Perform additional inspections to determine compliance of replaced or additional anchor installations. Prepare inspection reports.
E. For material, whose orientation is critical for its performance as a ballistic barrier, verify installation orientation.
F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 SYSTEM INSTALLATION
A. Comply with UL 681 and NFPA 731.
1. Comply with requirements for seismic-restraint devices .
B. Install wall-mounted equipment, with tops of cabinets not more than 72 inches (1830 mm) above the finished floor.
C. Connecting to Existing Equipment: Verify that existing perimeter security system is operational before making changes or connections.
1. Connect new equipment to existing control panel in existing part of the building.
2. Connect new equipment to existing monitoring equipment at the Supervising Station.
D. Security Fasteners: Where accessible to inmates, install intrusion detection components using security fasteners with head style appropriate for fabrication requirements, strength, and finish of adjacent materials except that a maximum of two different sets of tools shall be required to operate security fasteners for Project.

3.3 WIRING INSTALLATION
A. Wiring Method: Install wiring in metal raceways except in accessible indoor ceiling spaces and in interior hollow gypsum board partitions where cable may be used. Conceal raceways and wiring except in unfinished spaces and as indicated. Minimum conduit size shall be 1/2 inch (13 mm). Control and data transmission wiring shall not share conduit with other building wiring systems.
B. Wiring Method: Cable, concealed in accessible ceilings, walls, and floors when possible.
C. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points. Use lacing bars and distribution spools. Separate power-limited and non-power-limited conductors as recommended in writing by manufacturer. Install conductors parallel with or at right angles to sides and back of enclosure. Connect conductors that are terminated, spliced, or interrupted in any enclosure associated with intrusion system to terminal blocks. Mark each terminal according to system's wiring diagrams. Make all connections with approved crimp-on terminal spade lugs, pressure-type terminal blocks, or plug connectors.
D. Wires and Cables:
1. Conductors: Size as recommended in writing by system manufacturer unless otherwise indicated.
2. Control and Signal Transmission Conductors: as recommended in writing by system manufacturer unless otherwise indicated.
E. Splices, Taps, and Terminations: Make connections only on numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures.
F. Install power supplies and other auxiliary components for detection devices at control units unless otherwise indicated or required by manufacturer. Do not install such items near devices they serve.
G. Identify components with engraved, laminated-plastic or metal nameplate for master control unit and each terminal cabinet, mounted with corrosion-resistant screws.

3.4 IDENTIFICATION
A. Identify system components, wiring, cabling, and terminals.
B. Install instructions frame in a location visible from master control unit.

3.5 GROUNDING
A. Ground the master control unit and associated circuits; comply with IEEE 1100. Install a ground wire from main service ground to master control unit.
B. Ground system components and conductor and cable shields to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments.
C. Signal Ground Terminal: Locate at main equipment rack or cabinet. Isolate from power system and equipment grounding.

3.6 FIELD QUALITY CONTROL
A. Pretesting: After installation, align, adjust, and balance system and perform complete pretesting to determine compliance of system with requirements in the Contract Documents. Correct deficiencies observed in pretesting. Replace malfunctioning or damaged items with new ones and retest until satisfactory performance and conditions are achieved. Prepare forms for systematic recording of acceptance test results.
1. Report of Pretesting: After pretesting is complete, provide a letter certifying that installation is complete and fully operable; include names and titles of witnesses to preliminary tests.
B. Perform tests and inspections.
1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
C. Tests and Inspections: Comply with provisions in NFPA 731, Ch. 9, "Testing and Inspections."
1. Inspection: Verify that units and controls are properly labeled and interconnecting wires and terminals are identified.
2. Test Methods: Intrusion detection systems and other systems and equipment that are associated with detection and accessory equipment shall be tested according to Table "Test Methods" and Table "Test Methods of Initiating Devices."
D. Documentation: Comply with provisions in NFPA 731, Ch. 4, "Documentation."
E. Tag all equipment, stations, and other components for which tests have been satisfactorily completed.

3.7 ADJUSTING
A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to three visits to Project during other-than-normal occupancy hours for this purpose.

3.8 DEMONSTRATION
A. Train Owner's maintenance personnel to adjust, operate, and maintain the intrusion detection system. Comply with documentation provisions in NFPA 731, Ch. 4, "Documentation and User Training."

END OF SECTION 281600

REVISION	DESCRIPTION	INITIAL	DATE

SEAL:

CONSULTANT:

BrokawDesign
PO BOX 3103
ROHNERT PARK, CA 94928
WWW.BROKAWDESIGN.COM

PROJECT:

COUNTY OF MENDOCINO
INTRUSION DETECTION SYSTEM
ADDITIVE ALTERNATE BID
405 Observatory Ave.,
Ukiah, CA 95482

ASSESSORS PARCEL NO x

BID ALTERNATE #1

SHEET TITLE:

