

SITE IMPROVEMENT PLANS COURTHOUSE INFRASTRUCTURE PROJECT FINAL CONSTRUCTION MENDOCINO COUNTY COURTHOUSE

UKIAH, CA

PREPARED FOR

NORTH COAST RAILROAD AUTHORITY (NCRA)

PREPARED BY

RAU AND ASSOCIATES INC.

CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

JULY 2017

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ELECTRICAL SHEETS – CITY OF UKIAH

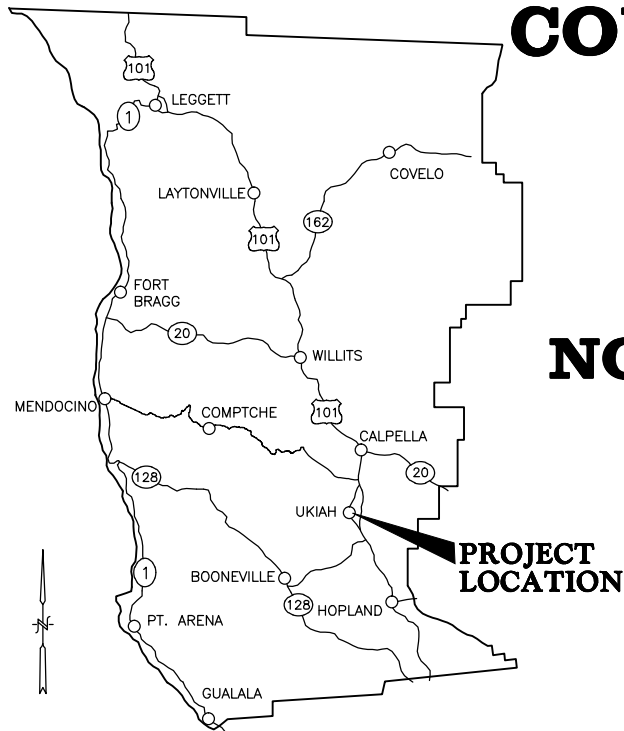
1 of 4	COVER, NOTES AND DETAIL SHEET
2 of 4	SUBSTRUCTURE PLAN
3 of 4	SUBSTRUCTURE PLAN
4 of 4	STREET LIGHT PLAN AND DETAILS

CERTIFICATION:

I CERTIFY THAT THIS PROJECT WAS DESIGNED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES



GEORGE C. RAU, R.C.E. 21908 EXP. 09/30/17 DATE _____



MENDOCINO COUNTY MAP

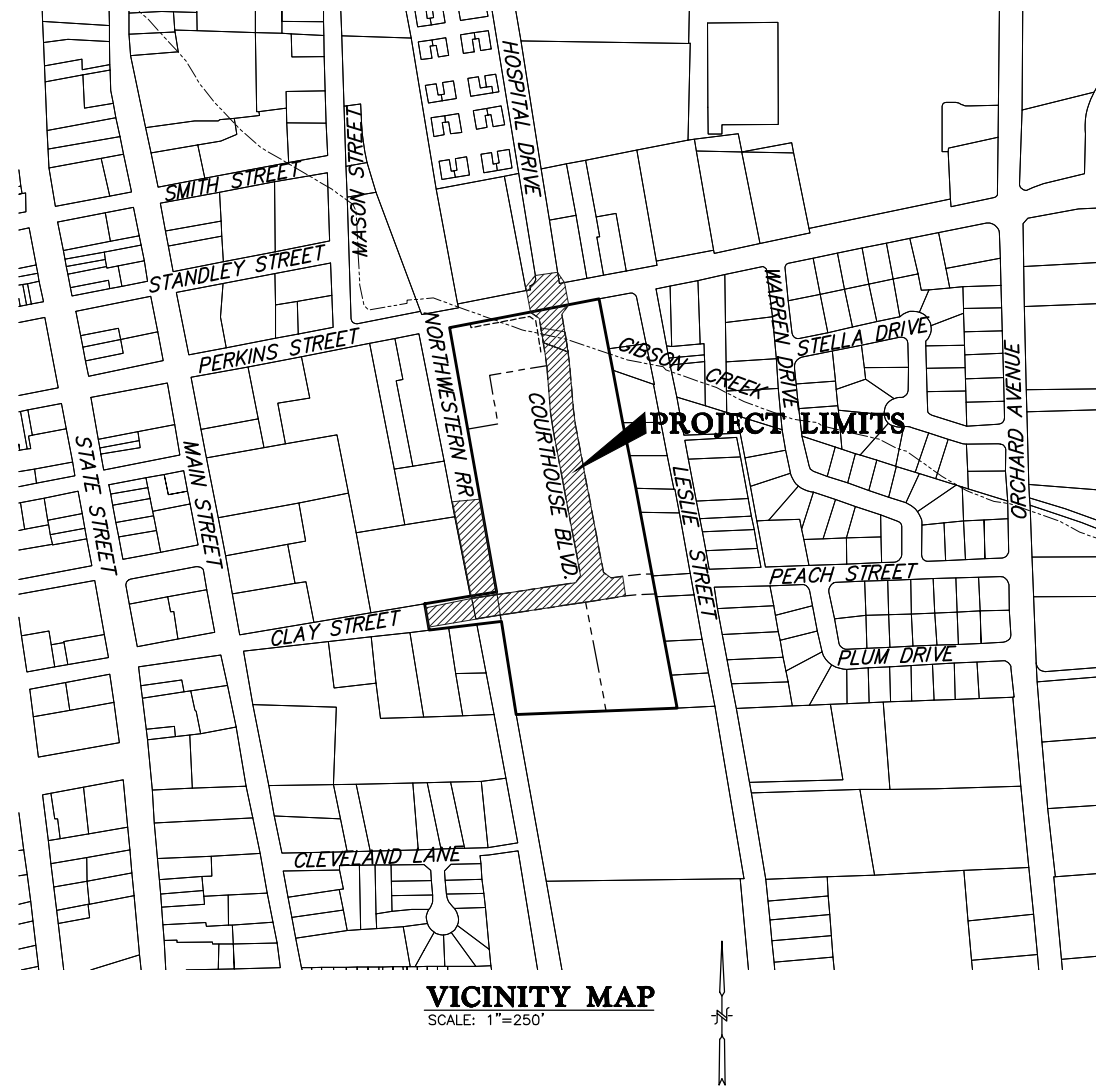
NOT TO SCALE

MENDOCINO COUNTY



CALIFORNIA MAP

NOT TO SCALE



VICINITY MAP

SCALE: 1"=250'

Xrefs: R11003.5_TB_Final.dwg
Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Cover_Sht_Final.dwg Plot Date: Jul 26, 2018 at 2:23pm

DATE:	REVISION:	BY:	COMPUTER NO: SERVER 2\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\CIVIL\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Cover_Sht_Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW: SHT01 COVER
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

VERIFY SCALE

BAR REPRESENTS THREE INCHES ON ORIGINAL

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

RAU AND ASSOCIATES INC.

CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: COVER SHEET

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 1 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION

CONSTRUCTION GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF UKIAH (HEREAFTER "CITY") SPECIFICATIONS, CITY OF UKIAH STANDARD DRAWINGS, AND THE PROJECT PLANS.
- THE CONTRACTOR SHALL PROVIDE, PROCURE AND PAY FOR ALL PERMITS REQUIRED TO CARRY ON AND COMPLETE THE WORK. THESE INCLUDE, BUT ARE NOT LIMITED TO, ENCROACHMENT PERMITS, CURRENT BUSINESS LICENSE, AND VALID AND PROPER CONTRACTOR'S LICENSE. ENCROACHMENT PERMITS MUST BE LOCATED ON THE JOB SITE DURING WHICH TIME CONTRACTOR IS WORKING THERE.
- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. DIAL (TOLL FREE) 1-800-642-2444.
- ANY AND ALL INSPECTION FEES SHALL BE DUE AND PAYABLE TO THE CITY BEFORE ANY WORK BEGINS.
- CONSTRUCTION MATERIALS AND EQUIPMENT SHALL BE NEW AND OF A QUALITY EQUAL TO THAT SPECIFIED OR APPROVED. WORK SHALL BE DONE AND COMPLETED IN A THOROUGH AND WORKMANLIKE MANNER.
- WHENEVER ANY MATERIAL OR EQUIPMENT IS INDICATED OR SPECIFIED BY PATENT OR PROPRIETARY NAME OR BY THE NAME OF THE MANUFACTURER, SUCH SPECIFICATION SHALL BE CONSIDERED AS USED FOR DESCRIBING THE MATERIAL OR EQUIPMENT DESIRED AND SHALL BE CONSIDERED AS FOLLOWED BY THE WORDS "OR APPROVED EQUIVALENT". THE CONTRACTOR MAY OFFER ANY MATERIAL OR EQUIPMENT WHICH SHALL BE SUBSTANTIALLY EQUIVALENT IN EVERY RESPECT TO THAT SPECIFIED, PROVIDED THAT WRITTEN APPROVAL IS FIRST OBTAINED FROM THE NCRA.
- MATERIALS SHALL BE SO STORED TO ENSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE WORK. THEY SHALL BE SO LOCATED AND DISPOSED THAT PROMPT AND PROPER INSPECTION THEREOF MAY BE MADE.
- THE CITY SHALL HAVE THE RIGHT TO TAKE POSSESSION OF AND USE ANY COMPLETED OR PARTIALLY COMPLETED PORTIONS OF THE WORK, NOTWITHSTANDING THE TIME FOR COMPLETING THE ENTIRE WORK OR SUCH PORTIONS WHICH MAY NOT HAVE EXPIRED; BUT SUCH TAKING POSSESSION AND USE SHALL NOT BE DEEMED AN ACCEPTANCE OF ANY WORK NOT COMPLETED IN ACCORDANCE WITH THE PROJECT PLANS. IF SUCH PRIOR USE INCREASES THE COST OF OR DELAYS THE WORK, THE CONTRACTOR SHALL BE ENTITLED TO SUCH EXTRA COMPENSATION OR EXTENSION OF TIME, OR BOTH, AS THE NCRA DETERMINE.

SEWER CONSTRUCTION NOTES

- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. DIAL TOLL FREE 1-800-642-2444.
- ALL SEWER TAPS INTO LIVE MANHOLES OR MAINS SHALL BE MADE BY THE CITY, AT THE NCRA EXPENSE, UNLESS OTHER ARRANGEMENTS HAVE BEEN APPROVED.
- NEW SEWER MAINS ARE TO BE CLEANED AND FREE OF DEBRIS, BY MEANS OF AN APPROVED METHOD (E.G. RUBBER BALL WASHED THROUGH, HYDRO-CLEANER, ETC.) PRIOR TO TESTS FOR LEAKAGE AND DEFLECTION.
- PIPE DEFLECTION SHALL BE TESTED BY USE OF A STEEL MANDREL, WITH MAXIMUM ALLOWABLE DEFLECTION OF 5%. CONTRACTOR SHALL PROVIDE A STEEL MANDREL AT THE JOB SITE, FOR EVERY DIAMETER OF SEWER MAIN CONSTRUCTED.
- SEWER MAINS SHALL BE TESTED FOR SOUNDNESS AND TIGHTNESS (LEAKAGE) BY THE USE OF LOW-PRESSURE AIR TEST OR A HYDROSTATIC TEST WITH A MINIMUM OF 10' OF HEAD AND ANY PORTION OF THE MAIN TO BE TESTED. CONTRACTOR SHALL HAVE ON-SITE, A MEANS BY WHICH TO TEST THE MAIN.
- MANHOLES SHALL BE COATED INSIDE WITH ONE (1) COAT OF THORO-SEAL, XYPEX OR APPROVED EQUAL.
- MANHOLES SHALL BE SUBJECT TO HYDROSTATIC TESTS, BY FILLING WITH WATER AND MEASURING THE DROP IN WATER LEVEL OVER A 30 MINUTE PERIOD. PRIOR TO THE 30 MINUTE TEST, MANHOLES SHALL BE FILLED WITH WATER FOR A MINIMUM 24 HOUR PERIOD.
- ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH STANDARD DRAWING NO. 220 PRIOR TO TESTS FOR LEAKAGE AND DEFLECTION.
- SEWER CONSTRUCTION IN PUBLIC RIGHT-OF-WAY AND ON SITE (EXCEPT THROUGHOUT THE BUILDING ITSELF) SHALL BE SUBJECT TO FIELD INSPECTIONS BY THE CITY.

STREET STRUCTURAL SECTION NOTES

- DESIGN TRAFFIC INDEX = 8.0
- MINIMUM R-VALUE - TOP 0.5 FEET, SUBGRADE = 25
- CLASS 2 AGGREGATE BASE R-VALUE = 78

CONTACT INFORMATION

CITY OF UKIAH
PUBLIC WORKS DEPARTMENT
300 SEMINARY DRIVE
UKIAH, CA 95482
(707) 463-6280
TIM ERIKSEN

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GEORGE RAU

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(707) 523-1010
MATT KENNEDY

GEOTECHNICAL ENGINEERING
CRAWFORD AND ASSOCIATES, INC.
100 NORTH PINE STREET
UKIAH, CA 95482
RYAN HOUGHTON
(707) 240-4400

ELECTRICAL ENGINEERING
CITY OF UKIAH
ELECTRIC UTILITY DEPARTMENT
UTILITY DESIGN SERVICES, LLC
(707) 380-5803
AL SMATSKY

BRIDGE DESIGN
NRV
8350 MARINA GREENS WAY
SACRAMENTO, CA 95826
(707)884-9551
ROBERT VALENTINE

ABBREVIATIONS

AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ALT	ALTERNATE
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CL	CENTERLINE
CP	CONTROL POINT
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EXIST,(E)	EXISTING
FES	FLARED END SECTION
FG	FINISHED GRADE
FHWA	FEDERAL HIGHWAY ADMINISTRATION
F&C	FRAME AND COVER
FL	FLOW LINE
GB	GRADE BREAK
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
LF	LINEAR FOOT
LT	LEFT
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
(P)	PROPOSED
PC	POINT OF CURVATURE
PGL	PROPOSED GRADE LINE
PCC	PORTLAND CEMENT CONCRETE
PM	POST MILE
PMP	PERMEABLE MATERIAL
PT	POINT OF TANGENT
PVI	POINT OF VERTICAL INTERSECTION
PL	PROPERTY LINE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
Rt	RIGHT
ROW	RIGHT OF WAY
SC	SAW CUT
STA	STATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
VAR	VARIABLE
VC	VERTICAL CURVE

WATER CONSTRUCTION NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF UKIAH SPECIFICATION, CITY OF UKIAH STANDARD DRAWINGS, CALIFORNIA PLUMBING CODE (LATEST EDITION) AND AWWA STANDARDS.
- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. DIAL (TOLL FREE) 1-800-227-2600.
- ALL CONNECTIONS TO LIVE WATER MAINS SHALL BE MADE BY CITY FORCES, AT NCRA EXPENSE.
- AT THE LOCATION OF EACH WATER AND SEWER SERVICE LATERAL, THE LETTERS "W" FOR WATER AND "S" FOR SEWER SHALL BE INSCRIBED INTO THE FACE OF THE CURB. THE LETTERS "W" AND "S" SHALL BE 4" HIGH AND COMPLETELY LEGIBLE.
- METER BOXES AND VAULTS SHALL BE LOCATED OUT OF TRAFFIC LOADING AREAS WHENEVER POSSIBLE AND SET SO THAT THE LIDS ARE CENTERED OVER THE RISER ASSEMBLY.

EXISTING CONDITION LEGEND

	STORM DRAIN MANHOLE		WATER VALVE
	TELECOM/ATT MANHOLE		FIRE HYDRANT
	WATER CHECK VALVE		UTILITY POLE
	BUILDING		GUY WIRE
	STREET LIGHT		BOLLARD
	SIGN (AS INDICATED)		UNDERGROUND FIBER OPTICS
	PLANTER BOX W/DECIDUOUS TREE		OVERHEAD UTILITIES LINES
	ELECTRICAL VAULT		UNDERGROUND UTILITIES LINES
	TELECOM/ATT VAULT		UNDERGROUND WATER
	WATER METER		UNDERGROUND SANITARY SEWER
	SANITARY SEWER CLEANOUT		UNDERGROUND STORM DRAIN
	SANITARY SEWER MANHOLE		INDEX CONTOUR
			INTERMEDIATE CONTOUR
			PAINT STRIPE
			PARKING SPACE DELINEATORS
			DIRECTIONAL DELINEATION AS SHOWN

Xrefs: R11003.5_TB_Final.dwg Plot Date: Jul 26, 2018 at 2:23pm Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Cover_Sht_Final.dwg

DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\CIVIL\FINAL
9/12/17	RAISE SD BY 1'±, MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Cover_Sht_FINAL.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2'±,	MAW	PSVIEW: SHT02 NOTE-SYMBOLS
9/27/17	WATER TO SS PROFILE-RAISE MH#1,ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

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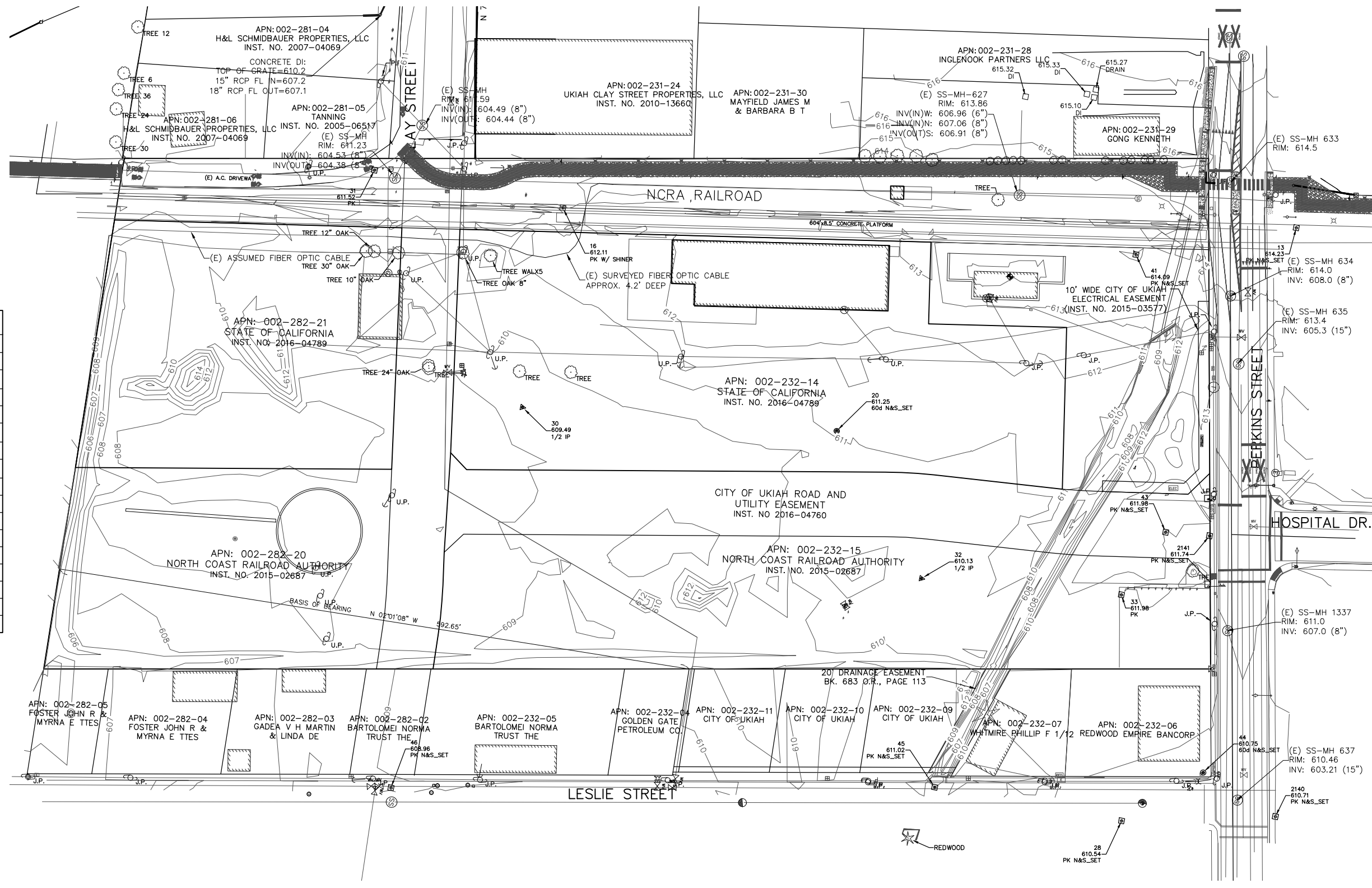
DRAWING: GENERAL NOTES AND SYMBOLS

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 2 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	



FOR CONSTRUCTION



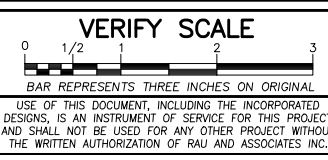
VERTICAL DATUM
 THE ELEVATIONS SHOWN HEREON ARE BASED ON A BENCHMARK SURVEY DISK, ELEVATION=618.10' NGVD 1988, SET VERTICALLY IN THE WEST BRICK WALL OF THE DEPOT STATION BUILDING, 25.82' SOUTH OF NORTHWEST CORNER OF BUILDING AND 3.9' ABOVE FLOOR. IDENTIFIED AS K11168 ON FEMA FLOOD INSURANCE RATE MAP PANEL 1514F; MENDOCINO COUNTY, CALIFORNIA AND INCORPORATED AREAS. COMMUNITY NUMBER 060183 AND 060186; JUNE 2, 2011.

HORIZONTAL DATUM
 COORDINATES ARE BASED ON RECORD OF SURVEY (ASSUMED)

Point #	Northing	Easting	Elevation	Description
13	11,067.7164	9,468.2873	614.23	PK N&S_SET
16	10,394.9693	9,580.8099	612.11	PK W/ SHINER
20	10,684.6088	9,735.5271	611.25	60d N&S_SET
28	11,013.9905	10,040.5411	610.54	PK N&S_SET
30	10,393.5179	9,769.9854	609.49	1/2 IP
31	10,216.3694	9,580.0064	611.52	PK
32	10,788.1260	9,855.1254	610.13	1/2 IP
33	10,973.5615	9,834.3496	611.98	PK
34	11,165.6242	9,451.8035	614.72	PK North of Perkins
41	10,926.2102	9,521.3964	614.09	PK N&S_SET
43	11,002.7874	9,769.3733	611.98	PK N&S_SET
44	11,079.8014	9,981.8659	610.75	60d N&S_SET
45	10,837.5310	10,043.2332	611.02	PK N&S_SET
46	10,341.5047	10,140.6534	608.96	PK N&S_SET
2140	11,153.5353	10,009.2569	610.71	PK N&S_SET
2141	11,043.4395	9,764.8275	611.74	PK N&S_SET

Xrefs: R11003.3_TitledBlock.dwg; R11003.5_TitledBlock.dwg; R11003.5_TB_Phase1.dwg; R11003.5_TB_Final.dwg
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DATE:	REVISION:	BY:	COMPUTER NO: SERVER 2\
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\CIVIL
9/12/17	RAISE SD BY 1", MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.3_Topodwg
9/18/17	RAISE CLAY ST, COURTHOUSE BLVD 0.2±	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482



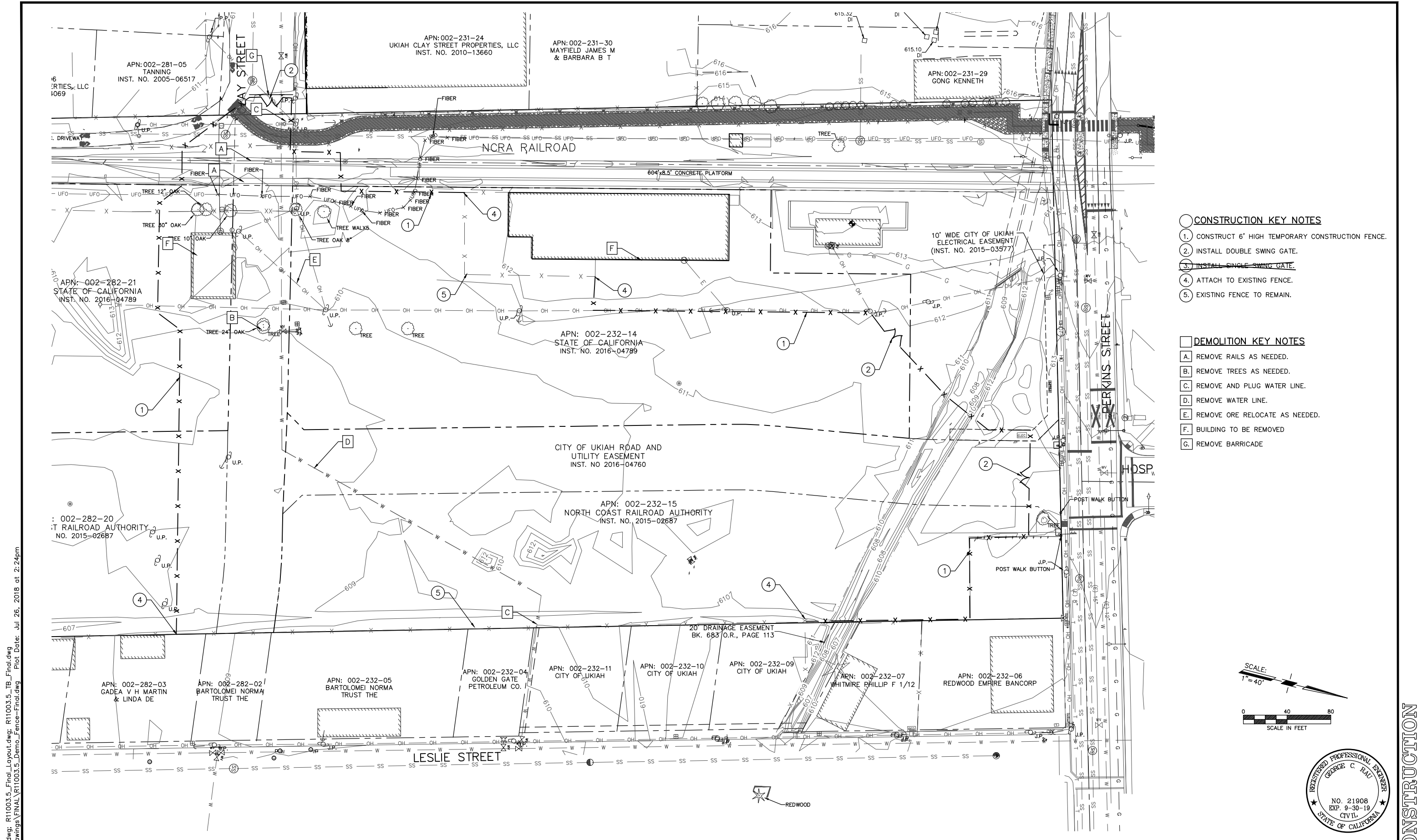
DRAWING: PROJECT CONTROL MAP
 EXISTING CONDITIONS
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date: JULY 2017
 Scale: AS SHOWN
 Drawn: M.A.W.
 Checked: G.C.R.
 Reviewed: G.C.R.
 Job No. R11003.5



SHEET
3
 of
27
SHEETS

FOR CONSTRUCTION



- CONSTRUCTION KEY NOTES**
1. CONSTRUCT 6' HIGH TEMPORARY CONSTRUCTION FENCE.
 2. INSTALL DOUBLE SWING GATE.
 3. INSTALL SINGLE SWING GATE.
 4. ATTACH TO EXISTING FENCE.
 5. EXISTING FENCE TO REMAIN.

