

SMART DAIRY FARM



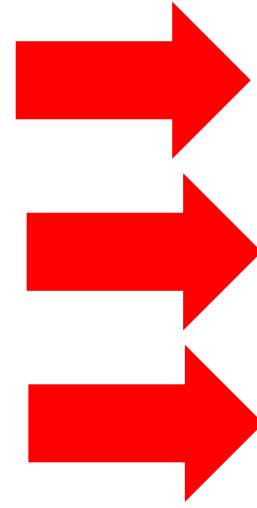


DAIRY FARM FOOD PROCESSING PLANT

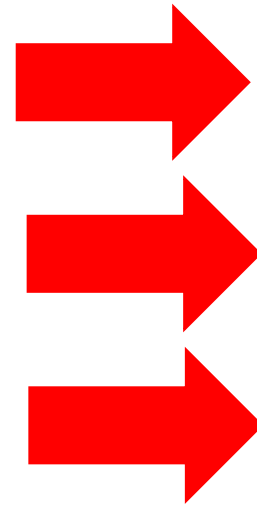
- Pharma1humanitas owner of company; provide consulting service for engineering service and consultancy for supply processing plant and production line in dairy sector and pharmaceutical field.



SMART DAIRY FARM CONSULTANCY FOR ASSEMBLANTION MILK POWDER PROCESSING PLANT

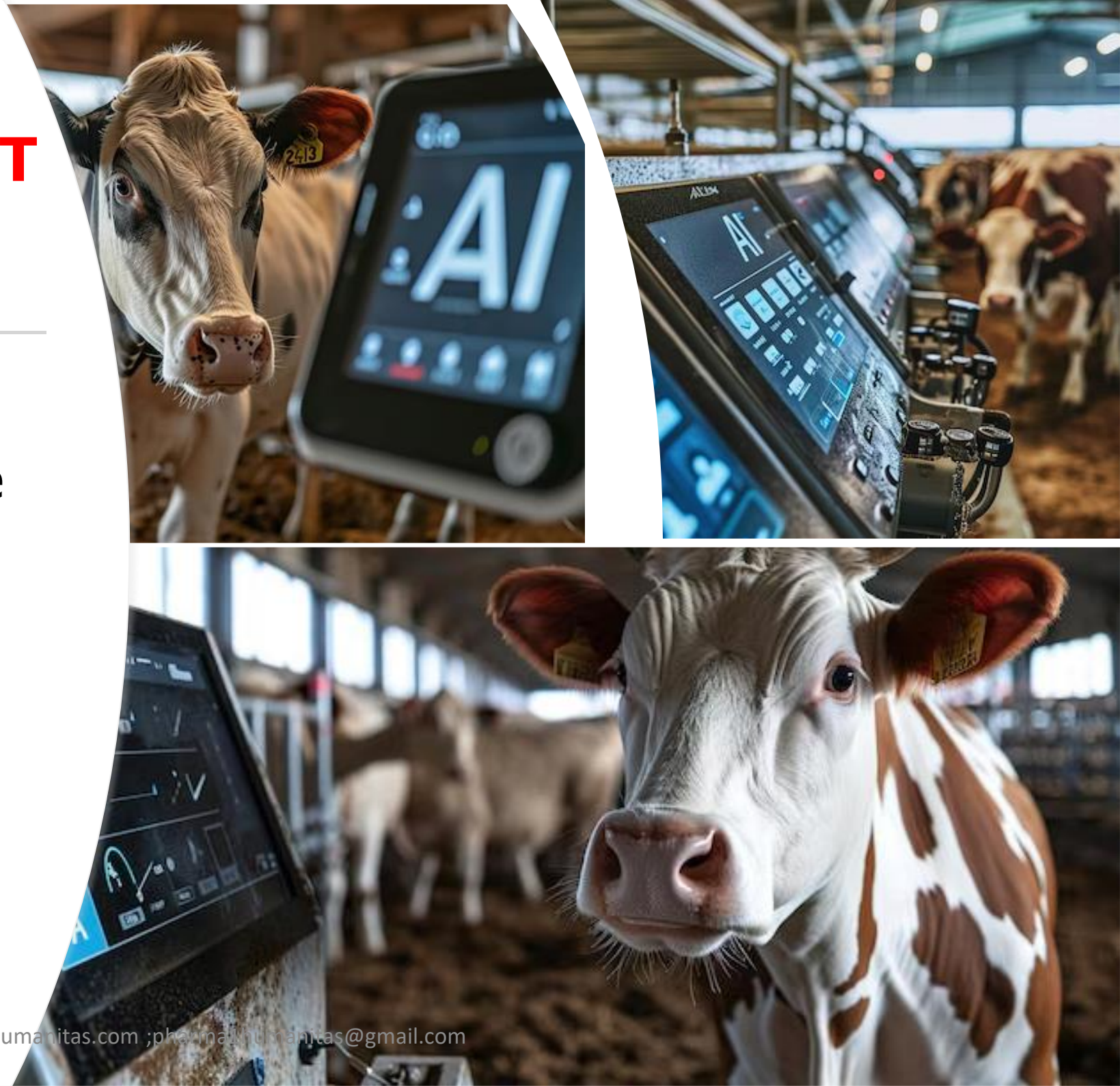


SMART DAIRY FARM CONSULTANCY FOR SALES MILK POWDER PRODUCTION LINE



SMART DAIRY FARM WE SUPPLY EQUIPMENT AND HI-TECH PRODUCTION LINES

- Pharma1humanitas owner of company; provide consulting service for engineering service and consultancy for supply innovative technological processing plant & production line in dairy sector and pharmaceutical field. We are able to construction and spin-off in buyer's private label a new brand.





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- The concept of using goat colostrum in the production of dietary supplements and functional foods is an innovative and increasingly popular application in the health and wellness industry. Colostrum, the first milk produced after a goat gives birth, is highly nutritious and rich in antibodies, growth factors, and other bioactive compounds. These properties make it valuable for use in supplements aimed at boosting immune health, promoting growth and recovery, and supporting gut health.



- **FEEDER BOTTLE WITH HANDLE**



- **CALF -DRINKING PAIL, WITH TEAT VALVE**



SMART DAIRY FARM

- **STAINLESS STEEL CAN WITH PLASTIC LID (Ø OPENING 200 MM)**

**SMART DAIRY FARM
WE SUPPLY EQUIPMENT
AND HI-TECH
PRODUCTION LINES**



SMART DAIRY FARM

- **FEEDER BOTTLE WITH HANDLE**

**SMART DAIRY FARM
WE SUPPLY EQUIPMENT
AND HI-TECH
PRODUCTION LINES**





Designing and constructing a smart agro-industry for dairy production involves integrating advanced technologies and sustainable practices to optimize efficiency, productivity, and quality. Here's a step-by-step guide to consulting on such a project:

1. Initial Assessment & Feasibility Study

•**Objective:** Understand the project's scope, goals, and potential challenges.

•**Activities:**

- **Site Analysis:** Evaluate land availability, climate, soil, and water resources.
- **Market Research:** Analyze market demand, competition, and consumer preferences for dairy products.
- **SWOT Analysis:** Identify strengths, weaknesses, opportunities, and threats related to the project.

2. Design & Planning

•**Objective:** Develop a comprehensive plan that incorporates the latest technologies and sustainable practices.

•**Activities:**

- **Facility Layout:** Design efficient farm layouts, including barns, milking parlors, feed storage, and processing units.
- **Technology Integration:** Plan for smart technologies such as automated milking systems, IoT sensors, and data management platforms.
- **Sustainability Planning:** Incorporate renewable energy sources (e.g., solar, biogas), water recycling systems, and waste management solutions.
- **Regulatory Compliance:** Ensure designs meet local, national, and international regulations and standards.





- **3. Technology Selection & Integration**
- **Objective:** Choose and integrate the right technologies to enhance productivity and product quality.
- **Activities:**
 - **Automated Milking Systems:** Evaluate robotic milking machines, automated feeders, and cow monitoring systems.
 - **IoT Sensors & Data Analytics:** Implement sensors for monitoring cow health, milk quality, and environmental conditions; utilize data analytics for decision-making.
 - **Precision Farming:** Use GPS and drones for feed crop management, ensuring high-quality and cost-effective feed production.
 - **Smart Supply Chain Management:** Incorporate blockchain for traceability and AI for demand forecasting.
- **4. Construction Management**
- **Objective:** Oversee the construction process to ensure quality and adherence to the plan.
- **Activities:**
 - **Contractor Selection:** Choose reliable construction firms with experience in agro-industrial projects.
 - **Project Scheduling:** Develop a timeline for construction activities, ensuring minimal disruption.
 - **Quality Control:** Monitor construction quality and ensure compliance with design specifications.
 - **Safety Management:** Implement safety protocols for workers and livestock during construction.



• **5. Sustainability & Environmental Impact**

• **Objective:** Minimize the environmental footprint of the dairy production process.

• **Activities:**

- **Energy Efficiency:** Design facilities to minimize energy use, incorporating energy-efficient lighting, cooling, and heating systems.
- **Waste Management:** Implement systems for managing manure, wastewater, and other waste products, possibly converting them into biogas or fertilizer.
- **Water Conservation:** Use smart irrigation systems for feed crops and recycle water where possible.
- **Carbon Footprint Reduction:** Explore ways to offset carbon emissions, such as carbon credits or afforestation projects.



