Project Contact

Dave Ruby
County Project Engineer
(209) 533-5633
2 S. Green Street
Sonora, CA 95370
druby@co.tuolumne.ca.us

Tuolumne Road Surface Treatment

Project No. 1722
Federal Project No.

Description

The proposed project will repair Tuolumne Road from Mono Way to Tuolumne Road North (6.97 miles). Consultant firm, Nichols Consulting Engineers, will be providing roadway analysis to determine recommended treatment.

Purpose and Need

The current Pavement Condition Index (PCI) for the County is 30. A goal of the Board of Supervisors is to improve transportation infrastructure by facilitating a Pavement Management Program.

Strategic Plan Goals

Mitigate traffic impacts to Tuolumne Road as a result of development projects.

Funding Sources

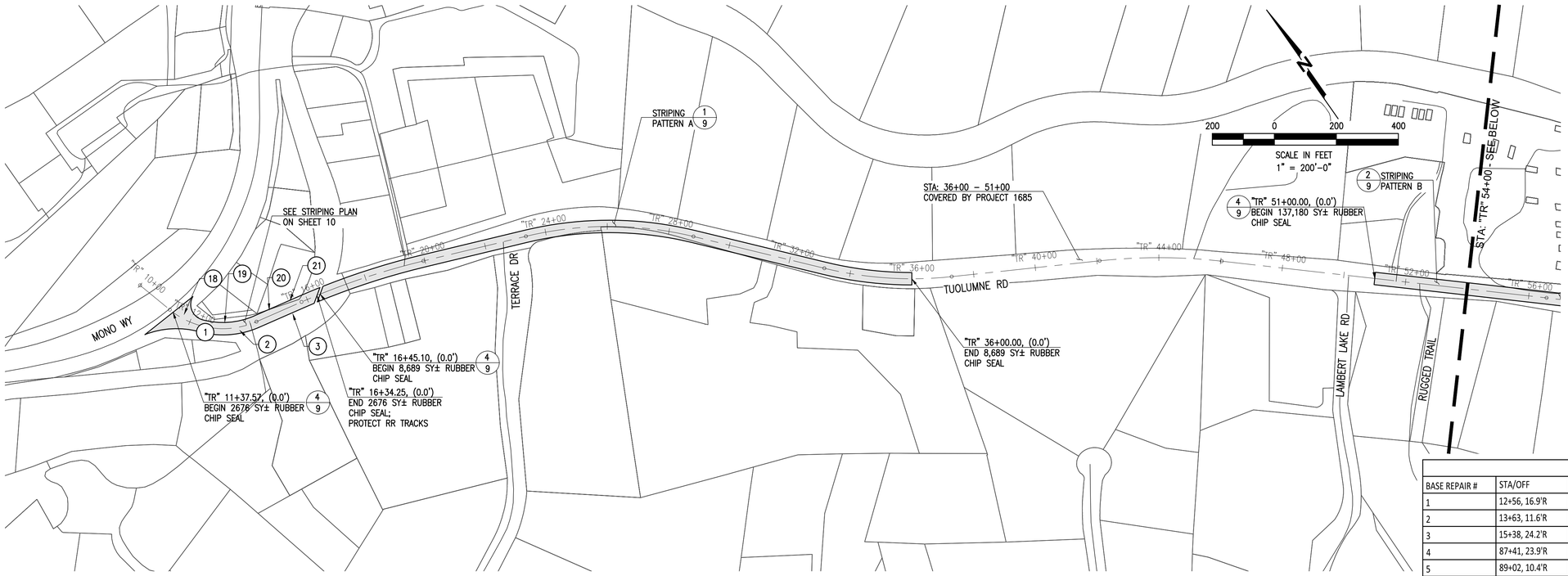
Mitigation Fund; SB1 RMRA

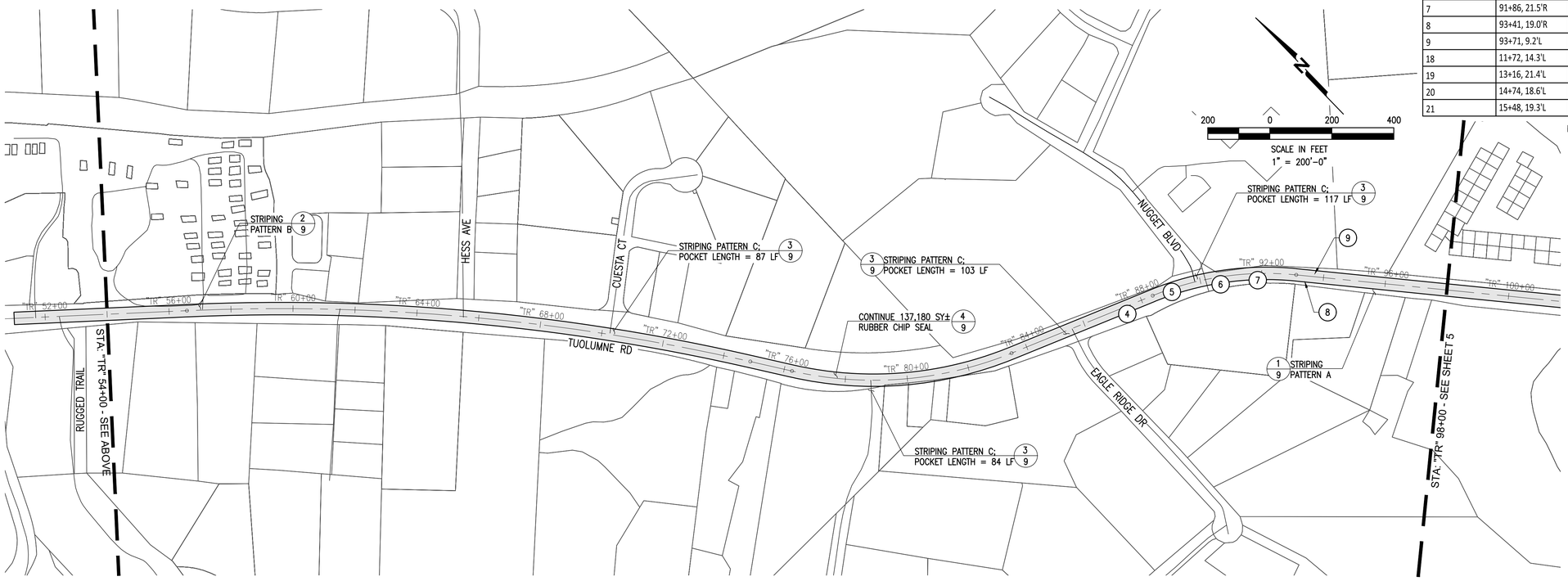
Total Project Cost: $1,265,000

Current Phase

Preliminary Engineering is completed

Anticipated Year of Construction: TBD





BASE REPAIRS					
BASE REPAIR #	STA/OFF	LENGTH (FT)	WIDTH (FT)	AREA (SF)	DEPTH (IN)
1	12+56, 16.9'R	43	5	215	15
2	13+63, 11.6'R	160	15	2400	15
3	15+38, 24.2'R	15	15	225	15
4	87+41, 23.9'R	130	35	4550	8
5	89+02, 10.4'R	70	10	700	8
6	90+63, 23.9'R	60	12	720	8
7	91+86, 21.5'R	105	11	1155	8
8	93+41, 19.0'R	77	11	847	8
9	93+71, 9.2'L	57	11	627	8
18	11+72, 14.3'L	73	18	1314	15
19	13+16, 21.4'L	46	5	230	15
20	14+74, 18.6'L	30	22	660	15
21	15+48, 19.3'L	31	5	155	15

NOTES:
1. SEE DETAILS 1/8 & 2/8. BASE REPAIRS WILL BE LOCATED IN THE FIELD BY THE ENGINEER.
2. BASE REPAIRS 18 AND 19 SHALL BE COORDINATED WITH COUNTY SIGNAL CONTRACTOR.
3. BASE REPAIR 18 CONTAINS A WATER VALVE; ADJUST TO GRADE.
4. APPLY CRACK SEALING AS NEEDED.

