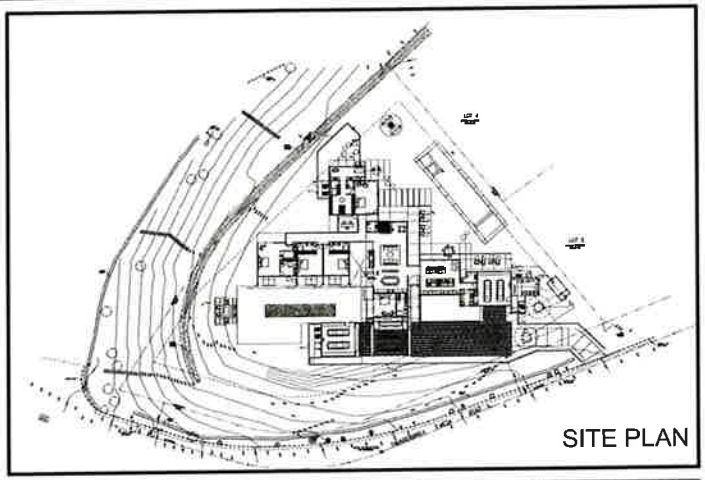
LANDSCAPE PLANS
FOR:

Lot # 6- Thunderbird Heights

70100 Thunderbird Mesa Drive
RANCHO MIRAGE, CALIFORNIA
APN: 690-220-020
LOT 6 OF TRACT NO. 19381
SEC. 11, T. 5 S., R 5 E., S.B.M

SHEET INDEX:

L-CS	COVER SHEET
L-1.0	SITE PLAN
L-1.1	PLANTING PLAN
L-2.1	PLANTING DETAILS
L-3.1	IRRIGATION PLAN
L-4.1	IRRIGATION DETAILS
L-4.2	IRRIGATION DETAILS
L-5.1	LIGHTING PLAN AND DETAILS



SITE PLAN

ARCHITECT:
o2 Architecture
1089 N. Palm Canyon Drive Ste. B
Palm Springs, CA 92253
(760) 778-8165

FOR ARCHITECTURAL DETAILS, PAVING AND SITE LAYOUT SEE ARCHITECT'S PLANS

CIVIL:
Amir Engineering
160 Luring Drive Ste. A
Palm Springs, CA 92262
(760) 318-7424

FOR PRECISE GRADING, WALL LAYOUTS, WALL DETAILS, PAVING AND SITE SPECIFICATIONS SEE CIVIL ENGINEERING PLANS

POOL:

FOR POOL PLANS, DETAILS, MATERIALS, AND SPECIFICATIONS POOL CONTRACTOR WILL PROVIDE SHOP DRAWINGS ONCE CONTRACT IS AWARDED



REGIONAL MAP - NTS



VICINITY MAP - NTS

Important Notice – Underground Service Alert

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property, that this requirement shall be made to apply continuously and not be limited to normal working hours, and contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on the project, excepting liability arising from the sole negligence of design professional.

NO PERMANENT STRUCTURES WITHIN CVWD AND/OR USBR EASEMENTS. CVWD WILL NOT BE RESPONSIBLE FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO DECORATIVE CONCRETE, LANDSCAPING, CURB, GUTTER, SIDEWALKS, PLANTING, GATES + RELATED IMPROVEMENTS INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS. IN ADDITION, NO TREES SHALL BE INSTALLED WITHIN 10' OF A CVWD AND / OR USBR PIPELINE. SURFACE IMPROVEMENTS MAY BE INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS ONLY UPON THE PRIOR CONSENT OF CVWD/ USBR DESCRIPTION IN THE EVENT OF SUCH CONSENT THERE IS A NON-INTERFERENCE REVIEW LETTER (NIRL) MAY APPLY PER SECTION 8.4 OF CVWD'S DEVELOPMENT DESIGN MANUAL. TREES, PLANTS, WALLS, SIDEWALKS AND PERMANENT STRUCTURES OF ANY KIND SHALL NOT BE PLANTED, INSTALLED OR BUILT IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD NO TREES TO BE LOCATED WITHIN 10 FEET OF CVWD IRRIGATION, SEWER AND WATER LINES

THESE PLANS HAVE BEEN REVIEWED BY THE COACHELLA VALLEY WATER DISTRICT IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE, SECTION 65591 ET SEQ. REQUIRING EFFICIENT LANDSCAPE AND IRRIGATION DESIGN IN COOPERATION WITH THE LOCAL GOVERNING AGENCY (CITY OR COUNTY). APPROVAL OF THIS DRAWING BY CVWD STAFF DOES NOT CONSTITUTE APPROVAL TO ENCROACH INTO DISTRICT AND USBR RIGHT-OF-WAY. TREES, PLANTS, WALLS AND PERMANENT STRUCTURES OF ANY KIND MAY NOT BE PLANTED OR INSTALLED IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD.

DATE — WATER MANAGEMENT DEPARTMENT
CVWD PLAN # — DEVELOPMENT SERVICES DEPARTMENT

T K D ASSOCIATES, INC.

LOT # 6
70100 THUNDERBIRD MESA DRIVE
RANCHO MIRAGE CA
THUNDERBIRD HEIGHTS
APN:690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270
Raymond Herrera
760-808-0049

COVER SHEET

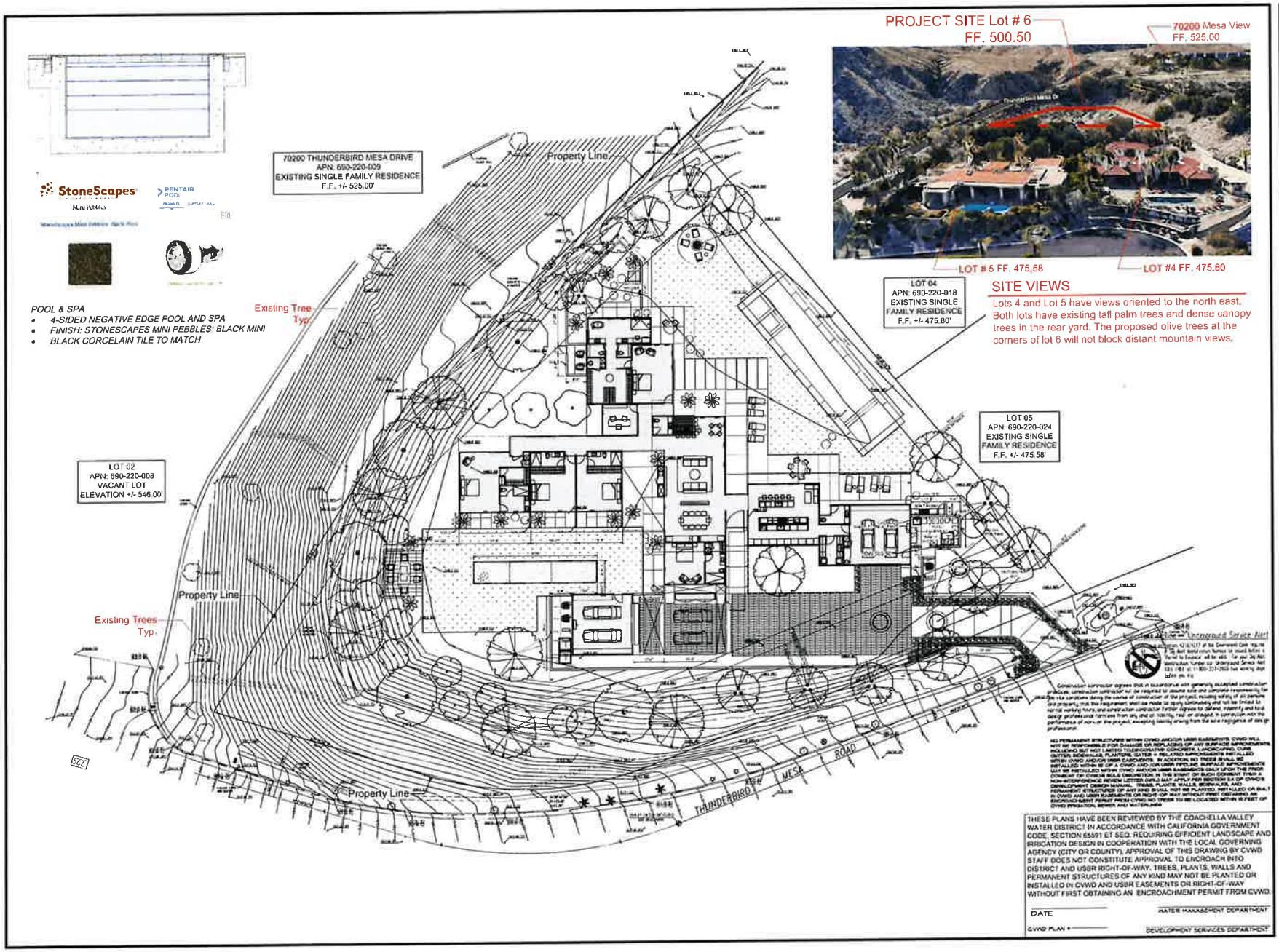
NORTH

SEE PLAN

REVISIONS			
NO	DATE	TYPE	BY
	09/30/26		
	11/04/26	HOA SUBMITTAL	TKD

DATE	08-31-26
ISSUED FOR	
EFFECTIVE DATE	
DESIGN BY	TKD
DRAWN BY	TD
FILENAME	

SHEET NO.
TOTAL SHEETS
L-CS



TK D ASSOCIATES, INC.

LOT # 6

70100 THUNDERBIRD MESA DRIVE

RANCHO MIRAGE CA

THUNDERBIRD HEIGHTS

APN: 690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270

Raymond Herrera
760-808-0049

SITE PLAN

NORTH

1/16" = 1'-0"

