

TRUCKEE TAHOE AIRPORT DISTRICT

CONSTRUCTION PLANS FOR:

TRUCKEE-TAHOE AIRPORT
TRUCKEE, CALIFORNIA

AIP NO. 3-06-0262-

RECONSTRUCT APRON A2

MARCH 2025

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BID SCHEDULE NOTES:

- THIS PROJECT IS BEING BID UNDER TWO SEPARATE BID SCHEDULES. THE PROJECT SCOPE IS THE SAME FOR EACH BID SCHEDULE, THE DIFFERENCE IS THAT SCHEDULE A REQUIRES THE PROJECT TO BE CONSTRUCTED IN TWO SEPARATE PHASES WITHIN 60 WORKING DAYS AND SCHEDULE B ALLOWS THE PROJECT TO BE COMPLETED AS ONE SINGLE COMBINED PHASE WITHIN 45 WORKING DAYS.
- SEE THE CONSTRUCTION SAFETY AND PHASING PLAN SHEETS AND APPENDIX IN THE SPECIFICATIONS FOR DETAILED PHASING REQUIREMENTS. IF SCHEDULE B IS ACCEPTED, THE ONLY CHANGE TO THESE PLANS IS THAT THE CONTRACTORS STORAGE AND STAGING AREA IDENTIFIED FOR PHASE 1 WILL NOT BE AVAILABLE FOR USE.
- SCHEDULE B WILL BE ACCEPTED IF IT HAS A COST SAVINGS OF AT LEAST 5% OVER SCHEDULE A AND CAN BE COMPLETED WITHIN THE 45 WORKING DAY PERIOD (REDUCTION OF RAMP CLOSURE BY 3 WEEKS).
- BIDDERS MAY SUBMIT BIDS FOR ONLY SCHEDULE A, ONLY SCHEDULE B, OR BOTH SCHEDULES A & B. SEE INSTRUCTIONS TO BIDDERS AND SPECIFICATION DOCUMENTS FOR DETERMINATION OF THE LOWEST RESPONSIBLE BIDDER.

TRUCKEE TAHOE AIRPORT DISTRICT:

APPROVED: _____ DATE: _____
ROBB ETNYRE, GENERAL MANAGER

APPROVED: _____ DATE: _____

DESIGNED BY :



SAFETY PLAN NOTES:

- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SECURITY AND CLEANLINESS OF THE WORK SITE AND CONTRACTOR'S STORAGE AREA AT ALL TIMES
- WESTERN HAUL ROUTE SHALL BE UTILIZED TO ACCESS THE WEST PORTION OF APRON A2 (PHASES 1 AND 1A). SWING GATE SOUTH OF FUEL ISLAND SHALL BE USED BY CONTRACTOR FOR HAUL ROUTE . HAUL ROUTE WILL CONTINUE NORTH FROM THE SWING GATE ALONG A ROUTE, MARKED BY BARRICADES, WEST OF THE WASH RACK AND EAST OF THE FUEL ISLAND TO PHASE 1 WORK AREA.
- EASTERN HAUL ROUTE TO PROVIDE ACCESS TO THE EAST PORTION OF APRON A2 (PHASE 2). AUTOMATIC GATE #5 SOUTHEAST OF THE FIRE STATION WILL BE USED BY THE CONTRACTOR FOR ACCESS TO THE AIRPORT. CONTRACTOR SHALL DELINEATE, WITH BARRICADES OR CONES A 30' WIDE HAUL ROUTE ALONG THE WEST EDGE OF THE JET PARKING RAMP AS SHOWN ON THESE PLANS.
- DUST CONTROL SHALL BE MAINTAINED BY THE CONTRACTOR ON ALL HAUL ROADS. PAVED SURFACES SHALL BE MAINTAINED CLEAR OF DEBRIS AT ALL TIMES. APRON AND TAXIWAYS SHALL BE MAINTAINED BROOM CLEAN.
- CONTRACTOR SHALL LIMIT ALL CONSTRUCTION VEHICLE ACTIVITY TO THE LIMITS OF THE PROJECT AND THE HAUL ROAD SHOWN ON THE PLANS. NO CONSTRUCTION TRAFFIC WILL BE ALLOWED BEYOND THE LIMITS OF THE WORK AREA .
- THE OWNER WILL PROVIDE A QUALIFIED FLAGGER TO MONITOR THE AIRPORT GROUND FREQUENCY 118.3 MHZ AND ESCORT THE CONTRACTOR THROUGH ANY AREA OPEN TO AIRCRAFT. AIRCRAFT HAVE THE RIGHT OF WAY AT ALL TIMES.
- CONTRACTOR'S PERSONNEL & EQUIPMENT ARE NOT ALLOWED ON TAXIWAY A OR RUNWAY 11-29 AT ANY TIME.
- CONTRACTOR SHALL ERECT & MAINTAIN LIGHTED AIRPORT-FURNISHED BARRICADES AT THE BOUNDARY OF THE WORK AREA TO KEEP VEHICLES AND AIRCRAFT FROM ENTERING THE CONTRACTOR'S WORK AREAS AND THE CONTRACTOR'S PERSONNEL & EQUIPMENT FROM OCCUPYING ANY OF THE AREAS OPEN FOR AIRCRAFT OPERATIONS .
- CONTRACTOR SHALL VERIFY LOCATION AND PROTECT ALL EXISTING UTILITIES.
- SHOULD CONTRACTOR ENCOUNTER AND DAMAGE A WATERLINE ON THE AIRPORT HE SHALL IMMEDIATELY NOTIFY THE LOCAL FIRE DEPARTMENT AND THE AIRPORT.
- IN CASE OF AN AIRCRAFT EMERGENCY THE AREA AROUND THE AIRCRAFT SHALL BE EVACUATED AND NOT REENTERED BY THE CONTRACTOR WITHOUT GIVEN PERMISSION EXCEPT FOR LIFESAVING ACTIVITIES.
- ALL GATES USED BY THE CONTRACTOR SHALL REMAIN CLOSED AT ALL TIMES EXCEPT WHEN AUTHORIZED EQUIPMENT IS ACTUALLY ENTERING THE AIRPORT OR GATE IS CONTINUOUSLY GUARDED BY A FLAGGER, TRAINED BY THE AIRPORT, TO KEEP UNAUTHORIZED PERSONNEL AND WILDLIFE FROM ENTERING THE AIRPORT.

- CONTRACTOR'S STORAGE AND STAGING AREA LOCATION SHALL BE DESIGNATED BY THE AIRPORT MANAGER. CONTRACTOR SHALL BARRICADE DESIGNATED AREA AND INSTALL BMP'S AS REQUIRED BY SWPPP. SEE PLAN FOR DESIGNATED CONTRACTOR'S STAGING AND TEMPORARY STOCKPILE AREA. DESIGNATED STAGING AREAS ARE LOCATED NEAR AIRCRAFT TRAVEL ROUTE. CONTRACTOR SHALL MAINTAIN DUST CONTROL ON ALL STOCKPILES. STOCKPILES LOCATED NEAR AIRCRAFT TRAVEL ROUTE MUST BE PROTECTED FROM JET BLAST BY MAINTAINING A WET SURFACE. CONTRACTOR SHALL MAKE PROVISIONS TO KEEP SURFACE WET AND PROTECTED FROM JET BLAST 7 DAYS OF THE WEEK.
- ALL EQUIPMENT OPERATING DURING DAYLIGHT HOURS SHALL BE EQUIPPED WITH AN ORANGE AND WHITE CHECKERED FLAG OR FLASHING AMBER BEACON. EQUIPMENT OPERATING IN LOW VISIBILITY CONDITIONS, DAWN OR DUSK HOURS SHALL BE EQUIPPED AND USE AN AMBER FLASHING BEACON.
- ALL TRASH SHALL BE PLACED IN WASTE CONTAINERS TO PREVENT THE ATTRACTION OF WILDLIFE. WASTE CONTAINERS SHALL BE EQUIPPED WITH LIDS AND SECURED AT ALL TIMES. NO TRASH OR DEBRIS SHALL BE LEFT ON SITE BY THE CONTRACTOR.
- CONTRACTOR SHALL COVER/OBSCURE AIRFIELD GUIDANCE SIGNS AS SHOWN ON SHEET 4 & 5.
- PRIOR TO START OF WORK CONTRACTOR , RPR AND AIRPORT OPERATIONS WILL ESTABLISH EMERGENCY CONTACT INFORMATION FOR WORKING DAYS AND NON-WORKING DAYS.

SEED	RATE OF APPLICATION (LBS/ACRE)
WHEATGRASS STREAMBANK SO	15.0
FESCUE SHEEP VNS	20.0
RYEGRASS ANNUAL VNS	8.0
TOTAL	43.0

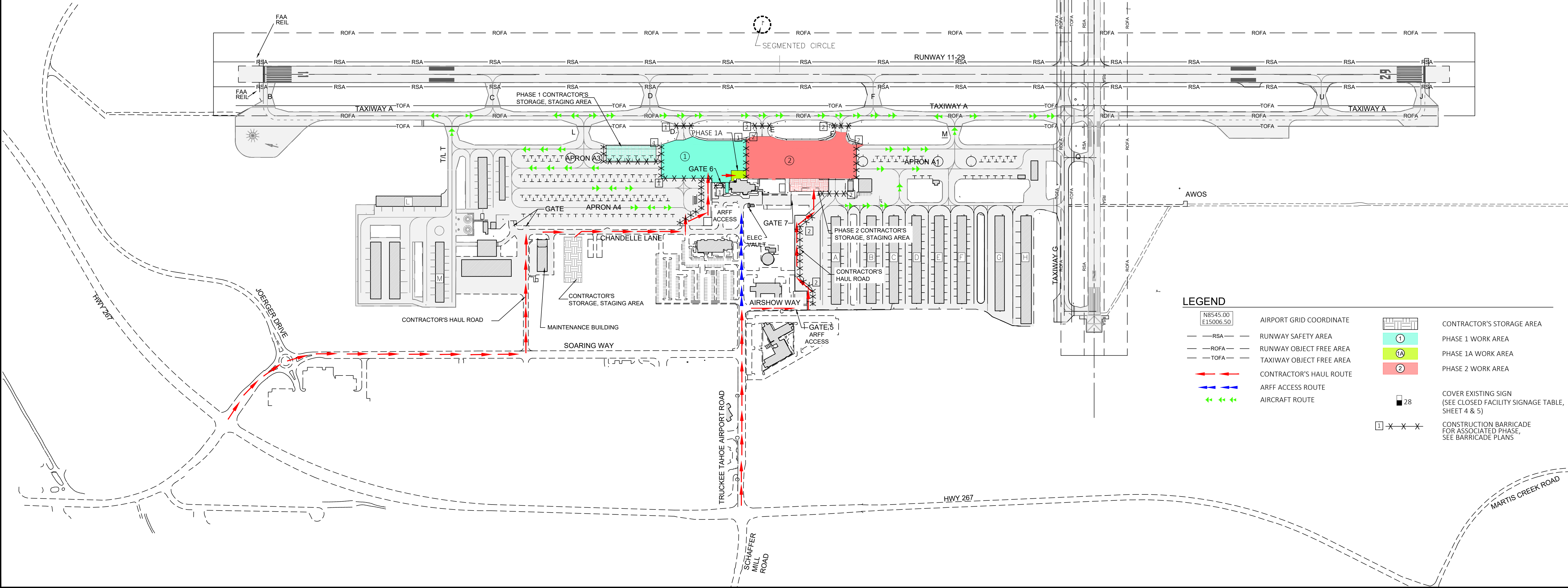
SEEDING NOTES:

- AT CONCLUSION OF ALL WORK, CONTRACTOR SHALL SEED CONTRACTOR'S STORAGE, STAGING AND TEMPORARY STOCKPILE AREAS AND ALL DISTURBED SHOULDER AREAS. LIMITS OF SEEDING SHALL BE VERIFIED BY RESIDENT PROJECT REPRESENTATIVE. HYDROSEEDING SHALL BE A REQUIRED BMP TO BE INCLUDED IN THE SWPPP. NO ADDITIONAL PAYMENT FOR SEEDING DISTURBED AREAS SHALL BE MADE, COST SHALL BE INCLUDED IN THE COST OF PREPARING AND IMPLEMENTING THE SWPPP.
- MULCH SHALL BE APPLIED AT A MINIMUM RATE OF 1,800 LB/ACRE.
- TACKIFIER SHALL BE APPLIED AT A MINIMUM RATE OF 150 LB/ACRE.
- FERTILIZER SHALL BE APPLIED AT A MINIMUM RATE OF 5 GALLONS/ACRE AS NECESSARY TO PRODUCE ADEQUATE GROWTH TO SATISFY THE STATE WATER BOARD SUCH THAT THE SWPPP CAN BE CLOSED OUT AFTER THE PROJECT IS COMPLETE.
- INOCULANT SHALL BE APPLIED AT A MINIMUM RATE OF 50 LB/ACRE.
- SEE TABLE THIS SHEET FOR SEED MIX.

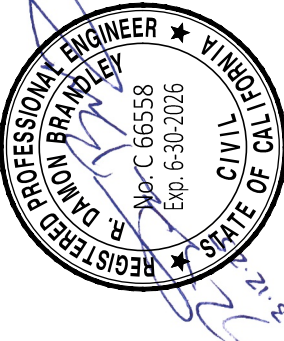
CONSTRUCTION STAGING PLAN			
PHASE	CONTRACTOR'S WORK	CONTRACTOR'S WORK AREA	FACILITY CLOSURE
1	RECONSTRUCT WEST PORTION OF APRON A2	WEST PORTION OF APRON A2, DRAINAGE WEST OF TERMINAL	WEST PARKING ON APRON A2, TAXIWAY D BETWEEN TAXIWAY A AND APRON, PORTION OF APRON TAXILANES (NO THRU TAXI), GATE 6 AND PARKING WEST OF TERMINAL
1A	CONSTRUCT SNOW MELT APRON	PORTION OF APRON A2	PORTION OF APRON A2, LIMITED PEDESTRIAN ACCESS TO TERMINAL FROM THE WEST
2	RECONSTRUCT EAST PORTION OF APRON A2	EAST PORTION OF APRON A2	EAST PARKING ON APRON A2, TAXIWAY E AND F, AND LIMITED PEDESTRIAN ACCESS TO TERMINAL FROM THE EAST.

STAGING NOTES:

- THE CONTRACTOR SHALL PERFORM ALL AIRFIELD WORK IN A SINGLE, COMBINED PHASE ONLY IF SCHEDULE B IS ACCEPTED. IF SCHEDULE B IS ACCEPTED, THE PHASE 1 CONTRACTOR STORAGE AND STAGING AREA WILL NOT BE AVAILABLE FOR USE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PERFORM ALL AIRFIELD WORK IN 2 DIFFERENT PHASES ON THE AIRPORT AS SHOWN IN CONSTRUCTION SCHEDULE, IF SCHEDULE A IS ACCEPTED. THE AREA INCLUDED IN EACH PHASE OF WORK IS INDICATED BY A CIRCLE WITH THE STAGE NUMBER INDICATED IN THE CIRCLE. THE BARRICADES REQUIRED FOR EACH PHASE OF WORK IS INDICATED BY A SQUARE WITH THE WORK PHASE NUMBER INDICATED. SEE BARRICADE PLAN FOR EACH PHASE, SHEET 3 THRU 5.
- THE PHASE 1 CONTRACTOR STORAGE AND STAGING AREA WILL ONLY BE AVAILABLE FOR USE PRIOR TO JUNE 30 FOR SCHEDULE A. THIS AREA MUST BE BROOM CLEAN AND CLEANED UP TO THE SATISFACTION OF THE AIRPORT AND RPR BY JUNE 30. REGULAR AIRPORT OPERATIONS WILL REQUIRE THE USE OF THIS AREA BY AIRCRAFT STARTING JULY 1. THIS AREA IS NOT AVAILABLE ANYTIME FOR SCHEDULE B.
- WORK IN PHASES 1 AND 1A MAY BE PERFORMED CONCURRENTLY. WORK IN PHASE 1 AND 1A SHALL BE COMPLETED BEFORE STARTING WORK IN PHASE 2. WORK IN PHASE 1A MAY BE STARTED PRIOR TO WORKING IN PHASE 1. SEE BARRICADE PLAN SHEET 3 FOR PHASE 1A.
- DRAINAGE IMPROVEMENTS TO BE CONSTRUCTED IN PHASE 1 WILL REQUIRE THE CLOSURE OF THE PARKING AREA, SIDEWALKS AND LANDSCAPE AREA JUST WEST OF THE TERMINAL BUILDING. THE WORK IN THIS AREA SHALL BE COMPLETED IN 5 WORKING DAYS. CLOSURE OF THIS AREA WILL BE DURING WORKING HOURS ONLY AND ALL TRENCHES SHALL BE COVERED WITH APPROVED TRENCH PLATES OR BACKFILL COMPLETED PRIOR TO OPENING AT THE END OF EACH DAYS WORKING HOURS.
- DRAINAGE IMPROVEMENTS TO BE CONSTRUCTED IN PHASE 2 WILL REQUIRE ISOLATED CLOSURE OF THE PLAYGROUND AND LAWN AREA EAST OF THE TERMINAL. BARRICADES WILL BE PLACED AROUND THE PERIMETER OF THE WORK AREA. CLOSURE OF THE PLAYGROUND AND LAWN AREA WILL ONLY BE DURING WORKING HOURS AND ALL TRENCHES SHALL BE COVERED WITH APPROVED TRENCH PLATES OR BACKFILL COMPLETED PRIOR TO OPENING AT THE END OF EACH DAYS WORKING HOURS
- PEDESTRIAN TRAFFIC FROM THE APRON WILL BE MAINTAINED BY PLACEMENT OF BARRICADES, AS SHOWN ON THE PLANS , BUT ACCESS PATH WILL BE LIMITED TO PORTION OF APRON A2 NOT UNDER RECONSTRUCTION.
- CONTRACTOR SHALL PROVIDE STAGING SCHEDULE AT TWO WEEKS PRIOR TO START OF CONSTRUCTION. DETAILED CONSTRUCTION SCHEDULES SHALL BE UPDATED AND COORDINATED WITH THE AIRPORT MANAGER AND RPR.
- THE AIRPORT MAY REQUIRE SOME TEMPORARY STRIPING ON THE WEST APRON DESIGNATED AS APRON A4. ALL TEMPORARY MARKINGS SHALL BE REMOVED AT THE END OF THE PROJECT. SEE NOTES ON MARKING PLAN SHEETS FOR REQUIREMENTS AND DETAILS.



ENGINEER OF RECORD



DATE

BY

APR

REVISIONS

No.

No.

TRUCKEE

CALIFORNIA

RECONSTRUCT APRON A2

CONSTRUCTION SAFETY AND PHASING PLAN

DATE

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PROJECT No.

FILE

SCALE

SHEET No.

3/12/2025

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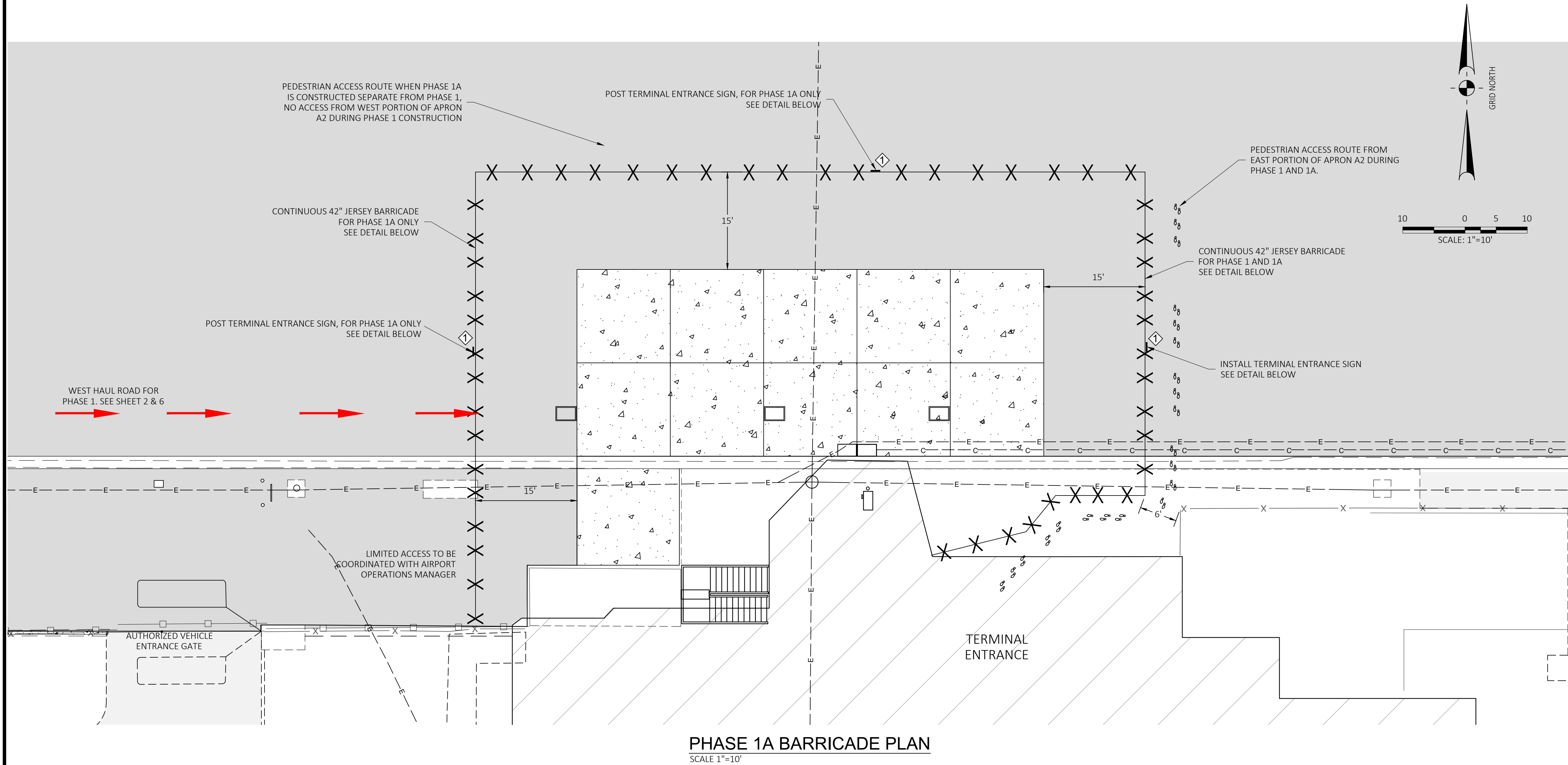
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1"=300'

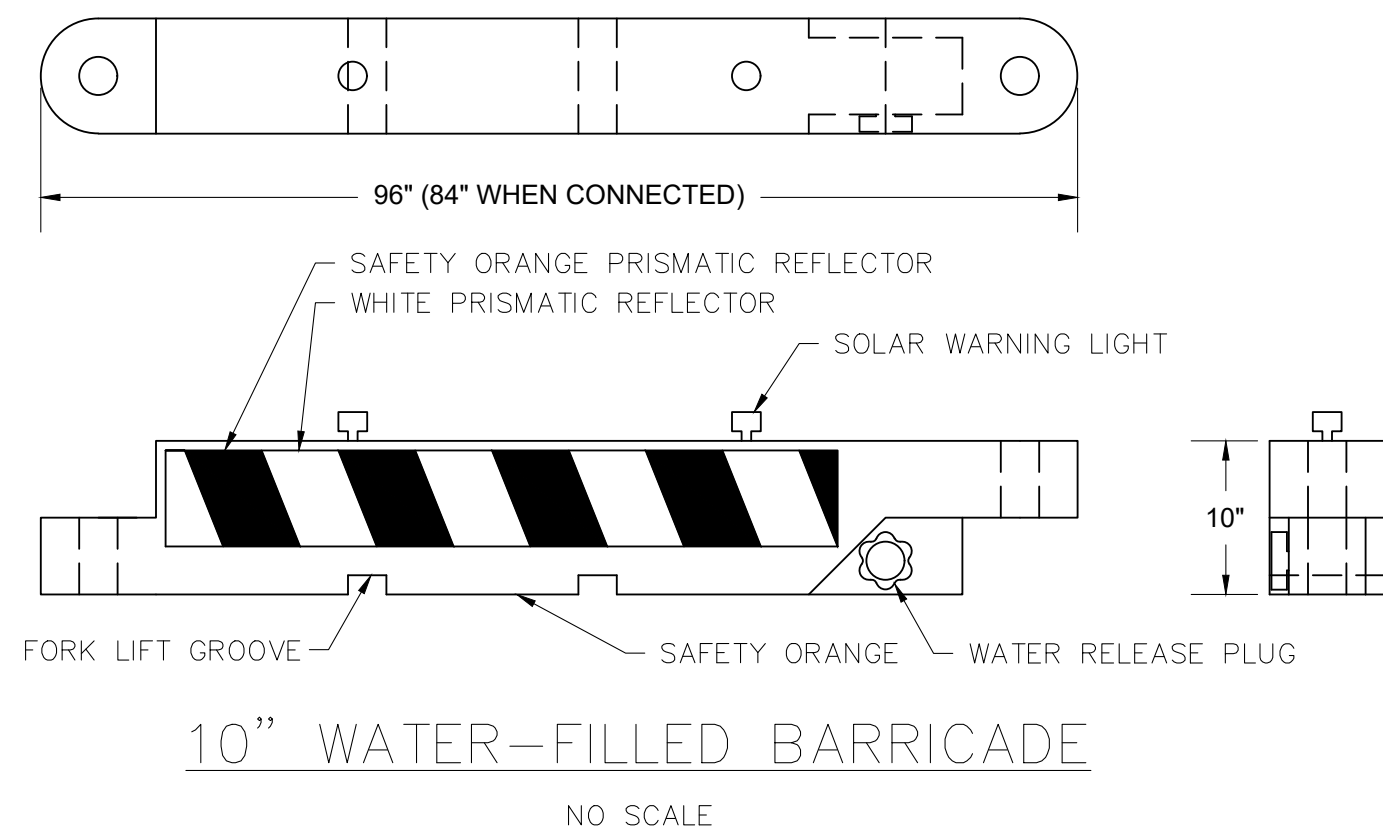
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G:\40 TRUCKEE\38 APRON A2\BID SET\4038.02 SAFETY.DWG
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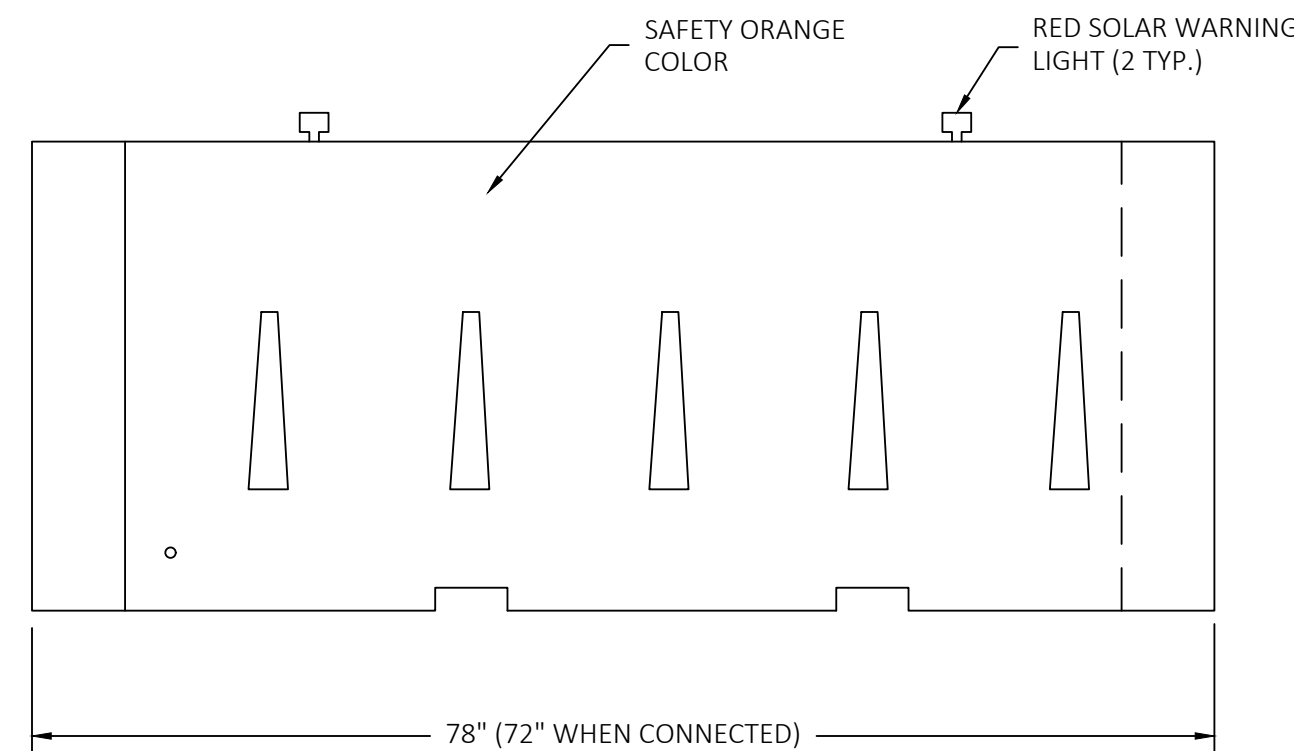
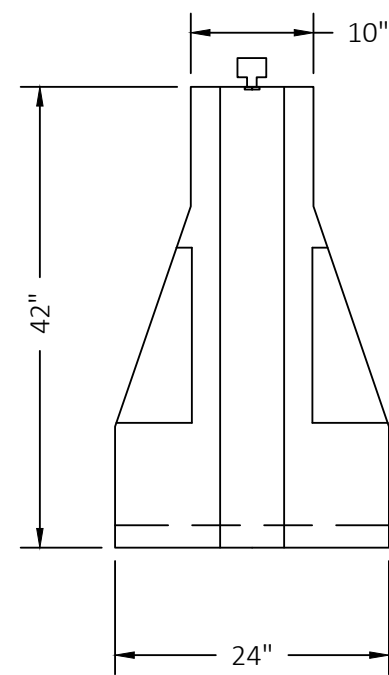
PHASE 1A BARRICADE PLAN
SCALE 1"=10'

- NOTE:
1. BARRICADE PLAN TO BE USED FOR CONSTRUCTION OF PHASE 1A (SNOW MELT APRON) PRIOR TO START OF PHASE 1. PHASE 1 AND 1A SHALL BE COMPLETED PRIOR TO START OF PHASE 2.
 2. SEE SHEET 4 FOR BARRICADE PLAN IF CONTRACTOR WORKS CONCURRENTLY IN PHASE 1 AND 1A.



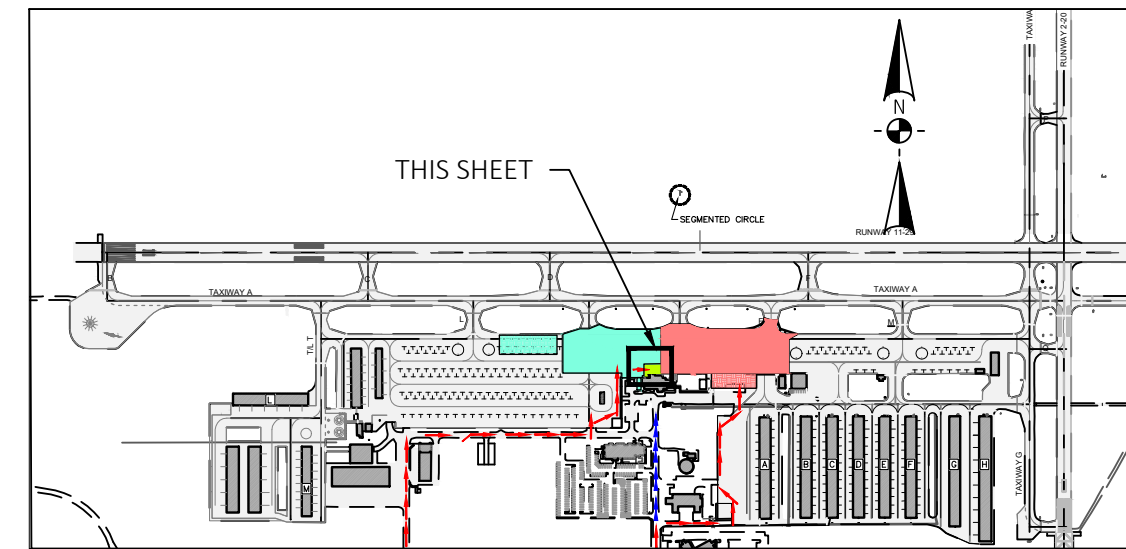
BARRICADE NOTES:

1. BARRICADES WILL BE PROVIDED BY THE AIRPORT. BARRICADES WILL BE PLASTIC, WATER-FILLED TYPE WITH RED SOLAR POWERED LIGHTS. CONTRACTOR SHALL FILL BARRICADES WITH WATER, PLACE AND MAINTAIN LIGHTS AND BARRICADES THROUGHOUT THE PROJECT.
2. EACH BARRICADE SHALL HAVE 2 SOLAR-POWERED LIGHTS WITH RED LENSES EACH CONTROLLED BY PHOTOCELLS SUCH THAT THEY ARE ON CONTINUOUS AT NIGHT AND OFF BY DAY.
3. BARRICADES SHALL BE SECURED IF NECESSARY TO RESIST MOVEMENT FROM JET BLAST OR PROP BLAST.
4. AT THE COMPLETION OF CONSTRUCTION, ALL BARRICADES SHALL BE DRAINED OF WATER, LIGHTS DISMANTLED, AND RETURNED TO THE AIRPORT MAINTENANCE BUILDING.
5. CONTRACTOR WILL COORDINATE DELIVERY OF BARRICADES TO WORK AREA WITH AIRPORT OPERATIONS MANAGER. LOCATION OF BARRICADES TO BE APPROVED BY AIRPORT OPERATIONS AND RESIDENT ENGINEER BEFORE START OF ANY WORK.



CONTINUOUS 42" JERSEY BARRICADE

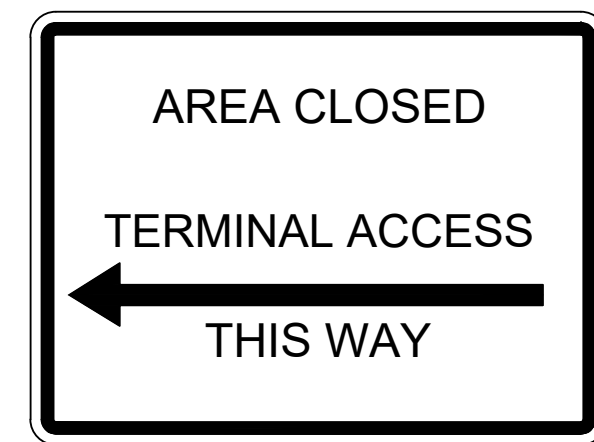
NTS



LOCATION MAP

LEGEND

- | | |
|--|-----------------------------|
| | EXISTING BUILDING |
| | NEW PCC PAVEMENT |
| | EX EDGE OF PAVEMENT |
| | DESIGNATED PEDESTRIAN ROUTE |
| | BARRICADE |
| | HAUL ROAD |
| | TERMINAL ACCESS SIGN |



SIGN No. 1
NOT TO SCALE

TERMINAL ENTRANCE DIRECTION SIGN

NTS

NOTE:

1. TERMINAL ENTRANCE SIGN SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR WHEN PHASE 1A WORK AREA BARRICADES ARE INSTALLED.
2. 24"H X 36"W STANDARD REGULATORY SIGN, BLACK LETTERING ON WHITE BACKGROUND, 4" LETTERING TYPICAL.

JERSEY BARRICADE NOTES:

1. JERSEY BARRICADES SHALL BE PROVIDED BY CONTRACTOR. BARRICADES SHALL BE PLASTIC, WATER-FILLED, JERSEY-SHAPED BARRICADE WITH RED SOLAR POWERED LIGHTS. CONTRACTOR SHALL PLACE AND MAINTAIN BARRICADES AND LIGHTS THROUGHOUT PROJECT DURATION.
2. BARRICADES SHALL BE APPROVED BY AIRPORT PRIOR TO DELIVERY AND INSTALLATION.
3. EACH BARRICADE SHALL HAVE 2 SOLAR-POWERED LIGHTS WITH RED LENSES, EACH CONTROLLED BY PHOTOCELLS, SET TO CONINUOUS "ON" AT NIGHT AND "OFF" AT DAY.
4. BARRICADES SHALL BE SECURED IF NECESSARY TO RESIST MOVEMENT FROM JET OR PROP BLAST.
5. LOCATION OF JERSEY BARRICADES TO BE APPROVED BY AIRPORT OPERATIONS MANGER AND RESIDENT ENGINEER,
6. AT COMPLETION OF CONSTRUCTION, ALL BARRICADES SHALL BE DRAINED OF WATER AND REMOVED FROM THE AIRPORT.
7. ALL DETAIL DIMENSIONS IN INCHES.

TRUCKEE-TAHOE AIRPORT

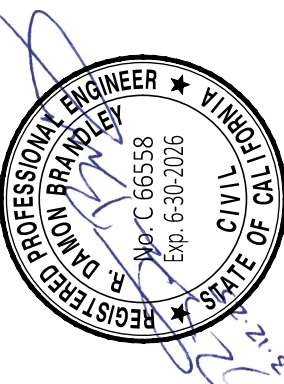
TRUCKEE

CALIFORNIA

RECONSTRUCT APRON A2

BARRICADE PLAN - PHASE 1A

ENGINEER OF RECORD



BY DATE

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SCALE

1"=10'

SHEET No.

3

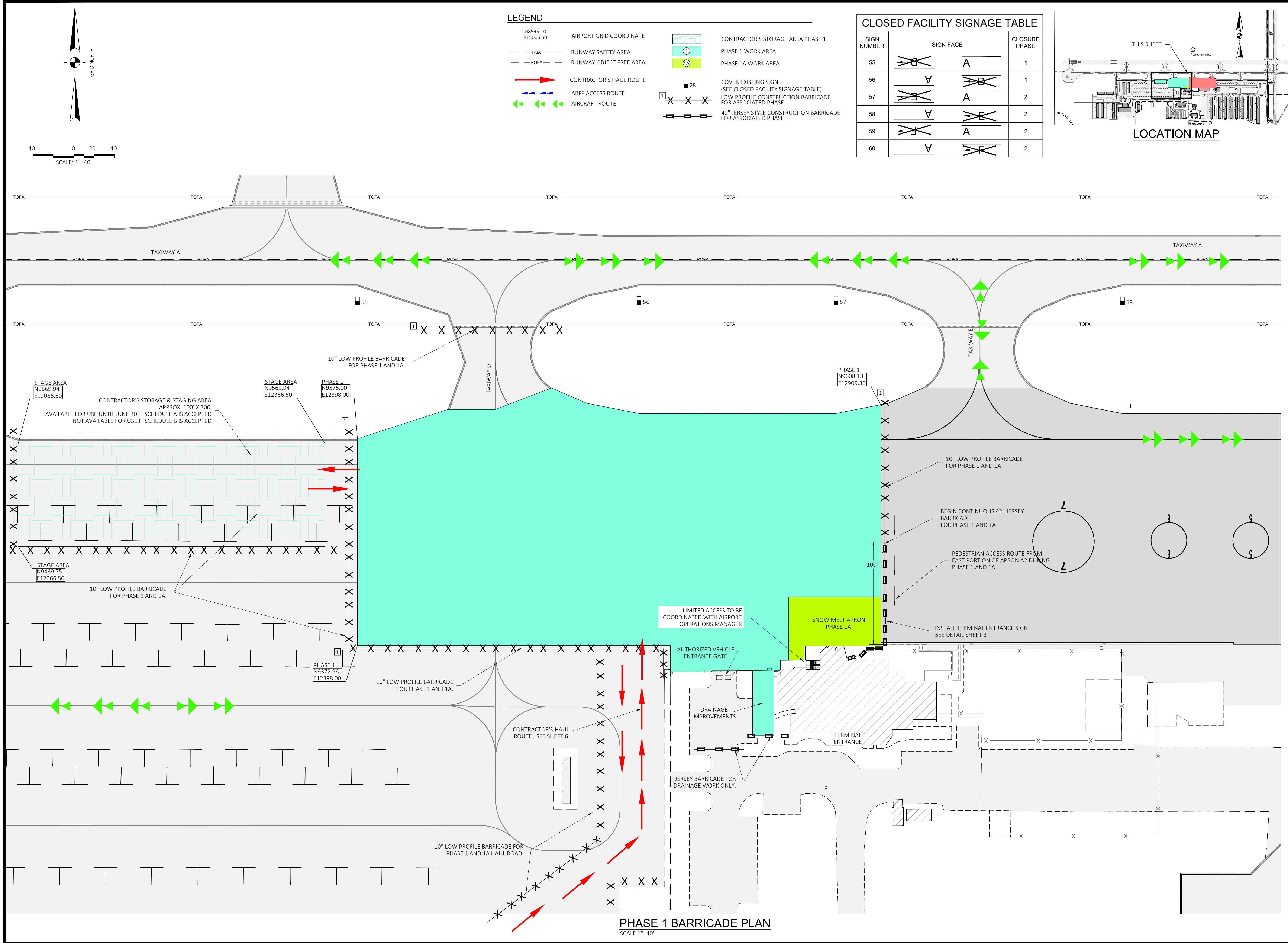
OF

25

BRANDLEY
ENGINEERING

6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725

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TRUCKEE-TAHOE AIRPORT

TRUCKEE

CALIFORNIA

RECONSTRUCT APRON A2

BARRICADE PLAN - PHASE 1

ENGINEER OF RECORD

PROFESSIONAL ENGINEER
KEVIN CURRY
STATE OF CALIFORNIA
LICENSE NO. 68323
CIVIL ENGINEERING

DATE

3/12/2025

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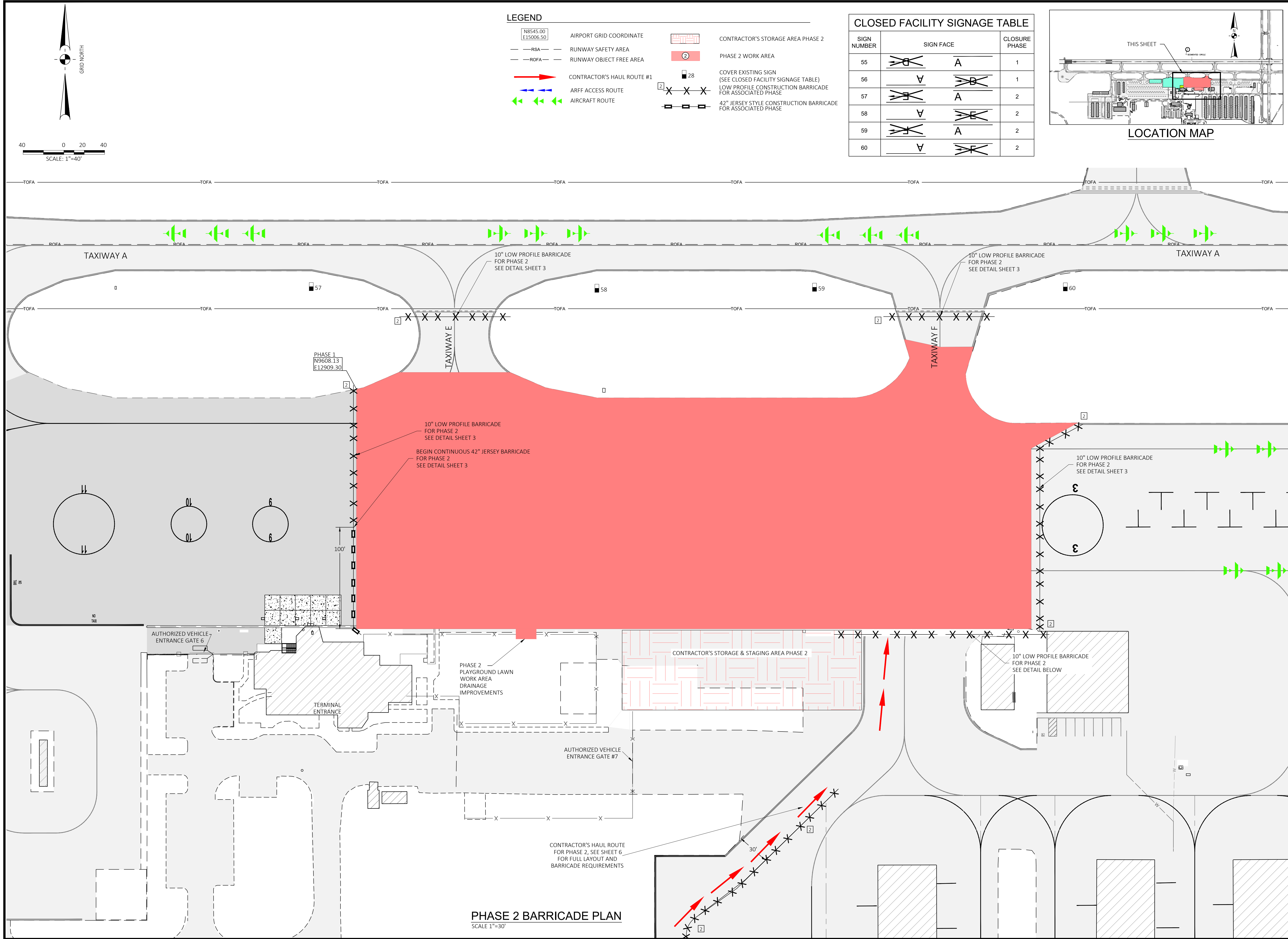
SCALE

1"=40'

SHEET No.

4 OF 25

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TRUCKEE-TAHOE AIRPORT

DATE

3/12/2025

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SCALE

1"=40'

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5 OF 25

CALIFORNIA

RECONSTRUCT APRON A2

BARRICADE PLAN - PHASE 2

ENGINEER OF RECORD

PROFESSIONAL ENGINEER

REGISTERED

STATE OF CALIFORNIA

NO. 006558

DATE 03/03/2025

PAUL BRANDLEY

6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725

BRANDLEY

ENGINEERING

LEGEND

N8545.00
E15006.50

AIRPORT GRID COORDINATE

— RSA —

RUNWAY SAFETY AREA

— ROFA —

RUNWAY OBJECT FREE AREA

CONTRACTOR'S HAUL ROUTE

ARFF ACCESS ROUTE

AIRCRAFT ROUTE

CONTRACTOR'S STORAGE AREA

1

PHASE 1 WORK AREA

1A

PHASE 1A WORK AREA

28

COVER EXISTING SIGN
(SEE CLOSED FACILITY SIGNAGE TABLE)

LOW PROFILE CONSTRUCTION
BARRICADE
FOR ASSOCIATED PHASE

42" JERSEY STYLE CONSTRUCTION
BARRICADE
FOR ASSOCIATED PHASE

THIS SHEET

TERMINAL ENTRANCE

LOCATION MAP

PHASE 1A

PHASE 2

CONTRACTOR'S STORAGE & STAGING AREA PHASE 2

TERMINAL ENTRANCE

AUTHORIZED VEHICLE ENTRANCE GATE #7

CONTRACTOR'S HAUL ROUTE FOR PHASE 2.

30'

30'

30'

35'

CHANDELLE LANE

TRUCKEE TAHOE AIRPORT ROAD

AIRSHOW WAY

PHASE 1 HAUL ROAD BARRICADE PLAN

SCALE 1"=40'

PHASE 2 HAUL ROAD BARRICADE PLAN

SCALE 1"=40'

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TRUCKEE

TRUCKEE-TAHOE AIRPORT

CALIFORNIA

RECONSTRUCT APRON A2

BARRICADE PLAN - HAUL ROADS

ENGINEER OF RECORD

PROFESSIONAL ENGINEER

PAUL BRANDLEY

REGISTERED CIVIL

STATE OF CALIF.

NO. 61658

EXP. 03/31/26

DATE

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SCALE

1"=40'

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6 OF 25

BRANDLEY

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GENERAL NOTES:

- CONSTRUCTION OF THIS PROJECT SHALL BE IN ACCORDANCE WITH THE CONTRACT AGREEMENT, THESE PLANS, TECHNICAL SPECIFICATIONS, SPECIAL PROVISIONS, INFORMATION FOR BIDDERS, AND ALL APPLICABLE FAA STANDARDS AND OTHER REFERENCED DOCUMENTS. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL SAFETY AND ENVIRONMENTAL REGULATIONS. THE PROJECT IS SUBJECT TO INSPECTION OF THE OWNER AND THE RESIDENT PROJECT REPRESENTATIVE DESIGNATED BY THE OWNER, THE FEDERAL AVIATION ADMINISTRATION, AND ANY OTHER GOVERNING AGENCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING A MINIMUM OF 72 HOURS IN ADVANCE TO OBTAIN CLEARANCE FOR WORK.
- THE CONTRACTOR'S SUPERINTENDENT SHALL BE ON THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS WHILE THIS PROJECT IS IN PROGRESS. SUPERINTENDENT SHALL BE CONTRACTOR'S DESIGNATED RESPONSIBLE REPRESENTATIVE AND SHALL BE AVAILABLE IN CASE OF EMERGENCIES ON A 24-HOUR DAILY BASIS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CLEANLINESS, SAFETY, AND SECURITY OF THE WORK, STAGING AND STORAGE AREAS AT ALL TIMES.
- THESE PLANS SHOW ITEMS TO BE CONSTRUCTED UNDER THIS CONTRACT AND EXISTING FIELD CONDITIONS AT THE TIME THESE PLANS WERE PREPARED. THE EXISTING INFORMATION SHOWN ON THESE PLANS IS FROM THE BEST SOURCES AVAILABLE AT THE TIME OF COMPILATION. ACTUAL FIELD CONDITIONS, GRADES, LOCATIONS AND OTHER FEATURES MAY DIFFER FROM CONDITIONS INDICATED ON THESE DOCUMENTS. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO SATISFY HIMSELF THAT THE INFORMATION IS STILL CURRENT AT THE TIME OF CONSTRUCTION NOTICE TO PROCEED. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER OF ANY DISCREPANCIES OR CHANGES ENCOUNTERED.
- ELECTRONIC FILES OF THESE PLANS MAY BE PROVIDED BY THE ENGINEER AS A CONVENIENCE TO THE CONTRACTOR. IF THERE ARE ANY DISCREPANCIES BETWEEN THE PLANS AND THE ELECTRONIC FILES, THE PLANS SHALL GOVERN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE ENCOUNTERED. EXISTING GRADES SHOWN ARE LIMITED BY THE ACCURACY OF SURVEYING METHODS AND INTERPOLATION BETWEEN SURVEY POINTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONSTRUCT THE PROJECT TO THE PRINTED PLANS AND SPECIFICATIONS AND IN ACCORDANCE WITH SOUND CONSTRUCTION PRACTICES.
- A TOPOGRAPHIC SURVEY FOR THE PROJECT WAS PERFORMED BY CTA ENGINEERING & SURVEYING IN MAY 2024.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES, SERVICE LATERALS AND CONDUIT ("UTILITIES") IS BASED ON THE BEST AVAILABLE INFORMATION TO THE ENGINEER AND SHALL BE ASSUMED AS APPROXIMATE AND REQUIRING FIELD VERIFICATION. CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND FOR REPAIRING ALL DAMAGE THAT OCCURS DUE TO THE CONTRACTOR'S ACTIVITIES. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT PRIOR TO CONSTRUCTION, AND SHALL POTHOLE TO VERIFY LOCATION, DEPTH, AND SIZE OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- EXERCISE EXTREME CARE WHEN USING ANY EQUIPMENT TO PREVENT CONTACT WITH ANY NEARBY POWER LINES AND POWER SOURCES. SAFE WORKING CLEARANCES SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.
- EXISTING AIRPORT SURVEY MONUMENTS ARE LOCATED THROUGHOUT THE CONSTRUCTION AREA. IF ANY OTHER SURVEY MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL AT HAVE A REGISTERED LAND SURVEYOR REPLACE THE DISTURBED MONUMENTS AT HIS EXPENSE.
- THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND RPR ON THE PRECISE LOCATION AND LIMITS OF THE CONTRACTOR'S STAGING AND STORAGE AREA, AS WELL AS ANY SPECIAL REQUIREMENTS FOR FENCING, SECURITY OR ACCESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL UTILITIES AND HOOK-UPS NECESSARY FOR THE CONTRACTOR'S USE AND FOR ALL PROJECT FIELD OFFICES AS REQUIRED IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL USE THE STAGING AND STORAGE AREA FOR SHOP, MATERIAL AND EQUIPMENT STORAGE, AND OTHER PROJECT-RELATED ACTIVITIES INCLUDING EMPLOYEE PARKING. ALL COSTS ASSOCIATED WITH PREPARATION AND CLEANUP OF THE STAGING AREA SHALL BE BORNE BY THE CONTRACTOR.
- ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR AND PAID DIRECTLY TO THE APPROPRIATE UTILITY. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER AND RPR.

- THE CONTRACTOR SHALL NOT ENTER ONTO ANY AREA OUTSIDE OF THE CONSTRUCTION LIMITS, STAGING AREA, OR DESIGNATED HAUL ROUTES WITHOUT APPROVAL OF THE OWNER AND RPR.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE TRAFFIC REGULATIONS CONCERNING THE USE OF STREETS AND ROADWAYS FOR HAULING. ANY DAMAGE DONE TO THE ROADWAYS DUE TO THE CONTRACTOR'S EQUIPMENT OR HAULING OPERATIONS SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT NO COST TO THE OWNER.
- NO MATERIAL SHALL BE WASTED OR STOCKPILED ON THE AIRPORT UNLESS APPROVED BY THE OWNER AND RPR. STOCKPILED MATERIAL SHALL MEET SWPPP REQUIREMENTS AND SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AS A RESULT OF AIRCRAFT OPERATIONS OR WIND AND IN ACCORDANCE WITH FAA ADVISORY CIRCULARS 7 DAYS PER WEEK.
- THE CONTRACTOR SHALL INVESTIGATE THE AVAILABILITY OF AN ADEQUATE SUPPLY OF SUITABLE WATER AND PROVIDE NECESSARY FACILITIES TO FURNISH WATER FOR USE DURING CONSTRUCTION, SOLELY AT HIS EXPENSE. CONTRACTOR SHALL NOT DRAW WATER FROM ANY FIRE HYDRANT FOR USE ON THE WORK WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE CONTROLLING FIRE DEPARTMENT OR UTILITY.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FIRE HYDRANTS AND BACKFLOW PREVENTERS AT ALL TIMES.
- THE CONTRACTOR SHALL SUBMIT A DRAWING SHOWING THE PROPOSED SITE LAYOUT OF ANY BATCH PLANTS. THE PLAN SHALL BE APPROVED BY THE OWNER AND RPR PRIOR TO STARTING ANY WORK.
- ANY WASTE, CONSTRUCTION DEBRIS, OR SOIL MUST BE DISPOSED OF PROPERLY. DISPOSAL OF MATERIAL OFF-SITE SHALL BE DONE IN A LAWFUL MANNER AND AT A SITE HAVING CURRENT APPROVAL TO ACCEPT SOLID WASTE. DISPOSAL SITE AND PROCEDURES MUST BE IDENTIFIED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER AND RPR FOR APPROVAL PRIOR TO USE.
- CONTRACTOR SHALL HAVE SPILL KITS AVAILABLE IN WORK AREAS AND SHALL CONTAIN ALL SPILLS IMMEDIATELY AND SHALL NOTIFY RPR. AT ANY SIGN OF CONTAMINATED SOIL, THE CONTRACTOR SHALL NOTIFY RPR AND OWNER FOR ASSESSMENT OF APPROPRIATE REMEDIATION.
- ANY PRODUCTS IN 5 GALLON CONTAINERS OR LARGER MUST HAVE SECONDARY CONTAINMENT AND KEPT AWAY FROM STORM DRAINS. ENSURE ALL STORM DRAINS ARE PROTECTED IN CONSTRUCTION AND STAGING AREAS.
- ANY SOLVENT USED TO CLEAN TOOLS, EQUIPMENT, OR SPILLS MAY BE CONSIDERED A HAZARDOUS WASTE AND MUST BE PROPERLY MANAGED. NO SOLVENTS, CLEANING BY-PRODUCTS, WASTE, REFUSE, OR LEFTOVER PAINT MAY BE DISPOSED OF OR DISCHARGED INTO STORM DRAINS, DRYWELLS, OR ANY GROUND SURFACE, OR OTHERWISE BE PERMITTED TO REMAIN ON AIRPORT PROPERTY. ALL SUCH MATERIAL SHALL BE REMOVED OFF-SITE BY CONTRACTOR IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.
- THE CONTRACTOR SHALL CONDUCT THE FINAL CLEANING OF AFFECTED AIRPORT PAVEMENTS PRIOR TO REOPENING THE PAVEMENTS TO AIR TRAFFIC. CONTRACTOR TO PROTECT ALL EXISTING UTILITY VAULTS AND LIDS DURING CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT ALL VAULT LIDS ARE OPERATIONAL FOLLOWING COMPLETION OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTINUOUS DAILY CLEAN-UP OF THE WORK AREA. NO WIRE OR METAL BRISTLES ARE ALLOWED ON AIRFIELD PAVEMENTS.
- AT THE CONCLUSION OF ALL WORK, CONTRACTOR SHALL SEED CONTRACTOR'S STORAGE, STAGING AND TEMPORARY STOCKPILE AREA AND ALL DISTURBED GRADING OR EMBANKMENT AREAS. LIMITS OF SEEDING SHALL BE VERIFIED BY RESIDENT ENGINEER. HYDROSEEDING SHALL BE A REQUIRED BMP TO BE INCLUDED IN THE SWPPP. NO ADDITIONAL PAYMENT FOR SURFACE PREPARATION OR SEEDING OF DISTURBED AREAS SHALL BE MADE, COST SHALL BE INCLUDED IN THE COST OF PREPARING AND IMPLEMENTING THE SWPPP. SEED MIX MUST MATCH LOCAL GRASSES, COMPLY WITH LOCAL REQUIREMENTS, AND BE SUITABLE FOR USE ON AIRPORTS. SEED MIX, MULCH, FERTILIZER, AND APPLICATION RATES SHALL BE APPROVED BY OWNER PRIOR TO USE. HYDROSEEDING MUST PRODUCE ADEQUATE GROWTH TO SATISFY THE STATE WATER BOARD SUCH THAT THE SWPPP CAN BE CLOSED OUT AFTER THE PROJECT IS COMPLETE.
- THE CONTRACTOR SHALL COMPLETE CLEANUP AND RESTORATION OF THE ENTIRE PROJECT AREA, INCLUDING STAGING AND STORAGE AREAS AND BATCH PLANTS PRIOR TO PROJECT FINAL ACCEPTANCE.

