

CHICAGO ROCKFORD INTERNATIONAL AIRPORT
MIDFIELD AIR CARGO ALTERNATIVE CONCEPT DEVELOPMENT PLAN

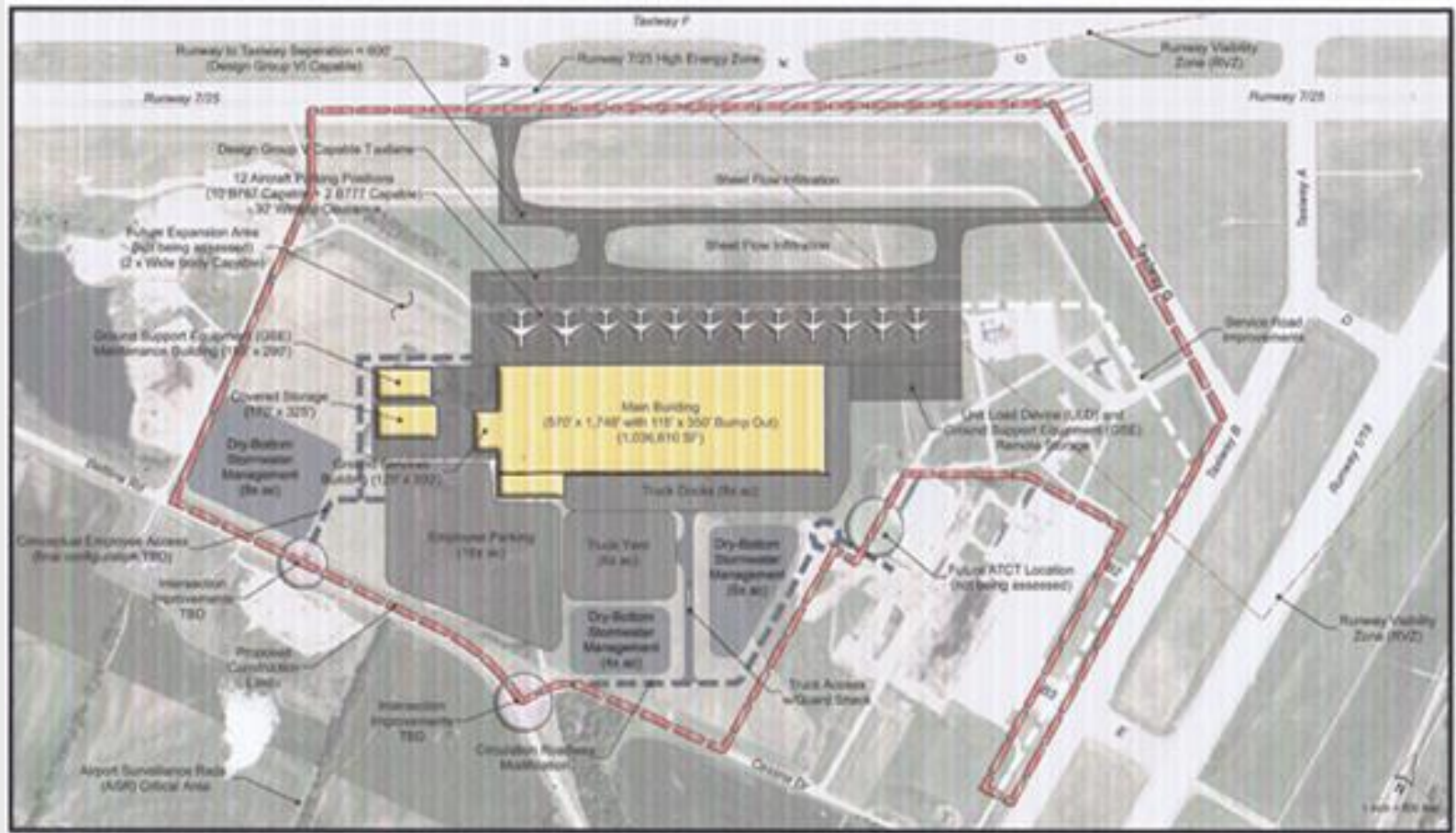
