



## AGENDA

### COMMITTEE OF THE WHOLE WORKSHOP BOARD OF COUNTY COMMISSIONERS

Board Chambers  
Suite 100  
Ernie Lee Magaha Government Building - First Floor  
221 Palafox Place

October 13, 2016  
9:00 a.m.

Notice: This meeting is televised live on ECTV and recorded for rebroadcast on the same channel. Refer to your cable provider's channel lineup to find ECTV.

1. Call to Order

(PLEASE TURN YOUR CELL PHONE TO THE SILENCE OR OFF SETTING.)

2. Was the meeting properly advertised?

3. VT MAE Project  
(Dave Penzone, on behalf of the City of Pensacola - 30 min)
  - A. Board Discussion
  - B. Board Direction

4. RESTORE Projects Risk Analysis  
(Chips Kirschenfeld - 45 min)
  - A. Board Discussion
  - B. Board Direction

5. Dog-friendly Dining Ordinance  
(Alison Rogers - 15 minutes)
  - A. Board Discussion
  - B. Board Direction

6. ADA - Enforcement and Building Access  
(Jack Brown/Alison Rogers - 30 min)
  - A. Board Discussion
  - B. Board Direction
  
7. Downtown Trolley Service  
(Colby Brown/David Forte - 30 minutes)
  - A. Board Discussion
  - B. Board Direction
  
8. Acquisition of the Midtown Commerce Park Site  
(Amy Lovoy/Chips Kirschenfeld - 45 minutes)
  - A. Board Discussion
  - B. Board Direction
  
9. Adjourn

**Committee of the Whole**

**3.**

**Meeting Date:** 10/13/2016

**Issue:** VT MAE Project

**From:** Jack Brown, County Administrator

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**Information**

**Recommendation:**

VT MAE Project

(Dave Penzone, on behalf of the City of Pensacola - 30 min)

A. Board Discussion

B. Board Direction

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**Attachments**

*No file(s) attached.*

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**Committee of the Whole**

**4.**

**Meeting Date:** 10/13/2016

**Issue:** RESTORE Projects Risk Analysis

**From:** Chips Kirschenfeld, Director

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**Information**

**Recommendation:**

RESTORE Projects Risk Analysis

(Chips Kirschenfeld - 45 min)

A. Board Discussion

B. Board Direction

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**Attachments**

RESTORE ProjSelectionUpdate-CW Oct 2016

RESTORE Risk Assessment

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# RESTORE Direct Component Project Selection Update

Committee of the Whole

10/13/16

# Overview

- August 11th COW- Commissioners decided to select two projects per commissioner for further assessment.
- Staff has conducted Risk Assessments on the projects sent for further review by each commissioner
- Today's Agenda
  - Review the projects submitted to staff
  - Assess risks and benefits of each project
  - Board discussion/direction

# Projects Nominated to Date:

1. Carpenter Creek & Bayou Texar Economic & Environmental Revitalization
2. Project Universal Access
3. Perdido Key Gulf of Mexico Beach Access
4. Perdido Key Multi-Use Path
5. OLF8 Commerce Park Improvements
6. South Dogtrack Drainage- Coral Creek, Hampton Lake, Three Waters Green (aka, Mariner Village), Liberty Church



# Carpenter Creek and Bayou Texar Economic & Environmental Revitalization Plan

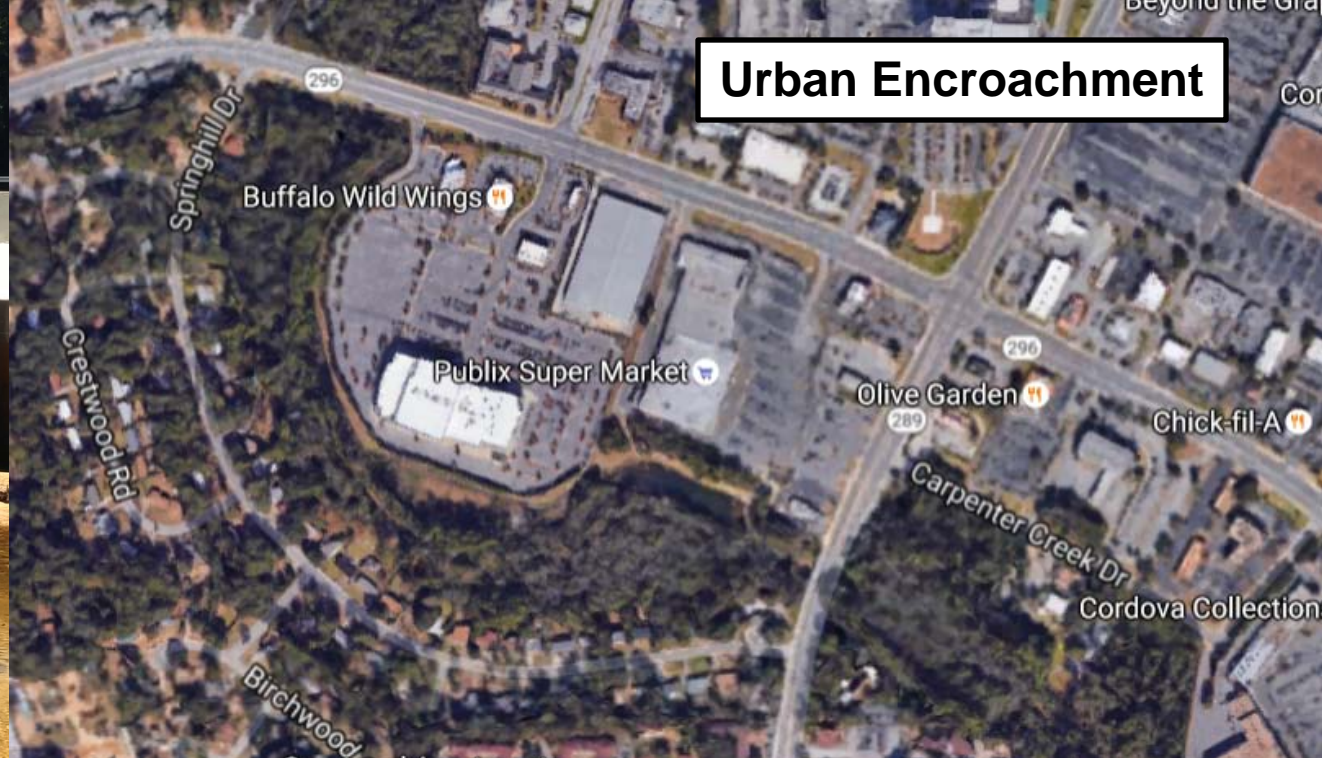
- Phase 1: Develops a Master Plan for Carpenter Creek and Bayou Texar
  - Community/stakeholder Input
  - Pre-design Water Quality/Habitat Monitoring
  - Watershed Assessments
  - Identify Community Goals
  - Identify Restoration Activities
  - Identify Stormwater Controls/Treatment Projects
  - Illustrate Project Components
- Future Phases: Master Plan Implementation, including:
  - Land/Easement Acquisition
  - Stream Restoration
  - Riparian Zone Restoration/Preservation
  - Establish Greenway/ Public Access



**Sedimentation**



**Urban Encroachment**



**Flooding**



**Nutrient & Bacteria  
Pollution**



- Key Facts:

- Carpenter Creek & Bayou Texar Legacy Issues
  - Sedimentation
  - Nutrients
  - Impaired Waters: Fecal Coliform TMDL- Bacterial Pollution Control Plan
  - Habitat Loss

- Anticipated Return on Investment:

- Restored/ Enhanced Floodplain/ Reduce Residential & Commercial Flooding
- Reduce Water Flow Velocity
- Improve Water Quality/ Increase Dissolved Oxygen/ Begin Addressing TMDL
- Preserve Natural Habitats/ Enhance Riparian Buffers
- Establish Greenway for Pedestrian/ Bicycles
- Stormwater Runoff Treatment/ Reduction
- Increase Recreational Access/ Use & Ecotourism



# Carpenter Creek and Bayou Texar Economic & Environmental Revitalization Plan

<b>Phase 1: Total Funding Request</b>	<b>\$1,090,000</b>
Project Administration & Management	\$120,000
Public Outreach	\$85,000
Stakeholder Involvement	\$65,000
Baseline Assessment/Data Gap Analysis	\$175,000
Supplemental Data Collection/Analysis	\$366,000
Draft & Final Master Plan w/ Project Prioritization	\$279,000

<b>Future Phases: Total Funding</b>	<b>\$47,735,000</b>
Phase 2: Early Demonstration Projects	\$2,705,000
Phase 3: Land/Easement Acquisition	\$2,180,000
Phase 4: Project Implementation/Construction	\$39,900,000
Phase 5: Monitoring, Public Outreach, and Maintenance	\$2,950,000
<b>Total Project Cost (Over 20 Years)</b>	<b>\$48,825,000</b>

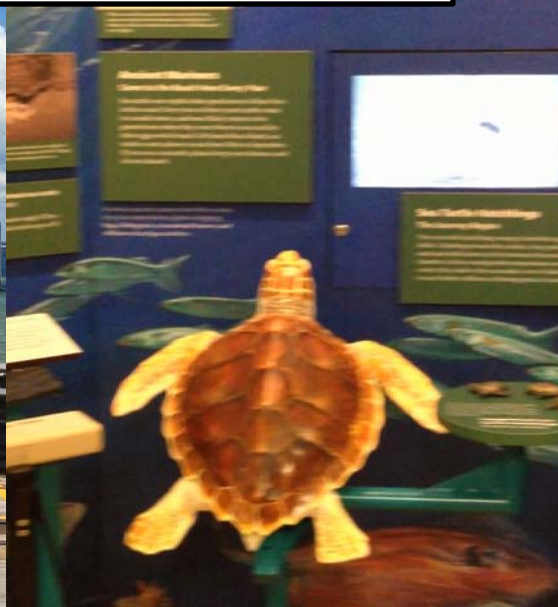
A banner image for 'Project Universal Access' featuring two side-by-side photographs. The left photo shows a wooden boardwalk or pier extending into a sandy area. The right photo shows a person in a wheelchair on a blue paved path leading to a beach. The title 'Project Universal Access' is overlaid in white text with a blue outline.

# Project Universal Access

- Phase 1: ADA Evaluation of Public Access Points on Pensacola Beach, Perdido Key, and Ferry Landings
  - Accessibility Evaluation of beach access points, trails, parking lots, sidewalks, and restrooms
  - Produces a Needs Assessment for persons with disabilities going beyond legal requirements
- Future Phases: Plan Implementation:
  - Strategic Design- Retrofits, Improvements, and Location Identification
  - Disabled Community Input
  - Construction
  - Monitoring



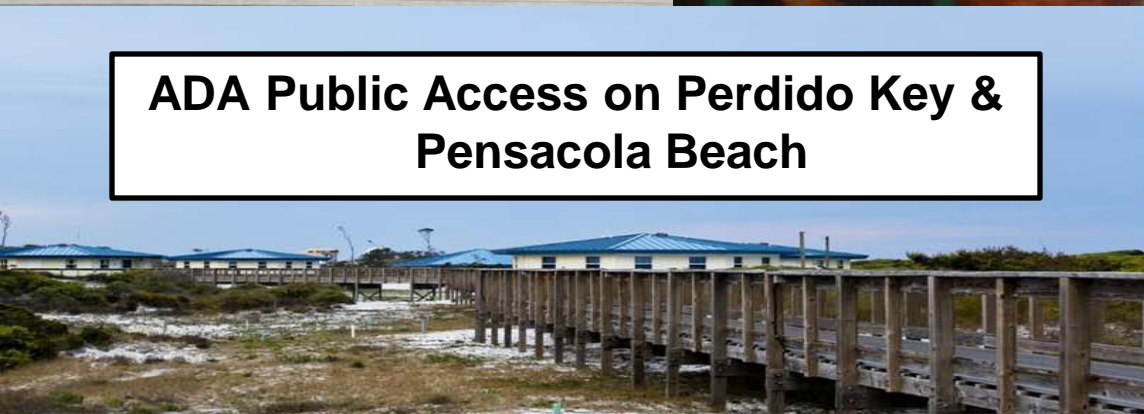
## New Projects to Accommodate Multi-Sensory Signage & Displays



## ADA Observational Platforms, Bathrooms & Tourism Opportunities



## ADA Public Access on Perdido Key & Pensacola Beach



## Wheelchair Access on Beaches





- **Key Facts:**

- Disabled persons do not have adequate access to recreational public access points
- Escambia County has 54,000 persons with disabilities
- Pensacola Beach currently undergoing some updates

- **Anticipated Return on Investment:**

- Construct/ Enhance ADA Trails/ Walkovers
- Provide ADA Connectivity; Construct ADA Parking
- Enhance Educational Signage (Multi-Sensory)
- Tourism/ Ecotourism Enhancements
- Improves Recreational Opportunities for Disabled Locals (54,000 persons) and Visitors
- Access to Recreational Fishing Locals
- Construct Walkovers on Environmentally Sensitive Lands/ Reducing Unsanctioned Trails

The banner image is split into two panels. The left panel shows a wooden boardwalk extending into a field of tall grass under a clear blue sky. The right panel shows a person in a wheelchair on a blue mat that leads from a paved area onto a sandy beach, with the ocean in the background.

# Project Universal Access

<b>Phase 1: Total Funding Request</b>	<b>\$300,000</b>
ADA Evaluation	\$100,000
Strategic Plan	\$200,000

<b>Future Phases: Total Funding</b>	<b>\$3,500,000</b>
Phase 2: Construction	\$3,000,000
Phase 3: Monitoring	\$500,000

<b>Total Project Cost</b>	<b>\$3,800,000</b>
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# Perdido Key Gulf of Mexico Public Access

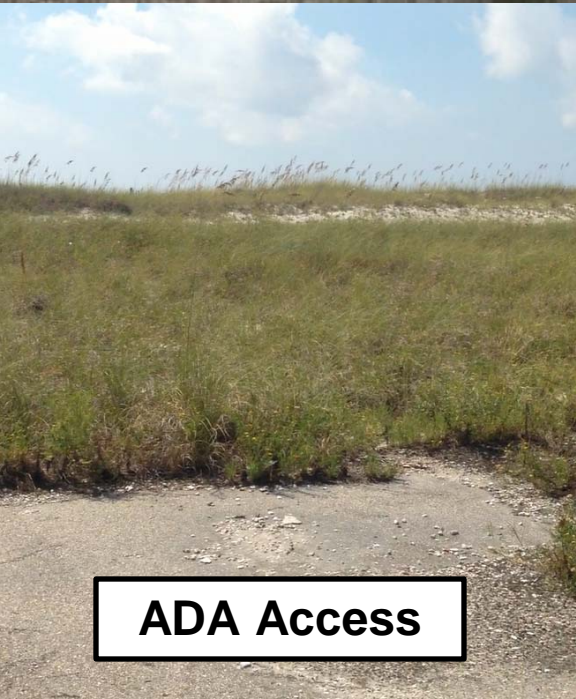
- Phase 1: Planning & Design
  - Restroom Design/Features
  - Dune Walkover/Pavilion Design
  - ADA Compatibility/Features
  - Parking Improvements
  - Educational Kiosk
  - Beach Mouse Habitat Improvement Planning
  - Near-shore Reef Design/Permitting
- Future Phases: Construction & Monitoring
  - Dune Walkover
  - Restroom Facilities
  - Pavilion
  - Parking Lot
  - Beach Mouse Habitat Restoration/Preservation
  - Educational Kiosk Installation
  - Near-shore Reef Deployment
  - Monitoring



**Public Access & Parking**



**Tourism Opportunities**



**ADA Access**



**Beach Mouse**





- Key Facts:
  - Limited public access
  - The Perdido Key Beach Mouse is listed as an Endangered Species and has limited habitat
- Anticipated Return on Investment:
  - Habitat Restoration & Conservation (Dune Habitat)
  - Habitat Creation (Snorkel Reef)
  - Enhance Natural System Resiliency
  - Connecting Trail/ Greenway
  - Provides ADA Access to Gulf of Mexico
  - Tourism Destination/ Activity
  - Fishing Opportunities through Enhanced Access
  - Enhances Tourism Industry & Ecotourism Opportunities



# Perdido Key Gulf of Mexico Public Access

<b>Phase 1: Total Funding Request</b>	<b>\$123,000</b>
Design/ Engineering/ Permitting	\$123,000

<b>Future Phases: Total Funding</b>	<b>\$1,525,000</b>
Parking Lot Improvements	\$300,000
Picnic Pavilions	\$180,000
Bathroom Facilities	\$500,000
Dune Walkover (ADA)	\$135,000
Environmental Kiosk	\$5,000
Beach Mouse Enhancements	\$300,000
Near-shore Reef	\$100,000
Monitoring Surveys	\$5,000

<b>Total Project Cost</b>	<b>\$1,648,000</b>
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## Perdido Key Multi-Use Path

- Phase 1: Design & Engineering
  - Design for a Multi-Use Path on the north side of Perdido Key Dr. from the Alabama state line to the Theo Baars Bridge for 6.2 miles
  - Designs collector sidewalks on the south side of Perdido Key Dr.
  - Designs three ADA dune walkovers at existing public access points
  - Plans & Designs any necessary habitat restoration work around the path and/or dune walkovers
  - Snorkel Reef Design/ Permit
- Phase 2: Construction
  - 6.2 miles of paved multi-use path
  - Collector sidewalks
  - Three ADA dune walkovers
  - Near-shore snorkel reef





**Separation of Walkway  
from Roadway**



**Fast Speed Limits**



**Pedestrian Road Crossings & ADA  
Beach Access**



- **Key Facts**

- No alternative transportation routes exist to connect Perdido Key
- There have been several pedestrian injuries and/or fatalities prior to crosswalk installation on Perdido Key Dr.
- Florida Department of Transportation (FDOT) has funded the Planning & Design for the east segment of the Multi-Use Path on North side
- FDOT is likely to fund the west segment of the Multi-Use Path

- **Anticipated Return on Investment:**

- Habitat Restoration
- Habitat Conservation
- Enhance Natural System Resiliency
- Adds Alternative Transportation- 6.2 Miles of Trail
- Connecting Trail/ Greenway
- Provides Access to Gulf of Mexico
- Tourism Destination/ Activity
- Fishing Opportunities through Enhanced Access
- Enhances Tourism Industry



# Perdido Key Multi-Use Path

<b>Phase 1: Total Funding Request</b>	<b>\$800,000</b>
Planning, Design, Engineering	\$800,000

<b>Future Phases: Total Funding</b>	<b>\$5,700,000</b>
Construction	\$5,600,000
Snorkel Reef	\$100,000

<b>Total Project Cost</b>	<b>\$6,500,000</b>
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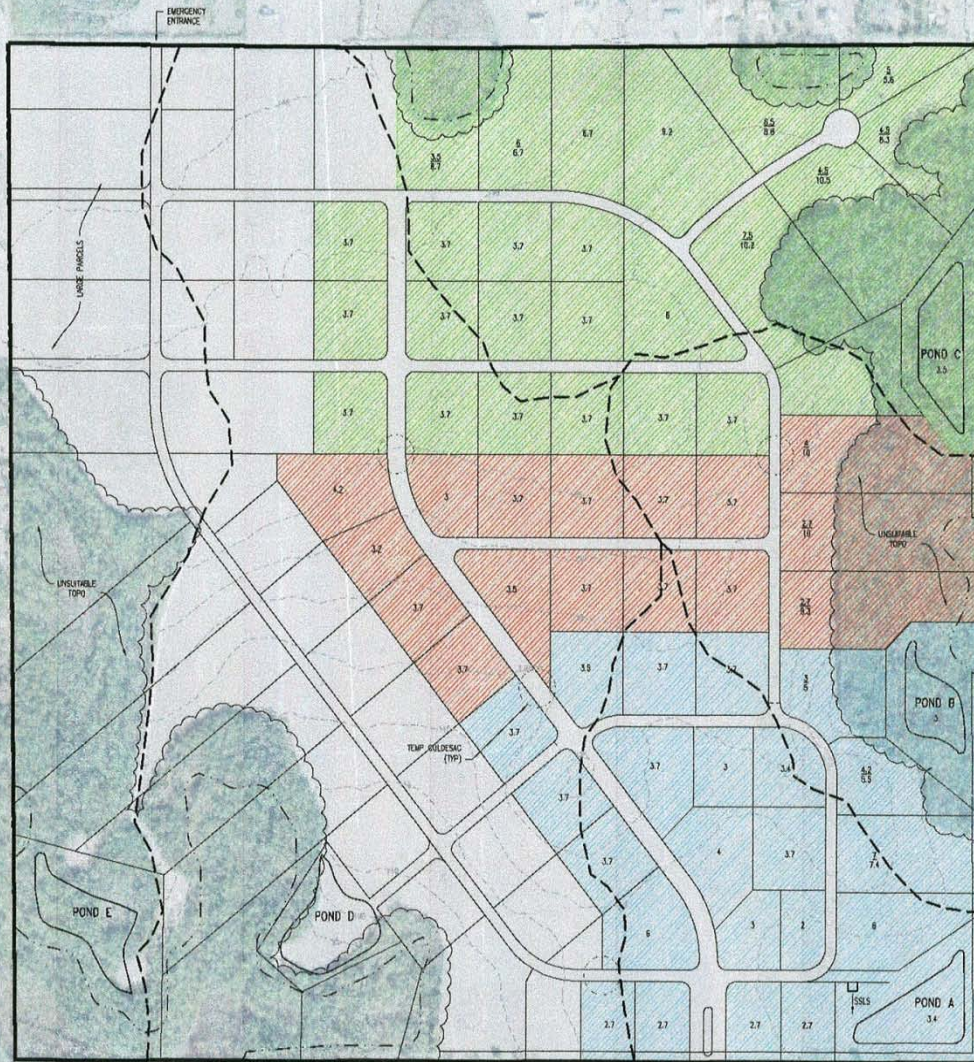


# OLF8 Commerce Park Improvements

- Phase 1: Master Planning
  - Develop a plan identifying land use (i.e. type of business activity)
  - Park layout
  - Public input
  - Habitat conservation
  - Infrastructure requirements
  - Costs and timeline
- Design/ Permitting
  - Engineering specs
  - Environmental permitting requirements
  - Site plans for development
- Phase 2: Construction
  - Roadways
  - Utilities
  - Lighting
  - Drainage



# Need for Commerce Park



**Baskerville-Donovan, Inc. Conceptual Design, 2011**







- Key Facts:

- \$2 Million invested in property acquisition OLFX
- Additional Investments

- Anticipated Return on Investment:

- Job Creation (3,600 new jobs)
- Private Industry and Business Growth
- Military Industry and Training Growth
- LEED Certifications and Stormwater Management
- Encourage Tourism
- Wetland Preservation
- Walkable and Bikeable Community



# OLF8 Commerce Park Improvements

<b>Phase 1: Total Funding Request</b>	<b>\$1,270,000</b>
OLF-8 Master Plan	\$635,000
Design & Permitting	\$635,000

<b>Future Phases: Total Funding</b>	<b>\$17,767,790</b>
Phase 2: Construction	\$15,864,825
Contingency & Monitoring	\$1,902,965

<b>Total Project Cost</b>	<b>\$19,037,790</b>
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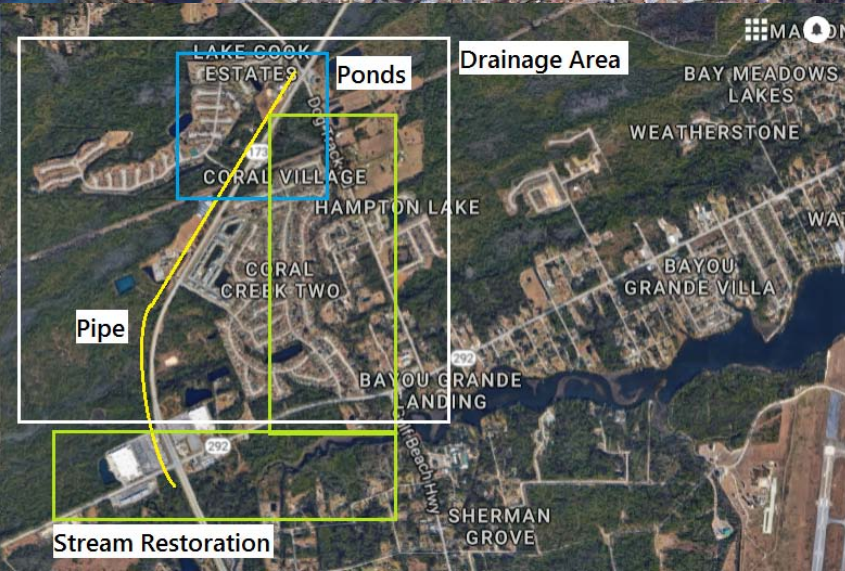
# South Dogtrack Drainage- Coral Creek, Hampton Lake, Three Waters Green, Liberty Church

- Phase 1: Planning, Design, & Construction
  - Conceptual Plan/Study
  - Identify properties for acquisition/easements
  - Install 7,000 feet of new 48" storm pipe along the west side of Blue Angel Parkway
- Phase 2: Construction
  - Stormwater Ponds
- Phase 3: Stream Restoration
  - Coral Creek Stream Restoration
  - Easement/Land Acquisition



# Flooding Issues

# Water Quality Degradation







- Key Facts:

- Hydrological flow has been diverted by surrounding development
- Repetitive flooding of homes
- Encroachment around Coral Creek has increased water volume while reducing flow out of the creek

- Anticipated Return on Investment:

- Flood Protection (Over 300 homes)
- Floodplain Restoration
- Stream Restoration
- Water Quality Improvements
- Enhance Natural System Resiliency
- Restores Stormwater Flow/ Volume
- Improves Community Resiliency
- Provides Temporary Employment
- Reduces Repeated Loss



# South Dogtrack Drainage- Coral Creek, Hampton Lake, Three Waters Green, Liberty Church

<b>Phase 1: Total Funding Request</b>	<b>\$200,000</b>
Planning, Design, and Engineering	\$200,000

<b>Future Phases: Total Funding</b>	<b>\$7,900,000</b>
Drainage Pipe	\$1,000,000
Phase 2: Pond Construction	\$1,900,000
Phase 3: Stream Restoration	\$5,000,000

<b>Total Project Cost</b>	<b>\$8,100,000</b>
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# Risk Assessments

- Projects were reviewed by staff as submitted
- Reviews were completed on conceptual designs only
- 10-17 Staff Reviewers for each project

# Staff Reviewers

- Natural Resources Director
- Senior Natural Resources Manager
- Environmental Program Manager
- RESTORE Program Manager
  - RESTORE Coordinator
- Engineering Stormwater Manager
- Engineering Project Coordinator
  - Engineer
  - Engineer
  - Engineer Technician
- Development Services Director
- Development Services Division Manager
  - Senior Urban Planner
  - Senior Urban Planner
  - Senior Urban Planner

# Outside Reviewers

## Economic Comments:

- Escambia County Economic Development Representative
- City of Pensacola Economic Development Representative

## Permitting Comments:

- U.S. Army Corps of Engineers (2 Representatives)
- Florida Department of Environmental Protection (4 Representatives)



# Risk Analysis

**Project Title: 1. Carpenter Creek & Bayou Texar Economic & Environmental Revitalization**    **Project Number: 57**  
**Plan**

Likelihood		Consequences	
Almost Certain	Risk will almost certainly happen (>90%)	Catastrophic	Project will not be able to continue
Likely	Risk will likely happen (61-89%)	Major	Project may not be able to continue
Moderate	Risk may happen (40-60%)	Moderate	Project will be affected
Unlikely	Risk will not likely happen (11-39%)	Minor	Project will be slightly affected
Rare	Risk will rarely happen (<10%)	Insignificant	Project will hardly be affected

*Please leave a category blank if you do not feel you could accurately assess the risk.*

Risk	Likelihood (Circle One)	Consequences (Circle One)	Mitigation
Legal - Land Not Acquired	Almost Certain	Catastrophic	Ensure proper compliance and purchasing measures are taken.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Risk	Likelihood (Circle One)	Consequences (Circle One)	Mitigation
Legal - Land Easements Not Acquired	Almost Certain	Catastrophic	Ensure proper protocol is followed.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	

# Risk Analysis

Project Title: 1. Carpenter Creek & Bayou Texar Economic & Environmental Revitalization Plan Project Number: 57

Likelihood		Consequences	
Almost Certain	Risk will almost certainly happen (>90%)	Catastrophic	Project will not be able to continue
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Legal - Land Not Acquired	Almost Certain	Catastrophic	Ensure proper compliance and purchasing measures are taken.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Legal - Land Easements Not Acquired	Almost Certain	Catastrophic	Ensure proper protocol is followed.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Insufficient Budgetary	Almost Certain	Catastrophic	Ensure project is properly phased so intermediate steps can be completed if lack of funding. Obtain multiple estimates.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Environmental Compliance (Riparian Restoration) Permit Denied: DEP	Almost Certain	Catastrophic	Be sure plan addresses all EC. Follow previously successful projects that are similar in scope. Hold pre-application meetings.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Environmental Compliance (Bayou Restoration) Permit Denied: Army Corps	Almost Certain	Catastrophic	Follow previously successful projects that are similar in scope. Hold pre-application meeting.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Environmental Compliance (Water Management) Permit Denied: NFWF/WMD	Almost Certain	Catastrophic	Follow previously successful projects that are similar in scope. Hold pre-application meeting.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Permit Denied (Water Management)-Escambia County & City of Pensacola	Almost Certain	Catastrophic	Ensure local government regulations are being followed and proper permits obtained.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Operational Challenges	Almost Certain	Catastrophic	Utilize experienced personnel
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Delayed Timeline	Almost Certain	Catastrophic	Ensure proper milestones and expected due dates are reasonable & flexible.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Not Reaching	Almost Certain	Catastrophic	Plan should address

Desired Ecological Goals: # of Acres of Riparian Buffers Restored	Likelihood (Circle One)	Consequences (Circle One)	Mitigation
Desired Ecological Goals: Water Quality	Almost Certain	Catastrophic	reasonable amount of acreage that can be restored for 1. meaningful ecological benefit & 2. feasible access of land.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Desired Ecological Goals: Habitat Restoration	Almost Certain	Catastrophic	Plan should address reasonable amount of sediment & nutrient reduction for water quality benefits.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Desired Ecological Goals: Invasive Species	Almost Certain	Catastrophic	Plan should address reasonable amount of invasives that could be removed.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Desired Ecological Goals: Flooding Reduction	Almost Certain	Catastrophic	Plan should address estimated increased stormwater capacity based off of individual projects identified.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Desired Ecological Goals: Trails	Almost Certain	Catastrophic	Plan should address number, length, & location of additional trail systems for local business to increase attractiveness.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Inadvertent Harm to the Environment: Damaging Current Habitat	Almost Certain	Catastrophic	Ensure all projects are using best available science during planning process.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Maintenance of Restoration Projects	Almost Certain	Catastrophic	Monitor & make plans to fix areas if necessary
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Maintenance Challenges of Trails	Almost Certain	Catastrophic	Monitor & make plans to fix areas if necessary
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Public Acceptance Challenges	Almost Certain	Catastrophic	ensure public outreach and participation is included throughout the planning & design as well as local businesses.
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	
Other	Almost Certain	Catastrophic	Mitigation
	Likely	Major	
	Moderate	Moderate	
	Unlikely	Minor	
	Rare	Insignificant	

## Example Risks:

- Legal
- Permit
- Not Reaching Ecological Goal
- Not Reaching Economic Goals
- Maintenance
- Inadvertent Harm to the Environment
- Public Acceptance Challenges



# Risk Assessment Summary

RISK	Carptenter Creek/ Bayou Texar Revitalization	Project Universal Access	Perdido Key Gulf Access	Perdido Key Multi-Use Path	OLF8 Commerce Park	South Dogtrack Drainage
LEGAL	97.86	41.00	25.66	16.93	71.55	154.20
BUDGET	60.86	49.79	41.00	35.50	86.00	63.20
PERMIT	29.20	22.83	34.98	24.74	25.85	109.56
TIMELINE/ OPERATIONAL/ MAINTENANCE	52.39	38.93	37.00	31.16	61.33	82.11
ECOLOGICAL	40.09	36.65	51.47	29.40	37.77	56.34
ECONOMIC	56.46	34.79	28.41	35.04	63.69	75.50
PUBLIC	45.93	37.62	84.64	73.14	69.69	60.07
TREASURY	16.00	64.00	16.00	16.00	64.00	144.00
<b>TOTAL</b>	<b>398.79</b>	<b>325.61</b>	<b>319.16</b>	<b>261.91</b>	<b>479.88</b>	<b>744.98</b>

# Risk Explanations

RISK	Carptenter Creek/ Bayou Texar Revitalization	Project Universal Access	Perdido Key Gulf Access	Perdido Key Multi-Use Path	OLF8 Commerce Park	South Dogtrack Drainage
<b>TOTAL</b>	<b>398.79</b>	<b>325.61</b>	<b>319.16</b>	<b>261.91</b>	<b>479.88</b>	<b>744.98</b>
	<ul style="list-style-type: none"> <li>• More Activities</li> <li>• Project Relies on Land Acquisition &amp; Easements</li> <li>• Budget Variable</li> <li>• More Unknowns without Master Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Budget Highly Variable</li> <li>• May Need Extra Time/ Effort for Treasury Review</li> </ul>	<ul style="list-style-type: none"> <li>• Beach Mouse Concerns</li> <li>• Public Opinion Concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Public Opinion Concerns</li> </ul>	<ul style="list-style-type: none"> <li>• Legal Delays &amp; Concerns</li> <li>• Budget Variable</li> <li>• More Unknowns without Master Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns with Easement/ Land Acquisition</li> <li>• Permitting Concerns with applicant draft design</li> </ul>

# Benefits Review Sheet

Environmental Benefits							Notes
		Habitat Restoration	Habitat Conservation & Preservation	Water Quality Improvements	Natural Systems Resiliency		
Strength	5						
	4						
	3						
	2						
	1						
	0						

Economic Benefits							Notes
		Tourism Opportunities	Recreational Fishing & Local Seafood	Job Creation	Industry & Business Growth	Workforce Development	
Strength	5						
	4						
	3						
	2						
	1						
	0						

Infrastructure Benefits							Notes
		Transportation Network Improvement	Flooding Improvements	Community Resiliency			
Strength	5						
	4						
	3						
	2						
	1						
	0						

PROJECT BENEFITS	Carpenter Creek/ Bayou Texar Revitalization	Project Universal Access	Perdido Key Gulf Access	Perdido Key Multi-Use Path	OLF8 Commerce Park	South Dogtrack Drainage
Habitat Restoration	3.64	1.08	2.20	1.86	1.56	3.29
Habitat Preservation	4.21	1.69	2.93	2.23	2.38	3.07
Water Quality	4.14	0.62	0.87	0.69	1.88	4.00
Natural Resiliency	3.93	0.92	1.60	1.25	1.75	3.43
<b>ENVIRONMENT</b>	<b>15.93</b>	<b>4.31</b>	<b>7.60</b>	<b>6.03</b>	<b>7.56</b>	<b>13.79</b>
Tourism Opportunities	2.07	4.00	4.33	4.07	2.00	0.36
Rec Fishing & Seafood	1.93	2.46	3.80	1.79	0.63	1.07
Job Creation	1.07	1.62	1.73	1.36	4.56	0.93
Business/Industry Growth	1.50	2.23	2.07	1.93	4.56	0.43
Workforce Development	1.15	1.31	0.93	0.36	4.56	0.57
<b>ECONOMIC</b>	<b>7.73</b>	<b>11.62</b>	<b>12.87</b>	<b>9.50</b>	<b>16.31</b>	<b>3.36</b>
Transportation Improvements	1.93	2.85	2.73	4.07	2.25	1.43
Flooding Improvements	4.14	0.54	0.60	0.36	1.75	4.64
Community Resiliency	3.93	1.85	1.67	1.00	2.00	4.00
<b>INFRASTRUCTURE</b>	<b>10.00</b>	<b>5.23</b>	<b>5.00</b>	<b>5.43</b>	<b>6.00</b>	<b>10.07</b>

# Risks Vs. Benefits

	<b>Carpenter Creek/ Bayou Texar Revitalization</b>	<b>Project Universal Access</b>	<b>Perdido Key Gulf Access</b>	<b>Perdido Key Multi-Use Path</b>	<b>OLF8 Commerce Park</b>	<b>South Dogtrack Drainage</b>
<b>OVERALL RISK</b>	<b>398.79</b>	<b>325.61</b>	<b>319.16</b>	<b>261.91</b>	<b>479.88</b>	<b>744.98</b>
<b>OVERALL BENEFIT</b>	<b>33.66</b>	<b>21.16</b>	<b>25.47</b>	<b>20.96</b>	<b>29.87</b>	<b>27.22</b>
<b>Phase 1 Budget</b>	<b>\$1,090,000</b>	<b>\$300,000</b>	<b>\$123,000</b>	<b>\$800,000</b>	<b>\$1,270,000</b>	<b>\$200,000</b>



# Leveraging Opportunities

LEVERAGE	Carpenter Creek/ Bayou Texar Revitalization	Project Universal Access	Perdido Key Gulf Access	Perdido Key Multi-Use Path	OLF8 Commerce Park	South Dogtrack Drainage	Average Awarded Funding
NRDA	67-100%	67-100%	67-100%	32-66%	0-33%	32-66%	\$13,492,862.00
NFWF- Gulf Environmental Benefit	67-100%	0-33%	32-66%	0-33%	0-33%	32-66%	\$6,712,493.00
RESTORE Council	67-100%	0-33%	0-33%	0-33%	0-33%	32-66%	\$3,002,758.00
Triumph Gulf Coast	0-33%	0-33%	0-33%	0-33%	67-100%	0-33%	\$1.125 Billion for FL Panhandle; tbt
Tourism Grants	0-33%	67-100%	32-66%	32-66%	0-33%	0-33%	
Florida Forever Funds	32-66%	32-66%	32-66%	32-66%	0-33%	0-33%	Varies by Agency/Legislature
Coastal Partnership Initiative	32-66%	32-66%	32-66%	32-66%	0-33%	0-33%	\$45,000.00
319 Grant	67-100%	0-33%	0-33%	0-33%	0-33%	32-66%	\$343,827.00
FEMA Disaster Mitigation Grant	0-33%	0-33%	0-33%	0-33%	0-33%	32-66%	< \$15 Million
FEMA Flood Mitigation Assistance	0-33%	0-33%	0-33%	0-33%	0-33%	32-66%	Varies; \$199 Million Available
TMDL Water Quality Restoration	67-100%	0-33%	0-33%	0-33%	0-33%	32-66%	\$307,069.00
Defense Infrastructure	0-33%	0-33%	0-33%	0-33%	0-33%	0-33%	\$100,000-\$1 Million
FDOT	0-33%	0-33%	0-33%	67-100%	0-33%	0-33%	Varies

# Summary

Project	Phase 1	Future Phases	Total Project Cost
Carptenter Creek/ Bayou Texar Revitalization	\$1,090,000	\$47,735,000	\$48,825,000
Project Universal Access	\$300,000	\$3,500,000	\$3,800,000
Perdido Key Gulf Access	\$123,000	\$1,525,000	\$1,648,000
Perdido Key Multi-Use Path	\$800,000	\$5,700,000	\$6,500,000
OLF8 Commerce Park	\$1,270,000	\$17,767,790	\$3,800,000
South Dogtrack Drainage	\$200,000	\$7,900,000	\$8,100,000
<b>Total</b>	<b>\$4,783,000</b>	<b>\$83,127,790</b>	<b>\$72,673,000</b>
Direct Component (Pot 1) Funds	\$12,022,399 (Current Pot 1 Funds Available)	\$58,523,295 (Future Pot 1 Funds)	\$70,961,544 (Total Pot 1 Funds)

# Next Steps

- Additional Analysis for Return on Investment
- Develop Scope of Work for Design
- Drafting the Multi-Year Implementation Plan to include selected projects

**RESTORE Direct Component Project Nominations Risk Assessment Summary (as of 10-13-16)**

RISK	Carpenter Creek/ Bayou Texar Revitalization	Project Universal Access	Perdido Key Gulf Access	Perdido Key Multi-Use Path	OLF8 Commerce Park	South Dogtrack Drainage		Chart Key	
LEGAL	97.86	41.00	25.66	16.93	71.55	154.20		Low	0-50
BUDGET	60.86	49.79	41.00	35.50	86.00	63.20		Moderate	51-100
PERMIT	29.20	22.83	34.98	24.74	25.85	109.56		High	>100
TIMELINE/ OPERATIONAL/ MAINTENANCE	52.39	38.93	37.00	31.16	61.33	82.11			
ECOLOGICAL	40.09	36.65	51.47	29.40	37.77	56.34			
ECONOMIC	56.46	34.79	28.41	35.04	63.69	75.50			
PUBLIC	45.93	37.62	84.64	73.14	69.69	60.07			
TREASURY	16.00	64.00	16.00	16.00	64.00	144.00			
<b>TOTAL</b>	<b>398.79</b>	<b>325.61</b>	<b>319.16</b>	<b>261.91</b>	<b>479.88</b>	<b>744.98</b>			

**BENEFITS**

Habitat Restoration	3.64	1.08	2.20	1.86	1.56	3.29		High Benefit	3.41-5.00
Habitat Preservation	4.21	1.69	2.93	2.23	2.38	3.07		Moderate Benefit	1.71-3.40
Water Quality	4.14	0.62	0.87	0.69	1.88	4.00		Low Benefit	0.00-1.70
Natural Resiliency	3.93	0.92	1.60	1.25	1.75	3.43			
<b>ENVIRONMENT</b>	<b>15.93</b>	<b>4.31</b>	<b>7.60</b>	<b>6.03</b>	<b>7.56</b>	<b>13.79</b>			
Tourism Opportunities	2.07	4.00	4.33	4.07	2.00	0.36		High Benefit	3.41-5.00
Recreational Fishing & Seafood	1.93	2.46	3.80	1.79	0.63	1.07		Moderate Benefit	1.71-3.40
Job Creation	1.07	1.62	1.73	1.36	4.56	0.93		Low Benefit	0.00-1.70
Business/Industry Growth	1.50	2.23	2.07	1.93	4.56	0.43			
Workforce Development	1.15	1.31	0.93	0.36	4.56	0.57			
<b>ECONOMIC</b>	<b>7.73</b>	<b>11.62</b>	<b>12.87</b>	<b>9.50</b>	<b>16.31</b>	<b>3.36</b>			
Transportation Improvements	1.93	2.85	2.73	4.07	2.25	1.43		High Benefit	3.41-5.00
Flooding Improvements	4.14	0.54	0.60	0.36	1.75	4.64		Moderate Benefit	1.71-3.40
Community Resiliency	3.93	1.85	1.67	1.00	2.00	4.00		Low Benefit	0.00-1.70
<b>INFRASTRUCTURE</b>	<b>10.00</b>	<b>5.23</b>	<b>5.00</b>	<b>5.43</b>	<b>6.00</b>	<b>10.07</b>			
<b>OVERALL BENEFIT</b>	<b>33.66</b>	<b>21.16</b>	<b>25.47</b>	<b>20.96</b>	<b>29.87</b>	<b>27.22</b>			

**LEVERAGE**

FUNDING SOURCE	Likelihood of Receiving Funds						Average Awarded Funding
NRDA	67-100%	67-100%	67-100%	32-66%	0-33%	32-66%	\$13,492,862.00
NFWF- Gulf Environmental Benefit	67-100%	0-33%	32-66%	0-33%	0-33%	32-66%	\$6,712,493.00
RESTORE Council	67-100%	0-33%	0-33%	0-33%	0-33%	32-66%	\$3,002,758.00
RESTORE Consortium	0-33%	0-33%	0-33%	0-33%	0-33%	0-33%	\$12.7 Million, total for Escambia
Triumph Gulf Coast	0-33%	0-33%	0-33%	0-33%	67-100%	0-33%	\$1.125 Billion for FL Panhandle; tbt
Gulf Research Program	0-33%	0-33%	0-33%	0-33%	0-33%	0-33%	\$133 Million; tbt
Tourism Grants	0-33%	67-100%	32-66%	32-66%	0-33%	0-33%	Varies
Florida Forever Funds	32-66%	32-66%	32-66%	32-66%	0-33%	0-33%	Varies by Agency/Legislature
Coastal Partnership Initiative	32-66%	32-66%	32-66%	32-66%	0-33%	0-33%	\$45,000.00
319 Grant	67-100%	0-33%	0-33%	0-33%	0-33%	32-66%	\$343,827.00
FEMA Disaster Mitigation Grant	0-33%	0-33%	0-33%	0-33%	0-33%	32-66%	< \$15 Million
FEMA Flood Mitigation	0-33%	0-33%	0-33%	0-33%	0-33%	32-66%	Varies; \$199 Million Available
TMDL Water Quality Restoration	67-100%	0-33%	0-33%	0-33%	0-33%	32-66%	\$307,069.00
Defense Infrastructure	0-33%	0-33%	0-33%	0-33%	0-33%	0-33%	\$100,000-\$1 Million
FDOT	0-33%	0-33%	0-33%	67-100%	0-33%	0-33%	Varies

\* Please see Oct 13th Committee of the Whole Presentation for details & context.