REVISIONS			
NO	DATE	TYPE	BY
	09/26/26		
1	11/05/26	HOA SUBMITTAL	TKD

DATE 08-31-26
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L-1.0

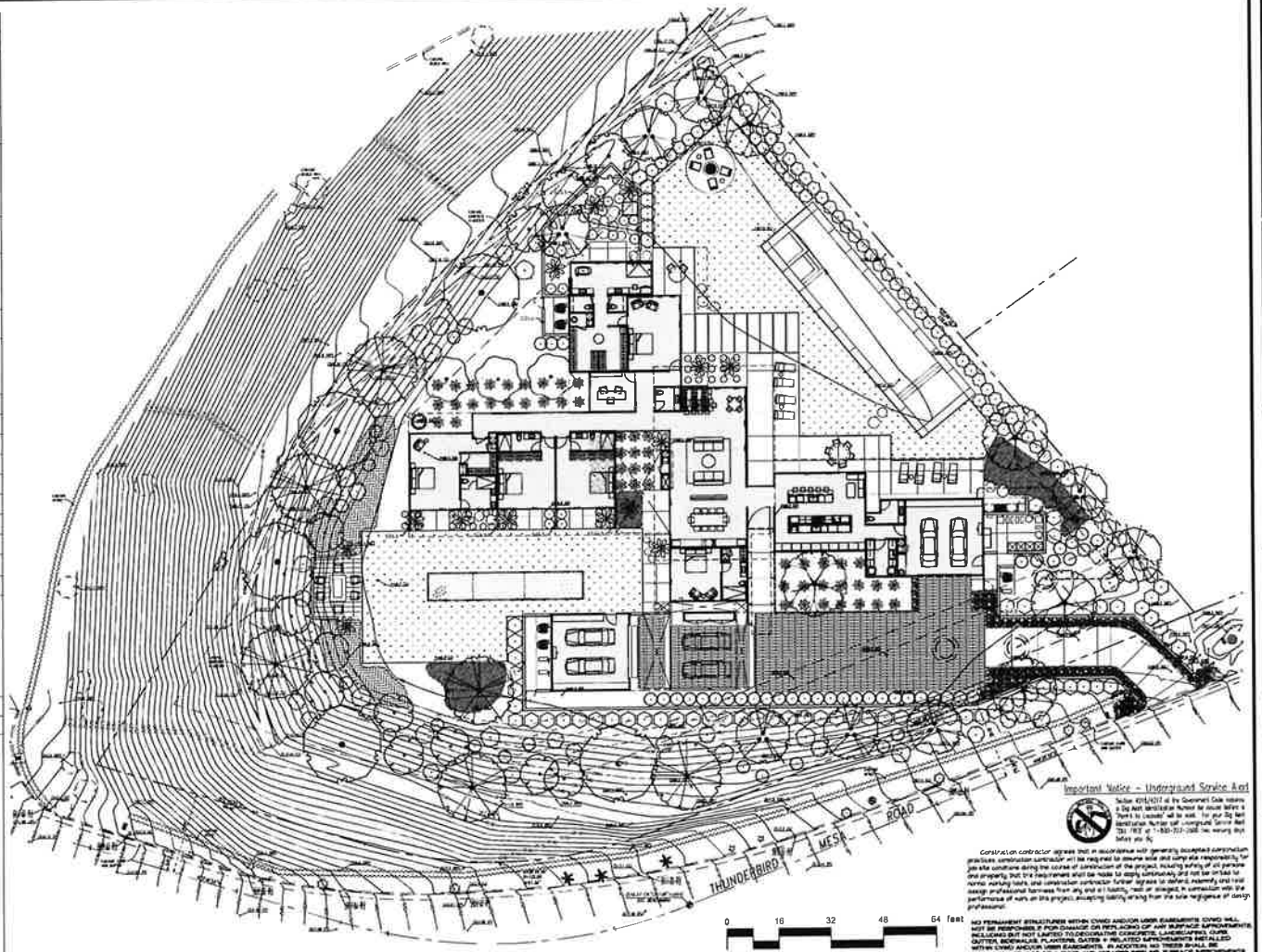
PLANT SCHEDULE

SYMBOL	BOTANICAL / COMMON NAME	CONT	WUCOLS	QTY
TREES				
	Acacia aneura Mulga	36" Box	LOW (2)	2
	Cercidium praecox Sonoran Palo Verde	36" Box Multi	LOW (2)	6
	Olea europaea 'Sevillo' Sevillo Olive	48" Box Multi Trunk	LOW (2)	0
	Olea europaea 'Sevillo' Sevillo Olive Multi Trunk	48" Box_Old Growth	LOW (2)	5
	Pithecellobium flexicaule Texas Ebony	36"box	LOW (2)	3
	Prosopis x 'Phoenix' TM Hybrid Mesquite	36" Box Multi	LOW (2)	5
PALM TREES				
	Chamaerops humilis Mediterranean Fan Palm	24"box	MOD (5)	14
	Washingtonia filifera California Fan Palm	6-14 B.T.H	MOD (5)	9
SHRUBS				
	Cassia macrocarpa 'Boxwood Beauty' Beauty Head Plum	5 gal	MOD (5)	37
	Cassia sturtocarpa 'Rena' Desert Rose Plum	5 gal	MOD (5)	54
	Encelia farinosa Brittlebush	5 gal**	V. LOW (1)	24
	Eremophila maculata 'Valentine' Spotted Emu Bush	5 gal*	LOW (2)	15
	Eremophila x 'Summertime Blue' Emu Bush	5 gal*	LOW (2)	12
	Lantana montevidensis Trailing Lantana	5 gal	MOD (5)	18
	Leucophyllum laevigatum Chihuahuan Sage	5 gal*	LOW (2)	18
	Olea europaea 'Montra' Little Ollie® Olive	5 gal*	LOW (2)	46
	Tecoma x 'Sunrise' Sunrise Yellow Bells	5 gal	MOD (5)	14
CACTI				
	Agave americana Century Plant	24"box	LOW (2)	2
	Agave parrasana Century Plant	5 gal*	LOW (2)	44
	Agave x 'Blue Glow' Blue Glow Agave	15 gal.	LOW (2)	51
	Yucca rostrata Beaked Yucca	5 Ht.	LOW (2)	2
SYMBOL	BOTANICAL / COMMON NAME	CONT	WUCOLS	QTY
GROUND COVERS				
	Baileya multiradiata Desert Marigold	1 gal*	LOW (2)	217
	Carissa macrocarpa 'Green Carpet' Green Carpet Natal Plum	5 gal*	LOW (2)	40

INERT MATERIALS SCHEDULE

SYMBOL	CODE	DESCRIPTION	QTY
SURFACE MATERIALS			
	SM - 101	2"-3" BLACK BEACH PEBBLES, LAY FLAT	533 sf
	SM - 102	3/8" PEA GRAVEL CHAMOIS BEIGE	1,286 sf
	SM - 103	ARTIFICIAL TURF	5,315 sf

ALL OTHER PLANTED AREAS TO RECEIVE 3" LAYER OF DESERT GOLD DECOMPOSED GRANITE AS A PLANTING MULCH. THIS MULCH SHOULD BE FEATHERED INTO THE UNPLANTED SLOPES WHICH SHALL REMAIN NATIVE SOIL AND BE UNDISTURBED



0 16 32 48 64 feet

1/16" = 1'-0"

Important Notice – Underground Service Alert

Construction contractor agrees that in accordance with generally accepted construction practices construction contractor will be responsible for determining and controlling the means, methods, techniques, sequences and procedures of construction, and for coordinating all portions of the work under the contract, unless the contract documents give other specific instructions concerning these matters. If the contract documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, then the construction contractor shall be responsible for the safety precautions and programs incident thereto, for its own actions and for those of its subcontractors and agents. Construction contractor agrees that the owner and architect shall not be responsible for the construction contractor's failure to perform the construction work in accordance with the contract documents. Construction contractor agrees that the owner and architect shall not be responsible for the acts or omissions of construction contractor, any subcontractor, any of their agents or employees, or any other persons performing any of the construction work. Construction contractor agrees to indemnify and hold harmless the owner and architect from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of owner or architect.

NO PERMANENT STRUCTURES WITHIN CVWD AND/OR USBR EASEMENTS. CVWD WILL NOT BE RESPONSIBLE FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO DECORATIVE CONCRETE, LANDSCAPING, CURB, GUTTER, SIDEWALKS, PLANTERS, GATES + RELATED IMPROVEMENTS INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS. IN ADDITION, NO TREES SHALL BE INSTALLED WITHIN 10' OF A CVWD AND /OR USBR FIELD/LINE. BUBBLER IMPROVEMENTS MAY BE INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS ONLY UPON THE PRIOR CONSENT OF CVWD& BOLD DISCRETION. IN THE EVENT OF SUCH CONSENT THERE A HIGH INTERFERENCE REVIEW LETTER (HIRL) MAY APPLY PER SECTION 8 OF CVWD'S DEVELOPMENT DESIGN MANUAL. TREES, PLANTS, WALLS, BERMS AND PERMANENT STRUCTURES OF ANY KIND SHALL NOT BE PLANTED, INSTALLED OR BUILT IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD. NO TREES TO BE LOCATED WITHIN 10 FEET OF CVWD FIRE HYDRANTS, BOXES AND WATERLINES.

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DATE _____ WATER MANAGEMENT DEPARTMENT

CVWD PLAN # _____ DEVELOPMENT SERVICES DEPARTMENT

T K D ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
14123 HON BRIDGE ROAD
COLUMBIA, TENNESSEE
PH: (760) 776-1751

LOT # 6

70100 THUNDERBIRD MESA DRIVE

RANCHO MIRAGE CA

THUNDERBIRD HEIGHTS

APN:690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270

Raymond Herrera
760-808-0049

PLANTING PLAN

SEE PLAN

NORTH

REVISIONS			
NO	DATE	TYPE	BY
	09/26/26		
	11/04/26	HOA SUBMITTAL	TKD

DATE	08-31-26
ISSUED FOR	
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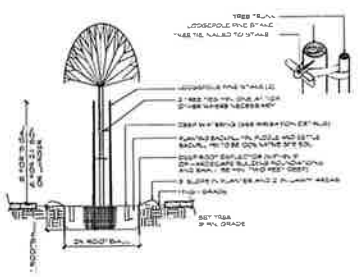
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TOTAL SHEETS

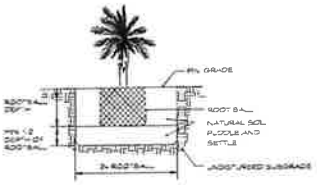
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PLANT SCHEDULE

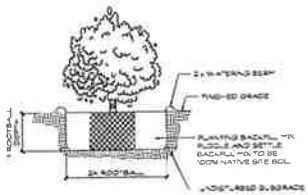
SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	QTY
TREES				
	ACA LIM	Acacia anaura Mulga	36" Box	3
	CP7	Cercidium praecox Sonoran Palo Verde	36" Box Multi	4
	OLE SWA	Olea europaea 'Swan Hill' Swan Hill Olive	48" Box Multi-trunk	8
	OX	Olea europaea 'Sevillano' Sevillano Olive Multi-Trunk	48" Box_Old Growth	5
	PIT FLE	Pittosporum tenuifolium Tawa Variety	36"box	3
	PHO Phm	Prosopis x 'Phoenix' TM Hybrid Mesquite	36" Box Multi	5
PALM TREES				
	CHA HU2	Chamaerops humilis Mediterranean Fan Palm	24"box	14
	WAS FIL	Washingtonia filifera California Fan Palm	8-14' B.T.H	9
	CODE	BOTANICAL / COMMON NAME	CONT	QTY
SHRUBS				
	CB	Carissa macrocarpa 'Boxwood Beauty' Beauty Natal Plum	5 gal	37
	CAR NAN	Carissa macrocarpa 'Nana' Dwarf Natal Plum	5 gal	54
	ENC FAR	Encelia farinosa Brittlebush	5 gal	24
	EV	Eremophila maculata 'Valentine' Spotted Emu Bush	5 gal	13
	EHL SUM	Eremophila x 'Summertime Blue' Emu Bush	5 gal	12
	LAN PUN	Lantana montevidensis Trailing Lantana	5 gal	11
	LEU LAE	Leucophyllum laevigatum Chihuahuan Sage	5 gal	28
	OLE LIT	Olea europaea 'Montra' Little Ollie® Olive	5 gal	46
	TEC SUN	Tecoma x 'Sunrise' Sunrise Yellow Bells	5 gal	14
CACTI				
	AA	Agave americana Century Plant	24"box	2
	AGA GEM	Agave gemmiflora Century Plant	5 gal	44
	AGA BLA	Agave x 'Blue Glow' Blue Glow Agave	15 gal.	31
	YH	Yucca rostrata Beaked Yucca	5 ft.	2
SYMBOL		BOTANICAL / COMMON NAME	CONT	QTY
GROUND COVERS				
		Baileya multiradiata Desert Marigold	1 gal*	217
		Carissa macrocarpa 'Green Carpet' Green Carpet Natal Plum	5 gal*	49



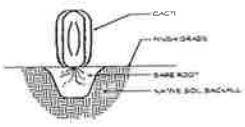
A STANDARD TREE PLANTING
NTS TKD-PL-01



B ORNAMENTAL PALM PLANTING
NTS TKD-PL-02

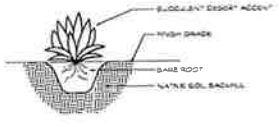


C SHRUB PLANTING
NTS TKD-PL-03



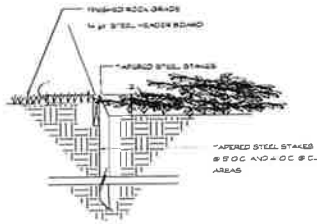
NOTE
- NATIVE SOIL TO BE USED FOR BACKFILL OF ALL SHRUBS AND DESERT ACCENTS TAMP SOIL IN PLACE
- NO FERTILIZER TO BE USED.
- HOLE TO BE AS DEEP AND AS WIDE AS ROOT MASS.
- NO BASINS
- DRIP EMITTERS TO BE AT LEAST 12" AWAY FROM CENTER OF PLANT

D BARE ROOT CACTUS PLANTING
NTS TKD-PL-04



NOTE
- NATIVE SOIL TO BE USED FOR BACKFILL OF ALL SHRUBS AND DESERT ACCENTS TAMP SOIL IN PLACE
- NO FERTILIZER TO BE USED.
- HOLE TO BE AS DEEP AND AS WIDE AS ROOT MASS.
- NO BASINS
- DRIP EMITTERS TO BE AT LEAST 12" AWAY FROM CENTER OF PLANT

