GENERAL GRADING NOTES:

APPROVAL OF THIS GRADING PLAN DOES NOT CONSTITUTE APPROVAL OF VERTICAL OR HORIZONTAL ALIGNMENT OF ANY PRIVATE ROAD SHOWN HEREON FOR COUNTY ROAD PURPOSES.

2. FINAL APPROVAL OF THESE GRADING PLANS IS SUBJECT TO FINAL APPROVAL OF THE ASSOCIATED IMPROVEMENT PLANS WHERE APPLICABLE.

3. IMPORT MATERIAL SHALL BE OBTAINED FROM A LEGAL SITE.

4. A CONSTRUCTION EXCAVATION OR ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT-OF-WAY.

5. ALL SLOPES WILL BE PLANTED IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS.

6. THE CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATION OF ALL UTILITIES BEFORE

COMMENCING AGENCIES.	WORK.	NOTICE	OF	THE	PROPOSED	WORK	SHALL	BE	GIVEN	ТО	THE	FOLLOWING
	SAN PAC	DIEGO	GAS L	AND) ELECTRIC			1- 1-	·800-4 ·800-4	·22- ·22-	-4133	5

COX CABLE HELIX WATER DISTRICT

1-800-422-4133
1-800-422-4133
1-800-422-4133
1-619-443-3805

7. A SOILS REPORT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.

8. APPROVAL OF THESE PLANS BY THE DIRECTOR OF PUBLIC WORKS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND A VALID GRADING PERMIT HAS BEEN ISSUED.

9. THE DIRECTOR OF PUBLIC WORKS APPROVAL OF THESE PLANS DOES NOT CONSTITUTE COUNTY BUILDING OFFICIAL APPROVAL OF ANY FOUNDATIONS FOR STRUCTURES TO BE PLACED ON THE AREA COVERED BY THESE PLANS. NO WAIVER OF THE GRADING ORDNANCE REQUIREMENTS CONCERNING MINIMUM COVER OVER EXPANSIVE SOILS IS MADE OR IMPLIED (SECTION 87.403 AND 87.410). ANY SUCH WAIVER MUST BE OBTAINED FROM THE DIRECTOR OF PLANNING AND LAND USE.

10. ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE OR RUNNING OF TRUCKS, EARTH MOVING EQUIPMENT, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 AM AND 6:00 PM EACH DAY, MONDAY THROUGH SATURDAY AND NO EARTH MOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON THE PREMISES ON SUNDAYS OR HOLIDAYS.

11. ALL MAJOR SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT TO FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.

12. NOT WITHSTANDING, THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOT WITHSTANDING THE APPROVAL OF THESE PLANS, THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO THE ADJACENT PROPERTY. NO PERSON SHALL EXCAVATE ON LAND SO CLOSE TO THE PROPERTY LINE AS TO ENDANGER ANY ADJOINING PUBLIC STREET, SIDEWALK, ALLEY, FUNCTIONS OF ANY SEWER DISPOSAL SYSTEM OR ANY OTHER PUBLIC OR PRIVATE PROPERTY WITHOUT SUPPORTING OR PROTECTING SUCH PROPERTY FROM SETTLING, CRACKING, EROSION, SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.

13. SLOPE RATIOS:

CUT - 1.5:1 FOR MINOR SLOPES, 2:1 FOR MAJOR SLOPES FILL – 2:1 FOR ALL SLOPES

FILL: 13,000 C.Y. EXCAVATION: 13,000 C.Y. EXPORT: IMPORT: 0 C.Y. 0 C.Y.

A SEPARATE VALID PERMIT MUST BE OBTAINED FOR EITHER WASTE OR IMPORT AREAS.

14. SPECIAL CONDITION IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING GRADING OPERATIONS. SUCH OPERATIONS WILL CEASE IMMEDIATELY. AND THE PERMITTEE WILL NOTIFY THE DIRECTOR OF PUBLIC WORKS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS TO DO SO.

15. COMPACTION TESTING AND THE COMPACTION REPORT IS REQUIRED FOR ALL FILL THAT IS OVER 12 INCHES IN DEPTH.

16. FINISHED GRADING SHALL BE CERTIFIED BY A REGISTERED CIVIL ENGINEER AND INSPECTED BY THE COUNTY ENGINEER FOR DRAINAGE CLEARANCE. APPROVAL OF ROUGH GRADING DOES NOT CERTIFY FINISH GRADING BECAUSE OF POTENTIAL SURFACE DRAINAGE PROBLEMS THAT MAY BE CREATED BY LANDSCAPING ACCOMPLISHED AFTER ROUGH GRADING CERTIFICATION.

17. ALL GRADING WILL BE IN ACCORDANCE WITH THE SAN DIEGO COUNTY STANDARD DRAWINGS DS-8, DS-10, DS-11 AND D-75.

PDS ENVIRONMENTAL NOTE:

NOTICE: THE ISSUANCE OF THIS PERMIT/APPROVAL BY THE COUNTY OF SAN DIEGO DOES NOT AUTHORIZE THE APPLICANT FOR SAID PERMIT/APPROVAL TO VIOLATE ANY FEDERAL. STATE, OR COUNTY LAYS, ORDINANCES, REGULATIONS, OR POLICIES INCLUDING, BUT NOT LIMITED TO. THE FEDERAL ENDANGERED SPECIES ACT AND ANY AMENDMENTS THERETO.

MONUMENTATION GENERAL NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT ALL SURVEY CONTROL MEASUREMENTS, WHETHER SHOWN ON THESE PLANS OR NOT, WITHIN THE PROJECT AREA, ALL SURVEY MONUMENTS, WHETHER FOR HORIZONTAL OR VERTICAL CONTROL, THAT WILL OR COULD BE DISTURBED OR REMOVED BY THE CONTRACTOR, OR HIS EMPLOYEES, AGENTS, SUBCONTRACTORS, CONSULTANT OR LICENSEES, SHALL BE LOCATED PRIOR TO BEING DISTURBED OR REMOVED AND REPLACED OR RESET IN ACCORDANCE WITH THE CALIFORNIA BUSINESS & PROFESSIONS CODE SECTION 8771(b), AT THE CONTRACTOR'S SOLE EXPENSE, UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA. IN ADDITION, A RECORD OF SURVEY OR CORNER RECORD. AS APPLICABLE. SHALL BE FILED AND/OR RECORDED. IN ACCORDANCE WITH THE PROVISIONS OF SAID CODE.

OWNER'S CERTIFICATE:

IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES. ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PUBLIC WORKS DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS.

I HEREBY AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING COUNTY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED. IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

EMAD YOUSIF 1490 SOUTH ORANGE AVENUE, #128 EL CAJON, CA 92020 (573) 289-5107

SOILS ENGINEER CERTIFICATION:

JOHN J. DONOVAN RGE 2790 EXP 6-30-25 ADVANCED GEOTECHNICAL SOLUTIONS, INC. 485 CORPORATE DRIVE, SUITE B ESCONDIDO, CA 92029 (619) 867-0487

DATE:

R.C.E.



OWNER'S / PERMITTEE'S							
NAME:	EMAD YOUSI	-					
ADDRESS:	1490 SOUTH ORANGE AVENUE, #128						
_	EL CAJON, C	EL CAJON, CA 92020					
TELEPHONE NO	TELEPHONE NO.: (573) 289–5107						
SHORT FGAL	DESCRIPTION	LOTS 5, 9 & 10 AND					
		POR. LOTS 4, 6 & 8, MAP 4684					
A.P.N 4	98–192–09						
SITE ADDRES	SUNDALE	ROAD (VACANT)					
	EL CAJON	EL CAJON, CA 92019					

GRADING PLAN



IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS.

DATE

THIS GRADING PLAN HAS BEEN REVIEWED BY THE UNDERSIGNED AND FOUND TO BE IN CONFORMANCE WITH THE RECOMMENDATIONS AS OUTLINED IN THE SOILS REPORT FOR THIS PROJECT. THE SOILS REPORT SHALL BE CONSIDERED AS A PART OF THIS PLAN, AND ALL GRADING WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND RECOMMENDATIONS OF SAID REPORT DATED 7-30-21 TITLED "PRELIMINARY GEOTECHNICAL INVESTIGATION AND DESIGN RECOMMENDATIONS. SUNDALE 6-LOT SUBDIVISION, SUNDALE ROAD, EL CAJON, COUNTY OF SAN DIEGO, CALIFORNIA" PREPARED BY ADVANCED GEOTECHNICAL SOLUTIONS, INC.

DATE



SHEET INDEX:

SHEET 1	TITLE SHEET
SHEET 2	GRADING PLAN
SHEET 3	EROSION CONTROL AND CONSTRUCTION
	BMP STANDARD NOTES AND DETAILS
SHEET 4	EROSION CONTROL AND CONSTRUCTION BMP PLAN
SHEET 5	DMA EXHIBIT
SHEET 6-10	STRUCTURAL/WALL PLANS

NOTE: ALL REQUIRED FIRE CLEARING WILL NOT CREATE A LAND DISTURBANCE ACTIVITY AS DEFINED BY COUNTY CODE.

		DISTURBANCE ACTIVITY AS DEFINED) BY COUNTY	(CODI	Ε.	BRASS DISC STAMPED "RCE 18	136" AT CENT	ER OF	BULB IN
DISTURBANCE ACTIVITY AS DEFINED BY COUL DISTURBED AREA CALCS PAD + SLOPES: 112,097 ROAD: 8,745 PRIMARY SEPTIC: 8,516 FIRE CLEARING: 0 TOTAL: 129,354 WDID NO. (if greater than 1 acre): 9 37C396570 SWPPP / CONSTRUCTION SITE RISK LEVEL: LEV RECORD PLAN FIRE AGENCY			ALCS			SUNDALE ROAD APPROXIMATEL' SOUTHWESTERLY CORNER OF S	Y 31' NORTHWE	ESTERI	LY FROM As shown
	PAD +	SLOPES : 112,097			SF	HEREON. EL: 647.07 (NAVD88)			
	ROAD	8,745			SF	PDS ENVIRONMENT		W	
	PRIMA	RY SEPTIC:8,516			SF	APPROVED FOR COMPLIANCE			CURB G
	FIRE C	LEARING: 0			SF	WITH ENVIRONMENTAL REVIEW			SITE PL
	ΤΟΤΑΙ	:129,354			SF				
	WDID	NO. (if greater than 1 acre): 9 37	C396570			APPROVED BY:			TENTAT
	SWPP	P / CONSTRUCTION SITE RISK LEVEL:	LEVEL	1		DATE:			N.O.I. NC
RECORD PLAN		FIRE AGENCY				COUNTY APPROVED CHA	NGES		
		SAN MIGUEL FIRE PROTECTIO	N DISRICT	NO.	DES	CRIPTION	APPROVED BY	DATE	DESCRIP
		AFFROVED BT.							LOCA
EXPIRES:		DATE:							ELEVATIO
							1 1	. !	

WORK TO BE DONE

DRAINAGE AND GRADING WORK CONSIST OF THE FOLLOWING WORK TO TO BE DONE ACCORDING TO THESE PLANS, THE SAN DIEGO AREA REGIONAL STANDARD DRAWING (RSD) AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK). CURRENT EDITION AND PER SAN DIEGO COUNTY GRADING ORDINANCE.