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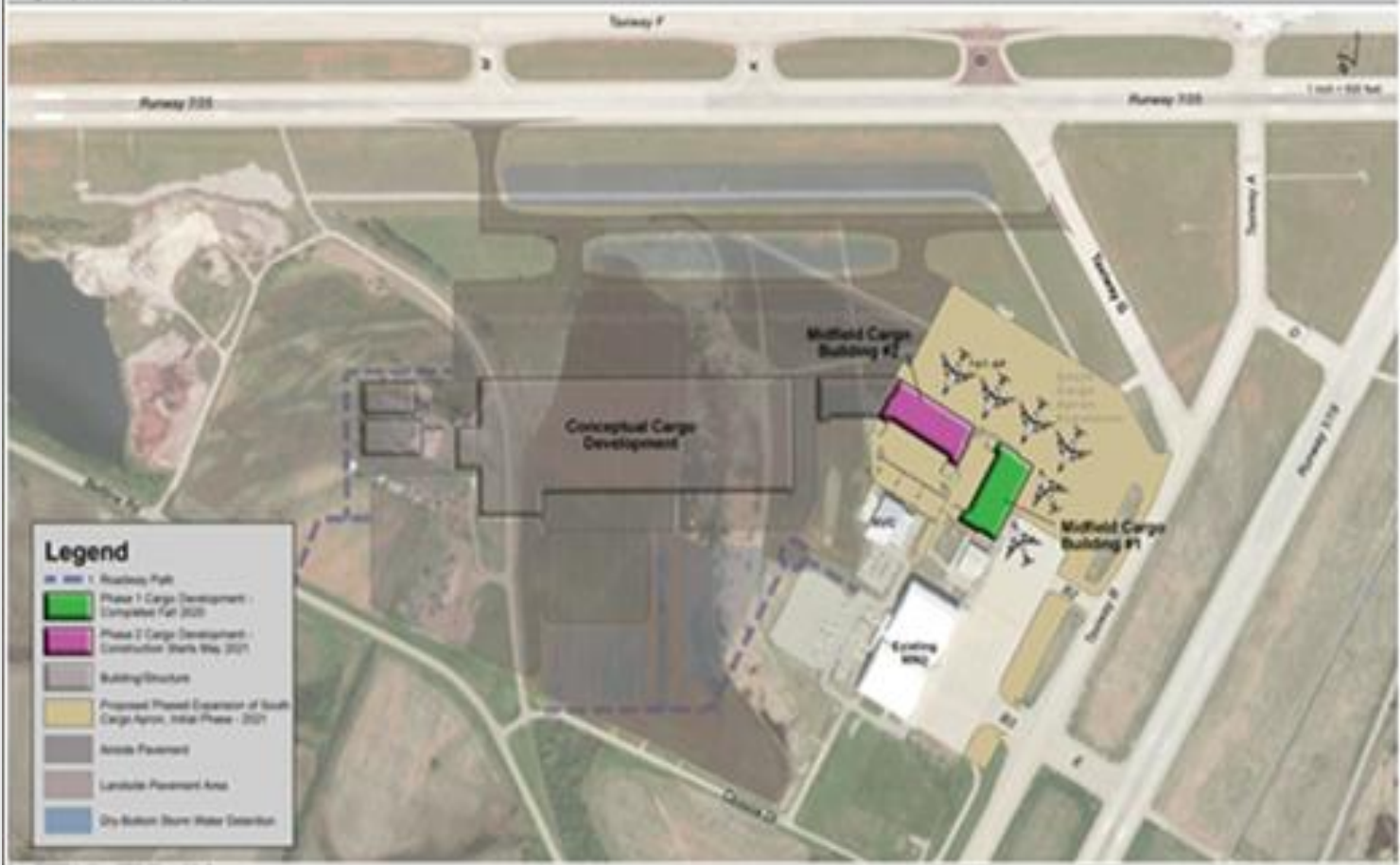
DOMENICO D'ALESSANDRO