E SUCCULENT / DESERT ACCENT PLANTING
NTS TKD-PL-05



F STEEL EDGING
3/16" = 1'-0" TKD-PL-06

1. THIS PLAN IS DIAGRAMMATIC. THE CONTRACTOR SHALL VERIFY ALL QUANTITIES AND AREA CALCULATIONS.
2. THE CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL QUANTITIES AND PROVIDE THE OWNER OR OWNER'S REPRESENTATIVE WITH INVOICES PRIOR TO INSTALLATION. PLANT MATERIAL QUANTITIES ON THE PLAN ARE LISTED FOR THE CONVENIENCE OF THE CONTRACTOR. ACTUAL NUMBER OF SYMBOLS SHALL HAVE PRIORITY OVER QUANTITY ENUMERATED.
3. THE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES DURING CONSTRUCTION AND THROUGH COMPLETION OF MAINTENANCE WORK.
4. ALL PLANT MATERIAL SHALL BE APPROVED AT THE SITE BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. ALL PLANT MATERIAL WHICH IS REJECTED SHALL BE RETURNED AT NO COST TO THE OWNER.
5. GROUNDCOVER PLANTING SHALL BE CONTINUOUS UNDER AND AROUND ALL SHRUB AREAS.
6. THE CONTRACTOR IS TO PROVIDE 3" DEEP MEDIUM GRIND AGED BROWN WOOD MULCH IN ALL TREE, SHRUB, AND ALL OTHER AREAS NOT RECEIVING GROUND COVER PLANTINGS OR TURF AREAS.
7. CONTRACTOR IS TO PROVIDE ROOT BARRIERS FOR ALL TREES PLANTED WITHIN 5'-0" OF ANY HARDSCAPE OR ARCHITECTURAL STRUCTURE. ROOT BARRIER TO BE 24" MIN DEPTH AND RUN CONTINUOUS ALONG CURB, SIDEWALK, WALL, OR ARCHITECTURAL FEATURE AND EXTEND A MINIMUM 5' PAST THE CENTER OF THE TREE IN BOTH DIRECTIONS
8. AFTER ALL SOIL HAS BEEN IMPORTED TO THE SITE AND ROUGH GRADING COMPLETE, BUT BEFORE SOIL PREPARATION, THE CONTRACTOR SHALL FURNISH A COPY OF SOIL TESTS FOR AGRICULTURAL SUITABILITY AND FERTILITY (PREPARED BY A CALIFORNIA ASSOCIATION OF AGRICULTURAL LABORATORIES MEMBER) TO THE OWNER AND LANDSCAPE ARCHITECT.
9. CONTRACTOR SHALL ROTOTILL EXISTING SITE SOIL TO A DEPTH OF 6" AND AMEND SOIL PER SECTION 3.02 "PREPARATION" OF THE PLANTING SPECIFICATIONS. AMENDMENTS SHALL BE WORKED INTO SOIL BY THE CONTRACTOR BY ROTOTILLING, OR OTHER METHOD APPROVED BY THE ENGINEER.
10. CONTRACTOR WILL BE RESPONSIBLE TO REVIEW THE PLANS ON FILE AT THE CITY FOR DRAINAGE LOCATION, DRAINAGE SWALES, AND CONTOUR GRADE. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGES DUE TO MODIFICATIONS OF THE FIELD CONDITIONS AND ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE OWNER OR OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOT ALLOW OR CAUSE ANY DRAINAGE COURSE OR SWALE TO BE BLOCKED FROM CONVEYANCE OF WATER FROM SITE. POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES SHALL BE MAINTAINED. CONTRACTOR SHALL GRADE ANY AND ALL DIRT SWALES AS DIRECTED BY THE OWNER TO ALLOW FOR SITE DRAINAGE.
11. DUE TO THE LIMITED SIZE OF SOME OF THE PLANTING AREAS ON THIS PROJECT, ADDITIONAL MAINTENANCE AND PRUNING MAY BE REQUIRED. ALL PRUNING OF TREES SHALL BE DONE UNDER THE SUPERVISION OF A CERTIFIED ARBORIST TO INSURE PROPER TREE GROWTH AND THAT TREES GROW TO CONFORM TO THE CONSTRAINTS OF THE SITE.
12. A 21-DAY WEED ABATEMENT PERIOD WILL BE REQUIRED DURING 90 DAY MAINTENANCE PERIOD PRIOR TO TURN OVER TO OWNER THE CONTRACTOR SHALL APPLY A PRE-EMERGENT TO THE SITE.
13. GUARANTEE SHRUBS 6 MONTHS FROM DATE OF FINAL ACCEPTANCE. TREES ONE YEAR FROM DATE OF ACCEPTANCE.

J PLANTING NOTES
TKD-PL-10

Important Notice - Underground Service Alert

Section 4216.2(d)(1) of the Government Code requires a 2 day (not inclusive) notice to locate before a trench is excavated. Call 811 or 1-800-227-2600 (or another toll free telephone number set by the California Service Alert (DIG) for the location of underground facilities before you dig.

Contractor (or contractor's agents) that, in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours; and construction contractor further agrees to defend, indemnify, and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

NO PERMANENT STRUCTURES WITHIN CVWD AND/OR USBR EASEMENTS. CVWD WILL NOT BE RESPONSIBLE FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS, NOT BE RESPONSIBLE FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO DECORATIVE CONCRETE, LANDSCAPING, CURB, GUTTER, BERMS, LIKE PLANTING, WATER & RELATED IMPROVEMENTS INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS. IN ADDITION, NO TREES SHALL BE INSTALLED WITHIN 5' OF A CVWD AND/OR USBR PIPELINE. SURFACE IMPROVEMENTS INSTALLED WITHIN 5' OF A CVWD AND/OR USBR EASEMENTS ONLY UNDER THAT PRIOR WRITTEN CONSENT OF CVWD'S RULE DIRECTION. IN THE EVENT OF SUCH CONSENT THEN A NON-INTERFERENCE REVIEW LETTER SHALL HAVE APPLY PER SECTION 5.4 OF CVWD'S DEVELOPMENT DESIGN MANUAL. TREES, PLANTS, WALLS, SIDEWALKS, AND PERMANENT STRUCTURES OF ANY KIND SHALL NOT BE PLANTED, INSTALLED OR BUILT IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD. NO TREES TO BE LOCATED WITHIN 10 FEET OF CVWD IRRIGATION, SEWER AND WATERLINES.

THESE PLANS HAVE BEEN REVIEWED BY THE COACHELLA VALLEY WATER DISTRICT IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE, SECTION 65591 ET SEQ. REQUIRING EFFICIENT LANDSCAPE AND IRRIGATION DESIGN IN COOPERATION WITH THE LOCAL GOVERNING AGENCY (CITY OR COUNTY). APPROVAL OF THIS DRAWING BY CVWD STAFF DOES NOT CONSTITUTE APPROVAL TO ENCROACH INTO DISTRICT AND USBR RIGHT-OF-WAY. TREES, PLANTS, WALLS AND PERMANENT STRUCTURES OF ANY KIND MAY NOT BE PLANTED OR INSTALLED IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD.

DATE _____ WATER MANAGEMENT DEPARTMENT

CVWD PLAN # _____ DEVELOPMENT SERVICES DEPARTMENT

T.K.D. ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
WATER CONSERVATION
1412 IRON BRIDGE ROAD
LOGANVILLE, TENNESSEE
PH: (770) 776-1751

LOT # 6
70100 THUNDERBIRD MESA DRIVE
RANCHO MIRAGE CA
THUNDERBIRD HEIGHTS
APN: 690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270

Raymond Herrera
760-808-0049

PLANTING DETAILS

NORTH

SCALE: SEE PLAN

REVISIONS			
NO	DATE	TYPE	BY
	09/28/26		
	11/04/26	HOA SUBMITTAL	TKD

DATE 08-31-26
ISSUED FOR
EFFECTIVE DATE
DESIGN BY: TKD
DRAWN BY TD
FILENAME

SHEET NO:
TOTAL SHEETS
L-2.1

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
1401 1402 1404	Rain Bird 1804-1400 Fixed 1401 Fixed Bubbler 4.0in, 90deg, install w/ PA-80 adapter	82	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird LFV-075 3/4in Low Flow DV Valve	7
	Rain Bird MDCFCAP Drip line Flush Valve cap in Drip areas on 1/2 mg on plan	7
	Rain Bird ARV050 50 PSI Air Relief Valve made of durable, weather resistant materials, with a 6in. drip valve box (12.8 3/4in center box). Use with installation below soil. The valve will allow air to escape the system, thus preventing water hammer or blockage.	6
	Area of Assume Drip Emitters Rain Bird XB-PC-1032 Single Outlet, Pressure Compensating Drip Emitters. Flow rates of 0.2GPH, 0.5 GPH Black, 1GPH, 1.0 GPH Black, and 2GPH 2.0 GPH Red. Comes with a 10-32 threaded stem + barb outlet. On 6911 Series.	17,503 sf
	0.5 emitters (2 assigned to each 5 gal plant)	23
	1.0 emitters (1 assigned to each 1 gal plant)	297
	1.0 emitters (2 assigned to each 15 gal plant)	102
	1.0 emitters (1 assigned to each 5 gal plant)	244
	2.0 emitters (2 assigned to each 24"box plant)	4
	2.0 emitters (1 assigned to each 5 gal plant)	116
	2.0 emitters (2 assigned to each 5 gal plant)	4

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird DV Electric Remote Control Valve. Standard Configuration. Plastic residential in 3/4in or 1in.	6
	PVC Shut Off Valve Sized to match mainline	2
	Rain Bird PESB-PRS-D 1" 1in., 1-1/2 in., 2in., 3in. Plastic Industrial Master Valves. Low Flow Operating Capability. Globe Configuration. With Pressure Regulating Module and Slurpeon Technology for Reliable Performance in Dirty Water Irrigation Applications.	1
	Febco 825Y 3/4" Note - Reduced Pressure Backflow Prevention to be installed	1
	Rain Bird ESP-MC3 with (1) ESP-SM3 (2) ESP-SM4 10 Station, Hybrid Modular Outdoor Controller, For Residential or Light Commercial Use. Use Wi-Fi Module and Flow Sensor Ready	1
	Rain Bird RSD-BEx Rain Sensor, with metal locking bracket, extension wire.	1
	Rain Bird FC-100 1in. FC100 Flow Sensors w/ NPT Union Fittings, Operating Range: 11.4 LPM-94.5 LPM. Size for Flow Not According to Pipe Size, No Straight Pipe Requirements.	1
M	Water Meter 1" EXISTING WATER METER	1
	Irrigation Lateral Line PVC Schedule 40	3,722 lf
	Irrigation Mainline PVC Schedule 40	748.4 lf
	Pipe Sleeve PVC Schedule 80	75.8 lf