**Committee of the Whole**

**5.**

**Meeting Date:** 10/13/2016

**Issue:** Dog-friendly Dining Ordinance

**From:** Bobbie Ellis-Wiggins, Assistant County Attorney

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**Information**

**Recommendation:**

Dog-friendly Dining Ordinance

(Alison Rogers - 15 minutes)

A. Board Discussion

B. Board Direction

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**Attachments**

Proposed Dog-Friendly Dining Ordinance

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## MEMORANDUM

To: Alison Rogers  
From: Bobbie Ellis-Wiggins  
Date: 06 October 2016  
Re: Dog-Friendly Dining Ordinance

### 1. Section 509.233/Land Development Code

Section 509.233 authorizes local governments to establish by ordinance an exemption to the FDA Food Code prohibiting pets in public food service establishments. The Florida Division of Hotels and Restaurants, Department of Business and Professional Regulation (“Division”), has adopted the FDA Food Code. The Division is the oversight agency charged with enforcing the requirements and restrictions in 509.233.

Section 509.233 requires the County to codify its dog-friendly dining program within its land development code. The statute contemplates a fairly comprehensive program, placing responsibilities and restrictions on restaurant owners and establishing administrative and enforcement obligations on the County.

Restaurant owners must apply for/receive/renew a permit and comply with its conditions and the associated Code requirements. The County must establish a permit application/permit issuing system, a procedure for receiving and responding to citizen’s complaints, and a monitoring/communication system to comply with the requirements for reporting various types of information to the Division. For example, the County must provide the Division with copies of each citizen complaint, the County’s enforcement response to the complaint, and copies of all approved applications and permits issued.

The County must also establish enforcement protocol for its code enforcement officers and/or determine that the ordinance will be enforced using the procedures in place for other code enforcement matters. Also required is BCC’s approval of permit/renewal fee schedules, Planning Board participation, coordination with Animal Control, and other related actions better identified by those more familiar with these processes.

### 1. Amendment to Section 10-11(b)

Adoption of a dog-friendly dining ordinance will require an amendment to Code Section 10-11(b), which prohibits animals in public places such as restaurants or other establishments serving food.

### 2. Attachments

Attached is a proposed draft of new LDC section 4-7.16. Most of the specific requirements are mandated by statute. Some of the provisions in the draft are discretionary, most of which are highlighted.

Also attached is a proposed revision to Code Sec. 10-11, the City of Pensacola’s dog-friendly dining ordinance, and Section 509.233, Florida Statutes.

ESCAMBIA COUNTY LAND DEVELOPMENT CODE

Chapter 4 – LOCATION AND USE REGULATIONS  
Article 7. – SUPPLEMENTAL USE REGULATIONS  
Sec. 4-7.16 - Outdoor dog-friendly dining areas.

[DRAFT]

Sec. 4-7.16 - Outdoor dog-friendly dining areas.

(a) *Purpose and intent.* The purpose and intent of this section is to implement Sec. 509.233, F.S., by permitting public food service establishments within the unincorporated areas of Escambia County, Florida to allow patrons' dogs within certain designated outdoor portions of their respective establishments, subject to the provisions of this section.

(b) *Definitions.* Terms used in this section shall have the following meaning:

- (1) *Division* means the Division of Hotels and Restaurants of the Florida Department of Business and Professional Regulation.
- (2) *Outdoor area* means an area adjacent to a public food service establishment that is predominantly free of any physical barrier on all sides and above.
- (3) *Public food service establishment* means any building, vehicle, place, or structure, or any room or division in a building, vehicle, place, or structure, where food is prepared, served, or sold for immediate consumption on or in the vicinity of the premises, as further defined in Chapter 509, F.S., as amended.

(c) *Application and Permit.* To protect the health, safety, and general welfare of the public, a public food service establishment is prohibited from having any dog on its premises unless it possesses a valid permit issued in accordance with this section. In order to implement and enforce the provisions of this section, applications shall include, along with any other such information deemed reasonably necessary by the permitting authority, the following:

- (1) The name, location, mailing address, telephone contact information, and email address of the subject public food service establishment.
- (2) The name, location, mailing address, telephone contact information, and email address of the applicant.
- (3) A diagram and description of the outdoor area to be designated as available to patrons' dogs, including dimensions of the designated area; a depiction of the number and placement of tables, chairs, and restaurant equipment, if any; the entryways and exits to the designated outdoor area; the boundaries of the designated area and of other areas



of outdoor dining not available for patrons' dogs; any fences or other barriers; surrounding property lines and public rights-of-way, including sidewalks and common pathways; and such other information reasonably required by the permitting authority. The diagram or plan shall be accurate and to scale but need not be prepared by a licensed design professional.

- (4) A description of the days of the week and hours of operation that patrons' dogs will be permitted in the designated outdoor area.
  - (5) The license number issued to the public food service establishment by the Division.
  - (6) Proof that the applicant possesses liability insurance in the minimum amount of twenty-five thousand dollars (\$25,000.00) in the event that a dog bites a staff member, patron, guest or passerby while on the premises.
  - (7) With respect to applicants whose outdoor seating is on a public sidewalk, proof that the restaurant has erected a physical barrier which would prevent pedestrian passersby from having direct contact with any dog on premises.
  - (8) With respect to applicants located adjacent to another public food service establishment, proof that the applicant has provided the neighboring establishment with notification of the applicant's intent to seek a permit under this section.
  - (9) With respect to applicants whose establishments are located on property not owned by the applicant, written authorization from the property owner to obtain the permit.
  - (10) Payment of a nonrefundable application review fee as established by the fee schedule approved by the Board of County Commissioners.
  - (11) Additional conditions as may be imposed by the County as necessary to protect the health, safety, and welfare of the community.
- (d) *Permit renewal.* Permits shall be renewed annually, on or before October 1, by submitting an application and renewal fee as established by the fee schedule approved by the Board of County Commissioners. Permit renewal applications received after October 10 shall incur a late fee established by the fee schedule approved by the Board of County Commissioners.
- (e) *Permit transferability.* A permit issued pursuant to this section shall not be transferred to a subsequent owner upon the sale of a public food service establishment but shall expire automatically upon the sale of the establishment. The subsequent owner shall be required to reapply for a permit pursuant to this section if the subsequent owner wishes to continue to accommodate patrons' dogs.



- (f) *Compliance.* In order to protect the health, safety, and general welfare of the public, and pursuant to ch. 509, F.S., permitted public food service establishments shall comply with the following requirements:
- (1) All public food service establishment employees shall wash their hands promptly after touching, petting, or otherwise handling any dog. Employees shall be prohibited from touching, petting, or otherwise handling any dog while serving food or beverages or handling tableware or before entering any other parts of the public food service establishment.
  - (2) Patrons in a designated outdoor area shall be advised that they should wash their hands before eating. Waterless hand sanitizer shall be provided at tables in the designated outdoor area.
  - (3) Employees and patrons shall be instructed that they shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens, paper products, or any other items involved in food service operations.
  - (4) Patrons shall keep their dogs on a leash at all times and shall keep their dogs under reasonable and direct control.
  - (5) Dogs shall not be allowed on chairs, tables, or other furnishings.
  - (6) All table and chair surfaces shall be cleaned and sanitized with an approved product between seating of patrons. Spilled food and drink shall be removed from the floor or ground between seating of patrons.
  - (7) Accidents involving dog waste shall be cleaned immediately and the area sanitized with an approved product. A kit with the appropriate materials for this purpose shall be kept near the designated outdoor area.
  - (8) A sign or signs reminding employees of the applicable rules and requirements shall be posted on the premises in a manner and place as determined by the local permitting authority; provided, however, at least one sign shall be posted in a conspicuous location frequented by employees and shall be not less than eight and one-half inches in width and 11 inches in height and printed in easily legible typeface of not less than 20-point font size.
  - (9) A sign or signs reminding patrons of the applicable rules and requirements shall be prominently posted on premises in a manner and place as determined by the local permitting authority.

- (10) A sign or signs shall be prominently posted in a manner and place as determined by the local permitting authority that places the public on notice that the designated outdoor area is available for the use of patrons and patrons' dogs.
- (11) At least one sign reminding employees of the applicable rules, including those contained in this section, and those additional rules and regulations, if any, included as further conditions of the permit by the county administrator or designee, shall be posted in a conspicuous location frequented by employees within the public food service establishment. The mandatory sign shall be not less than eight and one-half inches in width and 11 inches in height and printed in easily legible typeface of not less than 20-point font size.
- (12) At least one sign reminding patrons of the applicable rules, including those contained in this section, and those additional rules and regulations, if any, included as further conditions of the permit by the county administrator or designee, shall be posted in a conspicuous location frequented by employees within the public food service establishment. The mandatory sign shall be not less than eight and one-half inches in width and 11 inches in height and printed in easily legible typeface of not less than 20-point font size.
- (13) At all times while the designated outdoor portion of the public food service establishment is available to patrons and their dogs, at least one sign shall be posted in a conspicuous and public location near the entrance to the designated outdoor portion of the public food service establishment, the purpose of which shall be to place patrons on notice that the designated outdoor portion of the public food service establishment is currently available to patrons accompanied by their dog or dogs. The mandatory sign shall be not less than eight and one-half inches in width and 11 inches in height and printed in easily legible typeface of not less than 20-point font size.
- (14) Dogs shall not be permitted to travel through indoor or non-designated outdoor portions of the public food service establishment, and ingress and egress to the designated outdoor portions of the public food service establishment must not require entrance into or passage through any indoor or non-designated outdoor portion of the public food service establishment.
- (g) *Complaints.* In accordance with ch. 509, F.S., the **development services department** shall accept and document citizen complaints related to this section, and shall timely report all complaints and the county's enforcement responses to such complaints to the division.

- (h) *Enforcement.* In cooperation with the division, the county shall monitor permit holders for compliance with this section. A public food service establishment that fails to comply with the provisions of this section or the terms of its permit, including allowing dogs in an unpermitted outdoor dining area, shall be subject to any and all enforcement proceedings consistent with the applicable provisions of the Escambia County Code of Ordinances, Escambia County Land Development Code, and general law.
- (i) *Revocation.* After notice and reasonable time for correction, a permit may be revoked for failure to comply with any of the provisions of this section or any conditions of permit approval, and for failure to maintain any required state or local license.
- (1) Permit revocation may be appealed to the board of adjustment ("BOA"). The decision of the BOA shall constitute final action subject to judicial review.
- (2) A public food service establishment whose permit has been revoked may not reapply for a permit for a period of 12 months from the date of revocation.
- (j) *Documentation.* The local permitting authority shall, on an annual basis, provide the division with a copy of all approved applications and permits issued. All applications, permits, and other related documentation shall contain the appropriate division-issued license number for each public food service establishment.
- (k) *Service animals and law enforcement dogs.* This section does not apply to dogs used as a service animal for blind, hearing impaired, or disabled persons, or to dogs employed in the service of a law enforcement agency.



Sec. 10-11. - Animal control.

- (a) *Generally.* Animals are prohibited from roaming at large on any public or private property without the consent of the owner or lessee unless such animal is specifically excepted as further set out in this section. All animals when not on the premises of the owner or the premises of another who consents thereto shall be under the direct control of a person competent to control such animal at all times or, otherwise, shall be considered an animal nuisance and may be seized, restrained, impounded, and disposed of as provided by this chapter.
- (b) *Public places.* Except as provided in the Escambia County Land Development Code, Chapter 4, Article 7, Section 4-7.16 "Outdoor dog-friendly dining areas," Animals are prohibited from public places in the county such as airports, hotels, restaurants, theaters, public conveyances, grocery stores, or other establishments serving food, beverages or staple foods, and at public gatherings such as outdoor festivals, fairs, etc. Animals so found, whether roaming or on direct control by the owner, may be impounded.
  - (1) It shall be unlawful for the owner of an animal to allow his animal in public places of the county such as school grounds, school bus stops, public parks, beaches, and playgrounds.
  - (2) It shall be unlawful for the owner of an animal to allow his animal, whether roaming at large or on a leash or otherwise under his control, on public bathing beaches or recreational areas on that portion of Santa Rosa Island owned by and under the jurisdiction of the county or the Santa Rosa Island Authority, or on that portion of any beach, public or private, lying seaward of the coastal construction setback line for land southward of the right-of-way of State Road 292 or lying seaward of the line of vegetation for land northward of the right-of-way for State Road 292 on the portion of the county known as Perdido Key which is bordered to the west by the Alabama state line, to the south by the waters of the Gulf of Mexico, to the east by the property of the U.S. Government, and to the north by the waters of the Intracoastal Waterway.
  - (3) Provided, however, no animal owner shall be prohibited from permitting his animal within 50 feet of a building which the animal owner owns or leases.



West's Florida Statutes Annotated

Title XXXIII. Regulation of Trade, Commerce, Investments, and Solicitations (Chapters 494-560)

Chapter 509. Lodging and Food Service Establishments; Membership Campgrounds (Refs & Annos)

Part I. Public Lodging and Public Food Service Establishments

West's F.S.A. § 509.233

509.233. Public food service establishment requirements;  
local exemption for dogs in designated outdoor portions

Effective: October 1, 2009

Currentness

**(1) Local exemption authorized.**—Notwithstanding s. 509.032(7), the governing body of a local government may establish, by ordinance, a local exemption procedure to certain provisions of the Food and Drug Administration Food Code, as currently adopted by the division, in order to allow patrons' dogs within certain designated outdoor portions of public food service establishments.

**(2) Local discretion; codification.**—

(a) The adoption of the local exemption procedure shall be at the sole discretion of the governing body of a participating local government. Nothing in this section shall be construed to require or compel a local governing body to adopt an ordinance pursuant to this section.

(b) Any ordinance adopted pursuant to this section shall provide for codification within the land development code of a participating local government.

**(3) Limitations on exemption; permit requirements.**—

(a) Any local exemption procedure adopted pursuant to this section shall only provide a variance to those portions of the currently adopted Food and Drug Administration Food Code in order to allow patrons' dogs within certain designated outdoor portions of public food service establishments.

(b) In order to protect the health, safety, and general welfare of the public, the local exemption procedure shall require participating public food service establishments to apply for and receive a permit from the governing body of the local government before allowing patrons' dogs on their premises. The local government shall require from the applicant such information as the local government deems reasonably necessary to enforce the provisions of this section, but shall require, at a minimum, the following information:

1. The name, location, and mailing address of the public food service establishment.

2. The name, mailing address, and telephone contact information of the permit applicant.

3. A diagram and description of the outdoor area to be designated as available to patrons' dogs, including dimensions of the designated area; a depiction of the number and placement of tables, chairs, and restaurant equipment, if any; the entryways and exits to the designated outdoor area; the boundaries of the designated area and of other areas of outdoor dining not available for patrons' dogs; any fences or other barriers; surrounding property lines and public rights-of-way, including sidewalks and common pathways; and such other information reasonably required by the permitting authority. The diagram or plan shall be accurate and to scale but need not be prepared by a licensed design professional.

4. A description of the days of the week and hours of operation that patrons' dogs will be permitted in the designated outdoor area.

(c) In order to protect the health, safety, and general welfare of the public, the local exemption ordinance shall include such regulations and limitations as deemed necessary by the participating local government and shall include, but not be limited to, the following requirements:

1. All public food service establishment employees shall wash their hands promptly after touching, petting, or otherwise handling dogs. Employees shall be prohibited from touching, petting, or otherwise handling dogs while serving food or beverages or handling tableware or before entering other parts of the public food service establishment.

2. Patrons in a designated outdoor area shall be advised that they should wash their hands before eating. Waterless hand sanitizer shall be provided at all tables in the designated outdoor area.

3. Employees and patrons shall be instructed that they shall not allow dogs to come into contact with serving dishes, utensils, tableware, linens, paper products, or any other items involved in food service operations.

4. Patrons shall keep their dogs on a leash at all times and shall keep their dogs under reasonable control.

5. Dogs shall not be allowed on chairs, tables, or other furnishings.

6. All table and chair surfaces shall be cleaned and sanitized with an approved product between seating of patrons. Spilled food and drink shall be removed from the floor or ground between seating of patrons.

7. Accidents involving dog waste shall be cleaned immediately and the area sanitized with an approved product. A kit with the appropriate materials for this purpose shall be kept near the designated outdoor area.

8. A sign or signs reminding employees of the applicable rules shall be posted on premises in a manner and place as determined by the local permitting authority.

9. A sign or signs reminding patrons of the applicable rules shall be posted on premises in a manner and place as determined by the local permitting authority.

10. A sign or signs shall be posted in a manner and place as determined by the local permitting authority that places the public on notice that the designated outdoor area is available for the use of patrons and patrons' dogs.

11. Dogs shall not be permitted to travel through indoor or nondesignated outdoor portions of the public food service establishment, and ingress and egress to the designated outdoor portions of the public food service establishment must not require entrance into or passage through any indoor area of the food establishment.

(d) A permit issued pursuant to this section shall not be transferred to a subsequent owner upon the sale of a public food service establishment but shall expire automatically upon the sale of the establishment. The subsequent owner shall be required to reapply for a permit pursuant to this section if the subsequent owner wishes to continue to accommodate patrons' dogs.

**(4) Powers; enforcement.**—Participating local governments shall have such powers as are reasonably necessary to regulate and enforce the provisions of this section.

**(5) State and local cooperation.**—The division shall provide reasonable assistance to participating local governments in the development of enforcement procedures and regulations, and participating local governments shall monitor permit holders for compliance in cooperation with the division. At a minimum, participating local governments shall establish a procedure to accept, document, and respond to complaints and to timely report to the division all such complaints and the participating local governments' enforcement responses to such complaints. A participating local government shall provide the division with a copy of all approved applications and permits issued, and the participating local government shall require that all applications, permits, and other related materials contain the appropriate division-issued license number for each public food service establishment.

#### **Credits**

Added by Laws 2006, c. 2006-72, § 3, eff. July 1, 2006. Amended by Laws 2007, c. 2007-5, § 127, eff. July 3, 2007; Laws 2009, c. 2009-195, § 46, eff. Oct. 1, 2009.

West's F. S. A. § 509.233, FL ST § 509.233

Current through the 2016 Second Regular Session of the Twenty-Fourth Legislature.

**Committee of the Whole**

**6.**

**Meeting Date:** 10/13/2016

**Issue:** ADA - Enforcement and Building Access

**From:** Jack Brown, County Administrator

---

**Information**

**Recommendation:**

ADA - Enforcement and Building Access

(Jack Brown/Alison Rogers - 30 min)

A. Board Discussion

B. Board Direction

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**Attachments**

Summary of ADA/Accessibility Enforcement Authority

---



ALISON PERDUE ROGERS  
County Attorney  
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Local Government Law

CHARLES V. PEPPLER  
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**BOARD OF COUNTY COMMISSIONERS**  
ESCAMBIA COUNTY, FLORIDA  
OFFICE OF THE COUNTY ATTORNEY

221 PALAFOX PLACE, SUITE 430  
PENSACOLA, FLORIDA 32502

TELEPHONE: (850) 595-4970  
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To: Alison P. Rogers, County Attorney

From: Bobbie Ellis-Wiggins, Assistant County Attorney

A handwritten signature in blue ink, appearing to read "B. Ellis-Wiggins", is written over the "From:" line.

Date: October 10, 2016

From: Summary of ADA/Accessibility Enforcement Authority  
Escambia County Code of Ordinances and Florida Statutes

SUMMARY

According to the language of the Code, building construction code enforcement officers appear to be responsible for initial, front-line enforcement of the accessibility code for existing facilities required to comply. Enforcement of parking space requirements and unsafe building abatement are also arguably the responsibility of building construction code enforcement officers.

The sheriff, highway patrol, parking enforcement specialists, and landowners are responsible for enforcing accessible parking requirements.

KEY FACTORS

- By definition, all references in the ordinances to the "building code" also include the "accessibility code."

Sec. 14-33 adopts the Florida Building Code for Escambia County. The Florida Building Code contains the technical portions of the Florida Accessibility Code for Building Construction in their entirety. (§ 553.73(1)(b)).

- By definition, most references to "code enforcement officers" include both "building construction code enforcement officers" and "environmental law enforcement officers," without distinction.

*"Building construction code enforcement officer means any person who is duly employed by the board of county commissioners for the purpose of enforcing building construction code laws and ordinances and whose primary responsibility is the enforcement of building construction code laws and*

ordinances. For the purpose of article II of this chapter, building construction code enforcement officers are also *code inspectors* authorized to assure code compliance through procedures established in article II of this chapter.” (§ 30-92)

*“Building construction code enforcement officers shall be under the direction of developmental services department for the purpose of enforcing building construction code laws and ordinances as well as any other related laws deemed necessary by the board of county commissioners. For the purpose of article II of this chapter, environmental law enforcement officers are also code inspectors authorized to assure code compliance through procedures established in article II of this chapter.” (§ 30-93)*

*“Environmental law enforcement officer means any person who is duly employed by the board of county commissioners for the purpose of enforcing environmental laws and ordinances and whose primary responsibility is the prevention and detection of environmentally related criminal activities and the enforcement of the environmental laws of the state and county.” (§ 30-92)*

*“Environmental law enforcement officers shall be under the direction of the solid waste department for the purpose of enforcing environmental laws and ordinances as well as any other laws deemed necessary by the board of county commissioners.” (§ 30-93).*

- **Federal ADA regulations require removal of architectural barriers in “existing facilities” in “places of public accommodation” where removal is “readily achievable.” (28 C.F.R § 36.304)**

**“Places of public accommodation” is defined as facilities operated by a private entity whose operations affect commerce, such as hotels, restaurants, theaters, convention centers, retail establishments, banks, etc. (29 C.F.R. § 36.304)**

**“Existing facility” means a facility in existence on any given date, without regard to whether the facility may also be considered newly constructed or altered under this part. This definition reflects the Department’s longstanding interpretation that public accommodations have obligations in existing facilities that are independent of but may coexist with requirements imposed by new construction or alteration requirements in those same facilities. (28 C.F.R. § Pt. 36, App. A)**

**“Readily achievable” means easily accomplishable and able to be carried out without much difficulty or expense.**

- **Florida’s Accessibility Code for Building Construction mirrors the above federal regulation and requires, for *existing* facilities (as well as those under construction), the following:**

- (1) The removal of barriers at common or emergency entrances and exits of business establishments which would prevent use of such entrances or exits. (§ 553.504)
- (2) The removal of architectural barriers from a parking facility unless compliance would not be "readily achievable." (§ 553.5041)

## ACCESSIBILITY ENFORCEMENT (NON-PARKING SPACE/SIGNAGE)

### **1. Building Official:**

Sec. 14-34(f) authorizes and directs the *building official* to enforce the provisions of the building code, and "shall have the authority to render interpretations of this Code and to adopt policies and procedures in order to clarify the application of its provisions."

Sec. 14-37 authorizes the building official to invoke the following penalties for violations of the building code (in addition to penalties under Section 109 of the Florida Building Code): (a) issue stop work orders; (b) seek injunctive relief; and (c) turn over to state attorney for prosecution as misdemeanor which upon conviction punished by fine up to \$500 or imprisonment in county jail up to 60 days or both.

### **2. Building Construction Code Enforcement Officers:**

Sec. 30-94 provides: "*Building construction code enforcement officers* shall be under the direction of developmental services department for the purpose of enforcing building construction code laws and ordinances as well as any other related laws deemed necessary by the board of county commissioners." (§ 30-94)

"Persons employed as building construction code enforcement officers must meet the requirements for certification as a building construction code enforcement officer." (§ 30-94)

### **3. Contractor Competency Board:**

"Pursuant to F.S. § 553.73(1)(e), the *Escambia County Contractor Competency Board* shall be vested with the responsibility for enforcement, interpretation, and regulation of the Florida Building Code in Escambia County, Florida." (§ 14-34(w))

§ 553.73(1)(e): "Subject to the provisions of this act, responsibility for enforcement, interpretation, and regulation of the Florida Building Code shall be vested in a specified local board or agency, and the words 'local government' and

'local governing body' as used in this part shall be construed to refer exclusively to such local board or agency."

**4. State Attorney:**

Section 14-34(bb) provides that any person who violates the building code or any requirement thereof shall be guilty of a misdemeanor and punished as provided by state laws; Sec. 14-37 authorizes the building official to invoke prosecution of violators (misdemeanor punishable by fine up to \$500 or imprisonment in county jail up to 60 days or both).

**ACCESSIBILITY ENFORCEMENT (PARKING SPACES/SIGNAGE)**

**1. Code Enforcement Officers (which ones?):**

Sec. 94-100(b) lists the requirements for parking construction with specific references to

§ 553.5041 – "Parking spaces for persons who have disabilities."

Violations of Sec. 94-100 "shall be punishable under section 30-64 by a civil penalty as provided in section **30-63**." (§ 94-100(c))

Sec. **30-63** governs the issuance of citations by "code enforcement officers."

Q: Which code enforcement officers – "environmental law enforcement officers" or "building construction code enforcement officers" or both?

Q: Sec. **30-66** creates more uncertainty: "The provisions of this section [Article?] [Article III – "CITATIONS"] shall not apply to the enforcement pursuant to F.S. §§ 553.79 and 553.80 of building codes adopted pursuant to F.S. § 553.73 as they apply to construction, provided that a building permit is either not required or has been issued by the county. For the purposes of this subsection, "building codes" means only those codes adopted pursuant to F.S. § 553.73."

**2. Owners of land on which a business operates:**

Sec. 94-100 requires landowners whose property is used by a business to require its business tenants, subtenants, and contractors to comply with all statutes or parking ordinances, and specifically delineates requirements for disabled parking spaces.

**3. County Administrator:**

LDC Chapter 1, Article 3, Sec. 1-3.2 provides that the Administrator's authority and duties include enforcement of all LDC provisions.



LDC Chapter 5, Article 6, Sec. 5-6.2 (c) establishes requirements for handicap parking spaces according to the Florida Accessibility Code for Building Construction.

## UNSAFE BUILDINGS

### **1. Code Enforcement Officers (*which ones?*):**

Sections 30-202(m)(5) in the Unsafe Building Abatement ordinance defines unsafe buildings as "any building that has any of the following conditions, such that life, health, property or safety of its occupants or the general public are endangered:...(5) The buildings, dwellings, or portion thereof has been constructed or maintained in *violation of a specific requirement of the Florida Building Code* or of a city, county, or state law."

Sec. 30-206 states that Article VI – "Unsafe Building Abatement" may be enforced in any manner authorized by F.S. Chapter 162 – "Local Government Code Enforcement Boards."

§ 162.06 establishes code enforcement procedures utilizing "code inspectors" as key players in the process. Sections 30-92 and 30-93 provide that *building construction code enforcement officers* and *environmental law enforcement officers* are also "*code inspectors* authorized to assure code compliance through procedures established in article II ["Special Masters"] of this chapter."

Note: Unsafe building enforcement is relevant only when the "life, health, property or safety of its occupants or the general public are endangered."

### **2. State Attorney:**

Sec. 30-206 states that this article (Article VI – "Unsafe Building Abatement") may be prosecuted by the state attorney in the same manner as a misdemeanor pursuant to F.S. § 125.69.

## ACCESSIBLE PARKING ENFORCEMENT

### **1. Sheriff and Highway Patrol:**

Sec. 94-101 states that "the sheriff...and officers of the state highway patrol shall be responsible for enforcing this division ..."

"This division" is Division 4. – "CITATIONS," Article II – "STOPPING, STANDING, PARKING," Chapter 94 – "TRAFFIC AND VEHICLES."

Sec. 94-101(3) provides that unlawful parking in a "Parking by Disabled Permit Only" space shall be enforced according to § 316.1955 – "Enforcement of parking requirements for persons who have disabilities."

2. **Parking Enforcement Specialist:**

3. **Owner or Lessee of Parking Space:**

Section 316.1955(1)(a) provides: "Whenever a law enforcement officer, a *parking enforcement specialist*, or *the owner or lessee of the space* finds a vehicle in violation of this subsection, that officer, *owner*, or *lessor* shall have the vehicle in violation removed to any lawful parking space or facility or require the operator or other person in charge of the vehicle immediately to remove the unauthorized vehicle from the parking space. Whenever any vehicle is removed under this section to a storage lot, garage, or other safe parking space, the cost of the removal and parking constitutes a lien against the vehicle."

**Committee of the Whole**

7.

**Meeting Date:** 10/13/2016

**Issue:** Downtown Trolley Service

**From:** Joy D. Blackmon, P.E., Director

---

**Information**

**Recommendation:**

Downtown Trolley Service

(Colby Brown/David Forte - 30 minutes)

A. Board Discussion

B. Board Direction

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**Attachments**

Downtown Trolley Presentation

---

# Downtown Pensacola Pilot Trolley Service

COMMITTEE OF THE WHOLE WORKSHOP  
BOARD OF COUNTY COMMISSIONERS

Board Chambers  
Suite 100

Ernie Lee Magaha Gov't Building - First Floor  
221 Palafox Place

October 13, 2016  
9:00 a.m.





# Proposed Downtown Trolley Routes





# Proposed Schedule & Costs

- Proposed Daytime Route:

- Daily
- 10 a.m. - 2 p.m.
- Every 15 minutes

- Proposed Nighttime Route:

- Thurs, Fri, Sat
- 5 p.m. - 10 p.m.
- Every 30 minutes

- Drivers wages : \$13.50
- Driver benefits : \$2
- Fuel: \$14.50
- Maintenance wages: \$6
- Maintenance benefits: \$1
- Parts: \$3
- Administrative support and overhead: \$12
- Total hourly cost: \$52 / hour

# Interlocal Agreements

County and Santa Rosa  
Island Authority (SRIA):

- That the trolleys be allowed for operation in downtown Pensacola
- October 1, 2016 and December 31, 2016

County and Downtown  
Improvement Board (DIB):

- Est. roles and responsibilities between the two entities regarding the downtown Pensacola pilot trolley routes.
- That the DIB shall reimburse the County for all costs incurred for such pilot trolley service.



# Questions

Colby Brown, P.E.

Deputy Director, Public Works

850-595-3404

[csbrown@myescambia.com](mailto:csbrown@myescambia.com)



**Committee of the Whole**

**8.**

**Meeting Date:** 10/13/2016

**Issue:** Acquisition of the Midtown Commerce Park Site

**From:** Amy Lovoy, Assistant County Administrator

---

**Information**

**Recommendation:**

Acquisition of the Midtown Commerce Park Site

(Amy Lovoy/Chips Kirschenfeld - 45 minutes)

A. Board Discussion

B. Board Direction

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**Attachments**

Midtown Commerce Park

O&M Plan

Economic Impact Report

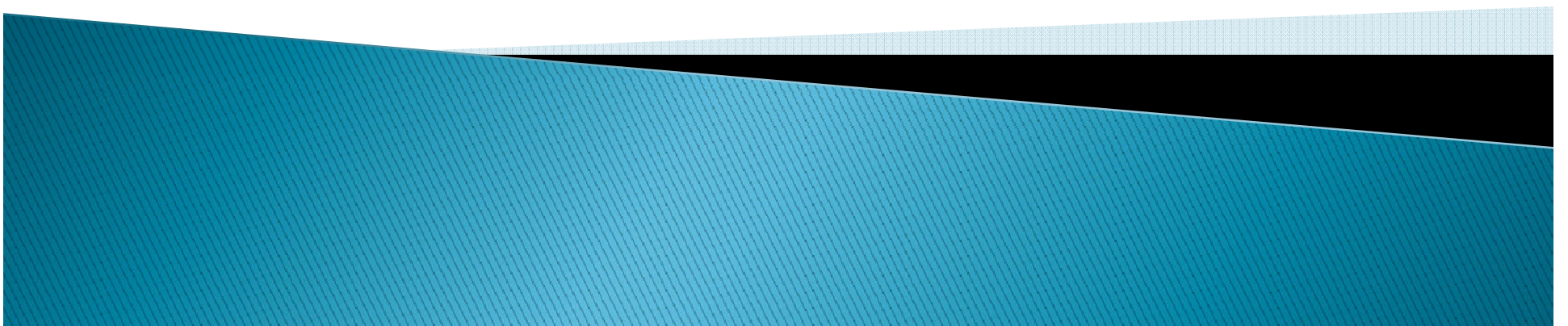
Review of City's Phase I

Phase II

Palafox Commerce Park Master Plan

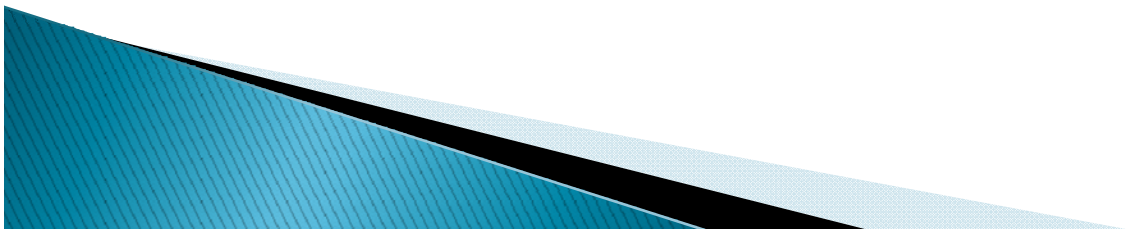
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# Midtown Commerce Park



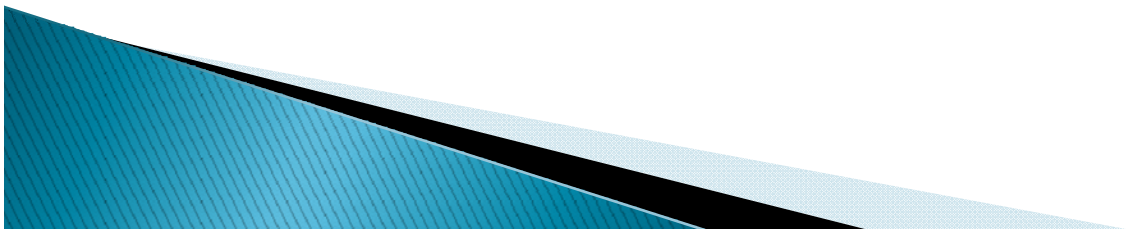
# History

- ▶ Is a remediated superfund site located near 3910 N Palafox Street just north of Fairfield.
- ▶ The site is an abandoned wood preserving facility that operated from 1942 to 1982. The operation of this facility resulted in extensive creosote, pentachlorophenol (PCP) and dioxin contamination in the soil and groundwater.
- ▶ The Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) conducted a remedial action that included soil cleanup and neighborhood relocation that was finally completed in 2010.



# Specifications

- ▶ About 85 acres of which 70 acres is owned by the federal government.
- ▶ Another 15 acre parcel is currently owned by the City of Pensacola. This parcel escheated to the County, and the Board transferred ownership of this parcel to the City several years ago.







Pace

Clarinda Triangle

Oak Park Escambia Arms

Rosewood Terrace

Former Wastewater Pond and Source Area for Plume

Palafox

Herman and Pearl Streets

Agrico Superfund Site

Fairfield

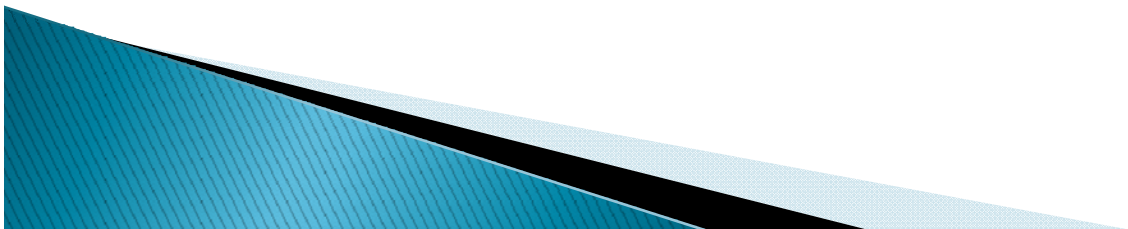






# Proposal

- ▶ The Environmental Protection Agency (EPA) would transfer to the County all federally owned properties in exchange for the County assuming all operations and maintenance tasks and costs in the approved O&M plan.
- ▶ This plan requires the County to maintain all the properties on or near the cap even if they would not be owned by the County. This would include the parcel owned by the City as well as 2 properties currently owned by private entities.
- ▶ The County could then redevelop the area subject to the following restrictions.
  - The Property shall be used solely for commercial, industrial, or manufacturing purposes, except that the Property shall not be used for any business involving temporary or permanent housing of individuals. The following uses are forbidden unless FDEP grants prior approval in accordance with Paragraph 3 of this Declaration:
  - The Property shall not be used for residential purposes, including mobile homes, hotels, motels, apartments, dormitories, campgrounds, group homes, retirement communities, or temporary shelters.
  - The property shall not be used for day care centers, kindergartens, or elementary or secondary schools.
  - The property shall not be used for playgrounds, athletic fields, or camps.
  - The property shall not be used for mining or agricultural purposes, including community gardens and forestry.



# O&M Requirements

- ▶ Final Operation & Maintenance plan was adopted by U.S. EPA in March 2012. O&M activities are currently ongoing.
- ▶ The primary goal of O&M activities is to protect the containment cell and liner system during future reuse or redevelopment of the site. Protection of the containment cell and liner system will ensure the site remains protective of human health and the environment. Key elements of the O&M plan include the following:
  - Inspections of stormwater management & subsurface drainage systems
  - Inspections of soil cover system
  - Maintenance of site vegetation (mowing)
  - Groundwater sampling & analysis
  - Leachate sampling, analysis, treatment & disposal
  - Site security & fence maintenance
  - Enforcement of institutional controls during/following redevelopment
- ▶ Escambia County will assume responsibility for the implementation of the O&M plan and related costs under the property transfer proposal. However, the State of Florida will remain ultimately responsible for its statutory and contractual O&M obligations.
- ▶ Some aspects of the O&M plan are expected to decrease in frequency over time. Others may eventually be able to be eliminated from the plan with written consent from the U.S. EPA. O&M of institutional controls required to safeguard the on-site waste containment system will be required indefinitely.

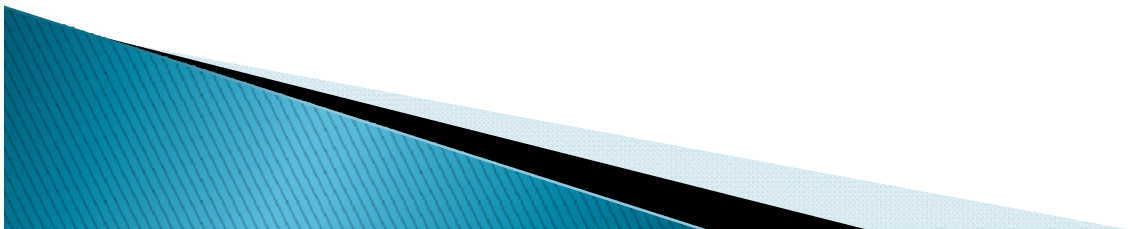




# O&M Estimated Costs

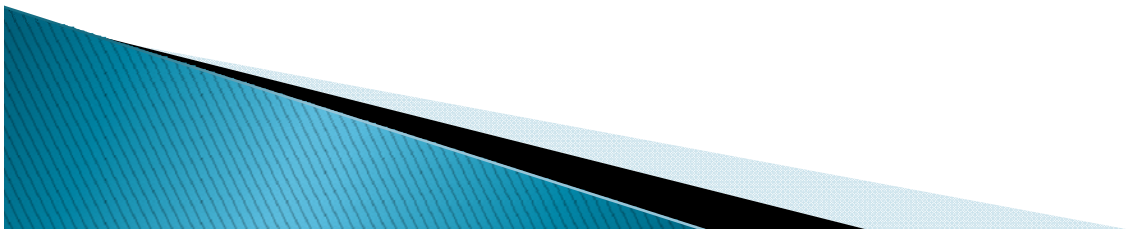
- ▶ FDEP has provided a 30-year cost estimate for O&M activities based on the current level of effort and actual costs.
- ▶ A reduction in overall O&M costs could be realized by completing certain required activities in-house, such as stormwater & drainage inspections, vegetative maintenance (mowing), security & fence maintenance, groundwater monitoring, and leachate monitoring.

