



NCEDA Technical Due Diligence Webinar

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DUE DILIGENCE – WHAT IS IT & WHY IS IT IMPORTANT TO ME?

RISK MANAGEMENT

- Identify Time & Budget Constraints
- Understand the intended outcomes

SITE SUITABILITY EVALUATION

- What do we want and will it fit?
- How much will it cost?



DUE DILIGENCE – WHAT HAS BEEN DONE & WHAT IS LEFT TO DO?

WHAT DO WE NEED TO KNOW?

Zoning

Surveys – Boundary, Topography

Environmental Constraints

Wetlands

Phase I ESA

Threatened & Endangered Species

Cultural and Historical Resources

Geotechnical Analysis – Rock/Poor Soils

Utilities





PROCUREMENT – Is there a Wetlands Store?

WHO DO I ENGAGE? (I know someone)

Engineer, Geologist, Surveyor, Archeologist,
Wetland Scientist, Landscape Architect?

PUBLIC ENTITY vs NON-PROFIT

State & Local Procurement Rules

Purchase Orders? Contracts?

Qualification Based Requirements?

FUNDING

Grants, Local Match, Private Investment

How much do I need?

The screenshot shows a 'PURCHASE ORDER' form with the following fields:

- Company Name
- Address
- City, State, Zip Code
- DATE ORDERED
- ORDER NO.
- VEHICLE
- SHIP TO
- CONTRACT NAME
- MAIL/DEPT
- CLIENT CONTRACT NAME
- CLIENT CONTRACT NAME
- ADDRESS
- ADDRESS
- PHONE
- PHONE

Below the form are two tables:

SHIP VIA	SHIP FROM METHOD	SHIP FROM PORT	DEPART DATE

CODE	PRODUCT NAME / DESCRIPTION	QTY	UNIT PRICE	DEPART DATE



SITE UTILITIES

WHERE IS IT & HOW MUCH DO WE HAVE?

