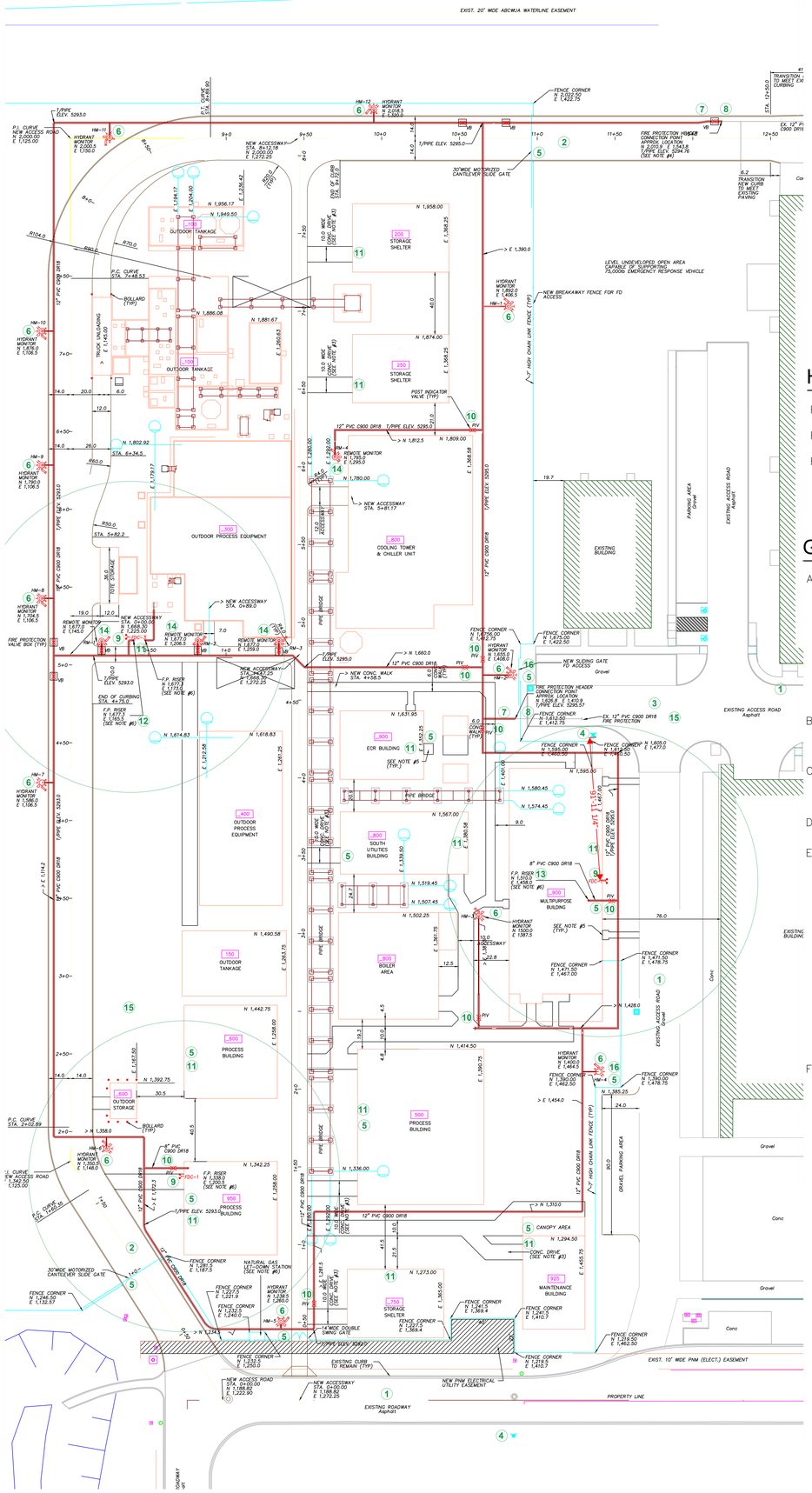


D1
FIRE-1

ENLARGED FIRE-1 PLAN

SCALE : 1": 30'

0' 30' 60' 90'

N

PROJECT DESCRIPTION:

THE PROPOSED DEVELOPMENT FOR KAIROS POWER INVOLVES TWO LAND USE REVIEWS. THE INFORMATION AND DRAWINGS INCLUDED IN THIS SUBMITTAL PACKAGE HAVE BEEN PROVIDED FOR A SITE PLAN, MAJOR AMENDMENT, REVIEW BY THE DEVELOPMENT FACILITATION TEAM (DFT). THE SCOPE OF THIS SUBMITTAL INCLUDES THE SITE PREPARATION, BASIC UTILITIES AND SEVERAL NEW DETACHED BUILDINGS. THE PROPOSED BUILDINGS ARE AN EXPANSION TO THE EXISTING KAIROS POWER CAMPUS AND ARE TO BE USED FOR LIGHT MANUFACTURING.

