

GENERAL NOTES:

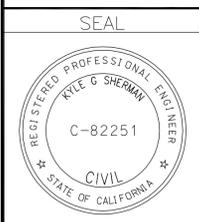
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD PLANS OF THE TOWN OF YUCCA VALLEY AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST EDITION, AND THE PROJECT'S "CONDITIONS OF APPROVAL", CALTRANS STANDARDS MAY 2006 OR CURRENT EDITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AN EFFECTIVE MEANS OF DUST CONTROL WHICH SHALL INCLUDE PROVISIONS FOR ADEQUATE WATERING DURING THE GRADING PROCESS AND PROVISIONS FOR CONTINUANCE OF DUST CONTROL UNTIL THE GRADE SURFACE PRESENTS SUFFICIENT COVER AGAINST WIND OR WATER EROSION THAT SPECIAL DUST CONTROL MEASURES ARE NO LONGER NECESSARY.
- CONTRACTOR SHALL OBTAIN PERMITS, AS REQUIRED BY THE TOWN OF YUCCA VALLEY DEVELOPMENT CODE.
- ALL GRADING SHALL COMPLY WITH APPENDIX CHAPTER 33 OF THE CALIFORNIA BUILDING CODE, LATEST EDITION AS AMENDED BY THE TOWN OF YUCCA VALLEY.
- THE LOCATION OF EXISTING, UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. SUBJECT TO THE PROVISIONS OF SECTION 4215 OF THE CALIFORNIA GOVERNMENT ODE, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. CONTACT DIG ALERT AT 1-800-227-2600 TWO WORKING DAYS PRIOR TO ANY EXCAVATION.
- DIMENSIONING TO CURBS SHALL BE TO FACE OF CURB.
- CONTRACTOR SHALL DISPOSE OF ALL DEBRIS OFF-SITE AT A LEGALLY APPROVED DISPOSAL SITE.
- CONTRACTOR SHALL REMOVE ANY ABANDONED UTILITY FACILITIES AND SHOW LIMITS OF REMOVALS ON RECORD DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, REPLACEMENT OR RELOCATION OF ALL REGULATORY, WARNING AND GUIDE SIGNS.
- THE ASPHALT DESIGN MUST MEET THE CALTRANS STANDARD SPECIFICATIONS, DATED 2010, SECTION 39, FOR TYPE B ASPHALT, 3/4" MAXIMUM MEDIUM AND 1/2" MAXIMUM MEDIUM. THE OIL SHALL BE PG 70-10.
- THE AGGREGATE BASE SHALL BE CLASS II, FOR 3/4" MAXIMUM ACCORDING TO THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS, SECTION 26, DATED 2010.
- A "RECORD DRAWING" (FORMALLY CALLED "AS-BUILT" DRAWING) OF THIS PLAN MUST BE SUBMITTED TO AND APPROVED BY THE TOWN ENGINEER BY THE PROJECT ENGINEER OF RECORD PRIOR TO ACCEPTANCE OF THE PROJECT.