Water

Sewer

Power

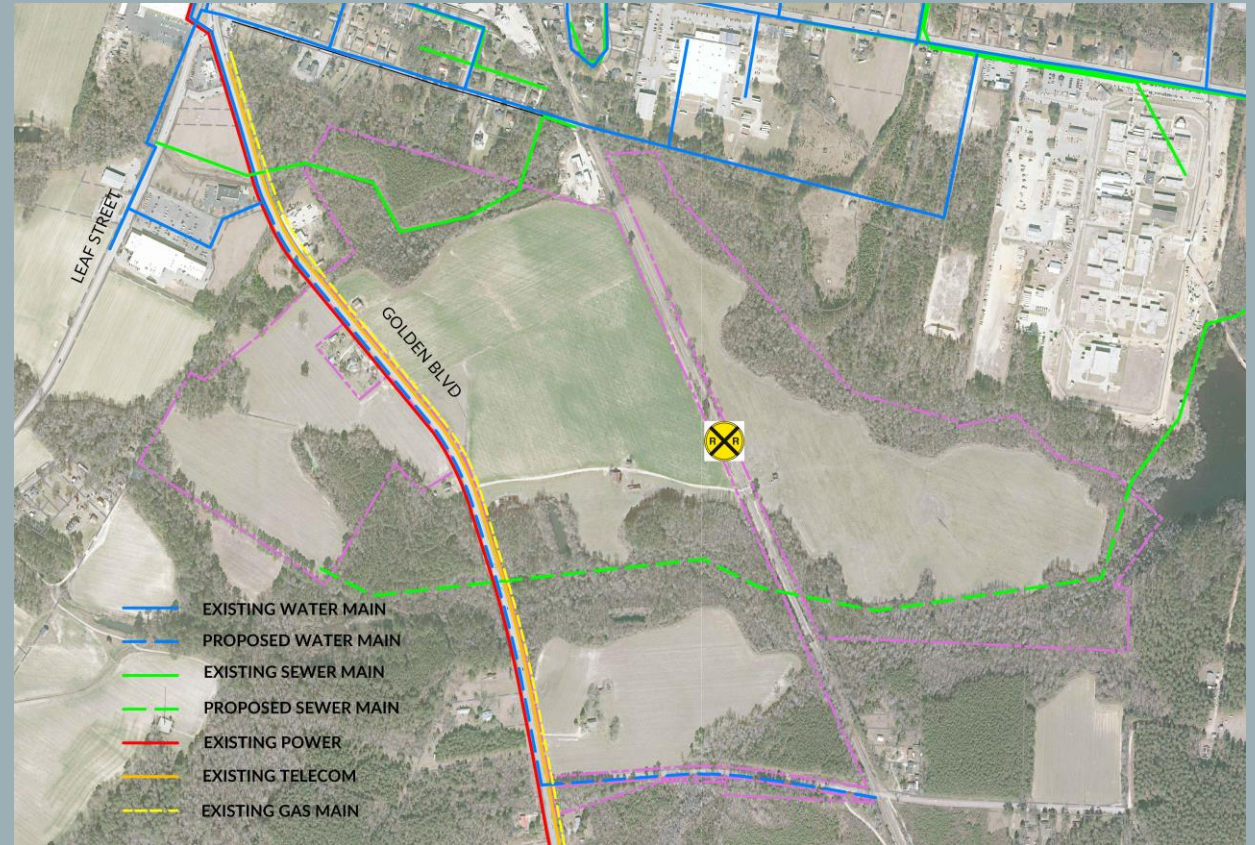
Gas

Communications

SYSTEM CAPACITY vs SITE CAPACITY

HOW MUCH DO WE NEED?

WILL SERVE LETTERS



TRANSPORTATION — Is Traffic a Good Thing or Bad Thing?

WHEN DO I NEED A TRAFFIC STUDY?

Timing

Cost

FACTORS TO CONSIDER

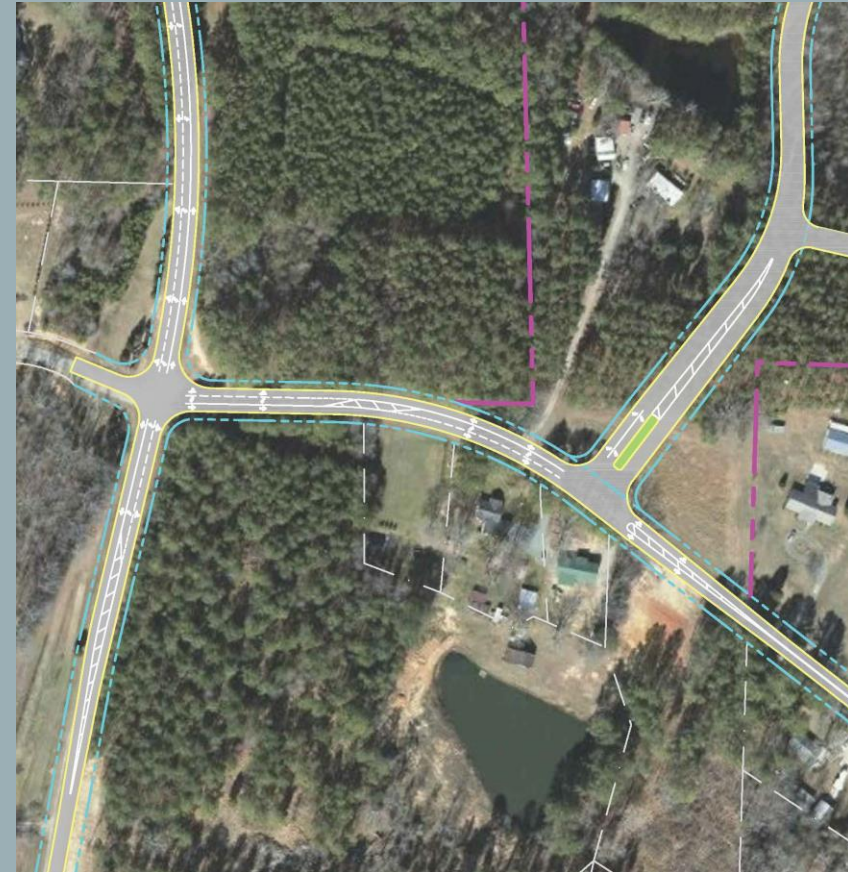
Local Traffic Volume

Site Traffic Volume

Signalization

Access Points

How Does My Site Impact Others?