6. Operations Management & Staff Training

- **Objective:** Ensure efficient operation of the dairy farm with well-trained staff.

- **Activities:**

- **Training Programs:** Develop and conduct training sessions for staff on operating advanced technologies and managing livestock.
- **Operational Procedures:** Establish standard operating procedures (SOPs) for daily farm operations, milk processing, and quality control.
- **Maintenance Plans:** Set up a maintenance schedule for all equipment and technologies to ensure long-term reliability.





- **7. Quality Control & Product Development**

- **Objective:** Maintain high standards of quality for dairy products.

- **Activities:**

- **Quality Assurance Systems:** Implement HACCP (Hazard Analysis Critical Control Point) or other quality control systems.
- **Product Innovation:** Develop new dairy products (e.g., organic milk, flavored yogurts) to meet market demands.
- **Packaging & Branding:** Design eco-friendly packaging and develop strong branding strategies to differentiate products in the market.

- **8. Market Launch & Continuous Improvement**

- **Objective:** Successfully launch the dairy products and continuously improve operations.

- **Activities:**

- **Marketing Strategy:** Develop a comprehensive marketing plan, including digital marketing, partnerships, and distribution channels.
- **Feedback Loop:** Establish systems to collect customer feedback and continuously improve product quality and farm operations.
- **Expansion Planning:** Plan for future expansion, including the introduction of new products or the expansion of facilities.



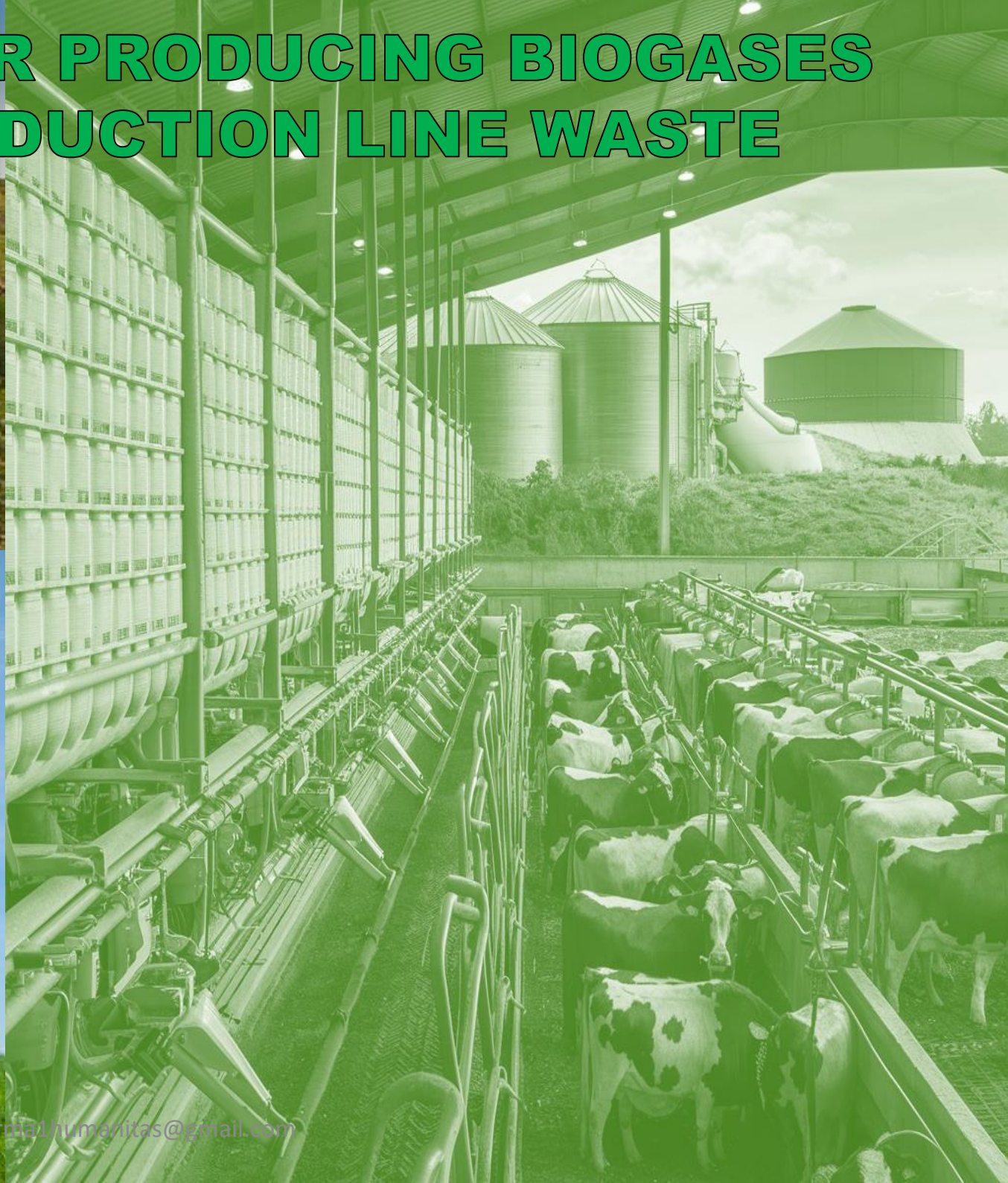


PHARMA1HUMANITAS SMART LIVESTOCK FARMING

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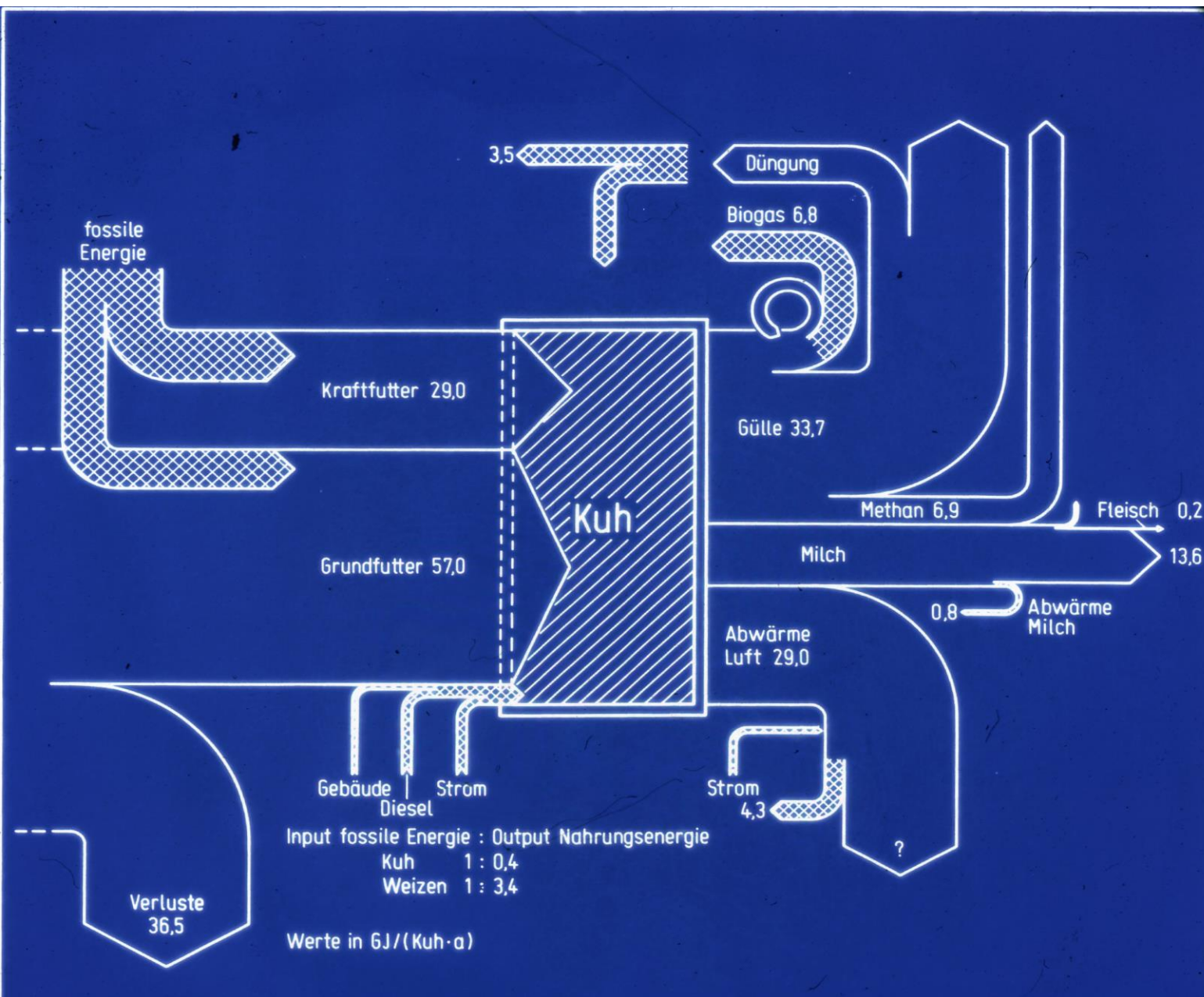
FUTURE PLANT FOR PRODUCING BIOGASES FROM ANIMAL PRODUCTION LINE WASTE