- CONSTRUCTION SIGNING, LIGHTING AND BARRICADING SHALL BE PROVIDED ON ALL PROJECTS AS REQUIRED BY TOWN STANDARDS OR AS DIRECTED BY THE TOWN ENGINEER. AS A MINIMUM, ALL CONSTRUCTION SIGNING, LIGHTING AND BARRICADING SHALL BE IN ACCORDANCE WITH STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES" DATED 1991, OR SUBSEQUENT EDITIONS IN FORCE AT THE TIME OF CONSTRUCTION.
- THE FLOW LINES OF ALL CURB AND GUTTERS AND CROSS GUTTERS SHALL BE WATER TESTED BEFORE ACCEPTANCE OF THE PROJECT.
- PARKING STALLS SHALL BE CLEARLY DELINEATED WITH A 4 TO 6 INCH STRIPE "HAIRPIN" OR ELONGATED "U" DESIGN OR OTHER APPROVED STRIPING OR STALL DELINEATION.
- FINAL SITE GRADING AND DRAINAGE FLOW LINES SHALL BE CERTIFIED, IN WRITING, BY THE ENGINEER OF RECORD TO BE IN CONFORMANCE TO THE APPROVED GRADING PLAN PRIOR TO FINAL INSPECTION.
- NPDES PERMIT IS REQUIRED PRIOR TO ISSUANCE OF A GRADING PERMIT FOR PARCELS 1 ACRE OR GREATER.
- THE LOCATION OF BLOCK WALLS, AND OTHER STRUCTURES SHALL BE CLEARLY DEFINED ON THE PLANS. CONSTRUCTION AND STRUCTURAL DETAILS SHALL NOT BE SHOWN ON THE GRADING PLAN.
- ALL PROVISIONS OF THE PRELIMINARY SOILS REPORT PREPARED BY _____ DATED _____ SHALL BE COMPLIED WITH.
- THIS PLAN IS FOR GRADING PURPOSES ONLY. APPROVAL DOES NOT CONSTITUTE APPROVAL OF BUILDING LOCATIONS, OFF-SITE DRAINAGE FACILITIES, DRIVEWAY LOCATIONS OR SIZES, PARKING LOT LAYOUT, ETC, OR OTHER ITEMS NOT RELATED TO BASIC GRADING OPERATIONS. NO STRUCTURAL CALCULATIONS HAVE BEEN MADE FOR ANY STRUCTURES ON THIS PLAN DURING PLAN CHECK; THEREFORE, THE PLAN CHECK ENGINEER TAKES NO RESPONSIBILITY FOR THE INTEGRITY OF SUCH STRUCTURES.
- PLANS MAY BE SUBJECT TO COMPLIANCE REVIEW WITH CURRENT REQUIREMENTS IF CONSTRUCTION HAS NOT STARTED WITHIN 12 MONTHS OF PLAN APPROVAL BY THE TOWN ENGINEER.
- GRADING PLAN MUST INCLUDING THE FOLLOWING GENERAL NOTE: "UPON ISSUANCE OF A GRADING PERMIT BY THE TOWN OF YUCCA VALLEY ALL GRADING SHALL BE UNDERTAKEN AND COMPLETED IN COMPLIANCE WITH TOWN OF YUCCA VALLEY ORDINANCE NO. 133 IN PARTICULAR, SECTION 4(B) BUILDING CODE AMENDMENTS: 4. APPENDIX, VOLUME 1, CHAPTER 33, EXCAVATION AND GRADING, A. SECTION 3309.3 GRADING DESIGNATION, B. SECTION 3316, EROSION CONTROL, AND 5. SECTION 3320 ENGINEERING REPORTS, AND THE ENGINEER OF RECORD SHALL CERTIFY THAT ALL GRADING COMPLIES WITH SAID ORDINANCE PRIOR TO ACCEPTANCE OR INSURANCE OF ANY PERMITS BY THE TOWN OF YUCCA VALLEY."

