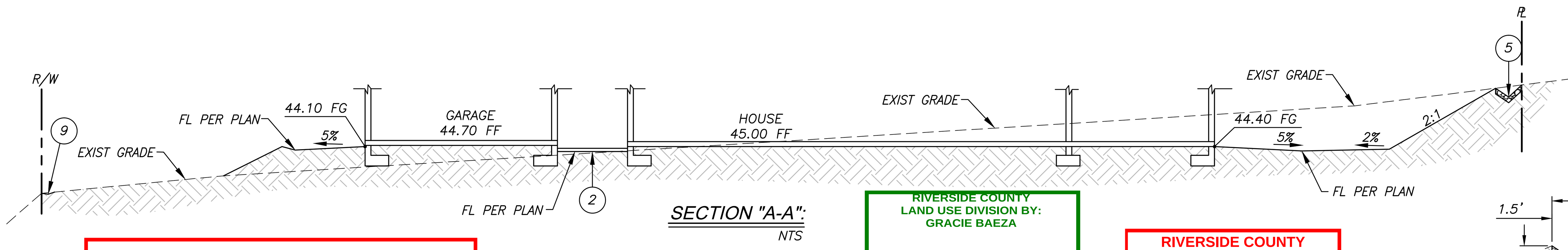
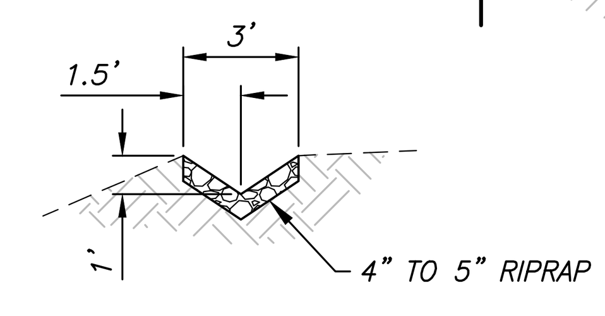
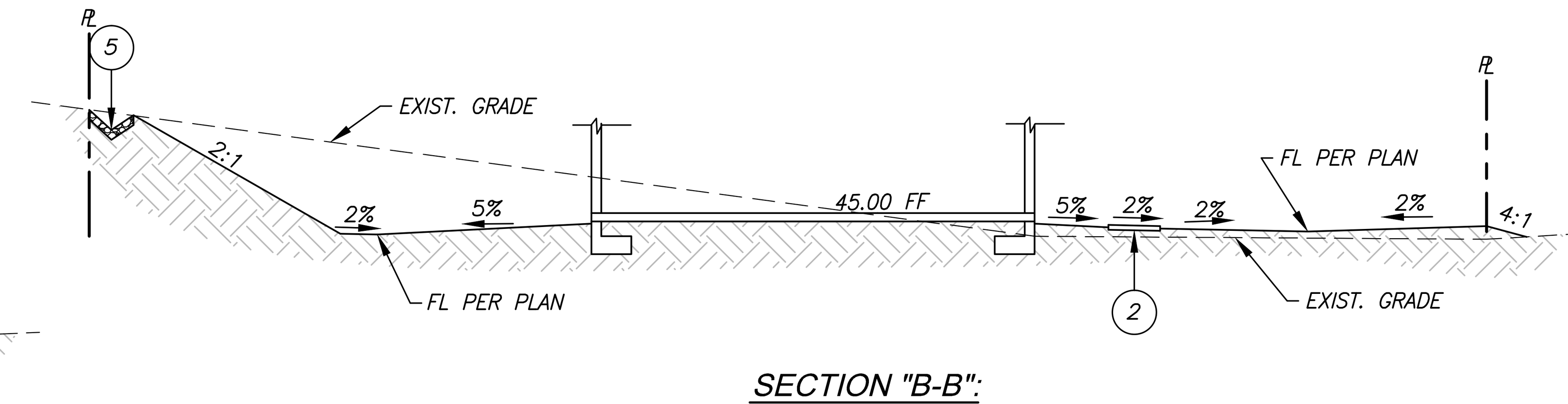


SECTION "A-A":
NTS



DITCH DETAIL: (5)
NTS



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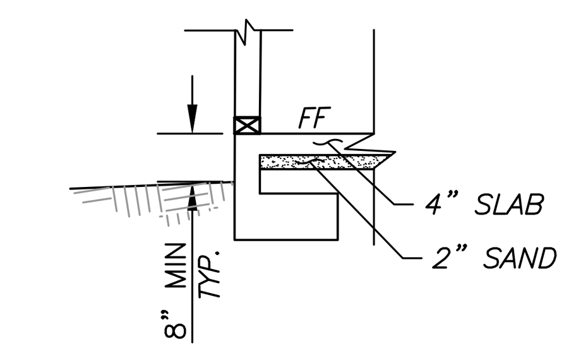


(PAD ELEV. TO BE ADJUSTED AND OVER EXCAVATION PER SOILS ENG. RECOMMENDATION)

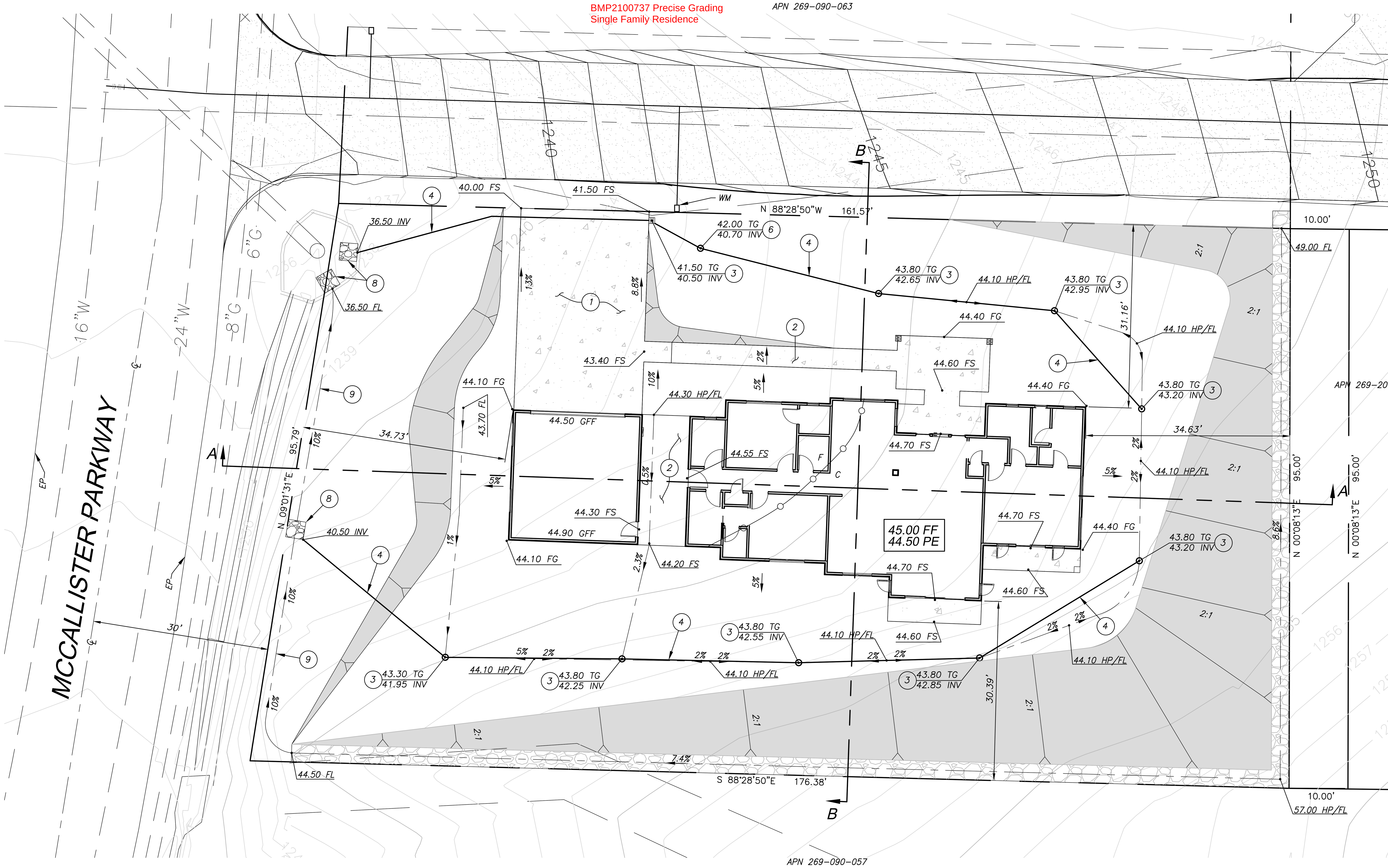
GRADING DETAIL:
NTS

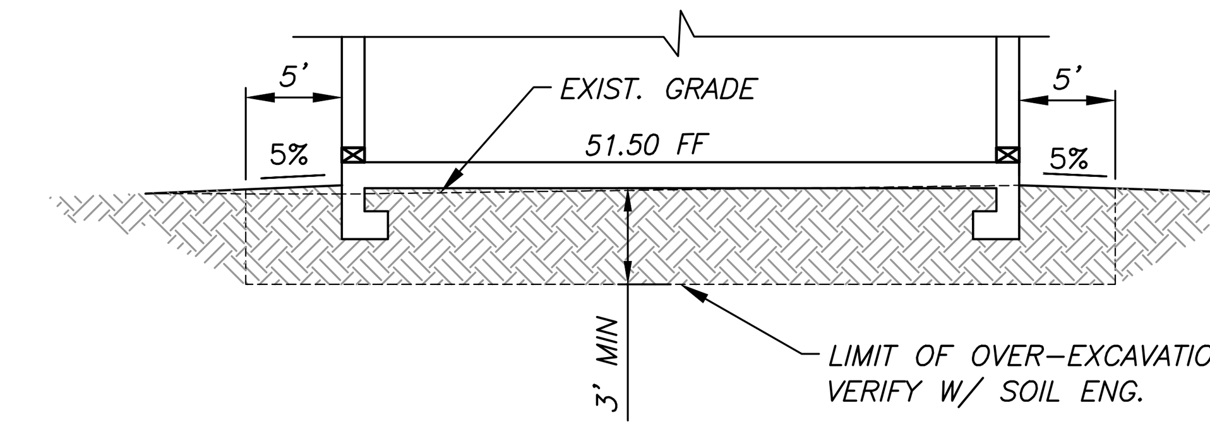
HIGH FIRE AREA
This project subject to the provisions of:
RIVERSIDE COUNTY ORDINANCE NO. 787
CALIFORNIA BUILDING CODE - CHAPTER 7-A
CALIFORNIA RESIDENTIAL CODE - R337

RIVERSIDE COUNTY LAND USE DIVISION BY: GRACIE BAEZA
12/1/2021
PLANS ACCEPTABLE FOR APPLICATION PURPOSES ONLY

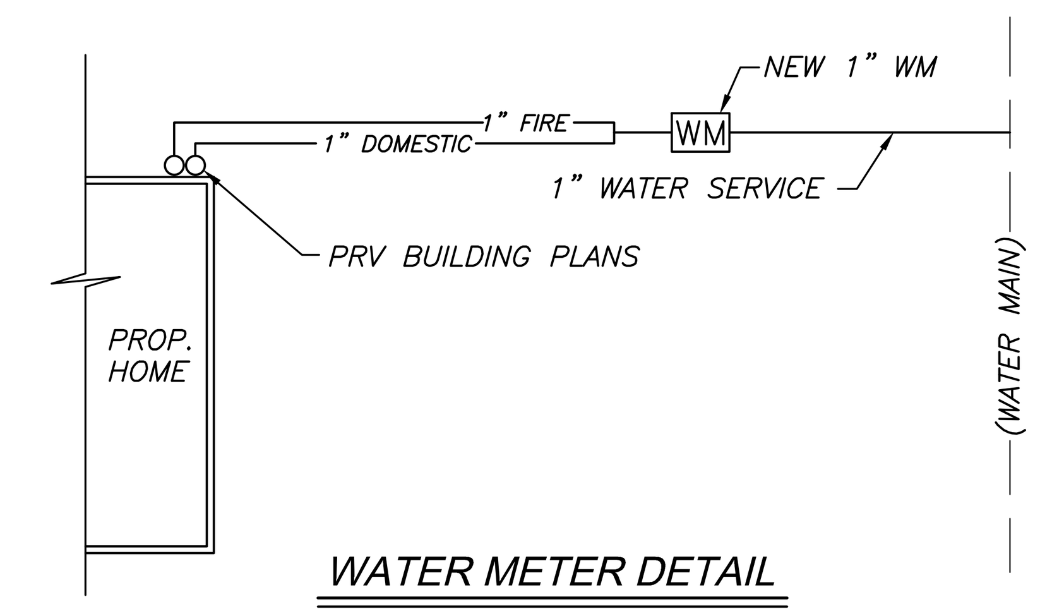
RIVERSIDE COUNTY PERMIT NUMBER:
BGR2100629

COC21179
BGR2100629
BMP2100737 Precise Grading
Single Family Residence

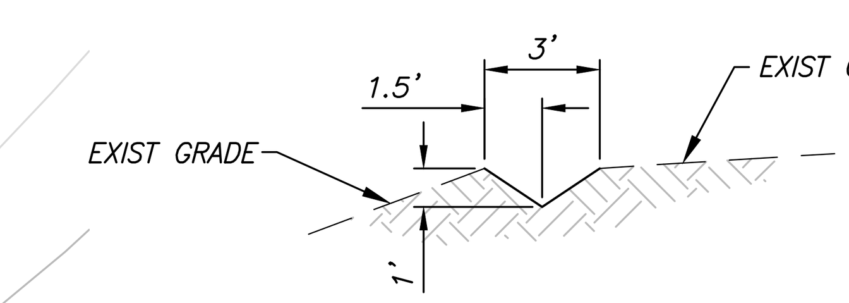




OVEREXCAVATION DETAIL:
NTS



WATER METER DETAIL
NTS



V-DITCH DETAIL: (5)
NTS

1 inch = 10 ft.