ABBREVIATIONS:

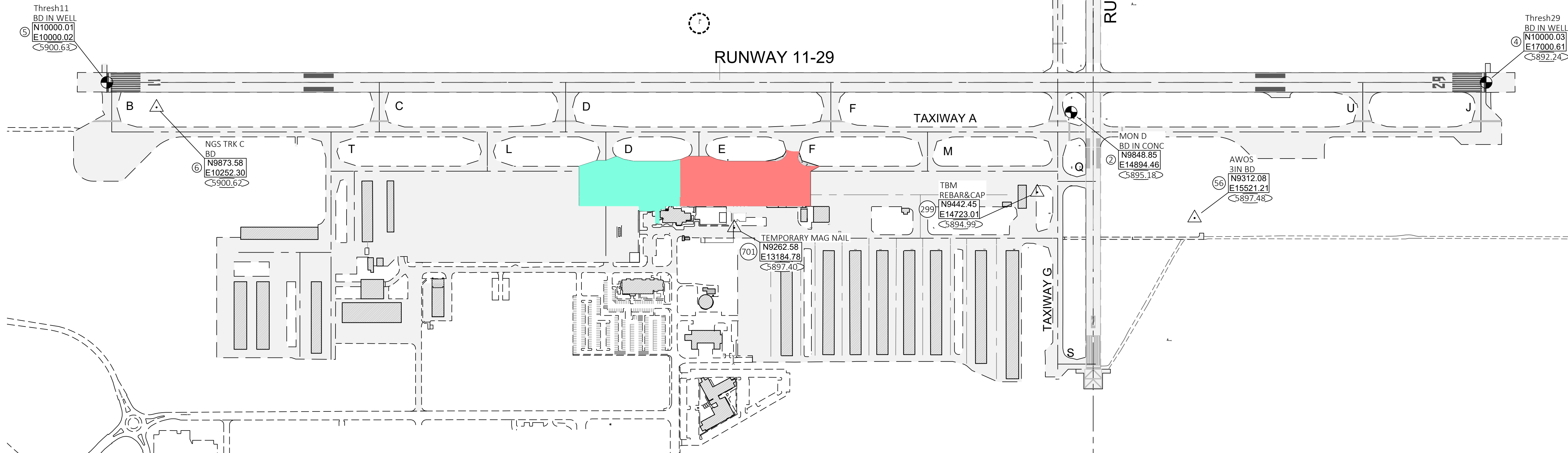
AB	AGGREGATE BASE	LF	LINEAR FEET
ABND	ABANDONED	LT	LEFT
AC	ASPHALT CONCRETE	MAX	MAXIMUM
ALT	ALTERNATE	MH	MANHOLE
APPROX	APPROXIMATE	MIN	MINIMUM
ASB	AGGREGATE SUBBASE	MON	MONUMENT
ATCT	AIR TRAFFIC CONTROL TOWER	N	NORTH
AWG	AMERICAN WIRE GAUGE	NE	NORTHEAST
BNDY	BOUNDARY	NIC	NOT IN CONTRACT
BLD	BUILDING	No., #	NUMBER
BM	BENCH MARK	NOTAM	NOTICE TO AIR MISSIONS
BVC	BEGIN VERTICAL CURVE	NTS	NOT TO SCALE
BVCE	BEGIN VERTICAL CURVE ELEVATION	NW	NORTHWEST
BVCS	BEGIN VERTICAL CURVE STATION	OC	ON CENTER
CBR	CALIFORNIA BEARING RATIO	OD	OUTSIDE DIAMETER
CL OR C	CENTERLINE	PAPI	PRECISION APPROACH PATH INDICATOR
COMM	COMMUNICATION	PB	PULL BOX
COORD	COORDINATE	PC	POINT OF CURVATURE
CTAF	COMMON TRAFFIC ADVISORY FREQUENCY	PCB	PERMEABLE CONCRETE BASE COURSE
CTPB	CEMENT TREATED PERVIOUS BASE	PCC	PORTLAND CEMENT CONCRETE
CSPP	CONSTRUCTION SAFETY & PHASING PLAN	PI	POINT OF INTERSECTION
CU YD OR CY	CUBIC YARD	PL	PROPERTY LINE
DIA	DIAMETER	PT	POINT OF TANGENCY
DI	DROP INLET	PVI	POINT OF VERTICAL INTERSECTION
DIP	DUCTILE IRON PIPE	PWR	POWER
E	EAST	R	RADIUS
EA	EACH	RCP	REINFORCED CONCRETE PIPE
EG	EXISTING GRADE (OR GROUND)	RPR	RESIDENT PROJECT REPRESENTATIVE
EVC	END VERTICAL CURVE	RT	RIGHT
EVCE	END VERTICAL CURVE ELEVATION	RW	RUNWAY
EVCS	END VERTICAL CURVE STATION	S	SOUTH, OR SLOPE
EX, EXIST	EXISTING	SCH	SCHEDULE
EXC	EXCAVATION	SD	STORM DRAIN
FAA	FEDERAL AVIATION ADMINISTRATION	SDR	STANDARD DIMENSION RATIO
FBO	FIXED BASED OPERATOR	SE	SOUTHEAST
FG	FINISHED GRADE (OR GROUND)	SPEC	SPECIFICATIONS
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	SQ YD, SY	SQUARE YARD
FT	FEET	SW	SOUTHWEST
GAL	GALLON	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
GALV	GALVANIZED	TD	TOP OF DUCT
GB	GRADE BREAK	T/L	TAXILANE
GND	GROUND	T/W	TAXIWAY
HGR	HANGAR	TYP	TYPICAL
HH	HANDHOLE	UG	UNDERGROUND
HORZ	HORIZONTAL	VAR	VARIES (OR VARIABLE)
HP	HIGH POINT	VC	VERTICAL CURVE
ID	INSIDE DIAMETER	VOL	VOLUME
INV	INVERT	W/	WITH
kV	KILOVOLT	W	WEST, OR WIDTH, OR WATER
kVA	KILOVOLT AMPERE	WM	WATER METER
L	LENGTH	WV	WATER VALVE

NOTES:

- THE BASIS OF THE BEARING FOR THIS PROJECT IS THE CENTERLINE OF RUNWAY 11-29 WHICH BEARS WEST-EAST. THRESHOLD OF RUNWAY 11 IS HELD AS N10,000, E10,000.
- ALL MEASUREMENTS, PROJECT COORDINATES, AND STATION VALUES SHOWN ARE GROUND DISTANCES, UNITS ARE IN US SURVEY FEET.
- THE BASIS FOR VERTICAL CONTROL IS BE USGS MONUMENT D, 5895.18'. ELEVATIONS BASED ON THE THE NORTH AMERICAN VERTICAL DATUM OF 1988, GEOID 12B.
- A TOPOGRAPHIC SURVEY FOR THE PROJECT WAS PERFORMED BY CTA ENGINEERING & SURVEYING IN MAY 2024.
- MONUMENTS NOTED WITH AN * NOT FOUND OR SET IN THE SURVEY OF THIS PROJECT.

LEGEND

N9738.46 E13727.35	AIRPORT GRID COORDINATE
	EXISTING BUILDING
	EXISTING PAVEMENT SECTION
	PHASE 1 AND 1A
	PHASE 2
	EXISTING PAVEMENT EDGE
	SURVEY MONUMENT



TRUCKEE-TAHOE AIRPORT

CALIFORNIA

RECONSTRUCT APRON A2

GENERAL NOTES AND COORDINATE LAYOUT PLAN

ENGINEER OF RECORD

BY

DATE

REVISIONS

No.

DATE	3/12/2025
DRAWN	TS
CHECKED	DB
PROJECT No.	40.38
FILE	4038.06.Coord
SCALE	1"=300'
SHEET No.	7 OF 25

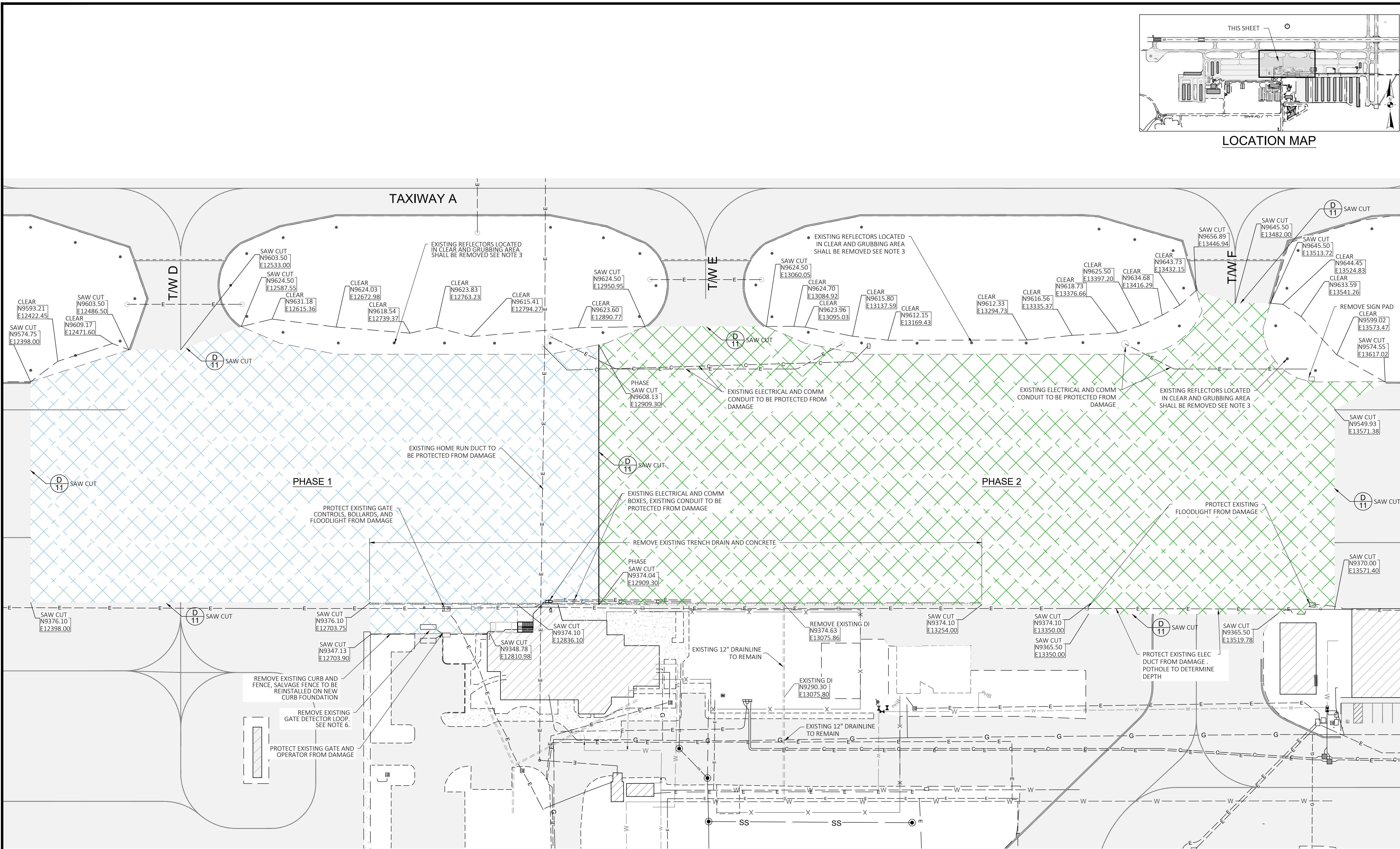


BRANDLEY
ENGINEERING

6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725

PLOTTED BY Kevin Currey 3/12/2025 4:24 PM

G:\40 TRUCKEE\39 APRON A2\BID SET\4038.07 DEMO.DWG

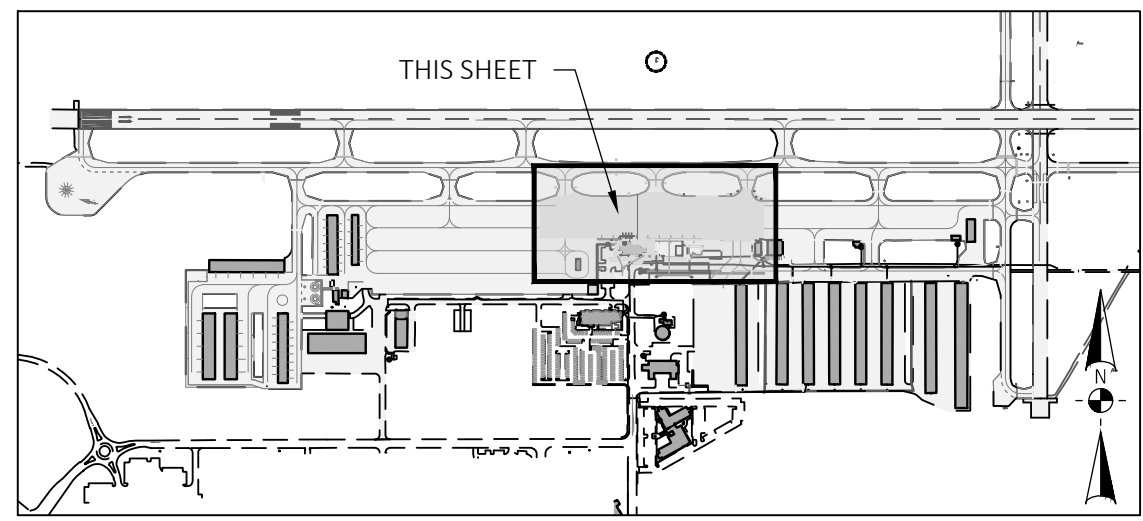
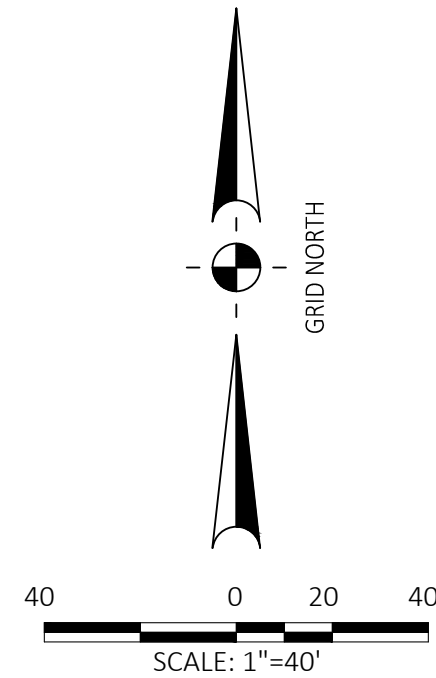


NOTES:

1. LIMITS OF DEMOLITION AND SAW CUT SHALL BE VERIFIED BY RPR PRIOR TO START OF PULVERIZING OPERATION.
2. APPROXIMATE LIMITS OF CLEARING AND GRUBBING ON INFELD SHOWN. VERIFY LIMITS OF CLEARING AND GRUBBING WITH GRADING PLAN. CLEARING AND GRUBBING SHALL BE INCIDENTAL TO UNCLASSIFIED EXCAVATION BID ITEM. NO SEPARATE PAYMENT FOR CLEARING AND GRUBBING.
3. EXISTING REFLECTORS IN AREAS TO BE CLEARED AND GRUBBED SHALL BE REMOVED AND DELIVERED TO THE AIRPORT. SOIL ANCHORS FOR EXISTING REFLECTORS SHALL BE REMOVED AND DISPOSED OF OFF SITE. SEE SHEET 20 FOR LOCATION OF NEW REFLECTORS TO BE INSTALLED.
4. ALL EXISTING UTILITY BOXES, FLOODLIGHT FOUNDATIONS, FENCE POST FOUNDATIONS, DUCT ETC. SHALL BE PROTECTED FROM DAMAGE. CONTRACTOR SHALL POTHOLE AND LOCATE ALL UTILITIES TO VERIFY DEPTH AND ENSURE THEY ARE PROTECTED.
5. ALL HAUL ROADS SHALL REMAIN BROOM CLEAN AT ALL TIMES. SEE SAFETY PLAN FOR DESIGNATED HAUL ROUTE, TEMPORARY STOCKPILE AREA AND FLAGGERS.
6. COORDINATE WITH AIRPORT OPERATIONS FOR SHUT DOWN OF EXISTING GATE OPERATOR PRIOR TO REMOVAL OF EXISTING GATE DETECTOR LOOP.

LEGEND

<div><div></div><div>N9738.46 E13727.35</div></div>	AIRPORT GRID COORDINATE
<div><div></div><div>PHASE 1</div></div>	PULVERIZE EXISTING PAVEMENT SECTION, EXCAVATE, STOCKPILE AND PLACE AS AGGREGATE SUBBASE
<div><div></div><div>PHASE 2</div></div>	
<div><div></div><div></div></div>	EXISTING BUILDING
<div><div></div><div>E</div></div>	EXISTING ELECTRICAL
<div><div></div><div>W</div></div>	EXISTING WATER LINE
<div><div></div><div>G</div></div>	EXISTING GAS LINE
<div><div></div><div>C</div></div>	EXISTING COMM LINE
<div><div></div><div></div></div>	EXISTING STORM DRAIN
<div><div></div><div></div></div>	EXISTING DROP INLET



LOCATION MAP

TRUCKEE-TAHOE AIRPORT

CALIFORNIA

RECONSTRUCT APRON A2

DEMOLITION PLAN

ENGINEER OF RECORD

BY APR DATE

REVISIONS

No.

DATE

BY APR DATE

REVISIONS

No.

DATE

TS

CHECKED

DB

PROJECT No.

40.38

FILE

4038.07.Demo

SCALE

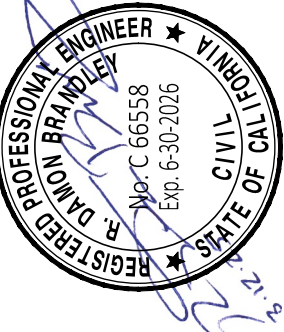
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SHEET No.

8 OF 25

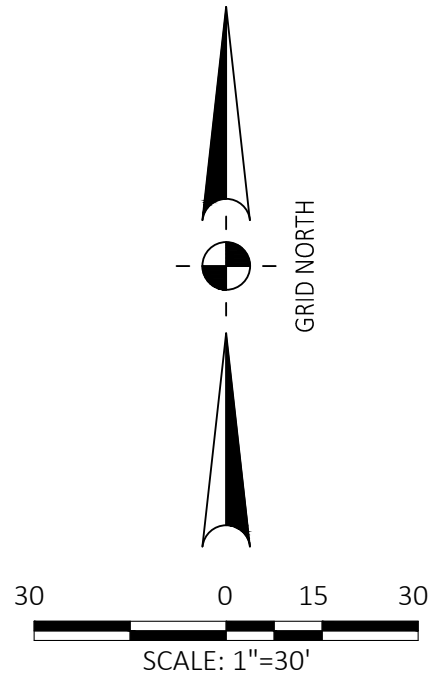
BRANDLEY
ENGINEERING

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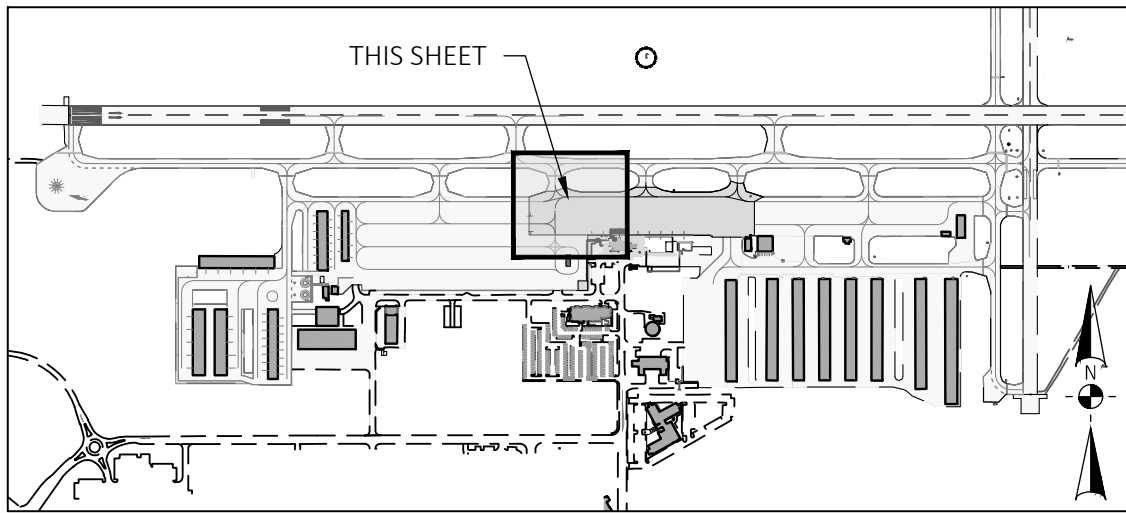
NOTES:

1. SEE CONSTRUCTION SAFETY AND PHASING PLAN SHEET 2- 6 FOR WORK AREA BARRICADE LAYOUT AND PHASING RESTRICTIONS.
2. FOR EXISTING PAVEMENT DEMOLITION LIMITS SEE SHEET 8.
3. SEE SHEET 11 FOR TYPICAL PAVEMENT SECTIONS & SHEET 12 FOR CONCRETE CURB DETAILS.
4. SEE SHEETS 16 TO 19 FOR NEW DRAINAGE PIPE AND DROP INLET CONSTRUCTION AND DETAILS.
5. SEE SHEETS 13 TO 15 FOR SNOW MELT APRON GRADING, JOINT PLAN AND DETAILS.
6. CONTRACTOR SHALL POT HOLE AND LOCATE EXISTING UTILITIES LOCATED WITHIN THE NEW PAVEMENT SECTION. SEE SHEET 21 FOR REQUIREMENTS FOR THE CONCRETE CAPPING OF EXISTING UTILITIES.
7. SEE SHEET 20 FOR LOCATION OF NEW DUCTS, PULLBOXES, AND EXTENSIONS OF EXISTING DUCT.

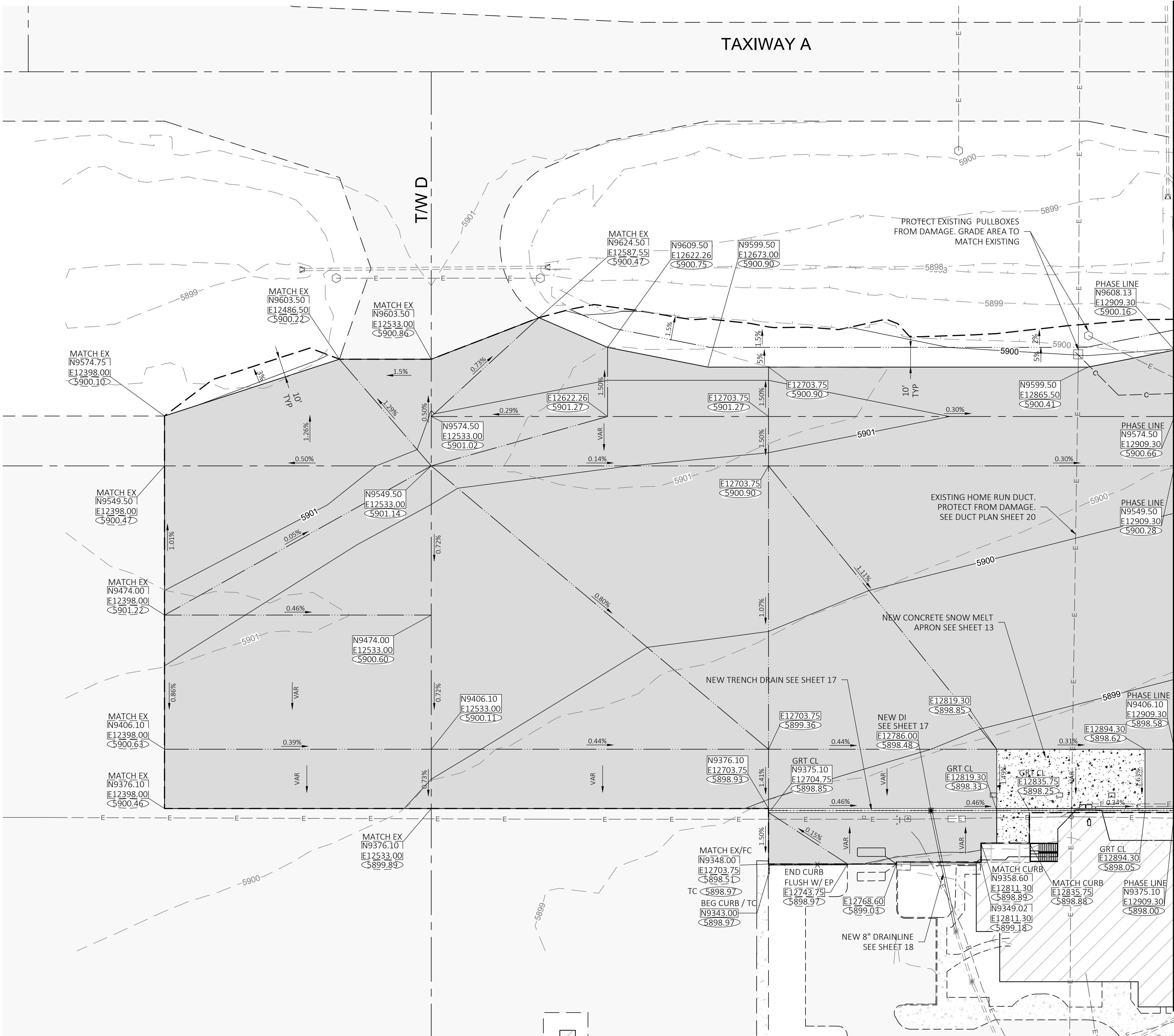


LEGEND

	STATION AND OFFSET
	FINISHED GRADE ELEVATION
	EXISTING GRADE ELEVATION
	NEW AC PAVEMENT
	EXISTING PAVEMENT
	NEW PCC PAVEMENT
	CENTERLINE
	GRADE BREAK
	FINISHED GRADE CONTOUR
	EXISTING GRADE CONTOUR
	LIMITS OF CONSTRUCTION / MATCH EXISTING GRADE
	NEW TRENCH DRAIN
	NEW STORM DRAIN
	EXISTING STORM DRAIN
	STORM DRAIN INLET (EX, NEW)
	FLARED END SECTION (EX, NEW)
	EXISTING ELECTRICAL LINE



LOCATION MAP



MATCHLINE - E 12909.30
SEE SHEET 10

TRUCKEE-TAHOE AIRPORT

CALIFORNIA

RECONSTRUCT APRON A2

GRADING PLAN - PHASE 1



No.	REVISIONS	BY	DATE

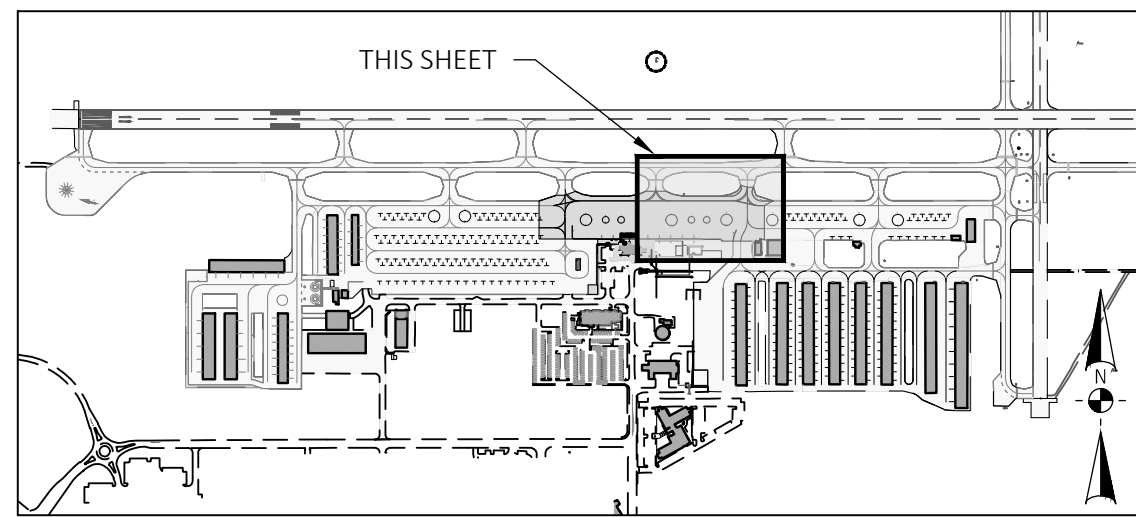
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DRAWN	KDC
CHECKED	DB
PROJECT No.	40.38
FILE	4038.08.Grade
SCALE	1"=30'
SHEET No.	9 OF 25

NOTES:

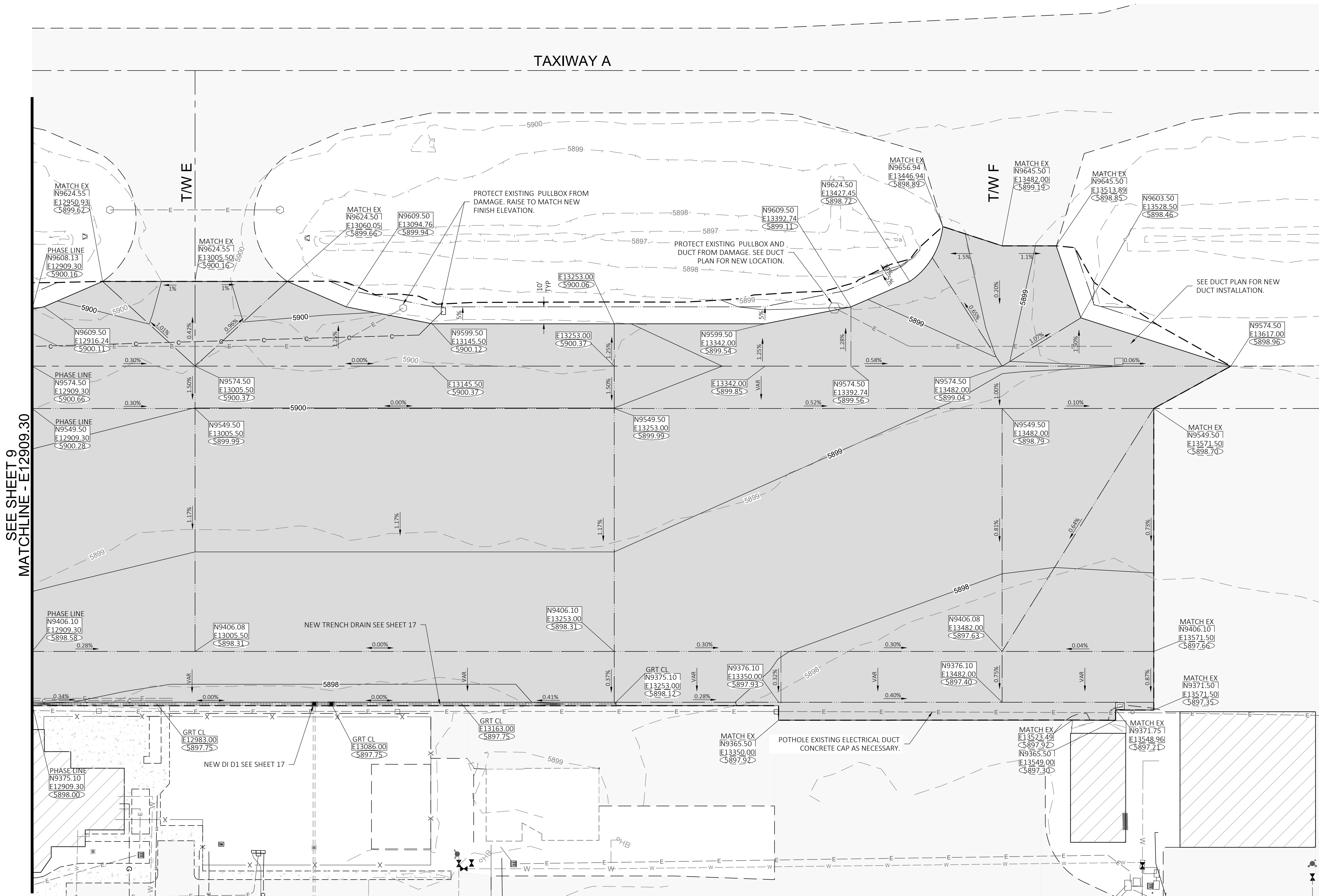
- SEE CONSTRUCTION SAFETY AND PHASING PLAN SHEET 2- 6 FOR WORK AREA BARRICADE LAYOUT AND PHASING RESTRICTIONS.
- FOR EXISTING PAVEMENT DEMOLITION LIMITS SEE SHEET 8.
- SEE SHEET 11 FOR TYPICAL PAVEMENT SECTIONS.
- SEE SHEETS 16 TO 19 FOR NEW DRAINAGE PIPE AND DROP INLET CONSTRUCTION AND DETAILS.
- SEE SHEETS 13 TO 15 FOR SNOW MELT APRON GRADING, JOINT PLAN AND DETAILS.
- CONTRACTOR SHALL POTHOLE AND LOCATE EXISTING UTILITIES LOCATED WITHIN THE NEW PAVEMENT SECTION. SEE SHEET 21 FOR REQUIREMENTS FOR THE CONCRETE CAPPING OF EXISTING UTILITIES.
- SEE SHEET 20 FOR LOCATION OF NEW DUCTS, PULLBOXES, AND EXTENSIONS OF EXISTING DUCT.

LEGEND

	STATION AND OFFSET
	FINISHED GRADE ELEVATION
	EXISTING GRADE ELEVATION
	NEW AC PAVEMENT
	EXISTING PAVEMENT
	NEW PCC PAVEMENT
	CENTERLINE
	GRADE BREAK
	FINISHED GRADE CONTOUR
	EXISTING GRADE CONTOUR
	LIMITS OF CONSTRUCTION / MATCH EXISTING GRADE
	NEW TRENCH DRAIN
	NEW STORM DRAIN
	EXISTING STORM DRAIN
	STORM DRAIN INLET (EX, NEW)
	EXISTING FLARED END SECTION
	EXISTING ELECTRICAL LINE



LOCATION MAP



6:40 TRUCKEE38 APRON A2BID SET\4038.08 GRADE.DWG

PLOTTED BY Kevin Curney 3/12/2025 4:24 PM



ENGINEER OF RECORD

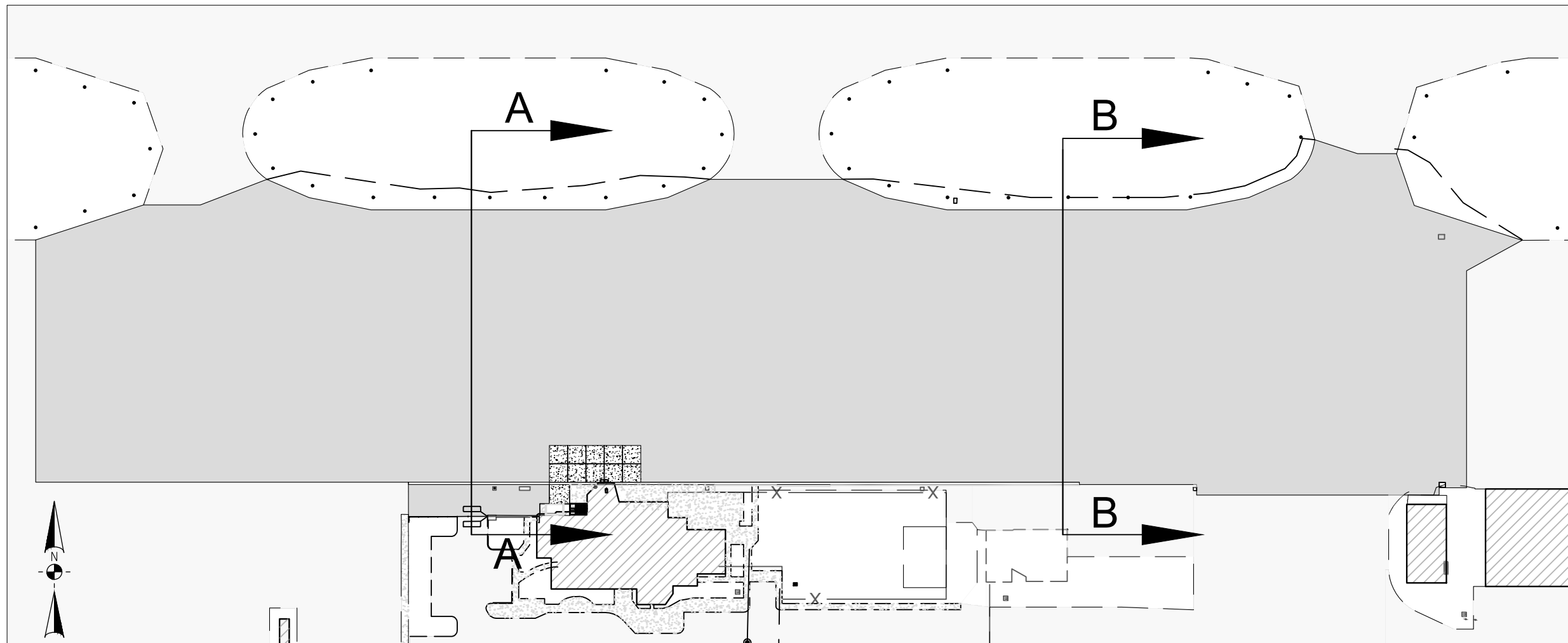
No.	REVISIONS	BY	DATE

TRUCKEE	CALIFORNIA
TRUCKEE-TAHOE AIRPORT	
RECONSTRUCT APRON A2	
GRADING PLAN - PHASE 2	

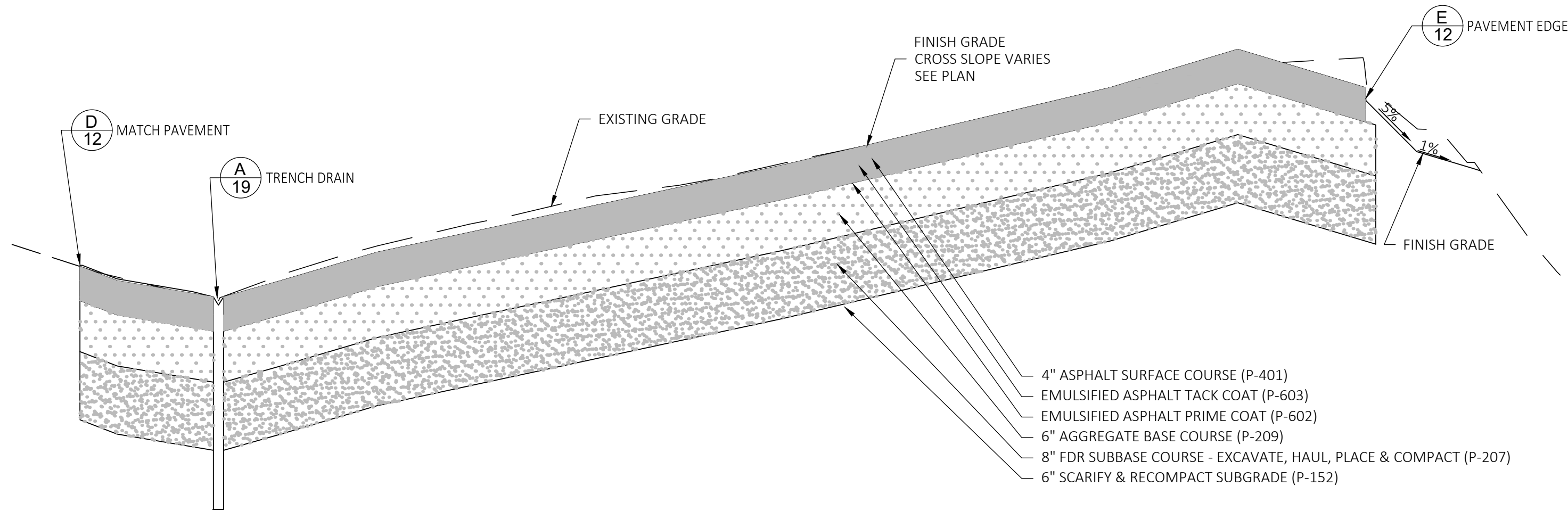
DATE	3/12/2025
DRAWN	KDC
CHECKED	DB
PROJECT No.	40.38
FILE	4038.08.Grade
SCALE	1"=30'
SHEET No.	10 of 25

PAVEMENT SECTION NOTES:

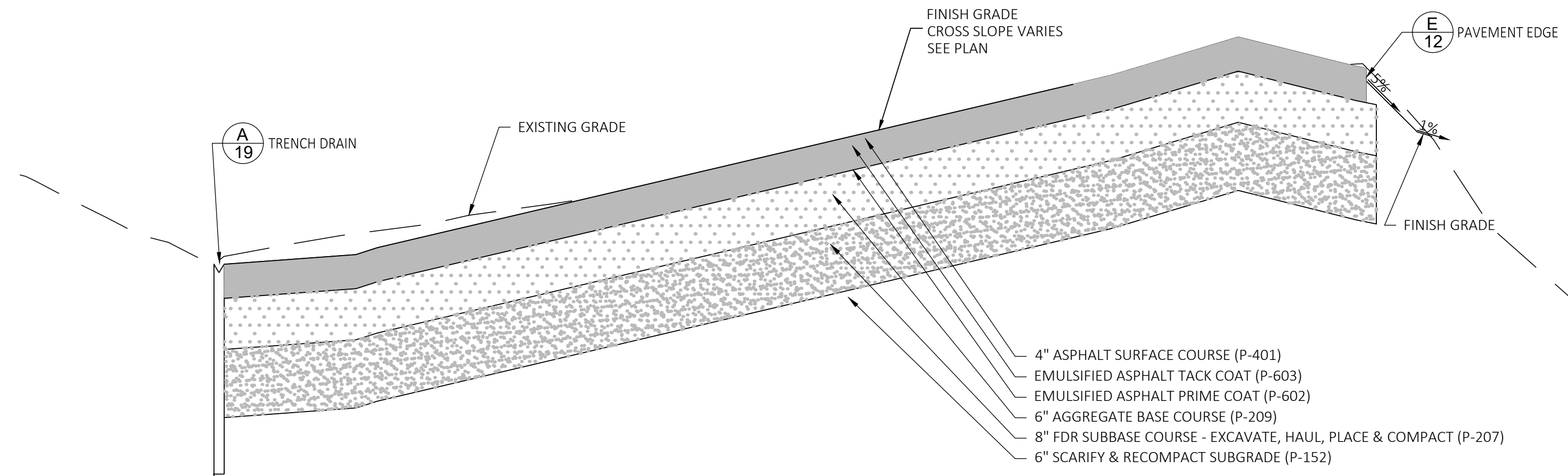
- ALL SUITABLE UNCLASSIFIED EXCAVATION MATERIALS SHALL BE USED AS EMBANKMENT MATERIAL. HAULING OF EXCAVATION MATERIAL IS CONSIDERED INCIDENTAL TO THE UNCLASSIFIED EXCAVATION BID ITEM.
- EXISTING PAVEMENT SHALL BE PULVERIZED TO A TOTAL DEPTH OF 8 INCHES. THE PULVERIZING OPERATIONS SHALL BE SUCH THAT IT WILL THOROUGHLY MIX THE PULVERIZED PAVEMENT SECTION MATERIALS PER THE REQUIREMENT OF P-207. CONTRACTOR SHALL ENSURE THAT UNDERLYING SUBGRADE MATERIALS ARE NOT PULVERIZED INTO MATERIALS. SEE SHEET 25 FOR SOIL BORING LOGS OF EXISTING SECTION THICKNESS. CONTRACTOR SHALL POTHOLE DURING PULVERIZATION TO ENSURE NO CONTAMINATION IS OCCURRING.
- PULVERIZING OF EXISTING AC WITH EXISTING AB, AS FDR AGGREGATE SUBBASE COURSE WILL BE PAID UNDER A SINGLE BID ITEM IN SPECIFICATION SECTION P-207 AND AS DESCRIBED BELOW:
 - "IN-PLACE FULL DEPTH RECYCLED (FDR) ASPHALT AGGREGATE SUBBASE COURSE - PULVERIZE, MIX, EXCAVATE, STOCKPILE, HAUL, PLACE, AND COMPACT" WILL BE PAID BY THE CUBIC YARD AS MEASURED IN ITS FINAL COMPACTED POSITION IN AREAS DESIGNATED ON THE PLANS AS "FDR AGGREGATE SUBBASE COURSE". THIS ITEM WILL INCLUDE PULVERIZING AND MIXING THE EXISTING PAVEMENT SECTION MATERIALS (AC WITH EXISTING AB), EXCAVATION AND TEMPORARY STOCKPILING OF THE PULVERIZED MATERIALS, AND THE HAULING, PLACING, AND COMPACTING OF THE FDR MATERIALS IN THEIR FINAL POSITION AS AGGREGATE SUBBASE COURSE. THIS PAY ITEM WILL ALSO BE USED TO PAY FOR ANY FDR MATERIALS USED TO FILL "MUCK EXCAVATION" AREAS OF UNSTABLE SUBGRADE.
- ALL AC SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO BID ITEMS UNDER P-207. NO SEPARATE PAYMENT SHALL BE MADE FOR AC SAW CUTTING.
- IMPORTED "AGGREGATE SUBBASE COURSE" AS SPECIFIED IN SECTION P-154 SHALL BE USED ONLY AFTER ALL P-207 MATERIALS HAVE BEEN USED.
- ANY EXCAVATION OF UNSTABLE SUBGRADE MATERIALS WILL BE PAID UNDER "MUCK EXCAVATION" UNDER SPECIFICATION P-152. SEE SUBGRADE STABILIZATION SECTION DETAIL THIS SHEET. ALL EXCAVATION OF SUBGRADE SOILS WILL BE PAID UNDER "UNCLASSIFIED EXCAVATION". IN NO CASE SHALL ANY FDR AGGREGATE SUBBASE COURSE MATERIALS BE PAID UNDER UNCLASSIFIED EXCAVATION. ALL WORK FOR P-207 MATERIALS WILL ONLY BE PAID UNDER THE RESPECTIVE BID ITEM FOR P-207.
- ALL EXCESS UNCLASSIFIED EXCAVATION AND MUCK EXCAVATION MATERIALS NOT USED AS SHOULDER BACKING SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF AIRPORT PROPERTY.
- PRIME AND TACK COAT MATERIALS SHALL MEET ASTM D977, D2397, OR D2027. "TOPEIN S" MAY NOT BE USED FOR PRIME OR TACK COAT.
- ASPHALT SURFACE COURSE TO BE PLACED IN TWO LIFTS. CONTRACTOR IS REQUIRED TO MEET ALL REQUIREMENTS OF P-401 INCLUDING SMOOTHNESS AND GRADE TOLERANCES. ALL GRADE CONTROL FOR ASPHALT SURFACE COURSE SHALL BE DONE BY STRING LINE UNLESS A SUPERIOR METHOD IS PROPOSED BY THE CONTRACTOR AND APPROVED BY THE RPR.
- ALL ASPHALT PLACED ON THE APRON SHALL BE PLACED IN CONTINUOUS LANES STARTING AT THE EDGE OF THE APRON AND CONTINUING TO THE MATCH LINE AT PHASE 1 AND PHASE 2 WITHOUT ANY TRANSVERSE JOINTS. IF SCHEDULE B IS ACCEPTED THEN THERE WILL NOT BE ANY TRANSVERSE JOINTS ALLOWED FOR THE FULL LENGTH OF THE APRON SECTION. THE ONLY CASES IN WHICH TRANSVERSE JOINTS MAY BE ALLOWED IS DUE TO UNFORESEEN MECHANICAL BREAKDOWNS.
- SAW CUT EAST EDGE OF PHASE 1 AC BEFORE PAVING PHASE 2 AC.
- AT THE CONCLUSION OF ALL WORK, CONTRACTOR SHALL SEED CONTRACTOR'S STORAGE, STAGING AND TEMPORARY STOCKPILE AREA AND ALL DISTURBED GRADING OR EMBANKMENT AREAS. LIMITS OF SEEDING SHALL BE VERIFIED BY RPR. HYDROSEEDING SHALL BE A REQUIRED BMP TO BE INCLUDED IN THE SWPPP. NO ADDITIONAL PAYMENT FOR SURFACE PREPARATION OR SEEDING OF DISTURBED AREAS SHALL BE MADE. COST SHALL BE INCLUDED IN THE COST OF PREPARING AND IMPLEMENTING THE SWPPP. SEED MIX SHALL BE AS SHOWN ON SHEET 2. HYDROSEEDING MUST PRODUCE ADEQUATE GROWTH TO SATISFY THE STATE WATER BOARD SUCH THAT THE SWPPP CAN BE CLOSED OUT AFTER THE PROJECT IS COMPLETE.
- SEE SHEETS 13 TO 15 FOR CONCRETE SNOW MELT APRON SECTIONS AND DETAILS.



LOCATION MAP
1"=100'



A-A TYPICAL APRON A2 RECONSTRUCTION SECTION - PHASE 1
SCALE: 1"=20'

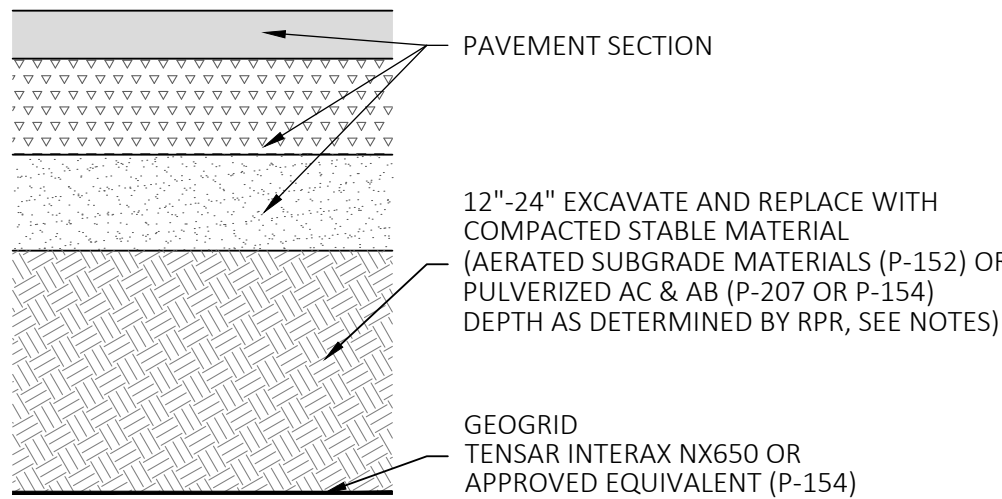


B-B TYPICAL APRON A2 RECONSTRUCTION SECTION - PHASE 2
SCALE: 1"=20'

SUBGRADE STABILIZATION NOTES:

TEST BORINGS HAVE INDICATED SOME VARIATION IN SUBSOIL & SUBGRADE CONDITIONS. BASED ON THESE BORINGS AND PAST CONSTRUCTION PROJECTS THERE EXISTS A POTENTIAL THAT SOME OF THE SILTY SANDY MATERIALS MAY BE SOFT AND SATURATED. IF THE SUBGRADE BECOMES UNSTABLE THE RESIDENT PROJECT REPRESENTATIVE WILL DETERMINE THE TREATMENT TO BE USED TO STABILIZE THE SUBGRADE AFTER THE EXISTING PULVERIZED MATERIALS HAVE BEEN REMOVED FROM THE SECTION. THE SUBGRADE AND SUBSOIL TREATMENTS THAT WILL BE USED WILL BE ONE OF THE FOLLOWING:

- SUBGRADE & SUBSOILS STABLE - SCARIFY AND RECOMPACT 6 INCHES OF SUBGRADE TO 95% RELATIVE COMPACTION.
- SUBGRADE AND SUBSOILS UNSTABLE - EXCAVATE UNSTABLE SOILS TO DEPTHS OF 1 TO 3 FEET, AERATE AND DRY EXCAVATED SOILS, REPLACE DRIED SOILS AND COMPACT TO 95% RELATIVE COMPACTION. PAYMENT WILL BE MADE UNDER UNCLASSIFIED EXCAVATION FOR THIS TREATMENT, IF NEEDED).
- SUBGRADE AND SUBSOILS UNSTABLE - EXCAVATE UNSTABLE SOILS UP TO A DEPTH OF 2 FEET, PLACE TENSAR INTERAX NX650 GEOGRID, HAUL, PLACE, AND COMPACT FDR ASPHALT AGGREGATE SUBBASE OR IMPORTED AGGREGATE SUBBASE TO BRING OVEREXCAVATION BACK TO SUBGRADE ELEVATION, AND COMPACT TO 95% RELATIVE COMPACTION. PAYMENT WILL BE MADE UNDER THE MUCK EXCAVATION(P-152) ITEM AND FDR ASPHALT AGGREGATE SUBBASE-EXCAVATE, HAUL, PLACE, & COMPACT(P-207) OR SUBBASE COURSE(P-154) AND GEOGRID(P-154).
- UNSTABLE SUBGRADE - STOP ALL WORK IN UNSTABLE AREA. ROLL SUBGRADE WITH SCRAPERS OR ROLLERS, AS DIRECTED, UNTIL SECTION WEAVES UNDER LOAD. AT THAT TIME CEASE ALL WORK IN THE AREA FOR 24 HOURS, THEN REPEAT UNTIL SUBGRADE IS STABLE UNDER ALL LOADS. PAYMENT FOR THIS WORK SHALL BE MADE ON A TIME AND MATERIALS BASIS BASED ONLY ON EQUIPMENT AND MATERIALS USED. THERE WILL BE NO PAYMENT FOR TIME LOST OR OTHER DELAYS.
- AN APPROPRIATE TIME EXTENSION WILL BE MADE FOR ANY EXTRA WORK.



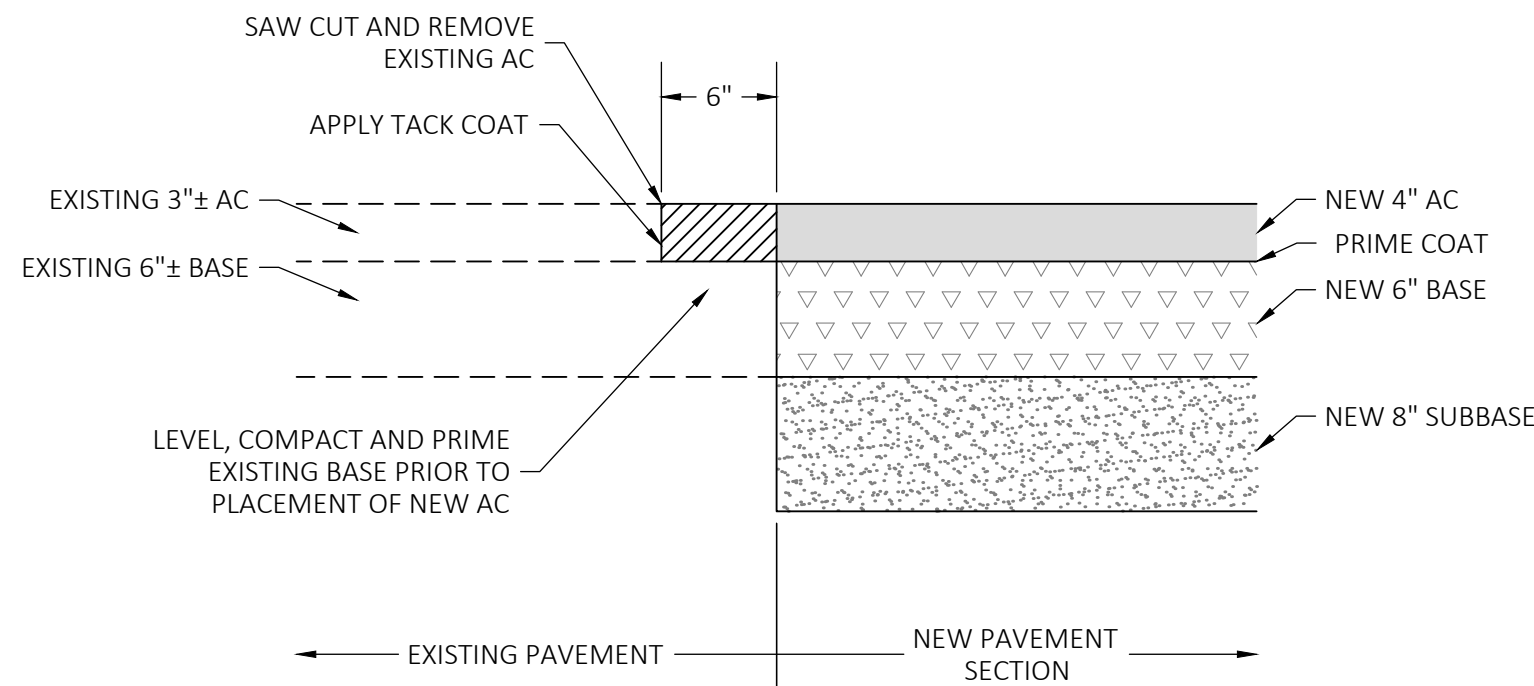
SUBGRADE STABILIZATION SECTION
NTS



ENGINEER OF RECORD	DATE	BY	APR	REVISIONS	No.

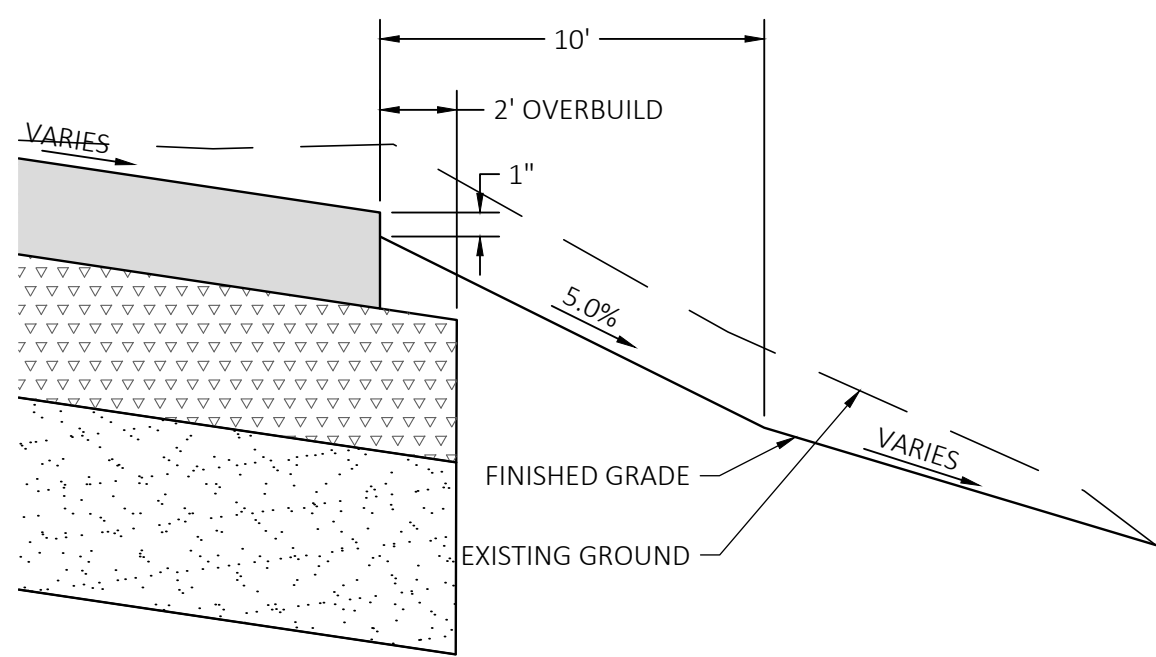
TRUCKEE-TAHOE AIRPORT	CALIFORNIA
TRUCKEE	RECONSTRUCT APRON A2
	TYPICAL SECTIONS

DATE	3/12/2025
DRAWN	KDC
CHECKED	DB
PROJECT No.	40.38
FILE	4038.08.TypeSection
SCALE	1"=20'
SHEET No.	11 of 25

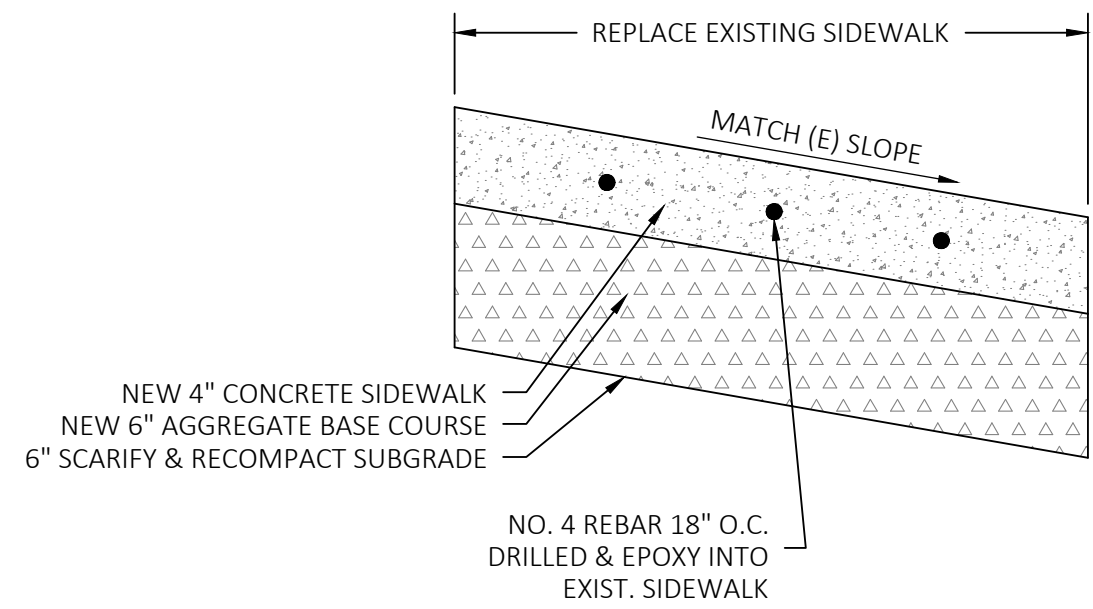


- NOTES:
1. REMOVAL OF EXISTING 6" SAW CUT AC SHALL NOT OCCUR UNTIL THE PLACEMENT OF NEW BASE COURSE HAS BEEN COMPLETED.
 2. CONTRACTOR SHALL PROTECT SAW CUT FACE FROM DAMAGE. DAMAGED AREAS SHALL BE SAW CUT MAINTAINING A CONTINUOUS STRAIGHT EDGE AT THE CONTRACTORS EXPENSE.