ESTIMATE OF EARTHWORK QUANTITIES:

CUT: ±1445 CY
 FILL: ±1170 CY
 NET: ±280 CY CUT

THESE QUANTITIES DO NOT INCLUDE ANY LOSSES DUE TO DEMOLITION, SHRINKAGE, SPECIAL CONDITIONS, OR REQUIREMENTS THAT MAY BE SPECIFIED IN THE SOILS REPORT. THESE QUANTITIES ARE FOR PERMIT PURPOSES ONLY. CONTRACTORS BIDDING ON THIS PROJECT SHOULD MAKE THEIR OWN DETERMINATION OF EARTHWORK QUANTITIES PRIOR TO SUBMITTING A BID.

ON-SITE AREA: 0.95 AC
 DISTURBED AREA: 0.84 AC



GRADING IMPROVEMENT PLANS

57858 TWENTYNINE PALMS HIGHWAY

YUCCA VALLEY, CA 92284

**PRELIMINARY
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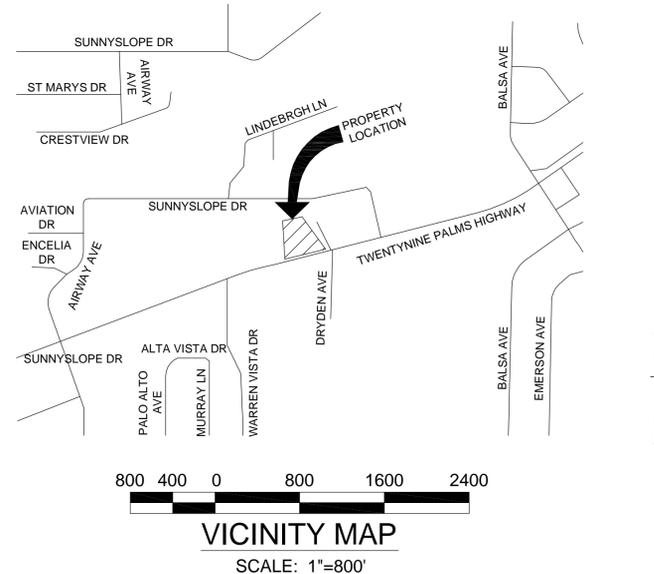
UTILITY NOTE:

CONTRACTORS SHALL NOTIFY ALL UTILITY AGENCIES CONCERNED A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION, INCLUDING BUT NOT LIMITED TO:

- UNDERGROUND SERVICE ALERT (USA) 811
- SOUTHERN CALIFORNIA EDISON CO 800 990 7788
- THE GAS COMPANY 800 427 2200
- MOJAVE WATER AGENCY 760 946 7000
- HI-DESERT WATER DISTRICT 760 365 8333
- SPECTRUM - FORMERLY TIME WARNER 760 365 0200
- FRONTIER - FORMERLY VERIZON 800 921 8101

NOTE:

THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5 FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, OR OBTAIN PERMIT FROM STATE OF CALIFORNIA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (CAL/OSHA). THIS PERMIT AND ANY OTHER SAFETY PERMIT SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF ANY WORK. *CONTACT CAL/OSHA AT 714-558-4451 FOR ADDITIONAL INFORMATION.



CONSTRUCTION NOTES

#	ITEM	QUANTITY
1	PORTLAND CEMENT CONCRETE	
2	ASPHALT CONCRETE PAVEMENT	
3	CONCRETE CURB	
4	CONCRETE CURB AND GUTTER	
5	LANDSCAPING	