BGR________

CONSTRUCTION NOTES:	QUANTITIES:
(1) CONST. 4" PCC W/ #4 @ 24" O.C.E.W.	316 S.F.
(2) CONST. 4" PCC WALKWAY	165 S.F.
(3) INSTALL 4" AREA DRAIN	5 EA.
(4) INSTALL 4" PVC DRAIN PIPE	110 L.F.
(5) CONST. RIPRAP DITCH 3' WIDE 1' DEEP PER DETAIL HEREON	264 L.F.
(6) INSTALL 12"x12" AREA DRAIN	1 EA.
(7) INSTALL 1" WATER METER	1 EA.
(8) INSTALL 9 S.F. 4"–5" RIPRAP	3 EA.
(9) CONST. V–DITCH PER DETAIL HEREON	18 L.F.

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

The private engineer signing these plan is responsible for assuring the accuracy and acceptability of the design hereon, in the event of discrepancies arising after county approved or during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for approved by the county.

REGISTERED PROFESSIONAL ENGINEER SAM AKBARPOUR C053038 CIVIL STATE OF CALIFORNIA

SAKE ENGINEERS, INC.
www.sakeengineers.com
ENGINEERING ● SURVEYING ● LAND DEVELOPMENT
400 S. RAMONA AVE., STE. 202
CORONA, CALIFORNIA 92879
(951) 279-4041 FAX: (951) 279-2830

MARK	BY	DATE	REVISIONS	APP.	DATE
ENGINEER				COUNTY	

SEAL–COUNTY

COUNTY OF RIVERSIDE
DEPARTMENT OF BUILDING & SAFETY

APPROVED BY: DATE:
RECOMMENDED BY: DATE:

BENCH MARK:
SEE COVER SHEET

SCALE: AS SHOWN

COUNTY OF RIVERSIDE
PRECISE GRADING PLAN
FOR
APN 269-090-064

PRECISE GRADING PLAN

FOR | W.O. | COUNTY FILE NO.

SHEET NO. 2 OF 4 SHEETS

\\nas-new\data\projects\CO RIVERSIDE\JN3381 John Russo APN064\Civil\PGP.dwg, PGP2, 9/29/2021 4:50:11 PM, DWG To PDF.pc3, 1:10

COUNTY OF RIVERSIDE
PRECISE GRADING PLAN
FOR
16926 MCALLISTER ST.
RIVERSIDE, CA 92503

GENERAL NOTES:

1. ALL GRADING SHALL CONFORM TO THE 2019 CALIFORNIA BUILDING CODE (CBC) CHAPTERS 17, 18, & APPENDIX–J AS AMENDED BY ORDINANCE 457.
2. ALL PROPERTY CORNERS, GRADING BOUNDARIES AND ALL CONSERVATION AREAS/LEAST SENSITIVE AREA\ (LSA) DETERMINED BY THE ENVIRONMENTAL PROGRAMS DEPARTMENT (EPD) SHALL BE CLEARLY DELINEATED AND STAKED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION/GRADING.
3. ALL WORK UNDER THIS PERMIT SHALL BE LIMITED TO WORK WITHIN THE PROPERTY LINES. ALL WORK WITHIN THE ROAD RIGHT–OF– WAY WILL REQUIRE SEPARATE PLANS AND A SEPARATE REVIEW–APPROVAL (PERMIT) FROM THE TRANSPORTATION DEPARTMENT.
4. ALL GRADING SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE PRELIMINARY SOILS INVESTIGATION PREPARED BY ARCH ENGINEERING, INC. DATED 7–15–2021.
5. COMPACTED FILL TO SUPPORT ANY STRUCTURES SHALL COMPLY WITH SECTION 1803.5.8
. PROJECTS WITHOUT A PRELIMINARY SOILS REPORT SHALL INCLUDE DETAILED SPECIFICATIONS IN ACCORDANCE WITH SECTIONS 1803.2 AND1803.5 PREPARED BY THE ENGINEER OF RECORD.
6. THE CONTRACTOR SHALL NOTIFY THE BUILDING AND SAFETY DEPARTMENT AT LEAST 24 HOURS IN ADVANCE TO REQUEST FINISH LOT GRADE AND DRAINAGE INSPECTION. THIS INSPECTION MUST BE APPROVED PRIOR TO BUILDING PERMIT FINAL INSPECTION FOR EACH LOT.
7. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT, TWO DAYS BEFORE DIGGING AT 1–800–422–4133.
8. PRIOR TO GRADING, A MEETING SHALL BE SCHEDULED WITH A RIVERSIDE COUNTY ENVIRONMENTAL COMPLIANCE INSPECTOR PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.

CUT/FILL:

9. MAXIMUM CUT AND FILL SLOPE = 2:1 (HORIZONTAL TO VERTICAL).
10. NO FILL SHALL BE PLACED ON EXISTING GROUND UNTIL THE GROUND HAS BEEN CLEARED OF WEEDS, TOPSOIL AND OTHER DELETERIOUS MATERIAL. FILLS SHOULD BE PLACED IN THIN LIFTS (8–INCH MAX OR AS RECOMMENCED IN THE SOILS REPORT), COMPACTED AND TESTED THROUGHOUT THE GRADING PROCESS UNTIL FINAL GRADES ARE ATTAINED. ALL FILLS ON SLOPES STEEPER THAN 5 TO 1 (HORIZONTAL TO VERTICAL) AND A HEIGHT GREATER THAN 5 FEET SHALL BE KEYED AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. THE BENCH UNDER THE TOE MUST BE 10 FEET WIDE MINIMUM.
11. THE SLOPE STABILITY FOR CUT AND FILL SLOPES OVER 30 FEET IN VERTICAL HEIGHT, OR CUT SLOPES STEEPER THAN 2:1 HAVE BEEN VERIFIED WITH A FACTOR OF SAFETY OF AT LEAST 1.5.
12. NO ROCK OR SIMILAR IRREDUCIBLE MATERIAL WITH A MAXIMUM DIMENSION GREATER THAN 12 INCHES SHALL BE BURIED OR PLACED IN FILLS CLOSER THAN 10 FEET TO THE FINISHED GRADE.

DRAINAGE, EROSION / DUST CONTROL:

13. DRAINAGE ACROSS PROPERTY LINES SHALL NOT EXCEED THAT WHICH EXISTED PRIOR TO GRADING. EXCESS OR CONCENTRATED DRAINAGE SHALL BE CONTAINED ON SITE OR DIRECTED TO AN APPROVED DRAINAGE FACILITY. EROSION OF THE GROUND IN THE AREA OF DISCHARGE SHALL BE PREVENTED BY INSTALLATION OF NON–EROSIVE DOWN DRAINS OR OTHER DEVICES.
14. PROVIDE A PAVED SLOPE INTERCEPTOR DRAIN ALONG THE TOP OF CUT SLOPES WHERE THE DRAINAGE PATH IS GREATER THAN 40 FEET TOWARDS THE CUT SLOPE.
15. PROVIDE 5' WIDE BY 1' HIGH BERM ALONG THE TOP OF ALL FILL SLOPES STEEPER THAN 3:1 (HORIZONTAL TO VERTICAL).
16. THE GROUND SURFACE IMMEDIATELY ADJACENT TO THE BUILDING FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF NOT LESS THAN ONE UNIT VERTICAL IN 20 UNITS HORIZONTAL (5–PERCENT SLOPE) FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE FOUNDATION.
17. NO OBSTRUCTION OF NATURAL WATER COURSES SHALL BE PERMITTED.
18. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE CONTROL (BEST MANAGEMENT PRACTICES, BMPS) SHALL BE PROVIDED TO PREVENT PONDING WATER AND DRAINAGE TO ADJACENT PROPERTIES.
19. DUST CONTROL SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
20. FUGITIVE DUST CONTROL: CONSTRUCTION SITES SUBJECT TO PM10 FUGITIVE DUST MITIGATION SHALL COMPLY WITH AQMD RULE 403.1.
21. ALL EXISTING DRAINAGE COURSES AND STORM DRAIN FACILITIES SHALL CONTINUE TO FUNCTION. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS.
22. FOR ALL SLOPES STEEPER THAN 4 TO 1 (H/V): ALL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT ARE REQUIRED TO BE PLANTED WITH AN APPROVED DROUGHT–TOLERANT GROUND COVER AT A MINIMUM SPACING OF 12" ON CENTER OR AS APPROVED BY THE ENGINEER OF RECORD OR THE REGISTERED LANDSCAPE ARCHITECT AND DROUGHT–TOLERANT SHRUBS SPACED AT NO MORE THAN 10' ON CENTER. SLOPES EXCEEDING 15' IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED SHRUBS NOT TO EXCEED 10' ON CENTER, OR TREES SPACED NOT TO EXCEED 20' ON CENTER, OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15' IN ADDITION TO THE GRASS OR GROUND COVER. SLOPES THAT REQUIRE PLANTING SHALL BE PROVIDED WITH AN IN–GROUND IRRIGATION SYSTEM EQUIPPED WITH AN APPROPRIATE BACKFLOW DEVICE PER C.P.C. CHAPTER 6. THE SLOPE PLANTING AND IRRIGATION SYSTEM SHALL BE INSTALLED AS SOON AS POSSIBLE UPON COMPLETION OF ROUGH GRADING. ALL PERMANENT SLOPE PLANTING SHALL BE ESTABLISHED AND IN GOOD CONDITION PRIOR TO SCHEDULING PRECISE GRADE INSPECTION.

COMPLETION OF WORK:

ROUGH GRADE

23. A REGISTERED CIVIL ENGINEER SHALL PREPARE FINAL COMPACTION REPORT/GRADING REPORT AND IT SHALL BE SUBMITTED TO THE DEPARTMENT OF BUILDING AND SAFETY FOR REVIEW AND APPROVAL. THE REPORT SHALL INCLUDE BUILDING FOUNDATION DESIGN PARAMETERS (ALLOWABLE SOIL PRESSURES, ETC.), EXPANSION INDEX (AND DESIGN ALTERNATIVES IF EI > 20), WATER SOLUBLE SULFATE CONTENT, CORROSIVITY AND REMEDIAL MEASURES IF NECESSARY.
24. EXCEPT FOR NON–TRACT SINGLE RESIDENTIAL LOT GRADING, THE COMPACTION REPORT SHALL INCLUDE THE SPECIAL INSPECTION VERIFICATIONS LISTED ON TABLE 1705.6 OF 2016 CBC.
25. THE COUNTY OF RIVERSIDE REQUIRES A LICENSED PROFESSIONAL ENGINEER TO SUBMIT A WET SIGNED AND STAMPED ROUGH GRADING CERTIFICATION WHICH INCLUDES PAD ELEVATIONS PRIOR TO REQUESTING INSPECTION AND ISSUANCE OF THE BUILDING PERMIT.
26. ROUGH GRADE ONLY PERMITS: IN ADDITION TO OBTAINING ALL REQUIRED INSPECTIONS AND APPROVAL OF ALL FINAL REPORTS, ALL SITES PERMITTED FOR ROUGH GRADE ONLY SHALL PROVIDE VEGETATIVE COVERAGE (100 PERCENT) OR OTHER MEANS OF SITE STABILIZATION APPROVED BY ENVIRONMENTAL COMPLIANCE DIVISION, PRIOR TO RECEIVING A ROUGH GRADE PERMIT FINAL.

PRECISE GRADE

27. A REGISTERED CIVIL ENGINEER SHALL SUBMIT TO THE BUILDING AND SAFETY DEPARTMENT WRITTEN FINAL CERTIFICATION OF COMPLETION OF GRADING IN ACCORDANCE WITH THE APPROVED GRADING PLAN PRIOR TO THE REQUEST OF PRECISE GRADING INSPECTION.

