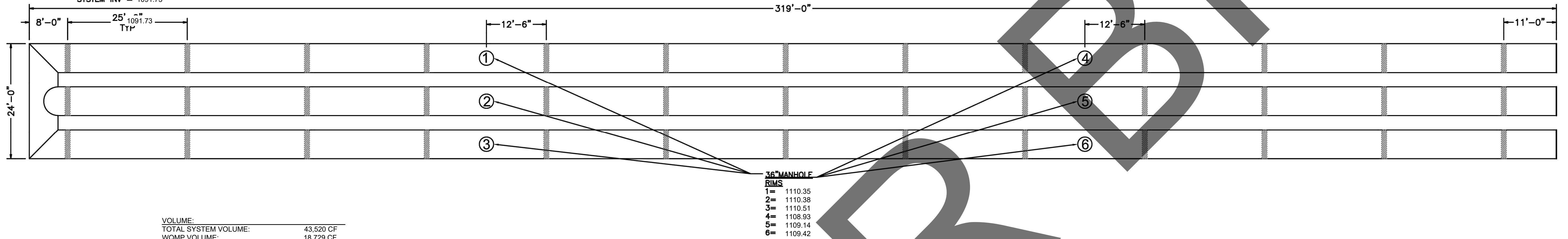
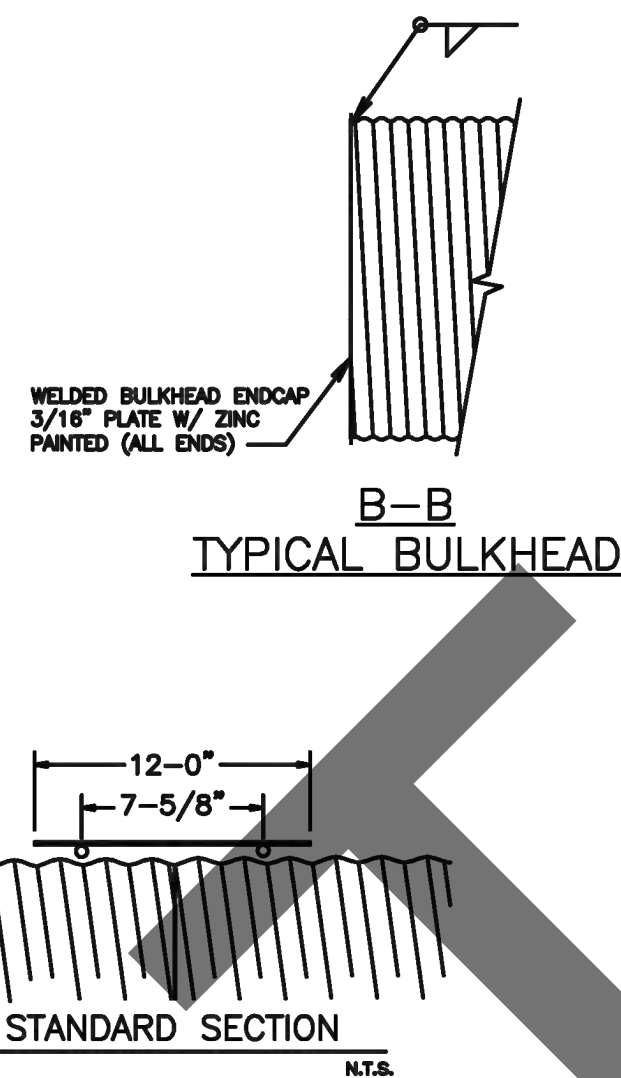
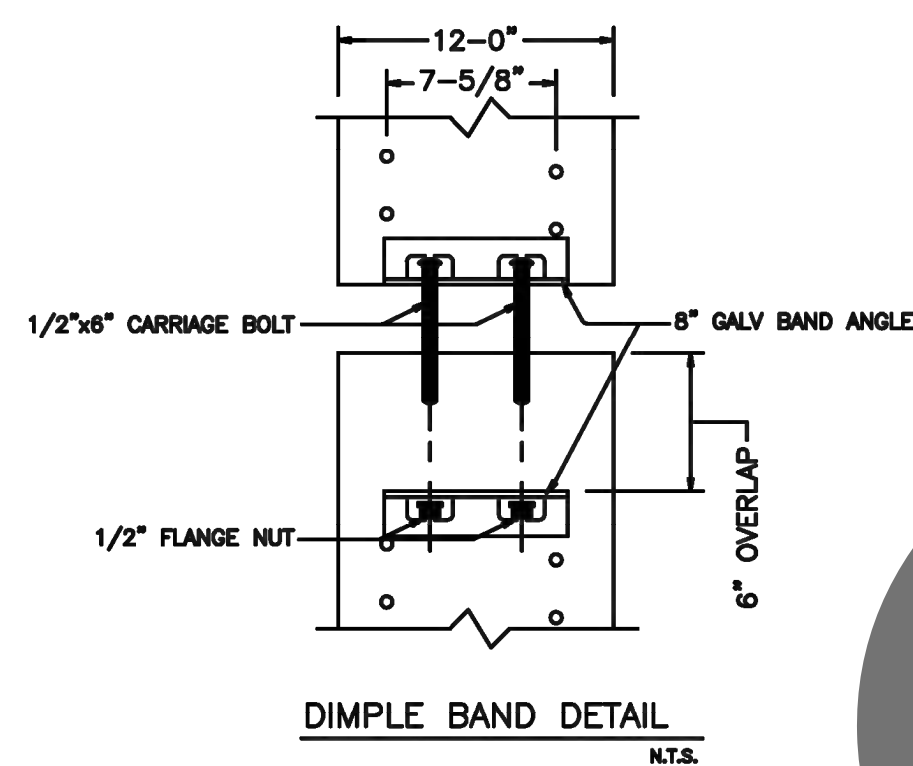
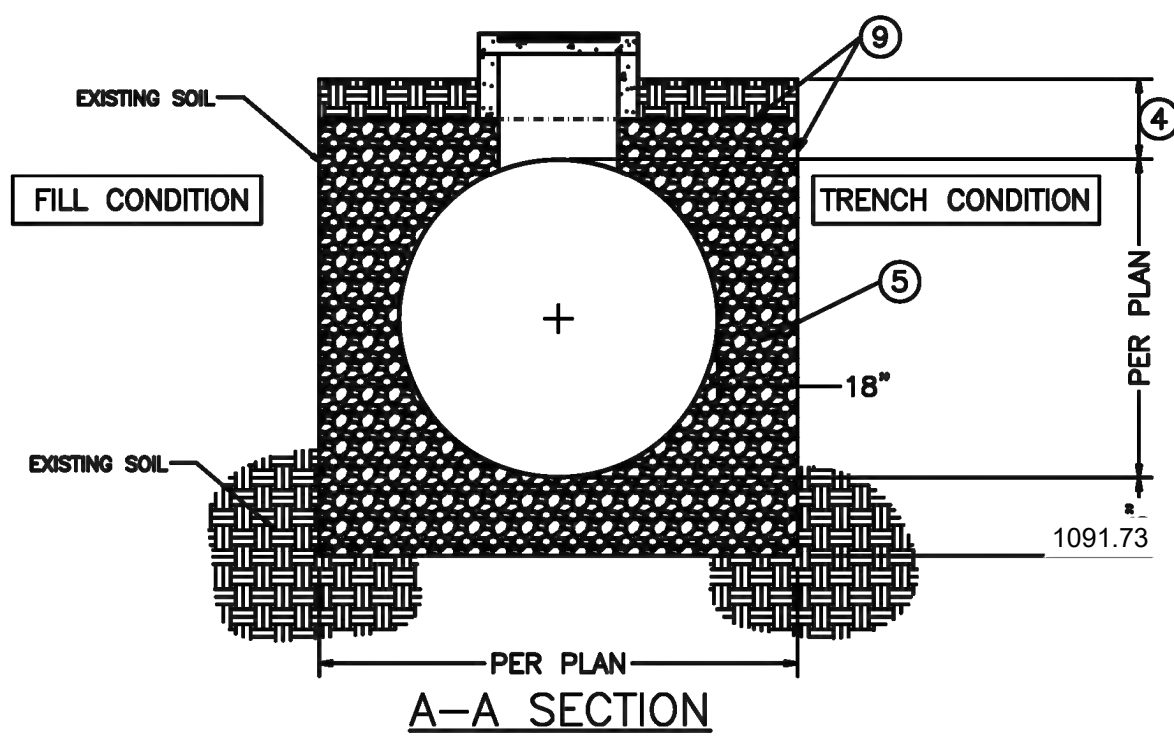


DESIGN INFORMATION
MATERIAL FINISH = ALZD TYP II
PIPE GAUGE = 14GA
PERFORATED = YES
DIAMETER = 72"
LOADING = H20/H25
SYSTEM INV = 1091.73



VOLUME:
TOTAL SYSTEM VOLUME: 43,520 CF
WQMP VOLUME: 18,729 CF
PIPE INVERT ELEV: 1098.17 FT
WQMP MAX WATER SURFACE: 1100.87 FT



GENERAL NOTES:
1. BANDS ARE FURNISHED AS FOLLOWS:
12" THRU 48" - 1-PIECE
48" THRU 96" - 2-PIECE
96" THRU 144" - 3-PIECE
2. GALV BAND ANGLES ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDED.
3. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
4. DIMPLE BANDS FOR ARCHED PIPE ARE THE SAME AS FOR EQUIVALENT ROUND PIPE DIAMETER.

NOTES:
1. RIGID OR FLEXIBLE PAVEMENT.
2. GRANULAR ROAD BASE.
3. NORMAL ROADWAY EMBANKMENT FILL PLACED IN 8" LIFTS AND COMPACTED TO MIN. 90% STANDARD DENSITY PER AASHTO T-99.
4. 12" MIN. FOR DIAMETERS THROUGH 96", 18" MIN. FOR DIAMETERS FROM 102" AND UP. MEASURE FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF PIPE TO TOP OF RIGID PAVEMENT.
5. FREE DRAINING ANGULAR WASHED STONE 3/4" - 2" AROUND PIPE ENVELOPE AS SHOWN OR OTHERWISE NOTED.
6. 5 x 1" CSP GAGE PER AASHTO SECTION 11.
7. NOT USED
8. LISTED SPACING CHART IS FOR MULTIPLE PIPE INSTALLATION. FOR SINGLE RUN, THE TRENCH REQUIRES ONLY THE BOTTOM WIDTH OF THE PIPE'S SPAN, PLUS ROOM FOR COMPACTION EQUIPMENT.
9. 6 oz. NON WOVEN GEOTEXTILE FABRIC.
10. RELATIVELY LOOSE GRANULAR BEDDING ROUGHLY SHAPED TO FIT BOTTOM OF PIPE, 4" TO 6" IN DEPTH. (#57 OR #8 OR OTHER SUITABLE GRANULAR).

DIAMETER	REQUIRED SPACING
UP TO 24"	12"
24" - 72"	1/2 PIPE DIA.
72" AND UP	36"

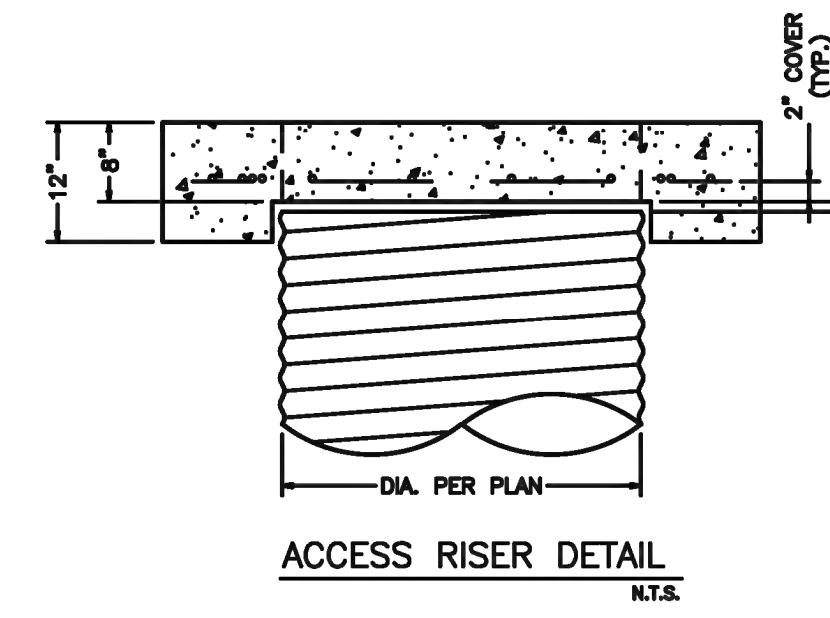
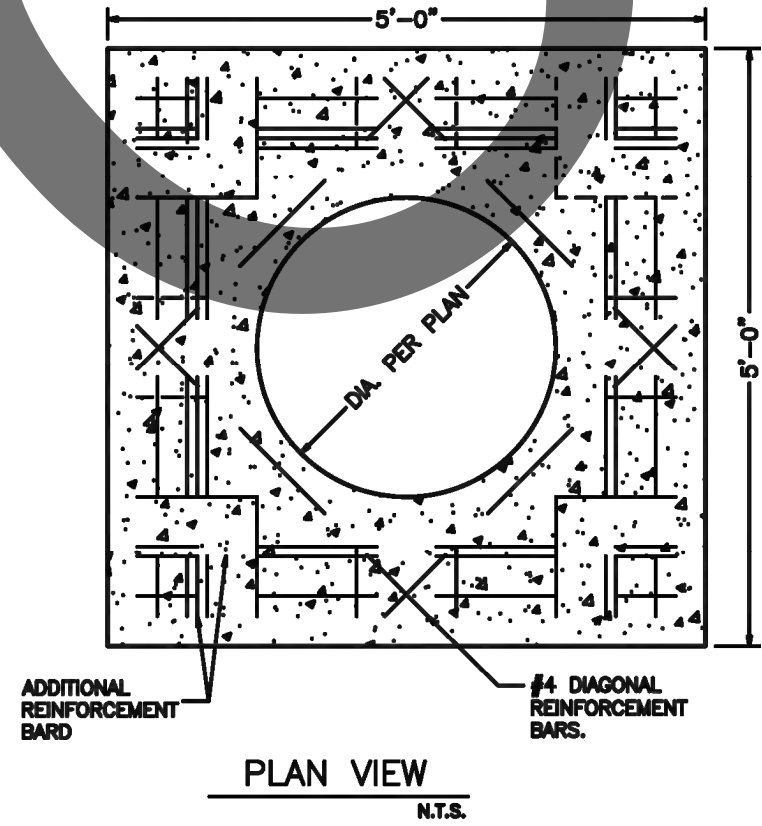
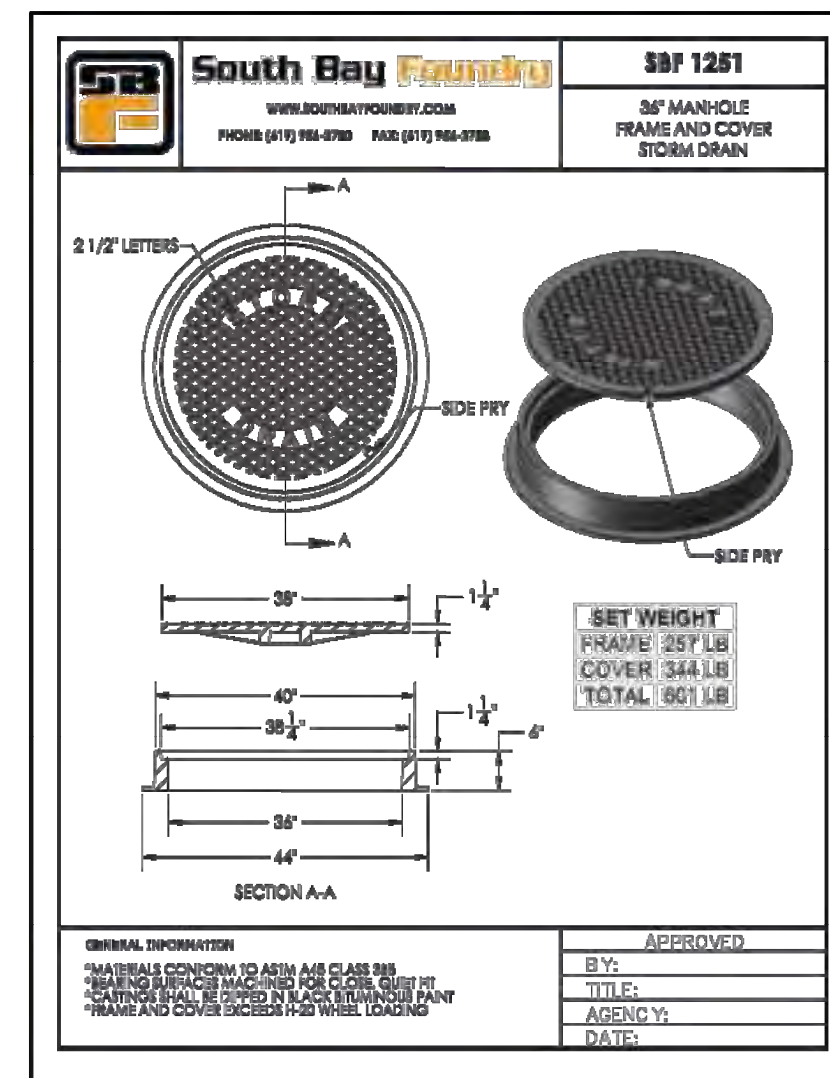