6	CATCH BASIN	
7	AREA DRAIN	
8	POP UP DRAIN EMITTER	
9	BIOLOGICAL FILTRATION TRENCH	
10	4" PVC DRAINAGE PIPE	
11	SANITARY SEWER 4" PVC PIPE	
12	SEWER GREASE INTERCEPTOR	
13	SEPTIC TANK & SEEPAGE PIT	
14	2" DI WATER PIPE	
15	WATER METER & VALVE	
16	2" DI GAS PIPE	
17	GAS VALVE	
18	ELECTRICAL DUCT	
19	ELECTRICAL PULLBOX	
20	LIGHT POLE	
21	FIRE HYDRANT & VALVE	

SHEET INDEX

- TITLE SHEET
- SITE GRADING PLAN
- EROSION CONTROL PLAN
- HYDROLOGY PLAN

A/C	ASPHALT		POWER POLE
BOL	BOLLARD		STREET LIGHT
CB	CATCH BASIN		LIGHT POLE
CD	CURB DRAIN		CHAIN-LINK FENCE
CF	CURB FACE		BLOCK WALL DETAIL R
CMB	COMMUNICATION PULL-BOX		FLOW LINE
CONC	CONCRETE		BREAK LINE
C/L	CENTERLINE		OVERHANG
DI	DROP INLET		OVERHEAD WIRE(S)
DR	DOOR		UNDERGROUND GAS
DRN	DRAIN		UNDERGROUND ELECTRICAL
DWY	DRIVEWAY		CONCRETE
ECB	ELECTRIC CABINET		BUILDING PERIMETER
ELP	ELECTRIC PANEL		TELEPHONE MANHOLE
EM	ELECTRIC METER		STORM DRAIN MANHOLE
EO	ELECTRIC OUTLET		SEWER MANHOLE
EP	EDGE OF PAVEMENT		ELECTRIC MANHOLE
EPB	ELECTRIC PULL-BOX		HANDICAP PARKING STALL
ET	ELECTRIC TRANSFORMER		SIGN
FH	FIRE HYDRANT		GUY WIRE
GM	GAS METER		GAS METER
GR	GUARD RAIL		FLAG POLE
GT	GATE		TREE
GTM	GATE MOTOR		FIRE HYDRANT
GW	GUY WIRE		WATER VALVE
HC	HANDICAP		LIGHT POST
LIP	LIP OF GUTTER		
LP	LIGHT POLE		
L/S	LANDSCAPE		
MF	METAL FENCE		
OVHG	BUILDING OVERHANG		
PKWY	PARKWAY		
PP	POWER POLE		
RD	ROOF DRAIN		
SCO	SEWER CLEANOUT		
SDMH	STORM DRAIN MANHOLE		
SLPB	STREET LIGHT PULL-BOX		
SMH	SEWER MANHOLE		
SN	SIGN		
STR	STAIR		
S/W	SIDEWALK		
TRW	TREE WELL		
TSPB	TRAFFIC SIGNAL PULL-BOX		
TW	TOP OF WALL		
V-GUT	VALLEY GUTTER		
WM	WATER METER		
WV	WATER VALVE		