WETLANDS & WATERS OF THE UNITED STATES

HOW MUCH BUILDABLE LAND?

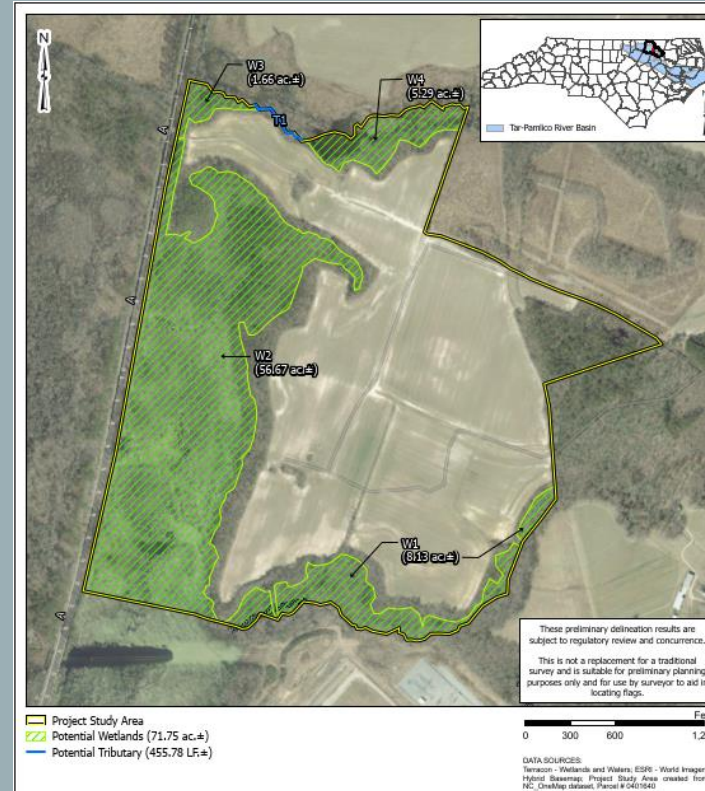
Desktop Evaluation

Wetland & Stream Delineation

AVOID & MINIMIZE IMPACTS !!!

Permitting

- Nationwide Permit
- Individual Permit
- Stream Buffers



PHASE I ENVIRONMENTAL SITE ASSESSMENT

IS THE SITE CONTAMINATED?

Three Components

- Historical Research
- Visual Assessment
- Surrounding Incidents

Phase II ESA

Risk Management



THREATENED & ENDANGERED SPECIES

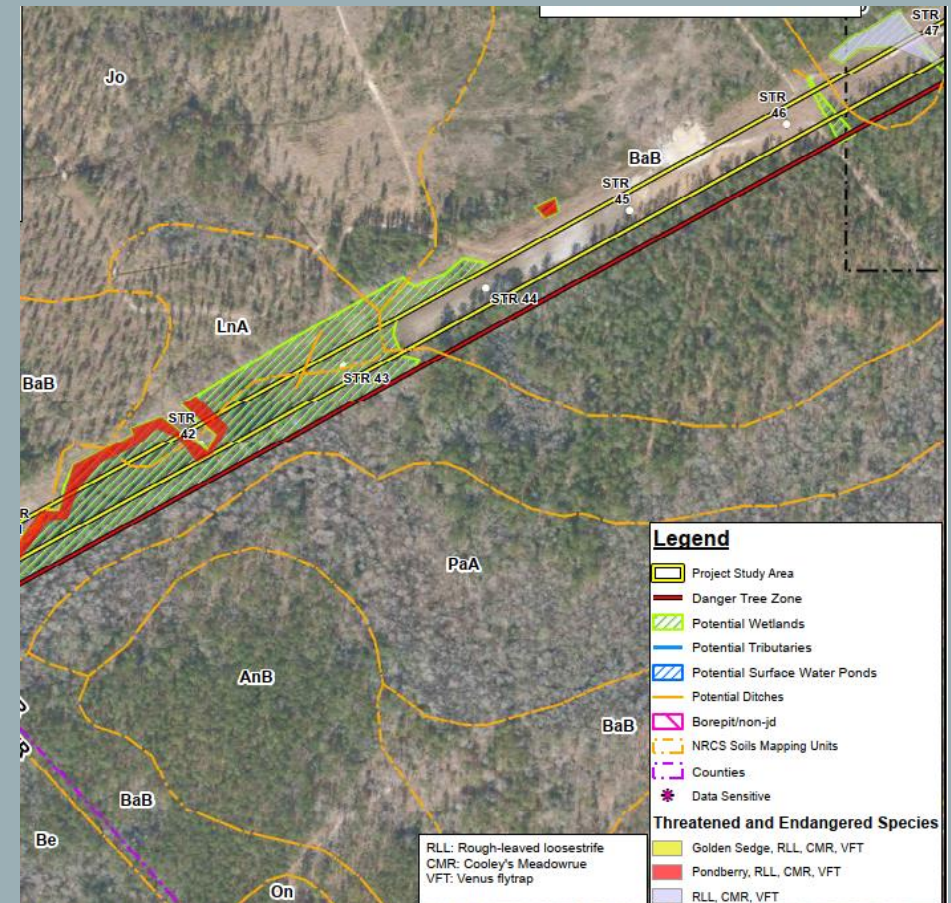
WHAT COULD SLOW DOWN MY PERMITTING?