Valve Detail
Valve Number
Valve Flow
Valve Size

IRRIGATION NOTES

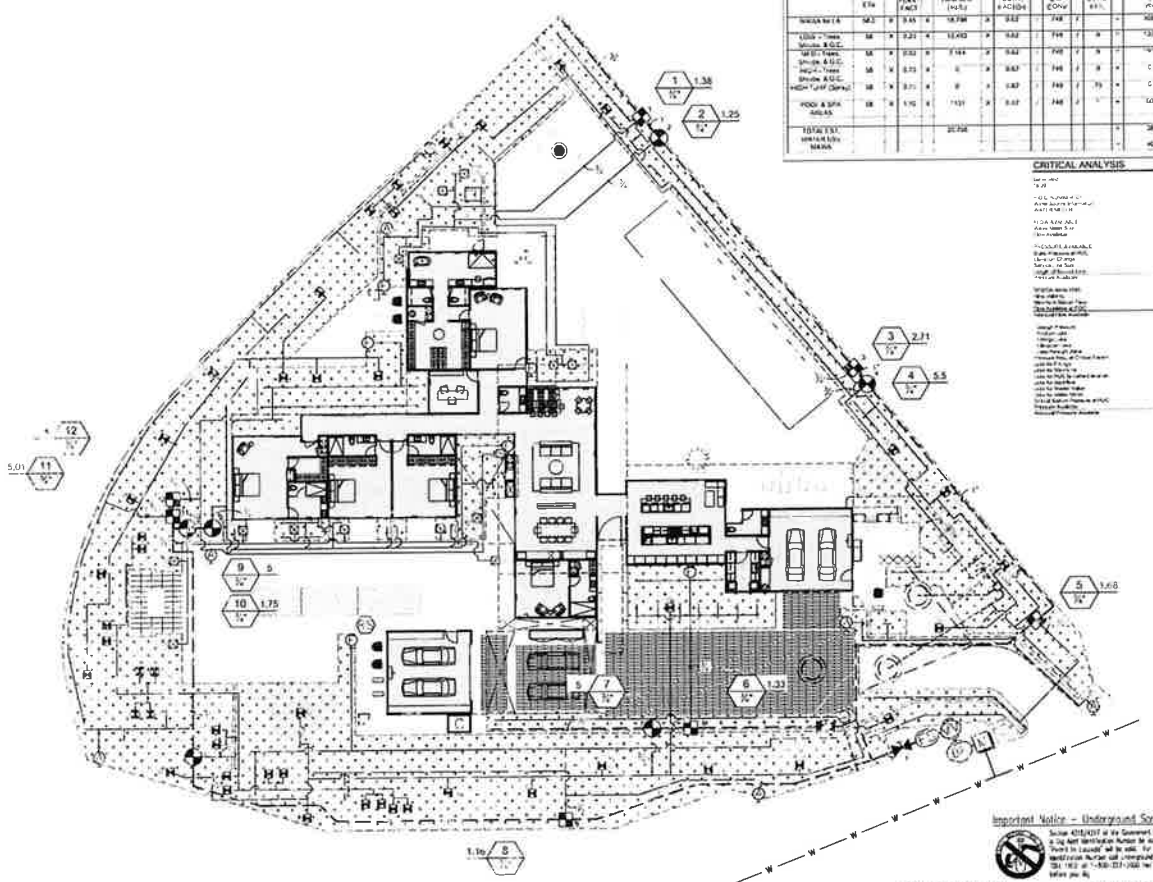
1. THE DESIGN IS DIAGRAMMATIC ONLY. ALL PIPING, VALVES, BACKFLOW PREVENTOR, WIRING, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTER AREAS WHEREVER POSSIBLE.
2. DO NOT WILFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THESE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIMENSIONS IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED IN WAITING, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
3. ALL IRRIGATION EQUIPMENT SHALL BE OF FIRST QUALITY AND OF MANUFACTURER AS SPECIFIED ON THE DRAWINGS. THESE MATERIALS SHALL BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS.
4. ALL LATERAL, MAINLINE PIPING AND CONTROL WIRES UNDER PAVING SHALL BE INSTALLED IN SEPARATE SLEEVES. MAINLINE SLEEVE SIZE SHALL BE A MINIMUM OF TWICE (2X) THE OUTSIDE DIAMETER OF THE PIPE TO BE SLEEVED. CONTROL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES UNDER PAVING REFER TO PLAN.
5. ALL SLEEVES UNDER ROADWAYS SHALL BE SCHEDULE 80 (NEW). EXISTING SLEEVES SHALL REMAIN IN PLACE. IF EXTENSIONS ARE REQUIRED THE PIPE SHALL BE SCH. 80 LATERAL LINE SLEEVE UNDER PAVING SHALL BE SCHEDULE 40. ALL SLEEVES SHALL BE PVC, OR AS NOTED ON PLANS.
6. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE PLANS AND DETAILS. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED. BUT SUBSTITUTIONS OF LARGER SIZES MAYBE APPROVED. ALL DAMAGED AND REJECTED PIPE SHALL BE REMOVED FROM THE SITE AT THE TIME OF SAID REJECTION.
7. THE IRRIGATION SYSTEM SHALL BE FULLY AUTOMATIC. CONTROL VALVES SHALL BE INSTALLED PER DETAILS.

WATER USE CALCULATIONS - T.B. HEIGHTS #6

ZONE 2. 20,798 SQ. FT. LANDSCAPE

	ETo	PLANT FACT	HA or SF or (HUE)	CONV. & ACRES	EO ZONE	IRRIG EFF.	MAWA GPD per YEAR
Medium Turf A	MA	x 0.65 x	10,798	x 0.02	748	/ 0.75 =	10,367
Low Trees Shrubs & G.C. Medium Trees	MA	x 0.23 x	10,410	x 0.02	748	/ 0.75 =	13,339
Tall Ex Trees Shrubs & G.C. Medium Trees	MA	x 0.52 x	7,164	x 0.02	748	/ 0.75 =	9,179
Shrubs & G.C. Medium Trees	MA	x 0.73 x	0	x 0.02	748	/ 0.75 =	0.0
Shrubs & G.C. Medium Turf (Spray)	MA	x 0.71 x	0	x 0.02	748	/ 0.75 =	0.0
POOL & SPA AREAS	MA	x 1.10 x	1431	x 0.02	748	/ 1 =	22,915
TOTALS (Sf, Acres & Units) MAWA			20,798			=	355
						=	407

CRITICAL ANALYSIS



Important Notice – Underground Service Alert

0 16 32 48 64 feet
1/16" = 1'-0"

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	DESIGN PSI	VELOCITY	FRICTION LOSS	VALVE LOSS	PSI	PSI LESS VALVE LOSS	MAINLINE LOSSES	PSI @ POC	RESIDUAL PSI
1	Rain Bird LFV-075	3/4"	Area for Drip Emitters	1.38	30	5 Ft sec	0.15	3.24	33.4	30.2	13.9	47.3	10.7
2	Rain Bird DV	3/4"	Bubbler	1.25	30	5 Ft sec	0.15	3.20	33.4	30.2	13.6	47.1	11.0
3	Rain Bird LFV-075	3/4"	Area for Drip Emitters	2.71	30	5 Ft sec	0.16	3.33	33.5	30.2	13.8	47.3	10.7
4	Rain Bird DV	3/4"	Bubbler	5.5	30	5 Ft sec	4.28	2.13	36.4	32.1	15.8	50.2	5.77
5	Rain Bird LFV-075	3/4"	Area for Drip Emitters	1.68	30	5 Ft sec	0.11	3.27	33.4	30.1	12.7	46.1	11.9
6	Rain Bird LFV-075	3/4"	Area for Drip Emitters	1.33	30	5 Ft sec	0.03	3.23	33.3	30.0	12.6	43.9	12.1
7	Rain Bird DV	3/4"	Bubbler	5	30	5 Ft sec	0.89	4.2	35.1	30.9	14.2	49.5	8.47
8	Rain Bird LFV-075	3/4"	Area for Drip Emitters	1.16	30	5 Ft sec	0.05	3.22	33.3	30.0	12.5	45.8	12.2
9	Rain Bird DV	3/4"	Bubbler	5	30	5 Ft sec	1.48	4.2	35.7	31.5	16.2	51.8	6.16
10	Rain Bird DV	3/4"	Bubbler	1.75	30	5 Ft sec	0.09	3.49	33.6	30.1	12.9	46.5	11.5
11	Rain Bird LFV-075	3/4"	Area for Drip Emitters	0.3	30	5 Ft sec	0.02	3.07	33.1	30.0	12.2	43.3	12.7
12	Rain Bird LFV-075	3/4"	Area for Drip Emitters	2.03	30	5 Ft sec	0.11	3.3	33.4	30.1	13.2	46.7	11.4
Unknown	Rain Bird DV	3/4"	Bubbler	9	30	5 Ft sec	1.25	4.84	36.1	31.2	16.3	52.3	5.56

THESE PLANS HAVE BEEN REVIEWED BY THE COACHELLA VALLEY WATER DISTRICT IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE, SECTION 65591 ET SEQ. REQUIRING EFFICIENT LANDSCAPE AND IRRIGATION DESIGN IN COOPERATION WITH THE LOCAL GOVERNING AGENCY (CITY OR COUNTY). APPROVAL OF THIS DRAWING BY CVWD STAFF DOES NOT CONSTITUTE APPROVAL TO ENCROACH INTO DISTRICT AND USBR RIGHT-OF-WAY. TREES, PLANTS, WALLS AND PERMANENT STRUCTURES OF ANY KIND MAY NOT BE PLANTED OR INSTALLED IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD.

DATE — WATER MANAGEMENT DEPARTMENT

CVWD PLAN # — DEVELOPMENT SERVICES DEPARTMENT

NO PERMANENT STRUCTURES WITHIN CVWD AND/OR USBR EASEMENTS. CVWD WILL NOT BE RESPONSIBLE FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO DECORATIVE CONCRETE, LANDSCAPING, CURB, GUTTER, SIDEWALK, PLANTERS, GATES + RELATED IMPROVEMENTS INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS. IN ADDITION, NO TREES SHALL BE INSTALLED WITHIN 10' OF A CVWD AND USBR PIPELINE. SURFACE IMPROVEMENTS MAY BE INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS ONLY UPON THE PRIOR CONSENT OF CVWD + BUILT ENCROACHING IN THE EVENT OF SUCH CONSENT, THEN A NON-INTERFERENCE REVIEW LETTER SHALL MAY APPLY PER SECTION 8A OF CVWD'S DEVELOPMENT DESIGN MANUAL. TREES, PLANTS, WALLS, SIDEWALKS, AND PERMANENT STRUCTURES OF ANY KIND SHALL NOT BE PLANTED, INSTALLED OR BUILT IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD. NO TREES TO BE LOCATED WITHIN 5' FEET OF CVWD IRRIGATION, SEWER AND WATERLINES.

T.K.D ASSOCIATES, INC.
LAND PLANNING | LANDSCAPE ARCHITECTURE
WATER CONSERVATION
73733 DINAH SHORE ROAD
COLUMBIA, TENNESSEE 38401
PHONE (760) 776-1751 tkdassociates.net

LOT # 6

70100 THUNDERBIRD MESA DRIVE
RANCHO MIRAGE CA
THUNDERBIRD HEIGHTS

APN: 690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270

Raymond Herrera
760-808-0049

IRRIGATION PLAN

NORTH

SCALE: SEE PLAN

REVISIONS			
NO	DATE	TYPE	BY
	09/28/26		
	11/04/26	HOA SUBMITTAL	TKD

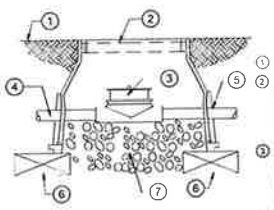
DATE: 09-21-26
ISSUED FOR:
EFFECTIVE DATE:
DESIGN BY: TKD
DRAWN BY: TD
FILENAME:

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TOTAL SHEETS
L-3.1

PLANT WUCOLS & EMITTER SCHEDULE

PLANT SCHEDULE

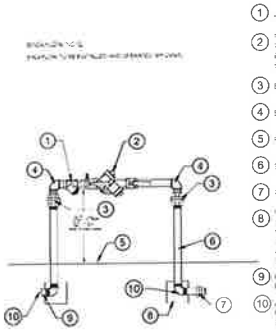
SYMBOL	BOTANICAL / COMMON NAME	WUCOLS	IRRIG.	QTY
TREES				
	Acacia smallii Sweet Acacia	LOW (.2)	(1) Bubbler - Per Irrig. Plan	3
	Cercidium x 'Desert Museum' Desert Museum Palo Verde	LOW (.2)	(1) Bubbler - Per Irrig. Plan	6
	Olea europaea 'Swan Hill' Fruitless Olive	LOW (.2)	(1) Bubbler - Per Irrig. Plan	8
	Olea europaea 'Swan Hill' Fruitless Olive Multi-Trunk	LOW (.2)	(1) Bubbler - Per Irrig. Plan	3
	Prosopis x 'Phoenix' TM Hybrid Mesquite	LOW (.2)	(1) Bubbler - Per Irrig. Plan	5
	Rhaphiolepis indica Indian Hawthorn	LOW (.2)	(1) Bubbler - Per Irrig. Plan	3
	Vitex agnus-castus Chaste Tree	LOW (.2)	(1) Bubbler - Per Irrig. Plan	3
PALM TREES				
	Chamaerops humilis Mediterranean Fan Palm	MOD (.5)	(1) Bubbler - Per Irrig. Plan	14
	Washingtonia filifera California Fan Palm	MOD (.5)	(2) Bubblers - Per Irrig. Plan	9
SHRUBS				
	Carissa macrocarpa 'Boxwood Beauty' Beauty Natal Plum	MOD (.5)	(1) 2 gph emitter	37
	Carissa macrocarpa 'Nana' Dwarf Natal Plum	MOD (.5)	(1) 2 gph emitter	54
	Ericameria laricifolia Turpentine Bush	V. LOW (.1)	(1) .5 gph emitter	24
	Eremophila maculata 'Valentine' Spotted Emu-bush	LOW (.2)	(1) 1 gph emitter	10
	Eremophila x 'Summertime Blue' Emu Bush	LOW (.2)	(1) 1 gph emitter	12
	Lantana montevidensis Trailing Lantana	MOD (.5)	(1) 2 gph emitter	11
	Leucophyllum langmaniae Chihuahuan Sage	LOW (.2)	(1) 1 gph emitter	78
	Olea europaea 'Montra' Little Ollies Olive	LOW (.2)	(1) 1 gph emitter	46
	Tecoma x 'Sunrise' Sunrise Yellow Bells	MOD (.5)	(1) 2 gph emitter	14
CACTI				
	Agave americana Century Plant	LOW (.2)	(2) 2 gph emitter	2
	Agave gentryi/fara Century Plant	LOW (.2)	(1) 1 gph emitter	44
	Agave x 'Blue Glow' Blue Glow Agave	LOW (.2)	(2) 1 gph emitter	34
	Yucca rostrata Beaked Yucca	LOW (.2)	(2) 2 gph emitter	2
SYMBOL	BOTANICAL / COMMON NAME	WUCOLS	IRRIG.	QTY
GROUND COVERS				
	Baileya multiradiata Desert Marigold	LOW (.2)	(1) 1 gph emitter	217
	Sanvitalia macrocarpa 'Green Carpet' Green Carpet Creeping Zinnia	LOW (.2)	(1) 1 gph emitter	49