- DEMOLITION KEY NOTES**
- A. REMOVE RAILS AS NEEDED.
 - B. REMOVE TREES AS NEEDED.
 - C. REMOVE AND PLUG WATER LINE.
 - D. REMOVE WATER LINE.
 - E. REMOVE ORE RELOCATE AS NEEDED.
 - F. BUILDING TO BE REMOVED
 - G. REMOVE BARRICADE

R11003.5_Topodwg: R11003.5_Final_Layout.dwg: R11003.5_TB_Final.dwg
 R11003.5_Drawing: R11003.5_Demo_Fence-Final.dwg Plot Date: Jul 26, 2018 at 2:24pm

8/29/17 REVISIONS TO CONSTRUCTION FENCE/GATES MAW

DATE:	REVISION:	BY:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW
5/26/18	FINAL CONSTRUCTION PLANS	MAW

VERIFY SCALE

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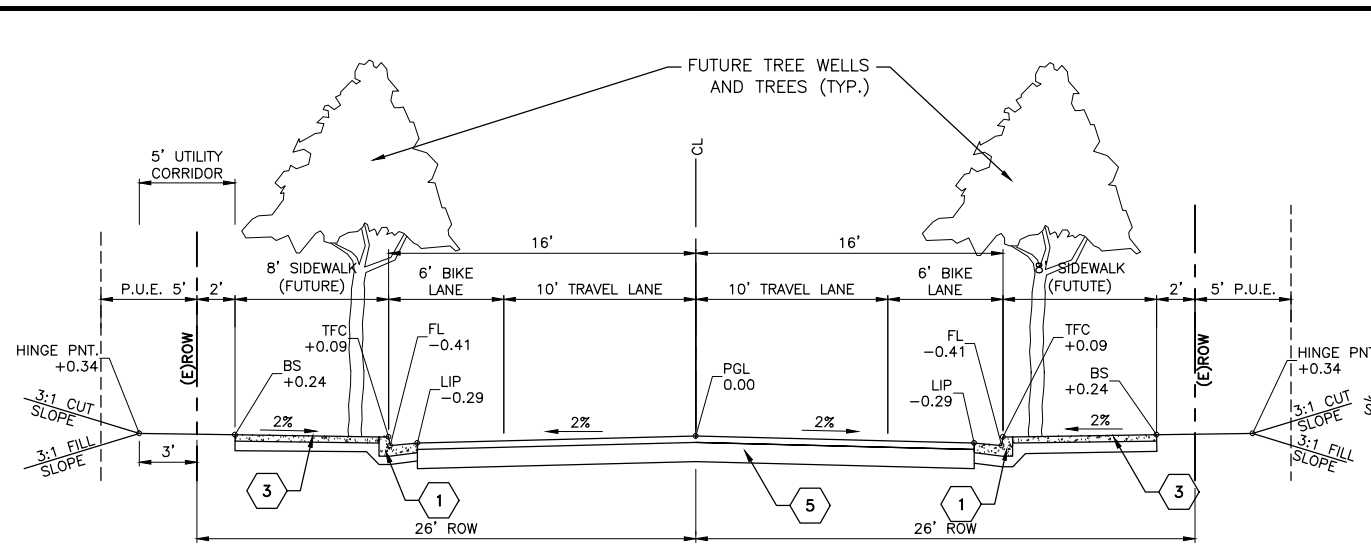
DRAWING: CONSTRUCTION FENCE AND DEMOLITION PLAN

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

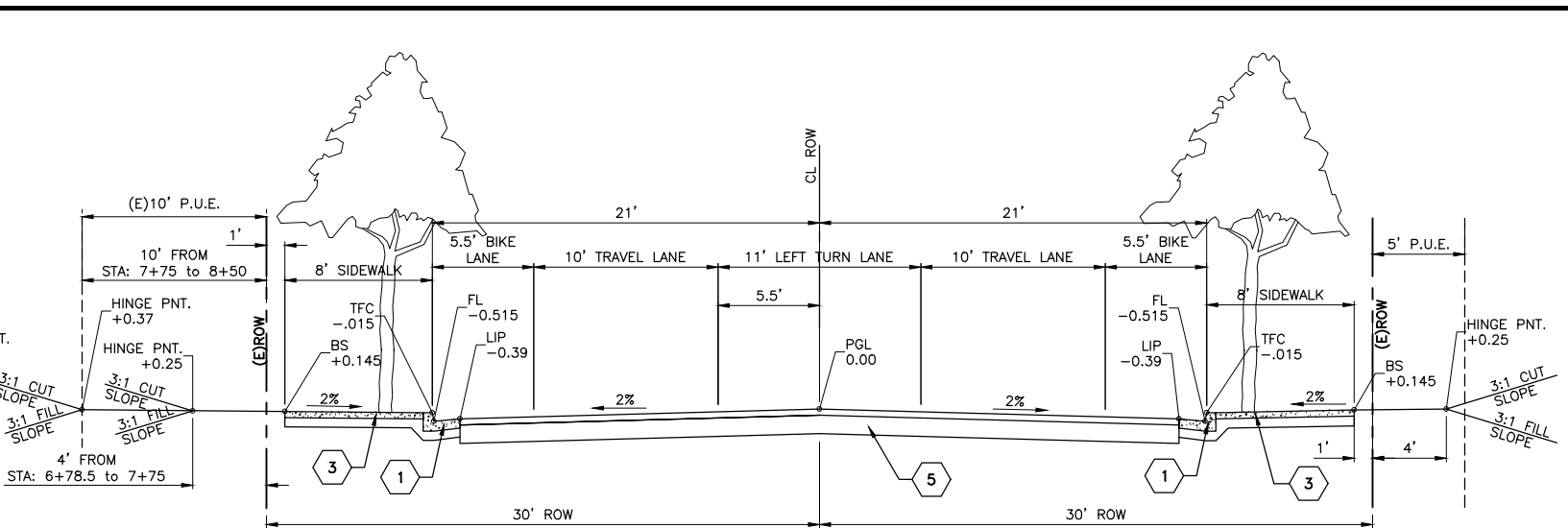
Date: JULY 2017	SHEET
Scale: AS SHOWN	4
Drawn: M.A.W.	of
Checked: G.C.R.	27
Reviewed: G.C.R.	SHEETS
Job No. R11003.5	



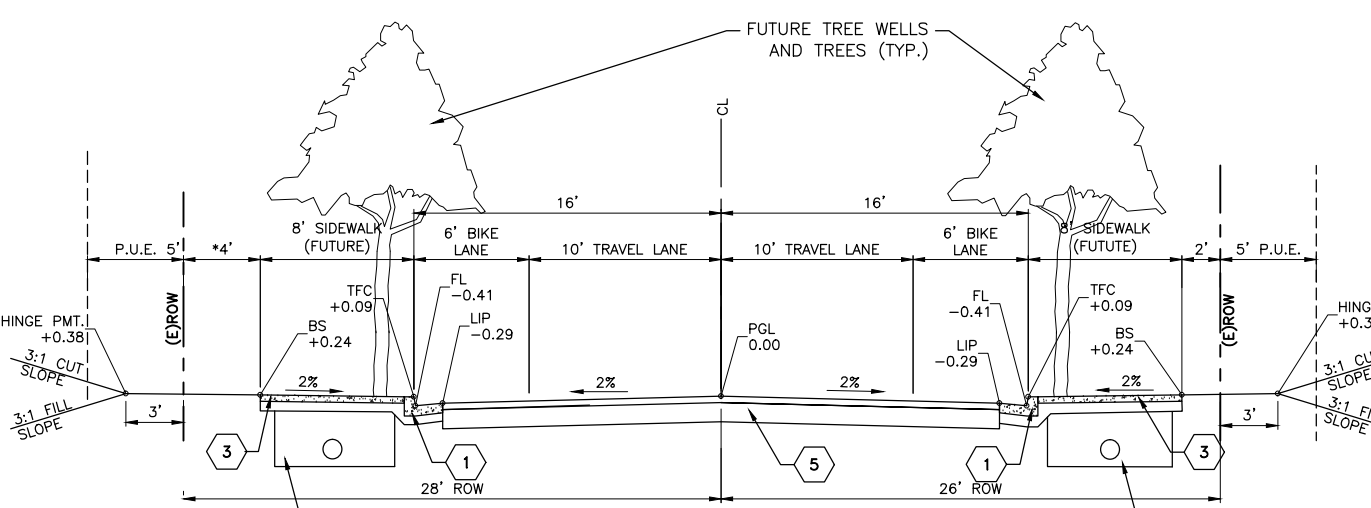
FOR CONSTRUCTION



CLAY STREET—STA: 10+59.21 to 11+07.22

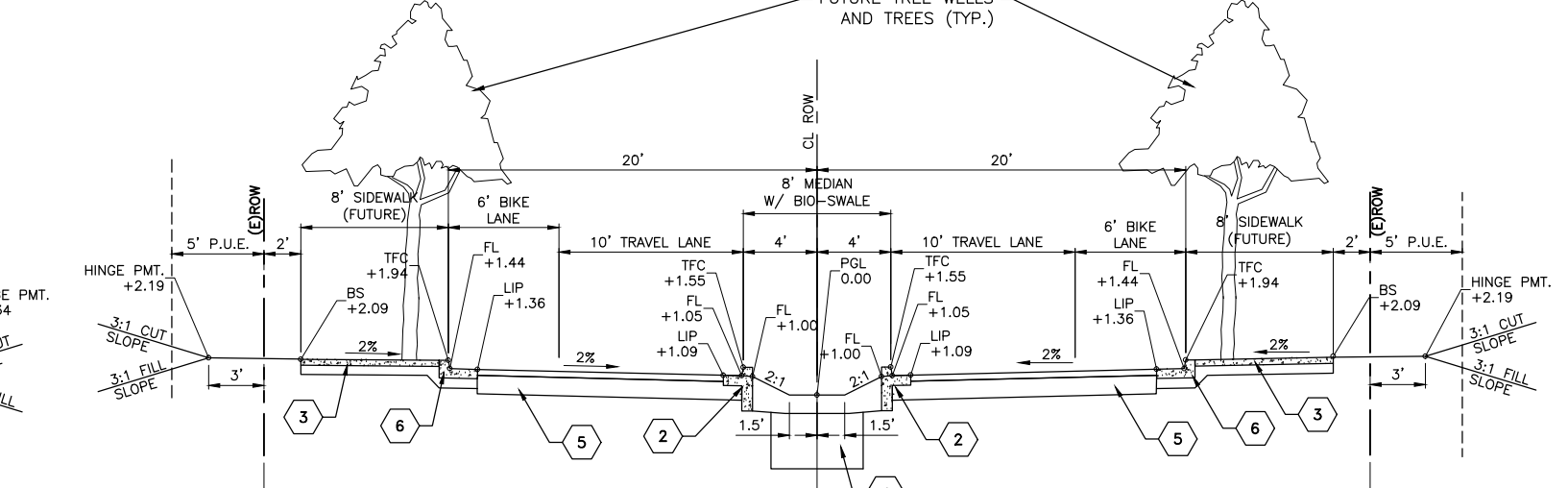


COURTHOUSE BLVD. — STA: 6+78.50 TO 8+50

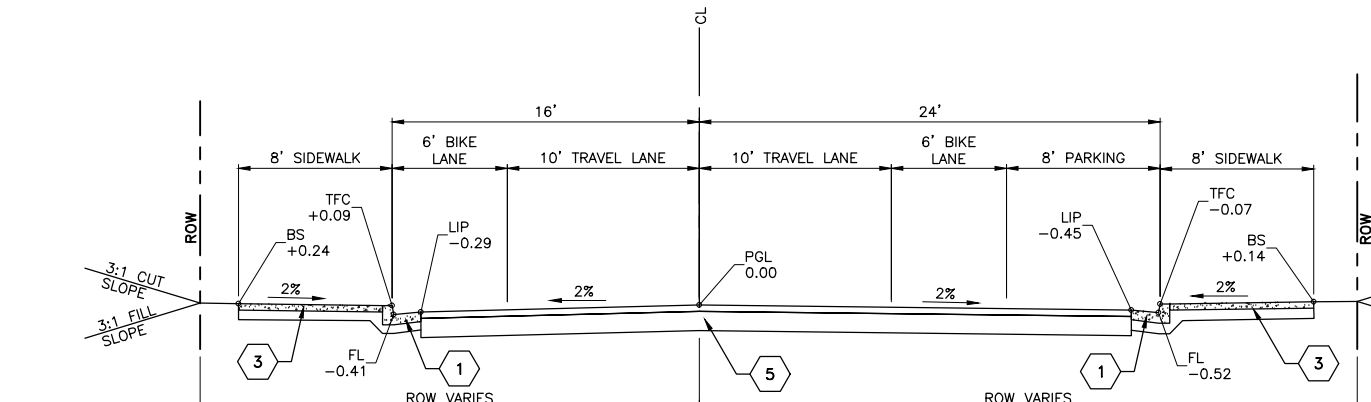


CLAY STREET—STA: 7+00 to 10+59.21

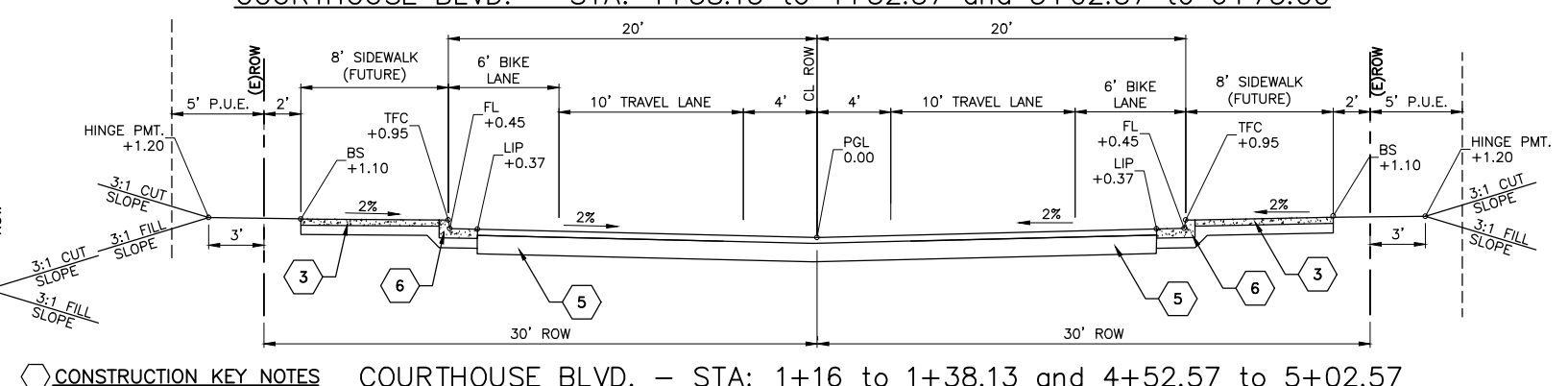
*EXTRA 2' RESERVED FOR RAILROAD CROSSING EQUIPMENT AND SIDEWALK



COURTHOUSE BLVD. — STA: 1+38.13 to 4+52.57 and 5+02.57 to 6+75.00



CLAY STREET—STA: 1+00 to 7+00 (FUTURE)

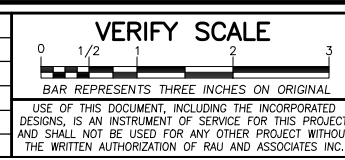


COURTHOUSE BLVD. — STA: 1+16 to 1+38.13 and 4+52.57 to 5+02.57

- CONSTRUCTION KEY NOTES**
- 1. CONSTRUCT CURB AND GUTTER PER DETAIL 2, SHEET 9.
 - 2. CONSTRUCT NOTCHED MEDIAN CURB PER DETAIL 4, SHEET 9.
 - 3. CONSTRUCT SIDEWALK PER DETAIL 1, SHEET 9. (FUTURE EXCEPT COURTHOUSE BLVD STA: 6+78.50 TO 8+50, LEFT (WEST SIDE))
 - 4. INSTALL LOW IMPACT DRAINAGE (LID) PER DETAILS SHEET 12; SEGMENTS SHOWN ON SHEET 11
 - 5. INSTALL 0.40' HMA PAVEMENT OVER 1.0' AGGREGATE BASE.
 - 6. INSTALL VERTICAL CURB PER DETAIL 3, SHEET 9.
 - 7. INSTALL 4'x4' TREE GRATE PER DETAIL X, SHEET 9

Xrefs: R11003.5_TB_Final.dwg Plot Date: Jul 26, 2018 at 2:25pm Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Typicals-Final.dwg

DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Typicals-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2',	MAW	PSVIEW: SHT05-Typical Sections
9/27/17	WATER TO SS PROFILE—RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
 LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
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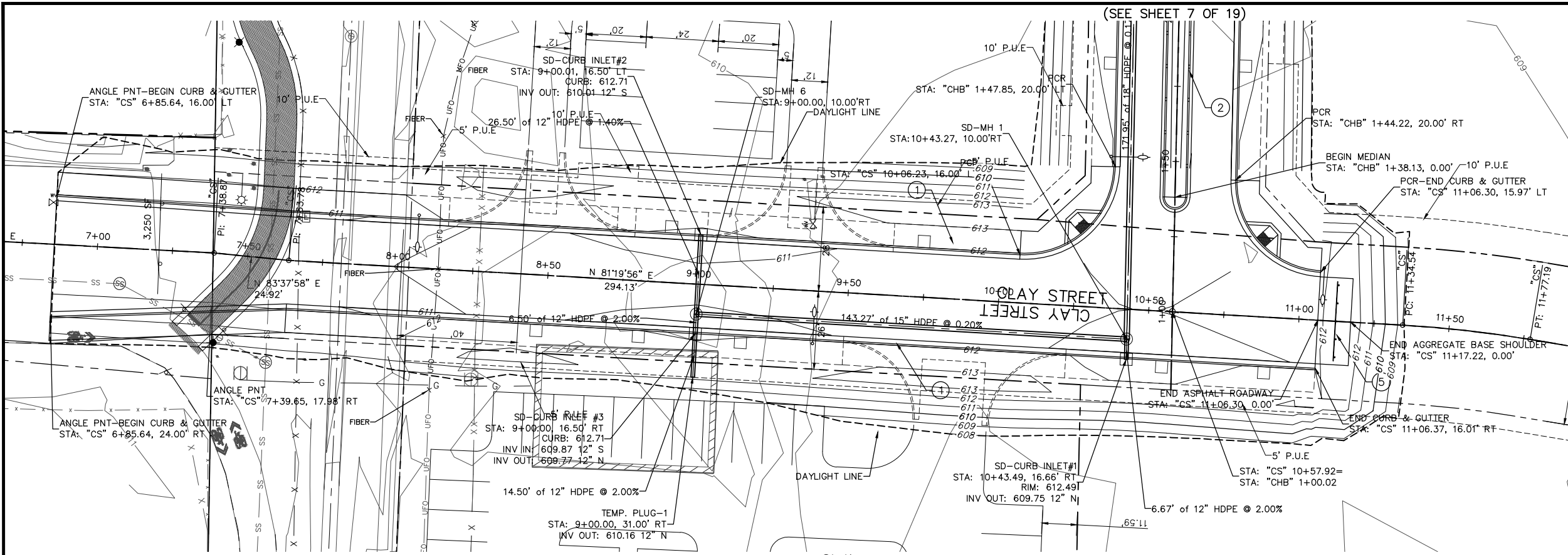
DRAWING: TYPICAL SECTIONS
 PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 5 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.:	R11003.5	



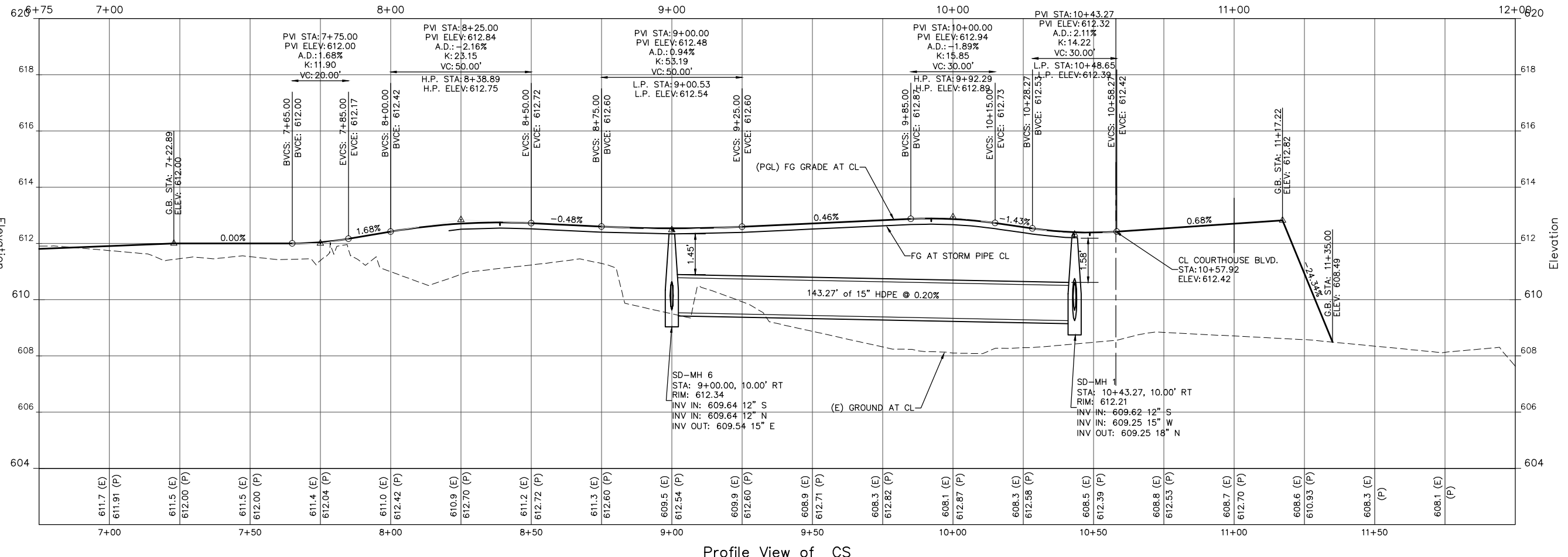
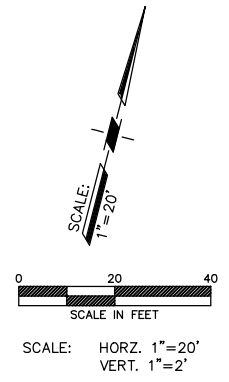
FOR CONSTRUCTION

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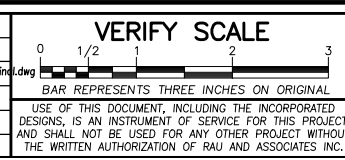


- ROADWAY CONSTRUCTION KEY NOTES**
1. CONSTRUCT CURB AND GUTTER
 2. CONSTRUCT NOTCHED MEDIAN CURB
 3. CONSTRUCT SIDEWALK (FUTURE)
 4. CONSTRUCT ADA RAMP (FUTURE)
 5. CONSTRUCT BARRICADE
 6. CONSTRUCT STORM DRAIN MH PER DETAIL 16, SHEET 15.
 7. CONSTRUCT STORM DRAIN PIPE PER DETAIL 15, SHEET 15.
 8. CONSTRUCT FIELD DRAIN PER LID PLANS.
 9. CONSTRUCT CURB INLET PER DETAILS 12, 13 & 14, SHEET 15.

- NOTES:**
1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.
 2. PROPOSED CONTOURS SHOWN ARE TO SUB-GRADE.



DATE:	REVISION:	BY:	COMPUTER NO. SERVER:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	Z:\R11003.5
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

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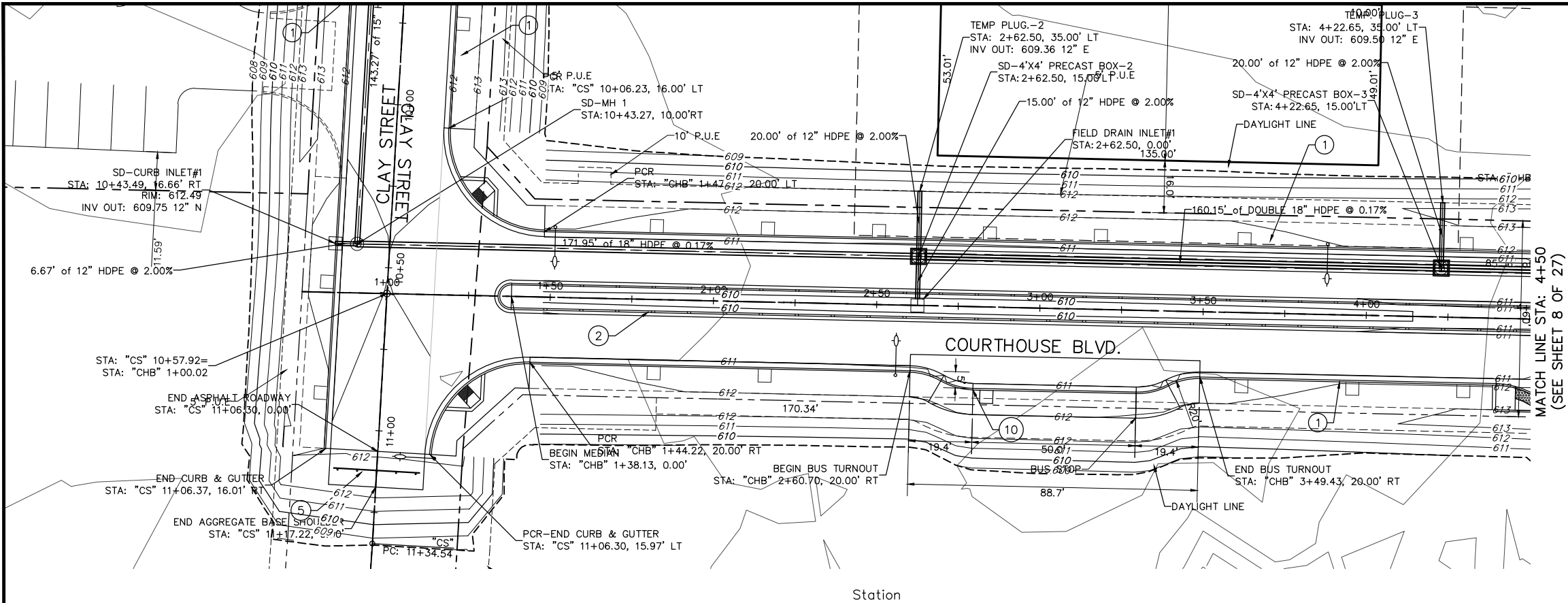
DRAWING: ROADWAY/STORM SEWER
 PLAN and PROFILE-CLAY STREET
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date: JULY 2017
 Scale: AS SHOWN
 Drawn: M.A.W.
 Checked: G.C.R.
 Reviewed: G.C.R.
 Job No. R11003.5

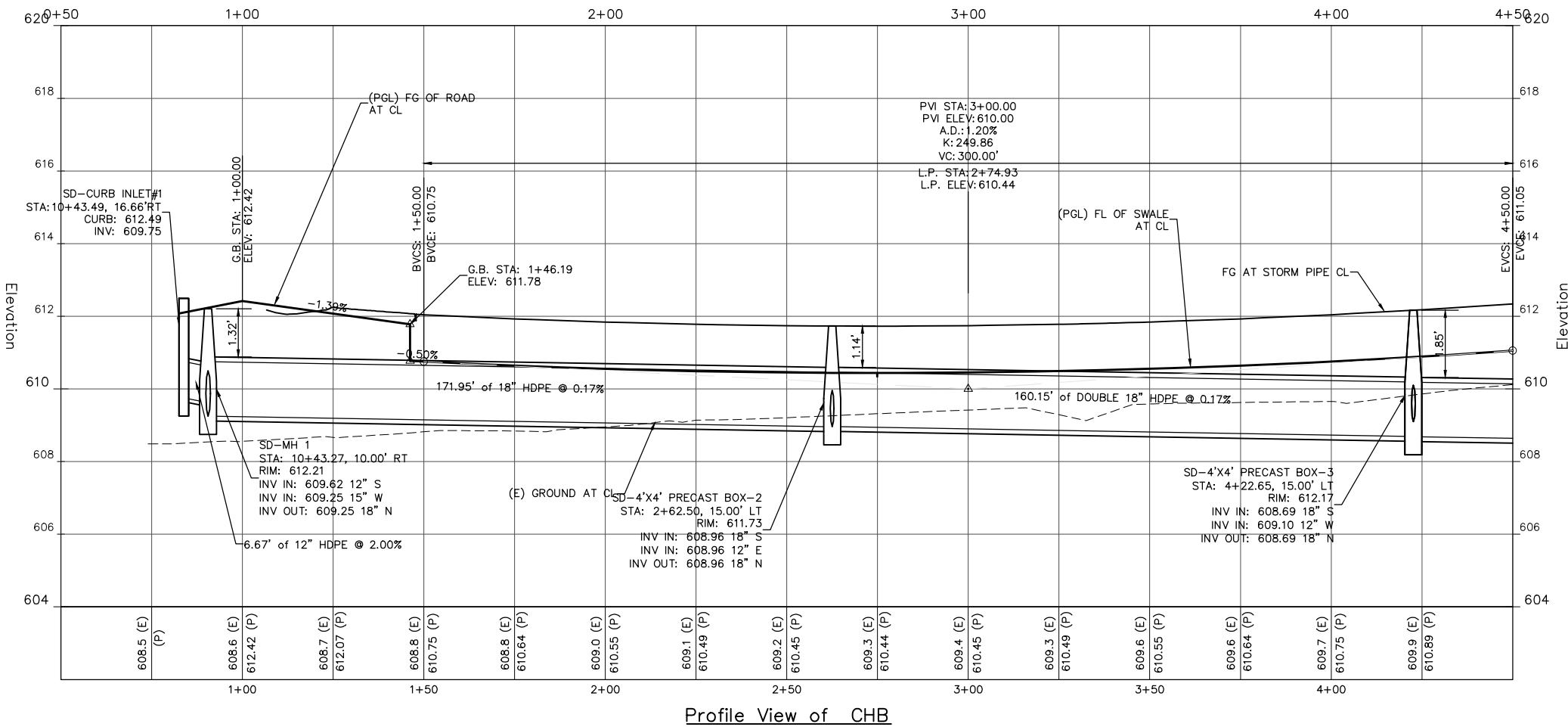
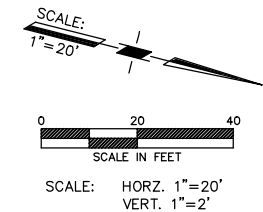


FOR CONSTRUCTION

Xrefs: R11003.5_Topo.dwg; R11003.5_WaterandSewer_Phase1.dwg; NWP_Rail_Trail_Plan_CPUC-Rev.dwg; R11003.5_TB_Final.dwg; R11003.5_Final_Layout.dwg
 P-Path: 2:\R11003.5_Drawings\FINAL\R11003.5_Road_Plan-Profile_Final.dwg Plot Date: Jul 26, 2018 at 2:26pm



- ROADWAY CONSTRUCTION KEY NOTES**
- CONSTRUCT CURB AND GUTTER
 - CONSTRUCT NOTCHED MEDIAN CURB
 - CONSTRUCT SIDEWALK (FUTURE)
 - CONSTRUCT ADA RAMP (FUTURE)
 - CONSTRUCT BARRICADE
 - CONSTRUCT STORM DRAIN MH PER DETAIL 16, SHEET 15.
 - CONSTRUCT STORM DRAIN PIPE PER DETAIL 15, SHEET 15.
 - CONSTRUCT FIELD DRAIN PER DETAIL XX, LID PLANS
 - CONSTRUCT CURB INLET PER DETAILS 12, 13 & 14, SHEET 5.
 - CONSTRUCT BUS TURNOUT



- NOTES:**
- FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.
 - PROPOSED CONTOURS SHOWN ARE TO SUB-GRADE.



DATE:	REVISION:	BY:	COMPUTER NO. SERVER 2:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Road_Plan-Profile-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2+.	MAW	PSVIEW: SH07-Courthouse
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MSS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

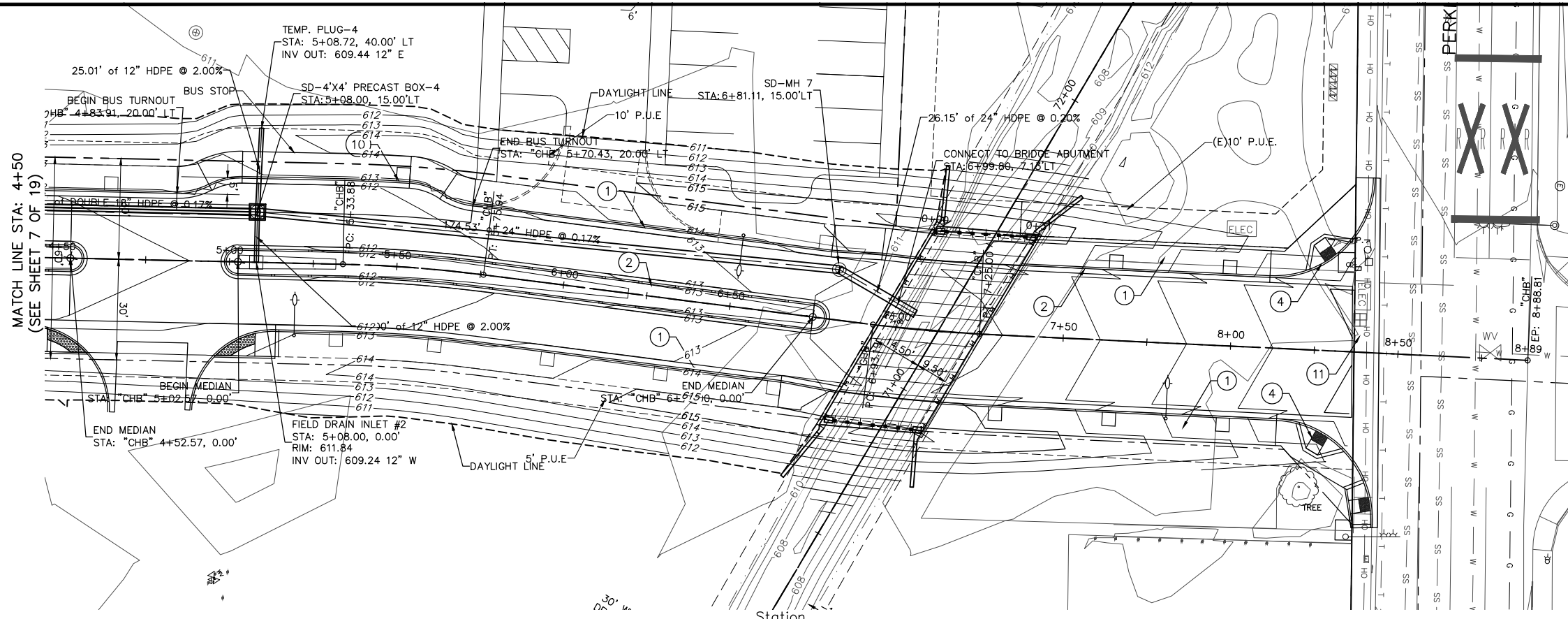
RAU AND ASSOCIATES INC.
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DRAWING: ROADWAY/STORM SEWER PLAN
 and PROFILE-COURTHOUSE BLVD.
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date:	JULY 2017	SHEET
Scale:	AS SHOWN	7
Drawn:	M.A.W.	of
Checked:	G.C.R.	27
Reviewed:	G.C.R.	SHEETS
Job No.:	R11003.5	

FOR CONSTRUCTION

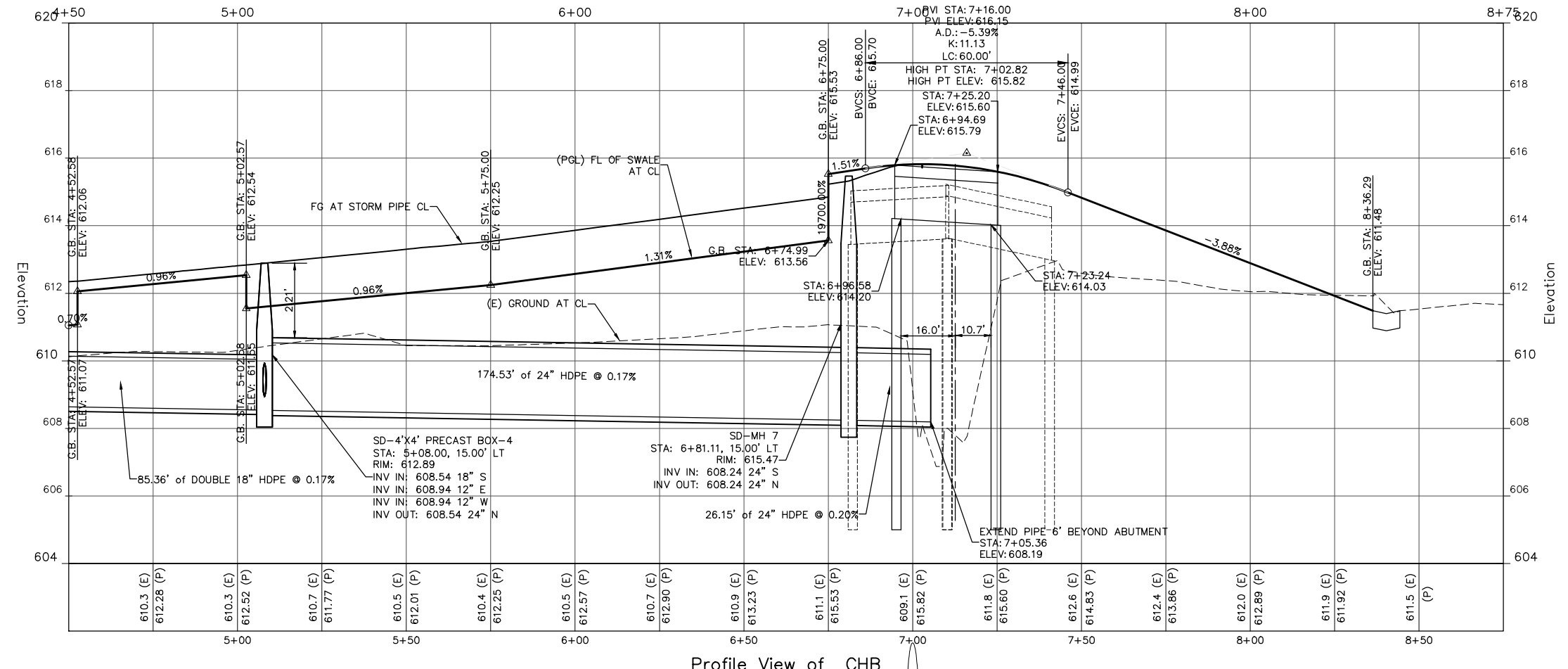
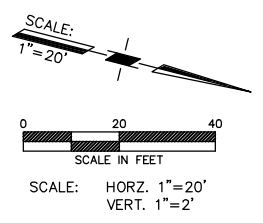
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 Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Road_Plan-Profile_Final.dwg Plot Date: Jul 26, 2018 at 2:26pm



- ROADWAY CONSTRUCTION KEY NOTES**
1. CONSTRUCT CURB AND GUTTER
 2. CONSTRUCT NOTCHED MEDIAN CURB
 3. CONSTRUCT SIDEWALK (FUTURE)
 4. CONSTRUCT ADA RAMP (FUTURE)
 5. CONSTRUCT BARRICADE
 6. CONSTRUCT STORM DRAIN MH PER DETAIL 16, SHEET 15.
 7. CONSTRUCT STORM DRAIN PIPE PER DETAIL 15, SHEET 15.
 8. CONSTRUCT FIELD DRAIN PER DETAIL XX, LID PLANS.
 9. CONSTRUCT CURB INLET PER DETAILS 12, 13 & 14, SHEET 15.
 10. CONSTRUCT BUS TURNOUT
 11. CONSTRUCT 8' WIDE CONCRETE VALLEY GUTTER

GEOTECHNICAL NOTES

1. ROADWAY FILL CONSTRUCTION WITHIN 150 FEET OF EACH ABUTMENT SHALL BE COMPACTED TO 95% (MIN.) WHEN TESTED IN ACCORDANCE WITH ASTM D-1557.
2. THE TOP 0.5 FEET OF IMPORTED SOIL SHALL HAVE AN R-VALUE OF 25 (MIN.)