Federal T&E Species

Evaluation of Habitat Requirements

Triggered by Federal Permitting

Desktop vs. Field Investigation



CULTURAL RESOURCES

WHAT ELSE COULD SLOW DOWN MY PERMITTING?

Section 106 of the National Historic Preservation Act (NHPA)

State Historic Preservation Office (SHPO)

- Historic Properties

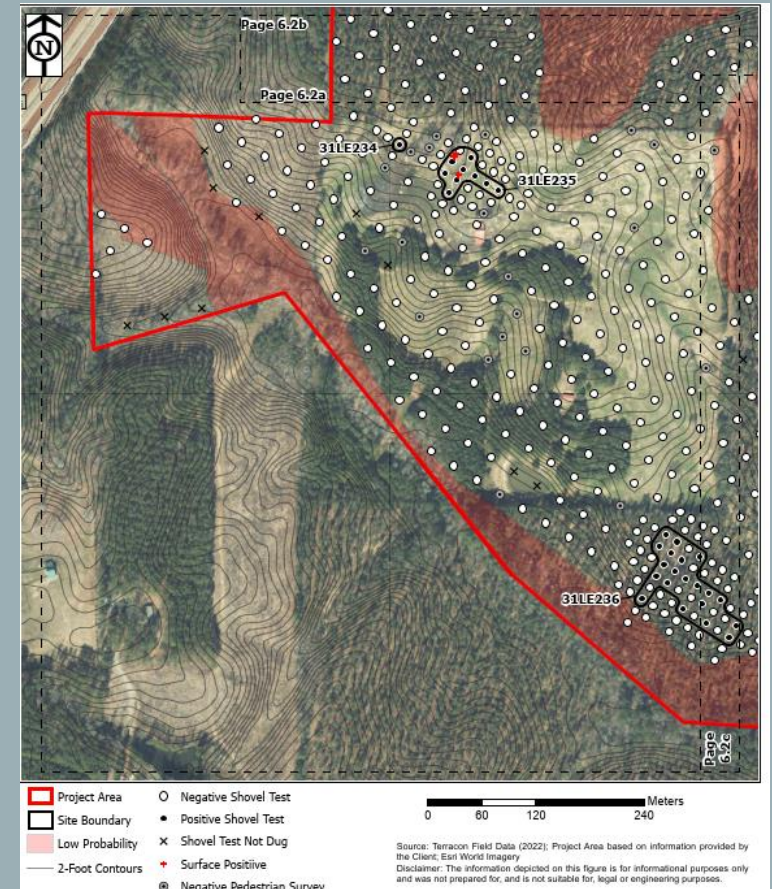
NC Office of State Archaeology (OSA)

- Archaeological Sites

Evaluation triggered by Federal Permitting

Desktop vs. Field Investigation

Curate Artifacts



OTHER ENVIRONMENTAL CONSTRAINTS

WHAT ELSE COULD SLOW DOWN MY PROJECT?

Air Permitting

Asbestos Consulting



GEOTECHNICAL ENGINEERING

HOW MUCH DO WE NEED TO KNOW?