LEGEND

(#) BASE REPAIR LOCATION

Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER STEPHEN HAWKINS NO. 36556 EXP. 06/30/2022 CIVIL STATE OF CALIFORNIA

ISSUED FOR BIDS DATE:07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISOR'S APPROVAL

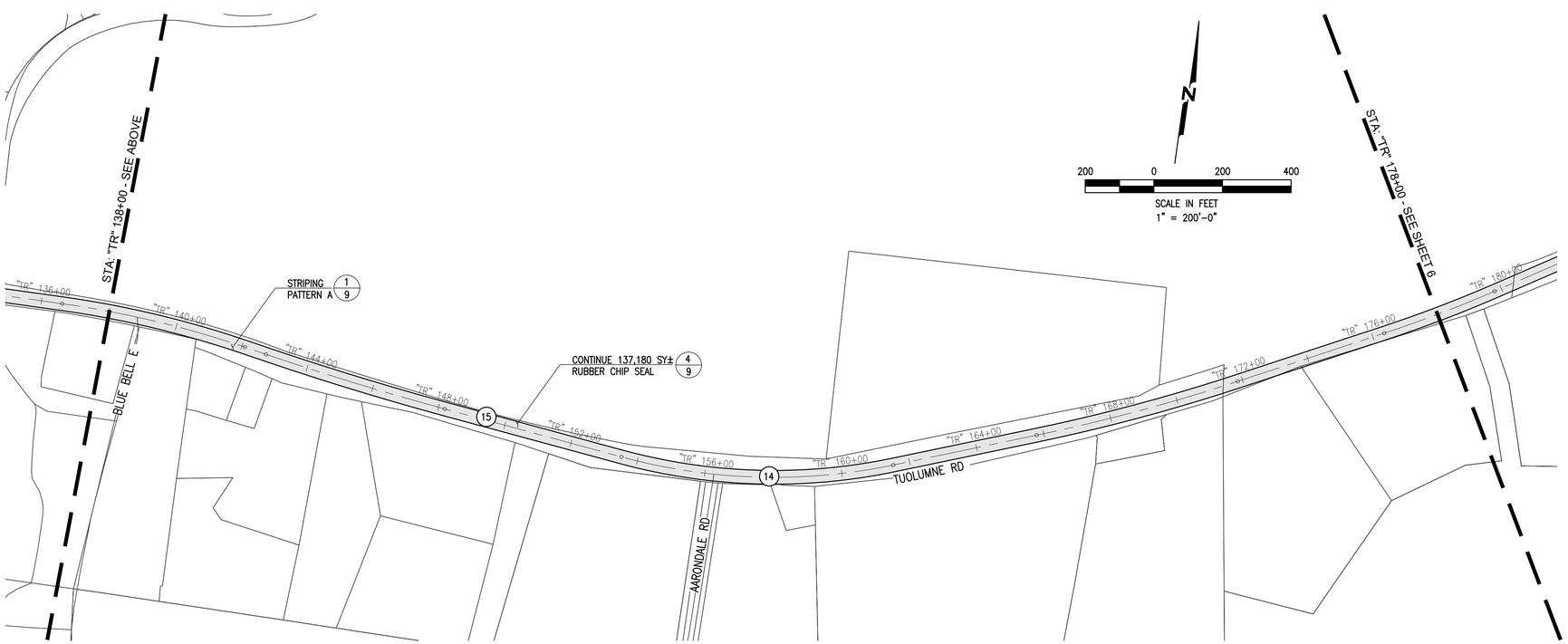
TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD IMPROVEMENT PLAN
STA: 10+00 - 98+00

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER 4
OF 17 SHEETS



BASE REPAIRS					
BASE REPAIR #	STA/OFF	LENGTH (FT)	WIDTH (FT)	AREA (SF)	DEPTH (IN)
10	114+31, 8.4'R	70	11	770	8
11	115+76, 17.4'R	113	11	1243	8
12	126+73, 1.9'R	137	6	822	15
14	157+88, 2.6'L	475	12	5700	8
15	149+42, 9.4'L	68	4	272	8
16	119+07, 13.9'L	37	6	222	8
17	110+84, 6.8'R	15	5	75	15

NOTES:
1. SEE DETAILS 1/8 & 2/8. BASE REPAIRS WILL BE LOCATED IN THE FIELD BY THE ENGINEER.
2. APPLY CRACK SEALING AS NEEDED.

LEGEND

(#) BASE REPAIR LOCATION

Know what's below. Call before you dig.

STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

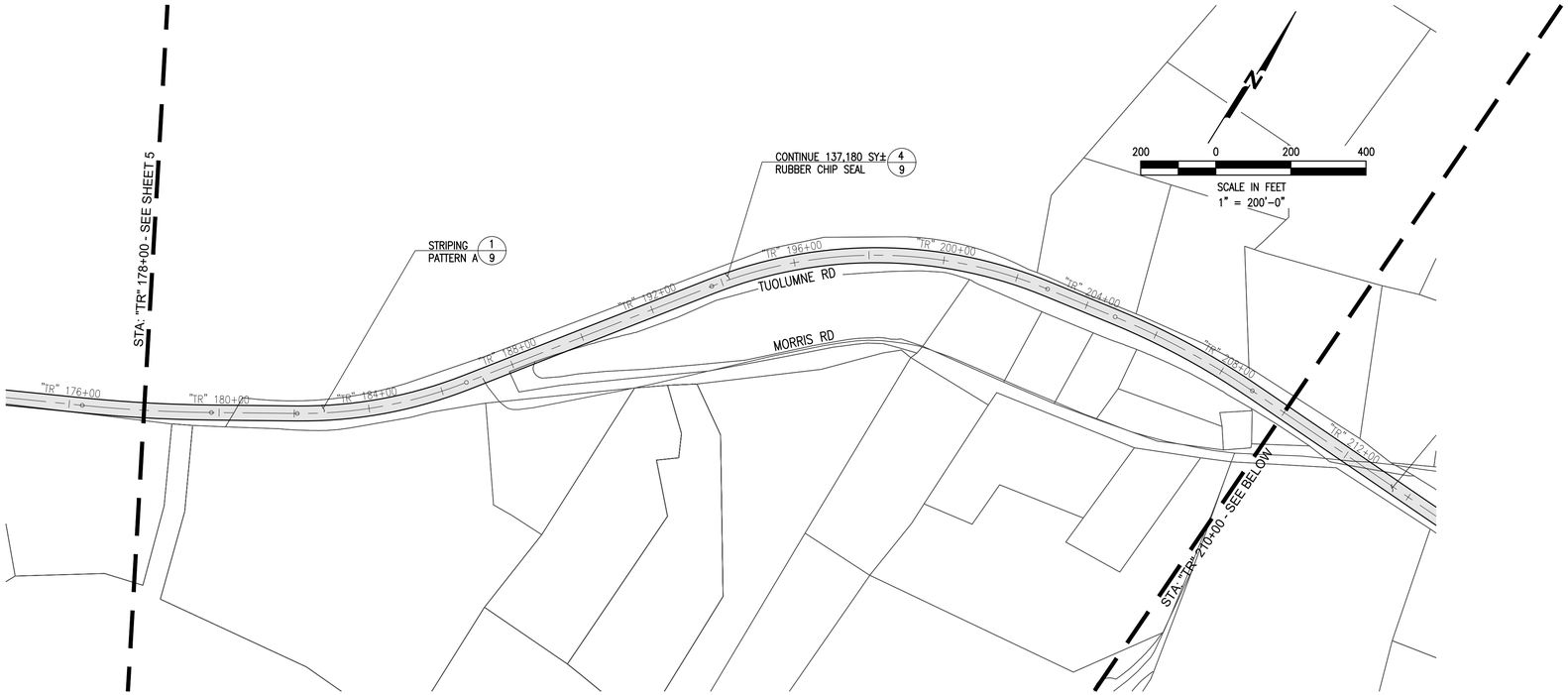
TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

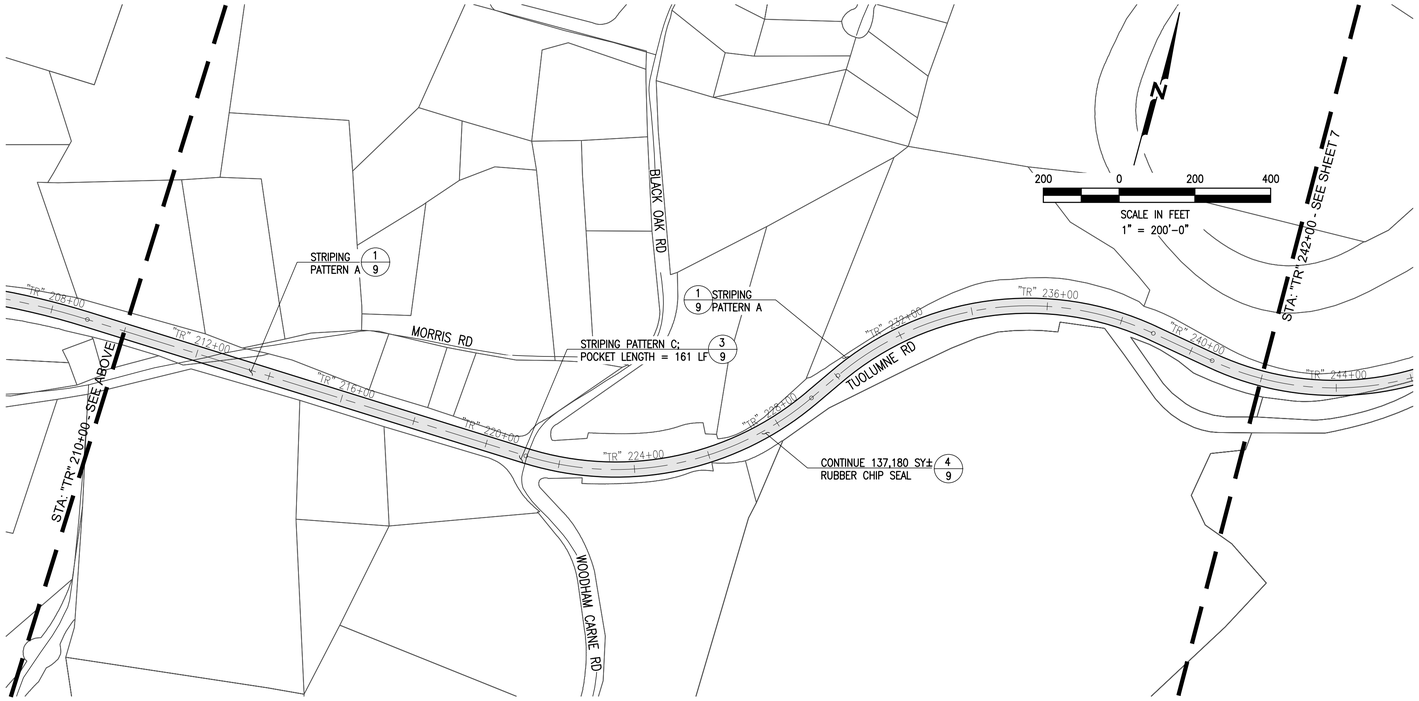
TUOLUMNE ROAD IMPROVEMENT PLAN
STA: 98+00 - 178+00