ON BEHALF OF

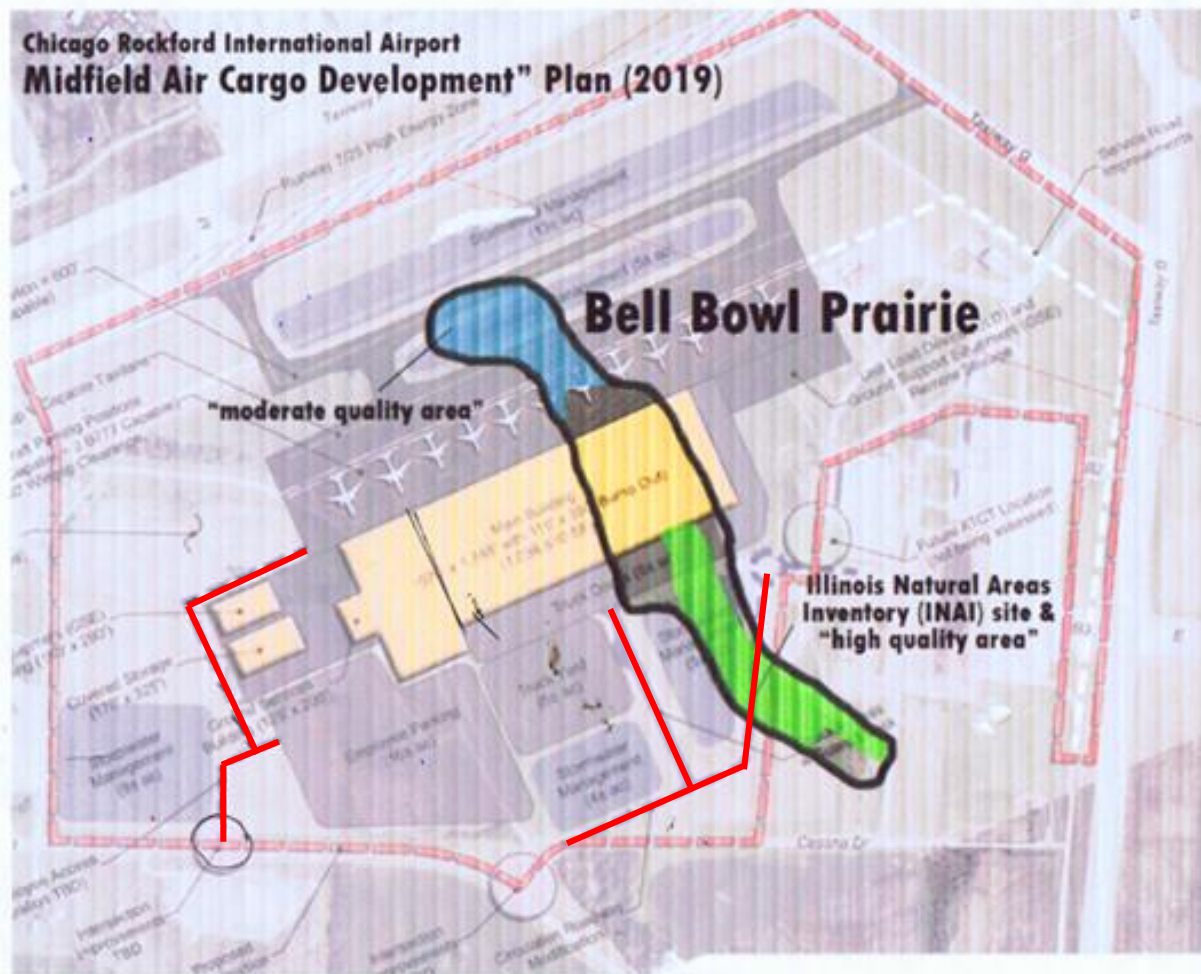
SAVE BELL BOWL PRAIRIE ADVOCATES

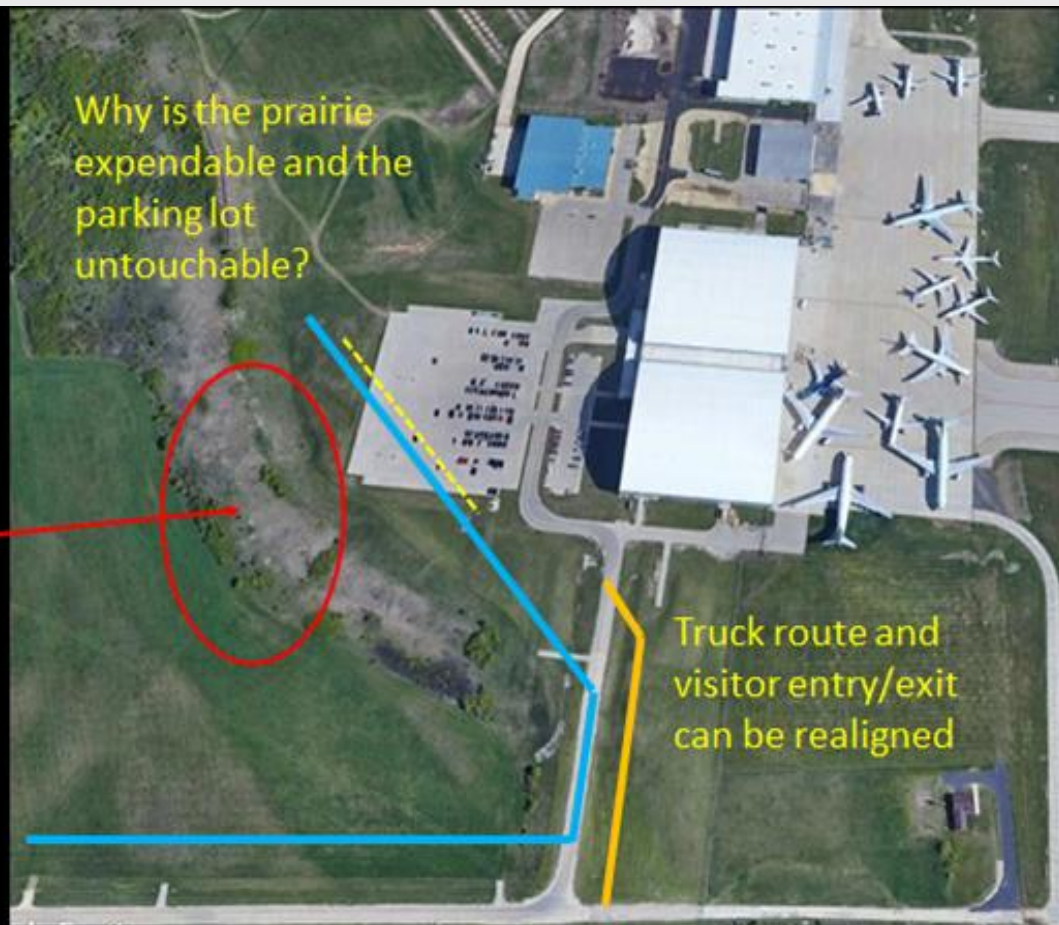