Table 7.8				
General guidelines for minimum cover required for heavy off-road construction equipment				
Pipe Span, in.	18-50	50-75	75-110	110-150
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

* Minimum cover may vary, depending on local conditions. The contractor must provide the additional cover required to avoid damage to the pipe. Minimum cover is measured from the top of the pipe to the top of the maintained construction roadway surface.



HEAVY CONSTRUCTION
For temporary construction vehicle loads (100 kips/axle load), put at least four feet of compacted cover on top of the pipe (but not exceeding the maximum allowable cover over the pipe).
The use of heavy construction equipment necessitates greater protection for the pipe than finished grade cover minimums.
Finished Grade
Temporary cover for construction loads

PACIFIC CORRUGATED PIPE CO.
13680 SLOVER AVENUE FONTANA, CA 92337
800.338.5858 * 909.829.4235
Fx: 909.829.8035
SOCAL@PCPIPE.COM

NOTE:
THE SUITABILITY OF THE INFORMATION PRESENTED FOR USE ON ANY PARTICULAR PROJECT SHOULD BE DETERMINED BY THE ENGINEER RESPONSIBLE FOR THE DESIGN.

PROJECT NAME: SB ANIMAL CARE	PROJECT #:	DRAWN BY: C.CLARK
SIGN & DATE TO RELEASE FOR MANUFACTURE (SUBJECT TO PRICE VERIFICATION)	PLANS APPROVED <input type="checkbox"/> (AS NOTED) <input type="checkbox"/> (W/CHANGES)	SCALE: AS NOTED
DATE REV.	SIGNATURE DESCRIPTION	DATE SHEET NO: 1 OF 1

Underground Service Alert

Call: TOLL FREE
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
NATIONAL GEODETIC SURVEY DATA SHEET

DESIGNATION: 700 10
PID: EV1239
ELEVATION: 1250.56' NAVD88

PREPARED BY:
BOENADIMAN
JOSEPH BOENADIMAN & ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS, DESIGNERS

TEL: (909) 985-3806
341 NORTH ARROWHEAD AVE.
SAN BERNARDINO, CA 92408
CAL 909 381-0711
WWW.BENADIMAN.COM

SEAL
REGISTERED PROFESSIONAL ENGINEER
JAMES T. STANTON
No. C-70944
Exp. 6-30-25
CIVIL
STATE OF CALIFORNIA

DATE BY MARK
ENGINEER REVISIONS
DESIGNED BY: JTS DRAWN BY: JTS CHECKED BY: JTS

SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

OSVALDO ROQUE
SUPERVISING ENGINEER, TRAFFIC DIVISION

JEREMY JOHNSON
ENGINEERING MANAGER, TRAFFIC DIVISION

RECOMMENDED BY:
APPROVED BY:

MICHAEL FAM
ENGINEERING MANAGER, LAND DEVELOPMENT DIVISION

GRADING PLAN

DETAILS
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

FILE NO.
GRAD 2024-00007

SHEET 12 OF 14

EROSION CONTROL NOTES:

- IN CASE OF EMERGENCY, CALL GREG DARLING AT (562) 595-4687.
- POLLUTION AND EROSION PREVENTION MEASURES, ALSO KNOWN AS BEST MANAGEMENT PRACTICES (BMPs), MUST BE INSTALLED PRIOR TO GRADING. THESE MEASURES, INCLUDING THE PREVENTION OF SEDIMENTATION OR FLOOD DAMAGE, TO OFFSITE PROPERTY SHALL BE ADEQUATE WHETHER OR NOT AN EROSION CONTROL PERMIT IS REQUIRED.
- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ONSITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
- EROSION CONTROL DEVICES SHALL BE FUNCTIONING AT ALL TIMES. IN CASE OF FAILURE, RAPID CONSTRUCTION OF EMERGENCY DEVICES SHALL BE IMPLEMENTED.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOILS AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- EXCESS OR WASTE CONCRETE MUST BE CONTAINED ONSITE. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ONSITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
- DEVELOPERS/CONTRACTORS ARE RESPONSIBLE TO ENSURE ALL EROSION CONTROL DEVICES AND BMPs ARE INSTALLED AND FUNCTIONING PROPERLY PER PLAN. PROPER PRECAUTION SHALL BE CONSIDERED WHEN 50% OR GREATER PROBABILITY OF PREDICTED PRECIPITATION, AND AFTER ACTUAL PRECIPITATION. A CONSTRUCTION SITE INSPECTION CHECKLIST AND INSPECTION LOG SHALL BE MAINTAINED AT THE PROJECT SITE AT ALL TIMES AND AVAILABLE FOR REVIEW BY THE BUILDING OFFICIAL.
- TRASH AND CONSTRUCTION-RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
- ALL SILT AND DEBRIS SHALL BE REMOVED FROM ALL DEVICES WITHIN 24 HOURS AFTER EACH RAINSTORM AND BE DISPOSED OF PROPERLY.
- ALL STORM WATER CAPTURE DEVICES SHALL BE PROTECTED AT ALL TIMES.
- EROSION AND SEDIMENT CONTROL PRACTICES SHOULD BE IN CONFORMANCE WITH THE CALIFORNIA STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK* (WWW.CASQA.ORG). THE MOST COMMON EROSION CONTROL MEASURES ARE:
 - SCHEDULING (EC-1)
 - PRESERVATION OF EXISTING VEGETATION (EC-2)
 - STOCKPILE MANAGEMENT (WM-3)
 - SILT FENCE (SE-1)
 - FIBER ROLLS (SE-5)
 - SANDBAG BARRIER (SE-8)
 - STRAW BALE BARRIER (SE-9)
 - STORM DRAIN INLET PROTECTION (SE-10)
 - CONCRETE WASTE MANAGEMENT (WM-8)
 - VEHICLE AND EQUIPMENT FUELING (NS-9)
 - VEHICLE AND EQUIPMENT MAINTENANCE (NS-10)
 - STABILIZED CONSTRUCTION ENTRANCE/EXIT (TC-1)
 - ENTRANCE/EXIT TIRE WASH (TC-3)
 - WIND EROSION CONTROL (WE-1)
- DUST SHALL BE CONTROLLED BY WATERING.

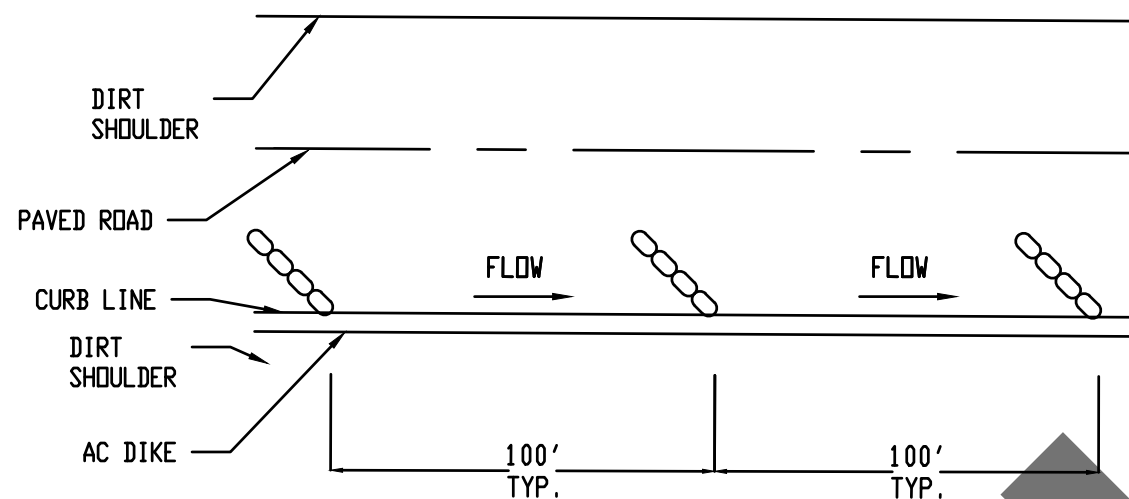


TYPICAL SECTION TYPICAL ELEVATION

NOTES: ALL CONSTRUCTED INLETS AND TEMPORARY INLETS SHALL BE GRAVELBAGGED PRIOR TO ANY ANTICIPATED RAINFALL.

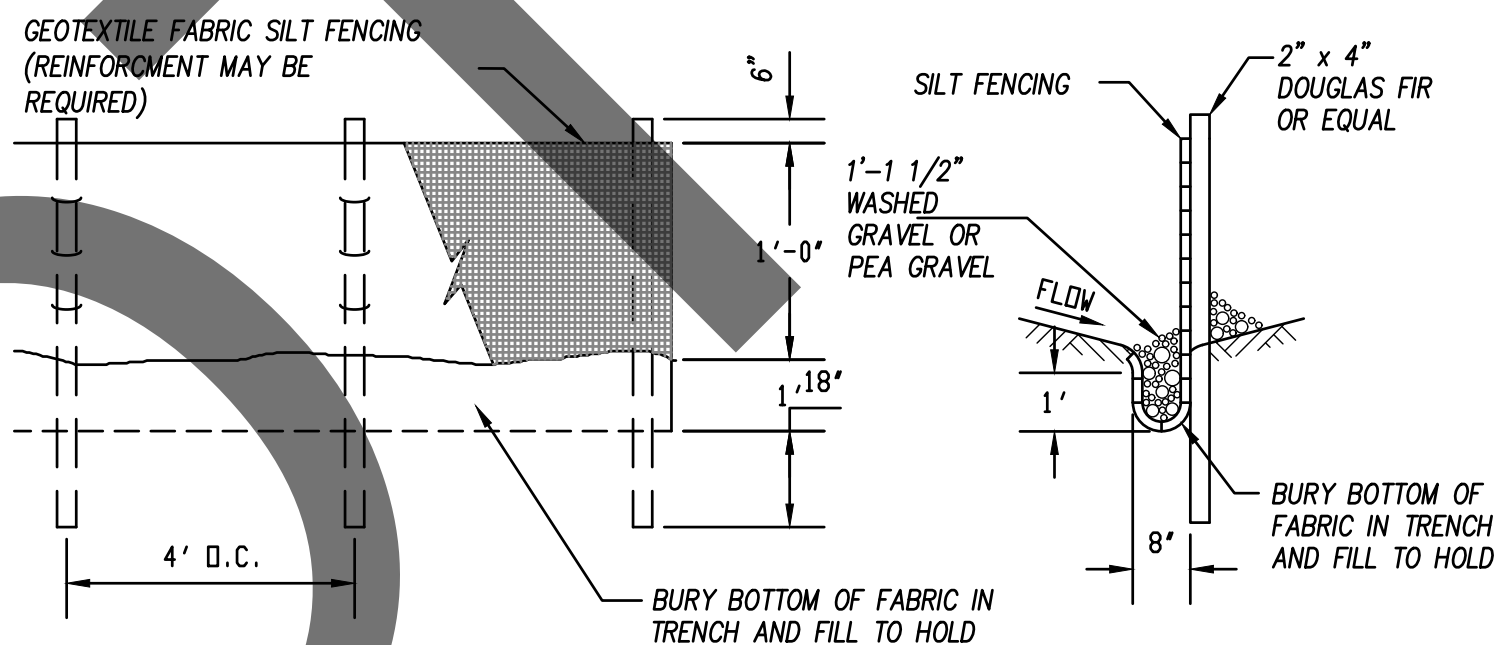
GRAVEL BAG BARRIER DETAILS

NOT TO SCALE



GRAVEL BAG-CHECK DAM DETAIL

NOT TO SCALE



ELEVATION

SILT FENCE DETAILS

NOT TO SCALE

SECTION

SAN BERNARDINO COUNTY
GRADING PLAN
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

APN: 0260-061-18

EROSION CONTROL:

- EC1 - SCHEDULING
- EC2 - PRESERVATION OF EXISTING VEGETATION
- EC3 - HYDRAULIC MULCH
- EC4 - HYDROSEEDING
- EC5 - SOIL BINDERS
- EC6 - STRAW MULCH
- EC7 - GEOTEXTILES & MATS
- EC8 - WOOD MULCHING
- EC9 - EARTH DIMES AND DRAINAGE SWALES
- EC10 - VELOCITY DISSIPATION DEVICES
- EC11 - SLOPE DRAINS
- EC12 - STREAMBANK STABILIZATION
- EC13 - POLYACRYLAMIDE

TEMPORARY SEDIMENT CONTROL:

- SE1 - SILT FENCE
- SE2 - SEDIMENT BASIN
- SE3 - SEDIMENT TRAP
- SE4 - CHECK DAM
- SE5 - FIBER ROLLS
- SE6 - GRAVEL BAG BERM
- SE7 - STREET SWEEPING & VACUUMING
- SE8 - GRAVELBAG BARRIER
- SE9 - STRAW BALE BARRIER
- SE10 - STORM DRAIN INLET PROTECTION

WIND EROSION CONTROL:

- WE1 - WIND EROSION CONTROL

EQUIPMENT TRACKING CONTROL:

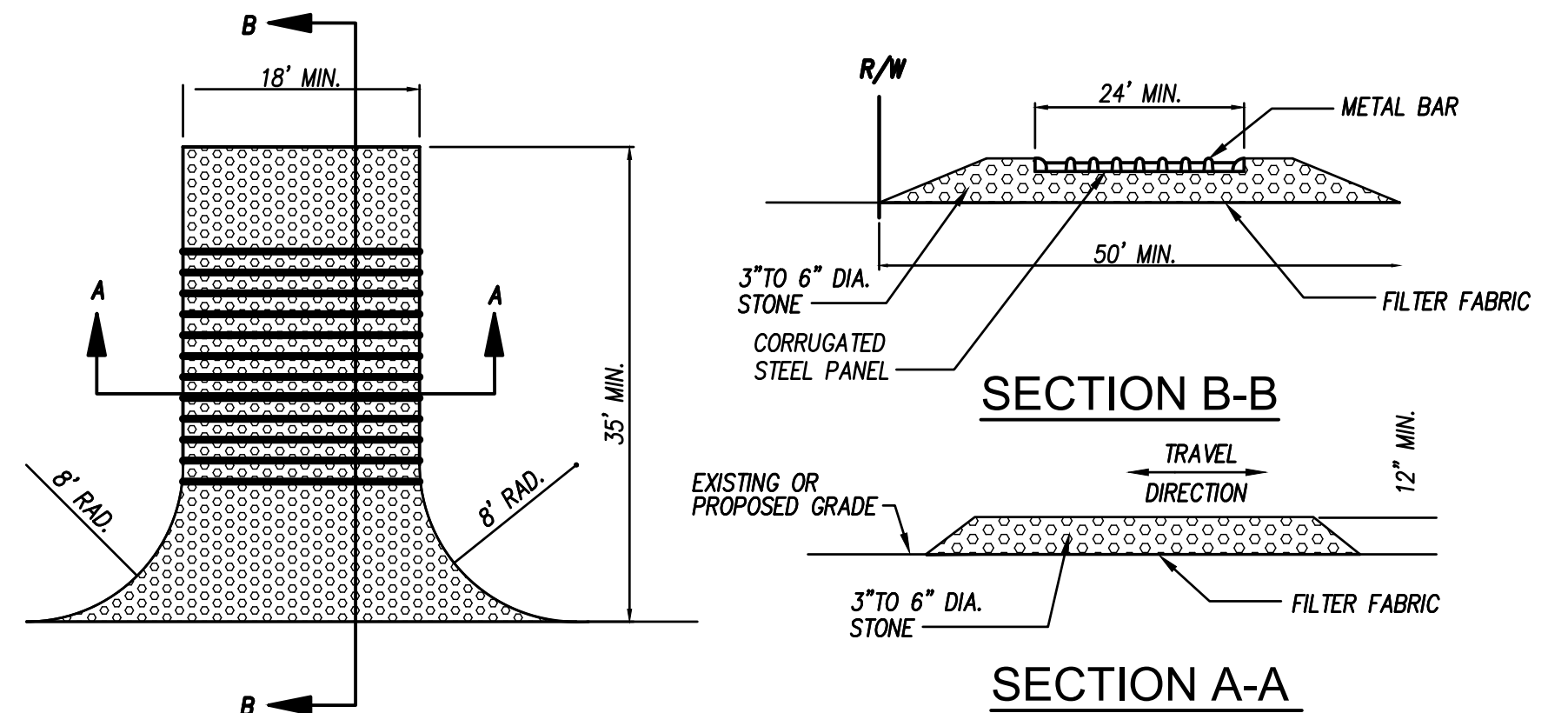
- TC1 - STABILIZED CONSTRUCTION ENTRANCE/EXIT
- TC2 - STABILIZED CONSTRUCTION ROADWAY
- TC3 - ENTRANCE/OUTLET TIRE WASH

WASTE MANAGEMENT& MATERIAL
POLLUTION CONTROL:

- WM1 - MATERIAL DELIVERY AND STORAGE
- WM2 - MATERIAL USE
- WM3 - STOCKPILE MANAGEMENT
- WM4 - SPILL PREVENTION AND CONTROL
- WM5 - SOLID WASTE MANAGEMENT
- WM6 - HAZARDOUS WASTE MANAGEMENT
- WM7 - CONTAMINATION SOIL MANAGEMENT
- WM8 - CONCRETE WASTE MANAGEMENT
- WM9 - SANITARY/SEPTIC WASTE MANAGEMENT
- WM10 - LIQUID WASTE MANAGEMENT

NON-STORMWATER MANAGEMENT:

- NS1 - WATER CONSERVATION PRACTICES
- NS2 - DEWATERING OPERATIONS
- NS3 - PAVING AND GRINDING OPERATIONS
- NS4 - TEMPORARY STREAM CROSSING
- NS5 - CLEAR WATER DIVERSION
- NS6 - ILLUQIT CONNECTION/DISCHARGE
- NS7 - POTABLE WATER/IRRIGATION
- NS8 - VEHICLE AND EQUIPMENT CLEANING
- NS9 - VEHICLE AND EQUIPMENT FUELING
- NS10 - VEHICLE AND EQUIPMENT MAINTENANCE
- NS11 - PILE DRIVING OPERATIONS
- NS12 - CONCRETE CURING
- NS13 - CONCRETE FINISHING
- NS14 - MATERIAL AND EQUIPMENT USE
- NS15 - DEMOLITION ADJACENT TO WATER
- NS16 - TEMPORARY BATCH PLANTS



STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAILS

NOT TO SCALE

LEGEND:

- GRAVEL BAGS TO BE PLACED PER PLAN
- SILT FENCE TO BE PLACED PER PLAN
- STABILIZED CONSTRUCTION ENTRANCE/EXIT

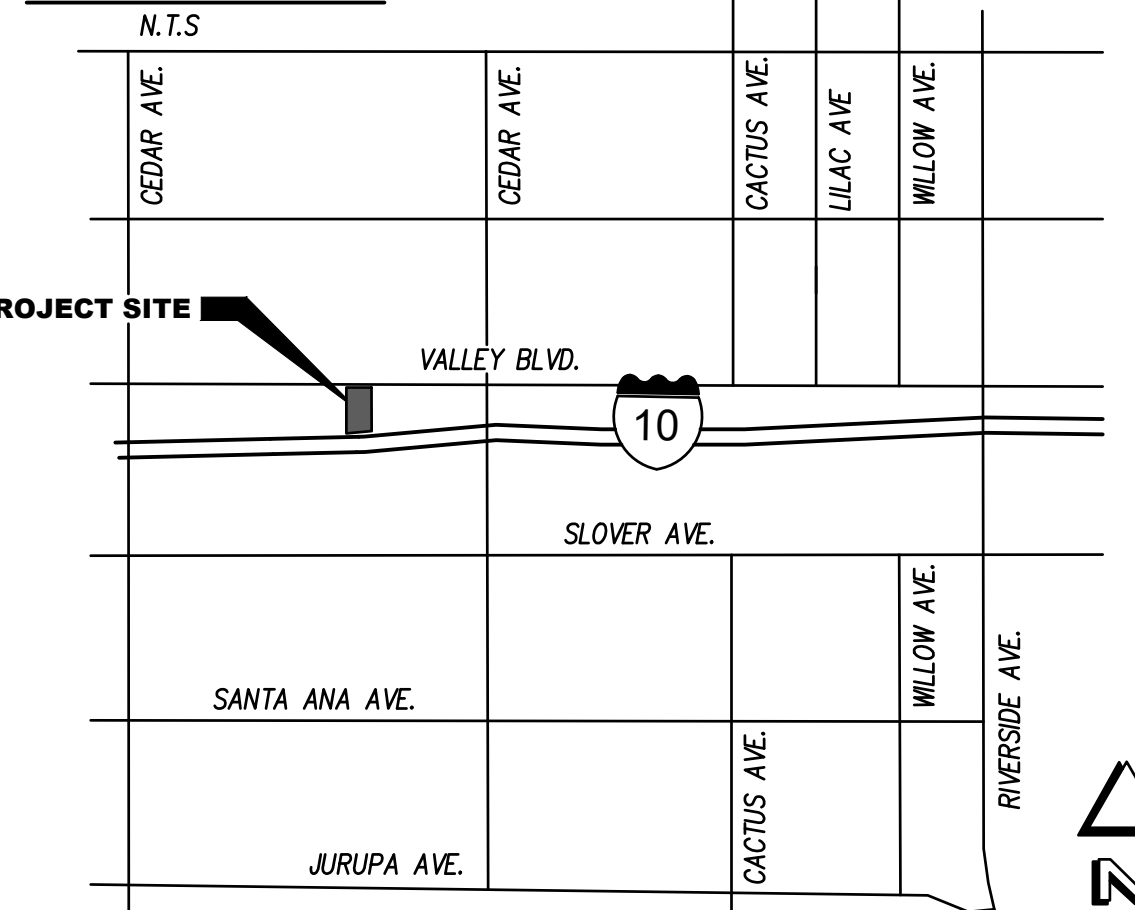
24 HR CONTACT PERSON

NAME: KENNETH HYLIN
PHONE: (909) 387-5000

SPECIAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A "QUALIFIED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PRACTITIONER" (OSP) FOR ALL RECORDS, INSPECTIONS AND DOCUMENTATION REQUIRED AS PART OF THE STORM WATER POLLUTION PREVENTION PLAN.
- THE "QUALIFIED SWPPP PRACTITIONER" (QSP) SHALL UPDATE THE SWPPP AND EROSION CONTROL PLAN PER FIELD CONDITION AS OUTLINE IN TABLE 1.1 OF THE SWPPP.
- THE QSP SHALL DOCUMENT ALL CHANGES TO THE SWPPP AND EROSION CONTROL PLAN FOR THE DURATION OF THE PROJECT.
- THE QSP SHALL KEEP ALL RECORD, INSPECTION REPORTS, ETC. AND PROVIDED COPIES AS PART OF THE ANNUAL REPORT.

VICINITY MAP



BLOOMINGTON

Underground Service Alert



Call: TOLL FREE
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

NATIONAL GEODETIC SURVEY DATA SHEET

DESIGNATION: 700 10
PID: EV1239
ELEVATION: 1250.56' NAVD88

PREPARED BY:



TEL: (909) 885-3806
241 NORTH ARROWHEAD AVE
BLOOMINGTON, CA 92313
CAL 0000 381-0701
www.benadiman.com

SCALE: NONE

DATE: 03-13-24

SEAL



SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

OSVALDO ROQUE	DATE	RECOMMENDED BY:
SUPERVISING ENGINEER, TRAFFIC DIVISION		
JEREMY JOHNSON	DATE	APPROVED BY:
ENGINEERING MANAGER, TRAFFIC DIVISION		
MICHAEL FAM	DATE	
ENGINEERING MANAGER, LAND DEVELOPMENT DIVISION		

GRADING PLAN

EROSION CONTROL
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

FILE NO.
GRAD 2024-00007

SHEET 13 OF 14

GENERAL GRADING NOTES:

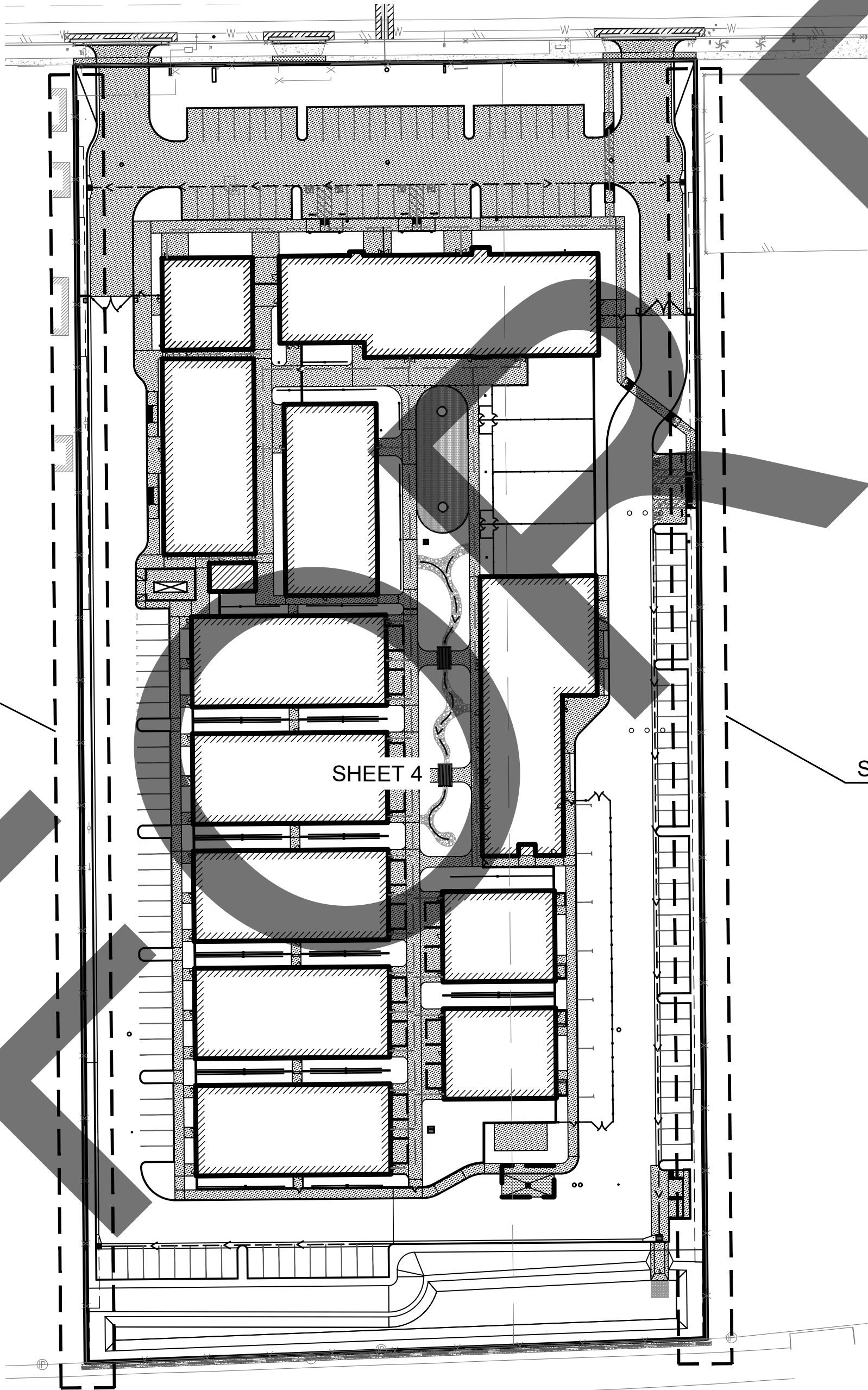
- ALL GRADING SHALL COMPLY WITH F.H.A. DATA SHEET 79-G, CITY OF RIALTO ORDINANCE NO. 649, REQUIREMENTS OF THE CITY ENGINEER, CURRENT EDITION OF THE C.B.C. AND GRADING SPECIFICATIONS OF THE PRELIMINARY SOILS REPORT.
- NO GRADING SHALL BE STARTED WITHOUT FIRST NOTIFYING THE CITY ENGINEERING INSPECTOR.
- A PRE-GRADING MEETING AT THE SITE IS REQUIRED BEFORE START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOILS ENGINEER, GEOLOGIST AND CITY INSPECTOR.
- FILLS SHALL BE COMPACTED THROUGHOUT TO 90% DENSITY AS DETERMINED BY U.B.C. SECTION 3313.4, AND CERTIFIED BY THE SOILS ENGINEER.
- AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE SOILS ENGINEER PRIOR TO PLACING OF FILL. FILL AREAS SHALL BE CLEARED OF ALL VEGETATION, DEBRIS, TOPSOIL AND OTHER UNSUITABLE MATERIALS AND SCARIFIED TO A MINIMUM DEPTH OF 12 INCHES AND INSPECTED BY THE SOIL TESTING AGENCY PRIOR TO THE PLACING OF FILL.
- ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY THE SITE SOILS ENGINEER PER THE GRADING CODE. THE SOIL CERTIFICATION SHALL INCLUDE THE STABILITY OF THE BACKFILL AND THAT THE COMPACTION IS 90% OF THE OPTIMUM DENSITY USING THE AASHTO TEST T-180-57 MODIFIED TO USE 3 LAYERS IN LIEU OF 5 LAYERS.
- THE FINAL COMPACTION REPORT AND CERTIFICATION FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE OR DRIVE RING AND SHALL BE SO NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
- THE DESIGN CIVIL ENGINEER SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO INSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE WITHIN HIS PURVIEW.
- STRICT ADHERENCE TO DUST CONTROL REQUIREMENTS SHALL BE ENFORCED AND ALL DUST SHALL BE CONTROLLED BY WATERING. PRIOR TO TOUCHING THE FOUNDATION, THE ROUGH GRADING SHALL BE APPROVED BY THE CITY AND THE ROUGH GRADE CERTIFICATION, ALONG WITH THE FINAL COMPACTION TESTING REPORT, SHALL BE SUBMITTED AND APPROVED BY THE CITY. FINISH GRADE CERTIFICATION SHALL BE SUBMITTED TO AND APPROVED BY THE CITY PRIOR TO CERTIFICATE OF OCCUPANCY.
- STATE LAW (SB3019) REQUIRES THE CONTRACTOR TO CONTACT UNDERGROUND SERVICE ALERT (USA) AND OBTAIN AN IDENTIFICATION NUMBER PRIOR TO THE ISSUANCE OF THE CITY'S ENCROACHMENT PERMIT. THE CONTRACTOR SHALL NOTIFY USA TWO WORKING DAYS (48 HOURS MINIMUM) IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES.
- ALL SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED IN PLACE, ANY DISTURBED OR COVERED MONUMENTS SHALL BE RESET BY A REGISTERED CIVIL ENGINEER OR A LICENSED LAND SURVEYOR.
- REPAIR OR REPLACE ALL EXISTING DAMAGED OR ALTERED PUBLIC IMPROVEMENTS AS REQUIRED BY THE ENGINEER IN THE FIELD.
- ANY MATERIAL INCORPORATED AS PART OF THE COMPACTED FILL MUST BE APPROVED BY THE SOILS ENGINEER. INSPECTION AND CERTIFICATION OF FILL PLACEMENT SHALL BE PROVIDED BY THE SOILS ENGINEER DURING THE PROCESS OF GRADING. NO ROCK OR SIMILAR MATERIAL GREATER THAN EIGHT INCHES IN DIAMETER WILL BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE SOILS ENGINEER IN ADVANCE AND APPROVED BY THE CITY ENGINEER.
- IF ANY UNKNOWN SUB-SURFACE STRUCTURES ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE SOILS ENGINEER AND THE CITY ENGINEER PRIOR TO PROCEEDING WITH GRADING OPERATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES OR STRUCTURES ABOVE OR BELOW GROUND, SHOWN OR NOT SHOWN ON THESE PLANS. HE WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO ANY UTILITIES OR STRUCTURES CAUSED BY HIS OPERATION. THE ENGINEER OF RECORD MUST BE NOTIFIED OF ANY CONFLICTS AND CONSTRUCTION MUST BE TERMINATED AND STREETS RESTORED UNTIL CORRECTIVE MEASURES HAVE BEEN APPROVED BY THE CITY ENGINEER.
- CUT SLOPES SHALL NOT EXCEED 1-1/2:1 AND FILL SLOPES SHALL NOT EXCEED 2:1 UNLESS OTHER SLOPE IS JUSTIFIED BY THE SOILS ENGINEER. FILL SLOPES SHALL HAVE NOT LESS THAN 90% RELATIVE COMPACTION AS DETERMINED BY ASTM D 1557-70 AND CERTIFIED BY THE SOILS ENGINEER. TOE OF SLOPES WILL BE LOCATED PER THE UNIFORM BUILDING CODE, LATEST EDITION. HOLD TOP AND TOE OF SLOPES FROM PROPERTY LINES AND BUILDING LOCATIONS PER THE U.B.C. THE TOE OF COMPACTED FILL SLOPES SHALL BE NO CLOSER THAN 3' TO AN ADJACENT PROPERTY LINE PAD. THE TOP OF A CUT SLOPE SHALL NOT BE CLOSER THAN 2' TO AN ADJACENT PROPERTY LINE.
- SEPARATE PERMITS SHALL BE REQUIRED FOR ANY IMPROVEMENT WORK IN THE PUBLIC RIGHT-OF-WAY.
- ADJACENT STREETS ARE TO BE CLEARED DAILY OF ALL DIRT AND DEBRIS THAT IS THE RESULT OF THIS OPERATION.
- ALL BACKFILLED TRENCHES TO BE CERTIFIED BY A SOILS ENGINEER (90% MINIMUM COMPACTION) PER CITY STANDARDS AND SPECIFICATIONS. ALL EXCAVATIONS, CONSTRUCTION AND INSTALLATIONS IN THE PUBLIC RIGHT-OF-WAY REQUIRE INSPECTION BY CITY INSPECTOR. FAILURE TO HAVE INSPECTION MAY RESULT IN REOPENING OF THE EXCAVATION AND POSSIBLE RECONSTRUCTION.
- EARTHWORK QUANTITIES FOR SITE GRADING ARE ESTIMATED TO BE:
CUT: 3,502 FILL: 20,312 IMPORT: 16,810
THESE QUANTITIES ARE BASED ON THE ASSUMPTION THAT A , 10% SUBSIDENCE WILL OCCUR OVER THE ENTIRE SITE.
- THE UNDERSIGNED CIVIL ENGINEER CERTIFIES THAT THIS GRADING WORK WILL BE SUPERVISED IN ACCORDANCE WITH SECTION 3309.4 OF THE UNIFORM BUILDING CODE.
SIGNATURE _____ R.C.E. NO. C-70944 DATE 06-30-23
- AN AS-BUILT GRADING PLAN SHALL BE SUBMITTED BY THE ENGINEER ALONG WITH THE FINAL GRADE CERTIFICATION PRIOR TO ISSUANCE OF OCCUPANCY.
- NO WATER SHALL BE TAKEN FROM CITY FIRE HYDRANTS WITHOUT AN AUTHORIZED HYDRANT METER.
- APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING ANY GRADING OPERATIONS. THE CITY MAY REQUIRE AND SHALL APPROVE ANY TEMPORARY DRAINAGE MEASURES USED TO PROTECT ADJOINING PROPERTY DURING GRADING OPERATIONS, I.E. EROSION CONTROL, FROM OCTOBER 1 TO MAY 1 AND SHALL BE ON FILE WITH THE CITY.
- APPROVAL OF THESE PLANS BY THE CITY OR ITS AGENTS DOES NOT RELIEVE THE ENGINEER AND THE APPLICANT FROM THE RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE APPROPRIATE PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL.
- ALL GRADING OPERATIONS SHALL CEASE IF WIND VELOCITIES EXCEED 25 M.P.H. THE PROJECT SITE SHALL BE REGULARLY WATERED TO MITIGATE BLOWING DUST DURING THE DURATION OF HIGH WIND CONDITIONS.
- ALL DRIVEWAYS TO BE 16' WIDE AT THE BOTTOM, UNLESS NOTED OTHERWISE. NO DRIVE APPROACH SHALL BE WITHIN 5' FROM TOP OF THE X-SECTION TO PROPERTY LINE. MAXIMUM GRADE OF DRIVEWAY SHALL BE 12%.
- NO FOOTING OR FOUNDATION SHALL REST ON BOTH CUT AND FILL SURFACES. FOUNDATIONS SHALL EXTEND THROUGH FILL INTO COMPACTED NATIVE SOIL OR NATIVE MATERIAL TO BE REMOVED AND REPLACED WITH FILL FOR A MINIMUM OF 12' BETWEEN FOUNDATION AND NATIVE SOIL IN CUT.
- PAD ELEVATION SHOWN ARE MINIMUM HEIGHT AND MAY BE ADJUSTED IF APPROVED BY THE ENGINEER AND THE CITY OF RIALTO.
- PROVIDE DRAINAGE SWALE 15' FROM REAR OF THE HOUSE AND 10' FROM SIDES WHERE POSSIBLE, 4' MINIMUM.
- DRAIN FROM CRITICAL POINT (C.P.) AT A MINIMUM OF 1.00% TO STREET.
- PROVIDE A MINIMUM OF 3' FROM CRITICAL POINT TO BUILDING PAD AND A MINIMUM OF 6' FROM PAD TO FINISH FLOOR.
- SLOPES TO BE ON LOT WITH LOWER ELEVATION.
- A PRECISE GRADING PLAN SHOWING HOUSE LOCATIONS AND DRAINAGE DETAILS SHALL BE SUBMITTED TO THE CITY OF RIALTO FOR APPROVAL PRIOR TO START OF ANY HOUSE CONSTRUCTION.
- ALL SLOPES 4' OR GREATER MUST BE PLANTED AND IRRIGATED. CITY OF RIALTO CONSTRUCTION

INSPECTION HOURS 7:00A.M. TO 5:00P.M. - MONDAY THROUGH THURSDAY

SAN BERNARDINO COUNTY
WALL PLAN

18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

APN: 0252-161-09 & 10



SEE WALL 2, SHEET 6

SHEET 4

SEE WALL 1, SHEET 5

SITE MAP
1" = 60'



RETAINING WALL MATRIX							
	BARK WALL 5'-3"	GARDEN WALL 8'-0"	COMBO WALL 0'-0" TO 2'-0"	COMBO WALL 2'-0" TO 3'-4"	COMBO WALL 3'-4" TO 4'-8"	COMBO WALL 4'-8" TO 6'-0"	COMBO WALL 6'-0" TO 7'-3"
	GREY PRECISION BLOCK	GREY PRECISION BLOCK	GREY PRECISION BLOCK	GREY PRECISION BLOCK	GREY PRECISION BLOCK	GREY PRECISION BLOCK	GREY PRECISION BLOCK
BARK WALL	488'	~	~	~	~	~	~
GARDEN WALL	~	690'	~	~	~	~	~
COMBINATION WALL	~	~	97'	272'	415'	360'	142'

SHEET INDEX

- TITLE SHEET
- DETAILS
- DETAILS
- SPECIAL INSPECTION
- RETAINING WALL PLAN
- RETAINING WALL PLAN & PROFILE
- RETAINING WALL PLAN & PROFILE

- 1
- 2
- 3
- 4
- 5
- 6
- 7

OWNER/APPLICANT:

SAN BERNARDINO COUNTY
385 N. ARROWHEAD AVE., 3RD FLOOR
SAN BERNARDINO, CA 92415

ATTN: KENNETH HYLIN, SR. PROJECT MANAGER
PHONE: (909) 387-5000
EMAIL: KENNETH.HYLIN@PFM.SBCOUNTY.GOV

BASIS OF BEARINGS

NAD83 CALIFORNIA STATE PLANE ZONE 5 GROUND
THE CENTERLINE OF VALLEY BLVD BEGIN N89°26'46"E

BENCHMARK

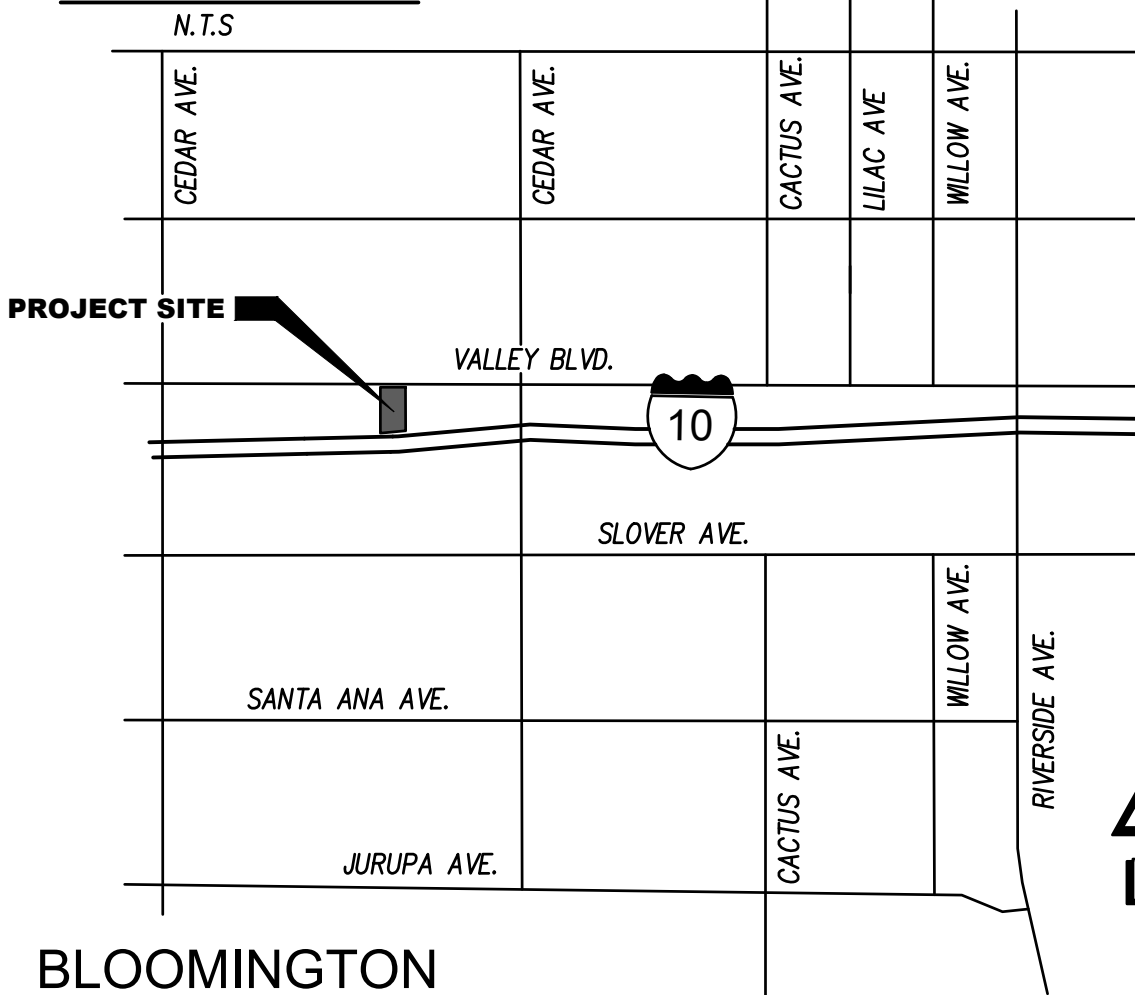
NATIONAL GEODETIC SURVEY DATA SHEET

DESIGNATION: 700 10
PID: EV1239
ELEVATION: 1250.56' NAVD88

LEGEND

- AC ASPHALTIC CONCRETE SURFACE
- BVC BEGIN VERTICAL CURVE
- BT BOTTOM OF TRENCH
- CL CENTER LINE
- EVC END OF VERTICAL CURVE
- FF FINISH FLOOR
- FG FINISH GRADE
- FL FLOWLINE
- FS FINISHED SURFACE
- GB GRADE BREAK
- GW GUY WIRE
- INV INVERT OF PIPE
- MH MANHOLE
- NTS NOT TO SCALE
- PP POWER POLE
- TC TOP OF CURB
- TF TOP OF FOOTING
- TW TOP OF WALL
- TYP TYPICAL
- WI WROUGHT IRON
- EXISTING CONCRETE SURFACE
- PROPOSED CONCRETE SURFACE
- PROPOSED AC PAVEMENT
- RIGHT OF WAY
- PROPERTY LINE
- CENTERLINE
- EXISTING BLOCK OR STONE WALL
- FLOWLINE
- FILL SLOPE
- INDICATES DIRECTION OF FLOW
- CONTOUR ELEVATION (FEET)

VICINITY MAP



BLOOMINGTON

Underground Service Alert



Call: TOLL FREE
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

SEE ABOVE

PREPARED BY:



TEL (909) 985-3806
384 NORTH ARROWHEAD AVE
SAN BERNARDINO, CA 92415
909.387.0771
www.benadiman.com

SCALE: NONE

DATE: 03-13-24

SEAL



DATE	BY	MARK	REVISIONS	APPR.	DATE
DESIGNED BY:	JTS		DRAWN BY: JTS		CHECKED BY: JTS

SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

WALL PLAN

ROAD NO.