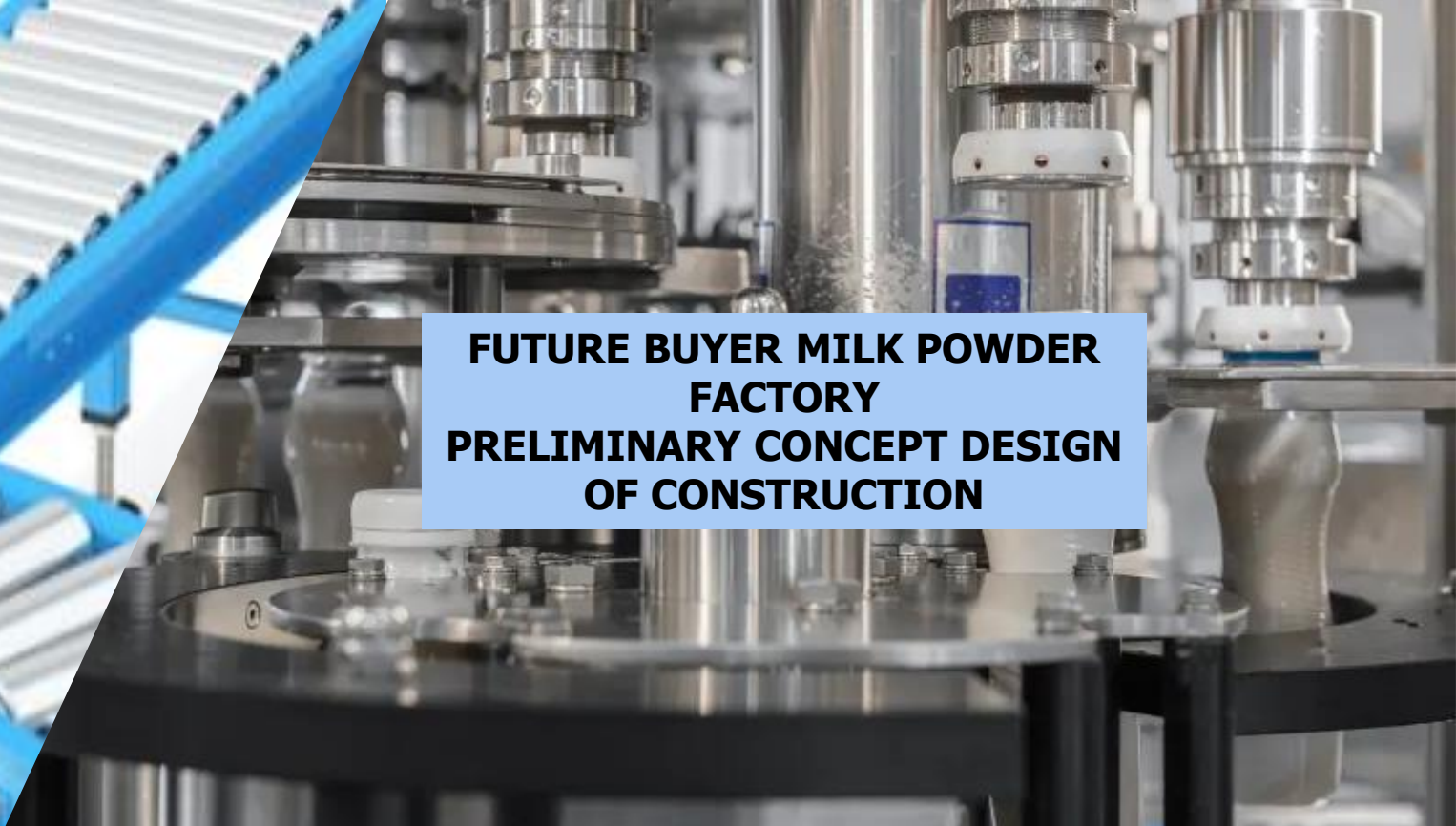


FUTURE PLANT FOR PRODUCING BIOGASES FROM ANIMAL PRODUCTION LINE WASTE

Thanks to the optimal and low-stress breeding conditions, it guarantees an increase in milk production of more than 10% - 15% compared to the best dairy cattle plants currently in Germany!

By filtering out the resulting greenhouse gases, such as methane, CO₂, ammonia, nitrogen oxides and by optimally using the resulting manure as an energy source and the generated renewable electricity, it is "energy autonomous" and generates profits from the sale of colostrum and industrial milk, from biomethane, bio-LNG, green hydrogen, renewable electricity from wind and sun, heat and cold, organic fertilizers as well as from the trade in large quantities of CO₂ certificates, significant additional profits income and considerable profits.





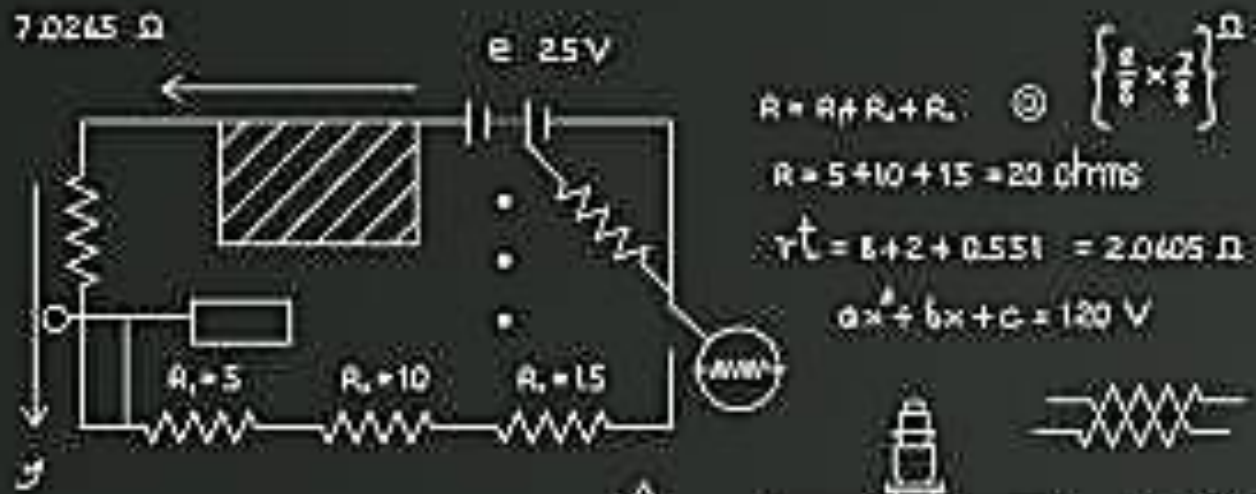
**FUTURE BUYER MILK POWDER
FACTORY
PRELIMINARY CONCEPT DESIGN
OF CONSTRUCTION**





**OUR TECHNOLOGY
TO SUPPLY**

**• PHARMA1HUMANITAS
TECHNOLOGICAL SCENARIO.**

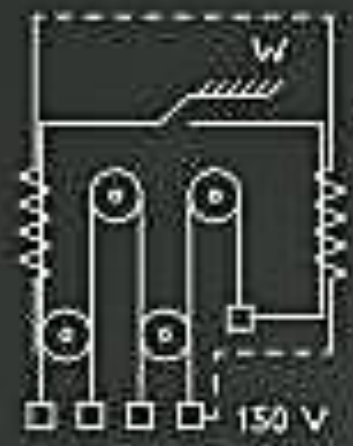


$$R = R_1 + R_2 + R_3 \quad \left\{ \frac{a}{8} \times \frac{2}{4} \right\} \Omega$$

$$R = 5 + 10 + 15 = 20 \text{ ohms}$$

$$r_1 = 1 + 2 + 0.551 = 2.0405 \Omega$$

$$ax^2 + bx + c = 120 \text{ V}$$



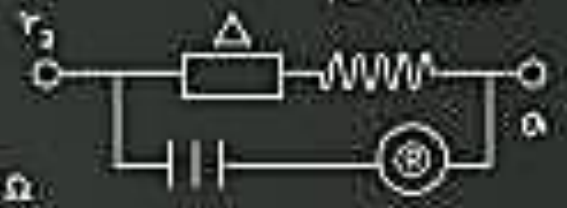
$$r_2 = \frac{a+b-1}{a+b} \times \left(\frac{b}{8} + \frac{2}{4} \right)^2 \quad P = I^2 R \quad c^2 + \left\{ \frac{a}{\sqrt{3+1}} \right\} = 2 \times a + 6^2$$

$$17 \Omega \quad y = y - x + 5h^2$$

$$r_1 = 1 + 5 + 0.2817 = 6.0025 \Omega$$

$$x^2 + bx + c = 15 \Omega \quad \square \square \square$$

$$\frac{2}{r_1} = \frac{2}{10} + \frac{5}{15} + \frac{1}{a} = \frac{25}{2}$$



$$r = 15 + \frac{1}{a} + \frac{2}{10} + 25 = 8.20155 \Omega$$

$$r_2 \times \left(\frac{a}{2} \right) \pm x_1 + 5 \times 18 \times x_1 = \sqrt{\frac{a}{r_2} \times \left(\frac{b}{8} + \frac{17}{2} \right)^2}$$