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
5
OF 17 SHEETS





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

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

SUPERVISORS APPROVAL

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS

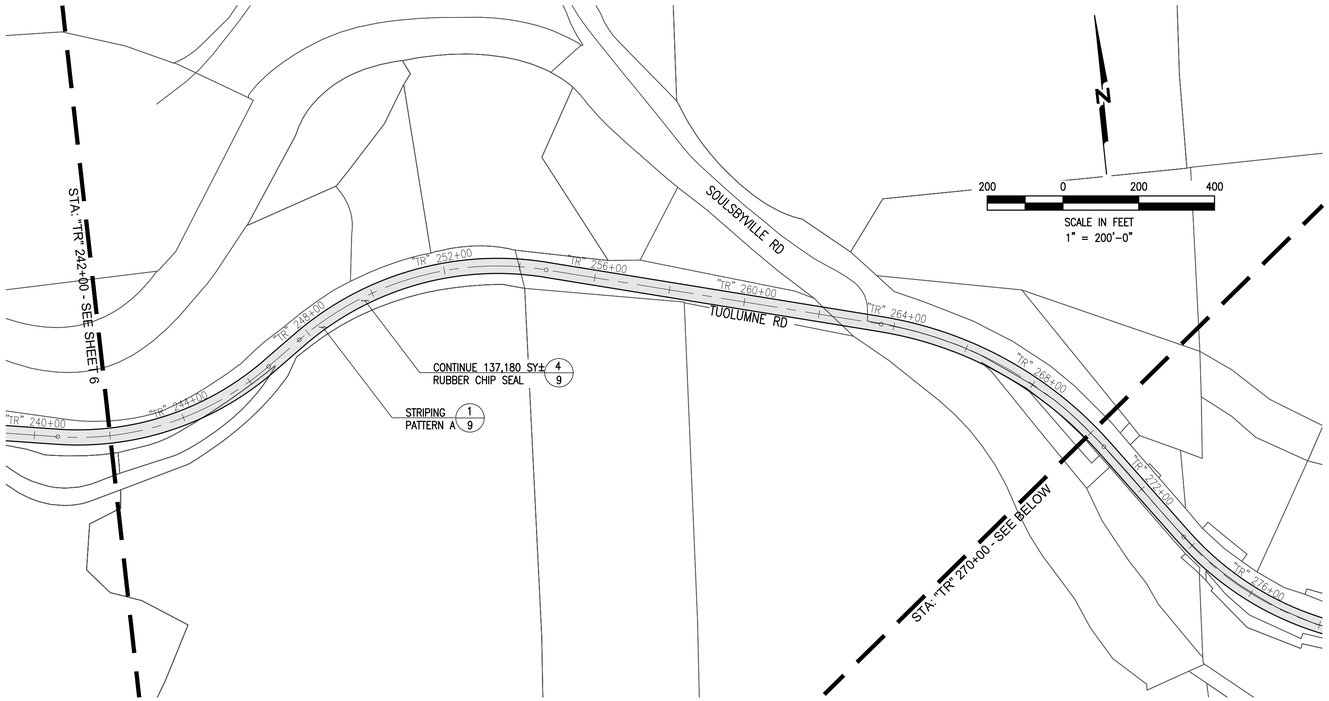
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

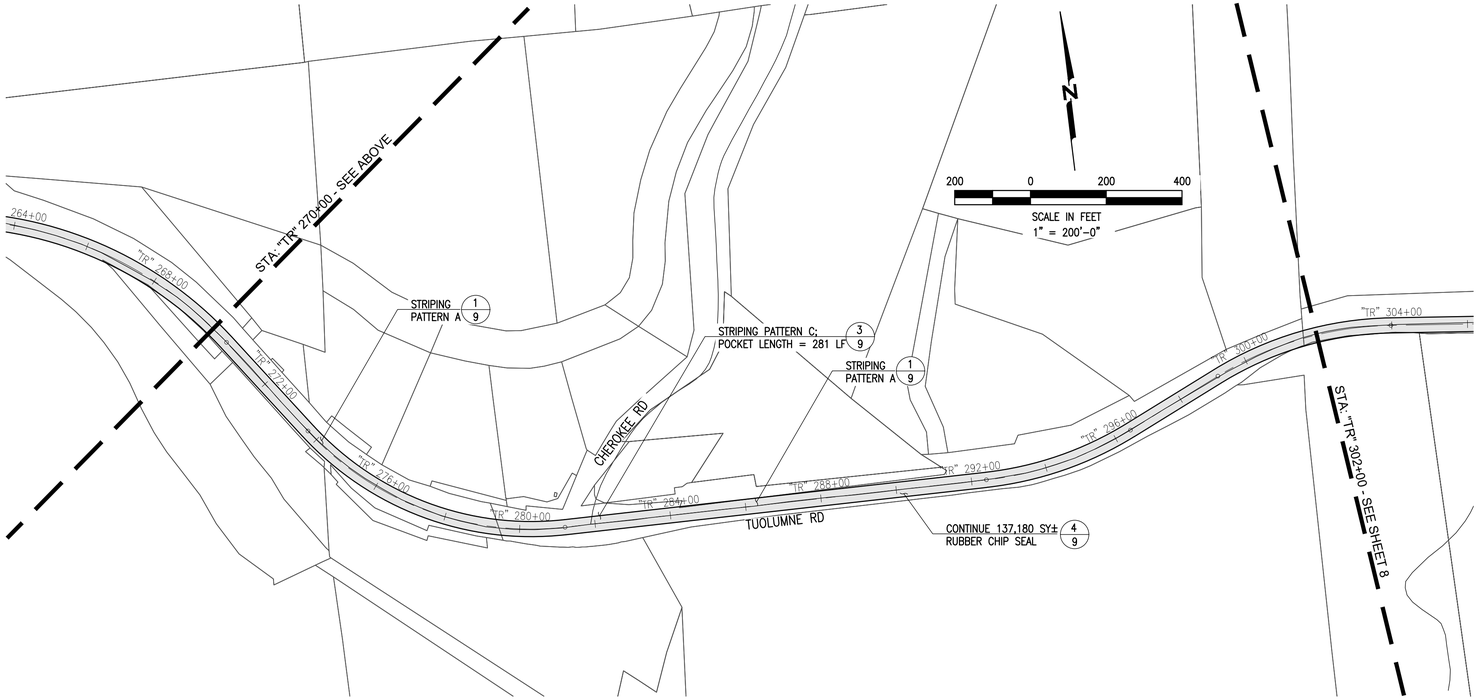
TUOLUMNE ROAD IMPROVEMENT PLAN
STA: 178+00 - 242+00

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
6
OF 17 SHEETS





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

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

SUPERVISORS APPROVAL

COUNTY OF TUOLUMNE CALIFORNIA

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS

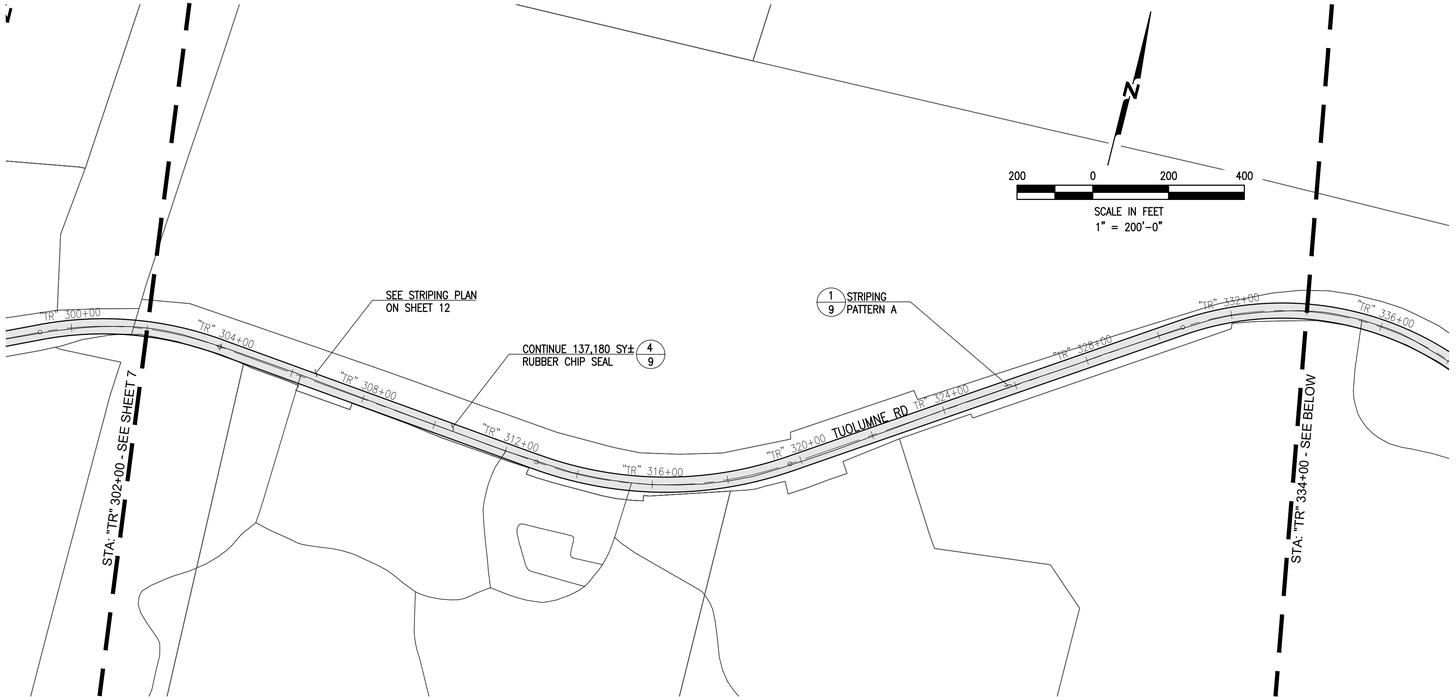
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