INTRUSION SYSTEM SPEC

ISSUE DATE:	MAY 25, 2021
PREPARATION AND REVIEW	
DRAWN BY:	MB
DESIGNER:	MB
PROJ MGR:	-
PEER REVIEW:	CAC

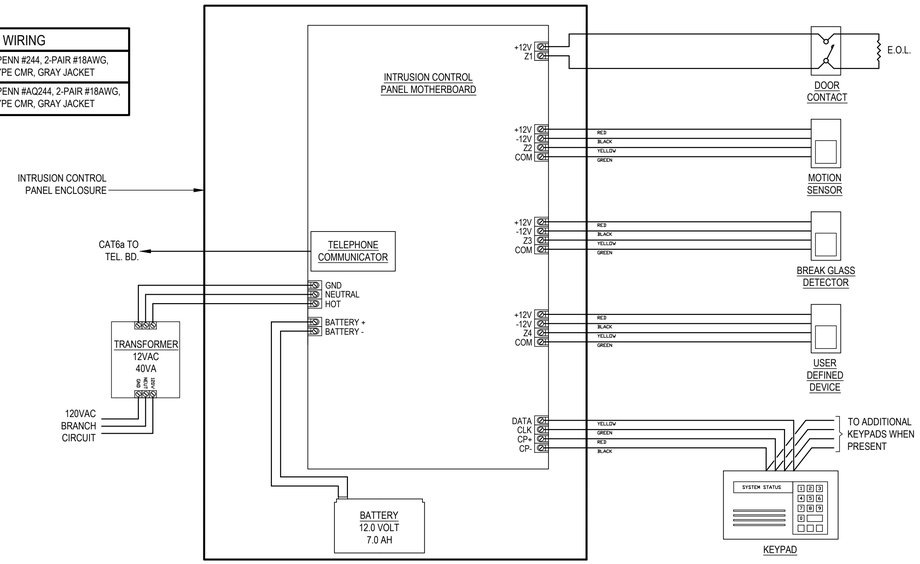
SHEET NUMBER:

E101

ADDITIVE ALTERNATE BID

A PROJECT PHOTO - (NORTH)
NOT TO SCALE

WIRING
INDOOR: WEST PENN #244, 2-PAIR #18AWG, UNSHIELDED, TYPE CMR, GRAY JACKET
INDOOR: WEST PENN #AQ244, 2-PAIR #18AWG, UNSHIELDED, TYPE CMR, GRAY JACKET



1 SECURITY SYSTEM WIRING DIAGRAM
NOT TO SCALE

PROJECT DESCRIPTION

BURGLAR ALARM AND SECURITY SYSTEM THAT HAS THE FOLLOWING SPECIFICATIONS.

A. SYSTEM WILL INCLUDE MOTION DETECTORS THROUGHOUT THE BUILDING TO COVER ALL AREAS OF POTENTIAL ENTRY.

B. SYSTEM TO HAVE 2 KEYPADS AS PER ATTACHED DRAWING ON MAINTENANCE & SERVICE

C. REQUISITION FORM AND UP TO 18 INPUTS INCLUDING DOOR AND WINDOW SENSORS, MOTION SENSORS AND PANIC BUTTONS.

D. SYSTEM WILL HAVE 4 PANIC BUTTONS LOCATED AT 3 VETERAN'S SERVICE OFFICER'S DESKS AND ONE AT THE FRONT LOBBY RECEPTION DESK FOR A TOTAL OF 4 PANIC BUTTONS.

E. SYSTEM TO HAVE DOOR AND WINDOW SENSORS

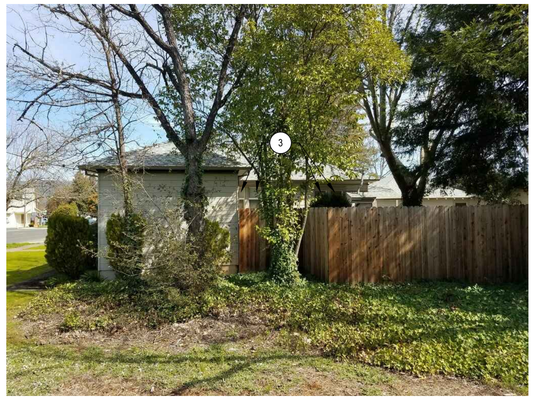
F. SYSTEM TO BE MONITORED BY ALARM COMPANY 24/7.

G. SYSTEM TO DISARM 0600 HOURS, M-TH, AUTO ARM 2000 HOURS, M-TH. REMAIN ARMED FRIDAY, SATURDAY, SUNDAY.

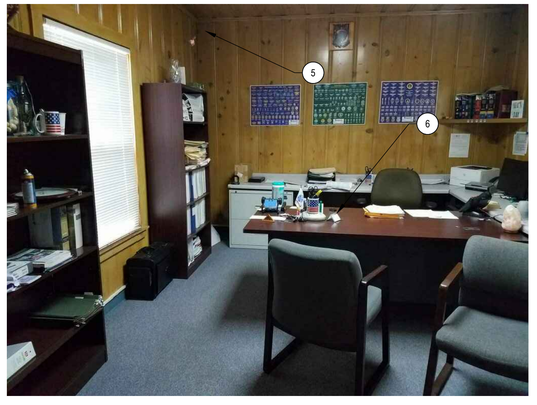
PROJECT NOTES

1. PROVIDE SECURITY SYSTEM MAIN CONTROL PANEL.
2. PROVIDE SECURITY SYSTEM KEYPAD.
3. PROVIDE WINDOW BREAK GLASS SENSOR PROTECTION.
4. PROVIDE DOOR CONTACT SENSOR PROTECTION.
5. PROVIDE MOTION SENSOR PROTECTION.
6. PROVIDE PANIC BUTTON. COORDINATE CONCEALED LOCATION WITH THE COUNTY OF MENDOCINO
7. PROVIDE AUDIBLE ALARM DEVICE (HORN).