TITLE SHEET
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

FILE NO.

SHEET 1 OF 7

DESIGN CRITERIA:

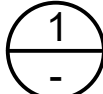
1. DESIGN CRITERIA PER 2022 CBC AND GEOTECHNICAL RECOMMENDATIONS
2. ALLOWABLE SOIL BEARING PRESSURE = 2,500 psf (WITH INCREASE PER SOILS REPORT)
3. ALLOWABLE SOIL PASSIVE PRESSURE = 220 pcf
4. COEFFICIENT OF FRICTION = 0.35
5. LEVEL ACTIVE PRESSURE = 45 pcf
6. SLOPED ACTIVE PRESSURE = N/A
7. MASONRY COMPRESSIVE STRENGTH, f_m = 1500 psi.

LOADING:

1. SEISMIC, SIX DAMPING @ 1 SECOND
ACCELERATION C_s = 1.200
2. DESIGN WIND = EXP. C @ 120mph

CONSTRUCTION NOTES:

1. REINFORCING STEEL SHALL BE DEFORMED AND CONFORM TO ASTM A615 GRADE 60. PROVIDE SPICES (LAPS) OF 48 BAR DIAMETERS OR 24 INCHES, WHICHEVER IS GREATER. CENTER VERTICAL BARS IN CELLS, UNO. SEE DETAIL.



2. JOINT REINFORCEMENT ("LADDER" TYPE) SHALL BE COLD-DRAWN STEEL WIRE CONFORMING TO ASTM A851. PROVIDE MINIMUM 6 INCH LAP SPICES.

3. CONCRETE SHALL BE TYPE II WITH A MINIMUM COMPRESSIVE STRENGTH @ 28 DAYS, AS FOLLOWS: FOOTINGS = 2,500 psi
WALL STEM = 2,500 psi

4. CONCRETE MUST BE CAST DIRECTLY AGAINST UNDISTURBED SOIL, UNO BY SOILS REPORT.

5. MASONRY UNITS SHALL CONFORM TO ASTM C90. MEDIUM WEIGHT COLORLESS PRECISION BLOCKS SHALL BE USED.

6. MORTAR SHALL BE SPEC MIX TYPE S PREBLENDED MASONRY MORTAR AS MANUFACTURED BY E-2 MIX INC. CONFORMING TO PROPORTIONS AND REQUIREMENTS OF ASTM C270. OR SPEC MIX (NP) MASONRY MORTAR AS MANUFACTURED BY E-2 MIX INC. CONFORMING TO PROPERTY REQUIREMENTS OF ASTM C270. COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 2000psi.

7. GROUT SHALL CONFORM TO ASTM C476, WITH AN 8-11 INCH SLUMP, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2000psi.

8. FIRST COURSE MAY BE WET-SET 1 1/2 INCHES MAX. WHILE CONCRETE IS PLASTIC.

9. CONCRETE BLOCK SHALL BE LAID IN RUNNING BOND PATTERN WITH VERTICAL CONTINUITY OF THE CELLS UNO.

10. VERTICAL CONTROL JOINTS SHALL BE SPACED AT A MAXIMUM OF 40'-0" O.C. OR 20'-0" O.C. IF WALL IS TO BE STUCCO COATED OR MORTAR WASHED SEE DETAIL.



11. GROUT ALL CELLS WITH REINFORCEMENT UNO.

12. INSPECTIONS:

- A. AFTER FOOTING IS READY FOR CONCRETE AND ALL FOOTING REINFORCING IS TIED IN PLACE.
B. AFTER VERTICAL REINFORCEMENT IS IN PLACE AND CELLS ARE READY FOR GROUT.

13. FOR TYPICAL REINFORCING AT WALL INTERSECTIONS SEE DETAIL.



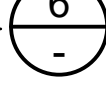
14. FOR TYPICAL FOOTING STEP SEE DETAIL.



15. FOR TYPICAL DRAINAGE BLOCK-OUT SEE DETAIL.



16. CLEAR (CLR.) OR CENTERLINE WHERE REFERENCED TO VERTICAL REINFORCING PER DETAIL.



17. RETAINING WALL BACKFILL SHOULD CONSIST OF SANDY SOILS THAT MUST MEET AT LEAST ONE OF THE FOLLOWING CRITERIA:

- A. A SAND EQUIVALENT (SE) OF 30 OR GREATER PER CALIFORNIA TEST METHOD (CTM) 217, OR
B. A MAXIMUM OF 35 PERCENT FINES (PASSING THE NO. 200 SIEVE) PER AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) D 421/422 AND AN EXPANSION INDEX OF 20 OR LESS.
RETAINING WALL BACKFILL SHOULD ALSO BE LIMITED TO FILL MATERIAL NOT EXCEEDING 3 INCHES IN GREATEST DIMENSION. SEE GEOTECHNICAL INVESTIGATION FOR ADDITIONAL RECOMMENDATIONS.

18. SEE SOILS REPORT FOR THE HORIZONTAL LIMITS OF SAND BACKFILL REQUIRED.

19. WALLS HAVE NOT BEEN DESIGNED FOR SURCHARGE RESULTING FROM VEHICULAR TRAFFIC OR ADJACENT FOOTINGS UNO.

20. EXCAVATION FOR WALL/ FOUNDATION SHALL NOT UNDERMINE ANY ADJACENT STRUCTURES. TEMPORARY SHORING AND STABILIZATION OF ADJACENT STRUCTURES SHALL BE PROVIDED BY THE CONTRACTOR AS REQUIRED

SPECIAL INSPECTION:

1. ALL TEST AND INSPECTIONS SHALL BE PERFORMED BY AN APPROVED AGENCY PER CBC SECTION 1703.
2. THE FOLLOWING PORTIONS OF WORK REQUIRE SPECIAL INSPECTION:

*MASONRY

CONCRETE AND REINFORCING NOTES
(CODE CHAPTER 19):

1. CONTRACTOR TO PROVIDE CONCRETE MIX DESIGNS FROM AN APPROVED LABORATORY OR FROM THE CONCRETE SUPPLIER PREPARED UNDER THE SUPERVISION OF, SIGNED, AND SEALED BY A CALIFORNIA REGISTERED ARCHITECT, CIVIL OR STRUCTURAL ENGINEER.

2. REINFORCEMENT:

A) DETAILING, FABRICATION AND PLACING SHALL CONFORM TO AC308 AND AC308.8. CERTIFICATION AND TESTING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF ASTM STANDARDS.

B) MINIMUM CONCRETE COVER:

CAST AGAINST & EXPOSED TO EARTH 3"
EXPOSED TO EARTH OR WEATHER 2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS, JOISTS 3/4"
BEAMS, COLUMNS (TIES, STIRRUPS, SPIRALS) 1-1/2"

C) CHAIRS, SPACERS AND AND PLATES: AS REQUIRED TO MAINTAIN CONCRETE COVER.

D) VERTICAL REINFORCEMENT: SHALL BE DOWELED TO SUPPORTING MEMBERS WITH THE SAME SIZE AND SPACING OF REINFORCEMENT AS SHOWN IN THE DRAWINGS AND GENERAL NOTES.

E) SPACING: CLEAR DISTANCE BETWEEN PARALLEL REINFORCEMENT IN A LAYER SHALL NOT BE LESS THAN 1-1/2 TIMES THE NOMINAL DIAMETER OF THE REINFORCEMENT, OR 1-1/2 TIMES MAXIMUM SIZE AGGREGATE, WHICHEVER IS GREATER THAN 1-1/2".

F) TACK WELDING, WELDING, HEATING OR CUTTING OF BARS: NOT PERMITTED UNO.

G) SPICES (STANDARD LAPS): AS SCHEDULED, 40 DIAMETERS OR 24 INCHES WHICHEVER IS GREATER UNO ON DRAWINGS. STAGGER BOTTOM SPICES AT LEAST 5'-0" FROM SPICES IN OTHER BOTTOM REINFORCEMENT. STAGGER SPICES FOR TOP REINFORCEMENT SIMILARLY.

PIPES, SLEEVES AND DUCTS: NOT TO BE PLACED IN WALLS, BEAMS, SLABS, FOOTINGS OR COLUMNS UNLESS SPECIFICALLY DETAILED.

4. ADMIXTURES: REVIEWED BY THE ENGINEER OF RECORD. CALCIUM CHLORIDE OR ADDED CHLORIDES ARE NOT PERMITTED. FLY ASH SHALL NOT BE PERMITTED IN CONCRETE MIXTURES.

5. CONSTRUCTION JOINTS: ACI 308R, 1/4-INCH AMPLITUDE MINIMUM OR KEYED JOINTS PER PLAN. LOCATION OF JOINTS TO BE REVIEWED BY THE ENGINEER OF RECORD PRIOR TO PLACEMENT OF REINFORCEMENT.

6. CONCRETE CURING: ACI 302.1R. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER ITS PLACEMENT. FOR CONCRETE OTHER THAN SLAB ON GRADE, APPROVED CURING COMPOUNDS MAY BE USED IN LIEU OF MOST CURING, IF APPROVED BY THE OWNER AND ARCHITECT.

7. VIBRATION: ALL CONCRETE SHALL BE CONSOLIDATED WITH MECHANICAL VIBRATORS IN ACCORDANCE WITH GENERAL PROVISIONS OUTLINED IN ACI 308R.

STRUCTURAL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS: PLATES AND BARS - ASTM A36, F_y=36 ksi, F_u=58 ksi.

2. FASTENERS FOR STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

NUTS - ASTM A563
WASHERS - ASTM F436
THREADED RODS - ASTM F1554, GRADE 36.

GENERAL:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS BEFORE COMMENCING WORK AND REPORT ANY DISCREPANCIES.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION AND SHALL PROVIDE ADEQUATE SHORING, BRACING AND GUYS DURING CONSTRUCTION. SAFETY AND BRACING REQUIREMENTS SHALL BE IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.

4. THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH ALL OF THE GENERAL PROVISIONS OF CBC CHAPTER 33 FOR ALL BUILDING AND SITE WORK, DEMOLITION AND CONSTRUCTION.

5. IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS BETWEEN ITEMS COVERED IN STRUCTURAL SPECIFICATIONS AND NOTES ON THE DRAWINGS OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE ENGINEER OF RECORD SHALL BE NOTIFIED AND HE WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS PRIOR TO INSTALLATION OF THAT PORTION OF WORK.

6. SIMILAR WORK: WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE THE SAME AS FOR SIMILAR WORK SHOWN ON THE DRAWINGS.

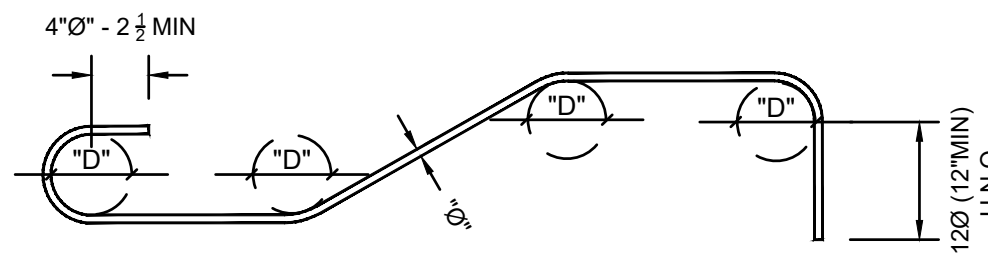
7. PIPES, DUCTS, SLEEVES, CHIMNEYS, ETC. SHALL NOT BE PLACED IN SLABS, BEAMS, OR WALLS UNLESS SPECIFICALLY SHOWN OR NOTED NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR PIPES, DUCTS, ETC. UNLESS SPECIFICALLY SHOWN. OBTAIN PRIOR WRITTEN APPROVAL FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, ETC.

8. LOCATE AND PROTECT UNDERGROUND OR CONCEALED CONDUIT, PLUMBING OR OTHER UTILITIES WHERE NEW WORK IS BEING PERFORMED. IDENTIFY AND LOCATE ANY SUBTERRANEAN UTILITIES PRIOR TO ANY EXCAVATION.

9. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES OR SEQUENCE OF CONSTRUCTION. UNLESS NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION, THE OWNER, ARCHITECT/ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.

10. PROPRIETARY COMPONENTS, MATERIALS, CHEMICAL, EPOXY AND WEDGE ANCHORS AND SHOT PINS SHALL BE EXACTLY AS CALLED FOR IN THESE DRAWINGS. ANY DEVIATIONS SHALL BE APPROVED OR DISAPPROVED BY THE ENGINEER OF RECORD AT THE EXPENSE OF THE ENTITY REQUESTING THE SUBSTITUTION PRIOR TO INSTALLATION.

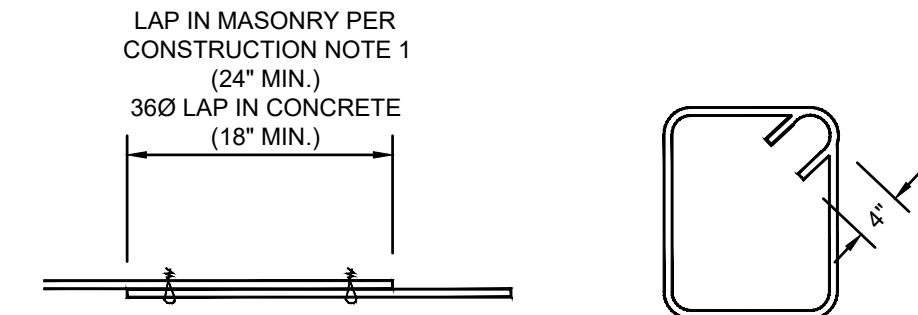
11. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR COORDINATION AND ASSEMBLY OF ALL PARTS OF THE CONSTRUCTION DEPICTED HEREIN. THE CONTRACTOR SHALL PERFORM ANY CONSTRUCTABILITY REVIEW OR COORDINATION DRAWINGS NECESSARY TO IDENTIFY CONSTRUCTABILITY PROBLEMS PRIOR TO CONSTRUCTION.