O&M Category	FDEP Cost Estimate	Escambia County including Loaded Wages	Escambia County minus Loaded Wages
Maintenance	\$17,900	\$12,600	\$5,200
Inspections & Operations	\$18,800	\$9,200	\$5,100
Monitoring	\$5,900	\$3,300	\$2,300
<b>Estimated Average Yearly Cost</b>	<b>\$42,600</b>	<b>\$25,100</b>	<b>\$12,600</b>

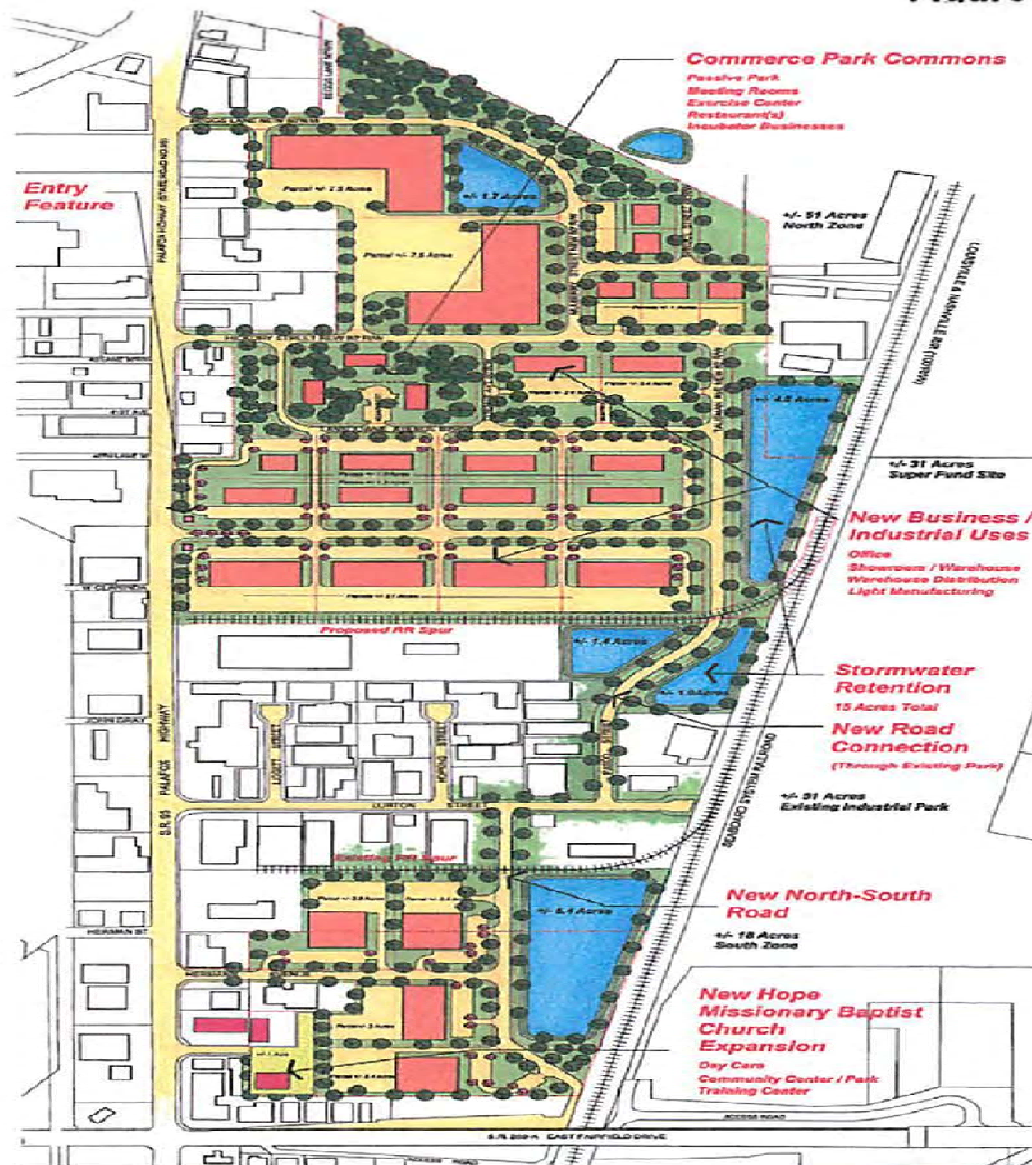


# Master Plan

- ▶ In 2000 the County contracted to have a master plan for this commerce park developed.
- ▶ Based on stakeholder input this plan focused on developing an eco-industrial park for the following targeted industries:
  - Information Technology
  - Industrial Services
  - Health & Medical Technology
  - Silicon Technology
  - Transportation Equipment



**Figure 2**



**Commerce Park  
Palafox Corridor Redevelopment**  
Community Redevelopment Agency  
Neighborhoods and Environmental Services Department  
Escambia County, Florida

**Master Plan**

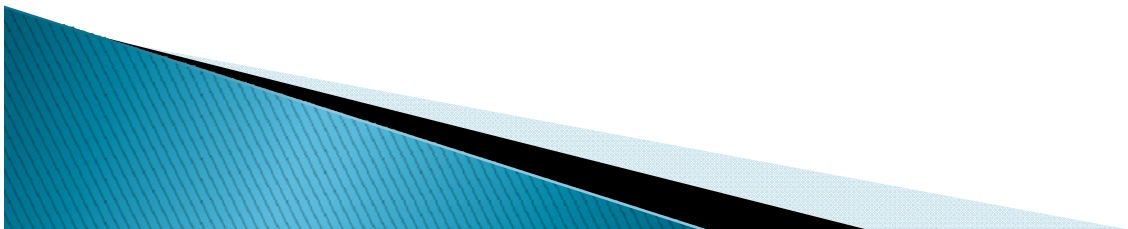
02/06/2008



# Economic Impact

- ▶ Based on the master plan, a economic impact study was completed in 2003.
- ▶ The findings of this study included:
  - At 100% development the park would support 1,714 jobs working in light manufacturing, wholesale trade and business service industries
  - A fully developed commerce park will genera \$32 million in federal taxes, \$10 million in state taxes and \$4.4 million in local tax revenues.

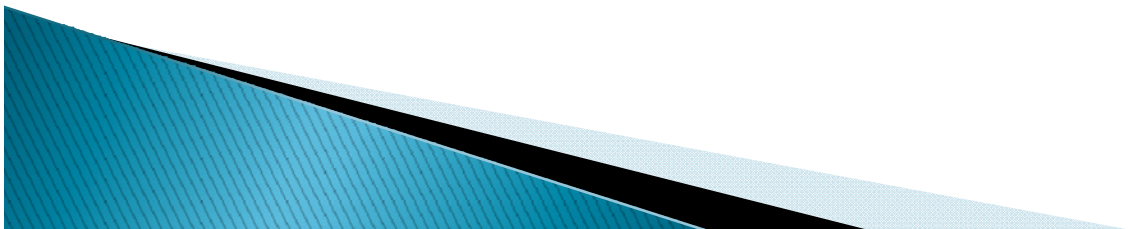
Build-Out Year	Jobs	Direct Spending
3	391	\$55,000,000
7	1,371	\$219,000,000
10	1,714	\$274,000,000





# Questions for the Board

- ▶ Does the Board wish to pursue acquisition of the site?
- ▶ Does the Board wish to consider allocating funding from LOST IV for the development of the site?



**FINAL  
OPERATIONS AND MAINTENANCE (O&M) PLAN**

**ESCAMBIA WOOD  
TREATING COMPANY  
SUPERFUND SITE**

**OPERABLE UNIT 01 (SOIL)**

**PENSACOLA, ESCAMBIA COUNTY, FLORIDA**

**PREPARED BY:**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA, GEORGIA**



**March 2012  
Revision 4**

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## Acronyms and Abbreviations

ARAR	Applicable or Relevant and Appropriate Requirement
Black & Veatch	Black & Veatch Special Projects Corp.
COC	Chemical of Concern
EPA	U.S. Environmental Protection Agency
ETC	Escambia Wood Treating Company
FDEP	Florida Department Environmental Protection
GCL	Geosynthetic clay liner
Geonet	Geosynthetic drainage net
HASP	Health and Safety Plan
HDPE	High Density Polyethylene
O&M	Operations and Maintenance
OU1	Operable Unit One
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
PAH	Polycyclic aromatic hydrocarbons
PCP	Pentachlorophenol
psi	pounds per square inch
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
ROD	Record of Decision
SVOC	Semi-volatile Organic Compounds
SWMU	Solid Waste Management Unit
S/S subcap	Solidified/Stabilized subcap
SSC	State Superfund Contract
USACE	U.S. Army Corps of Engineers
VOC	Volatile organic compound

## **1.0 Introduction**

### **1.1 Intent of Document**

This Operations and Maintenance (O&M) Plan is for Operable Unit 1 (OU1) at the Escambia Wood Treating Company (ETC) Superfund Site in Pensacola, Florida. The U.S. Environmental Protection Agency (EPA) conducted two Superfund Remedial Actions (RA) for OU1, an Interim RA starting in 1997 and a Final RA starting in 2006. Once a Superfund Remedial Action is complete, Operations and Maintenance must be conducted to ensure that the remedy remains protective of human health and the environment. This O&M Plan documents the O&M activities the EPA and FDEP agree are required to successfully maintain the protectiveness of the OU1 Remedies for the ETC Site. This O&M plan and the required O&M activities can be modified by agreement of the EPA and the State.

### **1.2 Site History and Location**

The ETC facility manufactured pressure treated wood products, primarily utility poles and foundation pilings. From 1942 to approximately 1970, coal-tar creosote was the primary wood preservative. Starting in 1963, Pentachlorophenol (PCP) dissolved in No. 6 diesel fuel was also used at the facility, and was the sole preservative in use from 1970 until 1982 when the facility closed. Facility operations resulted in extensive creosote, (polycyclic aromatic hydrocarbons (PAH)) and PCP contamination of soil and ground water. Soil at the Site is also contaminated with PAHs and dioxin, which is a common impurity in commercial-grade PCP.

Contaminated wastewater and runoff from the former treatment area were the primary chemical wastes managed at the facility. From the mid-1940s through the mid-1950s, all wastewater was sent to an unlined impoundment located in the northeastern part of the Site. After the mid-1950s, wastewater was processed by an oil/water separator to recover treating chemicals, and then sent to an impoundment to be discharged to the Pensacola sanitary sewer system or be pumped back into the process vacuum line. The contaminated runoff from the treatment area was directed into a runoff collection/separation system, where wastewater was allowed to evaporate from an impoundment area and the remaining liquid was discharged to the Pensacola sanitary sewer system.

The former ETC facility occupies approximately 26 acres and is located at 3910 North Palafox Street in the City of Pensacola, Escambia County, Florida (approximately 30° 27' 19" north latitude and 87° 13' west longitude).

### **1.3 Previous EPA Actions**

Starting in 1982, EPA and the State of Florida cited the ETC facility for numerous violations, including uncontrolled ground water contamination and inadequate financial assurance under hazardous waste regulations. In June 1990, EPA conducted a Facility Assessment at the ETC facility to verify the findings of an earlier file review, to assess the release or the potential for release of hazardous wastes or constituents from the facility, and to assess if further action is needed. The assessment identified 32 Solid Waste Management Units (SWMUs) and recommended the entire facility be treated as an Area of Concern. The site was uncontrolled, and there were immediate pathways of exposure to open waste pits, contaminated soil, and chemical drums.

Escambia Treating Company went bankrupt and abandoned the facility in 1991; in response EPA Region 4 activated the EPA Environmental Response Team to perform a preliminary assessment of the Site. The investigation indicated that a removal action was needed. In October 1991, EPA began a removal action to address immediate risks of exposure and to stabilize the Site. EPA excavated about 225,000 cubic yards of contaminated material and stored it under a 60-mil (1.5 millimeters [mm]), high density polyethylene (HDPE) liner treated to be resistant to ultraviolet light. The former process area and a former wastewater pond/landfill were excavated to approximately 40 feet deep. The removal action was completed in 1992.

EPA proposed the Site for inclusion on the National Priorities List (NPL) in August 1994 and the listing on the NPL was finalized on December 16, 1994.

### **1.4 Operable Unit 1 Remedial Actions**

Cleanup actions were divided into two Operable Units: OU1 addresses soil contamination and OU2 addresses contaminated ground water. For OU1, the EPA selected an Interim Remedial Action in 1997 and a Final Remedial Action in 2006.

#### ***1.4.1 Interim Remedial Action - Relocation***

The Interim Remedial Action for OU1 was selected in a 1997 Interim Record of Decision. The Interim ROD called for the permanent relocation of 358 households from the neighborhoods north of the facility (Rosewood Terrace, Oak Park, and Escambia

Arms) and the Goulding (Herman and Pearl Streets) neighborhoods south of the site. The relocation was carried out as part of the National Relocation Pilot Project. The relocation occurred from November 1997 to August 2005. In 2006, The Clarinda Triangle neighborhood was added to the Interim Remedy and an additional 46 households were permanently relocated from December 2006 to 2009. In total, more than 400 households and about 500 people were relocated and about 70 acres of land was acquired by the Federal Government.

#### **1.4.2 Final Remedial Action - Soil Remedy**

The Final Remedial Action for OU1 was selected in a 2006 Record of Decision. The cleanup strategy for the final OU1 soil remedy is to treat principal threat wastes through solidification/stabilization and to permanently isolate surface and subsurface soil contaminated above the selected cleanup levels in an on-site containment system in order to protect both human and ecological receptors. Construction activities began on September 24, 2007. The major components of the Remedy include:

- Excavation of contaminated soil on- and off-site;
- Containment of the contaminated soil in a lined cell followed by installation of a multi-layer cap over the containment system;
- Solidification/stabilization of identified principal threat waste to form a sub-cap beneath the multi-layer cap;
- Long-term operation & maintenance of the cap and containment system;
- Long-term monitoring of the containment system;
- Institutional controls to restrict future use of the Site to commercial uses compatible with the remedy;
- Five-year reviews of the remedy to ensure protectiveness is maintained; and
- Residential relocation within and immediately adjacent to the Clarinda Triangle neighborhood.

### **1.5 Milestone dates for State assumption of O&M responsibilities**

The phase of the Superfund program that follows Remedial Action is called Operation and Maintenance (O&M). O&M measures are designed to maintain the remedy at a site to ensure that the remedy remains protective of human health and the environment. Because the ETC OU1 remedy contains waste in an on-site containment and involves institutional controls, O&M is required indefinitely.



### **Responsibility for O&M**

Under CERCLA § 104(c), the State of Florida is responsible to pay for or ensure payment for all O&M activities at the ETC site. The State may assign O&M activities to a contractor, local government, or other entity. However, even if the State assigns O&M activities to another entity, the State remains ultimately responsible for its statutory and contractual O&M obligations. The State of Florida's Department of Environmental Protection is the specific organizational unit of the State responsible for O&M.

### **Definition of Operation and Maintenance**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR§300.435(f)(1), defines O&M as those measures "initiated after the remedy has achieved the remedial action objectives and remediation goals in the ROD (Record of Decision), and is determined to be *operational and functional*."

### **Definition of Operational and Functional**

The O&F determination governs when O&M begins. Pursuant to the NCP, 40 CFR§300.435(f)(2), "A remedy becomes 'operational and functional' either one year after construction is complete, or when the remedy is determined concurrently by EPA and the State to be functioning properly and is performing as designed, whichever is earlier."

At the ETC site, the dewatering phase of the containment cell construction will take longer to complete than will the other portions of the OU1 remedy. Therefore, for purposes of determining O&F, EPA and the State will treat the dewatering phase of the containment cell construction separately from the other portions of the remedy for OU1. This means that EPA and the State will make two O&F determinations: one for the dewatering phase of the containment cell construction; and one for the OU1 remedy excluding the dewatering phase of the containment cell construction.

### **Determining O&F for the Dewatering Phase of the Containment Cell Construction**

Within one year of the determination that the dewatering phase of the construction is completed, the EPA and the State will document the O&F determination for the dewatering phase by means of a letter agreement, to be signed by both parties, which will state that the dewatering phase of the containment cell construction is "functioning properly and performing as designed." The date the letter of agreement is signed by the second party will be the date that the dewatering phase of the containment cell construction will reach O&F.

### **Determining O&F for the OU1 Remedy, Excluding Dewatering Phase of the Containment Cell Construction**

EPA and the State have agreed in an amendment to the State Superfund Contract (SSC) that the OU1 Remedy, excluding the dewatering phase of the containment cell construction, will be “functioning properly and performing as designed”, as is contemplated by 40 C.F.R. §300.435(f)(2), as of the date the United States’ interest in the real property at the Site is transferred to the State. The date of the property transfer to the State will be the date that the OU1 Remedy, excluding the dewatering phase of the containment cell construction, will reach O&F.

### **Operation and Maintenance**

O&M for the Operable Unit 1 remedy is required since waste materials will remain on site. The State will assume responsibility for Operation and Maintenance (O&M) for the OU1 Remedy, excluding the dewatering phase of the construction, the day following the date the United States’ interest in the real property at the Site is transferred to the State. The State will assume responsibility for O&M for the dewatering phase of the containment cell construction following the completion of the construction, inspection by the State and EPA, and the determination that that the dewatering portion of the remedy is operational and functional.

### **Final Remedial Action Report**

An Interim Remedial Action Report will be issued within 90 days of the O&F determination for the OU1 Remedy, excluding the dewatering phase of the containment cell construction. This will document the RA completion and will supplement the Interim RA Reports previously completed for the Remedial Actions. A Final Remedial Action Report will be prepared within be issued within 90 days of the O&F determination of the dewatering phase of the containment cell construction.

### **The EPA’s role during O&M**

The EPA retains responsibility for determining if and when specific O&M activities are complete and for conducting five-year reviews. The EPA will require the submittal of periodic reports, maintain certain records, and host site visits from the EPA, as documented in this O&M Plan. The EPA cannot use federal funding for conducting O&M on parts of the Remedy that are O&F, except in specific cases, and may only use the Fund for oversight of O&M activities. EPA policy is to consider using EPA funding to repair or modify a remedy in the O&M phase when a latent design or construction

defect is found or when a new contaminant of concern or a more stringent cleanup level necessitates changes to the remedy.

## **1.6 Summary of O&M activities**

### ***1.6.1 Description and duration of O&M activities***

The primary goal of O&M activities at the ETC Site is to protect the containment cell and liner system during future reuse or redevelopment of the site. The basic categories of O&M activities are:

- Inspection
- Sampling, Monitoring and Analysis
- Routine Operation and Maintenance
- Reporting
- Emergency Notification Procedures
- Health and Safety Requirements for O&M Activities
- Proper Use of Property and Monitoring of Institutional Controls

### ***1.6.2 Summary of O&M performance standards***

The goal of the O&M activities is to ensure that the remedy remains protective of human health and the environment. The State of Florida must document that the O&M activities have been conducted in accordance with the O&M plan through the reporting requirements of this O&M Plan, described in Section 3.4.

### ***1.6.3 Conditions for modifying or terminating O&M activities***

This O&M Plan can only be modified by the consent of the EPA and the State of Florida. Because the ETC OU1 remedy contains waste in an on-site containment and involves institutional controls, many of the O&M activities are not eligible for termination. However, the frequency of O&M activities will change over time. To modify or terminate O&M activities, the O&M Plan must be revised in writing by the EPA.

## **1.7 Organization of this Plan**

Section 2 presents an overview of the design and functional description of key components of the remedy. Section 3 presents the O&M activities in detail. Appendix A contains the Final Design Drawings and the Site Survey. Appendix B presents a photo log of the components of the OU1 Remedy from the final joint inspection for the OU1

remedy. Appendix C provides copies of the warranties for the geosynthetic materials used for the liner system of the OU1 containment cell.



## **2.0 Remedy Design and Function of the Remedial Components**

### **2.1 Overview of Remedy Design**

The overall cleanup strategy for the OU1 remedy is to treat principal threat wastes through solidification/stabilization and to permanently isolate surface and subsurface soil contaminated above the selected cleanup levels in an on-site containment system to protect both human and ecological receptors. This section presents an overview of the design of the OU1 remedial action and the function of the remedial components. The key engineered elements of the ETC OU1 remedial action:

- Engineered Containment Cell
  - Containment Cell Bottom Liner and Sumps
  - Contaminated Soil Layers
  - Solidified/Stabilized Soil Subcap
  - Containment Cell Cap “Top Liner”
- Subsurface Water Drainage System
- Soil Cover System
- OU1 Remedy Verification Groundwater Monitoring Wells
- Surface Water Management System

The non-physical or administrative key elements of the ETC OU1 remedial action are:

- Institutional Controls
- Acquisition of Residential Real Estate

## **2.2 Engineered Containment Cell**

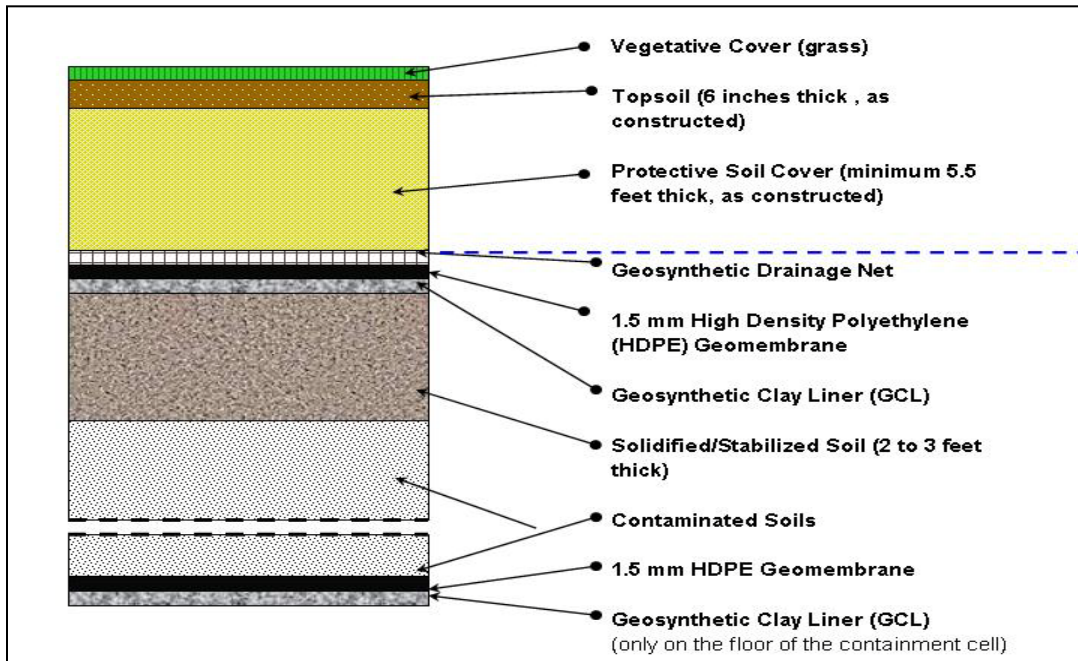
During the RA, contaminated soils that exceeded the site cleanup goals were excavated and deposited in an engineered containment cell on site. The containment cell is about 18 acres in size and about 550,000 cubic yards in volume. Detailed information on the containment cell can be found in the Remedial Action Report for OU1 Soils. The 100% Remedial Design Drawings and the Final Site Survey are provided in Appendix A.

### **2.2.1 Containment Cell Bottom Liner**

The containment cell liner was installed in three stages as the subgrade was prepared using temporary berms between each stage to contain rainfall run-off within the lined areas. The bottom liner consisted of a composite liner (60 mil HDPE and geosynthetic clay liner (GCL)) on the base of the cell and for a 3 foot height around the base of the containment cell slope. The rest of the slope was a single 60 mil HDPE liner. To facilitate drainage, four sumps were constructed in the corners of the containment cell and filled with gravel. Geocomposite drainage strips were laid in the base of the cell to drain to the sumps. The gravel-filled collection sumps included perforated HDPE collection pipes with solid HDPE risers. The sumps were installed to collect rainfall that fell into the containment cell prior to placement of the top liner and the resulting leachate. The liner system was installed under strict Quality Assurance/Quality Control (QA/QC) inspection and testing. Figure 1 provides a schematic illustration of the containment system at the Site, with the composite liner system at the bottom, covered with contaminated soils, solidified/stabilized soil, the top liner, the Subsurface Water Drainage System and finally the soil cover.

### **2.2.2 Contaminated Soil Layers**

Contaminated soil was excavated from either temporary stockpiles or directly from the excavations and transported to the containment cell. Excavated soils were placed and spread in lifts and compacted. The lift thickness was varied in the field to determine the optimal lift thickness that could be compacted to the specified 95 percent of maximum density as determined by ASTM D1557.



**Figure 1 Cross-section of Containment Cell**

### **2.2.3 Solidified/Stabilized Soil Subcap**

The top 2 to 3 feet of the containment cell consists of the Solidified/Stabilized subcap (S/S subcap). Prior to placement of the Solidified/Stabilized subcap (S/S subcap), the contaminated soil subgrade was graded to the contours of the final drainage system for the closure system and the grade was verified by survey. The S/S subcap was processed in a volumetric pugmill that mixed the soil, cement, and water in the required proportions. The S/S mix was spread and compacted by bulldozers. The final lift of the subcap was finished with a smooth steel roller to provide a smooth subgrade surface for placement of the geosynthetic cap materials. The average strength of the subcap exceeded 350 psi, in excess of the design specification of 250 psi. The compressive strength test results for the Solidified/Stabilized subcap are presented in Appendix H of the Remedial Action Report.

### **2.2.4 Containment Cell Cap “Top Liner”**

The containment cell cap or “top liner” was installed on top of the S/S subcap and consisted of a composite liner with a GCL and a 60 mil HPDE geomembrane. The HDPE geomembrane was attached to the liner system at the bottom of the containment cell.

## **2.3 Subsurface Water Drainage System**

A subsurface drainage system was installed above the containment cell cap to minimize the head on the containment cell cap and to prevent excess pore water pressure from

undermining the structural integrity of the soil above the containment cell. The shape of the S/S subcap was designed to facilitate drainage across the top of the containment cell. On top of the containment cell cap, a continuous layer of high-permeability geosynthetic drainage net (geonet) was installed to speed the flow of any infiltrated storm water off of the cap. Slotted HDPE pipes run north or south across the surface of the containment cell, draining to precast manholes. The manholes provide access for future inspection of the drainage system. The manholes are connected by HDPE pipes that run along the north and south of the cell. These pipes discharge into a city storm water pond northeast of the cell.

## **2.4 Soil Cover System**

Above the Subsurface Water Drainage System, the final soil cover consists of a minimum of 6 feet of clean soils to protect the liner and provide room for construction on top of the containment cell. This consists of uncontaminated natural soil excavated during the construction of the engineered containment cell. The top 6 inches of the soil cover is topsoil. The Site Survey in Appendix A shows the contours of the surface soil after the soil cover was in place in February 2010. The Site Survey also contains a cross-section of the elevation of the cap liner and the final grade as of February 2010.

## **2.5 OU1 Remedy Verification Groundwater Monitoring Wells**

The ROD requires a network of OU1 remedy verification groundwater monitoring wells around the containment cell to measure the water level elevation and to monitor for leaks from the containment cell. Two to four monitoring wells will be developed and installed by EPA during the OU2 remedial investigation, since the wells will also be used to provide water level data for the OU2 remedy.

## **2.6 Surface Water Management System**

The storm water that falls on the capped area runs off to either the large pond located south of the cell or to the City-owned storm water pond northeast of the site. Storm water that infiltrates into the soil cover enters the subsurface water drainage system discussed in section 2.3.

## **2.7 Institutional Controls**

Both OU1 Remedies call for Institutional Controls (ICs) to ensure the protectiveness of the remedies. ICs will be placed on the site to restrict future use to commercial and industrial uses in areas where that restriction is needed to prevent potential exposure. To protect the engineered components of the remedy, ICs are needed to document the restrictions on construction and site use.



### **2.7.1 Institutional Controls – Parcels without containment cell**

The parcels that do not house the containment cell have the following ICs, excerpted from the Declaration of Restrictive Covenants:

1. **Restrictions on Use:** The Property shall be used solely for commercial, industrial, or manufacturing purposes, except that the Property shall not be used for any business involving temporary or permanent housing of individuals. The following uses are forbidden unless FDEP grants prior approval in accordance with Paragraph 3 of the Declaration of Restrictive Covenants:
  - a. The Property shall not be used for residential purposes, including mobile homes, hotels, motels, apartments, dormitories, campgrounds, group homes, retirement communities, or temporary shelters.
  - b. The property shall not be used for day care centers, kindergartens, or elementary or secondary schools.
  - c. The property shall not be used for playgrounds, athletic fields, or camps.
  - d. The property shall not be used for mining or agricultural purposes, including community gardens and forestry.

### **2.7.2 Institutional Controls – Parcels with containment cell**

The restrictions on development and construction are more stringent for the parcels with the containment cell. Developers and construction contractors shall be required to submit their construction plans to the FDEP for review prior to any construction within the containment cell footprint. The review will verify the planned structures will comply with construction restrictions. The containment cell and capping system have been designed to accommodate redevelopment over the capped area with certain restrictions, excerpted from the Declaration of Restrictive Covenants:

1. **Restrictions on Use:** The following covenants, conditions, and restrictions apply to the use of the Property:
  - b. Groundwater shall not be used for any purpose until state groundwater standards and the groundwater cleanup standards identified in the ROD for OU2 are met.

- c. There shall be no drilling for water conducted on the Property, nor shall any wells, including monitoring wells, be installed on the Property unless pre-approved by FDEP and EPA.
- d. Attached to the Declaration of Restrictive Covenants is a survey map identifying the size and location of existing surface water and storm water management systems, including storm water swales, storm water detention or retention facilities, and ditches on the Property. Such existing features shall not be altered, modified, or expanded without prior approval from the FDEP. Additionally, there shall be no construction of new stormwater swales, stormwater detention or retention facilities, or ditches on the Property without prior written approval from the FDEP.
- e. The Property shall be used solely for commercial, industrial, or manufacturing purposes, except that the Property shall not be used for any business involving temporary or permanent housing of individuals. The following uses are forbidden unless FDEP grants prior approval:
  - i. The Property shall not be used for residential purposes, including mobile homes, hotels, motels, apartments, dormitories, campgrounds, group homes, retirement communities, or temporary shelters.
  - ii. The property shall not be used for day care centers, kindergartens, or elementary or secondary schools.
  - iii. The property shall not be used for playgrounds, athletic fields, or camps.
  - iv. The property shall not be used for mining or agricultural purposes, including community gardens and forestry.
- f. On-site engineering controls, including the engineered containment cell and soil cover system on the Property shall be maintained. This restriction may only be modified pursuant to the Declaration of Restrictive Covenants. Should future development require the disturbance of on-site engineering controls, additional response actions may be necessary. Prior to any construction activities, a plan must be submitted and approved by FDEP and EPA to address and ensure the appropriate management of any contaminated soil that may be encountered during construction.
- g. No actions shall be taken that would disturb, damage, or interfere with the engineered containment cell, soil cover system, storm or surface water management system, or groundwater monitoring system, including monitoring wells, sump cleanouts, piping, or other such remedial technology used in the environmental remediation and restoration on the Property.
- h. Design and Construction Restrictions. Because of the danger of damaging the

engineered containment cell, the following activities are restricted at the Property:

- i. Deep foundations such as pilings or piers are prohibited.
- ii. All foundations constructed on the engineered containment cell shall be shallow foundations and shall comply with the following:
  - a. A minimum of two feet of soil shall be maintained between the bottoms of building foundations and the top of the engineered containment cell.
  - b. Building foundation loads must be limited not to exceed the strength of the overlying cap soil cover and the geosynthetic material of the containment cell. The foundation design shall restrict the load on the underlying geosynthetics of the engineered cap to no greater than 3,500 pound per square foot.
  - c. The sand fill materials used below all foundations for the cover soils must be compacted to a minimum density of 95 percent of maximum density in accordance with ASTM D1557 below all foundations.
- iii. Deep rooted vegetation (i.e., root depth greater than 4 feet) is prohibited.
- iv. Road Construction.
  - a. A minimum of 18 inches of the existing sand cover soil must be left between the road base material and the top of the engineered containment cell geosynthetic materials.
  - b. A minimum of three feet of total cover must be left over the engineered containment cell geosynthetic materials such that there is always a minimum of three feet between the final surface of a roadway and the engineered containment cell.
- v. Railroad Construction.
  - a. A minimum of 24 inches of the existing sand cover soil must be left between the base material of the railroad and the top of the engineered containment cell geosynthetic materials.
  - b. A minimum of three feet of total cover must be left over the engineered containment cell geosynthetic materials such that there is always a minimum of three feet between the final surface of a railroad and the engineered containment cell.
- vi. Underground Utilities.
  - a. A minimum of 18 inches must be left between the bottom of any utility or stormwater drainage pipe trench and the top of the engineered containment cell geosynthetic materials.

- b. Utility installations shall not tie into or interfere with the engineered containment cell subsurface drainage system.
- vii. Light Pole Foundations.
  - a. A minimum of 18 inches of soil must remain between the base of light pole foundations and the top of the engineered containment cell geosynthetic materials.
  - b. The foundation design shall restrict the load on the underlying geosynthetics of the engineered cap to no greater than 3,500 pound per square foot.
- viii. Site Grading.
  - a. As part of any grading operations at the Property, including for parking areas and roads, a minimum of three feet of total cover must be left between the final surface and engineered containment cell geosynthetic materials.
  - b. Additional fill materials may be used to raise the final surface, so long as the restrictions in this document regarding the construction or installation of foundations, utilities, roads, railroads, and storm water drainage systems are met.
- ix. Storm Water Drainage Control.
  - a. Construction of storm water infiltration structures or ponds (including lined landscaping ponds) is prohibited.
  - b. Any storm water ditches shall be lined to minimize infiltration into the soil cover above the engineered containment cell.
  - c. Storm water control systems shall not tie into or interfere with the engineered containment cell subsurface drainage system.

## **2.8 Acquisition of Residential Real Estate**

The relocation component of the OU1 Interim Remedial Action was carried out by the US Army Corps of Engineers (USACE) as the agent of the EPA. The EPA acquired about 70 acres of residential property near the site as a result of the OU1 Interim Remedial Action. This property will be transferred to the State of Florida after the determination of O&F and the beginning of the O&M phase. The title insurance policies on the acquired tracts have been provided to the State. The only O&M components for the relocation component of the OU1 remedy are the ICs restricting the future use to commercial and industrial uses to prevent potential exposure.



## **3.0 Operation & Maintenance Activities**

This section outlines the O&M activities required for the ETC OU1 site remedy.

### **3.1 Inspections**

Table 1 shows a tabular schedule of inspections that are required. Additional inspections may be conducted as needed to ensure protectiveness.

#### ***3.1.1 Engineered Containment Cell***

The main function of the Containment Cell is to isolate the contaminated soil from the environment. The components of the containment cell that can be easily inspected are the sumps, the sump vaults, and the liquids in the sumps. O&M inspections for the sumps, sump vaults, and liquids in the sumps will begin with the O&F determination for the Dewatering Phase of the Containment Cell Construction.

The four sump vaults are concrete vaults about 10 feet long, 5 feet wide and 4 feet deep, and house the sump risers. The vaults should be dry and a seep hole is cut in the bottom of each vault under the sump riser. The lids to the vaults should be kept closed when unattended and secured to prevent access or vandalism.

The sump riser is connected to a slotted HDPE pipe in the bottom of the sump. The sump is about 18 inches deep and is intended to provide leachate storage. The water levels in the containment cell sumps are measured using submersible water level meters and can also be measured using a water level tape attached to a 95 foot plastic pipe. The water levels in the containment cell sumps should be inspected at least monthly for the first year of O&M and at least semi-annually thereafter. If the water level from the bottom of the pipe exceeds 18 inches, the sump should be emptied and the leachate treated or properly disposed. The inspection frequency should be increased if the water level exceeds 30 inches. Any removed leachate must be properly characterized, treated, and disposed in accordance with applicable local, state, and federal regulations. The cross-section of the sump and sump riser are in Appendix A, Sheet C-40. Excerpts of Sheet C-40 are included below as Figures 2 and 3.

If leachate accumulation within the sumps increases dramatically, it may indicate that water is entering the containment system. The potential for a leak shall be investigated, and EPA shall be notified if a leak in the containment system is suspected.

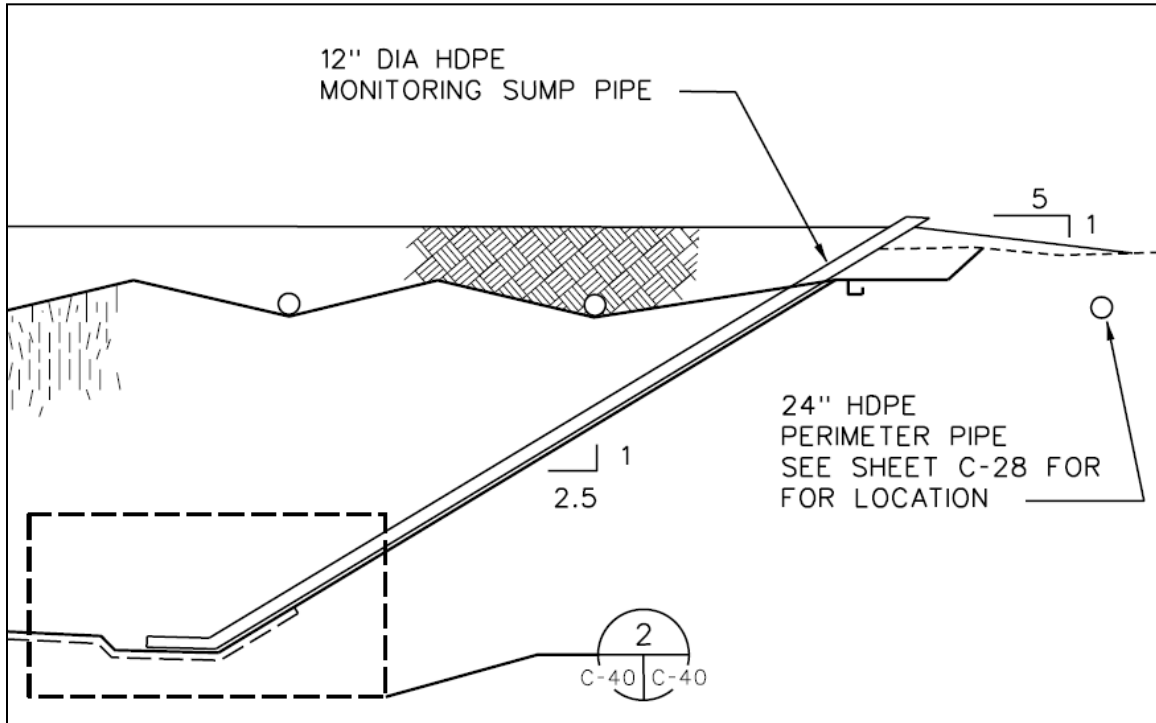


Figure 2 Cross Section of Containment Cell Sumps from Appendix A.

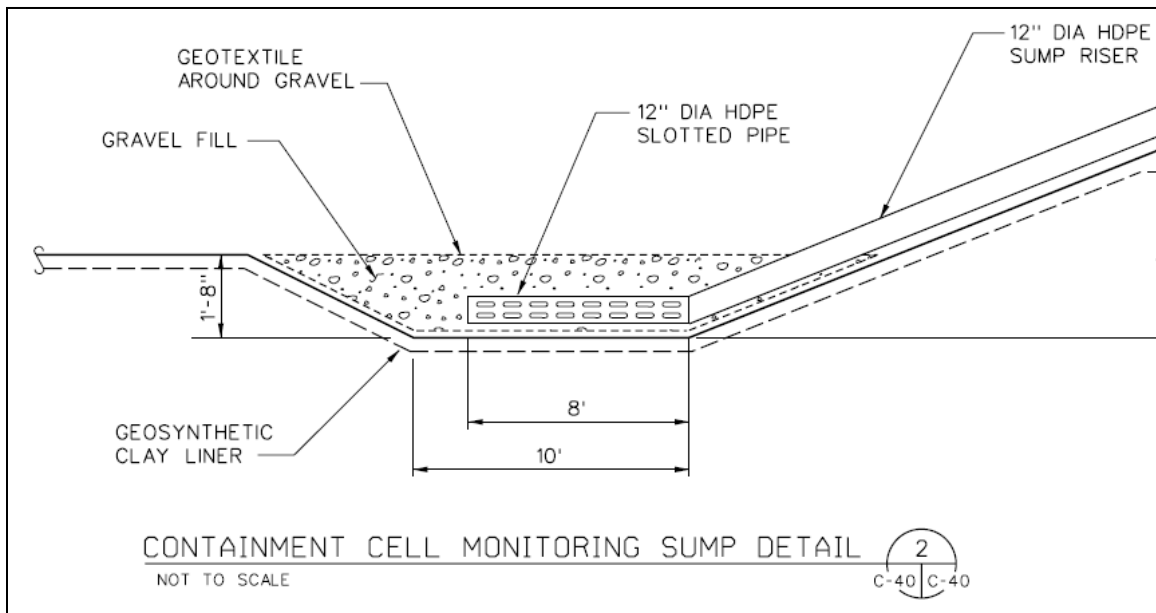


Figure 3 Detail of Containment Cell Sumps from Appendix A.

### **3.1.2 Subsurface Water Drainage System**

The Subsurface Water Drainage System is composed of a network of drainage lines installed above the Cell Cap and below the Soil Cover System. The drainage lines are connected by manholes to the City-owned storm water pond northeast of the cell, shown in Appendix A, Sheet C-28. The drainage system manholes shall be opened and visually inspected to determine if water is flowing, if the water is clear, and to ensure that there is not a significant accumulation of sediment in the manhole. The system shall be inspected in this way at least semi-annually. If flow is not observed at all, the inspection should be rescheduled within one week of a significant rain event, unless the area has been covered with an impermeable surface and stormwater is not infiltrating into the Soil Cover System. All problems identified during the inspections shall be evaluated and corrected. EPA shall be notified if significant problems are encountered.

### **3.1.3 Soil Cover System**

The main function of the Soil Cover System is to protect the containment cell. The Soil Cover System shall be inspected to ensure the containment cell is protected and to identify any significant changes in the Soil Cover System that may indicate a subsurface problem. Examples of problems to look for include erosion, vegetation deterioration, settling, ponding of water, uplift, washouts, or animal burrows. A field survey shall be performed to document any areas where significant settlement or uplifting has occurred. The frequency of the inspections shall be quarterly for the first year of O&M and may be reduced to semi-annually if no major problems are observed during the first year. The soil cover shall also be inspected after major storm events (more than 4 inches in a 24-hour period) to check for damage from the storm. All problems identified during the inspections shall be evaluated and corrected as soon as possible. EPA shall be notified if significant problems are encountered.

The Soil Cover System is designed to be built upon. When structures are present on the Soil Cover System, the following shall be part of the inspection; large cracks in the pavement or sidewalks, leaning light posts, cracks in building facades, or other signs of distress.

During construction activities, inspections of the Soil Cover System shall be conducted on at least a weekly basis to ensure that the excavation and construction restrictions in the restrictive covenants are being observed.

### **3.1.4 OU1 Remedy Verification Groundwater Monitoring Wells**

The OU1 Remedy Verification Groundwater Monitoring Wells should be visually inspected to be certain they are intact and secure against vandalism or illegal dumping. Groundwater monitoring requirements are discussed in section 3.2.

### **3.1.5 Surface Water Management System**

The Surface Water Management System should be inspected to verify that water is moving off of the containment cell area. The components of the Surface Water Management System may include swales, ditches, drain pipes, and manholes. The Surface Water Management System shall be inspected for signs of damage including obstructions or excessive silt in the drain pipes, damage to components, erosion of the soil cover, ponding of water, erosion or other damage to drainage swales or ditches, etc. The system shall be inspected at least semi-annually, and the inspections should be scheduled within one week of a rain event to observe problems like ponding. Additional inspections of the system shall be performed after major storm events (more than 4 inches in a 24-hour period) to check for damage from the storm. All problems identified during the inspections shall be evaluated and corrected. EPA shall be notified if significant problems are encountered. Necessary repairs shall be made as soon as possible.

### **3.1.6 Institutional Controls**

Continuous enforcement of institutional controls (e.g., covenants, zoning changes, deed restrictions) is required. Site developers and construction contractors must submit detailed plans of any planned construction within the containment cell area to the FDEP which shall review the plans to verify that all construction is compliant with the deed restrictions and that the capping system will be protected. Site inspections shall be performed to ensure compliance with the institutional controls.

### **3.1.7 Acquisition of Residential Real Estate**

The Real Estate component of the OU1 remedy is not expected to require inspections, except for institutional controls, addressed in the previous section.

### **3.1.8 Site Security**

The physical security of the Site shall be inspected quarterly and will include checking for vandalism and checking the integrity of all security fences, manhole covers, and monitoring well locks. In addition, the containment cell area shall be inspected to verify that no unauthorized construction has occurred over the containment cell area.