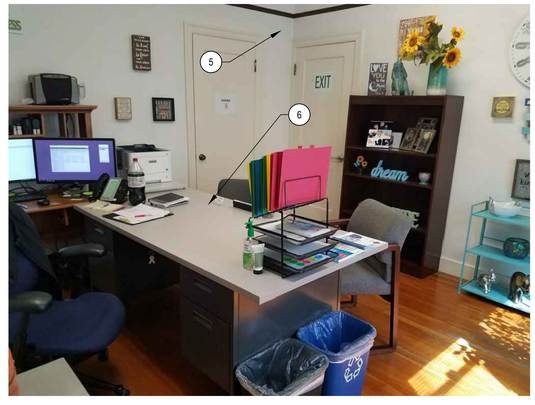
B PROJECT PHOTO - (EAST)
NOT TO SCALE



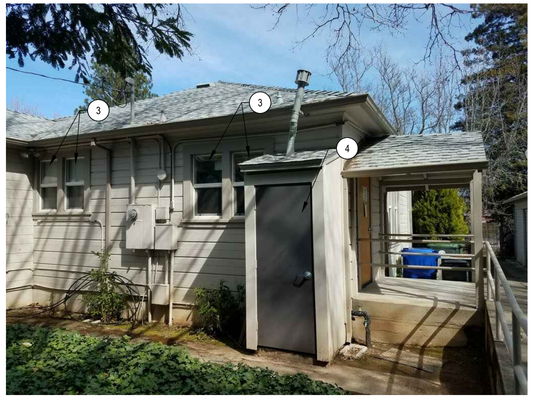
D PROJECT PHOTO - (WEST)
NOT TO SCALE



F PROJECT PHOTO
NOT TO SCALE

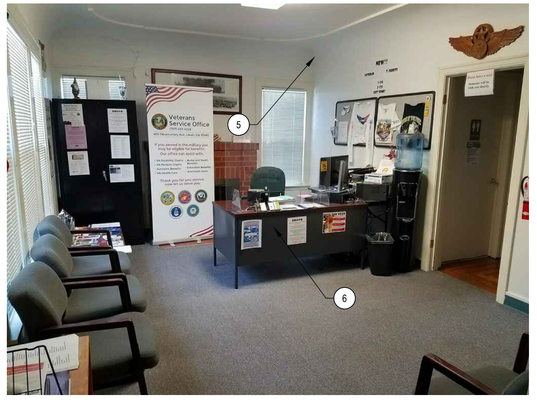


H PROJECT PHOTO
NOT TO SCALE

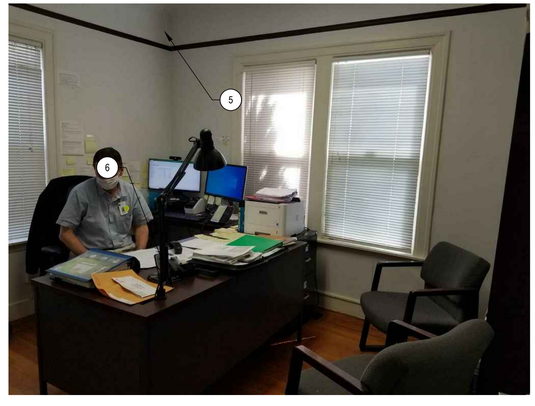


C PROJECT PHOTO - (WEST)
NOT TO SCALE

E PROJECT PHOTO - (SOUTH)
NOT TO SCALE



G PROJECT PHOTO
NOT TO SCALE



I PROJECT PHOTO
NOT TO SCALE

REVISION	DESCRIPTION	INITIAL	DATE

SEAL:

CONSULTANT:

BrokawDesign

PO BOX 3103
ROHNERT PARK, CA 94928

WWW.BROKAWDESIGN.COM

PROJECT:

COUNTY OF MENDOCINO
INTRUSION DETECTION SYSTEM

ADDITIVE ALTERNATE BID

405 Observatory Ave.,
Ukiah, CA 95482

ASSESSORS PARCEL NO x

BID ALTERNATE #1

SHEET TITLE:

INTRUSION DIAGRAM AND PHOTOS

ISSUE DATE:	MAY 25, 2021
PREPARATION AND REVIEW	
DRAWN BY:	MB
DESIGNER:	MB
PROJ MGR:	.
PEER REVIEW:	CAC

SHEET NUMBER:

E102