Stage I – Site Selection

Preliminary – Due Diligence

< 75 Acres – 1 per 15 developable acres

75 – 500 Acres – 1 per 20 developable acres

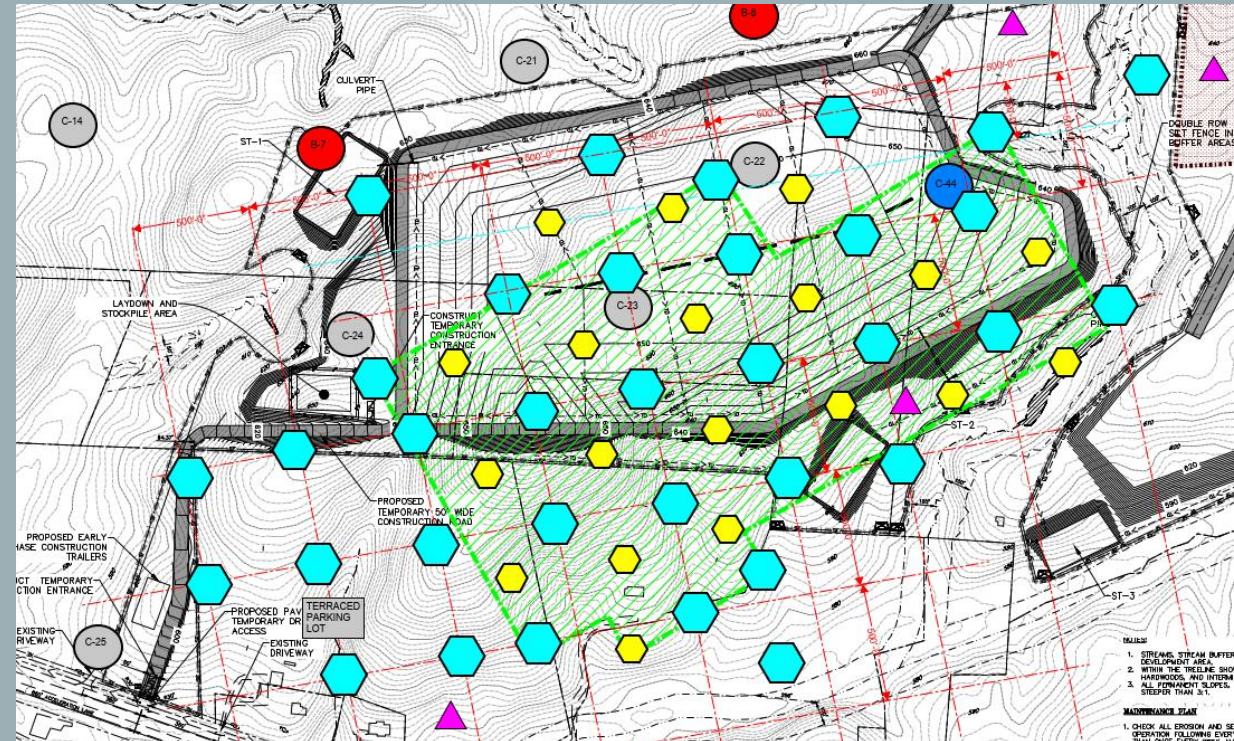
> 500 Acres – 1 per 30 developable acres

