

2501 TECHNOLOGY PLACE

A Planned Unit Development
Norman, OK

Applicant:
Chasm Advanced Materials, Inc.

Prepared by:

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Oklahoma City, OK 73104

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1. PROPERTY DESCRIPTION

Chasm Advanced Materials is an 8.14-acre industrial development located at 2501 Technology Place. The property is situated in Norman Business Park, just south of Highway 9. The property is surrounded by vacant land and other industrial uses in close proximity.

The property currently has a 15,000 square-foot building for offices and the manufacturing of carbon materials. In addition, an outdoor storage area exists for gases used in the manufacturing process. The property is not within the 100-year floodplain.

Legal Description: Lot TWO (2), in Block ONE (1), of NORMAN BUSINESS PARK, to Norman, Cleveland County, Oklahoma, according to the recorded plat thereof.

Existing Zoning: Current zoning is I-1, Light Industrial District.

Comprehensive Plan: The property is currently designated as Industrial in the NORMAN 2025 Land Use Plan. An amendment to the Land Use Plan is not necessary as part of this rezoning request.

2. DEVELOPMENT CONCEPT

Chasm's facility at 2501 Technology Place uses proprietary processes to create carbon materials (carbon nanotubes) which are targeted for use as additives for lithium-ion batteries, delivering improved performance over current technologies, and cement to enable decarbonization by reducing the amount of cement required for concrete, without compromising strength, while reducing carbon dioxide production from the cement manufacturing process. Both of these applications have been demonstrated (with customers) to be more cost effective than currently available technologies and represent a significant contribution to a more sustainable environment.

Because both of these applications will require substantially greater production output than is currently in place in the Norman plant, Chasm proposes expanding the existing facility in Norman to include additional manufacturing capacity. This includes an additional building and an expanded outdoor storage area for gases (which are an essential raw material used to produce carbon nanotubes). Chasm is requesting to rezone to PUD, Planned Unit Development, to allow for outdoor gas storage to continue the growth of the company, which began as a smart start from the University of Oklahoma research programs and has grown to become a fully operational manufacturing company. This request is aimed at building upon the many years of work to reach the current operation.

This PUD will not alter the existing uses conducted on the site, but will bring the property into compliance with the City of Norman's current Zoning Ordinance to permit future expansion of the facility. A site plan depicting the site layout and design features is provided as Exhibit "A": Site Plan. This PUD shall be developed in accordance with the City of Norman Zoning Ordinance and the use and development regulations of the I-1, Light Industrial District, except as otherwise specified herein.

See Exhibit "A": Site Plan

3. DEVELOPMENT STANDARDS

3.A. Development Standards Matrix: The subject property shall be developed in accordance with the below use and development regulations. These regulations are intended to closely follow those found in the I-1, Light Industrial District:

Net Land Area:	8.14 acres / 354,578 sq ft
Permitted Uses (See Exhibit "C" for complete list):	<ul style="list-style-type: none"> • Uses permitted in the I-1, Light Industrial District • Manufacturing of carbon materials • Outdoor storage of gases when used in the manufacturing of carbon materials. These gases include the following: <ul style="list-style-type: none"> ○ Ethylene ○ Hydrogen ○ Nitrogen ○ Carbon Monoxide ○ Carbon Dioxide
Use Conditions:	<ul style="list-style-type: none"> • The manufacturing of carbon materials shall be conducted entirely within an enclosed building, and shall not emit glare, dust, smoke, or noxious odor or fumes outside of the building housing the operation or produce a noise level or vibration at the property line that is greater than the average noise or vibration level occurring on the adjacent street • The outdoor storage of gases shall be completely fenced, with additional measures for security and safety • All uses shall comply with the use conditions specified in Exhibit "C".
Minimum Width:	There shall be no minimum lot width
Minimum Building Setbacks:	<ul style="list-style-type: none"> • Front: 25 feet • Side: None • Rear: None
Maximum Height:	There shall be no maximum height requirement

Building Coverage:	There shall be no building coverage requirement
Impervious Coverage:	There shall be no impervious coverage requirement
Landscaping Requirements:	In accordance with the City of Norman landscaping requirements, as amended from time to time

3.B. Parking and Loading Requirements: Parking may be developed in general compliance with the parking layout shown on the Site Plan, subject to changes allowed by Chapter 36-509(g). The Property shall comply with Norman’s applicable parking ordinances, as amended from time to time.