BAR BENDS

'D'=6d FOR #8 BAR AND SMALLER

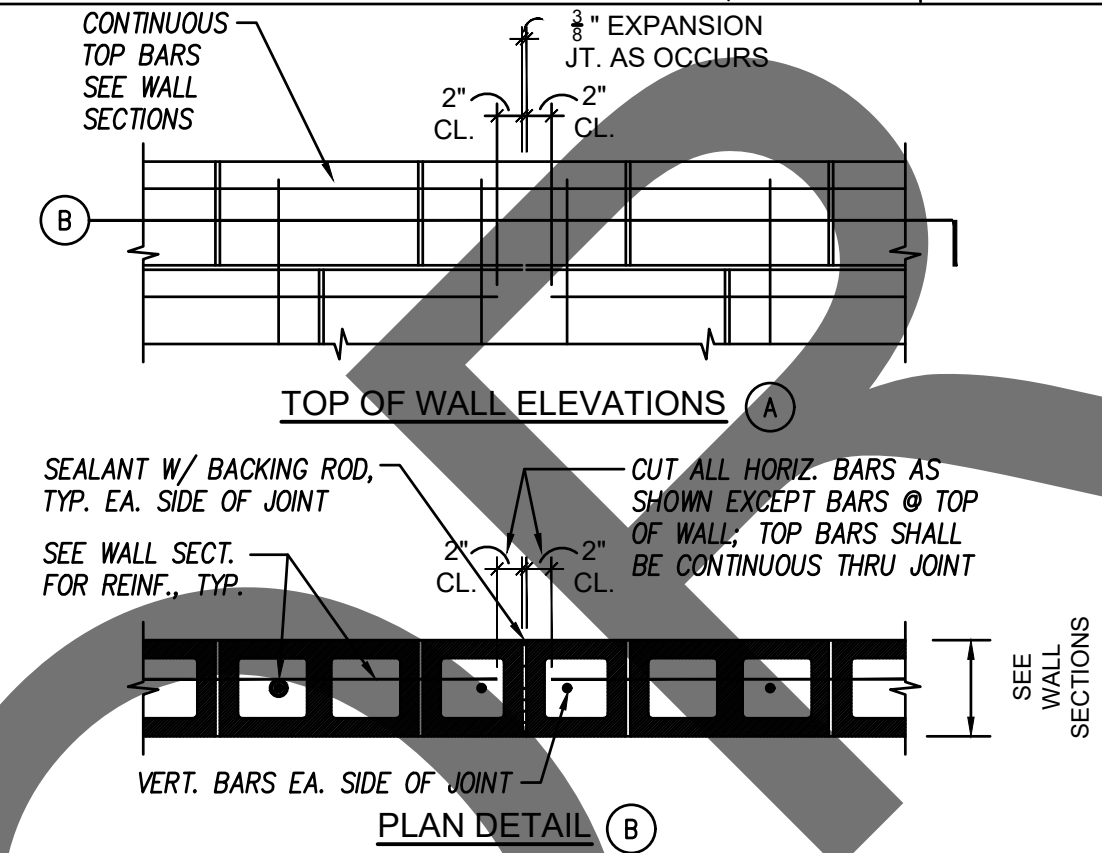
'D'=8d FOR #9 BAR AND LARGER



LAP AND OFFSET

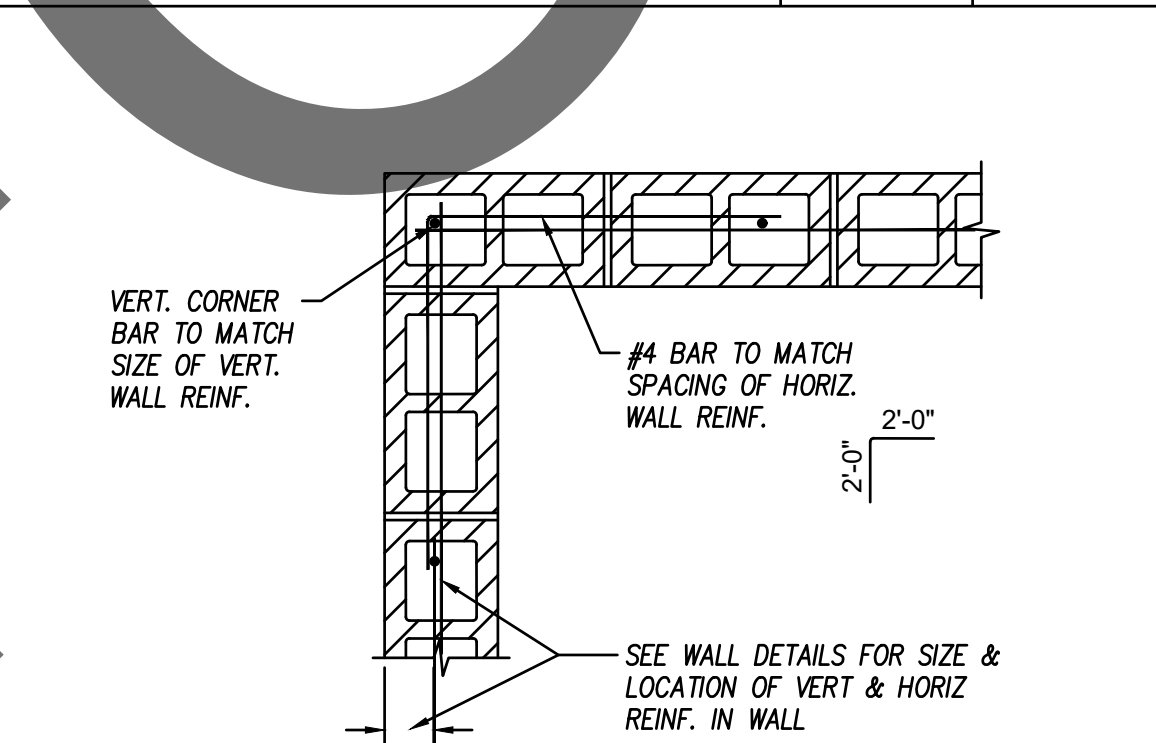
STIRRUP OR TIE

TYPICAL REINFORCING

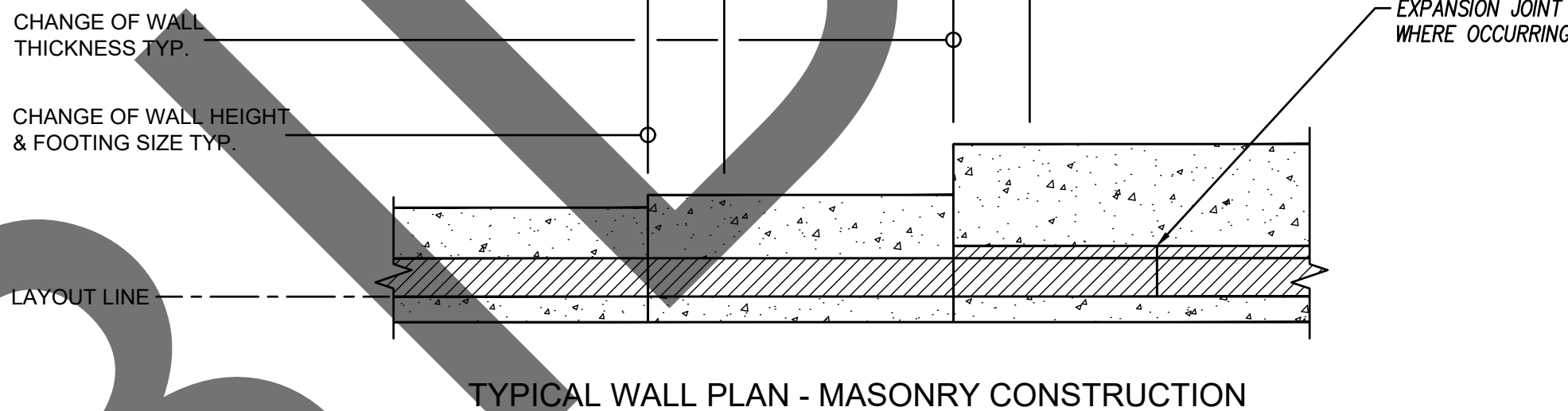


NOTES: (LOCATION OF CONTROL JOINTS)
1. AT REGULAR INTERVALS NOT TO EXCEED 40'-0"
2. AT PILASTER
3. NEAR WALL INTERSECTIONS

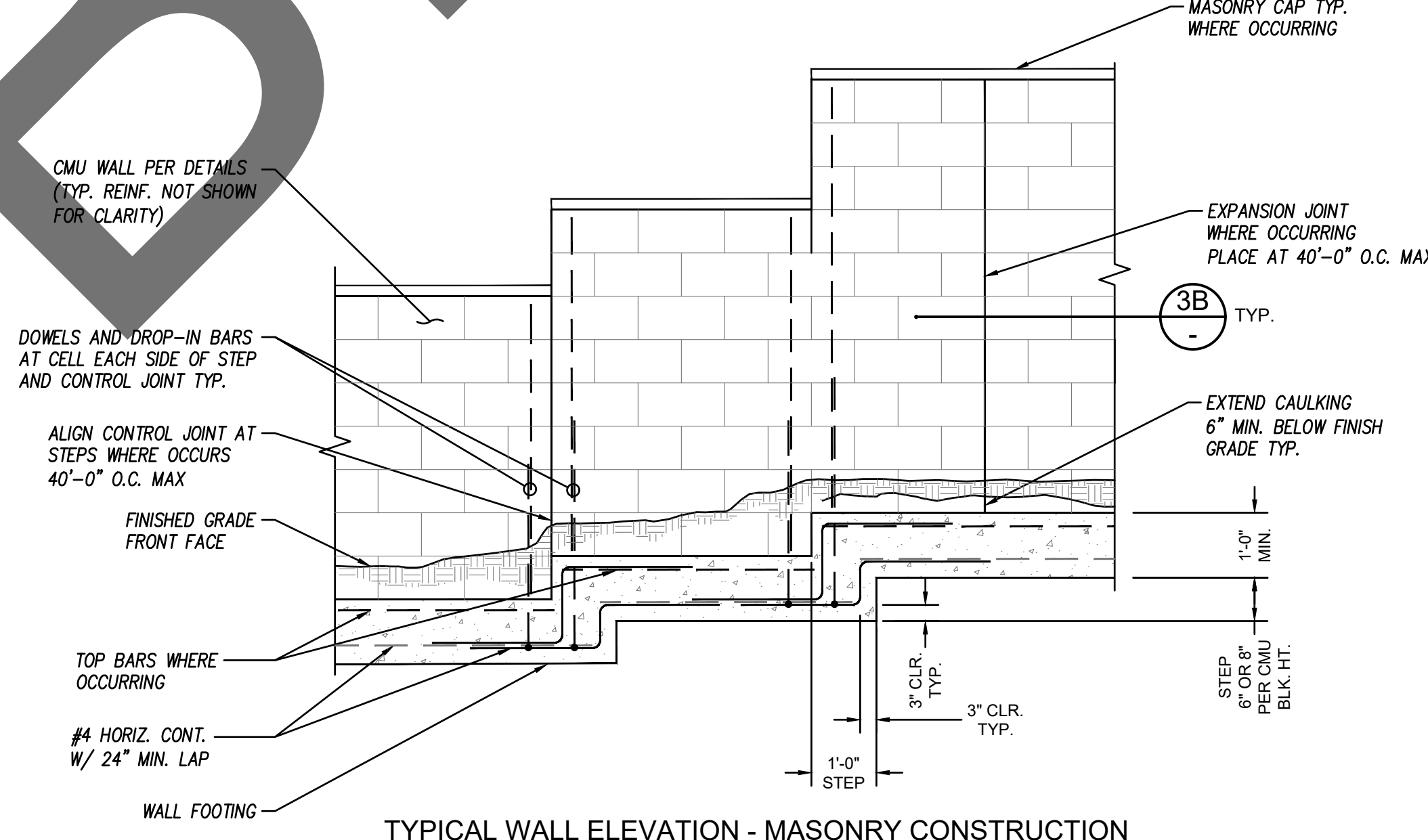
TYPICAL EXPANSION JOINT



CMU WALL INTERSECTION

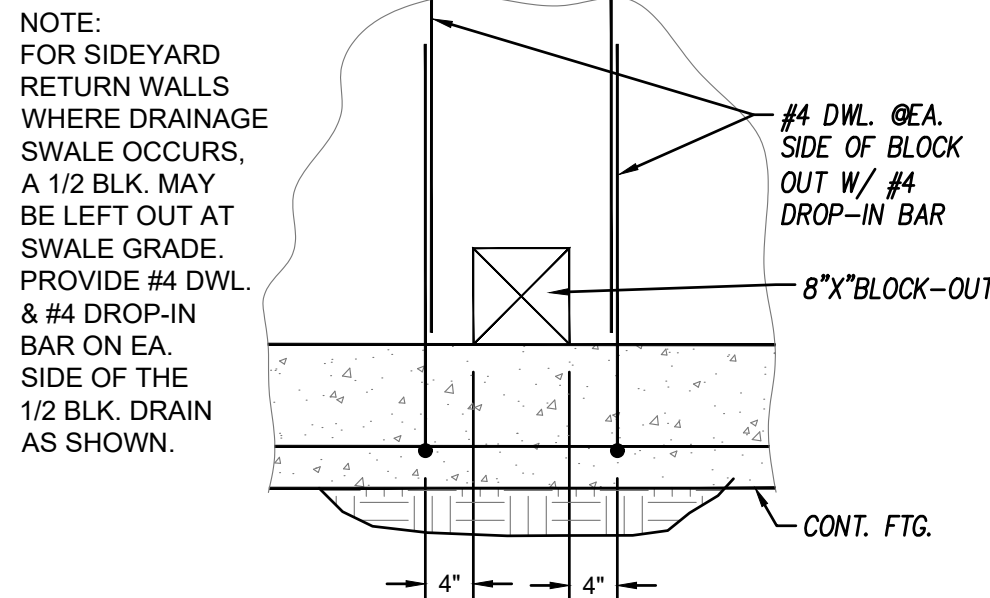


TYPICAL WALL PLAN - MASONRY CONSTRUCTION

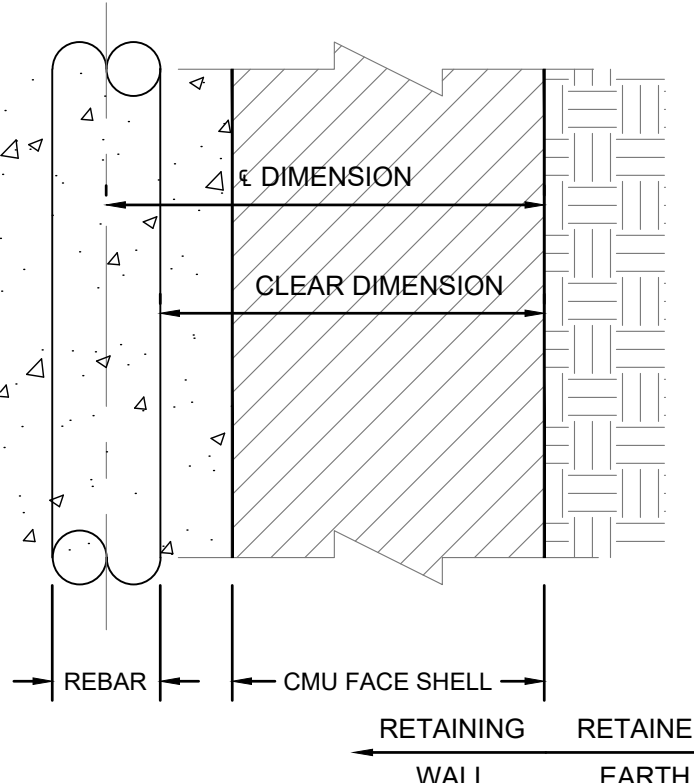


TYPICAL MASONRY WALL STEPPED FOOTING

TYPICAL MASONRY WALL STEPPED FOOTING



DRAINAGE BLOCK-OUT



REBAR LOCATION DETAIL

Underground Service Alert



Call: TOLL FREE

1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:

SEE ABOVE

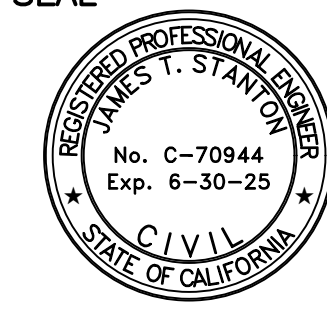
PREPARED BY:



SCALE: NONE

DATE: 03-13-24

SEAL



DATE	BY	MARK	REVISIONS	APPR.	DATE
DESIGNED BY:	JTS	DRAWN BY:	JTS	CHECKED BY:	JTS

SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

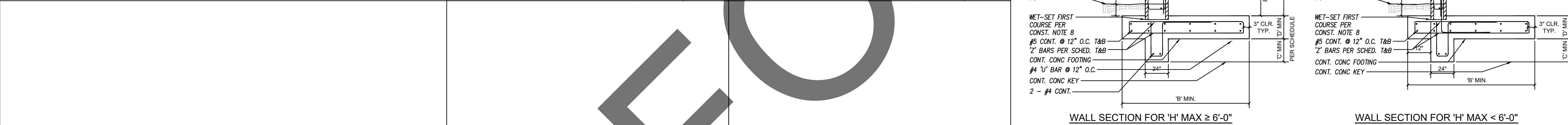
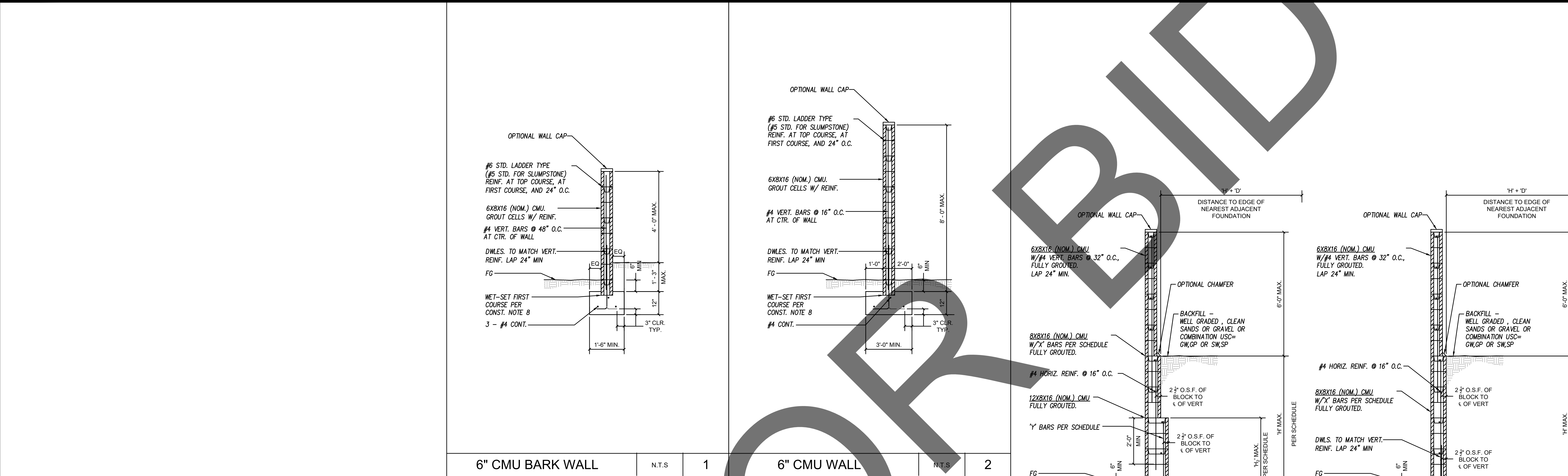
WALL PLAN

DETAILS
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

ROAD NO.


FILE NO.

SHEET 2 OF 7



MASONRY WALL SCHEDULE						
H' MAX.	H' MIN.	B' MIN.	C' MIN.	D' MIN.	X' BARS	Y' BARS
2'-0"	N/A	4'-6"	1'-0"	1'-0"	#4@ 16" O.C.	N/A
3'-4"	N/A	4'-10"	1'-0"	1'-0"	#4@ 16" O.C.	N/A
4'-8"	N/A	5'-6"	1'-0"	1'-6"	#4@ 8" O.C.	N/A
6'-0"	2'-0"	6'-3"	2'-6"	1'-6"	#4@ 8" O.C.	#5@ 12" O.C.
7'-4"	4'-0"	8'-0"	2'-6"	1'-6"	#5@ 8" O.C.	#5@ 12" O.C.

Underground Service Alert




Call: TOLL FREE
1-800-227-2600

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
SEE ABOVE

PREPARED BY:




TEL: (909) 985-3806
8341 NORTH ARROWHEAD AVE.
BLOOMINGTON, CA 92311
JOSEPH L. BENADIMAN & ASSOCIATES, INC.
ENGINEERS - E.C.D. - SURVEYING - PLANNING

SCALE: NONE

DATE: 03-13-24

SEAL



DATE	BY	MARK	REVISIONS	APPR.	DATE	
DESIGNED BY:	JTS		DRAWN BY:	JTS	CHECKED BY:	JTS

SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

WALL PLAN

DETAILS
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

ROAD NO.

FILE NO.

SHEET 3 OF 7

JOB #: 184546 DRAWING NAME: 225038 WALL.dwg PLOT DATE: 04/09/2024 - 12:46PM

WOOD FRAMING INSPECTION AND VERIFICATION		C	P
WOOD CONSTRUCTION (1705.5)			
1. Inspect grade stamp on framing lumber, plywood and OSB panels to verify lumber species, grading, size, moisture content, surface treatment.		X	
2. Verify nail, staple, screw, and bolt / fastener type, grade and location.		X	
3. Inspect wood connections including nailing, bolting, anchor bolts, tie downs, beam hangers and framing anchors. (see note)		X	
4. Inspect diaphragms and shear walls for proper panel thickness and fastener pattern.		X	
5. Inspect prefabricated wood trusses for proper fabrication, installation, and bracing.		X	
6. Special inspection required for pre-fabricated wood structural elements and assemblies shall be in accordance with Section 1704.2.5.	X		
7. Site built assemblies shall be subject to special inspection 1705.5.	X		
8. Inspect high-load diaphragms:			
A. Verify grade and thickness of sheathing.		X	
B. Verify nominal size of framing members at adjoining panel edges.		X	
C. Verify nail or staple diameter and length, the number of fastener lines and that the spacing between fasteners in each line and at edge margins agrees with the construction documents.	X		
9. Inspect prefabricated wood shear panels per the evaluation service report for the product.	---	---	
NOTE: ONLY APPLICABLE TO COMPONENTS AND CONNECTIONS WITHIN THE SEISMIC FORCE RESISTING SYSTEM WHEN THE FASTENER SPACING OF THE SHEATHING IS 4" O.C. OR LESS.			
REQUIRED SPECIAL INSPECTIONS FOR WIND RESISTANCE (1705.10)			
1. Roof cladding and roof framing connections.		X	
2. Wall connections to roof and floor diaphragms and framing.		X	
3. Vertical windforce-resisting systems, including braced frames, moment frames and shear walls.		X	
4. Windforce-resisting system connections to the foundation.		X	
5. Fabrication and installation of systems or components required to meet the impact-resistance Requirements of section 1609.1.2.		X	
FOUNDATION INSPECTIONS & VERIFICATION			
SOILS - TABLE 1705.6			
1. Verify subgrade materials below the footing for design bearing capacity.		X	
2. Verify depth of excavation and type of subgrade materials reached.		X	
3. Perform classification and compaction testing of controlled backfill materials.		X	
4. Verify materials used, layered thicknesses and compaction of back fills.		X	
5. Verify the subgrade and site preparations for controlled fill.		X	
PILE FOUNDATIONS - TABLE 1705.7			
6. Verify pile sizes, lengths and material specifications for each location.		X	
7. Determine capacities of test elements and conduct additional load tests, as required.		X	
8. Observe driving operations and maintain complete and accurate records for each element.		X	
Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage.	X		
10. For steel elements, perform additional inspections in accordance with Section 1705.2.	---	---	
For concrete and concrete-filled elements, perform additional inspections in accordance with Section 1705.3.	---	---	
For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge.	---	---	
For augered uncased and caisson elements, perform inspections in accordance with Section 1705.8.	---	---	
PIER FOUNDATIONS - TABLE 1705.8			
14. Observe drilling operations to monitor and record - drilled lengths, diameters and bell size (if applicable) for each pier.		X	
Verify placement locations and plumbness, confirm pier diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end bearing strata capacity.	X		
16. For concrete piers, perform additional inspections in accordance with Section 1705.3.	---	---	
17. For masonry piers, perform additional inspections in accordance with Section 1705.4.	---	---	
SPECIAL PROVISIONS FOR SEISMIC RESISTANCE IN OTHER BUILDING SYSTEMS DESIGNATED SEISMIC SYSTEMS			
1. Examine designated seismic systems requiring seismic qualification and verify that the label, anchorage or mounting conforms to the certificate of compliance.		X	

CONCRETE INSPECTIONS & VERIFICATION (TABLE 1705.3)		C	P
1. Inspection of reinforcing steel, including prestressing tendons, and placement. (ACI 318: 3.5, 7.1 - 7.7)		X	
2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2, Item 2b. (AWS D1.4, ACI 318: 3.5.2)	---	---	
3. Inspect anchors cast in place where allowable loads have been increased and post-installed in hardened concrete members.	---	X	
4. Verify use of required design mix. (ACI 318: Ch. 4, 5.2 - 5.4)		X	
5. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete. (ASTM C 172, ASTM C 31, ACI 318: 5.6, 5.8)		X	
6. Inspection of concrete and shotcrete placement for proper application techniques. (ACI 318: 5.9, 5.10)		X	
7. Inspection for maintenance of specified curing temperature and techniques. (ACI 318: 5.11 - 5.13)		X	
8. Inspection of prestressed concrete:			
a. Application of prestressing forces. (ACI 318: 18.20)		X	
b. Grouting of bonded prestressing tendons in the seismic-force-resisting system. (ACI 318: 18.18.4)		X	
c. Encapsulated assemblies		X	
9. Erection of precast concrete members. (ACI 318: Ch. 16)		X	
10. Verification of in-situ concrete strength, prior to stressing of tendons in post tensioned concrete and prior to removal of shores and forms from beams and structural slabs. (ACI 318: 6.2)		X	
11. Inspect formwork for shape, location and dimensions of the concrete member being formed. (ACI 318: 6.1.1)		X	
SPECIAL PROVISIONS FOR SEISMIC RESISTANCE			
12. Verify submittal of certified mill test reports for each shipment of reinforcing steel used to resist flexural, shear and axial forces in reinforced concrete intermediate frames, special moment frames and boundary elements of special reinforced concrete or reinforced masonry shear walls. (ACI 318: 3.5.2, AWS D1.4)		X	
13. Test ASTM A 615 reinforcing steel is used to resist earthquake-induced flexural and axial forces in special moment frames and in wall boundary elements of shear walls in structures assigned to Seismic Design Category D, E or F, per ACI 318.		X	
14. Test ASTM A 615 reinforcing steel that is to be welded: chemical tests shall be performed to determine weldability in accordance with Section 3.5.2 of ACI 318.		X	
15. Installation of (chemical / epoxy) adhesive anchors, rods and dowels.		X	
16. Installation and torque testing expansion anchors.		X	
MASONRY INSPECTIONS & VERIFICATION - LEVEL B DURING CONSTRUCTION (TABLE 1.19.2)			
1. Verify compliance with the approved submittals		X	
2. As masonry construction begins, the following shall be verified to ensure compliance:			
a. Proportions of site-prepared mortar.		X	
b. Construction of mortar joints.		X	
c. Grade and size of prestressing tendons and anchorages.		X	
d. Location of reinforcement, connectors, prestressing tendons and anchorages.		X	
e. Prestressing technique.		X	
3. The inspection program shall verify:			
a. Size and location of structural elements.		X	
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.		X	
c. Specified size, grade and type of reinforcement.		X	
d. Welding of reinforcing bars.		X	
e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).		X	
4. Prior to grouting, the following shall be verified to ensure compliance:			
a. Grout space is clear.		X	
b. Grade, type, and size of reinforcement and anchor bolts and prestressing tendons and anchorages.		X	
c. Placement of reinforcement, connectors, prestressing tendons and anchorages.		X	
d. Proportions of site-prepared grout and prestressing grout for bonded tendons.		X	
e. Construction of mortar joints.		X	
5. Application and measurement of prestressing force		X	
6. Placement of grout and prestressing grout for bonded tendon is in compliance		X	
7. Observe preparation of grout specimens, mortar specimens and/or prisms		X	
MINIMUM TESTS			
8. Verification of F _m prior to construction, in accordance with Article 1.4B prior to construction.	---	---	
9. Installation of (chemical / epoxy) adhesive anchors, rods and dowels		X	
10. Installation and torque testing expansion anchors in concrete or masonry		X	
MASONRY INSPECTIONS & VERIFICATION - LEVEL C DURING CONSTRUCTION (TABLE 1.19.3) OR 1705.4			
1. Verify compliance with the approved submittals		X	
2. From the beginning of masonry construction, the following shall be verified to ensure compliance:			
a. Proportions of site-prepared mortar, grout and prestressing grout for bonded tendons.		X	
b. Placement of masonry units and construction of mortar joints.		X	
c. Placement of reinforcement, connectors and prestressing tendons and anchorages.		X	
d. Grout space prior to grouting.		X	
e. Placement of grout.		X	
f. Placement of prestressing grout for bonded tendons.		X	
3. The inspection program shall verify:			
a. Size and location of structural elements.		X	
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.		X	
c. Specified size, grade and type of reinforcement and anchor bolts, and prestressing tendons and anchorages.		X	
d. Welding of reinforcing bars.		X	
e. Preparation, construction, and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).		X	
f. Application and measurement of prestressing force.		X	
4. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.		X	
5. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.		X	
MINIMUM TESTS			
6. Verification of F _m in accordance with Article 1.4B prior to construction and every 5,000 square feet during construction.	---	---	
7. Verification of proportions of materials in mortar and grout as delivered to the site.	---	---	
8. Verification of slump flow and Visual Stability Index (VSI) as delivered to the project site in accordance with Article 1.5.8.1.6.3 for self-consolidating grout.	---	---	
9. Installation of (chemical / epoxy) adhesive anchors, rods and dowels.		X	
10. Installation and torque testing expansion anchors in concrete or masonry.		X	