**Table 1 Schedule for Inspections**

<b>Remedy Component</b>	<b>Specific Item for Inspection</b>	<b>Initial Frequency (1<sup>st</sup> year unless noted)</b>	<b>Standard Frequency</b>	<b>After major storm events?</b>
Engineered Containment Cell (starting at the O&F determination for the Dewatering Phase of the Containment Cell Construction)	Sumps	Quarterly	Semi-annually	No
	Sump Vaults	Quarterly	Semi-annually	No
	Water Level in Sumps	As needed to maintain water level less than 30 inches.	Semi-annually	No
Subsurface Water Drainage System	Check for flow, clear water, lack of sediment	Semi-annually	Semi-annually	Yes
Soil Cover System During construction	Weekly	Weekly	Weekly	Yes
Soil Cover System	Erosion, Washouts	Quarterly	Semi-annually	Yes
	Vegetation Deterioration	Quarterly	Semi-annually	Yes
	Settling or Ponding of Water	Quarterly	Semi-annually	Yes
	Uplift	Quarterly	Semi-annually	Yes
	Animal Burrows	Quarterly	Semi-annually	Yes
	Structures over the Capped Area Settlement	Quarterly	Annual	No
	Pavement/Building Distress	Quarterly	Semi-annually	No
OU1 Remedy Verification Wells	Well Risers, Covers, and Locks	Quarterly	Semi-annually	No
Storm Water Management System: Swales, Ditches, Drain Pipes, Manholes	Obstructions	Quarterly	Semi-annually	Yes
	Erosion / Scouring	Quarterly	Semi-annually	Yes
	Ponding	Quarterly	Semi-annually	Yes
	Vegetation stress	Quarterly	Semi-annually	Yes
	Siltation	Quarterly	Semi-annually	Yes
Enforcement of Institutional Controls	Unapproved Construction or Land Use	Quarterly Weekly during Construction	Semi-annually Weekly during Construction	No
Site Security	Fences, Evidence of Trespassing / Vandalism	Quarterly	Semi-annually	No
	Manhole Covers, Vaults, Monitoring Well Locks	Quarterly	Semi-annually	No



## **3.2 Sampling and Monitoring**

Table 2 shows a schedule of sampling and monitoring activities that are required. Additional monitoring may be conducted as needed to ensure protectiveness.

### ***3.2.1 Ground Water Elevation in OU1 Remedy Verification Groundwater Monitoring Wells***

The groundwater levels in the OU1 remedy verification groundwater monitoring wells shall be measured to verify that at least a 5-foot distance is maintained between the bottom of the containment cell (55 feet above mean sea level) and the top of the water table. The seasonal high groundwater elevation is about 50 feet above mean sea level. The frequency of the groundwater elevation measurements shall be quarterly. If the water table elevation rises above 50 feet mean sea level, EPA shall be notified additional monitoring may be required.

### ***3.2.2 Sampling OU1 Remedy Verification Groundwater Monitoring Wells***

The ROD requires a network of OU1 remedy verification monitoring wells around the containment cell to measure the water level elevation and to monitor for leaks from the containment cell. Two to four monitoring wells will be developed and installed by EPA during the OU2 remedial investigation. Groundwater samples from the performance monitoring wells shall be sampled and analyzed for semi-volatile organic compounds (SVOCs) on an annual basis. Water levels shall be monitored on a quarterly basis.

### ***3.2.3 Leachate Removal, Sampling and Monitoring***

As described in section 1.5, the dewatering phase of the containment cell construction will take longer to complete than will the other portions of the OU1 remedy. Once the dewatering phase of the containment cell construction is complete, EPA and the State will document the O&F determination and the beginning of O&M for this portion of the remedy. Leachate removal, monitoring and disposal will be part of the O&M activities for the remainder of the life of the containment cell.

Section 3.1.1 describes the inspection requirements for the water levels in the containment cell sumps. If the water level from the bottom of the pipe exceeds 18 inches, the sump should be emptied and the leachate treated or properly disposed. Any removed leachate must be properly characterized, treated, and disposed in accordance with applicable local, state, and federal regulations.

If leachate accumulation within the sumps increases dramatically, it may indicate that water is entering the containment system. The potential for a leak shall be investigated, and EPA shall be notified if a leak in the containment system is suspected.

**3.2.4 Treated Leachate Sampling and Monitoring**

Once O&M begins, the State shall be responsible for the adequacy of sampling and monitoring the treated leachate.

**3.2.5 Settlement of Buildings Constructed on Containment Cell**

Once buildings or other structures have been constructed over the containment cell area, the structures shall be monitored for settlement which could indicate a problem with the cell cap. One inch or more of settlement on top of the soils compacted during the remedial action (not on top of additional fill material) would be unexpected. Investigating unexpected settlement is an O&M activity. EPA shall be notified immediately of the results of any investigation into unexpected settlement so that EPA can incorporate the results into the five year review process. The State will determine the appropriate locations for settlement monitoring, based on the construction at the site. The frequency of the settlement monitoring shall be quarterly for the first year following construction, semi-annually for the second and third year following construction, and then annually thereafter.

**Table 2 Schedule for Sampling and Monitoring**

<b>Remedy Component</b>	<b>Specific Item Requiring Monitoring</b>	<b>Frequency</b>
Groundwater Elevation (OU1 remedy verification monitoring wells)	Water table elevation	Quarterly
Groundwater Sampling and Analysis (OU1 remedy verification monitoring wells)	SVOCs	Annually
Leachate from Containment Cell (Sampling and Monitoring)	Leachate from the containment cell sumps	As needed for characterization, treatment and disposal
	Treated effluent	As needed for characterization, treatment and disposal
Soil Cover System	Elevation of Buildings on Capped Area	Quarterly for the first year after construction, semi-annually for the second and third year and annually thereafter.

### **3.3 Routine Operation and Maintenance**

The State shall be responsible for performing preventative or routine maintenance on the ETC OU1 remedy components. Preventive maintenance shall be completed as soon as practical to preclude further damage and minimize the need for emergency action. If a hazard is determined to be imminent or has already occurred during the course of the inspection or any time between inspections, corrective actions shall be implemented immediately with notification to EPA and FDEP.

The State will be responsible to ensure that repairs to the components of the remedy are compatible with the materials used at the site and will maintain the protectiveness of the remedy.

Preventative maintenance activities are expected to include:

- **Vegetative Cover.** The vegetative cover (i.e., grass) over the containment cell area is important to prevent water and wind erosion of the soil cap and maintain proper drainage over the capped area. Sparse or stressed vegetation could lead to erosion of soil over the containment cell area. Overgrown vegetation over the containment cell area could lead to the growth of undesirable vegetation (e.g., deep rooted trees) and encourage burrowing animals. Therefore, the grass shall be mowed as often as necessary so that the height of the grass does not exceed 4 to 5 inches. The frequency of the maintenance of the vegetative cover shall be at least semi-annual to annual, as necessary. However, it is anticipated that mowing will be required more frequently during the growing season.

The grass cover shall be maintained to ensure a healthy vegetative cover, and is expected to include fertilizing, reseeding, and other activities. Routine cover maintenance may include reseeding as necessary for areas of the capped area left undeveloped. Soil testing, including pH measurements, may be helpful to determine any fertilizer and lime requirements. Landscaping is acceptable, provided deep-rooted plants are not used.

- **Erosion and Grading.** It is important that early signs of erosion be addressed as soon as possible to prevent large scale erosion or washouts of the soil cover. The frequency of the erosion inspections will be quarterly during the first year of O&M and after major storm events (more than 4 inches in 24 hours). If soil erosion is observed on the soil cap or within the drainage swales, the eroded features shall be backfilled with soil. The cause of the erosion shall be evaluated

and the area shall be re-graded, if necessary, to prevent additional erosion of the soil cover. Slope and grade at the Site shall be maintained to promote the runoff of surface water from the containment cell area. If saturated soil or ponding of water is observed on the soil cap, the area shall be re-graded to eliminate the issue.

- **Storm Water Management System.** The storm water management system has been designed to prevent the saturation of the soil cover and the potential infiltration of water into the containment cell. The drainage system piping must be kept clean of blockages and excessive sediment that may impede proper flow through the pipes. If blockage of the drain piping is discovered, the drain pipes shall be cleaned using a water jet, plumbing snake or other appropriate device.

### **3.4 Reporting**

The reporting requirements consist of documenting inspections, sampling and monitoring, O&M activities and providing an annual O&M Report. O&M records should be archived physically or electronically in a permanent location by the FDEP. O&M reports submitted to the EPA will become part of the site file.

#### ***3.4.1 Documenting Inspections***

An inspection log shall be created after each formal inspection to document and communicate observations at the Site. Inspection logs can be in a checklist or fill-in-the-blank-format. At a minimum, inspection logs should align with the O&M activities detailed in this O&M plan and include the date, time, weather conditions and the name of the individual(s) conducting the inspection. The inspection logs may be supplemented, as needed, with photos and written reports documenting failures/problems and mitigating actions taken. Locations where deficiencies are observed may be recorded by a field sketch on the Design Drawings (Appendix A) with reference (distance) to easily recognizable Site features.

#### ***3.4.2 Documenting O&M Sampling and Monitoring***

The results of O&M Sampling and Monitoring shall be documented.

#### ***3.4.3 Documenting Routine O&M***

O&M activities, such as leachate treatment or repairs, shall be documented with photos and written documentation.

#### **3.4.4 Annual O&M Reports**

An annual O&M Report should be submitted every year to transfer the year's accumulated records to the EPA. The EPA expects the annual O&M report to be brief and not to become an administrative burden (less than 10 pages, not including attachments). After conditions at the site become stable, the frequency of the annual O&M Report could be reduced by revising this O&M Plan. The O&M reporting requirements are critical to inform EPA's Five-Year Review activities at the Site. The annual O&M Report should consist of the following, at a minimum:

- A summary of any significant events or problems encountered
- A transfer of O&M activity documentation
  - Inspection checklists and reports
  - Monitoring results (leachate and groundwater)
  - A summary of routine operation and maintenance activities
- A summary of current land use
- Relevant photos
- A statement that the O&M obligations are being implemented

### **3.5 Emergency notification procedures**

In most cases, emergencies at the site should be handled in the same manner as an emergency at a typical facility. If an emergency does not impact the protectiveness of the OU1 remedy, then no additional action is required beyond standard emergency response. If one of the components of the OU1 remedy listed in this O&M manual becomes threatened or damaged, the State should notify the EPA as soon as possible.

#### **3.5.1 Breaches of the containment cell liner**

The containment cell liner system will be protected if the guidelines in this O&M plan are followed. If the containment cell liner system becomes damaged, the State should notify the EPA as soon as possible. Efforts should be made to prevent water from entering the containment cell, including building soil berms or using temporary tarps/covers to redirect rainwater. The containment cell liner should be repaired as soon as possible. The party responsible for the repairs is discussed below.

#### **3.5.2 Responsibility for repairs to remedy during O&M**

The repair and replacement of damaged, worn and obsolete equipment and structures to maintain the protectiveness of the remedy is the statutory and contractual responsibility of the State. Regardless of who causes damage to the remedy, the State of Florida is ultimately responsible to ensure the protectiveness of the remedy under the State's statutory and contractual O&M obligations. If the remedy is damaged by some form of



natural disaster, then the State should be prepared to make the necessary repairs. EPA will consider stepping in to repair a remedy during the O&M phase only in narrow circumstances, such as when a latent design or construction defect is found.

### **3.5.3 Fire, police, and emergency response**

The OU1 remedy is not expected to require special treatment during an emergency response beyond the guidelines presented in this O&M plan.

## **3.6 Health and Safety requirements for O&M activities**

A Site-Specific Health and Safety Plan (HASP) should be prepared for O&M activities. The HASP should meet the requirements presented in the Occupational Safety and Health Act standard, 29 CFR 1910.120/1926.65, *Hazardous Waste Operations and Emergency Response*. The HASP should address the site-specific hazards associated with O&M of the OU1 remedy, including chemical, physical, and electrical hazards. The HASP governs all work that is performed at the site by the contractor, subcontractors, or sub-tier subcontractors. The State is responsible to operate and maintain health and safety equipment, including Personal Protective Equipment, in accordance with the manufacturer's instructions and recommendations.

## **3.7 Proper Use of Property and Monitoring of Institutional Controls**

The Institutional Controls for the OU1 Remedies are discussed in detail in Section 2.7. These restrictions are needed to prevent potential exposure and to protect the engineering components of the remedy. The State shall ensure that the future uses of the property are compatible with the Institutional Controls.

**Appendix A**  
**Final Design Drawings and Site Survey**

**Appendix B**  
**Site Inspection Photo Log Final Site Inspection OU1**

**Appendix C**  
**Geosynthetic Material Warranties**

# **Economic Impact of the Proposed Palafox Commerce Park Superfund Redevelopment Initiative**

Prepared for:

Pensacola Area Chamber of Commerce  
Escambia County Community Redevelopment Agency  
City of Pensacola

June 6, 2003

Prepared by:

*Haas Center for Business Research and Economic Development  
The University of West Florida*





# Economic Impact of the Proposed Palafox Commerce Park Superfund Redevelopment Initiative

## Final Report

Commissioned by: Pensacola Area Chamber of Commerce  
Escambia County Community Redevelopment Agency  
City of Pensacola

Conducted by: Guy Livingston for:  
The Haas Center for Business Research and Economic  
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Submitted: Final Report submitted March 26, 2003

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# Executive Summary

The University of West Florida's Haas Center for Business Research and Economic Development (Haas Center) is pleased to submit the following report, in fulfillment of the terms of the contract entitled "Economic Impact of the Proposed Palafox Commerce Park Superfund Redevelopment Initiative." Virtually every community concerned with business retention and attraction is also concerned with providing sites that are available for commercial and industrial use. Businesses demand sites that are buildable, free of contamination, appropriately zoned, accessible to transportation, and possessing modern infrastructure, utilities, and telecommunication linkages. In today's fast-moving economy, where concepts like *time to market* and *just-in-time* delivery are emphasized, more and more companies are looking for sites that are immediately available for their growth and expansion. Commerce parks offer this availability. A commerce park is an economic development tool that offers a location for immediate industrial occupancy, features nearby road and rail service, industrial grade utilities, and full municipal services. A commerce park's main goal is to attract business investment, create jobs, revitalize neighborhoods, and strengthen local and regional economies.

Community support is needed for economic development efforts such as building a commerce park, as it is an activity that affects the entire community. The economic benefits and costs of these efforts affect virtually everyone in the region in one way or another. To start, many argue that economic development efforts are necessary to sustain the competitiveness of our regional economy and our overall standard of living. Second, economic development efforts are expected to result in a high level of employment and quality jobs for area residents. Third, it is expected to create middle-class job opportunities for the



jobless and working poor. And fourth, success in the first three goals is expected to provide the earnings and tax revenues needed to make further investments in education, government services, amenities, infrastructure, and improved quality of life.

In addition to the many direct benefits generated by bringing a new company into the community, economic development also results in significant *indirect* benefits. These indirect benefits are often realized as the existing local businesses enter into profitable supplier relationships with the new company and its employees. The result is more revenue for the existing local business owners. This increased revenue coming into local businesses enables them to hire more employees. So in addition to the number of direct jobs created by the new business, a quantifiable number of indirect jobs will also be created locally once the new company moves in. While these jobs may be at varying pay scales and require a wide range of skill levels, they may all be directly attributed to the increased local economic activity that takes place as a result of that new company moving in.

Economic impact analyses provide tangible estimates of these economic interdependencies and a better understanding of the role and importance of a specific economic stimulus in a region's economy. The purpose of this report is to present calculations that estimate the magnitude of changes in economic activity that would occur as a result of the development of the Palafox Commerce Park. The analysis describes the magnitude of the economic impact that will be attributable to the Commerce Park, and clarifies the impact that Commerce Park activities will have on the other industry sectors in the region. This report does not attempt to quantify quality of life issues, whether positive or negative, which may result from the development of a Commerce Park or the businesses it attracts. This report estimates only the gross impact of financial (spending) flows, ignoring the ancillary non-financial benefits (improved public services, increased business retention), and costs (e.g. traffic congestion, crime, other public service costs) and that may be associated with Commerce Park development.

The estimates provided in this report capture the local economic impact generated by two basic types of spending flows: spending generated by the new Commerce Park business tenants, and, spending on the construction of the required business infrastructure. The business spending flows were added to construction spending flows and entered into a computer economic model. Standard multiplier techniques were then applied to these data to estimate the overall magnitude of the economic impact that the Commerce Park will exert on the various sectors of the local economy, and to trace the relative impact on each industry sector. Estimates of total spending, employment, and wages are calculated. These estimates are for the two-county region that includes Escambia and Santa Rosa Counties, and all measures of impacts pertain to businesses and households located in this region. The various measures of economic impact for Commerce Park business tenants reflect annual impacts, while the construction impacts will occur only during the period of construction activities.

Among the most important findings of this investigation are that:

- ▶ At 100% development, the Commerce Park will support 1,714 employees working for Commerce Park business tenants in light manufacturing, wholesale trade, and in business service industries.
- ▶ The operating and capital expenditures of the Commerce Park tenants will inject an estimated \$274 million in direct spending each year that stays in the local economy.
- ▶ When the total impact of the Commerce Park is considered (i.e., when taking the “multiplier effect” into account), approximately \$418 million in local retail and business-to-business sales will be generated each year, supporting either directly or indirectly about 3,244 jobs, and generating incomes of approximately \$132 million.
- ▶ A fully developed Commerce Park will generate approximately \$32 million in federal tax revenues, \$10 million in state tax revenues, and \$4.4 million in local tax revenues annually.
- ▶ The construction of the 650,000 square feet of business facilities<sup>1</sup> will have stimulated additional economic activity during the period of construction.

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<sup>1</sup> The *Palafox Commerce Park Master Plan*, prepared by Landers-Atkins Planners, Inc, provides estimated building space, construction costs, and usage of the Commerce Park. Estimated construction costs for the 650,000 square feet of Commerce Park facilities were also supported by the Pensacola Area Chamber of Commerce Sites and Buildings Committee members.

A total of approximately \$47 million in local retail and business-to-business sales will be generated by this construction. About 455 jobs will have been either directly or indirectly supported by this new construction activity in the local economy along with incomes of approximately \$17.5 million. Approximately \$4.7 million in additional federal, state, and local tax revenues will also be generated by the construction of the 650,000 square feet of facilities.

▶ When the Commerce Park is fully developed, the economic stimulus that it generates will support a total of 1,530 new local jobs in 105 different industries outside of the Commerce Park, including an additional 53 accountants and bookkeepers, 44 more doctors and dentists, 37 more data processing employees, and 18 more auto repair and service workers.

▶ While it has no direct effect on the local real estate market, the new jobs that it creates will indirectly stimulate an additional \$5,889,025 in spending in that sector.

A summary of the estimated economic impact of a fully developed Palafox Commerce Park, delineating the direct, indirect, and induced impact generated is presented in Table 1 below (See Glossary of Terms for definitions of these categories).

**Table 1 - Summary of Estimated Economic Impact of Fully Developed Commerce Park**

<b>Estimated Annual Economic Impact of a Fully Developed Commerce Park</b>				
<b>Estimated Annual Park Business Tenants Spending Impact</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Total Spending (Output)	\$274,766,139	\$82,876,323	\$60,394,376	\$418,036,833
Incomes Generated	\$75,521,869	\$33,449,212	\$23,216,338	\$132,187,420
Jobs Supported	1,714	773	757	3,244
Annual Federal Tax Revenues Generated	\$32,484,335			
Annual State Tax Revenues Generated	\$10,316,347			
Annual Local Tax Revenues Generated	\$4,421,292			
Annual School District Tax Revenue	\$263,572			

Estimated Construction Impact	Direct	Indirect	Induced	Total
Total Spending (Output)	\$29,250,000	\$10,154,961	\$8,154,579	\$47,559,540
Incomes Generated	\$9,989,535	\$4,443,327	\$3,134,695	\$17,567,557
Jobs Supported	242	111	102	455
Federal Tax Revenues Generated	\$3,755,048			
State Tax Revenues Generated	\$729,212			
Local Tax Revenues Generated	\$312,519			

Source: IMPLAN Professional Social Accounting & Impact Analysis Software

This study also examines the role that the Commerce Park could play as an economic engine relative to the rest of the Pensacola area economy. Pensacola has seen strong growth in personal, business and professional services and in retail trade over the past two decades, while at the same time experiencing declining employment in the manufacturing sector. Future growth in each of these sectors would be positively influenced by the development of the Palafox Commerce Park.

Because the measured economic impacts are limited to quantifiable impacts, this report underestimates the actual expected impact. In addition to the quantifiable economic impacts associated with the development of the proposed Commerce Park, numerous intangible benefits should also be realized. These benefits include the contribution that the presence of an environmentally clean Commerce Park will make in the improved quality of life, and increased property values of residents living nearby. Benefit flows also include the attraction of additional skilled workforce to the area. The new Commerce Park could provide a stimulus to further investment in economically distressed inner-city neighborhoods that surround it, that may not occur in the area without its cleanup and development. Local economic development efforts may also benefit from the change in perceptions that the community would experience due to the successful development of this Commerce Park. Banks and insurance companies may become more willing to work with nearby businesses, once the superfund site has been cleaned up. Each of these contributions has a

significant but difficult to measure economic impact on the regional economy, which is not included in this analysis.



# Introduction

## Purpose, Definitions and Scope

The purpose of this report is to present calculations that estimate the magnitude of changes in economic activity that would occur as a result of the development of the Palafox Commerce Park. This report provides an excellent opportunity to examine the economic role that the Commerce Park could play in the region and to enhance understanding of that role. The analysis describes the magnitude of the economic impact in Pensacola that will be attributable to a Commerce Park, and clarifies the impact that Commerce Park activities will have on the other industry sectors in the region.

Several measures of Commerce Park related economic activity are estimated, including total spending, income, and employment. The attraction of new businesses and the construction of business facilities on the Commerce Park will result in numerous retail and business-to-business sales (e.g., a lumber yard sells sheetrock to a construction firm). The sum of retail sales plus business-to-business sales is reported as *total spending*. The *income* figures that are reported are the sum of proprietor's income and wages and salaries accruing to workers in these businesses. *Employment* figures represent the number of jobs supported by sales of goods and services to consumers and by the increased level of inter-industry transactions. The job estimates given include full time, part time and seasonal jobs.

For these economic impact calculations the region of interest is the Pensacola Metropolitan Statistical Area (MSA), which includes two counties: Escambia and Santa Rosa. The selection of a particular geographic region influences both the amount of spending by local businesses that is captured and the size of the multiplier effects. In these calculations, only spending that takes place within the Pensacola MSA is included as stimulating the changes in economic activity, and all measures of impacts pertain to businesses and

households located in the two-county region.

Each of the measures of economic impact reflects the value generated by industry for one annual calendar year of production. In actuality, most of the local economic impact associated with local spending changes will have occurred within this one-year time frame.

This report does not attempt to quantify quality of life issues, whether positive or negative, which are undoubtedly related to the real estate development, growing populations, or increased traffic that may result from the development of a Commerce Park. This report estimates only the gross impact of financial (spending) flows, ignoring ancillary non-financial costs (e.g. traffic congestion, crime, noise or pollution) and benefits (improved public services, increased business retention) that may be associated with a Commerce Park.

Economic impact analysis describes the effects of an economic stimulus using economic measures such as spending, employment, labor income and tax revenue. Economic activities generate spending in our local area, and cause jobs to be created that pay income to area residents and generate tax revenue that flows to government. However, quantifying these effects can be difficult, and the calculated economic impact should be considered an estimate based the best information available at the time.

A computer multiplier model was used to estimate the overall magnitude of the economic impact that the Commerce Park will exert on the various sectors of the local economy. Use of a multiplier model also lets us trace the relative impact of construction and new business spending on each industry sector. Use of these standard multiplier techniques permit the generation of estimates of total local economic impact, including total inter-industry spending, employment, tax revenues, and incomes associated with spending driven by Commerce Park activities.

## Understanding Economic Multipliers

There are several key concepts that must be used to get a correct estimate of the total economic impact arising from Commerce Park spending. One of these is the regional purchase coefficient. The RPC indicates what share of total spending is done within the study area, for each of the spending categories. For example, an RPC of 0.25 for a given commodity means that for each \$1 of local demand, 25% will be purchased from local producers. RPC's are based on the characteristics of the region and describe the actual trade flows for the region mathematically. The greater the RPC, the greater the level of local economic activity that is occurring, and the larger the economic multiplier will be. The RPC's used in this study reflect the actual percentage of spending that occurs within the Pensacola MSA for a given industry sector. Spending that occurs outside the Pensacola MSA is not included in the reported economic impacts.

Another key concept of impact analysis is the price margin that separates wholesale from retail prices. Since this analysis involves retail prices in some spending categories and wholesale prices in others, the total spending (final demand) values needed to be subdivided into either retail or wholesale prices. Wholesale prices are those paid in business-to-business transactions, retail prices are those paid at the consumer level. Margins represent the difference between producer and purchaser prices. Margining assigns direct expenditures to the correct industry sector multipliers by splitting a purchaser price into the appropriate producer values. In this study the dollar value of impacts resulting from purchase by retail consumers are split appropriately so as to capture the portion going to the retailer, to the wholesaler, to transportation providers, and to the manufacturer.

Conceptually, the total economic impact of an event can be separated into three different types of effects. First is the direct effect of spending; which is the impact of new spending on first tier suppliers. Thus, ten dollars spent by a new Commerce Park business owner at a local restaurant counts as a direct effect of

ten dollars. This direct spending has the advantage that it can be counted relatively easily, but it does not capture the “multiplier effect” of the additional economic activity set in motion by the purchase of the meal.

To the direct effect must be added the indirect effect of spending. In order to produce the ten-dollar meal, the restaurant must purchase certain inputs from other businesses. To the extent that these inputs are local, these purchases represent additional local spending. For example, the restaurant may purchase two dollars worth of food inputs from the local produce market for every ten-dollar meal sold. The produce market may have paid a local farmer one dollar for the goods that are then sold to the restaurant, and the farmer may have paid 10 cents for local inputs into the farm. The indirect effect measures the cumulative local purchases from other businesses that are generated from the ten dollars spent on the meal. Because much of this spending goes either immediately or eventually to businesses outside of Pensacola, the indirect effect tends to be smaller than the direct effect. A reasonable estimate of the indirect effect of a ten-dollar meal might be five dollars.

To the direct and indirect effects must be added the induced effect, which measures the additional spending that occurs across the economy because of the income paid by all of the businesses involved, directly or indirectly, in producing the meal. There is a flow of wages received by the waiters, cooks, produce store clerks, and others who play a part in putting that meal in front of the customer. These people receive most of those wages as take-home pay, and they spend most of that take-home pay and save some. To the extent that their spending generates jobs in the local economy, there is additional economic impact attributable to the meal. However, much of that pay may go to a mortgage or car payment that leaves the local economy. In fact, most of the grocery store spending will leave the local economy to pay for food produced elsewhere in the country. But the part that pays the local banker administering the car loan, or the clerk at the local store, or other local employees, represents a local economic impact of that ten-dollar meal. A reasonable value for the induced effect might be three dollars.

Thus, the total local economic impact of the ten dollar meal would be eighteen dollars, representing the initial purchase (the direct effect), plus the local purchases made from other businesses in producing the meal (the indirect effect), plus the local purchases resulting from the spending by households who received wage income while producing the meal (the induced effect). Here, “the multiplier” is said to be 1.8, meaning that every dollar spent on that category (restaurant meals) has a total impact of \$1.80 on the local economy, once the direct, indirect and induced effects are accounted for.

The multiplier effect can also be seen in the number of jobs created by Commerce Park related spending. The number of jobs created includes those employees working directly in businesses that work at the Commerce Park, people working for companies that support operations of these businesses, and those who become employed as a result of the overall increased wage base associated with the Commerce Park locally.

In order to say that the multiplier is 1.8 (versus some other number like 1.2 or 3.7), the U.S. Department of Commerce, Bureau of Economic Analysis, uses actual historical data, specific to each county in the country, to describe how goods and services are produced in each county. These tables show the amount of inputs from other industries used to produce a dollar’s worth of output in a particular industry. A number of commercial firms have elaborated on these basic input-output tables and used them to produce software that models these economic relationships. These are called economic impact models, or Input-Output models. The Haas Center owns several of these models and uses *IMPLAN Professional Social Accounting & Impact Analysis Software* (IMPLAN), which is the most widely used model, in most economic impact studies.



# Overview of Pensacola Area Economy

The Pensacola Metropolitan Statistical Area (MSA) consists of two counties, Escambia and Santa Rosa. Pensacola MSA has an estimated 2002 population of 424,010, with approximately 157,070 households and a mean household income of \$61,493. Average annual employment for the area is 220,990 persons, who receive \$9,522,196,000 in total earnings. Total industry output for the MSA is approximately \$19,870,053,000<sup>2</sup>. The largest industry sector is the services sector, which employs an annual average of 73,340 persons, followed by retail trade (41,850), military/DoD Civilians (23,446),<sup>3</sup> state and local government (21,710), and construction (16,110).

A review of employment data is a good way to identify and understand Pensacola's key industries. Employment data provides the number of people whose incomes depend directly on each particular industry. Employment data is also shown to provide an indication of which industries are growing and which are declining, as well as to reveal the relative importance of each industry to the local economy. Figure 1 compares relative employment by industry sector for the United States, Florida, and the Pensacola MSA. It shows the service industry employs the largest share of the MSA's workforce, and that the retail trade, government, and construction industries are also significant employers. The retail trade, military, and federal civilian sectors employ a larger percentage of the local workforce than is true for the State or Nation as a whole.

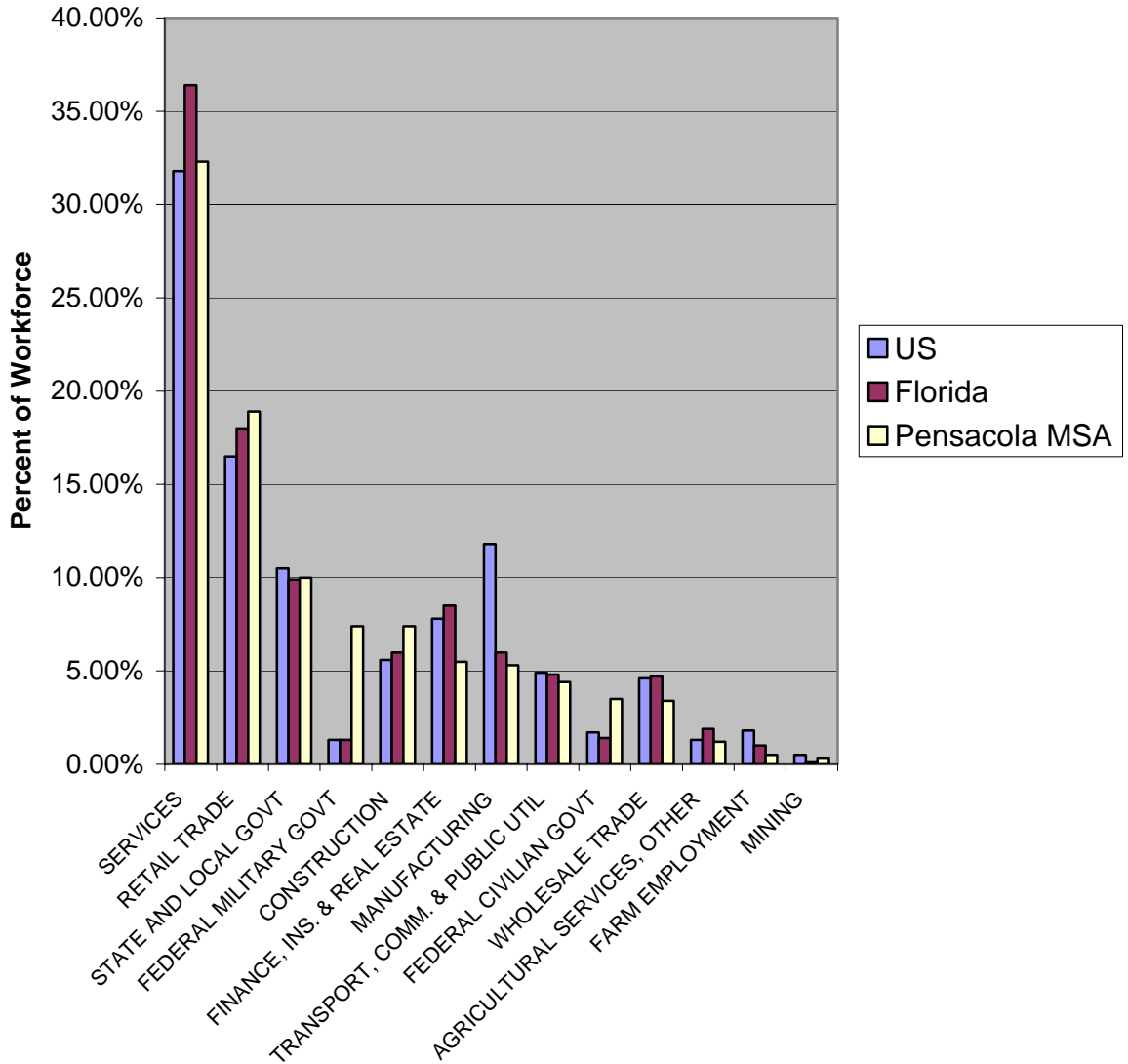
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<sup>2</sup> IMPLAN Professional Social Accounting & Impact analysis Software

<sup>3</sup> Claritas, Inc. Custom Summary Report of Escambia and Santa Rosa; Woods and Poole Economics; C.O. NAS Pensacola letter dated November 14, 2001.

Note: Highly dynamic military population with 36,000 student throughput annually.

Figure 1 - Employment by Industry Sector for the U.S., Florida, and Pensacola

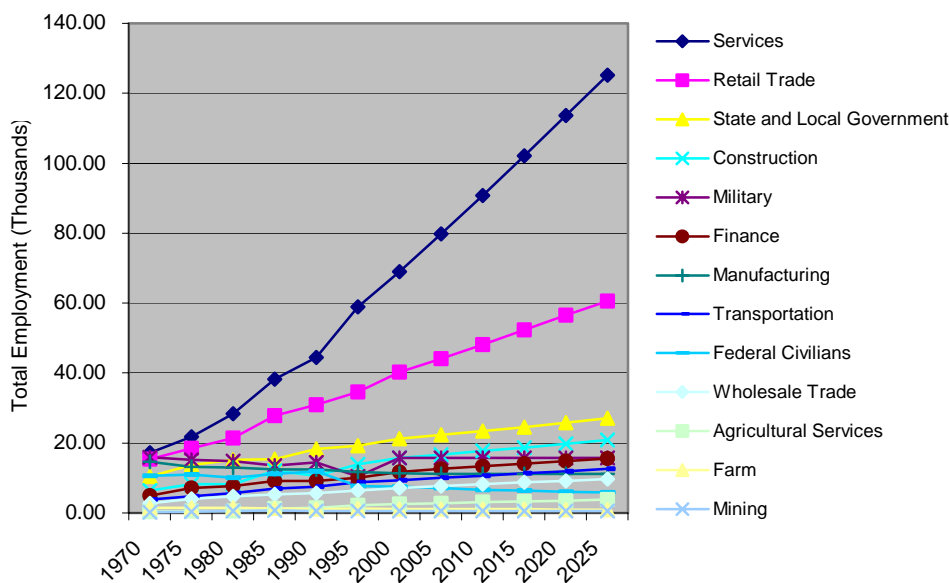


Source: Woods and Poole Economics 2000

## Historical Employment Trends

Figure 2 below show trends in employment from 1970 to present, and projections to 2025, broken out by major industry sector. While sectors such as manufacturing, federal civilians, and transportation, communication and public utilities are projected to stay relatively stable over this period; other sectors are forecast to grow substantially, both on sheer numbers and as a share of Pensacola employment. Most notable in Figure 2 is the expansion of employment over the past few decades in services, construction, and retail trade. Growth trends in these industries are projected to continue into the next decade.

**Figure 2 - Pensacola Employment Projections Through 2025 by Industry**



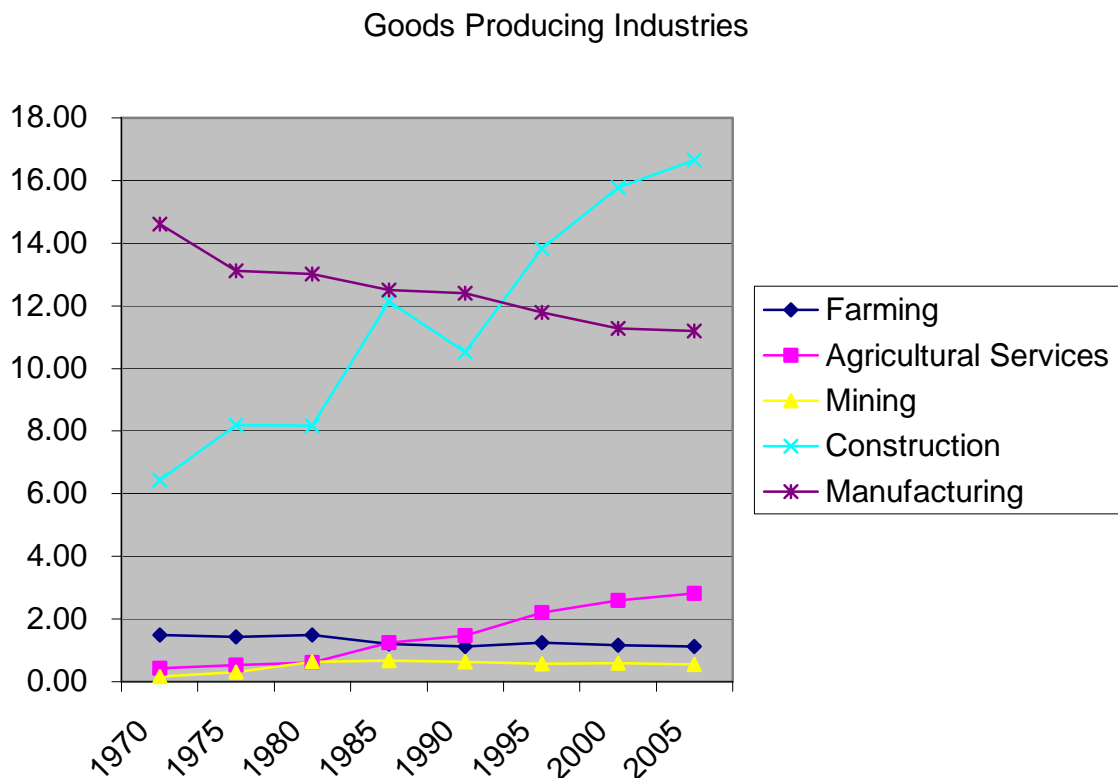
Source: Woods and Poole Economics 2000

To facilitate an understanding of trends in the Pensacola economy, industry sectors were divided into three broad employment categories: private goods producers, private service producers, and government. Employment (in thousands of jobs) is presented in Figures 3, 4, and 5 respectively. The goods producing industries (Figure 3) include agriculture, manufacturing, mining and construction. Nationally, the goods producing share of total employment has

declined steadily over the last three decades, from 32.1% of employment in 1970 to 21.0% in 2000. The employment shrinkage has been driven by improvements in technology and the resulting increase in output per worker. Overall output, measured in terms of both farm produce, extracted minerals and manufactured goods, has increased dramatically. However, automated production methods mean that more output can be produced with fewer workers.

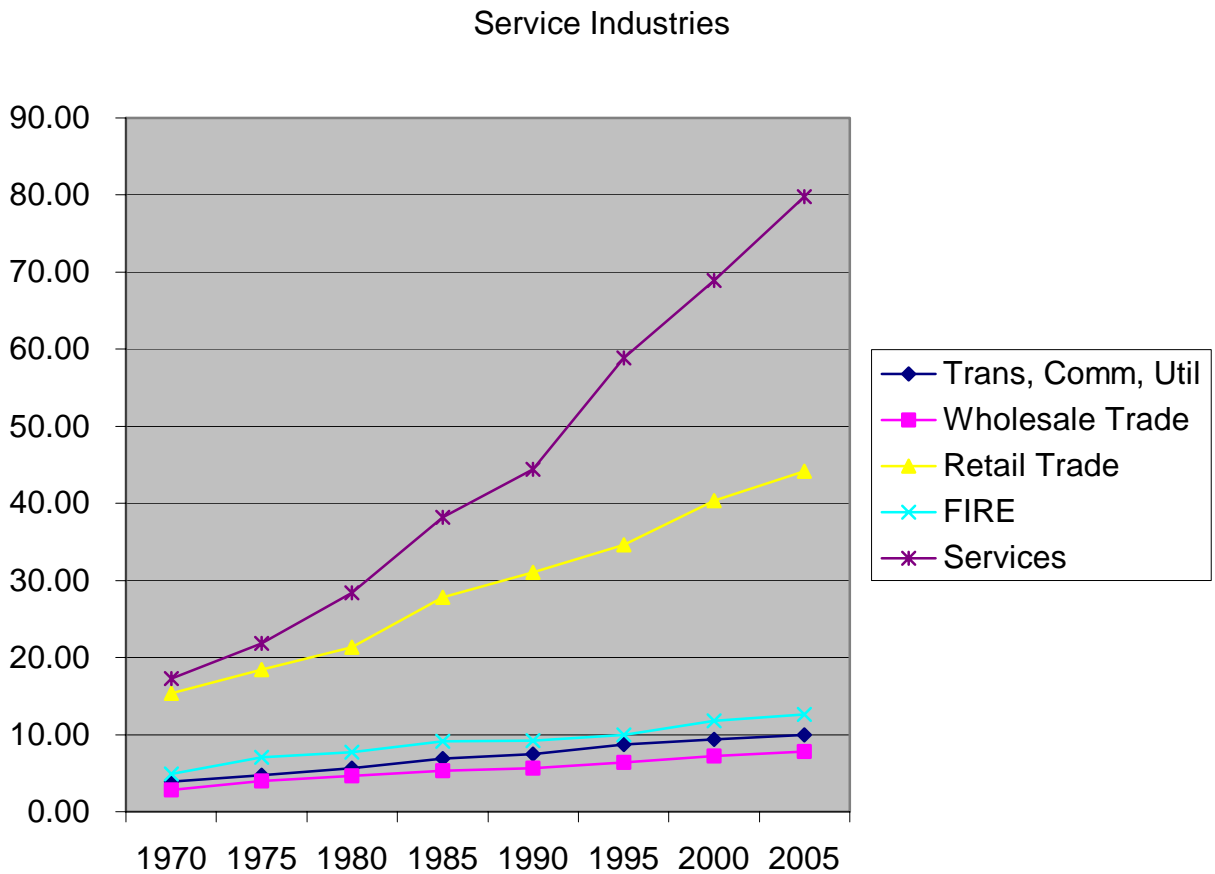
The Pensacola MSA has seen declining manufacturing employment during the 1990's, mirroring national trends. Pensacola's construction and agricultural services industries represent a larger share of the goods producing sector since 1970, while farm employment has declined during the same time period.

**Figure 3 - Employment Trends in the Goods Producing Sector, 1970-2005**



The service producing sector (Figure 4) of the economy has five major components: Personal, Business, and Professional services; Retail Trade; Finance, Insurance, and Real Estate; Wholesale Trade; and Transportation & Public Utilities. Nationally, this sector of total employment has climbed steadily since the Second World War. In recent years, Services have grown from approximately 49% of total U.S. employment in 1980 to 65.6% in 2000. Overall, this sector of the national economy has added workers in most years of the last decade. Pensacola has seen strong growth in both personal, business and professional services and retail trade over the past three decades.

**Figure 4 - Employment Trends in Service Industries, 1970-2005**



The government sector employment for the Pensacola MSA is shown in Figure 5 below. State and local government accounts for approximately 48% of



government employment in the Pensacola MSA, and both state and local and federal government have experienced increasing employment between 1970-2000. Federal civilian employees in Pensacola have borne most of the burden of Department of Defense (DoD) employment cutbacks in the past few decades. The large military and DoD employment in Pensacola presents important defense contracting opportunities locally.