1. FINISH GRADE
2. STANDARD VALVE BOX (HEAT BRAND THE COVER WITH THE LETTERS 'WM' IN 2" TALL CHARACTERS)
3. LANDSCAPE WATER METER (SEE IRRIGATION LEGEND FOR MANUFACTURER, MODEL AND SIZE)
4. MAINLINE PIPE TO BACKFLOW DEVICE
5. MAINLINE PIPE FROM RESIDENTIAL WATER METER
6. (4) BRICKS
7. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

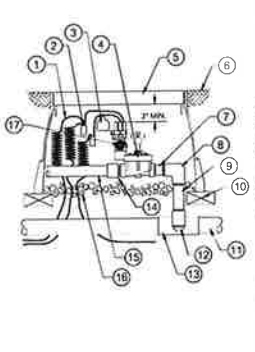
NOTES:
1. LANDSCAPE SUB-METER TO BE PLACED AS CLOSE TO THE RESIDENTIAL WATER METER AS POSSIBLE AND STAKE AND FLAG BEFORE THE BACKFLOW DEVICE (OR FIRST VALVE IF NO BACKFLOW IS PROVIDED).
2. INSTALL METER PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. WITH THE UNIVERSAL PADDLE WHEEL PROVIDED.

A IRRIGATION SUB-METER



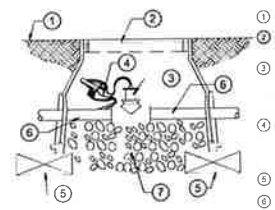
1. LANDSCAPE IRRIGATION MAIN LINE
2. ANGLE STOP VALVE
3. CAP
4. PIPE COUPLING WITH SET SCREW
5. VALVE BOX WITH COVER
6. MAIN LINE PIPE
7. PVC SCH 40 MALE ADAPTER
8. PVC NIPPLE
9. PVC MALE ADAPTER
10. BRICK (TYP.)
11. PVC MAIN LINE TEE
12. PVC ASSEMBLY NOT TO EXCEED 24" IN LENGTH
13. PVC SCH 40 TEE (TYP.)
14. PVC SCH 40 PIPE (TYP.)
15. PVC LATERAL TEE
16. PVC MAIN LINE PIPE
17. FINISHED GRADE

B CVWD BACKFLOW PREVENTOR



1. 3/4" MALE ADAPTER
2. 3/4" PVC SCH 40 NIPPLE
3. 3/4" PVC SCH 40 TEE
4. 3/4" PVC SCH 40 NIPPLE
5. 3/4" PVC SCH 40 90° ELBOW
6. 3/4" PVC SCH 40 NIPPLE
7. 3/4" PVC SCH 40 90° ELBOW
8. 3/4" PVC SCH 40 NIPPLE
9. 3/4" PVC SCH 40 90° ELBOW
10. 3/4" PVC SCH 40 NIPPLE
11. 3/4" PVC SCH 40 90° ELBOW
12. 3/4" PVC SCH 40 NIPPLE
13. 3/4" PVC SCH 40 90° ELBOW
14. 3/4" PVC SCH 40 NIPPLE
15. 3/4" PVC SCH 40 90° ELBOW
16. 3/4" PVC SCH 40 NIPPLE
17. 3/4" PVC SCH 40 90° ELBOW

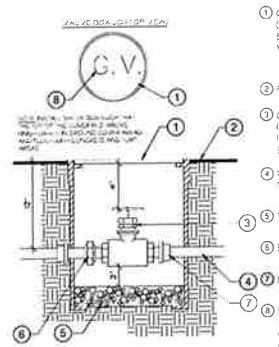
C MASTER VALVE WITH PRESSURE REGULATOR



1. FINISH GRADE
2. CARSON VALVE BOX W/ LOCKING LID
3. FLOW SENSOR (SEE IRRIGATION LEGEND FOR MANUFACTURER, MODEL AND SIZE)
4. IRRIGATION CONTROL WIRES WITH MINIMUM 12 GAL OF WIRE
5. (4) BRICKS
6. MAINLINE PIPE FROM MASTER VALVE
7. 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL

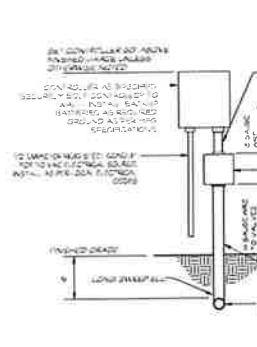
NOTES:
1. FLOW SENSOR WIRE SHALL BE PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS.
2. INSTALL FLOW SENSOR PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
3. ALL WIRE RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES. WIRE CONNECTIONS SHALL BE MADE USING DBRY-6 CONNECTORS OR APPROVED EQUAL.

D FLOW SENSOR



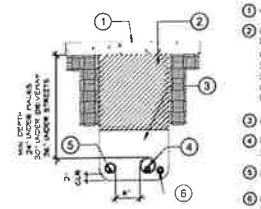
1. CARSON ROUND VALVE BOX (SEE IRRIG EQUIPMENT SCHEDULE) INSTALL FLUSH W/ FINISH GRADE
2. FINISH GRADE
3. GATE VALVE (SEE IRRIGATION LEGEND AND IRRIGATION EQUIPMENT SCHEDULE)
4. PRESSURIZED PVC MAINLINE
5. 1" GRUSHED GRAVEL
6. BRASS UNION
7. SCH 80 PVC NIPPLE
8. HEAT BRAND 'G.V.' IN 2" TALL CHARACTERS ON TOP CENTER OF VALVE BOX LID

E ISOLATION SHUT OFF VALVE



1. 24" CONTROLLER BOX (NOTE MOUNTING HEIGHT UNLESS OTHERWISE NOTED)
2. 2" DIAMETER PVC CONDUIT FOR 60V WIRES
3. CONCRETE MOW STRIP
4. 2" DIAMETER RIGID STEEL SWEEP FOR 60V WIRES
5. USE PVC SCH 40 BELOW GRADE

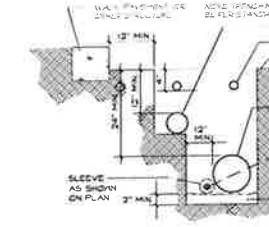
F WALL MOUNT CONTROLLER



1. HARDSCAPE SURFACE
2. CLEAN BACKFILL AS REQUIRED TO BE SET IN 6" LIFTS. REFER TO SPECIFICATIONS FOR SPECIFIC MATERIAL AND COMPACTION REQUIREMENTS.
3. CLEAN SAND
4. PRESSURE MAINLINE WITH SLEEVE
5. LATERAL LINE WITH SLEEVE
6. CONTROL WIRES AND WIRE SLEEVE

NOTES:
1. ALL SLEEVES TO BE PVC SCH. 80
2. ALL SLEEVES TO BE TWO (2) TIMES THE DIA. OF THE WORKING PIPE
3. ALL SLEEVES TO RUN A MIN. OF 12" BEYOND HARDSCAPE EDGES. CLEAN BACKFILL MAY BE SUBSTITUTED FOR SAND UNDER WALKS AND DRIVES

G SLEEVING DETAIL



NOTE:
1. PVC PLASTIC PIPING TO BE BRANDED IN TRENCHES
2. BUNDLE LINES IN KING PIPE AT 10' INTERVALS
3. TEFLON LOOSE TAPE ON MALE END AFTER ALL CONNECTIONS HAVE BEEN MADE
4. INSTALL ALL JOINTS, WIRE ON THE UNDERSIDE OF THE MAINLINE PIPE
5. SEE IRRIGATION SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS
6. 3" FOR 2" THRU 4" PIPE AND LARGER. SHALL BE 1/2" MINIMUM
7. 2" FOR 1" THRU 1 1/2" PIPE. LATERAL LINE SHALL BE 1/2" MINIMUM
8. 4" FOR 6" PIPE AND LARGER. MAINLINE SHALL BE 1/2" MINIMUM
9. 3" FOR 2" THRU 4" PIPE AND LARGER. MAINLINE SHALL BE 1/2" MINIMUM
10. 3" FOR 2" THRU 4" PIPE AND LARGER. MAINLINE SHALL BE 1/2" MINIMUM

H TRENCHING DETAILS

Important Notice – Underground Service Alert

Section 4216.2(d)(1) of the Government Code requires a 2-day (and identification number) be issued before it is legal to excavate will be valid. For your No. for identification, call Underground Service Alert (USA) TOLL FREE at 1-800-227-2600 (not working days) before you dig.

Contractor and contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property, that this requirement shall be made to apply continuously, and not be limited to normal working hours, and contractor contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

NO PERMANENT STRUCTURES WITHIN CVWD AND/OR USBR EASEMENTS. CVWD WILL NOT BE RESPONSIBLE IF FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO DECORATIVE CONCRETE, LANDSCAPING, CURB, GUTTER, SIDEWALKS, PLANTERS, GATES + RELATED IMPROVEMENTS INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS. IN ADDITION, NO TREES SHALL BE INSTALLED WITHIN 10' OF A CVWD AND / OR USBR FACILITIES. SURFACE IMPROVEMENTS MAY BE INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS ONLY UPON THE PRIOR CONSENT OF CVWD'S BOLD DISPOSITION IN THE EVENT SUCH CONSENT THEN A NON-INTERFERENCE REVIEW LETTER SHALL MAY APPLY PER SECTION 8.4 OF OWNER'S DEVELOPMENT DESIGN MANUAL. TREES, PLANTS, WALLS, SIDEWALKS, AND PERMANENT STRUCTURES OF ANY KIND SHALL NOT BE PLANTED, INSTALLED OR BUILT IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD. NO TREES TO BE LOCATED WITHIN 15 FEET OF CVWD IRRIGATION, SEWER AND WATERLINES.

THESE PLANS HAVE BEEN REVIEWED BY THE COACHELLA VALLEY WATER DISTRICT IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE, SECTION 65591 ET SEQ. REQUIRING EFFICIENT LANDSCAPE AND IRRIGATION DESIGN IN COOPERATION WITH THE LOCAL GOVERNING AGENCY (CITY OR COUNTY). APPROVAL OF THIS DRAWING BY CVWD STAFF DOES NOT CONSTITUTE APPROVAL TO ENCROACH INTO DISTRICT AND USBR RIGHT-OF-WAY. TREES, PLANTS, WALLS AND PERMANENT STRUCTURES OF ANY KIND MAY NOT BE PLANTED OR INSTALLED IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD.