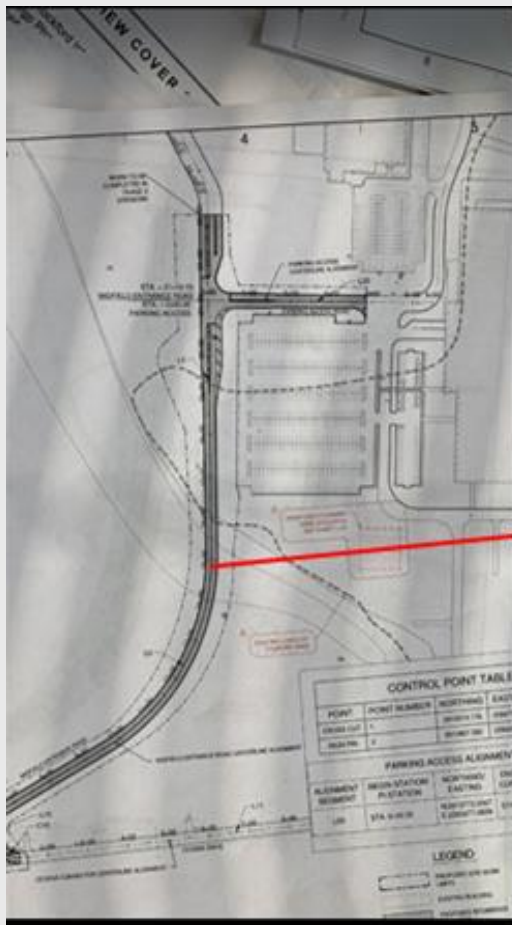
Figure 1-4
 Sponsor's Proposed Action - Midfield Air Cargo Development