D MATCH EXISTING PAVEMENT
NTS



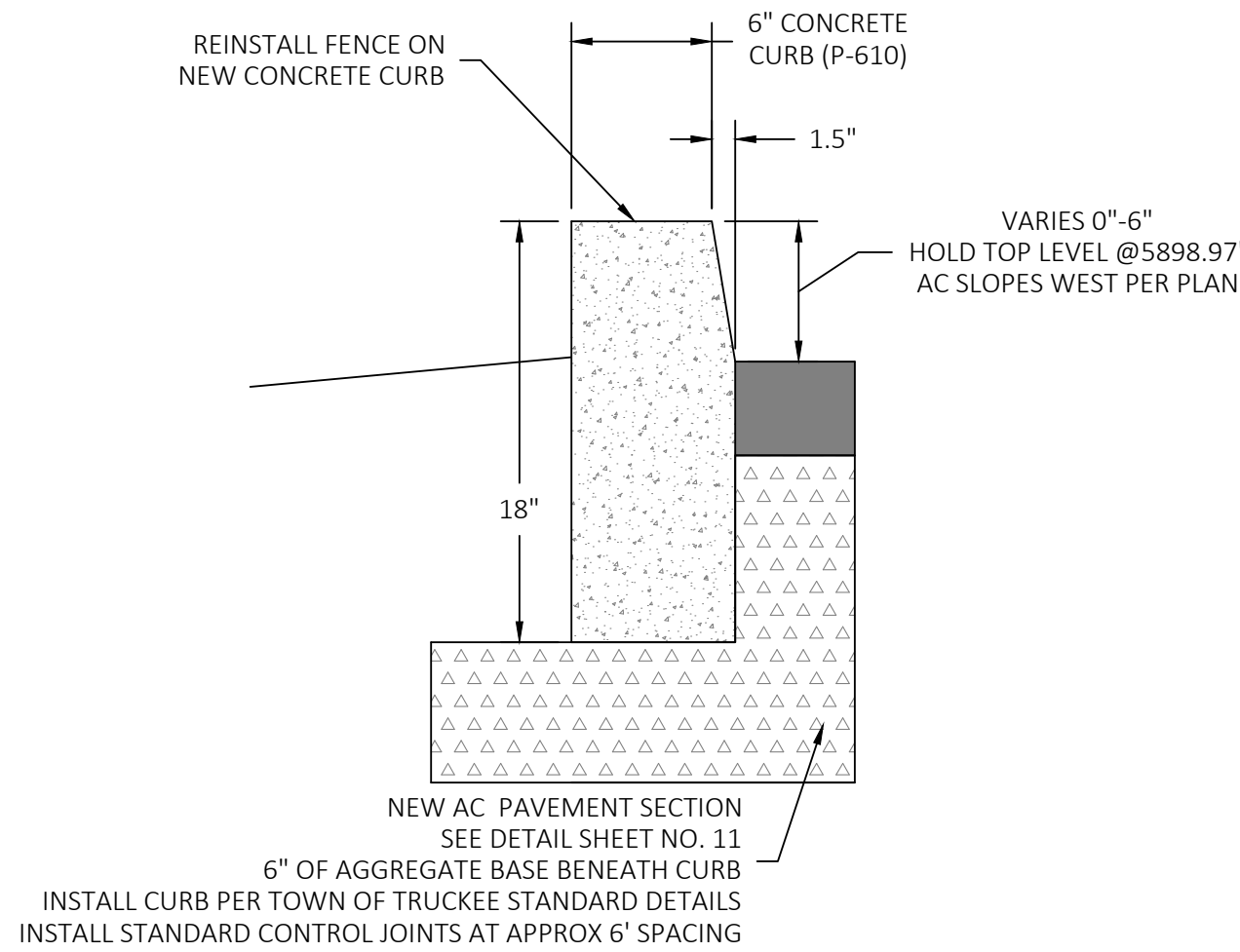
E PAVEMENT EDGE & SHOULDER
NTS



F NEW SIDEWALK DETAIL
NTS

NEW SIDEWALK NOTES:

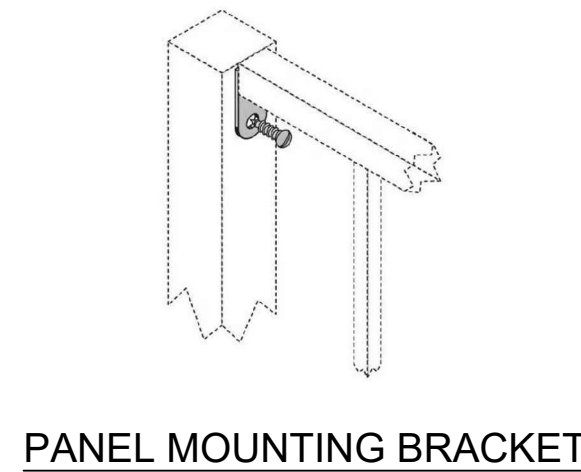
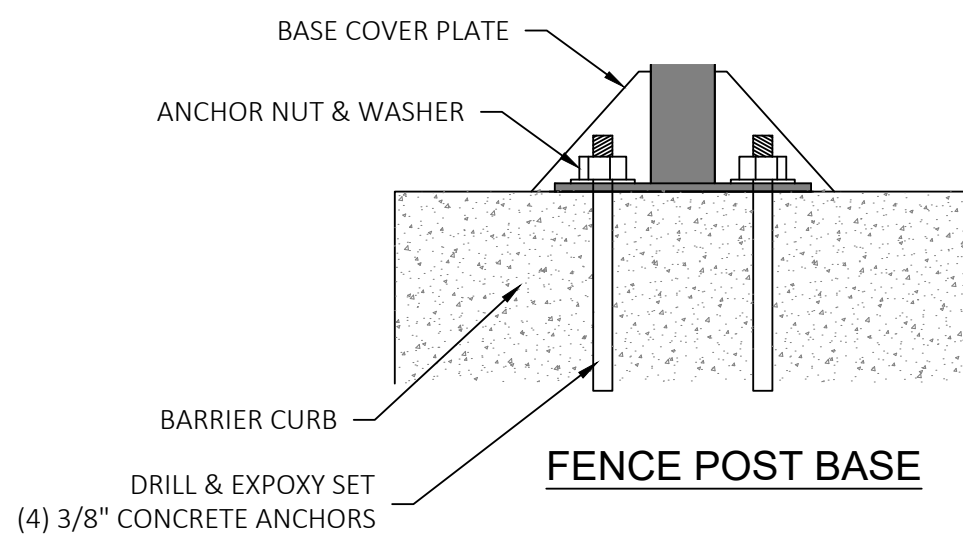
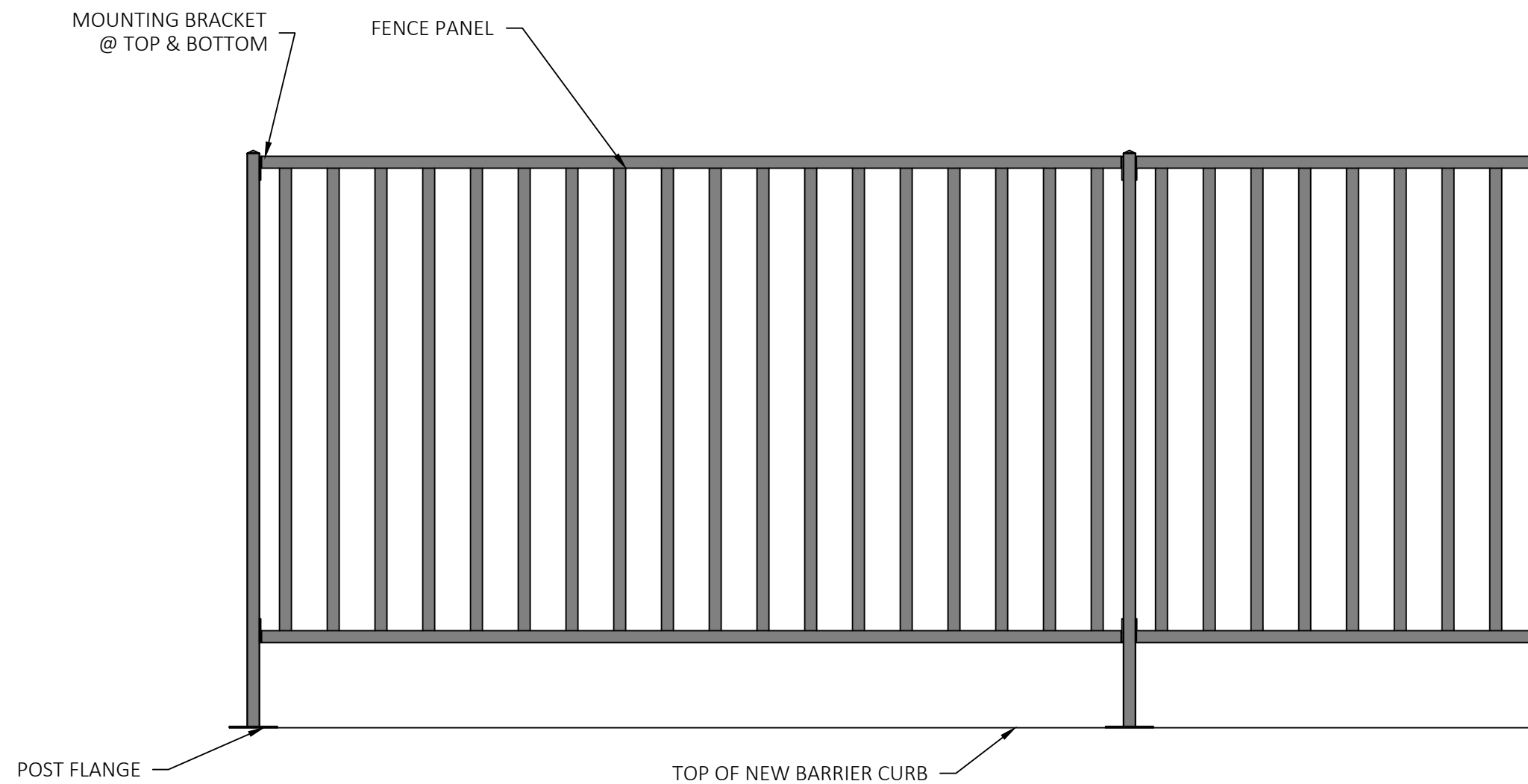
1. ALL WORK TO BE DONE AND ALL MATERIALS SUPPLIED SHALL CONFORM TO THE TOWN OF TRUCKEE STANDARDS SPECIFICATIONS LATEST EDITION.
2. ALL BROOMING SHALL BE PERPENDICULAR TO THE CURB & SHALL MATCH EXISTING SIDEWALK FINISH.
3. 1/2-INCH PRE-MOLDED JOINT FILLER SHALL BE INSTALLED IN EXPANSION JOINTS AT 18' INTERVALS.
4. CONTROL JOINTS SHALL BE 1.5" DEEP AND AT 6' INTERVALS. REMOVAL OF EXISTING AND PLACEMENT OF NEW SIDEWALK SHALL BE BETWEEN 2 EXISTING CONTROL JOINTS.
5. SIDEWALK REMOVAL AND REPLACEMENT AT DRAINAGE PIPE INSTALLATION SHALL BE INCIDENTAL TO THE DRAINAGE PIPE BID ITEM. NO SEPARATE PAYMENT FOR REMOVAL AND REPLACEMENT OF SIDEWALK.



G NEW CONCRETE CURB DETAIL
NTS

CONCRETE CURB NOTES:

1. ALL WORK TO BE DONE AND ALL MATERIALS SUPPLIED SHALL CONFORM TO THE TOWN OF TRUCKEE STANDARDS SPECIFICATIONS LATEST EDITION.
2. CONCRETE CURB BID ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING FLUSH CURB AND THE FENCE ON TOP OF IT, PROTECTION OF EXISTING FENCING MATERIALS, INSTALLATION OF THE NEW CONCRETE CURB, AND REINSTALLING THE EXISTING FENCE ON TOP OF THE NEW CURB. NO SEPARATE PAYMENT SHALL BE MADE FOR REINSTALLING THE FENCE.
3. FENCE IS MOUNTED ON TOP OF THE EXISTING MOW STRIP CONCRETE CURB. SEE DETAILS THIS SHEET FOR FENCE ANCHORING.
4. NEW CONCRETE CURB SHALL END AT THE EXISTING CONCRETE VALLEY GUTTER TO THE WEST. DRAINAGE SHALL ALL BE DIRECTED INTO THE VALLEY GUTTER AT THIS LOCATION. WRAP CONCRETE CURB TO THE SOUTH APPROXIMATELY 5' IF NECESSARY TO ENSURE ALL WATER ENTERS THE EXISTING VALLEY GUTTER. VERIFY FINAL LAYOUT OF CONCRETE CURB WITH RPR PRIOR TO INSTALLATION.



H SPACED BAR METAL FENCE
NTS

TRUCKEE-TAHOE AIRPORT

CALIFORNIA

RECONSTRUCT APRON A2

GRADING DETAILS



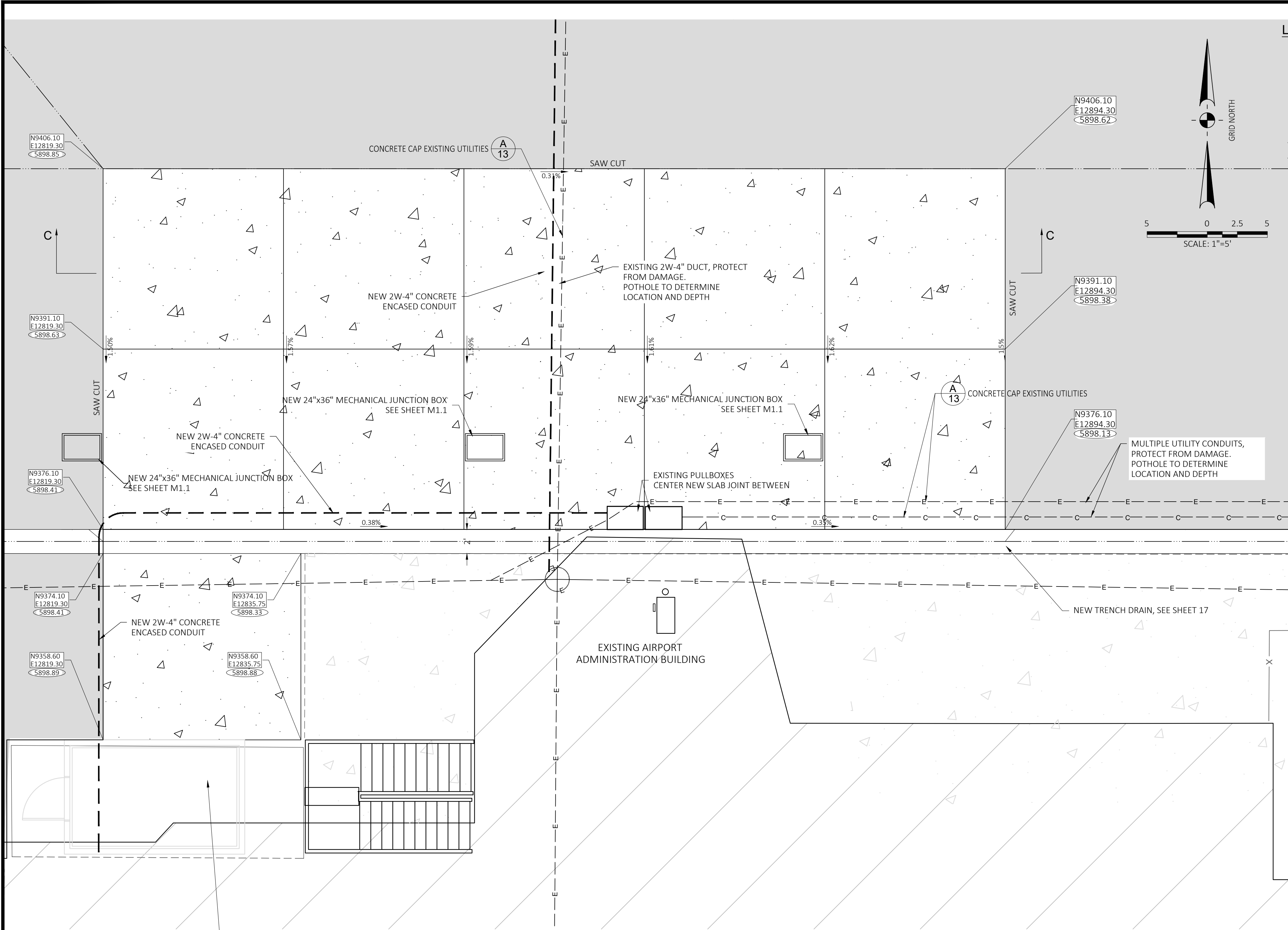
No.	REVISIONS	BY	DATE

DATE	3/12/2025
DRAWN	KDC
CHECKED	DB
PROJECT No.	40.38
FILE	4038.08.TypSection
SCALE	1"=20'
SHEET No.	12 of 25

BRANDLEY
ENGINEERING

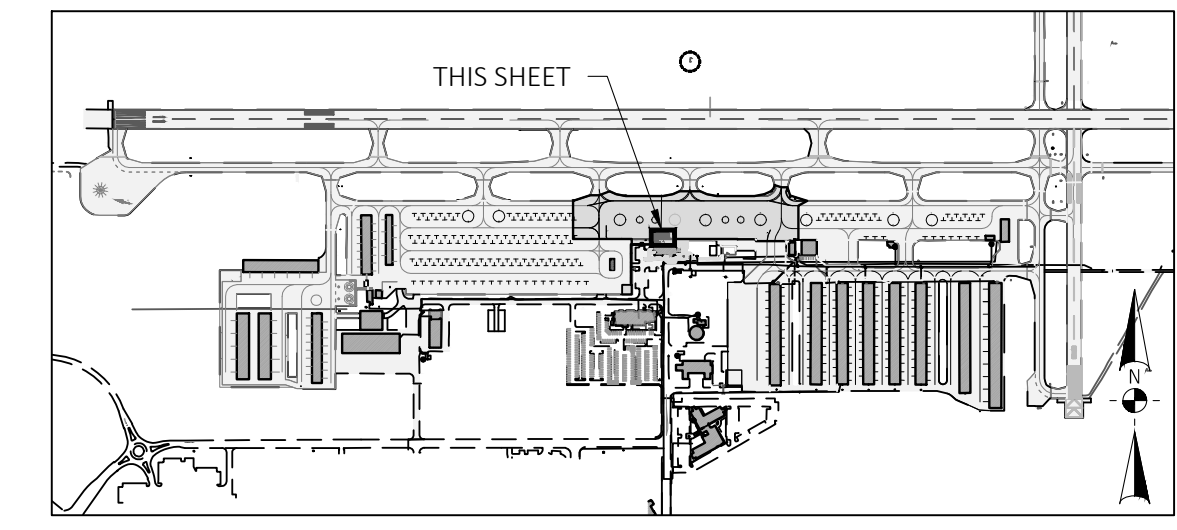
6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725

G:\40 TRUCKEE\38 APRON A2\BID SET\4038.00 SNOW GRADE.DWG
PLOTTED BY Kevin Curry 3/12/2025 4:24 PM



LEGEND

- N9000.00
E10700.00
-5900.00
- AIRPORT GRID COORDINATE
- EXISTING GRADE ELEVATION
- EXISTING BUILDING
- NEW PCC PAVEMENT
- EX EDGE OF PAVEMENT
- EX ELECTRICAL DUCT
- EX COMM DUCT
- NEW ELECTRICAL DUCT

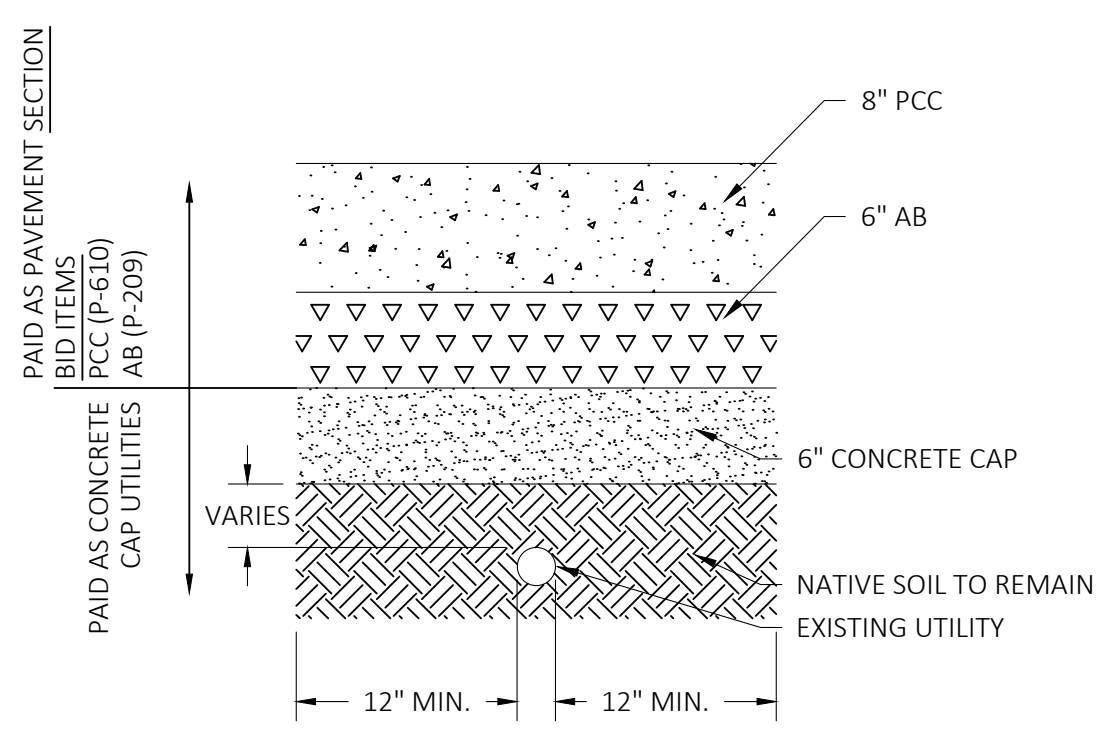


LOCATION MAP

NOTES:

- PLAN COORDINATES SHOWN ARE FOR CONVENIENCE AND MAY REQUIRE FIELD ADJUSTMENT. THE DIMENSIONS OF THE NEW CONCRETE SLAB SHALL BE AS SHOWN ON THIS PLAN.
 - THE SOUTH LINE SHALL MATCH THE NORTH EDGE OF THE NEW CONCRETE THAT SURROUNDS THE NEW TRENCH DRAIN AND NORTH LINE SHALL BE PARALLEL, OFFSET 30'.
 - THE CONTROLLING NORTH/SOUTH JOINT SHALL BE CENTERED BETWEEN THE 2 EXISTING PULLBOXES ADJACENT TO THE SOUTH EDGE OF THE NEW SLAB.
- SLOPES SHOWN ARE APPROXIMATE. NEW CONCRETE SHALL BE INSTALLED WITH SMOOTH STRAIGHT GRADES BASED ON NEW APRON PAVEMENT ELEVATIONS.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES, SERVICE LATERALS AND CONDUIT ("UTILITIES") IS BASED ON THE BEST AVAILABLE INFORMATION TO THE ENGINEER AND SHALL BE ASSUMED AS APPROXIMATE AND REQUIRING FIELD VERIFICATION. CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND FOR REPAIRING ALL DAMAGE THAT OCCURS TO DUE TO THE CONTRACTOR'S ACTIVITIES. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT PRIOR TO CONSTRUCTION, AND SHALL POT HOLE TO VERIFY LOCATION, DEPTH, AND SIZE OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- UNCLASSIFIED EXCAVATION, MUCK EXCAVATION (IF NECESSARY), SCARIFY & RECOMPACT SUBGRADE, NEW AGGREGATE BASE COURSE, AND CONCRETE SNOWMELT APRON WILL BE PAID UNDER THEIR RESPECTIVE UNIT PRICE BID ITEMS.
- SEE CONCRETE JOINT PLAN AND DETAILS, SHEETS 14 AND 15.
- SEE SHEETS M1.0 TO M2.1 AND E1.0 TO E4.4 FOR EMBEDDED PIPING, CONDUIT AND MECHANICAL SYSTEM SPECIFICATIONS AND DETAILS.
- CONCRETE SNOWMELT APRON BID ITEM WILL INCLUDE ALL JOINT INSTALLATION, JOINT SEALING, DOWEL BARS, AND ALL ITEMS TO COMPLETE THE CONCRETE SLAB PER THE REQUIREMENTS OF THE PLANS AND SPECIFICATION P-610.
- SNOWMELT PIPING LOCATED IN THE CONCRETE SLABS SHALL BE SECURED SUCH THAT IT WILL BE LOCATED IN THE CENTER OF THE SLAB (4" BELOW THE SURFACE). CONTRACTOR WILL BE RESPONSIBLE TO DEMONSTRATE THAT THE PIPING IS SECURED AND PROPERLY LOCATED PRIOR TO PLACING CONCRETE. PIPING SHALL BE SECURED SUCH THAT CONCRETE PLACEMENT DOES NOT DISPLACE OR MOVE THE PIPING.
- SNOWMELT PIPING OR OTHER CONDUITS SHALL NOT CROSS ANY CONCRETE JOINTS, ANY CROSSINGS SHALL BE MADE BELOW THE CONCRETE AND BROUGHT UP INTO EACH SLAB. ALL PULLBOXES OR STRUCTURES LOCATED IN THE PAVEMENT SECTION SHALL BE DESIGNED TO SUPPORT A SINGLE AXLE FUEL TRUCK, TOTAL WEIGHT OF 60,000 LBS, WITH 6 TOTAL TIRES.
- SEE SHEETS M1.0 TO M2.1, E1.0 TO E4.4, AND S1 TO S5.1 FOR SPECIFICATIONS, DETAILS AND REQUIREMENTS OF THE MECHANICAL SNOWMELT SYSTEM. THIS SYSTEM SHALL BE PAID AS A LUMP SUM AND WILL INCLUDE ALL PIPING, CONNECTIONS, MANIFOLDS, SENSORS, PULLBOXES, ELECTRICAL DUCT, MECHANICAL EQUIPMENT, BOILER, PUMPS, CONCRETE FOUNDATION FOR THE MECHANICAL SHED, VEHICLE PROTECTION BOLLARDS, DRY WELL, TRENCHING AND BACKFILL AND ALL OTHER ITEMS REQUIRED TO MAKE THE SYSTEM COMPLETE AND FUNCTIONING PER THE DRAWINGS. THE MECHANICAL SHED ITSELF WILL BE CONSTRUCTED BY OTHERS, BUT ALL PIPES, DUCTS, HOLD-DOWNS, ANCHOR BOLTS, OR OTHER ITEMS THAT ARE EMBEDDED OR PASS THROUGH THE FOUNDATION WILL BE INCLUDED IN THIS CONTRACT.
- ITEMS TO BE CONSTRUCTED BY OTHERS AND NOT INCLUDED IN THIS CONTRACT SHALL INCLUDE BUT ARE NOT LIMITED TO: NEW GAS LINE TO THE SHED, CONSTRUCTION OF THE SHED ITSELF, ELECTRICAL PANELS, ELECTRICAL WIRING FROM THE TERMINAL TO THE PANEL AND WITHIN THE SHED, LIGHTING, ELECTRICAL DUCT WITHIN THE SHED FROM PANEL SM, AND ELECTRIC VEHICLE CHARGING INFRASTRUCTURE. ITEMS KNOWN TO BE CONSTRUCTED BY OTHERS ARE IDENTIFIED WITH A RED CLOUD ON THE SNOWMELT PLANS. APRON CONTRACTOR SHALL COORDINATE WITH SHED CONTRACTOR FOR INSTALLATION OF MECHANICAL EQUIPMENT AFTER SHED CONSTRUCTION IS COMPLETE.
- CONCRETE FOUNDATION FOR THE MECHANICAL SHED WILL BE CONSTRUCTED IN THIS CONTRACT. FOUNDATION CONSTRUCTION SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR THE MECHANICAL SNOWMELT SYSTEM. SHED IS NOT INCLUDED IN THIS CONTRACT AND WILL BE CONSTRUCTED BY OTHERS.
- MECHANICAL SHED FOUNDATION DETAILS AND REQUIREMENTS ARE SHOWN ON SHEETS S1.1 THROUGH S5.1. MECHANICAL SHED FOUNDATION SHALL CONSIST OF CONCRETE MEETING SPECIFICATION SECTION P-610. 6" OF AGGREGATE BASE COURSE SHALL BE PLACED UNDER THE CONCRETE SLAB.

PAID AS PAVEMENT SECTION



NOTES:

- BEFORE BEGINNING ANY EXCAVATION ALL UTILITY LINES SHALL BE POT HOLED AT A MINIMUM OF TWO LOCATIONS TO LOCATE DEPTH AND LOCATION OF LINES. NO SEPARATE PAYMENT SHALL BE MADE FOR POT HOLLING. RESIDENT ENGINEER SHALL DETERMINE WHERE CONCRETE CAP OVER EXISTING UTILITY LINE IS NECESSARY.
- 6" SCARIFY AND RECOMPACT WILL BE DELETED IN AREAS WHERE NEW CONCRETE CAP IS PLACED.

A CONCRETE CAP EX UTILITIES

NTS

C-C TYPICAL SECTION

NTS

TRUCKEE-TAHOE AIRPORT

TRUCKEE

CALIFORNIA

RECONSTRUCT APRON A2

SNOW MELT APRON GRADING PLAN

DATE 3/12/2025

DRAWN TAS

CHECKED DB

PROJECT No. 40.38

FILE#038.00.SNOW GRADE

SCALE 1"=5'

SHEET No. 13 of 25

ENGINEER OF RECORD

DATE

BY

APR

REVISIONS

No.

BRANDLEY ENGINEERING

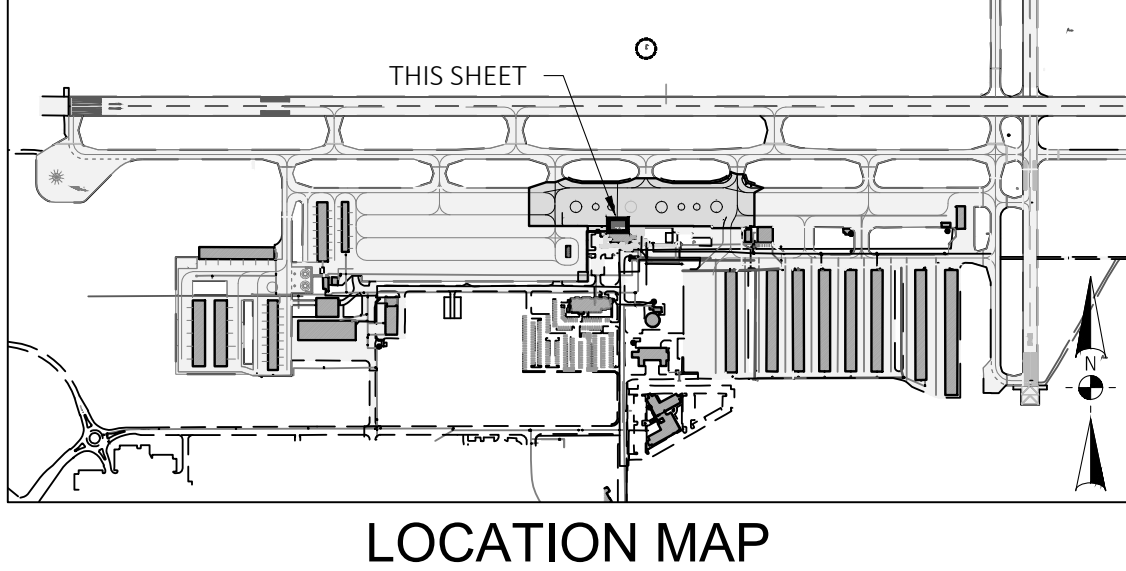
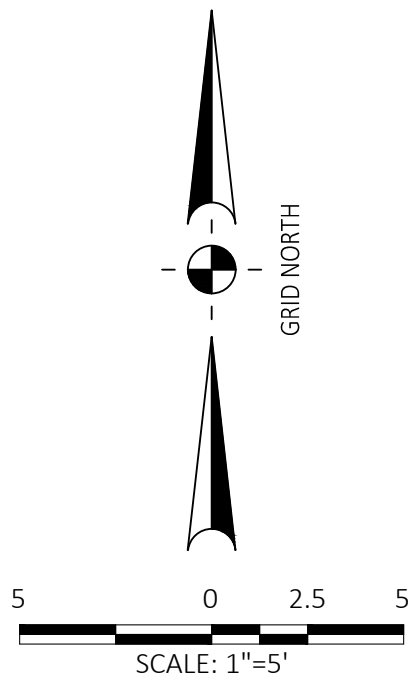
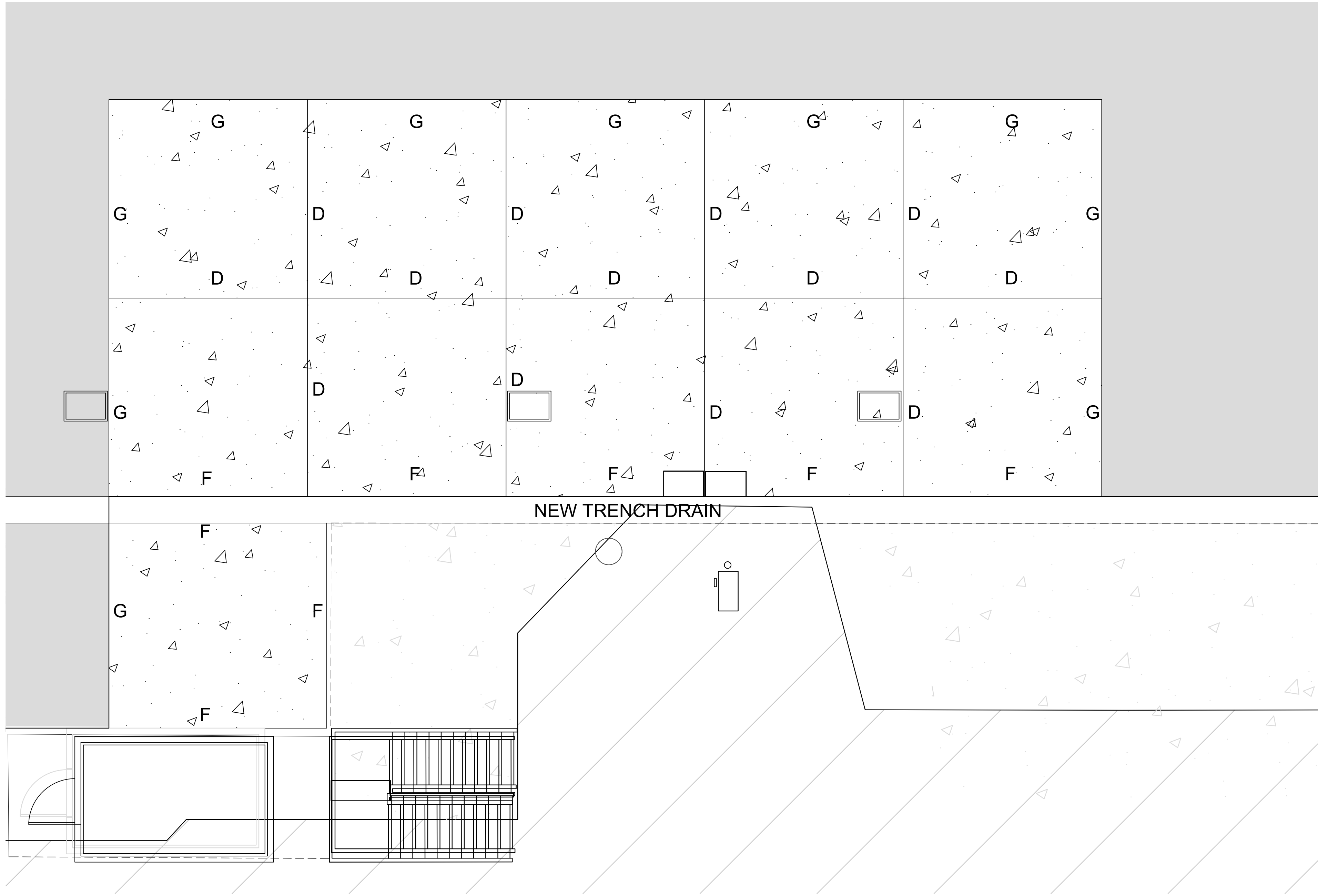
6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725

REGISTERED PROFESSIONAL ENGINEER

STATE OF CALIFORNIA

NO. 10000

EXPIRATION DATE 06/30/2026

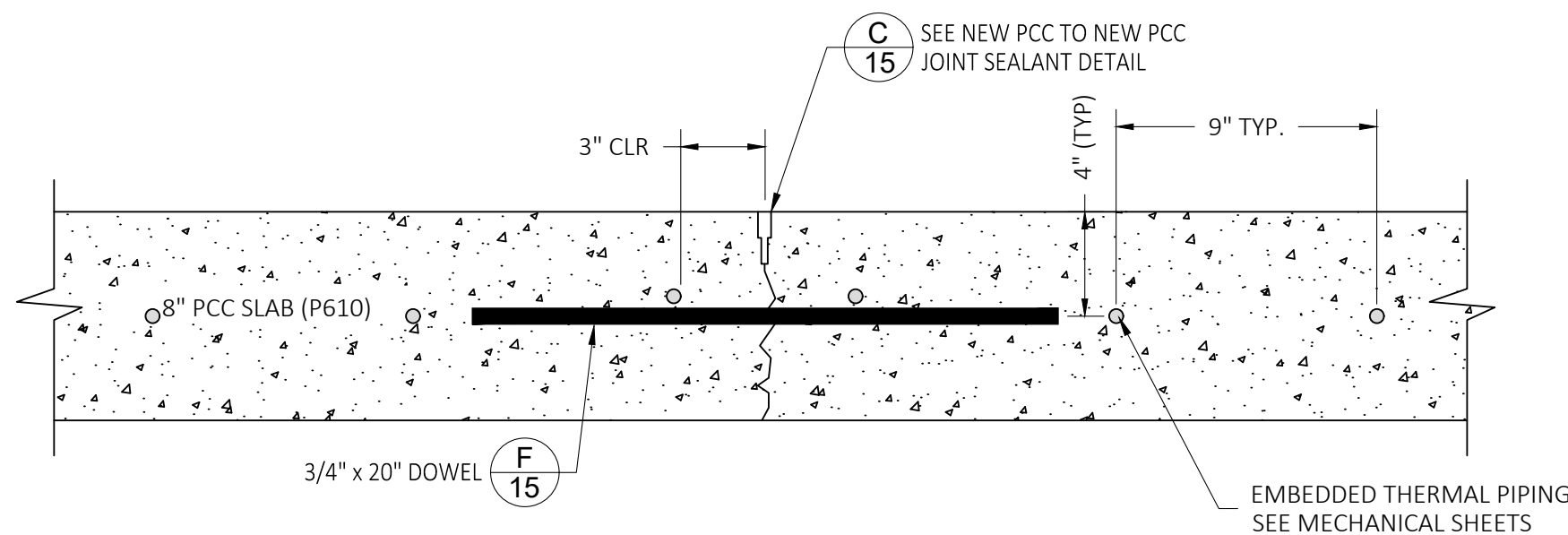


LEGEND

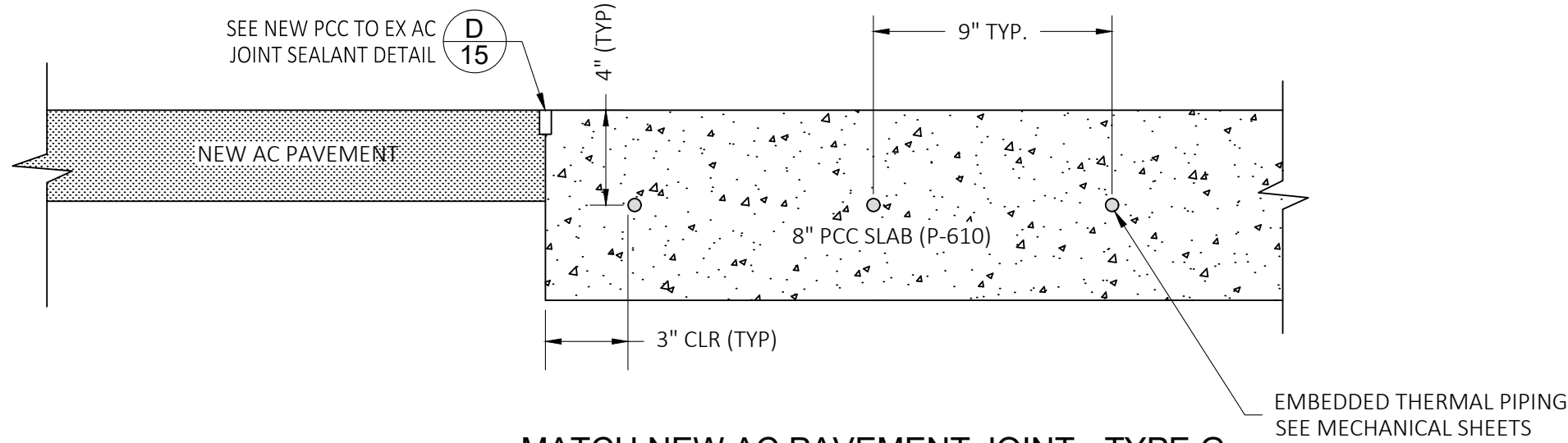
- EXISTING BUILDING
- NEW AC PAVEMENT
- NEW PCC PAVEMENT
- EX EDGE OF PAVEMENT
- EX ELECTRICAL CONDUIT
- EX COMMUNICATIONS CONDUIT
- NEW ELECTRICAL DUCT
- SAW & SEAL JOINT
- G - NEW AC PAVEMENT TO CONCRETE
- D - DOWELED JOINT
- F - EXISTING CONCRETE TO CONCRETE

NOTES:

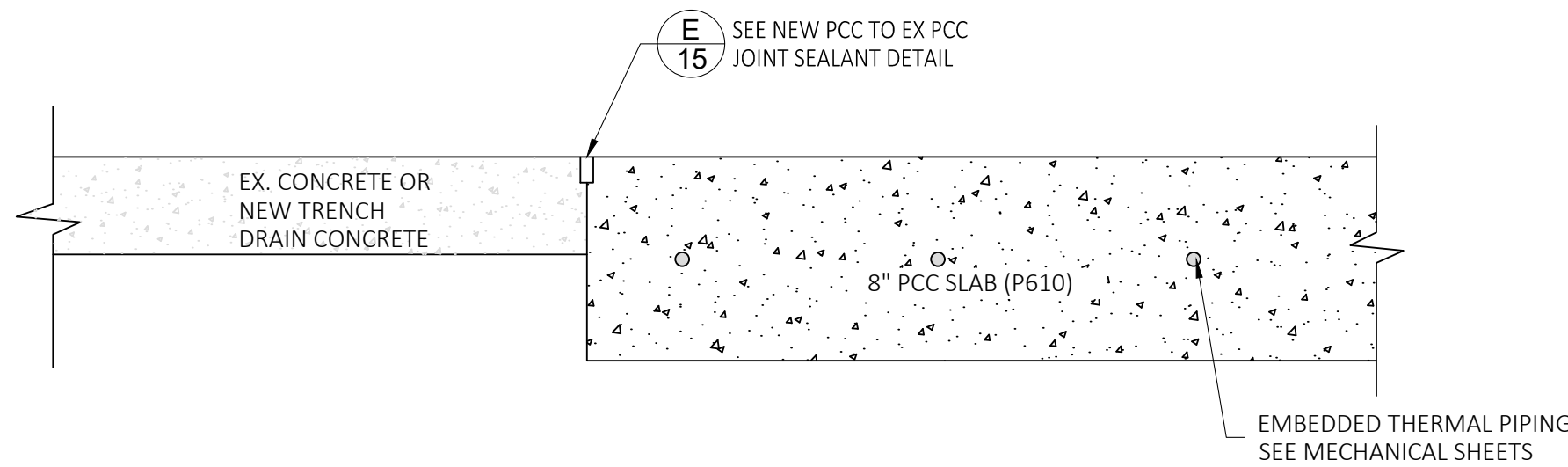
- SEE PLAN VIEW, THIS SHEET, FOR LOCATION OF JOINT TYPES.
- SEE DETAILS C-E, SHEET 15, FOR JOINT SEALANT DETAILS. SEE DETAIL F, SHEET 15, FOR DOWEL DETAILS AND NOTES.
- DOWELED CONSTRUCTION JOINTS SHALL BE FORMED AT THE END OF EACH DAY'S POUR. IF WORK IS INTERRUPTED FOR A LONG PERIOD OF TIME, AS DETERMINED BY THE RPR, THE CONCRETE SHALL BE REMOVED BACK TO THE NEAREST JOINT AND A CONSTRUCTION JOINT INSTALLED. NO INTERMEDIATE JOINTS WILL BE PERMITTED.




DOWELED JOINT - TYPE D
NTS



MATCH NEW AC PAVEMENT JOINT - TYPE G
NTS



MATCH EXISTING CONCRETE PAVEMENT JOINT - TYPE F
NO SCALE



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ENGINEER OF RECORD
PROFESSIONAL ENGINEER
R. J. BRANDLEY
No. 15558
Exp. 6/30/2026
REGISTERED CIVIL
STATE OF CALIF.

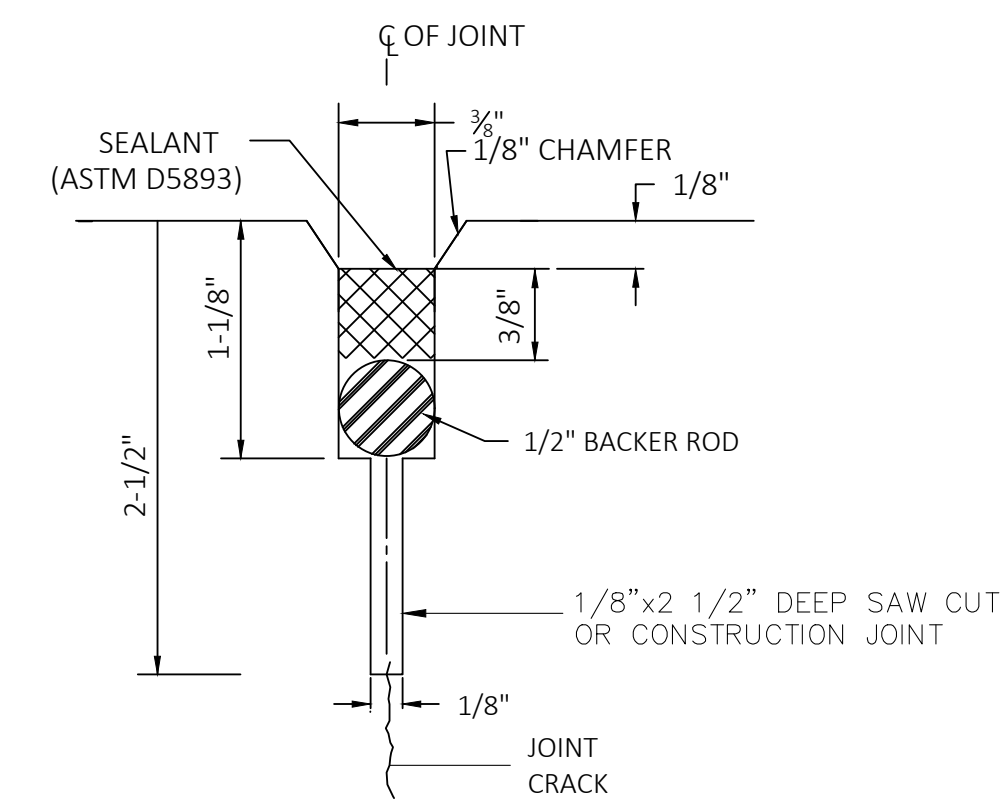
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TRUCKEE-TAHOE AIRPORT
CALIFORNIA

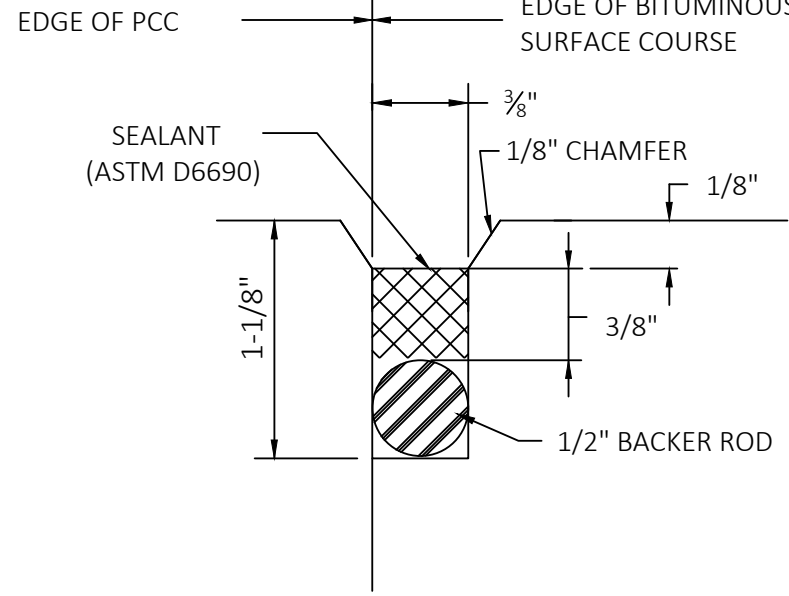
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RECONSTRUCT APRON A2
SNOW MELT APRON JOINT PLAN

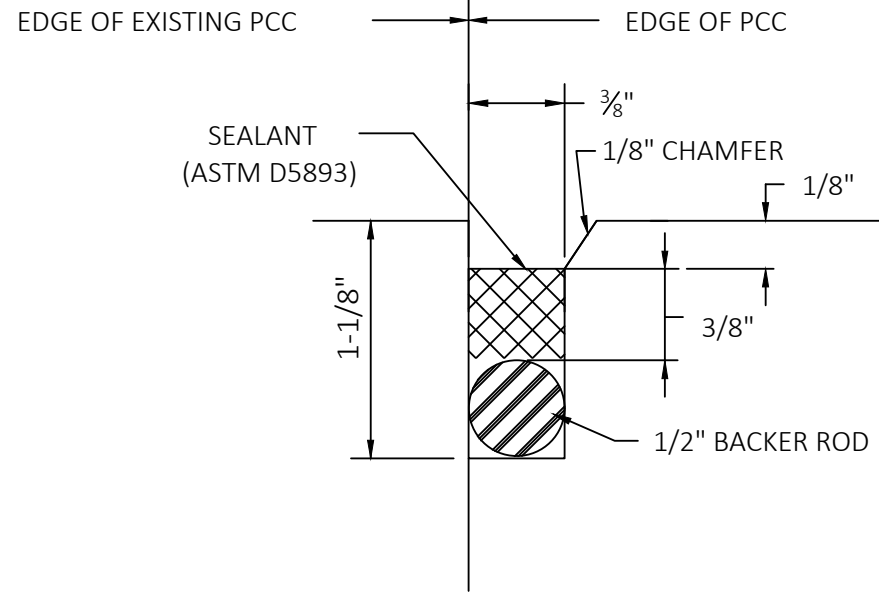
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PROJECT No.	40.38
FILE#038.00.SNOW JOINT	
SCALE	1"=5'
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C NEW PCC TO NEW PCC JOINT
NTS



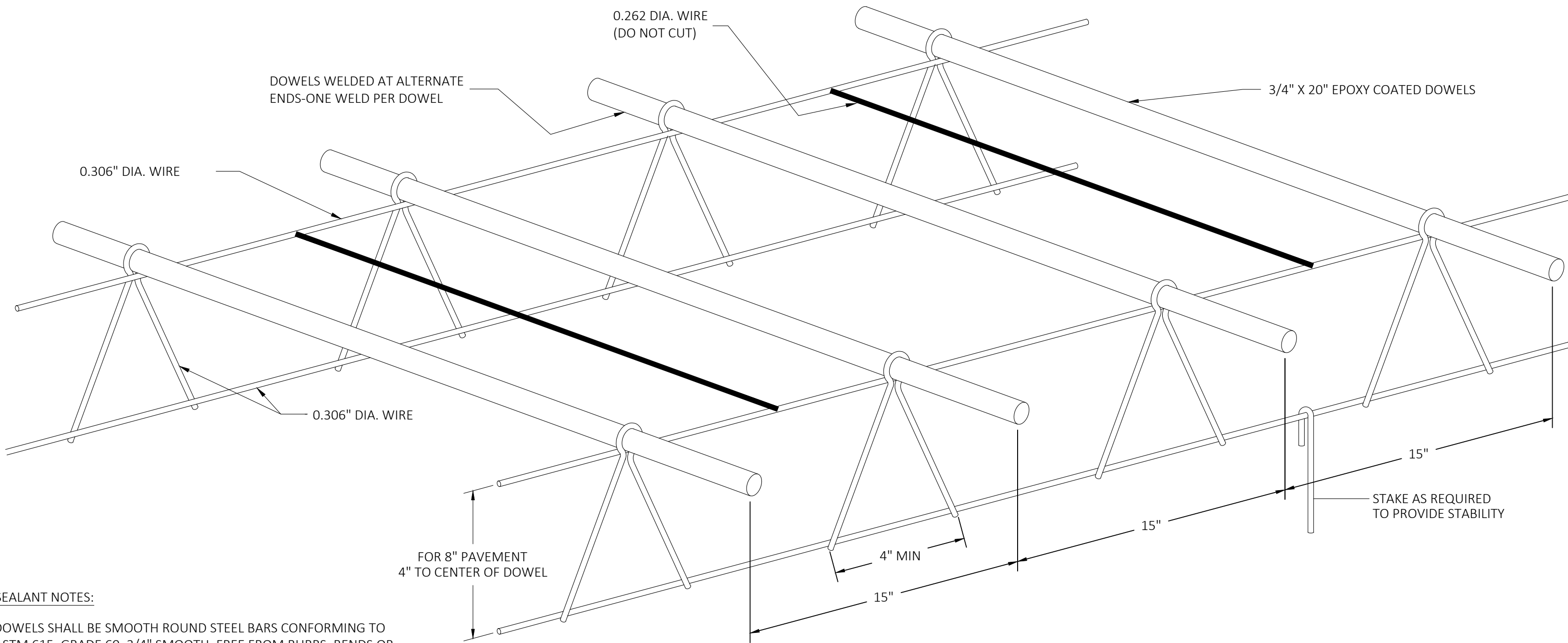
D NEW PCC TO AC JOINT
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E NEW PCC TO EX PCC JOINT
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JOINT NOTES:

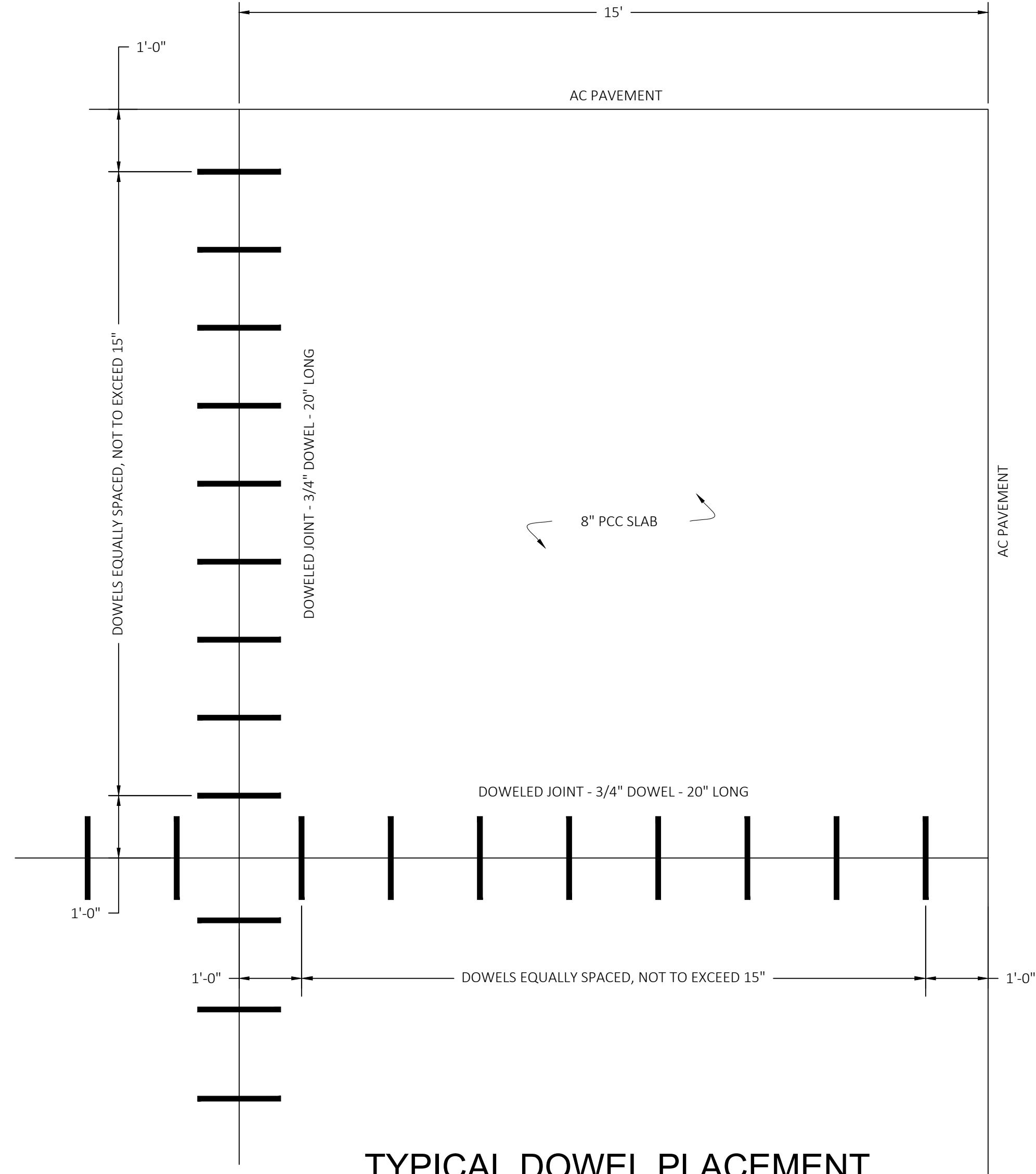
- ALL SAW CUT JOINTS SHALL HAVE AN INITIAL 1/8" CUT TO THE FULL DEPTH SHOWN AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT. THE SAW CUT SHALL NOT BE WIDENED UNTIL A MINIMUM OF 3 DAYS AFTER PLACEMENT. AFTER INITIAL PLACEMENT A ROPE OR REMOVABLE FILLER OF APPROPRIATE SIZE SHALL BE PLACED IN THE JOINT TO PREVENT DAMAGE. ROPE OR FILLER SHALL BE REMOVED PRIOR TO THE WIDENING SAW CUT.
- USE COLD APPLIED, SINGLE COMPONENT SEALANT (ASTM D5893) FOR ALL LONGITUDINAL AND TRANSVERSE JOINTS IN PCC PAVEMENT. (DETAILS C & E)
- USE HOT APPLIED ELASTOMERIC SEALANT (ASTM D6690) FOR ALL JOINTS BETWEEN AC AND PCC (DETAIL D)
- BACKER ROAD SHALL BE STRANDED ROPE MADE OF SYNTHETIC, IMPERVIOUS MATERIAL (NYLON OR APPROVED EQUAL) WHICH WILL NOT ABSORB SEALANT OR PERMIT SEALANT TO FLOW PAST AND WILL NOT BE DAMAGED FROM HEAT BY HOT APPLIED SEALANT. BACKER RODS SHALL BE HERCULES HBR-XL OR APPROVED EQUAL.



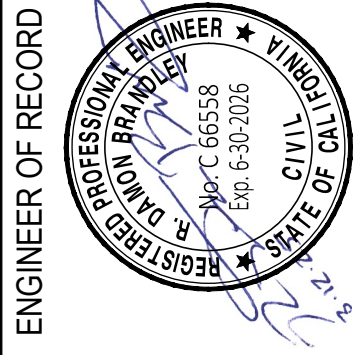
F DOWEL ASSEMBLIES
NTS

JOINT SEALANT NOTES:

- DOWELS SHALL BE SMOOTH ROUND STEEL BARS CONFORMING TO ASTM 615, GRADE 60, 3/4" SMOOTH, FREE FROM BURRS, BENDS OR OTHER DEFORMATIONS. DOWEL BARS SHALL BE FULL LENGTH EPOXY-COATED, INCLUDING ENDS, TO MEET AASHTO M-254-B-7.
- DOWELS SHALL BE PLACED PARALLEL TO THE FINISHED CONCRETE SURFACE VERTICALLY AND PERPENDICULAR TO THE JOINT HORIZONTALLY. HORIZONTAL AND VERTICAL ALLOWABLE TOLERANCE IS 1/4" FOR THE FULL LENGTH OF THE DOWEL FROM FINISHED SURFACE.
- DOWELS SHALL BE SECURELY SUPPORTED BY ASSEMBLY SUPPORTS. ASSEMBLY SUPPORTS SHALL BE DOWEL SHALL BE APPROVED BY RPR PRIOR TO USE. NO EXCEPTIONS ALLOWED. DIRECT PLACEMENT OF DOWELS INTO CONCRETE WILL NOT BE ALLOWED.
- ASSEMBLY SUPPORTS SHALL BE "A" FRAME ONLY. ASSEMBLY NO"J" OR "U" FRAME SUPPORTS WILL NOT BE ALLOWED.
- DOWEL ASSEMBLIES SHALL BE ANCHORED AS REQUIRED TO PREVENT ANY MOVEMENT WHEN PAVING MACHINE PASSES OVER ASSEMBLY.