LEGEND

ARCHITECT:

MPA ARCHITECTS
 3578 30TH STREET
 SAN DIEGO, CA 92104
 (619) 236-0595

PREPARED FOR:

CALIFORNIA GOLD DEVELOPMENT CORP.
 7514 GIRARD AVE, #15115
 LA JOLLA, CA 92037
 (760) 855-3851

BENCH MARK NO.

REVISIONS

MARK	DATE	INITIAL	DESCRIPTION	DATE	APP'D

PLANS PREPARED BY

PARTNER
 Engineering and Science, Inc.
 PREPARED UNDER THE SUPERVISION OF:

1761 GARRY AVENUE
 SANTA ANA, CA 92705
 (800) 419-4923A

- RCE - DATE



APPROVED BY:

ALEX QISHTA, PUBLIC WORKS DIRECTOR
 R.C.E. 68702 EXP. DATE 09/30/___ DATE

RECOMMENDED BY:

TITLE SHEET

GRADING IMPROVEMENT PLANS

57858 TWENTYNINE PALMS HIGHWAY

YUCCA VALLEY, CA 92284

SHEET 1 OF 4 SHEETS
 DRAWING NO.

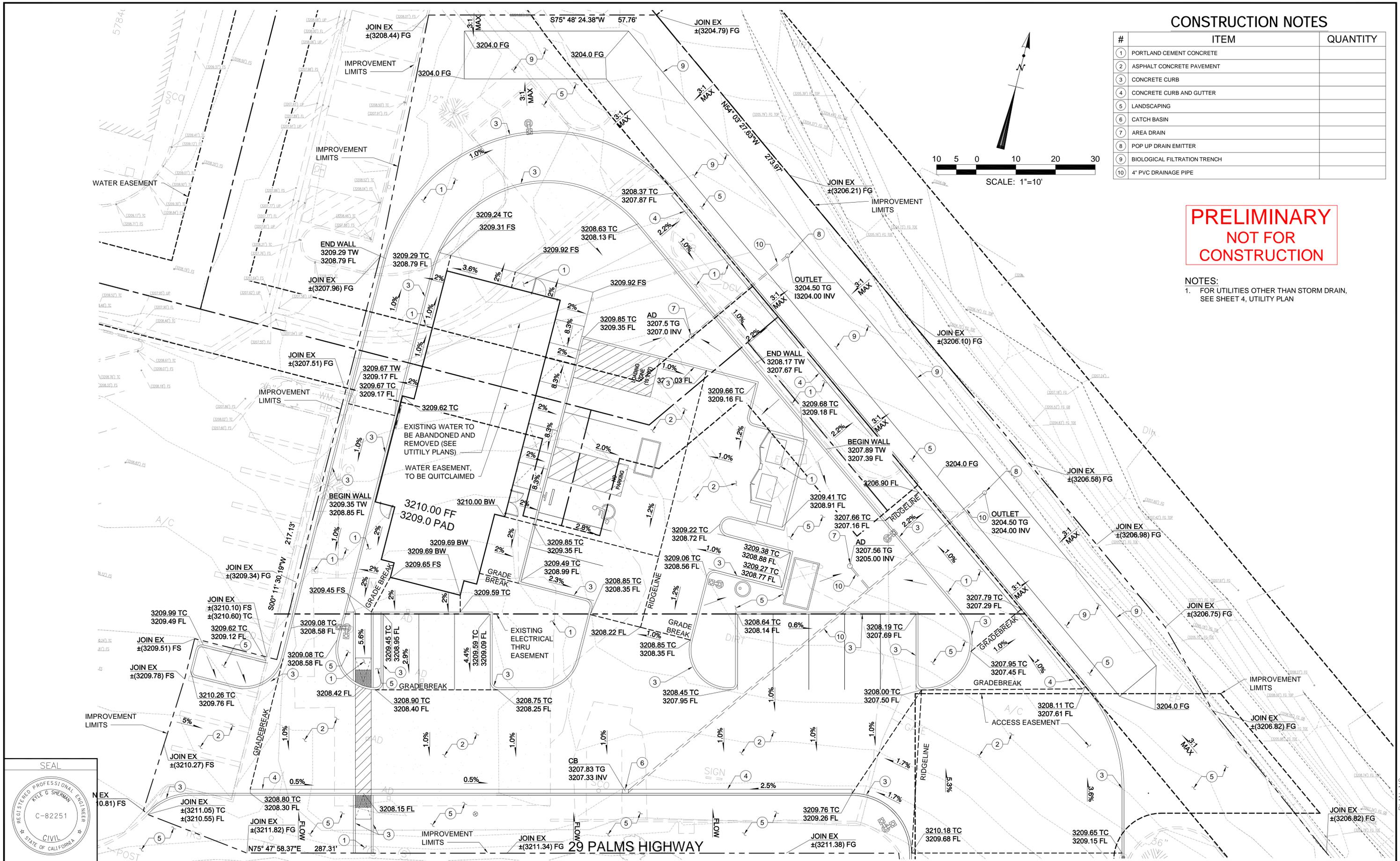
PROJECT: PLAN NO.:

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2	ASPHALT CONCRETE PAVEMENT	
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6	CATCH BASIN	
7	AREA DRAIN	
8	POP UP DRAIN EMITTER	
9	BIOLOGICAL FILTRATION TRENCH	
10	4" PVC DRAINAGE PIPE	

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NOTES:
1. FOR UTILITIES OTHER THAN STORM DRAIN,
SEE SHEET 4, UTILITY PLAN



SEAL
REGISTERED PROFESSIONAL ENGINEER
KYLE G. SHERMAN
C-82251
CIVIL
STATE OF CALIFORNIA

BENCH MARK NO.

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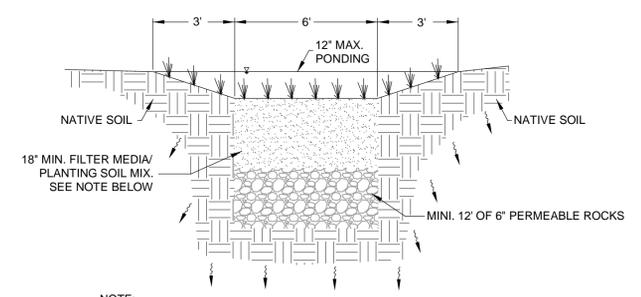
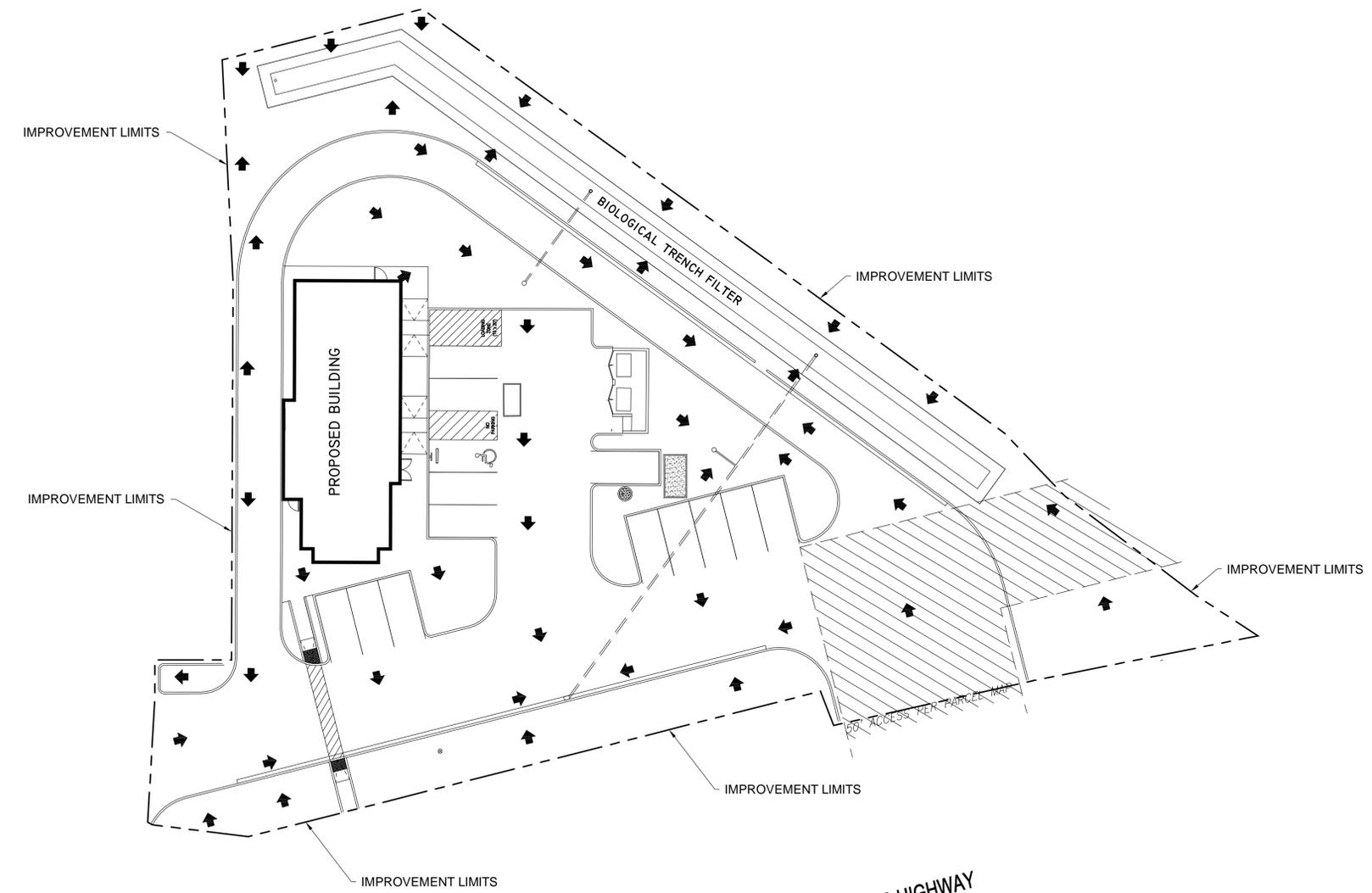


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SITE GRADING PLAN
GRADING IMPROVEMENT PLANS
57858 TWENTYNINE PALMS HIGHWAY
YUCCA VALLEY, CA 92284

SHEET
2
OF 4 SHEETS
DRAWING NO.

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NOTE:
SOIL USED IN LANDSCAPE BASED TREATMENT MEASURES SHALL MEET THE SPECIFICATIONS INCLUDING THE MOST RECENT VERSION OF ORANGE COUNTY TECHNICAL GUIDANCE DESIGN CRITERIA (OCTG - XIV.2)

INFILTRATION TRENCH (WITH NO UNDERDRAIN) SECTION
N. T. S.

	TOTAL LOT AREA	44,033 S.F.				
	IMPERVIOUS AREA	PERVIOUS AREA	% IMPERVIOUS	% PERVIOUS	a _i	a _p
EXISTING	25,770 S.F.	15,497 S.F.	62	38	0.62	0.38
PROPOSED	27,572 S.F.	13,695 S.F.	67	33	0.67	0.33