Chicago Rockford International Airport Midfield Air Cargo Development" Plan (2019)







About 61 percent of Illinois, approximately 22 million acres, once was prairie. Now less than one percent remains, about 2,500 acres. Most of the land once occupied by prairie is now farmland.

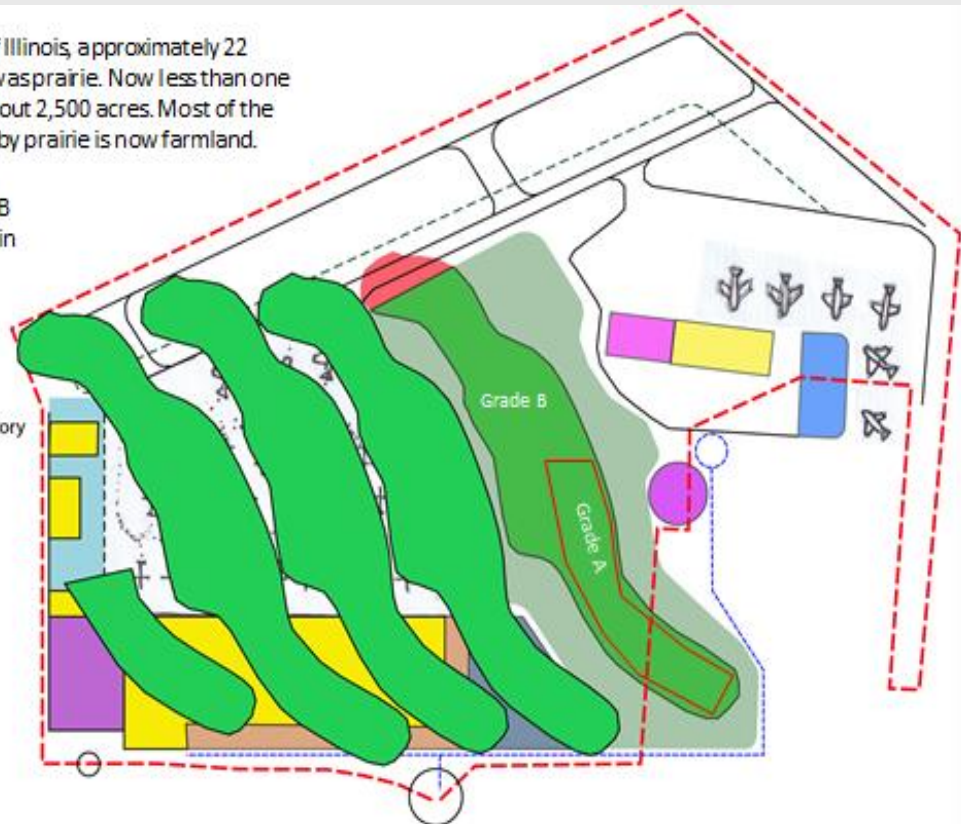
50.7 acres of Grade B gravel prairies remain

The original Illinois Natural Areas Inventory states:



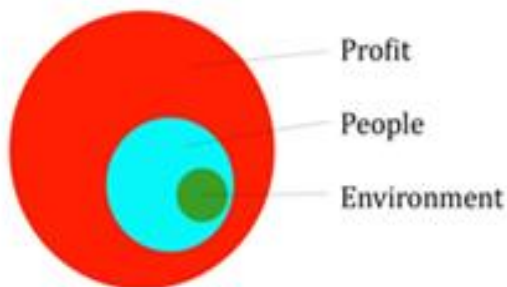
There are 21.8 acres of Grade A gravel prairies left in the state of Illinois.