THESE NEW BUILDINGS SUPPORT THE EXISTING MANUFACTURING IN THE EXISTING BUILDINGS. IN ADDITION TO BUILDINGS THERE SHALL BE EQUIPMENT, PIPING AND TANKS SIMILAR TO THOSE LOCATED SOUTH OF THE EXISTING TDL BUILDING. THIS PRODUCTION AREA IS REFERED TO AS THE SALT PRODUCTION FACILITY (SPF).

APPROXIMATELY 12 METAL BUILDINGS WILL BE CONSTRUCTED TO SUPPORT SALT PRODUCTION. THE PRE-ENGINEERED METAL BUILDINGS WILL HOUSE THE MANUFACTURING PROCESS. PIPE STANDS AND TANKS WILL BE LOCATED AROUND THESE BUILDINGS TO TRANSFER MATERIALS BETWEEN THE BUILDINGS DURING THE PROCESS. EQUIPMENT PADS THAT SUPPORT VARIOUS TANKS AND THE PROCESS EQUIPMENT WILL BE LOCATED SEVERAL HUNDRED FEET FROM THE SOUTH PROPERTY LINE.

THE STORM WATER SWALE WILL BE RECONFIGURED TO ACCOMMODATE THIS DEVELOPMENT. THE SITE ACCESS ON THE WEST END OF THE SITE WILL BE CONNECTED TO THE REST OF THE CIRCULATION SYSTEM.

HYDRANT AND FDC SPACING/DISTANCES:

FDC-1 TO EXISTING HYDRANT :	99'-0"
FDC-2 TO HYDRANT MONITOR HM-6:	53'-0"
FDC-3 TO HYDRANT MONITOR HM-8:	62'-4"

GENERAL NOTES:

A. ALL FIRE ACCESS AISLES SHALL BE IDENTIFIED BY CURBS PAINTED RED ON BOTH TOP AND FACE ALONG THE ENTIRE LENGTH OF THE FIRE LANE. WHERE NO CURB EXISTS OR A ROLLED CURB IS INSTALLED, A 6-INCH WIDE RED STRIPE APPLIED THE FULL LENGTH OF THE FIRE LANE. NO PARKING-FIRE LANE SHALL BE MARKED EVERY 15-FEET ALONG THE LENGTH OF A FIRE LANE WITH WHITE BLOCK CAPITAL LETTERS OF NOT LESS THAN 5-INCHES IN HEIGHT WITH A STROKE OF NOT LESS THAN ¾INCHES.

B. FIRE LINES SUPPLIED BY 18" PUBLIC WATER MAIN LOCATED ON CRICK AVE SE. SEE VICINITY MAP AND UTILITY PLANS FOR MORE INFORMATION.

C. NO FIRE ACCESS APPARATUS ACCESS ROADS WITH A DEAD END REQUIRE ACCESS GREATER THAN 150' OR EXCEED 5% GRADE.

D. NO FIRE APPARATUS ROADS ON SITE TO EXCEED 5% GRADE.

E. PER THE GEOTECHNICAL REPORT DATED FEBRUARY 28, 2022 AS PREPARED BY GEO-TEST, INC. ALL ASPHALT ACCESS ROADS SHALL MEET THE FOLLOWING REQUIREMENTS: MINIMUM ASPHALTIC PAVEMENT SECTION OF 3.0 INCHES OF HOT MIX ASPHALT (HMA) OVER 6.0 INCHES OF AGGREGATE BASE COURSE OVER 12 INCHES OF COMPACTED SUBGRADE IS RECOMMENDED FOR AREAS SUBJECT TO LIGHT AUTOMOBILE TRAFFIC AND PARKING AREAS. WHERE TRAFFIC LANES ARE SUBJECT TO HEAVY AUTOMOBILE OR HEAVY TRUCK TRAFFIC, THE ABOVE SECTION SHOULD BE THICKENED BY AN ADDITIONAL ONE INCH OF ASPHALT PAVEMENT. THE PAVEMENT RECOMMENDATIONS ARE IN GENERAL CONFORMANCE WITH PUBLICATIONS PREPARED BY THE ASPHALT INSTITUTE. 12 INCHES OF COMPACTED BASE COARSE FOR NON-PAVED AREAS.