NPDES: WHEN ONE ACRE OR MORE IS BEING DISTURBED:

1. CONSTRUCTION SITE BEST MANAGEMENT PRACTICES (BMPS) FOR THE MANAGEMENT OF STORM WATER AND NON–STORMWATER DISCHARGES SHALL BE DOCUMENTED ON THE GRADING PLAN. ARRANGEMENTS SHALL BE MADE BY THE DEVELOPER TO RETAIN THE SWPPP ON THE JOBSITE THROUGHOUT THE TIME OF CONSTRUCTION. THE IMPLEMENTATION AND MAINTENANCE OF THE SITE BMPS IS REQUIRED TO MINIMIZE JOBSITE EROSION AND SEDIMENTATION. ARRANGEMENTS SHALL BE MADE BY THE DEVELOPER TO MAINTAIN THOSE BMPS THROUGHOUT THE TIME OF CONSTRUCTION.
2. EROSION CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT AND/OR MINIMIZE THE ENTRAINMENT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON CONSTRUCTION SITES.
3. SEDIMENT CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT AND/OR MINIMIZE THE TRANSPORT OF SOIL FROM THE CONSTRUCTION SITE.
4. GRADING SHALL BE PHASED TO LIMIT THE AMOUNT OF DISTURBED AREA EXPOSED TO THE EXTENT FEASIBLE.
5. AREAS THAT ARE CLEARED AND GRADED SHALL BE LIMITED TO ONLY THE PORTION OF THE SITE THAT IS NECESSARY FOR CONSTRUCTION. THE CONSTRUCTION SITE SHALL BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
6. ONCE DISTURBED, SLOPES (TEMPORARY OR PERMANENT) SHALL BE STABILIZED IF THEY WILL NOT BE WORKED WITHIN 21 DAYS. DURING STORM SEASON, ALL SLOPES SHALL BE STABILIZED PRIOR TO PREDICTED STORM EVENT. CONSTRUCTION SITES SHALL BE REVEGETATED AS EARLY AS FEASIBLE AFTER SOIL DISTURBANCE.
7. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE OR STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
8. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OTHER THAN STORMWATER (NON–STORMWATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT–CONSTRUCTION ACTIVITY. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS, FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS, CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; WASTES FROM STREET CLEANING; AND SUPER–CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON–SITE PHYSICALLY SEPARATE FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
9. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING SHALL BE CONTAINED AT CONSTRUCTION SITE AND MUST NOT BE DISCHARGED TO RECEIVING WATERS OR LOCAL STORM DRAIN SYSTEM.
10. APPROPRIATE BMPS FOR CONSTRUCTION–RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE IMPLEMENTED TO ELIMINATE OR REDUCE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR RUNOFF.
11. ALL CONSTRUCTION CONTRACTORS AND SUBCONTRACTOR PERSONNEL ARE TO BE TRAINED IN THE IMPLEMENTATION AND USE OF THE REQUIRED BMPS AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS AND ALL TRAINING DOCUMENTATION SHALL BE MAINTAINED IN THE SWPPP.
12. DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON–CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES MAY REQUIRE A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FROM THE REGIONAL WATER QUALITY CONTROL BOARD.
13. BMPS SHALL BE MAINTAINED AT ALL TIMES. IN ADDITION, BMPS SHALL BE INSPECTED PRIOR TO PREDICTED STORM EVENTS AND FOLLOWING STORM EVENTS.
14.AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY, ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED OF IN TRASH OR RECYCLE BINS

DIG ALERT
CALL
811
48 HOURS BEFORE YOU DIG

ENGINEER'S NOTICE TO CONTRACTORS:

1. CONTRACTOR SHALL POTHOLE AT THE TIE–IN STATIONS AND AT ANY OTHER POINTS OF POTENTIAL CONFLICTS WITH UNDERGROUND FACILITIES BEFORE STARTING CONSTRUCTION. EXISTING SUBSURFACE UTILITY DATA ON DRAWINGS WERE COMPILED FROM INFORMATION FURNISHED BY VARIOUS SOURCES. NEITHER THE ACCURACY NOR THE COMPLETENESS OF THE INFORMATION SHOWN IS GUARANTEED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER MAINS, GAS MAINS, SANITARY SEWERS, STORM DRAINS, ELECTRIC CONDUITS, TELEPHONE LINES AND ANY OTHER UTILITIES WHICH MAY CONFLICT WITH THE DESIGN AND CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. RIM ELEVATIONS SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE RING AND COVER SHALL BE ADJUSTED IN THE FIELD TO MATCH THE FINISHED SURFACE OF THE PAVEMENT TO FORM A SMOOTH DRIVING SURFACE. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL COSTS FOR THE REPAIR OF ANY AND ALL DAMAGE TO THE CONTRACT WORK OR TO ANY UTILITY (WHETHER PREVIOUSLY KNOWN OR DISCLOSED DURING THE WORK) AS MAY BE CAUSED BY HIS OPERATIONS. UTILITIES NOT SHOWN ON THE DRAWING TO BE RELOCATED OR ALTERED BY OTHERS SHALL BE MAINTAINED BY THE CONTRACTOR. AT THE COMPLETION OF THE CONTRACT WORK, THE CONTRACTOR SHALL LEAVE ALL UTILITIES AND APPURTENANCES IN A CONDITION SATISFACTORY TO THE OWNERS AND THE CITY.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
3. CARE SHOULD BE TAKEN TO PREVENT GRADED DITCHES AND SWALES FROM UNDERMINING STREET IMPROVEMENTS. UPON INSPECTION OF THE SITES, THE COUNTY ENGINEER MAY REQUIRE TEMPORARY GUNITE SWALES, ENTERING OR LEAVING IMPROVEMENT.
4. ALL AREAS SHALL SLOPE A MINIMUM OF 1.0% TO STREETS, DRIVE OR SWALE UNLESS OTHERWISE NOTED.
5. QUANTITIES SHOWN HERE ARE FOR PLAN CHECKING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE TO PERFORM HIS OWN QUANTITY TAKEOFF.
6. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS; DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY THAT THE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE COUNTY OF RIVERSIDE HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE COUNTY OF RIVERSIDE.

NOTE:

A PRE–GRADING/PRE–CONSTRUCTION MEETING AND SITE INSPECTION SHALL BE ARRANGED FOR BY THE SITE DEVELOPER PRIOR TO COMMENCING GRADING OPERATIONS. THOSE PARTIES REQUIRED TO ATTEND THE PRE–CONSTRUCTION MEETING SHALL INCLUDE BUT ARE NOT LIMITED TO THE DEVELOPER, PROJECT SUPERINTENDENT, ENGINEER OF RECORD, SOIL ENGINEER, GRADING CONTRACTOR AND THE UNDERGROUND UTILITIES CONTRACTOR. REPRESENTING THE DEPARTMENT OF BUILDING AND SAFETY SHALL. BE THE GRADING PLAN–CHECKER AND/OR GRADING INSPECTOR. THE FOCUS OF THE PRE–CONSTRUCTION MEETING SHALL BE TO DISCUSS THE VARIOUS ASPECTS AND RESPONSIBILITIES OF THE GRADING PROJECT AND TO PROVIDE AN APPROXIMATE TIMETABLE FOR THE COMPLETION OF ROUGH GRADING. ARRANGE FOR A PREGRADING/PRECONSTRUCTION MEETING BY CALLING THE DISTRICT OFFICE RESPONSIBLE FOR PROVIDING YOUR GRADING AND BUILDING INSPECTIONS.

NOTE:

"THE ENGINEER WHO PREPARED THE GRADING PLAN HAS VERIFIED THE CONSISTENCY BETWEEN ON–SITE GRADING INFORMATION AND THE WORK WITHIN THE R/W APPROVED BY THE TRANSPORTATION DEPARTMENT"

30 0 30 60 90
1 inch = 30 ft.

SHEET INDEX:

OWNER/DEVELOPER:

JOHN RUSSO
P.O. BOX 77877
CORONA, CA 92877
(949) 735–3016 PH.
JRUSSO@E–EQUITIES.COM

ENGINEER:

SAKE ENGINEERS, INC.
400 S. RAMONA AVE. STE. 202
CORONA, CA 92879
(951) 279–4041 PH.
(951) 279–2830 FAX
SAM@SAKEENGINEERS.COM

ASSESSORS PARCEL NO.:

269–090–064

SOURCE OF TOPOGRAPHY:

LANDMARK SURVEYING
MAPPING & ENGINEERING INC.
14586 CHOKE CHERRY DRIVE
VICTORVILLE,CA 92392
(760) 955–4141 PH.
(760) 955–3441 FAX
LNDMRK10@GMAIL.COM
DATE OF SURVEY: 7–13–2021

SOILS ENGINEER:

ARCH ENGINEERING INC
117 S. MAIN STREET STE. 101
LAKE ELSINORE, CA 92530
(951) 245–2444 PH.
(951) 245–4211 FAX
ARCHENG117@GMAIL.COM

BASIS OF BEARING:

THE WEST LINE OF SECTION 29 BEING NORTH 00°08'41" WEST AS SHOWN ON M.B. 2/22.

BASIS OF ELEVATION:

FIELD SURVEY ON 06/24/21. RIV, CO, BM#454. ELEV = 1219.22'

LEGAL DESCRIPTION:

LOT 132 OF ASSESSORS MAP BOOK NO. 65 AS SHOWN ON MAP RECORDED IN BOOK 2 PAGE 22 OF MAPS RECORDS OF RIVERSIDE COUNTY.

AREA:

TOTAL AREA = 0.37 AC (16,048 SF)
IMPERVIOUS AREA = 0.09 AC (3,720 SF)
PERVIOUS AREA = 0.28 AC (12,328 SF)
DISTURBED AREA = 0.37 AC (16,048 SF)

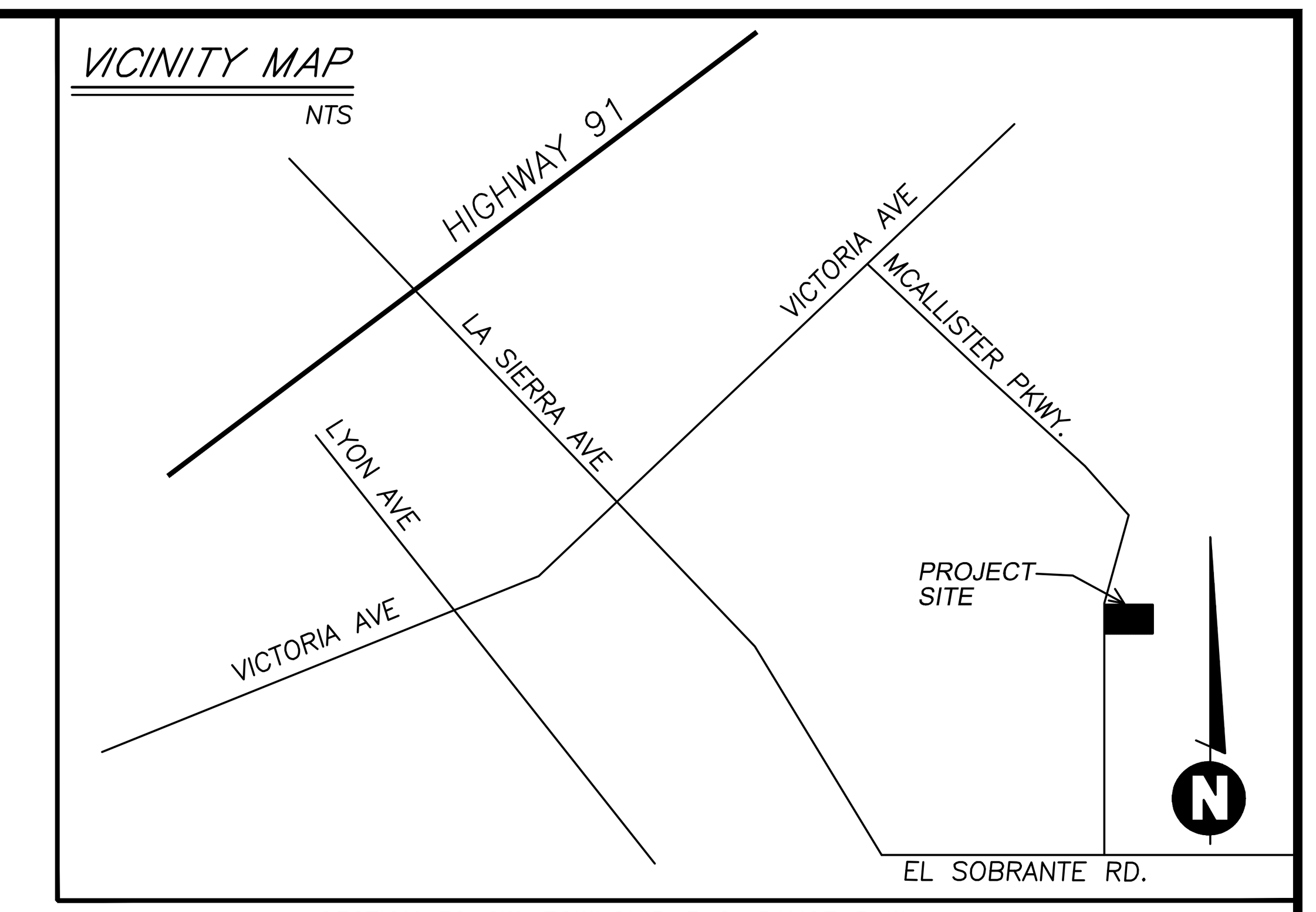
EARTHWORK:

CUT______________ 690±C.Y.
FILL______________ (160)±C.Y.
SHRINKAGE__15%_____ (90)±C.Y.
SUBSIDENCE_10%_____ (50)±C.Y.
EXPORT____________ (390) C.Y.
TO APN 269–470–020 BGR2100496
(16750 LA BELLA VILLA, RIVERSIDE COUNTY))

LEGEND:

FLOW LINE
PROPERTY LINE
CENTER LINE
EXISTING WATER LINE
EXISTING SANITARY SEWER LINE
EXISTING SLOPE
PROPOSED SLOPE
(600) EXISTING CONTOUR
601 PROPOSED CONTOUR
CUT AND FILL

VICINITY MAP



SECTION 30 SW, TOWNSHIP 3 S, RANGE 5 W
THOMAS GUIDE: PAGE 745, GRID A5

NOTE:

"EXCEPT FOR RETAINING WALLS IN CONJUNCTION WITH THIS GRADING, ALL INFORMATION ASSOCIATED WITH BUILDINGS (INCLUDING SETBACKS AND FF ELEVATIONS) IS FOR REFERENCE ONLY AND THE APPROVAL OF THIS GRADING PLANS DO NOT INCLUDE AND PROVISIONS ASSOCIATED WITH BUILDINGS."

EMERGENCY PHONE NUMBERS:

COUNTY OF RIVERSIDE FIRE DEPARTMENT —— (951) 782–5321
COUNTY OF RIVERSIDE SHERIFF —— (951) 787–7912
COUNTY OF RIVERSIDE TRAFFIC SIGNALS —— (951) 782–5376
RIVERSIDE SCHOOLS —— (951) 788–7132
UNDERGROUND ALERT SERVICE —— 811
GOODHEW AMBULANCE —— (951) 684–5520
PACIFIC BELL TELEPHONE —— (800) 303–3000
SOUTHERN CALIFORNIA EDISON COMPANY —— (951) 351–2450
SOUTHERN CALIFORNIA GAS COMPANY —— (800) 227–2600

ENGINEER'S STATEMENT:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY SUPERVISION AND THAT IT CONFORMS TO THE GRADING ORDINANCE OF THE COUNTY OF RIVERSIDE.