DATE _____ WATER MANAGEMENT DEPARTMENT

CVWD PLAN # _____ DEVELOPMENT SERVICES DEPARTMENT

T K D ASSOCIATES, INC.
LAND PLANNING • RESORT, GOLF AND RESIDENTIAL MASTER CONSULTANTS
P.O. BOX 1628 • 42-600 CAHUILLA ROAD, SUITE A
PALM DESERT, CALIFORNIA 92261-1628
PH: (760) 776-1721 • FAX: (760) 776-1723

LOT # 6
70100 THUNDERBIRD MESA DRIVE
RANCHO MIRAGE, CA
THUNDERBIRD HEIGHTS
APN: 690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270
Raymond Herrera
760-808-0049

IRRIGATION DETAILS

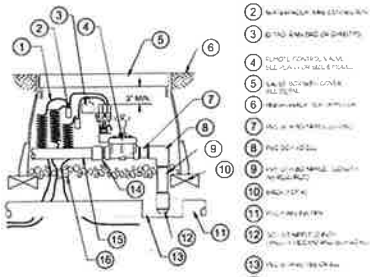
SEC PLAN

NORTH

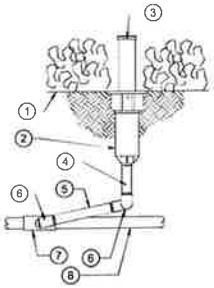
REVISIONS			
NO	DATE	TYPE	BY
	09/26/26		
	11/04/26	HOA SUBMITTAL	TKD

DATE	08-31-26
ISSUED FOR	
EFFECTIVE DATE	
DESIGN BY	TKD
DRAWN BY	RD
FILENAME	

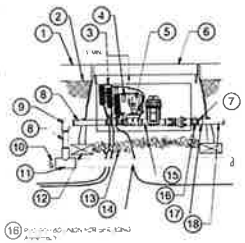
SHEET NO.
TOTAL SHEETS
L-4.1



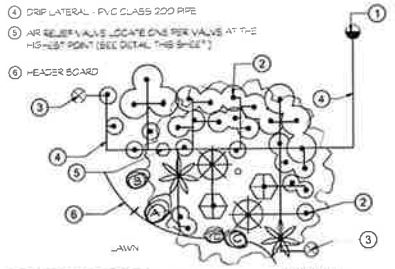
A ELECTRONIC REMOTE CONTROL VALVE



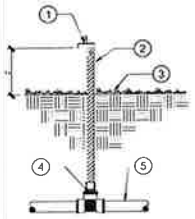
B POP-UP TREE BUBBLER



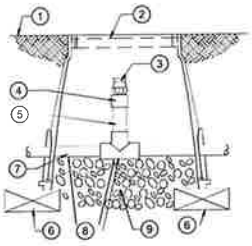
C DRIP CONTROL VALVE



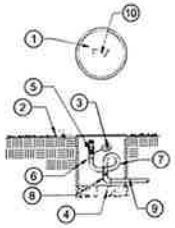
D EXAMPLE DRIP LATERAL/EMITTER LAYOUT



E DRIP EMITTER ASSEMBLY

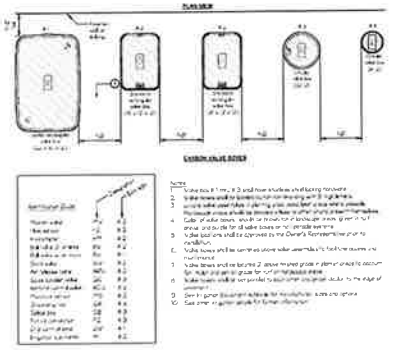


F AIR RELIEF VALVE IN PVC HEADER



NOTE
USE TEFLON TAPE ON ALL MALE PIPE THREADS

G AUTOMATIC FLUSH VALVE



H VALVE LAYOUT / VALVE BOXES

Important Notice – Underground Service Alert

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

NO PERMANENT STRUCTURES WITHIN CVWD AND/OR USBR EASEMENTS. CVWD WILL NOT BE RESPONSIBLE FOR DAMAGE OR REPLACING OF ANY SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO,DECORATIVE CONCRETE, LANDSCAPING, CURB, GUTTER, SIDEWALKS, PLANTERS, GATES + RELATED IMPROVEMENTS INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS. IN ADDITION, NO TREES SHALL BE INSTALLED WITHIN 5F OF A CVWD AND/OR USBR PIPELINE. SURFACE IMPROVEMENTS MAY BE INSTALLED WITHIN CVWD AND/OR USBR EASEMENTS ONLY UPON THE PRIOR CONSENT OF CVWD'S SOLE DISCRETION. IN THE EVENT SUP SUCH CONSENT THEN A NON-INTERFERENCE REVIEW LETTER (NRL) MAY APPLY PER SECTION 3.4 OF CVWD'S DEVELOPMENT DESIGN MANUAL. TREES, PLANTS, WALLS, SIDEWALKS, AND/OR PERMANENT STRUCTURES OF ANY KIND SHALL NOT BE PLANTED, INSTALLED OR BUILT IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT PRIOR OBTAINING AN ENCROACHMENT PERMIT FROM CVWD. NO TREES TO BE LOCATED WITHIN 5 FEET OF CVWD IRRIGATION, SEWER, AND WATERLINES.

THESE PLANS HAVE BEEN REVIEWED BY THE COACHELLA VALLEY WATER DISTRICT IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE, SECTION 65591 ET SEQ. REQUIRING EFFICIENT LANDSCAPE AND IRRIGATION DESIGN IN COOPERATION WITH THE LOCAL GOVERNING AGENCY (CITY OR COUNTY). APPROVAL OF THIS DRAWING BY CVWD STAFF DOES NOT CONSTITUTE APPROVAL TO ENCROACH INTO DISTRICT AND USBR RIGHT-OF-WAY. TREES, PLANTS, WALLS AND PERMANENT STRUCTURES OF ANY KIND MAY NOT BE PLANTED OR INSTALLED IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD.

DATE — WATER MANAGEMENT DEPARTMENT

CVWD PLAN # — DEVELOPMENT SERVICES DEPARTMENT

T.K.D ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
WATER CONSERVATION
14172 IRON BRIDGE ROAD
COLUMBIA, ILLINOIS 62236
PH: (Text) 778-1751

LOT # 6

70100 THUNDERBIRD MESA DRIVE
RANCHO MIRAGE CA
THUNDERBIRD HEIGHTS

APN:690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270

Raymond Herrera
760-808-0049

IRRIGATION DETAILS

SCALE: SEE PLAN

NORTH

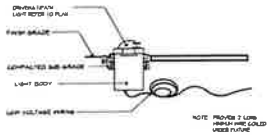
JOB NO: 3077

REVISIONS

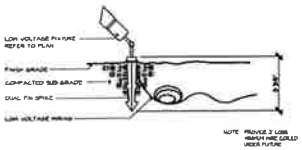
NO	DATE	TYPE	BY
	09/26/26		
	11/04/26	HOA SUBMITTAL	DED

DATE: 09-21-26
ISSUED FOR:
EFFECTIVE DATE:
DESIGN BY: TKD
DRAWN BY: TD
FILENAME:

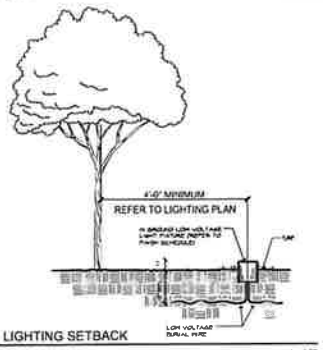
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TOTAL SHEETS



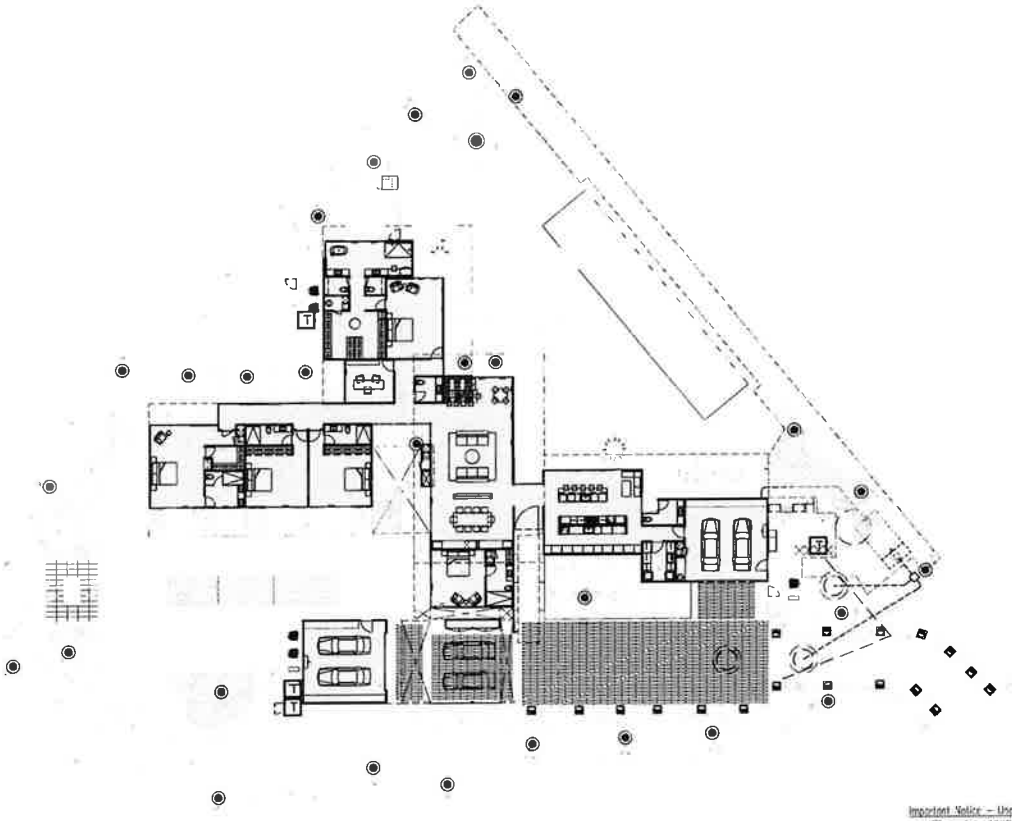
A LOW VOLTAGE WALK LIGHT



B LOW VOLTAGE UPLIGHT



C LIGHTING SETBACK



0 16 32 48 64 feet

1/16" = 1'-0"

Important Notice – Underground Service Alert

Contractor or contractor agrees that in accordance with generally accepted construction practices construction contractor will be required to assume sole and comp ete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours; and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

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LANDSCAPE LIGHTING SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION		Watts	Color Temp		
	Path Light	TLR-IGM-301	26 PVD	3W	2700K	Path
	Well Light	TLR-IG-GR-312	18 PVD	6W , 3W	2700K	Well
T	Transformer:		4	Stainless Steel	200W	

THESE PLANS HAVE BEEN REVIEWED BY THE COACHELLA VALLEY WATER DISTRICT IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE, SECTION 65591 ET SEQ. REQUIRING EFFICIENT LANDSCAPE AND IRRIGATION DESIGN IN COOPERATION WITH THE LOCAL GOVERNING AGENCY (CITY OR COUNTY). APPROVAL OF THIS DRAWING BY CVWD STAFF DOES NOT CONSTITUTE APPROVAL TO ENCROACH INTO DISTRICT AND USBR RIGHT-OF-WAY, TREES, PLANTS, WALLS AND PERMANENT STRUCTURES OF ANY KIND MAY NOT BE PLANTED OR INSTALLED IN CVWD AND USBR EASEMENTS OR RIGHT-OF-WAY WITHOUT FIRST OBTAINING AN ENCROACHMENT PERMIT FROM CVWD.

DATE _____ WATER MANAGEMENT DEPARTMENT

CVWD PLAN # _____ DEVELOPMENT SERVICES DEPARTMENT

T K D ASSOCIATES, INC
LAND PLANNING · LANDSCAPE ARCHITECTURE · WATER CONSERVATION
1112 MONTAGE ROAD
COLUMBIA, TENNESSEE 38401
PH: (760) 776-1751
tkd@tkdassoc.net

LOT # 6

70100 THUNDERBIRD MESA DRIVE

RANCHO MIRAGE CA

THUNDERBIRD HEIGHTS

APN:690-220-020

APEX DESERT LLC
74923 Highway 111
Indian Wells, CA 92270

Raymond Herrera
760-808-0049

ALL DRAWINGS, SPECIFICATIONS, AND DESIGNS ARE PROPERTY OF T.K.D. ASSOCIATES, INCORPORATED AND ARE NOT TO BE USED OR PUBLISHED IN ANY WAY WITHOUT THE EXPRESSED WRITTEN CONSENT OF T.K.D. ASSOCIATES, INCORPORATED. ALL DRAWINGS, SPECIFICATIONS AND DESIGNS SHALL REMAIN THE PROPERTY OF T.K.D. ASSOCIATES, INCORPORATED AND MUST BE RETURNED UPON REQUEST. ANY REPRODUCTION, PUBLICATION, OR USE OF THESE DRAWINGS, SPECIFICATIONS AND DESIGNS WITHOUT THE EXPRESSED WRITTEN CONSENT OF T.K.D. ASSOCIATES, INCORPORATED SHALL CONSTITUTE AN INFRINGEMENT OF COPYRIGHT LAWS AND THE OFFENDING PARTY SHALL BE LIABLE FOR ALL COSTS AND ATTORNEY'S FEES RESULTING FROM SUCH ACTIONS.