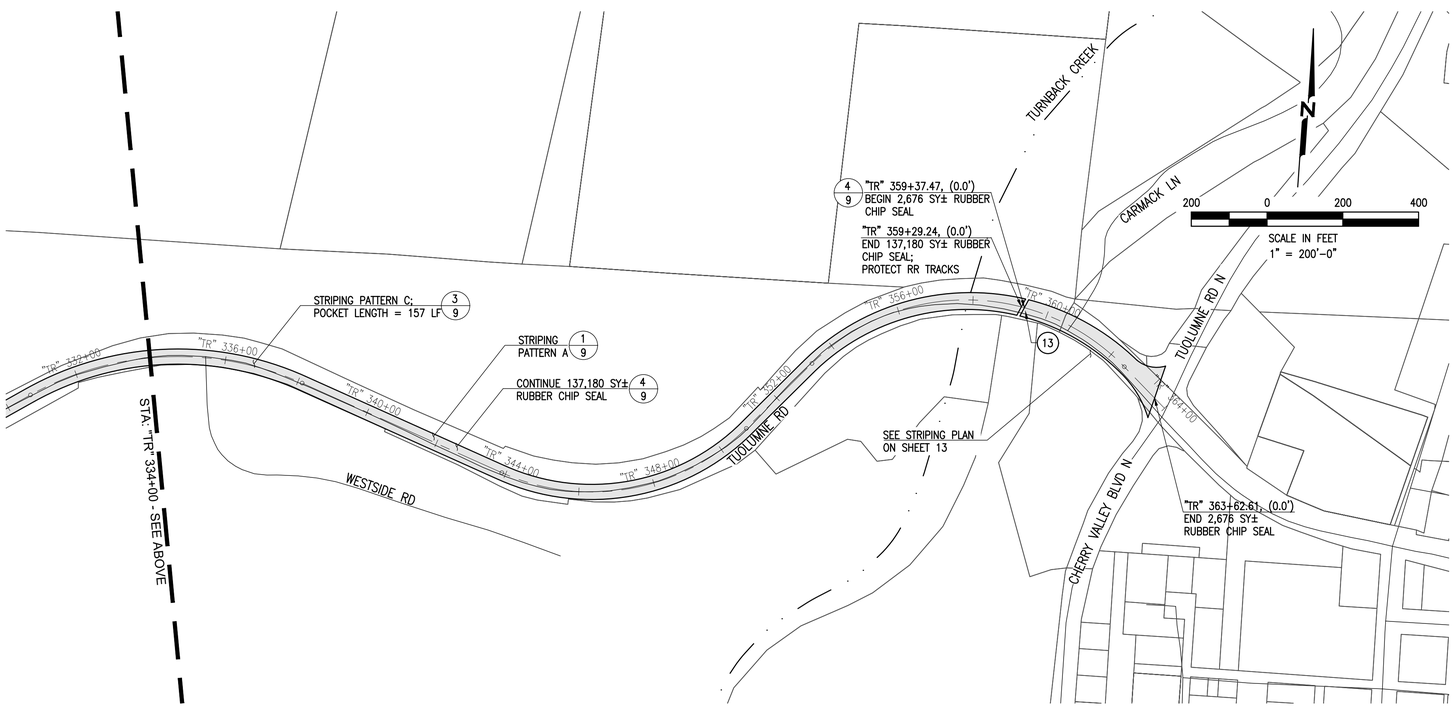
TUOLUMNE ROAD IMPROVEMENT PLAN
STA: 242+00 -302+00

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

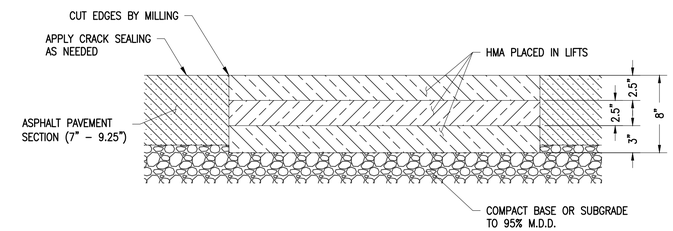
SHEET NUMBER
7
OF 17 SHEETS





BASE REPAIRS					
BASE REPAIR #	STA/OFF	LENGTH (FT)	WIDTH (FT)	AREA (SF)	DEPTH (IN)
13	359+43, 8.7'R	26	17	442	15

NOTES:
1. SEE DETAILS 1/8 & 2/8. BASE REPAIRS WILL BE LOCATED IN THE FIELD BY THE ENGINEER.
2. APPLY CRACK SEALING AS NEEDED.

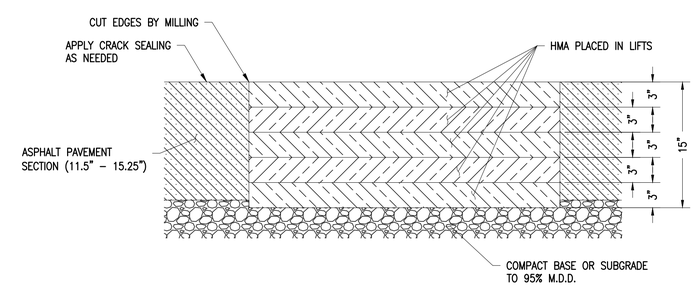


1/8 BASE REPAIR 8" (NOMINAL)

N.T.S.

NOTES:

1. APPROXIMATE BASE REPAIR AREAS ARE PROVIDED ON SHEETS 4, 5. & 8. EXACT LOCATIONS AND DIMENSIONS OF BASE REPAIRS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. TACK COAT SHALL BE APPLIED TO ALL PAVEMENT SURFACES PRIOR TO PLACEMENT OF EACH LIFT OF HMA.
3. OVER-EXCAVATE IF UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED. REPLACE UNSUITABLE MATERIAL WITH CLASS II AB AND RECOMPACT TO 95% M.D.D.



2/8 BASE REPAIR 15" (NOMINAL)

N.T.S.

NOTES:

1. APPROXIMATE BASE REPAIR AREAS ARE PROVIDED ON SHEETS 4, 5. & 8. EXACT LOCATIONS AND DIMENSIONS OF BASE REPAIRS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. TACK COAT SHALL BE APPLIED TO ALL PAVEMENT SURFACES PRIOR TO PLACEMENT OF EACH LIFT OF HMA.
3. OVER-EXCAVATE IF UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED. REPLACE UNSUITABLE MATERIAL WITH CLASS II AB AND RECOMPACT TO 95% M.D.D.

LEGEND

(#) BASE REPAIR LOCATION

Know what's below. Call before you dig.