3.C. Sanitation: Trash dumpsters will be located as depicted on the Site Plan or in locations as modified or approved by the City of Norman.

3.D. Exterior Building Materials: Exterior building materials shall be in conformance with the requirements outlined in the City of Norman Zoning Ordinance, Chapter 36-547 (Exterior Appearance), as amended from time to time.

3.E. Signage: All signs shall comply with the requirements outlined in the City of Norman Sign Code per the Industrial Zone Sign Standards, as amended from time to time.

3.F. Landscaping: Additional landscaping shall be installed and maintained in order to meet or exceed the City of Norman’s applicable landscaping requirements.

3.G. Lighting: All exterior lighting shall be installed in conformance with the City of Norman’s Commercial Outdoor Lighting Standards, as amended from time to time.

3.H. Open Space: The portions of the property planned for open space are depicted in the Open Space Plan. The Open Space Plan attributes approximately 26% of the property as open space.

See Exhibit “B”: Open Space Plan

3.I. Fencing and Screening: All fencing and screening shall comply with the requirements outlined in the City of Norman’s Zoning Ordinance, Chapter 36-552 (Fencing, Walls, and Screening), as amended from time to time. In addition, the outdoor storage of gases shall be completely fenced, with additional measures for security and safety.

4. ACCESS, DRAINAGE, UTILITIES AND FIRE PROTECTION

4.A. Vehicular Access and Circulation: As indicated in the Site Plan (Exhibit “A”), primary access to the site will continue to be provided off Technology Place. All future improvements to the site shall be in accordance with the recorded plat and City of Norman requirements.

See Exhibit “A”: Site Plan

4.B. Stormwater and Utilities: Utilities are available for the development and future improvements. City of Norman sanitary sewer is available along the southern lot line of the property. Existing water lines are available along Technology Place and within the interior of the property. Existing drainage solutions on the site and within the Norman Business Park shall suffice for Phase II of the development. Future phases may require engineered stormwater solutions as required by the City of Norman.

4.C. Fire Protection Services: Fire protection services will be provided by the City of Norman Fire Department and by the applicant as such are required by applicable City of Norman's codes, ordinances, and regulations.