LIGHTING PLAN

NORTH

SCALE: SEE PLAN

PROJECT NUMBER:

REVISIONS			
NO	DATE	TYPE	BY
	09/26/25		
	11/04/25	HOA SUBMITTAL	TKD

DATE 08-31-25

ISSUED FOR

EFFECTIVE DATE

DESIGN BY: TKD

DRAWN BY TD

FILENAME

SHEET NO.

TOTAL SHEETS L-5.1

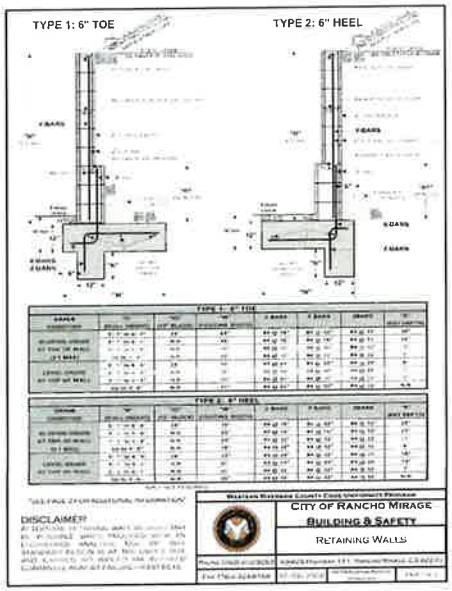
IN THE CITY OF RANCHO MIRAGE
LOT 6 OF TRACT NO. 19381
OF SECTION 11, T5S R5E, SBM PER MB 150/65-66
GRADING PLAN – A.P.N.: 690-220-020

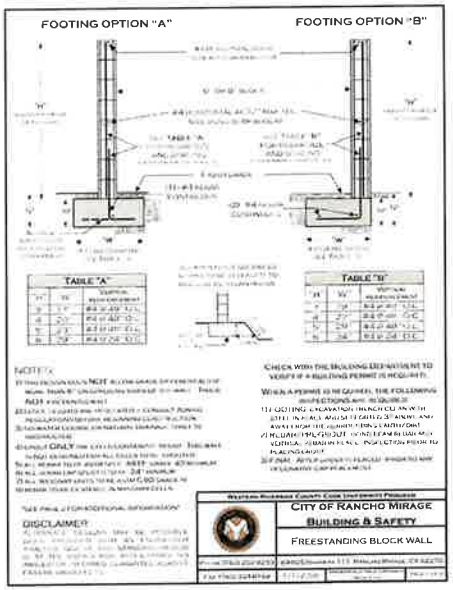
GRADING NOTES:

1. ALL WORK SHALL CONFORM TO CITY OF RANCHO MIRAGE GRADING ORDINANCE NO. 398, THE CITY ENGINEER, AND ANY SPECIAL PROVISIONS OF THE PERMIT.
2. GRADING SHALL BE IN ACCORDANCE WITH THE ENGINEERED GRADING REQUIREMENTS OF A SOILS REPORT PREPARED BY _____ NO. _____ DATED _____ TELEPHONE _____
3. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS INSPECTION LINE (760-324-8371) 24 HOURS PRIOR TO ANY GRADING, BRUSHING OR CLEARING, EACH PHASE OF CONSTRUCTION, AND ANY OTHER WORK REQUIRING INSPECTION.
4. DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURE, TEMPORARY DRAINAGE CONTROL SHALL BE PROVIDED TO PREVENT PONDING WATER, EROSION, AND DAMAGE TO ADJACENT PROPERTY.
5. 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 AFTER THE GRADING. DUST CONTROL SHALL CONTINUE UNTIL SUCH TIME THAT THE GRADED SURFACE PRESENTS SUFFICIENT PROTECTIVE COVER AGAINST WIND OR WATER EROSION AS DETERMINED BY THE CITY ENGINEER. SEE THE ATTACHED "LOCAL AIR QUALITY MANAGEMENT PLAN" FOR DETAILS OF EXPECTED DUST CONTROL METHODS.
6. AREAS OF FUTURE CONSTRUCTION AND ALL CUT AND FILL SLOPE FACES SHALL BE PLANTED WITH A CITY-APPROVED LANDSCAPE MATERIAL.
7. GRADING OPERATIONS AND MAINTENANCE OF EQUIPMENT WITHIN ONE HALF MILE OF HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 5:00 P.M. AND 6:00 A.M., OR ANYTIME ON A SUNDAY OR FEDERAL HOLIDAY PER CITY CODE 15.04.020 (A).
8. PRIOR TO ANY GRADING OPERATIONS, ALL FILL AREAS SHALL BE CLEARED OF ORGANIC MATERIAL AND THE EXISTING GROUND SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12", OR AS RECOMMENDED BY THE SOILS REPORT.
9. MAXIMUM CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL.
10. ALL BUILDING PADS SHALL BE COMPACTED TO A MINIMUM OF 90% RELATIVE DENSITY IN ACCORDANCE WITH CITY ORDINANCE NO. 398 AND ABOVE MENTIONED SOILS REPORT.
11. ALL FILLS SHALL BE COMPACTED TO A MINIMUM OF 90% RELATIVE DENSITY IN ACCORDANCE WITH CITY ORDINANCE NO. 398. FIELD DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH CITY GRADING ORDINANCE NO. 398.
12. MINIMUM BUILDING PAD AND DRAINAGE SLOPES=0.50% DRAINAGE SWALES SHALL BE A MINIMUM OF 0.5 FEET DEEP, 5 FEET WIDE, AND BE CONSTRUCTED A MINIMUM OF 3 FEET FROM THE TOP OF CUT OR FILL SLOPES. A 1-FOOT HIGH BERM SHALL BE PLACED AT THE TOP OF ALL SLOPES WHICH EXCEED 3:1 UNLESS PROTECTED WITH APPROVED EROSION CONTROL.
13. ALL TRAVELED WAYS MUST BE CLEANED DAILY OF ALL DIRT, MUD AND DEBRIS DEPOSITED ON THEM AS A RESULT OF THE GRADING OPERATION. CLEANING IS TO BE DONE TO THE SATISFACTION OF THE CITY ENGINEER.
14. BLOCK WALLS ARE NOT PART OF THE GRADING PERMIT. SUBMIT FOR SEPARATE BUILDING PERMIT.
15. THE SOILS ENGINEER, ENGINEERING GEOLOGIST AND DESIGN CIVIL ENGINEER SHALL DURING GRADING, ENSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODES WITHIN THEIR PURVIEW.
16. PRIOR TO FINAL ACCEPTANCE OF GRADING, THE SOILS ENGINEER AND DESIGN ENGINEER SHALL SUBMIT (ON CITY FORMS) VERIFICATION THAT ALL WORK HAS CONFORMED TO THE GRADING PLAN, CITY STANDARDS AND THE RECOMMENDATIONS OF THE SOILS REPORT.
17. ANY PUBLIC ROADWAY WHICH IS INTENDED TO BE USED TO CONDUCT ANY ASPECT OF THE GRADING FOR THE PROJECT SHALL BE COVERED BY A CITY ENCROACHMENT PERMIT AND SUBJECT TO PERMIT CONDITIONS.
18. THE CITY OF RANCHO MIRAGE IS IN A QUARANTINE AREA FOR THE RED IMPORTED FIRE ANT. PRIOR TO ANY MOVEMENT OF SOIL WITHIN THE SITE, OR FROM THE SITE, YOU MUST SCHEDULE AN INSPECTION AT 760-776-8208 WITH THE R.I.F.A. INSPECTOR AT LEAST 24 HOURS IN ADVANCE, AND SUBMIT CERTIFICATION OF CLEARANCE TO THE CITY.

GENERAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD PLANS OF THE CITY OF RANCHO MIRAGE AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AND OTHER STANDARD PLANS AS SPECIFIED IN THE PLANS. NOTHING IN THESE PLANS SHALL RELIEVE THE CONTRACTOR FROM OBTAINING PERMITS AS REQUIRED BY THE CITY OF RANCHO MIRAGE MUNICIPAL CODE.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, REPLACEMENT, PROTECTION, OR RELOCATION OF ALL REGULATORY, WARNING, AND GUIDE SIGNS, STRIPING, AND PAVEMENT LEGENDS.
4. STREET NAME SIGNS AND TRAFFIC CONTROL SIGNS, TYPE AND LOCATION SHALL BE APPROVED BY THE CITY ENGINEER. TRAFFIC STRIPING, LEGENDS AND PAVEMENT MARKERS, TYPE AND LOCATIONS SHALL BE APPROVED BY THE CITY ENGINEER.
5. PRIOR TO GRADING OPERATIONS ALL PROPERTY BOUNDARIES SHALL BE VISIBLY MARKED BY SETTING WITNESS STAKES AT ALL FOUND PROPERTY MONUMENTS. FOUND MONUMENTS SHALL BE NOTED ON THE PLANS. RESETTING OF MISSING MONUMENTS OR ANY REMOVAL/REPLACEMENT OF EXISTING MONUMENTS SHALL BE DONE BY AN R.C.E. BELOW 33365 OR L.S. ONLY. THE CONTRACTOR SHALL NOT DISTURB EXISTING MONUMENTS NOTED ON PLANS OR FOUND DURING CONSTRUCTION.
6. ALL STREET SECTIONS ARE TENTATIVE. THE MINIMUM SECTION IS 3" A.C./4" A.B. ADDITIONAL SOIL TEST MAY BE TAKEN AFTER ROUGH GRADING TO DETERMINE EXACT SECTION REQUIREMENTS.
7. LOCATIONS OF FIELD DENSITY TEST SHALL BE DETERMINED BY THE CITY OR APPROVED TESTING AGENCY AND SHALL BE SUFFICIENT IN BOTH HORIZONTAL AND VERTICAL PLACEMENT TO PROVIDE REPRESENTATIVE TESTING OF ALL FILL PLACED. TESTING IN AREAS OF A CRITICAL NATURE OR SPECIAL EMPHASIS SHALL BE IN ADDITION TO THE NORMAL REPRESENTATIVE SAMPLINGS.
8. ALL UNDERGROUND FACILITIES, WITH LATERALS, SHALL BE IN PLACE AND INSPECTED PRIOR TO PAVING, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING: SEWER, WATER, ELECTRIC, GAS, TELEPHONE AND DRAINAGE.
9. THE DESIGN CIVIL ENGINEER SHALL EXERCISE SUFFICIENT CONTROL OF THE CONSTRUCTION TO ENSURE COMPLIANCE WITH PLANS, SPECIFICATIONS AND CITY CODES.
10. THE FINAL UTILITY LINE BACKFILL REPORT FROM THE PROJECT SOIL ENGINEER SHALL INCLUDE AN APPROVAL STATEMENT THAT THE BACKFILL IS SUITABLE FOR THE INTENDED USE.
11. THE FINAL COMPACTION REPORT AND APPROVAL FROM THE SOILS ENGINEER SHALL CONTAIN THE TYPE OF FIELD TESTING PERFORMED, EACH TEST SHALL BE IDENTIFIED AS TO METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE OR DRIVE RING AND SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES BY THE FIELD TECHNICIAN.
12. ALL CONSTRUCTION AREAS SHALL BE PROPERLY POSTED AND LIGHTED IN CONFORMANCE WITH THE STATE MANUAL OF WARNING SIGNS, LIGHTS, AND DEVICES FOR USE IN THE PERFORMANCE OF WORK UPON HIGHWAYS, IN ORDER TO ELIMINATE ANY HAZARDS.
13. AT NO TIME WILL PRIVATE PROPERTY BE USED IN CONJUNCTION WITH THE PROJECT UNLESS PROPERTY-OWNER APPROVAL IS OBTAINED IN WRITING AND GIVEN TO THE CITY FOR APPROVAL.
14. ANY CHANGES CONTEMPLATED IN: DRAINAGE, ELEVATIONS OR STRUCTURES SHOWN ON THESE PLANS MUST BE REVIEWED BY THE CITY TO DETERMINE IF REVISED PLANS SHOULD BE SUBMITTED. NONCOMPLYING CONSTRUCTION MAY BE SUBJECT TO PENALTIES AND/OR REMOVAL. "AS-BUILT" PLANS MUST BE SUBMITTED PRIOR TO ANY RELEASE OF SECURITIES AND/OR ISSUANCE OF A CERTIFICATE OF USE.