**Figure 5 - Employment Trends in Government Sectors, 1970-2005**

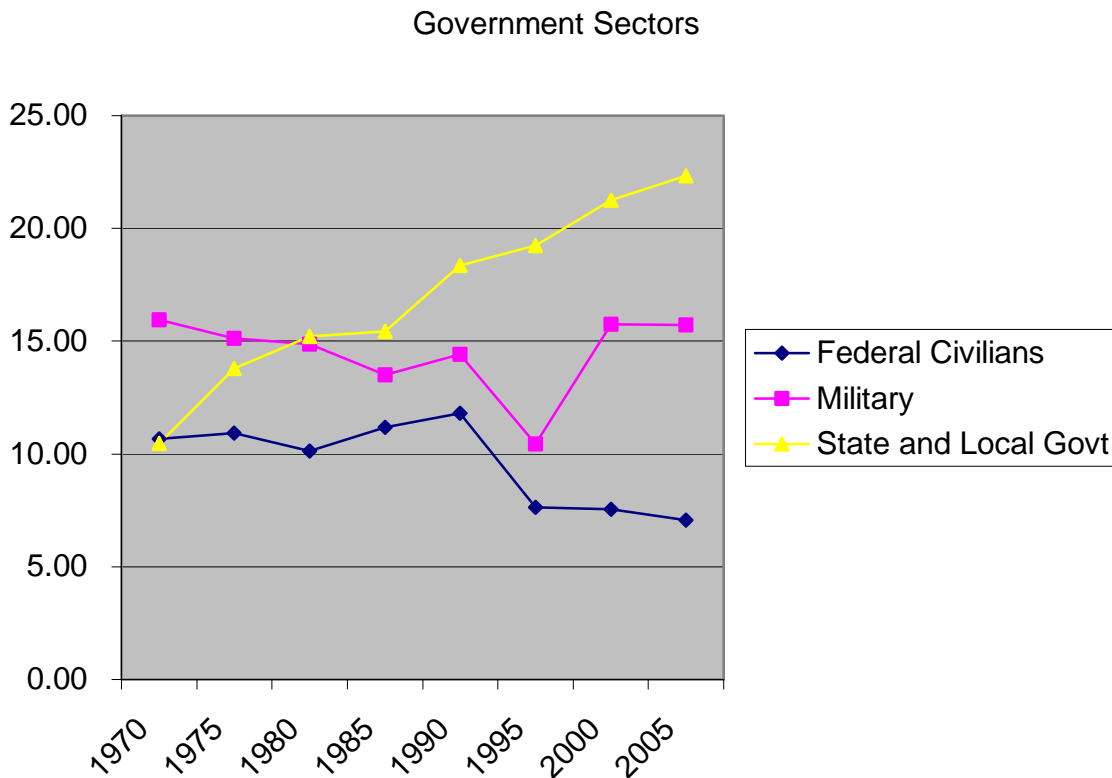
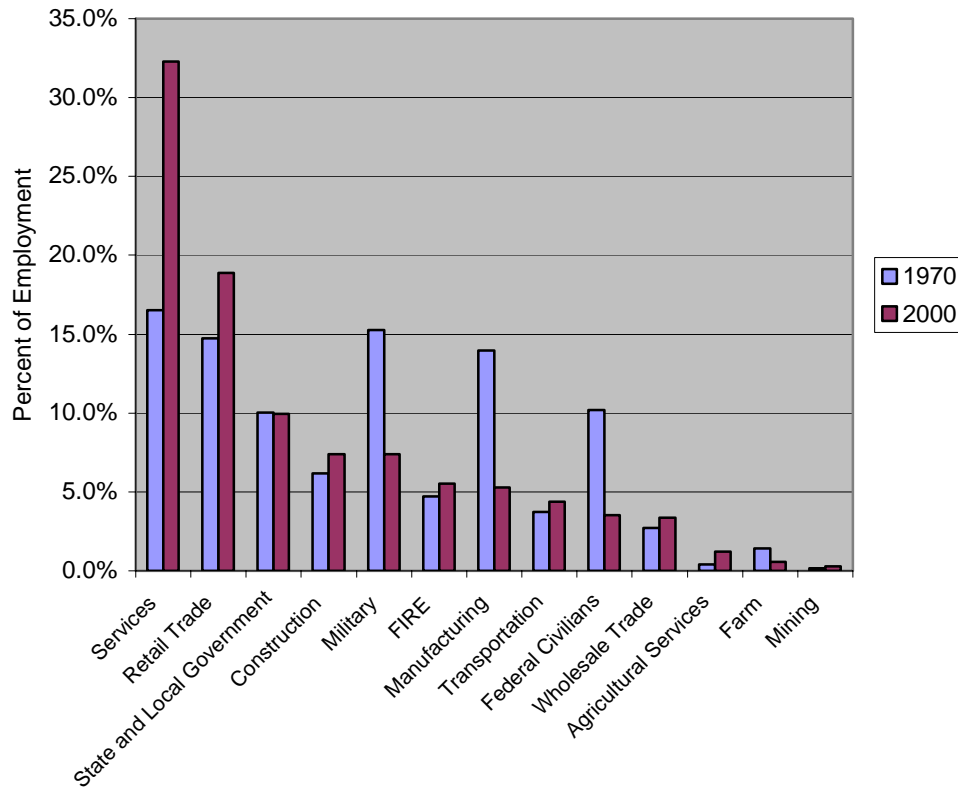


Figure 6 below shows what this differential job growth has meant for the share of MSA employment for different sectors. Here, the 1970-2000 period is shown. Over the past three decades, manufacturing employment has dropped from 14.0% of total employment to only 5.3% of employment. Meanwhile, employment in retail trade has increased over time (eating and drinking places are included under retail trade), and the share of retail in total employment has grown from 14% to 18%. The share of service employment, which includes

lodging places, as well as a wide variety of business services, grew by more than half, from 16.5% to 32.3% of total MSA employment over the period. In addition, construction and finance, insurance and real estate sectors grew slightly as a share of total employment, while military and federal civilian share of total employment dropped sharply.

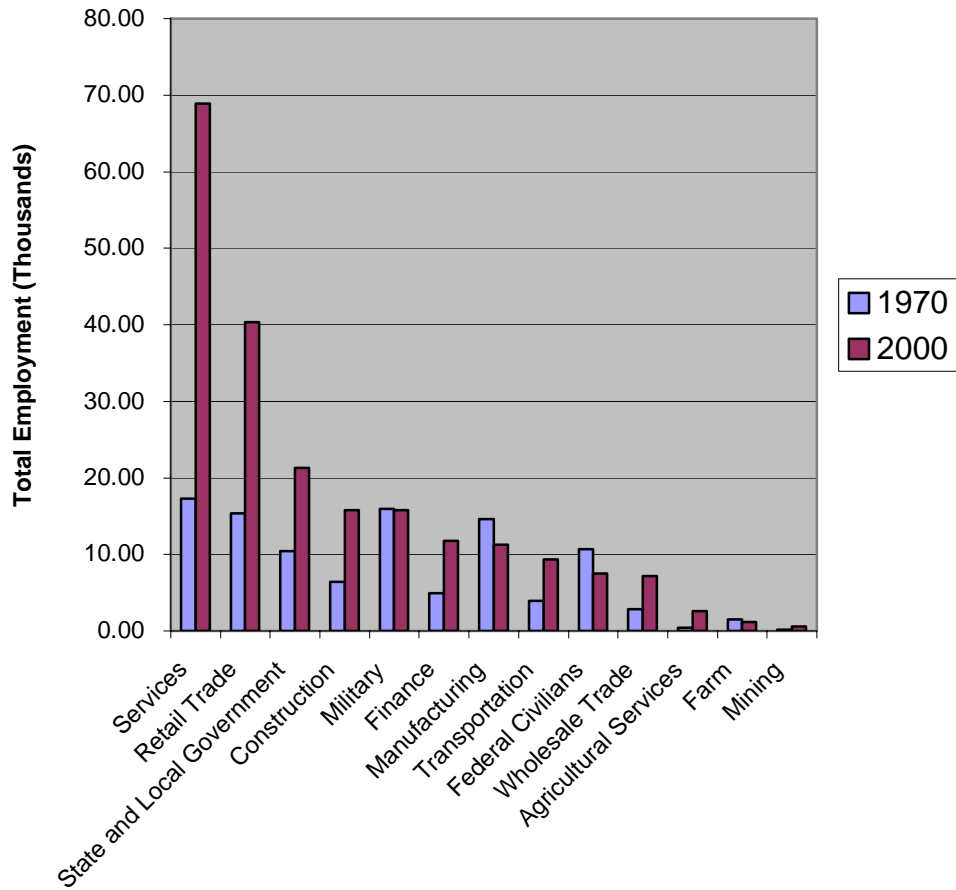
**Figure 6 - Changes in Percent of Employment by Industry Sector, 1970-2000**



Source: Woods and Poole Economics 2000

Figure 7 shows changes in the actual number of persons employed during the same 1970 through 2000 time-period for each major industry sector in the Pensacola area.

**Figure 7 – Changes in Number of Persons Employed by Industry Between 1970-2000**



## Does Pensacola Need a Commerce Park?

Communities often seek to obtain synergistic affects by integrating a commerce parks tenants and activities into the fabric of the community and its broader economic development goals and strategies. Recruiting efforts for the commerce park are often focused on attracting and developing businesses that will contribute resources to the development of those specific targeted industries that have already established a foothold in the region. This strategy of building on existing competitive strengths helps the regions existing companies compete and grow, and hopefully increases the commerce park's chances for success. Efforts to attract businesses that complement existing industries makes sense. These companies are already in the community, are often owned locally, and their profits are invested back into the community. And, they can be powerful allies in recruiting new companies into the region that complement their business by serving as suppliers or customers.

**Table 2 - Percent of our Targeted Industries Supply Chain Available Locally**

<b>Industry</b>	<b>Percent of Supply Chain Available Locally</b>
Industrial Services	13.7%
Silicon Technology	11.2%
Transportation Technology	22.2%
Health and Medical Technology	85.5%
Information Technology	38.9%

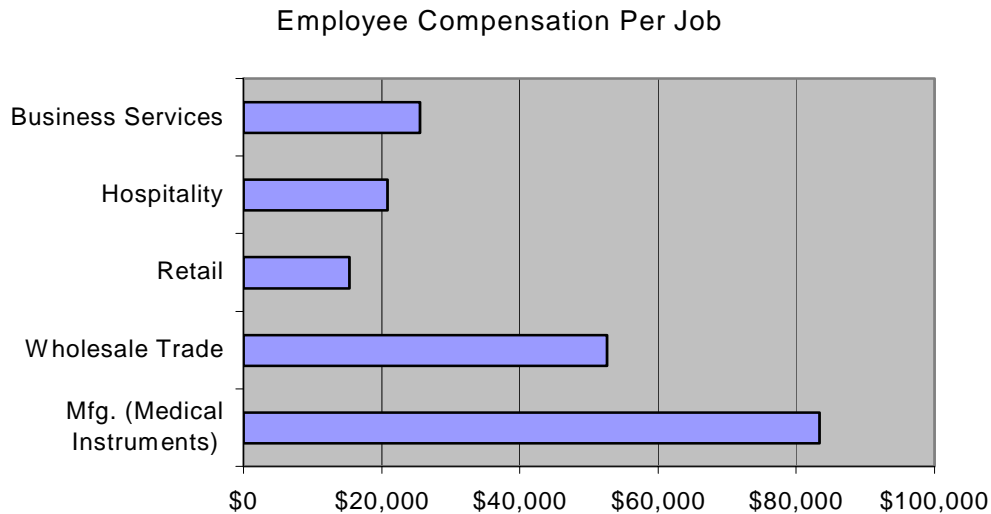
The Pensacola Area Chamber of Commerce has identified our region's targeted industry clusters as: Information Technology, Industrial Services, Health & Medical Technology, Silicon Technology, and Transportation Equipment. Table 2 above shows the percent of goods and services in each of these targeted industry's supply chain that are available locally. It illustrates the absence of many industries essential to a fully developed industry cluster. Because such a low percentage of their suppliers are available locally, area companies must go outside the region to obtain many of the products, services, and technologies that they need. If these missing elements could be attracted to our area, the addition of these critical suppliers will strengthen the existing local

clusters and facilitate the goal of retaining core businesses. Meanwhile, the newly attracted industries will benefit from ready-made markets for their products, and their proximity to local businesses will allow the tailoring of products to meet the specific needs of Pensacola's existing core industries. By addressing gaps and limitations in the economic foundations of our existing industry clusters, a successful commerce park could improve the region's ability to retain and grow industry and its ability to compete in global markets.

# Effect of Industry Selection

The type of businesses that are attracted to the Commerce Park will also determine the magnitude and direction of the economic impact on the local economy. Businesses that are labor intensive will have a different impact than those that are capital intensive. Manufacturing industries that are able to purchase the supplies they need from local suppliers will impact the economy differently than those who must go outside the local area for supplies. A software developer using primarily intellectual assets to produce their final product will have a different impact than a business that must purchase many goods and services to produce its product. Figures 8-10 below illustrate the economic impact per job that some of Pensacola's existing industries have on the local economy.

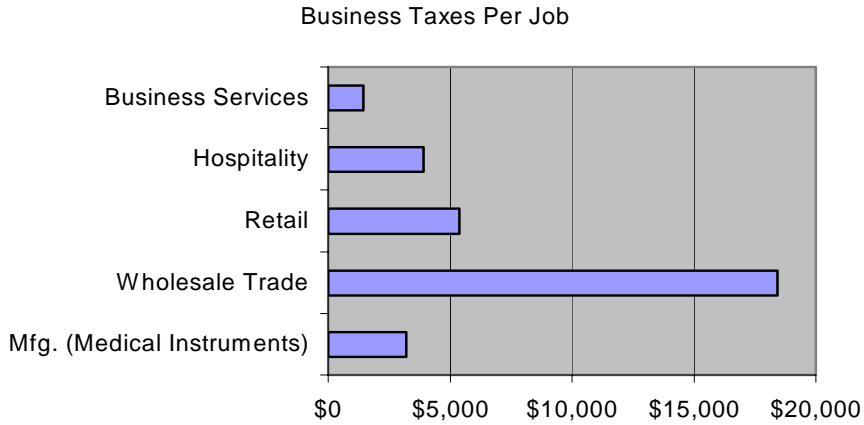
**Figure 8 - Industry Effect on Employee Compensation**



Source: IMPLAN Professional Social Accounting & Impact Analysis Software

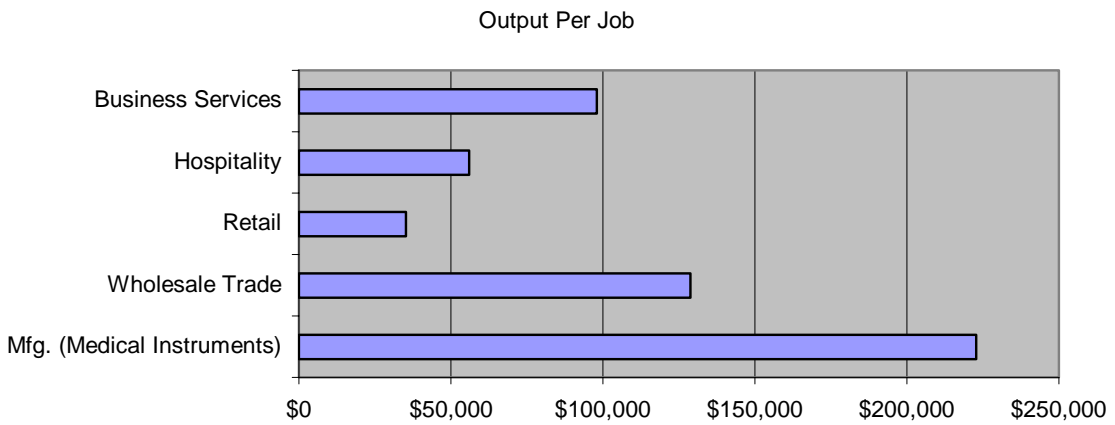


**Figure 9 - Industry Effect on Business Taxes Generated**



Source: IMPLAN Professional Social Accounting & Impact Analysis Software

**Figure 10 - Industry Effect on Total Spending Generated**



Source: IMPLAN Professional Social Accounting & Impact Analysis Software

# Estimated Economic Impact of the Proposed Palafox Commerce Park

The Palafox Commerce Park Master Plan envisions that when completely developed, the Commerce Park will contain approximately 650,000 square feet of facilities housing office, light manufacturing, and warehouse distribution businesses<sup>4</sup>. The economic impact estimates in this analysis are based upon the following assumptions:

- ▶ Sixty percent of the square footage will be occupied by light manufacturing businesses, twenty percent by wholesale trade, and twenty percent by professional business service companies;
- ▶ The light manufacturing businesses average 2.0 employees per 1000 square feet, wholesale trade and professional business service companies average 3.59 employees per 1000 square feet<sup>5</sup>;
- ▶ The Commerce Park is 20% developed at year three, 80% developed at year 7, and 100% developed after 10 years.
- ▶ Construction costs for the 650,000 square feet of facilities average \$45 per square foot.

## Economic Impact After Three Years

Given the assumptions above, the Commerce Park will support 391 employees after three years and at 20% of full development. The operating and capital expenditures of the Commerce Park tenants after three years will inject an estimated \$55 million in direct spending each year that stays in the local economy. When the total impact of the Commerce Park is considered (i.e., when taking the “multiplier effect” into account), approximately \$83 million in local retail and business-to-business sales will be generated each year. About 649 jobs will be either directly or indirectly supported by this new business activity in the local economy along with incomes of approximately \$26 million (see Table 3). The Commerce Park will generate almost \$884,000 in local tax revenues annually

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<sup>4</sup> Palafox Commerce Park Master Plan, A Partnership Between Escambia County and the City of Pensacola, Florida, Landers-Atkins Planners, Inc.

<sup>5</sup> Based on employee density calculations of the Institute of Transportation Engineers, Trip Generation Handbook.

after three years and 20% of full development. The construction of the facilities required to support a Commerce Park that is 20% fully developed will stimulate additional economic activity only during the period of construction. Approximately \$5.8 million in local retail and business-to-business sales will be generated while this construction occurs. About 91 jobs will be either directly or indirectly supported by this new construction activity in the local economy along with incomes of approximately \$3.5 million. Construction spending will generate approximately \$959,000 in federal, state, and local tax revenues.

**Table 3 - Summary of Estimated Economic Impacts After Three Years**

<b>Commerce Park Estimated Economic Impact After Three Years</b>				
<b>Estimated Park Business Tenants Spending Impact</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Total Spending (Output)	\$54,953,228	\$16,575,265	\$12,078,875	\$83,607,367
Incomes Generated	\$15,104,374	\$6,689,842	\$4,643,268	\$26,437,484
Jobs Supported	342.8	154.5	151.46	649
<b>Estimated Construction Impact</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Total Spending (Output)	\$5,850,000	\$2,030,992	\$1,630,916	\$9,511,908
Incomes Generated	\$1,997,907	\$888,665	\$626,939	\$3,513,511
Jobs Supported	48.3	22.18	20.46	91
Annual Federal Tax Revenues Generated	\$6,496,867			
Annual State Tax Revenues Generated	\$2,063,269			
Annual Local Tax Revenues Generated	\$884,258			

Source: IMPLAN Professional Social Accounting & Impact analysis Software

## Economic Impact After Seven Years

After seven years, we assume that the Commerce Park will be 80% developed. At 80% development, the Commerce Park will support 1,371 employees. The operating and capital expenditures of the Commerce Park tenants will inject an estimated \$219 million in direct spending each year that stays in the local economy. When the total impact of the Commerce Park is considered (i.e., when taking the “multiplier effect” into account), approximately \$334 million in local retail and business-to-business sales will be generated each year. About 2,595 jobs will be either directly or indirectly supported by this new business activity in the local economy along with incomes of approximately \$105 million (see Table 4). The Commerce Park will generate almost \$3.5 million in local tax revenues annually after seven years and 80% of full development. The construction of the business facilities required to support a Commerce Park that is 80% developed will stimulate additional economic activity only during the period of construction. Approximately \$38 million in local retail and business-to-business sales will be generated while this construction occurs. About 364 jobs will be either directly or indirectly supported by this new construction activity in the local economy along with incomes of approximately \$14 million. Approximately \$3.8 million in additional federal, state, and local tax revenues will have been generated by the construction of 80% of the 650,000 square feet of facilities.

**Table 4 - Summary of Estimated Impacts After Seven Years**

<b>Commerce Park Estimated Annual Economic Impact After Seven Years</b>				
Estimated Park Business Tenants Spending Impact	Direct	Indirect	Induced	Total
Total Spending (Output)	\$219,812,911	\$66,301,058	\$48,315,501	\$334,429,466
Incomes Generated	\$60,417,495	\$26,759,370	\$18,573,070	\$105,749,936
Jobs Supported	1,371	618	606	2,595
Estimated Construction Impact	Direct	Indirect	Induced	Total
Total Spending (Output)	\$23,400,000	\$8,123,969	\$6,523,663	\$38,047,632
Incomes Generated	\$7,991,628	\$3,554,662	\$2,507,756	\$14,054,046
Jobs Supported	193	89	82	364
Annual Federal Tax Revenues Generated	\$25,987,468			
Annual State Tax Revenues Generated	\$8,253,078			
Annual Local Tax Revenues Generated	\$3,537,033			

## Economic Impact After Ten Years

After ten years, we assume that the Commerce Park will be 100% developed. At 100% development, the Commerce Park will support 1,714 employees. Sixty percent of Commerce Park tenants are assumed to be employed in light manufacturing, twenty percent in wholesale trade, and twenty percent in business service industries. The operating and capital expenditures of the Commerce Park tenants will inject an estimated \$274 million in direct spending each year that stays in the local economy. When the total impact of the Commerce Park is considered (i.e., when taking the “multiplier effect” into account), approximately \$418 million in local retail and business-to-business sales will be generated each year. About 3,244 jobs will be either directly or indirectly supported by this new business activity in the local economy along with incomes of approximately \$132 million (see Table 5). The Commerce Park will generate approximately \$4.4 million in local tax revenues annually after ten years when fully developed. The construction of the 650,000 square feet of business facilities will have stimulated additional economic activity during the period of construction. A total of approximately \$47 million in local retail and business-to-business sales will be generated by this construction. About 455 jobs will have been either directly or indirectly supported by this new construction activity in the local economy along with incomes of approximately \$17.5 million. Approximately \$4.7 million in additional federal, state, and local tax revenues will have been generated by the construction of 100% of the 650,000 square feet of facilities.

**Table 5 - Summary of Estimated Economic Impacts After Ten Years**

<b>Commerce Park Estimated Annual Economic Impact After Ten Years</b>				
<b>Estimated Park Business Tenants Spending Impact</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Total Spending (Output)	\$274,766,139	\$82,876,323	\$60,394,376	\$418,036,833
Incomes Generated	\$75,521,869	\$33,449,212	\$23,216,338	\$132,187,420
Jobs Supported	1,714	773	757	3,244
<b>Estimated Construction Impact</b>	<b>Direct</b>	<b>Indirect</b>	<b>Induced</b>	<b>Total</b>
Total Spending (Output)	\$29,250,000	\$10,154,961	\$8,154,579	\$47,559,540
Incomes Generated	\$9,989,535	\$4,443,327	\$3,134,695	\$17,567,557
Jobs Supported	242	111	102	455
Federal Tax Revenues Generated	\$32,484,335			
State Tax Revenues Generated	\$10,316,347			
Annual Local Tax Revenues Generated	\$4,421,292			

Figure 12 below, and Table 6 on the next page, shows the industry sectors that will receive the largest economic stimulus from Commerce Park business and construction activities given the assumptions of this analysis.

**Figure 11 - Distribution of the Economic Impact of the Palafox Commerce Park**

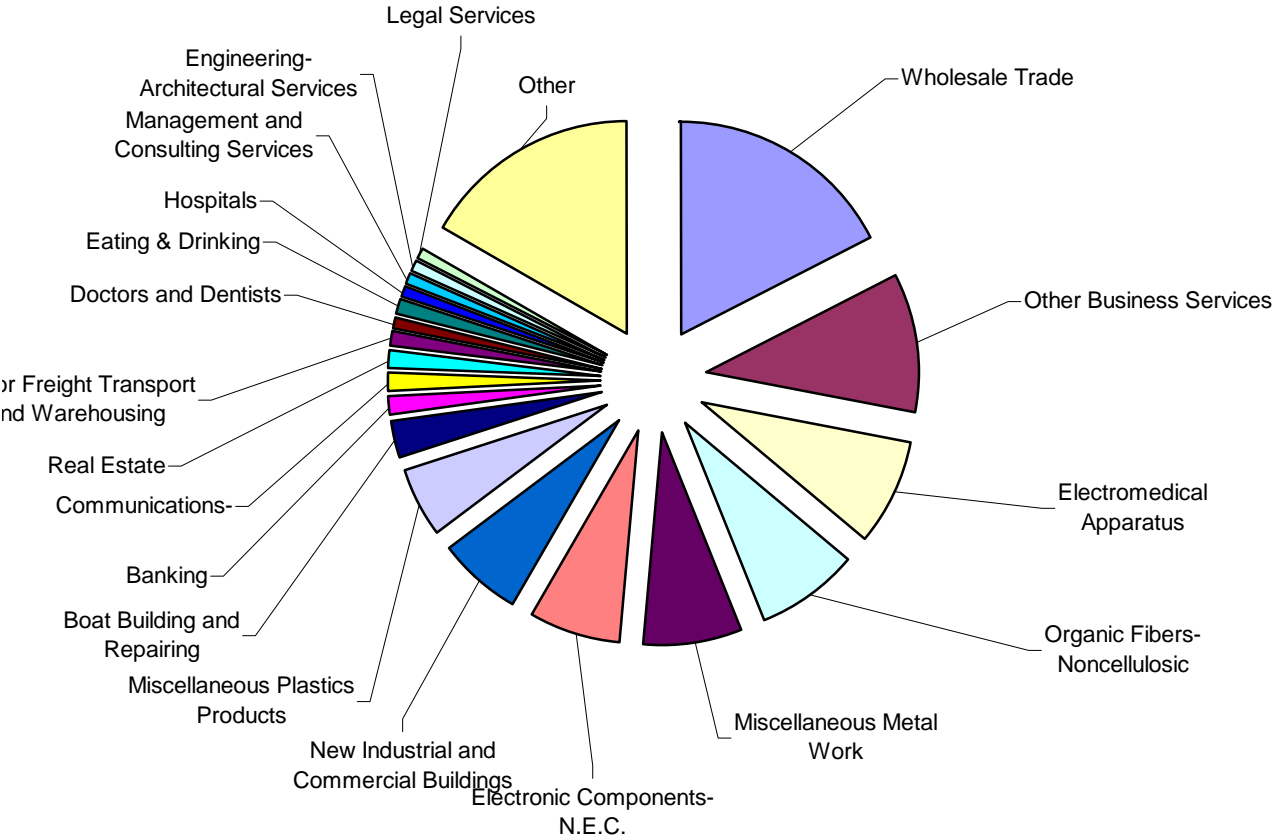


Table 6 below describes the estimated impact that Commerce Park economic activities will have on the other industry sectors in the region in terms



of spending generated, incomes supported, and jobs created. For example, Table 6 shows that when the Commerce Park is fully developed, the economic stimulus that it generates will support an additional 53.9 accountants and bookkeepers in the local economy. It will generate an additional \$1,392,136 in incomes for the banking industry. Furthermore, while it has no direct effect on the local real estate market, the new jobs that it creates will indirectly stimulate an additional \$5,889,025 in spending in that sector.

**Table 6 - Distribution of Economic Impacts of the Fully Developed Commerce Park**

Industry	Direct	Indirect	Induced	Total Spending	Incomes Generated	Jobs Generated
Wholesale Trade	\$60,141,280	\$16,817,624	\$4,086,217	\$81,045,120	\$34,048,864	629.3
Other Business Services	\$45,771,604	\$3,632,040	\$822,992	\$50,226,636	\$13,950,793	512.5
Electro medical Apparatus	\$36,316,052	\$475,524	\$23,609	\$36,815,184	\$11,544,309	131.8
Organic Fibers- Noncellulosic	\$29,011,336	\$6,805,472	\$49,534	\$35,866,344	\$11,355,032	160.7
Miscellaneous Metal Work	\$35,328,188	\$1,248	\$5	\$35,329,440	\$4,357,513	130.0
Electronic Components- N.E.C.	\$31,082,414	\$1,855,810	\$7,398	\$32,945,622	\$4,272,149	137.8
New Industrial and Commercial Buildings	\$29,250,000	\$0	\$0	\$29,250,000	\$9,989,535	241.5
Miscellaneous Plastics Products	\$24,461,340	\$41,022	\$1,412	\$24,503,774	\$5,761,544	130.2
Boat Building and Repairing	\$12,653,925	\$5,679	\$1,011	\$12,660,615	\$2,831,249	130.1
Banking	\$0	\$3,826,873	\$3,384,056	\$7,210,929	\$1,392,136	28.8
Communications- Except Radio and TV	\$0	\$4,764,390	\$1,749,984	\$6,514,374	\$1,585,064	23.9
Real Estate	\$0	\$2,859,630	\$3,029,395	\$5,889,025	\$798,115	30.6
Motor Freight Transport and Warehousing	\$0	\$4,110,087	\$834,143	\$4,944,230	\$1,638,820	43.3
Doctors and Dentists	\$0	\$0	\$4,555,622	\$4,555,622	\$2,719,760	44.0
Eating & Drinking	\$0	\$651,638	\$3,719,304	\$4,370,942	\$1,668,176	117.1
Hospitals	\$0	\$16,444	\$4,239,688	\$4,256,133	\$2,521,494	63.0
Management and Consulting Services	\$0	\$3,442,724	\$560,479	\$4,003,203	\$1,831,049	48.0
Engineering- Architectural Services	\$0	\$3,473,809	\$168,159	\$3,641,968	\$1,662,520	35.6
Legal Services	\$0	\$2,169,458	\$1,411,880	\$3,581,338	\$2,672,334	31.3
Maintenance and Repair Other Facilities	\$0	\$2,664,945	\$733,940	\$3,398,885	\$2,164,427	52.9
Computer and Data Processing Services	\$0	\$2,819,316	\$484,027	\$3,303,343	\$2,462,979	37.5
Accounting- Auditing and Bookkeeping	\$0	\$2,831,547	\$459,378	\$3,290,925	\$2,449,488	53.9
Personnel Supply Services	\$0	\$2,804,791	\$429,375	\$3,234,165	\$3,036,579	109.5

Industry	Direct	Indirect	Induced	Total Spending	Incomes Generated	Jobs Generated
Automotive Dealers & Service Stations	\$0	\$724,936	\$2,193,067	\$2,918,003	\$1,302,148	32.8
Insurance Carriers	\$0	\$304,292	\$2,237,243	\$2,541,535	\$578,327	44.1
Other State and Local Govt Enterprises	\$0	\$1,097,010	\$1,074,624	\$2,171,634	\$453,788	11.2
Hotels and Lodging Places	\$0	\$1,338,596	\$767,631	\$2,106,228	\$829,301	37.6
Food Stores	\$0	\$87,830	\$1,739,970	\$1,827,799	\$1,086,834	44.1
Credit Agencies	\$0	\$925,388	\$809,765	\$1,735,153	\$1,163,729	26.7
Plastics Materials and Resins	\$0	\$1,686,504	\$4,381	\$1,690,885	\$133,509	2.9
Automobile Repair and Services	\$0	\$783,376	\$856,896	\$1,640,272	\$570,319	18.3
Miscellaneous Retail	\$0	\$155,228	\$1,345,460	\$1,500,688	\$719,014	42.6
General Merchandise Stores	\$0	\$79,672	\$1,389,972	\$1,469,643	\$696,431	40.0
Security and Commodity Brokers	\$0	\$873,572	\$548,617	\$1,422,189	\$687,121	7.5
U.S. Postal Service	\$0	\$1,015,944	\$318,673	\$1,334,617	\$1,088,976	17.1
Radio and TV Broadcasting	\$0	\$989,356	\$214,594	\$1,203,950	\$458,154	5.8
Electric Services	\$0	\$568,438	\$593,827	\$1,162,265	\$242,835	3.6
Air Transportation	\$0	\$744,986	\$412,588	\$1,157,574	\$472,728	11.6
Advertising	\$0	\$952,673	\$184,653	\$1,137,326	\$559,265	9.2
Other Medical and Health Services	\$0	\$546	\$1,125,066	\$1,125,612	\$523,863	21.0
Equipment Rental and Leasing	\$0	\$932,940	\$138,133	\$1,071,073	\$363,764	7.1
Automobile Rental and Leasing	\$0	\$674,455	\$227,853	\$902,308	\$275,128	10.7
Blast Furnaces and Steel Mills	\$0	\$820,718	\$1,318	\$822,036	\$204,415	2.1
Cyclic Crude- Interm. & Indus. Organic Chem.	\$0	\$787,261	\$14,947	\$802,208	\$224,683	0.5
Services To Buildings	\$0	\$548,390	\$246,180	\$794,570	\$327,928	17.1
Building Materials & Gardening	\$0	\$126,650	\$648,189	\$774,839	\$429,127	14.4
Newspapers	\$0	\$619,443	\$142,942	\$762,385	\$311,083	8.0
Commercial Printing	\$0	\$655,512	\$106,573	\$762,085	\$241,365	6.3
Miscellaneous Repair Shops	\$0	\$639,380	\$108,676	\$748,056	\$259,941	12.3
Furniture & Home Furnishings Stores	\$0	\$98,043	\$649,928	\$747,971	\$371,425	15.5
Apparel & Accessory Stores	\$0	\$61,635	\$683,876	\$745,511	\$296,597	16.5
Nursing and Protective Care	\$0	\$0	\$703,660	\$703,660	\$498,109	20.0
Other	\$0	\$8,668,444	\$18,308,048	\$26,976,493	\$7,671,145	\$268
Total	\$304,016,139	\$93,031,288	\$68,548,955	\$465,596,381	\$149,754,976	3,698.4

# Methodology and Assumptions

Impact analysis describes the magnitude of change in overall economic activity that an economic stimulus (in this case the development of the Palafox Commerce Park) has on all the other industry sectors in the region. The analysis looks at the direct stimulus and calculates the “multiplier effect” of the additional economic activity set in motion by this original economic stimulus. In order to calculate the multiplier, the model uses actual historical data, specific to the local area, from the U.S. Department of Commerce, Bureau of Economic Analysis, to describe how goods and services are produced. These tables show the amount of inputs from other industries used to produce a dollar’s worth of output in a particular industry. These data are assembled in computer models called economic impact models, or Input-Output models. Data sources used in input-output models include:

- ▶ Bureau of Economic Analysis (BEA) Covered Employment and Wages
- ▶ BEA Regional Economic Information System (REIS) Data
- ▶ BEA Output Data
- ▶ National Income and Product Accounts
- ▶ BEA Current Benchmark IO Study

Industry output numbers are derived from several sources including Bureau of Census economic census, BEA output estimates, and the BLS employment projections. Employment is derived from ES202 data supplemented by county business patterns and REIS data.

Several measures of economic activity are estimated, including total output, income, tax revenues, and employment.

- ▶ Economic *output* is the total value of purchases by intermediate (business-to-business sales) and final consumers.
- ▶ The *income* figures that are reported are the sum of proprietor’s income and wages, salaries, and benefits accruing to workers in these businesses.
- ▶ *Employment* figures represent the number of jobs supported by sales of

goods and services to consumers and by the increased level of inter-industry transactions.

The effects of stimuli on economic activity are broken down into three components: direct, indirect, and induced. *Direct* effects are the changes in the industries to which a final demand change (the stimulus being measured in the study) was made. *Indirect* effects are the changes in inter-industry purchases as they respond to the new demands of the directly affected industries. These indirect purchases continue until leakage from the region stops the cycle. *Induced* effects reflect changes in spending from households as income increases or decreases due to the changes in production.

The measured economic impacts are limited to quantifiable impacts. In addition to the quantifiable economic impacts associated with the development of the proposed Commerce Park, there are also numerous intangible benefits. These benefits include the contribution that the presence of an environmentally clean Commerce Park will make in the improved quality of life, and increased property values of residents living nearby. Benefit flows also include the attraction of additional skilled workforce to the area. The new Commerce Park could provide a stimulus to further investment in economically distressed inner-city neighborhoods that surround it, that may not occur in the area without its cleanup and development. Local economic development efforts may also benefit from the change in perceptions that the community would experience due to the successful development of this Commerce Park. Banks and insurance companies may become more willing to work with nearby businesses, once the superfund site has been cleaned up. Each of these contributions has a significant but difficult to measure economic impact on the regional economy, which is not included in this analysis.

Also not included in the analysis are intangible costs that would undoubtedly be associated with developing and operating a Commerce Park, including increased traffic congestion, or other possible additional burdens on public infrastructure. Another risk is that the Commerce Park may fail, leaving the county with an under-used facility in an otherwise valuable location.

The following questions were addressed when preparing to conduct this economic impact study:

*What is the geographic location of the economic activity and what is the economic area of interest?*

▶ The selection of the region influences both the amount of spending captured and the multiplier effects. Only spending that takes place within the region of interest is included as stimulating the changes in economic activity, and all measures of impacts are for businesses and households within this local region. Considering initial impact site, residential location of the labor force and travel corridors (for the induced impact), location of supporting industries and services, and the location of consumers, this study uses the two county Pensacola MSA.

*What are the local expenditures?*

▶ This is expressed in terms of spending (capital and operating budget) generated by buy various industries as determined by the number of workers they employ. Industry employment in the proposed Commerce Park is estimated using “employees per square foot” of business facilities as provided by the Institute of Transportation Engineers, *Trip Generation Handbook*. This is a standard source of employee per square foot information used in transportation studies, and in economic impact studies of this type. The *Palafox Commerce Park Master Plan*, prepared by Landers-Atkins Planners, Inc, provided estimated usage of the Commerce Park. Estimated construction costs for the 650,000 square feet of Commerce Park facilities were provided by the Pensacola Area Chamber of Commerce Sites and Buildings Committee members.

▶ This study assumes that sixty percent of the square footage will be occupied by light manufacturing businesses, twenty percent by wholesale trade, and twenty percent by professional business service companies. This

industry mix is suggested by the Palafox Commerce Park Master Plan, and received support at a meeting attended by representatives of the Pensacola Chamber of Commerce, Escambia County, and the City of Pensacola.

- ▶ The light manufacturing businesses are assumed to average 2.0 employees per 1000 square feet, wholesale trade and professional business service companies average 3.59 employees per 1000 square feet<sup>6</sup>;
- ▶ The Commerce Park is assumed to be 20% developed at year three, 80% developed at year 7, and 100% developed after 10 years.
- ▶ Construction costs for the 650,000 square feet of facilities average \$45 per square foot.
- ▶ The impacts measured are gross (not net) impacts. The study assumes no impact from incentive programs.
- ▶ Spending counted should be new spending, not a substitute for other similar activities. To the extent that spending merely replaces other spending that would have otherwise occurred in the study area, the impact is reduced.
- ▶ Wages and salaries are assumed to be paid to individuals who live in the study area.
- ▶ The study assumes that construction contracts are awarded to a local contractor.

*What is the activity time frame?*

- ▶ Some impacts are one-time (such as building construction), some are reoccurring (such as the operations of the Commerce Park business tenants). Each of the measures of reoccurring economic impact in the model's reports reflects the value generated by industry for an annual calendar year of production.

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<sup>6</sup> Based on employee density calculations of the Institute of Transportation Engineers, Trip Generation Handbook.



*In what industry or institution does the spending occur?*

▶ The institutions looked at in this analysis are households. The development of a Commerce Park will result in increased employment and household income. In this study, we do not look at the effects on government.

▶ The Pensacola Area Chamber of Commerce, based on actual prospect inquiries that they have worked with over the past year, provided the particular industries that this study assumes will eventually occupy the industrial park. Table 6 below is the prospect information provided for this study by the Chamber of Commerce.

**Table 7 - Industry Prospect Information Provided by the Pensacola Area Chamber of Commerce**

Acreage/Square Feet Requested	Proposed Capital Investment	Proposed No. Of Employees	Type Of Work/Description
50,000	\$6,000,000	100	Lumber Distribution
50,000	\$10,000,000	125	Medical Device
50,000	\$2,500,000	500	Customer Service Center
41,000	\$38,700,000	39	Polymers Industry
100,000	\$55,000,000	1000	Distribution Center
60,000	\$10,000,000	150	Boat Manufacturer
65,000	\$3,000,000	350	Customer Service Center
85,000	\$5,000,000	125	Plastic Container Manufacturer
43,000	\$30,000,000	80	Light Metal Component Manufacturer For Automotive Parts
3,000	\$100,000	5	Manufacturer & Distributor For Diagnostics Systems For Infectious Diseases
2,000	\$100,000	5	Manufacturer Of Signs Employing Led Technologies
1,000	\$100,000	3	Retail
1,500	\$1,000,000	5	Information Technology Firm Providing Networks

Acreage/Square Feet Requested	Proposed Capital Investment	Proposed No. Of Employees	Type Of Work/Description
80,000	\$2,000,000	20	Manufacturer & Distributor

▶ Commodity or Industry driven impact. In an *industry* final demand change, only the industry impacted receives the direct impact. With *commodity*, all industries producing the commodity receive part of the change. This study looks at industry driven impacts. If an industry is not present in the region, that portion of the impact is lost.

▶ Margins represent the difference between producer and purchaser prices. Margining assigns impact to the correct sector: manufacturer, transportation, wholesale markup, and retail markup. If the purchaser price were applied to the industry (e.g. Retail sector) the model would calculate an average production of all items provided by retail (plastics for toys, oil for refined gasoline, lumber for furniture, etc.) instead of calculating the production of the specific item (t-shirts) and its associated linkages. Only retail stores that buy goods from manufacturers use margins, service-oriented stores (entertainment, amusement) produce the service at the time of purchase and do not have margins. Margins are also not applied to eating and drinking establishments. Households, Industry, Investment, Federal Government, and State and Local Government all have different margins based on purchasing power.

# Survey of Pensacola's Targeted Industries

In September 2000, the Haas Center mailed a survey to firms in Pensacola's targeted industry clusters to learn their views concerning the best potential uses of the Commerce Park. The survey results are included in this report to provide an indication of the views of the local business community. Pensacola's targeted industry clusters include the following industry sectors: Information Technology, Industrial Services, Health & Medical Technology, Silicon Technology, and Transportation Equipment. Using the State Business Directory by InfoUSA database, every firm in the Pensacola Metropolitan Statistical Area who's SIC matched the targeted business and industry sector list provided by the PACC was mailed a survey (those SIC's, businesses, and the survey instrument are included in the appendix). Over 200 firms from these industry sectors are currently doing business in Escambia and Santa Rosa Counties. The response rate was approximately 10 percent, so the following responses should be considered as informational rather than definitive.

## Doing Business in Pensacola

Most of the businesses (83%) that responded to the survey were locally owned companies. When they were asked, "Overall, how would you rate the Pensacola region as a place to do business," 83% responded either "This is an excellent place to do business" (41.7%) or "this is an adequate place to do business" (41.7%). Only 16.7% stated, "This is not a good place to do business."

## Growth Expectations

Growth expectations for these businesses appeared favorable. When asked, "What is the likelihood of your company expanding or adding product lines or divisions

over the next two to five years,” 75% answered either Very likely (66.7%) or likely (8.3%). When asked, “What are the barriers to expanding your business, the most common responses were capital and workforce availability. Other barriers to expansion cited were: Lack of Liability Insurance Carriers, Limited core business opportunities, Site Availability, State Regulations, Trial Attorneys, and Site Location. When asked, “What type of assistance would help your business to become more profitable,” the most common responses were workforce development and training programs. Other assistance requested were: Capital for improvement and upgrading; Northwest Florida market is weak, we need to attract more business to this area; Nursing Home Regulation Modification; Other companies need to be ISO 9000 certified if we partner/use as a supplier; Quality/ISO 9000 Programs; and Technology Transfer.

## Customers

The majority of the customers for these businesses are local. When asked, “What is the percentage of your Customers that are from the Pensacola region (Escambia and Santa Rosa Counties),” the Mean response was 60%. When asked, “What percent of your Customers are located outside the Pensacola Region,” the Mean response was 40%.