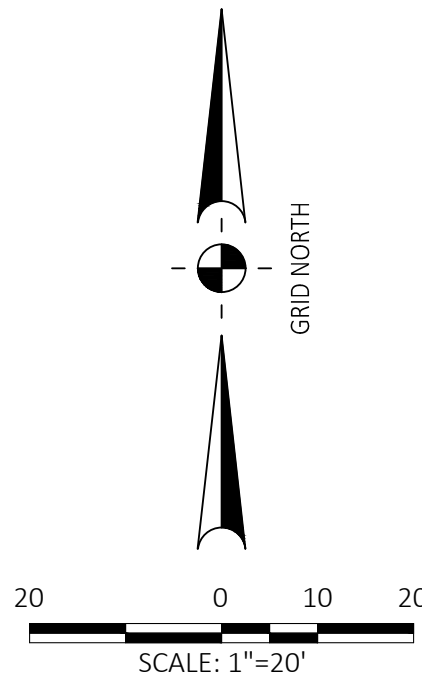


TYPICAL DOWEL PLACEMENT
NTS



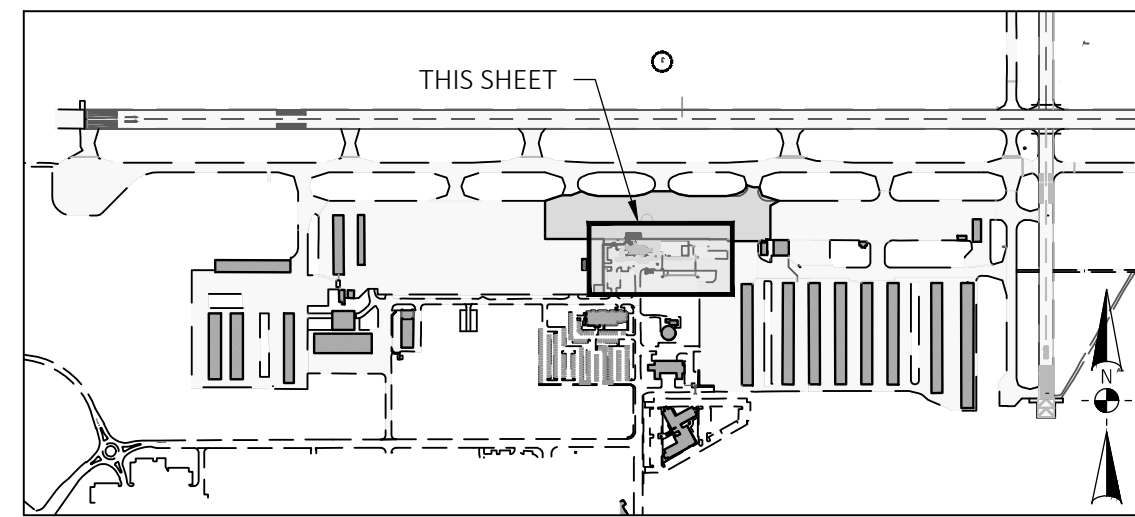
NOTES:

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SERVICE LATERALS AND CONDUIT ("UTILITIES") ARE BASED ON THE BEST AVAILABLE INFORMATION TO THE ENGINEER AND SHALL BE ASSUMED AS APPROXIMATE AND REQUIRING FIELD VERIFICATION. CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND FOR REPAIRING ALL DAMAGE THAT OCCURS DUE TO THE CONTRACTOR'S ACTIVITIES. CALL BEFORE YOU DIG. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT PRIOR TO CONSTRUCTION, AND SHALL POT HOLE TO VERIFY LOCATION, DEPTH, AND SIZE OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- CONTRACTOR SHALL UTILIZE APPROPRIATE TRENCH SHORING OR SHIELDING TO LIMIT IMPACT ON TREES AND EXISTING INFRASTRUCTURE.
- SAW CUT, REMOVE, AND REPLACE EXISTING SIDEWALK AS NEEDED FOR TRENCHING. SIDEWALK REMOVAL AND REPLACEMENT SHALL BE INCIDENTAL TO THE PAY ITEM FOR THE NEW PIPE BEING INSTALLED.
- OPEN STORM DRAIN TRENCHES IN PUBLIC AREAS SHALL BE BACKFILLED OR HAVE STEEL PLATE COVERING AT THE END OF EACH WORKING DAY.
- CONTRACTOR SHALL PROTECT OR REPLACE ANY LANDSCAPING OR GRASS THAT IS DAMAGED OR REMOVED DURING DRAINAGE INSTALLATIONS.
- SEE SHEET 19 FOR STORM DRAIN DETAILS.
- TRENCH DRAIN STATIONING MATCHES PROJECT COORDINATE EASTING.
- ALL LABOR AND MATERIALS REQUIRED TO TIE IN THE EXISTING 12" STEEL PIPE TO NEW DI B1 SHALL BE INCIDENTAL TO THE BID ITEM FOR INLETS (D-751).
- BID ITEM FOR TRENCH DRAIN PER LINEAR FOOT SHALL INCLUDE THE NEW TRENCH DRAIN, FRAMES, GRATES, CONCRETE, REINFORCING STEEL, TRANSVERSE JOINTS, JOINT SEALING OF THE NEW LONGITUDINAL JOINTS WITH THE ASPHALT OR CONCRETE, AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE TRENCH DRAIN INSTALLATION.
- THE 4' STUB OF 18" HDPE WITH A CAP OUT OF NEW DI B1 IS A SINGLE LUMP SUM BID ITEM INCLUDING CONNECTION TO THE NEW INLET STRUCTURE. THE CAP SHALL BE WATER TIGHT WITH A PLUG OF CONCRETE PLACED AT THE END OF THE CAP SO THAT IT WILL NOT COME OFF.

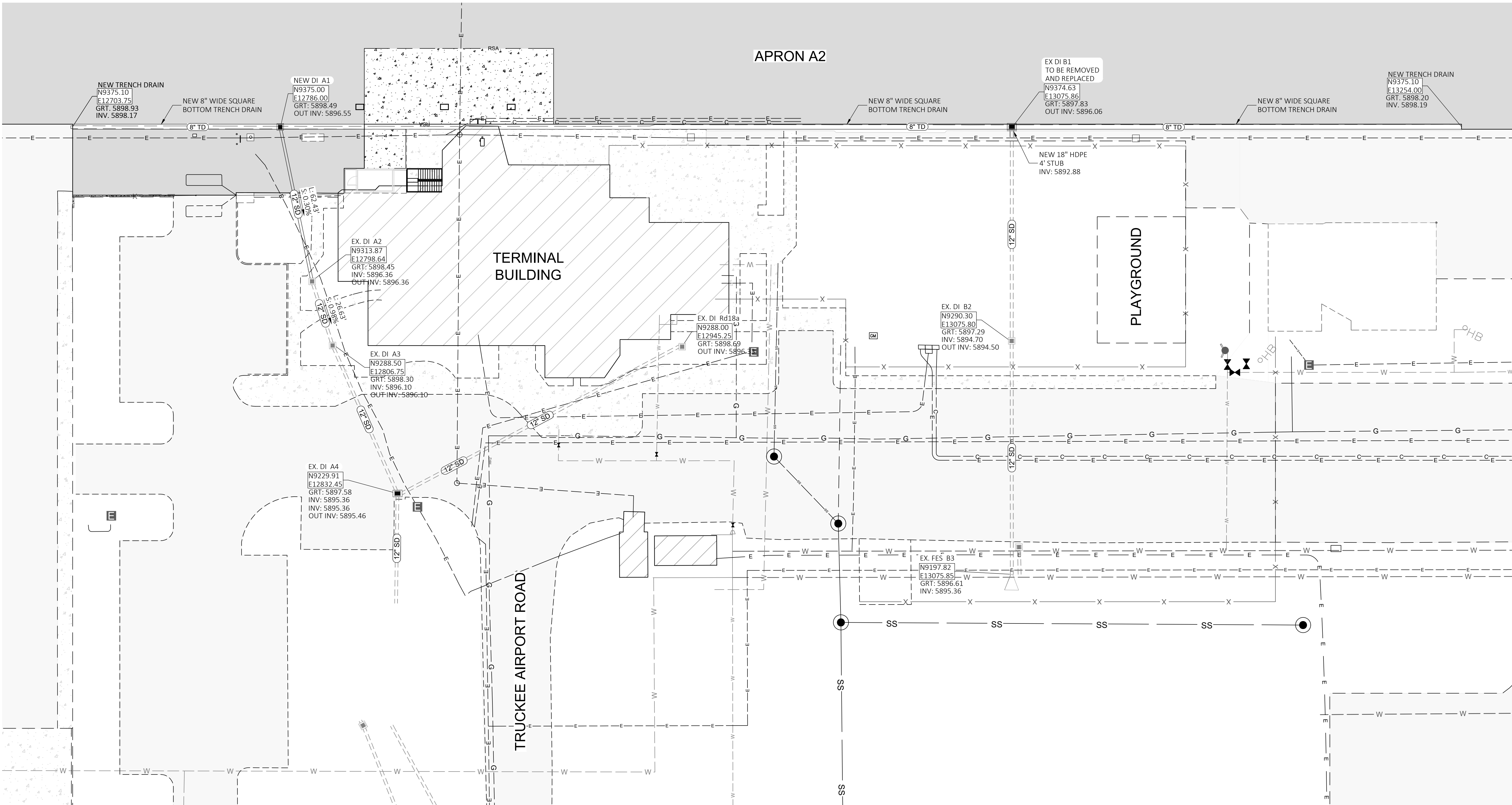


LEGEND

	STATION AND OFFSET
	NEW AC PAVEMENT
	EXISTING PAVEMENT
	NEW PCC PAVEMENT
	NEW TRENCH DRAIN
	NEW STORM DRAIN
	EXISTING STORM DRAIN
	STORM DRAIN INLET (EX, NEW)
	FLARED END SECTION (EX, NEW)
	EX FENCE LINE
	EX ELECTRICAL LINE
	EX SEWER LINE
	EX WATER LINE
	EX GAS LINE



LOCATION MAP

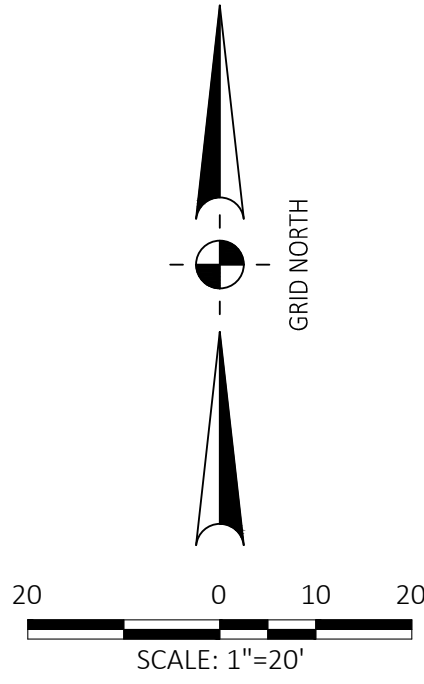


ENGINEER OF RECORD

No.	REVISIONS	BY	DATE

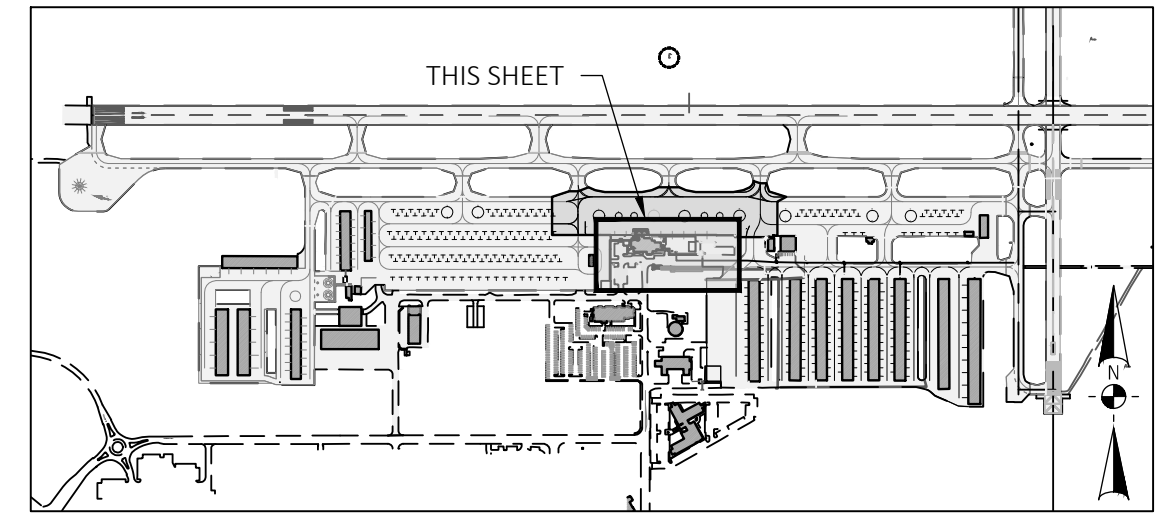
NOTES:

- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, SERVICE LATERALS AND CONDUIT ("UTILITIES") ARE BASED ON THE BEST AVAILABLE INFORMATION TO THE ENGINEER AND SHALL BE ASSUMED AS APPROXIMATE AND REQUIRING FIELD VERIFICATION. CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL UTILITIES AND FOR REPAIRING ALL DAMAGE THAT OCCURS DUE TO THE CONTRACTOR'S ACTIVITIES. CALL BEFORE YOU DIG. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT PRIOR TO CONSTRUCTION, AND SHALL POTHOLE TO VERIFY LOCATION, DEPTH, AND SIZE OF UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- CONTRACTOR SHALL UTILIZE APPROPRIATE TRENCH SHORING OR SHIELDING TO LIMIT IMPACT ON TREES AND EXISTING INFRASTRUCTURE.
- SAW CUT, REMOVE, AND REPLACE EXISTING SIDEWALK AS NEEDED FOR TRENCHING. SIDEWALK REMOVAL AND REPLACEMENT SHALL BE INCIDENTAL TO THE PAY ITEM FOR THE NEW PIPE BEING INSTALLED.
- OPEN STORM DRAIN TRENCHES IN PUBLIC AREAS SHALL BE BACKFILLED OR HAVE STEEL PLATE COVERING AT THE END OF EACH WORKING DAY.
- CONTRACTOR SHALL PROTECT OR REPLACE ANY LANDSCAPING OR GRASS THAT IS DAMAGED OR REMOVED DURING DRAINAGE INSTALLATIONS.
- SEE SHEET 19 FOR STORM DRAIN DETAILS.
- TRENCH DRAIN STATIONING MATCHES PROJECT COORDINATE EASTING.
- ALL LABOR AND MATERIALS REQUIRED TO TIE IN THE EXISTING 12" STEEL PIPE TO NEW DI B1 SHALL BE INCIDENTAL TO THE BID ITEM FOR INLETS (D-751).
- BID ITEM FOR TRENCH DRAIN PER LINEAR FOOT SHALL INCLUDE THE NEW TRENCH DRAIN, FRAMES, GRATES, CONCRETE, REINFORCING STEEL, TRANSVERSE JOINTS, JOINT SEALING OF THE NEW LONGITUDINAL JOINTS WITH THE ASPHALT OR CONCRETE, AND ALL OTHER ITEMS NECESSARY TO COMPLETE THE TRENCH DRAIN INSTALLATION.
- THE 4' STUB OF 18" HDPE WITH A CAP OUT OF NEW DI B1 IS A SINGLE LUMP SUM BID ITEM INCLUDING CONNECTION TO THE NEW INLET STRUCTURE. THE CAP SHALL BE WATER TIGHT WITH A PLUG OF CONCRETE PLACED AT THE END OF THE CAP SO THAT IT WILL NOT COME OFF.

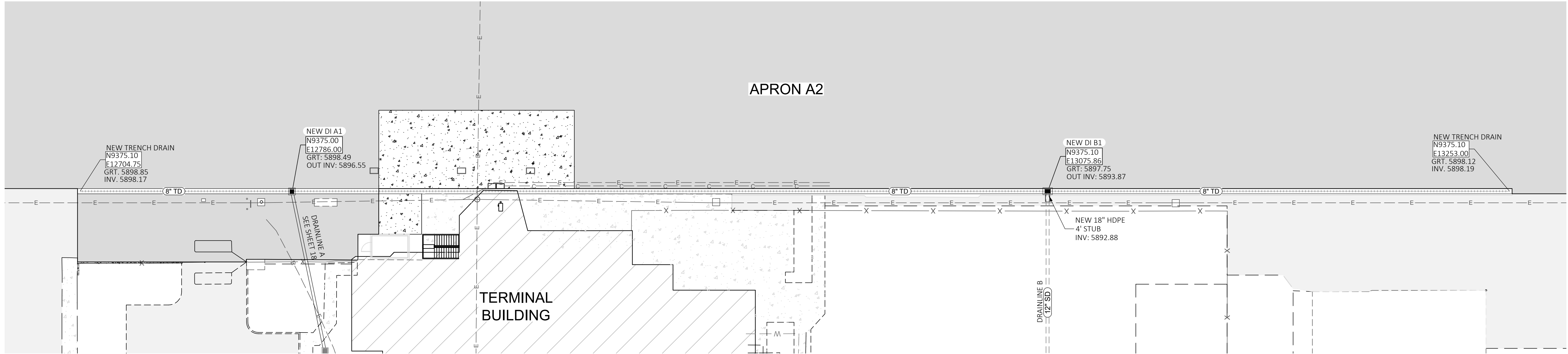


LEGEND

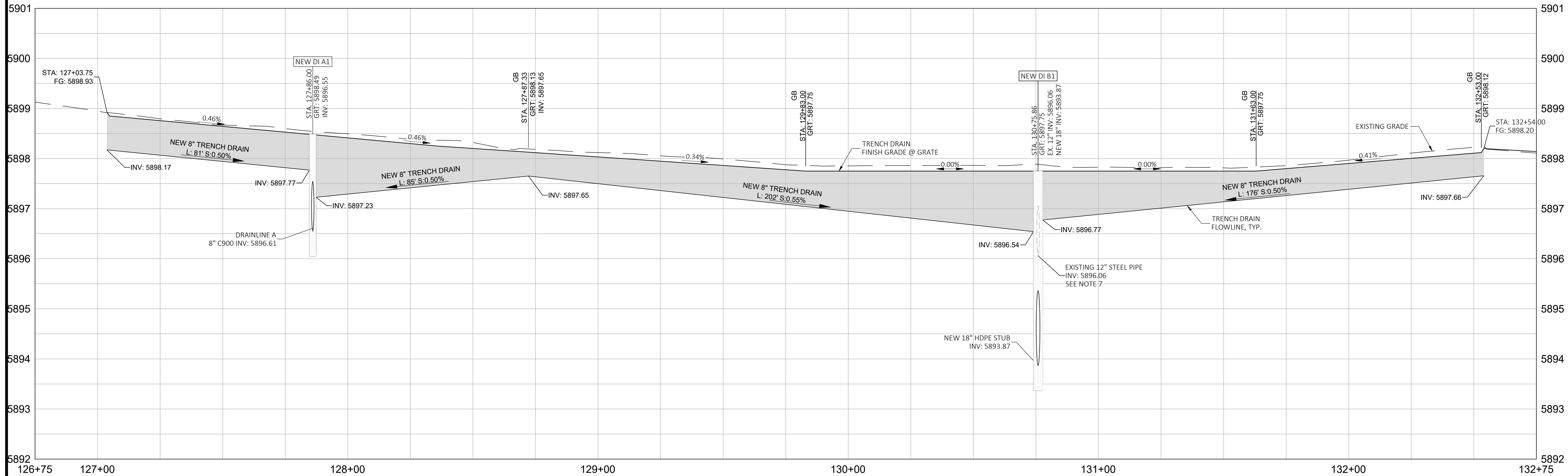
N9500.00 E13200.00	STATION AND OFFSET
	NEW AC PAVEMENT
	EXISTING PAVEMENT
	NEW PCC PAVEMENT
	NEW TRENCH DRAIN
	NEW STORM DRAIN
	EXISTING STORM DRAIN
	STORM DRAIN INLET (EX, NEW)
	FLARED END SECTION (EX, NEW)
	EX FENCE LINE
	EX ELECTRICAL LINE
	EX SEWER LINE
	EX WATER LINE
	EX GAS LINE



LOCATION MAP



TRENCH DRAIN PLAN



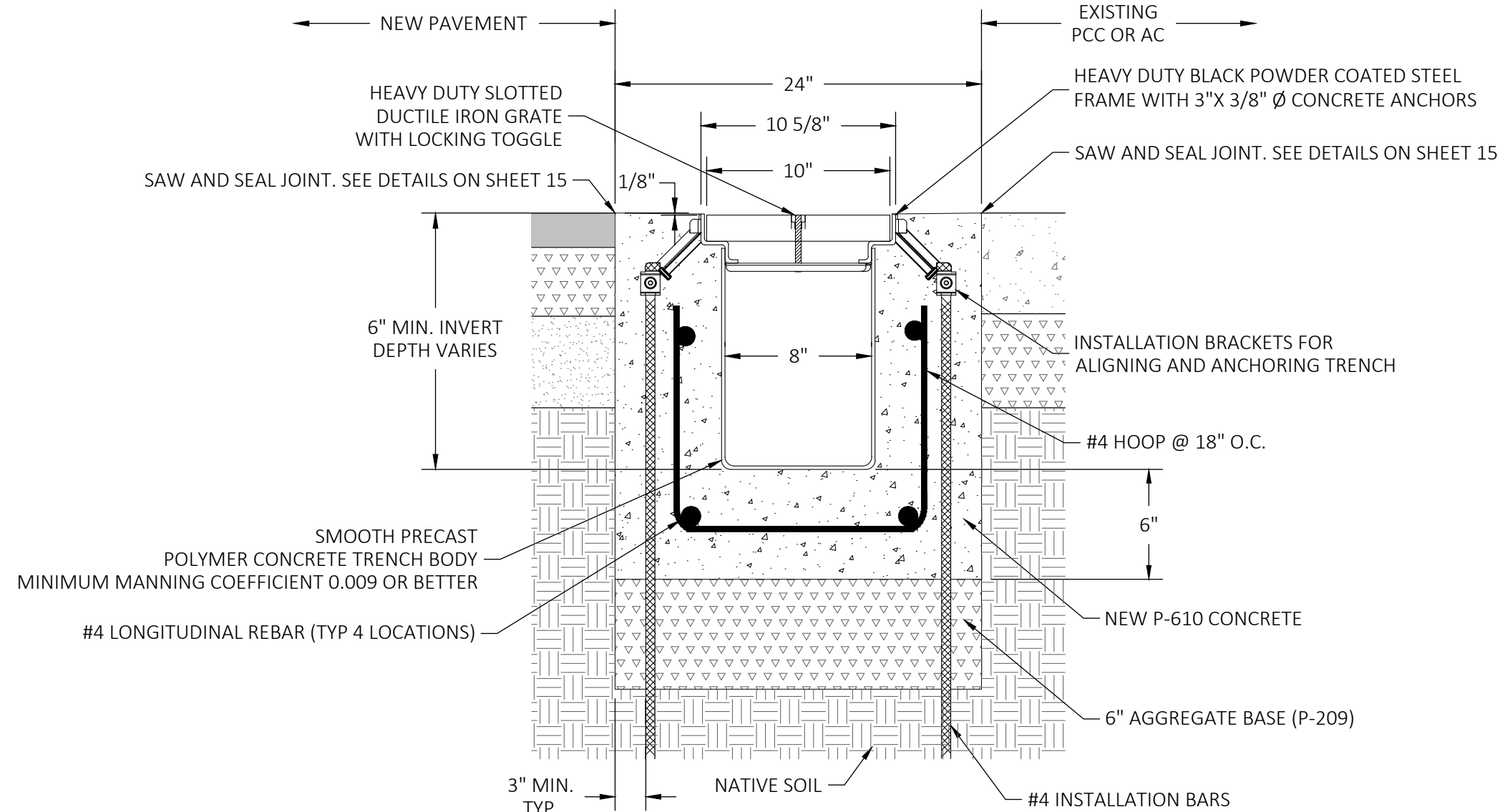
TRENCH DRAIN PROFILE



No.	REVISIONS	BY	DATE

TRUCKEE	CALIFORNIA
RECONSTRUCT APRON A2	
STORM DRAIN PLAN AND PROFILE - TRENCH DRAIN	

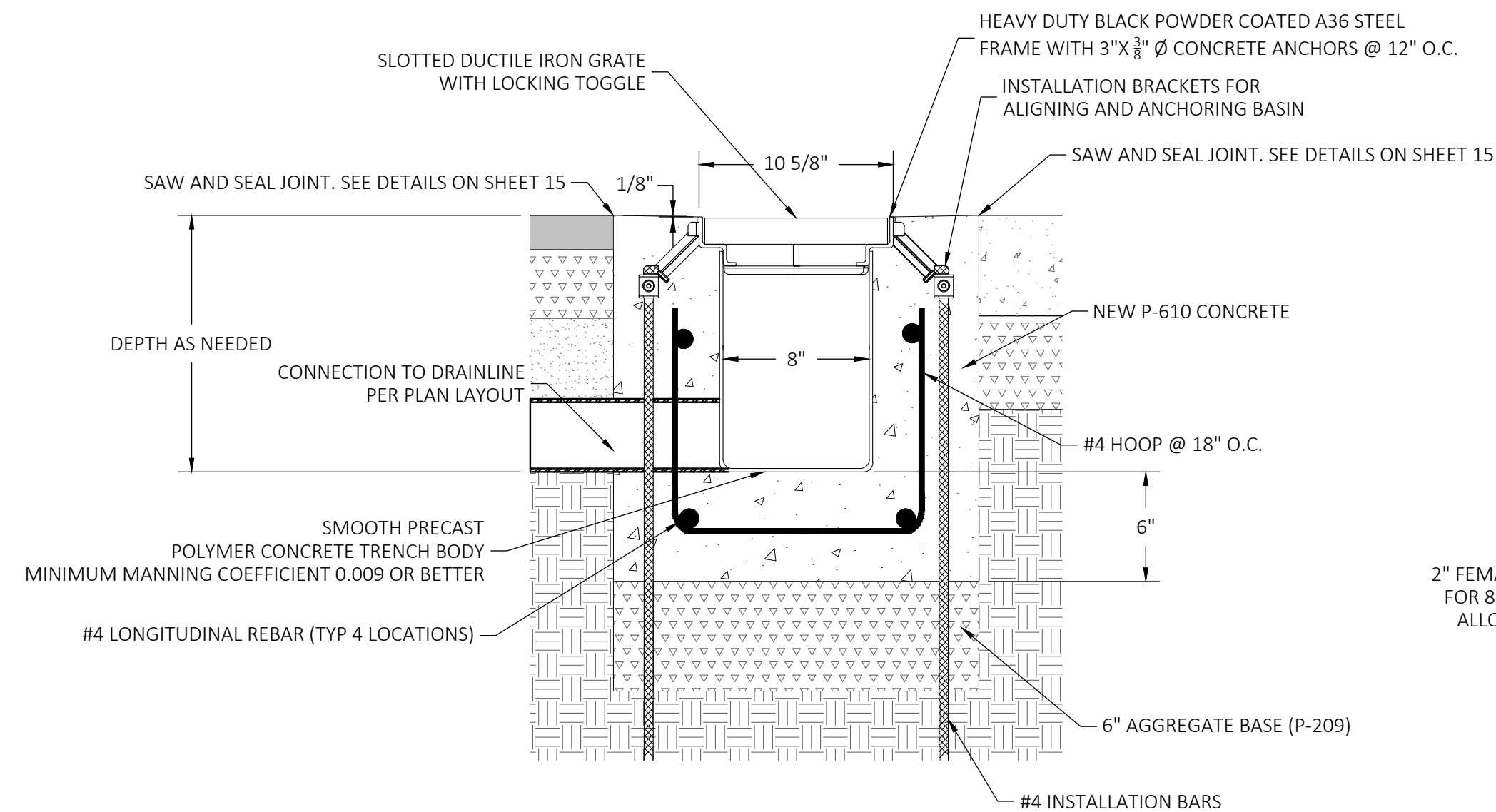
DATE	3/12/2025
DRAWN	DMB
CHECKED	DB
PROJECT No.	40.38
FILE	4038.16.StormTrn
SCALE	1"=20'
SHEET No.	17 of 25



NOTES:

1. TRENCH DRAIN FRAME AND GRATE SHALL BE H20 RATED.
2. TRENCH DRAIN GRATE MUST BE 1/8" BELOW FINISHED CONCRETE GRADE.
3. TRENCH DRAIN DESIGN BASED ON DURA TRENCH PREFABRICATED 8" WIDE TRENCH DRAIN (DTPF8-HDBP15ZSA) AND GRATE (10B24DI). THIS TRENCH DRAIN OR AN APPROVED EQUAL TRENCH DRAIN SHALL BE FURNISHED AND INSTALLED.
4. INSTALL JOINTS IN THE CONCRETE AT 8' TO 12' SPACING TO MATCH THE JOINT SPACING OF THE TRENCH DRAIN SEGMENTS.

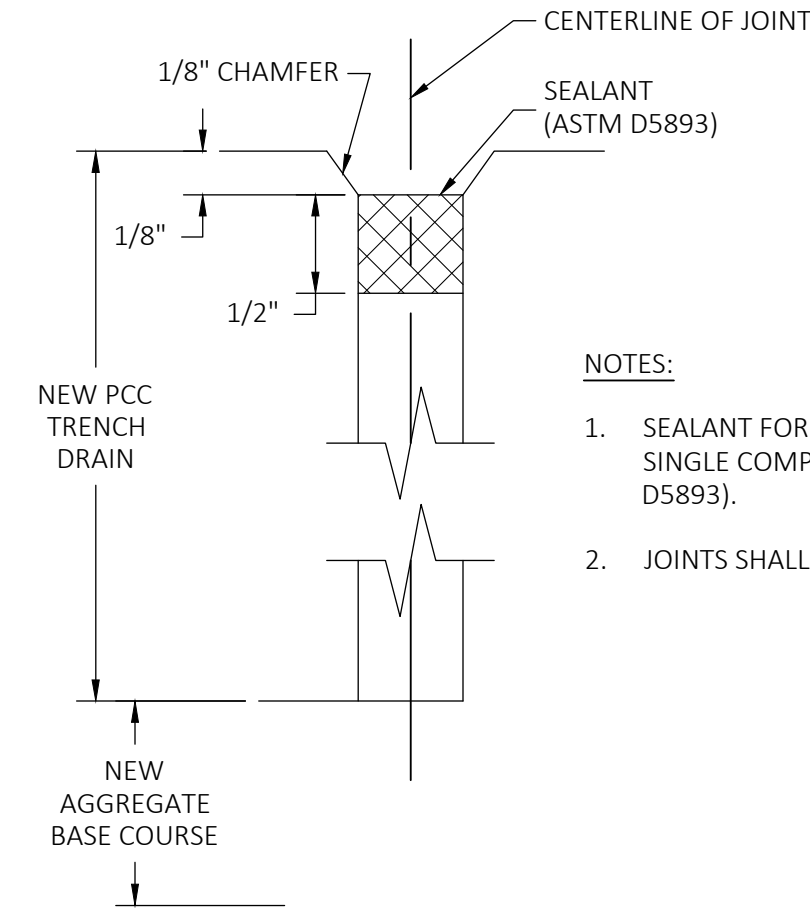
A TYPICAL SQUARE TRENCH SECTION
NTS



NOTES:

1. INLET FRAME AND GRATE SHALL BE H20 RATED.
2. GRATE MUST BE 1/8" BELOW FINISHED CONCRETE GRADE.
3. INLET DESIGN BASED ON DURA TRENCH PREFABRICATED 8" I.D. CATCH BASIN (DTCBP8-HDBP15ZSA-GLCP6-D60") AND GRATE (10B24DI) THIS INLET OR AN APPROVED EQUAL SHALL BE FURNISHED AND INSTALLED.

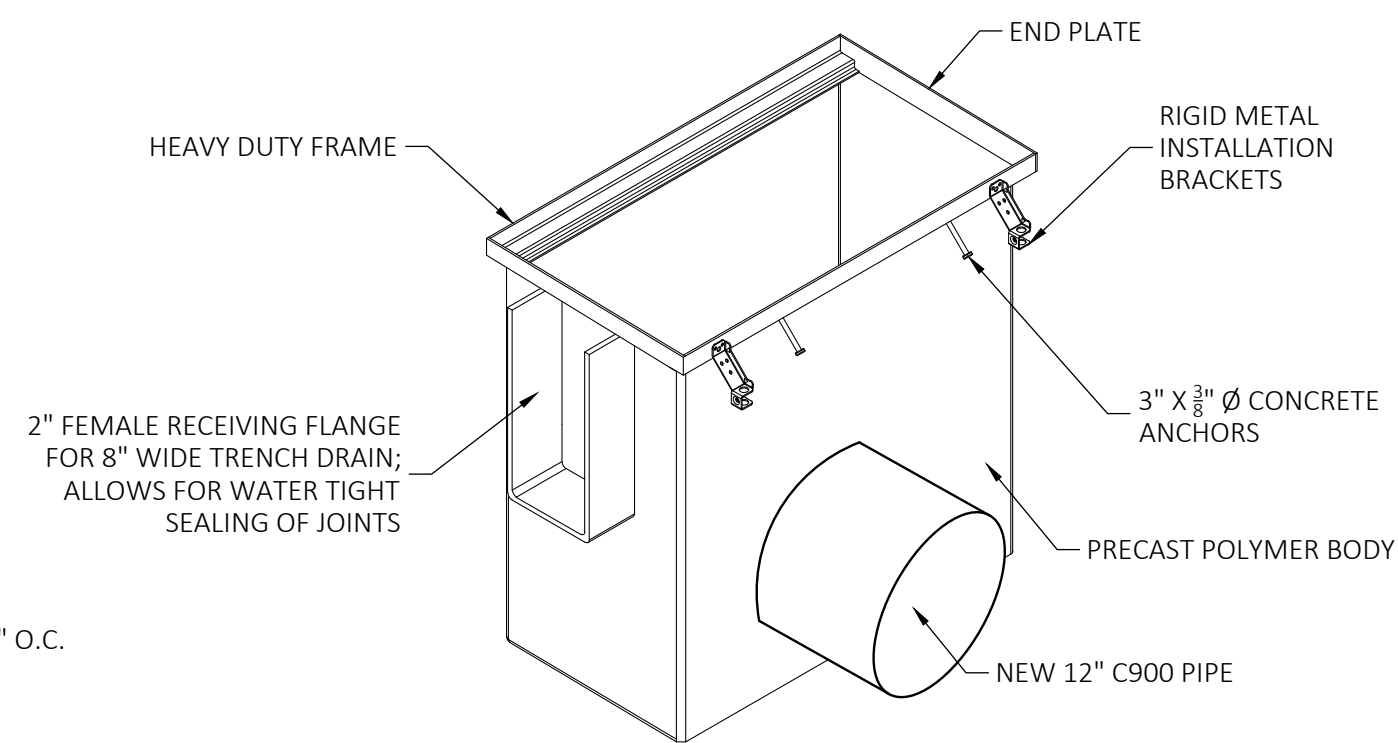
C TYPICAL INLET STRUCTURE DETAIL
NTS



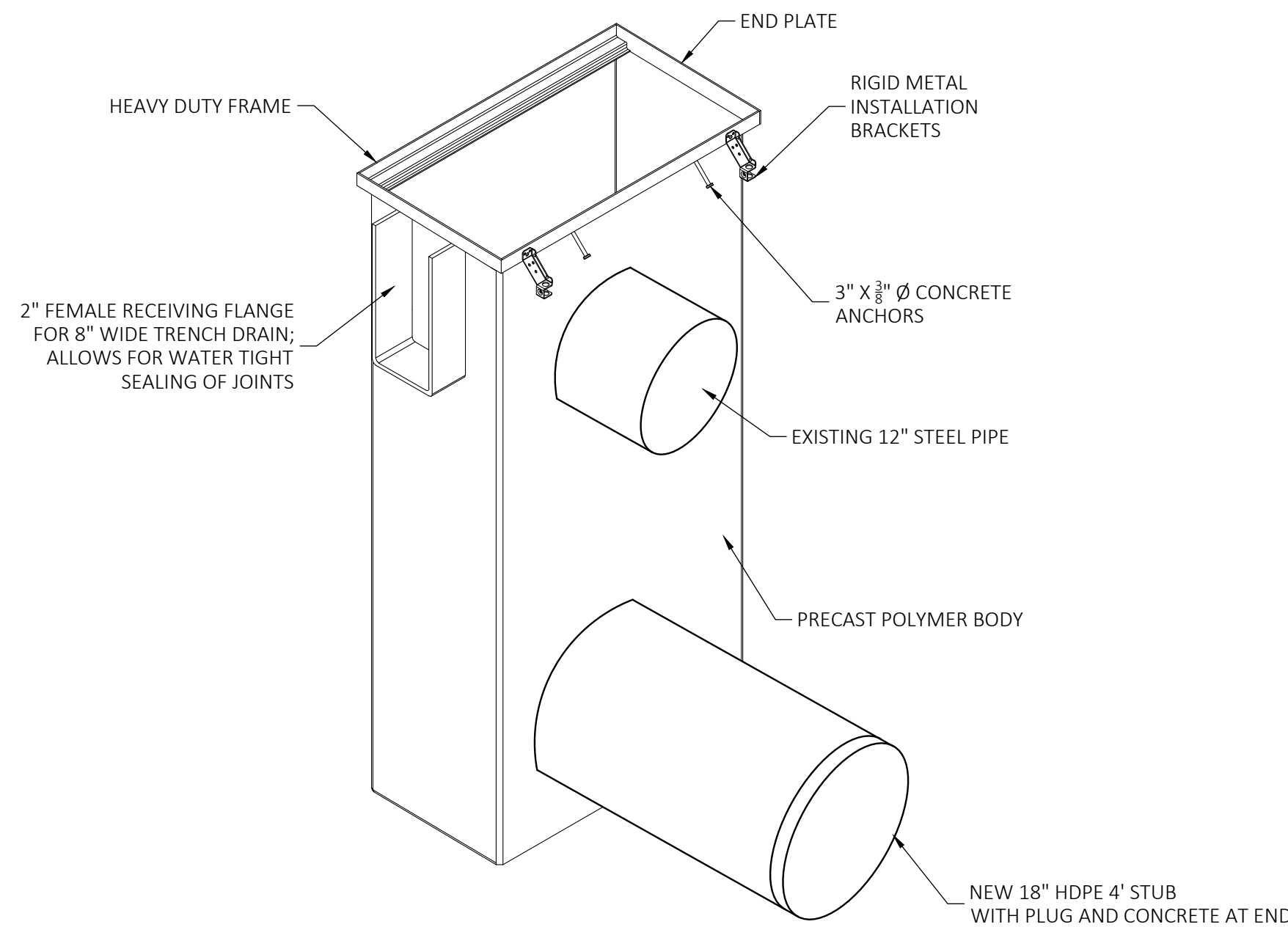
NOTES:

1. SEALANT FOR ALL JOINTS IN THE CONCRETE TRENCH DRAIN SHALL BE SINGLE COMPONENT, COLD APPLIED SILICONE SEALANT (ASTM D5893).
2. JOINTS SHALL BE SPACED 8'-12' TO MATCH TRENCH DRAIN SEGMENTS.

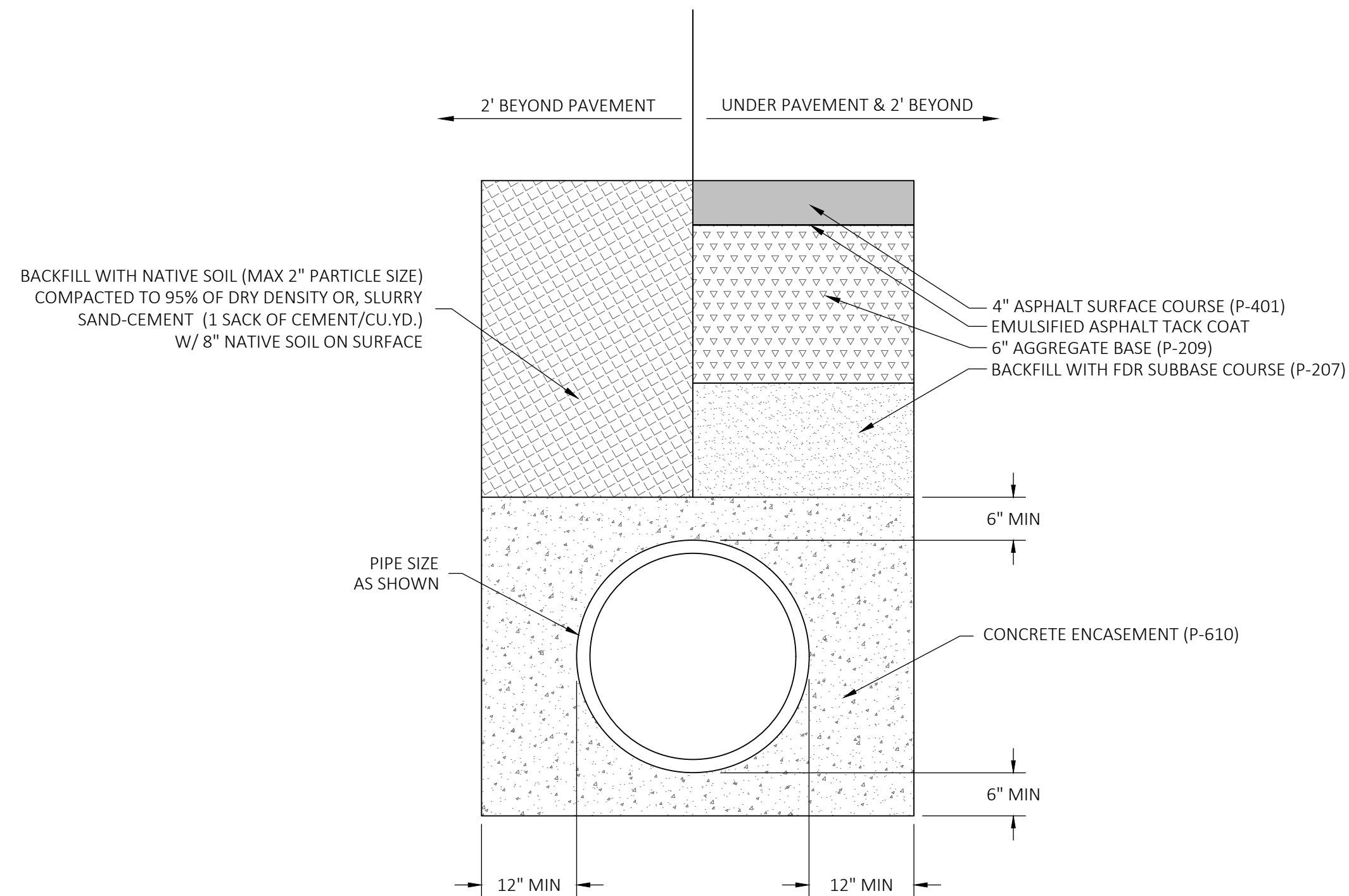
B CONCRETE TRENCH DRAIN JOINT
NTS



D DI A1 CATCH BASIN DETAIL
NTS



E DI B1 CATCH BASIN DETAIL
NTS



F TYPICAL PIPE TRENCH
NTS



ENGINEER OF RECORD

REVISIONS	BY	DATE
No.		

TRUCKEE-TAHOE AIRPORT	CALIFORNIA
RECONSTRUCT APRON A2	
STORM DRAIN DETAILS	

DATE	3/12/2025
DRAWN	DMB
CHECKED	DB
PROJECT No.	40.38
FILE	4038.14.StormDet
SCALE	AS SHOWN
SHEET No.	19 of 25

NOTES:

- AIRPORT WILL REMOVE EXISTING SOLAR POWERED TAXIWAY EDGE LIGHTS FROM REFLECTOR STAKES. CONTRACTOR SHALL REMOVE REFLECTOR STAKES AND SHOE FROM EXISTING LOCATIONS. DELIVER REFLECTOR STAKES TO AIRPORT AND DISPOSE OF REFLECTOR SHOE.
- CONTRACTOR SHALL FURNISH AND INSTALL NEW METAL ANCHOR SHOE FOR EACH NEW TAXIWAY REFLECTIVE EDGE MARKER AS REQUIRED. AIRPORT WILL INSTALL TAXIWAY EDGE LIGHTS ON NEW REFLECTOR POSTS/STAKES FURNISHED AND INSTALLED BY CONTRACTOR.
- SEE SHEETS 21 FOR ELECTRICAL DETAILS.
- CONTRACTOR SHALL POT HOLE, LOCATE, AND PROTECT EXISTING ELECTRICAL DUCT AND UTILITIES.
- ALL ELECTRICAL CONDUIT BENDS SHALL BE SWEEPS AS SPECIFIED BY NEC. MINIMUM 24" RADIUS FOR 4" CONDUIT.
- SEE SNOWMELT PLANS FOR NEW CONDUITS REQUIRED AS PART OF THE NEW SNOWMELT APRON. ALL CONDUIT FOR SNOWMELT APRON IS INCIDENTAL TO THE LUMP SUM BID ITEM FOR THE MECHANICAL SNOWMELT SYSTEM. THE ONLY ELECTRICAL CONDUIT ASSOCIATED WITH THE SNOWMELT APRON THAT IS TO BE PAID SEPARATELY IS THE CONDUIT FROM THE PULLBOX IN FRONT OF THE TERMINAL TO THE NEW SNOWMELT SHED FOUNDATION. THIS 2W-4" CONDUIT WILL BE PAID UNDER ITS RESPECTIVE UNIT PRICE BID ITEM.

LEGEND

- N14251.078
E9586.500
- EXISTING AC PAVEMENT
- NEW AC PAVEMENT SECTION
- EXISTING ELECTRICAL DUCT
- NEW CONCRETE ENCASED 1W-2" CONDUIT
- NEW CONCRETE ENCASED 2W-4" CONDUIT
- EXISTING DRAINLINE
- EXISTING EDGE OF PAVEMENT
- NEW EDGE OF PAVEMENT

AIRPORT GRID
COORDINATES

EXISTING AC PAVEMENT

NEW AC PAVEMENT SECTION

EXISTING ELECTRICAL DUCT

NEW CONCRETE ENCASED 1W-2" CONDUIT

NEW CONCRETE ENCASED 2W-4" CONDUIT

EXISTING DRAINLINE

EXISTING EDGE OF PAVEMENT

NEW EDGE OF PAVEMENT

EXISTING TAXIWAY EDGE LIGHT

EXISTING ELECTRICAL PULLBOX

EXISTING SIGN TO REMAIN

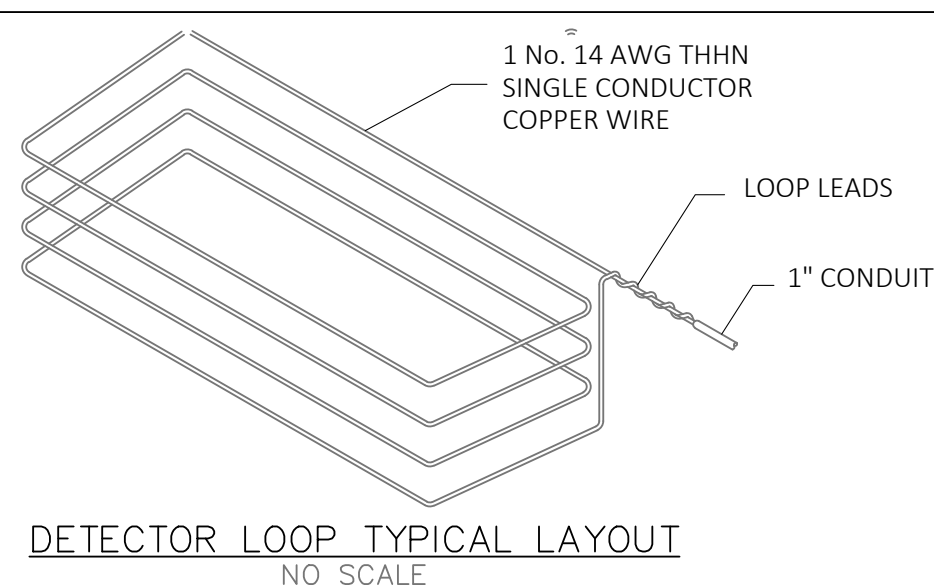
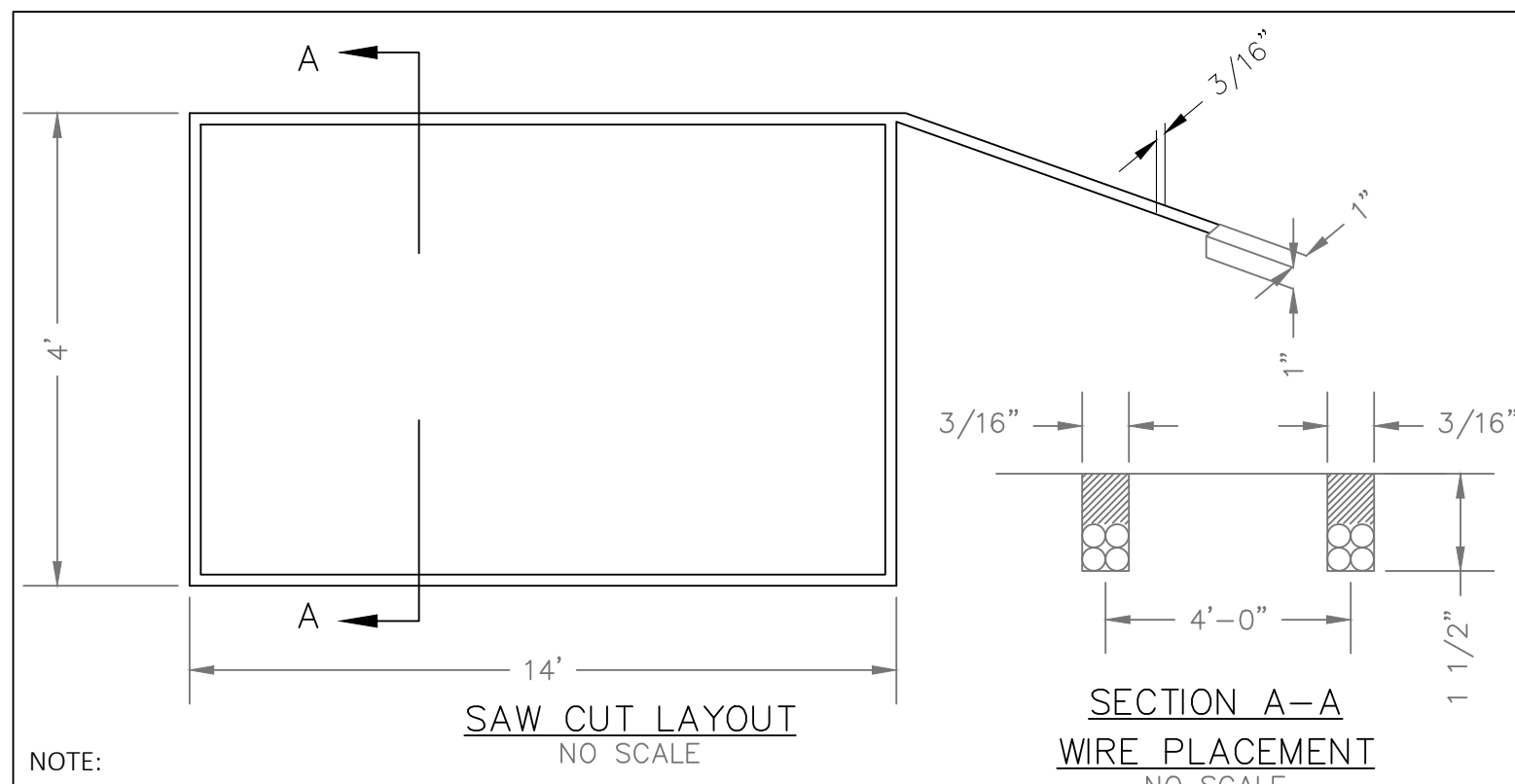
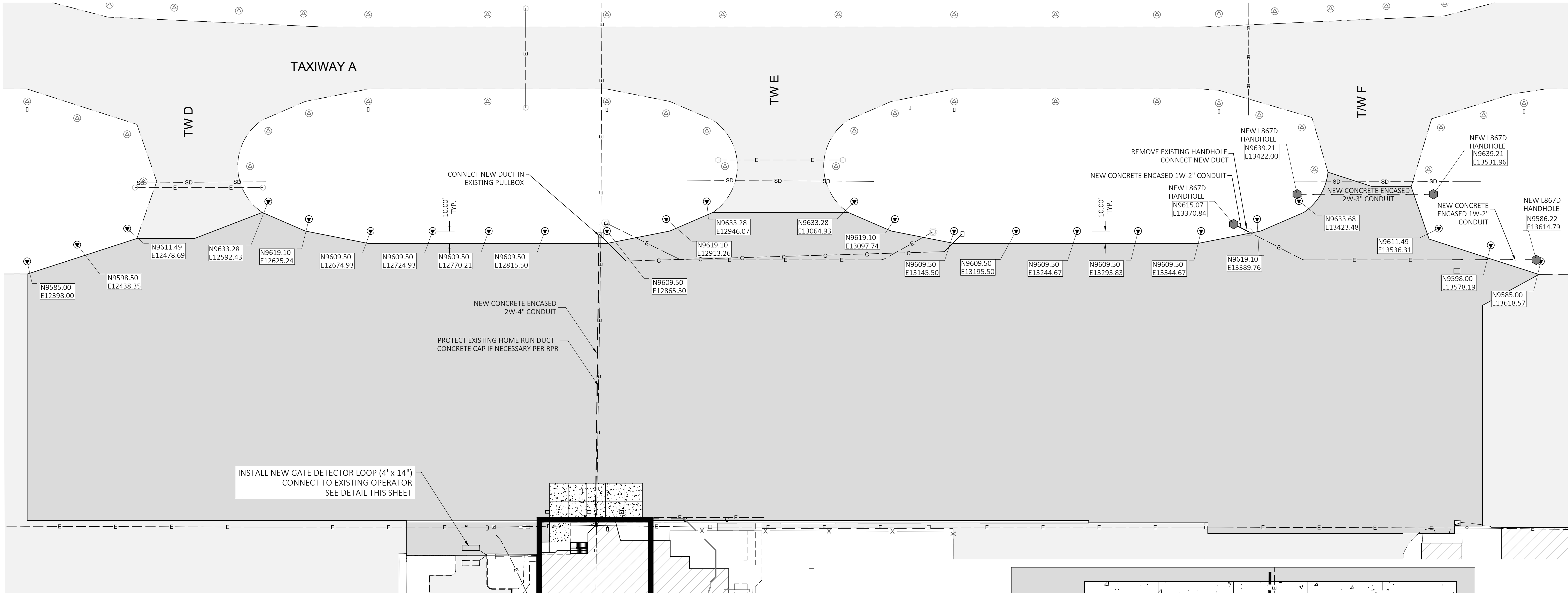
NEW L867 SIZE D HANDHOLE

EXISTING TAXIWAY EDGE RETROREFLECTIVE MARKER LOCATION

NEW TAXIWAY EDGE RETROREFLECTIVE MARKER LOCATION

SCALE: 1"=40'

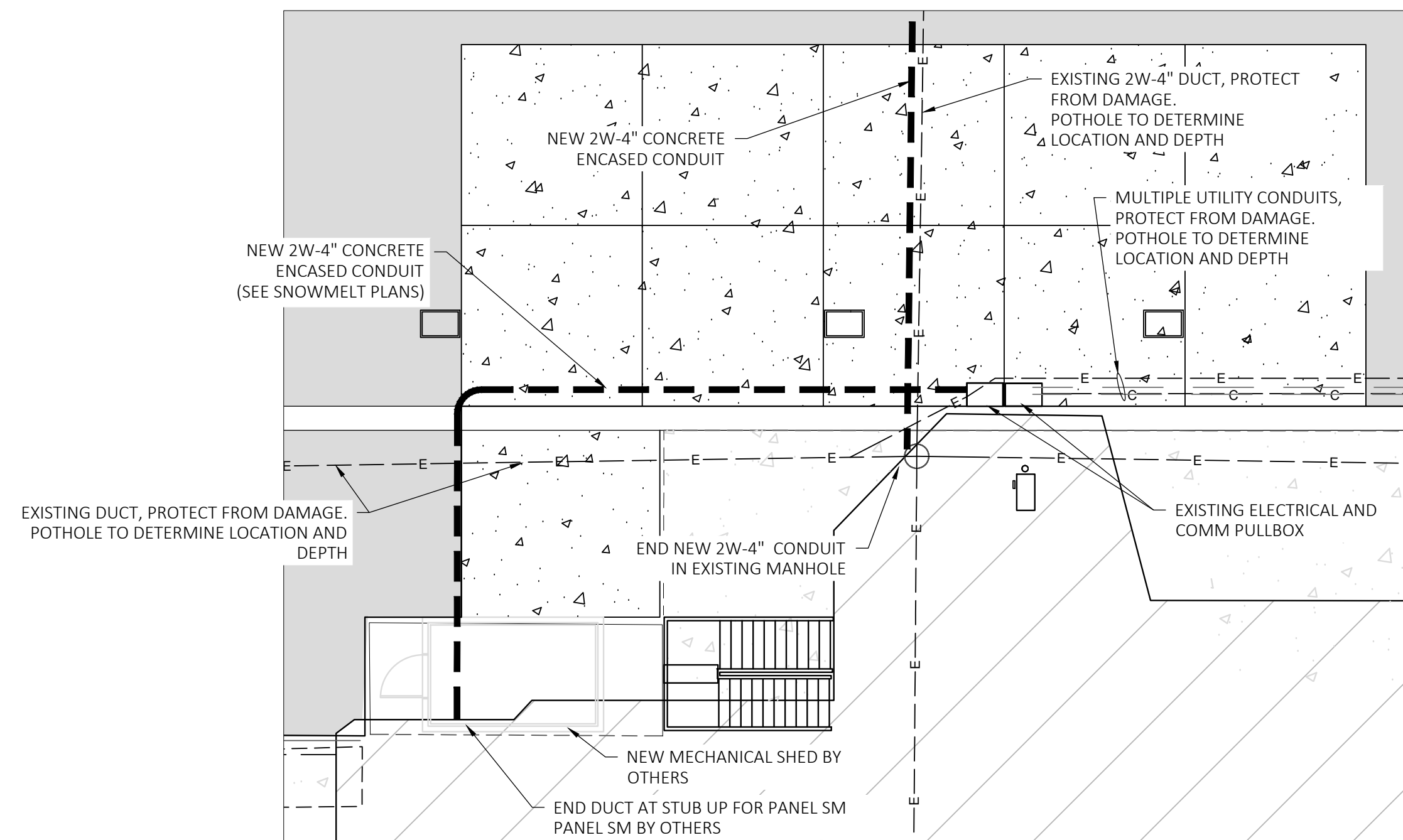
LOCATION MAP



DETECTOR LOOP DETAIL
NO SCALE

NOTES:

- TYPICAL LAYOUT FOR LOOP
SAW SLOT 3/16" WIDE x 1 1/2" DEEP
MAKE RECTANGULAR SHAPE TO
SPECIFIED LOOP DIMENSIONS
PLUS SLOT FOR LEAD CONDUIT.
SEAL WITH 3M LOOP EPOXY SEALANT
NO. 62-5764-6320-9 OR
APPROVED EQUAL.
- LOOP LEADS ARE LIMITED TO 100'
LOOPS TO HAVE 4 TURNS AS SHOWN
CAUTION: CONTROL & POWER RUN
TO BE 18" FROM DETECTOR LOOPS
LOOPS LEADS TO HAVE (6) TWISTS
PER FOOT MINIMUM.
- NO SEPARATE PAYMENT FOR DETECTOR
LOOPS, DUCT, EPOXY OR SAW CUTTING TO
INSTALL.



SNOWMELT APRON ELECTRICAL DUCT DETAIL
SCALE: 1"=10'



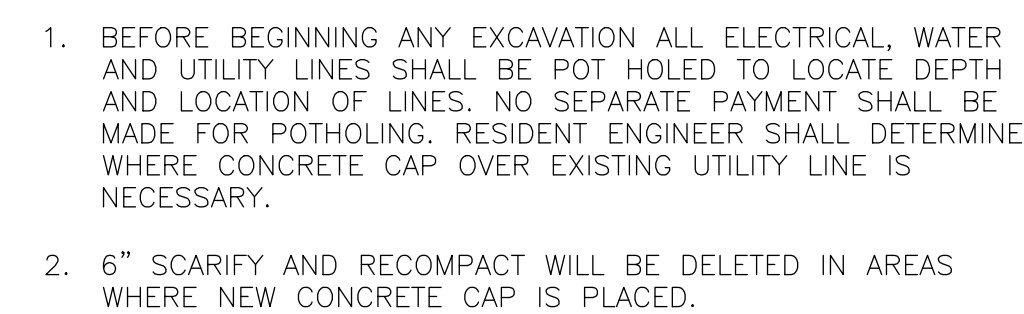
ENGINEER OF RECORD		BY		DATE	
No.	REVISIONS	BY	DATE		

TRUCKEE	CALIFORNIA
RECONSTRUCT APRON A2	
APRON A2 DUCT PLAN	

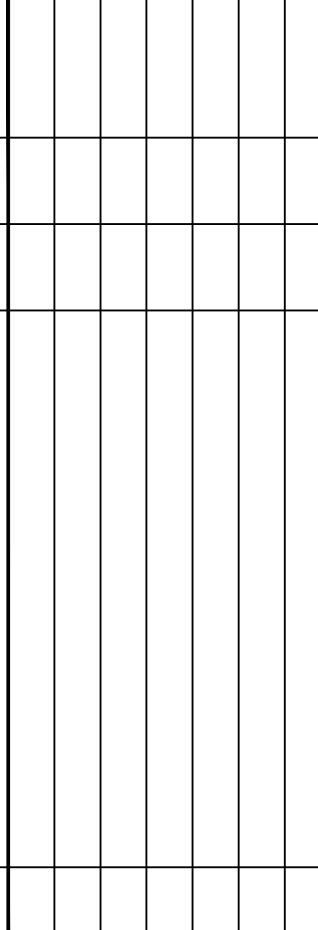
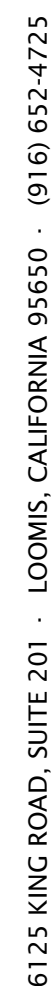
DATE	3/12/2025
DRAWN	DMB
CHECKED	DB
PROJECT No.	40.38
FILE	4038.00.Elec
SCALE	1"=40'
SHEET No.	20 of 25



1. MARKERS SHALL BE MADE OF POLYETHYLENE OR APPROVED EQUAL, FLEXIBLE, AND APPROVED BY THE FAA. MARKERS SHALL MATCH EXISTING MARKERS ON THE AIRPORT.
2. MARKERS SHALL BE MANUFACTURED IN ACCORDANCE WITH F.A.A. ADVISORY CIRCULAR 150/5345-39D, SPECIFICATIONS FOR L-853, RUNWAY AND TAXIWAY RETROREFLECTIVE MARKERS.
3. CONTRACTOR SHALL FURNISH AND INSTALL MARKER COMPLETE WITH THE GROUND ANCHOR, TUBE AND COLOR BAND PLACED AT THE LOCATION SHOWN ON LIGHTING OR MARKING PLAN.
4. AIRPORT WILL INSTALL SOLAR POWERED TAXIWAY EDGE LIGHTS ON THESE MARKERS.