LEGEND:

CL	=	CENTERLINE
EX	=	EXISTING
FF	=	FINISH FLOOR
FG	=	FINISH GRADE
FL	=	FLOW LINE
FS	=	FINISH SURFACE
INV	=	INVERT
NG	=	NATURAL GROUND
PA	=	PLANTER AREA
PL	=	PROPERTY LINE
TG	=	TOP OF GRATE
TC	=	TOP OF CURB
TG	=	TOP OF GRATE
TP	=	TOP OF PAVEMENT
TRW	=	TOP OF RETAINING WALL
TW	=	TOP OF WALL
R/W	=	RIGHT-OF-WAY
(500)	=	EXISTING ELEVATION
	=	EXISTING CONTOUR LINE
	=	EXISTING TREE
	=	P.C. CONCRETE
	=	TURF
	=	EXISTING HEDGES

EARTHWORK ESTIMATE

25 CY CUT
25 CY FILL

NOTE: REFERENCED SOIL REPORT RECOMMENDS OVEREXCAVATION TO 3 FEET BELOW EXISTING GRADE OR 2 FEET BELOW FOOTING, WHICHEVER IS DEEPER, TO 5 FEET LATERALLY FROM BUILDING STRUCTURE.

NOTE: QUANTITIES ARE APPROXIMATE AND FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL PERFORM HIS OWN ESTIMATES FOR BIDDING.

UTILITY COMPANIES

GAS CO.	SCG
POWER CO.	IID
WATER CO.	CVWD
SEWER CO.	CVWD
SCHOOL DISTRICT	DSUSD

OWNER

APEX DESERT LLC – MANAGER RAYMOND HERRERA
74923 HIGHWAY 111, #227
INDIAN WELLS, CA. 92210

APN

690-220-020

CURRENT LAND USE

RESIDENTIAL

SITE AREA

1.04 ± ACRES

DISTURBED AREA

0.00± ACRES

PROJECT ADDRESS

70100 THUNDERBIRD MESA DRIVE
RANCHO MIRAGE, CA. 92270

SOURCE OF TOPOGRAPHY

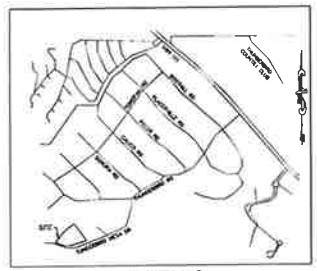
A TOPOGRAPHY SURVEY WAS PERFORMED ON JULY 15, 2026.

CONSTRUCTION NOTES

1	INSTALL 6" DECK / YARD DRAIN MODEL NOS #50	35 EA
2	INSTALL 6" P.V.C. (SDR35) PIPE @ 1% MIN	1008 LF
3	CONSTRUCT RETAINING WALL PER BUILDING & SAFETY HANDOUT (SEPARATE PERMIT REQUIRED)	173 LF
4	CONSTRUCT FREESTANDING BLOCK WALL PER BUILDING & SAFETY HANDOUT (SEPARATE PERMIT REQUIRED)	340 LF

LEGAL DESCRIPTION

LOT 6 OF TRACT NO. 19381, IN THE CITY OF RANCHO MIRAGE, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN M.B. 150, PAGE(S) 65 TO 66, INCLUSIVE, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.



IMPORTANT NOTICE: CALL BEFORE YOU DIG

UNAUTHORIZED CHANGES & USES: ENGINEER'S NOTE TO CONTRACTOR:

#	REVISIONS	DATE	APP.

BENCH MARK NO. RM-18
ELEV 371.033

BASIS OF BEARINGS: THE CENTERLINE OF THUNDERBIRD MESA RD. BEING N72° 48' 33"W PER TRACT NO. 19381, M.B. 150/65-66

ENGINEER: AMIR ENGINEERING & SURVEYING INC.
C.E. & ENGINEERING PLANNING FEASIBILITY STUDIES
150 LORNE PARK, SUITE A, PALM SPRINGS, CA. 92262
PHONE (760) 318-1424
FAX (760) 318-1430
EMAIL AMIRENGINEER.COM

PREPARED UNDER THE DIRECT SUPERVISION OF: [signature] 10/30/25
AMIR FARZANEH R.C.E. 50387 EXP. 9/30/2025 DATE

GEOTECHNICAL CERTIFICATION IS REQUIRED BY _____ DATE

RECOMMENDED FOR APPROVAL BY _____ DATE
DINA YORK / MR GREEN PACIFIC INC. R.C.E. 46387

APPROVED BY CITY OF RANCHO MIRAGE: _____ DATE
STEPHEN M. LONGORIA, CITY ENGINEER R.C.E. 34433

APEX DESERT LLC – MANAGER RAYMOND HERRERA
74923 HIGHWAY 111, #227
INDIAN WELLS, CA. 92210

CITY OF RANCHO MIRAGE

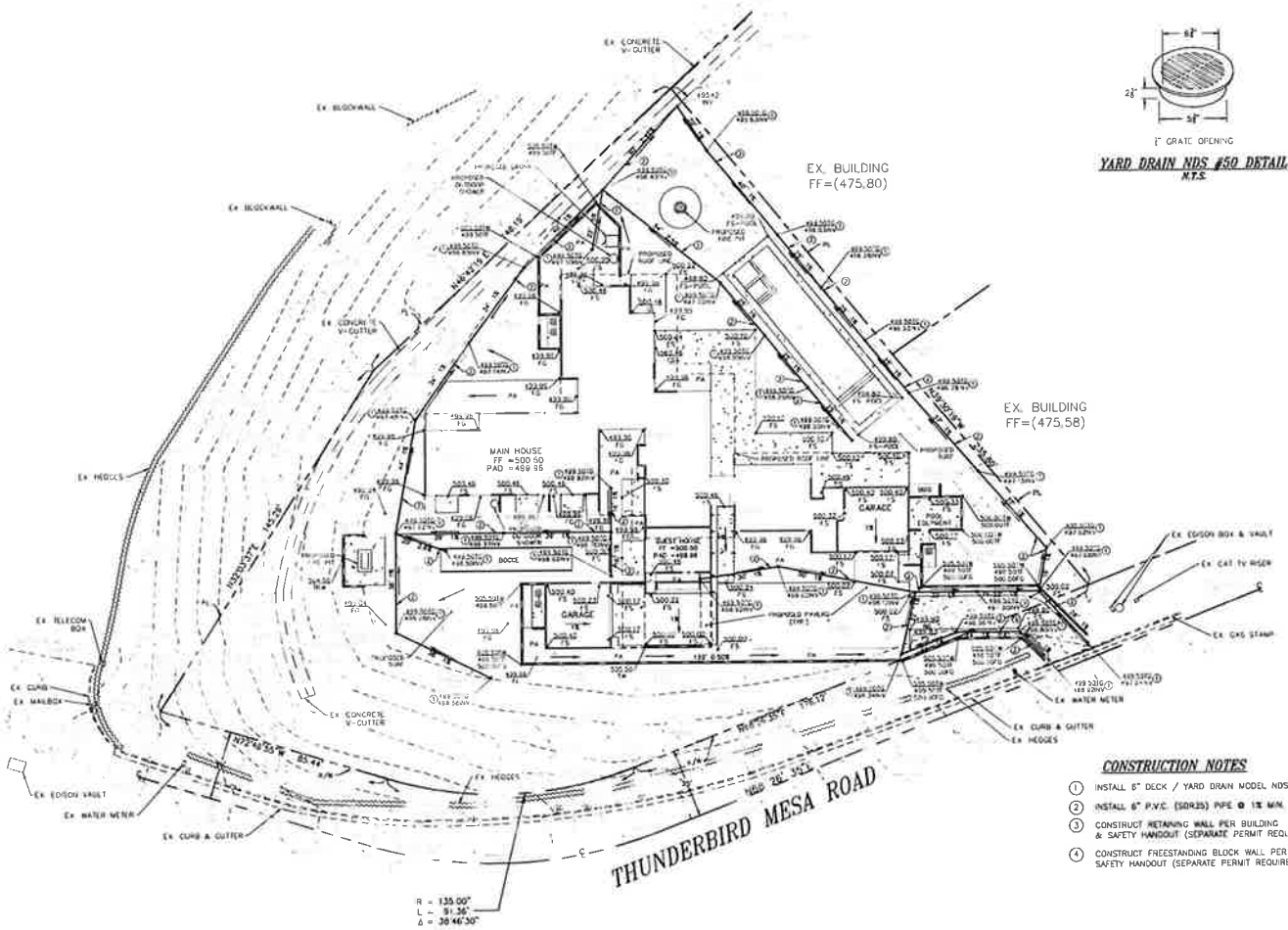
PROJECT DESCRIPTION: GRADING PLAN
SITE ADDRESS: A.P.N.: 690-220-020
LEGAL DESCRIPTION: LOT 6 OF TRACT NO. 19381 PER MAP BOOK 150/65-66 SEC. 11, T. 5 S., R. 5 E. S.B.M.

SHEET 1 OF 2
PRIVATE REFERENCE # R95-1
CITY REFERENCE #

LEGEND:

CL	=	CENTERLINE
EX	=	EXISTING
FF	=	FINISH FLOOR
FG	=	FINISH GRADE
FL	=	FLOW LINE
FS	=	FINISH SURFACE
INV	=	INVERT
NG	=	NATURAL GROUND
PA	=	PLANTER AREA
PL	=	PROPERTY LINE
TG	=	TOP OF GRATE
TC	=	TOP OF CURB
TG	=	TOP OF GRATE
TP	=	TOP OF PAVEMENT
TRW	=	TOP OF RETAINING WALL
TW	=	TOP OF WALL
R/W	=	RIGHT-OF-WAY
(500)	=	EXISTING ELEVATION
———	=	EXISTING CONTOUR LINE
	=	EXISTING TREE
	=	P.C. CONCRETE
	=	TURF
	=	EXISTING HEDGES

SCALE 1" = 20'



1" GRATE OPENING

YARD DRAIN NDS #50 DETAIL
N.T.S.

CONSTRUCTION NOTES

1	INSTALL 6" DECK / YARD DRAIN MODEL NDS #50	35 EA
2	INSTALL 6" P.V.C. (SDR35) PIPE @ 1% MIN.	1008 LF
3	CONSTRUCT RETAINING WALL PER BUILDING & SAFETY HANDOUT (SEPARATE PERMIT REQUIRED)	173 LF
4	CONSTRUCT FREESTANDING BLOCK WALL PER BUILDING & SAFETY HANDOUT (SEPARATE PERMIT REQUIRED)	340 LF

IMPORTANT NOTICE
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
TOLL FREE 811

UNAUTHORIZED CHANGES & USES:
ENGINEER'S NOTE TO CONTRACTOR:

#	REVISIONS	DATE	APP.

BENCH MARK NO. RM-18
ELEV 371.033
BASIS OF BEARING: THE CENTERLINE OF THUNDERBIRD MESA RD. BEING N68° 28' 30"E FOR TRACT NO. 19381, M.B. 150/65-66

AMIR ENGINEERING & SURVEYING INC.
CIVIL ENGINEERING AND PLANNING CONSULTANTS
78-078 CALLE STARK, SUITE A
LA QUINTA, CA. 92253
PHONE: (760) 219-7024
FAX: (760) 219-7452
EMAIL: AMIR@AMIRENG.COM

PREPARED UNDER THE DIRECT SUPERVISION OF:
AMIR FAYAZBAD
R.C.E. 50597 EXP. 9/30/2027
DATE 10/30/26

GEOTECHNICAL CERTIFICATION, IF REQUIRED BY:
DATE

RECOMMENDED FOR APPROVAL BY:
TIM YORK / VP GREEN PACIFIC INC.
R.C.E. 48387
DATE

APPROVED BY CITY OF RANCHO MIRAGE:
STEPHEN M. LONDONO, CITY ENGINEER
R.C.E. 34438
DATE

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74925 HIGHWAY 111, #227
INDIAN WELLS, CA. 92210

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LEGAL DESCRIPTION: LOT 6 OF TRACT NO. 19381 PER MAP BOOK 150/65-66 SEC. 11, T. 5 S., R. 5 E., S.B.M.

SHEET 2
OF 2
PRIVATE REFERENCE # R86-1
CITY REFERENCE #