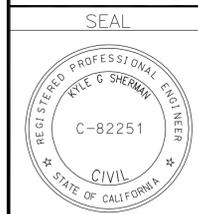
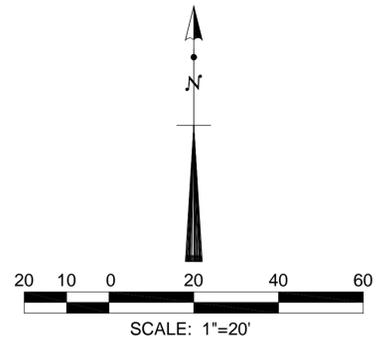
Regression Coefficients for Intensity (I) and 6-hour Mean Storm Rainfall			
Quantity	Valley	Mountain	
6-hour Rainfall (P6)	1,4807	1,9090	1,2371
Intensity (I)	0,2787	0,3614	0,56

Project Data
 Area Averaged 2-Year 1-Hour Rainfall From NOAA Atlas 14, Volume 6, Version 2 YUCCA VALLEY C.D.F. = 0.522
 San Bernardino County climatic Region - Valley
 Drainage Area (A) = 0.95 Acres
 Impervious Area = 0.63 Acres
 Volume Based BMP Design Runoff
 CBMP = 0.9583 - 0.782 + 0.774 + 0.04
 P0 = 3" CBMP * 1%
 V0 = (P0 * A) / 12
 Watershed Imperviousness Ratio (I) = 0.67
 Runoff Coefficient (CBMP) = 0.407
 6-Hour Mean Storm Rainfall Coefficient = 1.4807
 6-Hour Mean Storm Rainfall (P6) = 1.4807
 Watershed Imperviousness Ratio (I) = 0.56
 Draw Down Time = 48 Hours
 Regression Constant (a) = 1.603
 Maximized Detention Volume (P0) = 1.18 Inches
 Target Capture Volume (V0) = 0.0937 Acre Feet = 4082 Cubic Feet

Assumed drainage runoff from 100% of the lot area (44,000 square feet; V0 = 4,297 f3) is captured and infiltrated. The required infiltration area is calculated using the following formula:
 The depth of water that can be drawn down in 48 hours can be calculated using the following equation:
 $d48 = KDESIGN (in/hr) \times (117/12h) 48 hrs$
 Where:
 d48 = basin 48-hour drawdown depth, ft
 KDESIGN = basin design infiltration rate, in/hr (0.3 assumed)
 This is the maximum depth of the basin below the overflow device to achieve drawdown in 48 hours.
 $d48 = KDESIGN \times 4 \times 0.3 \times 4 = 1.2 ft$. Use d48 = 1.0 ft
 Calculate the Required Infiltrating Area
 The required infiltrating area (i.e. basin area at mid ponding depth) can be calculated using the following equation:
 $A = V0 / (dP)$
 Where:
 A = required basin infiltrating area, sq-ft (assumed to be the basin area at mid-ponding depth)
 V0 = design capture volume, cu-ft = 4,297 f3
 dP = ponding depth, ft (should be equal to or less than d48) = 1.5 ft
 $A = 4,082 / 1.50 = 2,721 sq$ Area provided = 2,750 sq > 2,865 OK (See Tributary Area Plan)

LEGEND

- ➔ FLOW DIRECTION
- PVC DRAINAGE PIPE
- AREA DRAIN
- CATCH BASIN
- POP UP DRAIN EMITTER



BENCH MARK NO.