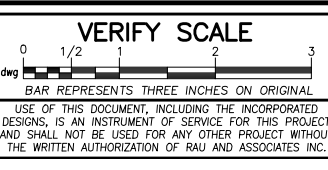


NOTES:

1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.
2. PROPOSED CONTOURS SHOWN ARE TO SUB-GRADE.



DATE:	REVISION:	BY:	COMPUTER NO:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	SERVER 2\R11003.3
9/12/17	RAISE SD BY 1'S, MOVE CLAY ST CURB INLETS	MAW	PATH: \DRAWINGS\FINAL
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2+	MAW	FILE: R11003.3_Road_Plan-Profile_Final.dwg
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	PSVIEW: SH08-Courthouse
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVP:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	MSVIEW:



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

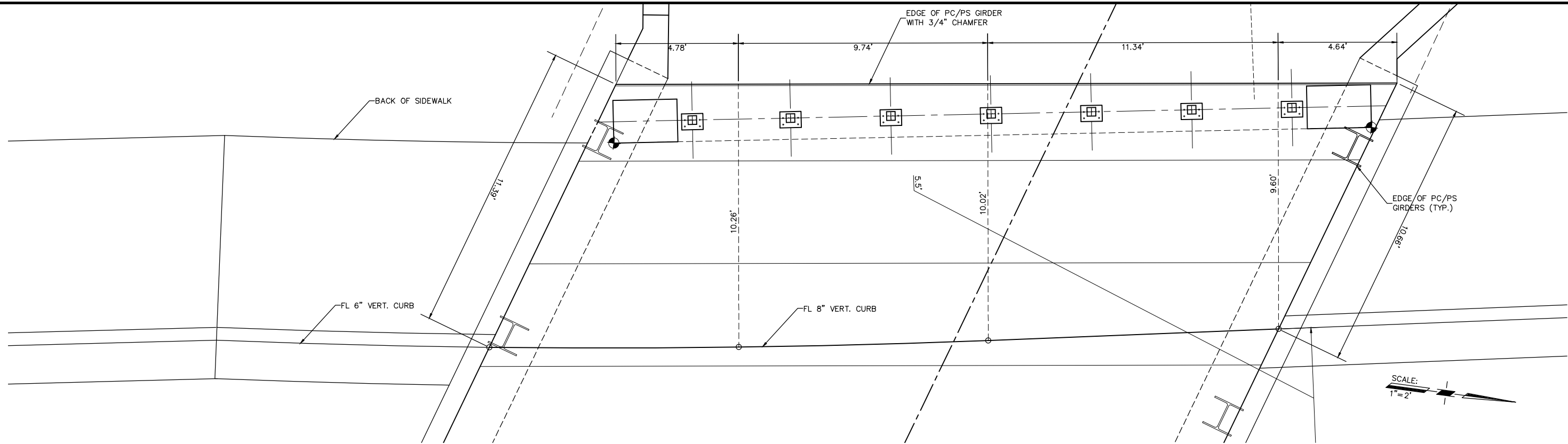
RAU AND ASSOCIATES INC.
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DRAWING: ROADWAY/STORM SEWER PLAN
 and PROFILE COURTHOUSE BLVD.
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

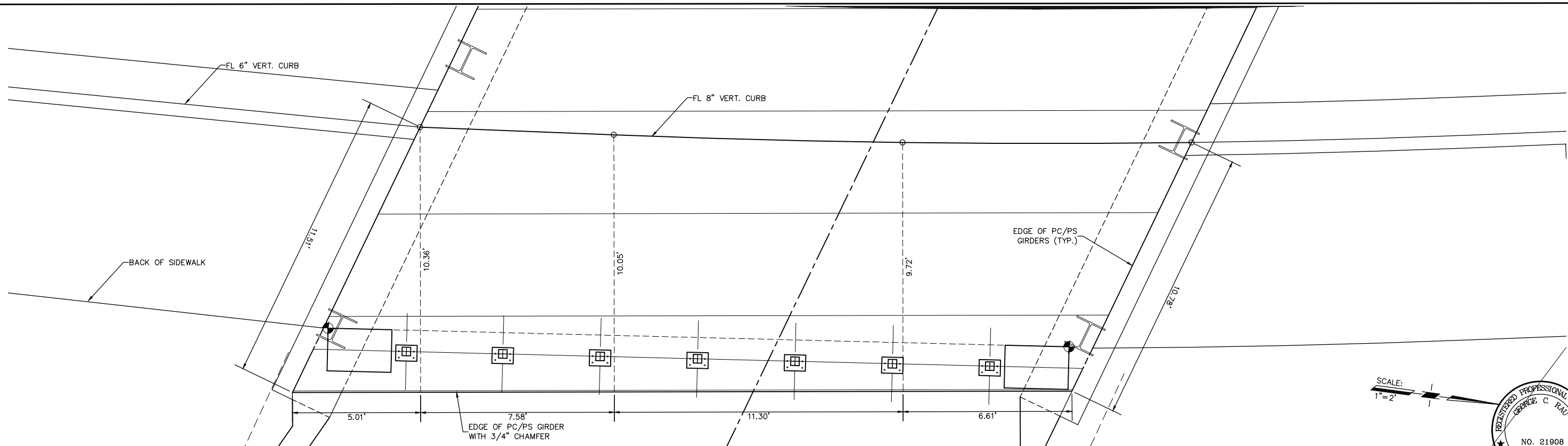
Date:	JULY 2017	SHEET 8 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION

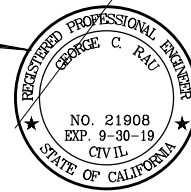
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 P-Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road_Plan-Profile-Final.dwg Plot Date: Jul 26, 2018 at 2:27pm



WEST SIDE OF BRIDGE (LEFT)



EAST SIDE OF BRIDGE (RIGHT)



DATE:	REVISION:	BY:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW
5/26/18	FINAL CONSTRUCTION PLANS	MAW

COMPUTER NO: SERVER 2\R11003.3
PATH: \DRAWINGS\FINAL
FILE: R11003.3_Road_Plan-Profile-Final.dwg
PSVIEW: Curb Layout-1
MSVP:
MSVIEW:

VERIFY SCALE

BAR REPRESENTS THREE INCHES ON ORIGINAL

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
 LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
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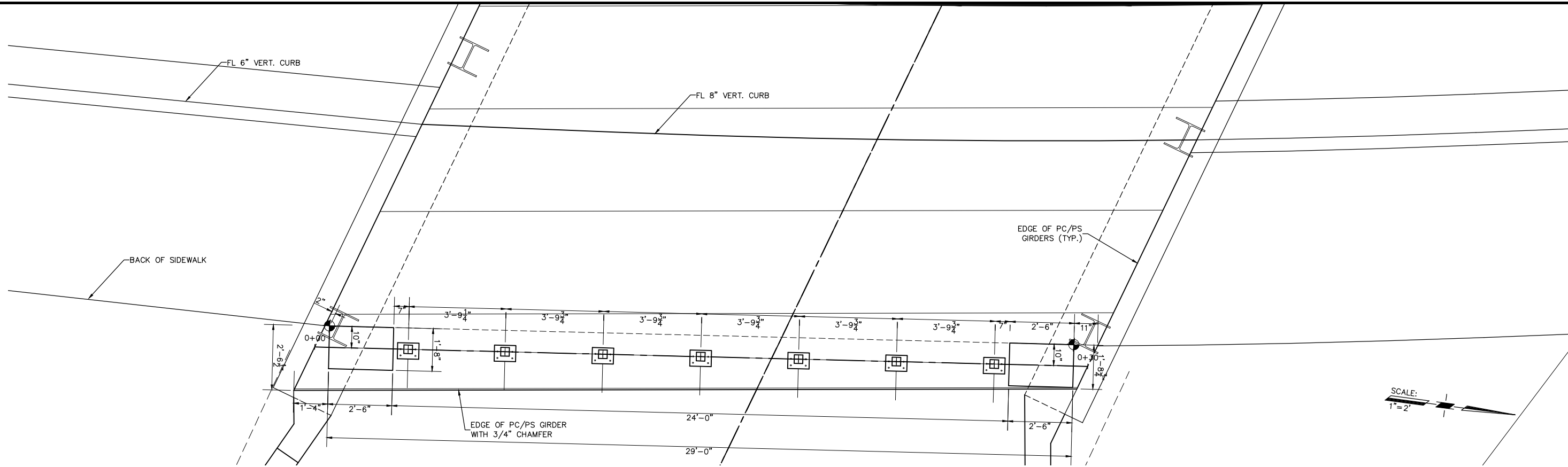
DRAWING: BRIDGE CURB/SIDEWALK LAYOUT
 PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date:	JULY 2017
Scale:	AS SHOWN
Drawn:	M.A.W.
Checked:	G.C.R.
Reviewed:	G.C.R.
Job No.	R11003.5

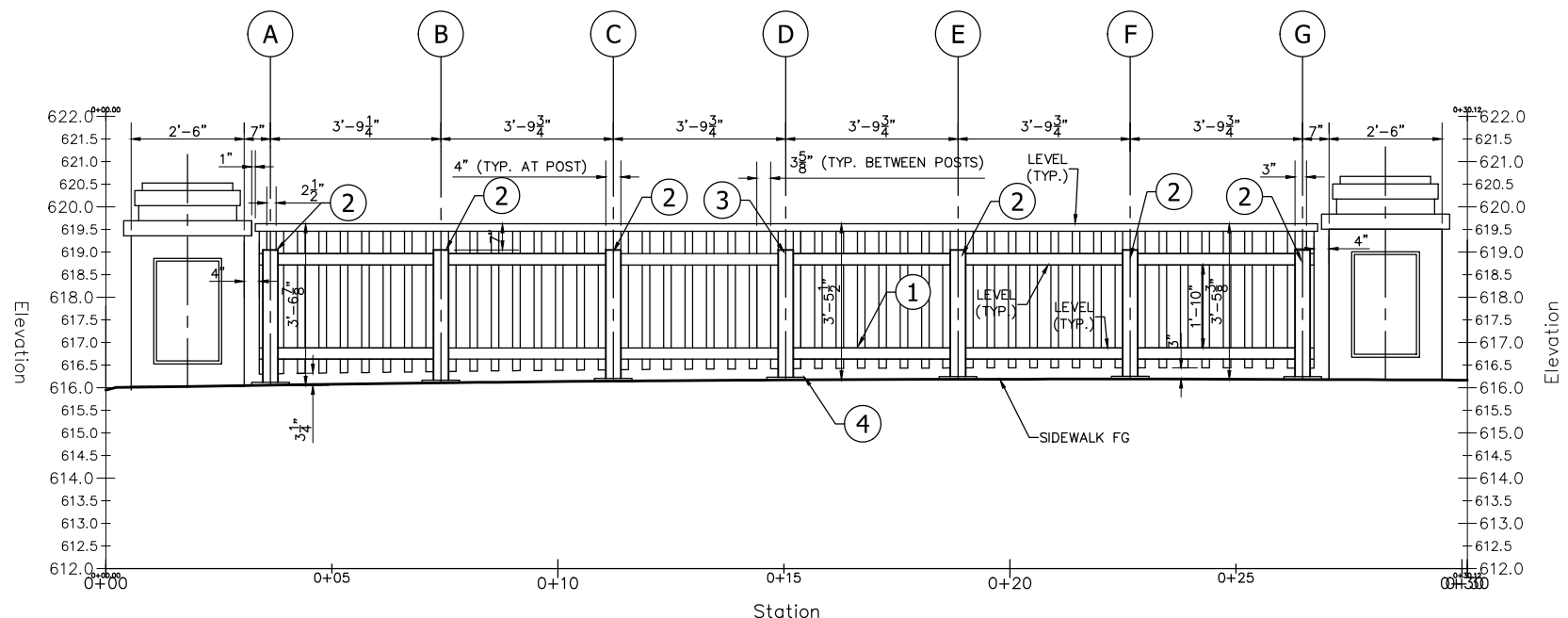
SHEET 9 of 27 SHEETS

FOR CONSTRUCTION

Xrefs: R11003.5_Topog.dwg; R11003.5_WaterandSewer_Phase1.dwg; NWP_Rail_Trail_Pln_CPUC-Rev.dwg; R11003.5_TB_Final.dwg; R11003.5_Final_Layout.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road_Plan-Profile-Final.dwg Plot Date: Jul 26, 2018 at 2:27pm



EAST SIDE OF BRIDGE (RIGHT)



Profile View of Bridge Rail East
Looking West from Creek Side

- BRIDGE RAIL KEY NOTES**
- SEE RAILING DETAIL (TYPICAL) SHEET 1 OF 6 BY ROBERT VALENTINE, INC.
 - SEE STANDARD POST CONNECTION DETAIL BY ROBERT VALENTINE, INC.
 - SEE EXPANSION POST CONNECTION DETAIL BY ROBERT VALENTINE, INC.
 - SEE BASE PLATE (TYPICAL) DETAIL SHEET 2 OF 6 BY ROBERT VALENTINE, INC.

- EAST RAILING NOTES:**
- MINIMUM HANDRAIL HEIGHT 3'-6" FROM SIDEWALK FG.
 - ALL HAND RAILS AND 3"x3" CROSS MEMBERS ARE LEVEL.
 - ALL POSTS ARE PLUMB, HEIGHT VARIES BASED ON SIDEWALK FG.
 - ALL PICKETS ARE PLUMB, LENGTHS VARIES BASE ON SIDEWALK FG, 3" MIN. - 4" MAX.
 - DISTANCE BETWEEN POST TYPICAL EXCEPT BETWEEN POST A & B.
 - SEE PLAN FOR SPACING BETWEEN PICKETS.



DATE:	REVISION:	BY:	COMPUTER NO. SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.3_Road_Plan-Profile-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2',	MAW	PSVIEW: Railing P&P Layout-2
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

VERIFY SCALE

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.

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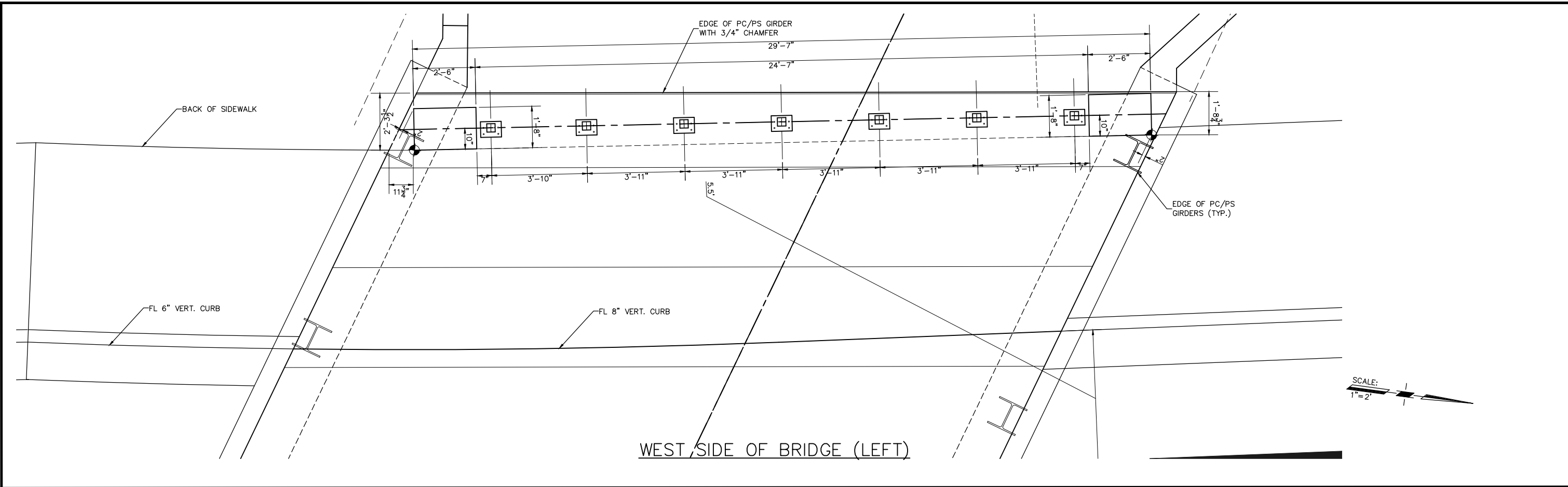
DRAWING: EAST SIDE BRIDGE RAILING
 LAYOUT PLAN AND PROFILE

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

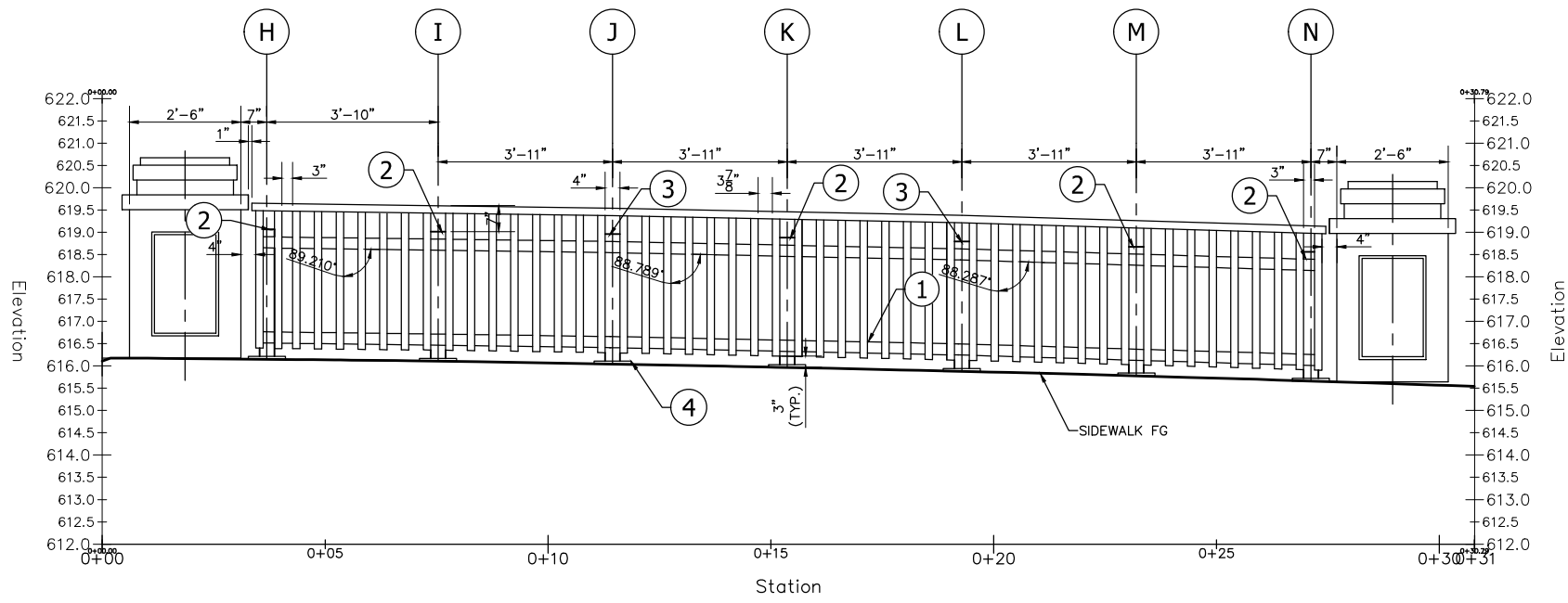
Date:	JULY 2017	SHEET 10 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION

Xrefs: R11003.5_Topo.dwg; R11003.5_WaterandSewer_Phase1.dwg; NWP_Rail_Trail_Plan_CPUC-Rev.dwg; R11003.5_TB_Final.dwg; R11003.5_Final_Layout.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road_Plan-Profile_Final.dwg Plot Date: Jul 26, 2018 at 2:27pm



WEST SIDE OF BRIDGE (LEFT)

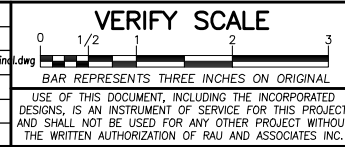


Profile View of Bridge Rail West
Looking East from Road Side

- BRIDGE RAIL KEY NOTES**
1. SEE RAILING DETAIL (TYPICAL) SHEET 1 OF 6 BY ROBERT VALENTINE, INC.
 2. SEE STANDARD POST CONNECTION DETAIL BY ROBERT VALENTINE, INC.
 3. SEE EXPANSION POST CONNECTION DETAIL BY ROBERT VALENTINE, INC.
 4. SEE BASE PLATE (TYPICAL) DETAIL SHEET 2 OF 6 BY ROBERT VALENTINE, INC.
- WEST RAILING NOTES:**
1. MINIMUM HANDRAIL HEIGHT 3'-6" FROM SIDEWALK FG.
 2. HAND RAILS AND 3"x3" CROSS MEMBERS ARE PARALLEL WITH SIDEWALK. DIVIDED IN 3 SECTIONS. BETWEEN H & J, J & L AND L & N. SEE PLAN FOR ANGLES.
 3. ALL POSTS ARE PLUMB, HEIGHT VARIES BASED ON SIDEWALK FG.
 4. ALL PICKETS ARE PLUMB, LENGTH VARIES BASE ON SIDEWALK FG, 3" MIN. - 4" MAX.
 5. DISTANCE BETWEEN POST TYPICAL EXCEPT BETWEEN POST H & I.
 6. SEE PLAN FOR SPACING BETWEEN PICKETS.



DATE:	REVISION:	BY:	COMPUTER NO. SERVER Z:\R11003.3
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
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9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2',	MAW	PSVIEW: Railing P&P Layout-3
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

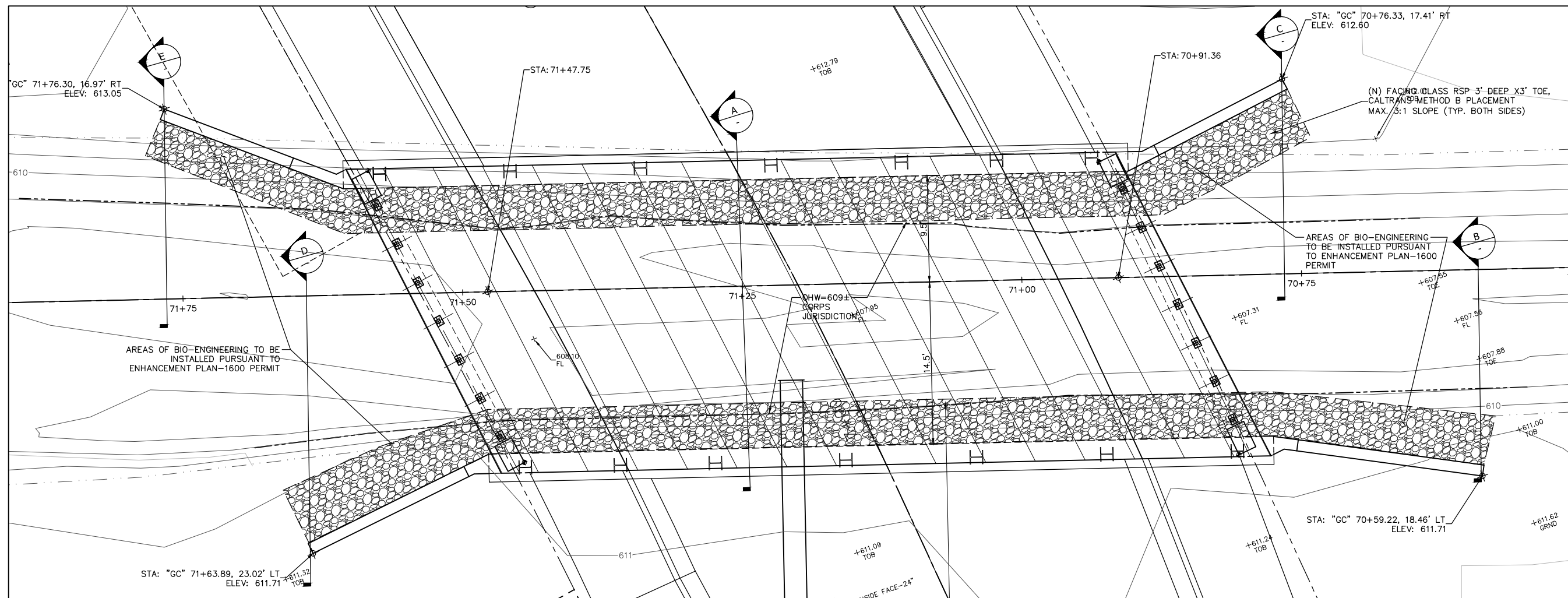
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DRAWING: WEST SIDE BRIDGE RAILING
 LAYOUT PLAN AND PROFILE

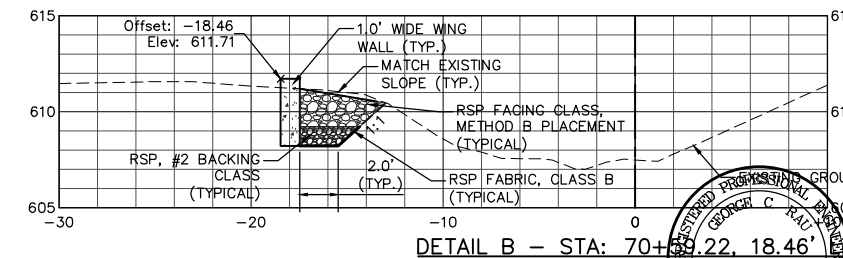
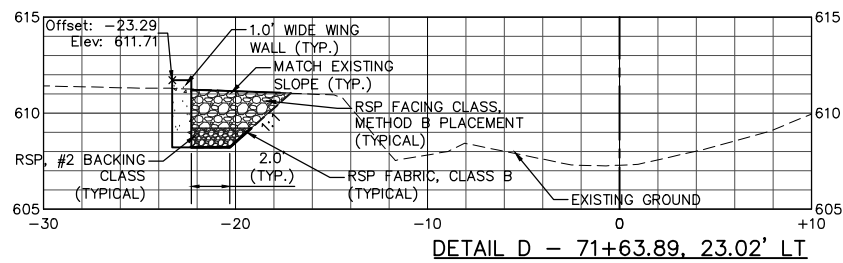
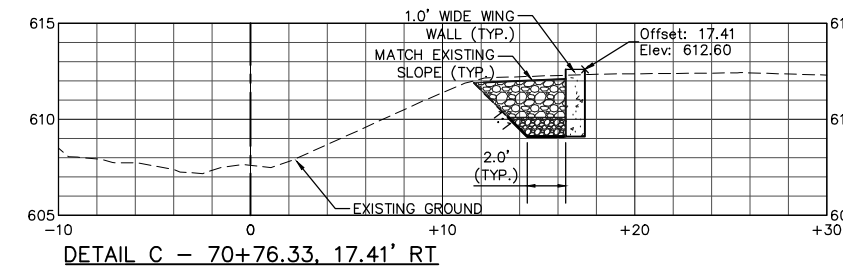
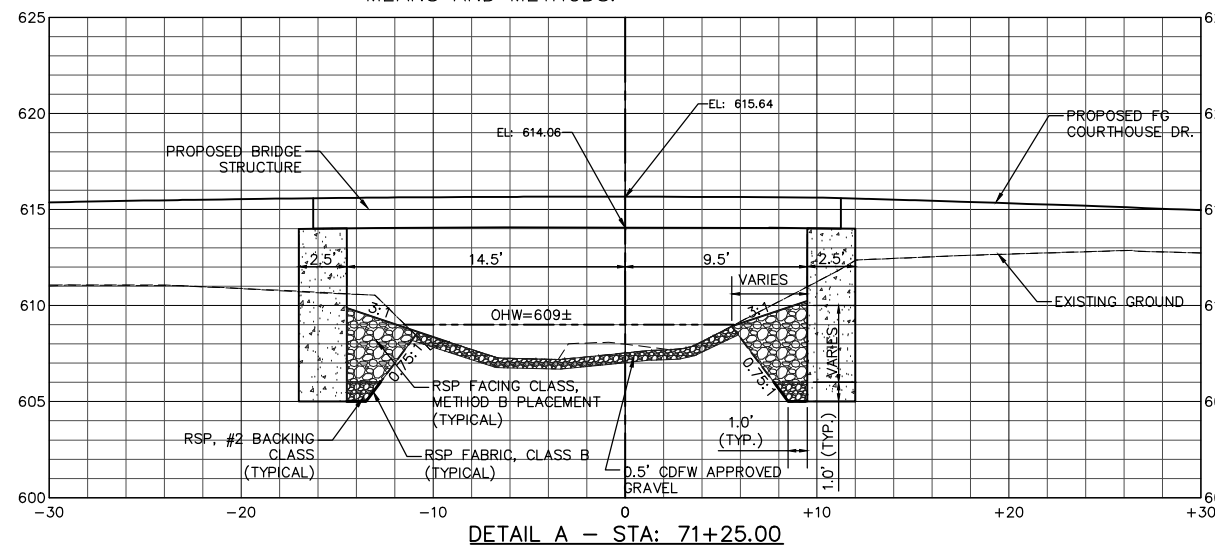
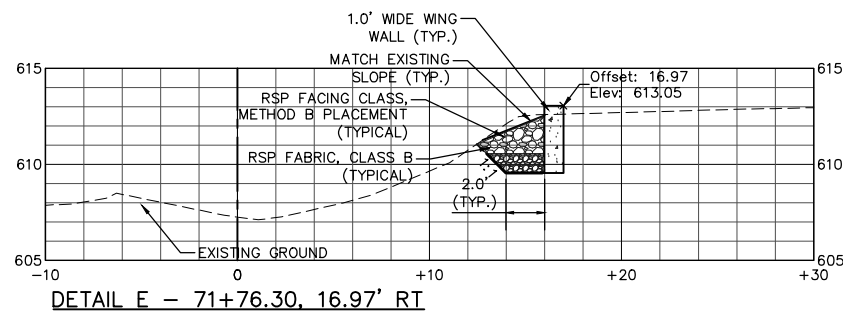
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 11 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION



NOTE: FINAL CONFIGURATION OF RSP WILL BE DETERMINED BY CONTRACTOR'S EXCAVATION MEANS AND METHODS.