LEGEND

ІТЕМ	REGIONAL STD. DWG.	SYMBOL	QTY.
CONTOUR		>00	
GRADED SLOPE (2:1 CUT/2:1 FILL)	DS-08, 10, 11	ٳ ؆ٟ؞ڎؚ⊌۴ ؆	
SPOT ELEVATION		720.7	
DAYLIGHT LINE			
PROPOSED 18"X18" CATCH BASIN WITH STEEL GRATE ("BROOKS" 1818CB)			10 EA
PROPOSED 24X24" CATCH BASIN WITH STEEL COVER ("BROOKS" 2424CB)			4 EA
PROPOSED 12"X12" CATCH BASIN WITH STEEL COVER ("BROOKS" 1212CB)			3 EA
PROPOSED 12"X12" CATCH BASIN WITH STEEL GRATE ("BROOKS" 1212CB)			1 EA
PROPOSED PRIVATE 6" PVC STORM DRAIN PIPE (SCH	. 20)		478 LF
PROPOSED PRIVATE 10" PVC STORM DRAIN PIPE (SCI	H. 20)		195 LF
PROPOSED PRIVATE 12" PVC STORM DRAIN PIPE (SCI	H. 20)		183 LF
PROPOSED RETAINING WALL. SPECIAL INSPECTION IS I (PER STRUCTURAL ENGINEER SHEETS 6–10)	REQUIRED		1,688 SF
PROPOSED 5' MAX RETAINING WALL	RSD C-02		123 SF
PROPOSED BERM (SEE DETAIL ON SHEET 2)		<u>—</u> B— —B— —B—	
PROPOSED CURB OUTLET - TYPE B	RSD D-25B		3 EA
PROPOSED 16' DRIVEWAY	RSD G-14A		6 EA
PROPOSED TREE WELL FOR STORMWATER TREATMENT PU (SEE SHEETS 2 & 5 FOR MATURE CANOPY DIAMETER SIZ	RPOSES ZE)		9 EA
PROPOSED TYPE 2 5'x5'x1.1' THICK NO. 2 BACKING CLASS RIPRAP	RSD D-40	这	1 CY

LEGAL DESCRIPTION:

PROJECT DESIGN.

PARCELS A, B, C, & D OF CERTIFICATE OF COMPLIANCE NO. BC-21-0016 C(1) RECORDED IN THE OFFICE OF THE COUNTY RECORDER ON JUNE 3. 2021 AS DOCUMENT NO. 2021-0415208

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT. THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR



-DIRT BERM PAD~ 0.5' DEEP-SWALE

TREE WELL LEGEND:								
NO.	NO. CANOPY DIAMETER (FT)		FG	ΤW	BW			
1	15	5.5	645.4	645.9	644.9			
2	20	6	644.7	646.7	643.7			
3	20	6	618.0	620.0	617.0			
4	20	4	619.6	620.1	618.6			
5	20	6	591.7	593.7	590.7			
6	20	6	593.3	593.8	592.3			
7	15	6	592.9	593.4	591.9			
8	20	6	592.9	593.4	591.9			
9	20	6	584.8	585.3	583.8			







STORM WATER MANAGEMENT NOTES

- 1. DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER IN THE EVENT OF A RAIN STORM 125 SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.
- 2. NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES AT ANY GIVEN TIME WITHOUT DEMONSTRATING TO THE SAN DIEGO COUNTY D.P.W. DIRECTOR'S SATISFACTION THAT ADEQUATE EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED. ANY DISTURBED AREA THAT IS NOT ACTIVELY GRADED FOR 15 DAYS MUST BE FULLY PROTECTED FROM EROSION. UNTIL ADEQUATE LONG-TERM PROTECTIONS ARE INSTALLED, THE DISTURBED AREA SHALL BE INCLUDED WHEN CALCULATING THE ACTIVE DISTURBANCE AREA. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED DURING ANY INACTIVE PERIOD.
- 3. THE PROPERTY OWNER IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORM WATER REGULATIONS AT ALL TIMES. THE B.M.P.'S (BEST MANAGEMENT PRACTICES) THAT HAVE BEEN INCORPORATED INTO THE THIS PLAN SHALL BE IMPLEMENTED AND MAINTAINED TO EFFECTIVELY PREVENT THE POTENTIALLY NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORM WATER QUALITY. THE MAINTENANCE OF THE B.M.P.'S IS THE PERMITTEE'S RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE B.M.P.'S MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS. IF INSTALLED B.M.P.'S FAIL, THEY MUST BE REPAIRED OR REPLACED WITH AN ACCEPTABLE ALTERNATE WITHIN 24 HOURS, OR A SOON AS SAFE TO DO SO.
- 4. A NOTICE OF INTENT (NOI) HAS BEEN, OR WILL BE FILED WITH THE STATE WATER RESOURCES CONTROL BOARD (SWRCB) AND THAT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN OR WILL BE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CALIFORNIA GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (PERMIT NO. CASOO0002) FOR ALL OPERATIONS ASSOCIATED WITH THESE PLANS. THE NOI NUMBER ASSIGNED BY SWRCB FOR THIS PROJECT IS [WDID#] [ALTERNATIVE: NOT YET ASSIGNED, BUT WILL BE PROVIDED BEFORE A PERMIT IS ISSUED], THE PERMITTEE SHALL KEEP A COPY OF THE SWPPP ON SITE AND AVAILABLE FOR REVIEW BY COUNTY.

EMERGENCY EROSION CONTROL NOTES

- 1. ALL BUILDING PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PAD UNTIL THE STREETS AND DRIVEWAYS ARE PAVED AND WATER CAN FLOW FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
- 2. TOPS OF SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
- 3. MANUFACTURED SLOPES AND PADS SHALL BE ROUNDED VERTICALLY AND HORIZONTALLY AS APPROPRIATE TO BLEND WITH THE SURROUNDING TOPOGRAPHY.
- 4. AS SOON AS CUTS OR EMBANKMENTS ARE COMPLETED, BUT NOT LATER THAN OCTOBER 1, ALL CUT AND FILL SHALL BE STABILIZED WITH A HYDROMULCH MIXTURE OR AN EQUAL TREATMENT APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. BETWEEN OCTOBER 1 AND APRIL 15, APPROVED SLOPE PROTECTION MEASURES SHALL PROCEED IMMEDIATELY BEHIND THE EXPOSURE OF CUT SLOPES AND/OR THE CREATION OF EMBANKMENT SLOPES.
- 5. CATCH BASINS, DESILTING AND STORM SYSTEMS SHALL BE INSTALLED TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- 6. GRAVEL BAG CHECK DAMS TO BE PLACED IN A MANNER APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS IN UNPAVED STREETS WITH GRADIENTS IN EXCESS OF 2% AND OR IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- 7. THE DEVELOPER TO MAINTAIN THE PLANTING AND EROSION CONTROL MEASURES DESCRIBED ABOVE UNTIL RELIEVED OF THE SAME BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVELOPER SHALL REMOVE ALL SOIL INTERCEPTED BY GRAVEL BAGS, CATCH BASINS AND DESILTING BASINS AND KEEP THESE FACILITIES CLEAN AND FREE OF SILT AND SAND AND SHALL REPAIR ANY ERODED SLOPES AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.

IRRIGATION NOTE

LOCATION AND FREQUENCY OF SPRINKLER HEADS TO BE DETERMINED IN THE FIELD BY CONTRACTOR.

BONDED FIBER MATRIX (BFM) SLOPE PROTECTION

APPLICATION RATES SHALL BE 3,500 POUNDS PER ACRE MINIMUM FOR 2:1 OR SHALLOWER SLOPES AND 4,000 POUNDS PER ACRE FOR SLOPES STEEPER THAN 2:1. BFM SHALL BE APPLIED AT LEAST 24 HOURS BEFORE OR AFTER RAINFALL. THE SITE MUST BE PROTECTED WITH BROW DITCHES AND/OR DIVERSION BERMS AT THE TOP OF SLOPES TO DIVERT FLOW FROM THE FACE OF THE SLOPE. BFM SHALL BE APPLIED TO PROVIDE 100% COVERAGE (i.e. APPLICATION FROM MULTIPLE ANGLES).

FOR PERMANENT EROSION CONTROL PURPOSES, BFM MUST BE INSTALLED IN CONJUNCTION WITH SEEDED EROSION CONTROL VEGETATION.

A LETTER FROM THE HYDROSEED CONTRACTOR CERTIFYING THAT THE BFM HAS BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED APPLICATION RATES AND COVERAGE REQUIREMENTS SHALL BE SUBMITTED TO THE COUNTY INSPECTOR FOR APPROVAL.