UTILITIES:

ELECTRIC —— SO. CAL. EDISON COMPANY
GAS —— SO. CAL GAS COMPANY
WATER —— W.M.W.D.
SEWER —— SEPTIC SYSTEM
TELEPHONE —— AT & T
CABLE —— TIME WARNER

NOTE:

EARTH QUANTITIES SHOWN HERE ARE FOR RAW ESTIMATING PLAN CHECK FEES ONLY. GRADING CONTRACTOR IS RESPONSIBLE TO PERFORM THEIR OWN CALCULATIONS FOR EARTH VOLUME WITH THE SOIL'S ENGINEER'S RECOMMENDATION.

COUNTY OF RIVERSIDE
BUILDING & SAFETY DEPARTMENT
GRADING PLAN CHECK APPROVED
7/11/2022
REVIEWED BY: BRIAN MILLET, PE
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATIONS OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. THIS SET OF PLANS MUST BE KEPT ON THE JOB UNTIL COMPLETION

ABBREVIATIONS:

G.B. = GRADE BREAK
H.P. = HIGH POINT
E.P. = EDGE OF PAVEMENT
D.L. = DAYLIGHT
G.S. = GROUND SHOT
W.V. = WATER VALVE
W = WATER MAIN
W.M. = WATER METER
FL = FLOW LINE
F.G. = FINISHED GRADE
BM = BENCH MARK
LS = LANDSCAPING
T.G. = TOP OF GRATE
INV. = INVERT ELEVATION
A.C. = ASPHALT CONCRETE
D.F. = DEEPEN FOOTING
TB = TOP OF AC BERM
TW = TOP OF WALL
R = RADIUS
TF = TOP OF FOOTING
(106.02) = EXIST. ELEVATION
106.02 = PROPOSED ELEVATION
FG = FINISHED GRADE
FS = FINISHED SURFACE
CJ = CONTROL JOINT
TOE = TOE OF SLOPE
TOP = TOP OF SLOPE
TOP/D.L. = TOP OF SLOPE/DAYLIGHT
TOC = TOP OF CURB
FF = FINISHED FLOOR

BMP2100737 BGR2100629

NOTE:
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REGISTERED PROFESSIONAL ENGINEER
SAM AKBARPOUR
C053038
CIVIL
STATE OF CALIFORNIA

SAKE ENGINEERS, INC.
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ENGINEERING ● SURVEYING ● LAND DEVELOPMENT
400 S. RAMONA AVE., STE. 202
CORONA, CALIFORNIA 92879
(951) 279–4041 FAX: (951) 279–2830
SAM@SAKEENGINEERS.COM

MARK	BY	DATE	REVISIONS	APP.	DATE
ENGINEER				COUNTY	

SEAL–COUNTY

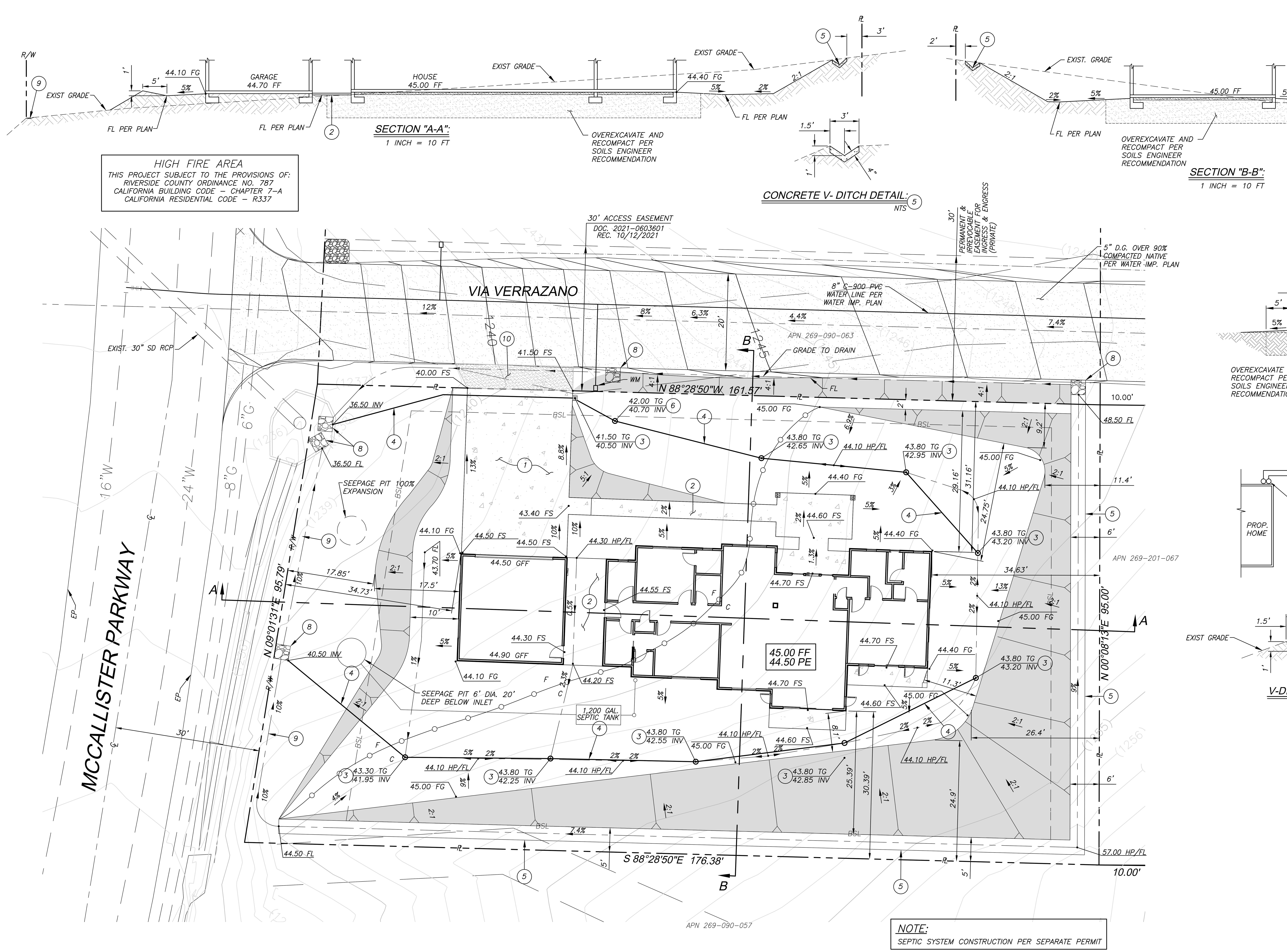
COUNTY OF RIVERSIDE
DEPARTMENT OF BUILDING & SAFETY
APPROVED BY: DATE:
RECOMMENDED BY: DATE:

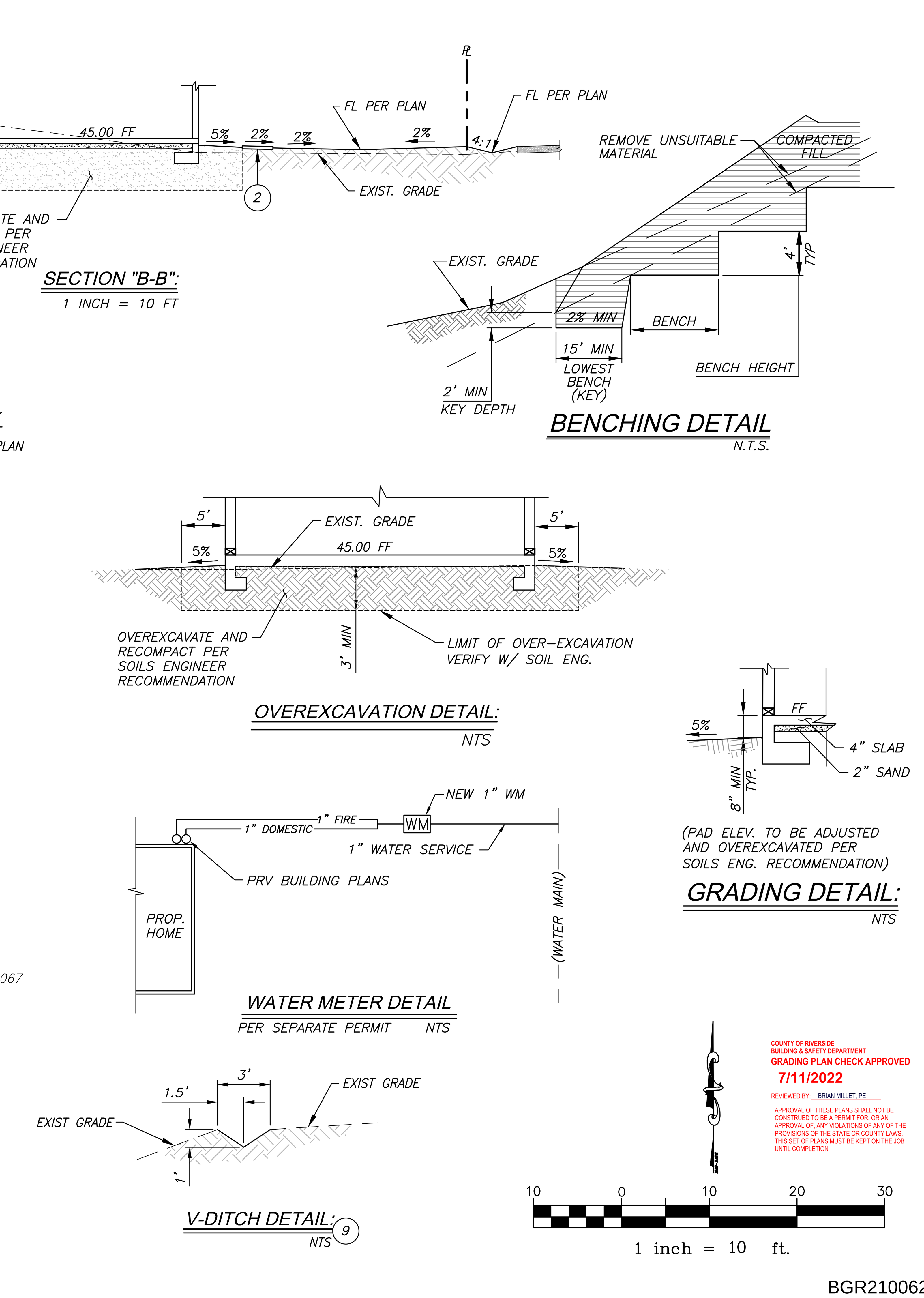
BENCH MARK:
FIELD SURVEY ON 06/24/21. RIV, CO, BM#454.
ELEV = 1219.22'
1 MILE (1.6 KM) SOUTH OF RIVERSIDE, 1.2 MILES (1.9 KM) NORTH ALONG MCALLISTER STREET FROM THE INTERSECTION OF MCALLISTER STREET AND EL SOBRANTE ROAD, AT THE INTERSECTION OF MCALLISTER STREET AND MWDSC UPPER FEEDER PIPELINE, 88 FEET (26.8 M) WEST OF THE CENTERLINE OF MCALLISTER STREET AND 15 FEET (4.6 M) NORTH OF CENTERLINE OF MWDSC UPPER FEEDER PATROL ROAD, A STANDARD ALUMINUM MWD DISK SET FLUSH IN TOP OF SOUTHWEST CORNER OF BLOW–OFF STRUCTURE, AT STATION 112+95.
SCALE: AS SHOWN

COUNTY OF RIVERSIDE
PRECISE GRADING PLAN
FOR
16926 MCALLISTER ST.
TITLE SHEET

SHEET NO. 1 OF 4 SHEETS

FOR | W.O. | COUNTY FILE NO.





COUNTY OF RIVERSIDE
BUILDING & SAFETY DEPARTMENT
GRADING PLAN CHECK APPROVED
7/11/2022
REVIEWED BY: BRIAN MILLET, PE

BGR2100629

NOTE:
SEPTIC SYSTEM CONSTRUCTION PER SEPARATE PERMIT

CONSTRUCTION NOTES:	QUANTITIES:
1 — CONST. 4" PCC W/ #4 @ 24" O.C.E.W.	316 S.F.
2 — CONST. 4" PCC WALKWAY	165 S.F.
3 — INSTALL 4" AREA DRAIN	5 EA.
4 — INSTALL 4" PVC DRAIN PIPE	110 L.F.
5 — CONST. CONCRETE V-DITCH 3' WIDE 1' DEEP PER DETAIL HEREON	260 L.F.
6 — INSTALL 12"x12" AREA DRAIN	1 EA.
7 — INSTALL 1" WATER METER BY SEPARATE PERMIT	1 EA.
8 — INSTALL 9 S.F. 4"-5" RIPRAP 12" THICK	5 EA.
9 — CONST. V-DITCH PER DETAIL HEREON	18 L.F.
10 — CONST. 5" D.G. OVER 90% COMPACTED NATIVE	115 S.F.