Key Considerations

Type of Soil

Depth to Rock

Depth to Groundwater



GEOTECHNICAL ENGINEERING

DESIGN PHASE

Buildings

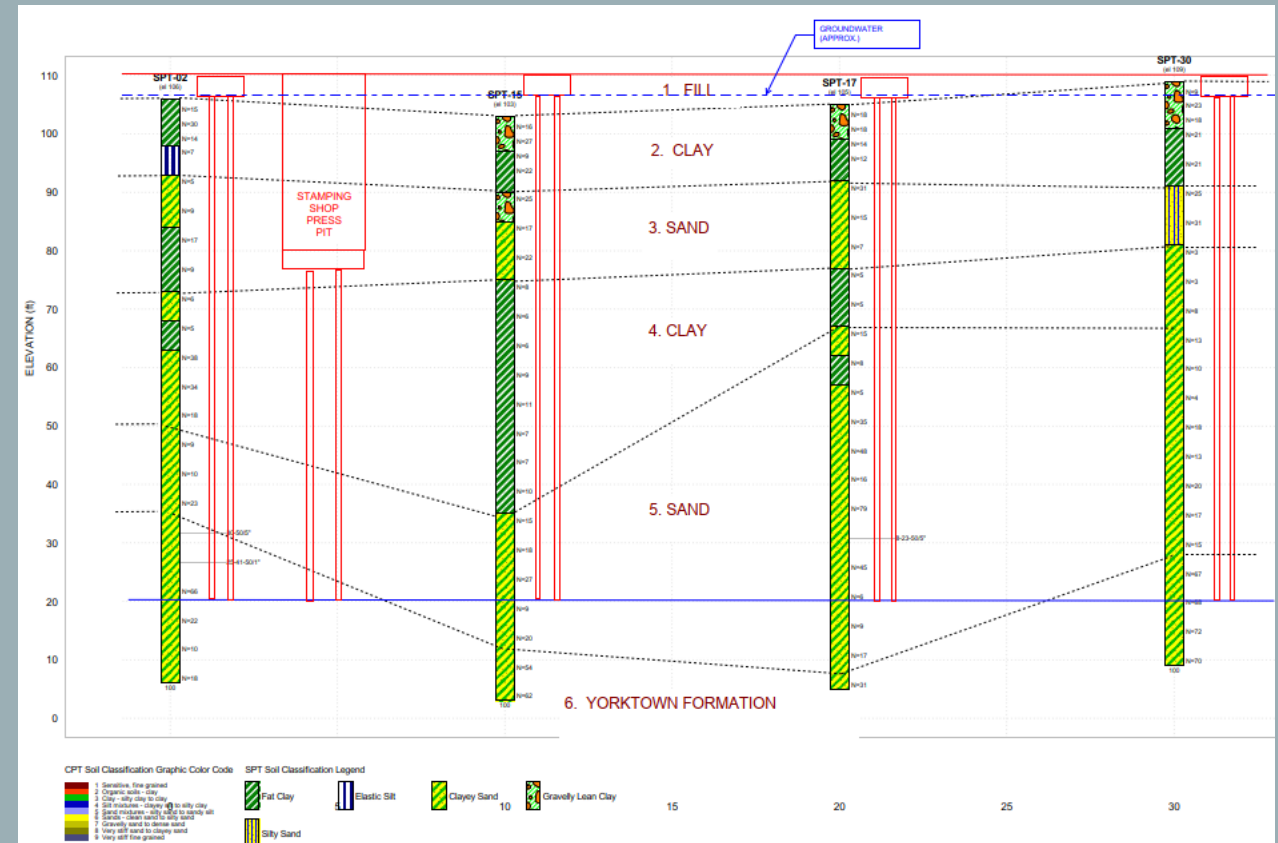
Roads

Parking Lots

Stormwater Ponds

Retaining Walls

DOES THIS CHANGE THE VALUE?



BUILDABLE AREA MAP – VISUAL SUMMARY

OVERALL SITE vs. USEABLE ACREAGE

Boundary / Easements

Wetlands

Steep Slopes

Floodplain

Access Points

DOES THIS CHANGE THE VALUE?