All can fit within this project site with plenty of room to spare.



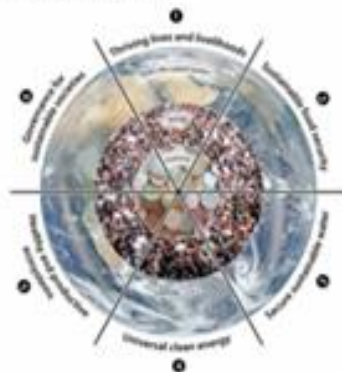
USUAL, CURRENT BIG PICTURE STRATEGY

1. **Metrics of efficiency** - lowest cost
2. **Tactics** - reduce amount and cost of materials (value engineering)
3. **Strategies** - Compress dimensions and scope.
4. **Goals** - Create the smallest space that can accommodate use.
5. **Principles** - too late!!! - metrics, tactics and goals already established.
6. **Human values** - unexpressed.



VALUE-BASED STRATEGY

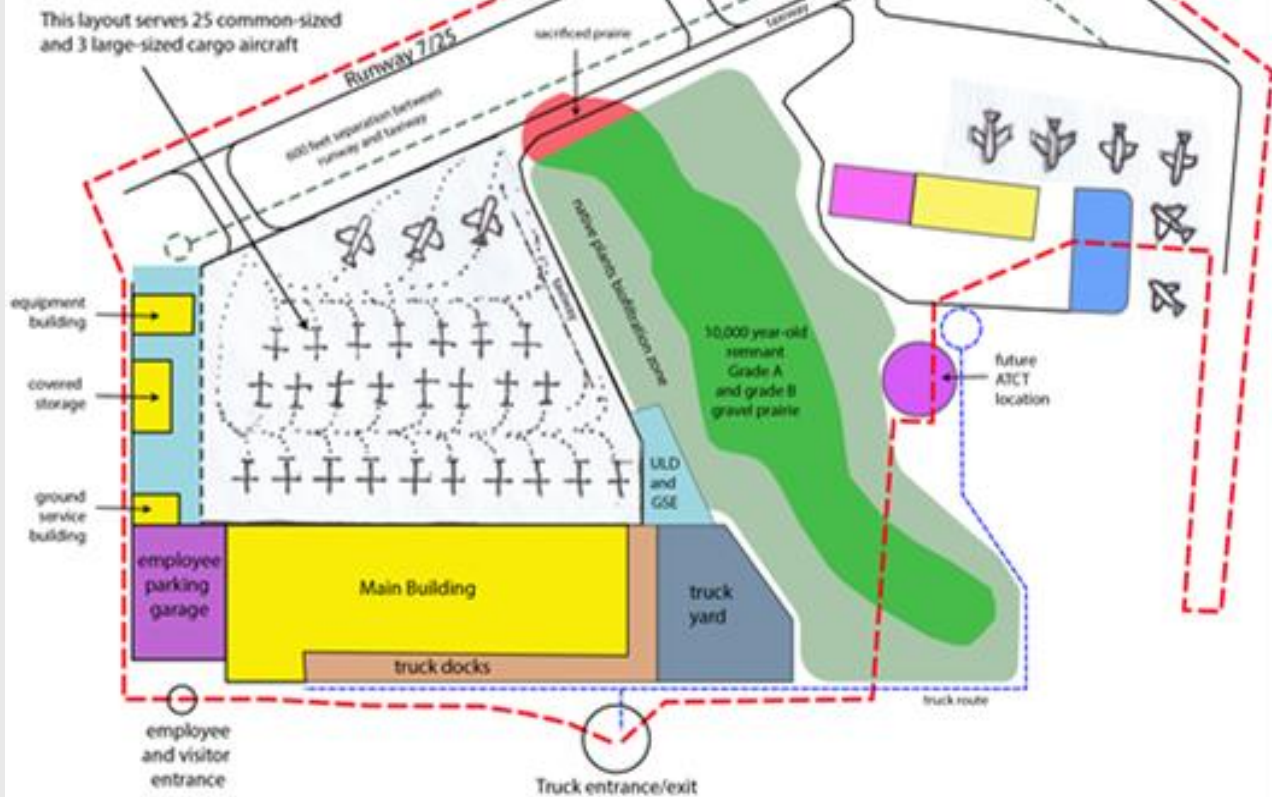
1. Establish **values** for engaging the world.
2. Work with teams to establish **principles**.
3. Develop **goals** to realize values.
4. Develop **strategies** to meet goals.
5. Develop **tactics** to execute strategies.
6. Develop **metrics** to measure effectiveness of tactics.