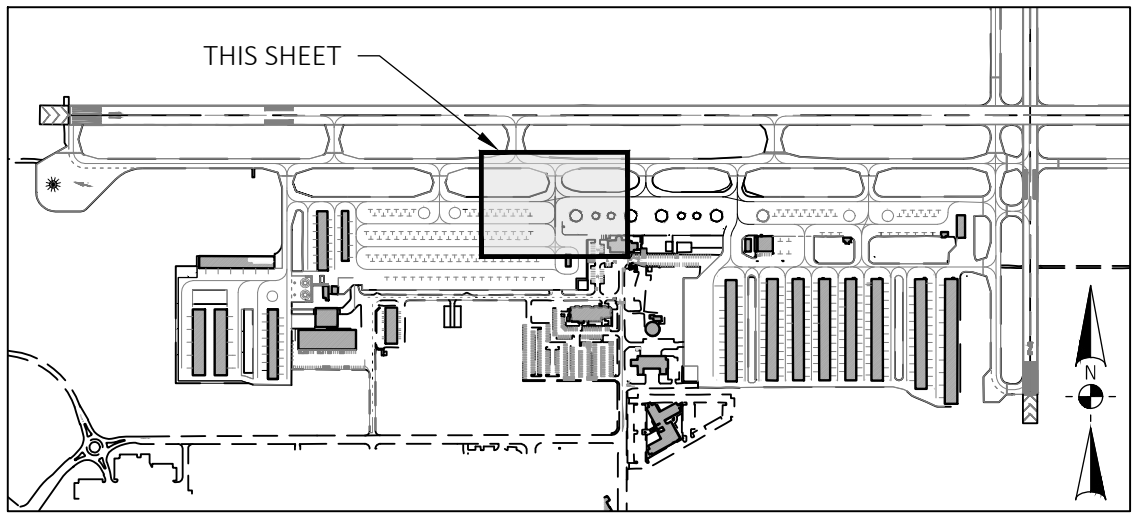
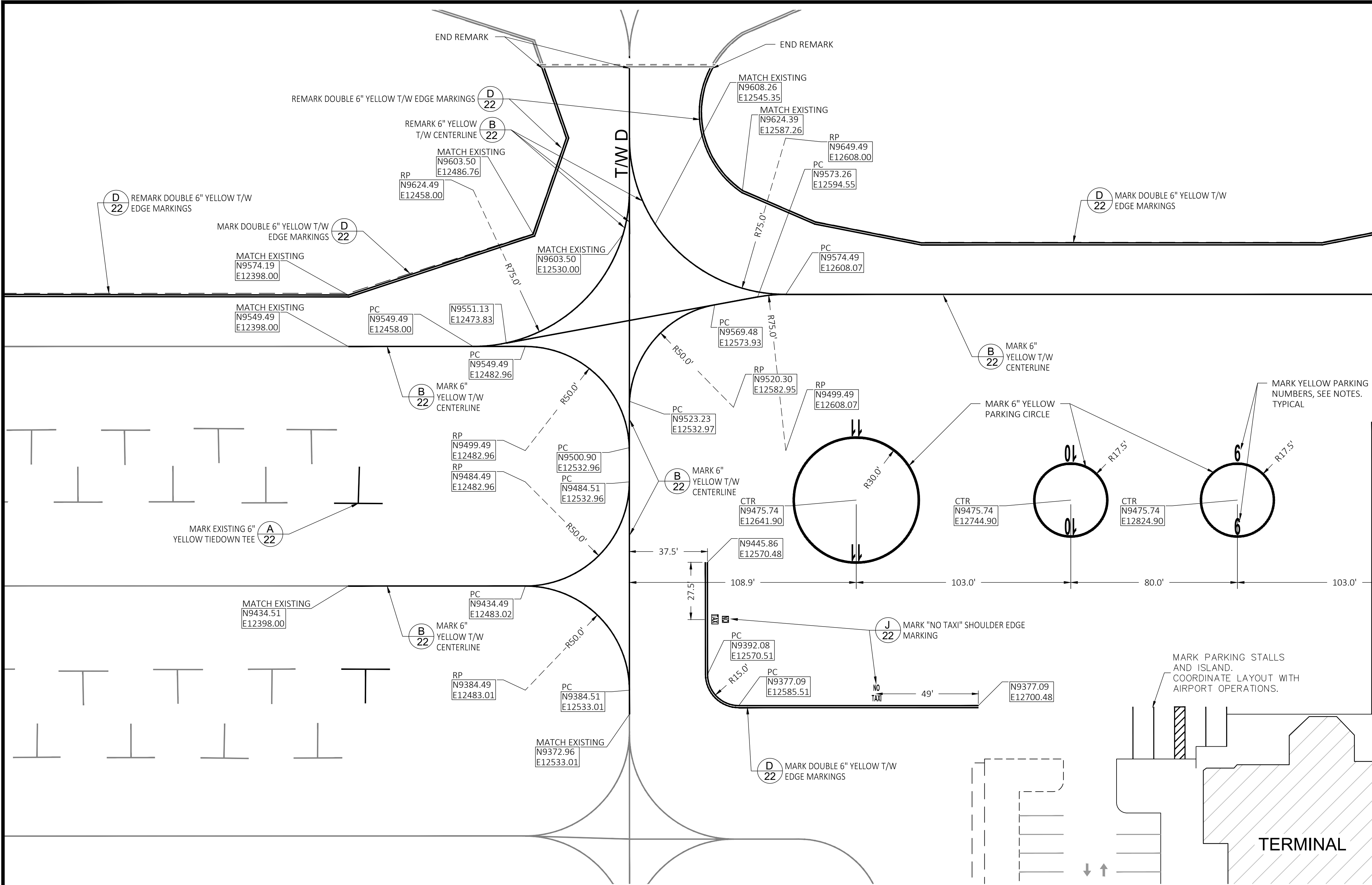


CONCRETE CAP OVER EXISTING UTILITY DETAIL

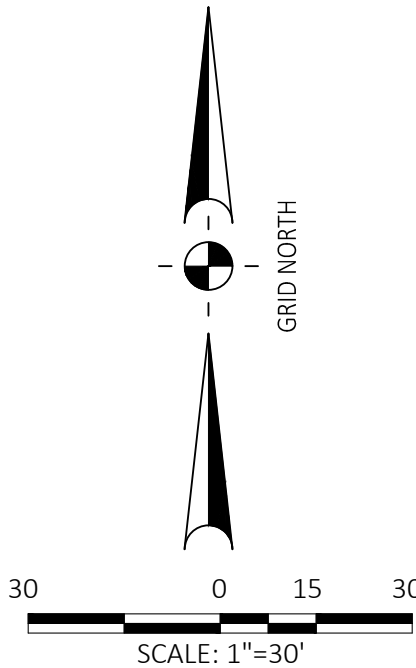


APRON A2 ELECTRICAL DETAILS

DATE	3/12/2025
DRAWN	KDO
CHECKED	RWB
PROJECT No.	40.38
FILE	4038.00.ElecDetails
SCALE	NONE
SHEET No.	
21	OF 25



LOCATION MAP



GRID NORTH

SCALE: 1"=30'

TRUCKEE

TRUCKEE-TAHOE AIRPORT

CALIFORNIA

RECONSTRUCT APRON A2

MARKING PLAN AND DETAILS - PHASE 1

DATE

3/12/2025

DRAWN

DMB

CHECKED

DB

PROJECT No.

40.38

FILE

4038.15.Marking

SCALE

1"=30'

SHEET No.

22 of 25

ENGINEER OF RECORD

PROFESSIONAL ENGINEER

JOHN BRADLEY

NO. 55558

DATE 6/30/2006

REGISTERED CIVIL ENGINEER

STATE OF CALIF.

BY

APR

DATE

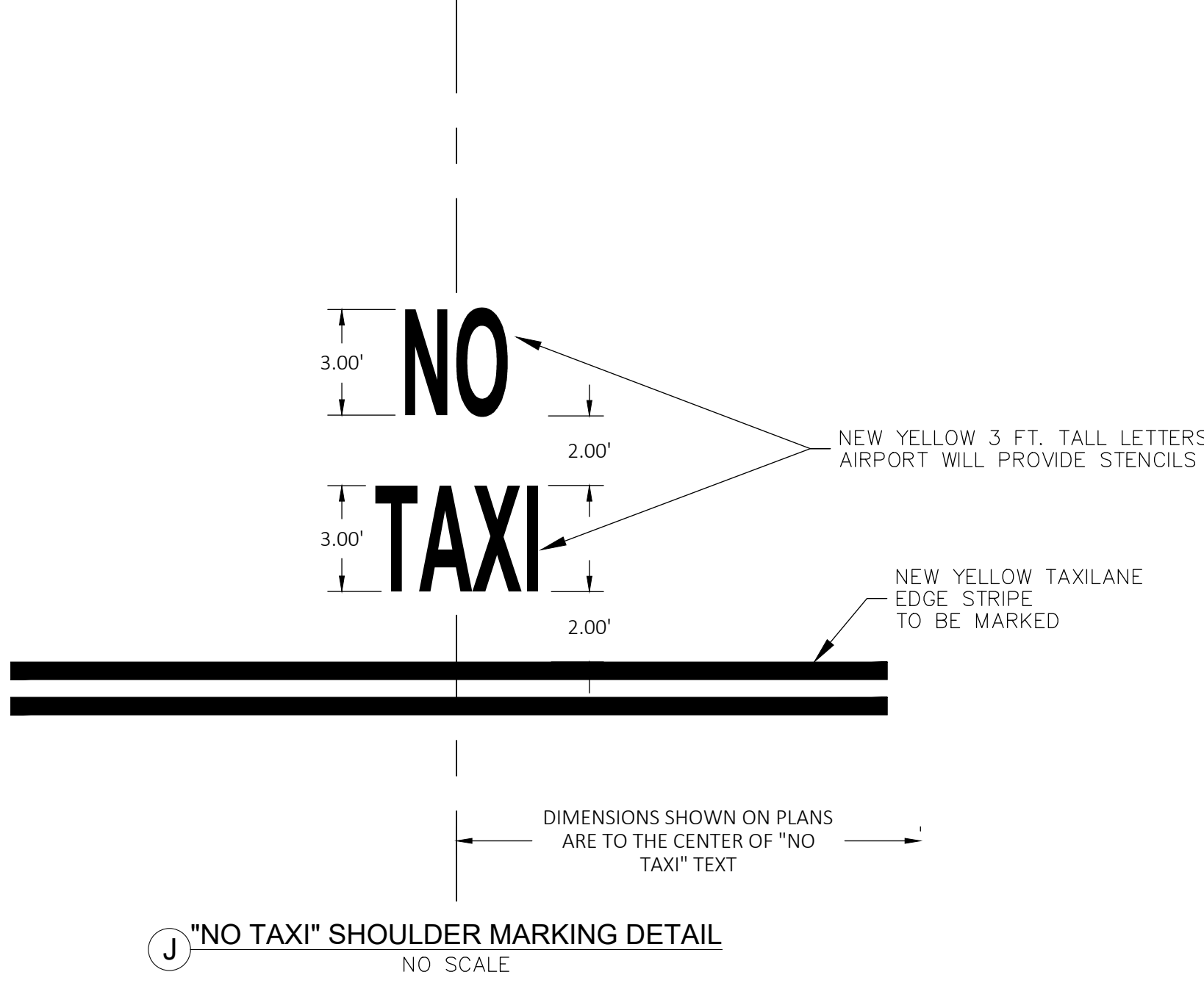
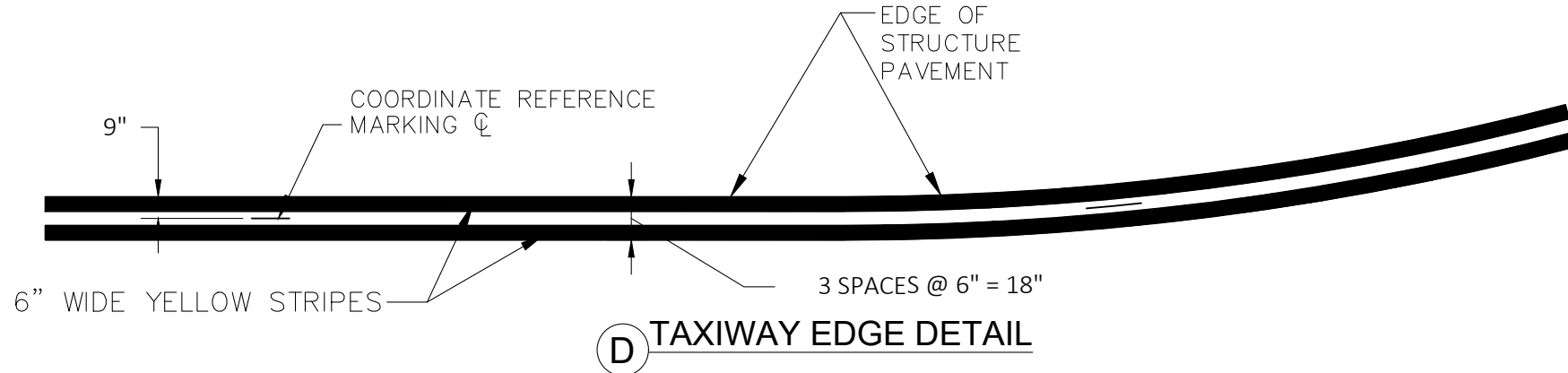
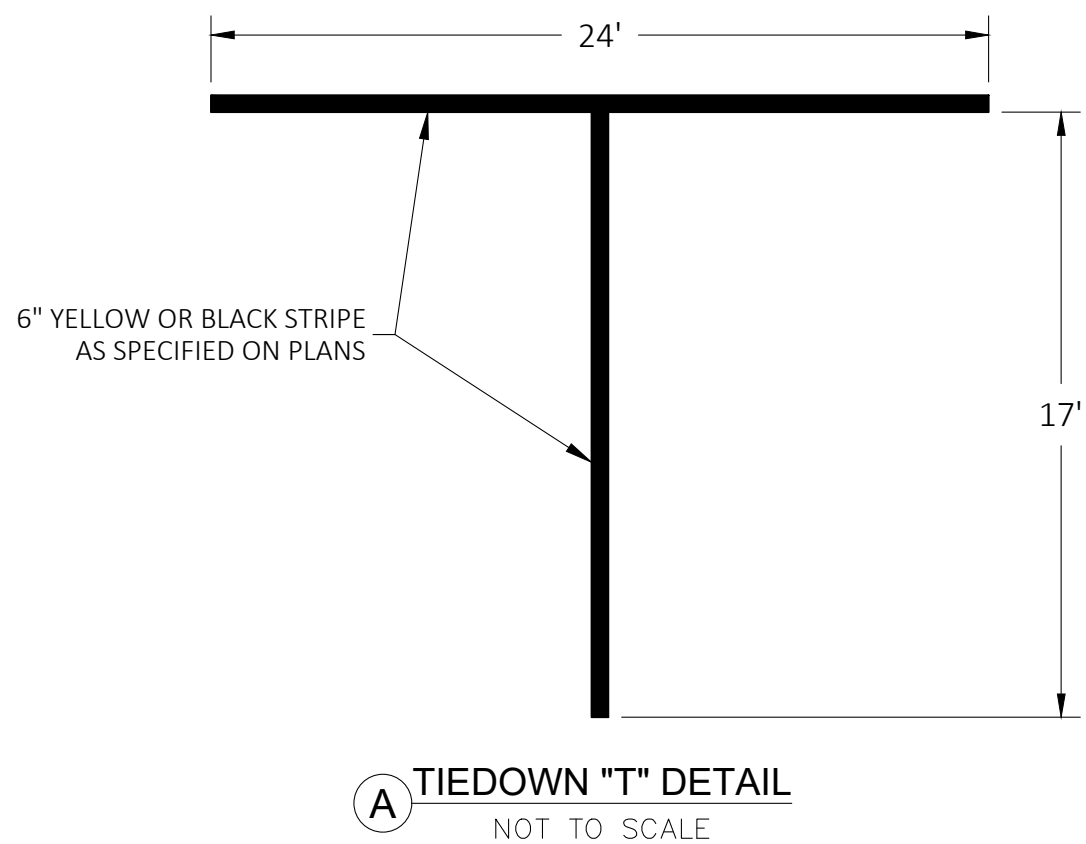
REVISIONS

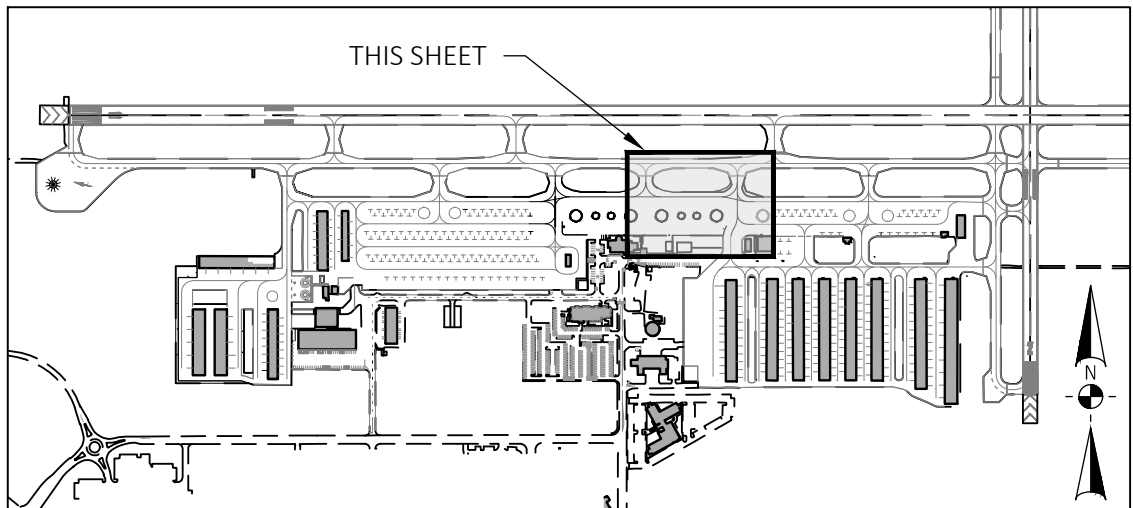
No.

BRANDLEY

ENGINEERING

6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725

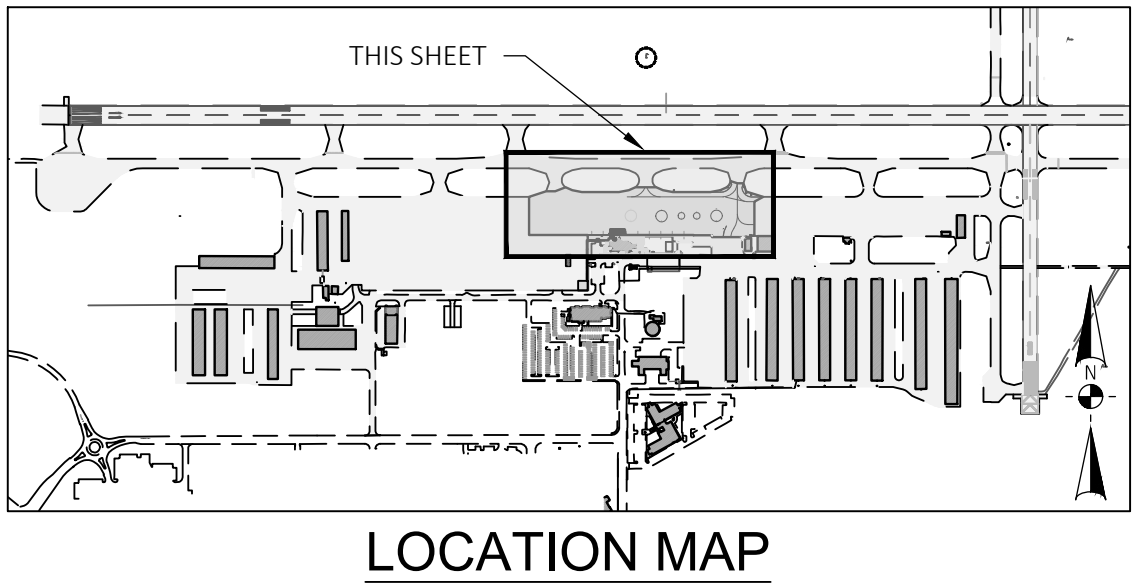
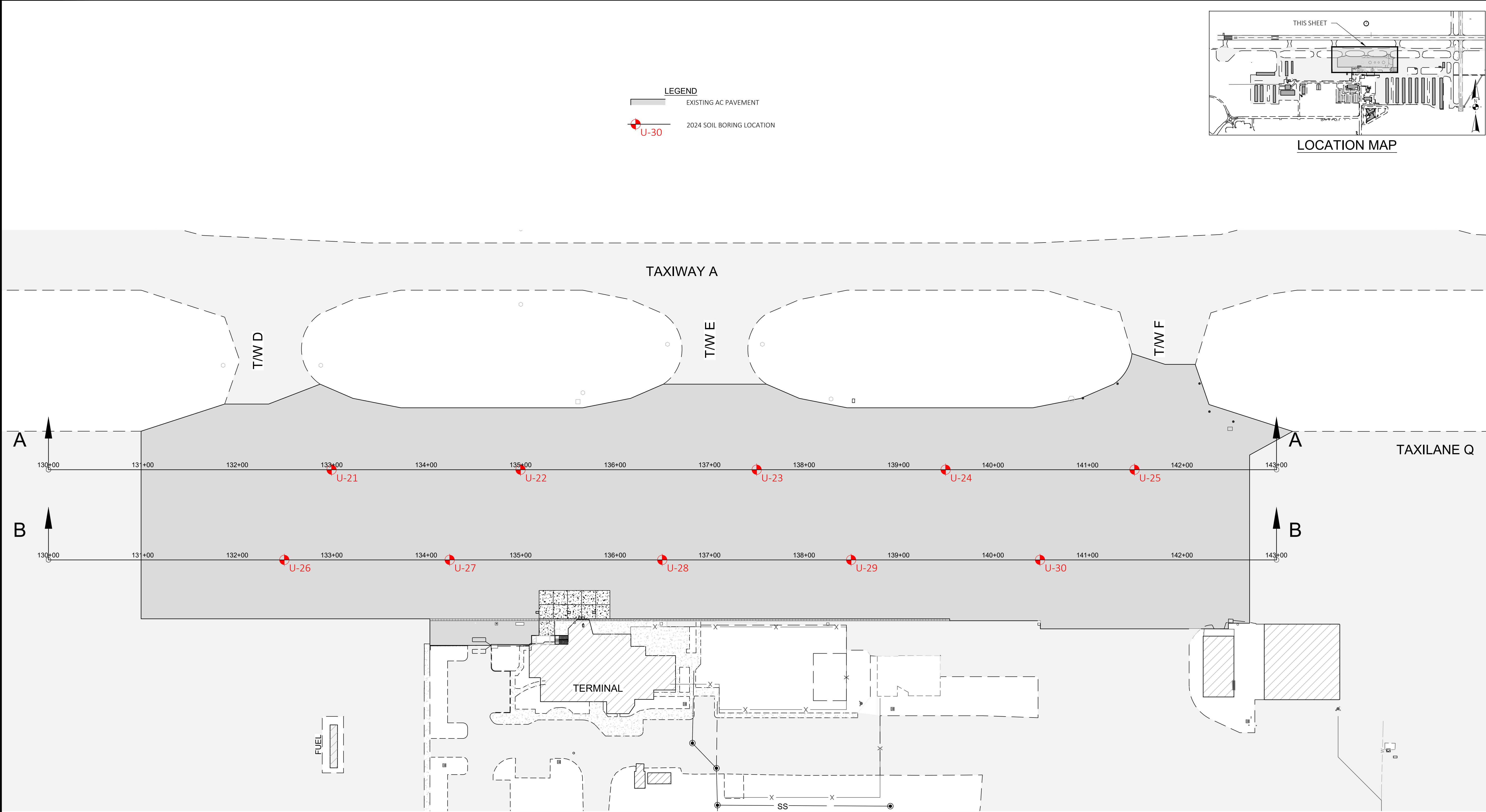




1. THE AIRPORT MAY REQUIRE SOME TEMPORARY STRIPING ON THE WEST APRON DESIGNATED AS APRON A4. THESE MARKINGS WILL BE APPLIED AT THE BEGINNING OF THE PROJECT AND THEN REMOVED AT THE END OF THE PROJECT. TEMPORARY STRIPING WILL INCLUDE THE FOLLOWING: TEMPORARY MARKING REMOVAL; BID ITEMS. MARKING REMOVAL WILL INCLUDE A SS1H TACK COAT PLACED ON THE REMOVED MARKING LOCATIONS. LAYOUT AND REQUIREMENTS WILL BE PROVIDED BY THE AIRPORT AT THE BEGINNING OF CONSTRUCTION.
2. ALL TEMPORARY MARKINGS SHALL BE REMOVED AT THE END OF THE PROJECT. ALL MARKING REMOVAL SHALL BE DONE SUCH AS TO MINIMIZE DAMAGE TO EXISTING PAVEMENTS. PLACE SS1H TACK COAT ON ALL MARKING REMOVAL AREAS. MARKING REMOVAL IS COMPLETELY. SS1H TACK COAT COSTS ARE INCIDENTAL TO MARKING REMOVAL BID ITEM.

G:\40 TRUCKEE\38 APRON A2\BID SET\4038 15 MARKING DWG

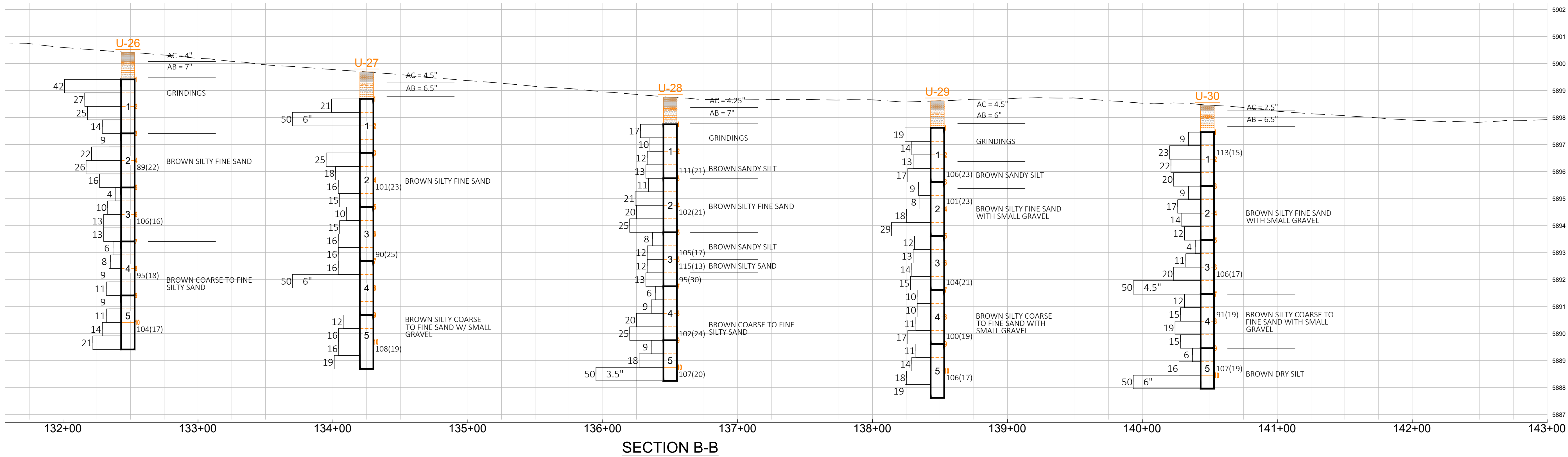
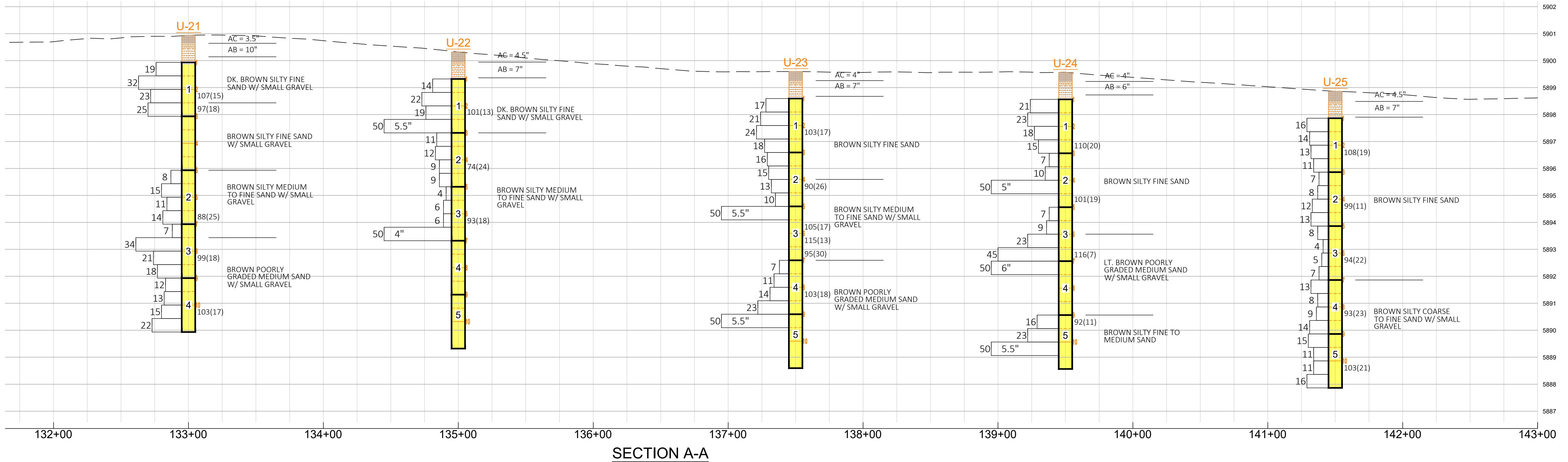
G:\40 TRUCKEE\38 APRON A2\BID SET\4038.24 SOILS.DWG PLOTTED BY Kevin Currey 3/12/2025 4:26 PM



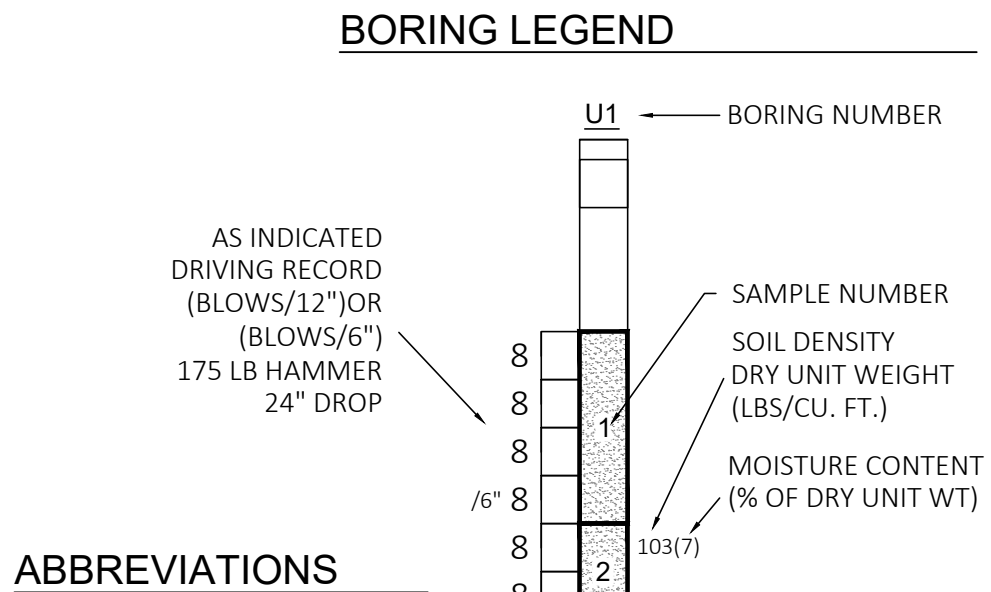
TRUCKEE		CALIFORNIA	
RECONSTRUCT APRON A2		TESTHOLE LOCATION PLAN	
DATE	3/12/2025	ENGINEER OF RECORD	KEVIN BRANDLEY
DRAWN	DMB	PROFESSIONAL ENGINEER	REGISTERED CIVIL ENGINEER
CHECKED	DB	STATE OF CALIFORNIA	6125 KING ROAD, SUITE 201 · LOOMIS, CALIFORNIA 95650 · (916) 652-4725
PROJECT No.	40.38	BY	APR
FILE	4038.24 Soils	DATE	
SCALE	1"=50'	REVISIONS	
SHEET No.	24 of 25	No.	



G:\40 TRUCKEE\38 APRON A2\BID SET\4038.24 SOILS.DWG PLOTTED BY Kevin Currey 3/12/2025 4:28 PM

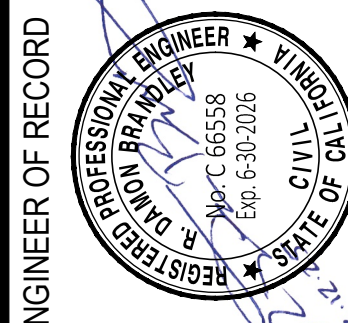


NOTE:
1. PAST PROJECTS ON THE AIRPORT HAVE SHOWN THAT THE NATIVE SUBGRADE AT THE TRUCKEE TAHOE AIRPORT HAS VARYING AMOUNTS OF COBBLES THAT RANGE IN SIZE FROM 4" TO 24" OR LARGER. THESE ARE NOT ALWAYS INDICATED IN INDIVIDUAL SOIL BORINGS AS THEY ARE TOO LARGE TO BE CAPTURED IN THE SAMPLE TUBES.



ABBREVIATIONS

- AC. ASPHALT
- AB. AGGREGATE BASE
- BR. BROWN
- DK. DARK
- MED. MEDIUM



MECHANICAL SPECIFICATIONS

1. Where required for this project: Fire Suppression and Fire Alarm designs shall be by design-build PE, or NICET 3 licensed technicians. Contractor shall submit to Building Department as DEFERRED SUBMITTALS. Contractor shall include all fees for designing and permitting of these systems. Any related information shown on the MEP plans is for general guidance only.
2. Where required for this project: controls, security, data, telecom, audio-visual, WIFI, access control, and similar low-voltage designs shall be by the Contractor. Contractor shall submit to Building Department as DEFERRED SUBMITTALS if requested by building department or its designate. Contractor shall include all fees for designing and permitting of these systems. Any related information shown on the MEP plans is for general guidance only.
3. These notes accompany all other specification sections, manuals, and notes across all divisions. Subcontractors are bound with the general contractor to all parts of the construction contract. See specifications, plans and other divisions for additional information required for coordination. If a conflict is discovered, submit a request for interpretation.
4. These plans and their referenced specifications function together as engineering design intent and depend upon all other parts of the design documents from all other parties (architecture, structure, civil, fire protection, data, etc.). These plans and specifications must therefore be used in whole, and in conjunction with all other plans and specifications. No sheet, page or part may be used individually.
5. Sugarpine Engineering shall have no responsibility for deviations from these plans and specifications, unless such deviations are authorized in advance, in writing, by Sugarpine Engineering. If deviations are made without authorization, then the party who authorized or made the deviations assumes all responsibility for the deviations. In the case of a Contractor making deviations, then that contractor shall be the Designer of Record and in responsible charge of those deviations, including for all effects, costs, or delays related to them.
6. This project is an addition to an existing facility. The mechanical plans indicate existing items to the extent that information and prior plans were available. Verify all field conditions and notify engineer of any necessary deviations or issues.
7. Coordinate with site work per Civil Plans.
8. Coordinate with general (prime) contractor (GC) for what items are to be provided and connected by which subcontractor.
9. Do not scale mechanical drawings. Verify and coordinate light fixtures, conduits, framing, structure, furnishings, etc., in field and across other divisions prior to procurement or commencement of work. Architectural and structural drawings shall govern all dimensions.
10. All contractors shall be licensed and experienced with the systems, performance levels, and construction types indicated in the plans and specifications prior to bidding.
11. All Contractors and Subcontractors shall be thoroughly knowledgeable in their part of the construction and shall perform in a responsible manner with customary construction sequence, shall recognize the priority of the construction documents, and shall notify the general contractor in writing of potential problems when the construction documents are unclear or inconsistent.
12. Subcontractors shall be responsible to notify the prime contractor of discrepancies or conflicts in the construction documents or as-built conditions discovered during bidding and/or prior to performing the work.
13. Items not indicated on the plans or specifications, including but not limited to some designs and details for fire suppression, plumbing, HVAC, hose bibbs, drains, bracing, hangers, attachments, controls, junctions, splices, and other items necessary for the project, shall be designed and provided by the licensed contractors installing their own work per State laws.
14. All equipment shall meet or exceed 2022 Title 24 Part 6 Prescriptive and Mandatory efficiencies and requirements. All other portions of the work shall be designed and installed to comply with the 2022 Title 24 code series.
15. All products shall be selected and capable of performance at project altitude of 6,000'.
16. All products shall be provided, braced and installed to comply with USCIB/CBCB Chapter 16 seismic requirements.
17. Sugarpine Engineering (SPE) assumes, through its designs, specifications, observations, or by any other means, no responsibility for the prevention, reduction or elimination of microorganisms, legionella, chemicals, particles, molecules or debris (collectively substances) in air, water or other building systems, or control potential risk factors for human health. Additionally, SPE cannot guarantee security of the project, including but not limited to entry, forced entry, filtration, air quality, equipment reliability, frost protection, or other means of protection, explicit or implied.
18. Examinations of bidding documents:
- A. GC shall make the entire set of bid documents available to every subcontractor and vendor during the bidding period. Every subcontractor shall examine the bidding documents carefully, and not later than seven (7) days prior to bid submission, GC shall make written request to the owner for interpretation or correction of any discrepancies, ambiguities, inconsistencies, or errors therein which he may discover. The owner or architect will issue any interpretation or correction as an addendum. Only a written interpretation or correction by addendum shall be binding. No bidder shall rely upon interpretations or corrections given by any other method. If discrepancies, ambiguities, inconsistencies, or errors are not presented by the contractors in writing, contractor shall include in his bid, labor materials and methods of construction to provide the highest cost option in question. After award of contract, no allowance or extra compensation will be made on behalf of the contractor due to his failure to make the written requests described above.
- B. Failure to request clarification during the bid period of any inadequacy, omission, or conflict will not relieve the contractor of his responsibilities. The signing of the contract implicitly denotes that the contractor has a thorough comprehension of the full intent and scope of the construction contract drawings and specifications.
19. Provide base bid with basis-of-design or listed equivalent products. Make and model named on any schedule or note is the basis-of-design. Other manufacturers listed (if any) are considered equivalents subject to matching the features and specifications of the basis-of-design.
20. Manufacturers not listed by name are considered substitutions and must be submitted with a "substitution request" highlighting variances from the basis-of-design and indicating cost or schedule savings. Substitutions may require additional design fees to review and/or accommodate. Substitutions will be considered only after bid award and will be considered only if there is a proposed schedule or cost savings. Contractor assumes all responsibility for delays and costs incurred due to review and/or accommodation of substitutions.
21. Contractor is responsible for all coordination of equivalents and substitutions, in addition to review and/or redesign fees. Where contract documents permit selection from several equivalents, or where substitutions become authorized, coordinate clearance and interface requirements with all divisions.
- A. Provide necessary additional items so that selected or substituted item operates equivalent to the basis-of-design and properly fits in the space allocated for the basis-of-design.
- B. Provide all features which are standard on the basis-of-design plus any specified options.
- C. Be responsible for assuring that piping, conduit, duct, flue, and other service locations for equivalents or substitutions do not cause access, service, or operational difficulties any greater than would be encountered with the basis-of-design.
22. Work shall be performed in a workmanlike manner to the satisfaction of the architect, owner, and engineer.
23. Materials, minor details, and/or equipment not scheduled on plans shall be identified by the subcontractor with sufficient time to allow selection, purchase, and delivery to maintain construction schedule.
24. All work of all trades shall meet or exceed the minimum materials, means and methods requirements of the 2019 Title 24 California Building Code Series, National Electrical Code, most current NFPA, all local ordinances and amendments and manufacturer's installation recommendations. Perform diligent review of these requirements prior to bidding. If a conflict between these publications and/or the construction documents exists, the most expensive requirement shall be included in base bid, and a written request for clarification shall be submitted.
25. Pay for and secure all required permits and inspections. Coordinate with GC. Provide all documentation to owner at project completion, prior to final pay application.
26. All materials and/or equipment shall be new and shall be handled and installed per manufacturer's specifications and recommendations.
27. Coordinate and overlay civil, architectural, structural, mechanical, fire protection, electrical, landscaping, and interior design drawings prior to installation.
28. Provide equipment to match electrical voltages, phase, breakers, controls, and capacities scheduled and/or available. Any deviation is considered a substitution subject to fees and terms above.
29. Field-verify exact locations of existing and new aboveground and underground utilities, piping, and roadway systems prior to trenching. Notify engineer immediately upon discovery of any discrepancy from the plans.
30. Provide necessary trenching, backfill, excavation, supports, saw cutting and patching, concrete/paving, etc., as required. Backfill trenches in 6" layers and to 90% compaction and patch to match grade.
31. Submittals:
- A. Number of copies: per Division 01, or 5 copies if not specified. Alternate: PDF.
- B. Submit all mechanical shop drawings and product data at one time. Submittals shall each be bound and indexed according to major system/type: dry HVAC, wet HVAC, plumbing, controls, fire protection, etc. Partial submittals will be rejected. Submittals shall be for equipment and materials for this project and shall include, but not be limited to: boilers, furnaces, pumps, fans, fixtures, insulation, diffusers, piping, valves, controls, and fire protection, as such occurs in this project.
- C. Failure to submit, order, or release order for materials and/or equipment will not be accepted as a reason to substitute materials, equipment, or installation methods.
- D. Submit record documents (as-builts) to architect. Documents shall include all addenda, instructions, directives, approved change orders, alterations, re-routings, etc.
32. Warranty:
- A. Guarantee the installation against defects in materials and workmanship. Labor warranty shall be for a period of one year, superseded by Division 01 completion, prior to final pay application.
- B. All warranties shall commence on the day of owner's acceptance. Defects shall be promptly remedied without cost to the owner.
33. Field observations may be periodically conducted by SPE, for the sole purpose of reviewing progress and quality of work completed by the Contractor which falls within SPE's scope of design services. Observation is not intended to be an exhaustive check or a detailed inspection of the Contractor's work but rather to allow SPE to become generally familiar with the work in progress and to determine, in general, if the work is proceeding in accordance with the Contract Documents. SPE assumes no responsibility for concealed work, construction means, methods, techniques, quality, sequences or procedures utilized by the Contractor, nor for the Contractor's safety precautions or programs, nor for acts or omissions of the Contractor, nor for the Contractor's failure to perform work in accordance with the Contract Documents or any applicable laws, codes, rules or regulations.
34. Systems shall be complete, operable, and ready for continuous operation prior to acceptance by the owner.
35. Offset piping, ductwork, etc. as necessary to accommodate such obstacles as structure, beams, columns, and/or equipment. Record and submit all field changes.
36. Mount all wall-hung operator controls (stats, dials, etc) so top-of-box is 48" AFF in "accessible" areas, 54" AFF in other areas. Provide boxes for all devices, mounting directly to drywall not allowed. Coordinate location and type of trim with wall finish. Avoid casework, moldings, trim, furniture, heat sources, sunlit and exterior walls. Notify engineer of any conflicts prior to beginning box rough-in.
37. Fire stopping requirement. Penetrations through rated walls and floors shall be sealed with a material capable of preventing the passage of flames and hot gasses when subjected to the requirements of the test standard specific for fire stops ASTM-E-814. Acceptable materials include: Dow Corning RTV fire stop foam for bare pipe and metal conduit, and elastical cable; 3M fire dam 150 caulk for bare pipe, metal conduit, and building construction gages; 3M CP-25 caulk and FS-185 intumescent strips for insulated pipes, plastic pipe or conduit, and electrical cable. Submit UL Listed application data for each type of penetration encountered. Select and apply all fire-stopping materials in strict accordance with the mfr's written instructions and UL listings.
38. Ducts, piping, and conduits penetrating through roof shall have roof flashing compatible with the roofing system. See architectural drawings. In the absence of any other requirements, provide sheet lead type flashing for plumbing vents in built-up roofs, tall cone with EPDM boot for pipe and conduit in single ply membrane roofs, and curved roof penetrations in all types of roof. Installation shall be watertight.

39. Systems shall be tested for proper operation. Perform at a minimum all code required tests or systems. If tests of work are defective, contractor shall make corrections necessary at no additional cost to owner.
40. Test-Adjust-Balance (TAB):
- A. Provide certified AABC TAB as part of base bid. Contractor shall be accredited by AABC. Balancing procedures shall be in accordance with AABC guidelines for proportional balances. Submit TAB report on standard AABC forms or equivalent forms with same data.
- B. Initiate TAB only after systems are installed, operational, and being controlled.
- C. Measurements shall include: all motor amperage and voltage readings; motor and fan RPM; water flow at all flow measurement stations; inlet and outlet pressure at pumps with flow calculated from the pump curve; and water flow at all manifolds and branch loops.
- D. Adjust VFDs, ECMs, controls, valves, and programming as necessary. Fully coordinate with controls contractors.
- E. Adjust flows to within 10% of listed quantity. If any flow is more than 10% low, investigate cause, attempt to rectify and notify engineer of cause. Submittal of balance report with less than required flows without explanation is cause for rejection.
41. Pipe materials:
- A. All pipes, fittings, and plumbing fixtures in contact with the potable water system shall be listed as NSF-61 lead-free.
- B. Gas pipe within building, above grade: Schedule 40 black steel pipe, 150 lb, malleable iron threaded fittings. Welded fitting on all pipes larger than 4".
- C. Gas pipe below grade outdoors: SDR11 or higher, ASTM-D2513 PE gas pipe with heat-fusion or mechanical fittings listed for the application. Include 12-gauge tracer wire (HMWPE or HDPE jacket) listed for direct-bury. OR detectable marking tape listed and labeled for the application. THHN not allowed. Join all fittings per pipe mfr's instructions. Min. 18" cover.
- D. Gas pipe below grade outdoors (short lengths): PVC or epoxy-bonded, UPC Listed, Schedule 40 black steel. Completely wrapped and sealed with PVC outdoor-listed pipe protection tape wherever coating is damaged. Min. 18" cover.
- E. Gas pipe below building or under outdoor concrete slabs: Same gas carrier pipe, but add: PVC or epoxy-bonded, UPC Listed, Schedule 40 black steel containment conduit vented at building exterior. Completely wrapped and sealed with PVC outdoor-listed pipe protection tape wherever coating is damaged. Comply with NFPA 54.
- F. Gas valves: Non-lubricated ball or plug valve with resilient seats, AGA and UL Listed for natural gas service.
- G. Hydronic piping:
- 1) Above grade, up through 2-1/2": Schedule 40 steel pipe with malleable iron threaded fittings, or Type "L" copper tube with wrought copper fittings and 95-5 no lead solder.
- 2) Above grade, 3" and larger: schedule 40 steel pipe with cast iron or steel welding fittings.
- 3) Below grade or where concealed: Factory-insulated PEX, InsuPEX, R-Flex, or equivalent.
- H. Snowmelt and/or radiant floor tubing:
- 1) All tubing to be cross-linked polyethylene (PEX) with an oxygen diffusion barrier. Tubing to be rated for continuous operation of 100 psig and a temperature suitable for the specific application. Factory manifolds shall be equipped with loop valves and zone valves per controls requirements. Systems shall be capable of withstanding temperatures 180-degree F to 230 degree F for limited periods of time. Install piping and manifold in accordance with the manufacturer's recommendations.
- 2) Install remote air vent with access panel for any loop that is higher in elevation than the serving manifold.
- 3) Snowmelt tubing sizes and spacing shall be per plans.
- I. Drain and receptor piping:
- 1) Combustion Condensate (Concealed or Buried): Schedule 40 solid-wall PVC pipe with solvent welded DWV fittings. Provide neutralization systems as recommended by combustion appliance manufacturer. Connect to plastic waste system, or for cast iron downstream of nearest regularly used fixture.
- 2) Combustion Condensate (Exposed): Type L copper tube with DWV wrot copper fittings and 95-5 no lead solder. Provide neutralization systems as recommended by combustion appliance manufacturer. Connect to plastic waste system, or for cast iron downstream of nearest regularly used fixture.
- 3) Non-combustion Drains (Concealed or Buried): Schedule 40 solid-wall PVC pipe with solvent welded DWV fittings. Connect to nearest sink tailpiece or use trapped air gap fitting.
- 4) Non-combustion Drains (Exposed): Type L copper tube with DWV wrot copper fittings and 95-5 no lead solder. Connect to nearest sink tailpiece or use trapped air gap fitting.
- 5) Hydronic Pipe (indoors, above ground) insulation thermal conductivity shall be k=0.25-0.29, 1.5" thickness for pipe size 1½" and smaller, 2" thickness for pipe sizes 2" and larger per Title 24, Part 6, Section 120.3. Fiberglass, preformed pipe insulation with factory-applied white, all service jacket (ASJ) and SSL.
- 6) Exterior water or hydronic piping: 2" thick elastomeric preformed pipe insulation with 2" lapped and sealed seams. Provide corrugated aluminum manufactured pipe jacket with 4" overlapped seams. Install additional G90 sheet metal jacket in any place pipe is subject to snow/ice impact, foot traffic, or other hazards. Use pre-formed insulation components for pipe fittings, where available.
- 7) All materials shall have a smoke developed rating of 25 or less and a flame spread rating of 25 or less.
42. Piping execution:
- A. Support pipe with rod and clevis, ring hangers, trapeze, or clamps. No "plumber's tape" or strapping allowed for pipes larger than ¾". All hangers shall be sized for O.D. of insulation, if any.
- B. Pipe insulation shall pass uninterrupted through hangers. 2" and larger: install cellular glass or calcium silicate inserts where pipes pass through hangers. 1.5" or smaller: 20ga sheet metal saddles.
- C. Vapor barriers shall be continuous and sealed with non-breathing mastic on cold piping. All raw edges of insulation shall be neatly trimmed and sealed with mastic.
- D. Isolate bare copper pipes from hangers with Vibrastop or equivalent, copper coated hangers are not sufficient, wrapping pipe with tape not allowed.
- E. Provide a dielectric union at each connection between dissimilar metals.
- F. Refer to plumbing fixture connections schedule for pipe sizes to individual plumbing fixtures.
- G. Provide expansion joints or loops on all above ground chilled, snowmelt and heating water piping runs in excess of 50 feet and in accordance with the manufacturer's recommendations.
- H. Fill snowmelt system with 50% propylene glycol/water solution.
- I. Grade and valve all snowmelt water piping with ¾" hose end valves to permit complete drainage of the system. Vent all high points in equipment rooms as necessary with automatic air vents piped to convenient drain. All high points in system outside of equipment rooms with combination automatic/manual air vents as required to relieve air in the system.
- J. Provide plastic grommets on all piping passing through beams, joists and studs.
43. Equipment labels: label all piping and equipment. Provide full band or strip type markers and flow arrows on piping. Provide engraved plastic valve tags with valve number and attach with standard chain or S-hooks. Provide engraved plastic sign on or near specified equipment. Rivet or screw tags to equipment, but do not damage equipment.
44. All products and systems shall be UL Listed, and installed to comply with the UL listings.
45. All wiring shall be in listed, metallic (EMT) raceways.
- A. Controls under 50 Volts: Raceways by EC, wiring by MC. MC responsible to coordinate this requirement to the EC and GC for base bid.
- B. All systems over 50 Volts: Raceways and wiring by EC.
46. Refer to the submitted and approved Title 24 Part 6 Certificates of Compliance, hereby incorporated by reference.
47. Prior to rough mechanical inspections, Contractor shall complete and provide all applicable Title 24 Certificates of Installation (NRCI).
48. Prior to final mechanical inspections, Contractor shall complete and provide all applicable Title 24 Certificates of Acceptance (NRCIA). Provide Acceptance Test Technician services in base bid.
49. Comply with all requirements indicated in the NRCC documents.
50. Comply with and provide all required HERS Rater testing indicated in the Title 24 energy compliance documents. Provide all required HERS Rater services in base bid.

ABBREVIATIONS & ACRONYMS			
(E) Existing	DFU Drainage Fixture Unit	IE Invert Elevation (Bottom of Pipe)	RP Reduced Pressure
(N) New	IWC Inches Water Column	RPBFP Reduced Pressure Backflow Preventer	
A Amperes, Amps	DIAG Diagram	ISO Isolation, Isolator	RPM Revolutions per Minute
ABS Acrylonitrile Butadiene Styrene	DN Down	JT Joint Trench	RTN Return
ADA Americans with Disabilities Act	DT Differential Temperature	KBTU 1,000 Btu	SA Supply Air
ADJ Adjustable	DX Direct Expansion Refrigerant	LAT Leaving Air Temperature	SEER Seasonal Energy Efficiency Ratio
AFJ Above Finished Floor	EA Exhaust Air	LAV Lavatory	SF Square Feet
AFG Above Finished Grade	EAT Entering Air Temperature	LPG Liquefied Petroleum Gas (Propane)	SI Sea Level
AFUE Annual Fuel Utilization Efficiency	EC Electrical Contractor	LRA Locked Rotor Amps	SS Sanitary Sewer
AGF Air Gap Fitting	ECM Electrically Commutated Motor	LWT Leaving Water Temperature	SUP Supply
ALT Altitude	ED Electrical Division	MAT Mixed Air Temperature	T24 Title 24 (California)
APD Air Pressure Drop	EEF Energy Efficiency Ratio	MBH 1,000 Btu per Hour	TEMP Temporary, Temperature
ASSE American Society of Sanitary Engineering	EFF Efficiency	MC Mechanical Contractor	TFR Transfer
ATD Air Temperature Differential	EPA Environmental Protection Agency, US	MCA Minimum Circuit Ampacity	THERM 100,000 Btu
BMS Building Automation System	EWT Entering Water Temperature	MD Mechanical Division	TPV Trap Primer Valve
BOD Building Draft Damper	MFQ Manufacturing	MFG Manufacturer	TV Typing
BPF Below Finished Floor	FBO Furnished By Others/Owner	NFR Manufacturer	UL Underwriters Laboratory
BFG Below Finished Grade	FC Fan Coil	MG Medium Pressure (2psl) Gas	UNO Unless Noted Otherwise
BFP Backflow Preventer	FCO Floor Cleanout	MGF Management	UPC Uniform Plumbing Code
BHP Brake Horsepower	FD Floor Drain	MOCP Max Overcurrent Protection	V Volts
BMS Building Management System	FKT Fixture	NA Not Applicable	VAR Variable
BMS Building Management/Automation System	FLA Full Load Amps	NG Natural Gas (Methane)	VFD Variable Frequency Drive
BTU/hour	FREQ Frequency	NIC Not In Contact	VIB Vibration
CA Combustion Air	FS Floor Sink, Fire/Smoke	OD Opposed Blad Damper	VOC Volatile Organic Compound
CFM Cubic Feet per Hour	FT Feet	OC On Center	VSD Variable Speed Drive
CFH Cubic Feet per Minute	GA Gauge	CCC Occupancy	VTR Vent Through Roof
CHT Circuit	GC General/Prime Contractor	OSA Outside Air / Ventilation Air	W Waste, Watts
CLG Coiling	GEO Geological, Geochange, Earth	PE Polyethylene	WC With
CO Cleanout	GPH Gallons Per Hour	PEX Cross-linked Polyethylene	WCO Wall Cleanout
COMB Combustion, Combination	GPM Gallons Per Minute	PH Phase	WSFU Water Supply Fixture Unit
COC Concentric, Concrete	GSHD Ground Source Heat Pump	PRV Pressure Reducing Valve	WTD Water Temperature Differential
COP Coefficient of Performance	HOA Hand-Off-Auto	PSI Pounds per Square Inch	WWHP Water to Water Heat Pump
COTG Cleanout To/At Grade	HP Heat Pump, Horsepower	PVC Polyvinyl Chloride	
CW Cold Water	HW Domestic Hot Water	RA Return Air	
DDC Direct Digital Control	HWC Domestic Hot Water Recirculation	RLA Running Load Amps	
	Hz Hertz		

PIPE SYMBOLS, DEVICES & PLAN TAGS		
SMS SNOWMELT SUPPLY	PW PRESSURIZED WASTE	REDUCED PRESSURE BACKFLOW PREVENTER
SMR SNOWMELT RETURN	ST STORM DRAIN	PIPE ANCHOR
HWS HEATING WATER SUPPLY	ST(OF) STORM DRAIN OVERFLOW	PIPE EXPANSION JOINT
HWR HEATING WATER RETURN	SO SAND AND OIL WASTE	FLEXIBLE CONNECTOR
SHS SOLAR HEATING WATER SUPPLY	JB BUTTERFLY VALVE	SAFETY RELIEF VALVE
SHR SOLAR HEATING WATER RETURN	SHUT OFF VALVE (BALL, BUTTERFLY)	AIR VENT
G STD PRESSURE GAS	GLOBE VALVE	PRESSURE - TEMP. TAP
MG MEDIUM PRESSURE 2 PSI GAS	CK CHECK VALVE	PRESSURE GAUGE W/ EXTENSION & COCK
D DRAIN (NON SEWER)	FC FLOW CONTROL VALVE	THERMOMETER
PC PUMPED CONDENSATE	B BALL VALVE	VACUUM BREAKER
GF GLYCOL FEED	P PLUG OR BALANCING VALVE	FLOOR/GRADE CLEANOUT
RFS RADIANT FLOOR SUPPLY	F FLOW BALANCING VALVE	CLEANOUT CAP
RFR RADIANT FLOOR RETURN	P PLUG VALVE IN RISER	FLOOR DRAIN
RS REFRIGERANT SUCTION	B BALL OR GLOBE VALVE IN RISER	FLOOR SINK, FULL/HALF GRATE
RL REFRIGERANT LIQUID	B BALL DRAIN VALVE W/ HOSE END	ROOF DRAIN
-- CW DOMESTIC COLD WATER	TEMPERATURE CONTROL VALVE	STRAINER W/ BLOW-OFF VALVE
-- HW DOMESTIC HOT WATER	PRESSURE REDUCING VALVE	SHOCK ARRESTOR
--- HWC DOMESTIC HOT WATER CIRCULATION	VENTURIFLOW INDICATOR	FLOW SWITCH
F FIRE LINE	SOLENOID VALVE	HOSE BIBB
W WASTE PIPE	PUMP & EQUIPMENT CONNECTOR	WALL HYDRANT
V PLUMBING VENT PIPE	PIPE UNION	RADIANT MANIFOLD

CONTROLS SYMBOLS			
CD CARBON DIOXIDE SENSOR	SP STATIC PRESSURE SENSOR	AIRFLOW MEASURING STATION	CP CONTROL PANEL / MODULE
CO CARBON MONOXIDE SENSOR	EPO EMERGENCY POWER OFF SWITCH	TE AVERAGING TEMPERATURE SENSOR	
VOC GAS VOC AND/OR COMBUSTIBLE GAS SENSOR	CS CURRENT SENSOR	TE MOTOR STARTER	
STAT THERMOSTAT OR ROOM SENSOR	RH RELATIVE HUMIDITY SENSOR	TE RELAY	
SLAB TEMPERATURE SENSOR	RLY RELAY	TE VARIABLE SPEED/FREQUENCY (AC) DRIVE	
HUMIDISTAT OR ROOM SENSOR	SO SOLENOID VALVE	ECM ELECTRICALLY COMMUTATED (DC) MOTOR	
3-WAY CONTROL VALVE	2-WAY CONTROL VALVE	BI BO AI AO DDC POINTS (ANALOG, BINARY, IN, OUT)	
FLOW SWITCH	DIFFERENTIAL PRESSURE TRANSMITTER	B MANUAL SWITCH	
SK SMOKE DETECTOR			

INSTALLATION NOTES

1. All potable water piping shall be Type L hard copper tube with no-leak solder joints. See specifications. Submit cost savings if PEX is proposed. Note that Sugarpine Engineering does not recommend substituting PEX for hot-re-circulating potable water due to potential health concerns.
2. All exposed pipes, ducts and materials shall be metallic or shall be suitably wrapped to meet applicable flame spread requirements. No exposed plastic pipe, insulation, duct or wiring is allowed.
3. Appliance flues shall be UL Listed for the application.
4. Floor-mounted equipment shall be on concrete housekeeping pads.
5. Coordinate with GC and all other trades prior to all installations.
6. If equipment connection is smaller than duct or pipe size indicated, then duct or pipe shall be full size to within 6" of equipment connection. All elbows and fittings shall be the full size.
7. Not all expansion loops, guides and anchors are shown on drawings. Contractor shall be responsible to provide all expansion piping loops not shown, as defined by the specifications and other project documentation.
8. Locations of existing services on drawings are approximate. Refer to diagrams and related floor plan sheets, and field verify all actual locations.
9. Fully coordinate locations for all work with all trades prior to procuring or installing any equipment or materials. Notify GC of any adjustments between trades.
10. Provide factory trained and qualified technicians for startup and commissioning of the new equipment in this project. Submit completed startup reports to the Engineer for acceptance.
11. Upon completion of functional testing of the snowmelt system and before project turnover, GC and MC shall coordinate with Owner's maintenance staff for a full demonstration of the snowmelt system operation and routine maintenance items.