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SEAL-COUNTY

COUNTY OF RIVERSIDE
DEPARTMENT OF BUILDING & SAFETY

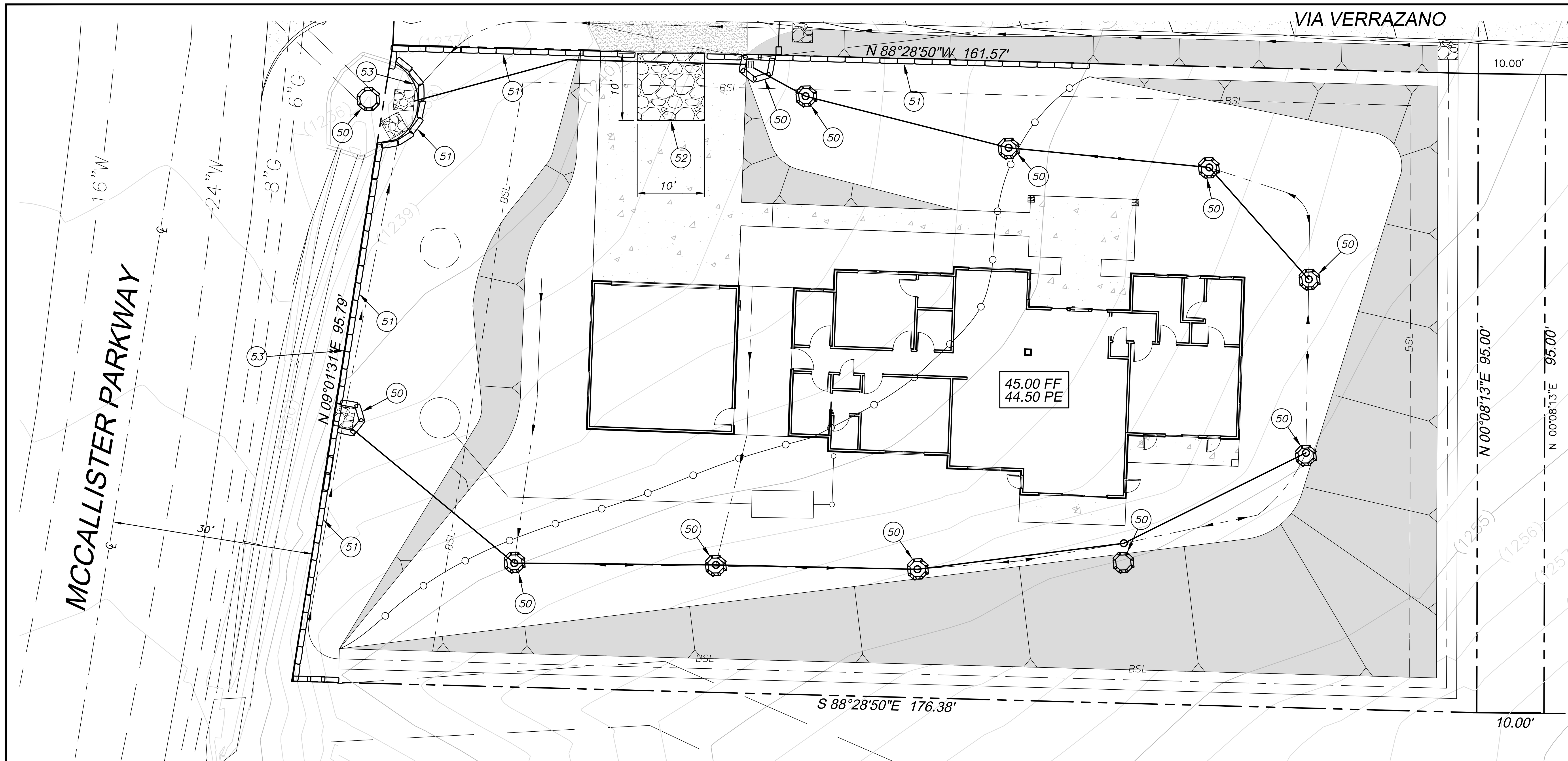
APPROVED BY: DATE:
RECOMMENDED BY: DATE:

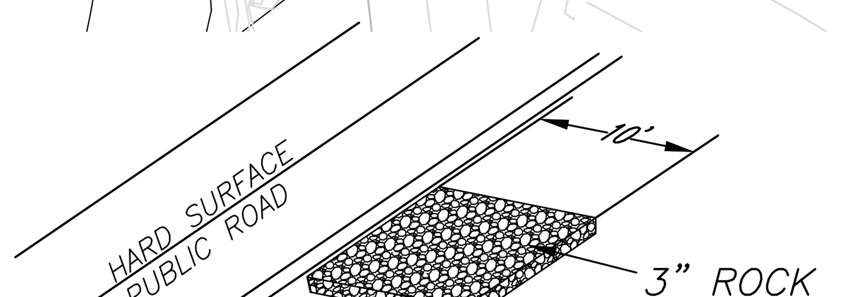
BENCH MARK:
SEE COVER SHEET
SCALE: AS SHOWN

COUNTY OF RIVERSIDE
PRECISE GRADING PLAN
FOR
16926 MCALLISTER ST.
PRECISE GRADING PLAN

SHEET NO. 2 OF 4 SHEETS

FOR | W.O. | COUNTY FILE NO.





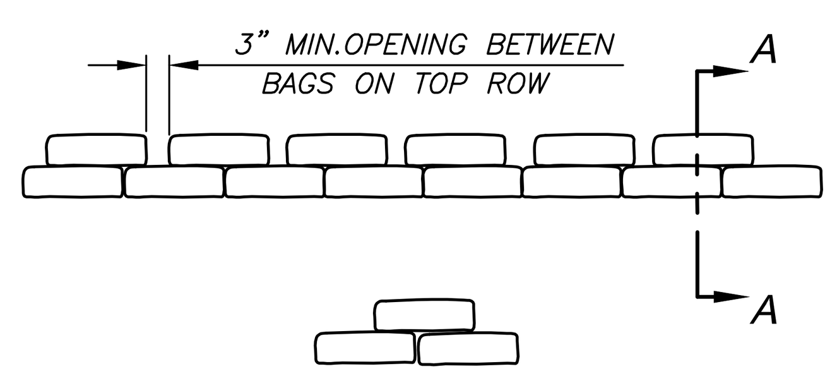
SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE:

REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

STABILIZED CONSTRUCTION ENTRANCE (52)

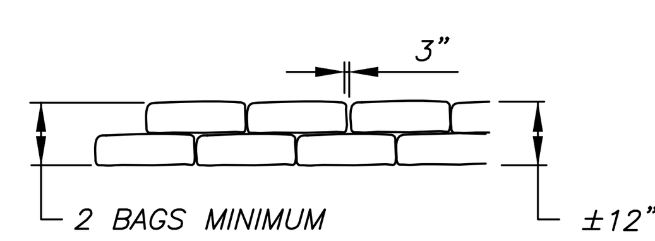
NTS



SECTION "A-A"
N.T.S.

GRAVELBAG INSTALLATION

N.T.S.



SECTION "A-A"
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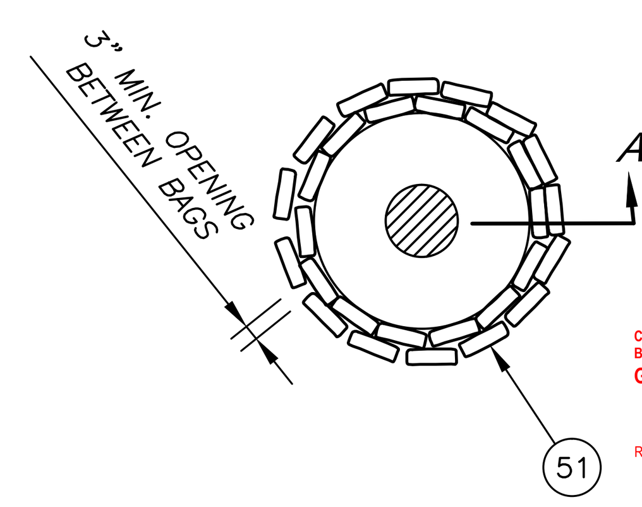
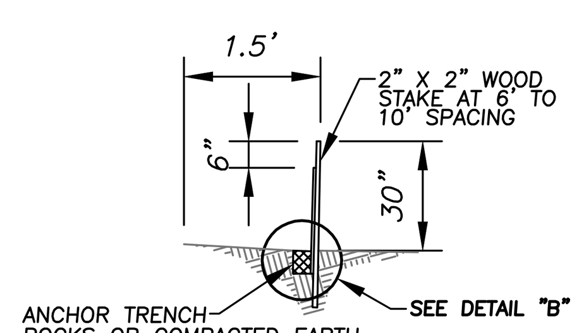


DETAIL "A"
N.T.S.

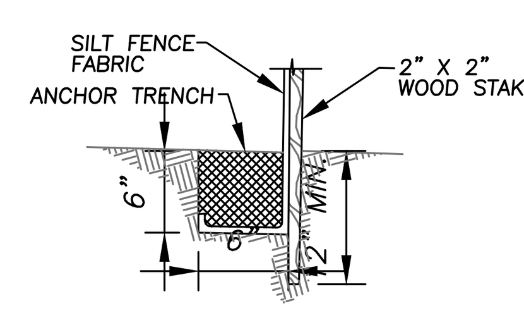
COUNTY OF RIVERSIDE BUILDING & SAFETY DEPARTMENT
GRADING PLAN CHECK APPROVED
7/11/2022
REVIEWED BY: BRIAN MILLET, PE

SANDBAG DRAIN PROTECTION (50)

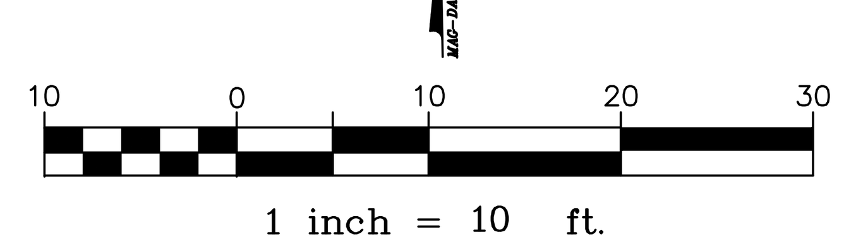
N.T.S.



SILT FENCE DETAIL (53)
N.T.S.



DETAIL "B"
N.T.S.



STREET MAINTENANCE

REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

SITE PREPARATION:

1. THE EMBANKMENT FOUNDATION AREA SHALL BE CLEARED OF ALL TREES, ROOTS, BRUSH, BOULDERS, SOD, AND DEBRIS.
2. ALL TOPSOIL CONTAINING EXCESSIVE AMOUNTS OF ORGANIC MATTER SHALL BE REMOVED.
3. ALL STORM DRAIN INLETS SHALL BE CAPPED AND/OR CATCH BASINS SHALL BE PROTECTED W/FILTER FABRIC HELD DOWN BY SANDBAGS AROUND BASINS.

CONSTRUCTION NOTES:	QUANTITIES:
(50) — INSTALL SANDBAG DRAIN PROTECTION PER DETAIL HEREON	11 EA.
(51) — INSTALL SAND/GRAVEL BAGS PER DETAIL HEREON	210 L.F.
(52) — INSTALL CONSTRUCTION ENTRANCE PER DETAIL HEREON	1 EA.
(53) — INSTALL SILT FENCE PER DETAIL HEREON	100 L.F.

THE FOLLOWING NOTES AND BMPS AS OUTLINED IN, BUT NOT LIMITED TO, THE BEST MANAGEMENT PRACTICE HANDBOOK. CALIFORNIA STORMWATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 1993, OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY THE GRADING INSPECTOR):

EROSION CONTROL NOTES:

1. EROSION CONTROL IS REQUIRED FOR GRADING OPERATIONS ON A YEAR ROUND BASIS. APPROVED PLANS ARE REQUIRED FOR ALL WORK REQUIRING A GRADING PERMIT.
2. IN CASE OF EMERGENCY, CALL JOHN RUSSO OF ________ AT (949) 735-3016.
3. THE ENGINEER OF RECORD WILL SUPERVISE EROSION CONTROL WORK AND ENSURE THAT WORK IS IN ACCORDANCE WITH APPROVED PLANS.
4. CITY APPROVAL OF PLANS DOES NOT RELIEVE THE DEVELOPER FROM RESPONSIBILITY FOR THE CORRECTION OF ERROR AND OMISSION DISCOVERED DURING CONSTRUCTION. UPON REQUEST, THE REQUIRED PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE PUBLIC WORKS DIRECTOR FOR APPROVAL.
5. THE PUBLIC WORKS DIRECTOR RESERVES THE RIGHT TO MAKE CHANGES OR MODIFICATIONS TO THIS PLAN AS DEEMED NECESSARY.
6. STANDBY CREW FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) OR TO REPAIR ANY DAMAGED BMPS WHEN RAIN IS IMMINENT.
7. AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL BMPS SHALL BE IMPLEMENTED AND MAINTAINED TO PREVENT AND/OR MINIMIZE THE TRANSPORT OF SOIL IN RUNOFF FROM DISTURBED SOIL AREAS ON THE CONSTRUCTION SITE AT ALL TIMES. IN ADDITION, BMPS SHALL BE INSPECTED PRIOR TO PREDICTED STORM EVENTS AND FOLLOWING STORM EVENTS. BMPS SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY INSPECTOR
8. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE-DAY RAIN PROBABILITY FORECAST EXCEEDS 40 PERCENT, AS FORECASTED BY THE NATIONAL WEATHER SERVICE.
9. AFTER A RAIN EVENT EXCEEDING ONE-QUARTER INCH IN ANY 12 HOUR PERIOD, OR UPON DIRECTION OF THE PUBLIC WORKS DIRECTOR, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK DAMS, SILT FENCES, AND DESILTING BASINS; AND THE BASINS SHALL BE PUMPED DRY AND RESTORED TO ORIGINAL DESIGN CONDITION. ANY EROSION CONTROL MEASURES DAMAGED DURING A RAIN EVENT SHALL ALSO BE IMMEDIATELY REPAIRED.
10. DESILTING BASINS ARE TO BE CONSTRUCTED AS GRADING OF INDIVIDUAL GRADING AREAS ARE COMPLETE PER ROUGH GRADING PLANS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
12. AREAS SHALL BE MAINTAINED IN SUCH A STATE THAT FIRE ACCESS SHALL BE MAINTAINED AT ALL TIMES (INCLUDING ACCESS TO NEIGHBORING PROPERTIES).
13. GRADED AREAS AROUND THE SITE PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
14. TEMPORARY EROSION PROTECTION IS REQUIRED FOR MANUFACTURED SLOPES PRIOR TO PERMANENT PLANTING.
15. ALL DISTURBED SLOPES SHALL BE PLANTED AND PROTECTED WITHIN 45 DAYS OF THE COMPLETION OF EACH STAGE OF GRADING. SUITABLE MEASURES TO PREVENT SLOPE EROSION INCLUDING, BUT NOT LIMITED TO, RAPID GROWTH VEGETATION SUFFICIENT TO STABILIZE THE SOIL, SHALL BE INSTALLED ON ALL DISTURBED AREAS UNTIL SUCH TIME AS THE PERMANENT VEGETATIVE COVER SUFFICIENTLY MATURES TO PROVIDE PERMANENT STABILITY.
16. NO OBSTRUCTION OR DISTURBANCE OF NATURAL DRAINAGE COURSES OR EXISTING STORM DRAIN INLETS SHALL OCCUR DURING GRADING OPERATIONS, UNLESS ADEQUATE TEMPORARY/PERMANENT DRAINAGE FACILITIES HAVE BEEN APPROVED AND INSTALLED TO CARRY SURFACE WATER TO THE NEAREST PRACTICAL STREET, STORM DRAIN OR NATURAL WATER COURSE. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST BE MAINTAINED IN A STATE TO ALLOW FOR CONTINUOUS FUNCTION.
17. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER THAT STORM RUNOFF WILL BE CONTAINED WITHIN THE PROJECT OR CHANNELED INTO THE STORM DRAIN SYSTEM WHICH SERVES THE RUNOFF AREA. STORM RUNOFF FROM ONE AREA SHALL NOT BE ALLOWED TO DIVERT TO ANOTHER RUNOFF AREA.
18. CONFORMANCE WITH THE REQUIREMENTS OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TO THIS SITE AND ADJACENT PROPERTIES. DURING GRADING OPERATIONS, TEMPORARY DRAINAGE CONTROL SHALL BE PROVIDED TO PREVENT PONDING WATER AND DAMAGE TO ADJACENT PROPERTIES. TEMPORARY DRAINAGE CONTROL SHALL CONSIST OF, BUT NOT BE LIMITED TO, CONSTRUCTING SUCH FACILITIES AND TAKING SUCH MEASURES AS ARE NECESSARY TO PREVENT, CONTROL AND ABATE WATER, MUD AND EROSION DAMAGE TO PUBLIC AND PRIVATE PROPERTY AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT.
19. FILL AREAS WHILE BEING BROUGHT UP TO GRADE AND DURING PERIODS OF COMPLETION PRIOR TO FINAL GRADE, SHALL BE PROTECTED BY VARIOUS MEASURES TO ELIMINATE EROSION AND THE SILTATION OF DOWNSTREAM FACILITIES AND ADJACENT AREAS. THESE MEASURES MAY INCLUDE, BUT SHALL NOT BE LIMITED TO: TEMPORARY DOWN DRAINS, EITHER IN THE FORM OF PIPES OR PAVED DITCHES TO DESILT RUNOFF; PROTECTION SUCH AS SAND BAGS AROUND INLETS WHICH HAVE NOT BEEN BROUGHT UP TO GRADE; AND EARTH BERMS AND APPROPRIATE GRADING TO DIRECT DRAINAGE AWAY FROM THE EDGE OF THE TOP OF SLOPES SHALL BE CONSTRUCTED AND MAINTAINED ON THOSE FILL AREAS WHERE EARTHWORK OPERATIONS ARE NOT IN PROGRESS.
20. CLEARING AND GRUBBING SHOULD BE LIMITED TO AREAS THAT WILL RECEIVE IMMEDIATE GRADING. EROSION CONTROL MEASURES WILL BE REQUIRED TO PROTECT AREAS WHICH HAVE BEEN CLEARED AND GRUBBED PRIOR TO GRADING OPERATION, AND WHICH ARE SUBJECT TO RUNOFF DURING A RAIN EVENT. THESE MEASURES MAY INCLUDE BUT SHALL NOT BE LIMITED TO: GRADED DITCHES; BRUSH BARRIERS AND SILT FENCES. CARE SHALL BE EXERCISED TO PRESERVE VEGETATION BEYOND LIMITS OF GRADING.
21. CONSTRUCTION SITES SHALL BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF GRADING TO THE EXTENT FEASIBLE AND THE USE OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
22. STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO ELIMINATE OR REDUCE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING, OR WIND.
23. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT WIND OR RUNOFF DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE TO STREETS, DRAINAGE FACILITIES OR ADJOINING PROPERTIES.
24. DISCHARGES OTHER THAN STORM WATER (NON-STORM WATER DISCHARGES) ARE PROHIBITED, EXCEPT AS AUTHORIZED BY AN INDIVIDUAL NPDES PERMIT, THE STATEWIDE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, OR OTHER APPLICABLE GENERAL NPDES PERMIT. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, SOLVENTS, DETERGENTS, GLUES, LIME, PESTICIDES, HERBICIDES, FERTILIZERS, WOOD PRESERVATIVES, AND ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; CONCRETE AND RELATED CUTTING OR CURING RESIDUES; FLOATABLE WASTES; WASTES FROM STREET CLEANING; SUPER-CHLORINATED POTABLE WATER FROM LINE FLUSHING AND TESTING; AND RUNOFF FROM EQUIPMENT AND VEHICLE WASHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ONSITE PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
25. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND PROPERLY DISPOSED IN TRASH OR RECYCLE BINS.
26. PAVED STREETS, SIDEWALKS AND OTHER IMPROVEMENTS SHALL BE MAINTAINED IN A NEAT AND CLEAN CONDITION, FREE OF LOSE SOIL, CONSTRUCTION DEBRIS AND TRASH. STREET SWEEPING OR OTHER EQUALLY EFFECTIVE MEANS SHALL BE USED ON A REGULAR BASIS TO CONTROL SILT THAT HAS BEEN DEPOSITED ON STREETS OR SIDEWALKS. WATERING SHALL NOT BE USED TO CLEAN STREETS.
27. DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING GROUNDWATER THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS ALSO PROHIBITED. DISCHARGING NON-CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING ACTIVITIES MAY REQUIRE A NPDES PERMIT FROM THE SANTA ANA REGIONAL BOARD.
28. ALL CONSTRUCTION CONTRACTOR AND SUBCONTRACTOR PERSONNEL ARE TO BE MADE AWARE OF THE REQUIRED BEST MANAGEMENT PRACTICES AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE AND ANY ASSOCIATED CONSTRUCTION STAGING AREAS.

BGR2100629

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MARK	BY	DATE	REVISIONS	APP.	DATE
ENGINEER				COUNTY	

SEAL-COUNTY

COUNTY OF RIVERSIDE
DEPARTMENT OF BUILDING & SAFETY

APPROVED BY: DATE:
RECOMMENDED BY: DATE:

BENCH MARK:
SEE COVER SHEET

SCALE: AS SHOWN

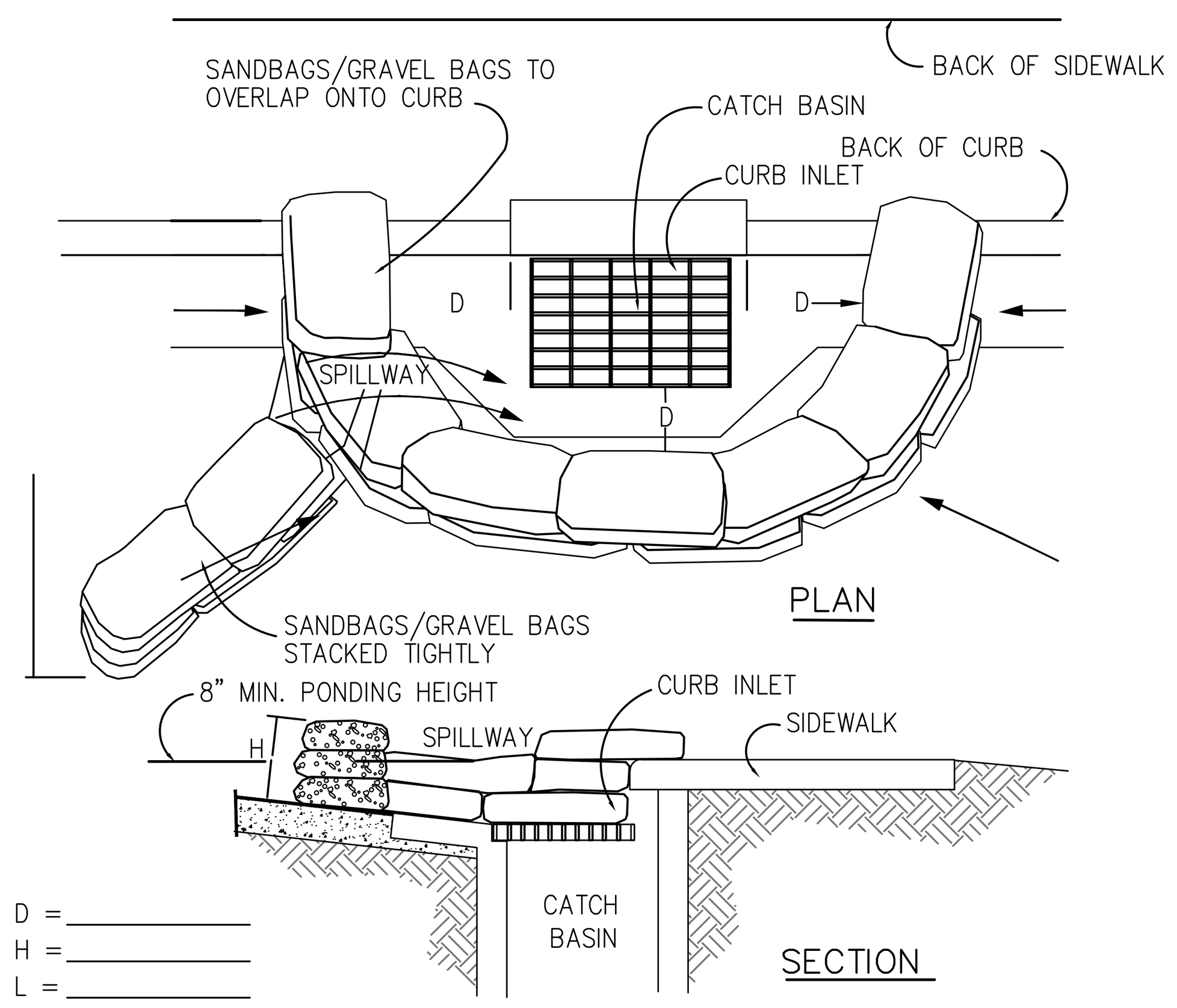
COUNTY OF RIVERSIDE
PRECISE GRADING PLAN
FOR
16926 MCALLISTER ST.
EROSION CONTROL PLAN

SHEET NO. 3 OF 4 SHEETS

FOR | W.O. | COUNTY FILE NO.

STORMWATER POLLUTION CONTROL PLAN

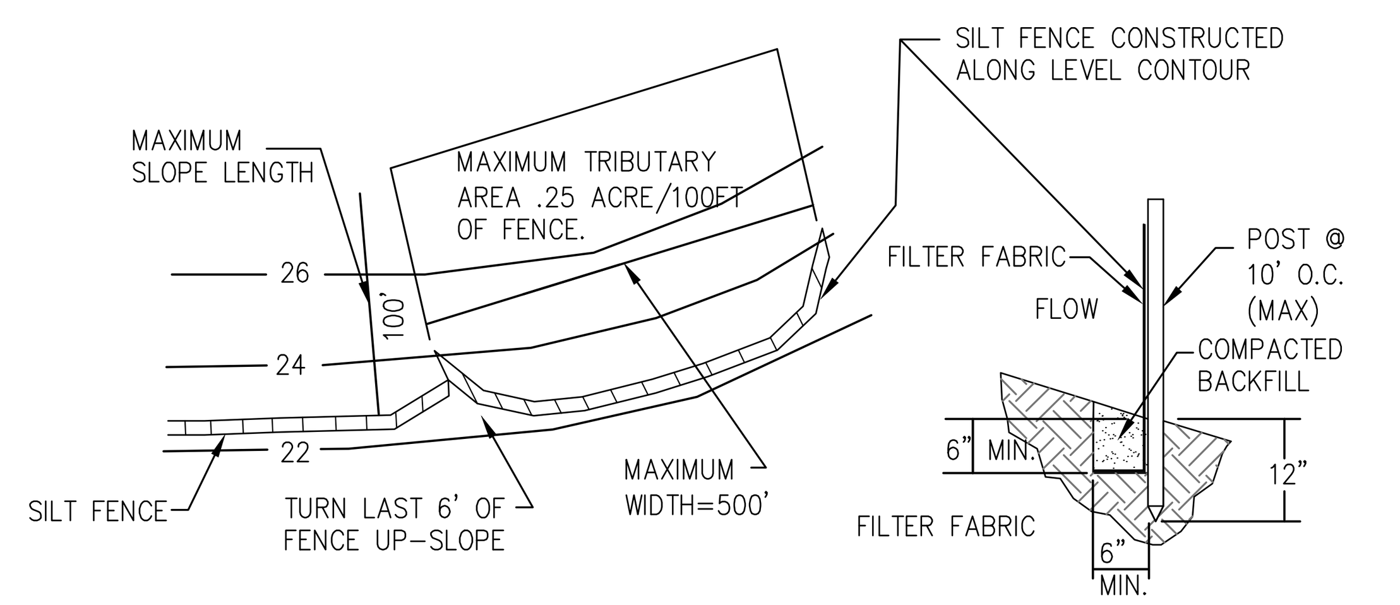
A
CATCH BASIN/INLET PROTECTION
CASQA STD. SE10



NOTES:

1. CATCH BASIN/INLET PROTECTION SHALL BE INSTALLED WHEREVER THERE IS A POTENTIAL OF STORMWATER OR NON-STORMWATER BEING DISCHARGED INTO IT.
2. INLET PROTECTION IS REQUIRED ALONG WITH OTHER POLLUTION PREVENTION MEASURES SUCH AS; EROSION CONTROL, SOIL STABILIZATION, AND MEASURES TO PREVENT TRACKING ONTO PAVED SURFACES.
3. MODIFY INLET PROTECTION AS NEEDED TO AVOID CREATING TRAFFIC HAZARDS.
4. INCLUDE INLET PROTECTION MEASURES AT HILLSIDE V-DITCHES AND MISC. DRAINAGE SWALES.
5. INLET PROTECTION SHALL BE INSPECTED AND ACCUMULATED SEDIMENTS REMOVED. SEDIMENT SHALL BE DISPOSED OF PROPERLY AND IN A MANNER THAT ASSURES THAT THE SEDIMENT DOES NOT ENTER THE STORM DRAIN SYSTEM
6. DAMAGED BAGS SHALL BE REPLACED IMMEDIATELY.
7. ADDITIONAL SANDBAG SEDIMENT TRAPS SHALL BE PLACED AT INTERVALS AS INDICATED ON SITE PLAN.