Xrefs: R11003.5_Road_Plan_Profile.dwg; R11003.5_Final_Layout.dwg; R11003.5_Top.dwg; R11003.5_TB_Final.dwg; Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Bridge-RSP_Detail-Final.dwg Plot Date: Jul 26, 2018 at 2:29pm

DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_GibsonCreek_Sections.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2'	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

VERIFY SCALE

BAR REPRESENTS THREE INCHES ON ORIGINAL

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

RAU AND ASSOCIATES INC.

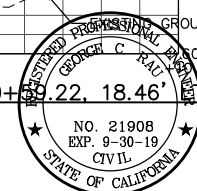
CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: GIBSON CREEK BRIDGE
RSP DETAILS

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

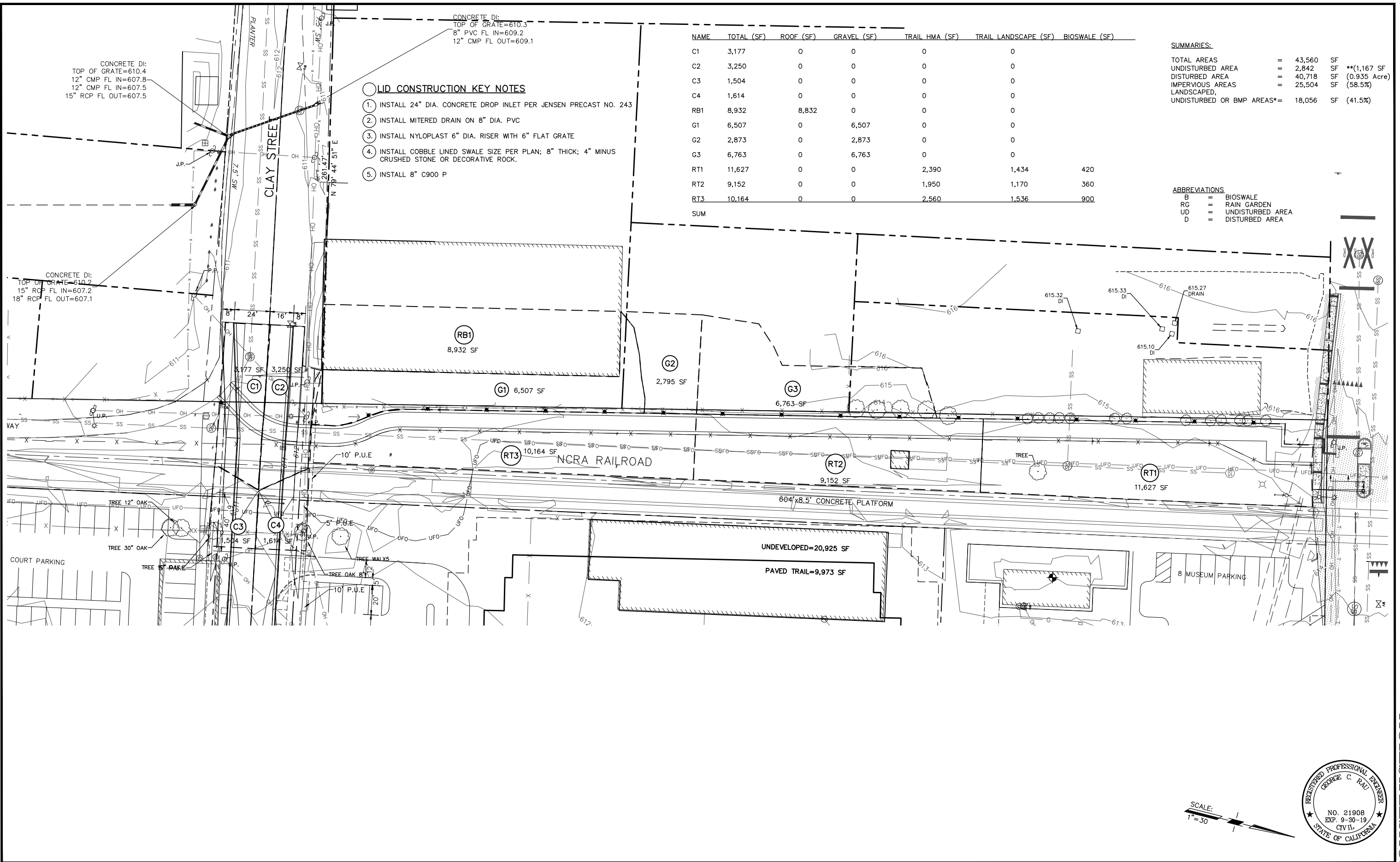
Date: JULY 2017
Scale: AS SHOWN
Drawn: M.A.W.
Checked: G.C.R.
Reviewed: G.C.R.
Job No. R11003.5

SHEET 12 of 27 SHEETS



FOR CONSTRUCTION

Xrefs: R11003.5_Topo.dwg; R11003.5_WaterandSewer_Phase1.dwg; NWP_Rail_Trail_Plan_CPUC-Rev.dwg; R11003.5_TB_Final.dwg; R11003.5_Final_Layout.dwg
 Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Road_Plan-Profile_Final.dwg Plot Date: Jul 26, 2018 at 2:30pm



NAME	TOTAL (SF)	ROOF (SF)	GRAVEL (SF)	TRAIL HMA (SF)	TRAIL LANDSCAPE (SF)	BIOSWALE (SF)
C1	3,177	0	0	0	0	
C2	3,250	0	0	0	0	
C3	1,504	0	0	0	0	
C4	1,614	0	0	0	0	
RB1	8,932	8,832	0	0	0	
G1	6,507	0	6,507	0	0	
G2	2,873	0	2,873	0	0	
G3	6,763	0	6,763	0	0	
RT1	11,627	0	0	2,390	1,434	420
RT2	9,152	0	0	1,950	1,170	360
RT3	10,164	0	0	2,560	1,536	900
SUM						

SUMMARIES:

TOTAL AREAS	=	43,560	SF
UNDISTURBED AREA	=	2,842	SF ** (1,167 SF)
DISTURBED AREA	=	40,718	SF (0.935 Acre)
IMPERVIOUS AREAS	=	25,504	SF (58.5%)
LANDSCAPED, UNDISTURBED OR BMP AREAS*	=	18,056	SF (41.5%)

ABBREVIATIONS

B = BIOSWALE
 RG = RAIN GARDEN
 UD = UNDISTURBED AREA
 D = DISTURBED AREA

- LID CONSTRUCTION KEY NOTES**
1. INSTALL 24" DIA. CONCRETE DROP INLET PER JENSEN PRECAST NO. 243
 2. INSTALL MITERED DRAIN ON 8" DIA. PVC
 3. INSTALL NYLOPLAST 6" DIA. RISER WITH 6" FLAT GRATE
 4. INSTALL COBBLE LINED SWALE SIZE PER PLAN; 8" THICK; 4" MINUS CRUSHED STONE OR DECORATIVE ROCK.
 5. INSTALL 8" C900 P

CONCRETE DI:
 TOP OF GRATE=610.4
 12" CMP FL IN=607.8
 12" CMP FL IN=607.5
 15" RCP FL OUT=607.5

CONCRETE DI:
 TOP OF GRATE=610.2
 15" RCP FL IN=607.2
 18" RCP FL OUT=607.1

DATE:	REVISION:	BY:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2',	MAW
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW
5/26/18	FINAL CONSTRUCTION PLANS	MAW

COMPUTER NO. SERVER Z:\R11003.3	VERIFY SCALE
PATH: \DRAWINGS\FINAL	0 1/2 1 2 3
FILE: R11003.3_Road_Plan-Profile_Final.dwg	BAR REPRESENTS THREE INCHES ON ORIGINAL
PSVIEW: Working	USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.
MSVP:	
MSVIEW:	

OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

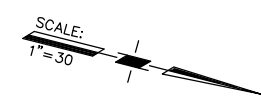
RAU AND ASSOCIATES INC.

CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: LID PLANS
 CLAY ST. AND RR TRACKS

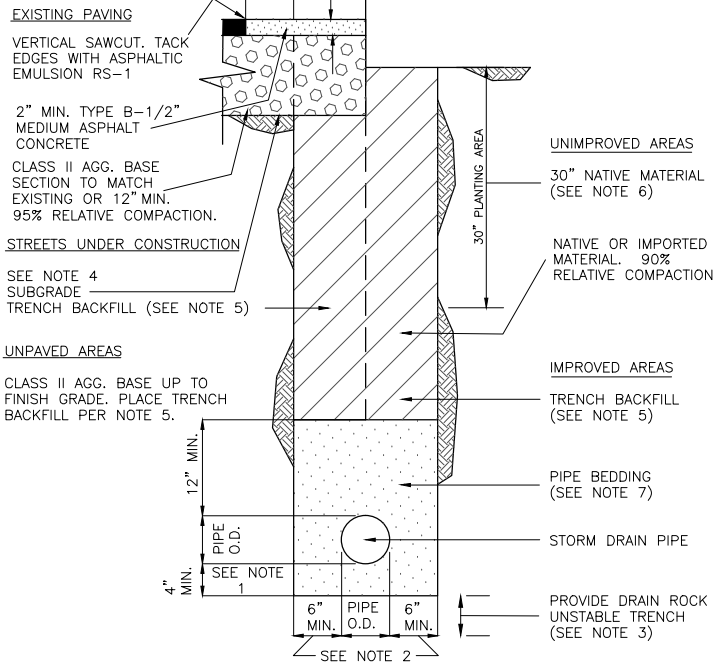
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date: JULY 2017	SHEET 13 of 27 SHEETS
Scale: AS SHOWN	
Drawn: M.A.W.	
Checked: G.C.R.	
Reviewed: G.C.R.	
Job No. R11003.5	



FOR CONSTRUCTION

TRENCH IN STREET RIGHT OF WAY **TRENCH OUTSIDE STREET RIGHT OF WAY**



NOTES:

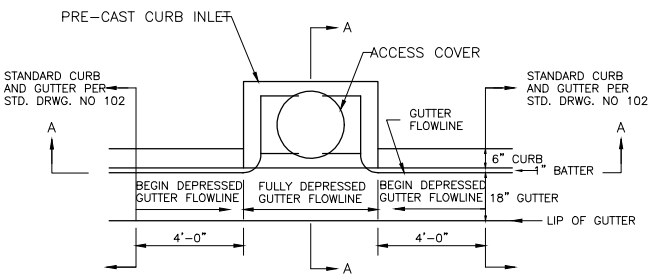
- WHEN EXCAVATION IS IN ROCKY GROUND, USE THE GREATER OF 1/4 PIPE O.D. OR 4" MINIMUM.
- FOR 18" PIPE OR LESS, USE 6" MIN., 9" MAX.; FOR GREATER THAN 18" USE 9" MIN., 12" MAX.
- FOR UNSTABLE TRENCH PROVIDE DRAIN ROCK FOR WIDTH OF TRENCH, DEPTH AS SPECIFIED ON THE IMPROVEMENT PLANS OR BY THE ENGINEER.
- NEW STREET SECTION PER IMPROVEMENT PLANS.
- TRENCH BACKFILL, 95% RELATIVE COMPACTION WITHIN 30" OF FINISH GRADE. REMAINING BACKFILL, 90% RELATIVE COMPACTION.
- BACKFILL WITH NATIVE MATERIAL REMOVED FROM UPPER 30", 85% RELATIVE COMPACTION.
- PIPE BEDDING, 90% RELATIVE COMPACTION.
- COMPACTION: HAND AND MECHANICAL TAMPING IN 8" MAXIMUM LIFTS.

SIEVE SIZE	% PASSING
3/4"	95%
NO. 4	65% MIN.
NO. 100	15% MAX.

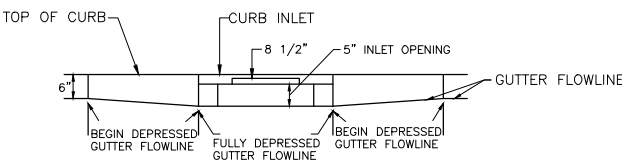
SIEVE SIZE	% PASSING
3/4"	95-100%
NO. 4	55-100%

CITY OF UKIAH
TRENCH DETAIL
STORM DRAIN PIPE
DRAWING NO. 420 FEB. '87

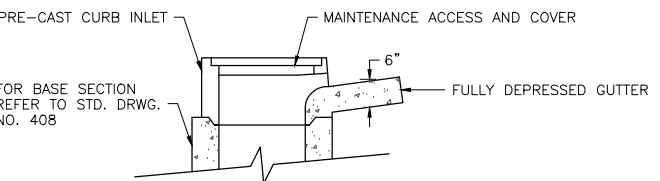
15 DETAIL
Not to Scale



PLAN VIEW



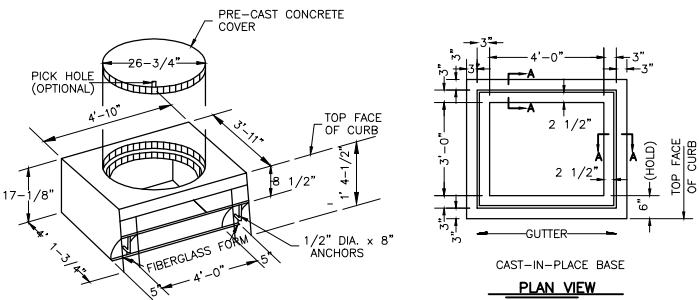
ELEVATION VIEW



SECTION A-A

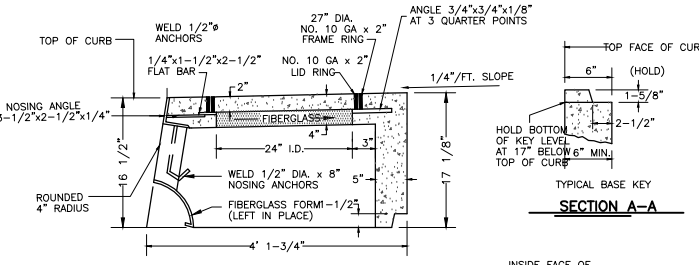
12 DETAIL
Not to Scale

CITY OF UKIAH
CURB INLET
GUTTER DEPRESSION
DRAWING NO 403 JULY '91



PERSPECTIVE

PLAN VIEW



SECTION A-A

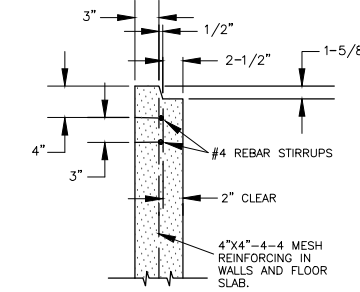
INSTALLATION DETAILS

NOTES:

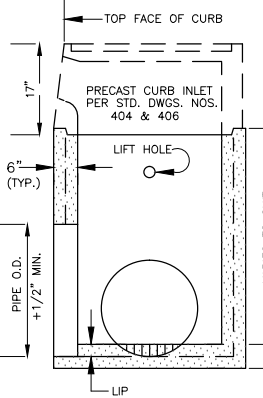
- ALL METAL PARTS SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION, ASTM-A123
- CONCRETE SHALL TEST TO 3000 PSI AT 28 DAYS
- ALL REINFORCING SHALL BE 4x4-6-6 MESH, REGARDLESS OF BASE WALL THICKNESS, HOLD THE INSIDE FACE OF BASE WALL 3" FROM TOP FACE OF CURB.
- MAXIMUM GUTTER SLOPE WITHOUT UPSTREAM GALLEY IS 6%.
- FOR BASE SECTION REFER TO STD. DRWG. NO. 408.
- APPROVED CURB INLET MANUFACTURER(S) AND MODEL(S): SANTA ROSA CAST PRODUCT MODEL 2-1/2A

CITY OF UKIAH
PRE-CAST CONCRETE
CURB INLET - MODEL 4AC
DETAILS
DRAWING NO. 406 JUL '91

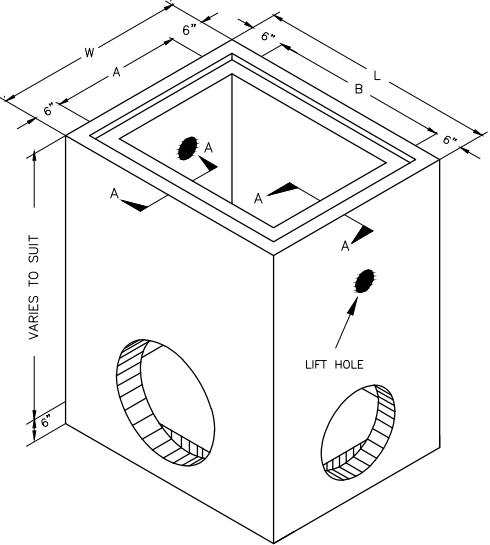
13 DETAIL
Not to Scale



SECTION A-A



SECTION



NOTES:

- OPENINGS SHALL BE CAST AS REQUIRED TO MEET CONNECTING STORM DRAIN PIPING.
- DEFLECTED OPENINGS MAY BE CHIPPED IN GREEN CONCRETE.
- CONCRETE SHALL TEST 3000 P.S.I. AT 28 DAYS.
- BASE SECTIONS OVER 4' IN WALL HEIGHT MAY BE CAST IN TWO PIECES.
- REFER TO STD. DRWG. NOS. 404 AND 406 FOR SETTING DETAILS.
- APPROVED MANUFACTURER(S): SANTA ROSA CAST PRODUCTS CO.

PRECAST CURB INLET MODEL	BASE SECTION DIMENSIONS				WEIGHT OF BASE COMPONENTS		
	A	B	W	L	WALL PER VERT. FT.	6" FLOOR SLAB	CURB INLET AND COVER
MODEL 2-1/2A	2'-0"	2'-6"	3'-0"	3'-6"	825 LB.	375 LB.	700 LB.
MODEL 4AC	3'-0"	4'-0"	4'-0"	5'-0"	1200 LB.	900 LB.	1500 LB.

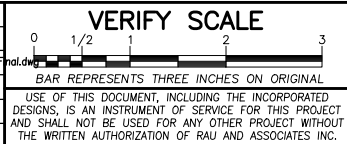
14 DETAIL
Not to Scale

CITY OF UKIAH
PRECAST BASE SECTION
FOR CURB INLET
DRAWING NO. 408 MAR. '87



Xrefs: R11003.5_TB_Final.dwg Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Storm Sewer_Details-Final.dwg Plot Date: Jul 26, 2018 at 2:30pm

DATE:	REVISION:	BY:	COMPUTER NO:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	SERVER 2\R11003.5
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	PATH: \DRAWINGS\FINAL
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2'	MAW	FILE: R11003.5_Storm Sewer_Details-Final.dwg
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	PSVIEW: SH114-Storm Sewer Details
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVP:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	MSVIEW:



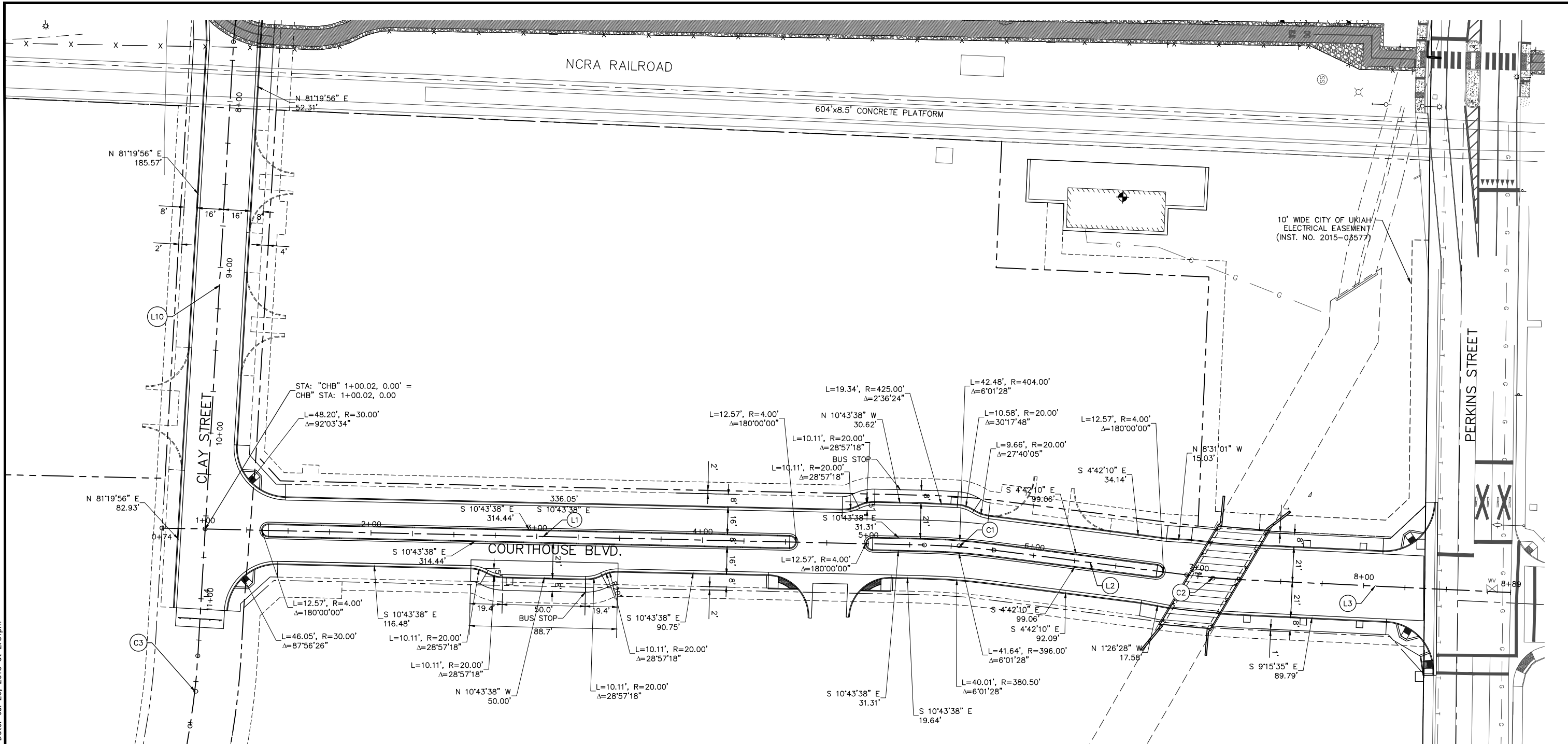
OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

RAU AND ASSOCIATES INC.
CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: STORM SEWER DETAILS
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 14 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.:	R11003.5	

FOR CONSTRUCTION



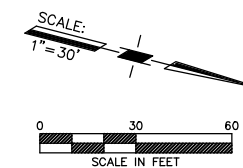
Centerline Data "CS"

Number	Radius	Length	Bearing/Delta Angle	Starting Station	Northing	Easting
L7		207.62'	N79°45'00"E	1+00.00	10,167.70	8,928.38
C5	600.00'	24.19'	Δ=2°18'36"	3+07.62	10,204.65	9,132.69
L8		169.28'	N82°03'35"E	3+31.81	10,208.47	9,156.57
C4	600.00'	9.76'	Δ=0°55'54"	5+01.09	10,231.86	9,324.23
L6		228.02'	N81°07'42"E	5+10.85	10,233.28	9,333.88
L9		24.92'	N83°37'58"E	7+38.87	10,268.45	9,559.17
L10		294.13'	N81°19'56"E	7+63.78	10,271.21	9,583.93
L4		76.62'	N81°19'56"E	10+57.92	10,315.54	9,874.71
C3	400.00'	42.65'	Δ=6°06'32"	11+34.54	10,327.09	9,950.45
L5		161.26'	N87°26'28"E	11+77.19	10,331.26	9,992.88

Centerline Data "CHB"

Number	Radius	Length	Bearing/Delta Angle	Starting Station	Northing	Easting
L1		459.88'	N10°43'38"W	0+74.00	10,289.98	9,879.55
C1	400.00'	42.06'	Δ=6°01'28"	5+33.88	10,741.82	9,793.95
L2		117.25'	N4°42'10"W	5+75.94	10,783.48	9,788.31
C2	400.00'	31.81'	Δ=4°33'25"	6+93.19	10,900.33	9,778.70
L3		163.81'	N9°15'35"W	7+25.00	10,931.90	9,774.83

NOTE:
CURB DATA BASED ON TOP FACE OF CURB.



Xrefs: R11003.5_Topo.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg; Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Roadway_Geo-Final.dwg Plot Date: Jul 26, 2018 at 2:31pm

DATE	REVISION	BY
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MSS	MAW
5/26/18	FINAL CONSTRUCTION PLANS	MAW

COMPUTER NO: SERVER Z:\R11003.5	OWNER: NORTH COAST RAILROAD AUTHORITY
PATH: \DRAWINGS\FINAL	APN: 002-232-15 and 002-282-20
FILE: R11003.5_Roadway_Geo-Final.dwg	LOCATION: 309 EAST PERKINS STREET
PSVIEW: SH15-Roadway-Geo	UKIAH, CA 95482
MSVP:	
MSVIEW:	

VERIFY SCALE

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

RAU AND ASSOCIATES INC.

CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

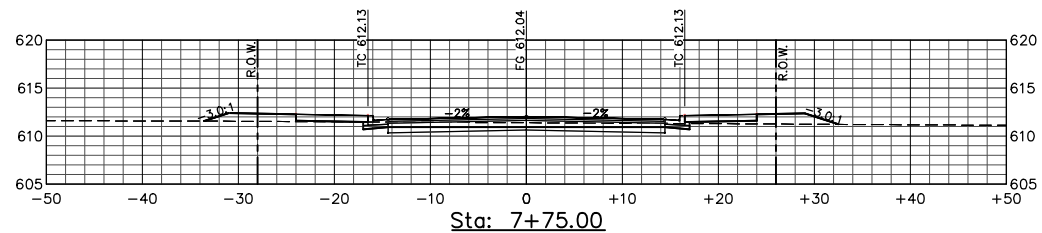
DRAWING: **STREET CENTERLINE AND ROADWAY LAYOUT PLAN**

PROJECT: **COURTHOUSE INFRASTRUCTURE PROJECT FINAL CONSTRUCTION**

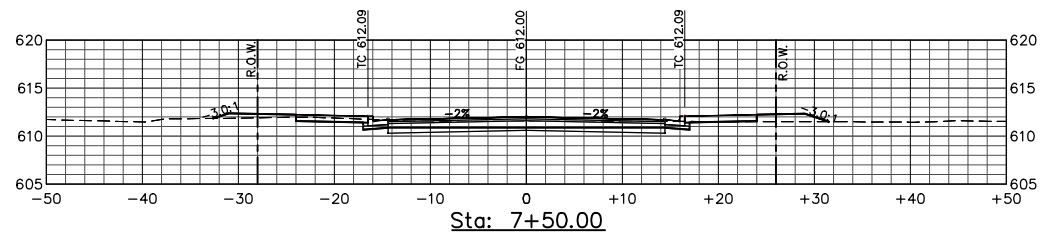
Date: JULY 2017	SHEET 15 of 27 SHEETS
Scale: AS SHOWN	
Drawn: M.A.W.	
Checked: G.C.R.	
Reviewed: G.C.R.	
Job No. R11003.5	

FOR CONSTRUCTION

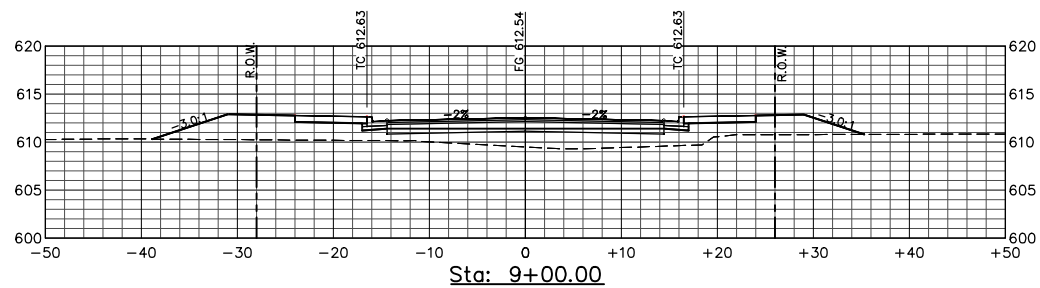
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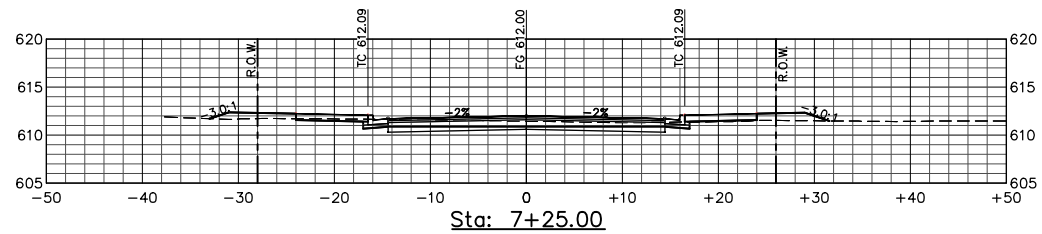
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Cut Area (Sq.Ft.)	16.54
Fill Area (Sq. Ft.)	16.18
Cut Vol. (Cu. Yds.)	20
Fill Vol. (Cu. Yds.)	11
Total Cut Vol. (Cu. Yds.)	159
Total Fill Vol. (Cu. Yds.)	40
Net Volume (Cu. Yds.)	119



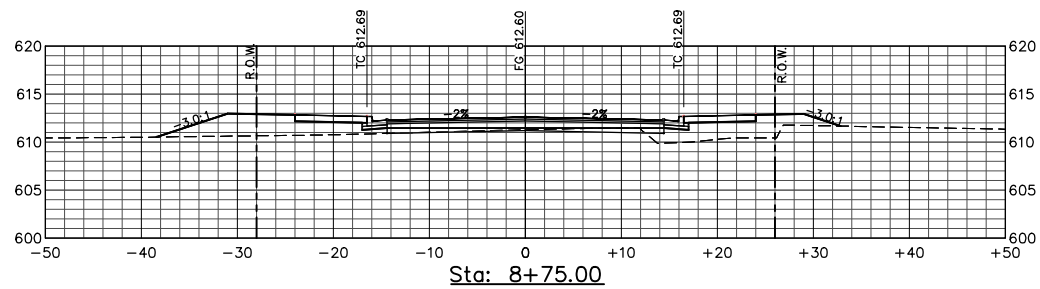
SECTION VOLUME Sta: 7+50.00	
Cut Area (Sq.Ft.)	26.64
Fill Area (Sq. Ft.)	8.05
Cut Vol. (Cu. Yds.)	23
Fill Vol. (Cu. Yds.)	8
Total Cut Vol. (Cu. Yds.)	139
Total Fill Vol. (Cu. Yds.)	29
Net Volume (Cu. Yds.)	110



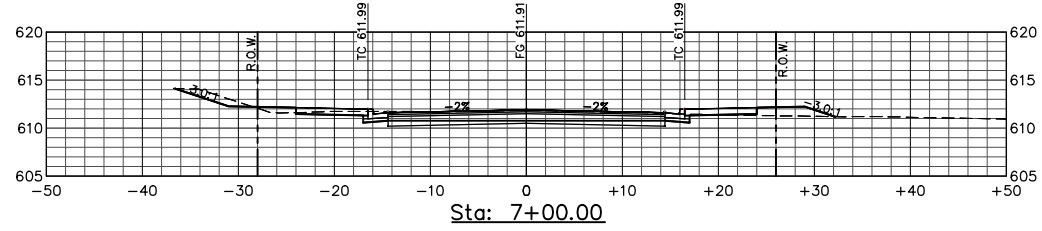
SECTION VOLUME Sta: 9+00.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	128.23
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	92
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	312
Net Volume (Cu. Yds.)	-141