GENERAL NOTES

1. See specifications for additional information.
2. These plans intend to describe only Mechanical parts of the work, shown as thick lines, and as noted. They do not intend to describe or convey information about any other work or parts of the project. Other work is shown for reference only as thin & light lines. Refer to applicable civil, architectural, structural, electrical, etc. (Other Divisions) for designs and information related to those other items or systems.
3. All control wiring shall be in metallic (EMT) raceways, unless otherwise noted on plans. Raceways by EC, wiring by MC. MC responsible to coordinate this requirement to the EC and GC for base bid.
4. All standalone, factory, and equipment-provided controls are considered part of the controls system for the project. Each device shall have its programming and settings adjusted by the Controls Contractor, and shall be integrated with the building's overall controls, if applicable. See control sequences for more information.
5. Sugarpine Engineering is available (for additional fees) to assist with the contractor's production of controls wiring and component diagrams, controls configurations, selection of components, shop drawings, or similar detailing.
6. Contractor shall be responsible for unauthorized deviations from the designs and information indicated in these plans and specifications, and shall request approval from SPE in writing before any deviation is made. Lack of SPE's approval shall result in the Contractor assuming responsibility as the designer-of-record for the deviation and its related impacts.
7. Contractor shall include applicable Acceptance Test and before project turnover. GC and MC shall coordinate with Owner's maintenance staff for a full demonstration of the snowmelt system operation and routine maintenance items.
8. Project Altitude: 6,000'

DEMOLITION & REMODEL SYMBOLS

- DISCONNECT FROM EXISTING
- CONNECT TO EXISTING
- THIN LINES = EXISTING
- THICK LINES = NEW
- DASHED OR HATCHED = REMOVE, OR AS NOTED

DOCUMENT OWNERSHIP AND USE

1. These plans and specifications are professional Instruments of Service (Original Work) and shall remain the Intellectual Property of Sugarpine Engineering, Inc. (SPE) whether or not the project is executed.
2. No changes, alterations, additions, or deletions shall be made without the express written consent of SPE.
3. Instruments of Service shall not be used or reproduced, in whole or in part, by anyone for other projects, for additions to this project, or for completion of this project by others, without the express written consent of SPE.
4. Submission or distribution to meet regulatory requirements, or for other purposes in connection with this project, shall not be construed as publication in derogation of the rights of Sugarpine Engineering, Inc.

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TERMINAL SNOWMELT
10356 Truckee Airport Rd.
Truckee, CA 96161

APN: 019-440-068-000

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02-11-2025

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For Permit

SCALE

See Plan

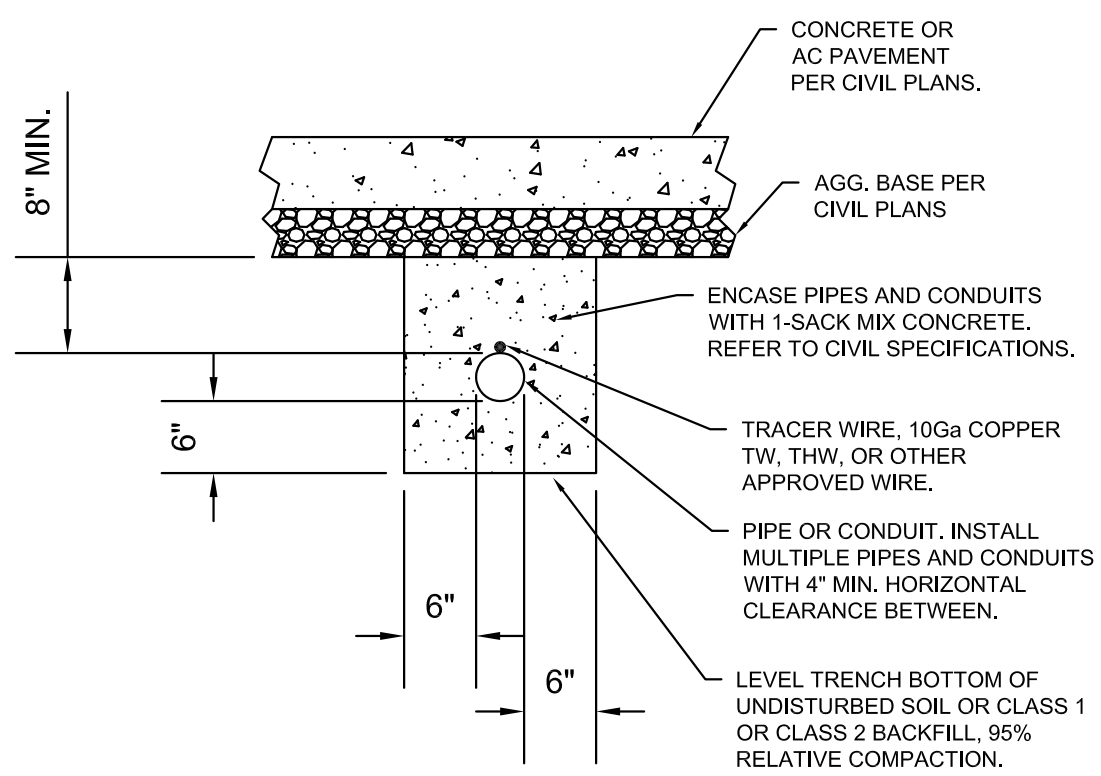
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MECHANICAL LEGENDS AND NOTES

SHEET NO.

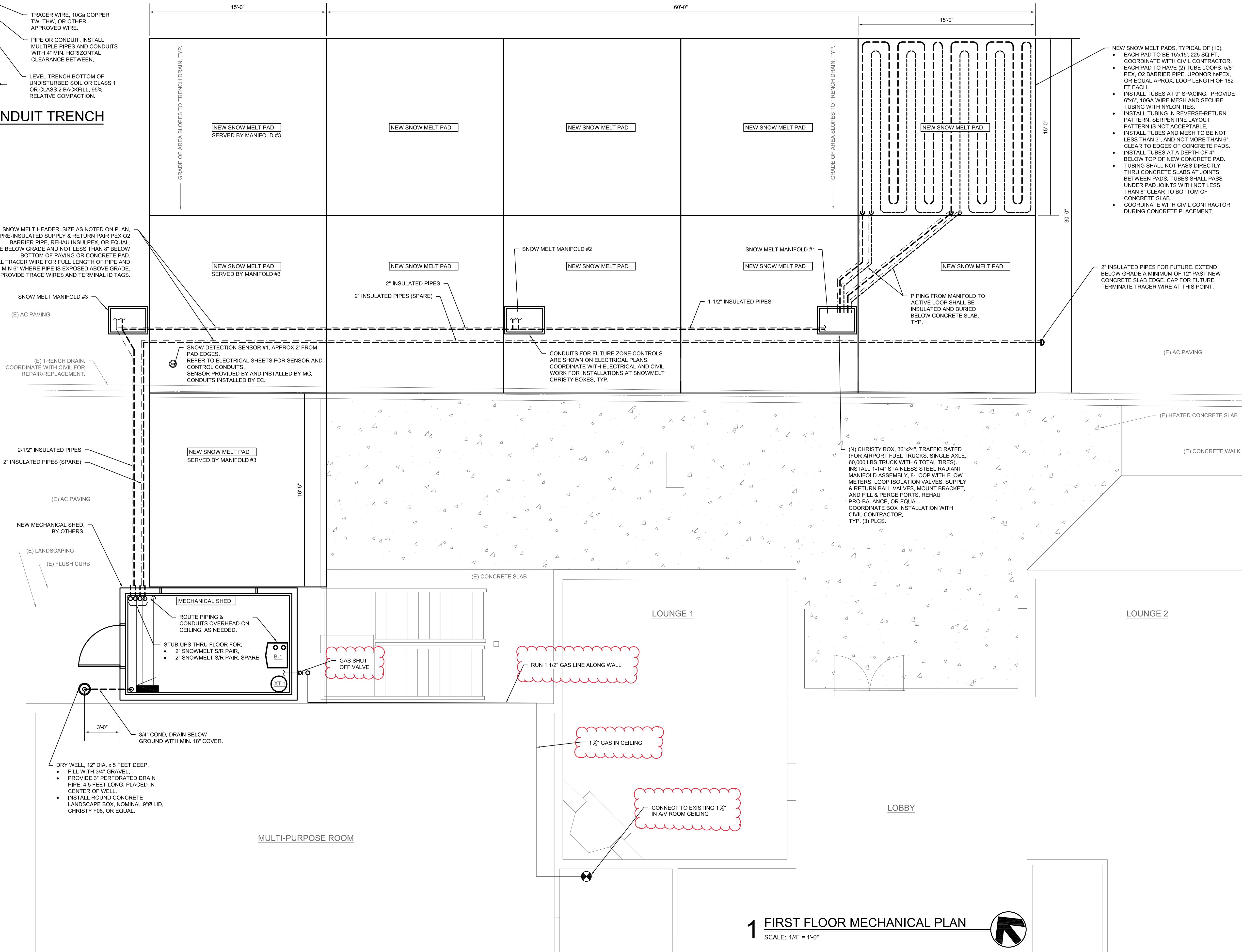
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ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.



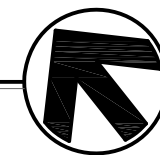
2 TYPICAL PIPE AND CONDUIT TRENCH

SCALE: NONE



1 FIRST FLOOR MECHANICAL PLAN

SCALE: 1/4" = 1'-0"



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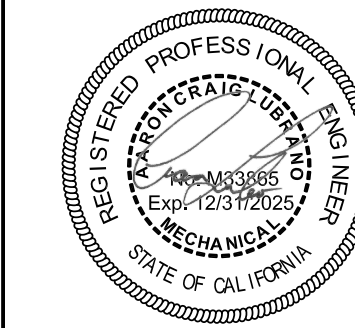


12710 Northwoods Blvd Ste 3
Truckee, CA 96161
530-214-0859

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SHEET NAME	

SNOWMELT PLAN

SHEET NO.

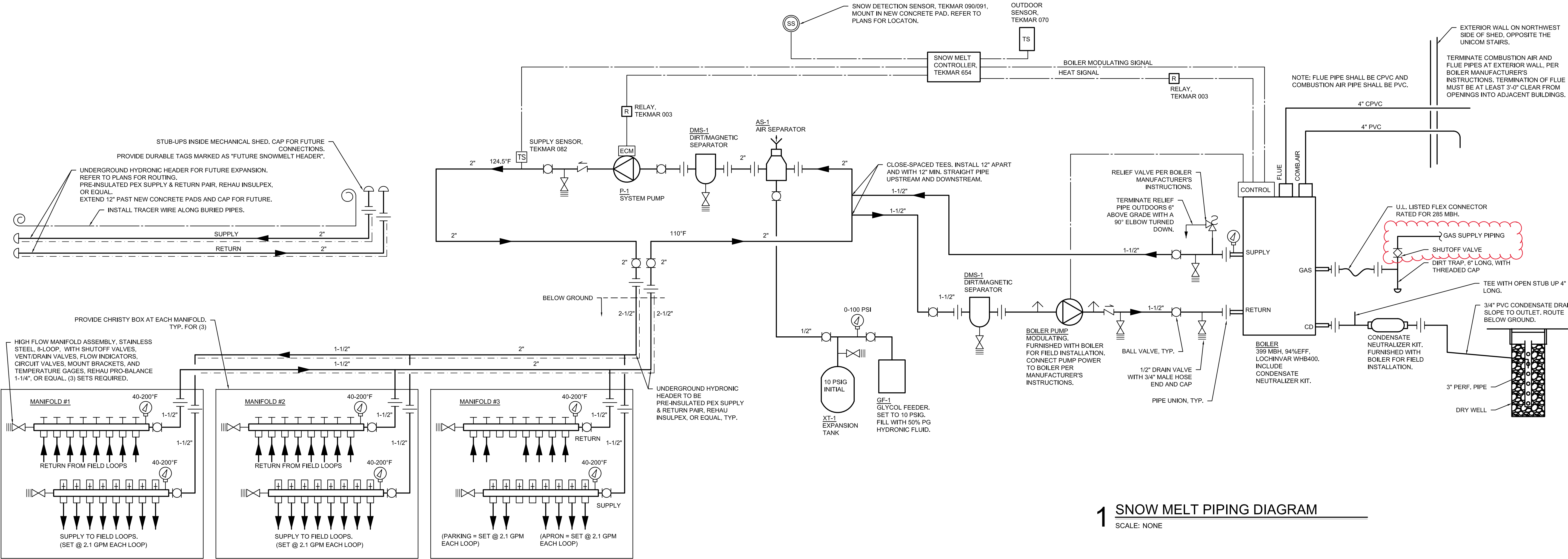
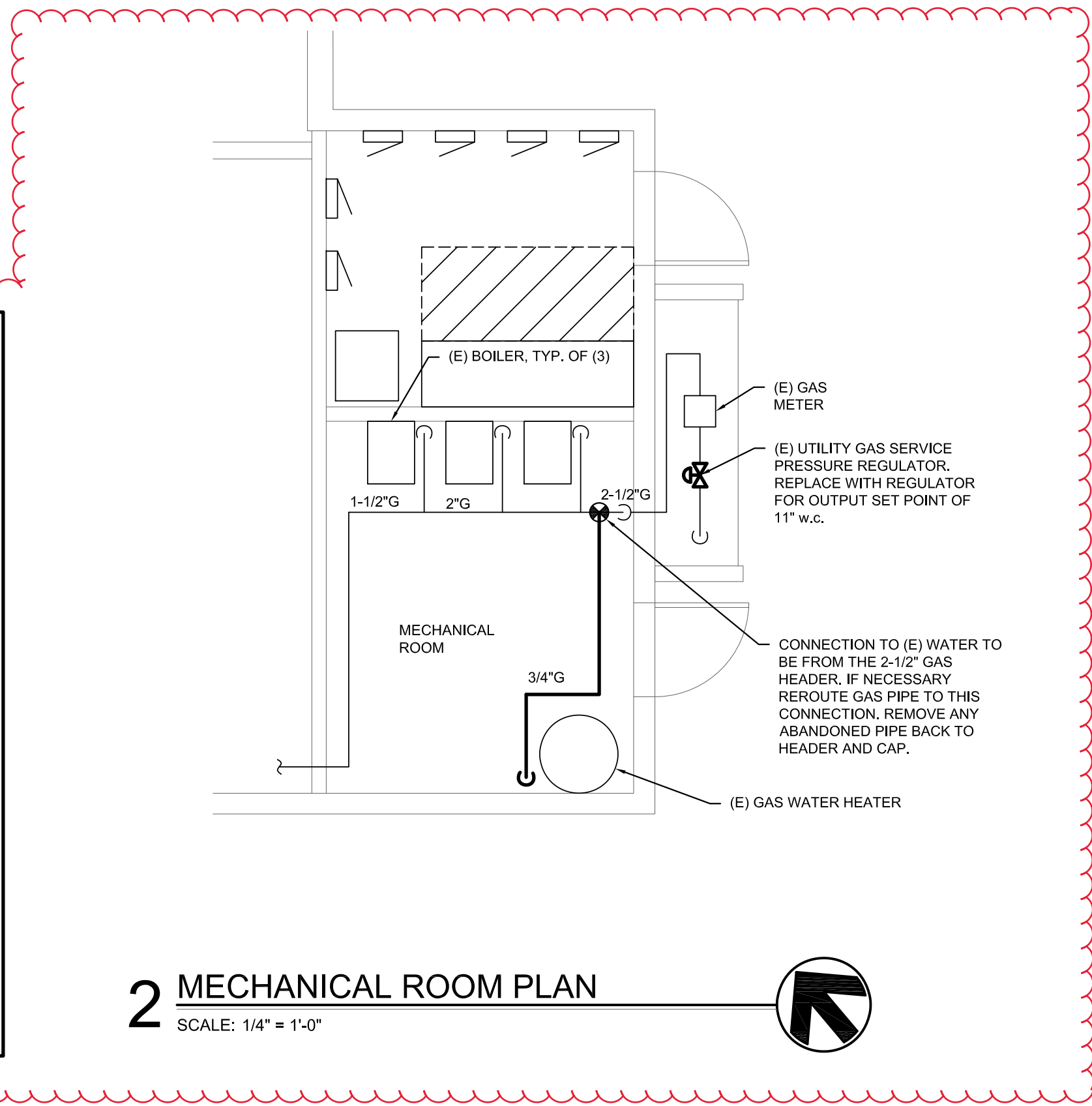
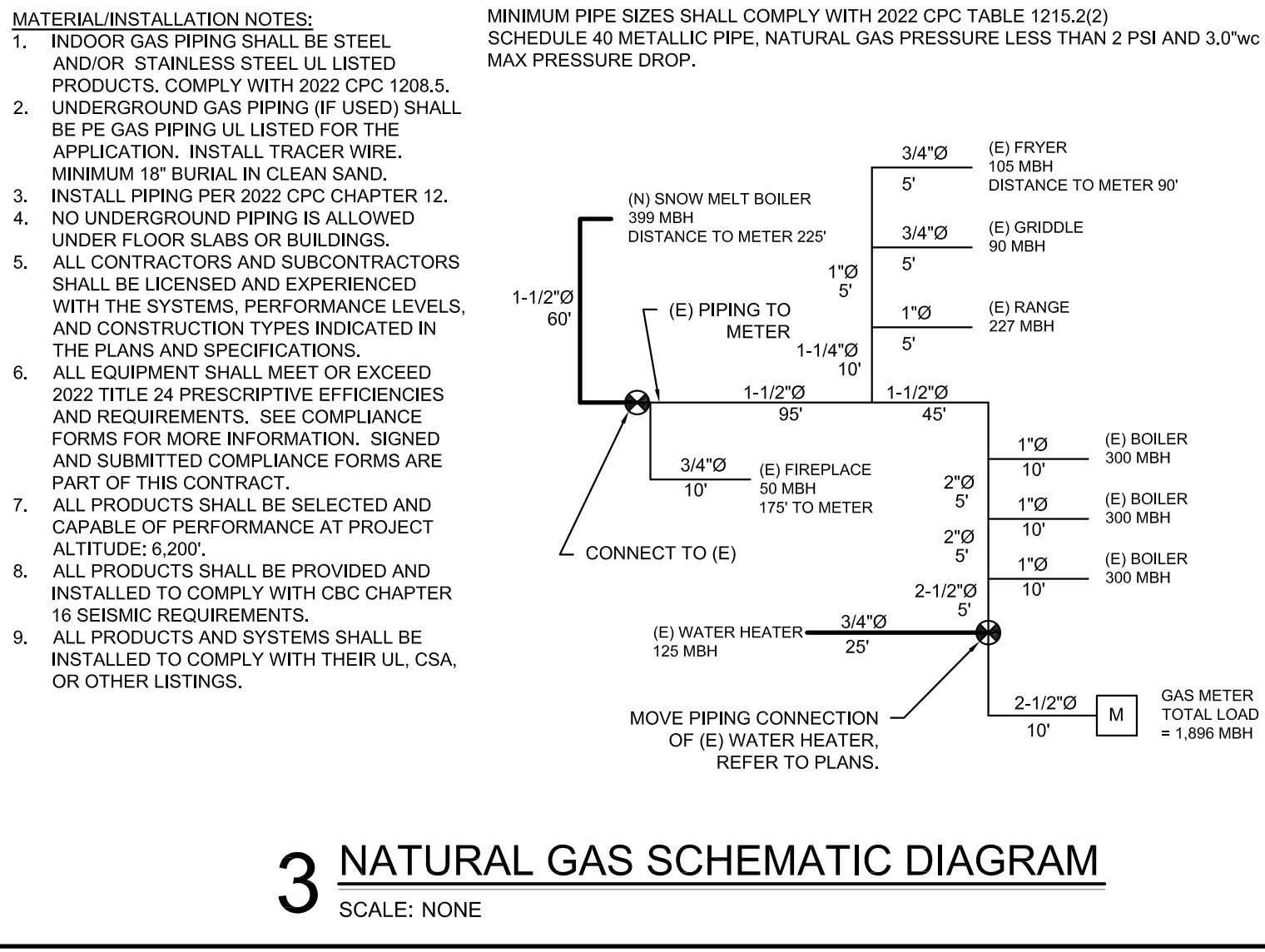
M1.1

ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.

BOILER SCHEDULE																	
MARK	SERVICE	BOILER TYPE	FUEL TYPE	HEATING CAPACITY			FLUID	DESIGN FLOW (GPM)	L.W.T. (°F)	E.W.T. (°F)	ELECTRICAL		VENT TYPE	APPROX. OPER. WEIGHT (LBS)	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
				INPUT @ S.L. (MBH)	OUTPUT @ ALT.	MINIMUM EFF.					MCA	VOLT/ PH					
B-1	SNOW MELT	CONDENSING GAS	N.G.	399	375	94 %	50% PG	25	116	80	4.5	120 / 1	CPVC	213	LOCHINVAR, WHB399N	FACTORY FURNISHED CIRCULATOR PUMP, CONDENSATE NEUTRALIZER KIT.	-

MISCELLANEOUS MECHANICAL EQUIPMENT SCHEDULE									
MARK	SERVICE	TYPE	CAPACITY	ELECTRICAL		APPROX. OPER. WEIGHT (LBS)	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
				AMP	VOLT/ PH				
AS-1	AIR SEPARATOR	-	2"	-	-	5	CALEFFI, 551 (2") BRASS		
DMS-1	DIRT SEPARATOR WITH MAGNET	-	SIZE AS NOTED	-	-	5	CALEFFI, 5463 (SIZE AS NOTED IN DIAGRAM)		
GF-1	GLYCOL FEEDER	-	4.5 GALLON	50W	120 / 1	50 LBS FULL	AXIOM, DMF150	POWER SUPPLY, MOUNTING BRACKET	0-45 PSIG SETPOINT RANGE.
XT-1	HYDRONIC EXPANSION TANK	DIAPHRAGM	20 GAL ACCEPTANCE	-	-	84 LBS DRY, 250 LBS FULL	WESSELS, NTA-40	-	-

PUMP SCHEDULE												
MARK	SERVICE	TYPE	GPM	TDH (FT)	FLUID	MOTOR			APPROX. OPER. WEIGHT (LBS)	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
						HP	RPM	VOLT/ PH				
P-1	SYSTEM PUMP	WET ROTOR CIRCULATOR	47	40	50% PG	610 W	VARIABLE	115 / 1	40	GRUNDFOS, MAGNA3 40-180F	FLANGE SET TO 1-1/2" NPT	CAST IRON BODY, ECM, PROGRAMMABLE SPEED CONTROL, SET TO CONST-PRES.



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SHEET NO.

M2.1

ELECTRICAL SPECIFICATIONS

ABBREVIATIONS

LIGHTING FIXTURE SYMBOLS

LIGHTING CONTROL SYMBOLS

LIGHTING CONTROL SYMBOLS

DEMOLITION & REMODEL SYMBOLS

///

ELECTRICAL INSTALLATION NOTES

- DOCUMENT OWNERSHIP AND USE

DOCUMENT OWNERSHIP AND USE

- GENERAL NOTES

GENERAL NOTES

POWER SYMBOLS

ONE-LINE DIAGRAM

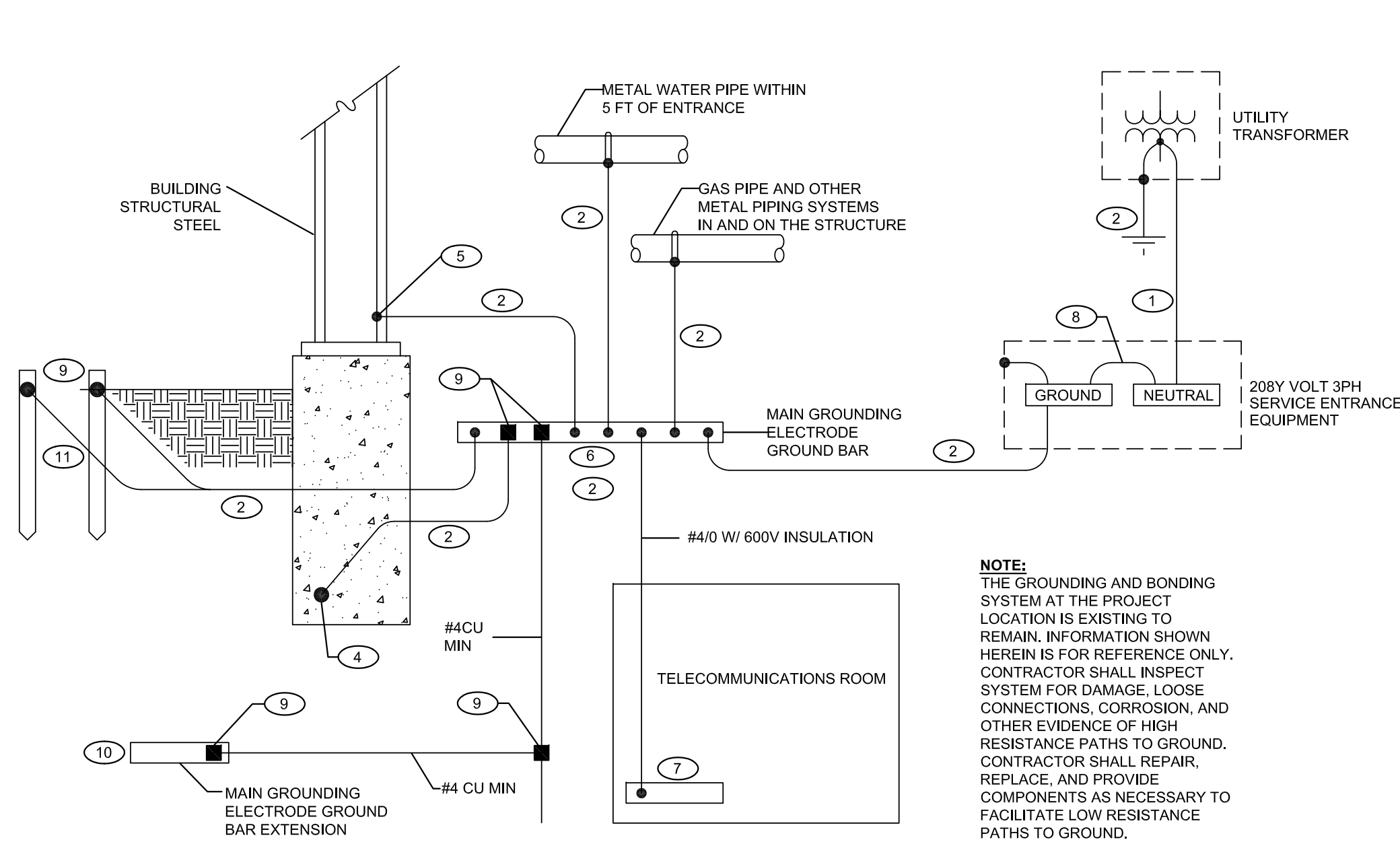
DESIGN-BUILD PARTS OF THE PROJECT

- ### EQUIPMENT AVAILABILITY NOTICE

EQUIPMENT AVAILABILITY NOTICE

These drawings are Instruments of Service and intellectual property of Sugarpine Engineering, Inc. (SPE), a California Corporation. They are not suitable for use on any other project, and shall not be otherwise used without the written permission of SPE.

ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.



2 GROUNDING & BONDING DIAGRAM

SCALE: NO SCALE

KEYED NOTES

- ① INSTALL GROUNDING (NEUTRAL) CONDUCTOR SAME SIZE AS THE LARGEST PHASE CONDUCTOR.
- ② INSTALL GROUNDING ELECTRODE CONDUCTOR, SIZED BASED ON NEC TABLE 250.66 USING THE SERVICE PHASE CONDUCTOR SIZE, BUT NOT SMALLER THAN #4 AWG.
- ③ INSTALL EQUIPMENT GROUNDING CONDUCTOR SIZED BASED ON NEC TABLE 250.122 USING THE FEEDER OVERCURRENT PROTECTION DEVICE SIZE.
- ④ INSTALL A CONCRETE-ENCASED MAIN GROUNDING ELECTRODE IN THE BUILDING FOUNDATION AROUND THE PERIMETER OF THE BUILDING EMBED AT LEAST 2' OF ELECTRODE IN THE BOTTOM 1/3 OF THE FOUNDATION WITH AT LEAST 3 INCHES OF CONCRETE COVER. USE EITHER OF THE FOLLOWING MATERIALS FOR THE ELECTRODE:
 BARE COPPER CABLE NOT SMALLER THAN THE GROUNDING ELECTRODE CONDUCTOR REQUIRED BY THE NEC AND NOT SMALLER THAN NO. 4.

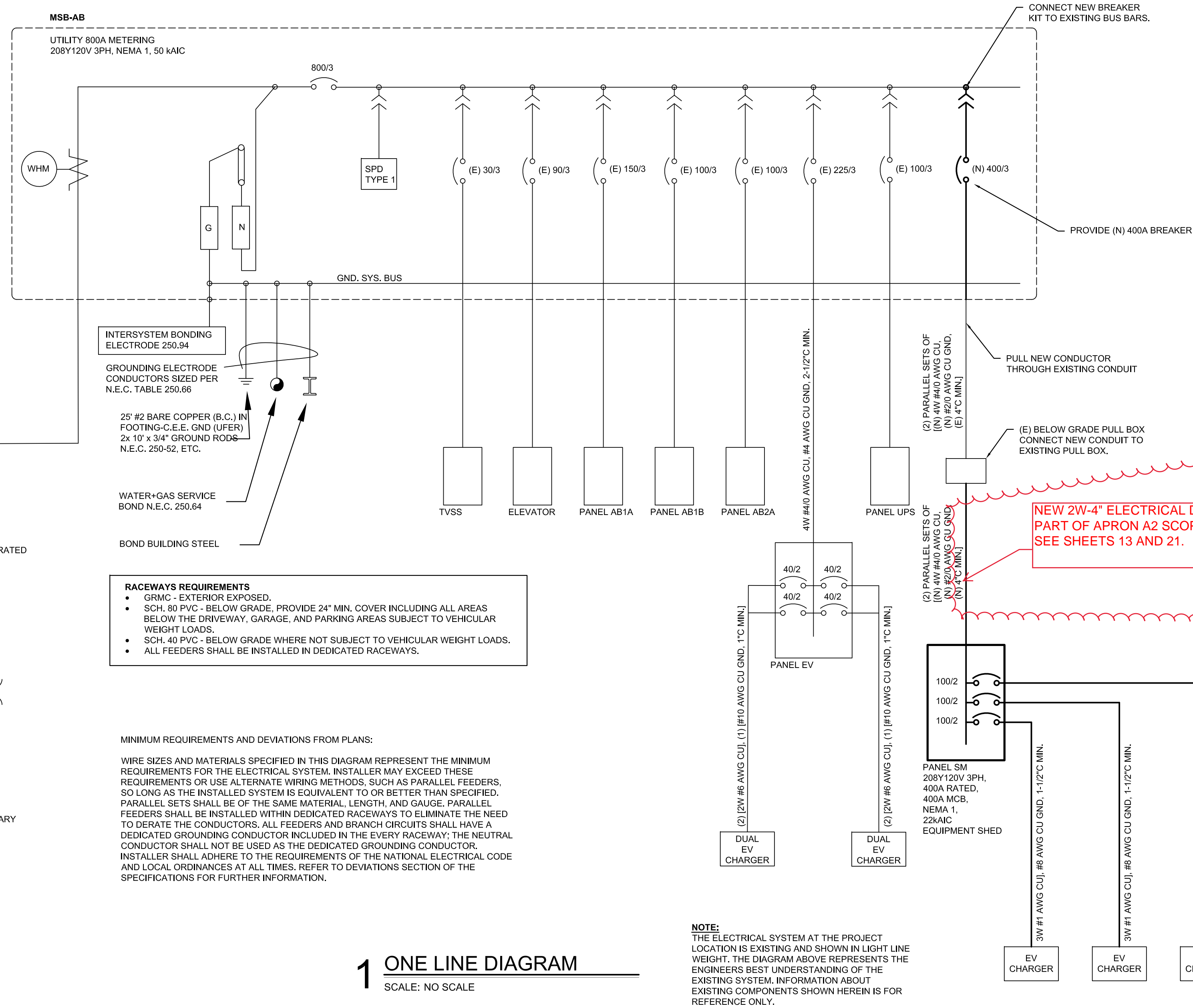
BARE OR GALVANIZED REBARS THAT ARE MADE ELECTRICALLY CONTINUOUS USING COPPER JUMPERS NOT SMALLER THAN THE NEC REQUIRED GROUNDING ELECTRODE CONDUCTOR AND NOT SMALLER THAN NO. 4, USE REINFORCING BARS NOT SMALLER THAN THE FOLLOWING BASED ON THE TOTAL LENGTH OF THE INTERCONNECTED AND PARALLELED REBARS:

TOTAL LENGTH	MINIMUM REBAR SIZE
112 FT	1 3/8" (#11 BAR)
150 FT	1" (#8 BAR)
192 FT	3/4" (#6 BAR)
223 FT	5/8" (#5 BAR)
268 FT	1/2" (#4 BAR)

- 5 BOND EACH PERIMETER STRUCTURAL STEEL COLUMN TO THE CONCRETE-ENCASED MAIN GROUNDING ELECTRODE. USE COMPRESSION CONNECTORS THAT MEET IEEE 837 REQUIREMENTS OR USE EXOTHERMIC WELDS.
- 6 INSTALL A "MAIN GROUND ELECTRODE GROUND BAR" FOR SINGLE POINT GROUNDING. LOCATE AT AN ACCESSIBLE POINT NEAR THE SERVICE ENTRANCE EQUIPMENT. MAKE CONNECTIONS TO THE GROUND ELECTRODE CONDUCTOR USING IRREVERSIBLE CONNECTORS OR EXOTHERMIC WELDS. MAKE OTHER CONNECTIONS TO THE GROUND BAR USING TWO-HOLE COMPRESSION SPACE LUGS THAT MEET IEEE 837 REQUIREMENTS. LABEL EACH CONNECTION TO THE GROUND BAR.
- 7 INSTALL A COPPER GROUNDING BAR IN EACH TELECOMMUNICATIONS ROOM. CONNECT TO THE "MAIN GROUNDING ELECTRODE GROUND BAR" USING 600V INSULATED #4/0 AWG COPPER CABLE AND COMPRESSION SPACE LUGS.
- 8 INSTALL MAIN BONDING JUMPER WIRE THAT IS SIZED BASED ON NEC TABLE 250.102(C)(1) FOR EACH APPLICATION PER NEC 250.28(D).
- 9 INSTALL IRREVERSIBLE COMPRESSION CONNECTOR WITH TAMPER-PROOF HARDWARE OR INSTALL EXOTHERMIC WELD.
- 10 AUXILIARY GND BUSES IN PANELS, GENSET, ETC. SIZE CONDUCTOR PER NEC 250.122, #4 AWG CU MINIMUM.
- 11 INSTALL (2) 10" x 3/4" COPPER GROUND RODS. SUPPLEMENTAL ROD SHALL BE INSTALLED NO LESS THAN 6" FROM THE PRIMARY ROD. BOTH RODS SHALL BE DRIVEN TO A DEPTH OF NO LESS THAN 8'.

SERVICE ENTRANCE RATED

(E) TDPUD PRIMARY



1 ONE LINE DIAGRAM

SCALE: NO SCALE

PANEL SM 208 Y/ 120_VOLT 3PH 4 WIRE										400 AMPERE MAIN			CB : 400 AMPERE BUS									
LOCATION Mechanical Shed					MOUNTING Surface							A.I.C. 22kA										
CIRCUIT NUMBER	LOAD			CIRCUIT TYPE L=LM LME=LM	LOAD DESCRIPTION	CIRCUIT BREAKER			BUS	CIRCUIT BREAKER			LOAD DESCRIPTION	CIRCUIT TYPE L=LM LME=LM	LOAD			CIRCUIT BREAKER				
	LINE A	LINE B	LINE C			POLE	TRIP	A		B	C	TRIP			POLE	LINE A	LINE B		LINE C			
1	8320			E	Ford Chargers (L)	2	100	+		20	1			Conv. Recs (G)	R	360			2			
6		8320			Ford Chargers (L)	2	100	+	+	20	1			Lighting (G)	L		480		2			
7			8320	E	Ford Chargers (L)	2	100	+	+	20	1			Boiler (G)	E			1200	6			
7	8320				"	-	100	+	+	20	1			Service Receptacles (G)	R	360			8			
9		8320		E	Ford Chargers (L)	2	100	+	+	30	2			Eave Ice Melt (GF)	E	500			10			
11			8320		"	-	100	+	+	30	-						500		12			
13					Space									Space					14			
15					Space				+					Space					16			
16					Space				+	+				Space					18			
17					Space									Space					20			
21					Space									Space					22			
23					Space									Space					24			
25					Space				+	+				Space					26			
27					Space					+	+			Space					28			
29					Space						+	+		Space					30			
16840	16840	16840												Space			720	980	1700			
SUB TOTALS																						
CIRCUIT TYPE DESCRIPTION: L=LIGHTING, R=RECEPTACLE, M=MOTOR, LM=LARGEST MOTOR, E=EQUIPMENT, A=APPLIANCE, S=SUBFEED PANEL															PANEL LINE VA					17360	17620	18340
NEC ADDER															FEED THRU LOAD							
TOTAL LINE VA															17					18	18	
LINE AMPS															145					147	153	
TOTAL VA LOAD															53.3							
FEEDER AMPS															148.0							

NOTES:
NEMA 1
Provide GFCI breakers indicated by (G) and 30mA GFEF breakers indicated by (GF).
Provide locking lugs to circuit breakers indicated by (L).
Refer to NEC Load Calculation for demand loads.

LIGHTING FIXTURE SCHEDULE									
MARK	TYPE	MFR	MODEL	MOUNTING	LAMP TYPE	ACCESSORIES	REMARKS	VOLT AMPS	VOLTS
L1	LINEAR	LITHONIA	LBL2 2000LM 80CRI 35K MIN10 G2T MVOLT	SURFACE	HIGH EFFICACY LED			17	120
W1	SCONCE	WAC	WS-W190208-30-BK	WALL	HIGH EFFICACY LED			6	120
MANUFACTURERS: LITHONIA, JUNO, COOPER, PHILIPS, RAB, WAC									
GENERAL NOTES:									
A:	PROVIDE BID BASED ON THE BASIS-OF-DESIGN PRODUCTS. SUBMIT ALTERNATES FOR REVIEW; MAY REQUIRE ARCHITECT APPROVAL IN ADVANCE.								
B:									

GENERAL NOTES:

A:	PROVIDE BID BASED ON THE BASIS-OF-DESIGN PRODUCTS. SUBMIT ALTERNATES FOR REVIEW; MAY REQUIRE ARCHITECT APPROVAL IN ADVANCE
----	--

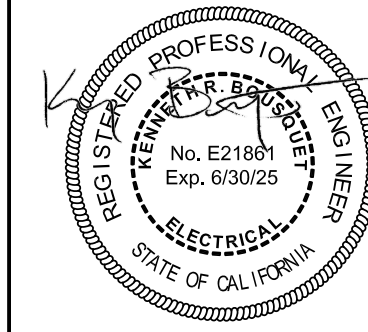
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**TRUCKEE TAHOE AIRPORT
TERMINAL SNOWMELT**
10356 Truckee Airport Rd,
Truckee, CA 96161

10356 Truckee Airport
Truckee, CA 96161

APN: 019-440-068-000

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02-11-2025

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DATE	02-11-2025
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SCALE

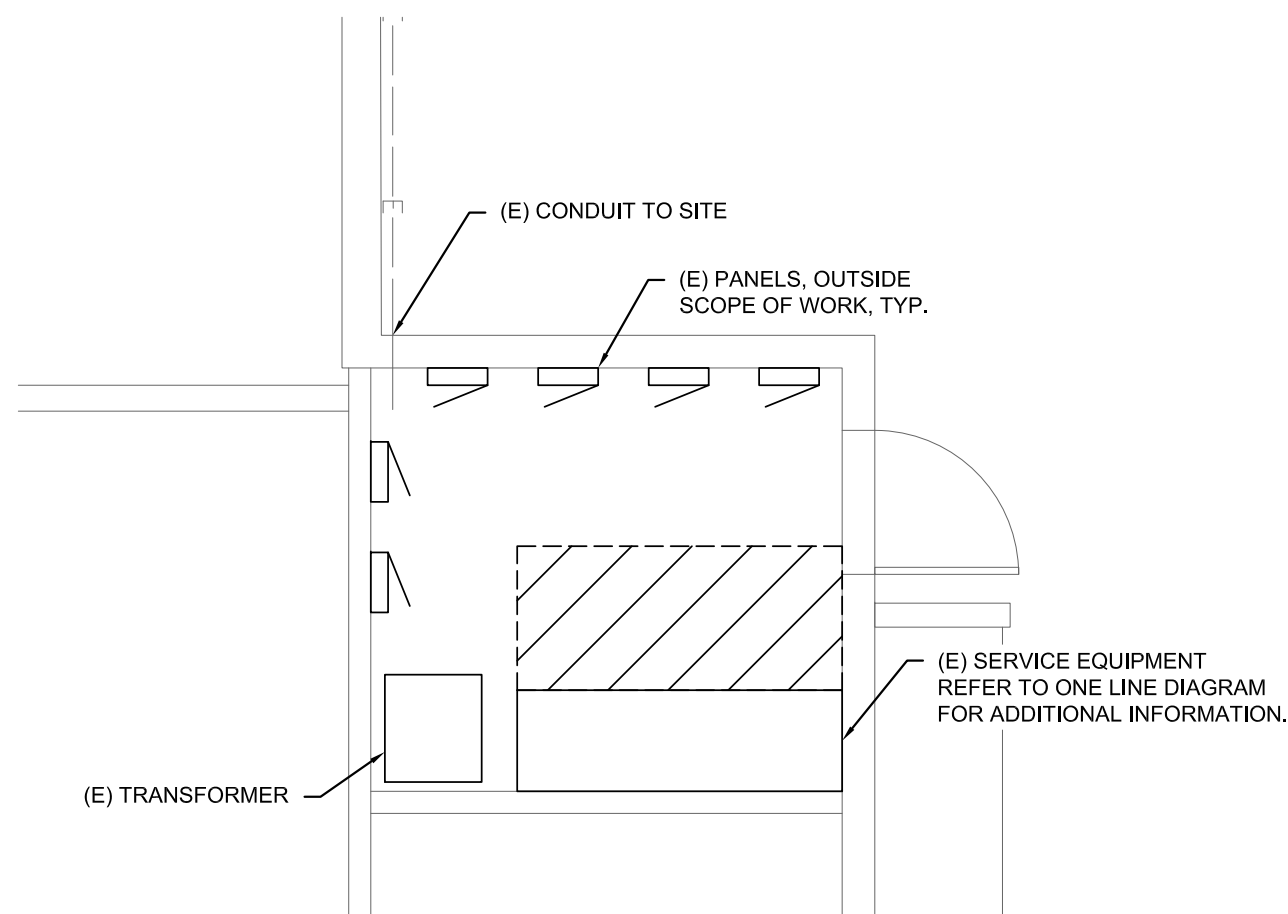
See Plan

ONE-LINE DIAGRAM

SHEET NO.

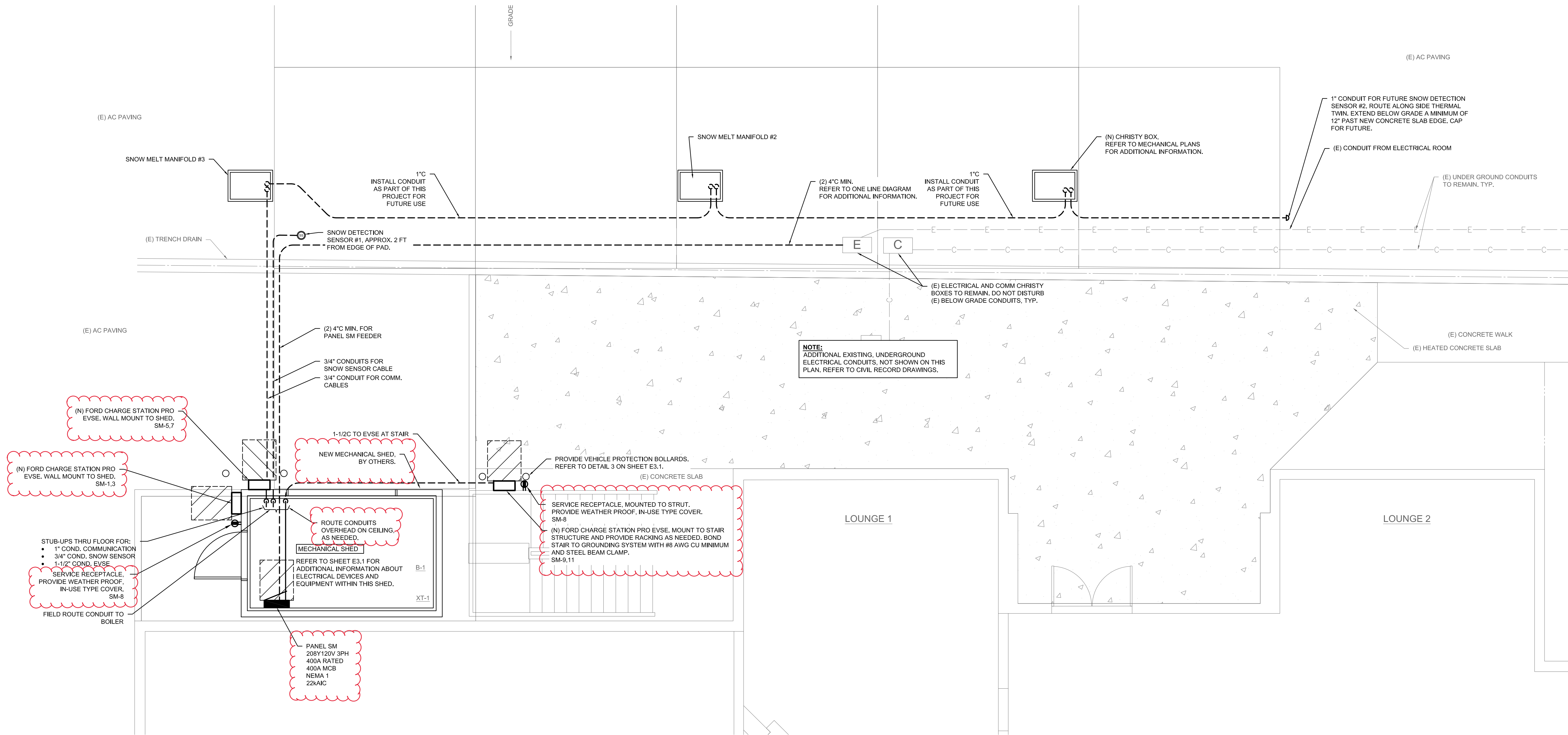
E1.1

ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.



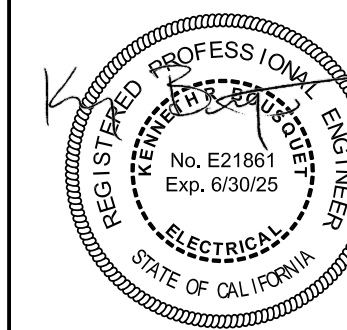
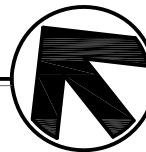
2 ELECTRICAL ROOM POWER PLAN

SCALE: 1/4" = 1'-0"

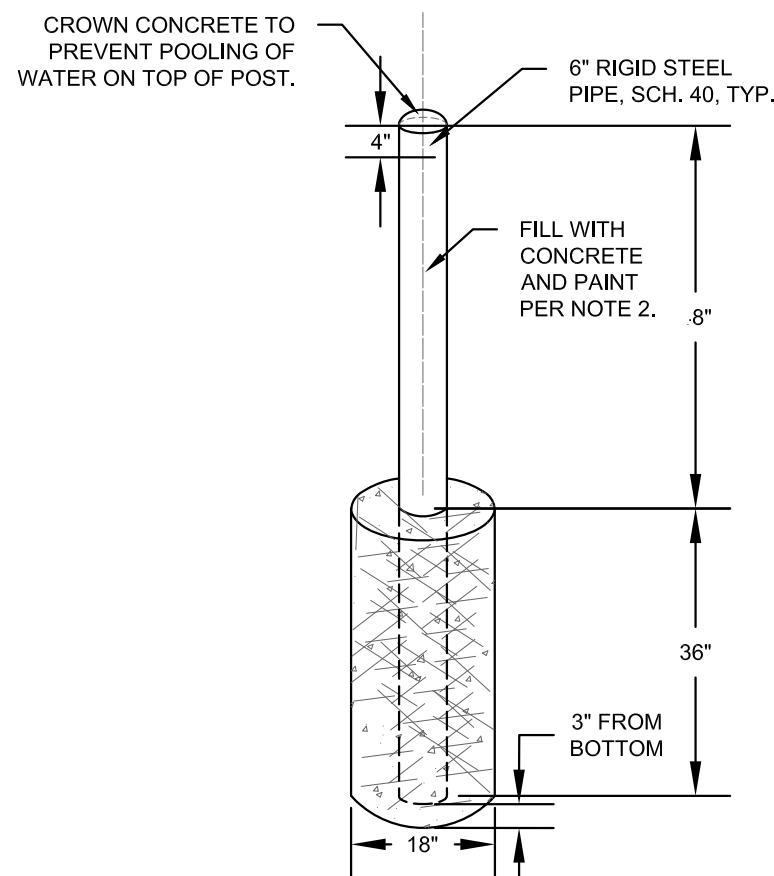


1 OVERALL POWER PLAN

SCALE: 1/4" = 1'-0"



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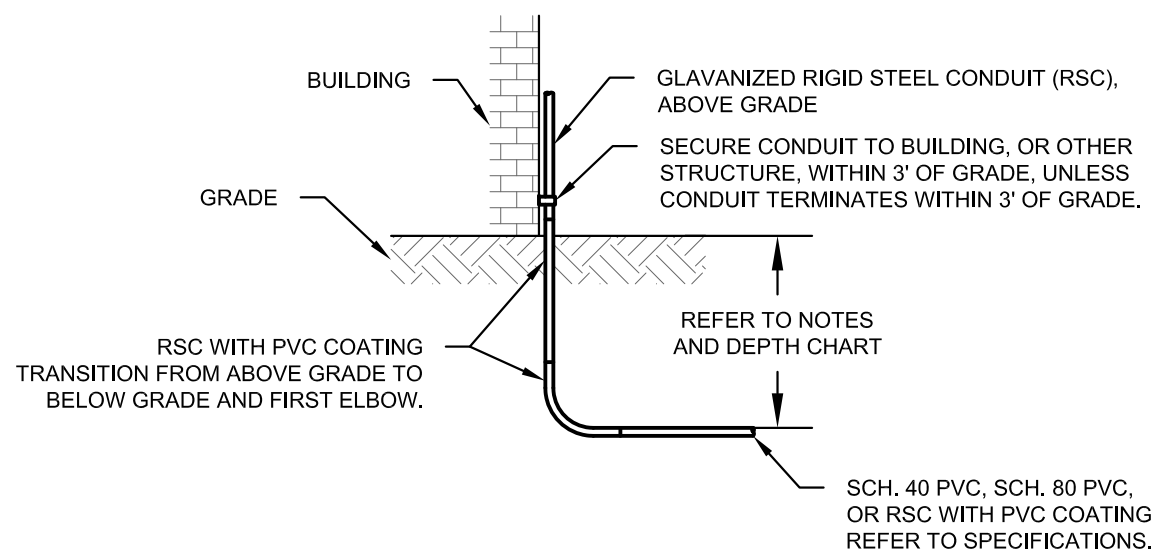
3 PERMANENT POST DETAIL

SCALE: NO SCALE

INSTALLATION NOTES:

1. ON SLOPES, SET POSTS SUCH THAT THE TOPS OF ALL POSTS ARE LEVEL WITH EACH OTHER. THE SHORTEST POST SHALL BE 48" ABOVE GRADE.
2. POST SHALL BE PAINTED WITH (2) COATS OF EXTERIOR RATED PAINT. WHERE POSTS PROTECT UTILITY EQUIPMENT, PAINT SHALL BE TRAFFIC LINE YELLOW PAINT.

DEPTH CHART	
DEPTH	CONDUIT DESCRIPTION
18" MIN.	NO VEHICLE TRAFFIC ABOVE
24" MIN.	VEHICLE TRAFFIC ABOVE

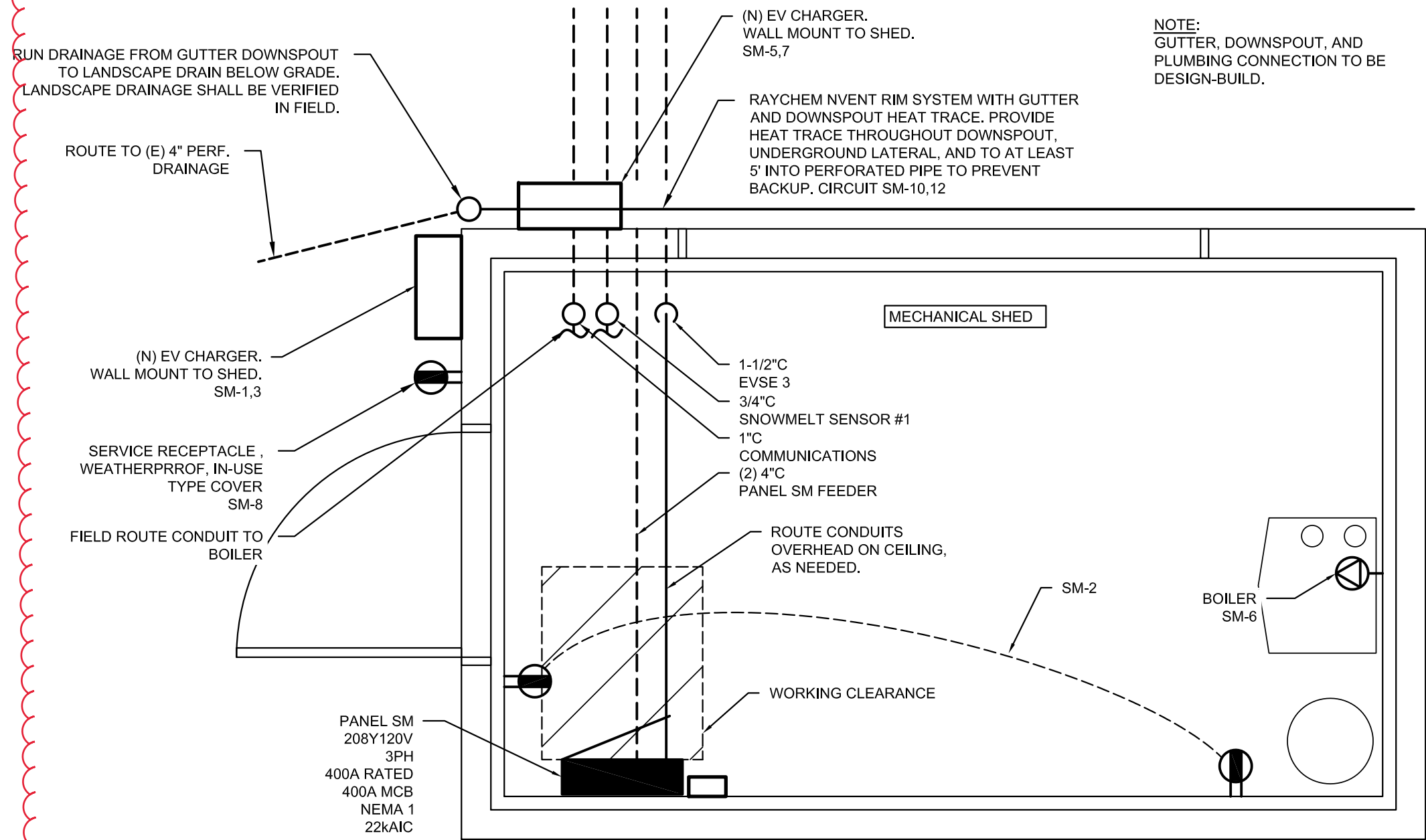


4 CONDUIT RISER DETAIL

SCALE: NO SCALE

NOTES:

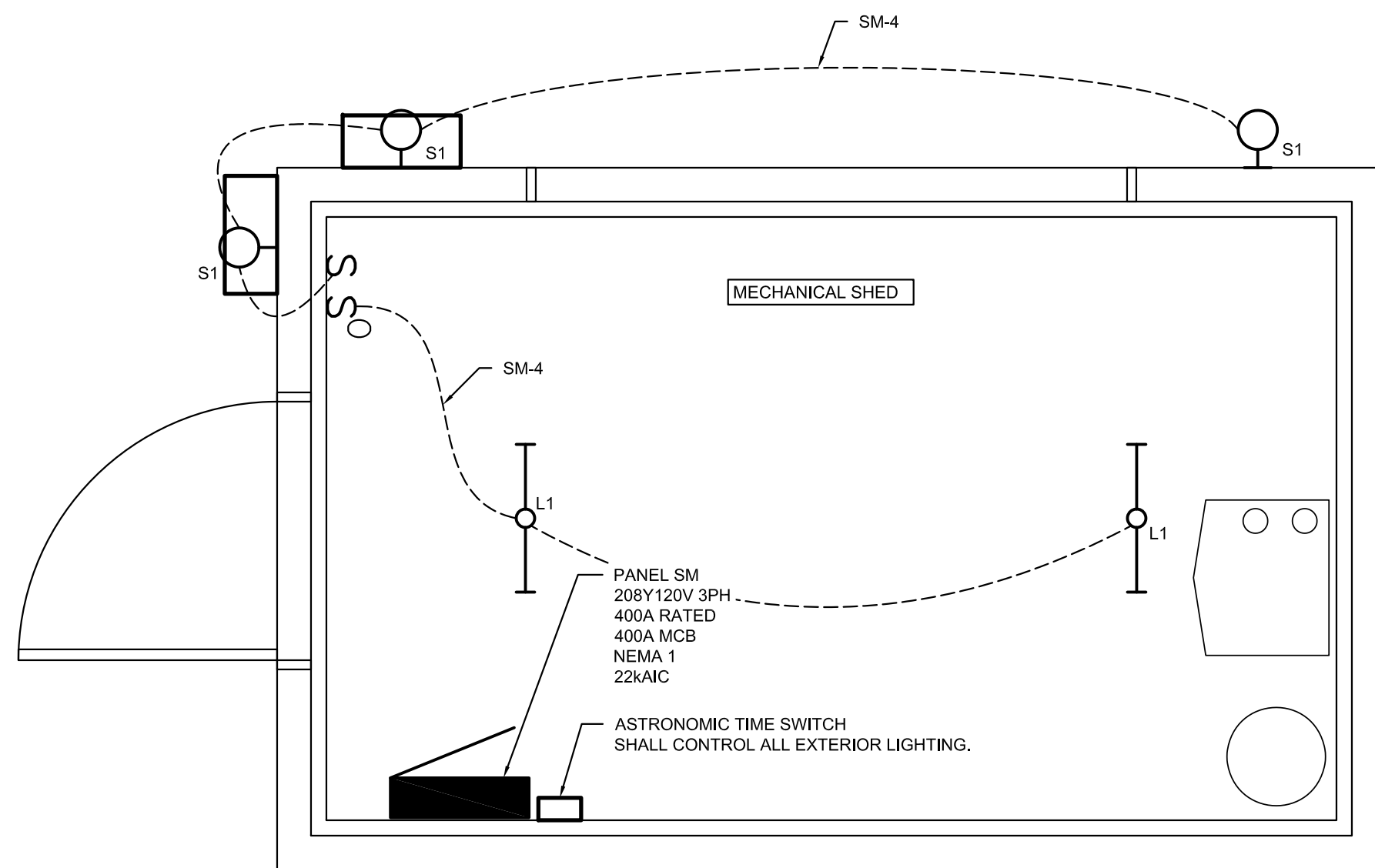
1. UTILITY REQUIREMENTS SHALL GOVERN WHERE WORK IS RELATED TO UTILITY SERVICE LATERAL.
2. CONDUIT BURIAL DEPTH SHALL NOT BE LESS THAN THE DEPTH OF THE FROST LINE, UNLESS RIGID FOAM INSULATION IS PROVIDED AS PART OF THE INSTALLATION. CONTRACTOR SHALL COORDINATE ADJUSTED DEPTH WITH RIGID FOAM INSULATION INSTALLATION INSTRUCTIONS.
3. CONDUIT BURIAL DEPTH SHALL NOT BE LESS THAN THE DEPTH INDICATED IN THE DEPTH CHART OF THIS DETAIL.