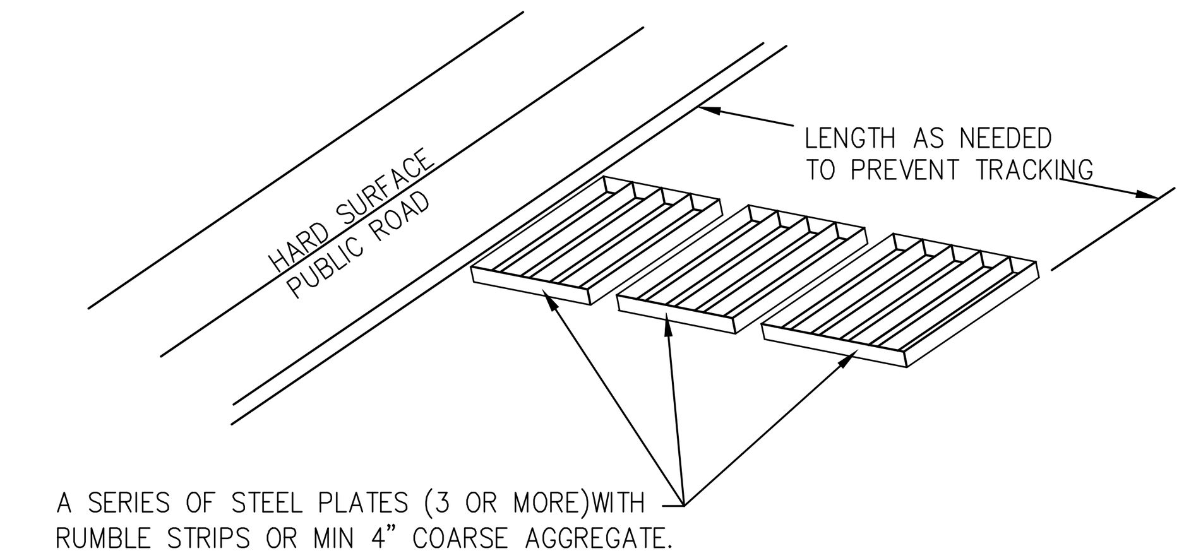
B
SILT FENCE
CASQA STD. SE1



NOTES:

1. CONSTRUCT THE SILT FENCE ALONG A LEVEL CONTOUR.
2. SILT FENCES SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
3. PROVIDE SUFFICIENT ROOM FOR RUNOFF TO POND BEHIND THE FENCE AND ALLOW SEDIMENT REMOVAL EQUIPMENT TO PASS BETWEEN THE SILT FENCE AND TOE OF SLOPE OR OTHER OBSTRUCTIONS. ABOUT 1200 SQ. FT. OF PONDING AREA SHALL BE PROVIDED FOR EVERY ACRE DRAINING TO THE FENCE.
4. TURN THE ENDS OF THE FILTER FENCE UPHILL TO PREVENT STORMWATER FROM FLOWING AROUND THE FENCE.
5. LEAVE AN UNDISTURBED OR STABILIZED AREA IMMEDIATELY DOWNSLOPE FROM THE FENCE.
6. DO NOT PLACE IN LIVE STREAM OR INTERMITTENTLY FLOWING CHANNELS.
7. WHEN STANDARD FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS.

C
STABILIZED CONSTRUCTION ENTRANCE
CASQA STD. TC1



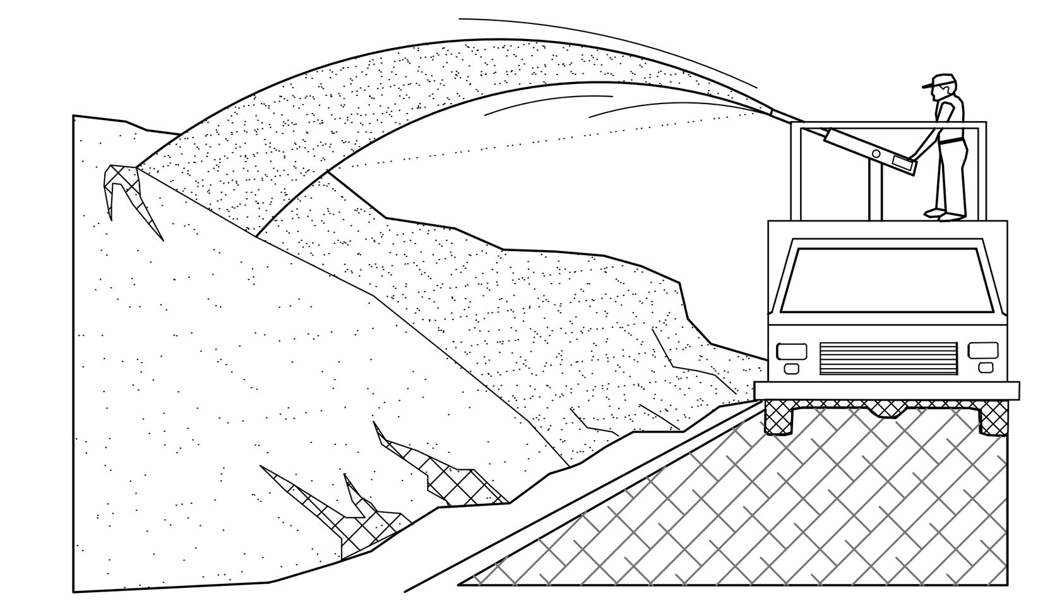
NOTES:

1. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE:
   A. LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
   B. A SERIES OF STEEL PLATES WITH "RUMBLE STRIPS", AND/OR MIN 4" COARSE AGGREGATE WITH LENGTH, WIDTH & THICKNESS AS NEEDED TO ADEQUATELY PREVENT ANY TRACKING ONTO PAVED SURFACES.
3. ADDING A WASH RACK WITH A SEDIMENT TRAP LARGE ENOUGH TO COLLECT ALL WASH WATER CAN GREATLY IMPROVE EFFICIENCY.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE SITES.

STREET MAINTENANCE

1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM.

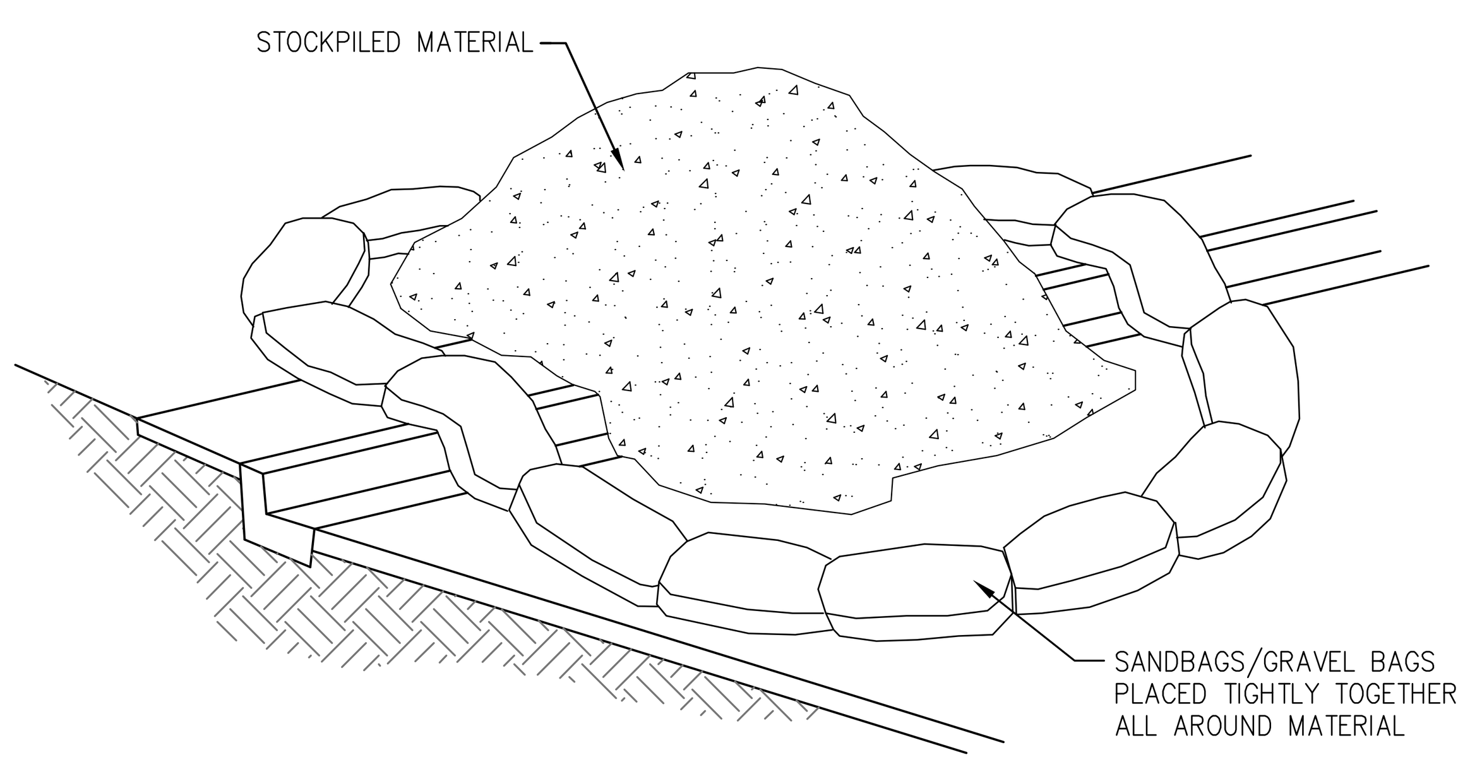
D
EROSION CONTROL
CASQA STD. EC4 & EC6



NOTES:

1. SOIL/SLOPE STABILIZATION PRACTICES SHALL BE DESIGNED TO PRESERVE EXISTING VEGETATION WHERE FEASIBLE AND TO REVEGETATE OPEN AREAS AS SOON AS FEASIBLE AFTER GRADING. THESE CONTROL PRACTICES SHALL INCLUDE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, OR OTHER SOIL STABILIZATION PRACTICES.
2. SOIL STABILIZATION SHALL BE IMPLEMENTED ON ALL INACTIVE DISTURBED AREAS FROM NOVEMBER 1 THRU APRIL 15 AND ON ALL DISTURBED AREAS DURING A RAIN EVENT OR POTENTIAL RAIN.
3. STABILIZATION PRACTICES SHALL CONTROL/PREVENT EROSION FROM THE FORCES OF WIND AND WATER.
4. STABILIZATION PRACTICES SHALL BE IMPLEMENTED IN CONJUNCTION WITH SEDIMENT TRAPPING/FILTERING PRACTICES AND PRACTICES TO REDUCE THE TRACKING OF SEDIMENT ONTO PAVED ROADS.
5. WHEN USING STRAW MULCHING, THE MINIMUM APPLICATION SHALL BE 2 TONS/ACRE. MULCH MUST BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
6. WHEN USING HYDROSEEDING/MULCHING, THE MINIMUM APPLICATION OF WOOD FIBER SHALL BE 1,500 LBS/ACRE, THAT DOES NOT CONTAIN MORE THAN 50 PERCENT NEWSPRINT.
7. FOR SEEDING RECOMMENDATIONS, CONTACT: USDA, NATURAL RESOURCES CONSERVATION SERVICE OR VENTURA COUNTY RCD.