$$P = \frac{V^2}{R} \quad P = I^2 R \quad r_2 = \frac{Vb - Vx^2}{a}$$



$$y = y - x + 5h^2 \quad x^2 + bx + c = 15 \Omega$$

$$P = \frac{V^2}{R}$$

$$r_2 = 6.0025 \left\{ \frac{a}{8} \times \frac{2}{8} \right\} \times r_1$$

$$r_1 = 7.0245$$

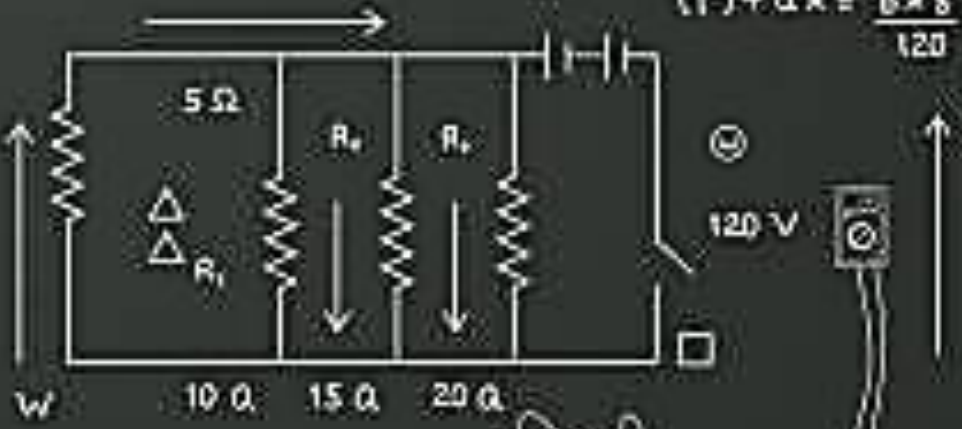
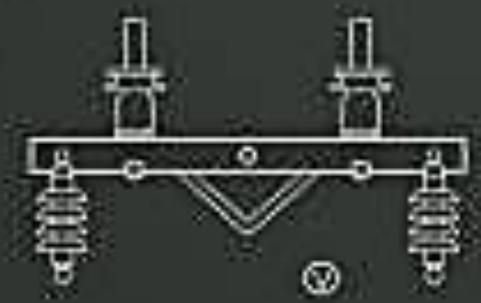
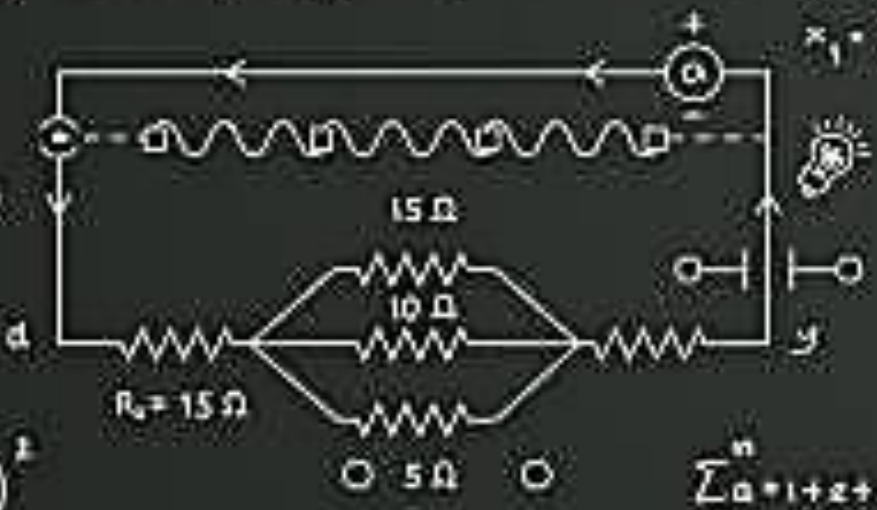
$$x_1 = \frac{a}{r_1} \times \left(\frac{b}{8} + \frac{17}{2} \right)^2$$



$$R_2 = 56 \times 8 \sqrt{1 - 10} \Omega$$

$$r_2 \times \left(\frac{a}{8} \right) \pm x_1 + 5 \times 18$$

$$(f) + dx = \frac{b \times 8}{120}$$



$$\frac{2}{r_1} = \frac{2}{10} + \frac{1}{a} + \frac{25}{2}$$

$$m = \frac{2}{r_1} \times \left(\frac{5}{15} + \frac{25}{2} \right)^2$$

$$d = \frac{5}{r_1} + x^2 = a + b \times 8$$

$$r = 15 + \frac{1}{a} + \frac{2}{10} + 25 = 8.20155 \Omega$$

$$\sum_{a=1}^n a = 1 + 2 + 3 + \dots + 8.20155 \Omega$$

$$\left(\frac{a}{2} \right) = \pm 5 \times 18 \eta + 61 = a \quad 5 \times b = \frac{c}{r_1} + 8a^2$$

$$m = (17 + b) - (a - b) \times 8 = (8 \times 2) - a^2 + \frac{2}{b}$$

$$\frac{2}{r_1} = \frac{2}{10} + \frac{5}{15} + \frac{1}{a} = \frac{25}{2}$$



$$r_1 = 1 + 2 + 0.551 = 2.0405 \Omega$$



*THREE-DIMENSIONAL VIEWS OF
THE FUTURE PROJECT OF THE
DAIRY FARM FOR PRODUCTION
MILK POWDER & FRESH MILK
(THE AESTHETIC DESIGN,
WINDOWS, (...)) IS PURELY
INDICATIVE)*

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- **Robotic milkers are one of the most advanced and automated solutions for milking cows. These systems are suitable for large farms that want to minimize human intervention.**
- **Milking robot: A milking robot is a fully automated device that takes care of all the stages of milking, from cleaning the udder to extracting and collecting the milk. The robots use sensors to locate the udder and adjust the suction force as needed.**
- **Automatic milk management: The milk is collected and automatically transferred to refrigerated containers to keep it fresh and safe.**





- *THREE-DIMENSIONAL VIEWS OF THE FUTURE PROJECT OF THE DAIRY FARM FOR PRODUCTION MILK POWDER & FRESH MILK (THE AESTHETIC DESIGN, WINDOWS, (...)) IS PURELY INDICATIVE)*

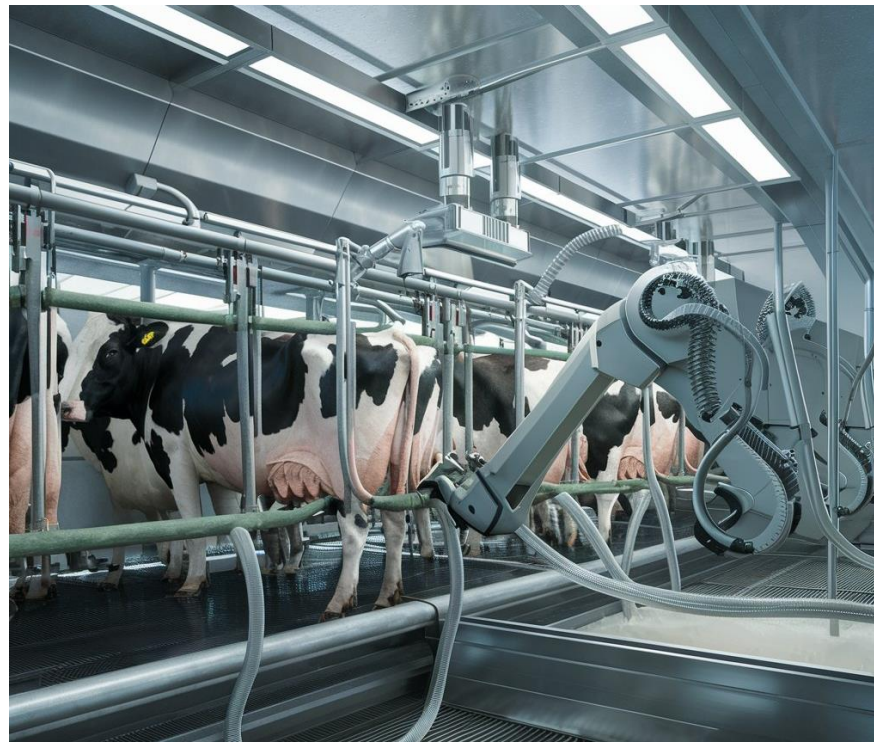




*THREE-DIMENSIONAL
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FARM (THE AESTHETIC
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- *THREE-DIMENSIONAL VIEWS OF THE FUTURE PROJECT OF THE DAIRY FARM FOR PRODUCTION MILK POWDER & FRESH MILK (THE AESTHETIC DESIGN, WINDOWS OF THE INFRASTRUCTURE, (...)) IS PURELY INDICATIVE*











- *THREE-DIMENSIONAL VIEWS OF THE FUTURE PROJECT OF THE DAIRY FARM FOR PRODUCTION MILK POWDER & FRESH MILK (THE AESTHETIC DESIGN, WINDOWS, (...)) IS PURELY INDICATIVE)*