LICENSED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

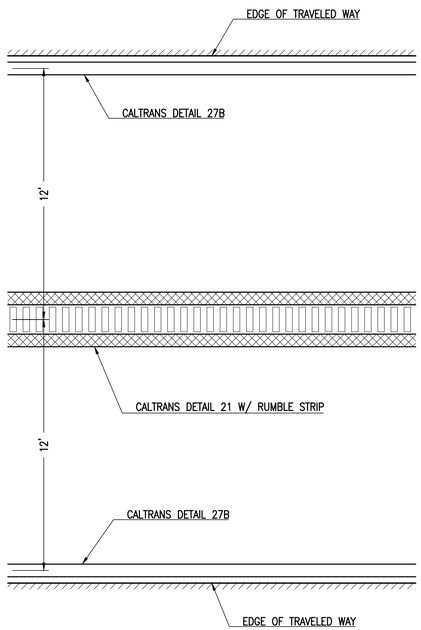
TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE: (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD IMPROVEMENT PLAN
STA: 302+00 - 364+00

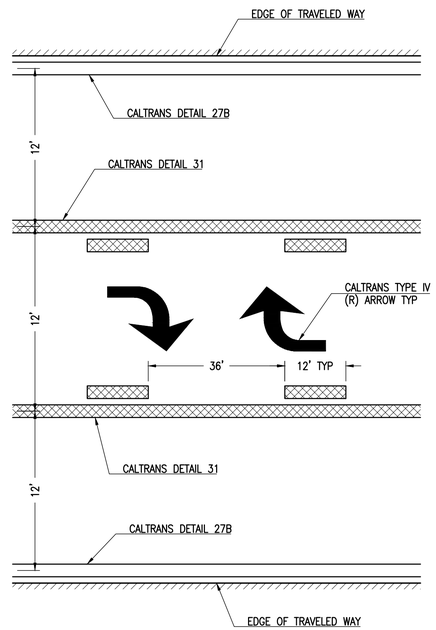
EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

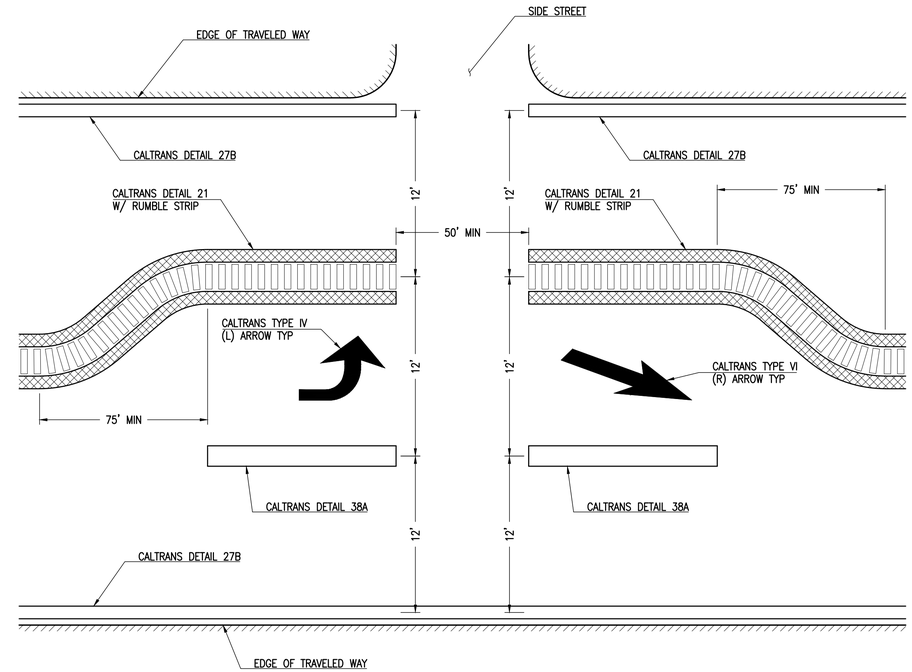
SHEET NUMBER
8
OF 17 SHEETS



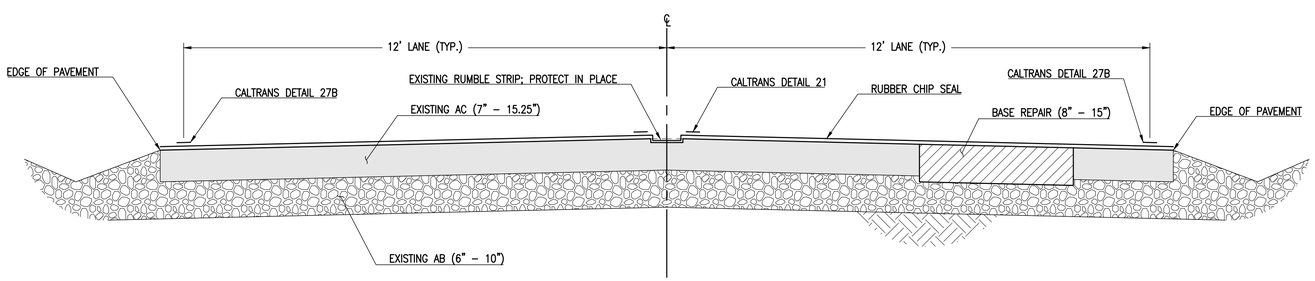
1/9 TUOLUMNE RD STRIPING PATTERN A
NTS



2/9 TUOLUMNE RD STRIPING PATTERN B
NTS



3/9 TUOLUMNE RD STRIPING PATTERN C
NTS



4/9 RUBBER CHIP SEAL WITH BASE REPAIR
NTS

NOTE: ALL STRIPES SHALL BE 4" WIDE UNLESS OTHERWISE SPECIFIED.

Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE: 07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD STRIPING DETAILS

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
9
OF 17 SHEETS

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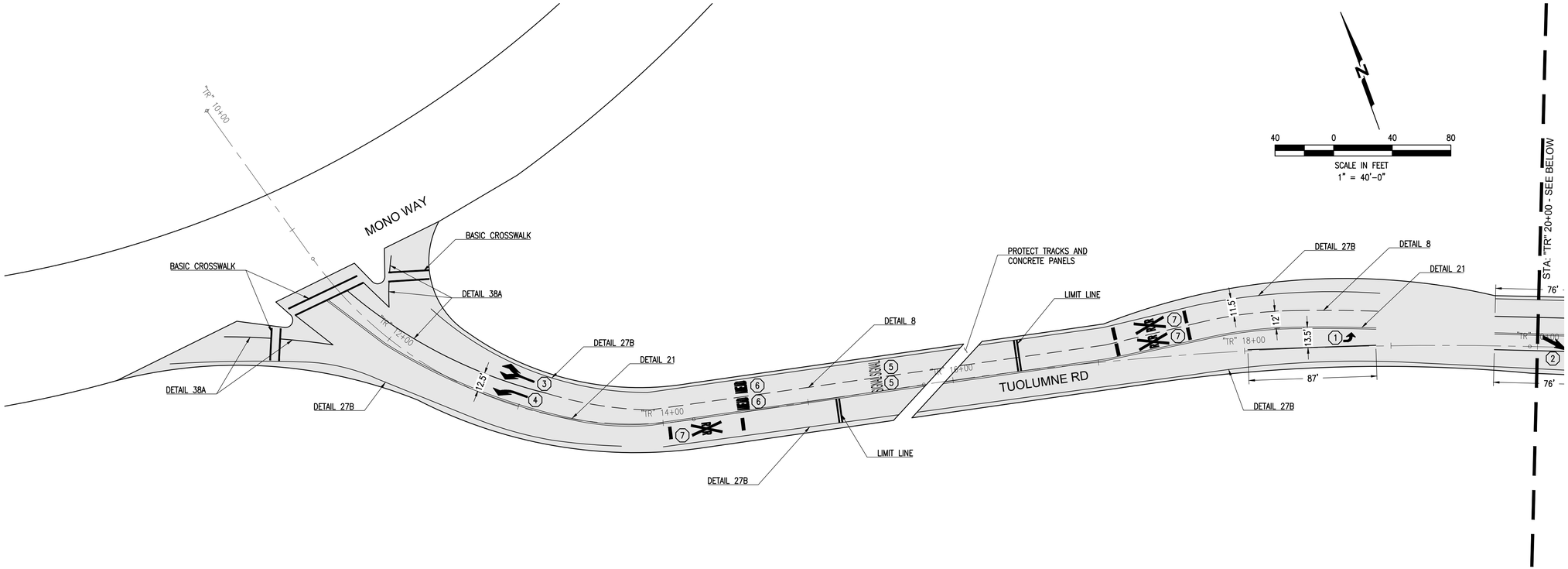

LEGEND

1. TYPE IV (L) ARROW - 15 SF
2. TYPE VI ARROW - 42 SF
3. TYPE III (B) ARROW - 73 SF
4. TYPE III (L) ARROW - 42 SF
5. PAVEMENT MARKING "SIGNAL" - 32 SF
6. PAVEMENT MARKING "AHEAD" - 31 SF
7. RAILROAD CROSSING SYMBOL - 70 SF

STRIPING AND MARKING QUANTITIES			
ITEM	QUANTITY	UNITS	WIDTH
CALTRANS TYPE I ARROW	4	EA	-
CALTRANS TYPE III LEFT ARROW	1	EA	-
CALTRANS TYPE IIIB 2-WAY ARROW	1	EA	-
CALTRANS TYPE IV LEFT ARROW	45	EA	-
CALTRANS TYPE IV RIGHT ARROW	13	EA	-
CALTRANS TYPE VI RIGHT ARROW	9	EA	-
AHEAD	4	EA	-
BUS	1	EA	-
ONLY	1	EA	-
RAILROAD CROSSING SYMBOL	3	EA	-
SIGNAL	4	EA	-
SCHOOL	2	EA	-
CALTRANS DETAIL 8 STRIPE	574	LF	4"
CALTRANS DETAIL 21 STRIPE	35655	LF	4"
CALTRANS DETAIL 27B STRIPE	66368	LF	4"
CALTRANS DETAIL 28 STRIPE	1521	LF	4"
CALTRANS DETAIL 31 STRIPE	2678	LF	4"
CALTRANS DETAIL 38A STRIPE	6235	LF	4"
CALTRANS BASIC CROSSWALK	707	LF	12"
CALTRANS LIMIT LINE (STOP LINE)	168	LF	12"