	SILTATION AND	D SEDIMENT CONTROL MEASURES NOTES:
	1. THE SEDIMENT B EVERY DRAINAGE SHALL BE MAINT EVERY RUNOFF F SEMI-PERMANEN STABILIZING VEGE ERODIBLE SLOPES	BASINS SHALL BE PROVIDED AT THE LOWER END OF GE AREA PRODUCING SEDIMENT RUNOFF. THE BASINS NTAINED AND CLEANED TO DESIGN CONTOURS AFTER PRODUCING STORM. THE BASINS SHOULD BE INT STRUCTURES THAT WOULD REMAIN UNTIL SOIL GETATION HAS BECOME WELL ESTABLISHED ON ALL PES.
	2. SEDIMENTATION E WITHOUT PRIOR	BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE APPROVAL OF THE COUNTY ENGINEER.
	3. UTILITY TRENCHE INLET DIKES SHA TO TOP OF DIKE.	1ES THAT ARE CUT THROUGH BASIN DIKES OR BASIN 1ALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE (E.
	4. ALL UTILITY TREM INTERVALS WITH ELEVATION LEVEL SURFACE OF THE LAPPED COURSES BLOCKING SHALL BUT NOT EXCEED	ENCHES SHALL BE BLOCKED AT THE PRESCRIBED I A DOUBLE ROW OF GRAVEL BAGS WITH A TOP EL WITH, AND TWO GRAVEL BAGS BELOW, THE GRADED HE STREET. GRAVEL BAGS ARE TO BE PLACED WITH SES. THE INTERVALS PRESCRIBED BETWEEN GRAVEL BAG LL DEPEND ON THE SLOPE OF THE GROUND SURFACE. ED THE FOLLOWING:
	<u>GRADE OF TI</u> LESS TH 2% TO 4% TO OVER	THE STREETINTERVALIHAN 2%AS REQUIREDTO 4%100 FEETTO 10%50 FEETR 10%25 FEET
	5. AFTER UTILITY T SURFACES OVER PREVENT CHANN SHOULD BE EXEF INTERVALS WHER CROWNED STREE	TRENCHES ARE BACKFILLED AND COMPACTED. THE IR SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO INELING OF WATER IN THE TRENCH AREA. CARE IERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT ERE TRENCHES ARE NOT ON THE CENTERLINE OF A EET.
	6. ALL BUILDING PA AND VELOCITY C DRIVEWAYS DRAI	PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS CHECK DAMS PROVIDED AT THE BASE OF ALL AINING INTO THE STREET.
	7. PROVIDE VELOCI AT THE INTERVA	CITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS ALS INDICATED BELOW:
	GRADE OF THE S LESS THAN 3% TO 6% OVER 6%	STREET INTERVAL BETWEEN CHECKDAMS 3% 100 FEET 5% 50 FEET % 25 FEET
	8. PROVIDE VELOCIT TO INTERVALS IN CONSTRUCTED O RESISTANT MATE SHALL EXTEND O RIGHT ANGLES T SERVE AS SEDIM	CITY CHECK DAMS IN ALL STREET AREAS ACCORDING INDICATED BELOW. VELOCITY CHECK DAMS MAY BE OF GRAVEL BAGS. TIMBER, OR OTHER EROSION TERIALS APPROVED BY THE COUNTY ENGINEER. AND COMPLETELY ACROSS THE STREET OR CHANNEL AT TO THE CENTERLINE. VELOCITY CHECK DAMS MAY ALSO IMENT TRAPS.
	<u>GRADE OF THE</u> LESS THAN 2% TO 49 4% TO 69 6% TO 10 OVER 109	E STREETINTERVALNO. OF BAGS HIGHN 2%AS REQUIRED14%100 FEET16%50 FEET110%50 FEET20%25 FFET2
	9. PROVIDE A GRAV DRAIN INLET TO	AVEL BAG SILT BASIN OR TRAP BY EVERY STORM O PREVENT SEDIMENT FROM ENTERING DRAIN SYSTEM.
	10. GRAVEL BAGS AI INTERVALS, REAL	AND FILL MATERIAL SHALL BE STOCKPILED AT ADY FOR USE WHEN REQUIRED.
	11. ALL EROSION CO MAINTAINED DUR POSSIBLE, MAINT ACCESS TO ALL	CONTROL DEVICES WITHIN THE DEVELOPMENT SHOULD BE JRING AND AFTER EVERY RUNOFF PRODUCING STORM. IF NTENANCE CREWS SHOULD BE REQUIRED TO HAVE L AREA.
	12. PROVIDE RIP RAI PRONE DRAINAGE THIS PROTECTION INCREASED FLOW SLOPES. OR FRO	AP ON CURVES AND STEEP DROPS IN ALL EROSION GE CHANNELS DOWNSTREAM FROM THE DEVELOPMENT. ON WOULD REDUCE EROSION CAUSED BY THE DWS THAT MAY BE ANTICIPATED FROM DENUDED ROM IMPERVIOUS SURFACES.
	13. ANY PROPOSED IN ADVANCE BY DEPARTMENT OF ENVIRONMENTAL) ALTERNATE CONTROL MEASURES MUST BE APPROVED Y ALL RESPONSIBLE AGENCIES; I.E., COUNTY ENGINEER,)F SANITATION AND FLOOD CONTROL, OFFICE OF L MANAGEMENT, ETC.
	Г	PRIVATE CONTRACT
	Г	SHEET COUNTY OF SAN DIEGO OF 10 3 DEPARTMENT OF PUBLIC WORKS SHEETS
L(Bl Sl	LOCAL BENCHMARK: CENTERLINE WELL MONUMENT WITH 3" BRASS DISC STAMPED "RCE 18136" AT CENTER OF BULB IN SUNDALE ROAD APPROXIMATELY 31' NORTHWESTERLY FROM THE	EROSION CONTROL NOTES AND DETAILS FOR:
S(HI	SOUTHWESTERLY CORNER OF SUBJECT PROPERTY AS SHOWN HEREON. EL: 647.07 (NAVD88)	SUNDALE ROAD
TE		CALIFORNIA COORDINATE INDEX: 218-1792
	AND DISC STAMPED "SAN DIEGO SURVEYOR".	RECOMMENDED FOR APPROVAL:
	OF INTERSECTION WITH FALDA DEL CERRO.	ENGINEER OF WORK: LAWRENCE W. WALSH CHECKED BY: TM 2272
	RECORD FROM: SAN DIEGO COUNTY BENCHBOOK AND ROS 17454 ELEVATION: 562.84 DATUM: NAVD88	RCE 46316 EXP 12-31-24 PDS2021-LDGRMJ-30366

LEGEND

ITEM	STD. DWG.	SYMBOL
FIBER ROLL	SC-5	FRFR
GRAVEL BAGS	SC-6, SC-8	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
HYDROSEEDING & BONDED FIBER MATRIX (B.F.M.)	SS-3, SS-4	
STABILIZED CONSTRUCTION ENTRANCE	TC-1	808080808
MULCH	SS-6, SS-8	
ENERGY DISSIPATER OUTLET PROTECTION	SS-10	

MATERIALS & WASTE MANAGEMENT CONTROL BMPs



MATERIAL DELIVERY & STORAGE SPILL PREVENTION AND CONTROL CONCRETE WASTE MANAGEMENT SOLID WASTE MANAGEMENT SANITARY WASTE MANAGEMENT HAZARDOUS WASTE MANAGEMENT







	ALL INCE W. WAY	COUNTY A	PPROVED CHANGES
	La A ST	NO. DESCRIPTION	APPROVED BY DA
	2015年46316 日本		
LAWRENCE W. WALSH R.C.E. 46316 DATE			
Walsh Engineering & Surveying, Inc. 607 Aldwych Road, El Cajon, CA 92020 (619) 588-6747 (619) 792-1232 Fax	CIVIL OF CALIFORNIA		

DESIGN BASIS			SUM	MARY	Ó OF WORK
A. APPLICABLE CODES:			CANTILEVE	RED CONCRET	E MASONRY UNIT (CMU) RETAININ AT SUNDALE RD. EL CAJON, CALI
2019 CBC, "CALIFORNIA BUILDING CODE"					
B. LATERAL LOADS					
1. <u>SEISMIC LOAD</u>					
RISK CATEGORY II SEISMIC IMPORTANCE FACTOR IF = 1.0					
SITE CLASS B SEISMIC DESIGN CATEGORY C			SHE	ET IND	DEX
SITE COORDINATES 32.7647278, -116.929 SEISMIC PARAMETERS	96684		SHEET	SHEET TITLE	
PGA _M 0.288 SITE MOE S _S = 0.746g	DIFIED PEAK	GROUND ACCELERATION	5	STRUCTURAL	COVER SHEET & STRUCTURAL NO
$S_1 = 0.275g$ $S_{DS} = 0.447g$			6	STRUCTURAL	NOTES CONTD, VERIFICATION & I
$S_{D1} = 0.147g$			7	TYPICAL CON	ISTRUCTION DETAILS
			8	CMU RETAINI	NG WALL LOCATION PLAN
			y y	RETAINING W	ALL CONSTRUCTION DETAILS
STIVIDULS					
- GRID ID		ELEVATION NO.			
(#) — — GRID LINES - CENTER		1	ELEVATION IND	ICATOR	
GRID ID		SHEET NO. WHERE			
(#) GRID LINES - FACE		ELEVATION IS SHOWN			
DE TAIL NO.		SECTION NO.			
BETAIL INDICATOR		[#] ∕ ≢.# ↓	SECTION INDICA	ATOR	
SHEET NO. WHERE DETAIL IS SHOWN		SHEET NO. WHERE			
ABBREVIATIONS					
# NUMBER	FF			P/C	
& AND = EQUAL, EQUALS	FFE FG	FINISH FLOOR ELEVATION FINISH GRADE		PAR PCC	PARALLEL PRECAST CONCRETE
	FJ FRM FRMC	FLOOR JOIST FRAME ERAMING		PCF PEN	POUNDS PER CUBIC FOOT PENETRATION DEPIMETER FELT JOINT
AC AIR CONDITIONING AB ANCHOR BOLT ACL AMERICAN CONCRETE INSTITUTE	FRMG FN FND	FRAMING FIELD NAIL FOUNDATION			
ADL ADDITIONAL	FO	FOUNDATION FACE OF FACE OF CONCRETE		PLTWD PNL PSF	PANEL POUNDS PER SOLIARE FOOT
AFF ABOVE FINISHED FLOOR AHU AIR HANDLING UNIT	FOM FOS	FACE OF MASONRY FACE OF STUD		PSI PT	POUNDS PER SQUARE INCH PRESSURE TREATED, POINT, PI
AHJ AUTHORITY HAVING JURISDICTION AISC AMERICAN INSTITUTE OF STEEL CONSTRUCTION	FS FT, '	FAR SIDE FOOT		REINF	REINFORCING, REINFORCED
ALT ALTERNATE APA AMERICAN PLYWOOD ASSOCIATION	FTG Fy	FOOTING YIELD STRESS		REQ REQMT	REQUIRED REQUIREMENT
APPROX APPROXIMATELY ARCH ARCHITECTURAL	GA	GAUGE		RET REV	RETURN, RETAINING REVISION, REVISED
ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS AT/FP ANTI-TERRORISM/ FORCE PROTECTION	GLB GT	GLUED LAMINATED BEAM GIRDER TRUSS		RF RPM	ROOF RFT RAFTERS REVOLUTIONS PER MINUTE
AVVƏ AMERICAN WELDING SUCIETY BTW BETWEEN	GUSS GYP BD	GUSSET GYPSUM BOARD		RS RT	ROOF TRUSS
BLW BELOW BM BEAM	HD HDR	HOLD DOWN HEADER		S SC	SECTION MODULUS SLIP CRITICAL
BLKG BLOCKING BN BOUNDARY NAIL	HGR HK	HANGER HOOK		SCBRW SCHED	SEGMENTAL CONCRETE BLOCK
BOF BOTTOM OF FOOTING BOT BOTTOM	HORIZ HP	HORIZONTAL HIGH POINT		SDI SECT	STEEL DECK INSTITUTE SECTION
BRG BEARING BSFRM BASE FRAME	HSS HT	HOLLOW STRUCTURAL SECTION HEIGHT	N	SEIS SEOR	SEISMIC STRUCTURAL ENGINEER OF RE
C CHANNEL	HVAC	HEATNG/ VENTILATING/ AIR CON	NDITIONING	SEP SHT	SEPARATION SHEET
CE CARBON EQUIVALENT CENT CENTERED	I IBC	MOMENT OF INERTIA	E	SHTHG SIM	SHEATHING SIMILAR
CFWF COLD-FORMED METAL FRAMING CFS COLD-FORMED STEEL CIP CAST IN DLACE	ID IN "	INSULATED CONCRETE FORM INSIDE DIAMETER		SJI SMS	STEEL JUIST INSTITUTE SHEET METAL SCREW
CJ CONTROL JOINT/CEILING JOIST CJP COMPLETE JOINT PENETRATION		INCLUDE INFORMATION		SPEC(S SPRT	SUPPORT SQUARF
CL CENTERLINE CLR CLEAR	INS	INSULATED, INSULATION		SS ST	STAINLESS STEEL SNUG TIGHT
CMU CONCRETE MASONRY UNIT COL COLUMN	JST	JOIST		STD STIF/ST	STANDARD TFF STIFFENER
CONC CONCRETE COND CONDITION	K, KIPS	THOUSAND POUNDS		STL STRUC	STEEL T STRUCTURAL, STRUCTURE
CONN CONNECT, CONNECTION CONST CONSTRUCTION	L LB	LENGTH, ANGLE POUND		SUSP SYM	SUSPENDED SYMMETRICAL
CONT CONTINUOUS CONTR CONTRACTOR		LUNG LIVE LOAD		T&B	
		LONG LEG HORIZONTAL LONG LEG VERTICAL		ואַG THK די	THICK, THICKNESS
	LONG LP	LONGITUDINAL LOW POINT		TN TO	TOE NAIL TOP OF
DEG DEGREE DEM DEMOLISH, DEMOLITION	LW	LIGHT WEIGHT		TOBM TOC	TOP OF BEAM TOP OF CONCRETE
DEP DEPRESSED DET DETAIL	MAS MB	MASONRY MACHINE BOLT		TOF TOGB	TOP OF FOOTING TOP OF GRADE BEAM
DIA DIAMETER DIAG DIAGONAL	MBR MCJ	MEMBER MASONRY CONTROL JOINT		TOS TOW	TOP OF STEEL TOP OF WALL
DL DEADLOAD DO DITTO	MECH MED	MECHANICAL MEDIUM		TYP	TYPICAL
DT DRAG TRUSS DWG(S) DRAWINGS	MEZZ MF	MEZZANINE MOMENT FRAME		UFC UNO	UNITED FACILITES CRITERIA UNLESS NOTED OTHERWISE
DWL DOWEL	MFR MFG	MANUFACTURER MANUFACTURING MINIMUM		UON	UNLESS OTHERWISE NOTED
EA EACH EF EACHFACE ELEC ELECTRICAL	MIN MO MOD	MINIMUM MASONRY OPENING MODIEY MODIEED		VB VERT	VAPOR BARRIER VERTICAL
ELEC ELECTRICAL ELEV ELEVATION EMBED EMBEDDED EMBEDMENT	MFR	MANUFACTURER		W M//	WIDTH, WEST, WIDE FLANGE
EN EDGE NAIL EQ EQUAL	NF NOM	NEAR FACE NOMINAL		vv/ W/O \\/F	WITHOUT WIDE FLANGE
EQN EQUATION EQUIP EQUIPMENT	NS	NEAR SIDE		WPT WWF	WORKING POINT WELDED WIRE FABRIC
ES EACH SIDE EW EACH WAY	OC OD	ON CENTER OUTSIDE DIAMETER		WWM	WELDED WIRE MESH
EXIST EXISTING EXT EXTERNAL, EXTERIOR	OH OPNG	OPPOSITE HAND, OVERHEAD OPENING		x	BY, TIMES
	OWSJ	OPEN WEB STEEL JOIST			