PROVIDE PRODUCTION LINE FOR CONSTRUCTION A FACILITY FOR MANUFACTURING BLENDED ANIMAL FEED

- preparing waste for grinding and processing into mixed feed; creating mixed feed; department in charge of "making a daily ration of cow feed (mixed feed, fodder plants, etc.) - this will be a section of the factory that makes combined feed.
- Dosed mixing of mixed feeds and fodder plants together with other formulations for the manufacture of a single portion of bovine feeding;







- **MINI POWER STATION FOR DISTRIBUTION THE ELECTRIC.**



- Electricity for each sector / departments of this Complex will be supplied separately, which will allow to minimize / exclude the "stopping" of the whole Complex due to a malfunction in the power supply system



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LABORATORY OF ARTIFICIAL INSEMINATION

- Carrying out of breeding works;
- Conducting "targeted point-of-insemination". Due to this method will increase the insemination and fertilization of the cattle;
- Minimizing the "depletion" of bulls- insemination;



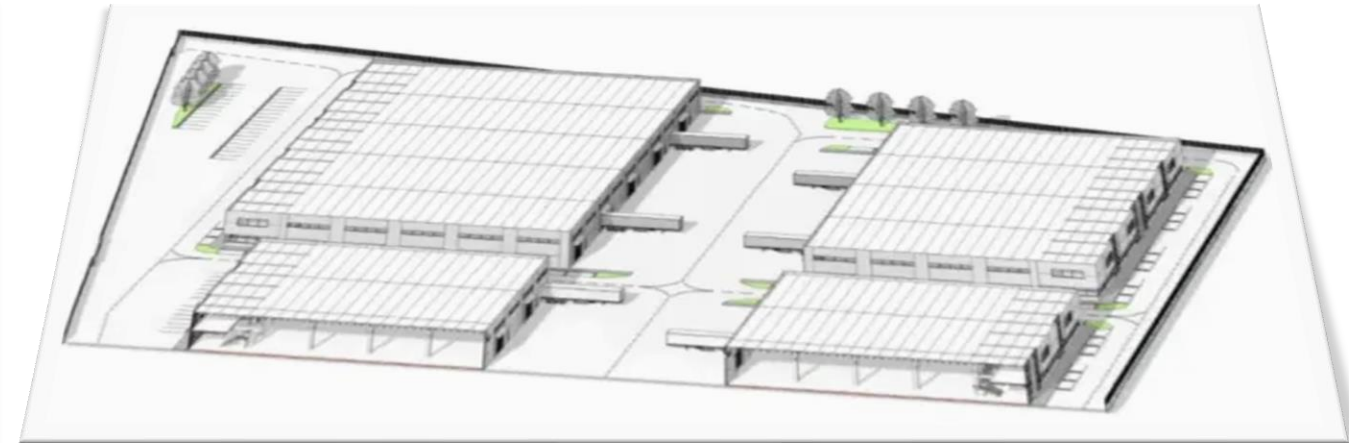
FUTURE BUYER SMART DAIRY FARM

Modular type stations for water purification

- In addition to the general treatment water supplied to each of the Farms will pass through this station;
- Reduce or even exclude the poisoning of cattle with heavy metals, toxic chemicals and compounds;
- Enrichment of water with microelements, ions, oxygen, etc.



PHARMA1HUMANITAS CONSULTING SERVICE FOR CONSTRUCTION YOUR SMART AGRO-INDUSTRY



THREE-DIMENSIONAL VIEWS OF THE FUTURE PROJECT OF THE SMART
DEPARTMENT STORE (THE AESTHETIC DESIGN, WINDOWS, (...)) IS PURELY
INDICATIVE)



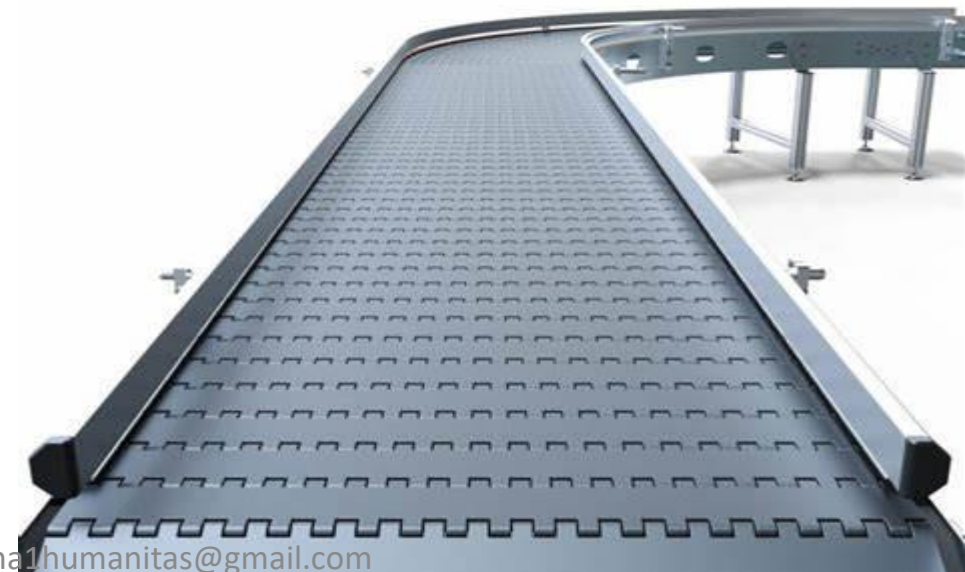
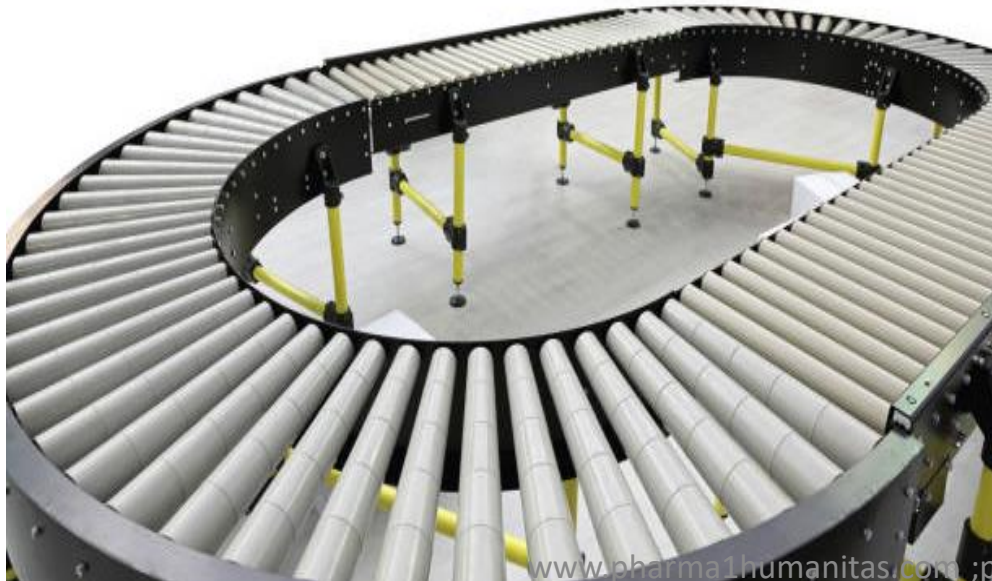
THREE-DIMENSIONAL VIEWS OF THE FUTURE PROJECT OF THE
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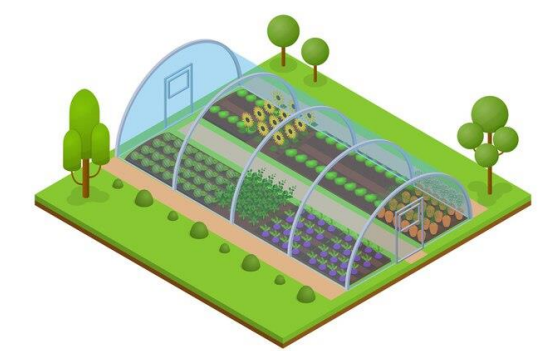
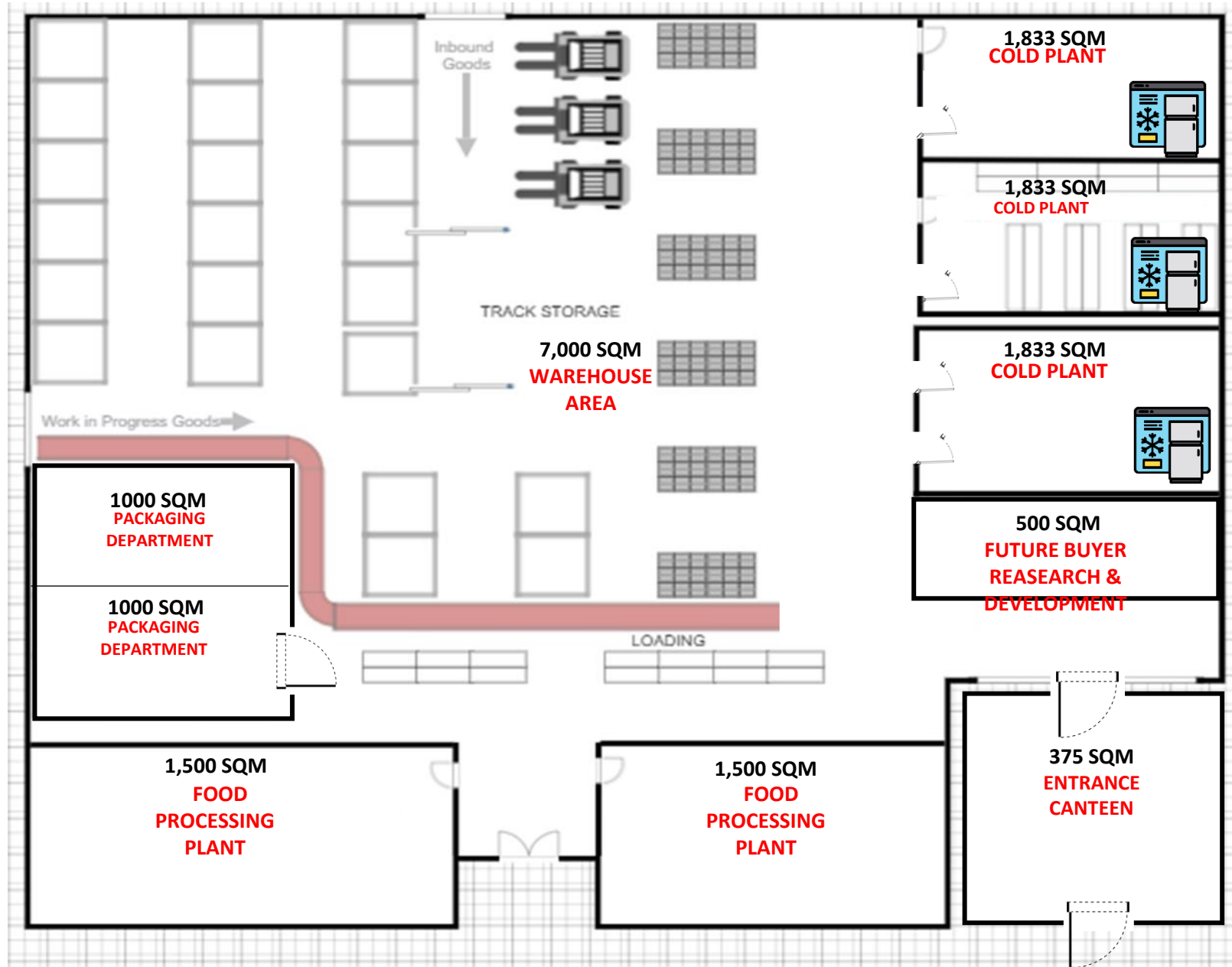
3D PHOTOGRAPHIC HYPOTHESIS
OF THE FUTURE CONSTRUCTION