F. PER THE GEOTECHNICAL REPORT DATED FEBRUARY 28, 2022 AS PREPARED BY GEO-TEST, INC. ALL GRAVEL ACCESS ROADS SHALL MEET THE FOLLOWING REQUIREMENTS: MINIMUM 6.0 INCHES OF AGGREGATE BASE COURSE OVER 12 INCHES OF COMPACTED SUBGRADE IS RECOMMENDED FOR AREAS SUBJECT TO LIGHT AUTOMOBILE TRAFFIC AND PARKING AREAS. 12 INCHES OF COMPACTED BASE COARSE FOR NON-PAVED AREAS.

GENERAL INFORMATION:

SITE ADDRESS:	5201 HAWKING DRIVE SE ALBUQUERQUE, NM 87106	
LOT SIZE:	1,238,746.212 S.F. / 28.4377 ACRES	
LOT COVERAGE (FAR):	22.2%	
LANDSCAPING:	EXISTING:	170,590 SF
	PROPOSED:	206,239 SF
LOT COVERAGE:	EXISTING:	225,452 SF
	PROPOSED:	311,752
BUILDING AREA:	NEW BUILDING AREA:	48,441 SF
	EXISTING BUILDING AREA:	225,452 SF
	TOTAL PROPOSED:	273,893 SF

NEW BUILDING's LARGEST FIRE FLOW (PER IFC APPENDIX B)

UNIT 500 PROCESS BUILDING

BUILDING SIZE:	9,761 ft²
BUILDING TYPE:	II-B
PROPOSED OCCUPANCY:	F-1
REQUIRED FIRE FLOW:	2000GPM PER APPENDIX B TABLE B105.1(2)
SPRINKLER SYSTEM:	NON-SPRINKLERED

	Area (ft2)	Height (ft)	Construction Type	Occupancy	Fire-Flow @20psi (GPM)	Duration (hr)	Minimum Number of Hydrants	Sprinklered (Y/N)
Unit 200 Storage Shelter	2800	24	IIB	S-1	1500	2	1	N
Unit 250 Storage Shelter	2800	24	IIB	S-1	1500	2	1	N
Unit 900 Multipurpose Building	9760.5	18	IIB	F-1	2000*	2	2	Y
Unit 900 ECR Building	2400	23	IIB	F-1	1500	2	1	N
Unit 800 South Utilities Building	2200	31	IIB	F-1	1500	2	1	N
Unit 800 Boiler Area	4500	30	IIB	F-1	1500	2	1	N
Unit 500 Process Building	8100	24	IIB	F-1	2000	2	2	N
Unit 925 Maintenance Building	2880	25	IIB	S-1	1500	2	1	N
Unit 750 Storage Shelter	2000	25	IIB	S-1	1500	2	1	N
Unit 600 Process Building	3600	14	IIB	F-1	1500	2	1	N
Unit 950 Process Building	7000	25	IIB	F-1	1750*	2	1	Y
Unit 600 Outdoor Storage Shelter	400	24	IIB	S-1	1500	2	1	N

*Can be reduced to the greater of 1000 GPM or Calculated Sprinkler Demand per Table B105.2

NOTE: THE LARGEST BUILDING WITH FIRE DEMAND IS THE EXISTING BUILDING, WHICH IS 168,288 SF INCLUDING ALL ADDITIONS. THE CONSTRUCTION TYPE FOR THIS BUILDING IS TYPE IIB, WHICH IS FOR METAL FRAMED BUILDINGS. PER TABLE B105.1(2) IN APPENDIX B OF THE 2021 INTERNATIONAL FIRE CODE, THE REQUIRED FIRE FLOW AT 8,000 GPM FOR BUILDINGS 138,301SF AND LARGER. 50% REDUCTION APPLIES TO FULLY SPRINKLERED BUILDINGS. THE EXISTING BUILDING AND ADDITION IS FULLY SPRINKLERED. MAXIMUM DEMAND IS 4,000 GPM. NO INCREASE FROM THE EXISTING DEMAND