NOTE:
GUTTER, DOWNSPOUT, AND
PLUMBING CONNECTION TO BE
DESIGN-BUILD.

1 POWER PLAN

SCALE: 1/2" = 1'-0"



2 LIGHTING PLAN

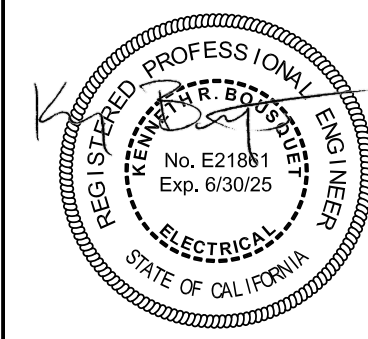
SCALE: 1/2" = 1'-0"

**TRUCKEE TAHOE AIRPORT
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LIGHTING PLAN

SHEET NO.

E3.1

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 1 of 7)

Project Address:

Date Prepared: 2025-02-10T18:20:56-05:00

A. GENERAL INFORMATION					
01	Project Location (city)	Truckee	04	Total Conditioned Floor Area (ft ²)	0
02	Climate Zone	16	05	Total Unconditioned Floor Area (ft ²)	119
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1
● Support Areas					

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft ²)	Calculation Method	Area (ft ²)
<input checked="" type="checkbox"/> New Lighting System	N/A	0	Area Category Method	119
<input type="checkbox"/> New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft ²)			119	

Generated Date/Time:

Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 273281-0225-0002

Schema Version: rev 20220101

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 3 of 7)

Date Prepared: 2025-02-10T18:20:56-05:00

F. INDOOR LIGHTING FIXTURE SCHEDULE									
This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.									
Designed Wattage: Unconditioned Spaces									
01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change ¹	Watts per luminaire ²	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector
L1	LED Linear 2'	No	NA	17	Mfr. Spec	2	No	34	<div>Pass</div> <div>Fail</div>
Total Designed Watts: UNCONDITIONED SPACES								34	

¹FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

²Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)					
This table includes lighting controls for conditioned and unconditioned spaces.					
Building Level Controls					
01	02	03		Field Inspector	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C			Pass	Fail
NA < 4,000W subject to multilevel	Whole Building Auto Time Switch			<input type="checkbox"/>	<input type="checkbox"/>

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CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 2 of 7)

Date Prepared: 2025-02-10T18:20:56-05:00

C. COMPLIANCE RESULTS									
If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D for guidance.									
Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)					Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)			Compliance Results
	01	02	03	04	05	06	07	08	
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	Total Allowed (Watts)	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	Total Adjusted (Watts) *Includes Adjustments	
	(See Table I)	(See Table I)	(See Table J)	(See Table K)		(See Table F)	(See Table P)		
	Conditioned								
Unconditioned		47.6			47.6	34		34	COMPLIES
Controls Compliance (See Table H for Details)									
Rated Power Reduction Compliance (See Table Q for Details)									

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

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Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 4 of 7)

Date Prepared: 2025-02-10T18:20:56-05:00

H. INDOOR LIGHTING CONTROLS (Not including PAFs)								
Area Level Controls								
04	05	06	07	08	09	10	11	12
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector
Shed	Electrical Mechanical Telephone Room	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: Not daylight zone	NA: Not daylight zone	No	<div>Pass</div> <div>Fail</div>
13								
Plan Sheet Showing Daylit Zones:								

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS					
Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used.					
Unconditioned Spaces					
01	02	03	04	05	06
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft ²)	Area (ft ²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment
Shed	Electrical Mechanical Telephone Room	0.4	119	47.6	Area Category
TOTALS:			119	47.6	No
					See Tables J, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

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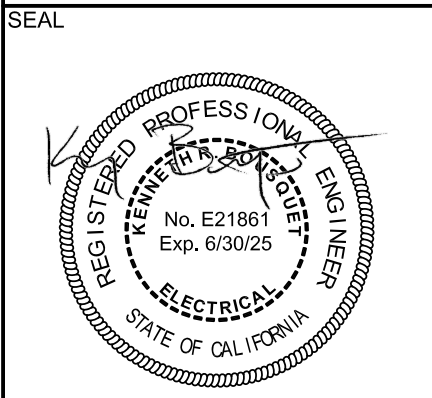
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530-214-0859

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10356 Truckee Airport Rd,
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APN: 019-440-068-000



REVISIONS

DATE

02-11-2025

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SCALE

See Plan

SHEET NAME

LIGHTING PLAN

SHEET NO.

E4.1

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STATE OF CALIFORNIA

Indoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 5 of 7)

Date Prepared: 2025-02-10T18:20:56-05:00

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

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NRCC-LTI-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 7 of 7)

Project Address:

Date Prepared: 2025-02-10T18:20:56-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ian Johnson

Documentation Author Signature: Ian Johnson

Company: Sugarpine Engineering

Signature Date: 02/10/2025

Address:

CEA/ HERS Certification Identification (if applicable):

City/State/Zip:

Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.

2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).

3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.

4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Ian Johnson

Responsible Designer Signature: Ian Johnson

Company: Sugarpine Engineering

Date Signed: 02/10/2025

Address:

License:

City/State/Zip:

Phone:

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

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CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 6 of 7)

Date Prepared: 2025-02-10T18:20:56-05:00

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCC-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

Form/Title

Systems/Spaces To Be Field Verified

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

Shed

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

Generated Date/Time:

Documentation Software: Energy Code Ace

Compliance ID: 273281-0225-0002

Report Generated: 2025-02-10 15:20:58

STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 1 of 8)

Project Address:

Date Prepared: 2025-02-10T18:28:11-05:00

A. GENERAL INFORMATION

01 Project Location (city) Truckee

02 Climate Zone 16

04 Total Illuminated Hardscape Area (ft²) 433

03 Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):

☐ LZ-0: Very Low - Undeveloped Parkland

☒ LZ-2: Moderate - Urban Clusters

☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval

☐ LZ-1: Low - Rural Areas

☐ LZ-3: Moderately High - Urban Areas

05 Occupancy Types within Project

Support Areas

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01

02

☒ New Lighting System

Must Comply with Allowances from 140.7 / 170.2(e)6

☐ Altered Lighting System

Is your alteration increasing the connected lighting load (Watts)?

Yes

No

03

04

05

% of Existing Luminaires Being Altered¹

Sum Total of Luminaires Being Added or Altered

Calculation Method

☐ < 10%

☐ >= 10% and < 50%

☐ >= 50%

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

¹ FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

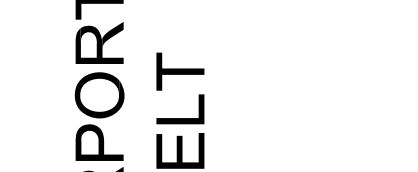
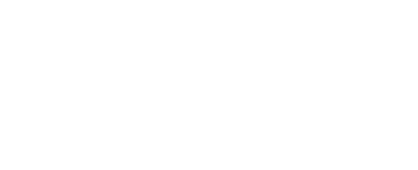
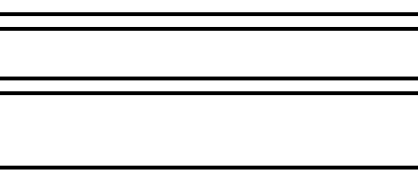
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Generated Date/Time:

Documentation Software: Energy Code Ace

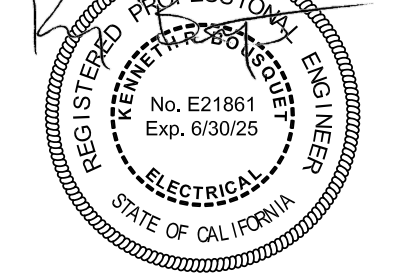
Compliance ID: 273281-0225-0003

Report Generated: 2025-02-10 15:28:13



APN: 019-440-068-000

SEAL



02-11-2025

REVISIONS

DATE

02-11-2025

ISSUE

For Permit

SCALE

See Plan

SHEET NAME

LIGHTING PLAN

SHEET NO.

E4.2

STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION	
Outdoor Lighting			
CERTIFICATE OF COMPLIANCE		NRCC-ITO-E	
Project Name:	Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade	Report Page:	(Page 2 of 8)
		Date Prepared:	2025-02-10T18:28:11-05:00

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e) or 141.0(b)(2) / 180.2(b)(4b)										Compliance Results		
01	02	03	04	05	06	07	08	09				
General Hardscape 140.7(d)(1) 170.2(e) (See Table I)	Per Application 140.7(d)(2) 170.2(e) (See Table J)	Sales Frontage 140.7(d)(2) (See Table K)	Ornamental Frontage 140.7(d)(2) (See Table L)	Per Specific Area 140.7(d)(2) 170.2(e) (See Table M)	OR Existing Power Allowance 141.0(b)(2) / 180.2(b)(4b) (See Table N)	=	Total Allowed (Watts)	≥	Total Actual (Watts)	07 must be >= 08		
224.13	6	---	---	---	OR	=	230.13	≥	18	COMPLIES		
Shielding Compliance (See Table G for Details)										N/A		
Controls Compliance (See Table H for Details)										COMPLIES		

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA

Outdoor Lighting

CERTIFICATE OF COMPLIANCE

CALIFORNIA ENERGY COMMISSION

NRCC-LTO-E

(Page 4 of 8)

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings					
01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
Building Exterior: "S1"	Astronomical Timer	Provided	NA: Each Luminaire <= 40 Watts	<input type="checkbox"/>	<input type="checkbox"/>

³Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.

Design Wattage:											
01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire ^{1, 2}	How is Wattage determined	Total Number Luminaires ¹	Luminaire Status ³	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)1 ⁴	Field Inspector	
										Pass	Fail
S1	LED Cylinder Sconce	<input type="checkbox"/> Linear	6	Mfr. Spec	3	New	<input type="checkbox"/>	18	NA: < 6200 lumens	<input type="checkbox"/>	<input type="checkbox"/>
Total Design Wattage:								18			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
 EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

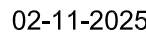
This section does not apply to this project.

STATE OF CALIFORNIA		CALIFORNIA ENERGY COMMISSION	
Outdoor Lighting		NRC-LTO-E	
CERTIFICATE OF COMPLIANCE		(Page 5 of 8)	
Project Name:	Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade	Report Page:	
		Date Prepared:	2025-02-10T18:28:11-05:00

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel							
02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Building Exterior	433	0.019	8.23	106	0.15	15.9	24.13
Initial Wattage Allowance for Entire Site (Watts):							200
Instances of Initial Wattage Allowance (LZ 0 only)¹							
Total General Hardscape Allowance (Watts):							224.13

	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 273281-0225-0003 Report Generated: 2025-02-10 15:28:13

EAL



REVISIONS

LIGHTING PLAN

SHEET NO.

E4.3

ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.

STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 6 of 8)

Date Prepared: 2025-02-10T18:28:11-05:00

J. LIGHTING ALLOWANCE: PER APPLICATION									
This table includes areas using the wattage allowance per application from Table 140.7-B / Table 170.2-S.									
01	02	03	04	05	06	07	08	09	10
Area Description	Application per Table 140.7-B ¹	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		# of Locations	Allowance per Location ²	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Building Entrance	Building Entrance/Exit	1	15	15	S1	6	1	6	6
Total Design Watts for this Area:									6
Total Allowance (Watts) All Areas:									6

¹ FOOTNOTES: Primary entrance applications are only available for senior care facilities, healthcare facilities, police stations, hospitals, fire stations, and emergency vehicle facilities.
² The Allowance per Location for ATMs is 100W for the first ATM and 35W for each additional per Table 140.7-B /Table 170.2-S.
³ For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 273281-0225-0003 Schema Version: rev 20220101 Report Generated: 2025-02-10 15:28:13

STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 8 of 8)

Project Address: Date Prepared: 2025-02-10T18:28:11-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ian Johnson

Documentation Author Signature: Ian Johnson

Company: Sugarpine Engineering

Signature Date: 02/10/2025

Address: CEA/ HERS Certification Identification (if applicable):

City/State/Zip: Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.

2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)

3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.

4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.

5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Ian Johnson

Responsible Designer Signature: Ian Johnson

Company: Sugarpine Engineering

Date Signed: 02/10/2025

Address: License:

City/State/Zip: Phone:

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 273281-0225-0003 Schema Version: rev 20220101 Report Generated: 2025-02-10 15:28:13

STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: Tahoe Truckee Airport District - Snowmelt & EV Charger Upgrade

Report Page: (Page 7 of 8)

Date Prepared: 2025-02-10T18:28:11-05:00

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCH-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/atttcp/providers.html>

Form/Title

Systems/Spaces To Be Field Verified

NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.

Building Exterior: "S1"

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Compliance ID: 273281-0225-0003 Schema Version: rev 20220101 Report Generated: 2025-02-10 15:28:13

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SUGARPINE ENGINEERING, Inc.

12710 Northwoods Blvd Ste 3
Truckee, CA 96161
530-214-0859

TRUCKEE TAHOE AIRPORT
TERMINAL SNOWMELT

10356 Truckee Airport Rd,
Truckee, CA 96161

APN: 019-440-068-000

SEAL

02-11-2025

REVISIONS

DATE
02-11-2025

ISSUE
For Permit

SCALE
See Plan

SHEET NAME
LIGHTING PLAN

SHEET NO.
E4.4

PROJECT STRUCTURAL GENERAL NOTES

01. GENERAL

A. These general notes shall apply to the structural drawings unless otherwise shown or noted.

B. Unless otherwise indicated all details of design, workmanship and materials shall conform to the 2022 Edition of the California Building Code (CBC) and the Minimum Design Loads for Buildings and Other Structures (ASCE/SEI 7-16). Timber design values are based upon the current edition of the National Design Standard (NDS).

C. Any discrepancies, errors, or omissions found by the Builder relating to the Structural Construction Documents, the Architectural Construction Documents, and actual Site Conditions shall be reported to the Architect. The Architect shall notify the Structural Engineer who shall, in time, correct such error or omission in writing. Any work done by the Builder after discovery of such error shall be at the Builder's risk.

D. The Builder shall verify and coordinate all dimensions among all drawings prior to proceeding with any work or fabrication.

E. The Builder is responsible for all bracing and shoring during construction.

F. DEFINITION OF SPECIAL INSPECTION : Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards (see Section IBC/CBC 1704).

G. DEFINITION OF SPECIAL INSPECTION, CONTINUOUS : The full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is being performed.

H. DEFINITION OF SPECIAL INSPECTION, PERIODIC : The part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been or is being performed and at the completion of the work.

I. DEFINITION OF STRUCTURAL OBSERVATION : The visual observation of the structural system by a registered design professional for general conformance to the approved construction documents at significant construction stages and at the completion of the structural system. Structural observation does not include or waive the responsibility for the inspection required by Section 110, 1705 or other sections of the code.

02. DESIGN CRITERIA

A. Governing Jurisdiction:	Nevada County, CA
B. Risk Category II	
C. Live Loads	
1. Roof (superseded by snow loads)	20 psf
D. Snow Loads	
1. Ground snow load (per jurisdiction):	$P_g = 186$ psf
2. Importance Factor:	$I_s = 1.0$
3. Flat roof snow load ($C_e = 1.0$)	$P_f = 130$ psf
4. See Structural Calculations for:	
• Snow Exposure Factors, C_e	
• Snow Thermal Factors, C_t	
• Drift Snow Loads	
E. Wind Loads	
1. Basic wind speed:	$V_W = 130$ mph
2. Importance factor:	$I_W = 1.0$
3. Wind exposure:	C
F. Seismic Loads	
1. Seismic importance factor:	$I_s = 1.0$
2. Mapped spectral response accelerations (0.2 sec):	$S_s = 1.36$
3. Mapped spectral response accelerations (1.0 sec):	$S_1 = 0.45$
4. Site Class:	D
5. Design spectral response accelerations (0.2 sec):	$S_{DS} = 1.088$
6. Seismic design category:	D
7. Response Modification Factor:	R = 6.5
8. Basic seismic-force-resisting system:	Bearing Wall System: Light-frame walls w/ wood sheathing
9. Analysis procedure used:	Equivalent Lateral Force Procedure
G. Soil Loads & Criteria	
1. Allowable Bearing Pressure:	$P_{all} = 1,500$ psf

03. FOUNDATION

A. A design soil bearing capacity of 1500 psf is assumed for dead plus long term live loads.

B. All foundation excavation is to be carried to undisturbed native material or placed in an approved engineered fill.

C. Over-excavation of materials shall be backfilled with concrete.

D. All backfill supporting footings and slabs shall be compacted to not less than 95% relative density in accordance with ASTM D 1557 (in lieu of alternate specification per Geotechnical Engineer).

E. Backfilling against foundation walls shall not be permitted until the wall has reached 28-day strength and all supporting structure is in place.

F. Specification of underlayment below interior slabs shall be the responsibility of the Architect, Geotechnical Engineer, Owner, or Contractor and is not the responsibility of the Structural Engineer. As a minimum, interior slabs shall be underlain with 4 inches of aggregate base.

G. Step footings at a ratio of one vertical to two horizontal, with a maximum vertical step of 2'-0", typ uno.

H. Specification of waterproofing for foundations and retaining walls shall be the responsibility of the Architect, Owner, or Contractor and is not the responsibility of the Structural Engineer.

I. Any unusual site conditions (e.g. loose fill, sub-surface water, etc.) shall be immediately reported to the Structural Engineer.

04. REINFORCED CONCRETE

A. Reinforced concrete shall conform to applicable requirements of the CBC/IBC as well as the current edition of the ACI-318.

B. Concrete shall have a 28 day compressive strength of not less than:

- Concrete in walls (exposed/stemwalls/retaining): 4500 psi (ACI318-19 section 19.3.2.1 exposure F2)
- Concrete stemwalls, footings (well drained): 3500 psi (ACI318-19 section 19.3.2.1 exposure F1)
- Structural design is based upon $f_c = 2500$ psi (Material Testing not required)

C. Slump shall be 3-4 inches.

D. Aggregate shall conform to ASTM C33 for stone concrete.

E. Provide control joints in all slabs on grade, where indicated. The maximum spacing of control joints shall not be more than 12'-0" O.C.

F. Additives containing calcium chloride shall not be used.

G. Provide water / cementitious materials ratio of 0.45.

H. Provide 4-6% air entrainment for all concrete exposed to freezing.

I. Concrete placed during cold weather (when the forecast is for a low less than 40 degrees Fahrenheit), cold weather provisions per ACI 308R shall be followed.

J. High-strength non-shrink grout below all steel column base plates shall have a minimum compressive strength of 8,000 psi at 28 days, and shall have less than 0.3% shrinkage at 28 days (shrinkage when tested in accordance with ASTM C827 and ASTM C1090)

K. Verification and special inspection shall be in accordance with IBC/CBC Table 1705.3.

05. REINFORCING STEEL

A. All reinforcing steel shall be as follows:

1. ASTM A615, Grade 60, Typical, U.N.O.
2. Reinforcing steel to be welded: ASTM A706, Grade 60
3. Welded wire fabric: ASTM A185

B. All reinforcing steel shall be accurately located and adequately secured in position prior to and during placement of concrete.

C. All details of fabrication and installation of reinforcing steel shall be in accordance with the current edition of the ACI Manual of Standard Practice.

D. Laps: See Detail, "STANDARD REINFORCING LAP SPLICES"

E. Hooks: See Detail, "STANDARD REINFORCING HOOKS"

F. Ties: See Detail, "STANDARD REINFORCING TIES"

G. Provide vertical and horizontal reinforcing bars in concrete and masonry walls to conform to the minimum provisions of ACI 318, Section 14.3, U.N.O.

H. Bend all horizontal wall bars 40 bar diameters around all corners, U.N.O.

06. STRUCTURAL STEEL

A. All shapes including structural steel plates shall conform to ASTM A-36, U.N.O.

B. Structural steel W sections shall conform to ASTM A992.

C. All steel pipe columns shall conform to ASTM A-53, Type E or S, Grade B.

D. All steel tube sections shall conform to ASTM A500, Grade B.

E. All detailing shall conform to the current AISC specifications.

F. WELDING :

1. All welding shall conform to current American Welding Society specifications for material being welded and be performed by appropriately certified welders.

2. Electrodes shall have minimum tensile strength of 70 ksi, and a minimum Charpy V-Notch rating of 20 ft-lbs at 0 deg. F.

a. Stick electrode: Use Excalibur 7018 (Lincoln Electric) or equal.

b. Wire electrode: Use Intershield NR-232 (Lincoln Electric) or equal.

(NOTE: Intershield NR-211 is not acceptable)

G. All bolts shall be unfinished ASTM A-307, U.N.O.

H. All high strength A325 bolts shall be installed in conformance with AISC Specification for Structural Joints Using ASTM A325 or A490 Bolts.

I. All structural steel and miscellaneous iron not encased in concrete shall receive one shop coat of approved primer paint.

J. Provide 5/8"Ø stud bolts @ 24" O.C. on faces of steel columns in wood walls (where applicable, U.N.O.).

K. STRUCTURAL STEEL VERIFICATION AND SPECIAL INSPECTION SHALL BE IN ACCORDANCE WITH CBC/IBC SECTION 1705.2 AND THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360.

07. ADHESIVE ANCHORS

A. Use adhesive manufactured for appropriate application and temperature conditions. Adhesive used for bolts placed into existing concrete shall be approved for use in cracked concrete in Seismic Design Category D, such as Hilti HIT-RE 500-SD, Simpson SET-XP, AT-XP, SET-3G or approved equivalent. Provide ICC report to engineer for approval.

B. Follow adhesive manufacturer's directions for proper application.

C. VERIFICATION & SPECIAL INSPECTION.

VERIFICATION AND SPECIAL INSPECTION OF ADHESIVE ANCHORS		
VERIFICATION & SPECIAL INSPECTION	CONT.	PERIODIC
1. Temp of Concrete or CMU	-	X
2. Temp of adhesive	-	X
3. Hole Depth & Diameter	-	X
4. Cleanout	-	X
5. Placement	-	X

08. WOOD FRAMING

A. All framing lumber shall be Douglas Fir/Larch #2 or better, UNO. Studs and plates may be construction grade material. 6x material shall be Douglas Fir #1 or better.

B. Preservative-treated wood:

1. SBX/DOT or Zinc Borate treatments may only be used in interior-dry applications.

2. Metal fasteners in contact with preservative-treated wood:

a. SBX/DOT or Zinc Borate treatment requires no special fastener corrosion resistance.

b. All other treatments require hot-dip galvanized (G185 minimum) or stainless steel fasteners.

C. Manufactured wood products shall be as follows, U.N.O.:

• GLB: 24F-V4

E = 1.8

F_v = 2400 psi

• PSL: 2.0E

F_v = 2,900 psi

F_t = 290 psi

F_c = 750 psi (perpendicular to grain)

• LVL: 2.0E

F_v = 2,600 psi

F_t = 285 psi

F_c = 750 psi (perpendicular to grain)

• LSL: 1.0E

F_v = 1,700 psi

F_t = 285 psi

D. Sheathing shall be manufactured with exterior glue in accordance with requirements of the IBC/CBC and American Plywood Association. Plywood shall be manufactured in accordance with A.P.A. Std. PS-1. The grade, thickness and panel identification index shall be as shown on the plans.

E. All metal hardware and connectors shall be Simpson "Strong Tie" or equal. Use nails per Simpson catalog, UNO. Consult Structural Engineer for nail alternates. Use stainless steel as required per Section 09.B.2 above.

F. Trusses, rafters, and joists shall align w/ studs, U.N.O.

G. Minimum nailing for connections not indicated on the plans shall be in accordance with Table 2304.10.1 of the CBC/IBC. (Exception: use (2) 20d box nails @ studs to 3x sill plates).

H. Fill all nail holes in hangers for "MAX" rating, TYP U.N.O.

I. Machine Bolts for wood members are A307 (TYP U.N.O.). Provide standard cut washers at all bolt heads and nuts bearing on wood (TYP U.N.O.).

J. Posts shall have full area bearing to the foundation, unless noted otherwise. A Continuous Parallel to Grain load path is required only where designated "CPG".

K. Timber sizes prescribed are minimum. Larger sizes may be substituted. Detailed connections may require modifications if substitutions are made.

L. Holddown nuts shall be re-tightened just prior to covering the wall framing.

M. NAILS:

1. Metal connectors are designed based upon nails specified in manufacturer's literature.

2. Shearwalls are designed based upon "common" or "box" nail values.

3. Horizontal Diaphragms are designed based upon "common" nail values.

4. Other nailed connections are designed based upon "box" and "sinker" nail values.

5. Use stainless steel nails as required for CCA or CA-B preservative-treated wood.

N. Exposed Hardware & Fasteners:

1. Metal fasteners exposed to weather (such as typical deck conditions): Hardware & Fasteners are required to be hot-dip galvanized (G185 minimum) or Type 316 stainless steel.

NAIL CHART		
Diameter	Min. Penetration	Capacity
.090" DIA.	1 inch	55 lbs.
.113" DIA.	1 1/8 inch	72 lbs.
.128" DIA.	1 1/8 inch	93 lbs.
.135" DIA.	1 1/8 inch	103 lbs.
.148" DIA.	1 1/8 inch	118 lbs.
.162" DIA.	1 1/8 inch	141 lbs.

MIN ROOF / FLOOR DIAPHRAGM NAIL SIZES	
8d COMMON	0.131" DIA W/ 1-3/8" MIN. PENETRATION
10d COMMON	0.148" DIA W/ 1-1/2" MIN. PENETRATION

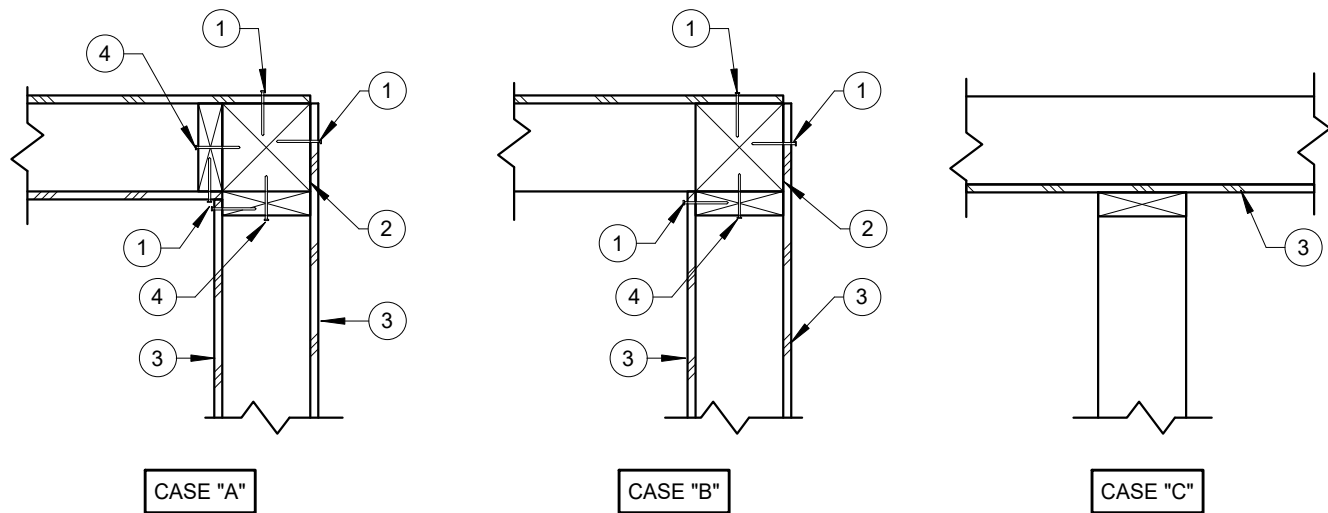
SEE SHEARWALL SCHEDULE 1 FOR SHEARWALL NAIL SIZE REQUIREMENTS

09. STATEMENT OF STRUCTURAL OBSERVATION				
A. IBC/CBC Section 202 and 1704.6... "STRUCTURAL OBSERVATION: The visual observation of the structural system by a registered design professional for general conformance to the approved construction documents. <u>Structural observation does not include or waive the responsibility for the inspection required by Section 110, 1705 or other sections of this code.</u> "				
B. Required observations shall be performed by GWSE, Contact Engineer of Record with reasonable advanced notice to schedule observations.				
C. FOR STRUCTURAL OBSERVATIONS INDICATED ABOVE, TYPICAL SEQUENCE OF OBSERVATIONS IS:				
• At footing stage				
• At stemwall / formed concrete / embedment stage				
• At rough framing stage				
D. The Engineer of Record may request to perform observations in addition to those required above.				
10. STATEMENT OF SPECIAL INSPECTION				
A. When indicated in the table below, the following items shall be inspected in accordance with the IBC/CBC Section 1704 by a certified special inspector from an established testing agency. The testing agency shall send copies of all testing and inspection reports directly to the Architect, Engineer and Building Department. Any materials which fail to meet the project specifications shall immediately be brought to the attention of the Architect.				
CODE SECTION	TYPE OF SPECIAL INSPECTION	REQUIRED (X)	CONTINUOUS (X)	PERIODIC (X)
1705.2	STRUCTURAL STEEL CONSTRUCTION (in accordance with AISC 360)			
	a. Shop Welding			
	b. Field Welding			
	c. High Strength Bolting			
	d. Shop Materials Identification			
	e. Other			
	complete & partial joint penetration groove welds			
	multi-pass fillet welds			
	single-pass fillet welds			
	welded anchors or studs			
	metal deck welding			
	ultrasonic testing of complete joint penetration welds at moment frames			
1705.3	CONCRETE CONSTRUCTION (TABLE 1705.3)			
	a. Post Installed Mechanical Anchors in Hardened Concrete			
	b. Post Installed Adhesive Anchors in Hardened Concrete	X		X
	c. Cylinder Compression Test			
	d. Mix Design			
	e. Prior to concrete Placement: slump, air content, concrete temp			
	f. Concrete Placement			
	g. Reinforcing & Placement			
	h. Anchor Bolts and Inserts			
	i. Cast-in-Place Anchors			
	j. Curing Temp & Techniques			
	k. Other			
1705.6	SOILS (by GEOTECHNICAL ENGINEER, TABLE 1705.6)			
	a. Bearing Capacity - Compaction			
	b. Grading, Excavation & Fill Material			
	c. Site Drainage			
	d. Other			
	Retaining Wall Drainage			
	Slab on Grade Preparation & Drainage			
1705.12	SEISMIC RESISTANCE			
1705.12.1	a. Structural Steel moment resisting frames			
1705.12.2	b. Structural Wood			
1705.12.4	c. Designated Seismic Systems			
1705.12.5	d. Architectural Components			
	g. Other			
	Shearwall Nailing			
	Horizontal Diaphragms (boundary, edge, field & collector nailing / metal straps)			
1705.5.1	High Load Diaphragms			
	Collectors			
	Holdowns			
	Anchor Bolts			
	Shear Transfer Connections (Straps, Clips, Bolts, etc.)			
	Holdown & Vertical Metal Strap Placement			
	Installation of premanuf. frames			
	Wood Frames			

ABBREVIATIONS			
A.B.	ANCHOR BOLT	LAM	LAMINATED
ACI	AMERICAN CONCRETE INSTITUTE	LGR	LEDGER
ADDL	ADDITIONAL	LBS	POUNDS
A.F.F.	ABOVE FINISH FLOOR	LF	LINEAR FOOT
AGGR	AGGREGATE	LL	LIVE LOAD
ALT	ALTERNATE	LSL	LAMINATED STRAND LUMBER
ALUM	ALUMINUM	LVL	LAMINATED VENEER LUMBER
ARCHTL	ARCHITECTURAL		
BLDG	BUILDING	MATL	MATERIAL
BLK	BLACK	MAX	MAXIMUM
BLKG	BLOCKING	MB	MACHINE BOLT
BLW	BELOW	MFR	MANUFACTURER
BM	BEAM	MFRD	MANUFACTURED
B.O.	BOTTOM OF	MIN	MINIMUM
BRG	BEARING	MISC	MISCELLANEOUS
BTM	BOTTOM	ML	MICROLAM
BTWN	BETWEEN	NSE	MECHANICALLY STABILIZED EARTH
B.W.	BOTH WAYS	MTL	METAL
		(N)	NEW
CALCS	CALCULATIONS	N/A	NOT APPLICABLE
CANTLR	CANTILEVER	NIC	NOT INCLUDED
CC	CENTER TO CENTER	NS	NEAR SIDE
C.J.	CONTROL JOINT	NTE	NOT TO EXCEED
CJP	COMPLETE JOINT PENETRATION	NTS	NOT TO SCALE
CLG	CEILING		
CLR	CLEAR	O/	OVER
CMU	CONCRETE MASONRY UNIT	O.C.	ON CENTER
CNTRS/NK	COUNTERSINK	OD	OUTSIDE DIAMETER
COL	COLUMN	OF	OUTSIDE FACE
CONC.	CONCRETE	OH	OVERHANG
CNNK	CONNECTION	OL	OUTLOOKER
CONTD	CONTINUED	OPNG	OPENING
CONT'S	CONTINUOUS	OPP	OPPOSITE
CTR	CENTER		
C.P.G.	CONTINUOUS PARALLEL TO GRAIN	PART	PARTITION
d	FENNY	P.B.	PITCH BEARK
D.B.O.	DESIGNED BY OTHERS	PC	PIPE COLUMN
DBL	DOUBLE	PCF	POUNDS PER CUBIT FOOT
DF	DOUG FIR	PKT	POCKET
DIA	DIAMETER	PLF	POUNDS PER LINEAR FOOT
DIAG	DIAGONAL	P.W.D	PREFAB
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DECKNG	DECKING	PSI	POUNDS PER SQUARE INCH
DL	DEAD LOAD	PSL	PARALLEL STRAND LUMBER
DN	DOWN	PT	PRESSURE TREATED
DTL	DETAIL		
DWG	DRAWING	RAD	RADIUS
(E)	EXISTING	RDWD	REDWOOD
EA	EACH	REINF.	REINFORCEMENT
E.J.	EXPANSION JOINT	REBAR	REINFORCING BARS
E.L.	END LENGTH	REF	REFERENCE
EMBED	EMBEDMENT	REQD	REQUIRED
EN	EDGE NAILING	REQMT	REQUIREMENT</

ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.

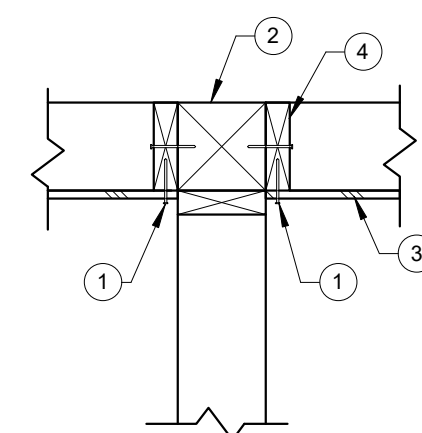
- 1 SHEARWALL EDGE NAILING
2 SOLID POST
3 SHEARWALL SHEATHING
4 2x STUD W/ .148" DIA NAILS PER SCHED. 2



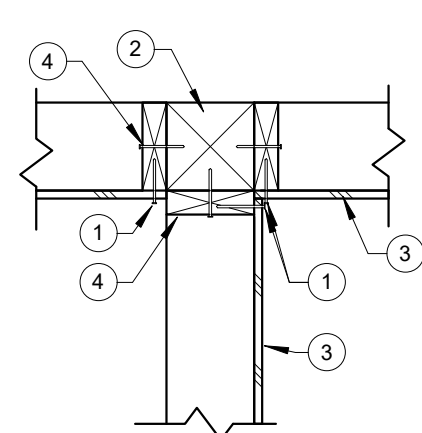
CASE "A"

CASE "B"

CASE "C"



CASE "D"

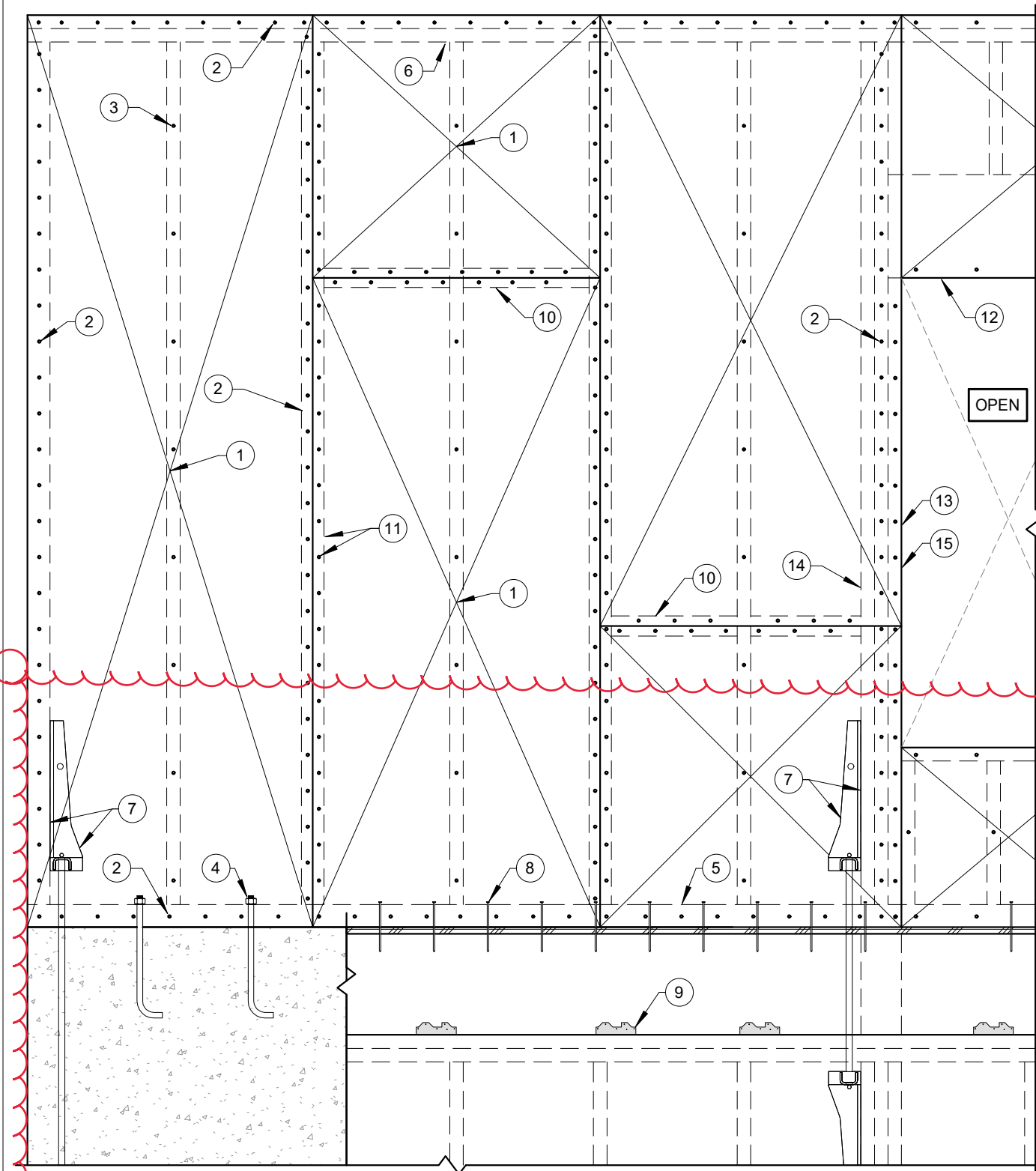


CASE "E"

2 TYPICAL SHEARWALL CONTINUITY METHODS / PLAN VIEW
1" = 1'-0"

GENSW03

- 1 PLYWOOD SHEATHING PER SCHEDULE 1
2 PROVIDE FULL HEIGHT SHEETS WHERE POSSIBLE, OTHERWISE STAGGER AND BLOCK BEHIND HORIZONTAL JOINTS. MINIMUM ALLOWABLE PANEL SIZE IS 24" x 24"
3 EDGE NAIL PER SCHEDULE 1
4 EDGE NAIL AT ALL PANEL JOINTS, SILL PL, TOP PL, TRIMMERS AND HOLDOWN POSTS.
5 FIELD NAIL PER SCHEDULE 1
6 ANCHOR BOLT, SPACING PER PLAN
7 SILL PL PER SCHEDULE 1
8 SILL SHALL BE PT WHEN IN CONTACT WITH CONCRETE
9 DOUBLE TOP PL
10 HOLDOWN AND HOLDOWN POST PER PLAN AND SCHEDULE 5
11 FASTENER PER SCHEDULE 2
12 CLIP PER SCHEDULE 3
13 BLOCK ALL PANEL EDGES
14 STAGGER NAILS AT PANEL EDGES AND PROVIDE STUD PER SCHED 1
15 HEADER PER PLAN
16 END OF WALL, WINDOW, OR DOOR OPENING PER PLAN
17 POST OR KING STUD PER PLAN
18 TRIMMER PER PLAN



ABOVE CONCRETE FOUNDATION

ABOVE WOOD FLOOR FRAMING

1 TYPICAL SHEARWALL ELEVATION
3/4" = 1'-0"

GENSW02

SW SCHEDULE 1					
SHEARWALL NAILS SHALL BE MIN. .148" DIA. x 2-1/4" LENGTH					
SW TYPE	SHEARWALL SHEATHING THICKNESS	EDGE NAIL SPACING	STUDS AT ADJOINING PANEL EDGES	SILL PLATE AGAINST CONC OR MASONRY	BTM PLATE ON SUBFLR
6	1/2"	.148 @ 6" O.C.	2x	3x	2x
4	1/2"	.148 @ 4" O.C.	3x	3x	2x
3	1/2"	.148 @ 3" O.C.	3x	3x	2x
2	1/2"	.148 @ 2" O.C.	3x	3x	2x
44	BOTH SIDES	.148 @ 4" O.C.	3x	3x	3x
33	BOTH SIDES	.148 @ 3" O.C.	3x	3x	3x
22	BOTH SIDES	.148 @ 2" O.C.	3x	3x	3x
CAPACITY (SEISMIC)					
6					340
4					510
3					665
2					870
44					1020
33					1330
22					1740

KEY TO SYMBOLS ON PLAN:

16 DENOTES CLIP SPACING

33 DENOTES TWO ROWS OF CLIP SPACING

SEE SCHEDULE 3 FOR CLIP SPACING

CLIPS NOT REQUIRED BECAUSE SHEATHING LAPS OVER RIM

10.25 DENOTES SHEARWALL LENGTH

6 DENOTES SHEARWALL TYPE

FOOTNOTES

1. Use APA Rated Sheathing Structural I, Exposure I.
2. Design based on approximate shearwall panel length rounded to the nearest 3" (0.25 feet). See architectural for precise wall dimensions, in case of conflict, notify engineer prior to proceeding.
3. Provide 3" x 3" x 1/4" thick plate washer at all sill plate A.B.'s.
4. Use studs @ 16" oc, U.N.O.
5. Block all panel edges.
6. Field Nailing: .148" DIA. @ 12" O.C.
7. Nail heads are not to penetrate plywood.
8. Provide edge nailing to all studs which hold tiedown hardware.
9. Sheathing joint nailing shall be staggered in all cases.
10. Edge nailing shall not split wood members. Contact Engineer if alternate nailing or detailing is required.
11. Substitution of (2) 2x for 3x members is not allowed.
12. At double-sided shearwalls, stagger inside and outside abutting panel edges.

SW SCHEDULE 2		
SHEAR TRANSFER		
FROM WALL BTM PLATE TO FLOOR FRAMING (ONE ROW OF FASTENERS FOR EACH LAYER OF WALL SHEATHING THAT DOES NOT LAP AT RIM JOIST)		
SW TYPE	FASTENER	MINIMUM RECEIVING MEMBER
	NAILS	SCREWS
6	.148" DIA @ 6" O.C.	SIMP. SDWS 22600DB SCREWS @ 16" O.C.
4	.148" DIA @ 4" O.C.	SIMP. SDWS 22600DB SCREWS @ 12" O.C.
3	.148" DIA @ 3" O.C.	SIMP. SDWS 22600DB SCREWS @ 8" O.C.
2	N/A	SIMP. SDWS 22600DB SCREWS @ 6" O.C.
44	(2) ROWS, .148" DIA @ 4" O.C.	(2) ROWS SIMP. SDWS 22600DB SCREWS @ 12" O.C.
33	N/A	(2) ROWS SIMP. SDWS 22600DB SCREWS @ 8" O.C.
22	N/A	(2) ROWS SIMP. SDWS 22600DB SCREWS @ 6" O.C.

SW SCHEDULE 3		
SHEAR TRANSFER		
VIA CLIPS		
SW TYPE	SIMP. CLIPS: L50, A35 OR LTP4	MINIMUM ATTACHING MEMBER
6	(1) ROW @ 16" O.C.	(1) 2x
4	(1) ROW @ 16" O.C.	(1) 2x
3	(1) ROW @ 12" O.C.	(1) 2x
2	(1) ROW @ 8" O.C.	(1) 2x
44	(2) ROWS @ 16" O.C.	(1) 4x OR (2) 2x's
33	(2) ROWS @ 12" O.C.	(1) 4x OR (2) 2x's
22	(2) ROWS @ 8" O.C.	(1) 4x OR (2) 2x's

SW SCHEDULE 4	
SHEAR TRANSFER	
VIA THREADED RODS TO STEEL BEAM	
S/W TYPE	FASTENER
6	5/8" DIA @ 48" O.C.
4	5/8" DIA @ 32" O.C.
3	5/8" DIA @ 24" O.C.
2	5/8" DIA @ 24" O.C.
44	3x PLATE W/ 5/8" DIA @ 16" O.C.
33	3x PLATE W/ 5/8" DIA @ 12" O.C.
22	3x PLATE W/ 5/8" DIA @ 8" O.C.

FOOTNOTES

1. It is the Builder's responsibility to avoid splitting wood members. Contact Engineer if alternate nailing schedule or detailing is required.
2. Each layer of shearwall plywood needs its own row of bottom plate fasteners. NOTE: When a layer of plywood splices over a rim, that layer of plywood does not require bottom plate fasteners.
3. Where one layer of a double sided shear wall splices over a rim joists use minimum receiving member for one layer of the equivalent shear wall.

FOOTNOTES

1. Weld threaded rod to steel beam flange with 1/4" thick fillet weld all around.
2. Bottom plate thickness Per Schedule 1

HOLDOWN SCHEDULE			
HOLDOWN STUDS AND ANCHORAGE REQUIREMENT			
SIMPSON HARDWARE	MINIMUM STUD REQMT	SIMPSON ANCHOR BOLT	A36 THRD ROD ANCHORS W/ DBL NUT & WASHER PLATE AT EMBED
HDU2-SDS2.5	(2) 2x	SSTB 20	5/8"Ø x 16" EMBEDMENT (MIN), 1/4 x 2-1/2 x 2-1/2 WASHER PL
HDU4-SDS2.5	(2) 2x	SB5/8x24	5/8"Ø x 16" EMBEDMENT (MIN), 1/4 x 2-1/2 x 2-1/2 WASHER PL
HDU5-SDS2.5	(2) 2x	SB5/8x24	5/8"Ø x 16" EMBEDMENT (MIN), 1/4 x 2-1/2 x 2-1/2 WASHER PL
HDU8-SDS2.5	(3) 2x	SSTB 28	7/8"Ø x 16" EMBEDMENT (MIN), 5/16 x 3 x 3 WASHER PL
HDU11-SDS2.5	6x	N.A.	1"Ø x 16" EMBEDMENT (MIN), 3/8 x 3-1/2 x 3-1/2 WASHER PL
HDU14-SDS2.5	6x	N.A.	1"Ø x 16" EMBEDMENT (MIN), 3/8 x 3-1/2 x 3-1/2 WASHER PL
HD19"	6x	N.A.	1-1/4"Ø x 16" EMBEDMENT (MIN), 1/2 x 3-1/2 x 3-1/2 WASHER PL

FOOTNOTES

1. EMBED 1" DIA AND GREATER HD ANCHORS INTO BOTTOM OF FOOTING AT CONDITIONS ON TOP OF STEMWALLS AND FOOTINGS. AT LOCATIONS INTO TOP OF TALL RETAINING WALLS GREATER THAN 5'-0" TALL, ANCHOR SHALL BE EMBEDDED AT LEAST 5'-0" INTO WALL & LAPPED W/ AT LEAST (2) VERTICAL WALL REBAR.
2. If (2) 2x studs used, "edge nail" wall sheathing to each 2x.
3. See plan for additional stud requirements. Shearwall stud requirements for "edge nailing" may govern.
4. (2) 2x studs shall be spiked together w/ (2) .148" dia. nails @ 12" O.C.
5. Install Simpson SSTB anchor bolts per all manufacturers specifications maintaining required edge clearances.
6. Secure all holdown anchors within formwork prior to pour.
7. Use threaded rod where Simpson anchor is too long for available embedment.

GABBART & WOODS TAHOE PARTNERS
STRUCTURAL ENGINEERS



ABE HAEN / SE
abe@gabbartandwoods.com / m (530) 563-6274



TTAD UTILITY SHED
TRUCKEE TAHOE AIRPORT
TRUCKEE, CA

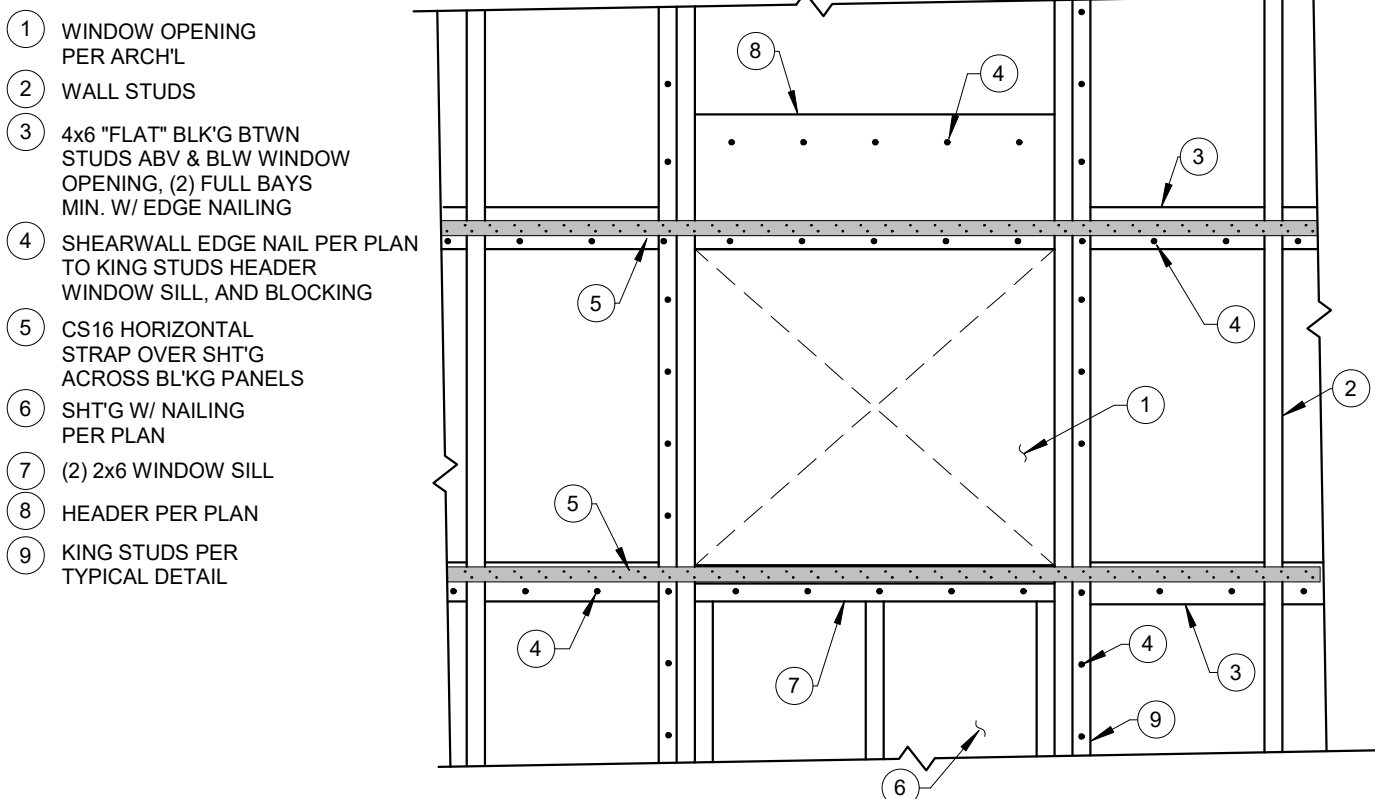
Revisions		
No.	Description	Date

Project number T.24.042
Date 02.04.2025
Drawn by AH

SHEARWALL SCHEDULES & TYPICAL
DETAILS

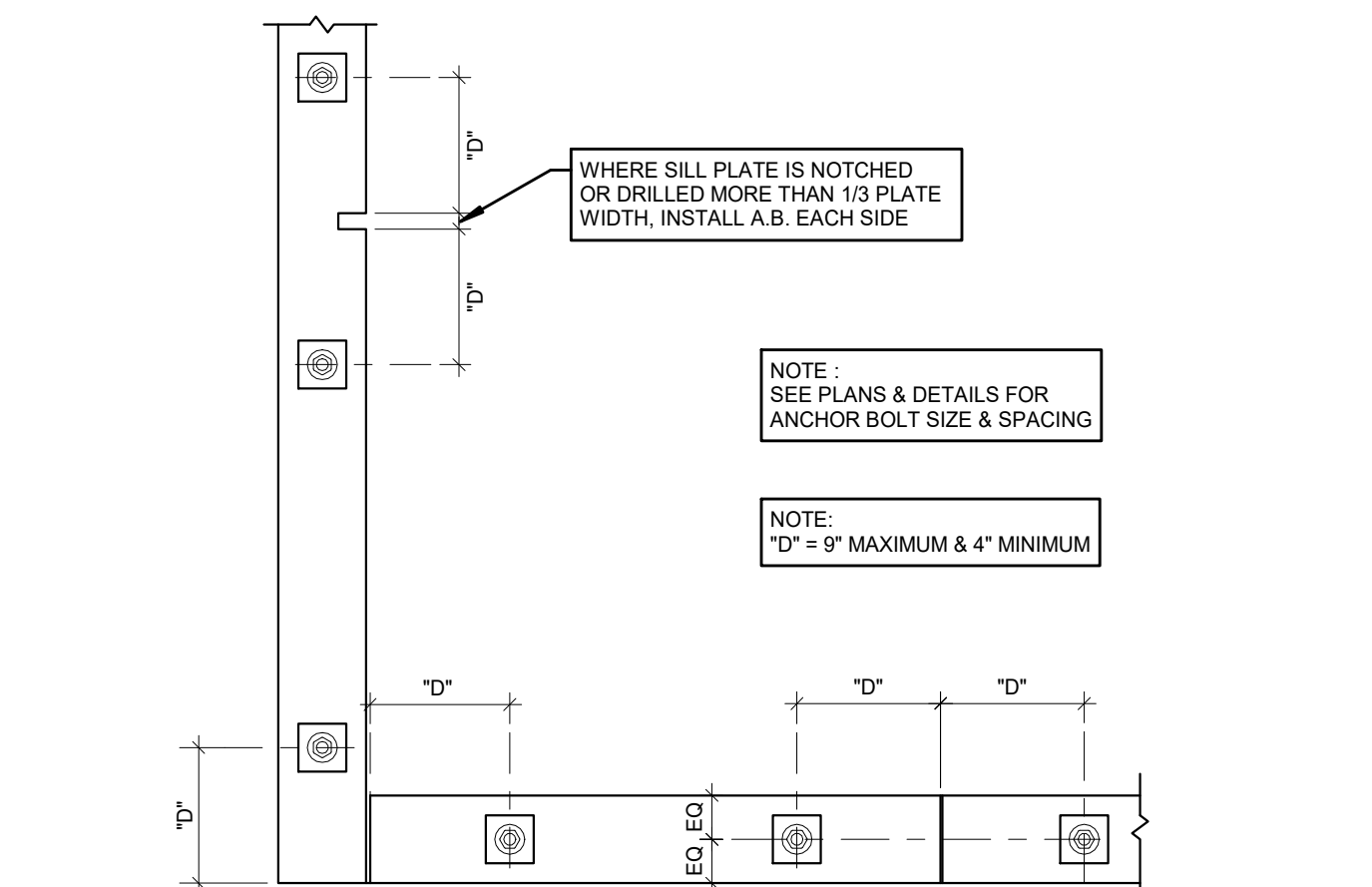
S1.2

Scale As indicated



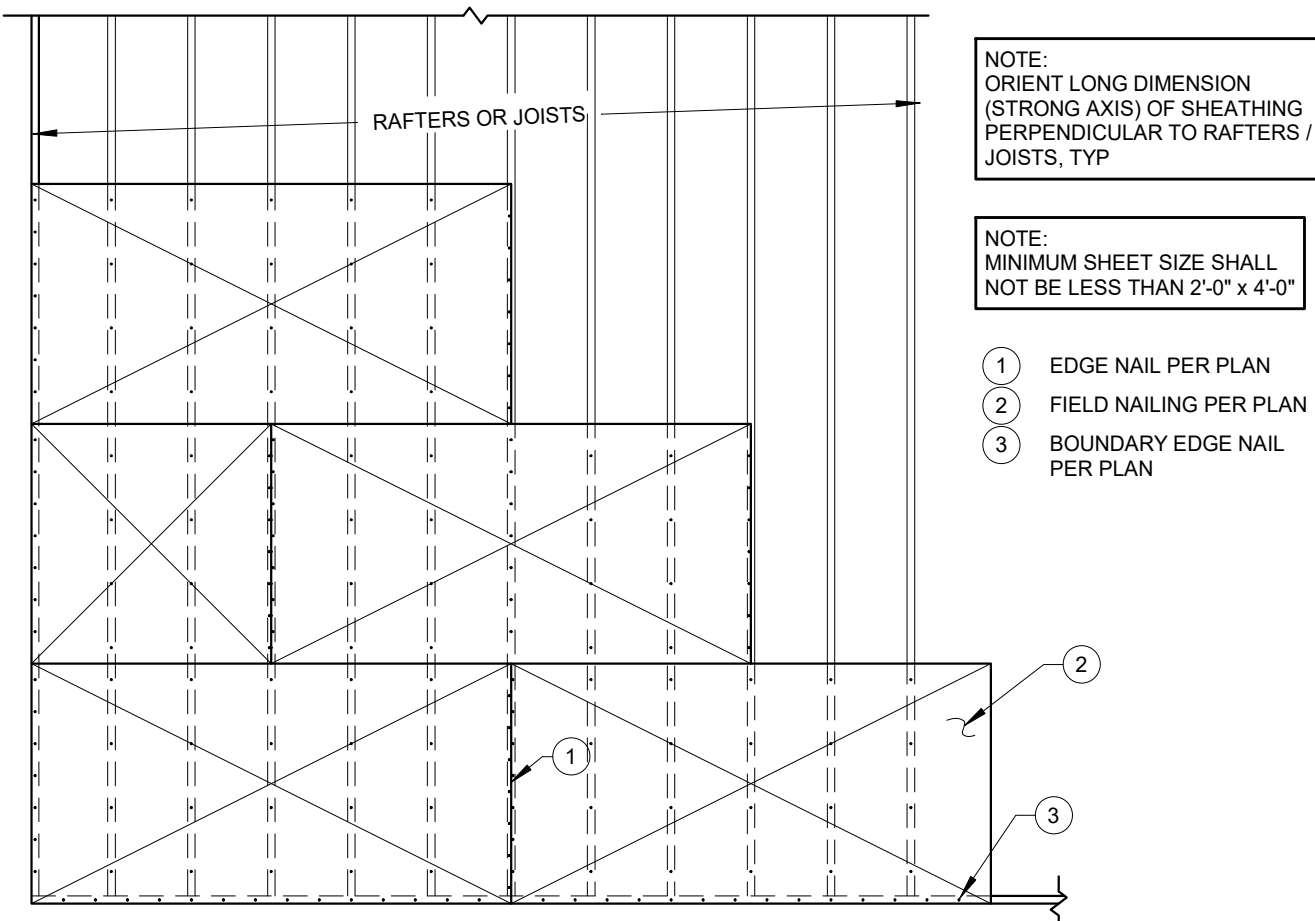
6 SHEAR TRANSFER AROUND OPENINGS IN SHEARWALLS
(ONLY WHERE NOTED ON PLAN)
3/4" = 1'-0"