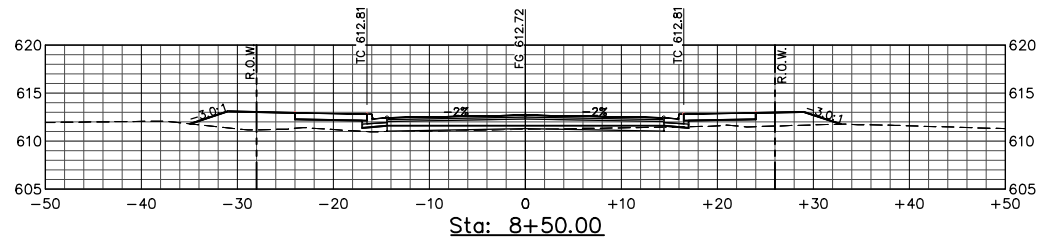
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Cut Area (Sq.Ft.)	21.90
Fill Area (Sq. Ft.)	10.29
Cut Vol. (Cu. Yds.)	28
Fill Vol. (Cu. Yds.)	9
Total Cut Vol. (Cu. Yds.)	117
Total Fill Vol. (Cu. Yds.)	20
Net Volume (Cu. Yds.)	96



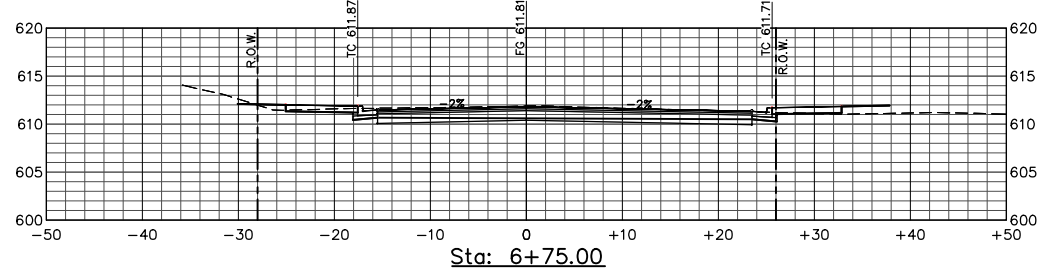
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Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



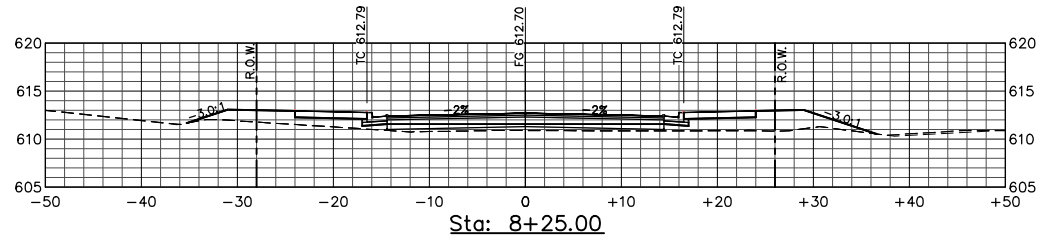
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Cut Area (Sq.Ft.)	37.64
Fill Area (Sq. Ft.)	8.34
Cut Vol. (Cu. Yds.)	41
Fill Vol. (Cu. Yds.)	6
Total Cut Vol. (Cu. Yds.)	89
Total Fill Vol. (Cu. Yds.)	12
Net Volume (Cu. Yds.)	77



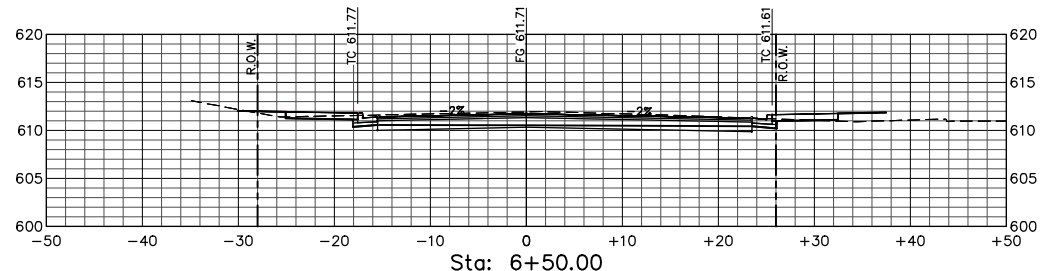
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Cut Area (Sq.Ft.)	0.08
Fill Area (Sq. Ft.)	48.94
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	53
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	164
Net Volume (Cu. Yds.)	7



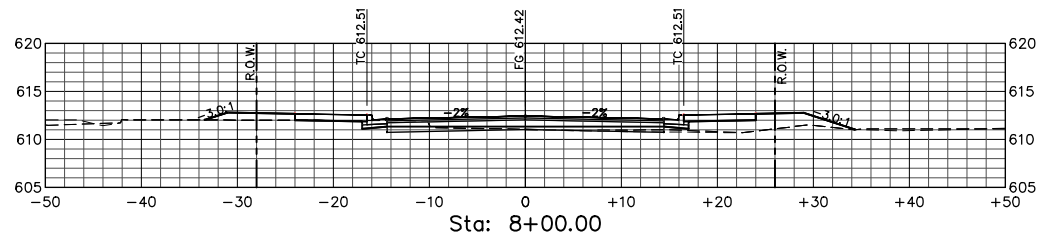
SECTION VOLUME Sta: 6+75.00	
Cut Area (Sq.Ft.)	50.15
Fill Area (Sq. Ft.)	5.60
Cut Vol. (Cu. Yds.)	48
Fill Vol. (Cu. Yds.)	5
Total Cut Vol. (Cu. Yds.)	48
Total Fill Vol. (Cu. Yds.)	5
Net Volume (Cu. Yds.)	43



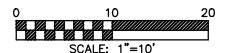
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Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	66.56
Cut Vol. (Cu. Yds.)	2
Fill Vol. (Cu. Yds.)	47
Total Cut Vol. (Cu. Yds.)	171
Total Fill Vol. (Cu. Yds.)	111
Net Volume (Cu. Yds.)	61



SECTION VOLUME Sta: 6+50.00	
Cut Area (Sq.Ft.)	54.41
Fill Area (Sq. Ft.)	5.77
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0

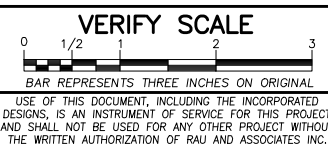


SECTION VOLUME Sta: 8+00.00	
Cut Area (Sq.Ft.)	5.05
Fill Area (Sq. Ft.)	35.01
Cut Vol. (Cu. Yds.)	10
Fill Vol. (Cu. Yds.)	24
Total Cut Vol. (Cu. Yds.)	169
Total Fill Vol. (Cu. Yds.)	64
Net Volume (Cu. Yds.)	105



NOTE:
 1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.

DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Road-Section-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: CROSS SECTIONS
 CLAY STREET-STA: 7+25 TO 9+75
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

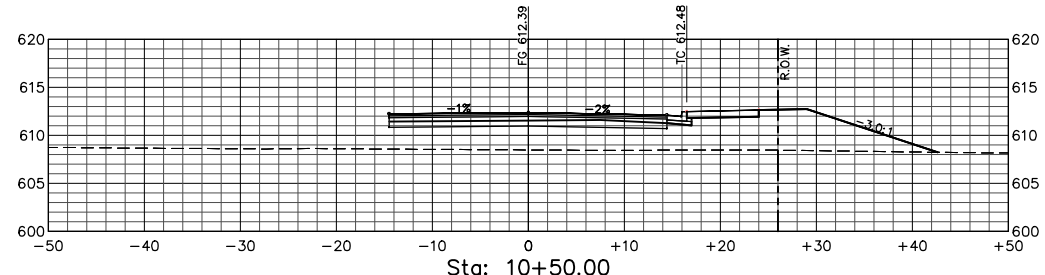
Date:	JULY 2017
Scale:	AS SHOWN
Drawn:	M.A.W.
Checked:	G.C.R.
Reviewed:	G.C.R.
Job No.:	R11003.5

SHEET 16
 of
27 SHEETS

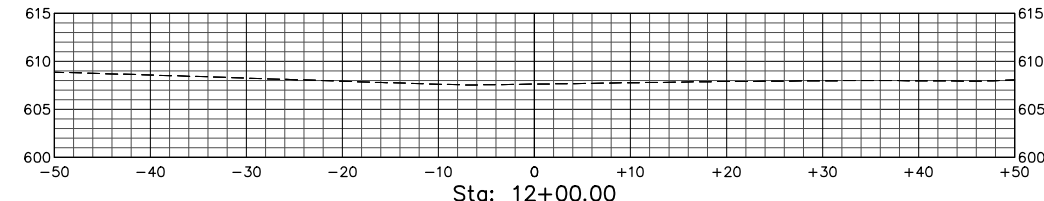


FOR CONSTRUCTION

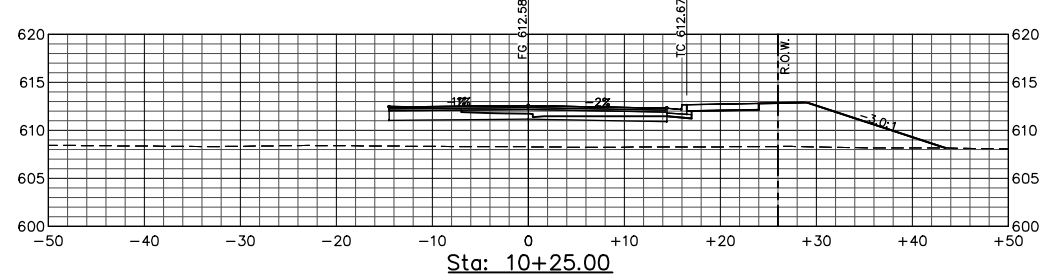
Xrefs: R11003.5_Road_Plan-Profile.dwg, R11003.5_Final_Layout.dwg, R11003.5_TB_Final.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road-Section-Final.dwg Plot Date: Jul 26, 2018 at 2:52pm



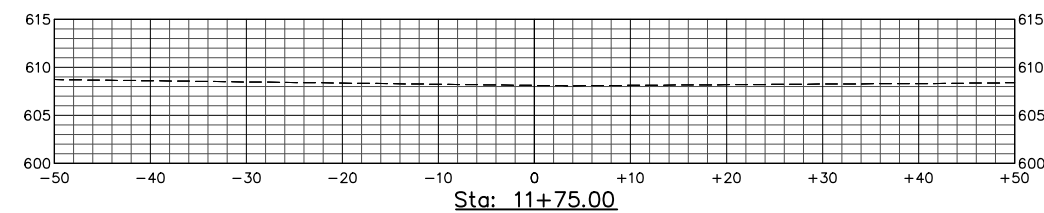
SECTION VOLUME Sta: 10+50.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	168.26
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	167
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	1,579
Net Volume (Cu. Yds.)	-1,407



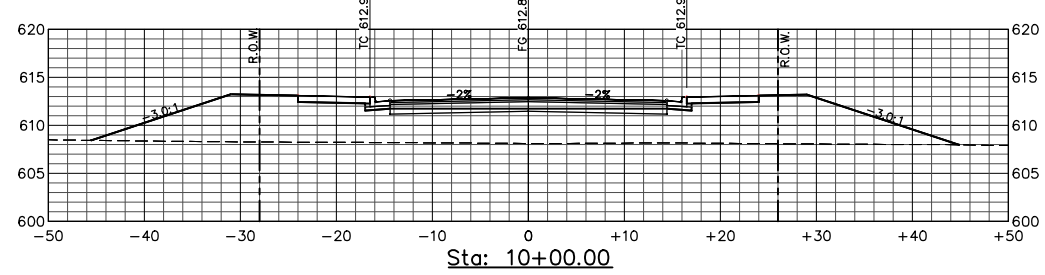
SECTION VOLUME Sta: 12+00.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



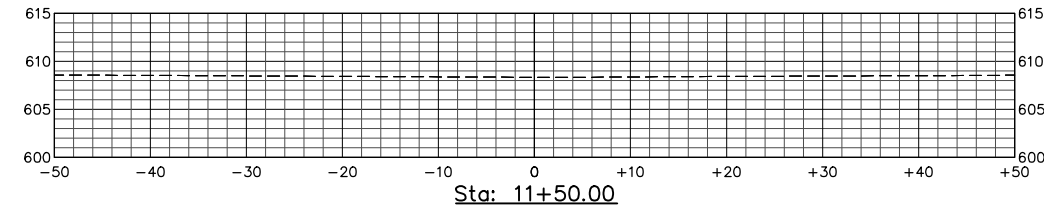
SECTION VOLUME Sta: 10+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	191.90
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	235
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	1,412
Net Volume (Cu. Yds.)	-1,241



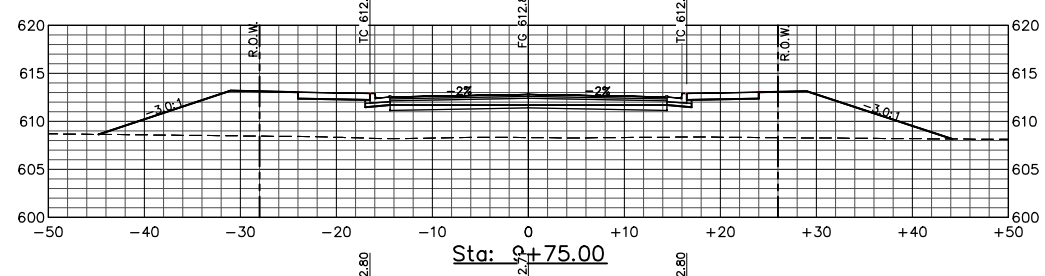
SECTION VOLUME Sta: 11+75.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	2,048
Net Volume (Cu. Yds.)	-1,876



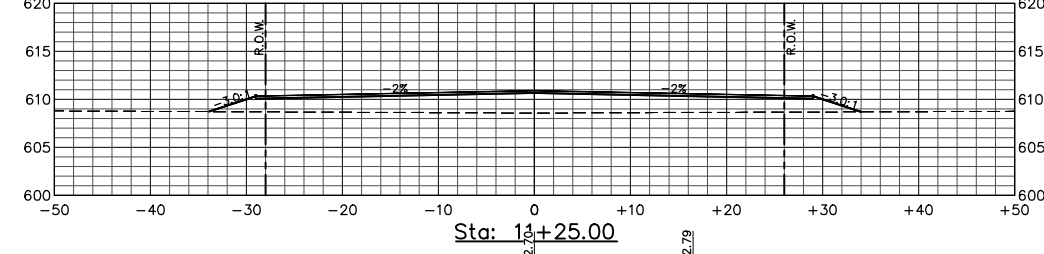
SECTION VOLUME Sta: 10+00.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	316.21
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	284
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	1,177
Net Volume (Cu. Yds.)	-1,005



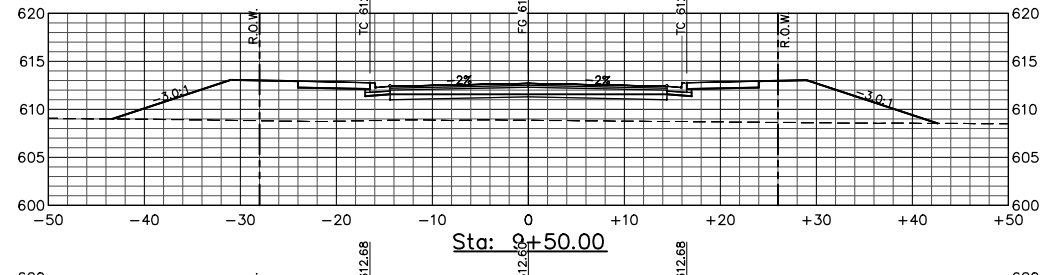
SECTION VOLUME Sta: 11+50.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	51
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	2,048
Net Volume (Cu. Yds.)	-1,876



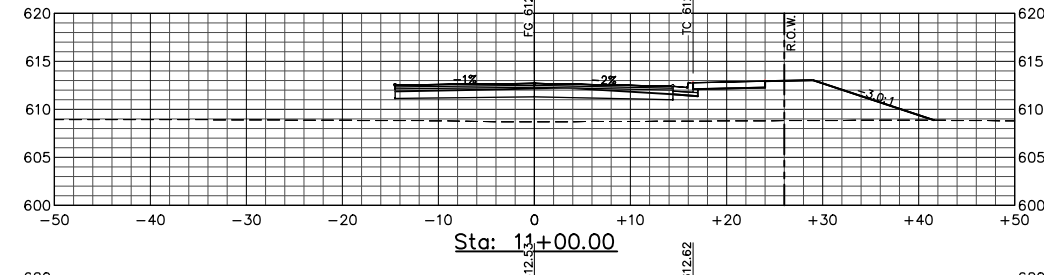
SECTION VOLUME Sta: 9+75.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	296.40
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	252
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	893
Net Volume (Cu. Yds.)	-722



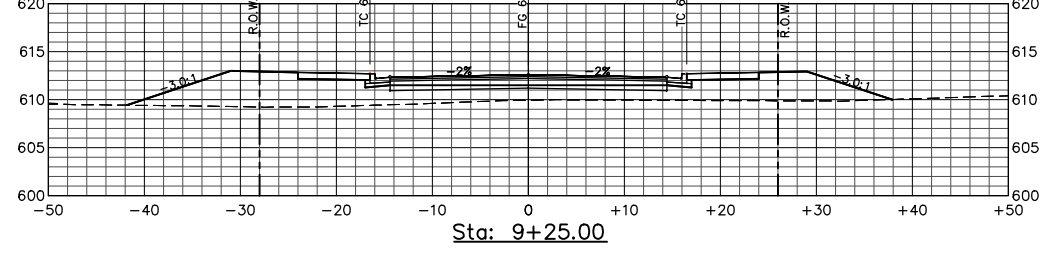
SECTION VOLUME Sta: 11+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	109.42
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	130
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	1,997
Net Volume (Cu. Yds.)	-1,826



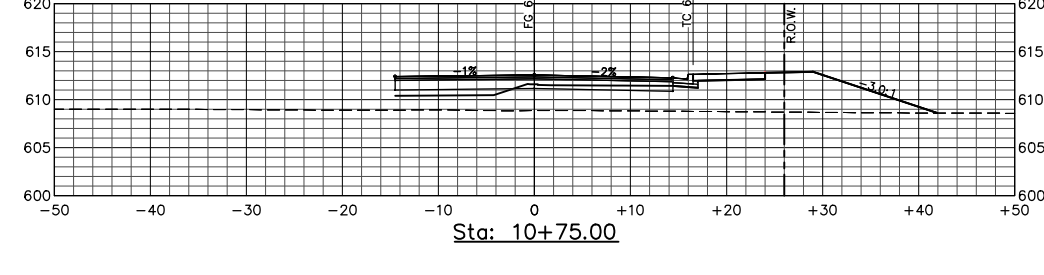
SECTION VOLUME Sta: 9+50.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



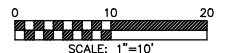
SECTION VOLUME Sta: 11+00.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



SECTION VOLUME Sta: 9+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0

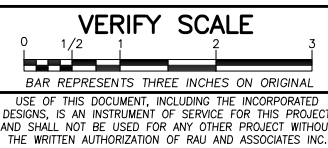


SECTION VOLUME Sta: 10+75.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	141.26
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	143
Total Cut Vol. (Cu. Yds.)	172
Total Fill Vol. (Cu. Yds.)	1,722
Net Volume (Cu. Yds.)	-1,551



NOTE:
 1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.

DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Road-Section-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
 LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: CROSS SECTIONS
 CLAY ST.-STA: 10+00 TO 12+75
 PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

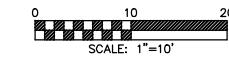
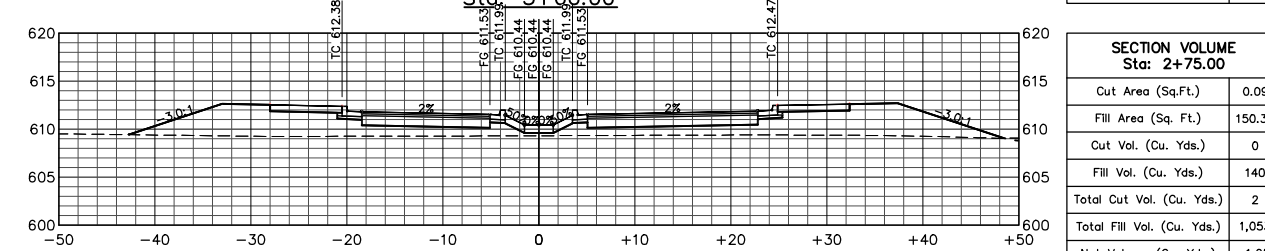
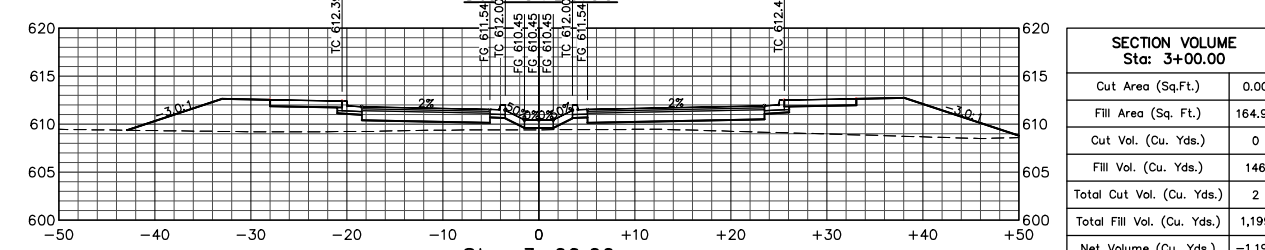
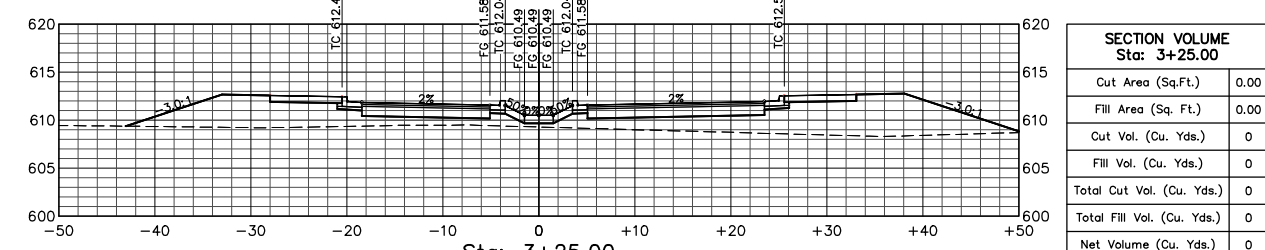
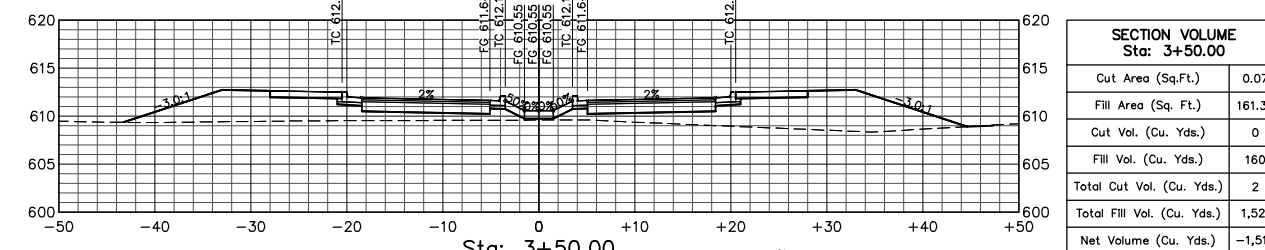
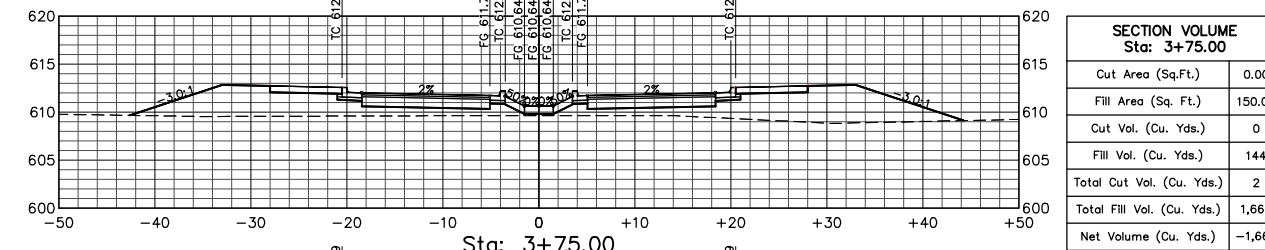
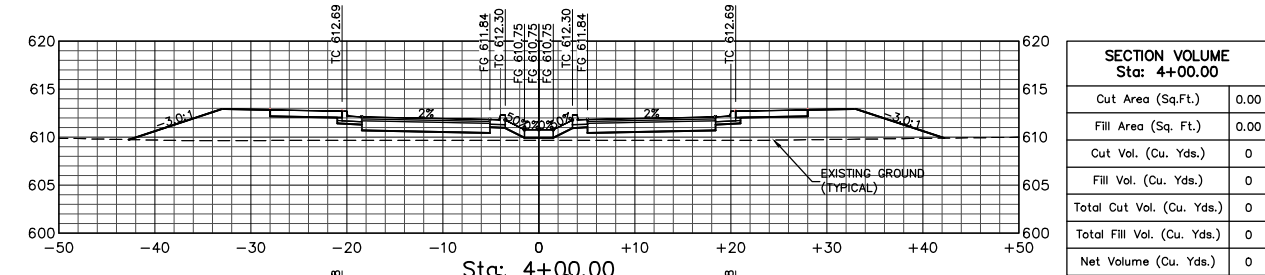
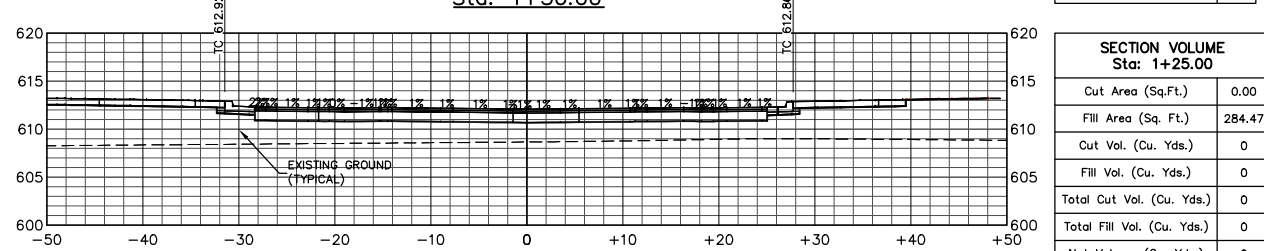
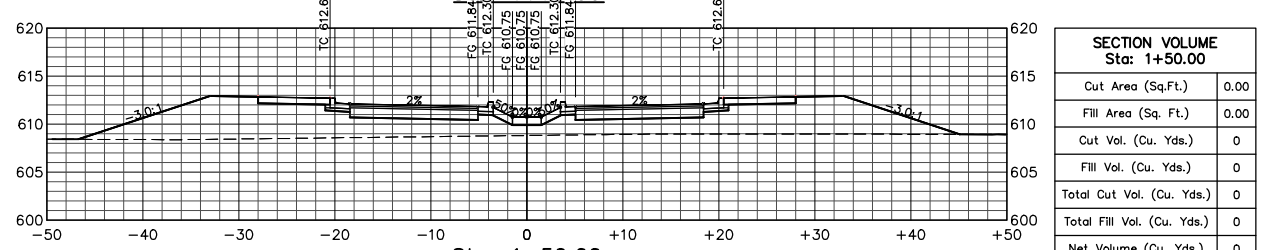
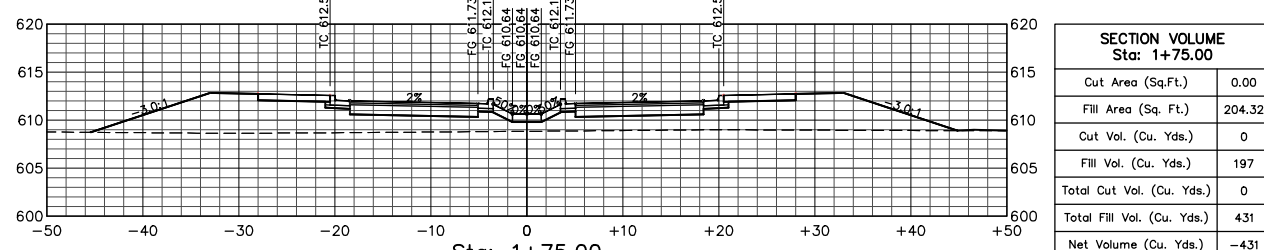
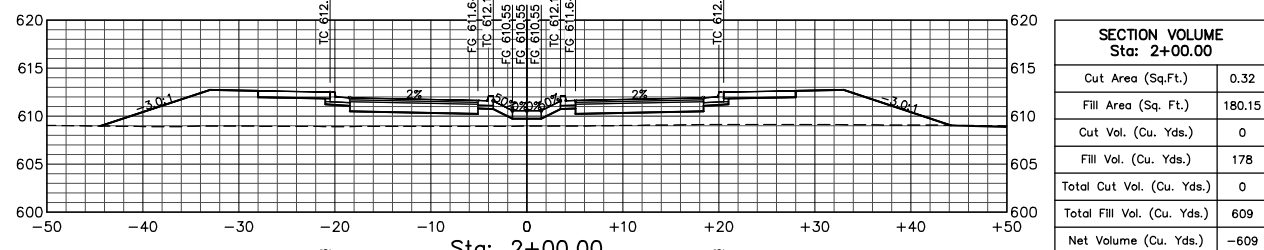
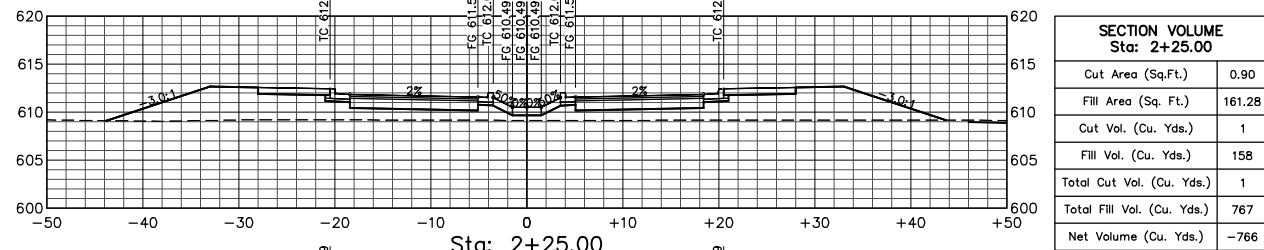
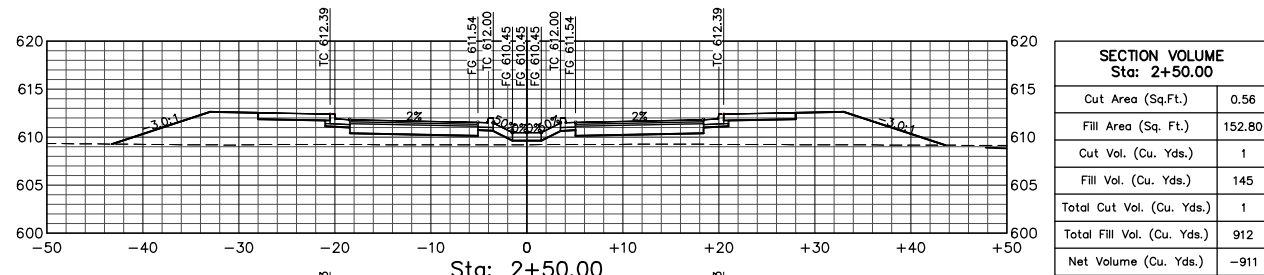
Date:	JULY 2017
Scale:	AS SHOWN
Drawn:	M.A.W.
Checked:	G.C.R.
Reviewed:	G.C.R.
Job No.:	R11003.5



SHEET **17** of 27 SHEETS

FOR CONSTRUCTION

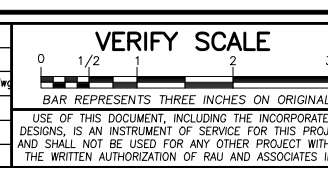
Xrefs: R11003.5_Road_Profile.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road-Section-Final.dwg Plot Date: Jul 26, 2018 at 2:52pm



NOTE:
 1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.



DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Road-Section-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
 LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

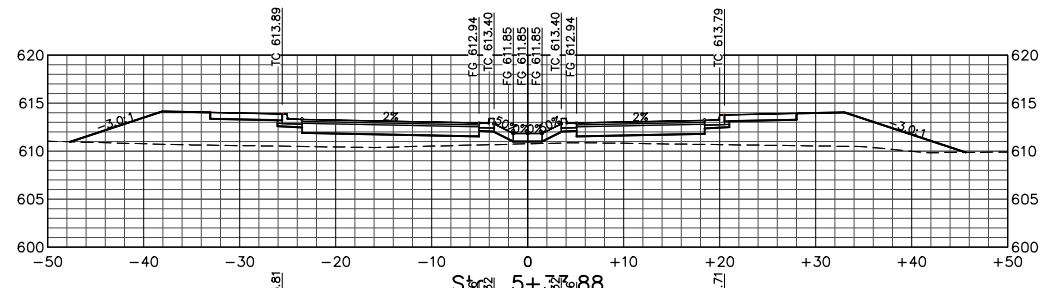
RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: CROSS SECTIONS—STA: 1+25 TO 3+75 — COURTHOUSE BLVD.
 PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

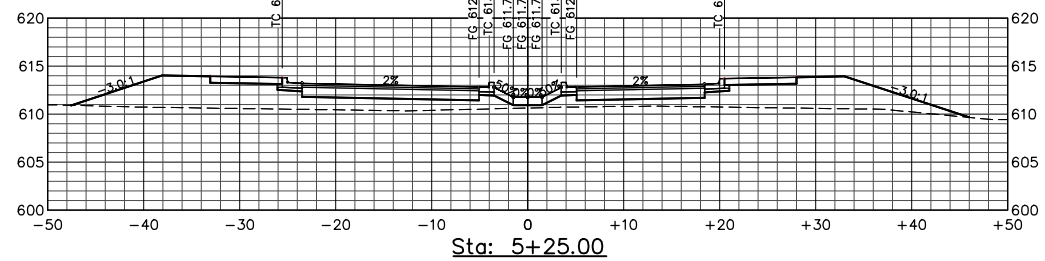
Date:	JULY 2017	SHEET 18 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION

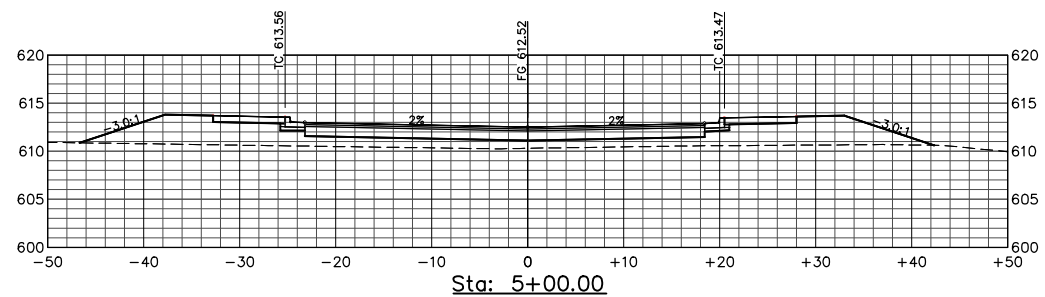
Xrefs: R11003.5_Road_Plan-Profile.dwg, R11003.5_Final_Layout.dwg, R11003.5_TB_Final.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road-Section-Final.dwg Plot Date: Jul 26, 2018 at 2:52pm



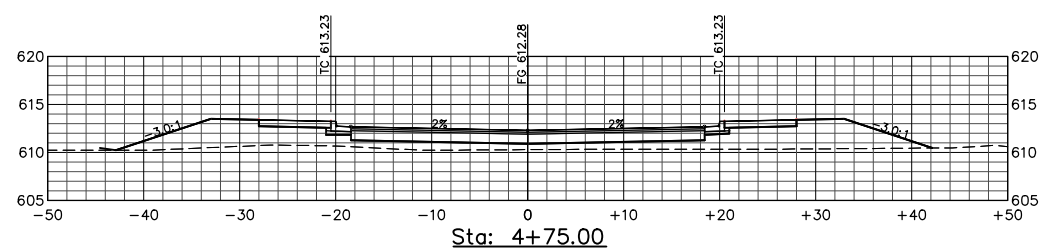
SECTION VOLUME Sta: 5+33.88	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



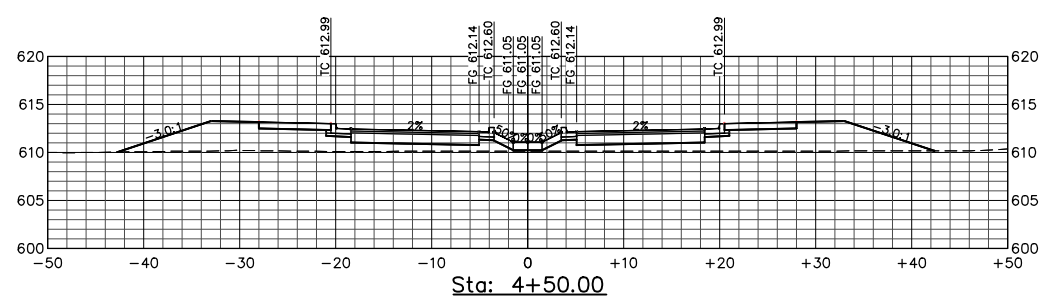
SECTION VOLUME Sta: 5+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	155.07
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	135
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	2,417
Net Volume (Cu. Yds.)	-2,416



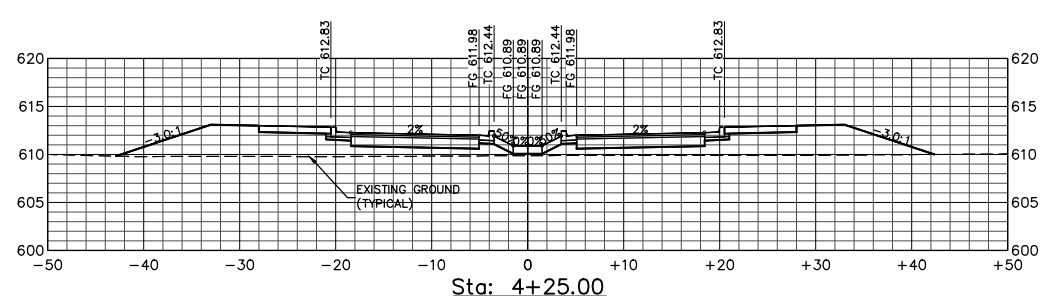
SECTION VOLUME Sta: 5+00.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



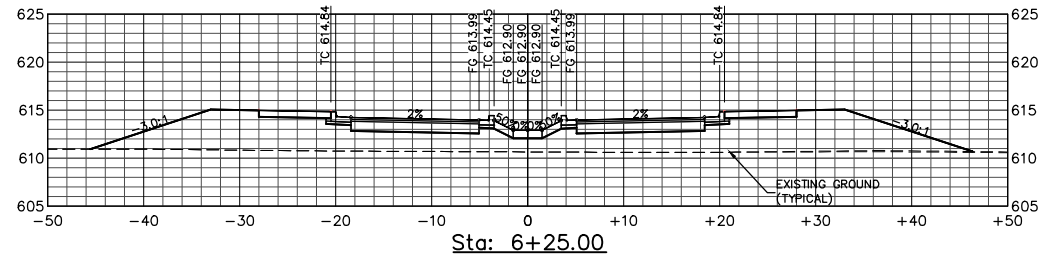
SECTION VOLUME Sta: 4+75.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



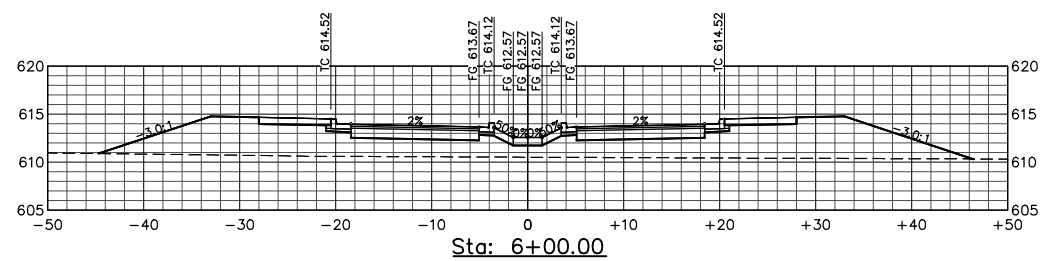
SECTION VOLUME Sta: 4+50.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	126.28
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	121
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	2,047
Net Volume (Cu. Yds.)	-2,045



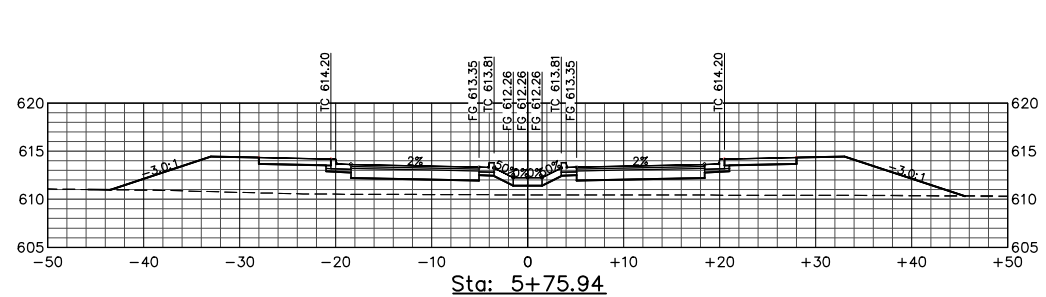
SECTION VOLUME Sta: 4+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	135.77
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	127
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	1,925
Net Volume (Cu. Yds.)	-1,924



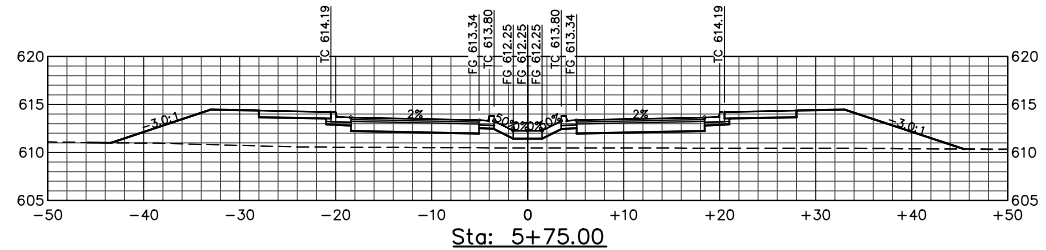
SECTION VOLUME Sta: 6+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	236.06
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	212
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	3,156
Net Volume (Cu. Yds.)	-3,154



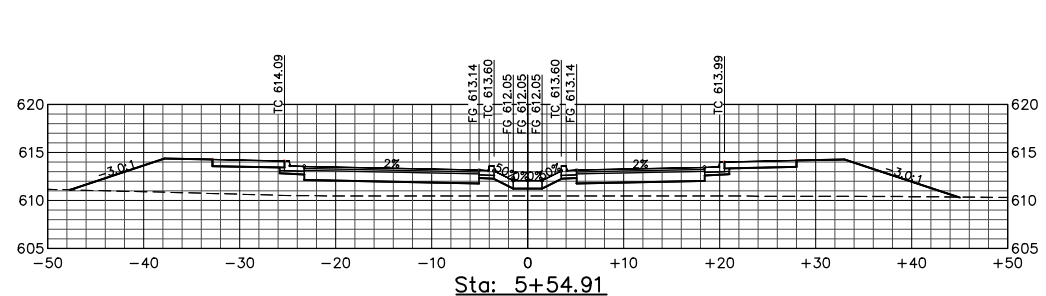
SECTION VOLUME Sta: 6+00.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	222.80
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	187
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	2,943
Net Volume (Cu. Yds.)	-2,941



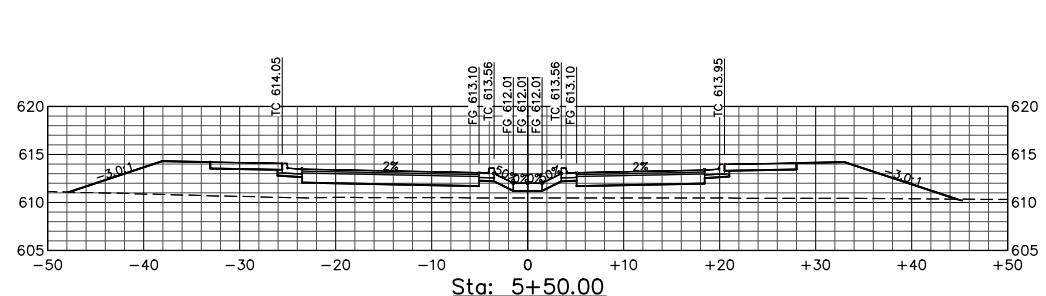
SECTION VOLUME Sta: 5+75.94	
Cut Area (Sq.Ft.)	0.02
Fill Area (Sq. Ft.)	196.31
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	7
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	2,756
Net Volume (Cu. Yds.)	-2,755



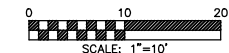
SECTION VOLUME Sta: 5+75.00	
Cut Area (Sq.Ft.)	0.02
Fill Area (Sq. Ft.)	195.29
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	142
Total Cut Vol. (Cu. Yds.)	2
Total Fill Vol. (Cu. Yds.)	2,750
Net Volume (Cu. Yds.)	-2,748



SECTION VOLUME Sta: 5+54.91	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



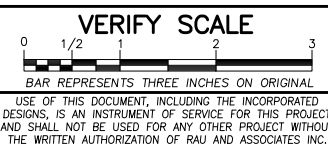
SECTION VOLUME Sta: 5+50.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



NOTE:
 1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.



DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Road-Section-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

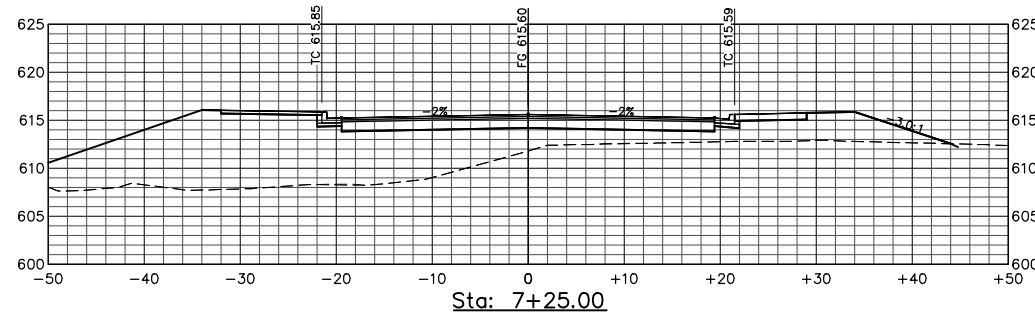


DRAWING: CROSS SECTIONS—STA: 4+00 TO 6+00 — COURTHOUSE BLVD.
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

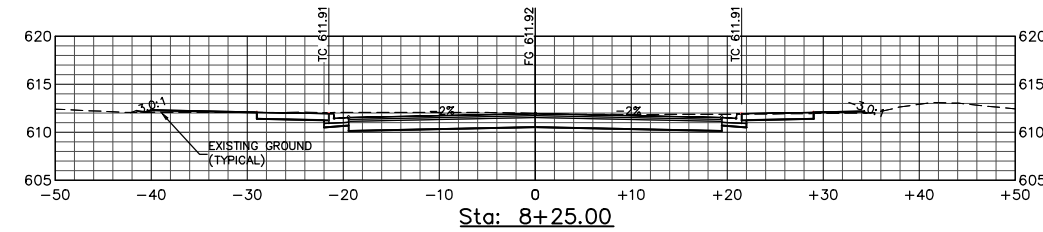
Date:	JULY 2017	SHEET 19 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION

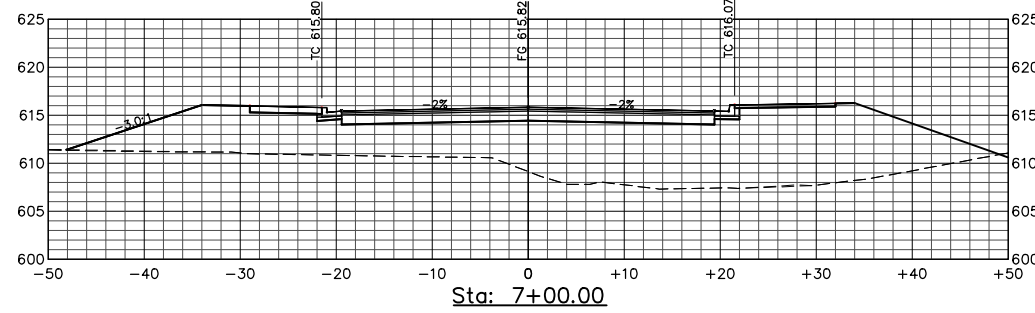
Xrefs: R11003.5_Road_Plan-Profile.dwg, R11003.5_Final_Layout.dwg, R11003.5_TB_Final.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Road-Section-Final.dwg Plot Date: Jul 26, 2018 at 2:52pm



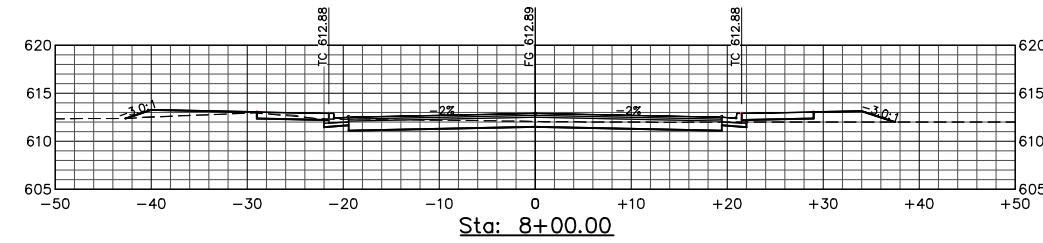
SECTION VOLUME Sta: 7+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



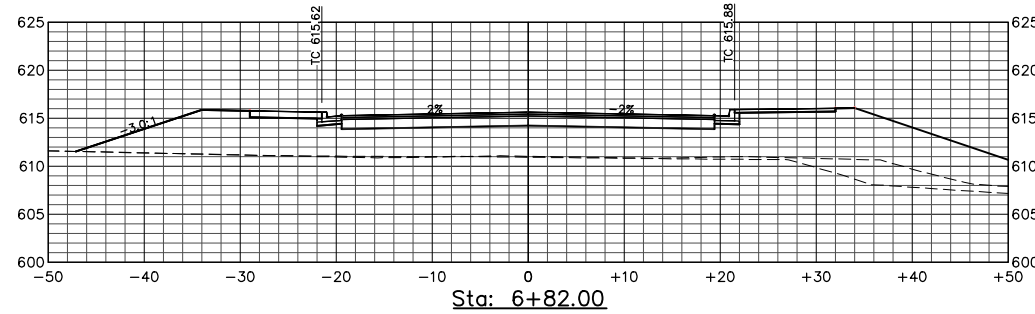
SECTION VOLUME Sta: 8+25.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



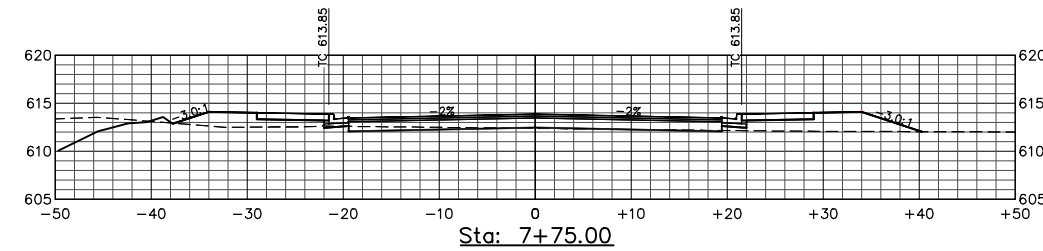
SECTION VOLUME Sta: 7+00.00	
Cut Area (Sq.Ft.)	0.22
Fill Area (Sq. Ft.)	474.05
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	272
Total Cut Vol. (Cu. Yds.)	5
Total Fill Vol. (Cu. Yds.)	3,981
Net Volume (Cu. Yds.)	-3,976



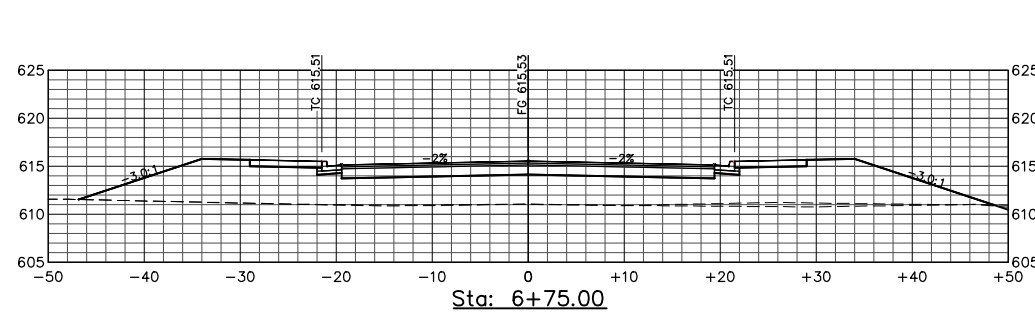
SECTION VOLUME Sta: 8+00.00	
Cut Area (Sq.Ft.)	36.22
Fill Area (Sq. Ft.)	14.81
Cut Vol. (Cu. Yds.)	25
Fill Vol. (Cu. Yds.)	26
Total Cut Vol. (Cu. Yds.)	39
Total Fill Vol. (Cu. Yds.)	4,679
Net Volume (Cu. Yds.)	-4,640



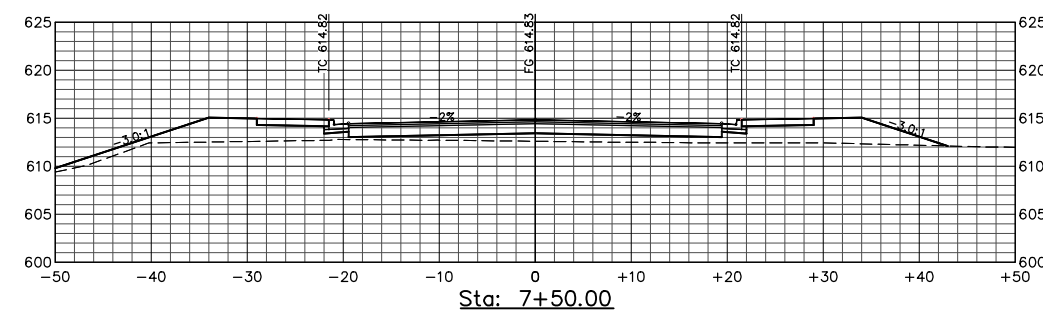
SECTION VOLUME Sta: 6+82.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



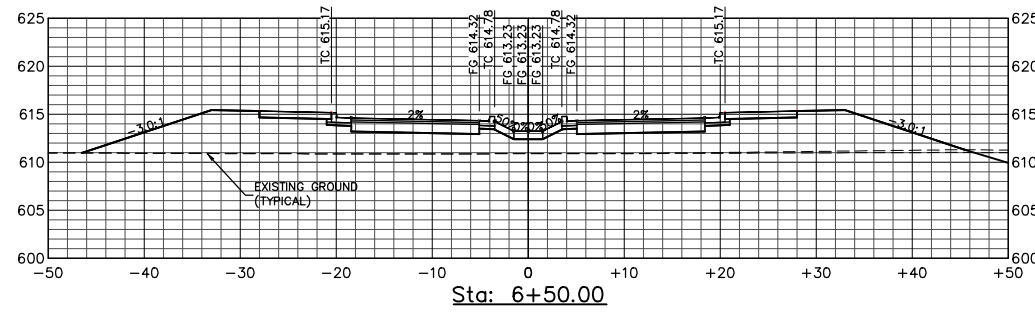
SECTION VOLUME Sta: 7+75.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



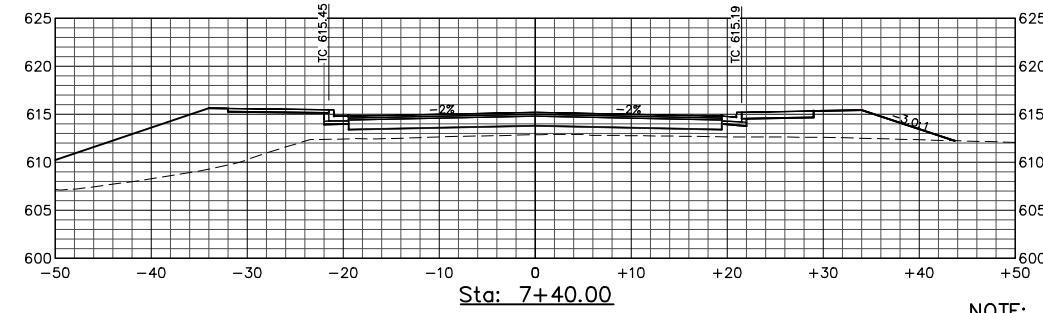
SECTION VOLUME Sta: 6+75.00	
Cut Area (Sq.Ft.)	0.35
Fill Area (Sq. Ft.)	292.63
Cut Vol. (Cu. Yds.)	2
Fill Vol. (Cu. Yds.)	248
Total Cut Vol. (Cu. Yds.)	5
Total Fill Vol. (Cu. Yds.)	3,626
Net Volume (Cu. Yds.)	-3,622



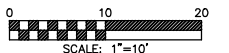
SECTION VOLUME Sta: 7+50.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



SECTION VOLUME Sta: 6+50.00	
Cut Area (Sq.Ft.)	3.01
Fill Area (Sq. Ft.)	244.13
Cut Vol. (Cu. Yds.)	1
Fill Vol. (Cu. Yds.)	222
Total Cut Vol. (Cu. Yds.)	3
Total Fill Vol. (Cu. Yds.)	3,378
Net Volume (Cu. Yds.)	-3,375



SECTION VOLUME Sta: 7+40.00	
Cut Area (Sq.Ft.)	0.00
Fill Area (Sq. Ft.)	0.00
Cut Vol. (Cu. Yds.)	0
Fill Vol. (Cu. Yds.)	0
Total Cut Vol. (Cu. Yds.)	0
Total Fill Vol. (Cu. Yds.)	0
Net Volume (Cu. Yds.)	0



NOTE:
 1. FUTURE ROADWAY SIDEWALK SHOWN FOR CLARITY ONLY, SEE NOTE 3 SHT 5.



DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Road-Section-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW:
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

VERIFY SCALE

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

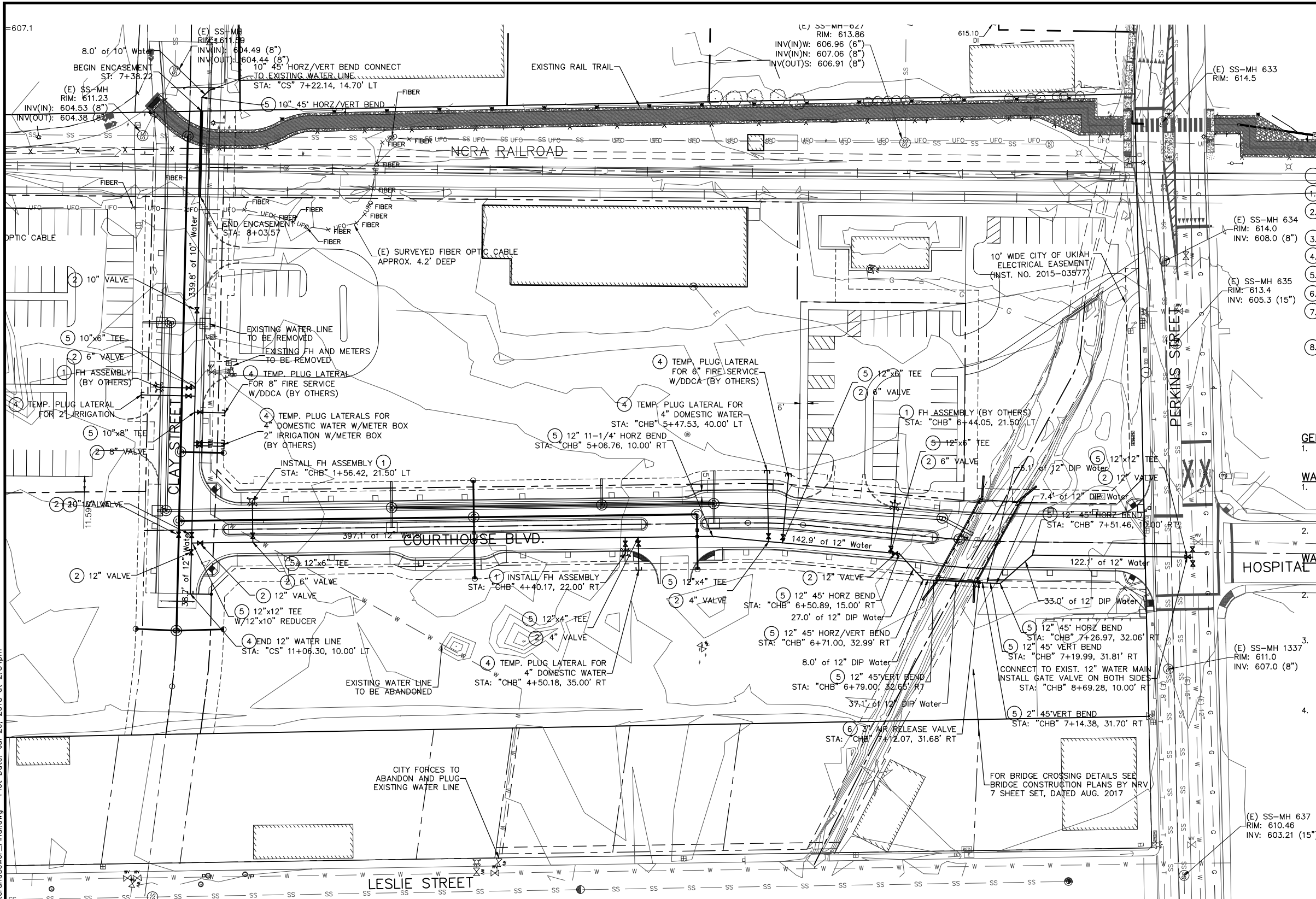
RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: CROSS SECTIONS—STA: 6+25 TO 8+25 — COURTHOUSE BLVD.

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 20 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

FOR CONSTRUCTION



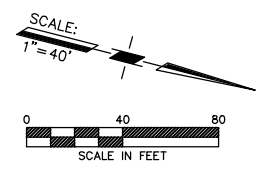
- WATER CONSTRUCTION KEY NOTES**
- CONSTRUCT FIRE HYDRANT AND ASSEMBLY PER DETAIL 19, SHEET 25.
 - CONSTRUCT BUTTERFLY VALVE OR GATE VALVE AND BOX (SIZE PER PLAN) PER DETAIL 20, SHEET 25.
 - CONSTRUCT WATER LINE (SIZE PER PLAN) PER TRENCH DETAIL 22, SHEET 25.
 - CONSTRUCT WATER MAIN DEAD END BLOW-OFF PER DETAIL 21, SHEET 25.
 - INSTALL FITTING (SIZE PER PLAN) PER DETAIL 22, SHEET 25.
 - INSTALL 3" COMBINATION AIR VALVE PER DETAIL 24, SHEET 25.
 - DEPRESS WATER LINE MIN. 1'-0" BELOW AND MIN. 2'-0" ON BOTH SIDES OF UTILITY CROSSING AS NOTED ON SANITARY SEWER PLAN AND PROFILES SHTS 12324. USE EBAA IRON, INC. MECHANICAL JOINT RESTRAINT.
 - ARRANGE WATER PIPE JOINTS SO THEY ARE NO CLOSER THAN 5 FEET EITHER SIDE OF SANITARY SEWER CROSSINGS.