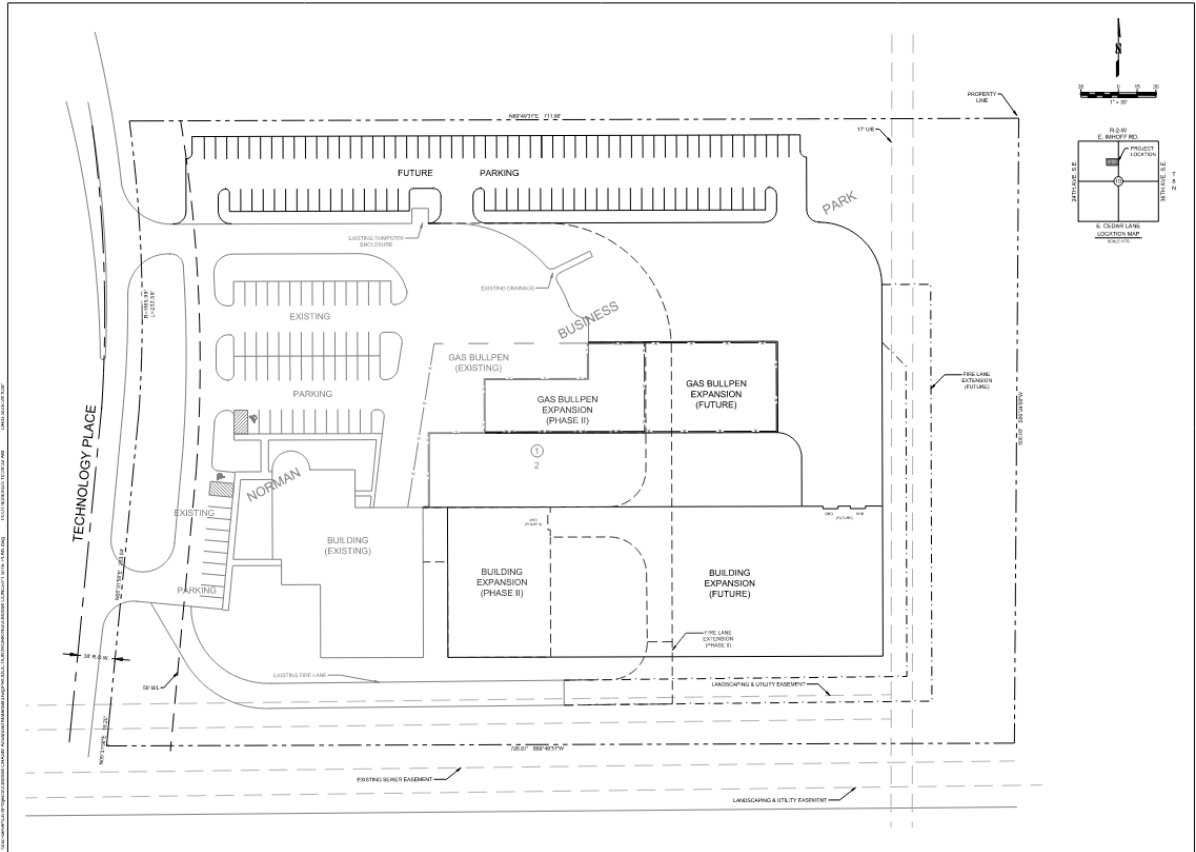
5. GENERAL PROVISIONS

5.A. SCHEDULE OF DEVELOPMENT: The next phase of development (Phase II) will include a new manufacturing building to the east of the existing building and the expansion of the gas bullpen. The remaining portions of the Site Plan shall be developed and completed as market conditions allow.

See Exhibit "A": Site Plan

EXHIBIT A – SITE PLAN

Full Size Plan Submitted to City Staff



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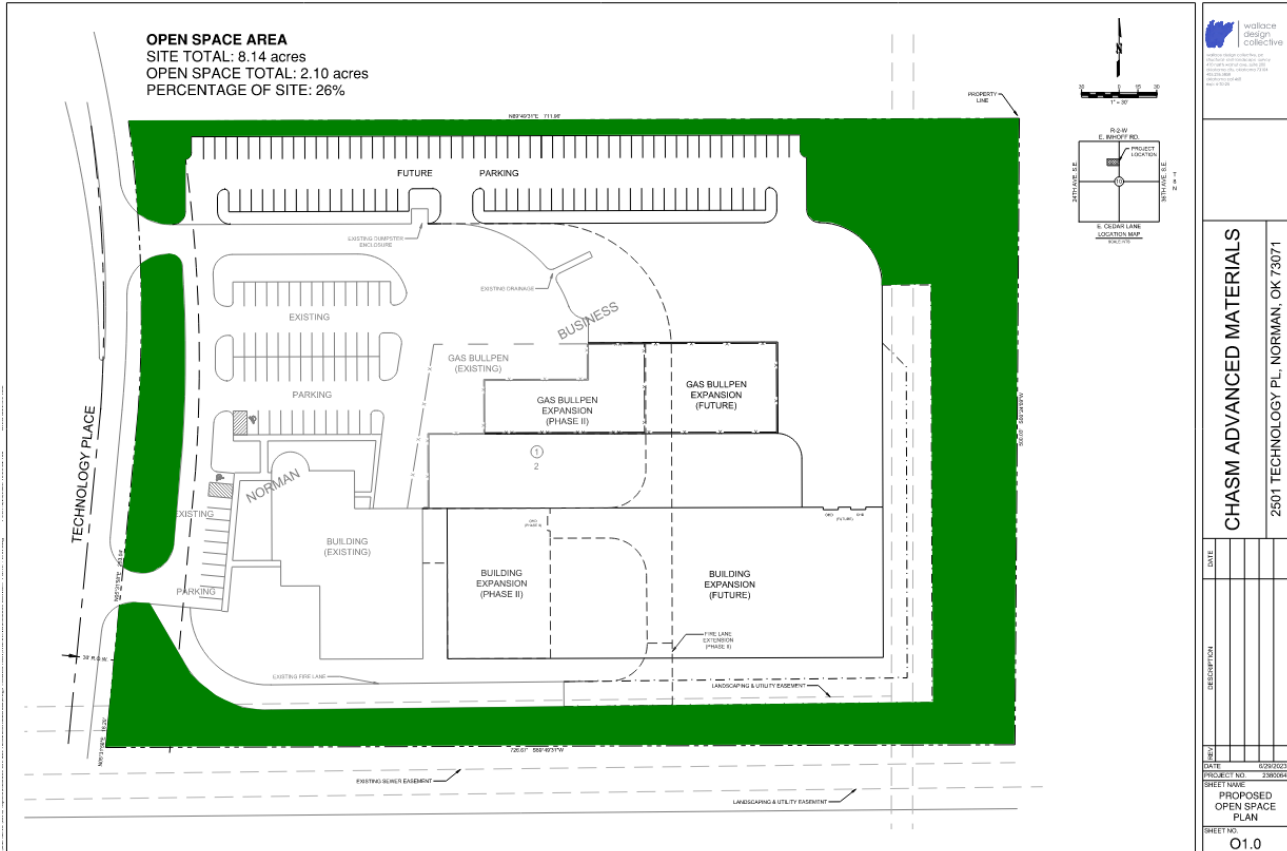
CHASM ADVANCED MATERIALS
 2501 TECHNOLOGY PL., NORMAN, OK 73071