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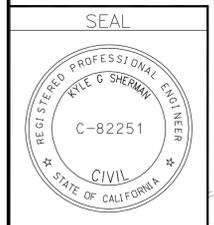
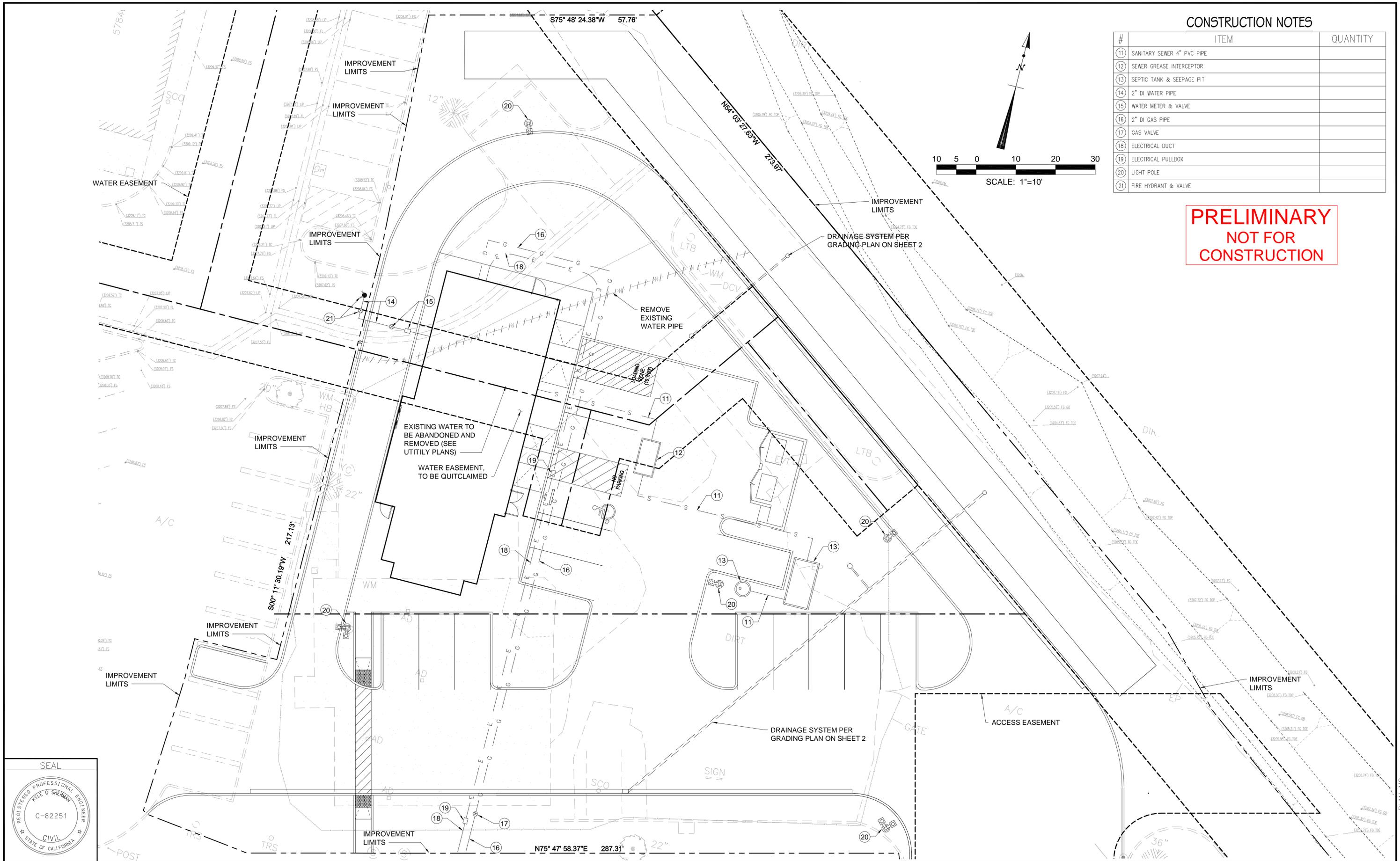
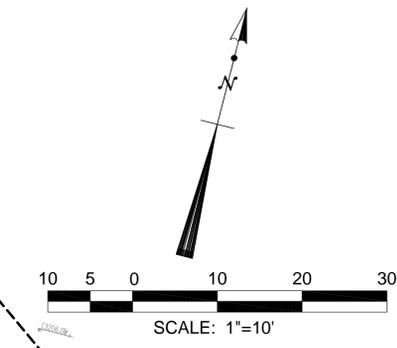
SHEET
3
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 DRAWING NO.

PROJECT: PLAN NO:

CONSTRUCTION NOTES

#	ITEM	QUANTITY
11	SANITARY SEWER 4" PVC PIPE	
12	SEWER GREASE INTERCEPTOR	
13	SEPTIC TANK & SEEPAGE PIT	
14	2" DI WATER PIPE	
15	WATER METER & VALVE	
16	2" DI GAS PIPE	
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UTILITY PLAN
GRADING IMPROVEMENT PLANS
 57858 TWENTYNINE PALMS HIGHWAY
 YUCCA VALLEY, CA 92284

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4
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