G WALL FOR RESIDENTIAL FORNIA.	GENERAL NOTES	SHOP DRAWINGS/SI	JBMITTALS		SOILS / FOU	NDATION			
	1. ALL MATERIALS AND WORKMANSHIP SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL STANDARDS AND APPLICABLE PROVISIONS OF THE CURRENT BUILDING CODES LISTED HEREIN.	1. THE FOLLOWING SUBMITTAL SHALL BE SUBMITTED TO THE SEOR PRIOR TO FABRICATION FOR APPROVAL:			 a. SOIL TYPE: SEE SOILS REPORT PREPARED BY: AGS, INC. 485 CORPORATE DRIVE, SUITE B, ESCONDIDO, CA 92029. PROJECT NO.: 2106-08 REPORT NO.: 2106-08-B-2 DATED: JULY 30 2021. 				
	ASTM REFERENCES ARE FROM THE LATEST ISSUE AND LATEST REVISION, UNLESS OTHERWISE NOTED.	a. MIX DESIGN FOR: i. CONCRETE			b. ADDENDUM GEOTECHNICAL REPORT PROVIDED BY ADVANCED GEOTECHNICAL SOLUTIONS (AGS), INC, P/W 2106-08 REPORT NO. 2106-08-B-3, DATED: DECEMBER 03, 2121.				
	2. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL BE RESPONSIBLE FOR CONDITIONS OF ALL WORK AND MATERIALS, INCLUDING THOSE FURNISHED BY SUB-CONTRACTORS ANY DISCREPANCIES AND/OR VARIATIONS SHALL BE	, ii GR iii MC - b. REINF	ii GROUT iii MORTAR b. REINFORCING BAR LAYOUT FOR: i. CONCRETE ii. MASONRY			2. GEOTECHNICAL REPORT AND ALL UPDATES ARE PART OF THESE CONTRACT DOCUMENTS AND SHALL BE COMPLIED WITH BY CONTRACT			
	BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO FABRICATION OR CONSTRUCTION.	i. CC ii. M/					NING PER DIRECTION OF THE		
OTES	3. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE,	2. STRUCTURAL FRAMING AND REINFORCING LISTS, QUANTITIES AND LENGTHS OF ALL MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS. THESE ITEMS ARE NOT INCLUDED IN SEOR REVIEW.			 4. FOUNDATION DESIGN IS BASED ON THE FOLLOWING PARAMETERS FROM THE ABOVE-REFERENCED GEOTECHNICAL REPORT: 				
NSPECTION SCHEDULES	WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR THE EARTH BANKS, FORMS, SCAFFOLDING, PLANKING, SAFETY NETS,	3. REVIEW OF SHOP DRAWINGS BY TH DOCUMENTS AND STRUCTURAL DE	HE SEOR IS FOR <u>GENERAL COMPLIANCE</u> SIGN INTENT. ALL ERRORS IN DETAILING	WITH THE CONTRACT G, FABRICATION, AND	ALLOWABLE SOIL BEARING 2,000 PSF				
	SUPPORT AND BRACING FOR CRANES AND GIN POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES	FOR CORRECT FITTING OF ALL STRUCTURAL MEMBERS INCLUDING COORDINATION WITH OTHER TRADES IS THE RESPONSIBILITY OF THE CONTRACTOR. SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER DO NOT CONSTITUTE CHANGE ORDERS, ANY PROPOSED			MAX ALLOWAE BEARING INCR	BLE SOIL BEARING REASE PER ADDL FT OF EMBED BEYOND MIN	3,000 PSF 250 PSF		
	OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR THE ENGINEER SHALL NOT INCLUDE THE INSPECTION OF THE ABOVE ITEMS. CONSTRUCTION MATERIALS, PLACED ON STRUCTURAL	CHANGES MUST BE SUBMITTED IN	A LETTER OR DETAIL TO THE SEOR FOR	APPROVAL.	BEARING INCR	REASE PER ADDL FT OF WIDTH BEYOND MIN	250 PSF 1/3		
	LISTED HEREIN.	FABRICATION DATE. A DIGITAL SET TO THE CONTRACTOR.	CLEARLY MARKED WITH ANY COMMENT	S WILL BE RETURNED	5. UNDERLYING FILL MA	ATERIALS ARE COMPACTED TO 95% RELATIVE CO	OMPACTION.		
	REPRESENTATIVE AND TYPICAL DETAILS TO ASSIST THE CONTRACTOR. THE DRAWINGS DO NOT ILLUSTRATE EVERY CONDITION. ALL ATTACHMENT, CONNECTIONS, FASTENINGS, ETC. TO BE	5. ANY SHOP DRAWINGS SHALL BE IN SHOWN IN THE APPROVED STRUCT	DEPENDENTLY CREATED BASED ON THE FURAL DRAWINGS.	E INFORMATION	6. UTILITY TRENCH BAC OF THE GEOTECHNIC	CKFILL SHALL BE MECHANICALLY COMPACTED IN CAL ENGINEER.	LAYERS TO THE APPROVAL		
	RESPONSIBLE FOR PROVIDING AND INSTALLING THEM.	DEMOLITION NOTES	<u>)</u>		7. ALL ABANDONED FOO BE REMOVED.	OTINGS, UTILITIES, ETC. THAT INTERFERE WITH N	NEW CONSTRUCTION SHALL		
	 DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES. NO PIPES, CONDUITS, OR DUCTS SHALL BE PLACED IN STRUCTURAL MEMBERS UNLESS 	1. THESE PLANS REPRESENT INFORM DOCUMENTS WHERE AVAILABLE AN	IATION TAKEN FROM THE ORIGINAL CON ND SITE OBSERVATION. DURING DEMOLI	ISTRUCTION TION ALL CONDITIONS	8. WALL FOOTINGS ARE COLUMNS, UNO.	E CENTERED UNDER WALLS AND COLUMN FOOTIN	NGS ARE CENTERED UNDER		
	SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER.7. REFER TO MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL INFORMATION	DIFFERENT FROM THE CONDITIONS DISCIPLINES ARE TO BE REPORTED	S REPRESENTED IN THE FIELD. ALL CONDITION TO THE ENGINEER IMMEDIATELY.	HOSE OF OTHER	9. PROVIDE FOR DESIG TO SAFELY RETAIN A	IN AND INSTALLATION OF ALL CRIBBING, SHEATHI ALL GRADES.	ING AND SHORING REQUIRED		
	 RELATED TO MEP ITEMS & DISTRIBUTION SYSTEMS EXCEPT AS SHOWN OR NOTED HEREIN. 8. CONSTRUCTION MATERIALS, PLACED ON STRUCTURAL MEMBERS, SHALL BE POSITIONED SUCH 	2. THE CONTRACTOR SHALL SUPPLY ENGINEERING NECESSARY TO PER	ALL SHORING AND TEMPORARY BRACIN FORM WORK EXCEPT WHERE SPECIFIC	G AND STRUCTURAL ALLY DETAILED IN	10. PROVIDE FOR DE-WA WATER.	ATERING OF EXCAVATIONS FROM SURFACE, GRO	UND, AND OR SEEPAGE		
	THAT THE LOADING DOES NOT EXCEED DESIGN LOADS LISTED HEREIN. 9. DETERMINE THE LOCATION OF UTILITY SERVICES IN AREAS TO BE EXCAVATED BEFORE	THESE DRAWINGS. ALL ENGINEERI ENGINEER REGISTERED IN THE ST	NG IS TO BE PERFORMED BY A CIVIL OR ATE OF CALIFORNIA.	STRUCTURAL	 IN THE EVENT EXCAVATIONS ARE CARRIED TO A DEPTH GREATER THAN REQUIRED, THE ADDITIONAL DEPTH SHALL BE FILLED WITH THE SAME CONCRETE AS THAT USED FOR THE FOOTING, AT NO ADDITIONAL COST TO THE OWNER. NO UNCONTROLLED FILL WILL BE PERMITTED. 				
	BEGINNING EXCAVATION. EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING. DAMAGE CAUSED AS A RESULT OF FAILING TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.	3. THE GENERAL CONTRACTOR IS RE PRIOR TO DEMOLITION (I.E. GAS, W PROTECTION SYSTEM IS TO BE CO	SPONSIBLE FOR THE VERIFICATION OF U ATER, ELECTRICAL SUPPLIES). ANY SHU ORDINATED WITH THE LOCAL FIRE DEPA	UTILITIES SHUTDOWN ITDOWN OF THE FIRE ARTMENT AND THE					
	10. THE CAD DRAWING FILES ARE THE PROPERTY OF THE STRUCTURAL ENGINEER AND WILL NOT BE RELEASED TO THE CONTRACTOR OR SUBCONTRACTORS FOR THEIR USE.	 CONTRACTOR IS TO PROVIDE OSHA APPROVED PUBLIC BARRIERS AND ACCESS AS REQUIRED. CONTRACTOR TO FIELD VERIFY LOCATION OF ANY EXISTING UNDERGROUND PIPING, ELECTRICAL CONDUIT LINES, ETC., OR PIPING IN CONCRETE SLAB PRIOR TO SAWCUTTING. IN PREPARATION OF THESE DRAWINGS IT HAS BEEN NECESSARY TO ASSUME SOME AS-BUILT CONDITIONS TO EXIST TO COMPLETE THE DESIGN WORK. WHERE THESE ASSUMPTIONS ARE MADE THE CONDITION IS IDENTIFIED AS "ASSUMED" OR "VERIFY IN FIELD (V.I.F)" ON THE DRAWINGS. CONTRACTOR SHALL VERIFY THESE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE SEOR IF THE WORK REQUIRES MODIFICATION OF THESE AS- BUILT CONDITIONS. 			MATERIAL REMOVED. NO STANDING WATER SHALL BE PRESENT. ALL EXCAVATIONS SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.				