DATE	DESCRIPTION

DATE: 8/3/2023	REVISION: 2
PROJECT NO: 2380064	
SHEET NAME: PROPOSED SITE PLAN	
SHEET NO: C1.0	

EXHIBIT B – OPEN SPACE PLAN

Full Size Plan Submitted to City Staff



CHASM ADVANCED MATERIALS	
2501 TECHNOLOGY PL., NORMAN, OK 73071	
DATE	
DESCRIPTION	
BY	
DATE	03/03/2023
PROJECT NO.	2380064
SHEET TITLE	PROPOSED OPEN SPACE PLAN
SHEET NO.	O1.0

EXHIBIT C – Permitted Uses

- Automobile sales and service, but not including automobile or machinery wrecking establishments or junk yards.
- Boat sales and service.
- Building materials sales yard, including the sale of rock, sand, gravel, and cement and the like as an incidental part of the main business. This shall not be construed as permitting a cement batch plant or transit mix plant.
- Contractor's equipment storage yard or yard for rental equipment of a type commonly used by contractors.
- Crematorium, subject to the following conditions and requirements:
 - Crematoriums shall meet the setback requirements of the underlying zoning district, except that they will be located a minimum of 400 feet from any RE, R-1, R-2, and R-3 zoning districts and 100 feet from all other zoning districts measured from the closest point of the building to the nearest residential district.
 - Facilities shall meet all applicable State and federal requirements for incineration equipment and shall be licensed at all times.
 - All storage shall be inside.
 - Incinerator stacks shall not be located on the front side of the roof of any structure facing the street.
 - Crematoriums shall have direct vehicle access to an arterial street.
- Funeral parlor, mortuary, and crematorium so long as the crematorium is attached to the funeral parlor or mortuary and complies with the following conditions and requirements:
 - Any building which incorporates a crematorium use shall meet the setback requirements of the underlying zoning district.
 - Facilities shall meet all applicable State and federal requirements for incineration equipment and shall be licensed at all times.
 - All storage shall be inside.
 - Incinerator stacks shall not be located on the front side of the roof of any structure facing the street.
- Farm machinery or contractor's machinery storage yard.
- Mobile home and camper sales.
- Office buildings and offices for such professional services as accountant, architect, attorney, business or management consultant, court reporter, dentist or dental surgeon, engineer, geologist or geophysicist, linguist, landscape architect, optometrist, optician, osteopathic physician, planning consultant, psychologist, physician or surgeon, or registered nurse; provided, however, that no retail sales nor stock of goods shall be permitted other than the

incidental sale of merchandise within the above professional offices or a pharmacy which may be located only in a building providing space for medical offices. Funeral homes and mortuaries shall not be considered professional services permitted in this district.