- CONSTRUCTION NOTES:**
- FUTURE SIDEWALK SHOWN FOR CLARITY ONLY. TO BE BUILT IN FUTURE

- GENERAL:**
- IN GENERAL, ALL WORK SHALL CONFORM TO THE MOST RECENT AWWA (AMERICAN WATER WORKS ASSOCIATION) SPECIFICATIONS.

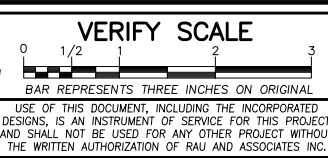
- WATER VALVE NOTES:**
- ALL 10" AND 12" DIAMETER VALVES TO BE WATERMAN MODEL #VBE2-W, 150 POUND RATING FLANGED STYLE BUTTERFLY VALVES WITH STAINLESS STEEL STEM AND CAST IRON EPOXY COATED DISK, BUNA-N SEATS, AND STANDARD OPERATOR WITH HANDWHEEL.
 - 6" AND 4" VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO THE CITY OF UKIAH STANDARD DRAWING NO. 307.

- WATER PIPE NOTES:**
- ALL PIPING 4" IN DIAMETER OR LARGER SHALL BE PVC PIPING TO BE C-900, CLASS 150, DR18, EXCEPT WHERE NOTED ON THE PROJECT PLANS.
 - 2" SERVICE LATERAL WATER PIPING BETWEEN WATER MAIN AND METER BOX TO BE 2" POLYETHYLENE (P.E.). ACCEPTABLE PRODUCTS ARE ORANGEBERG P.E. 3406, WESTFLEX (P.E.) 3408 OR APPROVED EQUIVALENT, 200 PSI, SDR-7, NSF APPROVED, CONFORMING TO THE CITY OF UKIAH STANDARD DRAWING NO. 301.
 - PRESSURE TEST ALL PIPING AFTER BACKFILLING BETWEEN CONTROL VALVES TO 150 PSI FOR 2 HOURS IN ACCORDANCE WITH THE PROCEDURES OF AWWA MANUAL NO. M23. THE HYDROSTATIC TEST PRESSURE SHALL BE MAINTAINED FOR THE DURATION OF THE TEST PERIOD BY PUMPING ADDITIONAL WATER INTO THE PIPE AT INTERVALS WHEN THE TEST PRESSURE DROPS MORE THAN 5 PSI. THE HYDROSTATIC TEST IS BASICALLY A CONSTANT PRESSURE TEST. EXAMINE EXPOSED PIPING AND REPLACE OR REMAKE JOINTS SHOWING VISIBLE LEAKAGE.
 - DISINFECT AND TEST ALL WATERLINES PRIOR TO OPENING VALVES TO CITY DISTRIBUTION SYSTEM. USE HYPOCHLORITE CONFORMING TO AWWA B300 OR LIQUID CHLORINE CONFORMING TO AWWA B301 TO DISINFECT. FOLLOW PROCEDURE IN AWWA C651 STANDARD TO DISINFECT WATER LINES.



Xrefs: R11003.5_Topo.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg; Path: Z:\R11003.5_Drawings\FINAL\R11003.5_WaterandSewer_Final.dwg Plot Date: Jul 26, 2018 at 2:34pm

DATE:	REVISION:	BY:	COMPUTER NO:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	SERVER Z:\R11003.5
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	PATH: \DRAWINGS\FINAL
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2'	MAW	FILE: R11003.5_WaterandSewer-Final.dwg
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	PSVIEW: SM14 OVERALL WATERSEWER
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVP:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	MSVIEW:



OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

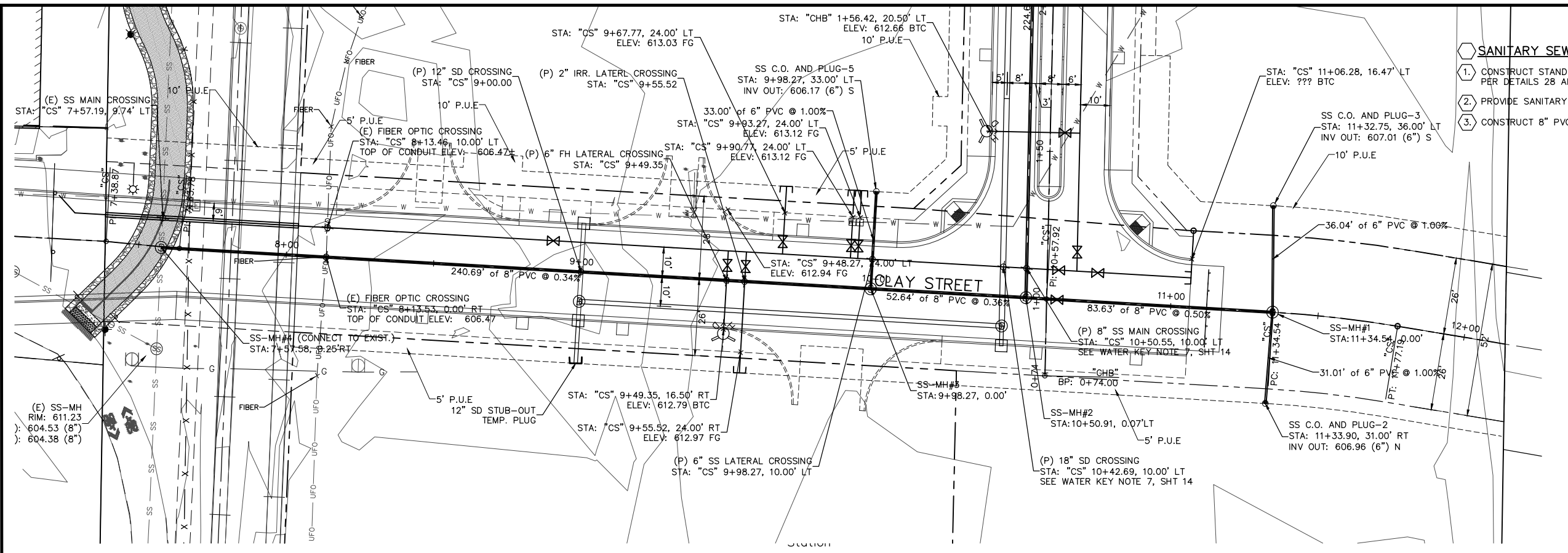
DRAWING: OVERALL WATER PLAN

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date:	JULY 2017	SHEET 21 of 27 SHEETS
Scale:	AS SHOWN	
Drawn:	M.A.W.	
Checked:	G.C.R.	
Reviewed:	G.C.R.	
Job No.	R11003.5	

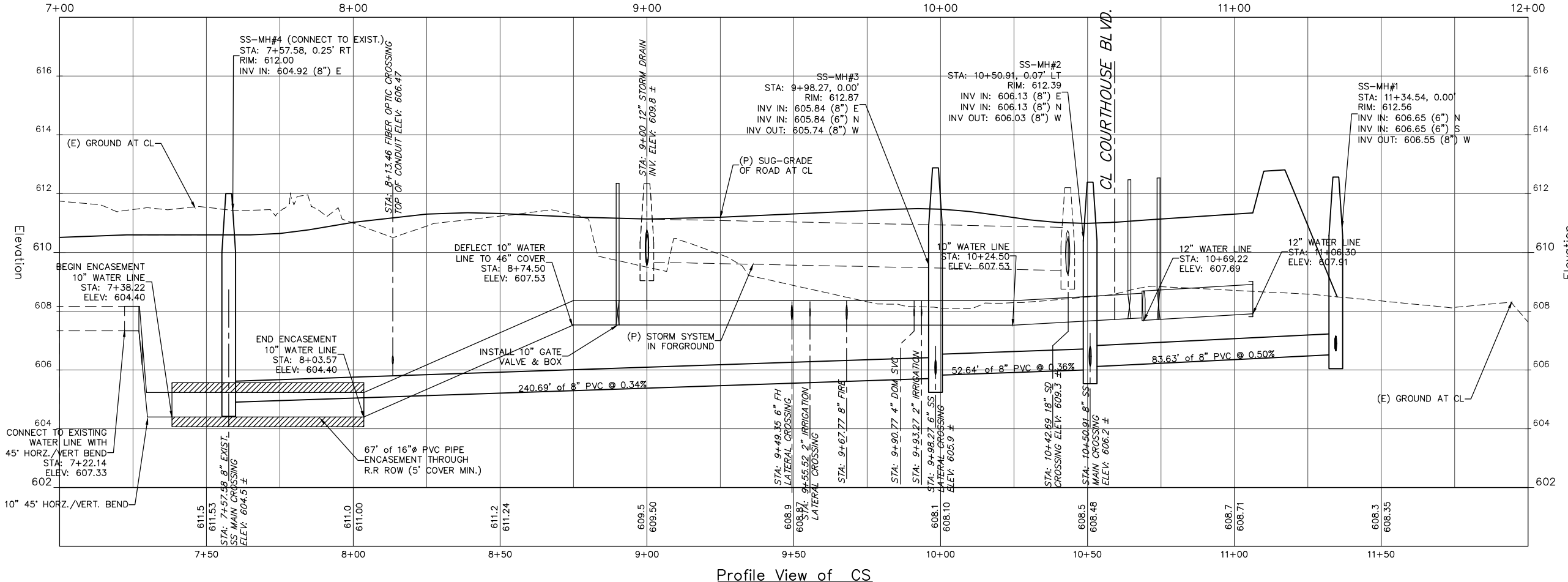
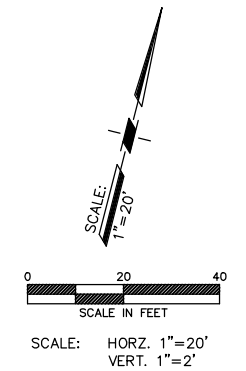


FOR CONSTRUCTION



- SANITARY SEWER CONSTRUCTION KEY NOTES**
1. CONSTRUCT STANDARD SANITARY SEWER MANHOLE WITH FRAME AND COVER PER DETAILS 28 AND 29, SHEET 19.
 2. PROVIDE SANITARY SEWER LATERAL PER DETAIL 30, SHEET 19.
 3. CONSTRUCT 8" PVC SANITARY SEWER PIPE PER TRENCH DETAIL 31, SHEET 19.

- PHASE 1 NOTES:**
1. FUTURE ROADWAY CURB, GUTTER AND SIDEWALK SHOWN FOR CLARITY ONLY.



Xrefs: R11003.5_Topog.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_WaterandSewer_Final.dwg Plot Date: Jul 26, 2018 at 2:34pm



DATE:	REVISION:	BY:	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISE TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_WaterandSewer_Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2',	MAW	PSVIEW: SH22-CLAY ST
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

VERIFY SCALE
 0 1/2 1 2 3
 BAR REPRESENTS THREE INCHES ON ORIGINAL
 USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

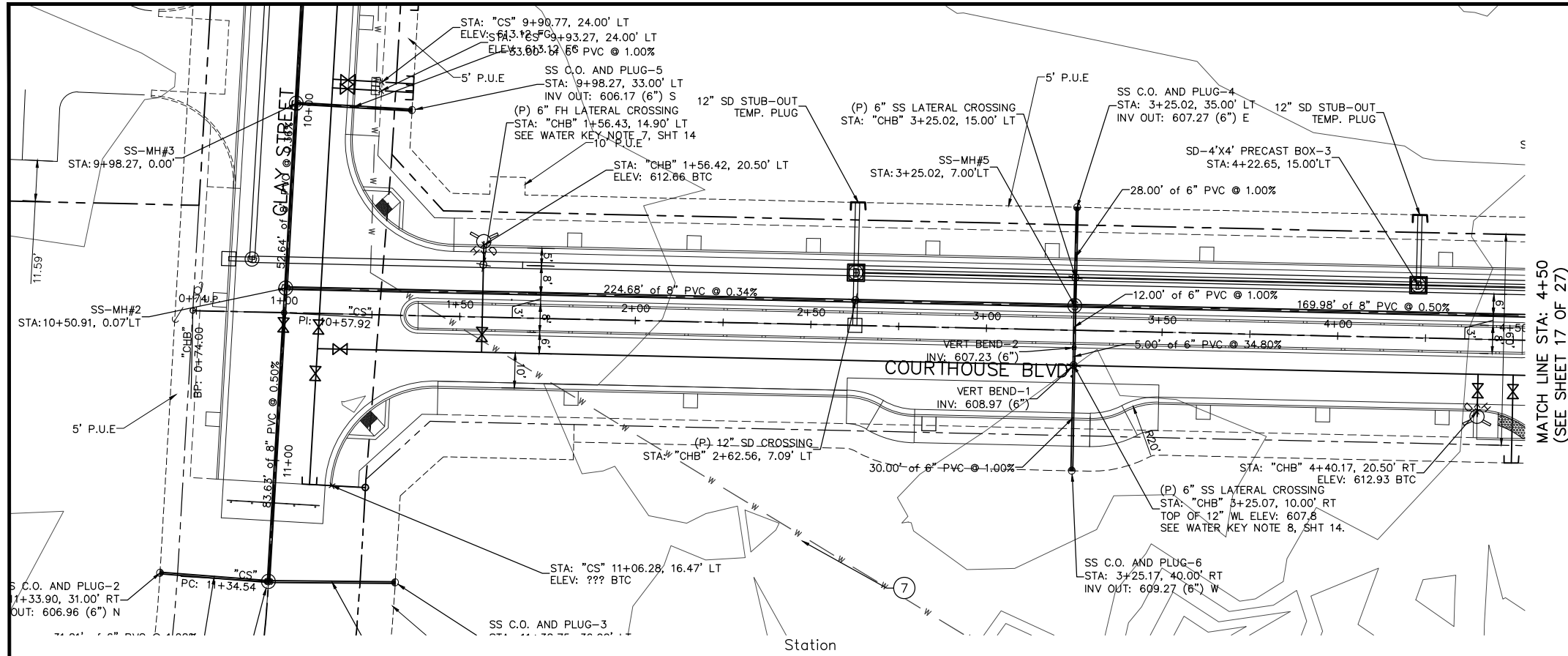
OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: SANITARY SEWER PLAN & PROFILE
CLAY STREET
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date:	JULY 2017	SHEET	22
Scale:	AS SHOWN	of	27
Drawn:	M.A.W.		
Checked:	G.C.R.		
Reviewed:	G.C.R.		
Job No.	R11003.5		

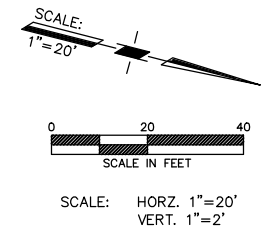
FOR CONSTRUCTION



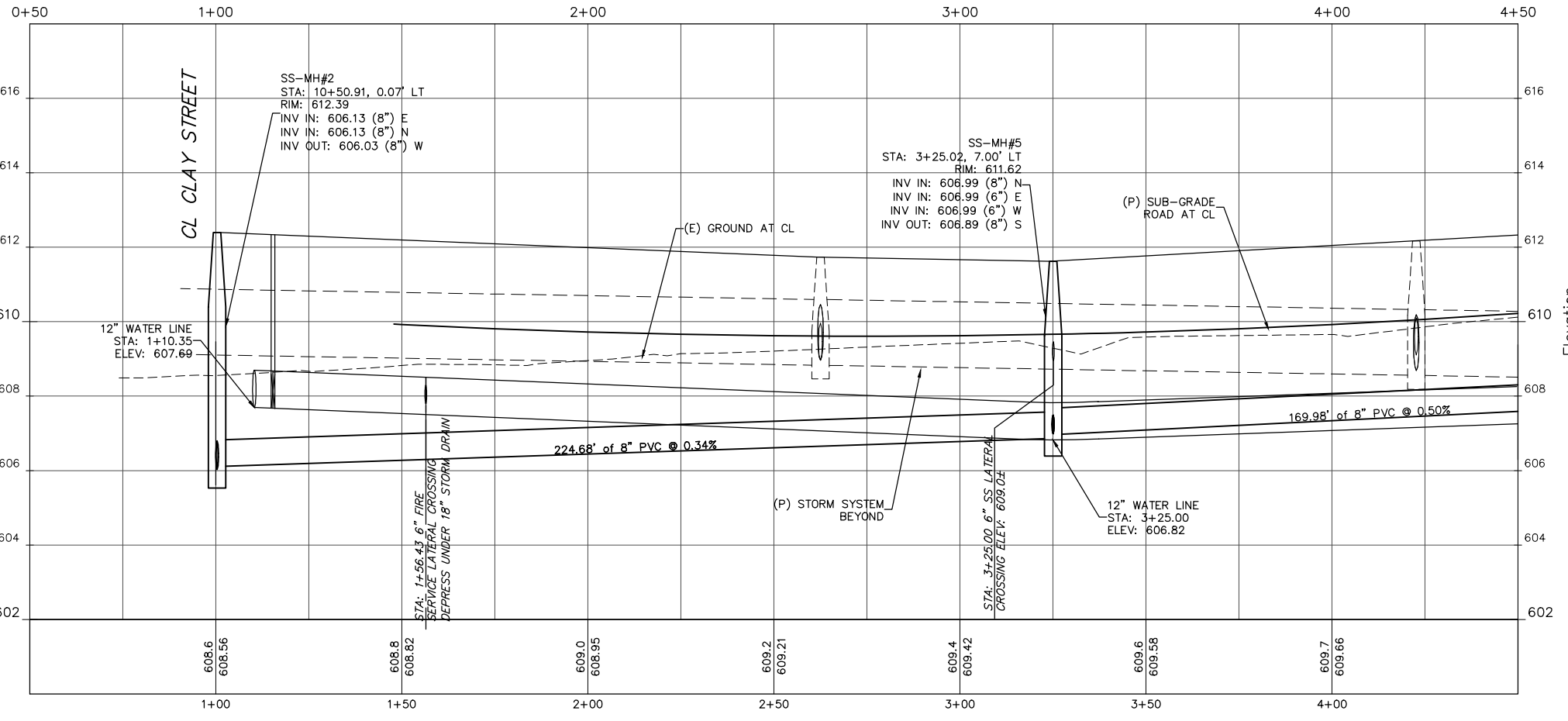
- SANITARY SEWER CONSTRUCTION KEY NOTES**
1. CONSTRUCT STANDARD SANITARY SEWER MANHOLE WITH FRAME AND COVER PER DETAILS 28 AND 29, SHEET 26.
 2. PROVIDE SANITARY SEWER LATERAL PER DETAIL 30, SHEET 26
 3. CONSTRUCT 8" PVC SANITARY SEWER PIPE PER TRENCH DETAIL 31, SHEET 26.

PHASE 1 NOTES:

1. FUTURE SIDEWALK SHOWN FOR CLARITY ONLY.



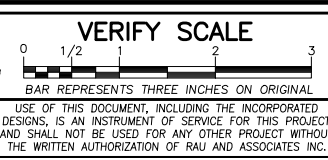
MATCH LINE STA: 4+50
(SEE SHEET 17 OF 27)



Profile View of CHB

Xrefs: R11003.5_Topog.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg; Path: Z:\R11003.5_Drawings\FINAL\R11003.5_WaterandSewer_Final.dwg Plot Date: Jul 26, 2018 at 2:34pm

DATE:	REVISION:	BY:	COMPUTER NO:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	SERVER Z:\R11003.5
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	PATH: \DRAWINGS\FINAL
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	FILE: R11003.5_WaterandSewer-Final.dwg
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	PSVIEW: SH23-COURTHOUSE
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVP:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	MSVIEW:



OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

RAU AND ASSOCIATES INC.
CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: SANITARY SEWER PLAN & PROFILE
COURTHOUSE BLVD.

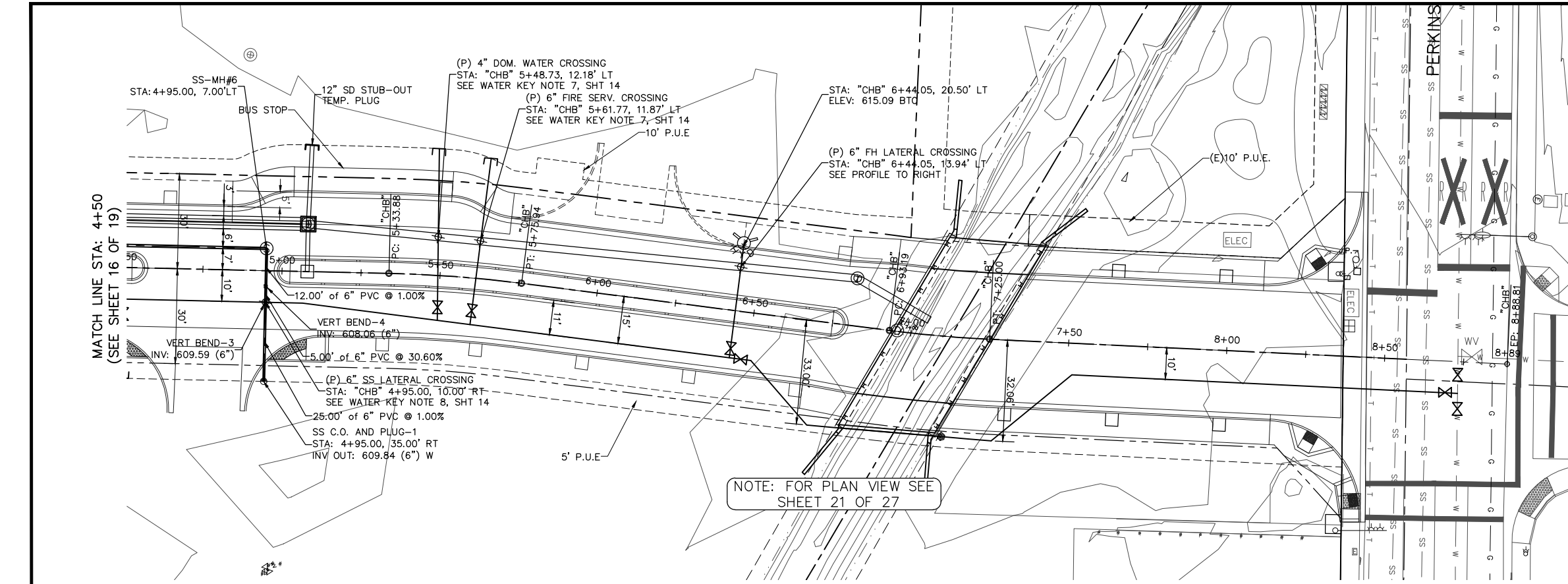
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date:	JULY 2017
Scale:	AS SHOWN
Drawn:	M.A.W.
Checked:	G.C.R.
Reviewed:	G.C.R.
Job No.	R11003.5



SHEET 23
of
27
SHEETS

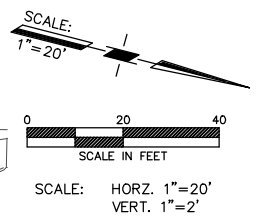
FOR CONSTRUCTION



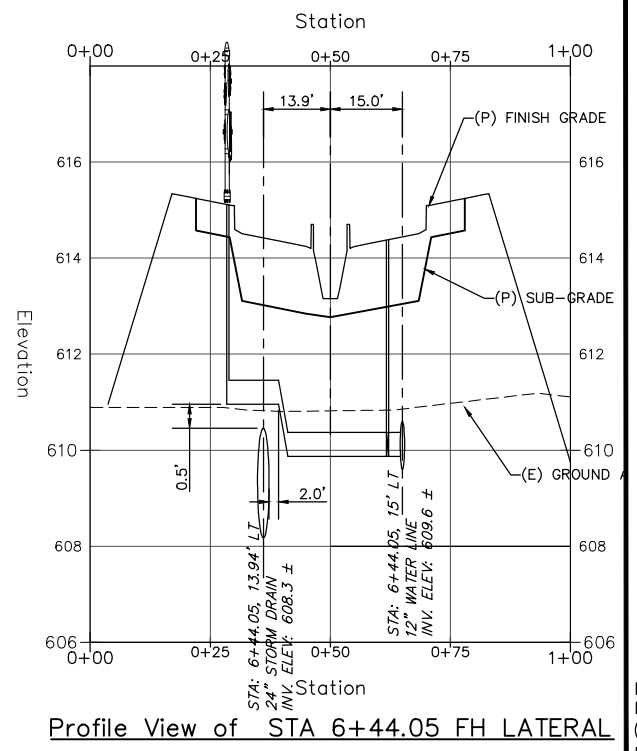
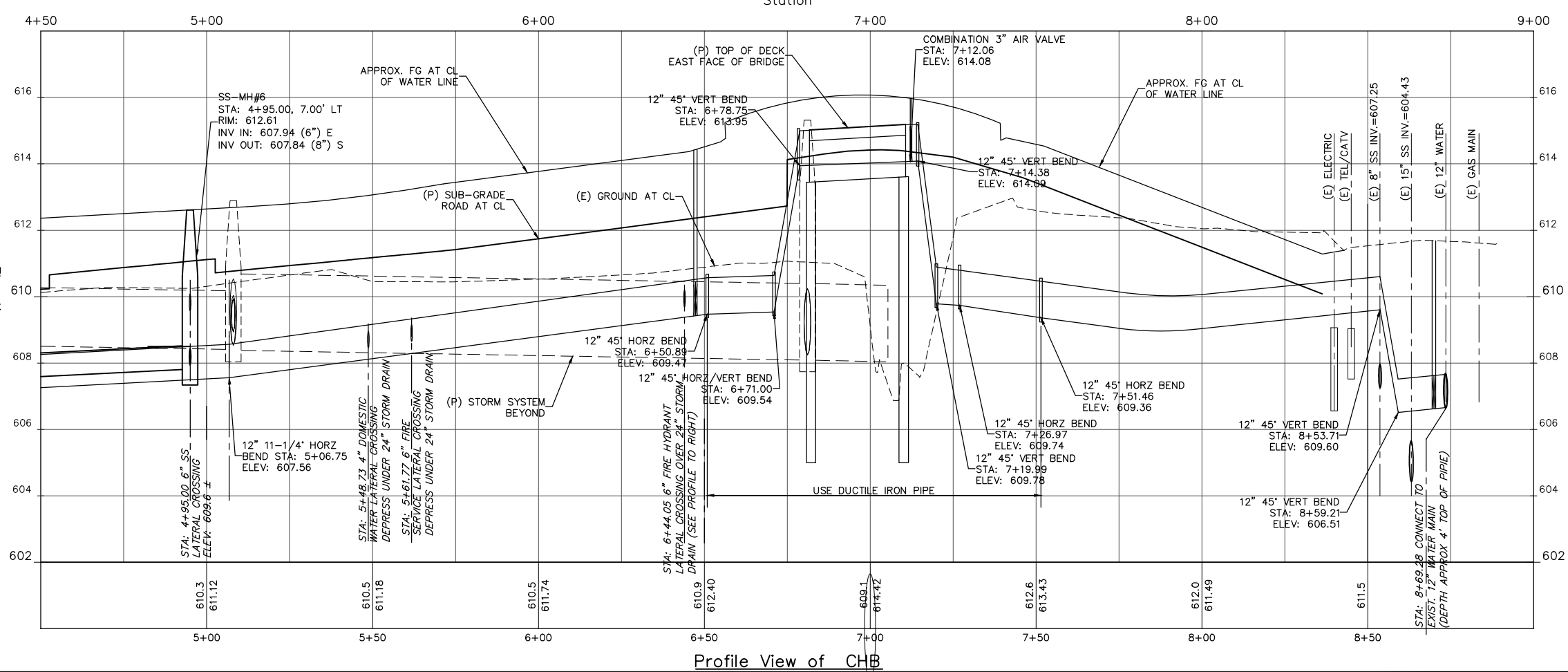
- SANITARY SEWER CONSTRUCTION KEY NOTES**
1. CONSTRUCT STANDARD SANITARY SEWER MANHOLE WITH FRAME AND COVER PER DETAILS 28 AND 29, SHEET 26.
 2. PROVIDE SANITARY SEWER LATERAL PER DETAIL 30, SHEET 26
 3. CONSTRUCT 8" PVC SANITARY SEWER PIPE PER TRENCH DETAIL 31, SHEET 26.

CONSTRUCTION PHASE NOTES:

1. FUTURE SIDEWALK SHOWN FOR CLARITY ONLY.

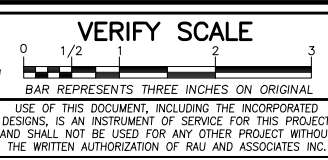


NOTE: FOR PLAN VIEW SEE SHEET 21 OF 27



Xrefs: R11003.5_Topo.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg; Path: Z:\R11003.5_Drawings\FINAL\R11003.5_WaterandSewer_Final.dwg Plot Date: Jul 26, 2018 at 2:34pm

DATE:	REVISION:	BY:	COMPUTER NO.:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	SERVER 2\R11003.5
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	PATH: \DRAWINGS\FINAL
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2',	MAW	FILE: R11003.5_WaterandSewer-Final.dwg
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	PSVIEW: SH24-COURTHOUSE
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVP:
5/26/18	PREMISE WATER CONNECTION AT PERKINS	MAW	MSVIEW:



OWNER: NORTH COAST RAILROAD AUTHORITY
 APN: 002-232-15 and 002-282-20
 LOCATION: 309 EAST PERKINS STREET
 UKIAH, CA 95482

RAU AND ASSOCIATES INC.
 CIVIL ENGINEERS • LAND SURVEYORS
 100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: SANITARY SEWER PLAN & PROFILE
 COURTHOUSE BLVD.
 PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date: JULY 2017
 Scale: AS SHOWN
 Drawn: M.A.W.
 Checked: G.C.R.
 Reviewed: G.C.R.
 Job No. R11003.5



FOR CONSTRUCTION

SHEET **24** of 27 SHEETS

REQUIRED AREA IN SQ. FT.						
PIPE SIZE	TEE DEADENDS	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	VALVE
4"	3	4	2	1	1	2
6"	6	9	5	2	2	4
8"	11	16	8	4	2	7
10"	18	26	14	6	3	11
12"	26	37	20	10	5	15

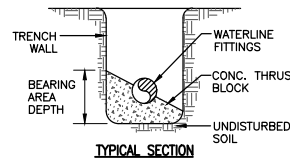
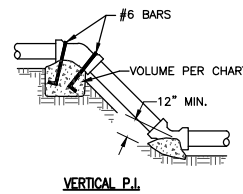
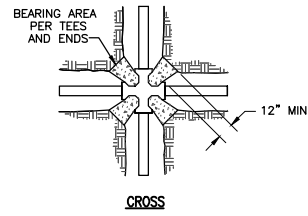
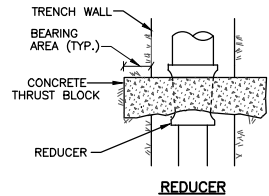
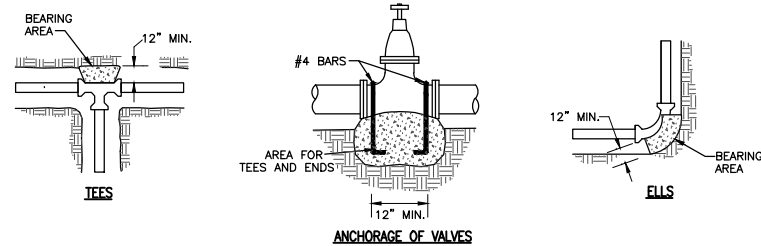
* For bends less than 11 1/4°, use thrust areas for 11 1/4°, unless otherwise approved by the engineer.

NOTES

- THRUST BLOCKING TABLE CALCULATED FOR SOIL BEARING CAPACITY OF 1,000 LBS./SQ. FT. AND 175 LBS./SQ. IN. TEST PRESSURE.
- ANY GREATER SOIL BEARING CAPACITY THAN 1,000 LBS./SQ. IN., SHALL BE DETERMINED BY AN ENGINEER, AND APPROVED BY THE CITY.
- CONCRETE BLOCKING SHALL BE CLASS B CONCRETE 2,000 LBS./SQ. IN., UNDISTURBED GROUND.
- CONCRETE BLOCKING, CAST IN PLACE, TO EXTEND FROM BELLS OF FITTINGS TO UNDISTURBED GROUND.
- FOR PLUGGED LEG(S) OF TEE OR CROSS WITH 90° FLOW PATTERN, USE DATA LISTED FOR 90° BEND.