## Suppliers

Concerning business linkages with suppliers, the survey responses supported the Input-Output model findings that supplier goods and services are often imported. When asked, “What percent of your Suppliers are from the Pensacola region (Escambia and Santa Rosa County),” the Mean response was 20.8%, with a Mean of almost 80% of suppliers being located outside the Pensacola region. Businesses were asked to list the industry sectors that they use as suppliers. The type of business that survey respondents listed as their primary suppliers are provided in Table 7 below.

**Table 8 - Suppliers Used by Local Businesses**

Suppliers Used By Area Businesses
Alum. Steel
Computer Equipment
Computers and Software
Custodial supplies
Depot level repair on aircraft and parts
Electronic Parts
FAA repair stations
Food Service
Food Wholesalers
Gulf South Medical Supplies
Insurance Companies
Manufacturers
Medical Supplies
Office supplies
Oil/lube/special tools
Property and Casualty Insurance Companies
Steering and suspension parts
Telecommunication
W/D's

Firms were asked, “Why do you use suppliers that are located outside the Pensacola region.” The reasons most frequently given were that suppliers were not available locally, and pricing. Other reasons cited by survey respondents included: Directed by government contract, Lack of customer service and poor selection, National contract.

Firms were asked “What types of suppliers would you like to see locate in the Pensacola area.” Suppliers that local firms who responded to the survey mentioned that they would like to see locate in Pensacola are listed in Table 8 below.

**Table 9 - Suppliers That Local Firms Would Like to see Locate in Pensacola**

Suppliers Wanted
A good office supply store that doesn't warehouse what you need.
Business that are FAA certified
Certified FAA repair stations or similar facilities
Computer equipment is limited, and prices are too expensive
Computers and Software companies

Suppliers Wanted
HVAC Equipment
Local Insurer for Independent Agents
Manufacture of Aviation Parts
Manufacture of Electronic Parts
Medical Supplies
Metals
Property and Casualty Insurance companies
Steering and suspension parts
Telecommunications

## Factors Influencing Business Location Decision

To provide an indication of the determinants of business location decisions, businesses were asked, “What factors were most important in your decision to locate your business in Pensacola.” The factors cited as most important were Availability of skilled workforce, followed by Quality of Life, Labor Cost, and Location next to other companies. Table 9 below provides their responses in descending order of stated importance.

**Table 10 - Factors Influencing Business Location Decision**

What factors were most important in your decision to locate your business in Pensacola? 1= Very Important; 2=Important; 3=Somewhat Important; 4=Not Important	
Factor	Mean Response
Availability of skilled workforce	1.44
Quality of life	1.60
Labor cost	1.66
Location next to other companies	2.22
Taxes	2.22
Education opportunities	2.22
Public utilities and services	2.33
Government programs (assistance, incentives)	2.33
Market access	2.33
Land (zoning, cost, availability)	2.44
Permit processes	2.55
Supply access (raw materials, components)	2.55
Business services (financial, legal, research)	2.77



**What factors were most important in your decision to locate your business in Pensacola?**

**1= Very Important; 2=Important; 3=Somewhat Important; 4=Not Important**

Capital	2.88
Air Transportation	3.11
Road, Rail Transportation	3.11

## Competitive Advantages Of Doing Business In Pensacola

To provide an indication of what local firms considered to be the competitive advantages of doing business in Pensacola as opposed to another region, firms were asked: “Please rate the following factors, indicating whether you consider them to be an advantage or disadvantage of doing business in the Pensacola region as opposed to another location.” Quality of life and labor costs were rated the biggest advantages offered by the Pensacola region. Access to suppliers, education and training opportunities, and air transportation were cited most often as disadvantages of locating a business in Pensacola. Survey responses are provided in Table 10 below. The lower the Mean response, the more of an advantage this region offered for the factor.

**Table 11 - Advantages Pensacola Offers to Businesses**

**We would like to know what you feel are the competitive advantages or disadvantages of doing business in the Pensacola region as opposed to another location. Please rate the following factors, indicating whether you consider them to be an advantage or disadvantage.  
1=Major Advantage, 2=Advantage, 3=No Effect, 4=Disadvantage, 5=Major Disadvantage**

<b>Factor</b>	<b>Mean Response</b>
Quality of life	1.50
Labor costs	2.09
Infrastructure	2.63
Energy costs	2.63
Business attitude of local government	2.63
Access to customers	2.72
Local taxes and regulations	2.72
Zoning and land use	2.81
Road, Rail Transportation	2.90
Capital availability	3.09
Availability of skilled workforce	3.18
Access to research facilities	3.18
Air Transportation	3.18

We would like to know what you feel are the competitive advantages or disadvantages of doing business in the Pensacola region as opposed to another location. Please rate the following factors, indicating whether you consider them to be an advantage or disadvantage.

1=Major Advantage, 2=Advantage, 3=No Effect, 4=Disadvantage, 5=Major Disadvantage

Factor	Mean Response
Education and training opportunities	3.27
Access to suppliers	3.36

# Appendix

## Glossary Of Terms

Term	Definition
Analysis Of Economic Impact	An economic impact analysis identifies the economic contribution of a single event (e.g. injection of tourist dollars for a particular tourist attraction within a specified region) to the remaining industry sectors within the same region.
Business Climate	Indicates how state, regional and local policies, relationships and local communities support business development.
Business Recruitment	The process undertaken to market your community to prospective businesses (may include visiting with companies at trade shows, hosting familiarization tours, responding to inquiries, sending printed collateral, etc.)
Business Retention	Programs geared toward insuring the success of existing industry. Usually targeted to “at risk” industries.
Clusters	Geographic concentrations of interdependent, complementary and/or competing businesses in related industries that trade with each other.
Direct Effects	The effects of stimuli on economic activity are broken down into three components: direct, indirect, and induced. Direct effects are the changes in the industries to which a final demand change (the stimulus being measured in the study) was made. Industries producing goods and services for consumption purchase goods and services from other producers for final use (final demand).
EDC/EDO/EDA	Economic Development Corporation, Economic Development Organization, Economic Development Alliance. These acronyms are used to refer to the non-profit entity that your community has tasked with implementing an economic development strategy.
Employment	Employment includes total wage and salary employees as well as self employed jobs in a region. It includes both full-time and part-time workers and is measured in annual average jobs. Data used to determine employment are ES202, Regional Economic Information System (REIS), and County Business Patterns.
Enterprise Zone	A Federal or State designation that allows companies locating in the zones to receive special tax credits.
Final Demand	Final demands consist of purchases of goods and services for final consumption as opposed to an intermediate purchase where the good will be further remanufactured.
Incentives	Grants, loans, tax breaks or other arrangements (typically monetary in nature) used to attract and retain businesses that are moving or expanding. Such inducements are leveraged at the state and local levels.
Indirect Business Taxes	Indirect business taxes consist of excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses. These taxes occur during the normal operation of businesses but do not include taxes on profit or income. Indirect business tax numbers are derived from U.S. Bureau of Economic Analysis Gross State Product data.
Indirect Effects	The effects of stimuli on economic activity are broken down into three components: direct, indirect, and induced. Indirect effects are the changes in inter-industry purchases as they respond to the new demands of the directly affected industries. These indirect purchases continue until leakage from the region stop the cycle.

Term	Definition
Induced Effects	The effects of stimuli on economic activity are broken down into three components: direct, indirect, and induced. Induced effects typically reflect changes in spending from households as income increases or decreases due to the changes in production.
Industrial Park	A tract of land designated and zoned for industrial development. Most industrial parks seek to bring together multiple companies in a “neighborhood” style setting.
Infrastructure	A community’s existing transportation, communication and utility network.
Input-Output Model	A regional economic analysis begins by identifying the relationships among different sectors in a region and then applying the appropriate multipliers in order to determine the amount of impact a change in input to one industry sector will cause in the output of that sector and subsequent sectors. This multiplying affect demonstrates how one dollar is spent and re-spent within the same region. More specifically, regional multipliers can be used to approximate the changes in output, income and employment in all industry sectors resulting from a change in spending in one sector.
Institutions	A type of final demand sector. Includes personal consumption expenditures or purchases made by households; federal, state, and local government purchases; investment purchases; and trade.
Labor Income	The terms Labor Income and wages are used interchangeably in this study. Labor Income includes changes in employee compensation and proprietor income resulting from the change in final demand measured by the study. Employee compensation is wage and salary payments as well as benefits including health and life insurance, retirement payments, and any other non-cash compensation. It includes all income to workers paid by employers. Proprietary income consists of payments received by self-employed individuals as income. This is income recorded on Federal Tax Form 1040C. Proprietary income includes income received by private business owners, doctors, lawyers, and so forth. Any income a person receives for payment of self-employed work is counted. Income estimates are derived using ES202, County Business Patterns and Regional Economic Information System (REIS) data.
Margins	Represents the difference between producer and purchaser prices. Producer prices are the prices of the goods at the site of production for commodity industries. Purchaser prices are prices paid by the end user of the good or service at a retail store.

Term	Definition
Metropolitan Statistical Area (MSA)	<p><b>What is a Metropolitan Statistical Area?</b></p> <p>The general concept of a metropolitan area (MA) is one of a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that nucleus.</p> <p>Each MA must contain either a place with a minimum population of 50,000 or a Census Bureau-defined urbanized area and a total MA population of at least 100,000. A MA comprises one or more counties. A MA may also include one or more outlying counties that have close economic and social relationships with the central county. An outlying county must have a specified level of commuting to the central counties and also must meet certain standards regarding metropolitan character, such as population density, urban population, and population growth.</p> <p>Primary Metropolitan Statistical Area (PMSA)</p> <p>If an area that qualifies as an MA has more than one million persons, primary metropolitan statistical areas (PMSA) may be defined within it. PMSAs consist of a large urbanized county or cluster of counties that demonstrate very strong internal economic and social links, in addition to close ties to other portions of the larger area. When PMSAs are established, the larger area of which they are component parts is designated a consolidated metropolitan statistical area (CMSA).</p> <p>Metropolitan Statistical Area (MSA)</p> <p>Metropolitan statistical areas (MSAs) are relatively freestanding MAs and are not closely associated with other MAs. These areas typically are surrounded by nonmetropolitan counties.</p>
Multipliers	Industries respond to meet final demands directly or indirectly by supplying goods and services to industries responding directly. Each industry that produces goods and services generates demands for other goods and services. These demands ripple through the economy, multiplying the original economic impact.
Output Impact	Total Industry Output is the value of production by industry for an annual calendar year production. Output is measured either by the total value of purchases by intermediate and final consumers, or by intermediate outlays plus value added. Output can also be thought of as value of sales plus or minus inventory. Most output data is from the Bureau of Economic Analysis output series and the Annual Survey of Manufacturers. Construction output is derived from the current Annual Survey of Construction Put-In-Place. State estimates are from the Census and Survey of Construction Activity.
Prospect	Term used to refer to a company that is considering your community for expansion/relocation.
Regional Purchase Coefficients (Rpc)	Ratios representing the portion of regional demands purchased from local producers. RPC's are used to estimate the trade flows of the model before multipliers are generated. The portion of the specific impact that is imported will not have an indirect or induced effect.
Site	A tract of land with varying levels of infrastructure that has been targeted for economic development.

Term	Definition
Site Selection	The process by which firms find new locations for business facilities or expansions of their operations.
Site Selection Consultant	A third-party specialist hired by firms to assist them in identifying the best communities and sites for their project.
Smart Growth	Describes the efforts of communities across the United States to manage and direct growth in a way that minimizes damage to the environment, reduces sprawl, and builds livable towns and cities.
State And Local Government Taxes	<p>State and local government income and expenditures by specific category come from the Annual Survey of State and Local Government Expenditures and include the following:</p> <ul style="list-style-type: none"> <li>Property Tax</li> <li>Total Sales Tax</li> <li>Alcoholic Beverage Tax</li> <li>Amusement License</li> <li>Corporate License</li> <li>Hunting</li> <li>Motor Vehicle Tax</li> <li>Motor Vehicle Operators</li> <li>PU License</li> <li>Occupational Business License</li> <li>Other License</li> <li>Individual Income Tax</li> <li>Corporate Income Tax</li> <li>Death and Gift Tax</li> <li>Document Stock Tax</li> <li>Severance Tax</li> <li>Taxes NEC</li> <li>Interest Earnings</li> <li>Fines Forfeits</li> <li>Rents</li> <li>Royalties</li> <li>State Education Transfers</li> <li>Local Education Transfers</li> <li>State Local Social Security</li> <li>Federal Grants in Aid</li> <li>State and Local Borrowing</li> <li>Corporate Interest</li> <li>Personal Interest</li> <li>Federal Education Transfers</li> <li>Total Education Operations</li> <li>State and Local Sales</li> <li>State and Local Non-education Purchases</li> <li>Federal Transfers Data</li> </ul>
Target Industry	An industry (or industries) that, based on the long-range vision for your community and your community's existing strengths, the economic development organization is working to grow in your area.
Tax Impacts Report	This report describes taxes related to the chosen impact analysis. Income information is combined with tax information to estimate taxes generated by a change in final demand. These estimates are based on the average for all industries within the model; the average taxes associated with each household income class; the average taxes and transfers associated with each of the government institutions defined by the model. See "State and Local Government Taxes"



Term	Definition
Total Economic Output	The effects of stimuli on economic activity are broken down into three components: direct, indirect, and induced. The total effect is the sum of direct, indirect, and induced effects, and is a measure of total inter-industry sales and purchases.
Transportation	Moving people and goods from one place to another. With economic development, transportation infrastructure is important in that companies must be able to get their product to market in a timely and cost-effective manner.
Underemployment	Occurs when you have a portion of your labor force working in jobs below their earning potential.
Value Added	Payments made by industry to workers, interest, profits and indirect business taxes.
Workforce Development	Refers to community efforts to train individuals for specific jobs or industries.

## Tax Revenue Estimates

**Table 12 - Estimated Tax Revenues Generated by Commerce Park Construction and Business Spending**

Level of Government	Transfers	Employee Compensation	Proprietary Income	Household Expenditures	Corporations	Indirect Business Taxes	Total
Federal Government Non-Defense	Corporate Profits Tax				\$4,005,911		\$4,005,911
	Indirect Bus Tax: Custom Duty					\$3,832,716	\$3,832,716
	Indirect Bus Tax: Excise Taxes					\$1,222,473	\$1,222,473
	Indirect Bus Tax: Fed Non-Taxes					\$376,006	\$376,006
	Personal Tax: Estate and Gift Tax						\$0
	Personal Tax: Income Tax			\$14,747,589			\$14,747,589
	Personal Tax: Non-Taxes (Fines- Fees			\$145,731			\$145,731
	Social Ins Tax- Employee Contribution	\$5,593,103	\$527,861				\$6,120,964
	Social Ins Tax- Employer Contribution	\$5,787,991					\$5,787,991
Federal Government Total		\$13,419,957	\$11,381,094	\$527,861	\$14,893,321	\$4,005,911	\$5,431,196
State/Local Government	Corporate Profits Tax				\$408,654		\$408,654
	Dividends				\$6,286		\$6,286
	Indirect Bus Tax: Motor Vehicle License					\$117,280	\$117,280
	Indirect Bus Tax: Other Taxes					\$776,361	\$776,361
	Indirect Bus Tax: Property Tax					\$4,895,992	\$4,895,992
	Indirect Bus Tax: S/L Non-Taxes					\$988,339	\$988,339
	Indirect Bus Tax: Sales Tax					\$7,665,172	\$7,665,172
	Indirect Bus Tax: Severance Tax					\$30,038	\$30,038
	Personal Tax: Estate and Gift Tax						\$0
	Personal Tax: Income Tax						\$0
	Personal Tax: Motor Vehicle License			\$197,417			\$197,417
	Personal Tax: Non-Taxes (Fines- Fees			\$416,210			\$416,210
	Personal Tax: Other Tax (Fish/Hunt)			\$10,859			\$10,859
	Personal Tax: Property Taxes			\$75,327			\$75,327
	Social Ins Tax- Employee Contribution	\$39,531					\$39,531
	Social Ins Tax- Employer Contribution	\$151,884					\$151,884
State/Local Government Total		\$3,805,793	\$191,415	\$0	\$699,813	\$414,940	\$14,473,182
Total		\$11,573,211	\$527,861	\$15,593,134	\$4,420,852	\$19,904,377	\$52,019,435

December 9, 2015

Escambia County  
Neighborhood & Human Services Division  
221 Palafox Place, Suite 305  
Old County Courthouse  
Pensacola, Florida 32502

Attn: Mr. Glenn Griffith  
Brownfields Coordinator  
850-595-3538  
gcgriffi@co.escambia.fl.us

Re: Status of OU-1 Contaminated Soil Remedy at  
Escambia Treating Company Superfund Site  
3910 North Palafox Street  
Pensacola, Florida  
Terracon Project No. EA157011

Dear Mr. Griffith:

In accordance with our proposal dated October 20, 2015, Terracon Consultants, Inc. (Terracon) has prepared this letter report regarding the status of the contaminated soil operable unit (OU-1) at the Escambia Treating Company Superfund Site (ETC). It is our understanding that Escambia County is considering acquiring the site. As such, the County asked Terracon to review available information and prepare a summary report regarding the status of the OU-1 Remedy at the site.

## 1.0 SITE HISTORY

The site is located at 3910 North Palafox Street, Pensacola, Escambia County, Florida, and consists of an approximately 31-acre property that was formerly occupied by the Escambia Treating Company (ETC), a wood treating facility. The United States Environmental Protection Agency (EPA) placed the former ETC site on the Superfund National Priorities List (NPL) in 1994 because of contaminated soil and ground water resulting from facility operations. EPA and the Florida Department of Environmental Protection (FDEP) have investigated site conditions and taken steps to clean-up the site in order to protect people and the environment from contamination. Contaminants of concern found on or immediately adjacent to the facility property included creosote, pentachlorophenol (PCP), polycyclic aromatic hydrocarbons (PAHs), naphthalene, and dioxin. The ETC NPL site commonly includes the 31-acre former ETC facility, as well as four nearby former residential areas as detailed below.



## Status of OU-1 Contaminated Soil Remedy

Escambia Treating Company ■ Pensacola, Florida  
December 9, 2015 ■ Terracon Project No. EA157011



- Former Escambia Treating Company Property (3 parcels comprising a total of approximately 31 acres);
- Former Rosewood Terrace Property (multiple former residential parcels comprising a total of approximately 17 acres);
- Former Oak Park/Escambia Arms Property (multiple former residential parcels comprising a total of approximately 30 acres);
- Former Clarinda Triangle Properties (multiple former residential parcels comprising a total of approximately 30 acres); and
- Former Herman-Pearl Properties (multiple former residential parcels comprising a total of approximately 20 acres).

The approximate site boundaries are shown on the attached **Figure 1**. Site investigations and cleanup activities have focused on two areas, which EPA refers to as OU-1 (contaminated soil) and OU-2 (contaminated groundwater). The OU-1 area is shown on **Figure 2**.

In summary, contaminated soil has been placed in an engineered containment area located on-site. Operation and maintenance activities for the cap and containment system are ongoing. Interim groundwater assessment/remediation activities are also ongoing.

## 2.0 FILE REVIEW AND INTERVIEWS

Terracon reviewed the following reports in order to prepare an up-to-date summary of the OU-1 Remedy.

- *Interim Remedial Action Report*  
*Escambia Wood Treating Company Superfund Site*  
*Operable Unit 1 Soils*  
U.S. Environmental Protection Agency  
September 2010
- *Final Operations and Maintenance Plan*  
*Escambia Wood Treating Company Superfund Site*  
*Operable Unit 1 Soils*  
U.S. Environmental Protection Agency  
March 2012

## Status of OU-1 Contaminated Soil Remedy

Escambia Treating Company ■ Pensacola, Florida  
December 9, 2015 ■ Terracon Project No. EA157011



- *Third Five-Year Review Report*  
*Escambia Wood Treating Company Superfund Site*  
Skeo Solutions  
September 2012
- *Annual Groundwater Sampling Investigation*  
*Escambia Wood Treating Company Superfund Site*  
U.S. Environmental Protection Agency  
July 2015
- *Annual Operation and Maintenance Report*  
*Operable Unit 1 Soils*  
*June 2014 through May 2015*  
Arcadis U.S., Inc. and Seneca SCMC LLC  
July 2015

In addition to the file reviews, Terracon completed the following tasks to gather additional information regarding the OU-1 Remedy:

- Interviewed the USEPA Project Manager (Eric Spalvins)
- Attempted to interview the FDEP Project Manager (Nancy Murchison). As of the date of this letter, Ms. Murchison has not returned our telephone calls.
- Visited the site. However, the on-site operations & maintenance contractor (SCMC LLC) was unwilling/unable to provide a site tour or a discussion of the on-site wastewater treatment system.

### 3.0 SUMMARY OF OU-1 REMEDY

In October 1991, EPA began a removal action to address immediate risks of exposure and to stabilize the site. EPA excavated about 225,000 cubic yards of contaminated soil and stored it under a 60-mil high density polyethylene (HDPE) liner on-site. The former process area and a former wastewater pond/landfill were excavated to a depth of approximately 40 feet. The removal action was completed in 1992.

An Interim Remedial Action for OU-1 was selected in a 1997 Record of Decision (ROD). The Interim ROD called for the permanent relocation of 358 households from the neighborhoods north of the facility (Rosewood Terrace, Oak Park, and Escambia Arms), and the Goulding neighborhoods south of the facility (Herman and Pearl Streets). The relocation was carried out as part of the National Relocation Pilot Project. The relocation occurred from November 1997 to August 2005. In 2006, the Clarinda Triangle neighborhood was added to the Interim Remedy

## Status of OU-1 Contaminated Soil Remedy

Escambia Treating Company ■ Pensacola, Florida  
December 9, 2015 ■ Terracon Project No. EA157011



and an additional 46 households were permanently relocated from December 2006 to 2009. In total, more than 400 households (500 people) were permanently relocated, and about 70 acres of land was acquired by the Federal Government.

The Final Remedial Action for OU-1 was selected in a 2006 ROD. The overall cleanup strategy for the final OU-1 Remedy was to treat principal threat wastes through solidification/stabilization and to permanently isolate surface and subsurface soil contaminated above the selected cleanup levels in an on-site containment system to protect both human and ecological receptors from exposure by direct contact or leaching to groundwater. Construction activities began in September 2007 and concluded in January 2010. The major components of the OU-1 Remedy included:

- Excavation of approximately 550,000 cubic yards of contaminated soil at the former facility and surrounding former residential areas (as needed).
- Containment of the contaminated soil in an on-site lined cell followed by installation of a multi-layer cap over the containment system.
- Solidification/stabilization of identified principal threat waste to form a sub-cap beneath the multi-layer cap.
- Long-term operation & maintenance of the cap and containment system.
- Long-term monitoring of the containment system.
- Institutional controls to restrict future use of the former facility and surrounding former residential areas.
- Five-year reviews of the remedy to ensure protectiveness is maintained.

The key engineered elements of the ETC OU-1 remedial action include:

- Engineered Containment Cell with Design Life of at Least 100 Years
  - Containment Cell Bottom Liner and Sumps
  - Contaminated Soil Layers
  - Solidified/Stabilized Soil Subcap
  - Containment Cell Cap "Top Liner"
- Subsurface Water Drainage System
- Soil Cover System
- OU-1 Remedy Verification Groundwater Monitoring Wells
- Surface Water Management System

## Status of OU-1 Contaminated Soil Remedy

Escambia Treating Company ■ Pensacola, Florida  
December 9, 2015 ■ Terracon Project No. EA157011



The phase of the Superfund program that follows Remedial Action is called Operation and Maintenance (O&M). O&M measures are designed to maintain the remedy at a site to ensure that the remedy remains protective of human health and the environment. Because the ETC OU-1 Remedy contains waste in an on-site containment and involves institutional controls, O&M is required indefinitely. The primary goal of O&M activities at the ETC Site is to ensure that the remedy/system remains effective, and to protect the containment cell and liner system during future reuse or redevelopment of the site. The principal O&M tasks include inspections of the stormwater system, inspection for erosion on slopes, inspection for vegetative cover, maintaining vegetative cover and mowing grass, inspection of the fences for security, and reporting. The O&M tasks are currently completed by SCMC LLC.

The Final O&M Plan dated March 2012 provides details regarding the required tasks and schedule. The most recent Annual Operation and Maintenance Report (July 2015) documented a few minor issues as follows. Some minor vandalism (fence damage and dumping of debris) was observed and remedied. Minor partial blockages of three stormwater outlet pipes due to iron fouling and/algal build up was observed, but no immediate action was required. The soil cover system was reported to be in good condition with no significant erosion. The OU-1 remedy verification wells (CCPMW-001 and CCPMW-002) (see **Figure 3**) were reported to be in good condition. Water levels in the performance monitoring wells are measured quarterly to ensure a 5 foot separation between the bottom of the OU-1 soil cell and the water table.

The groundwater elevation was higher than normal following the exceptionally heavy rain event that occurred in late April 2014 (>20 inches in 24 hours). Since February 2014, the separation distance between the bottom of the OU-1 soil cell and the water table was less than 5 feet for 9 of the 14 measurements recorded. In fact, the water table was higher than the bottom of the containment cell during two of the measuring events. In accordance with the Final O&M Plan, "If the water table elevation rises above 50 feet mean sea level, EPA shall be notified additional monitoring may be required." EPA was notified of the elevated water table conditions and additional monitoring was conducted.

The O&M Plan requires the remedy verification monitoring wells to be monitored for leaks from the containment cell. Samples collected in November 2014 from remedy verification well CC-PMW-002 showed significant increases since the 2013 baseline sample event in concentrations of 2-methylnaphthalene, dibenzofuran, and naphthalene. Analytical results from the November 7, 2014 sample event documented concentrations of seven analytes which exceeded groundwater cleanup target levels (GCTLs) in well CC-PMW-002 (1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, carbazole, dibenzofuran, pentachlorophenol, and naphthalene). To confirm the elevated contaminant concentrations reported in the November 2014 groundwater sample event, monitor wells CC-PMW-001 and CC-PMW-002 were resampled in June 2015. Groundwater sample results from the June 2015 sample event indicated all analyzed parameters, except carbazole, to be below laboratory detection levels or below GCTLs. According to the Annual Operation and Maintenance Report (July 2015), the



elevated contaminant concentrations documented in the November 2014 sample event could be a result of the record rain fall/high water table observed during the Spring of 2014 combined with the filling of SWMU10 (adjacent groundwater contaminant source area) with stormwater.

There are four sump vaults within the containment area that are designed to collect leachate from the enclosed soil. The sumps are about 18 inches deep and are intended to provide temporary leachate storage. The leachate levels in the containment cell sumps are measured using submersible water level meters. If the leachate level from the bottom of the pipe exceeds 18 inches, the sump is emptied into an on-site treatment system that utilizes granular activated carbon to treat the water prior to discharging to an on-site infiltration gallery. If leachate accumulation within the sumps increases dramatically, it may indicate that water is entering the containment system. The potential for a leak shall be investigated, and EPA shall be notified if a leak in the containment system is suspected. Further details regarding the O&M of the leachate collection and treatment system were not provided in the Final O&M Plan (March 2012) or in the Annual O&M Report (July 2015).

#### **4.0 SUMMARY AND CONCLUSIONS**

Based upon a review of available reports/data and interviews with regulatory personnel, the OU-1 Remedy appears to be functioning as intended. However, it is important to note that detailed information regarding the design, operation, and maintenance of the leachate collection and treatment system was not available for review.

Initially, more than 400 households (500 people) were permanently relocated and about 70 acres of land was acquired by the Federal Government. The former neighborhoods are fenced or barricaded, and trespassing and illegal dumping has been greatly reduced by the access controls.

Both the interim and final OU-1 soil remedies are reportedly functioning as designed. A subsurface containment cell contains about 550,000 cubic yards of contaminated soils collected from the former facility and the surrounding neighborhoods, preventing both direct exposure and ground water contamination. Leachate is collected from the containment cell and treated on-site. Current land use is commercial/industrial and consistent with the remedy. Physical access controls are in place for most of the site. Institutional controls/restrictive covenants have been implemented at the former neighborhoods to ensure long-term protection. The exposure assumptions, toxicity data, and cleanup levels remain valid.

According to the Third Five-Year Report (September 2012), the OU-1 Remedy currently protects human health and the environment because direct exposure has been eliminated, contaminated soils are contained, and exposure pathways have been mitigated through access controls. Reportedly, the integrity of the Soil Cover, Stormwater Collection System, and

Security Fencing is currently intact. The engineered containment cell reportedly has a design life of at least 100 years.

The restrictions on development and construction are more stringent for the parcels within the footprint of the containment cell. Developers and construction contractors will be required to submit their construction plans to the FDEP for review prior to any construction within the containment cell footprint. The review will evaluate whether the planned structures will comply with construction restrictions. The containment cell and capping system have been designed to accommodate redevelopment over the capped area with certain restrictions.

Elevated groundwater levels were reportedly observed in remedy verification monitoring wells after an exceptionally heavy rain event that occurred in late April 2014 (>20 inches in 24 hours). EPA was notified of the elevated water table conditions and additional monitoring was conducted.

Analytical results from the November 7, 2014 sample event documented concentrations of four analytes which exceeded groundwater cleanup target levels in one of the two remedy verification monitoring wells; one analyte also exceeded Florida NADCs. Groundwater sample results from the June 2015 sample event indicated all analyzed parameters, except Carbazole, to be below laboratory detection levels or below GCTLs. The elevated contaminant concentrations documented in the November 2014 sample event could be a result of the record rain fall/high water table observed during the Spring of 2014 combined with the filling of SWMU10 (adjacent groundwater contaminant source area) with stormwater.

## **5.0 RECOMMENDATIONS**

Assuming that Escambia County intends to acquire the site, the following recommendations are provided.

- Develop long term, institutional controls (restrictive covenants and zoning changes) for the 31-acre ETC property to protect the containment cell and restrict future land use.
- Continue operation and maintenance of the OU-1 Remedy in accordance with the approved O&M Plan (March 2012).
- Request and obtain a written opinion from EPA/FDEP regarding possible effects of the elevated water levels on the containment cell observed after the April 2014 storm event.

- Request and obtain a set of as-built plans from EPA/FDEP showing the details of the leachate collection and treatment system.
- Request and obtain a written O&M Plan from EPA/FDEP for the leachate collection and treatment system.

Terracon appreciates the opportunity to be of continued service to you. If you have any questions pertaining to the material presented herein, please contact the undersigned at (850) 477-0454.

Sincerely,  
**Terracon Consultants, Inc.**



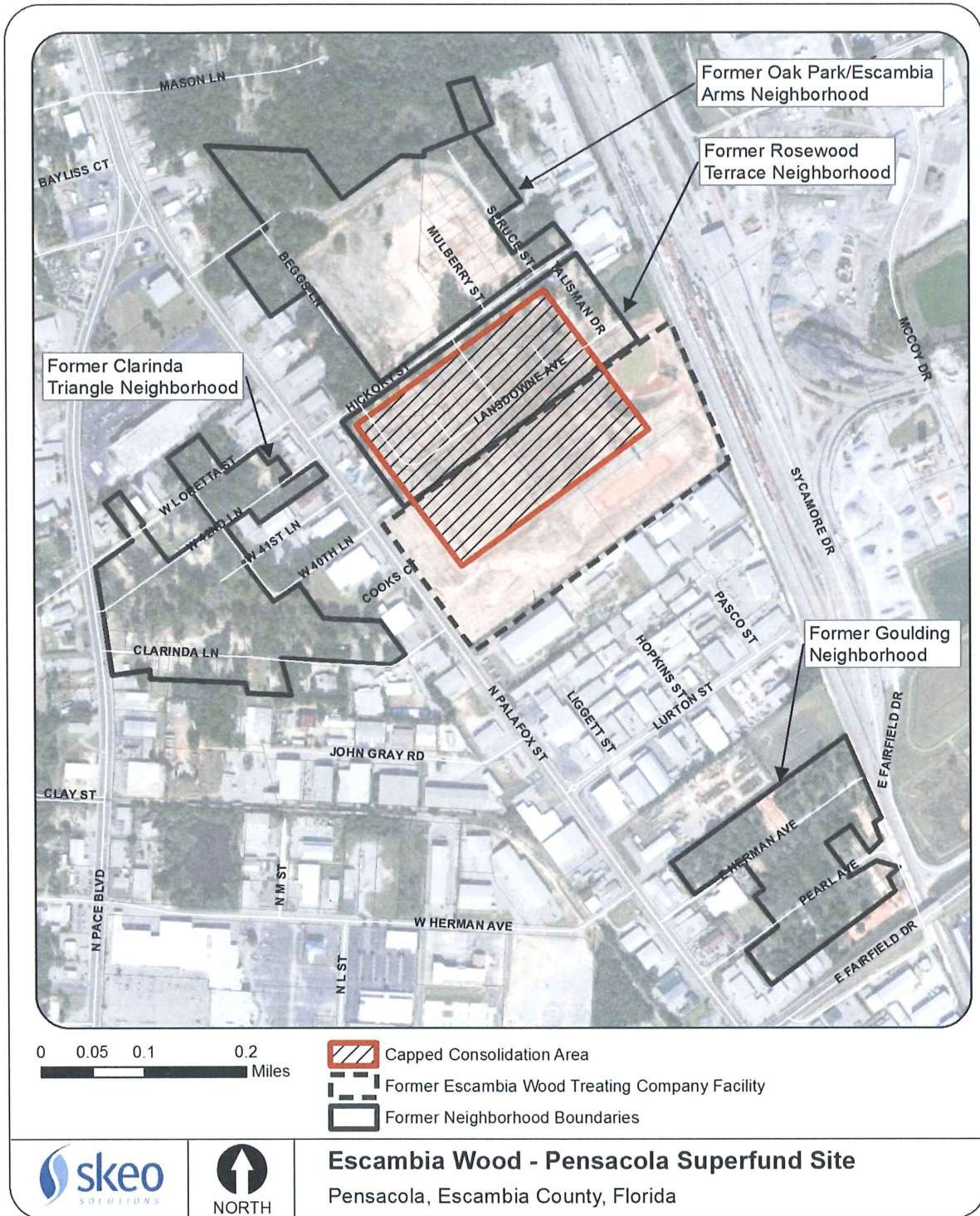
Paul S. Safko, P.G.  
Environmental Dept, Manager



Frank M. Nowicki  
Senior Project Professional

Attachments: Figure 1 – Detailed Site Map (Skeo Solutions, September 2012)  
Figure 2 – Institutional Control Base Map (Skeo Solutions, September 2012)  
Figure 3 – OU-1 Remedy Verification Wells (Black & Veatch, November, 2012)

Figure 1: Site Map

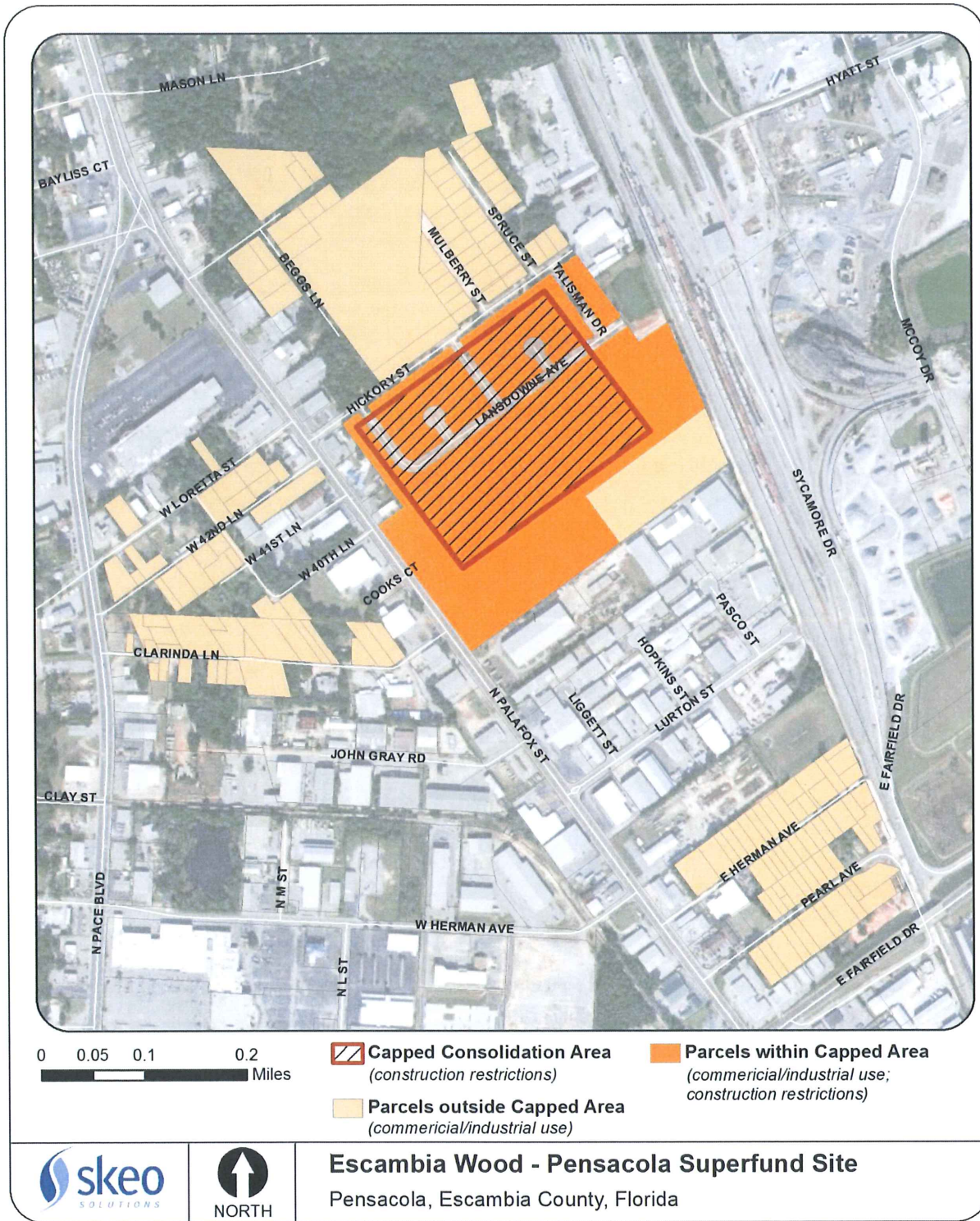


Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site, and is not intended for any other purpose.



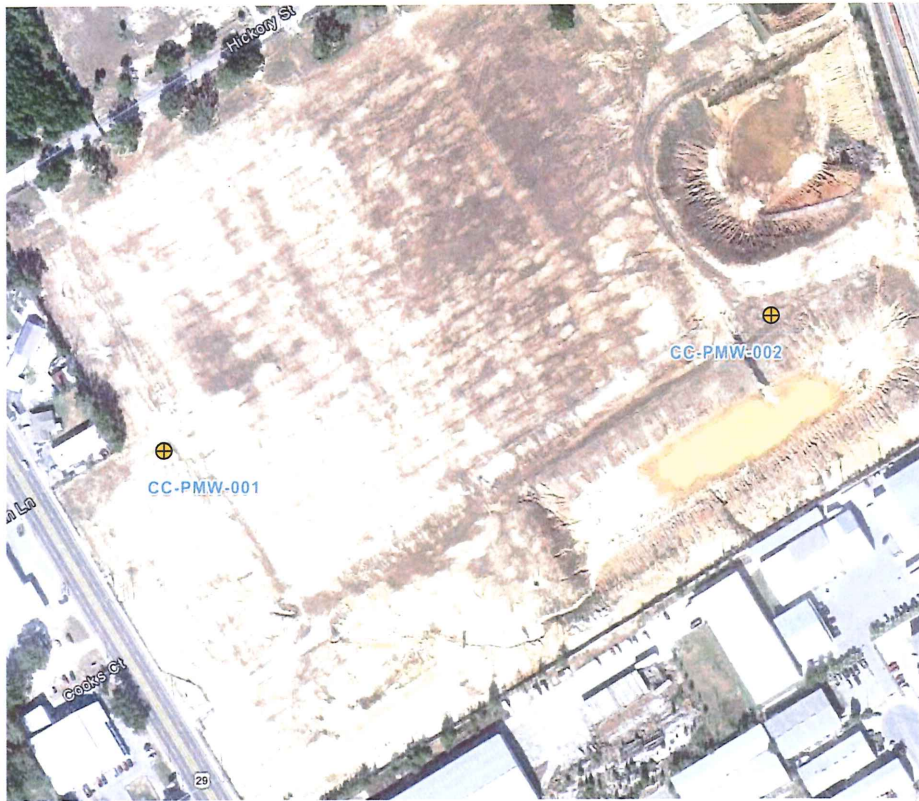


Figure 2: Institutional Control Base Map



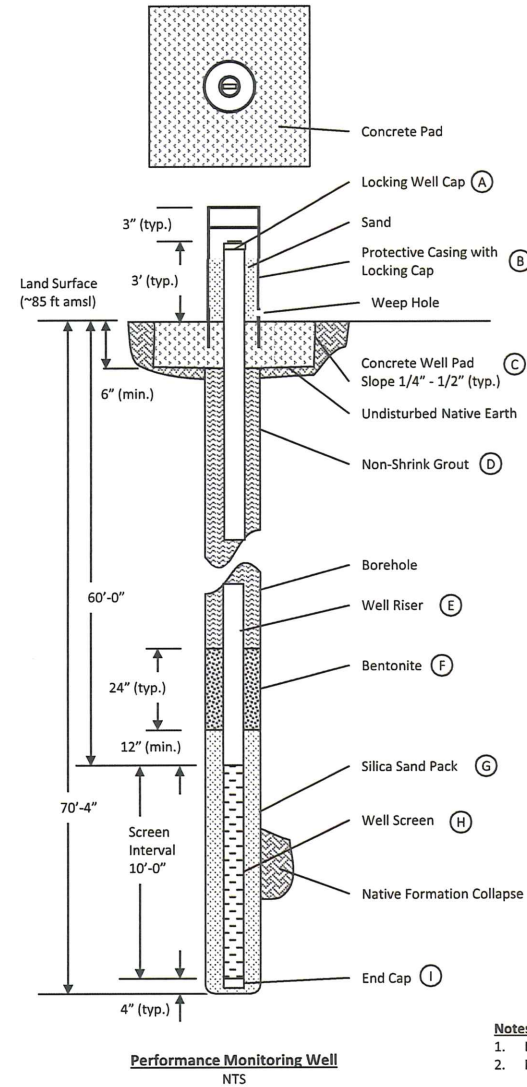
Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site, and is not intended for any other purpose.