Chicago Rockford International Airport Midfields Air Cargo Alternative Concept Development Plan (2021)

by Domenico D'Alessandro



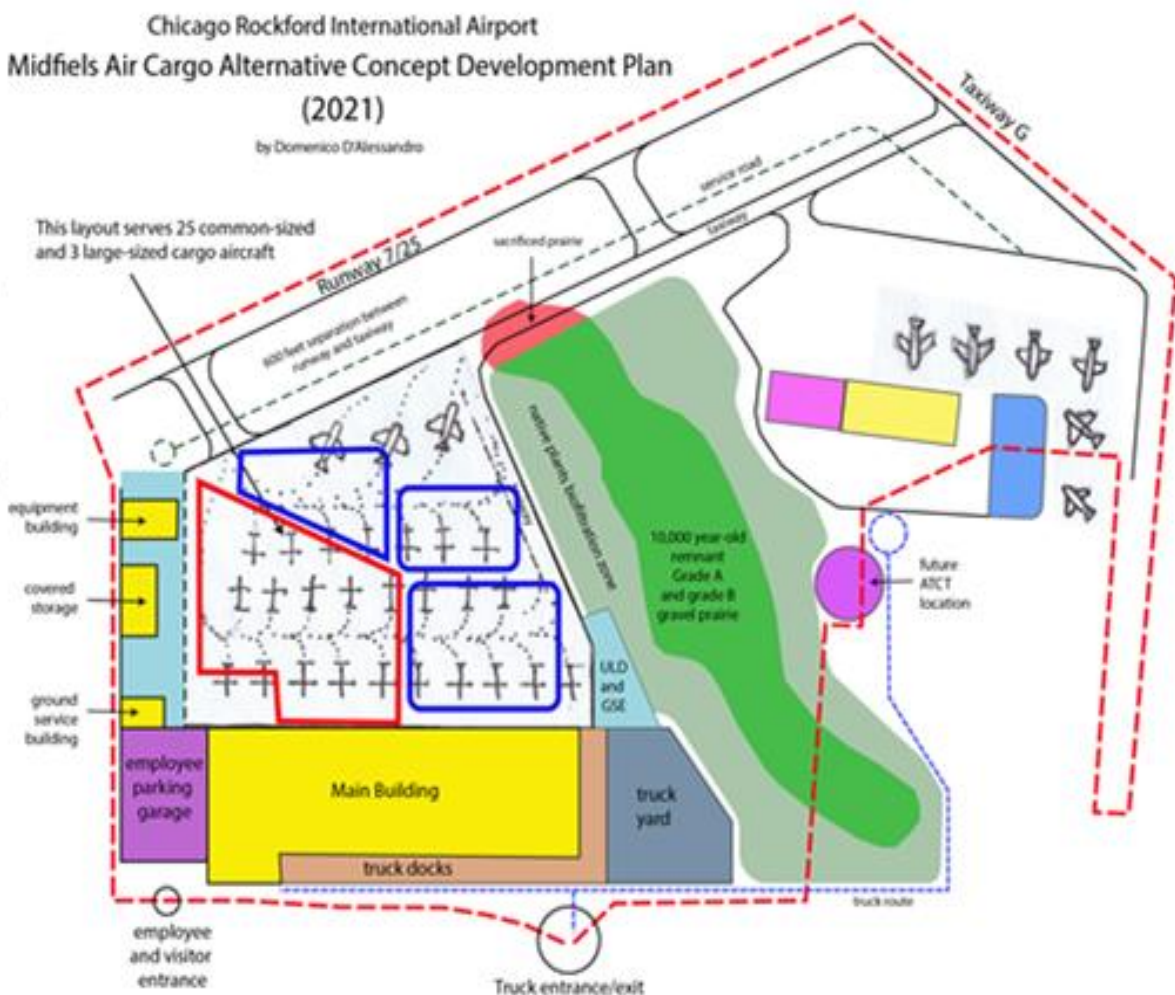
Chicago Rockford International Airport Midfiels Air Cargo Alternative Concept Development Plan (2021)