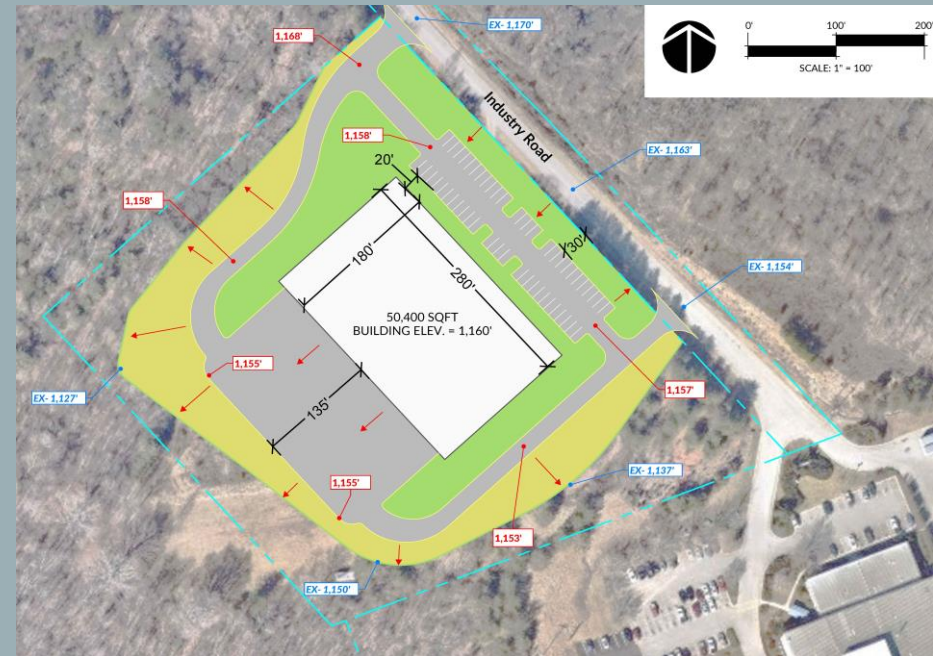


CONCEPT PLANS

MARKETING FOCUS



DEVELOPMENT FOCUS

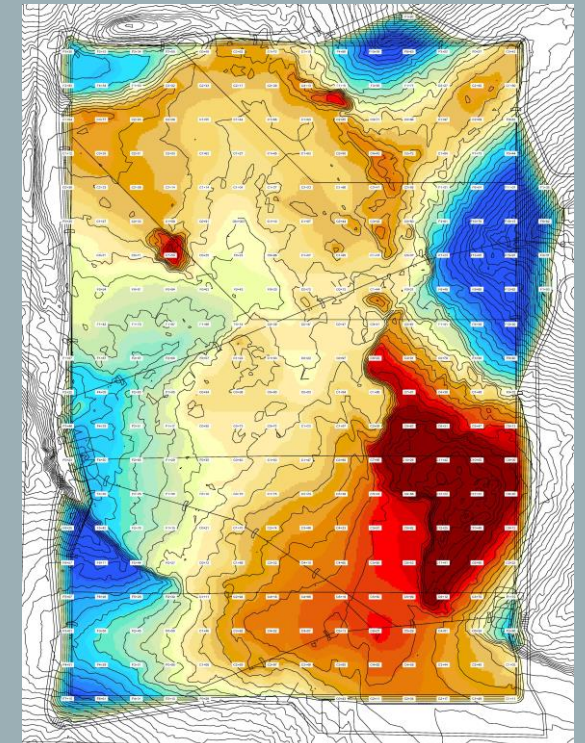
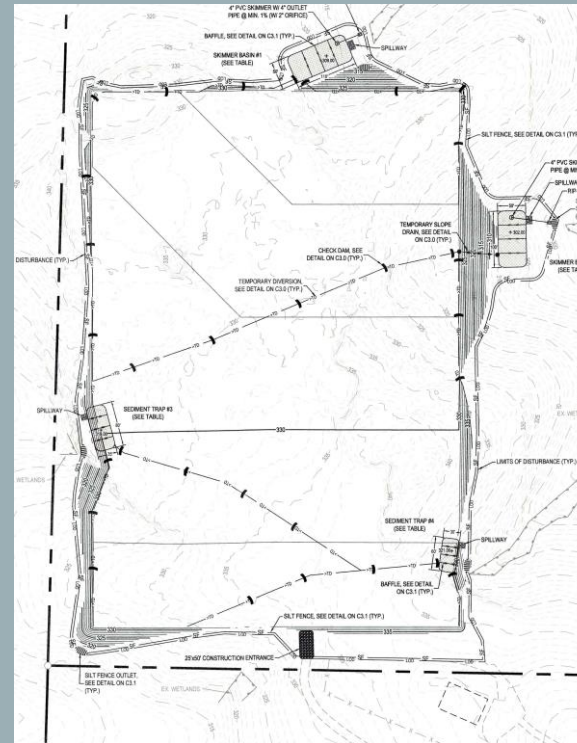


GRADING STUDIES

UNDERSTANDING THE COST TO DEVELOP

- Combining the Due Diligence
- Import / Export of Earthwork
- Rock Excavation / Undercut
- Refine the Budget

READY FOR CONSTRUCTION PLANS?





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Q&A



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