	11. STRUCTURAL DRAWINGS TO BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS BY: WALSH ENGINEERING & SURVEYING INC.				13. ALL SITE GRADING WORK SHALL BE DONE UNDER THE DIRECT OBSERVATION OF THE SOILS ENGINEER.				
	STRUCTURAL OBSERVATION NOTES				 14. PRIOR TO FOOTING EXCAVATION, SOIL ENGINEER TO REVIEW AND APPROVE IN WRITING THAT FOUNDATION PLANS AND FINAL GRADING PLANS COMPLY WITH THE SOILS REPORT. 15. ALL FILL SOILS SHALL BE IN ACCORDANCE WITH THE SOILS REPORT. 				
	1. THE OWNER SHALL EMPLOY THE ENGINEER RESPONSIBLE FOR THE STRUCTURAL DESIGN, TO PERFORM STRUCTURAL OBSERVATION AS DEFINED IN IBC. OBSERVED DEFICIENCIES SHALL BE								
	REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR AND THE BUILDING OFFICIAL. ALL DOCUMENTED OBSERVED DEFICIENCIES MUST BE RESOLVED FOR THE STRUCTURAL SYSTEM TO BE DEEMED IN COMPLIANCE WITH THE APPROVED PLANS &				16. FOUNDATION SHALL	BE EMBEDDED 8'-0" FROM DAYLIGHT.			
RETENSIONED	SPECIFICATIONS. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE AHJ A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFIED, REPORTED DEFICIENCIES HAVE, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE BEEN RESOLVED.	1. BACKFILLING OF RETAINING WALLS 90% OF ITS DESIGN STRENGTH.	SHALL BE PERFORMED ONLY WHEN TH	IE WALL HAS REACHED	AWAY FROM FOUNDA	ATIONS AND SLABS.	SUILDING TO DIRECT WATER		
	THE CONTRACTOR SHALL CONTACT THE STRUCTURAL ENGINEER A MINIMUM OF 5 WORKING DAYS PRIOR TO THE PROJECT REACHING THE PRESCRIBED MILESTONES OF CONSTRUCTION LISTED BELOW. ADDITIONALLY, WITHIN TWO DAYS AFTER THE START OF CONSTRUCTION, THE CONTRACT SHALL PROVIDE A PROJECT SCHEDULE TO THE STRUCTURAL ENGINEER OUTLINING	2. SLAB ON GRADE RESTRAINING THE MINIMUM OF 3 DAYS OR HAS REAC CONTROLS, PRIOR TO BACKFILLING	2. SLAB ON GRADE RESTRAINING THE BOTTOM OF RETAINING WALLS SHALL BE IN PLACE A MINIMUM OF 3 DAYS OR HAS REACHED 80% OF ITS DESIGNED STRENGTH, WHICH EVER CONTROLS, PRIOR TO BACKFILLING OF WALLS.			OCONDUITS RUNNING THROUGH WALLS AND SLAI CONTINUOUS FOOTINGS AND GRADE BEAMS PERF PASS ABOVE THE FOOTINGS OR THROUGH THE C OVIDE A CONCRETE JACKET IF PIPES ARE LOW EI	BS WITH 1/2 INCH EXPANSION PENDICULAR TO PIPE RUNS GRADE BEAMS. NOUGH TO BE PLACED		
	THE ESTIMATED DATES THE STRUCTURAL OBSERVATIONS WILL BE REQUIRED.2. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY	 ALL RETAINING WALLS SHALL BE PROVIDED WITH PROPER DRAINAGE TO AVOID BUILD UP OF HYDROSTATIC PRESSURE. REFER TO OTHER DRAWINGS & GEOTECHNICAL REPORT FOR RETAINING WALL DRAINAGE. RETAINING WALL DESIGN IS BASED ON THE FOLLOWING PARAMETERS FROM THE ABOVE-REFERENCED GEOTECHNICAL REPORT: 			 DELOW THE FOOTINGS AND GRADE BEAMS. LOWER FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS. 19. ALL RECOMMENDATIONS OF GEOTECHNICAL INVESTIGATION REFERENCED HEREIN MUST BE ACCOMPANIED FOR VALIDITY OF DESIGN INCLUDED HEREIN. 20. THE STRUCTURE(S) WILL BE LOCATED ENTIRELY ON UNDISTURBED NATIVE SOIL. IF THE BUILDING INSPECTOR SUSPECTS FILL, EXPANSIVE SOILS OR ANY GEOLOGIC INSTABILITY BASED UPON OBSERVATION OF THE FOUNDATION EXCAVATION, A SOILS OR GEOLOGICAL REPORT, AND RESUBMITTAL OF PLANS TO PLAN CHECK TO VERIEY THAT THE REPORT RECOMMENDATIONS 				
	SEOR FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT CONSTRUCTION STAGES LISTED BELOW SPECIAL INSPECTIONS SHALL ALSO BE PROVIDED AS REQUIRED HEREIN.								
K RETAINING WALL	3. THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF THE DEFICIENCIES WITHOUT SUBSTANTIAL EFEORT OR LINCOVERING OF THE WORK INVOLVED, AT A MINIMUM, THE FOLLOWING								
	SIGNIFICANT CONSTRUCTION STAGES REQUIRE A SITE VISIT AND AN OBSERVATION REPORT FROM THE STRUCTURAL OBSERVER:	ACTIVE PRESSURE W/ LEVEL BACK		42 PSF/FT	HAVE BEEN INCORPORATED, MAY BE REQUIRED.				
ECORD	CONSTRUCTION STAGES: ITEMS TO BE OBSERVED: A FOUNDATION 1 FOUNDATION EXCAVATION &	ACTIVE PRESSURE W/ SLOPED BAC	KFILL 2:1 (H:V)	61 PSF/FT 375 PSF/FT					
	PLACEMENT OF REINFORCEMENT PRIOR TO PLACEMENT OF CONCRETE.	PASSIVE PRESSURE W/ SLOPED BA	CKFILL 2:1 (H:V) DESCENDING	141 PSF/FT					
	B. FRAMING 1. PLACEMENT OF STEEL REINFORCEMENT			0.35					
	IN CMU WALL PRIOR TO GROUTING. 4. NO STRUCTURAL DETAILS ARE TO BE COVERED PRIOR TO STRUCTURAL OBSERVATION. CONTRACTOR SHALL SCHEDULE PROJECT ACCORDINGLY TO ALLOW ALL STRUCTURAL DETAILS.	THE ABOVE VALUES MAY BE INCREASED BY 1/3 FOR SHORT TERM LOADING							
	TO BE OBSERVE DURING ONE OF THE THREE STRUCTURAL OBSERVATIONS.								
					<u><u> </u></u>	IRUCIURAL COVERSHEET	& NOTES		
	D PROFESS/OVA						NTRACT		
					SHEET COUNTY OF SAN DIEGO OF 10				
	DECLARATION OF RESPONSIBLE	8285 La Mesa Blvd. Ste. C La Mesa. CA 91941	LOCAL BENCHMARK: CE BRASS DISC STAMPED SUNDALE ROAD APPRO	NTERLINE WELL MO "RCE 18136" AT C OXIMATELY 31' NOR	NUMENT WITH 3" ENTER OF BULB IN THWESTERLY FROM THF	GRADING PLANS FOR:			
	CHARGE	designgroup@junkereng.com www.junkereng.com 619.606.5058	SOUTHWESTERLY CORN HEREON. EL:	NER OF SUBJECT PR 647.07 (NAVD88)	PROPERTY AS SHOWN		AD		
	I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR SHEETS 5–9, THAT I HAVE EXCERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH	COUNTY APPROVED CHANGES BENCH I		BENCH MAR	RK CALIFORNIA COORDINATE INDEX: 218-1792				
	CURRENT STANDARDS.		DESCRIPTION : CENTER AND DIS	<u>LINE WELL MONUME</u> SC STAMPED "SAN	MENT WITH 1" PIPE RECOMMENDED FOR APPROVAL: APPROVED FOR WILLIA COUNTY ENGINEER N DIEGO SURVEYOR". COUNTY ENGINEER		ED FOR WILLIAM P. MORGAN, ITY ENGINEER		
	IFICATIONS BY THE COUNTY OF SAN DIEGO IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITES FOR PROJECT DESIGN		LOCATION: CE <u>NTERLI</u> INTERSEC	NE OF JAMACHA RO	DAD 15' NORTHERLY OF EL CERRO.		DATE: D BY: TM 2272		
	BY: DANIEL A. JUNKER, SE DATE: 05/20/21 RSE NO: S6178 FYPIPES: 09/30/25		ELEVATION: 562.84	DATUM: NAVD88	UUUN AINU KUS 1/454	SE6178 EXP 09-30-25	-LDGRMJ-30366		