by Domenico D'Alessandro



By constructing an employee parking garage and employing state of the art porous paving and an underground cistern system to capture runoff, we can save the rare gravel prairie from being obliterated. The area designated for employee parking and stormwater management in the plan proposed by airport authorities constitute an economic drain in perpetuity for the airport. This overlay illustrates the amount of land that can be converted into income-generating land use with minimal impact on the remnant, rare, irreplaceable prairie. The upfront costs associated with these changes would be recuperated over time as additional cargo aircraft accommodation is made possible by the alternate design. The parking garage would be beneficial to employees, especially during winter months, and save substantial costs over time in snow removal and deicing.

This layout serves 25 common-sized and 3 large-sized cargo aircraft

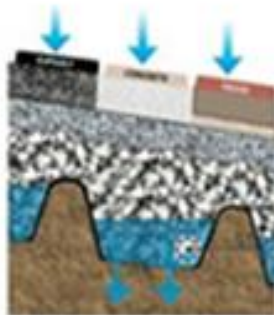


ACRP

RESEARCH REPORT 178

AIRPORT
COOPERATIVE
RESEARCH
PROGRAM

Guidance for Usage of Permeable Pavement at Airports



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Randall Road Corridor 2012



IHDC 2012 INTERNATIONAL CATEGORY - HIGHLY COMMENDED

Chicago Bioshift
Team | Domenico D' Alessandro

JUDGES' COMMENTS

"This attractively presented entry impressed the judges with its practical approach to addressing the environmental problems associated with urban sprawl and industrial farming in the Chicago city region."

"The judges were impressed with the wildlife tower, which was well-researched and designed to provide shelter for a wide range of species affected by the loss of old farm buildings."

This work tackles the biodiversity/water/food/energy nexus in the Chicago region. It proposes multi-phase plan that includes:

- urban core regenerative design
- urban rivers
- Great Lakes ecology and
- public infrastructure



1. The barn habitat structure provides habitat for swallows, owls, bats and wefts. 2. The bees elements of a bioshift.



The work is based on the transformation of strip mall surface parking into biodiverse, multi-functional spaces with groundwater recharge zones, forming green corridors that will provide habitat for a great variety of species and connect existing and planned nature reserves. The addition of a north-south rapid transit system with bike and walking trails will link more than 18 communities, reduce the use of the automobile and create opportunities for a healthier lifestyle.



Concept plan for the residential tower by bioshift position-renewing

On-site alternative energy generation, black and grey water recycling, organic food production and communal recreation activities will strive to change the mall experience from a consumer-driven program into community commons and potential town centers for suburban communities.



The bioshift design approach

Proposal to dedicate
Bell Bowl Prairie
as a living memorial
to all the men and women
who were stationed at
Camp Grant and sacrificed
their lives in WWI and WWII



Rocco's grave at the
Meuse-Argonne
American Military
Cemetery in France



WWI Midwest
Division insignia



WWI Blackhawk
Division insignia