- Public utility service company yard or electric receiving or transforming station.
- Truck and farm implement sales and service.
- Truck terminal.
- Veterinary hospital.
- Warehousing.
- Trade schools and schools for vocational training.
- Impoundment yard, subject to the following conditions:
 - The operator of the storage facility must obtain both a City license to operate an impoundment yard and a State wrecker license;
 - All areas used for the storage of impounded vehicles shall be completely screened by an eight-foot-tall opaque fence, and maintained in good condition;
 - All public parking areas shall be paved in accordance with City standards. However, areas used for storage of disabled vehicles shall, at a minimum, be surfaced with at least six inches of crushed rock, preferably limestone with appropriate gradations, installed on a sub-base which has been cleared and grubbed, properly graded and compacted, and consists of a suitable soil (one with a low to moderate plasticity index);
 - No disabled automobiles, parts, or salvage material of any kind shall be stored outside or above the fence.
- The following uses when conducted within a completely enclosed building:
 - Manufacture of beer, wine and spirits and associated sales of those products manufactured on-site, subject to the following conditions and requirements and compliant with the State Alcoholic Beverage Laws and Enforcement Commission (ABLE):
 - Compliance with all applicable State ABLE laws regarding manufacturing and packaging of beer, wine and spirits;
 - Compliance with all applicable State ABLE laws regarding on-site serving of alcoholic beverages (beer, wine and spirits) and pre-packaged sales, as well as retailing of associated merchandise;
 - Licensure with the State ABLE and the City.
 - The manufacture, compounding, processing or treatment of such products as bakery goods, candy, cosmetics, dairy products, drugs, perfumes, pharmaceuticals, toiletries, and food products.

- The manufacture, compounding, assembling, or treatment of articles or merchandise from the following previously prepared materials: Bone, cellophane, canvas, cloth, cork, feathers, felt, fiber, fur, glass, hair, horn, leather, paper, plastics, precious or semi-precious metals or stone, shell, textiles, tobacco, wood, yarn, and paint not employing a boiling process.
- The manufacture of pottery and figurines or other similar ceramic products, using only previously pulverized clay, and kilns fired only by electricity or gas.
- The manufacture and maintenance of electric and neon signs, commercial advertising structures, light sheet metal products, including heating and ventilating ducts and equipment, cornices, eaves, and the like.
- Manufacture of musical instruments, toys, novelties, and rubber and metal stamps.
- Machine shop excluding punch presses over 20 tons rated capacity, drop hammers, and automatic screw machines.
- Assembly of electrical appliances, electronic instruments and devices, radios and phonographs, including the manufacture of small parts only, such as coils, condensers, transformers, crystal holders and the like.
- Laboratories. Experimental, photo or motion picture, film or testing. For the purposes of this section, the term "laboratories" includes medical marijuana testing laboratories, as allowed by State law, that fully comply with this provision.
- Poultry or rabbit killing incidental to a retail business on the same premises.
- Foundry casting light weight non-ferrous metals.
- Tire retreading and recapping when incidental to a retail tire business.
- Pipe storage yard.
- Machinery or equipment storage yard.
- Medical marijuana commercial grower, as allowed by State law.
- Medical marijuana education facility, as allowed by State law.
- Medical marijuana processor (any tier, except that Tier I and Tier II will not be allowed to have on-site sales), as allowed by State law.
- Medical marijuana storage facility.
- Medical marijuana waste facility (incineration and/or composting only), as allowed by State law.
- Manufacturing of carbon materials
- Outdoor storage of gases, subject to the following conditions and requirements:
 - When used in the manufacturing of carbon materials.
 - The outdoor storage of gases shall be completely fenced, with additional measures for security and safety.

- Buildings, structures and uses accessory and customarily incidental to any of the above uses.