COLD ROOM



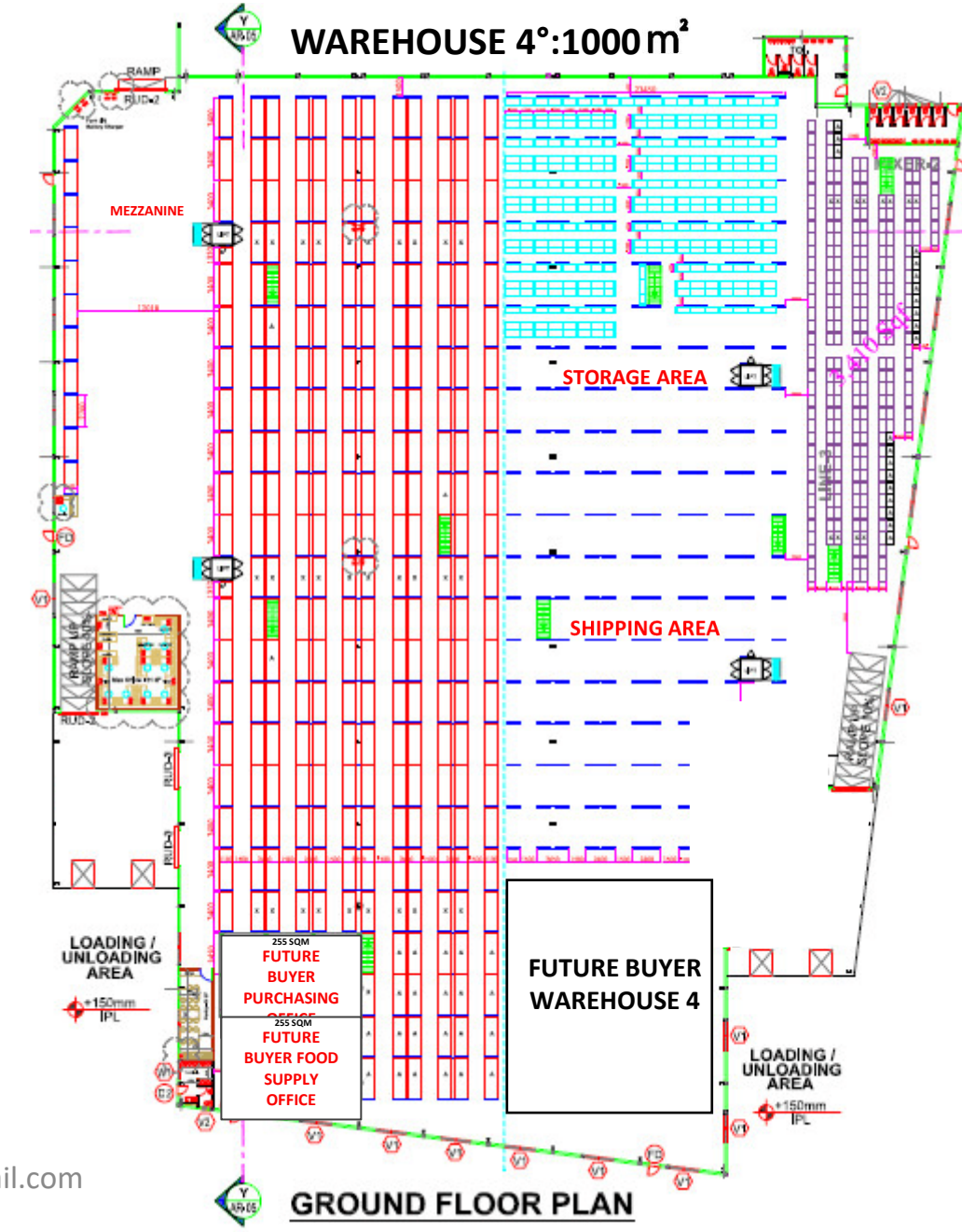
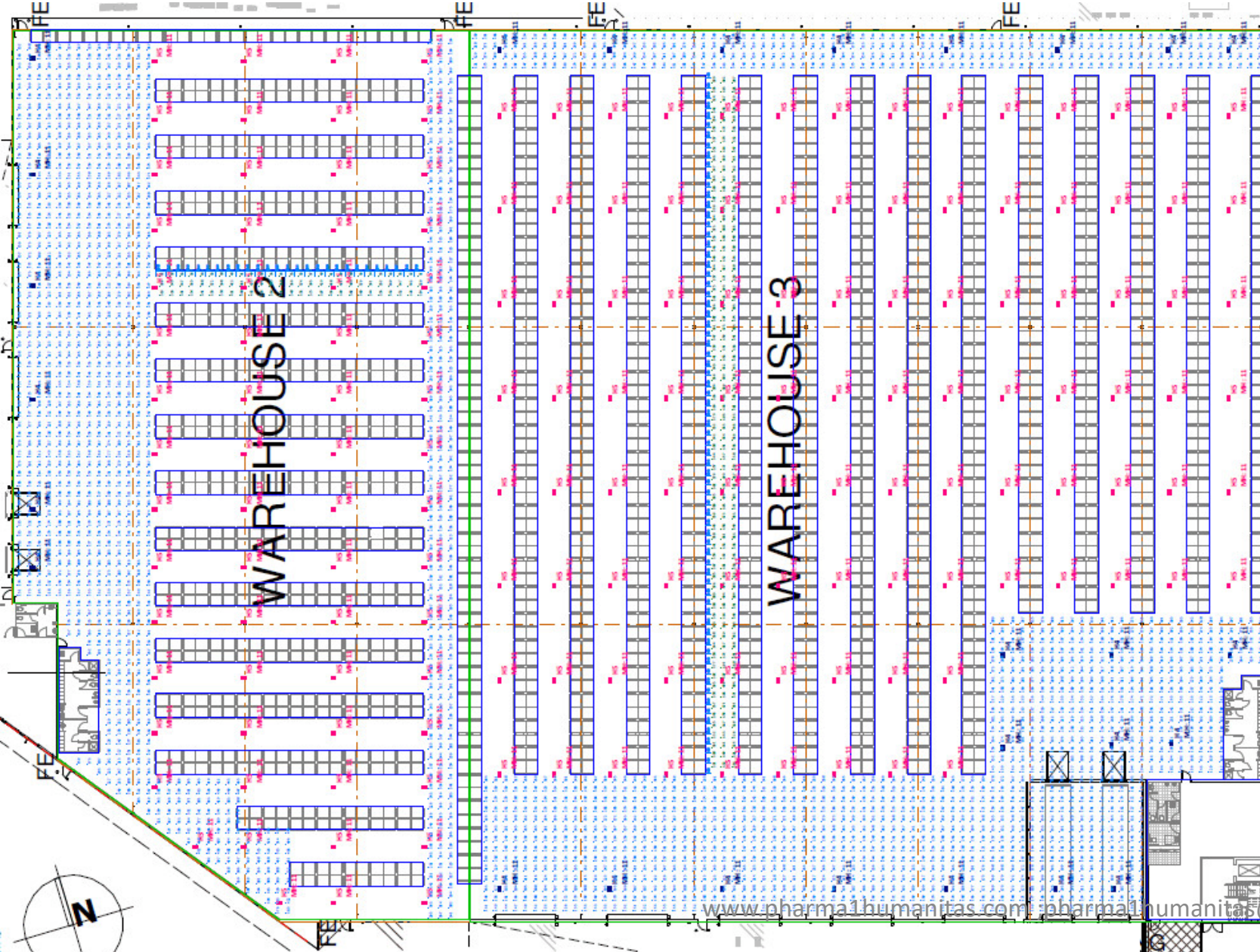
**ENTRANCE+ CANTEEN+PROCESSING PLANT + PACKAGING DEPARTMENT
+MEZANINE+STORAGE+WAREHOUSE + COLD PLANT+REASEARCH & DEVELOPMENT= 18,374 m²**