STRUCTURAL NOTES

	42 PSF/FT				
	61 PSF/FT				
	375 PSF/FT				
) DESCENDING	141 PSF/FT				
	0.35				

ALLOWABLE SOIL BEARING	2,000 PSF
MAX ALLOWABLE SOIL BEARING	3,000 PSF
BEARING INCREASE PER ADDL FT OF EMBED BEYOND MIN	250 PSF
BEARING INCREASE PER ADDL FT OF WIDTH BEYOND MIN	250 PSF
BEARING INCREASE FOR SHORT TERM LOADING	1/3

STRUCTURAL NOTES CONTD.

CONCRETE

- CEMENT SHALL CONFORM TO ASTM C150, TYPE II/V.
- CONDUITS EMBEDDED HORIZONTALLY IN THE SLAB SHALL HAVE AN OUTSIDE DIAMETER NO GREATER THAN 1/3 THE THICKNESS OF THE SLAB. CONDUIT SHALL NOT BE EMBEDDED IN A SLAB THAT IS LESS THAN 3 1/2" THICK. EXCEPT FOR LOCAL OFFSETS, MIN. CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 6". REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION OF ALL PIPES, CONDUITS, ETC. NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE BEAMS, FOOTINGS, OR SLABS, UNLESS SPECIFICALLY DETAILED IN THESE PLANS, OR AS APPROVED BY THE STRUCTURAL ENGINEER.
- AGGREGATES FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C33, 1 1/2" MAXIMUM SIZE, AGGREGATES FOR LIGHTWEIGHT CONCRETE SHALL CONFORM TO ASTM C330, 1" MAXIMUM
- THE MAXIMUM CONCRETE SLUMP SHALL BE PER SCHEDULE BELOW PRIOR TO THE ADDITION OF ANY PLASTICIZING ADMIXTURES.
- ADMIXTURES MAY BE USED WITH PRIOR WRITTEN APPROVAL OF THE ENGINEER. APPROVAL MUST BE RECEIVED DURING THE BUILDING PERIOD. ADMIXTURES SHALL COMPLY WITH ASTM A494 AND BE OF THE TYPE THAT INCREASE THE WORKABILITY OF THE CONCRETE, BUT SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT. (CALCIUM CHLORIDE SHALL NOT BE USED).
- READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.
- ALL REINFORCING BARS AND INSERTS SHALL BE SECURED IN PLACE PRIOR TO CONCRETE, POUR
- NON-STRUCTURAL STEEL MEMBERS EMBEDDED IN CONCRETE SHALL BE GALVANIZED OR PAINTED. ALL DAMAGED GALVANIZED AREAS SHALL BE REPAIRED PRIOR TO EMBEDMENT.
- LIGHT-WEIGHT CONCRETE FILL SHALL HAVE A MAXIMUM DRY DENSITY OF 110 pcf. ALL OTHER CONCRETE SHALL HAVE A MAXIMUM DRY DENSITY OF 150 pcf.

10.	D. MINIMUM CONCRETE COMPRESSIVE STRENGTH AND MAXIMUM SLUMPS:							
		MINLES						

	(28 DAYS)	MAX SLUMP	W/C
FOOTINGS	2,500 psi	4" +/- 1"	0.55

*2500 PSI DESIGNED STRENGTH, SPECIAL INSPECTION NOT REQUIRED, SEE INTERIOR FLOOR SLAB NOTES ON THIS SHEET FOR ADDITIONAL REQUIREMENTS

- PROVIDE (2) #4 DIAGONAL BARS AT CORNERS OF ALL OPENINGS IN CONCRETE FLOORS AND ROOFS.
- PROVIDE CONSTRUCTION AND CONTROL JOINTS AS SHOWN ON PLANS AND IN TYPICAL DETAILS UNLESS SPECIFIED OTHERWISE. LOCATION OF JOINTS NOT SPECIFICALLY INDICATED SHALL BE REVIEWED BY THE SEOR PRIOR TO PLACING REINFORCING STEEL.
- . DRY PACK SHALL BE ONE PART CEMENT AND 2 3/4 PARTS SAND WITH SUFFICIENT WATER TO HYDRATE CEMENT AND FORM A BALL SHOWING MOISTURE ON THE SURFACE WHEN SQUEEZED. IT SHALL BE RAMMED IN TIGHT TO MAXIMUM DENSITY ATTAINABLE, AND SHALL HAVE A MINIMUM STRENGTH OF 5000 PSI AT 28 DAYS.
- NON-SHRINK GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 7,000 psi PER ASTM C109. GROUT BASE PLATES AFTER PLUMBING OF COLUMN.
- 5. CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4 INCH.
- PROVIDE WATERSTOPS IN ALL BELOW-GRADE FOUNDATION WALL CONSTRUCTION JOINTS.
- ALL CONCRETE WHICH DURING THE LIFE OF THE STRUCTURE WILL BE SUBJECT TO FREEZING TEMPERATURES WHILE WET. SHALL HAVE A WATER CEMENT RATIO NOT EXCEEDING 0.45 BY WEIGHT AND SHALL CONTAIN ENTRAINED AIR PER ACI 613. SUCH CONCRETE SHALL INCLUDE EXTERIOR SLABS, PERIMETER FOUNDATIONS, EXTERIOR CURBS, ETC.
- 8. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS, INCLUDING AGGREGATE GRADATION, FOR CONCRETE STRENGTH F'c > 2500 PSI.

REINFORCING STEEL

1.	METAL REINFORCING:	
	BAR DIAMETERS OF #4 AND GREATER	ASTM A615 GRADE 60
	OTHER DIAMETER	ASTM A615 GRADE 40

- ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST ACI STANDARDS AND THE LATEST EDITION OF THE GOVERNING CODES HEREIN.
- ALL REINFORCING SHALL BE ADEQUATELY SUPPORTED TO PREVENT DISPLACEMENT BY CONCRETE PLACEMENT OR WORKERS.
- WHERE REINF. BARS ARE CALLED OUT TO BE CONTINUOUS (CONT.) PROVIDE CONTINUOUS BARS OR FULL SPLICES PER SPLICE TABLE SCHEDULE. IT IS CONTRACTOR'S OPTION TO PROVIDE CONTINUOUS BARS WHERE SPLICES ARE SHOWN.
- UNLESS OTHERWISE SHOWN, WALL VERTICAL REINFORCING SHALL BE POSITIONED AT THE CENTER OF THE WALL.
- PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING IN ACCORDANCE WITH THE LATEST ACI STANDARDS AND THE LATEST EDITION OF THE CURRENT BUIDLING CODE HEREIN:

MINIMUM PROTECTIVE COVER FOR REINFORCING STEEL					
ON EARTH SIDE WHEN PLACED AGAINST EARTH	3"				
ON EARTH SIDE WHEN FORMED	2"				
EXTERIOR WALL STEEL	1 1/2"				

- ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE OR GROUT.
- DOWELS BETWEEN FOOTINGS AND WALL SHALL BE THE SAME GRADE, SIZE AND SPACING AS VERTICAL WALL REINFORCING UNLESS OTHERWISE NOTED ON DETAILS.
- FURNISH #3 SPACER TIES AT APPROXIMATELY 2'-6" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING IN PLACE, UNLESS OTHERWISE NOTED.
- ALL REINFORCEMENT SHALL BE BENT COLD. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.
- COORDINATE PLACEMENT OF CAST-IN-PLACE EMBEDS AND ANCHOR RODS. SET ANCHOR RODS WITH A TEMPLATE. SECURELY ATTACH EMBED ITEMS TO FORMWORK OR REINFORCING.
- PROVIDE CLASS "B" REINFORCEMENT SPLICES FOR CONTINUOUS REINFORCEMENT. PROVIDE STANDARD 90-DEGREE HOOKS IN ACCORDANCE WITH ACI 318, UNLESS NOTED OTHERWISE. . DO NOT WELD OR BEND REINFORCEMENT IN THE FIELD UNLESS SPECIFICALLY SHOWN OR
- APPROVED BY STRUCTURAL ENGINEER. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF MAIN REINFORCING, UNO.
- PROVIDE CONTINUOUS HORIZONTAL WALL REINFORCEMENT WITH 90-DEGREE BENDS AND EXTENSIONS AT CORNERS AND INTERSECTIONS AS SHOWN ON TYPICAL BAR PLACING DETAILS.

CONCRETE MASONRY UNIT

CONCRETE BLOCK MASONRY UNITS SHALL CONFORM TO ASTM C-90. ALL UNITS SHALL BE OPEN END, BOND BEAM TYPE A BLOCK. DESIGN STRENGTH SHALL BE AS SHOWN BELOW.

DESIGN STRENGTH:	<u>f'm = 1500 PSI</u>	

MASONRY COMPONENTS STRENGTH	I @ 28 DAYS
a. CONCRETE MASONRY UNITS:	1900 PSI
b. GROUT:	2500 PSI
c. MORTAR (TYPE S):	1800 PSI

- ALL CELLS CONTAINING REINFORCING OR ANCHOR BOLTS SHALL BE GROUTED SOLID. WHEN WALLS ARE SHOWN TO BE SOLID GROUTED, ALL CELLS SHALL BE FILLED WITH GROUT. WHEN WALL CANNOT BE COMPLETED IN ONE POUR OR WHEN CONCRETE SLAB IS TO BE CAST OVER WALL, STOP POUR 1 1/2" BELOW TOP BLOCK TO FORM KEY JOINTS. ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR, MINIMUM 4,000 R.P.M., 3/4" HEAD. SOLID GROUT BELOW GRADE. LIFTS SHALL NOT EXCEED 8 FEET IN HEIGHT. PROVIDE INSPECTION AND CLEAN OUT HOLES FOR GROUT LIFTS EXCEEDING 4 FEET IN HEIGHT. GROUT LIFTS SHALL NOT EXCEED THOSE SPECIFIED IN ACI 530-05 SECTION 3.5. REMOVE OVERHANGING MORTAR, DROPPINGS AND ALL DEBRIS FROM CELLS TO BE GROUTED.
- MORTAR JOINTS SHALL BE STRAIGHT, CLEAN AND UNIFORM IN THICKNESS, AND SHALL BE TOOLED AS SHOWN ON PLANS (FLUSH JOINTS IF NO SPECIAL TREATMENT SPECIFIED). UNLESS OTHERWISE SPECIFIED OR DETAILED ON THE PLAN, HORIZONTAL AND VERTICAL MORTAR JOINTS SHALL BE 3/8" WITH FULL MORTAR COVERAGE ON THE FACE SHELL. VERTICAL HEAD JOINTS SHALL BE BUTTERED WELL FOR A THICKNESS EQUAL TO THE FACE SHELL OF THE BLOCK AND THESE JOINTS SHALL BE SHOVED TIGHTLY SO THAT THE MORTAR BONDS WELL TO BOTH BLOCKS. IF IT IS NECESSARY TO MOVE A BLOCK SO AS TO OPEN A JOINT, THE BLOCK SHALL BE REMOVED FROM THE WALL, CLEANED AND SET IN FRESH MORTAR.
- REINFORCING SHALL BE AS SPECIFIED FOR CONCRETE.
- ALL MASONRY WORK SHALL CONFORM TO LATEST EDITION OF CODES LISTED HEREIN.
- CONCRETE MASONRY UNITS SHALL BE MEDIUM WEIGHT UNITS IN ACCORDANCE WITH ASTM C90 WITH MAXIMUM LINEAR SHRINKAGE OF 0.065%.
- CEMENT SHALL BE AS SPECIFIED FOR CONCRETE.
- SPECIFIED COMPRESSIVE STRENGTH- PROPORTIONS ESTABLISHED BY 28-DAY COMPRESSIVE STRENGTH TESTS IN ACCORDANCE WITH TEST METHOD C 1019 THAT OBTAIN THE SPECIFIED COMPRESSIVE STRENGTH. THE GROUT SHALL BE MIXED TO A SLUMP OF 8 in. TO 11 in. AS DETERMINED BY TEST METHOD C 143/C 143M AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 psi AT 28 DAYS.
- ALL CELLS SHALL BE FILLED SOLID WITH GROUT UNLESS OTHERWISE NOTED.
- ALL GROUT SHALL BE CONSOLIDATED WITH A MECHANICAL VIBRATOR. MINIMUM 4000 rpm, 3/4" MAXIMUM HEAD. PROVIDE INSPECTION AND CLEANOUT HOLES AT THE BASE OF GROUTED CELLS FOR ALL LIFTS GREATER THAN 5'-0".
- . WHEN GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING THE GROUT POUR 1 1/2" BELOW TOP OF THE UPPERMOST UNIT.
- UNLESS OTHERWISE NOTED, ALL MASONRY SHALL BE CONSTRUCTED WITH A RUNNING BOND PATTERN
- 13. ELECTRIC CONDUIT BOXES AND/OR OTHER OBSTRUCTIONS ARE NOT PERMITTED IN CELLS CONTAINING REINFORCING, UNLESS APPROVED BY THE ENGINEER.
- 4. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL LAP SPLICES OF REINFORCING STEEL IN MASONRY SHALL BE PER SCHEDULE.
- 15. ALL VERTICAL REINFORCEMENT BARS SHALL BE PLACED AT THE CENTER OF THE WALL UNLESS OTHERWISE SHOWN. VERTICAL BARS ARE TO BE TIED OR OTHERWISE FIXED IN POSITION AT INTERVALS OF NOT MORE THAN 200 BAR DIAMETERS AND AT TOP AND BOTTOM.
- 16. ANCHOR BOLTS MUST BE SET WITH TEMPLATES AND HELD IN PLACE PRIOR TO GROUTING.
- PROVIDE A MINIMUM OF ONE BAR DIAMETER OF GROUT BETWEEN MAIN REINFORCING AND MASONRY UNITS. PROVIDE A MINIMUM OF 1" [25mm] GROUT AROUND ALL BOLTS EMBEDDED IN MASONRY.
- 18. ALL MASONRY SHALL BE CONSTRUCTED WITH SINGLE OPEN-END MASONRY UNITS.
- 19. INSTALL ANCHORS, ACCESSORIES, AND OTHER ITEMS TO BE BUILT IN AS WORK PROGRESSES. FINISHED UNITS.
- 20. PERFORM CUTTING AND FITTING OF MASONRY WITH MASONRY SAWS PROVIDING CUT 21. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, DO NOT SLOPE
- DOWEL MORE THAN ONE HORIZONTAL TO SIX VERTICAL.