**SYMBOL LEGEND**

- ⊕ Proposed Performance Monitoring Well



**Notes:**

1. Install threaded SS end caps
2. Non-shrink grout to be CETCO Pure Gold or equivalent

**Monitoring Well Material List**

Part	Size	Item	Description
A	2"	Locking Well Cap	PVC, Compression
B	4" x 4" Square	Monument Cover	Steel, painted, Locking
C	3' x 3' X 4"	Concrete Pad	3,000 psi, Welded Wire Fabric Reinforcement
D	-	High Solids Bentonite Grout	N/A
E	2"	Riser	SS304, ASTM F480 MPT x FPT
F	-	Bentonite	Chips
G	-	Sand Pack	20/30 Silica Sand; Cu < 2.5
H	2"	Well Screen	0.01 Slot Continuous Wire (Johnson Vee-Wire or equivalent), SS304, SH 40, ASTM F480 MPT x FPT
I	2"	End Plug	SS304, ASTM F480 MPT x FPT



Drawn By:  
EMS/TT

Client:  
U.S. EPA Region 4, RAC

Date:  
11/19/12

Rev:  
1.0

Project #:  
049036

Title:  
**Locations and Construction of Performance Monitoring Wells**  
Escambia Wood treating Site, Pensacola, Florida

Figure  
3



# Phase II Environmental Site Assessment

## OAK PARK/ESCAMBIA ARMS PROJECT AREA FORMER SOIL STOCKPILE SIGNIFICANT DATA GAP PENSACOLA, ESCAMBIA COUNTY, FLORIDA

February 7, 2012

Terracon Project No. EA117041-11



**Prepared for:**

City of Pensacola Office of Sustainability  
222 West Main Street  
Pensacola, Florida 32502

**Prepared by:**

Terracon Consultants, Inc.  
Pensacola, Florida

Offices Nationwide  
Employee-Owned

Established in 1965  
terracon.com

**Terracon**

Geotechnical ■ Environmental ■ Construction Materials ■ Facilities



February 7, 2012

City of Pensacola Office of Sustainability  
222 West Main Street  
Pensacola, Florida 32502

Attn: Ms. Cynthia Williams  
P: 850-435-1603  
E: cwilliams@ci.pensacola.fl.us

Re: Phase II Environmental Site Assessment  
Oak Park/Escambia Arms Project Area  
(Former Soil Stockpile Significant Data Gap)  
Pensacola, Escambia County, Florida  
Terracon Project No. EA117041-11

Dear Ms. Williams:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase II Environmental Site Assessment report for the above-referenced site. This investigation was performed in accordance with Terracon Proposal No. EA117041-9 and Agreement for Services, dated November 16, 2011.

We appreciate the opportunity to be of service to you on this project. If there are any questions regarding this report or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,

**Terracon Consultants, Inc.**

Paul S. Safko, P.G.  
Environmental Department Manager

Peter H. Dohms, P.G.  
Senior Consultant



Terracon Consultants, Inc. 9900 N. Davis Highway Pensacola, FL 32514  
P [850] 477 0454 F [850] 477 0534 terracon.com

Geotechnical



Environmental



Construction Materials



Facilities

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- Appendix A Soil Sampling Protocol and Sample Processing Protocol  
Appendix B Laboratory Analytical Report and Chain-of-Custody  
(Level IV QA/QC Report in Appendix B on companion Compact Disk)  
Appendix C EPA-Furnished Information on the Incremental Soil Sampling Method  
Appendix D Photo Logs; Incremental Soil Sampling; Soil Processing  
Appendix E United States Environmental Protection Agency, Files for Former Soil Stockpile Management during Escambia Treating Company OU-1 Cleanup

**PHASE II ENVIRONMENTAL SITE ASSESSMENT**  
**Oak Park/Escambia Arms Project Area**  
**(Former Soil Stockpile Significant Data Gap)**  
**Pensacola, Escambia County, Florida**

Terracon Project No.: EA117041-11  
Report Date: February 7, 2012

## **1.0 INTRODUCTION**

At the request of Ms. Cynthia Williams of the City of Pensacola Office of Sustainability, Terracon Consultants, Inc. (Terracon) performed a Phase II Environmental Site Assessment (Phase II ESA) at the above-referenced site. The Phase II ESA was performed in accordance with Terracon Proposal No. EA117041-9 and Agreement for Services, dated November 16, 2011. The purpose of the Phase II ESA was to further investigate the following “significant data gap” associated with the site that was identified in the Phase I Environmental Site Assessment (ESA) previously conducted by Terracon (Project EA117041-3, August 5, 2011):

The Records Review indicates that the Site was used as a “support area” during the recent EPA-funded cleanup of affected soil at the nearby Escambia Treating Company (ETC; during the OU-1 response action). Support area activities included the construction and operation of two “contaminated soil stockpiles” and an associated leachate management area. This had the purpose of temporarily holding affected soils during the construction of the “OU-1 contaminated soil containment cell” at the ETC site. At the conclusion of the use of the soil stockpiles and the liners removal, there was apparently no EPA confirmation sampling completed in the underlying soil.

Based upon the findings of the Phase I ESA, and subsequent correspondence with interested parties, it was determined that additional investigation would be conducted to evaluate if soil and/or ground water at the site have been affected or potentially affected by the above-listed data gap. A detailed regulatory file review, plus soil sampling, were proposed to evaluate the significant data gap.

## **2.0 SITE LOCATION AND DESCRIPTION**

The Oak Park/Escambia Arms project area encompasses 47 parcels of property containing approximately 30 acres. The project area is owned by the United States of America, with the US Army Corps of Engineers as the property manager. It was purchased as one element of the Escambia Treating Company Superfund Site investigation and cleanup. The project area of this investigation is located in Section 8, Township 2 South, Range 30 West, and is depicted on the

## Phase II Environmental Site Assessment

Oak Park/Escambia Arms Project Area

Former Soil Stockpile Significant Data Gap ■ Pensacola, Florida

February 7, 2012 ■ Project No. EA117041-11

United States Geological Survey (USGS) 7.5-minute topographic quadrangle *Pensacola, Florida*, (dated 1994), included as Figure 1. Figure 2 shows the area of this investigation.

The project area is currently unoccupied, but formerly contained a residential neighborhood (Oak Park) and apartment complex (Escambia Arms). During the recent Phase I ESA, the area of the investigation reported herein was identified as having been the site of two “contaminated soil temporary stockpiles” and an associated leachate management facility. A more detailed discussion of the site history is included in the Phase I ESA report, and is summarized in Section 6.0 of this report.

Tasks conducted during the course of this investigation included the following:

- Application to the United States Army Corps of Engineers and the EPA for a License to conduct the field investigation on properties belonging to the United States of America;
- Preparation of a Sampling & Analysis Plan (SAP) and Health & Safety Plan (HASP) to govern field activities;
- Site access arrangements with the local contractor for EPA and the Corps of Engineers;
- Site reconnaissance to define a grid for “incremental soil sampling” collection;
- Collection of three distinct sets of soil samples from 102 grid locations;
- Soil sample processing and volume reduction, with preparation of three composite incremental samples for laboratory testing;
- Soil sample shipment and analysis;
- Evaluation of findings; and,
- Preparation of this report.

### 3.0 GENERAL SITE CHARACTERIZATION

Section 6.0 of this report summarizes the historic file review that was conducted for the former soil stockpile & leachate facility (the significant data gap identified in the Phase I ESA). The former soil stockpile area encompasses a significantly-sized area (approximately 5 acres) and the concern is to define potential “exposure concentrations” of contaminants of concern over a long period of time. Evaluation of these long-term objectives for the project area demonstrated that “incremental soil sampling” would provide a more conservative means of examining long-term exposure risk of future site occupants than would “traditional” (i.e., discrete) soil sampling, while also offering a substantial cost savings. On that basis, it was decided to employ “incremental soil sampling” instead of “discrete soil sample” collection. Appendices “A” and “C” have more detail on this method.

### **3.1 Site Geology and Soils**

According to the geologic references for Escambia County, Florida, the subsurface geology is comprised of Quaternary-aged undifferentiated quartz sands and reworked Citronelle Formation with varying amounts of silt and clay. The Citronelle Formation consists of moderate-reddish-brown deeply weathered fine to very coarse quartz sand and silty sand, with lesser amounts of varicolored typically mottled, lenticular beds of clay and clayey gravel.

According to the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey website, the soil underlying the site is Troup Sand, Level Phase with 0 to 2 percent slopes. The Troup Sands consist of very deep, well drained, very rapid or rapidly permeable soils on uplands in the lower Coastal Plain, formed upon thick sandy sediments.

During this assessment, the main soil type encountered varied from lightly-colored to brightly-colored, silty quartz sand in the 102 soil sampling grid locations. Soil sampling records are included in Appendix A, and the locations of the 102 soil grid nodes are shown on Figure 2.

### **3.2 Site Hydrogeology**

The closest surface water, Bayou Texar, is located approximately one mile east of the site. Based on historical information, shallow ground water flow is generally to the east-southeast. The sandy, water-bearing surficial horizons of the undifferentiated sediments and the Citronelle Formation are equivalent to the hydrogeologic Sand & Gravel Aquifer, the drinking water source for Escambia County. The Sand & Gravel Aquifer is estimated to be approximately 260 feet thick within the study area, and is divided into three zones. These comprise the Surficial zone (from the water table [about 40 feet below ground surface {bgs}] to about 70 feet bgs), the Low Permeability zone (approximately 70 to 140 feet bgs), and the Main Producing zone (about 140 to 310 feet bgs). Based on the nature and location of this data gap, only near-surface soils were tested and no ground water sampling was done.

Beneath the Sand & Gravel Aquifer, a great thickness of low permeability sediments (Alum Bluff Group/Pensacola Clay) underlies the Sand & Gravel aquifer. Directly beneath this confining bed lies the upper limestone of the Floridan Aquifer System, which is saline in Escambia County and therefore is not used as a water supply source.

## **4.0 SOIL ASSESSMENT**

### **4.1 Soil Characterization**

The license from EPA to enter upon the site to conduct soil sampling was obtained on December 12, 2011. Previously, the site had been walked with the representative of J2



## Phase II Environmental Site Assessment

Oak Park/Escambia Arms Project Area

Former Soil Stockpile Significant Data Gap ■ Pensacola, Florida

February 7, 2012 ■ Project No. EA117041-11



Engineering, EPA's local contractor for site care and maintenance, and access arrangements had been completed. The 102 soil sampling grid nodes were laid out on December 16, 2011 and the incremental soil sampling was scheduled for the December 20 - 22 period. Inclement weather and standing water in the sampling grid, however, caused postponement of the incremental sampling. Owing to Christmas-week schedules, the sampling had to be postponed to the week of January 2 - 6, 2012, and the access license from EPA was modified accordingly. Soil sampling was conducted on January 3 - 5, and sample processing and shipping to the lab was completed on January 5, 2012. Appendix A has a detailed description of the soil sampling, and Appendix C contains EPA-supplied information on the Incremental Soil Sampling technique.

At each grid node, three soil samples were collected in the 0-1' bgs interval at distances of one foot north ("A" sample), southwest ("B" sample) and southeast ("C" sample) and separately bagged. Photos 3 and 7 (Appendix D) illustrate sample collection. To avoid the possibility of confusion, separate site entries were conducted for the "A" set, "B" set and "C" set of samples.

Soil characterization was based on the soils recovered from the above-described grid sampling. This necessarily limited the characterization of subsurface soils to the general observation that they are dominated by lightly- to brightly-colored somewhat silty unconsolidated quartz sands, consistent with the Citronelle formation description summarized in Section 3.1 above. No staining or unusual odors were noted during soil sampling.

After completion of the field soil sampling, the three "sets" of samples were transported to the Terracon soil lab in Pensacola, Florida for pre-analytical processing. A detailed description of the pre-analytical soil processing is provided in Appendix A and is summarized as follows:

- Equal volumes were collected at the "A," "B" and "C" locations at each sampling node (i.e., "A," "B" and "C" "sets" of samples);
- In the lab, each set of samples was separately processed; the processing equipment was cleaned after each set of samples was processed;
- The first step of sample processing was to combine the 102 samples of the set being processed;
- The combined soil sample from the set was split in a large-capacity riffle splitter and recombined 3 times to ensure thorough mixing;
- The mixed, recombined sample was next split three times in the large-capacity riffle splitter, reducing the sample to one-eighth of its original volume;
- The one-eighth sample was run through a smaller-capacity riffle splitter and recombined for additional mixing;
- The one-eighth sample was split once in the smaller-capacity riffle splitter, reducing the sample to one-sixteenth of its original volume;
- This one-sixteenth sample was divided between two wide-mouth laboratory-supplied soil sample jars for shipment to Pace Analytical Services.

## 4.2 Soil Sample Analytical Results

As noted above, soil analytical sampling was the principal element of this project. Following the pre-analytical processing, the three composite soil samples were shipped under chain-of-custody to the Pace Analytical Services (Pace) lab in Ormond Beach, Florida for analysis of the following-listed constituents:

- Semi-volatile organic compounds (BNAs – EPA Method 8270);
- Pentachlorophenol (EPA Method 8151); and,
- Dioxin (2,3,7,8-TCDD Equivalent; EPA Method 8290).

In addition, a 1-liter amber bottle of laboratory-supplied, analyte-free water accompanied the shipments (clean sample jars to Terracon; processed samples back to Pace) for analysis by Method 8270 (i.e., a “trip blank”). Level IV QA/QC was employed by Pace. The summary report of their findings is provided in Appendix B (note that the complete 1,231-page QA/QC report is furnished on a compact disk that is included in the original of this report). The analytical test results are summarized on Tables 1 & 2.

Table 1 presents the results of soils analysis for the semi-volatile organic compounds (BNAs – by EPA Method 8270) and pentachlorophenol (EPA Method 8151) for the three “incremental” soil samples (Samples A, B and C, respectively). Only those compounds that were detected by Pace are listed on the Table. Table 1 is also divided into two sections. The upper section lists the detections where the analytical result exceeded the lab’s Practical Quantitation Limit (PQL). In the lower section of Table 1, the compounds are listed for which the concentration falls between the PQL and the lab’s Method Detection Limit (MDL); these lower values are therefore considered to be “estimated” concentrations (though the generally narrow range of variation in the 3 samples supports the reported values). Also provided in Table 1 are the respective Florida Soil Cleanup Target Levels (SCTLs; see FAC Rule 62-777, Table II) for each listed compound, and the “mean” of the values for the A, B and C samples is listed in the far right column. The green color employed in the column of “mean” values is a subjective assessment indicating that the detections are within the limits of the Florida SCTLs for “commercial” sites.

A total of seven constituents were reported by the lab in concentrations exceeding their PQLs. Of these, the constituent benzo(a)pyrene is of note since the reported value (130 µg/kg) is a significant fraction of the Florida commercial SCTL (700 µg/kg [listed on Table 1 as 0.7 mg/kg, which is the same value]). The benzo(a)pyrene is additionally significant owing to the Florida requirement that all “carcinogenic” PAH compounds be “converted” to an “equivalent value” for benzo(a)pyrene using a specific methodology. In Table 1, the constituents where the SCTL value is noted with a “#” are those where the “benzo(a)pyrene” equivalence calculation is required. Of the constituents listed in Table 1, four of the compounds detected in values above PQLs and two compounds detected in values above MDLs require this numeric conversion,

which has been done and for which the resulting “benzo(a)pyrene equivalent” (“BAP-equivalent”) value is provided in Table 2.

Table 2 thus lists the results of the “BAP-equivalent” calculation as well as the lab-reported values for the 2,3,7,8-TCDD equivalent analysis (“dioxin analysis”) of Samples A, B and C. It is important to note that Pace Labs’ assignment was to provide the “2,3,7,8-TCDD Equivalent” values as the reportable result of their dioxin analysis of the three soil samples. Reference to the summary lab report in Appendix B shows that the lab tested for all the “dioxin” and “furan” species that are included in the EPA’s conversion methodology for the “2,3,7,8-TCDD Equivalent” reported value.

The three “sets” of BAP-equivalent calculated values in Table 2 range from 292 to 300 µg/kg, with a “mean” concentration of 296.3 µg/kg. This is a narrow range and is judged to represent a reliable value for evaluating long-term exposure to site soils. This value is also safely below the Florida SCTL of 700 µg/kg for BAP-equivalent. It is important to note that all of the reported values for BAP-Equivalent exceeded the Florida SCTL of 100 µg/kg for “residential” exposures.

The three “sets” of 2,3,7,8-TCDD Equivalent calculated values in Table 2 range from 6.6 to 7.2 nanograms per kilogram (ng/kg), with a “mean” concentration of 7.0 ng/kg. This is a narrow range and is judged to represent a reliable value for evaluating long-term exposure to site soils. The mean value is safely below the Florida “commercial” SCTL of 30 ng/kg. It is important to note that two of the reported values for 3,4,7,8-TCDD Equivalent (“A” and “C” samples) slightly exceeded the Florida SCTL of 7 ng/kg for “residential” exposures.

## **5.0 GROUND WATER ASSESSMENT**

As previously stated, no ground water sampling occurred during the course of this assessment.

## **6.0 FILE REVIEW – SOIL STOCKPILE SIGNIFICANT DATA GAP**

A file review was conducted by Terracon to examine the history of the temporary soil stockpiles and their associated leachate management facility. This review encompassed the following work periods:

- EPA-sponsored soil sampling of the former Oak Park/Escambia Arms project area,
- Excavation of contaminated soils from beneath the “footprint” of the stockpile area,
- Construction and operation of the stockpile and leachate areas
- Removal of the stockpiled soils and decommissioning of the facilities,
- Removal of the liners, and,
- Excavation of underlying soils from beneath some areas of the stockpile area footprint.

## Phase II Environmental Site Assessment

Oak Park/Escambia Arms Project Area

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Copies of pertinent file information are provided in Appendix E. Note that a complete history of the Escambia Treating Company Superfund site is provided in Sections 1 & 2 of Appendix C of Terracon's August 5, 2011 Phase I ESA Report on the Oak Park/Escambia Arms area (Report EA117041-3). During the EPA's initial soil sampling, there were two areas identified where soil removal during the OU-1 response action would occur; these are marked on Figure 2 as the "EXC01" and "EXC02" areas. The EXC02 area was beneath part of the soil stockpile footprint.

Copies of the EPA's soil characterization sampling reports for the Oak Park/ Escambia Arms, during which the EXC01 and EXC02 areas were identified, are in Sections 4 & 5 of Appendix C of Terracon's August 5, 2011 Phase I ESA Report. A summary of the "proof sampling" (see below) completed by EPA upon contaminated soil removal in the Oak Park/Escambia Arms area was provided in Section 3, Appendix C of Terracon's August 5, 2011 Phase I ESA Report.

The timeline of the pre-construction soil excavation, and the stockpile area construction, operation, decommissioning, removal, and post-removal work, is summarized as follows:

- October 1, 2007; OU-1 contractor and engineer's representatives mobilized to ETC site;
- November 2007; clearing of the stockpile area is begun;
- December 2007; excavation of the "EXC02" contaminated soil area (NE corner of north soil stockpile; see Figure 2) and did "proof sampling" to ensure that horizontal and vertical limits were achieved (see Section 3 of Appendix C of the Phase I ESA report);
- January 2008; pads for the two soil stockpiles were under construction and leachate basin excavation was underway;
- Late January 2008; perimeter fence constructed and liners installed (2 stockpile areas and the leachate basin);
- February 2008; Hickory Street closed (Beggs Lane opened) and initial placement of soil onto the north soil stockpile was begun;
- February 2008 – July 2008; placement of contaminated soils onto the north and south soil stockpiles (site visit reports dated April 30, 2008 and July 30-31, 2008 [the latter with accompanying aerial photo showing stockpile and leachate basin status] is provided in Appendix E herein [see Section 3 of Appendix E]);
- August 2008 – August 2009 (non-continuous activity); removal of soil from both stockpiles (oblique aerial from May 2009 shows most of soil already removed – *Note that Figure 2 of this report is based on a February 2009 aerial photograph*);
- August 2009; last soil removed from the stockpiles and those liners taken up;
- September 2009; removal of liner from beneath the leachate basin;
- October – November 2009; excavation of about 3 feet of soil from beneath the leachate basin area for use as "final cover" above the OU-1 containment cell (oblique aerial photo from October 2009 shows all stockpiles removed; December 2009 aerial photos show excavation in the leachate basin area);

## Phase II Environmental Site Assessment

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- December 2009 – January 2010; grading and soil replacement in the former leachate basin excavation;
- May 2010; entire area of former stockpiles and leachate basin seen to be flat and grassy (a June 2010 oblique aerial shows minor ponding from a recent rain event in the area underlying the former leachate basin and the south edge of the northern soil stockpile).

As noted, Appendix E has copies of pertinent site inspection reports (April 30 & July 30-31, 2008; August 5, 2009; and May 5, 2010), plus copies of the aerial photographs referenced above.

### File Review Discussion

The detailed review of the record showed that a significant amount of the former soil stockpile area had its underlying soil removed for use elsewhere at the Escambia Treating Superfund Site project area after the liners were removed. This was principally in the central area (i.e., beneath the former leachate management facility and the north part of the southern contaminated soil stockpile area). During the recent rainfall event described in Section 4.1 above, it was noted that rainfall pooled in this area, as it remains as somewhat of a low spot. Since, however, most of the area from beneath the liner was not disturbed after liner removal, the file review supports the completion of this sampling effort as a prudent confirmation of liner integrity during the stockpile's operation.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the field observations, laboratory analytical results, and regulatory file reviews, a cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The data gap that was examined through this program is related to a potential release of constituents of concern that could have escaped containment during the operation of the contaminated soil stockpiles and leachate basin during the Escambia Treating Company OU-1 response action.
- During the Escambia Treating Company Operable Unit 1 (soil) response action, the area of this project was the site of two contaminated soil stockpiles plus a centrally-located leachate management basin.
- The test of this data gap was completion of collection and analysis of soil from beneath the formerly-lined contaminated soil stockpile and leachate areas.

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- Based on an evaluation of the long-term objectives for the project area, it was decided that “incremental soil sampling” would provide a more conservative means of examining long-term exposure risk of future site occupants than would “traditional” (i.e., discrete) soil sampling, while also offering a substantial cost savings.
- On the basis of the size and geometry of the former soil stockpiles and leachate basin, a soil sample grid was defined that incorporated 102 sampling nodes.
- At each of the 102 sampling nodes, three near-surface soil samples were collected (“A,” “B” and “C” samples at distances of one foot north, southwest, and southeast, respectively, of the pin flag designating the node location).
- Separate project area entries were conducted to collect the “A,” “B” and “C” sets of soil samples.
- The “A,” “B” and “C” sets of soil samples were separately transported to the Terracon soil lab in Pensacola for pre-analytical processing.
- Pre-analytical soil sample processing included combining the 102 individual soil samples for each sample set (“A,” “B” and “C” sets), mixing thoroughly, and reducing the volume using standard sample volume reduction techniques (riffle-splitting).
- The three resulting soil samples were placed on ice and was shipped under chain-of-custody to a properly-qualified analytical laboratory, Pace Analytical Services.
- Analytical testing was completed for EPA Method 8270 semi-volatile organic compounds (BNAs), EPA Method 8151 chlorinated herbicides (for Pentachlorophenol), and EPA Method 8290 (for 2,3,7,8-TCDD Equivalent). Level IV QA/QC was completed for the analytical testing.
- Pentachlorophenol and six BNA compounds were detected by the lab and reported (Table 1) in concentrations exceeding the lab PQLs in all three soil samples. An additional nine BNA compounds were detected by the lab in concentrations that fall between the lab’s MDLs and PQLs in all three soil samples, and a tenth compound (naphthalene) was reported in this range in one of three samples. The values falling between MDLs and PQLs are considered “estimated” values.
- For pentachlorophenol and nine of the BNA compounds, direct comparison of the detected values with Florida Soil SCTLs revealed no exceedances for either direct exposure in a commercial setting, or a risk to ground water.



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- For the compound benzo(a)pyrene and the other six “carcinogenic” BNA compounds detected, the FDEP-specified calculation for converting the reported values to “BAP-Equivalent” concentrations was performed; the calculated values (Table 2) showed values safely within Florida Soil SCTLs for direct exposure in commercial settings, though the calculated BAP-Equivalent value exceeds the Florida SCTL for residential site use.
- Concentrations of 2,3,7,8-TCDD Equivalent were also reported by the lab in all three submitted soil samples (Table 2); the reported values are safely within Florida Soil SCTLs for direct exposure in commercial settings, though the 2,3,7,8-TCDD Equivalent value exceeds the Florida SCTL for residential site use in two of the three incremental soil samples.
- The quality assurance and quality control performed for this analysis were found to be satisfactory.
- A detailed regulatory file review conducted as the second major element of this investigation confirmed that significant areas of soil from beneath the formerly-lined soil stockpile and leachate management areas were undisturbed following liner removal, and that this testing program was therefore a prudent response to the data gap thus identified during the previous investigation of the site.

The following conclusions were drawn:

- Evaluation of the detected concentrations of pentachlorophenol and BNA compounds revealed no exceedance of Florida SCTLs for direct exposure in commercial future land uses of the site.
- Evaluation of the reported concentrations of 2,3,7,8-TCDD Equivalent revealed no exceedances of Florida SCTLs for direct exposure in commercial future land uses of the site.
- A future land use of Residential, however, is not indicated since the BAP-Equivalent SCTL for residential settings is exceeded in all three incremental samples, and the 2,3,7,8-TCDD SCTL is exceeded in two of the three incremental samples.
- The EPA’s “soil screening” criteria that were used in determining OU-1 excavation boundaries were reviewed. The EPA’s “thresholds of concern” for these constituents exceeded any of the reported concentrations during this soil sampling program, and the EPA’s sampling prior to the OU-1 response action showed contaminant concentrations similar to those reported herein (outside the areas that EPA excavated during site cleanup). It is therefore unclear, and somewhat irrelevant, whether or not constituents of

**Phase II Environmental Site Assessment**

Oak Park/Escambia Arms Project Area

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concern broke through the liners beneath the former soil stockpile and leachate management areas.

- The incremental soil sampling reported herein appears to indicate long-term exposures for a commercial future land use of the site will be within Florida SCTL criteria.

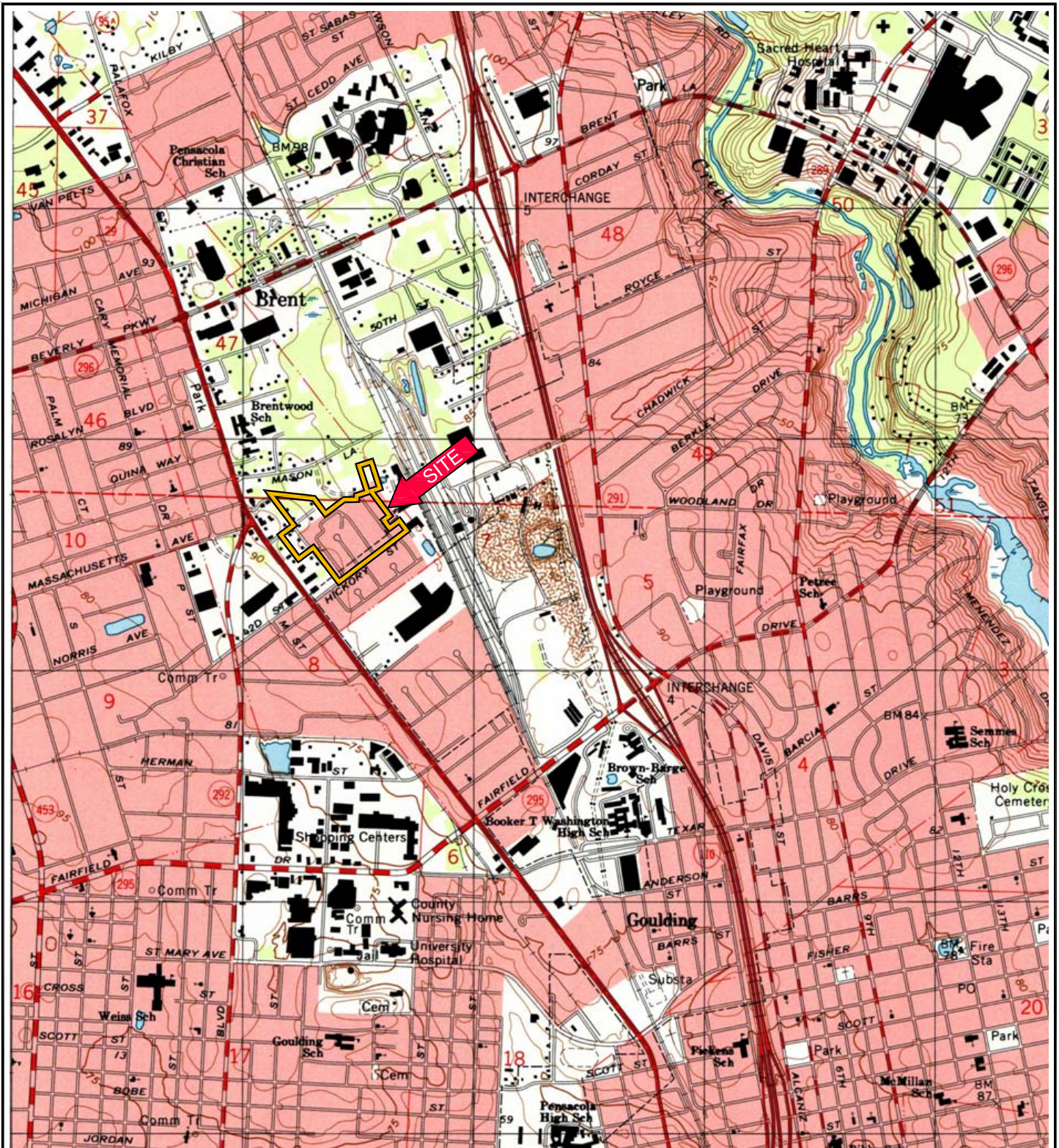
On the basis of the findings and conclusions arising from this Phase II Environmental Site Assessment, no additional work is recommended in connection with the data gap at the former Oak Park / Escambia Arms project area.



**Phase II Environmental Site Assessment**  
Oak Park/Escambia Arms Project Area  
Former Soil Stockpile Significant Data Gap ■ Pensacola, Florida  
February 7, 2012 ■ Project No. EA117041-11

## FIGURES





Map Name: Pensacola  
Map Year: 1994

Project Mngr:	PHD	Project No.	EA117041
Drawn By:	WAS	Scale:	1" = 2000'±
Checked By:	PHD	File No.	EA117041-003.dwg
Approved By:	PHD	Date:	July 2011

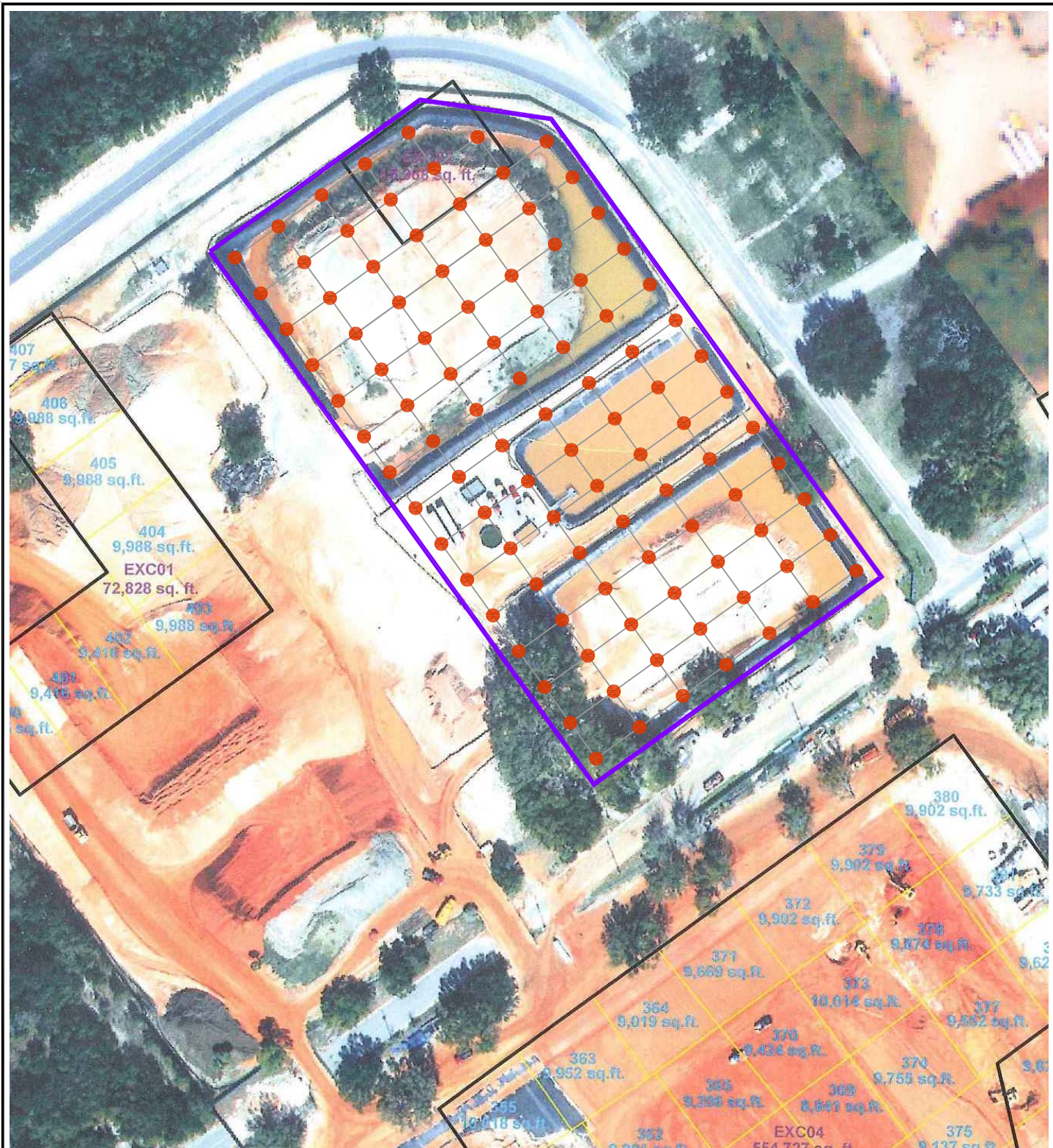
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TOPOGRAPHIC MAP  
PHASE I ENVIRONMENTAL SITE ASSESSMENT  
**OAK PARK / ESCAMBIA ARMS**  
NORTH OF HICKORY STREET, EAST OF PALAFOX STREET  
PENSACOLA FLORIDA

FIG. No.	1
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Aerial Date: February 2009  
Source: EPA

Project Mngnr:	PHD
Drawn By:	WAS
Checked By:	PHD
Approved By:	PHD

Project No.	EA117041-T9
Scale:	1" = 150'±
File No.	EA117041-T9-01.dwg
Date:	December 2011

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INCREMENTAL SOIL SAMPLING GRID  
STOCKPILE DATA GAP  
OAK PARK/ESCAMBIA ARMS AREA  
NORTH PALAFOX STREET  
PENSACOLA, ESCAMBIA COUNTY FLORIDA

FIG. No.  
**2**

**Phase II Environmental Site Assessment**  
Oak Park/Escambia Arms Project Area  
Former Soil Stockpile Significant Data Gap ■ Pensacola, Florida  
February 7, 2012 ■ Project No. EA117041-11



## **TABLES**



**Table 1**

**Summary of Soil Analytical Testing**  
**Stockpile Data Gap Project Area, Incremental Soil Sampling**  
**Escambia Treating Company Superfund Project Area, Escambia County, Florida**

Constituent	Method	SCTL*	Lab PQL	Lab MDL	Concentration A	Concentration B	Concentration C	Mean
<b>Values Exceeding PQL</b>		<b>mg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>
Pentachlorophenol	8151.1	28	1.0	0.87	2.8	2.7	2.1	2.5
Benzo(a)pyrene	8270/3546	0.7	35.0	3.8	130	132	129	130
Benzo(b)fluoranthene	8270/3546	#	35.0	2.5	73.4	76.2	65.4	71.7
Benzo(g,h,i)perylene	8270/3546	52,000	35.0	3.2	61.5	64.1	61.4	62.3
Benzo(k)fluoranthene	8270/3546	#	35.0	5.2	92	94.6	94.4	93.7
Dibenz(a,h)anthracene	8270/3546	#	35.0	3.7	144	146	142	144
Indeno(1,2,3-cd)pyrene	8270/3546	#	35.0	3.7	126	129	124	126
<b>Values Exceeding MDL</b>		<b>mg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>	<b>µg/kg</b>
Anthracene	8270/3546	300,000	35.0	2.2	3.2	3.2	3.6	3.3
Benzo(a)anthracene	8270/3546	#	35.0	3.1	12.9	11.5	13.5	12.6
Chrysene	8270/3546	#	35.0	3.1	14.9	16.0	16.1	15.7
bis(2-Ethylhexyl)phthalate	8270/3546	1,900	180	26.3	110	114	106	110
Fluoranthene	8270/3546	59,000	35.0	3.9	16.6	13.1	19.7	16.5
Naphthalene	8270/3546	300	35.0	3.7	Below MDL	Below MDL	15.0	6.3
1-Methylnaphthalene	8270/3546	1,800	35.0	4.4	7.6	6.4	14.7	9.6
2-Methylnaphthalene	8270/3546	2,100	35.0	4.9	12.7	7.5	25.3	15.2
Phenanthrene	8270/3546	36,000	35.0	3.3	6.0	6.1	10.2	7.4
Pyrene	8270/3546	45,000	35.0	4.2	17.0	12.4	17.1	15.5

Notes: \* - Soil Cleanup Target Levels used are for "direct contact in commercial/industrial settings" (FDEP Rule 62-777; Table II - Table values listed in "**mg/kg**" [multiply by 1000 to get µg/kg equivalents])  
# - "Benzo(a)pyrene equivalent" calculation by Terracon using FDEP methodology; see Table 2 for results.  
- Green color indicates Mean concentration is within SCTL for "commercial" land use.



**Table 2**

**Summary of Soil Analytical Testing - Calculated Values for BAP-Equivalent and 2,3,7,8-TCDD Equivalent  
 Stockpile Data Gap Project Area, Incremental Soil Sampling  
 Escambia Treating Company Superfund Project Area, Escambia County, Florida**

Constituent	Method	Units	SCTL	Lab PQL	Lab MDL	Concentration A	Concentration B	Concentration C	Mean
<b>Calculated Equivalents</b>									
<b>2,3,7,8-TCDD equivalent</b>	(calculated)*	ng/kg	30	NA	NA	7.2	6.6	7.2	7.0
<b>Benzo(a)pyrene-equivalent</b>	(calculated)#	µg/kg	700	NA	NA	296.2	300.6	292.3	296.3

**Notes:** "SCTL" = Florida's 'Soil Cleanup Target Level' - see Table II of FAC Chapter 62-777.

See lab analytical reports for details.

\* - "2,3,7,8-TCDD Equivalent" calculation performed by lab in accordance with US EPA methodology; note that the mean calculated value of 7.0 ng/kg equals the FDEP "residential" SCTL.

# - "Benzo(a)pyrene equivalent" calculation by Terracon using FDEP methodology (note that the calculated value of Benzo(a)pyrene equivalent [296.3 µg/kg] exceeds the "residential" SCTL of 100 µg/kg)

- Green color indicates Mean concentration is within SCTL for "commercial" land use.

# Palafox Commerce Park Master Plan

A Partnership Between  
Escambia County and The City of Pensacola,  
Florida



Prepared by  
**Landers-Atkins Planners, Inc.**  
with  
Connelly & Wicker, Inc. Consulting Engineers  
Aerostar Environmental Services, Inc.  
and  
The Haas Center for Business Research and Economic Development  
University of West Florida

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## **1.0 INTRODUCTION**

The Palafox Commerce Park Master Plan is a response to several related issues and concerns of Escambia County, the City of Pensacola and the Pensacola Chamber of Commerce. The first issue is that current industrial business sites are decreasing and new industrial parcels are needed in the City as well as the County. Second, the Palafox location is an industrial zone and is part of the County's Community Redevelopment Area and the Brownfield Redevelopment Program. Third, the Escambia Treating Company Superfund Site, and its impact on adjacent residential areas, has offered the opportunity for approximately 100 acres of "new" land for industrial development.

## **2.0 HISTORY OF SITE**

### **2.1 Site Description**

The Escambia Treating Company (ETC) site is located (*Figure 1*) at 3910 North Palafox Street in the City of Pensacola, Escambia County, Florida at approximately 30° 27' 19" North latitude and 87° 13' West longitude. The 26-acre site, located in a mixed industrial and residential area, is bordered on the north by residential neighborhoods, on the west by Palafox Street, on the east by the CSX railroad switchyard, and on the south by an abandoned concrete plant and small industrial park. The site is an abandoned wood preserving facility that operated from 1942 until it's closing in 1982.

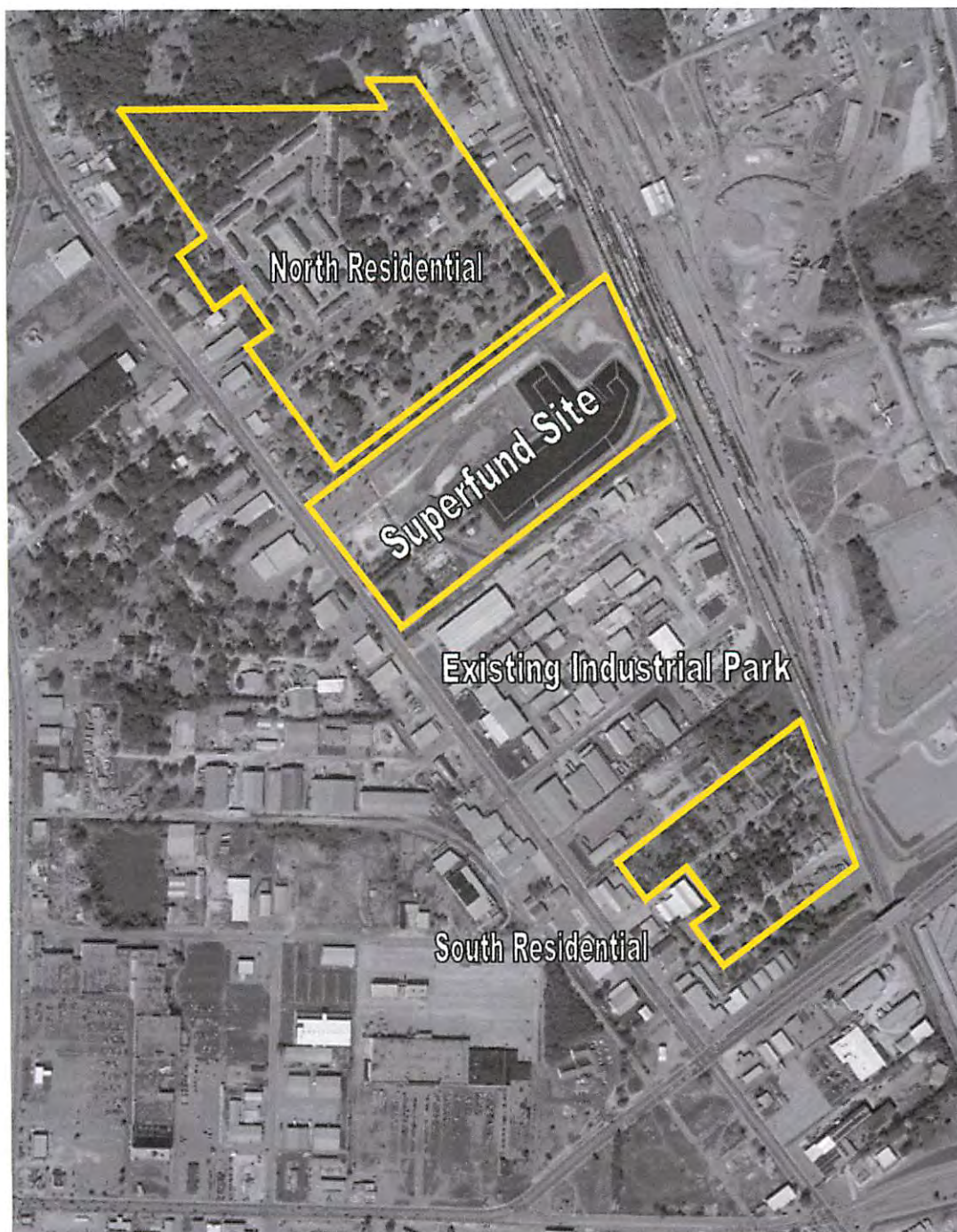
### **2.2 History of ETC Facility Operations**

The ETC site was first operated in 1942 as a manufacturing facility for the treatment of wood products with creosote. Before the start of operations, the land was used for farming. ETC's Pensacola facility was involved in the pressure treating of wood products - primarily utility poles and foundation pilings. Southern Yellow Pine was debarked, formed, dried, impregnated with preservatives, and stored at the facility until delivered to customers. From 1944 to approximately 1970, coal-tar creosote was used as the primary wood preservative. Pentachlorophenol or PCP dissolved in No. 6 diesel fuel was used at the facility as a preservative from 1963, and was the sole preservative in use from 1970 to 1982. Excess wood preservative was allowed to drain from the treated products along drip tracks before being stored in nine treated wood storage areas.