KEYED NOTES:

1. EXISTING SITE ACCESS
2. NEW 26'-0" (MIN) WIDE FIRE ACCESS AISLE/FIRE LANE
3. NEW FIRE APPARATUS TURNAROUND
4. EXISTING FIRE HYDRANT
5. NEW ILLUMINATED KNOX BOX – MOUNT 4'-0" TO 6'-0" ABOVE GRADE. KNOX BOX TO BE 3200 OR 4400 AS REQUIRED BY ALBUQUERQUE FIRE RESCUE
6. NEW FIRE HYDRANT-MONITOR
7. 12" WATER LINE
8. EXISTING 12" FIRE LINE
9. SPRINKLER FIRE DEPARTMENT CONNECTION (FDC) – INLET TO BE BETWEE 18" TO 48" ABOVE GRADE – FDC TO BE UNOBSTRUCTED FROM PERMANI OBJECTS WITH A 3'-0" RADIUS OF CLEAR SPACE AND 6'-6" IN HEIGHT.
10. POST INDICATOR VALVE (PIV) INSTALLED PER NFPA 13
11. ALPHABETICAL BUILDING IDENTIFICATION AND ADDRESS NUMBERS. EAC CHARACTER SHALL BE GREATER THAN 4" TALL WITH A MINIMUM STROKE WIDTH OF 1" IN A CONTRASTING COLOR. VIEW FROM FIRE ACCESS APPARATUS ROAD NOT TO BE OBSTRUCTED BY ANY MEANS. MOUNTING HEIGHT SHALL BE GREATER THAN THAT OF ANY SURROUNDING OBSTRUCTIONS. FINAL LOCATION TO BE COORDINATED WITH THE ALBUQUERQUE FIRE MARSHALL
12. DELUGE SYSTEM RISER
13. SPRINKLER SYSTEM RISER
14. REMOTELY OPERATED MONITORS
15. RADIUS 100'-0" RADIUS AROUND FDC – ATLEAST 1 HYDRANT TO FAL WITHIN THIS
16. NEW SLIDING GATE FOR HYDRANT-MONITOR ACCESS
17. EXISTING PREMISE IDENTIFICATION AND ADDRESS NUMBERS

APPLICATION NUMBER

FP25100026

ALBUQUERQUE FIRE MARSHAL'S DIVISION OFFICE PLANS CHECKING DIVISION

PERMIT

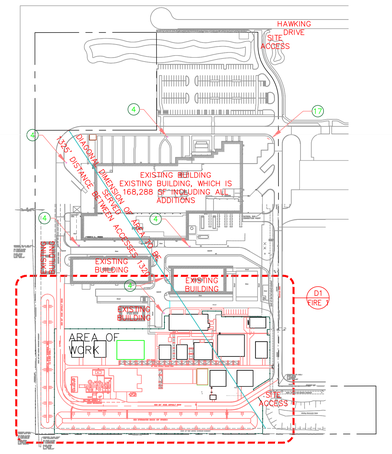
PERMIT NUMBER: FP-25-100026

APPROVED DATE: 04/30/2025

APPROVED

THESE CONSTRUCTION DOCUMENTS WERE REVIEWED AND APPROVED BY THE ALBUQUERQUE FIRE MARSHAL'S OFFICE IN ACCORDANCE WITH THE CITY ORDINANCE, THE INTERNATIONAL FIRE CODE, AND NFPA STANDARDS. THIS PERMIT IS VALID FOR 180 DAYS. FINAL INSPECTION IS REQUIRED.

FIRE FLOW: 2000 GPM, 2 HYDRANTS.



D4
FIRE 1

OVERALL SITE PLAN

SCALE: 1" = 200'

N

NOT FOR CONSTRUCTION

REVISION HISTORY

REV	DATE	DESCRIPTION	BY	CHK	APP

KBR Kairos Power

COOLANT PRODUCTION FACILITY FIRE -1 PLAN

DRAWN	TB	CHECKED	APPROVED	DATE
SCALE	1" = 30'	DRAWING NUMBER		REV.
PROJ	218356	KPS-SLT-K11-XXX-X-XXX		A