SPECIAL INSPECTION NOTES

- "NOTICE TO THE APPLICANT/OWNER'S AGENT/ARCHITECT OR ENGINEER OF RECORD BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMMPLY WITH THE REQUIREMENTS OF COUNTY OF SAN DIEGO FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS. CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES " "NOTICE TO THE CONTRACTOR/BUILDER/INSTALLER/SUB-CONTRACTOR/OWNER-BUILDER: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF COUNTY OF SAN DIEGO FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES." THE SPECIAL INSPECTOR MUST BE CERTIFIED BY THE COUNTY OF SAN DIEGO, DEVELOPMENT SERVICES, IN THE CATEGORY WORK REQUIRED TO HAVE SPECIAL INSPECTION. THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE COUNTY OF SAN DIEGO. DEVELOPMENT SERVICES, FOR TESTING OF MATERIAL, SYSTEMS, COMPONENTS AND EQUIPMENTS.

- THE SPECIAL INSPECTIONS IDENTIFIED ON PLANS ARE, IN ADDITION TO, AND NOT SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY COUNTY'S PDCI.
- STATEMENT OF SPECIAL INSPECTIONS NOTES:
- A. THE CONSTRUCTION INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY CBC. THE SPECIAL INSPECTIONS IDENTIFIED ON PLANS ARE IN ADDITION TO, AND NOT A SUBSTITUTE FOR THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A COUNTY'S PDCI INSPECTOR. SPECIALLY INSPECTED WORK WHICH IS INSTALLED
- OR COVERED WITHOUT THE APPROVAL OF THE COUNTY INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE. . SPECIAL INSPECTION IS REQUIRED DURING THE PERFORMANCE OF THE WORK PER CBC REFERENCED ABOVE. C. IT IS THE RESPONSIBILITY OF THE OWNER OR CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST TWO WORKING DAYS PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.
- ALL WORK PERFORMED WITHOUT SPECIAL INSPECTION IS SUBJECT TO REMOVAL. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE FIELD INSPECTION DIVISION (PDCI) THE SPECIAL INSPECTOR MUST BE CERTIFIED BY THE COUNTY OF SAN DIEGO IN THE CATEGORY OF WORK
- REQUIRED TO HAVE SPECIAL INSPECTION. THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE COUNTY OF SAN DIEGO LAND
- DEVELOPMENT DEPARTMENT FOR TESTING OF MATERIALS SYSTEMS, COMPONENTS AND EQUIPMENT. A PROPERTY OWNER'S FINAL REPORT FOR WORK REQUIRED TO HAVE SPECIAL INSPECTIONS, TESTING AND STRUCTURAL OBSERVATIONS MUST BE COMPLETED BY THE PROPERTY OWNER, PROPERTY OWNER'S AGENT OF RECORD. ARCHITECT OR ENGINEER OF RECORD AND SUBMITTED TO THE COUNTY OF SAN DIEGO DPW PRIVATE DEVELOPMENT CONSTRUCTION INSPECTION (PDCI) OFFICIAL.

VERIFICATION & INSPECTION SCHEDULES



(a) FREQUENCY REFERS TO THE FREQUENCY OF INSPECTION. WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODICALLY DURING THE LISTED TASK, AS DEFINED IN THE TABLE. (b) REQUIRED FOR THE FIRST 5,000 SQUARE FEET OF AAC MASONRY (c) REQUIRED AFTER THE FIRST 5,000 SQUARE FEET OF AAC MASONRY

REQUIRED

	VERIFICATION A
1.	VERIFY MATERIALS BELOW

	ARE ADEQUATE TO ACHIEV
	CAPACITY.
2.	VERIFY EXCAVATIONS ARE

- DEPTH AND HAVE REACHE 3. PERFORM CLASSIFICATION
- COMPACTED FILL MATERIA 4. VERIFY USE OF PROPER M
- LIFT THICKNESSES DURING COMPACTION OF COMPACT
- . PRIOR TO PLACEMENT OF
- SUBGRADE AND VERIFY TH PREPARED PROPERLY.



THIS "STATEMENT OF SPECIAL INSPECTIONS" IS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS OF THE CURRENT GOVERNING CODES LISTED HEREIN.

THE VERIFCATION & INSPECTION SCHEDULESS SUMMARIZES THE SPECIAL INSPECTIONS AND TESTS REQUIRED. SPECIAL INSPECTORS WILL REFER TO THE APPROVED PLANS AND SPECIFICATIONS FOR DETAILED SPECIAL INSPECTION REQUIREMENTS. ANY ADDITIONAL TESTS AND INSPECTIONS REQUIRED BY THE APPROVED PLANS AND SPECIFICATIONS SHALL ALSO BE PERFORMED.

SPECIAL INSPECTIONS AND TESTING WILL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, THIS STATEMENT AND IBC SECTIONS 1704, 1705. INTERIM REPORTS WILL BE SUBMITTED TO THE AHJ AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH IBC SECTION 1704.2.4.

A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ACCEPTANCE OF THE BUILDING BY AHJ. THE FINAL REPORT WILL DOCUMENT:

 REQUIRED SPECIAL INSPECTIONS. CORRECTION OF DISCREPANCIES NOTED IN INSPECTIONS.

THE CONTRACTOR RECOGNIZES HIS OR HER OBLIGATION TO ENSURE THAT THE CONSTRUCTION COMPLIES WITH THE APPROVED PERMIT DOCUMENTS AND TO IMPLEMENT THIS PROGRAM OF SPECIAL INSPECTIONS. IN PARTIAL FULFILLMENT OF THESE OBLIGATIONS, THE CONTRACTOR WILL RETAIN AND DIRECTLY PAY FOR THE SPECIAL INSPECTIONS AS REQUIRED IN RELEVANT SECTIONS OF THE GOVERNING CODES LISTED HEREIN.

- THIS PLAN HAS BEEN DEVELOPED WITH THE UNDERSTANDING THAT THE CONTRACTING OFFICER WILL:
- REVIEW AND APPROVE THE QUALIFICATIONS OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE INSPECTIONS.
- MONITOR SPECIAL INSPECTION ACTIVITIES ON THE JOB SITE TO ASSURE THAT THE SPECIAL INSPECTORS ARE QUALIFIED AND ARE PERFORMING THEIR DUTIES AS CALLED FOR IN THIS
- STATEMENT OF SPECIAL INSPECTION. REVIEW SUBMITTED INSPECTION REPORTS.
- PERFORM INSPECTIONS AS REQUIRED BY THE LOCAL BUILDING CODE.

SPECIAL INSPECTION LEGEND

NOTATION USED IN TABLE

COLUMN HEADERS:

- FOR STRUCTURAL STEEL QC QUALITY CONTROL (QC) AS SPECIFIED IN THIS AISC 360 SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
- QA QUALITY ASSURANCE (QA) AS SPECIFIED IN THIS CHAPTER SHALL BE PROVIDED BY THE SPECIAL INSPECTOR OR QUALITY ASSURANCE INDIVIDUAL IF QUALIFIED.
- O OBSERVE THESE ITEMS ON A RANDOM BASIS AT A MINIMUM OF [10%, 15%, 20%, 25%] OF THE TASKS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
- PC PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER CONTINUOUSLY.
- PP THESE INSPECTIONS SHALL BE PERFORMED PRIOR TO THE FINAL ACCEPTANCE OF THE ITEM.
- D DOCUMENT THE INSPECTOR SHALL PREPARE REPORTS INDICATING THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE REPORT NEED NOT PROVIDE DETAILED MEASUREMENTS FOR JOINT FIT UP, WPS SETTINGS, COMPLETED WELDS, OR OTHER INDIVIDUAL ITEMS LISTED IN THE TABLES. FOR SHOP FABRICATION, THE REPORT SHALL INDICATE THE PIECE MARK OF THE PIECE INSPECTED. FOR FIELD WORK, THE REPORT SHALL INDICATE THE REFERENCE GRID LINES AND FLOOR OR ELEVATION INSPECTED. WORK NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND WHETHER THE NONCOMPLIANCE HAS BEEN SATISFACTORILY REPAIRED SHALL BE NOTED IN THE INSPECTION REPORT.
- FOR OTHER MATERIALS INDICATES CONTINUOUS INSPECTION IS REQUIRED DURING TASK LISTED. SPECIAL INSPECTION IS PRESENT WHEN AND WHERE THE WORK IS TO INSPECTED IS BEING PERFORMED.
- INDICATES PERIODIC INSPECTIONS ARE REQUIRED DURING TASK LISTED. SPECIAL INSPECTOR IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.

BOX ENTRIE

IS PLACED IN THE APPROPRIATE COLUMN TO DENOTE EITHER "C" CONTINUOUS OR "P" PERIODIC INSPECTIONS.

- DENOTES NO SPECIAL INSPECTION IS REQUIRED.
- 1 DENOTES ONE TIME INSPECTION.

ADDITIONAL DETAIL REGARDING INSPECTIONS AND TESTS ARE PROVIDED IN THE PROJECT SPECIFICATIONS OR NOTES ON THE DRAWINGS.