NOTE: EXACT LOCATIONS FOR STRIPING AND PAVEMENT MARKINGS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

TUOLUMNE RD STRIPING PLAN AT MONO WAY

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

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISOR'S APPROVAL

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD & MONO WAY
STRIPING LAYOUT

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
10
OF 17 SHEETS

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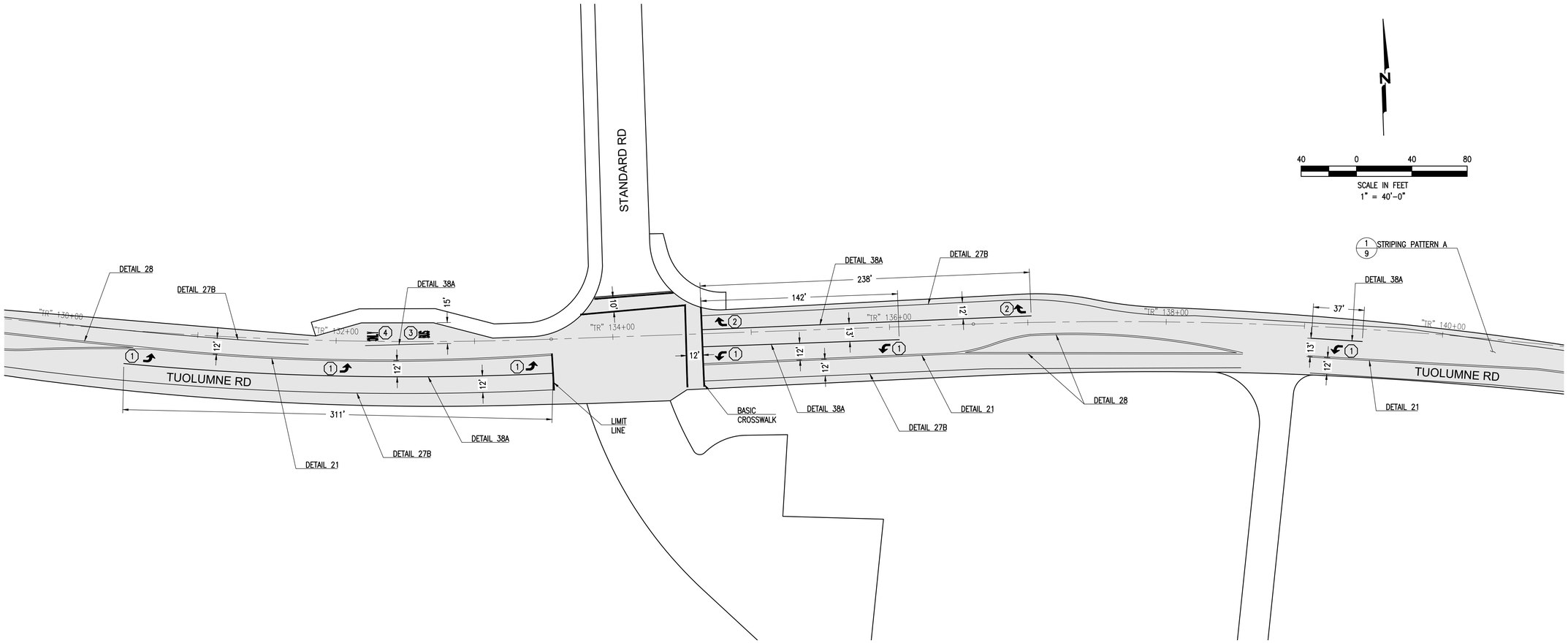


TUOLUMNE RD STRIPING PLAN AT STANDARD ROAD

LEGEND

1. TYPE IV (L) ARROW - 15 SF
2. TYPE IV (R) ARROW - 15 SF
3. PAVEMENT MARKING "BUS" - 20 SF
4. PAVEMENT MARKING "ONLY" - 22 SF

Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE: 07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISOR'S APPROVAL

COUNTY OF TUOLUMNE CALIFORNIA

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

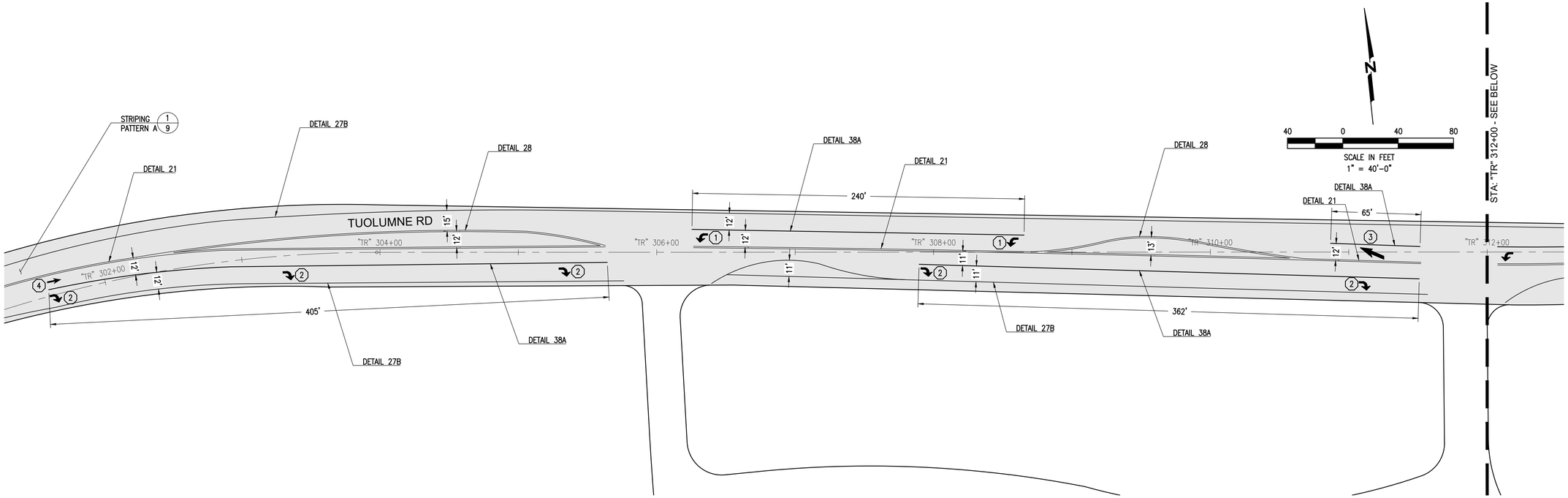
TUOLUMNE ROAD & STANDARD ROAD
STRIPING LAYOUT

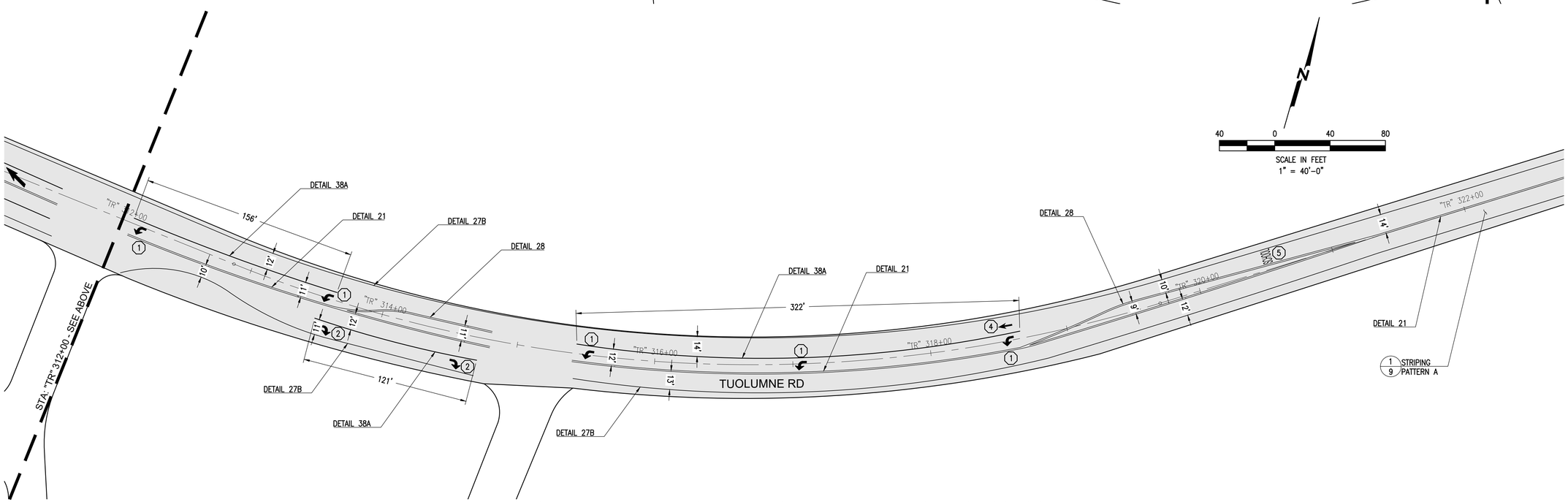
EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
11
OF 17 SHEETS