WAREHOUSE 2°:500 m²

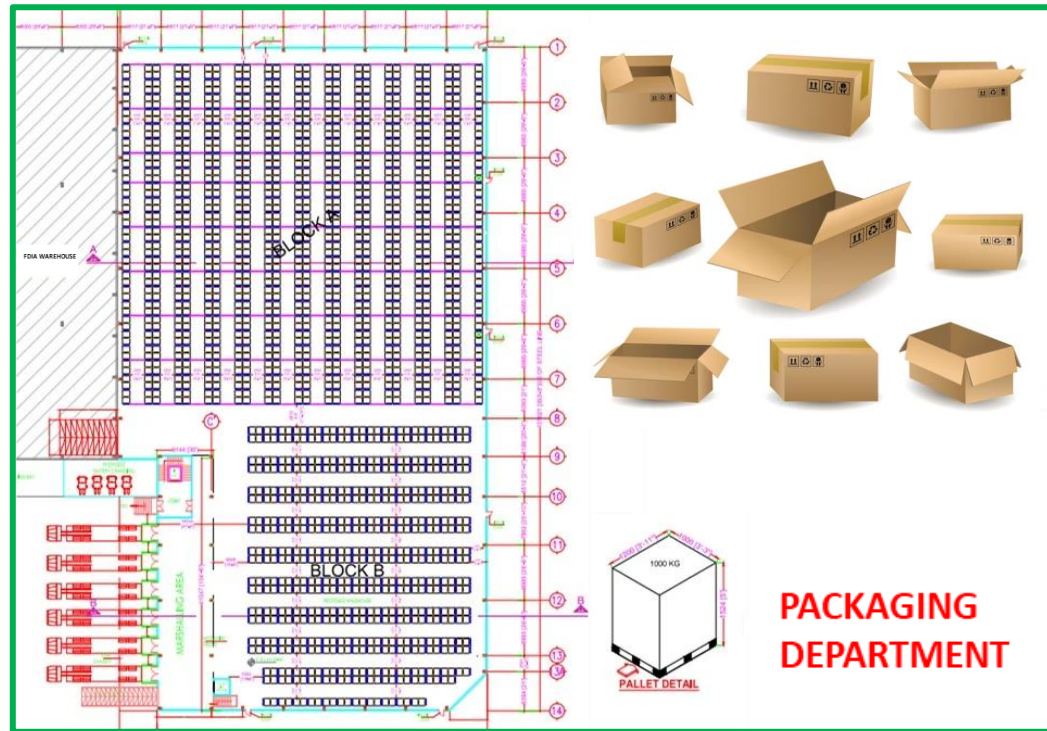
WAREHOUSE 3°:1000 m²

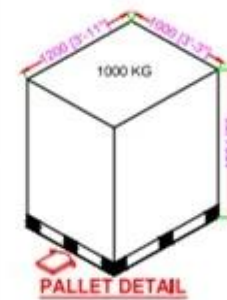
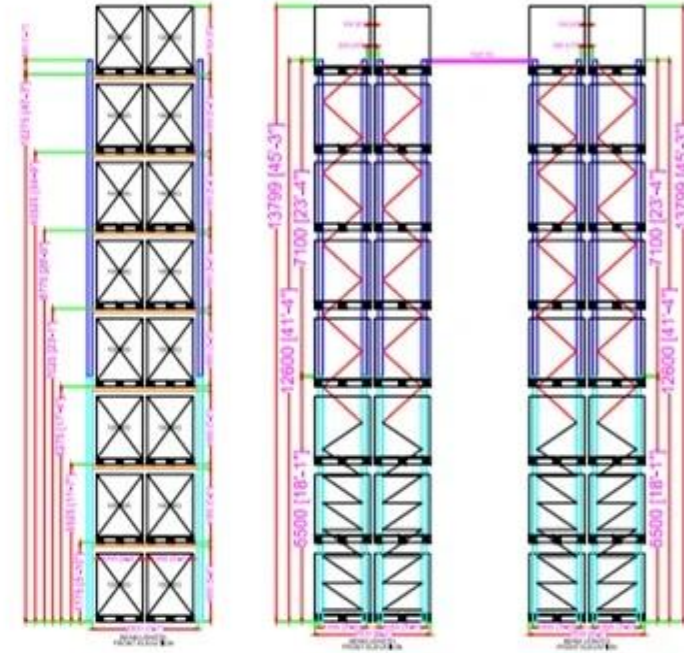
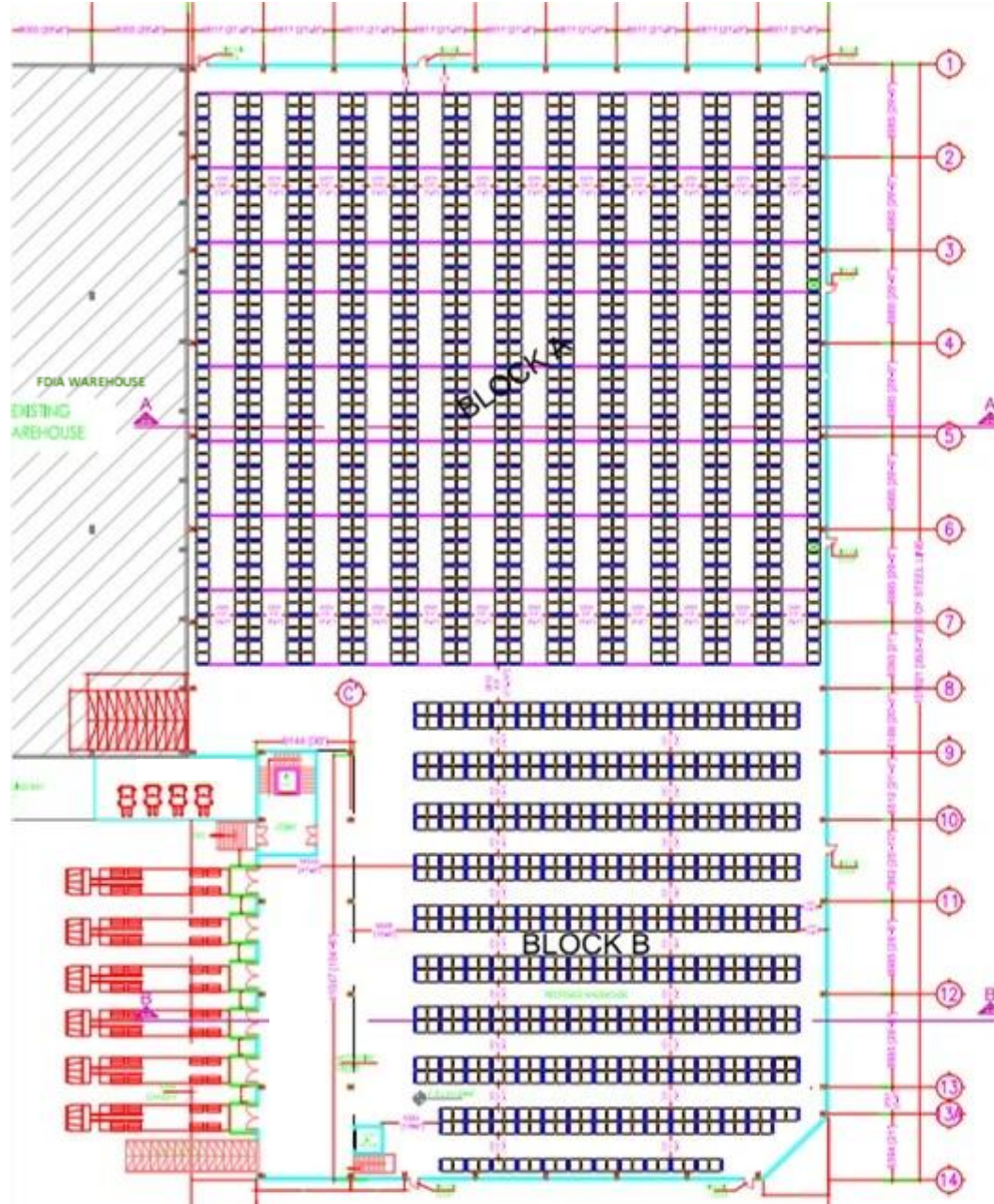
WAREHOUSE 4°:1000 m²