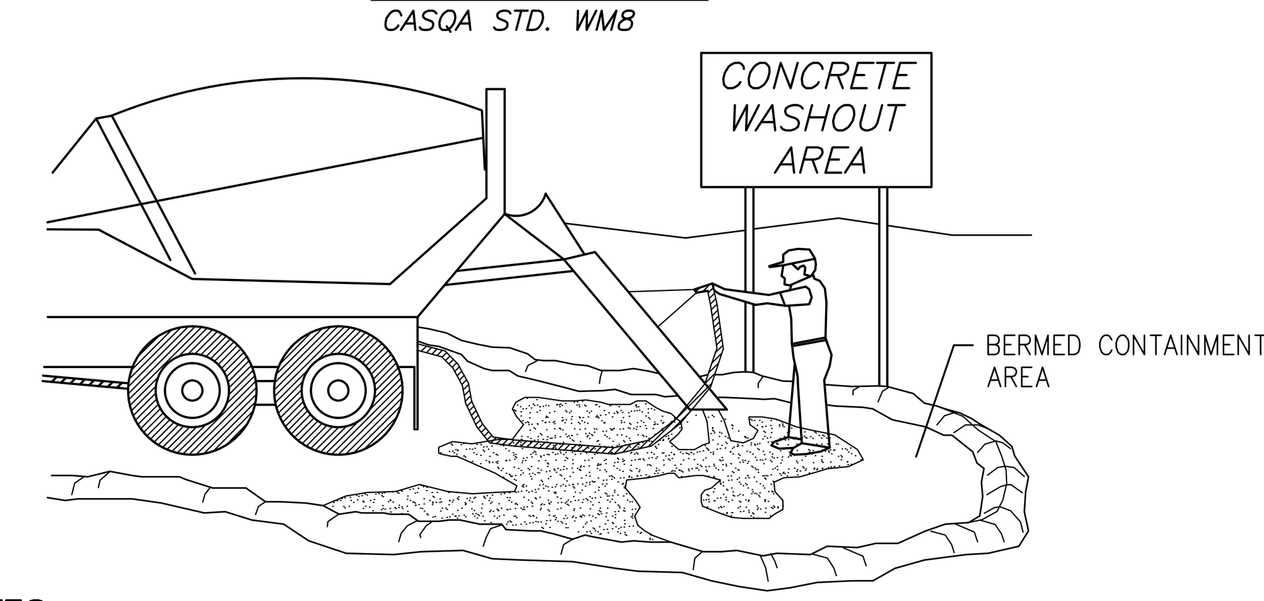
E
MATERIAL STORAGE
CASQA STD. WM1 & WM3



NOTES:

1. DIRT AND OTHER CONSTRUCTION RELATED MATERIALS PLACED IN THE STREET OR ON OTHER IMPERVIOUS SURFACES MUST BE CONTAINED WITH SANDBAGS OR OTHER MEASURES TO PREVENT TRANSPORT TO THE STORMDRAIN SYSTEM.
2. ANY CONSTRUCTION MATERIAL STORED OR STOCKPILED ON-SITE SHALL BE PROTECTED FROM BEING TRANSPORTED BY THE FORCE OF WIND OR WATER.

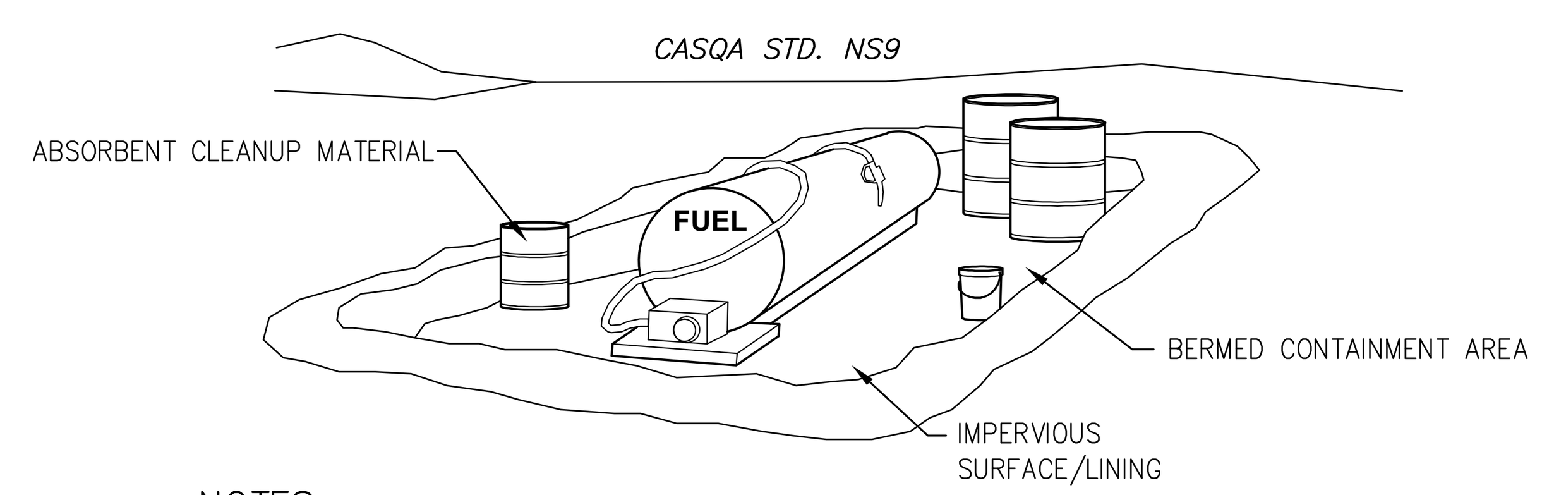
F
CONCRETE WASTE MANAGEMENT
CASQA STD. WM8



NOTES:

1. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM.
2. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED ON SITE.
3. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.

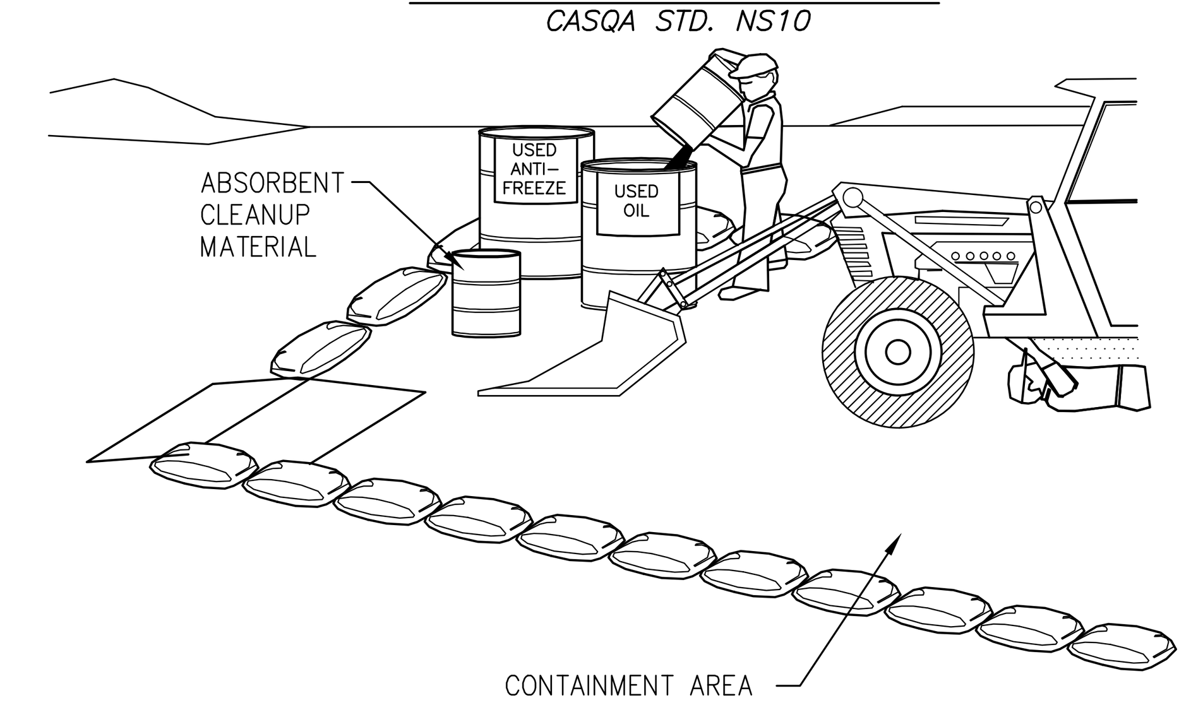
G
VEHICLE/EQUIPMENT FUELING
CASQA STD. NS9



NOTES:

1. FUELING SHALL BE PERFORMED IN A DESIGNATED AREA, AWAY FROM DRAINAGE COURSES.
2. ABSORBENT CLEANUP MATERIAL SHALL BE ON SITE AND USED IMMEDIATELY IN THE EVENT OF A SPILL.

H
EQUIPMENT REPAIR/MAINTENANCE
CASQA STD. NS10



NOTES:

1. LEAKING VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED ON-SITE. EQUIPMENT AND VEHICLES SHALL BE INSPECTED FREQUENTLY FOR LEAKS AND SHALL BE REPAIRED IMMEDIATELY. CLEAN UP SPILLS AND LEAKS PROMPTLY WITH ABSORBENT MATERIALS; DO NOT FLUSH WITH WATER.
2. VEHICLES AND EQUIPMENT SHALL BE MAINTAINED, AND REPAIRED ON-SITE ONLY IN DESIGNATED AREAS. PREVENT RUN-ON AND RUN-OFF FROM DESIGNATED AREAS. CONTAINMENT DEVICES SHALL BE PROVIDED AND AREAS SHALL BE COVERED IF NECESSARY.
3. DESIGNATE ON-SITE VEHICLE AND EQUIPMENT MAINTENANCE AREAS, AWAY FROM STORM DRAIN INLETS AND WATERCOURSES.
4. ALWAYS USE SECONDARY CONTAINMENT, SUCH AS A DRAIN PAN OR DROP CLOTH, TO CATCH SPILLS AND LEAKS WHEN REMOVING OR CHANGING FLUIDS.
5. LEGALLY DISPOSE OF USED OILS, FLUIDS, AND LUBRICANTS.
6. PROVIDE SPILL CONTAINMENT DIKES OR SECONDARY CONTAINMENT AROUND STORED OIL, FUEL, AND CHEMICAL DRUMS.
7. MAINTAIN AN ADEQUATE SUPPLY OF ABSORBENT SPILL CLEANUP MATERIALS IN DESIGNATED AREA.

STORMWATER POLLUTION CONTROL PLAN

GENERAL NOTES

1. BEST MANAGEMENT PRACTICES (BMP'S) CONTAINED HEREIN REFLECT MINIMUM REQUIREMENTS. FOR ADDITIONAL BMP'S REFER TO CALIFORNIA STORMWATER BMP HANDBOOKS.
2. ALL CONSTRUCTION ACTIVITY SHALL BE PERFORMED IN ACCORDANCE WITH A STORMWATER POLLUTION CONTROL PLAN (SWPCP) DEVELOPED AND IMPLEMENTED IN COMPLIANCE WITH REQUIREMENTS OF THE ORANGE COUNTYWIDE STORMWATER QUALITY MANAGEMENT PROGRAM, NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT NO. ____________
3. THE SWPCP SHALL:
   A. IDENTIFY POTENTIAL POLLUTANT SOURCES AND INCLUDE THE DESIGN AND PLACEMENT OF BMP'S TO EFFECTIVELY PROHIBIT THE ENTRY OF POLLUTANTS FROM THE CONSTRUCTION SITE INTO AND ONTO THE STREET AND STORM DRAIN SYSTEM DURING CONSTRUCTION.
   B. BE KEPT ON SITE AND AMENDED TO REFLECT CHANGING CONDITIONS THROUGHOUT THE COARSE OF CONSTRUCTION.
   C. BE KEPT UP TO DATE. ANY ADDITIONAL UPDATES REQUESTED BY AGENCY REPRESENTATIVES ARE TO BE MADE IMMEDIATELY.
4. NON-STORMWATER DISCHARGES ARE PROHIBITED FROM ENTERING ANY STORM DRAIN SYSTEM AND/OR STREET.
5. DISCHARGES OF PUMPED GROUND WATER REQUIRE A DISCHARGE PERMIT FROM THE STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD (RWQCB).
6. POLLUTANTS SHALL BE REMOVED FROM STORMWATER DISCHARGES TO THE MAXIMUM EXTENT PRACTICABLE (MEP) THROUGH DESIGN & IMPLEMENTATION OF THE SWPCP.
7. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON (NOV. 1 TO APR. 15). NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF EMERGENCY DEVICES WHEN RAIN IS IMMINENT.
8. PORTABLE SANITARY FACILITIES SHALL BE LOCATED ON RELATIVELY LEVEL GROUND AWAY FROM TRAFFIC AREAS, DRAINAGE COURSES, AND STORM DRAIN INLETS.
9. EMPLOYEES, SUBCONTRACTORS AND SUPPLIERS SHALL BE EDUCATED ON ALL BMP'S INCLUDING CONCRETE WASTE STORAGE AND DISPOSAL PROCEDURES.
10. SEDIMENT CONTROL PRACTICES SHALL EFFECTIVELY PREVENT A NET INCREASE OF SEDIMENT LOAD IN STORMWATER DISCHARGE.

COUNTY OF RIVERSIDE BUILDING & SAFETY DEPARTMENT
GRADING PLAN CHECK APPROVED
7/11/2022
REVIEWED BY: BRIAN MILLET, PE
APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATIONS OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS. THIS SET OF PLANS MUST BE KEPT ON THE JOB UNTIL COMPLETION

DIG ALERT
CALL
811
48 HOURS BEFORE YOU DIG

BGR2100629

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

The private engineer signing these plan is responsible for assuring the accuracy and acceptability of the design hereon, in the event of discrepancies arising after county approved or during construction, the private engineer shall be responsible for determining an acceptable solution and revising the plans for approved by the county.

REGISTERED PROFESSIONAL ENGINEER SAM AKBARPOUR C053038 CIVIL STATE OF CALIFORNIA

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SAM@SAKEENGINEERS.COM

MARK	BY	DATE	REVISIONS	APP.	DATE
ENGINEER				COUNTY	

SEAL-COUNTY

COUNTY OF RIVERSIDE
DEPARTMENT OF BUILDING & SAFETY

APPROVED BY: DATE:

RECOMMENDED BY: DATE:

BENCH MARK:
SEE COVER SHEET

SCALE: AS SHOWN

COUNTY OF RIVERSIDE
PRECISE GRADING PLAN
FOR
16926 MCALLISTER ST.
BEST MANAGEMENT PRACTICES

SHEET NO. 4 OF 4 SHEETS

FOR | W.O. | COUNTY FILE NO.