File: C:\Users\Jason Herbers\Desktop\V26 Tuolumne Co RMRA - NCE\06 CAD\Production\Plansheets\TUOLUMNE RD STRIPING PLAN.dwg | Layout: 11 | Printed Jul 08, 2020 @ 12:24pm | ID:Jo22.0s (JMS Tech)





TUOLUMNE RD STRIPING PLAN AT SUMMERVILLE UNION HIGH SCHOOL

LEGEND

1. TYPE IV (L) ARROW - 15 SF
2. TYPE IV (R) ARROW - 15 SF
3. TYPE VI ARROW - 42 SF
4. TYPE I 10' ARROW - 14 SF
5. PAVEMENT MARKING "SCHOOL" - 35 SF

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

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

COUNTY OF TUOLUMNE CALIFORNIA

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD STRIPING LAYOUT AT SUMMERVILLE UNION HIGH SCHOOL

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
12
OF 17 SHEETS

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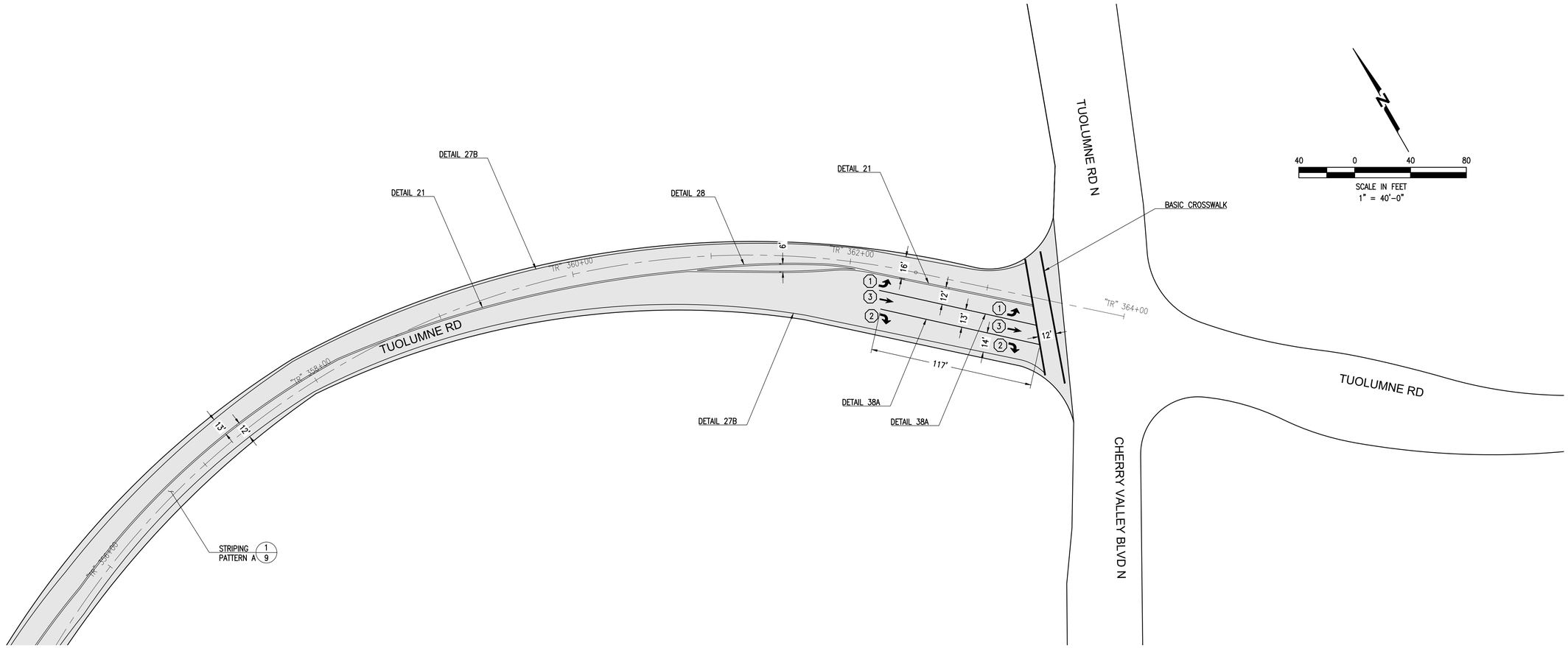

TUOLUMNE RD STRIPING PLAN AT TUOLUMNE ROAD NORTH

LEGEND

1. TYPE IV (L) ARROW - 15 SF
2. TYPE IV (R) ARROW - 15 SF
3. TYPE I 10' ARROW - 14 SF

Know what's below. Call before you dig.

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD & TUOLUMNE ROAD
NORTH STRIPING LAYOUT

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
13
OF 17 SHEETS

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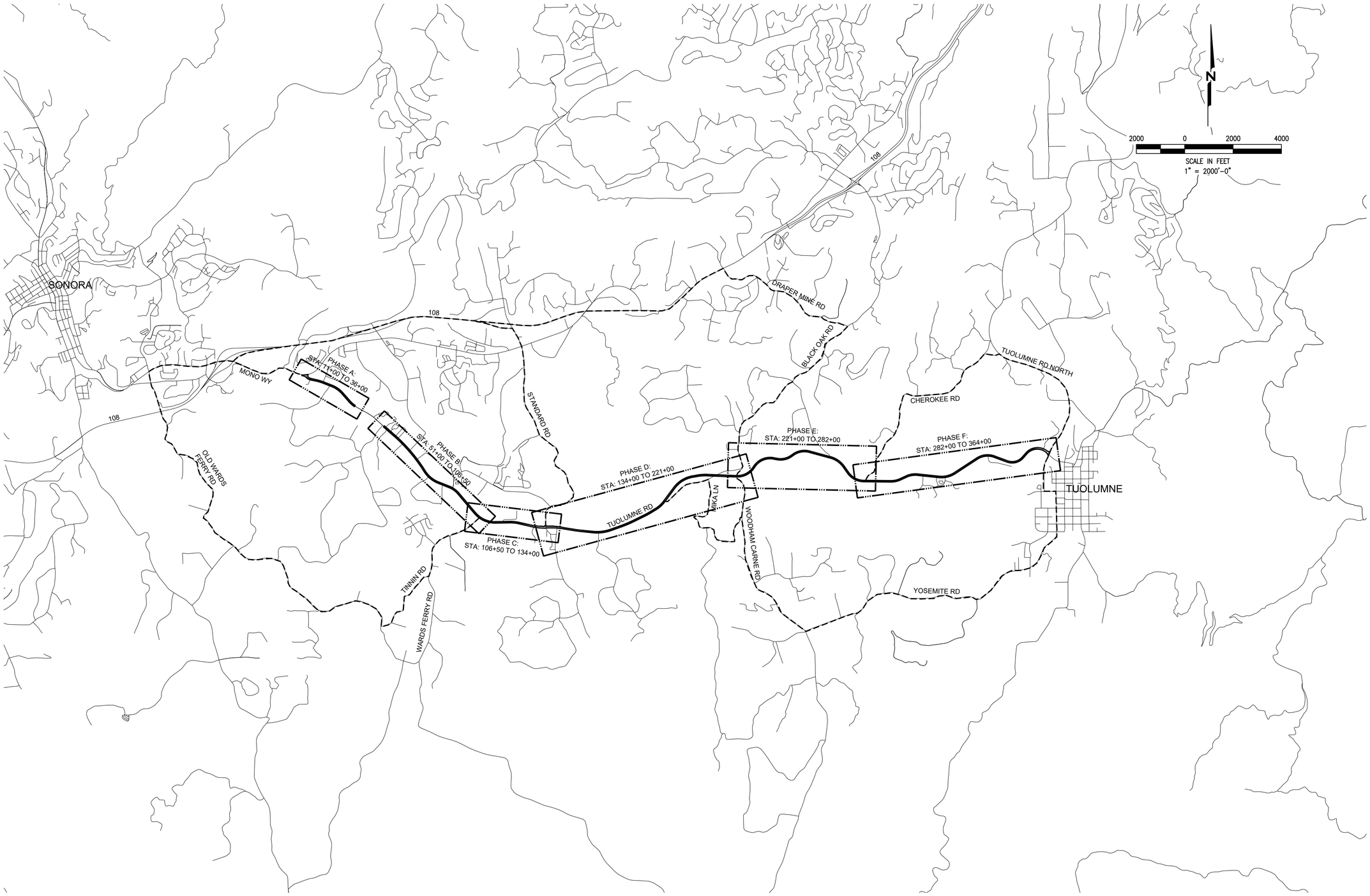

TUOLUMNE ROAD DETOUR PLAN

LEGEND

- - - - - - DETOUR ROAD

—·—·— CONSTRUCTION PHASE

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

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

SIGNATURES:

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

SUPERVISORS APPROVAL

COUNTY OF TUOLUMNE CALIFORNIA

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS

2 SOUTH GREEN STREET
SONORA, CALIFORNIA 95370
PHONE (209) 533-5601
FAX (209) 533-5698

TUOLUMNE ROAD DETOUR PLAN

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
14
OF 17 SHEETS

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Atifo Ferouz
No. C80402
Exp. 3-31-19
CIVIL
STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING

SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
					X	Y	Z **
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	50	100	25
60	1440	720	360	240	50	100	25
65	1560	780	390	260	50	100	25
70	1680	840	420	280	50	100	25
75	1800	900	450	300	50	100	25

* - For other offsets, use the following merging taper length formula for L:
For speed of 40 mph or less, $L = WS^2/60$
For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
W = Width of offset in feet
S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING

SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891
75	820	866	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

NOTES

1. USE 45 MPH AS THE SPEED LIMIT FOR THE PURPOSE OF TRAFFIC CONTROL SIGN SPACING.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

NO SCALE

T9

REGISTERED PROFESSIONAL ENGINEER
STEPHEN HAWKINS
REG. NO. 36556
EXP. 06/30/2022
CIVIL
STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

Know what's below. Call before you dig.