NOTES

SPECIAL INSPECTION FOR CONCRETE IS EXEMPTED FOR THIS PROJECT PER 2019 CBC, SECTION 1705.3-2.3. THE STRUCTURAL DESIGN OF THE FOOTING IS BASED ON A SPECIFIED COMPRESSIVE STRENGTH, F 'C, NOT MORE THAN 2,500 POUNDS PER SQUARE INCH (PSI) (17.2 MPA), REGARDLESS OF THE COMPRESSIVE STRENGTH SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS OR USED IN THE FOOTING CONSTRUCTION.



CATION AND INSPECTION OF LEVEL B MASONRY								
MINIMUM TESTS								
V AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN PECIFICATION ARTICLE 1.5 B.1.B.3 FOR SELF-CONSOLIDATING GROUT								
D f _{AAC} IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4 B PRIOR TO DN, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE								
				REFERENCE F	OR CRITERIA			
N AND INSPECTION	С	Р	APPLICABLE	TMS 402/ACI 530/ASCE 5	TMS 602/ACI 530.1/ASCE 6			
THE APPROVED SUBMITTALS		х	•		ART. 1.5			
ON BEGINS, THE FOLLOWING	SHA	LL B	E VERIFIED T	O ENSURE CC	MPLIANCE:			
PREPARED MORTAR.		х	•		ART. 2.1, 2.6A			
RTAR JOINTS.		х	•		ART.3.3B			
E-STRESSING TENDONS AND		х	•		ART. 2.4B, 2.4H			
CEMENT, CONNECTORS AND IS, AND ANCHORAGES.		Х	•		ART. 3.4, 3.6A			
QUE.		х			ART. 3.6B			
ED MORTAR FOR AAC	X ^(a)	X ^(b)	•		ART. 2.1C			
Y THE FOLLOWING ARE IN CO	OMPL	IAN	CE:					
l.		х	•		ART. 3.2D, 3.2F			
OF REINFORCEMENT AND RESTRESSING TENDONS AND		х	•	SEC. 1.16	ART. 2.4, 3.4			
RCEMENT, CONNECTORS NDONS AND ANCHORAGES.		х	•	SEC. 1.16	ART. 3.2E, 3.4, 3.6A			
PREPARED GROUT AND FOR BONDED TENDONS.		х	•		ART. 2.6B, 2.4G.1.B			
RTAR JOINTS.		х	•		ART. 3.3B			
CTION:								
STRUCTURAL ELEMENTS.		х	•		ART. 3.3F			
ON OF ANCHORS, INCLUDING HORAGE OF MASONRY TO , FRAMES OR OTHER		х	•	SEC. 1.16.4.3,1.17.1				
EMENT.	х			SEC.2.1.7.7.2, 3.3.3.4 (C), 8.3.3.4(B)				
UCTION AND PROTECTION OLD WEATHER 40 DEGREES F) OR HOT RE ABOVE 90 DEGREES F).		х	•		ART. 1.8C, 1.8D			
UREMENT OF	х		•		ART. 3.6B			
AND PRESTRESSING GROUT IS IN COMPLIANCE	х				ART. 3.5, 3.6C			
SONRY UNITS AND I-BED MORTAR JOINTS	X ^(b)	X ^(c)	•		ART. 3.3B.8			
I OF GROUT SPECIMENS, ID/OR PRISMS		х	•		ART. 1.4 B.2.A.3,1.4 B.2.B.3, 1.4 B.2.C.3, 1.4 B.3, 1.4 B.4			

OVERIFICATION AND INSPECTION OF SOIL						
ND INSPECTION	с	Ρ	APPLICABLE	REFERENCED STANDARD	CBC/IBC REF.	
SHALLOW FOUNDATIONS /E THE DESIRED BEARING		х	•			
EXTENDED TO PROPER D PROPER MATERIAL.		х	•		TABLE	
I AND TESTING OF NLS.		х	•			
ATERIALS, DENSITIES AND 3 PLACEMENT AND TED.	х		•		1700.0	
COMPACTED FILL, OBSERVE IAT SITE HAS BEEN		х	•			

CTED.			•							
F COMPACTED FILL, OBSERVE THAT SITE HAS BEEN		х	•							
					1	<u>ST</u> 	RUCTURAL RIFICATION SCHE	NOTES CO & INSPEC DULES	<u>)NTD,</u> ;TION	
						PRIVATE CONTRACT				
LOCAL BENCHMARK: CENTERLINE WELL MONUMENT WITH 3"					SHEET 7	COUNTY OF DEPARTMENT OF	SAN DIEGO PUBLIC WORKS	OF 10 SHEETS		
BRASS DISC STAMPED "RCE 18136" AT CENTER OF BULB IN SUNDALE ROAD APPROXIMATELY 31' NORTHWESTERLY FROM THE SOUTHWESTERLY CORNER OF SUBJECT PROPERTY AS SHOWN HEREON										
	BE		H MARK			CALIFORN		X: 218-1792		
DESCRIPTION : <u>CENTERLINE</u> AND DISC	<u>e wi</u> sta	<u>ELL</u> MPE	<u>monument</u> d "san die	WITH 1" PIPE EGO SURVEYOR	·".	RECOMMENDED	FOR APPROVAL:	APPROVED FOR WIL COUNTY ENGINE	LIAM P. MORGAN, ER	
LOCATION: CENTERLINE	OF	JAM	ACHA ROA	D 15' NORTHE	<u>rly o</u> f	SU		BY:	DATE:	
RECORD FROM:SAN DIEGO			TY BENCHB	OOK AND ROS	17454		KK: DANIEL AARON JUNKER	CHECKED BY:	TM 2272	
ELEVATION: <u>562.84</u> DATUM: <u>NAVD88</u>					SE6178	EXP 09-30-25	PDS2021-LDGRMJ-30	366		





CMU RETAINING WALL LOCATION PLAN

[PRIVATE CONTRACT				
OCAL BENCHMARK: CENTERLINE WELL MONUMENT WITH 3"	SHEETCOUNTY OF SAN DIEGOOF 109DEPARTMENT OF PUBLIC WORKSSHEETS				
BRASS DISC STAMPED "RCE 18136" AT CENTER OF BULB IN SUNDALE ROAD APPROXIMATELY 31' NORTHWESTERLY FROM THE SOUTHWESTERLY CORNER OF SUBJECT PROPERTY AS SHOWN HEREON. EL:647.07 (NAVD88)	GRADING PLANS FOR: SUNDALE ROAD				
BENCH MARK	CALIFORNIA COORDINATE INDEX: 218-1792				
DESCRIPTION : CENTERLINE WELL MONUMENT WITH 1" PIPE AND DISC STAMPED "SAN DIEGO SURVEYOR".	RECOMMENDED FOR APPROVAL: APPROVED FOR WILLIAM P. MORGAN, COUNTY ENGINEER				
LOCATION: CENTERLINE OF JAMACHA ROAD 15' NORTHERLY OF	SUBDIVISION ENGINEER BY: DATE:				
RECORD FROM: SAN DIEGO COUNTY BENCHBOOK AND ROS 17454	ENGINEER OF WORK: DANIEL AARON JUNKER				
ELEVATION: <u>562.84</u> DATUM: <u>NAVD88</u>	SE6178 EXP 09-30-25 PDS2021-LDGRMJ-30366				

C:\USERS\VON LOYOLA\JEG DROPBOX\JEG TEAM\01-PROJECTS\2021\2021-152-SUNDALE RD (WALSH)\02-DWGS\01-STRUC\00-LATEST\2021-152-6~10.DWG

CMU RETAINING WALL DETAIL @ PL LINE W/ H < = 8'-0"

12 NTS

9.1.9. Retaining Wall Backfill and Drainage Recommendations Retaining wall backfill should consist of free-draining granular soil with sand equivalent "SE" >20. Retaining walls should be provided with a drainage system adequate to prevent buildup of hydrostatic pressures. A heel drain should be placed at the heel of the wall (see Figure 9.1.8). and should consist of a 4-inch diameter perforated pipe (SDR35 or SCHD 40) surrounded by 1 cubic foot of crushed rock (3/4-inch) per lineal foot, wrapped in filter fabric (Mirafi[®] 140N or equivalent).

Proper drainage devices should be installed along the top of the wall backfill, which should be properly sloped to prevent surface water ponding adjacent to the wall. In addition to the wall drainage system, for building perimeter walls extending below the finished grade, the wall should be waterproofed and/or damp-proofed to effectively seal the wall from moisture infiltration through the wall section to the interior wall face.

The wall should be backfilled with granular soils placed in loose lifts no greater than 8inches thick, at or near optimum moisture content, and mechanically compacted to a

RETAINING WALL BACKFILL & DRAINA RECOMMENDATIONS PER GEOTECH (в

SEE DETAIL / 12 FOR RETAINING WALL INFORMATION - SLEEVE AROUND - PIPE PER CIVIL FINISHED GRADING EL= PER CIVIL PROPOSED -LEACH FIELD (DEPTH = 1'-0" VIF)

CMU RETAINING WALL @ LEACH FIELD

xp. 09-30-25

OF CAL

junker

engineering group

8285 La Mesa Blvd. Ste. C La Mesa, CA 91941 designgroup@junkereng.com www.junkereng.com

619.606.5058

PVC PIPE OR APPROVED EQUIVALENT
RATIONS DOWN AND SURROUNDED BY A
F 3/4 INCH ROCK OR APPROVED EQUIVALENT
N MIRAFI 140 FILTER FABRIC OR APPROVED

content, and meenameany compacted to a				
AGE NICAL REPORT	NING WALL CONSTR	RUCTION DETAILS		
	CONTRACT			
DCAL BENCHMARK: CENTERLINE WELL MONUMENT WITH 3"	SHEET COUNTY OF 10 DEPARTMENT OF	SAN DIEGO OF 10 PUBLIC WORKS SHEETS		
RASS DISC STAMPED "RCE 18136" AT CENTER OF BULB IN UNDALE ROAD APPROXIMATELY 31' NORTHWESTERLY FROM THE OUTHWESTERLY CORNER OF SUBJECT PROPERTY AS SHOWN EREON. EL:647.07 (NAVD88)	GRADING PLANS FOR: SUNDALE ROAD			
BENCH MARK	CALIFORNIA COORDINATE INDE	X: 218-1792		
ESCRIPTION : CENTERLINE WELL MONUMENT WITH 1" PIPE AND DISC STAMPED "SAN DIEGO SURVEYOR".	RECOMMENDED FOR APPROVAL:	APPROVED FOR WILLIAM P. MORGAN, COUNTY ENGINEER		
LOCATION: CENTERLINE OF JAMACHA ROAD 15' NORTHERLY OF	SUBDIVISION ENGINEER	BY: DATE:		
INTERSECTION WITH FALDA DEL CERRO. RECORD FROM:SAN DIEGO COUNTY BENCHBOOK AND ROS 17454	ENGINEER OF WORK: DANIEL AARON JUNKER	CHECKED BY: TM 2272		
ELEVATION: <u>562.84</u> DATUM: <u>NAVD88</u>	SE6178 EXP 09-30-25	PDS2021-LDGRMJ-30366		