INSPECTION & VERIFICATION		C	P
STRUCTURAL STEEL INSPECTIONS & VERIFICATION (TABLE 1705.2.1)			
1. Material verification of high-strength bolts, nuts and washers:			
a. Identification markings to conform to ASTM standards specified in the approved construction documents. (See drawings, ASTM Standards, ANSI/AISC 360 Section A3.3)			X
b. Manufacturer's certificate of compliance required.			X
2. Inspection of high-strength bolting			
a. Bearing-type connections. (ANSI/AISC 360 Section M2.5)			X
b. Slip-critical connections. (ANSI/AISC 360 Section M2.5)			X
3. Material verification of structural steel:			
a. Identification markings to conform to ASTM standards specified in the approved construction documents.			X
b. Manufacturer's certified mill test reports.			X
4. Material verification of weld filler materials:			
a. Identification markings to conform to AWS specification in the approved construction documents. (ANSI/AISC 360 Section A3.5)			X
b. Manufacturer's certificate of compliance required.			X
5. Inspection of welding:			
a. Structural steel: (AWS D1.1)			
1) Complete and partial penetration groove welds.			X
2) Multi-pass fillet welds.			X
3) Single-pass fillet welds > 5/16"			X
4) Single-pass fillet welds ≤ 5/16"			X
5) Floor and roof deck welds. (AWS D1.3)			X
6) Shear connectors. (ANSI/AISC 360 Section A3.6)			X
b. Reinforcing steel: (AWS D1.4, ACI 318: 3.5.2)			
1) Verification of weldability of reinforcing steel other than ASTM A 706.			X
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.			X
3) Shear reinforcement.			X
4) Other reinforcing steel.			X
6. Inspection of steel frame joint details for compliance with approved construction documents:			
a. Details such as bracing and stiffening.			X
b. Member locations.			X
c. Application of joint details at each connection.			X
SPECIAL PROVISIONS FOR SEISMIC RESISTANCE			
7. The testing shall be as required by AISC 341.	---	---	
8. Base metal thicker than 1.5 inches (38 mm), where subject to through-thickness weld shrinkage strains, shall be ultrasonically tested for discontinuities behind and adjacent to such welds after joint completion.	---	---	
9. The acceptance criteria for nondestructive testing shall be as required in AWS D1.1. Any material discontinuities shall be accepted or rejected based on ASTM A 435 or ASTM A 898 (Level 1 criteria).			
10. Continuous special inspection is required for structural welding in accordance with AISC 341			

Notation:
X Denotes either continuous or periodic inspections.
--- Denotes an activity that is either a one-time activity or one where the frequency is defined in some other manner
C Indicates continuous inspection is required.
P Indicates periodic inspections are required. The notes and or contract documents should clarify

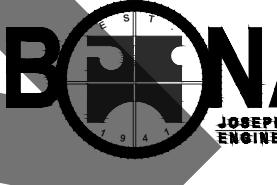
Notes:
Additional detail regarding inspections and tests are provided in the project specifications and/or notes on the drawings.



Underground Service Alert
Call: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK:
SEE ABOVE

PREPARED BY:




BENADIMAN
JOSEPH A. BENADIMAN, ASSOCIATE, INC.
REGISTERED - P.E. - SURVEYING - PLANNING

SCALE: NONE
DATE: 03-13-24

TEL: (909) 985-3806
241 NORTH ARROWHEAD AVE.
BLOOMINGTON, CA 92313
CAL 0000 361-0721
03/13/2024

SEAL



REGISTERED PROFESSIONAL ENGINEER
JAMES T. STANTON
No. C-70944
Exp. 6-30-25
CIVIL
STATE OF CALIFORNIA

DATE	BY	MARK	REVISIONS	APPR.	DATE
DESIGNED BY:	JTS	DRAWN BY:	JTS	CHECKED BY:	JTS

SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

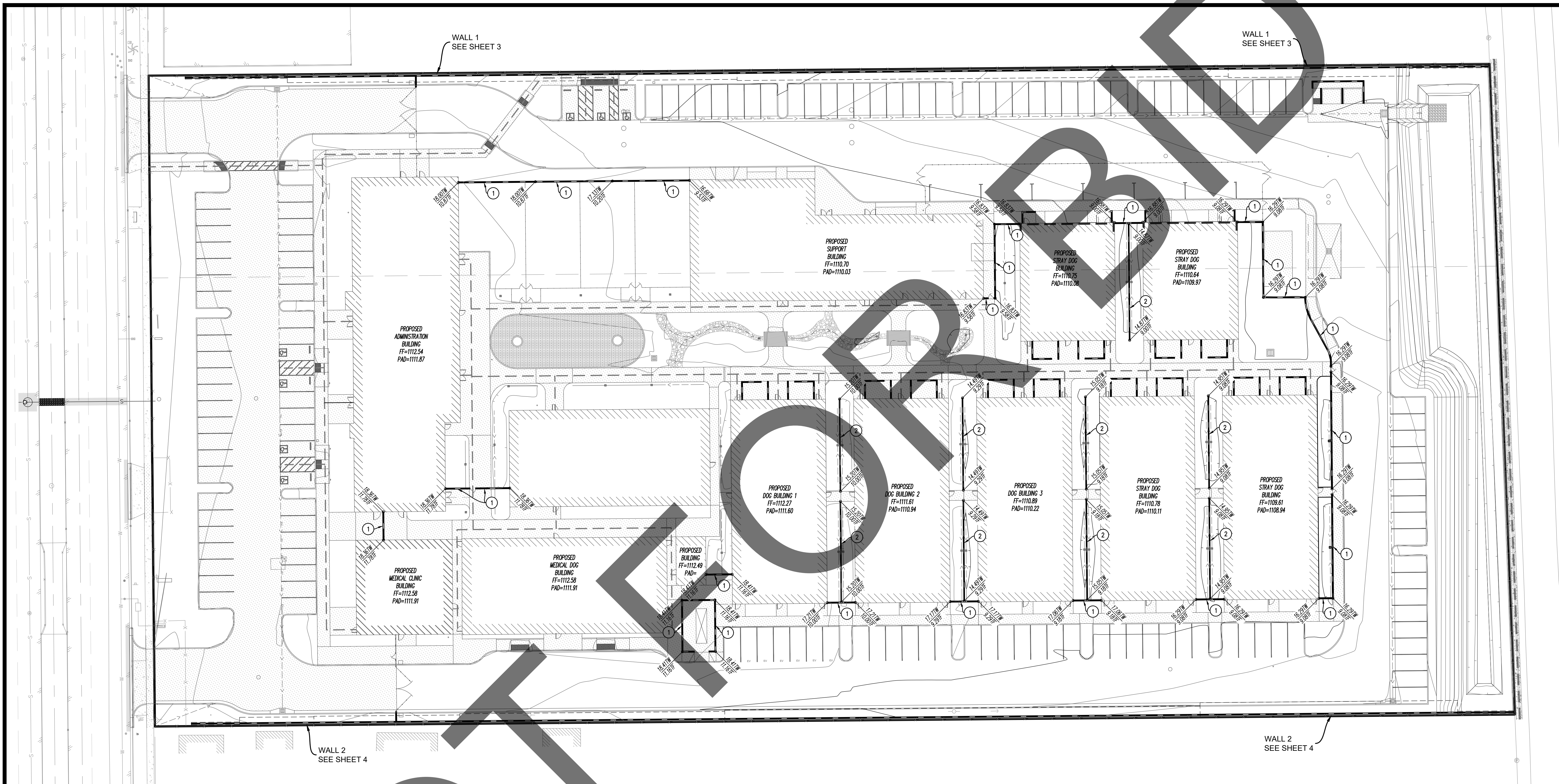
WALL PLAN

SPECIAL INSPECTION
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313

ROAD NO.

FILE NO.

SHEET 4 OF 7



CONSTRUCTION NOTES:

1. CONSTRUCT GARDEN WALL PER DETAIL 1, SHEET 3.
2. CONSTRUCT BARK WALL PER DETAIL 3, SHEET 3.
3. CONSTRUCT COMBINATION WALL PER DETAIL 2, SHEET 3.
TOP OF WALL TO BE 6" MIN. ABOVE GRADE.

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BLOOMINGTON, CA 92313
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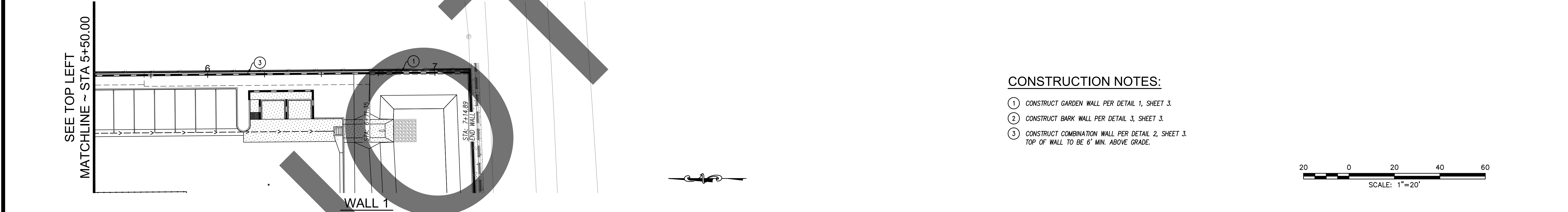
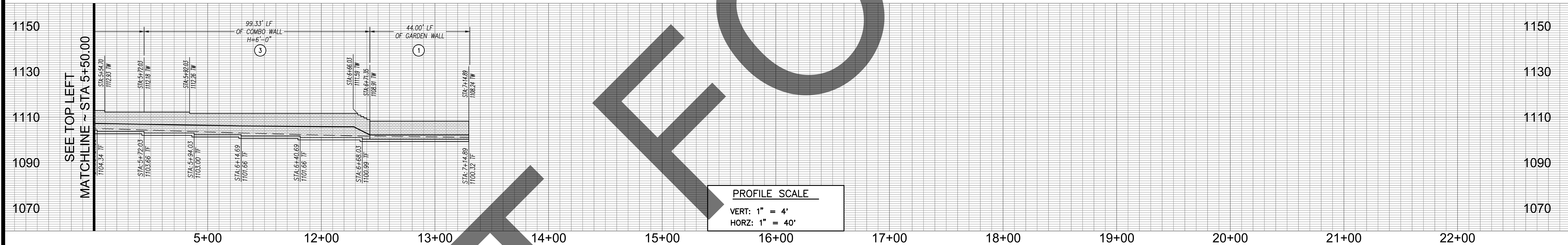
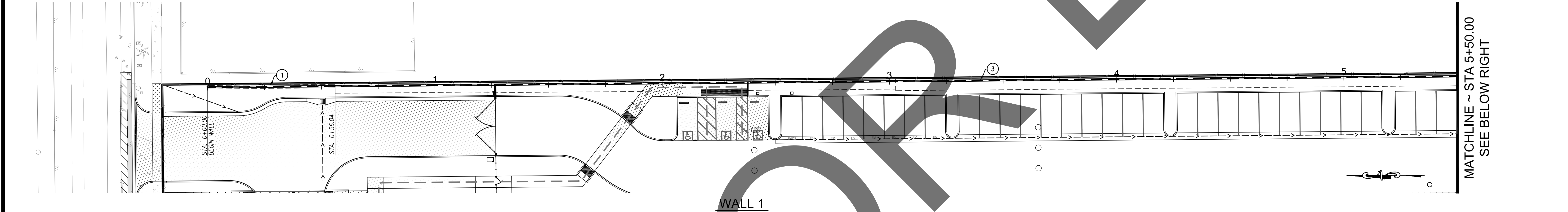
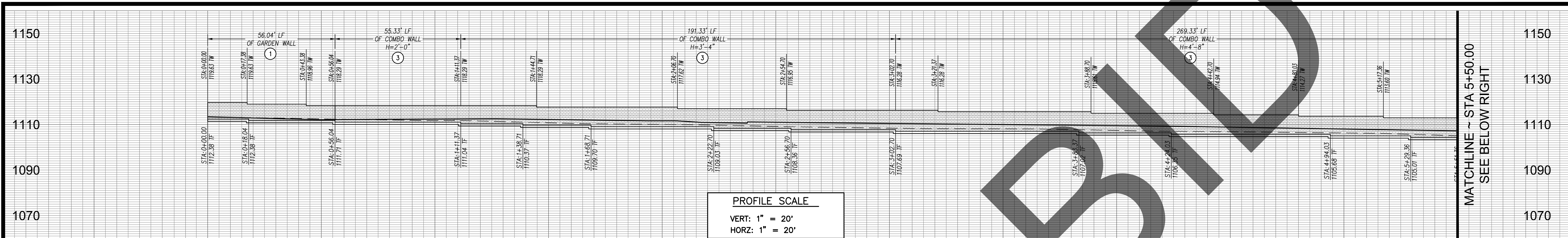
SEAL
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DATE	BY	MARK	REVISIONS	APPR.	DATE
	ENGINEER				
DESIGNED BY: JTS	DRAWN BY: JTS	CHECKED BY: JTS			

SAN BERNARDINO COUNTY
DEPARTMENT OF LAND USE SERVICES

WALL PLAN
18313 VALLEY BLVD.
BLOOMINGTON, CA 92313




ROAD NO.
FILE NO.
SHEET 5 OF 7



CONSTRUCTION NOTES:

- ① CONSTRUCT GARDEN WALL PER DETAIL 1, SHEET 3.
② CONSTRUCT BARK WALL PER DETAIL 3, SHEET 3.
③ CONSTRUCT COMBINATION WALL PER DETAIL 2, SHEET 3.
TOP OF WALL TO BE 6' MIN. ABOVE GRADE.



 <p>Underground Service Alert Call: TOLL FREE 1-800-227-2600 TWO WORKING DAYS BEFORE YOU DIG</p>	BENCHMARK: SEE ABOVE	PREPARED BY:  <p>TEL (909) 985-3806 340 NORTH ARROWHEAD AVE. SAN BERNARDINO, CA 92408 JOSEPH M. BENADIMAN ASSOCIATES ENGINEERS - A.E.C. - SURVEYING - PLANNING</p>	SEAL  <p>REGISTERED PROFESSIONAL ENGINEER JAMES T. STANTON No. C-70944 Exp. 6-30-25 CIVIL STATE OF CALIFORNIA</p>	SAN BERNARDINO COUNTY DEPARTMENT OF LAND USE SERVICES		WALL PLAN	ROAD NO.
				PLAN & PROFILE 18313 VALLEY BLVD. BLOOMINGTON, CA 92313		FILE NO.	
				DESIGNED BY: JTS DRAWN BY: JTS CHECKED BY: JTS		SHEET 6 OF 7	