2018 STANDARD PLAN T9

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

TUOLUMNE COUNTY
DEPARTMENT OF PUBLIC WORKS
2 SOUTH GREEN STREET
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PHONE (209) 533-5601
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TRAFFIC CONTROL SYSTEM FOR TWO LANE HIGHWAYS

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER
15
OF 17 SHEETS

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER Atifa Ferouz No. C80402 Exp. 3-31-19 CIVIL STATE OF CALIFORNIA

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

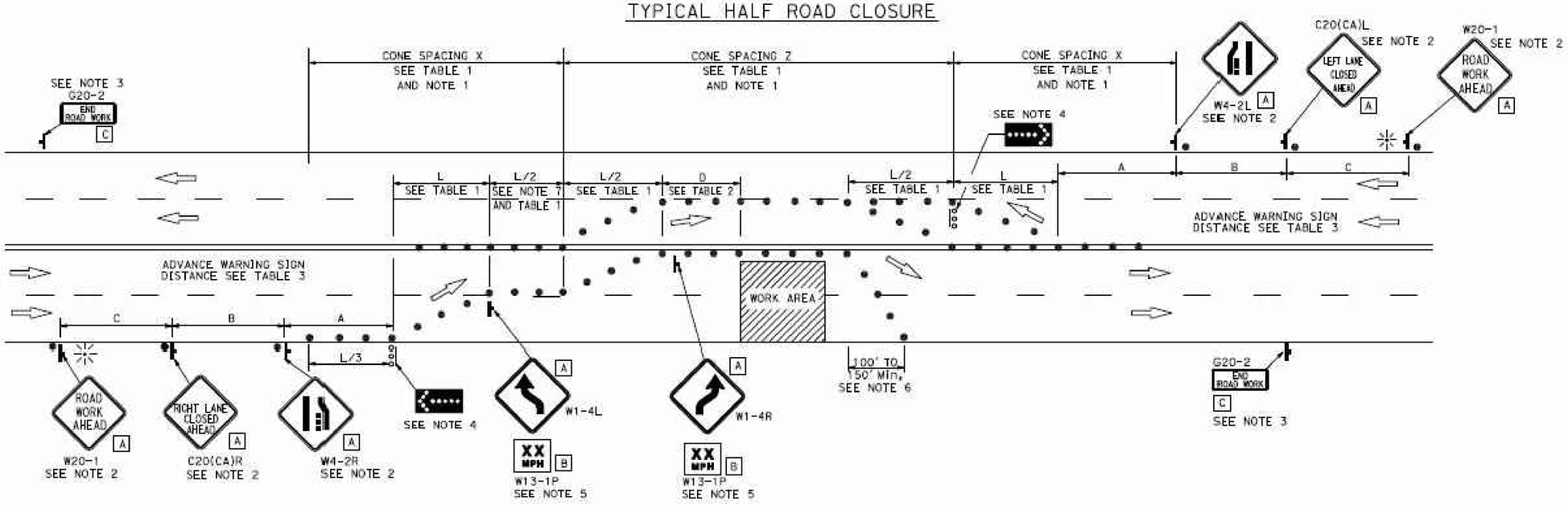
NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL HALF ROAD CLOSURE



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest verticle curve or on a horizontal curve.
5. Advisory speed will be determined by the Engineer, The W13-1P Plaque will not be required when advidory speed is more than the posted or maximum speed limit.
6. Length may be reduced by the Engineer to address site conditions.
7. The tangent (L/2) shall be used.
8. ALL LANES SHALL BE OPENED TO TRAFFIC AT THE END OF THE DAY THAT WORK IS COMPLETED.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR HALF ROAD CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS AND EXPRESSWAYS

NO SCALE

T12

REGISTERED PROFESSIONAL ENGINEER STEPHEN HAWKINS No. 36556 Exp. 06/30/2022 CIVIL STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE:07-07-2020

2018 STANDARD PLAN T12

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

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TRAFFIC CONTROL SYSTEM FOR MULTILANE HIGHWAYS

EXHIBIT FOR:
TUOLUMNE COUNTY RMRA PROJECT
TUOLUMNE ROAD SURFACE TREATMENT PROJECT
TUOLUMNE COUNTY, CALIFORNIA

JOB NO. 1722
DATE 7/7/2020
DR BY JH
CK BY JS
BRIDGE NO. N/A

SHEET NUMBER 16
OF 17 SHEETS

Know what's below. Call before you dig.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 31, 2018
PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER — Afifa Feroz — No. C80402 — Exp. 3-31-19 — CIVIL — STATE OF CALIFORNIA

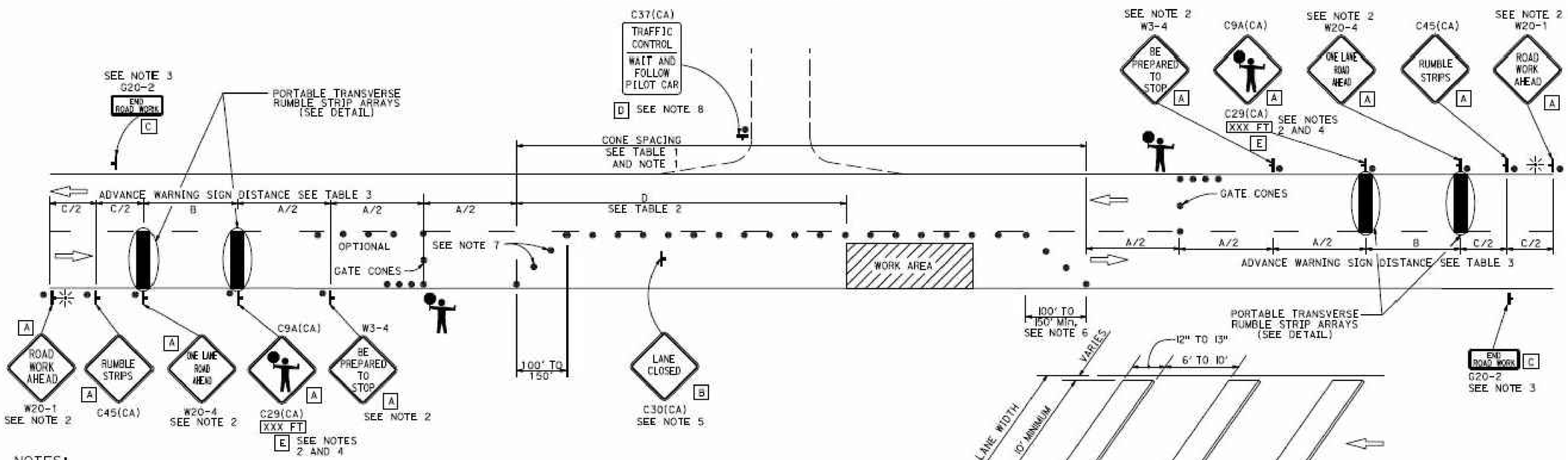
NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

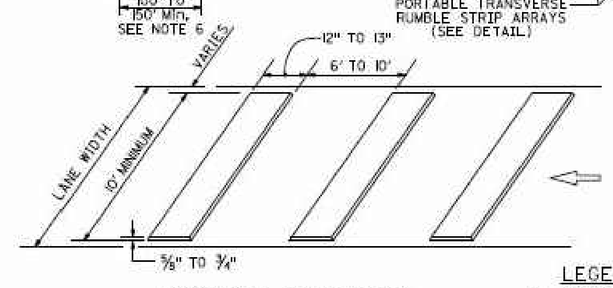
Provide at least one person to continuously maintain traffic control devices for lane closures.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



NOTES:

1. Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
4. An optional C29(CA) sign may be placed below the C9A(CA) sign.
5. Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from nthe flagger station.
6. Length may be reduced by the Engineer to address site conditions.
7. Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
8. When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within the traffic control area.
9. ALL LANES SHALL BE OPENED TO TRAFFIC AT THE END OF THE DAY THAT WORK IS COMPLETED.



PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL

SIGN PANEL SIZE (Min)

A	48" x 48"
B	30" x 30"
C	36" x 18"
D	36" x 42"
E	20" x 7"

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

2018 STANDARD PLAN T13

SIGNATURES:
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
SUPERVISORS APPROVAL

TUOLUMNE COUNTY
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TRAFFIC CONTROL SYSTEM FOR TWO LANE HIGHWAYS

EXHIBIT FOR:
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SHEET NUMBER 17 OF 17 SHEETS

REGISTERED PROFESSIONAL ENGINEER — STEPHEN HAWKINS — REG. NO. 36556 — EXP. 06/30/2022 — CIVIL — STATE OF CALIFORNIA

ISSUED FOR BIDS
DATE: 07-07-2020

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