CITY OF UKIAH
THRUST BLOCK
AREAS REQUIRED
DRAWING NO. 311 JUL '91

REDUCER SIZE	TOTAL BEARING AREA
4" x 6"	2 SQ. FEET
6" x 8"	4 SQ. FEET
8" x 12"	10 SQ. FEET



NOTES:

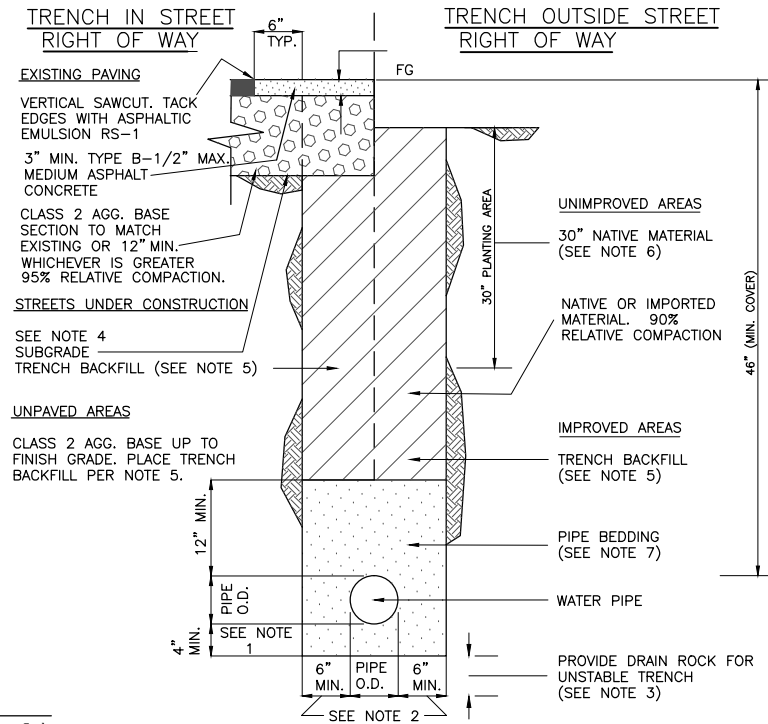
- WHEN EXCAVATION IS IN ROCKY GROUND, USE THE GREATER OF 1/4 PIPE O.D. OR 4" MINIMUM.
- FOR 18"Ø PIPE OR LESS, USE 6" MIN., 9" MAX.; FOR GREATER THAN 18"Ø USE 9" MIN., 12" MAX.
- FOR UNSTABLE TRENCH PROVIDE DRAIN ROCK FOR WIDTH OF TRENCH, DEPTH AS SPECIFIED ON THE IMPROVEMENT PLANS OR BY THE ENGINEER.
- NEW STREET SECTION PER IMPROVEMENT PLANS.
- TRENCH BACKFILL, 95% RELATIVE COMPACTION WITHIN 30" OF FINISH GRADE. REMAINING BACKFILL, 90% RELATIVE COMPACTION.

SIEVE SIZE	% PASSING
3/4"	90-100
NO. 4	30-65
NO. 200	0-12

- BACKFILL WITH NATIVE MATERIAL REMOVED FROM UPPER 30", 85% RELATIVE COMPACTION.
- PIPE BEDDING, 90% RELATIVE COMPACTION.

SIEVE SIZE	% PASSING
NO.200	90-100
NO.4	0-8

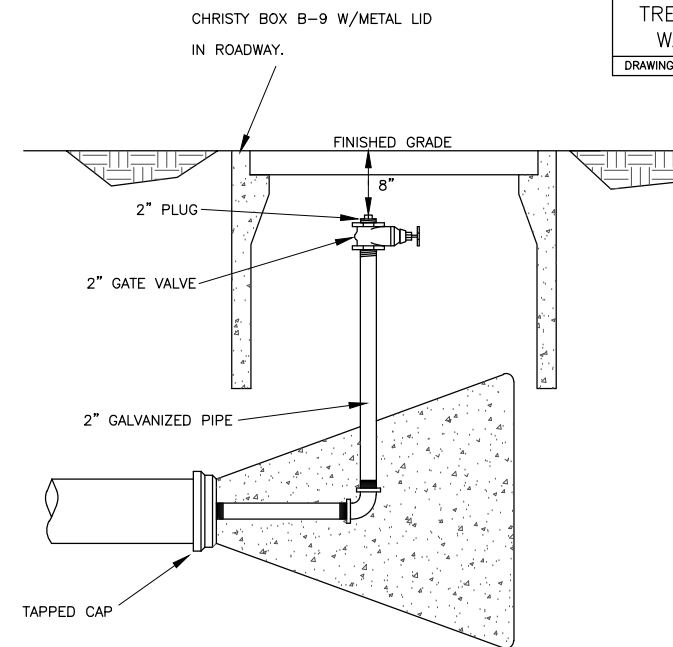
- COMPACTION: HAND AND MECHANICAL TAMPING IN 8" MAXIMUM LIFTS. NO JETTING PERMITTED



23 DETAIL

Not to Scale

CITY OF UKIAH
TRENCH DETAIL
WATER LINE
DRAWING NO. 320 FEB. '87



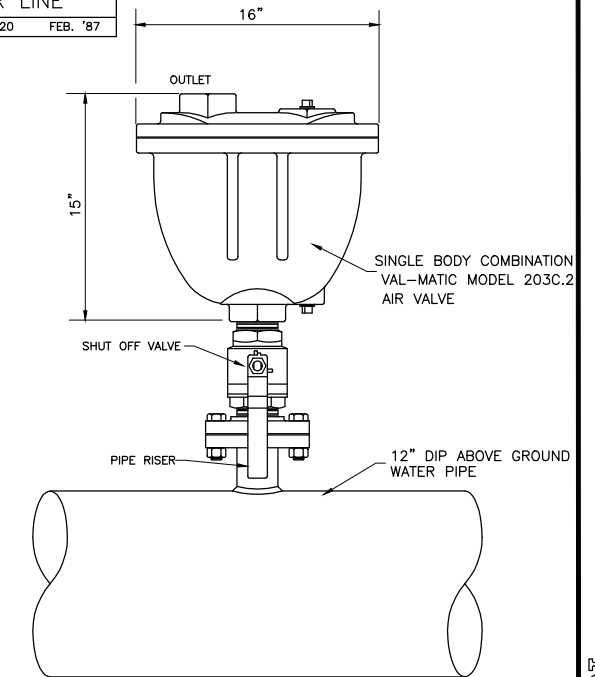
- TEMPORARY THRUST BLOCKING, AS APPROVED BY THE CITY, SHALL BE ALLOWED ON TEMPORARY DEAD-ENDS.
- PERMANENT DEAD-ENDS SHALL BE CONCRETE THRUST BLOCKED.

21 DETAIL

Not to Scale

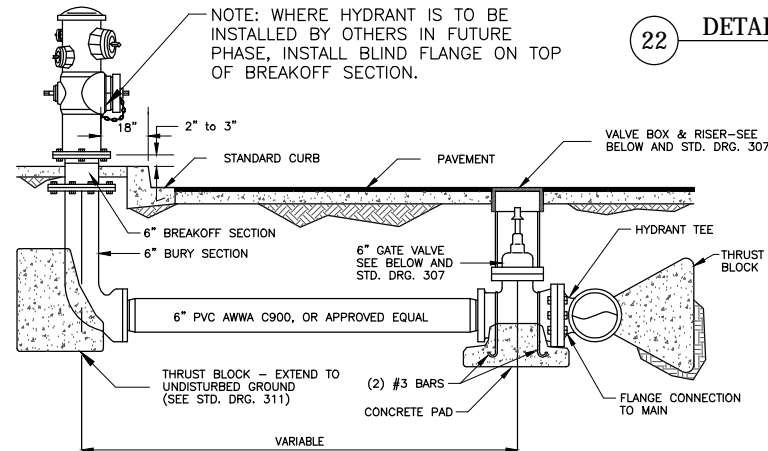
CITY OF UKIAH
WATER MAIN
DEADEND BLOW-OFF
DRAWING NO. 309 FEB. '86

SINGLE BODY COMBINATION 3" AIR VALVE DETAIL



24 DETAIL

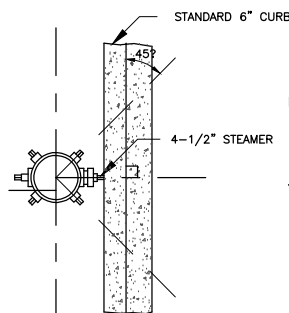
Not to Scale



22 DETAIL

Not to Scale

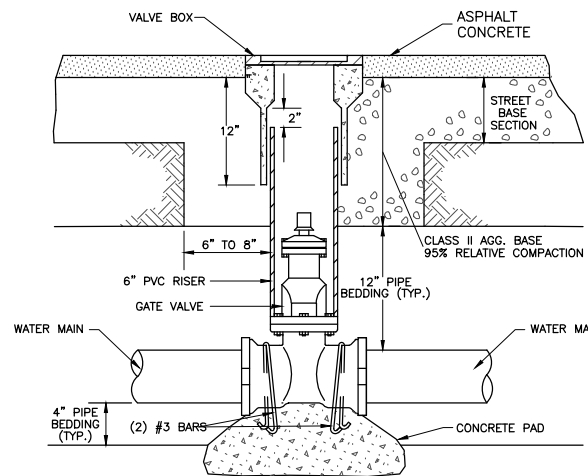
- GATE VALVE:** AMERICAN DARLING CRS OR APPROVED EQUAL. REFER TO STD. DRG. 307 FOR CONSTRUCTION DETAILS.
- VALVE BOX:** CHRISTY G5, OR APPROVED EQUAL.
- FIRE HYDRANT:** SPECIFY TWO (2) 2-1/2" HOSE OUTLETS AND ONE (1) 4-1/2" STEAMER OUTLET WHEN ORDERING. USE THE FOLLOWING TYPES: JONES J-3760, RICH NO.76 OR EQUALS SPECIFICALLY APPROVED.



19 DETAIL

Not to Scale

CITY OF UKIAH
FIRE HYDRANT LATERAL
DRAWING NO. 305 NOV. '87



NOTES:

- GATE VALVES SHALL BE OF THE TYPE RESILIENT SEAT WITH MODIFIED WEDGE, AND SHALL MEET AWWA 509-87 STANDARD. USE AMERICAN DARLING CRS OR APPROVED EQUIVALENT.
- VALVE BOXES SHALL BE SET FLUSH WITH FINISH STREET GRADE. BOX COVER SHALL INDICATE "WATER" ON TOP. VALVE BOXES SHALL BE CHRISTY G-5 OR APPROVED EQUIVALENT.
- VALVE CONNECTIONS SHALL BE PUSH-ON WHEN USING AWWA C900 PVC PIPE. CONNECTIONS SHALL BE MECHANICAL JOINT FOR PIPE OTHER THAN PVC.

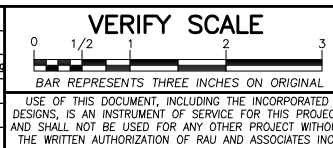
20 DETAIL

Not to Scale

CITY OF UKIAH
GATE VALVE &
VALVE BOX DETAIL
DRAWING NO. 307 JUL '91

Xrefs: R11003.5_TB_Final.dwg Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Water-Details-Final.dwg Plot Date: Jul 26, 2018 at 2:35pm

DATE	REVISION	BY	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Water-Details-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	PSVIEW: SHI25-Water Details
9/27/17	WATER TO SS PROFILE-RAISE MH#1 ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MASS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	



OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

RAU AND ASSOCIATES INC.
CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

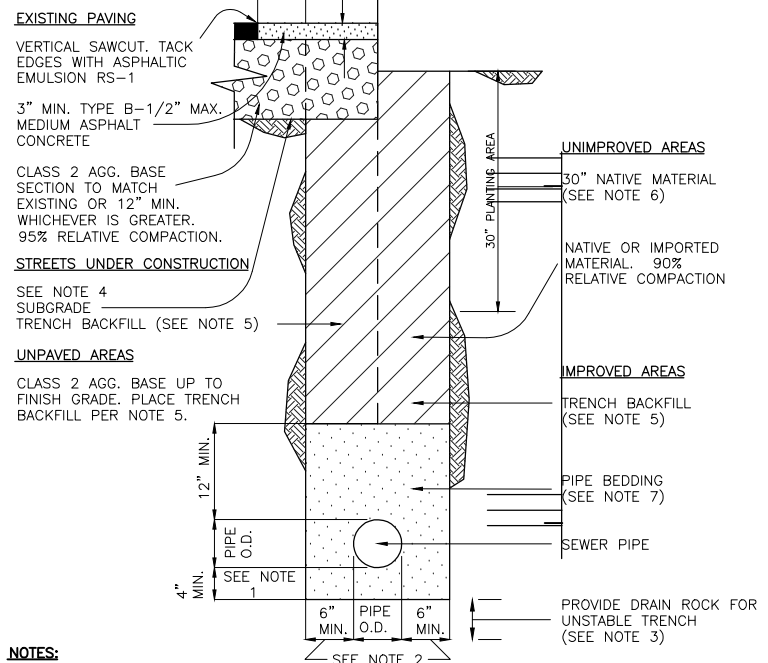
DRAWING: WATER DETAILS

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date: JULY 2017	SHEET 25 of 27 SHEETS
Scale: AS SHOWN	
Drawn: M.A.W.	
Checked: G.C.R.	
Reviewed: G.C.R.	
Job No. R11003.5	

FOR CONSTRUCTION

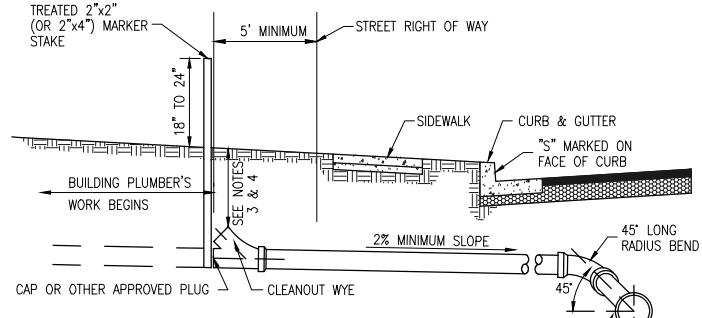
TRENCH IN STREET RIGHT OF WAY **TRENCH OUTSIDE STREET RIGHT OF WAY**



- NOTES:**
- WHEN EXCAVATION IS IN ROCKY GROUND, USE THE GREATER OF 1/4 PIPE O.D. OR 4" MINIMUM.
 - FOR 18" PIPE OR LESS, USE 6" MIN., 9" MAX.; FOR GREATER THAN 18" USE 9" MIN., 12" MAX.
 - FOR UNSTABLE TRENCH PROVIDE DRAIN ROCK FOR WIDTH OF TRENCH, DEPTH AS SPECIFIED ON THE IMPROVEMENT PLANS OR BY THE ENGINEER.
 - NEW STREET SECTION PER IMPROVEMENT PLANS.
 - TRENCH BACKFILL, 95% RELATIVE COMPACTION WITHIN 30" OF FINISH GRADE. REMAINING BACKFILL, 90% RELATIVE COMPACTION.
- | SIEVE SIZE | % PASSING |
|------------|-----------|
| 3/4" | 95 |
| NO. 4 | 65 MIN |
| NO. 200 | 15 MAX |
- BACKFILL WITH NATIVE MATERIAL REMOVED FROM UPPER 30", 85% RELATIVE COMPACTION.
 - PIPE BEDDING, 90% RELATIVE COMPACTION.
- | SIEVE SIZE | % PASSING |
|------------|-----------|
| 3/4" | 95-100 |
| NO. 4 | 55-100 |
- COMPACTION: HAND AND MECHANICAL TAMPING IN 8" MAXIMUM LIFTS. NO JETTING PERMITTED.

CITY OF UKIAH
TRENCH DETAIL
SEWER LINE
DRAWING NO. 220 FEB. '87

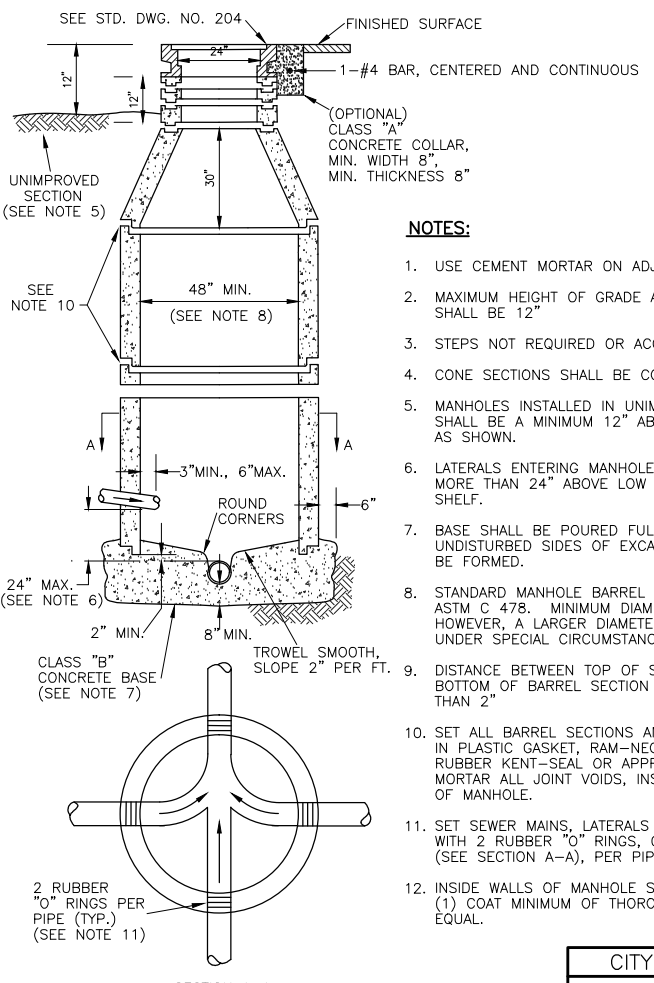
FILE: UKIAH_DWG220 28 DETAIL Not to Scale



- NOTES:**
- LATERAL PIPE TO BE 4" I.D. MINIMUM, AND ONE OF THE FOLLOWING MATERIALS:
A) CAST IRON PIPE
B) ASBESTOS CEMENT PIPE, CLASS 2400
C) POLYVINYL CHLORIDE (PVC), SDR-35
 - 2% MINIMUM SLOPE GRADE EXCEPT WHERE A VARIATION IS SPECIFICALLY APPROVED BY THE CITY ENGINEER.
 - DEPTH OF SERVICE LATERAL AT RIGHT OF WAY, IN NO CASE, SHALL BE LESS THAN 3', HOWEVER SUFFICIENT DEPTH SHALL BE PROVIDED TO ADEQUATELY SERVE THE BUILDING SITE.
 - IN SOME CASES, THE ENGINEER MAY BE REQUIRED TO STAKE THE LATERAL INVERT AT RIGHT OF WAY.
 - MINIMUM INVERT ELEVATION OF WYE BRANCH EQUALS CENTERLINE OF SEWER MAIN.
 - FOR SERVICE LATERAL TRENCH DETAILS SEE STANDARD DRAWING NO. 220.

30 DETAIL Not to Scale

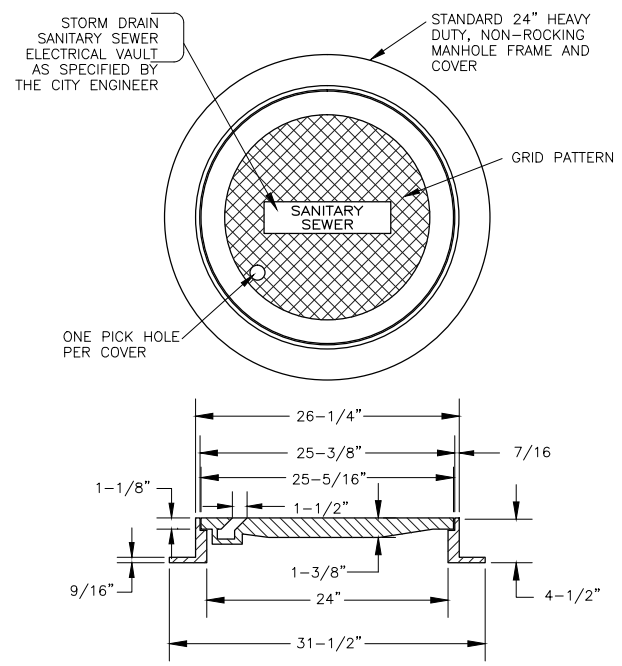
CITY OF UKIAH
SEWER SERVICE LATERAL
(INITIAL CONSTRUCTION)
DRAWING NO. 210 JUL '91



- NOTES:**
- USE CEMENT MORTAR ON ADJUSTMENT RINGS.
 - MAXIMUM HEIGHT OF GRADE ADJUSTMENT RINGS SHALL BE 12"
 - STEPS NOT REQUIRED OR ACCEPTED.
 - CONE SECTIONS SHALL BE CONCENTRIC.
 - MANHOLES INSTALLED IN UNIMPROVED AREAS SHALL BE A MINIMUM 12" ABOVE GRADE, AS SHOWN.
 - LATERALS ENTERING MANHOLE SHALL BE NO MORE THAN 24" ABOVE LOW POINT OF INSIDE SHELF.
 - BASE SHALL BE POURED FULL THICKNESS TO UNDISTURBED SIDES OF EXCAVATION OR SHALL BE FORMED.
 - STANDARD MANHOLE BARREL SECTION PER ASTM C 478. MINIMUM DIAMETER SHALL BE 48". HOWEVER, A LARGER DIAMETER MAY BE REQUIRED UNDER SPECIAL CIRCUMSTANCES.
 - DISTANCE BETWEEN TOP OF SEWER PIPE AND BOTTOM OF BARREL SECTION SHALL BE NO LESS THAN 2"
 - SET ALL BARREL SECTIONS AND TAPER SECTIONS IN PLASTIC GASKET, RAM-NECK, OR IN BUTYL RUBBER KENT-SEAL OR APPROVED EQUAL. MORTAR ALL JOINT VOIDS, INSIDE AND OUTSIDE OF MANHOLE.
 - SET SEWER MAINS, LATERALS AND STUB-OUTS WITH 2 RUBBER "O" RINGS, OR WATERSTOPS (SEE SECTION A-A), PER PIPE.
 - INSIDE WALLS OF MANHOLE SHALL RECEIVE ONE (1) COAT MINIMUM OF THOROSEAL OR APPROVED EQUAL.

28 DETAIL Not to Scale

CITY OF UKIAH
STANDARD SEWER MANHOLE
DRAWING NO. 201 DEC. '86



- NOTES:**
- SPECIFY "STORM DRAIN", "SANITARY SEWER", OR "ELECTRICAL VAULT" WHEN ORDERING; ALL CASTINGS SHALL BE DIPPED IN ASPHALT PAINT (BLACK BITUMINOUS PAINT).
 - ALL MATERIAL USED IN MANUFACTURING SHALL CONFORM TO A.S.T.M. A-159-G3000 OR TO UNITED STATES GOVERNMENT SPECIFICATIONS QQ1-652b.
 - MINIMUM WEIGHT REQUIREMENTS: COVER--130 POUNDS FRAME--135 POUNDS
 - APPROVED MANHOLES AND COVER ASSEMBLAGES:
PHOENIX IRON WORKS P-1090
PINKERTON FOUNDRY A-640
SOUTH BAY FOUNDRY A-46
VALLEY IRON AND STEEL 127

29 DETAIL Not to Scale

CITY OF UKIAH
MANHOLE FRAME & COVER
DRAWING NO. 204 JAN. '87

Xrefs: R11003.5_TB_Final.dwg Path: Z:\R11003.5 Drawings\FINAL\R11003.5_Sanitary_Sewer-Details-Final.dwg Plot Date: Jul 26, 2018 at 2:35pm

DATE:	REVISION:	BY:	COMPUTER NO:
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	SERVER Z:\R11003.5
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	PATH: \DRAWINGS\FINAL
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2±	MAW	FILE: R11003.5_Sanitary_Sew-Details-Final.dwg
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	PSVIEW: SHI28-SS Details
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVP:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	MSVIEW:

VERIFY SCALE

BAR REPRESENTS THREE INCHES ON ORIGINAL

USE OF THIS DOCUMENT, INCLUDING THE INCORPORATED DESIGNS, IS AN INSTRUMENT OF SERVICE FOR THIS PROJECT AND SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF RAU AND ASSOCIATES INC.

OWNER: NORTH COAST RAILROAD AUTHORITY
APN: 002-232-15 and 002-282-20

LOCATION: 309 EAST PERKINS STREET
UKIAH, CA 95482

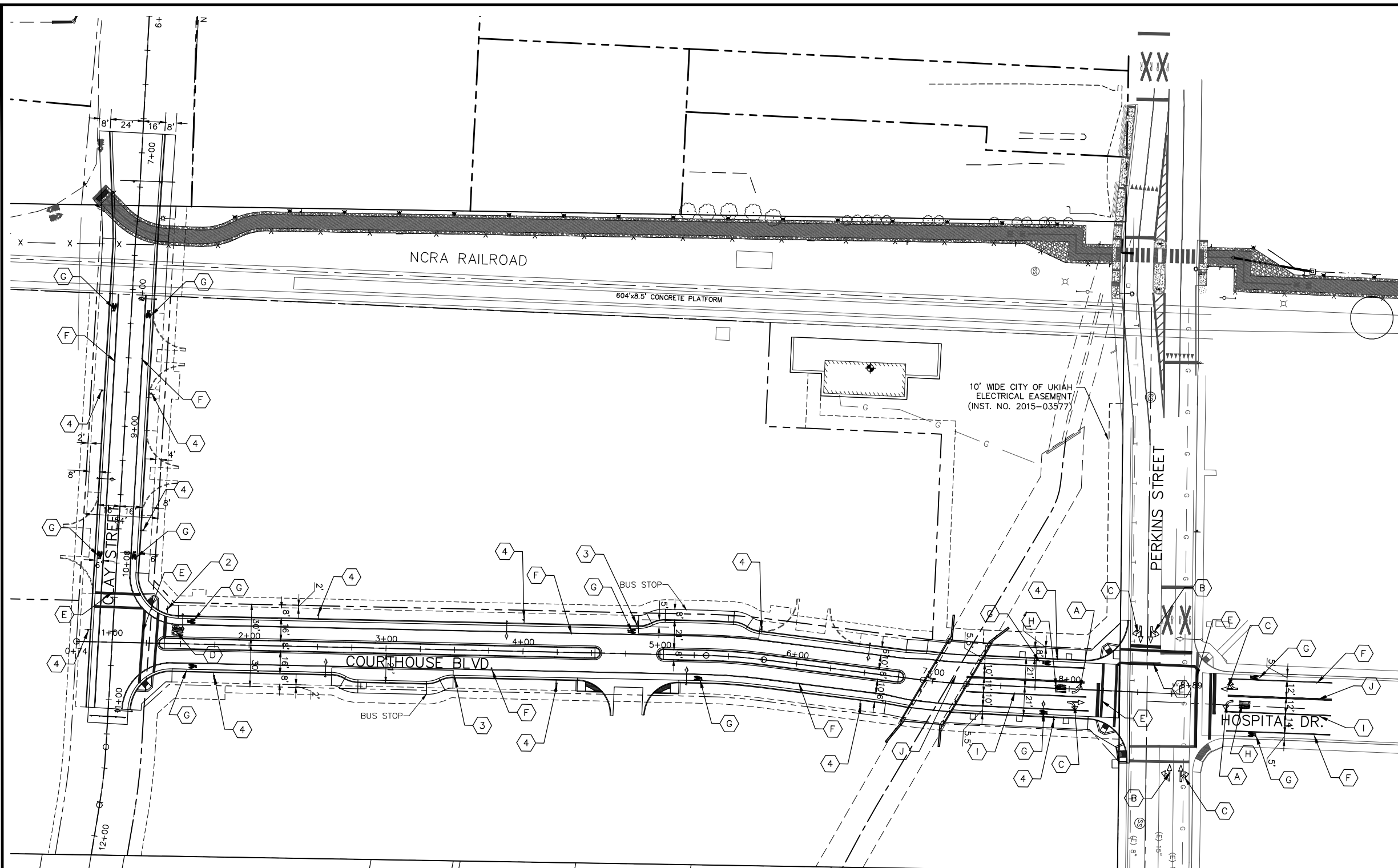
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CIVIL ENGINEERS • LAND SURVEYORS
100 NORTH PINE STREET • (707) 462-6536 • UKIAH, CA 95482

DRAWING: SANITARY SEWER DETAILS

PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
FINAL CONSTRUCTION

Date: JULY 2017	SHEET
Scale: AS SHOWN	26
Drawn: M.A.W.	
Checked: G.C.R.	of
Reviewed: G.C.R.	27
Job No. R11003.5	SHEETS

FOR CONSTRUCTION



DELINEATION KEY NOTES:

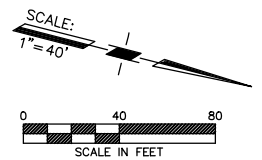
- A INDICATES TYPE IV(L) ARROW PER CALTRANS STD. PLAN A24A
- B INDICATES TYPE VI(L) ARROW PER CALTRANS STD. PLAN A24A
- C INDICATES TYPE VI(R) ARROW PER CALTRANS STD. PLAN A24A
- D INDICATES "STOP" LEGEND PER CALTRANS STD. PLAN A24D
- E CROSS WALK AND STOP LIMIT LINES PER CALTRANS STD. PLAN A24E
- F INDICATES BIKE LANE LINES PER CALTRANS STAD. PLAN A20D
- G INDICATES ROADWAY BICYCLE LANE MARKER W/ NO PERSON PER CALTRANS STD. PLAN A24C
- H INDICATES "ONLY" LEGEND PER CALTRANS STD. PLAN A24E
- I INDICATES CHANNELING LINE PER CALTRANS STD. DETAIL 38A, PLAN A20D
- J INDICATES NO PASSING ZONE LINE PER CALTRANS STD. DETAIL 21, PLAN A20A

SIGN KEY NOTES:

- 1 INSTALL STOP SIGN (R1-1)
- 2 INSTALL STOP SIGN (R1-1) WITH STREET NAME SIGNS
- 3 INSTALL 30 MPH SIGN (R2-1)
- 4 INSTALL NO PARKING SIGN (R26 CA)

SIGNING & STRIPING QUANTITIES

Description	Unit	Quantity
Stop Bar/Crosswalk Lines (12" white)	LF	319
Bike Lanes (6" white)	LF	2,080
Channelizing Lane (8" white)	LF	170
No Passing (4" double yellow stripe)	LF	260
No Parking/Speed Limit Sign & Post	EA	14
Stop/Street Sign & Post	EA	1
Thermoplastic Pavement Markers	SF	328



Xrefs: R11003.5_Topo.dwg; R11003.5_Final_Layout.dwg; R11003.5_TB_Final.dwg
 Path: Z:\R11003.5_Drawings\FINAL\R11003.5_Striping-Plan-Final.dwg Plot Date: Jul 26, 2018 at 2:36pm

DATE	REVISION	BY	COMPUTER NO: SERVER Z:\R11003.5
7/17/17	REVISIONS TO TYPICAL SECTIONS/VOLUMES	MAW	PATH: \DRAWINGS\FINAL
9/12/17	RAISE SD BY 1', MOVE CLAY ST CURB INLETS	MAW	FILE: R11003.5_Striping-Plan-Final.dwg
9/18/17	RAISE CLAY ST./COURTHOUSE BLVD 0.2'	MAW	PSVIEW: SHI27-SIGN-STRIPING
9/27/17	WATER TO SS PROFILE-RAISE MH#1, ADD LATERALS	MAW	MSVP:
10/6/17	AS-BUILT FIBER OPTIC, LOWER WATERLINE TO MISS	MAW	MSVIEW:
5/26/18	FINAL CONSTRUCTION PLANS	MAW	

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DRAWING: SIGN and STRIPING PLAN
PROJECT: COURTHOUSE INFRASTRUCTURE PROJECT
 FINAL CONSTRUCTION

Date: JULY 2017	SHEET 27 of 27 SHEETS
Scale: AS SHOWN	
Drawn: M.A.W.	
Checked: G.C.R.	
Reviewed: G.C.R.	
Job No. R11003.5	



FOR CONSTRUCTION