GENSW01



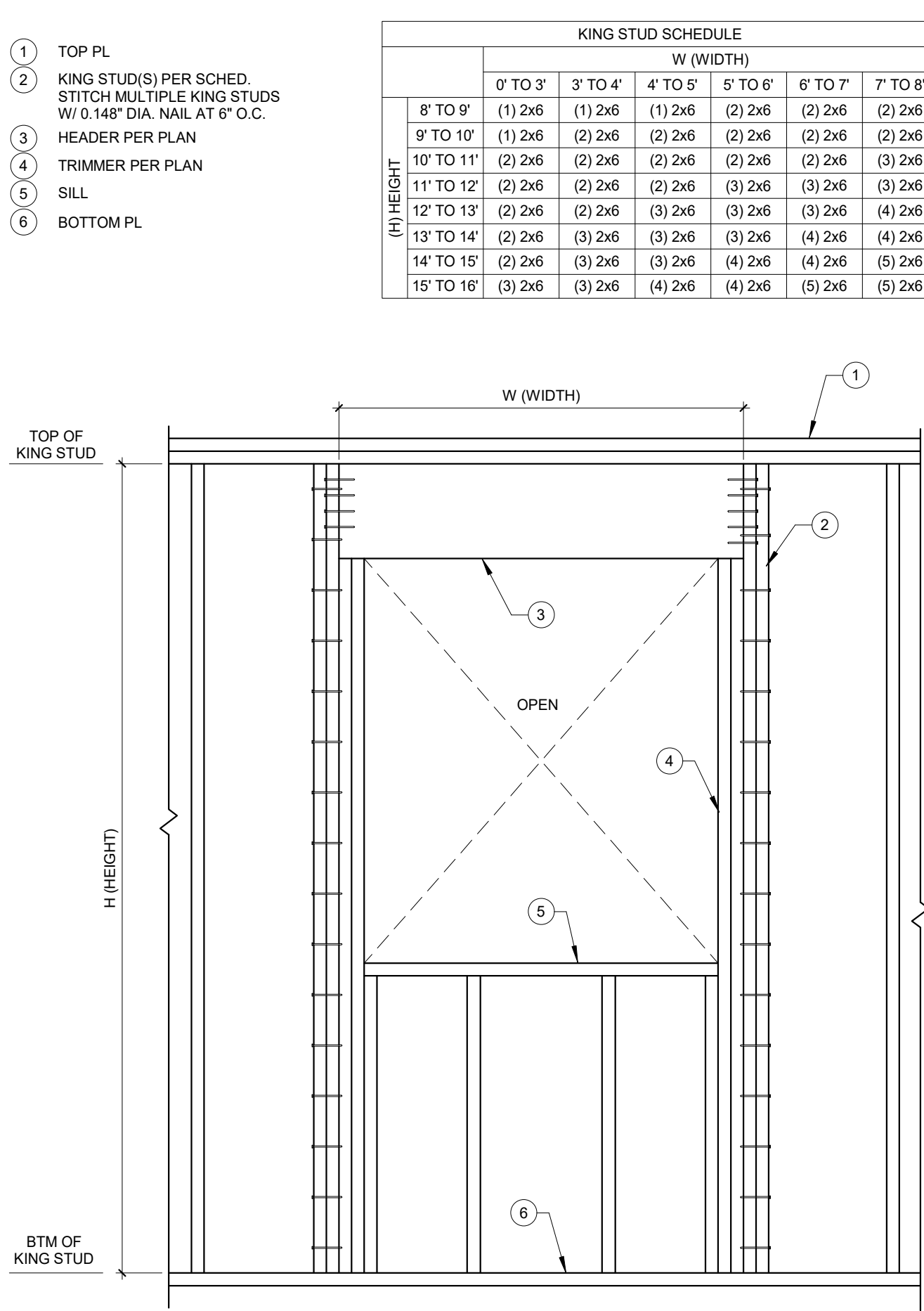
5 TYPICAL SILL PLATE BOLTING
1/2" = 1'-0"

GEN06



4 TYPICAL HORIZONTAL SHEATHING LAYOUT (FLOORS AND ROOFS)
1/2" = 1'-0"

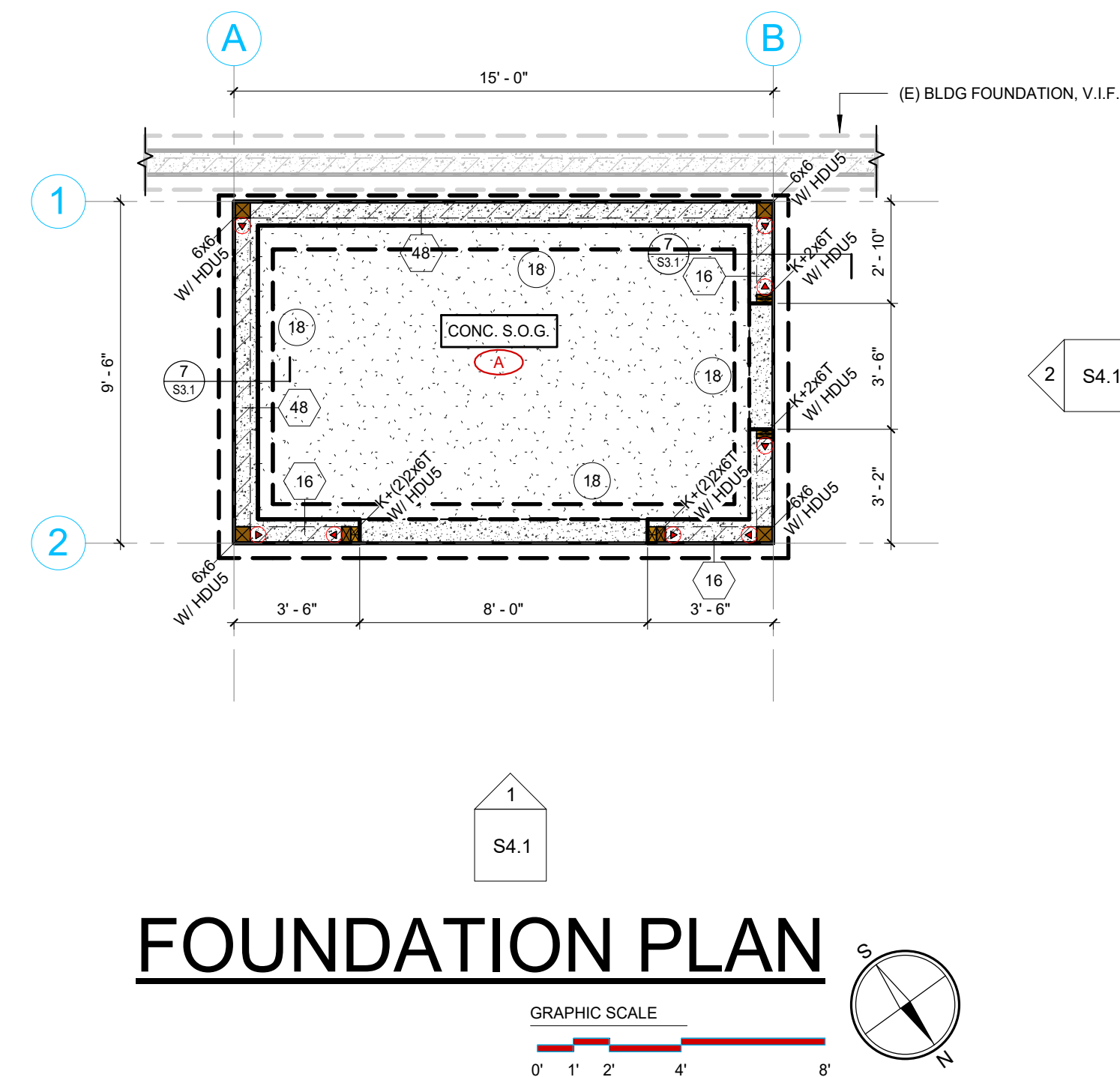
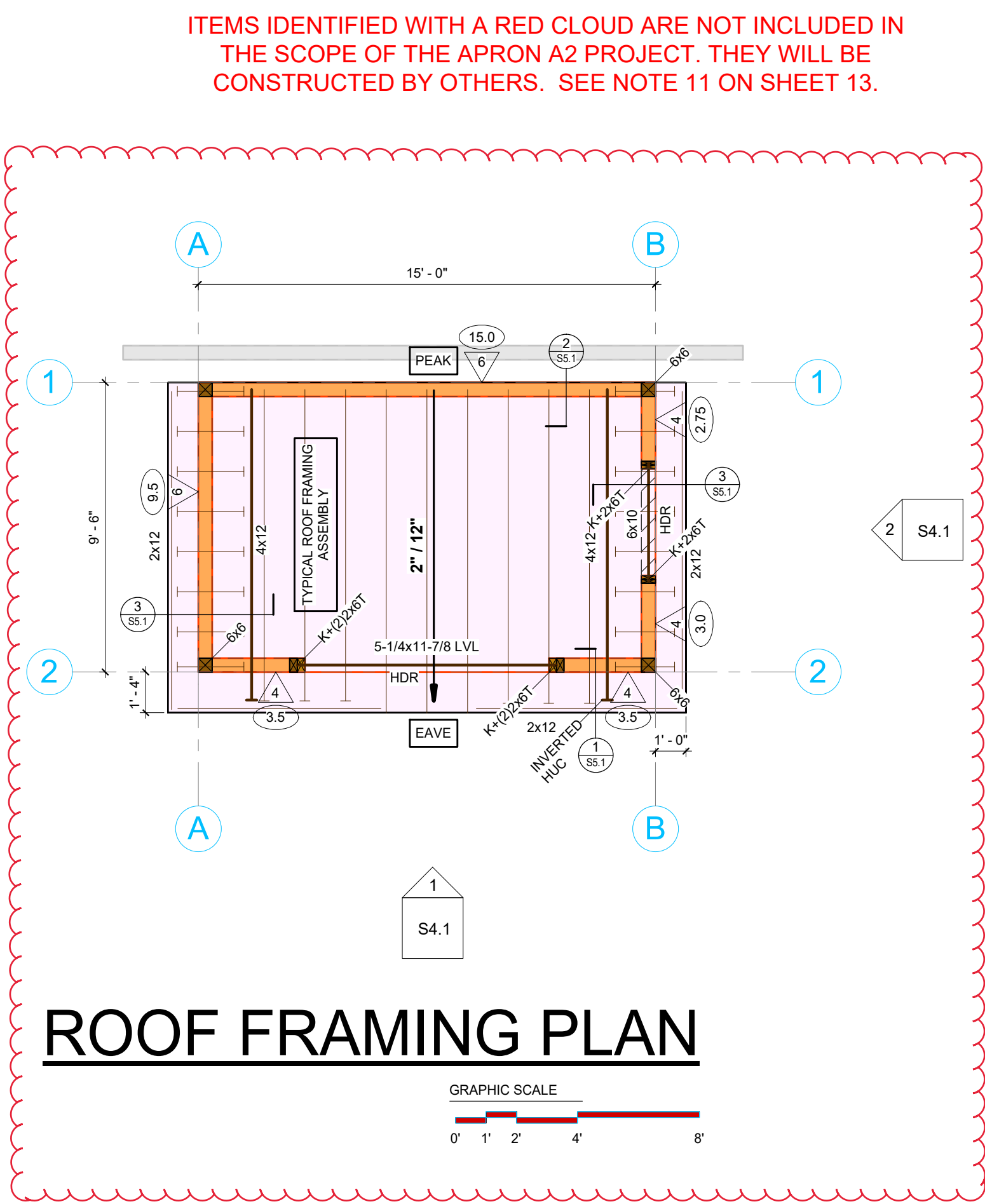
GEN02



3 TYPICAL KING STUD SCHEDULE AT EXTERIOR WALLS
3/4" = 1'-0"

GEN01

PLAN GRAPHIC LEGEND (BEST IN COLOR)	
	OVERBUILD OR FALSE "CALIFORNIA" FRAMING
	CONCRETE SLAB ON GRADE
	EXTERIOR CONCRETE PATIO
	BLOCKED DIAPHRAGM ZONE
	CONCRETE FOOTING
	STRUCTURAL WOOD WALL BELOW
	CONCRETE OR CMU WALL BELOW
	RAKE OR CLERESTORY WALL (OR "CLOSURE PIECE") BTWN ROOFS
	STRUCTURAL WALL ABOVE
	NON-STRUCTURAL PARTITION BELOW
	VENEER ABOVE CAVITY
	VENEER
	WOOD RAFTER, JOIST, LEDGER (2x, 3x)
	WOOD BEAM (4x, 6x)
	LARGE TIMBER (7x & LARGER)
	STEEL BEAM
	COLLECTOR BLOCKING
	HUNG
	BEARING
	ANCHOR BOLT TAG
	THREADED ROD TAG
	CONTINUOUS FOOTING TAG
	SHEARWALL LENGTH TAG
	SHEARWALL NAILING TAG
	PAD FOOTING TAG
	WOOD POST BELOW
	HSS COL BELOW
	KING POST (KP) BTWN BEAMS
	POST OR COL ABOVE
	WIDE FLANGE COL BELOW
	WIDE FLANGE COL ABV
	GENERAL SECTION DETAIL
	SPECIFIC LOCATION DETAIL
	KEYNOTE
	TIEDOWN HARDWARE
	FRAMING HARDWARE
	KNEE BRACE (KB)
	KING & TRIMMER STUDS AT WALL OPENING
	KING STUDS AT WALL OPENING
	KING STUDS AT WALL OPENING



ROOF ASSEMBLY, TYP. U.N.O.	
RAFTERS:	2x12 RAFTERS DF NO. 2 AT 16" O.C. TYP. U.N.O.
HANGERS:	SIMP HUS AT FACE MOUNT APPLICATIONS, U.N.O.
SHEATHING:	5/8" 4020 APA RATED SHEATHING. SEE SHEET NOTES FOR NAILING.

SIDING TO BE METAL SALES 24 GA 7/8" CORRUGATED TERRA COTTA OVER WRB.	
ROOF TO BE METAL SALES IMAGE II, 24 GA, ANTIQUE PATINA	FASCIA METAL TO MATCH ROOF.

PAD FOOTING SCHEDULE		
TAG	PAD SIZE	BOTTOM BARS ⁽³⁾
18	18" SQ x 9" THK	(2) #4 BARS EW
24	24" SQ x 10" THK	(3) #4 BARS EW
30	30" SQ x 12" THK	(4) #4 BARS EW
36	36" SQ x 12" THK	(5) #4 BARS EW
42	42" SQ x 12" THK	(6) #4 BARS EW
48	48" SQ x 12" THK	(7) #4 BARS EW
54	54" SQ x 14" THK	(8) #4 BARS EW
60	60" SQ x 16" THK	(9) #4 BARS EW

FOOTNOTES

- Place footings in undisturbed native soils or compacted fill per Geotechnical Report.
- Provide concrete pedestal above footing as required to extend minimum 8" above finished grade. See details for add'l information.
- Top bars may be required, see details for additional information where occurs.

CONTINUOUS FOOTING SCHEDULE		
TAG	FOOTING SIZE	BARS
18	18" W x 9" THK	(2) #4 CONT
18G	18" W x 30" THK	(3) #4 CONT TOP AND BTM
20G	20" W x 16" THK	(3) #4 CONT TOP AND BTM
24	24" W x 10" THK	(3) #4 CONT
24G	24" W x 30" THK	(3) #4 CONT TOP AND BTM
30	30" W x 12" THK	(4) #4 CONT
36	36" W x 14" THK	(4) #4 CONT

FOOTNOTES

- Place footings in undisturbed native soils or compacted fill per Geotechnical Report.

ANCHOR BOLT SCHEDULE	
TAG	BOLT SIZE AND SPACING
48	5/8" DIA x 12" J BOLT @ 48" O.C.
32	5/8" DIA x 12" J BOLT @ 32" O.C.
24	5/8" DIA x 12" J BOLT @ 24" O.C.
16	5/8" DIA x 12" J BOLT @ 16" O.C.
12	5/8" DIA x 12" J BOLT @ 12" O.C.
8	5/8" DIA x 12" J BOLT @ 8" O.C.

FOOTNOTES

- Tiedown bolts may serve as anchor bolts also, provided tiedown bolt have plate washer and nut installed on top of sill plate.
- Continue same spacing below windows and other openings.

HOLDOWN SCHEDULE			
HOLDOWN STUDS AND ANCHORAGE REQUIREMENT			
SIMPSON HARDWARE	MINIMUM STUD REQMT	SIMPSON ANCHOR BOLT	A36 THRD ROD ANCHORS W/ DBL NUT & WASHER PLATE AT EMBD
HDU2-SDS2.5	(2) 2x	SSTB 20	5/8"Ø x 16" EMBEDMENT (MIN), 1/4 x 2-1/2 x 2-1/2 WASHER PL
HDU4-SDS2.5	(2) 2x	SB5/6x24	5/8"Ø x 16" EMBEDMENT (MIN), 1/4 x 2-1/2 x 2-1/2 WASHER PL
HDU5-SDS2.5	(2) 2x	SB5/6x24	5/8"Ø x 16" EMBEDMENT (MIN), 1/4 x 2-1/2 x 2-1/2 WASHER PL
HDU8-SDS2.5	(3) 2x	SSTB 28	7/8"Ø x 16" EMBEDMENT (MIN), 5/16 x 3 x 3 WASHER PL
HDU11-SDS2.5'	6x	N.A.	1"Ø x 16" EMBEDMENT (MIN)', 3/8 x 3-1/2 x 3-1/2 WASHER PL
HDU14-SDS2.5'	6x	N.A.	1"Ø x 16" EMBEDMENT (MIN)', 3/8 x 3-1/2 x 3-1/2 WASHER PL
HD19'	6x	N.A.	1-1/4"Ø x 16" EMBEDMENT (MIN)', 1/2 x 3-1/2 x 3-1/2 WASHER PL

FOOTNOTES

- EMBED 1" DIA AND GREATER HD ANCHORS INTO BOTTOM OF FOOTING AT CONDITIONS ON TOP OF STEMWALLS AND FOOTINGS. AT LOCATIONS INTO TOP OF TALL RETAINING WALLS GREATER THAN 5'-0" TALL, ANCHOR SHALL BE EMBEDDED AT LEAST 5'-0" INTO WALL & LAPPED W/ AT LEAST (2) VERTICAL WALL REBAR.
- If (2) 2x studs used, "edge nail" wall sheathing to gage 2x.
- See plan for additional stud requirements. Shearwall stud requirements for "edge nailing" may govern.
- (2) 2x studs shall be spiked together w/ (2) .148" dia. nails @ 12" O.C.
- Install Simpson SSTB anchor bolts per all manufacturers specifications maintaining required edge clearances.
- Secure all holdown anchors within formwork prior to pour.
- Use threaded rod where Simpson anchor is too long for available embedment.

S2.1 NOTES	
FOUNDATION:	
1. ALL EXTERIOR FOOTINGS SHALL HAVE MINIMUM 24" FROST PROTECTION, U.N.O.	
2. BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.	
3. WIDEN / EXTEND FOOTINGS AS REQUIRED TO PROVIDE ADEQUATE SUPPORTS FOR ANY VENEER SHOWN ON ARCHITECTURAL DRAWINGS.	
4. IF "PONY WALLS" OCCUR BELOW THE FLOOR, PONY WALL SHEAR WALL NAILING Δ SHALL MATCH WALL ABOVE, U.N.O.	
5. POSTS MAY BEAR ON MUDDLILL, U.N.O. (NOT ALLOWED AT POSTS DESIGNATED "CPG").	
6. USE 3x6 P.T. MUDDLILL, TYP.	
7. AS A MINIMUM, STEMWALLS SHALL HAVE #4 HORIZONTAL BARS AT 16" O.C. WITH MINIMUM (1) BAR TOP & BOTTOM, AND #4 VERTICAL BARS (HOOKED INTO FOOTING) @ 24" O.C., TYP. U.N.O. (SEE RETAINING WALL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS).	
8. AS A MINIMUM, PROVIDE 5/8"Ø x 12" ANCHOR BOLT AT 48" O.C. TYP. U.N.O.	
9. PROVIDE 3" x 3" x 1/4" THICK PLATE WASHERS AT ALL ANCHOR BOLTS.	
10. SEE ARCHITECTURAL DRAWINGS FOR SLAB CONTROL JOINT PATTERN, U.N.O. AS A MINIMUM, PROVIDE CONTROL JOINTS AT 12'-0" O.C. AT INTERIOR SLABS OR 6'-0" O.C. AT EXTERIOR PATIOS, EACH WAY, U.N.O.	
11. SEE ARCHITECTURAL DRAWINGS FOR FLOOR DRAIN LOCATIONS IF APPLICABLE.	
FRAMING SYSTEM:	
1. LVL = LAMINATED VENEER LUMBER (2.0E) PSL = PARALLEL STRAND LUMBER (2.0E) LSL = LAMINATED STRAND LUMBER (1.3E)	
2. PROVIDE FLOOR JOISTS BELOW ALL PARALLEL PARTITIONS. BLOCK BELOW PERPENDICULAR PARTITIONS.	
3. PROVIDE BLOCKING BETWEEN FLOOR JOISTS OVER ALL SUPPORTS (SUGGEST BLOCKING OR BRIDGING AT MAXIMUM 12'-0" O.C. (FOR VIBRATION DAMPENING)).	
4. RIM JOIST SHALL BE (MIN) 1-3/4" LSL OR LVL (1.3E) OR EQUAL, U.N.O.	
5. MINIMUM NAILING ATTACHMENT FOR RAFTERS AND JOISTS AT BEARING- USE (3) TOENAILS (MIN).	
6. KING STUDS AT OPENINGS: SEE DETAIL 3 / S1.2	
7. STRUCTURAL STUD WALLS SHALL BE 2x6 AT 16" O.C., U.N.O. ALIGN STUD UNDER EA. JOIST OR RAFTER.	
8. ROOF SHEATHING SHALL BE NAILED WITH 10d NAILS AT 6" O.C. ALONG PANEL EDGES AND OVER SHEARWALLS. FIELD NAILING SHALL BE 10d AT 12" O.C.	
KEYNOTES REFERENCED ON PLAN	
A	6" CONCRETE SLAB ON W/ #4 AT 18" O.C. EACH WAY PLACED AT MID-DEPTH OF OF SLAB DEPTH. UNDERLAYMENT PER GEOTECHNICAL REPORT (MINIMUM 4" COMPACTED AGGR BASE).

GABBART & WOODS TAHOE PARTNERS
STRUCTURAL ENGINEERS



ABE HAEN / SE
abe@gabbartandwoods.com / m (530) 563-6274



TTAD UTILITY SHED
TRUCKEE TAHOE AIRPORT
TRUCKEE, CA

Revisions		
No.	Description	Date

Project number T.24.042
Date 02.04.2025
Drawn by AH

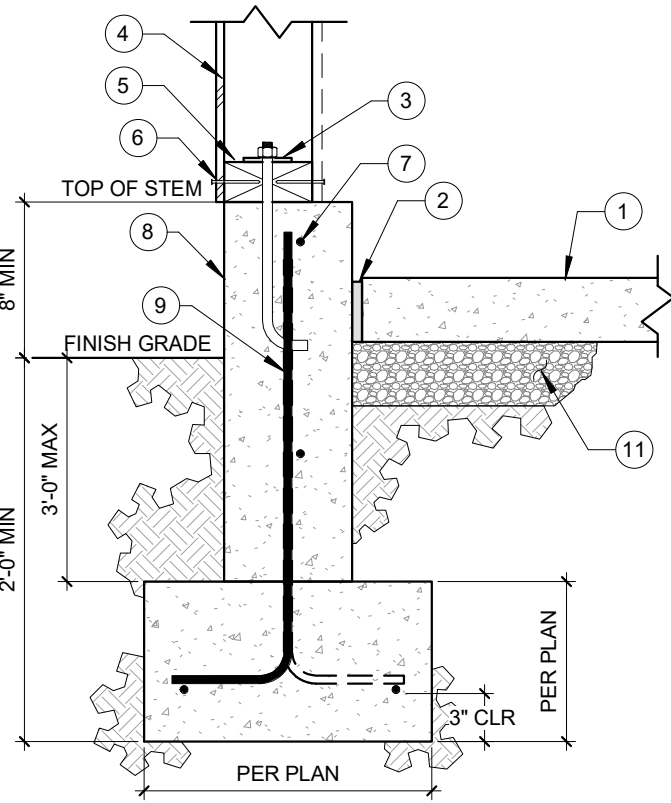
FOUNDATION & ROOF FRAMING PLAN

S2.1

Scale As indicated

ITEMS IDENTIFIED WITH A RED CLOUD ARE NOT INCLUDED IN THE SCOPE OF THE APRON A2 PROJECT. THEY WILL BE CONSTRUCTED BY OTHERS. SEE NOTE 11 ON SHEET 13.

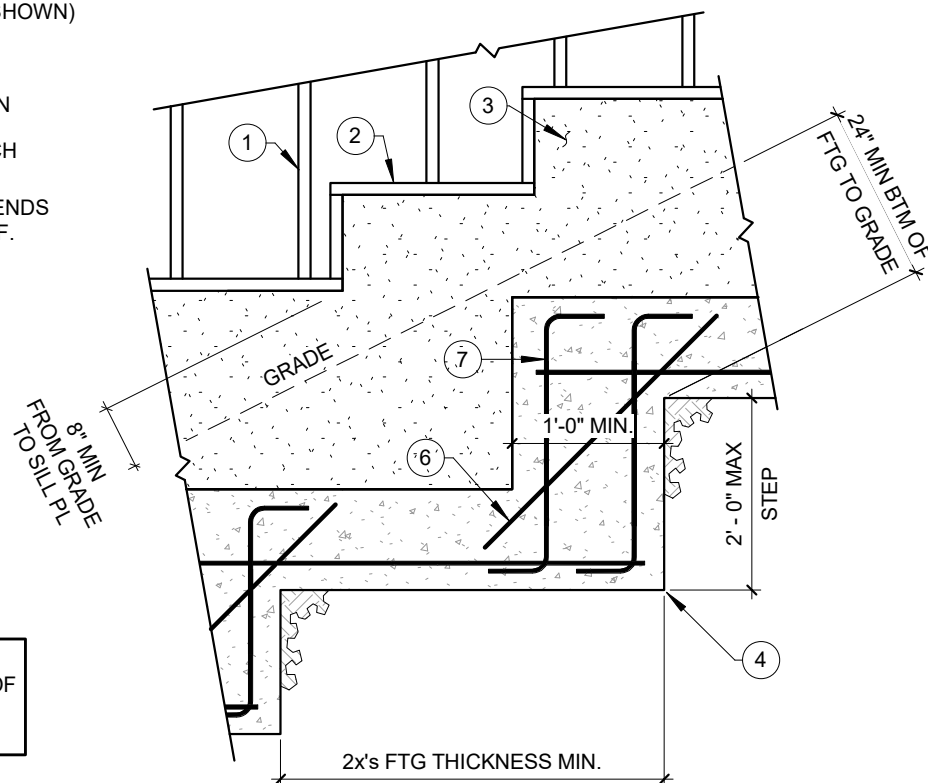
- CONC. SLAB ON GRADE PER PLAN
- JOINT MATERIAL DESIGNED BY OTHERS
- 3" x 3" x 1/4" PL WASHER AT ALL A.B.
- SHT'G (BOTH SIDES WHERE OCCURS)
- 3x P.T. MUDSILL W/ A.B. PER PLAN
- EDGE NAIL
- #4 HORIZ. AT 16" O.C. (AND AT TOP)
- 8" CONC. STEMWALL
- #4 "L" BARS AT 24" O.C.
- REINF. PER PLAN
- INSULATION AND / OR BASE MATERIAL DESIGNED BY OTHERS



7 PERIMETER STEMWALL AT CONC. SLAB EDGE
1" = 1'-0"

STD025

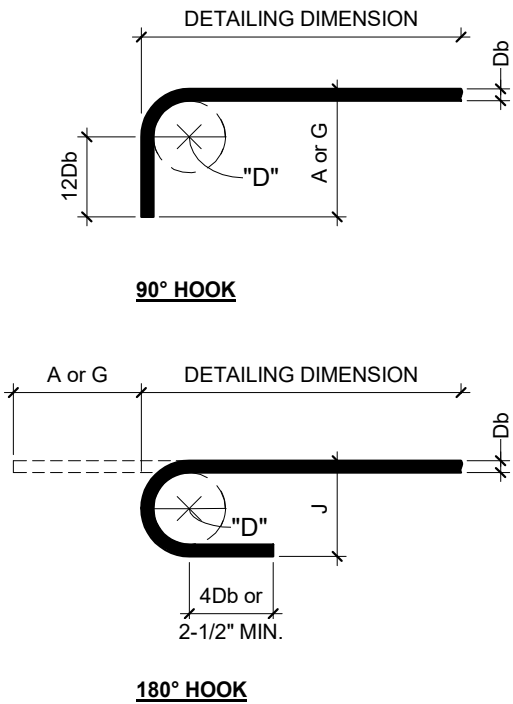
- 2x STUD AT 16" O.C. PER PLAN, U.N.O.
- MUDSILL W/ A.B. PER SCHED.
- STEMWALL (REBAR NOT SHOWN)
- FOOTING PER PLAN
- FOOTING REINF. PER PLAN
- DIAGONAL BARS TO MATCH FOOTING REINF.
- VERT. BARS W/ HOOKED ENDS TO MATCH FOOTING REINF.



NOTE:
ALL FOOTINGS ON SLOPES OF 10% OR MORE SHALL BE STEPPED PER THIS DETAIL

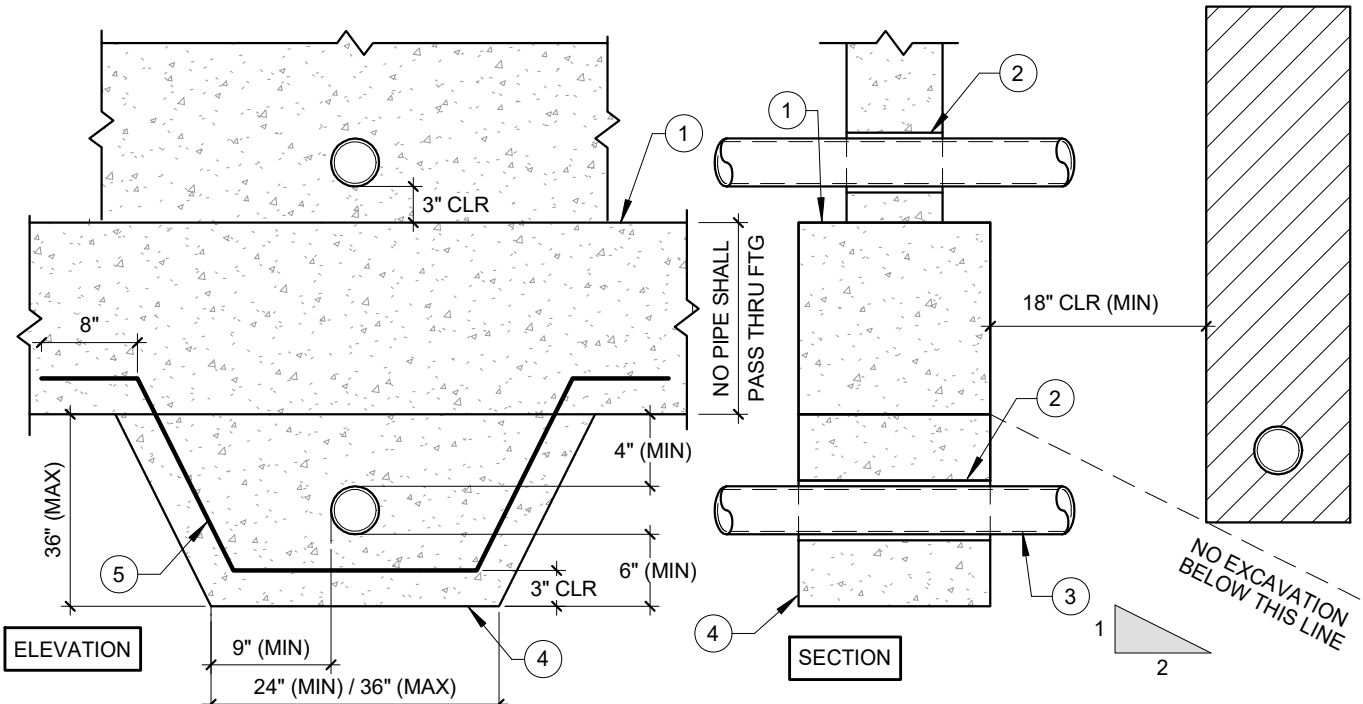
6 TYPICAL CONTINUOUS STEPPED FOOTING
1/2" = 1'-0"

BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	
#3	2-1/4"	5"	4"	6"
#4	3"	6"	6"	8"
#5	3-3/4"	7"	6"	10"
#6	4-1/2"	8"	6"	12"
#7	5-1/4"	10"	6"	14"
#8	6"	11"	6"	16"
#9	9-1/2"	15"	6"	19"
#10	10-3/4"	17"	6"	22"
#11	12"	19"	6"	24"



2 STANDARD REINFORCING HOOKS
1" = 1'-0"

REINF02



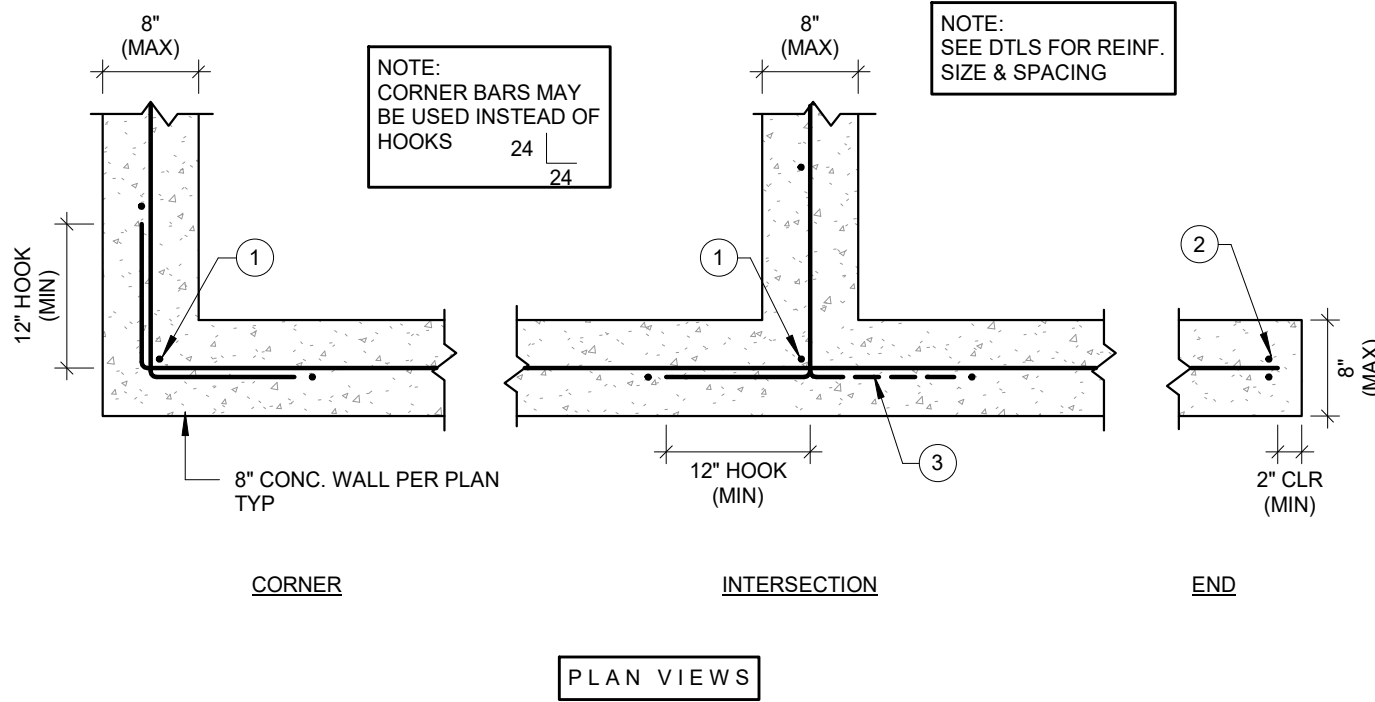
- CONT. FOOTING OR PAD FOOTING
- SLEEVE WALL OR FOOTING AS REQ'D FOR PIPE (1" CLR MIN)
- PIPE BY OTHERS
- ADDL CONC. UNDER CONT. FOOTING OR PAD FOOTING
- #4 AT 16" O.C. (LAP W/ FOOTING REBAR)

NOTE:
TRENCH SHALL NOT UNDERMINE FOOTING

9 TYPICAL FOOTING AT PIPE AND TRENCH
3/4" = 1'-0"

CONC06

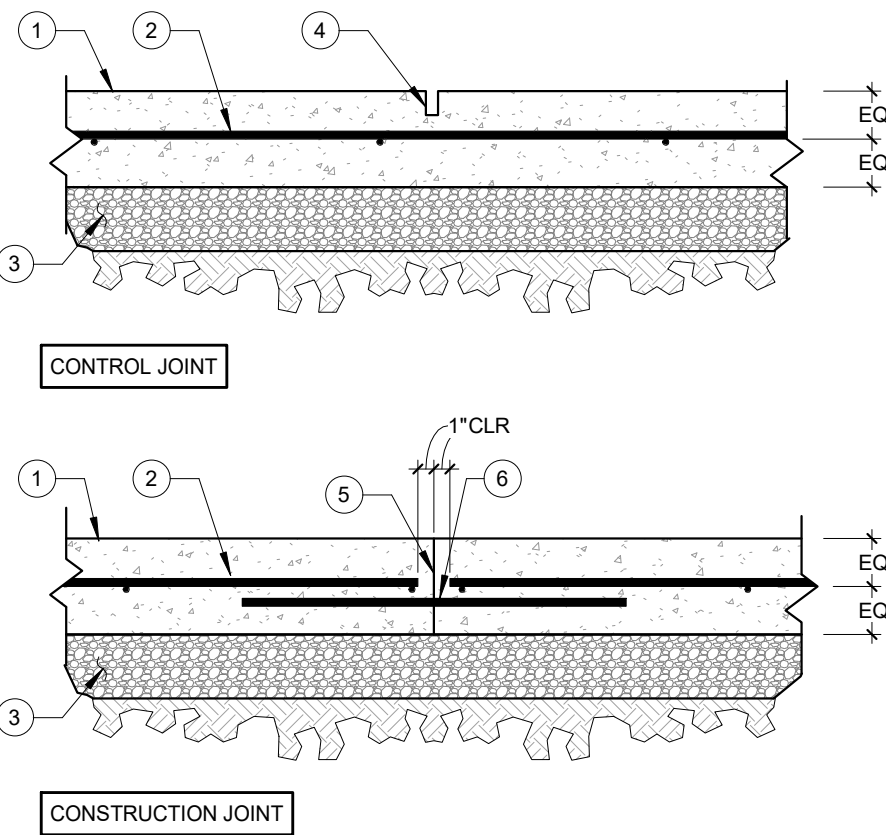
- (1) VERTICAL TRIM BAR
- (2) VERTICAL TRIM BARS
- ALTERNATE BENDS



5 TYPICAL REINFORCING LAPS IN CONCRETE WALL
3/4" = 1'-0"

CONC02

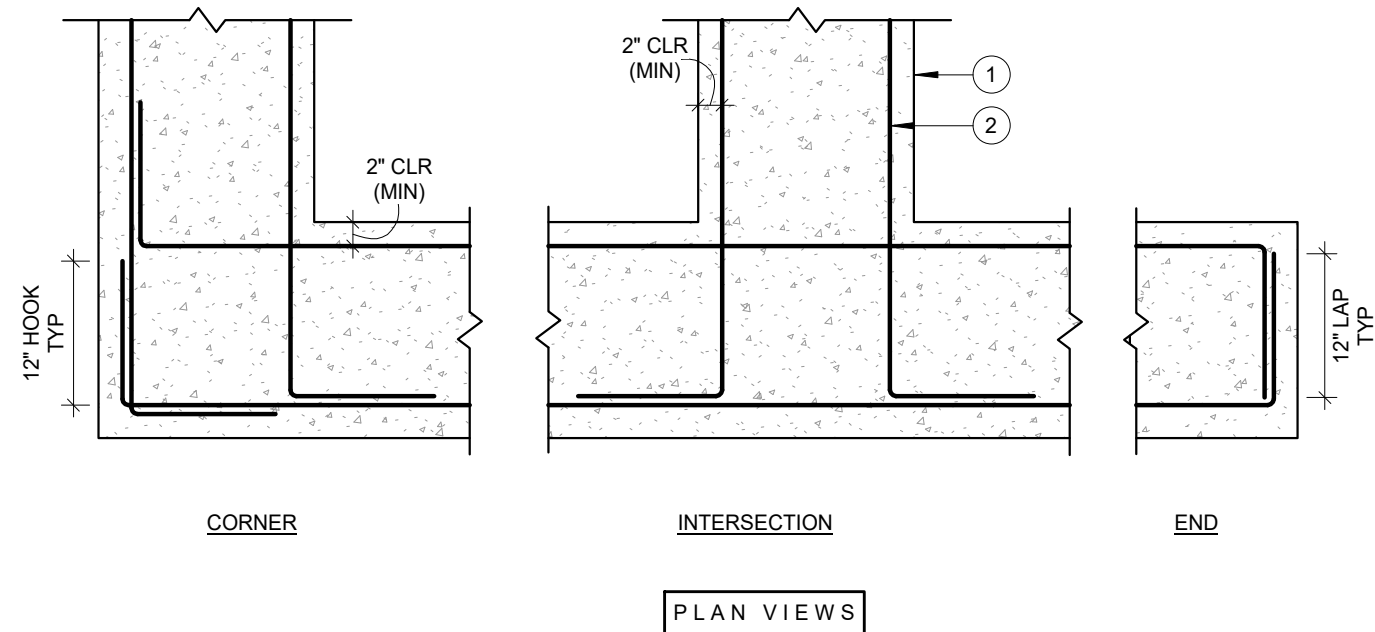
- SLAB PER PLAN
- SLAB REINF. PER PLAN
- UNDERLAYMENT & MOISTURE BARRIER DESIGNED BY OTHERS
- SAW-CUT JOINT, DEPTH = 1/4 OF SLAB THICKNESS (NO MORE THAN 24 HOURS AFTER SLAB IS POURED)
- TOOLED EDGE PER ARCH'L
- 1/2"Ø x 2'-0" LONG SMOOTH DOWEL AT 24" O.C. (WRAP OR GREASE ONE END)



8 TYPICAL FLOOR SLAB JOINT
1" = 1'-0"

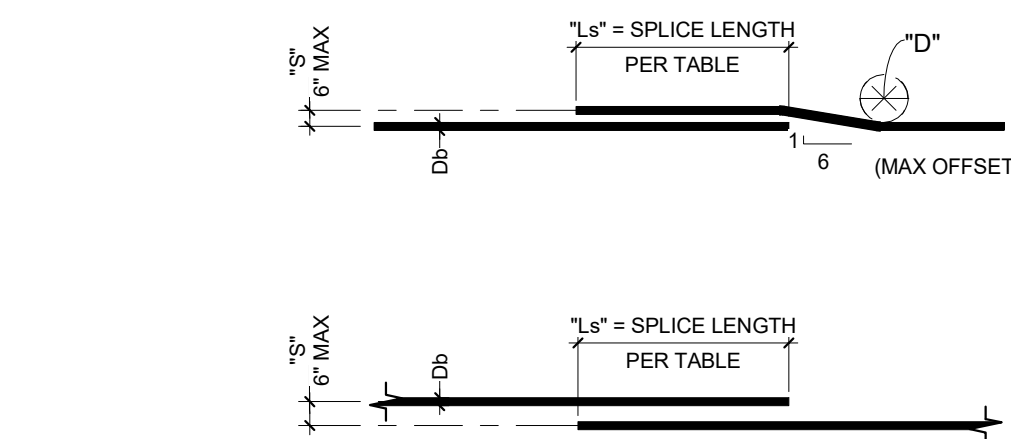
CONC05

- CONTINUOUS FOOTING PER PLAN
- LONGITUDINAL FOOTING REINF. PER FOOTING SCHEDULE



4 TYPICAL REINFORCING LAPS IN FOOTING
3/4" = 1'-0"

CONC01



BAR SIZE	"D _b " BAR DIA.	"D" BEND DIA.	"L _d " CONCRETE LAP SPLICE LENGTHS							
			SPECIFIED CONG STRENGTH							
			F _c = 2,500 psi (FTG'S & S.O.G.)		F _c = 3,000 psi		F _c = 4,000 psi		F _c = 5,000 psi	
			"L _s "	MAX "S"	"L _s "	MAX "S"	"L _s "	MAX "S"	"L _s "	MAX "S"
#3	0.375"	2-1/4"	23"	4"	22"	4"	20"	4"	17"	3"
#4	0.5"	3"	31"	6"	29"	5"	25"	5"	22"	4"
#5	0.625"	3-3/4"	39"	6"	36"	6"	31"	6"	29"	5"
#6	0.75"	4-1/2"	47"	6"	43"	6"	38"	6"	34"	6"
#7	0.875"	5-1/4"	69"	6"	62"	6"	55"	6"	49"	6"
#8	1.0"	6"	78"	6"	72"	6"	62"	6"	56"	6"
#9	1.128"	9-1/2"	88"	6"	81"	6"	70"	6"	62"	6"
#10	1.27"	10-3/4"	100"	6"	91"	6"	79"	6"	70"	6"
#11	1.41"	12"	111"	6"	101"	6"	87"	6"	78"	6"

- NOTES:
- Lap splices are based on ACI 318-19 section 25.5. Gr. 60 reinforcing steel, and normal weight concrete.
 - Clear cover to reinforcing bar must be greater than "D_b" (bar diameter) and spacing between bars must be greater than 2x D_b (2 times bar diameter).
 - Bars larger than #11 must be mechanically coupled; smaller bars may also be mechanical coupled, couplers shall be staggered at least 30".
 - Where larger bars lap with smaller bars, the smaller bar lap splice length applies, U.N.O.
 - For lightweight aggregate concrete all lap splices must be multiplied by 1.3 times.
 - Splice lengths listed are for uncoated bars.
 - Specific splice lengths called out in details supersede this table.

1 STANDARD REINFORCING LAP SPLICE
1" = 1'-0"

REINF01

GABBART & WOODS TAHOE PARTNERS
STRUCTURAL ENGINEERS



ABE HAEN / SE
abe@gabbartandwoods.com / m (530) 563-6274



TTAD UTILITY SHED
TRUCKEE TAHOE AIRPORT
TRUCKEE, CA

Revisions		
No.	Description	Date

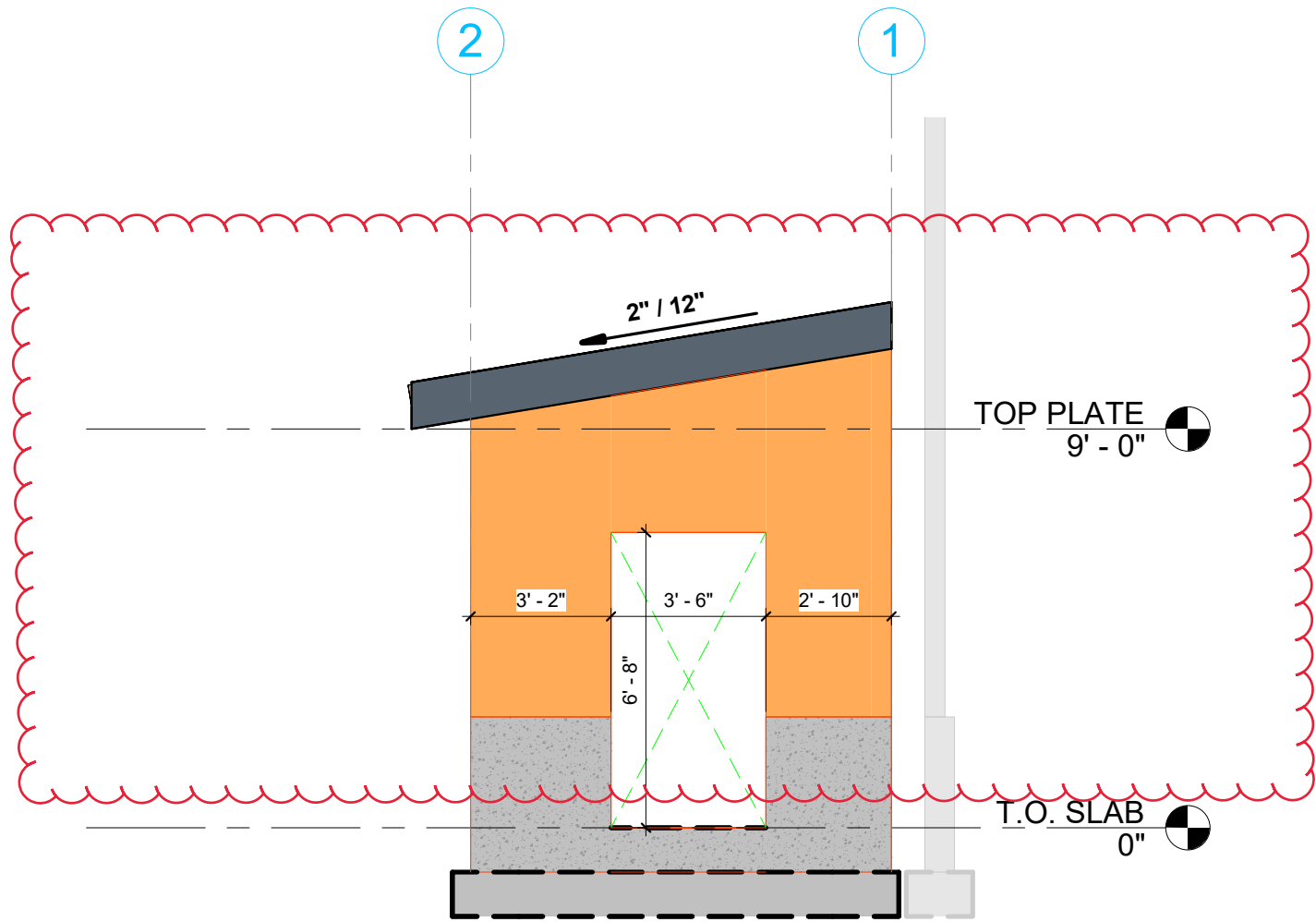
Project number T.24.042
Date 02.04.2025
Drawn by AH

CONCRETE & FOUNDATION DETAILS

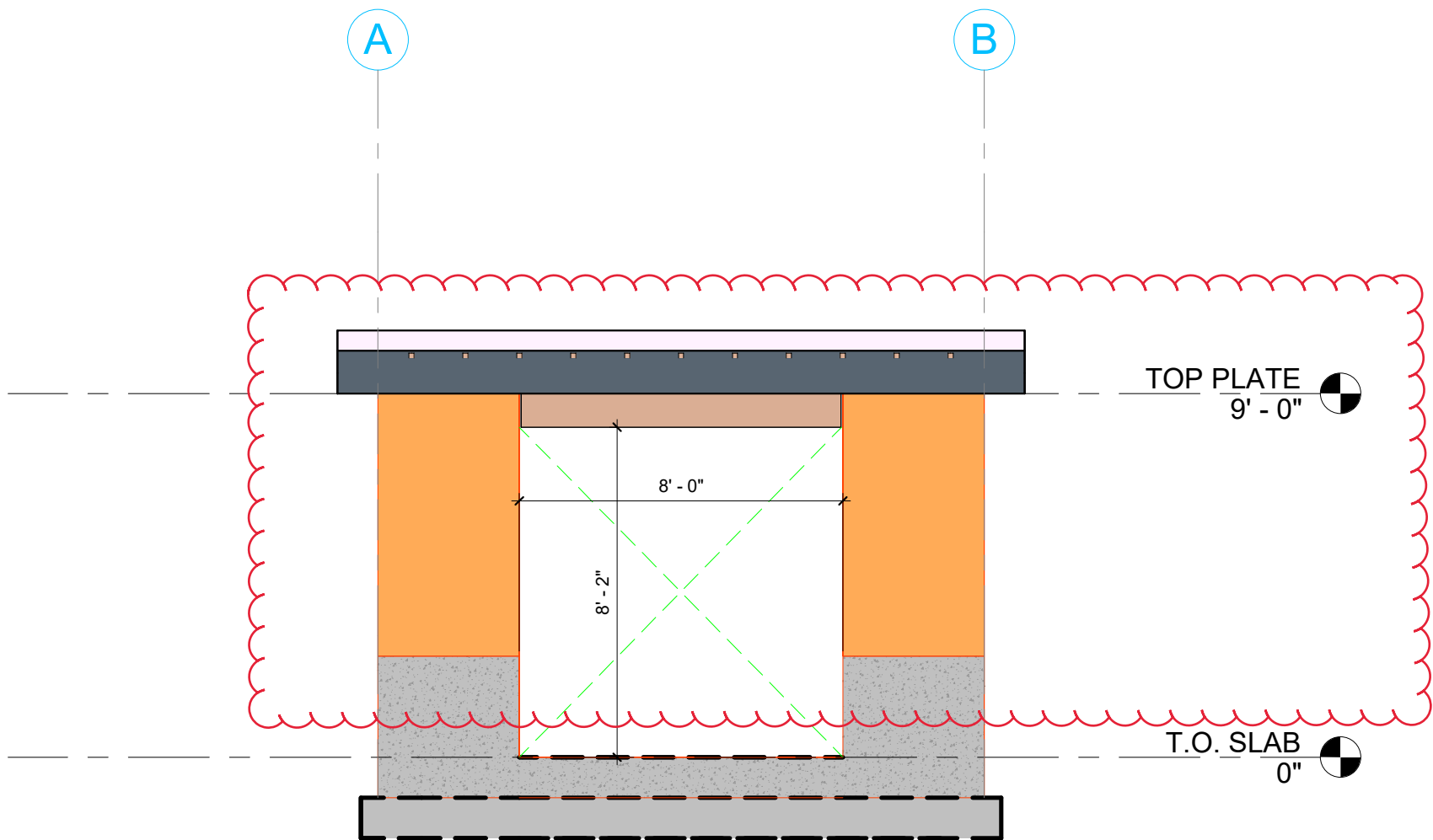
S3.1

Scale As indicated

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2 BUILDING ELEVATION
S4.1 1/4" = 1'-0"



1 BUILDING ELEVATION
S4.1 1/4" = 1'-0"

GABBART & WOODS **TAHOE PARTNERS**
STRUCTURAL ENGINEERS



ABE HAEN / SE
abe@gabbartandwoods.com / m (530) 563-6274



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TRUCKEE TAHOE AIRPORT
TRUCKEE, CA

Revisions		
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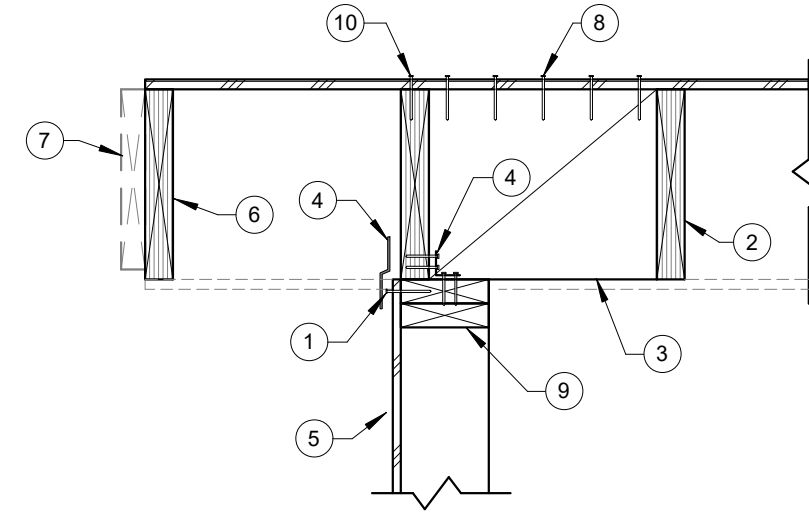
Project number	T.24.042
Date	02.04.2025
Drawn by	AH

BUILDING ELEVATIONS

S4.1

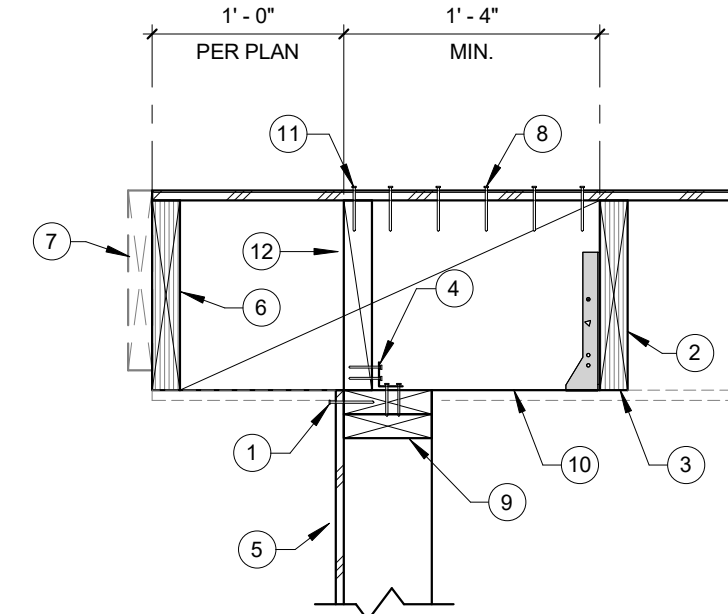
Scale	1/4" = 1'-0"
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- 1 SHEARWALL EDGE NAILING
PER PLAN
- 2 RAFTER PER PLAN
- 3 1-3/4" LVL (FULL DEPTH) BLK'G
AT 48" O.C.
- 4 SIMP. CLIP PER SCHEDULE 3
UNLESS NOTED OTHERWISE ON PLAN
- 5 SHTG PER PLAN
(BOTH SIDES WHERE OCCURS)
- 6 BARGE RAFTER
- 7 FASCIA PER ARCH'L
- 8 8d AT 3' O.C.
AT EACH BLK
- 9 DOUBLE TOP PLATE
- 10 EDGE NAIL



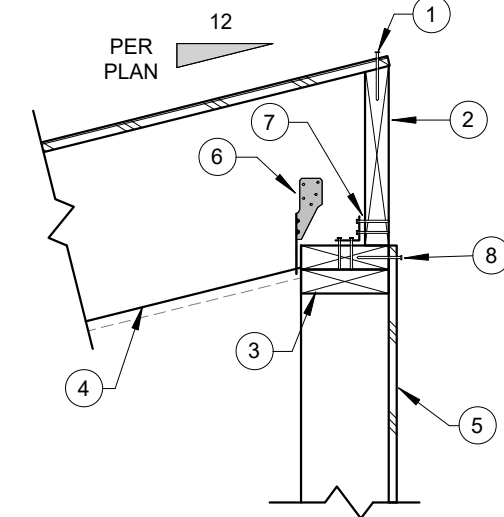
RF03

- ① SHEARWALL EDGE NAILING
PER PLAN
- ② RAFTER PER PLAN
- ③ 1-3/4" LVL (FULL DEPTH) BLK'G
AT 48" O.C.
- ④ SIMP. CLIP PER SCHEDULE 3
UNLESS NOTED OTHERWISE ON PLAN
- ⑤ SHT'G PER PLAN
- ⑥ BARGE RAFTER
- ⑦ FASCIA
- ⑧ 8d AT 3" O.C.
AT EACH BLK
- ⑨ DOUBLE TOP PLATE
- ⑩ LADDER RAFTERS AT 16" O.C.
TO MATCH TYP RAFTER SIZE
- ⑪ EDGE NAIL



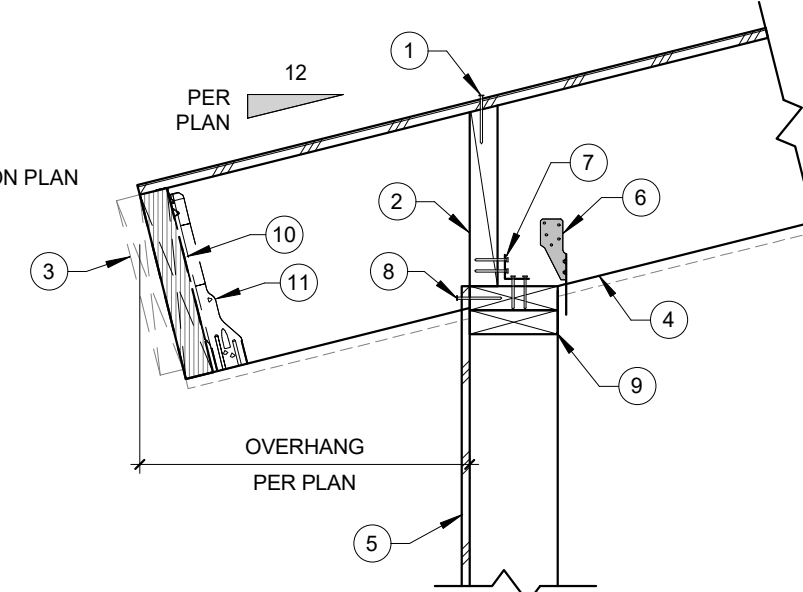
RF03

- 1 EDGE NAIL
- 2 2x RIM RAFTER
- 3 DOUBLE TOP PLATE
- 4 RAFTER PER PLAN
- 5 SHT'G PER PLAN
- 6 SIMP. H2.5A EACH RAFTER
- 7 SIMP. CLIP PER SCHEDULE 3
UNLESS NOTED OTHERWISE ON PLAN
- 8 SHEARWALL EDGE NAILING
PER PLAN



RF02

- 1 EDGE NAIL
- 2 1-3/4" LVL BLK'G
- 3 FASCIA
- 4 RAFTER PER PLAN
- 5 SHTG PER PLAN
- 6 SIMP. H2 5A EACH RAFTER
- 7 SIMP. CLIP PER SCHEDULE 3
UNLESS NOTED OTHERWISE ON PLAN
- 8 SHEARWALL EDGE NAILING
PER PLAN
- 9 DOUBLE TOP PLATE
- 10 STRUCT SUB-FASCIA
WHERE OCCURS PER PLAN
- 11 HANGER PER PLAN,
OR IF REQUIRED AT
LOCATIONS WITH
STRUCTURAL FASCIA



PRO

[illegible]

ROOF FRAMING DETAILS

Scale	1" = 1'-0"
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