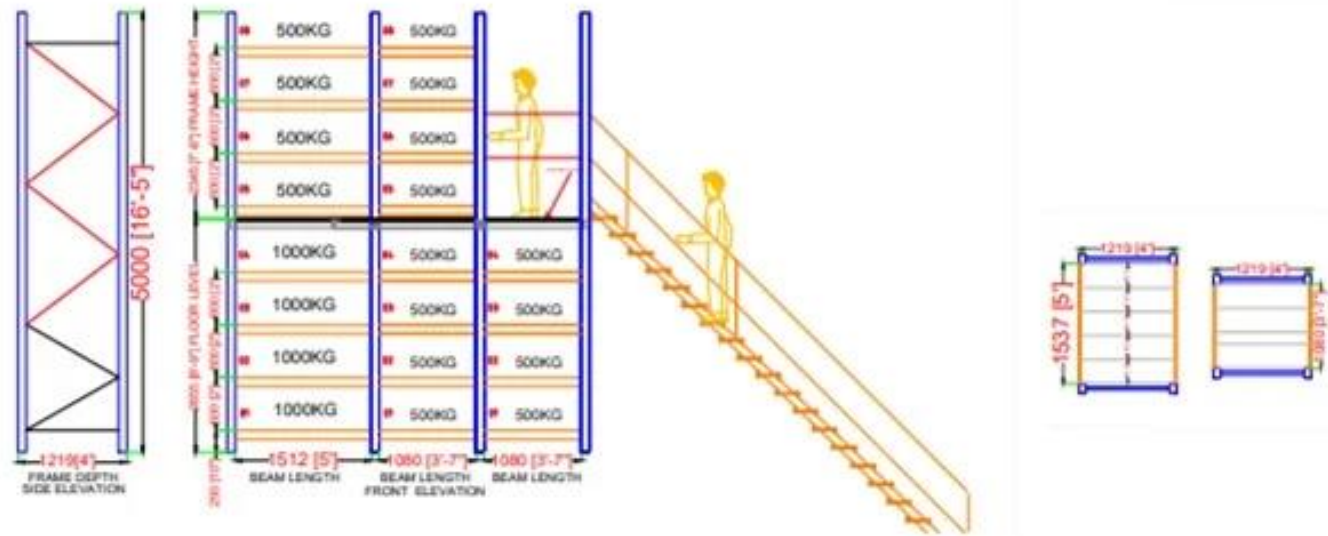
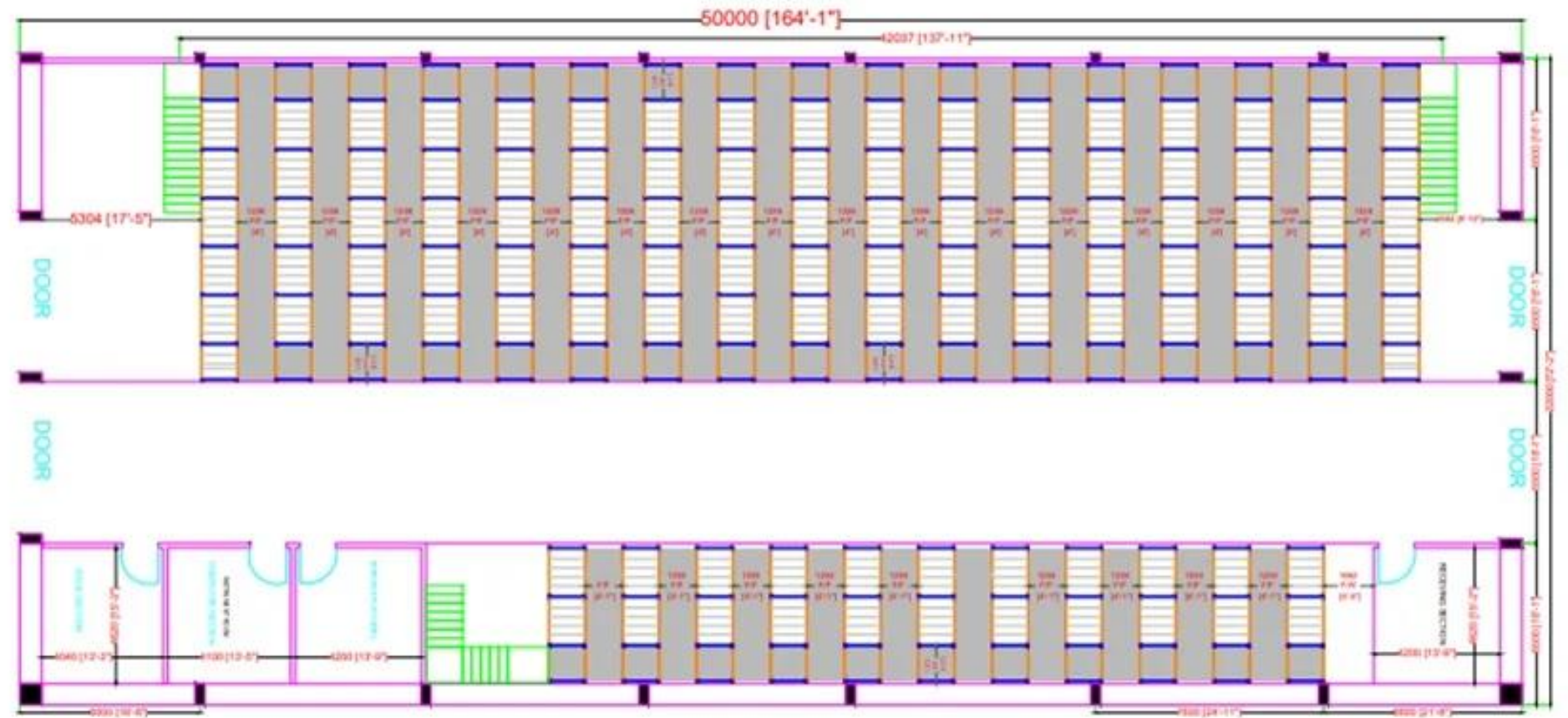


GROUND FLOOR PLAN

PACKAGING







FUTURE BUYER SMART DEPARTMENT

- 1) FIND AND RETRACE ROUTES & PRODUCTS.
- 2) CLASSIFY AND CATALOGUE PRODUCTS ACCURATELY.
- 3) LOCATING THE EXACT POSITION OF THE FOODSTUFFS IN SMART DEPARTMENT STORE & SMART AGRO INDUSTRY.
- 4) RECEIVE TAILORED RECOMMENDATIONS AND CORRELATIONS.
- 5) RECREATE IN PHYSICAL ENVIRONMENTS MODELS OF ANALYSIS AND CUSTOMISATION OF PATHS TYPICAL OF THE WEB.
- 6) REDUCTION OF PREPARATION ERRORS IN THE SMART DEPARTMENT STORE.
- 7) INCREASING OPERATIONAL EFFICIENCY
- 8) OPTIMISATION IN CATALOGUING AND CLASSIFICATION OF PRODUCTS DELIVERIES.
- 9) CREATE A SMART INVENTORY MANAGEMENT SYSTEM
- 10) PROVIDE TECHNOLOGICAL INSTRUMENTS.
- 11) TECHNOLOGY ENHANCED FROM FARM TO WAREHOUSE TO HUMANITARIAN CENTERS WITH SENSORS, PROCESSORS, MEMORY, COMMUNICATIONS

These electronic devices are capable of generating specific frequencies that are propagated through special instrument. The obtained findings show the effectiveness of developing a mathematical & computer model for the assessment of the distribution of production tasks across multiple plants to achieve maximum production in the quickest amount of time and efficient & quickly shipping.

Place sensors in smart department store and in all boxes. Build networks everywhere & analyse everything to greatly improve performance and users satisfaction. A smart supply chain applies the Internet of Things, advanced robotics, and big data analytics in the operation of supply chains. Unique, remote and wireless identification of products via radio frequency devices.





RESEARCH AND DEVELOPMENT



Promote and apply scientific research for the benefit of society, directly or indirectly, through universities, institutes or institutions and with other Foundations.

INFRASTRUCTURE





THE HYPOTETICAL PHOTO OF THE FUTURE PROJECT OF THE SMART DEPARTMENT STORE (THE AESTHETIC DESIGN, WINDOWS, PHOTOVOLTAIC PANELS IN THE ROOF, PARKING AREA (...) IS PURELY INDICATIVE)



AGRIVOLTAIC PROJECT



THE HYPOTETICAL PHOTO OF THE FUTURE PROJECT OF THE AGRIVOLTAIC (THE AESTHETIC DESIGN, PHOTOVOLTAIC PANELS IN THE ROOF, LAND AREA (...) IS PURELY INDICATIVE)

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AGRIVOLTAIC PROJECT



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AGRIVOLTAIC PROJECT



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