Contaminated wastewater and runoff from the former treatment area were the primary wastes managed at the facility. In the early years of operation all wastewater was sent to an unlined impoundment located in the northeastern part of the site. This natural earthen unit was used from the mid-1940s through the mid-1950s. After the mid-1950s, process wastewater and contaminated runoff were managed by two separate systems. The first system consisted of concrete and treated wood constructed surface impoundments. The former "hot" and "cold" ponds, each used from 1955 to 1982, had a holding area of 6250 cubic feet, and were operated in series.



**Figure 1**





The second system consisted of the contaminated runoff from the wood treatment area also being directed into a runoff collection/separation system. This system consisted of a concrete collection pad and a series of separation basins which removed waste treating solutions from the runoff water. Runoff was then pumped via a storm drain system to an impoundment located in the southern section of the facility. The impoundment, which was constructed of sectionally poured concrete, had a holding capacity of 225,000 gallons.

### **2.3 Environmental Regulatory History**

The ETC site has a lengthy regulatory history that begins with the submittal of the Notification of Hazardous Waste Activity Form (CERCLA 103C) to EPA in 1980. Before this submittal and the passing of the Resource Conservation and Recovery Act (RCRA), little available documentation was generated regarding compliance and non-compliance with federal, state, and country rules and regulations.

The wood treating operations at the ETC site from 1942 to 1982 resulted in extensive creosote and pentachlorophenol (PCP) contamination in soil and groundwater. Soil at the site is also contaminated with dioxin, which is a common impurity in commercial-grade PCP. To address the immediate threat posed by contamination at the site, the United States Environmental Protection Agency (EPA) completed an extensive removal action in 1992. The removal activities were designed to stabilize the site while EPA evaluated long-term clean-up solutions for site contamination. After installing a 12-foot high fence to restrict unauthorized access, EPA excavated approximately 255,000 cubic yards of contaminated soil and stockpiled these materials, which are currently onsite, under a secure cover to prevent further migration of contaminants into the groundwater. Two large excavated areas, approximately 40 feet deep, remain adjacent to the stockpiled material. EPA proposed the ETC site for inclusion on the National Priorities List (NPL) in August 1994. The site's listing on the NPL was finalized on December 16, 1994.

### **2.4 Community Relocation Project**

On February 12, 1997, the EPA issued a Record of Decision (ROD) Interim Remedial Action and National Relocation Pilot Project for the ETC site. This remedy was an interim action for the site. It addressed the relocation of households affected by the contamination at the ETC site. The major components of the selected remedy included:

- Permanent relocation of an estimated 358 households from four designated residential areas: the Rosewood Terrace subdivision, the Oak Park subdivision, the Escambia Arms Apartments, and the Goulding subdivision
- Demolition of the homes, and institutional controls to restrict the land use of the area to industrial or commercial use

According to the Real Estate Planning Report prepared by the U.S. Army Corps of Engineers, the affected residential areas targeted for relocation consisted of a total of approximately 65 acres and was partitioned into five designated areas: Beggs Lane, Oak Park, Rosewood Terrace, Escambia Arms Apartments, and Goulding Subdivision. The Rosewood Community was located immediately adjacent to the ETC site. The community is bordered to the west by Palafox Highway, to the south by the former Escambia Treating Company, and to the east by CSX Railroad switchyard. The Beggs Lane, Oak Park community and the Escambia Arms Apartments are located just north of the Rosewood



Terrace subdivision across Hickory Street. The Florida Drum Manufacturing Company, an industrial facility, is located within the Oak Park community between the residential area and CSX railroad to the east. There were approximately 200 families living in the Escambia Arms apartments.

The Goulding subdivision was located immediately south of the Palafox Industrial Park, which is immediately south of the site. The CSX Railroad yard is located immediately to the east. Beyond the railroad is the Agrico Chemical Superfund site. The community is bordered to the west by Palafox Highway, and to the south by East Fairfield Drive.

EPA's relocation remedy was based on the following factors: health risk reduction, community welfare, cost benefit and operational concerns associated with on-site cleanup of the ETC facility, configuration of the land area, and long-term community redevelopment goals. In general, EPA Superfund regulations specify that EPA may consider taking action at a site when cancer risks exceed the 1E-4 level. EPA may elect to develop cleanup levels, which will mitigate that cancer risk in a range from 1E-4 to 1E-6. Based on a preliminary evaluation, EPA determined that some levels of benzo(a)pyrene equivalents (BaPEQ) and dioxin exceeded the 1E-4 risk level in the Relocation Area.

Historical aerial photographs and topographic maps of the area indicated that the BaPEQ and dioxin contamination found in the neighborhoods north and south of the main ETC facility were a result of surface water drainage and erosion from treated lumber storage areas and waste water discharges at the ETC site. In 1996, in response to concerns that there may have been a contributing source of contamination in the Palafox Industrial Park, EPA conducted a site assessment in the Park. The site assessment indicated that the Park was not a source of the contamination. In conclusion, the relocation project was implemented in May of 1997 and is scheduled for completion no later than the summer of 2002.

### **3.0 EPA ACTIONS (Status of Environmental Cleanup)**

#### **3.1 Remedial Investigation and Feasibility Study**

In 1994, CDM Federal Programs Corporation (CDM) was tasked by EPA to conduct a Remedial Investigation/Feasibility Study (RI/FS) at the ETC site through Work Assignment No. 062-4LGS under Contract No. 68-W9-0056. The purpose of the RI/FS was to investigate the nature and extent of contamination at the ETC site and to develop and evaluate remedial alternatives, as appropriate. The results of the RI/FS for the ETC site are contained in the Final Remedial Investigation/ Feasibility Study for Source Soil Removals for the Escambia Treating Company Site Pensacola, Florida dated June 4, 1998 (Document Control Number 7740-062-RI BSZL) as prepared by CDM.

#### **3.2 Types of Contaminants and Established Cleanup Levels**

To support the development of remedial alternatives for the ETC site, risk-based remedial goal options (RGO's) were calculated for both cancer and non-cancer effects for the chemicals of concern (COC's) attributed to past operations of the ETC site in subsurface soils onsite, as well as offsite residential relocation areas. The RI/FS evaluated the appropriateness of both a residential and industrial land use scenario, with a lifetime resident and an onsite worker as the most appropriate receptors upon which to assess the risk-based



remediation goals. Incremental cancer (1E-6 to 1E-4) and a non-cancer (HQ=0.1 to 3) risk levels were evaluated for both the residential and industrial use scenarios. Soil cleanup levels were also calculated based on the potential for hazardous constituents to migrate and contaminate groundwater.

There were a total of two chemicals of concern (COC's) that were identified for surface soils (protection of human health) and eight COCs identified for surface and subsurface soils (protection of groundwater). The two surface soils COC's included BaPEQ or benzo(a)pyrene equivalents consisting of benzo(a)anthracene, chrysene, benzo(b/k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenzo(a,h)anthracene; and 2,3,7,8-TCDD TEQ or 2,3,7,8-tetrachlorobibenzo-p-dioxin toxic equivalents. The nine chemicals of concern for surface and subsurface soils relating to the protection of groundwater included various polyaromatic hydrocarbons (PAH's) such as naphthalene, acenaphthene, fluorene, phenanthrene, 2-methylnaphthalene, dibenzofuran, carbazole, and pentachlorophenol (PCP). The estimated volumes of soil above the various remedial goal options was then calculated for each area of concern including the onsite or ETC facility, the offsite residential relocation area to the north, and the offsite residential relocation area to the south. These calculations are included in the RI/FS report.

The cleanup standard for the ETC site established in the Record of Decision was based on commercial and industrial exposure and land use scenarios. The final cleanup standard will be included in the RI/FS Record of Decision.

### **3.3 Remedial Investigation Field Activities**

CDM Federal completed the ETC RI/FS remedial investigation field activities in 1996. The main objective of the field investigation was to characterize the nature of onsite soil and groundwater contamination and the extent of potential soil contamination in the adjacent neighborhood, which may be attributable to the ETC site. Although the investigation included the installation of monitor wells and the collection of groundwater samples from those wells, the focus of the investigation was on the soil contamination at and near the site that was attributable to the ETC site. The groundwater data collected during the field investigation was evaluated because they relate to the development of groundwater contaminants of concern and soil remedial goal options for the protection of groundwater.

In addition to the analytical data collected by CDM during the ETC RI/FS original field investigation (conducted from December 1995 to March 1996), the FS report also considered data collected during related investigations. These investigations include the field investigations conducted in July 1995 in the Rosewood Terrace, Oak Park, Escambia Arms and Goulding neighborhoods performed by Black and Veatch.

The soil and on-site groundwater contamination issues attributed to the ETC facility was bifurcated from the off-site groundwater contamination issue in 1998 in order to expedite the cleanup and ultimate reuse of the ETC site. The issue of offsite groundwater contamination, which is referred to by EPA as Operable Unit #2, will be addressed in a separate RI/FS document. The objective of the field investigation for Operable Unit #2 will be to determine the extent of vertical and horizontal offsite groundwater contamination attributable to the ETC site. This offsite groundwater investigation is currently being performed by CDM with the draft RI/FS expected in Fall of 2001. Remedial alternatives to address groundwater contamination will be developed and evaluated in that report.



### **3.4 Planned Remedial Options**

The planned remedial options for the site are contained in the Final Remedial Investigation/ Feasibility Study for Source Soil Removals for the Escambia Treating Company Site Pensacola, Florida dated June 4, 1998. The primary objectives of the FS portion of the report are to: identify remediation goals for soil; determine the extent of soil contamination above remediation goals; present remedial action objectives (RAOs) for soil contamination; develop general response actions (GRAs); identify, screen, and select remedial technologies and process options applicable to the soil contamination associated with the site; and develop and analyze remedial action alternatives. The FS report will be used to support subsequent decision documents, and the design and implementation of remedial actions for the source (soil contamination) attributable to the ETC site.

A total of six remedial alternatives were analyzed as part of the detailed analysis of alternatives of the Feasibility Study. These remedial alternatives include the following:

1. No Action
2. Soil excavation; on-site treatment with thermal desorption and base catalyzed dechlorination; and on-site disposal
3. Soil excavation; on-site treatment with solid phase bioremediation; and on-site disposal
4. Soil excavation; on-site treatment by soil washing; and on-site disposal
5. Soil excavation; off-site transportation and disposal at a Subtitle C landfill
6. Onsite disposal into a RCRQA designed landfill

The cleanup plan addressed soil contamination in four defined areas as follows:

1. Onsite - the ETC facility consisting of approximately +/-26 acres
2. Rosewood Terrace, Oak Park; and Escambia Arms - residential properties located adjacent and to the north of the ETC site (+/- 51 acres)
3. Pearl Street/Herman Avenue (a.k.a. Goulding subdivision) - residential area located to the south of the ETC and adjacent to the existing Palafox Industrial Park (+/- 18 acres)
4. The existing soil stockpile

### **3.5 Selected Remedy and the Superfund Site Reuse Project**

The RI/FS report does not select a specific remedial alternative or remedy. The Superfund regulations prohibit EPA from preselecting a remedy. The EPA is required to issue its proposal for remedial action in the form of a Proposed Remedy Plan. EPA then seeks public comment on the plan and, after the comments are considered, finalizes the plan in the form of a Record of Decision. All of the data and documents that were taken into consideration for the proposed remedy are required to be included in an Administrative Record. This Administrative Record includes public comments made at the time of the issuance of the Proposed Remedy Plan and is modified to include any additional considerations once the Record of Decision is made final. One of the objectives of this Superfund Site Reuse Project was that Stakeholder input and approval would be obtained pertaining to the redevelopment of the ETC site. That Stakeholder input will be considered in the development of the Proposed Remedy Plan. Therefore, after the Stakeholders have reviewed the reuse plan



and the County addresses the Stakeholders concerns, EPA will be in a position to develop the Proposed Remedy Plan based on the agreed upon redevelopment plan.

### **3.5 Timing of EPA Cleanup and Release for Redevelopment**

According to telephone conversations with EPA staff, the Proposed Remedy Plan will be completed after the finalization of the Palafox Commerce Park Master Plan. The proposed remedy will then open for public comment. The Record of Decision or ROD will be issued upon completion of the public involvement process, with an anticipated issuance date of the Fall of 2001.

The implementation of the selected remedial alternative usually occurs within 18 months of issuance of the ROD. Estimated time for completion of the final six remedial strategies ranged from an average of two through six years on the low end to an average of four to seven years on the high end. The proposed timetable for implementation of the selected cleanup remedy will be included in the ROD. The EPA may release portions of the northern and southern residential relocation areas within two to three years of issuance of the ROD. Based on this timetable is estimated that former ETC facility will be available for redevelopment within 8-10 years of issuance of the ROD.

### **4.0 MASTER PLAN**

The Master Plan for the Palafox Commerce Park (*Figure 2*) provides an illustration of how development may take place. While it does illustrate the location of buildings, parking and other parcel improvements, they are for illustrative purposes and will more than likely change as specific parcels are developed in response to end user needs. The key elements of the Master Plan are the street layout / circulation, parcel size and configuration and stormwater retention pond locations.

The existing industrial park (*Figure 1*) is in the center of the EPA Superfund Site and its impacted areas to the north and south. In order to create an integrated development, it is necessary to provide an internal north-south road connection to link these sites together so that Palafox Highway is not the only north-south means of circulation between the businesses in the future Palafox Commerce Park. In order to make this connection, it will be necessary to purchase some land from existing owners to allow this road connection to take place. Every effort has been made to use or expand existing right-of-way (r/w) and streets in order to minimize infrastructure costs. It will still be necessary to widen existing streets and build new streets with 3 lanes (36 feet, 80 feet r/w) in order to accommodate truck traffic turning movements.

The development program is mixture of small to medium size parcels ranging from 1 to 7.5 acres in size. The types of business are office, showroom / warehouse, light manufacturing, and warehouse distribution. The property could support new development in the range of 600,000 to 650,000 square feet. This translates to approximately 6000 to 6500 square feet per acre.

The Master Plan also has two other components, which need to be mentioned:

- The current residential area between Hickory Street and Lansdowne Avenue has several mature trees which the community expressed interest in preserving. The

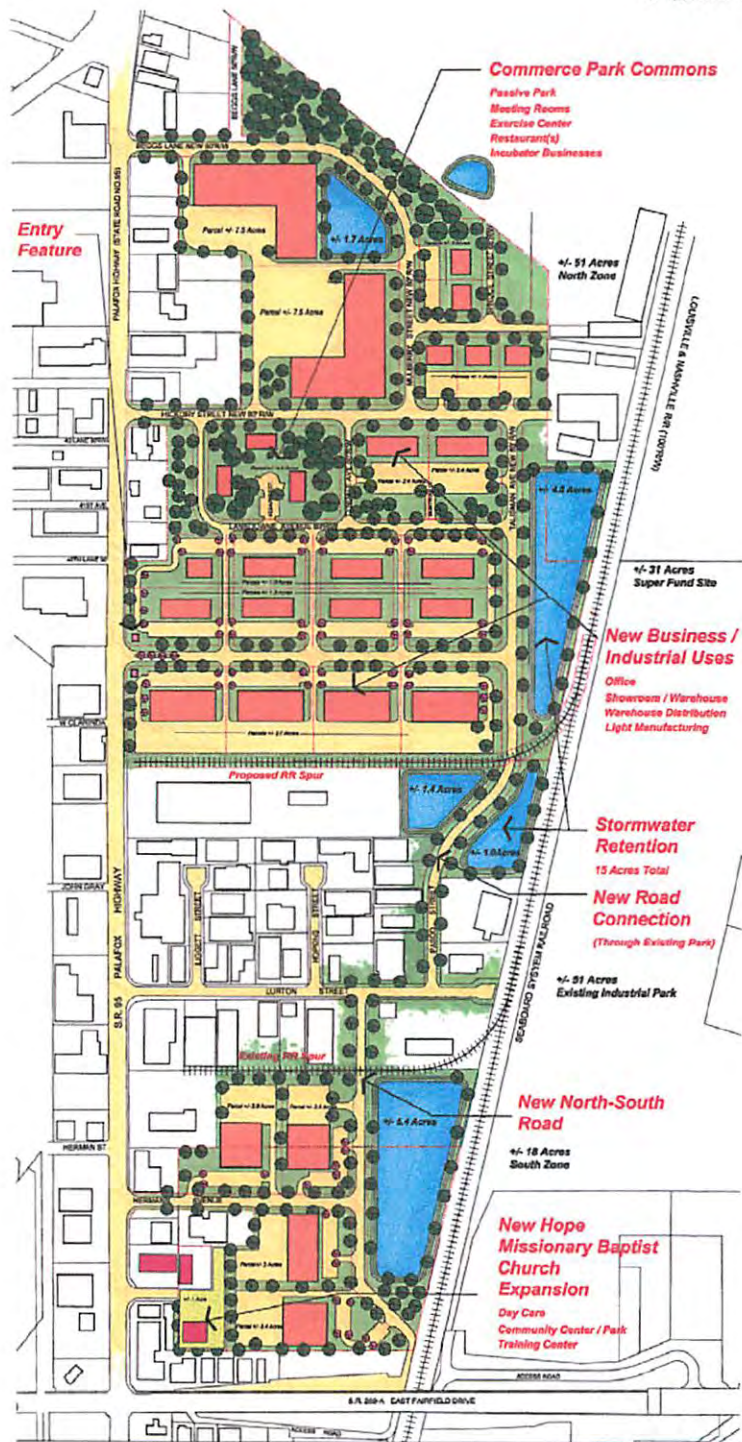


block bounded by Hickory, Tidal, and Lansdowne, south and west will be designated as Commerce Park Commons with smaller building footprints which will preserve more of the existing trees. This area will have a passive park, meeting rooms, an exercise center, restaurants, and several small offices for incubator businesses. It is the policy of the County to require a tree survey to be done on all plans presented for review before approval or permits are issued. This process will allow for the saving of other trees in the proposed Palafox Commerce Park.

- The New Hope Missionary Baptist Church located on Palafox Highway requested the County consider providing them with additional land for Church activities, including a day-care center, and maybe a community center, which could provide space for job training programs and other community services the Church may wish to undertake. It was agreed, on a preliminary basis, to give them one acre of land. As part of the Master Plan Concept, it was recommended that Pearl Avenue be closed due to heavy truck traffic passing by the Church. This truck traffic comes from the weigh station on the south side of East Fairfield Drive. The trucks pass under the East Fairfield Drive Overpass and then travel west on Pearl Avenue to access Palafox Highway. In accommodating this request it was also possible to offer the church an additional acre of land to the east of their present property for expansion of their parking and future facilities.



Figure 2



Commerce Park  
 Palafox Corridor Redevelopment  
 Community Redevelopment Agency  
 Neighborhoods and Environmental Services Department  
 Escambia County, Florida

Master Plan

5/26/2009





## **5.0 ECO-INDUSTRIAL PARK GUIDELINES**

Eco-industrial guidelines for new industrial parks can generate a number of benefits. They can provide reassurance to the surrounding residents and commercial property owners regarding the character of the new development and its occupants. They can also help create both a competitive edge with lower operating costs and a marketing edge with a distinctive character for the project. Typically, eco-industrial principles would be incorporated in the project's initial design. Examples of potential components might include:

- Use of grey water for irrigation
- Stormwater infiltration from buildings and parking lots to reduce detention pond requirements
- Constructed wetlands for stormwater polishing
- Native plants in landscaping, and minimization of traditional lawn
- Green Building requirements:
  - Use of standards such as U.S. Green Building Council's LEED Green Building Standards™;
  - Skylights in warehouses and maximization of daylighting;
  - Building orientation to resist solar impacts; and
  - Integration of alternative energy sources where they make economic sense
- Integration of facilities into the community (e.g. seeking out an organization such as the YMCA to operate the exercise facility for park residents and surrounding community)
- Centralization of support facilities (shipping, receiving, janitorial, etc.) to achieve maximum efficiencies

Eco-industrial guidelines would then enable and encourage businesses to adapt their practices to achieve maximum economic efficiencies and environmental benefits. They would also create a mechanism for integrating the new businesses into a network of other neighborhood and regional businesses for increased competitive advantage. These programs might include local sourcing networks to encourage local purchases (thereby avoiding shipping costs, markups and unnecessary energy use) and "waste" exchange programs. The guidelines can be designed to deal with aesthetic, use, environmental sustainability and social sustainability issues.

## **6.0 TARGET INDUSTRY**

### **6.1 Introduction**

The Haas Center for Business Research and Economic Development of the University of West Florida was retained to prepare a target industry assessment of the best potential uses of the Palafox Commerce Park located in the Palafox Corridor Brownfield's Redevelopment Area of Escambia County and the City of Pensacola. The following is a summary of that study. A full copy of this study is available at the office of the Escambia Community Redevelopment Agency.



The recommendations in this study are made in consideration of the region's targeted industry clusters: Information Technology, Industrial Services, Health & Medical Technology, Silicon Technology, and Transportation Equipment. By incorporating the commerce park's tenants and activities into the fabric of the community and its broader economic developmental goals and strategies, industry clustering identifies which business sectors to attract to obtain synergistic effects. This strategy of building on existing competitive strengths helps the region's existing companies to compete and grow while increasing the commerce park's chances for success.

The absence or underdevelopment of industries essential to a fully developed industry cluster causes area companies to go outside the region to obtain certain products, services, and technologies. It is these industry sectors which are identified as prime targets to attract to Pensacola. Such organizations will benefit from the ready-made markets for their products and their proximity to area businesses that will allow the tailoring of products to meet customers' needs. Meanwhile, the addition of these critical suppliers will strengthen the local clusters and facilitate the goal of retaining core businesses. By addressing gaps and limitations in the economic foundations of our targeted industry clusters, this strategy improves the region's ability to retain and grow industry, and its ability to compete in global markets.

The purpose of the targeted industry study is to describe the region's economy in terms of its industry clusters, and identify those industry segments in the external economy that appear attractive given the composition of existing industry. Ideally, the study seeks to identify industries absent or underdeveloped in the region that would provide the greatest economic benefit to the regional economy were they to relocate to the area. This information is to be used to adjust marketing efforts so that scarce resources are expended in areas where the return to the local economy is likely to be the greatest.

Each of Pensacola's five target industry clusters is described using the IMPLAN input-output model. An input-output, or inter-industry transactions model shows the economic linkages among industries within a specified region. Each industry not only produces goods or services, but is also a consumer, purchasing other goods and services for the production process. Input-output models permit the determination of all of these products flows, both sales and purchases among industry sectors, and is therefore an excellent tool for describing an industry cluster. Pensacola's industry clusters are then compared to more fully developed or ideal clusters.

By showing the economic relationship between industries in more fully developed or ideal clusters, all of the important elements of competitiveness for successful final producers of Pensacola's target industries clusters are revealed. The purpose is to allow the identification of gaps in the business linkages that exist for Pensacola's industry clusters. When this more successful industry cluster is compared with Pensacola's industry clusters, gaps in the value-adding chain that exist in the local industry cluster can be identified and targeted for recruitment.

## **6.2 Industries Recommended for Attraction**

One of Pensacola's economic developmental goals is to attract high quality jobs. To understand the relative desirability of the recommended industry sectors, the value added per employee is first calculated. By estimating the wages, profits, and taxes that are



generated by each job attracted to Pensacola within that industry sector, the "Value Added Per Job" figure serves as a good measure of job quality. The following table (Table A) lists the industry sectors that are recommended as prime attraction targets and the industry clusters that will benefit from its presence, and indicates the income effect per job so that they may be ranked by a measure of job quality.

TABLE A – INDUSTRY SECTORS RECOMMENDED AS ATTRACTION TARGETS				
SIC Code	Industry Sector	Value Added Per Job	Cluster	Location Quotient
2830	Drugs	\$184,451	Information Technology, Health and Medical Technology, Silicon Technology	0.06
1310	Natural Gas & Crude Petroleum	\$183,031	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Tech.	0.25
2865 2869	Cyclic Crudes - Intermediate. & Indus. Organic Chem.	\$181,274	Industrial Services	0.06
4810 4820 4840 4890	Communications- Except Radio and TV	\$159,106	Industrial Services, Transportation Equipment	0.00
3674	Semiconductors and Related Devices	\$156,619	Silicon Technology, Information Technology, Health and Medical Technology, Transportation Equipment	0.00
6200	Security and Commodity Brokers	\$129,297	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Tech.	0.38
6300	Insurance Carriers	\$95,275	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Tech.	0.43
3669	Communications Equipment N.E.C.	\$92,516	Information Technology	0.00
3577	Computer Peripheral Equipment	\$79,939	Information Technology	0.83
7370	Computer and Data Processing Services	\$78,986	Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Technology	0.71
8110	Legal Services	\$71,991	Transportation Equipment, Silicon Tech.	0.81
4500	Air Transportation	\$64,967	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Tech.	0.94
3724 3764	Aircraft and Missile Engines and Parts	\$64,958	Transportation Equipment	0.00
3541	Machine Tools- Metal Cutting Types	\$58,907	Industrial Services	0.00
3675 3676	Electronic	\$57,509	Information Technology	0.02



TABLE A – INDUSTRY SECTORS RECOMMENDED AS ATTRACTION TARGETS				
SIC Code	Industry Sector	Value Added Per Job	Cluster	Location Quotient
3677 3678 3679	Components- N.E.C.			
3821	Laboratory Apparatus & Furniture	\$52,755	Health and Medical Technology	0.00
3080	Miscellaneous Plastics Products	\$50,532	Information Technology, Health and Medical Technology, Transportation Equipment	0.14
3599	Industrial Machines N.E.C.	\$50,267	Transportation Equipment	0.33
2750	Commercial Printing	\$48,066	Health and Medical Technology	0.44
8740	Management and Consulting Services	\$45,670	Transportation Equipment, Silicon Tech.	1.26
7530 7549	Automobile Repair and Services	\$42,942	Transportation Equipment	1.13
4200	Motor Freight Transport and Warehousing	\$42,531	Information Technology, Health and Medical Technology, Transportation Equipment, Silicon Technology	0.73
8710	Engineering-Architectural Services	\$41,227	Information Technology, Transportation Equipment, Silicon Tech	1.19
8720 8990	Accounting- Auditing and Bookkeeping	\$39,798	Transportation Equipment	0.77
7320 7331 7338 7383 7389	Other Business Services	\$39,311	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Tech.	0.42
8730	Research-Development & Testing Services	\$37,779	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment	0.26
6400	Insurance Agents and Brokers	\$37,087	Information Technology, Health and Medical Technology, Industrial Services, Transportation Equipment, Silicon Tech.	0.73
6100 6710 6720 6733 6790	Credit Agencies	\$32,347	Transportation Equipment	0.55

Many considerations will go into an industrial targeting process. The Study focuses on identifying industry sectors that are likely to bring the most economic benefits to the community. Measuring benefits will include a host of factors, including number of jobs created, wage rates paid, level of investment, linkages with other firms (which will determine the multiplier effect), impacts on the environment, demands for infrastructure improvements, and social impacts. The study provides several pieces of information that can be used to estimate differential economic benefits that firms from different industry sectors might have on the region. First, the linkages that exist between industry sectors within local industry clusters are described and gaps within those clusters identified. For example, Pensacola's Information Technology Cluster is delineated in Table B. It describes inter-industry



transactions and linkages among industries in the Information Technology Cluster. It also provides a comparison of Pensacola's cluster to an ideal cluster, so that gaps in our region's cluster can be identified and targeted for attraction.

TABLE B - THE INFORMATION TECHNOLOGY CLUSTER				
SIC	Information Technology Industry Sectors	Ideal Cluster Output	PNS Cluster Output	% Ideal
7370	Computer and Data Processing Services	\$241,270.25	\$149,555.78	62.0%
5000				
5100	Wholesale Trade	\$186,528.34	\$28,445.07	15.2%
3669	Communications Equipment N.E.C.	\$138,610.66	\$0.00	0.0%
	Owner-occupied Dwellings	\$127,235.27	\$15,182.13	11.9%
6500	Real Estate	\$118,200.34	\$15,882.58	13.4%
3571	Electronic Computers	\$102,482.34	\$69,534.27	67.9%
	State & Local Government - Non-Education	\$82,495.71	\$6,427.07	7.8%
	State & Local Government - Education	\$76,891.82	\$17,439.65	22.7%
6000	Banking	\$70,784.69	\$9,245.43	13.1%
3674	Semiconductors and Related Devices	\$64,832.15	\$0.00	0.0%
3577	Computer Peripheral Equipment	\$61,120.85	\$0.00	0.0%
4810				
4820				
4840				
4890	Communications- Except Radio and TV	\$54,782.54	\$7,232.83	13.2%
8010				
8020				
8030				
8040	Doctors and Dentists	\$49,999.68	\$9,178.22	18.4%
	Federal Government - Military	\$43,919.20	\$55,580.67	126.6%
8060	Hospitals	\$43,311.91	\$7,949.65	18.4%
	Federal Government - Non-Military	\$42,888.52	\$9,730.62	22.7%
4910	Electric Services	\$41,171.76	\$7,016.48	17.0%
6300	Insurance Carriers	\$39,356.56	\$2,086.99	5.3%
5800	Eating & Drinking	\$38,437.61	\$6,298.42	16.4%
	Maintenance and Repair Other Facilities	\$35,742.60	\$4,007.29	11.2%
8110	Legal Services	\$34,924.15	\$6,029.31	17.3%
5900	Miscellaneous Retail	\$30,887.46	\$4,251.20	13.8%
5500	Automotive Dealers & Service Stations	\$30,872.50	\$5,869.59	19.0%
7360	Personnel Supply Services	\$26,856.60	\$4,885.78	18.2%
6200	Security and Commodity Brokers	\$26,713.94	\$1,309.42	4.9%
5400	Food Stores	\$26,587.01	\$4,084.52	15.4%
4200	Motor Freight Transport and Warehousing	\$24,334.51	\$1,472.80	6.1%
7000	Hotels and Lodging Places	\$22,424.72	\$2,087.36	9.3%
8740	Management and Consulting Services	\$21,368.55	\$2,897.53	13.6%
7320				
7331				
7338				
7383				
7389	Other Business Services	\$21,356.48	\$1,584.19	7.4%

TABLE B - THE INFORMATION TECHNOLOGY CLUSTER				
SIC	Information Technology Industry Sectors	Ideal Cluster Output	PNS Cluster Output	% Ideal
8720				
8990	Accounting- Auditing and Bookkeeping	\$20,950.48	\$2,438.50	11.6%
5300	General Merchandise Stores	\$19,102.68	\$3,372.67	17.7%
3675				
3676				
3677				
3678				
3679	Electronic Components- N.E.C.	\$18,185.17	\$963.73	5.3%
	New Residential Structures	\$17,841.69	\$2,515.43	14.1%
	New Industrial and Commercial Buildings	\$17,410.93	\$1,347.91	7.7%
1310	Natural Gas & Crude Petroleum	\$17,356.11	\$0.00	0.0%
6100				
6710				
6720				
6733				
6790	Credit Agencies	\$16,537.83	\$1,866.33	11.3%
8710	Engineering- Architectural Services	\$16,160.22	\$1,418.41	8.8%
4500	Air Transportation	\$16,038.72	\$1,595.67	9.9%
	New Government Facilities	\$14,077.73	\$1,209.75	8.6%
6400	Insurance Agents and Brokers	\$13,715.64	\$0.00	0.0%
4311	U.S. Postal Service	\$13,220.32	\$2,136.33	16.2%
7530				
7549	Automobile Repair and Services	\$13,030.06	\$1,951.67	15.0%
0740				
8070				
8080				
8090	Other Medical and Health Services	\$11,914.98	\$2,188.36	18.4%
3080	Miscellaneous Plastics Products	\$11,907.63	\$0.00	0.0%
5700	Furniture & Home Furnishings Stores	\$10,809.75	\$1,839.21	17.0%
	Other State and Local Government Enterprises	\$10,708.24	\$1,594.74	14.9%
8220	Colleges- Universities- Schools	\$10,486.45	\$0.00	0.0%
2830	Drugs	\$10,483.60	\$0.00	0.0%
8730	Research- Development & Testing Services	\$10,468.34	\$0.00	0.0%

Second, estimated value added per job for each recommended sector is provided, allowing comparisons of their relative desirability (see Table A). The Value Added calculations are estimates of the wages, profits, and taxes that each job in a given industry sector is likely to generate.

Third, Pensacola's existing targeted businesses were surveyed to ascertain their views concerning any competitive gaps or supplier opportunities that exist in the structure of our regions industry clusters. Their responses are listed in Table C, and reinforce many of the industry recommendations that resulted from the analysis of gaps in Pensacola's industry clusters.



<b>TABLE C – SUPPLIERS NEEDED IN PENSACOLA</b>
A good office supply store that doesn't warehouse what you need.
Business that are FAA certified
Certified FAA repair stations or similar facilities
Computer equipment is limited, and prices are too expensive
Computers and Software companies
HVAC Equipment
Local Insurer for Independent Agents
Manufacture of Aviation Parts
Manufacture of Electronic Parts
Medical Supplies
Metals
Property and Casualty Insurance companies
Steering and suspension parts
Telecommunications

And finally, location quotients, which are determined by comparing percentage employment in each industry locally relative to the national percentage employment for that industry, have been calculated for each industry sector (see Table D). Locations quotients are used to identify industry sectors for which Pensacola provides a larger than average workforce. It can be assumed that Pensacola offers some comparative or competitive advantage over other regions in those industry sectors.

<b>TABLE D - INDUSTRIES WHERE PENSACOLA HAS A COMPARATIVE ADVANTAGE IN WORKFORCE</b>					
SIC	Industry	Total Employment Pensacola MSA	% of Total Employment by Industry Sector - Pensacola MSA	% of Total Employment by Industry Sector - USA	Location Quotient
	Federal Government - Military	16789.0	8.5%	1.4%	6.2
5800	Eating & Drinking	13402.3	6.8%	5.2%	1.3
	State & Local Government - Education	13237.0	6.7%	5.4%	1.2
8060	Hospitals	8363.1	4.2%	2.8%	1.5
	Federal Government - Non-Military	6852.5	3.5%	1.8%	1.9
	New Residential Structures	5985.8	3.0%	1.4%	2.1
8010					
8020					
8030					
8040	Doctors and Dentists	5432.1	2.7%	2.1%	1.3
5400	Food Stores	5369.1	2.7%	2.4%	1.1
7360	Personnel Supply Services	5316.3	2.7%	2.5%	1.1

TABLE D - INDUSTRIES WHERE PENSACOLA HAS A COMPARATIVE ADVANTAGE IN WORKFORCE					
SIC	Industry	Total Employment Pensacola MSA	% of Total Employment by Industry Sector - Pensacola MSA	% of Total Employment by Industry Sector - USA	Location Quotient
5300	General Merchandise Stores	4831.4	2.4%	1.8%	1.4
5500	Automotive Dealers & Service Stations	4068.3	2.1%	1.7%	1.2
0740					
8070					
8080					
8090	Other Medical and Health Services	2442.6	1.2%	1.0%	1.2
8740	Management and Consulting Services	2415.5	1.2%	1.0%	1.3
	New Industrial and Commercial Buildings	2214.6	1.1%	1.0%	1.1
8710	Engineering, Architectural Services	2093.1	1.1%	0.9%	1.2
5200	Building Materials & Gardening	2089.2	1.1%	0.7%	1.6
9360	Residential Care	1965.5	1.0%	0.5%	2.0
	New Government Facilities	1959.7	1.0%	0.6%	1.6
2824	Organic Fibers, Non-cellulosic	1945.4	1.0%	0.0%	34.1
	Maintenance and Repair, Residential	1801.3	0.9%	0.6%	1.5
5700	Furniture & Home Furnishings Stores	1732.5	0.9%	0.7%	1.2
4810					
4820					
4840					
4890	Communications, Except Radio and TV	1666.5	0.8%	0.7%	1.2
7530					
7549	Automobile Repair and Services	1582.9	0.8%	0.7%	1.1
8210	Elementary and Secondary Schools	1534.3	0.8%	0.5%	1.6
2620	Paper Mills, Except Building Paper	1520.0	0.8%	0.1%	7.6
4311	U.S. Postal Service	1347.6	0.7%	0.6%	1.2
780	Landscape and Horticultural Services	1285.7	0.7%	0.5%	1.3
8320					
8390	Social Services, N.E.C.	1219.8	0.6%	0.6%	1.0
4910	Electric Services	1057.5	0.5%	0.3%	2.0
8660	Religious Organizations	990.4	0.5%	0.2%	2.6
8350	Child Day Care Services	900.1	0.5%	0.4%	1.2
2310					
2320					
2330					
2340					
2350					
2360					
2370					
2380	Apparel Made From Purchased Materials	890.8	0.5%	0.4%	1.1
	Other State and Local Government Enterprises	852.1	0.4%	0.4%	1.1



TABLE D - INDUSTRIES WHERE PENSACOLA HAS A COMPARATIVE ADVANTAGE IN WORKFORCE					
SIC	Industry	Total Employment Pensacola MSA	% of Total Employment by Industry Sector - Pensacola MSA	% of Total Employment by Industry Sector - USA	Location Quotient
	Other Federal Government Enterprises	803.3	0.4%	0.0%	9.2
	New Highways and Streets	683.2	0.3%	0.3%	1.4
7620	Electrical Repair Service	618.4	0.3%	0.1%	2.3
	New Utility Structures	599.8	0.3%	0.3%	1.1
3621	Motors and Generators	569.4	0.3%	0.0%	5.9
7690	Miscellaneous Repair Shops	567.4	0.3%	0.3%	1.0
2674	Bags, Paper	561.3	0.3%	0.0%	25.1
7350	Equipment Rental and Leasing	555.0	0.3%	0.2%	1.3
7510	Automobile Rental and Leasing	477.3	0.2%	0.2%	1.3
3296	Mineral Wool	436.6	0.2%	0.0%	13.5
7260	Funeral Service and Crematories	412.5	0.2%	0.2%	1.4
4400	Water Transportation	393.0	0.2%	0.1%	1.6
2821	Plastics Materials and Resins	278.1	0.1%	0.1%	2.8
3442	Metal Doors, Sash, and Trim	248.9	0.1%	0.1%	2.5
3272	Concrete Products, N.E.C	243.2	0.1%	0.1%	2.5
3469	Metal Stampings, N.E.C.	241.6	0.1%	0.1%	2.0
2861	Gum and Wood Chemicals	202.8	0.1%	0.0%	64.4
3060	Fabricated Rubber Products, N.E.C.	196.3	0.1%	0.1%	1.4
7948	Racing and Track Operation	190.4	0.1%	0.1%	1.5
131	Cotton	188.6	0.1%	0.0%	3.5
3273	Ready-mixed Concrete	178.4	0.1%	0.1%	1.2
2515	Mattresses and Bedsprings	150.4	0.1%	0.0%	3.4
4940					
4952	Water Supply and Sewerage Systems	130.0	0.1%	0.0%	3.5
2396	Automotive and Apparel Trimmings	127.8	0.1%	0.0%	1.6
3412	Metal Barrels, Drums and Pails	123.4	0.1%	0.0%	13.0
2297	Non-woven Fabrics	102.0	0.1%	0.0%	6.3
3732	Boat Building and Repairing	98.9	0.1%	0.0%	1.4
2521	Wood Office Furniture	90.7	0.0%	0.0%	2.3
910	Commercial Fishing	90.7	0.0%	0.0%	1.1
	Forest Products	89.6	0.0%	0.0%	1.1
2439	Structural Wood Members, N.E.C	88.0	0.0%	0.0%	1.5
1440	Sand and Gravel	67.7	0.0%	0.0%	1.4
2671	Paper Coated & Laminated Packaging	65.9	0.0%	0.0%	2.4
3845	Electromedical Apparatus	57.8	0.0%	0.0%	1.0
3799	Transportation Equipment, N.E.C	54.6	0.0%	0.0%	1.7
2298	Cordage and Twine	31.6	0.0%	0.0%	3.6

TABLE D - INDUSTRIES WHERE PENSACOLA HAS A COMPARATIVE ADVANTAGE IN WORKFORCE					
SIC	Industry	Total Employment Pensacola MSA	% of Total Employment by Industry Sector - Pensacola MSA	% of Total Employment by Industry Sector - USA	Location Quotient
3536	Hoists, Cranes, and Monorails	19.5	0.0%	0.0%	1.7
2097	Manufactured Ice	11.4	0.0%	0.0%	1.2

In summary, the information provided in this report will assist in implementing Pensacola's strategy to "source locally and compete globally" while at the same time increasing the commerce park's chances for success.

**7.0 Infrastructure Development and Cost Estimates**

**Existing Conditions:**

Generally, the area of the proposed Palafox Commerce Park has existing roadway, potable water, and sanitary sewer infrastructure in place. Additionally, electrical and telephone service is provided. A fiber-optic cable exists in the area and will have to be extended to the Commerce Park. An exception is the area of the superfund site, where no utilities are known to be in place at this time.

A portion of the existing sanitary sewer, generally located along the easterly edge of the Commerce Park, will require relocation in order to accommodate the proposed stormwater facilities. The existing two-inch diameter potable water line along Lansdowne Avenue will require replacement in order to provide for fire hydrants.

**Proposed Improvements:**

The Master Plan proposes to utilize several existing roadways within the limits of the Palafox Commerce Park. The roadways to remain include:

- Hickory Street, 1,650 feet
- Lansdowne Avenue, 1,700 feet
- Kilarney Court, 200 feet
- Montrose Court, 200 feet
- Tyndale Avenue, 450 feet
- Lurton Street, 1,450 feet
- Liggett Street, 500 feet
- Hopkins Street, 500 feet
- Herman Avenue, 900 feet
- Spruce Street, 400 feet
- An unnamed roadway south of Spruce Street, 550 feet



Further, some of the existing roadways are proposed for widening to a thirty-six foot roadway section:

- Beggs Lane, 800 feet
- Mulberry Street, 650 feet
- Talisman Avenue, 500 feet
- Pasco Street, 450 feet

Finally, new roadways include:

- Mulberry Street and Beggs Lane, 600 feet
- North-South connector road:
  - Between Lurton Street and Lansdowne Avenue, 1,450 feet
  - Between Fairfield Drive and Lurton Street, 1,600 feet
- East-West boulevard (at entry feature), 1,550 feet

The lengths shown above are approximate and for the purpose of showing the order of magnitude only.

In addition to the above, some new sanitary sewer infrastructure and potable water infrastructure will be required. Part of this requirement is based upon the necessity to relocate some of this infrastructure to accommodate the proposed stormwater management ponds. As the industrial park develops, we recommend that the electrical and telephone infrastructure be placed underground.

The stormwater management ponds and collection system will enhance the value of the individual sites by providing the necessary stormwater management in a common "regional" stormwater system.

Costs for the various components of the infrastructure follow. The costs do not include the cost for land purchase for new or additional rights-of-way or easements. An included line item is an estimated cost to repair and overlay the existing roadways that are to remain. This is provided for additional information that may be of value during implementation of the master plan.

In discussions with the Escambia County Utility Authority, reclaimed water for use as an irrigation source may be available within six to ten years. Costs for the construction of reclaimed water lines for irrigation is therefore included.

**7.3 PRELIMINARY ESTIMATE OF ORDER OF MAGNITUDE OF COSTS**

**ROADWAYS:**

widen existing roadways	2,400 linear feet	@	\$88 =	\$211,200
construct new roadways	5,200 linear feet	@	\$128 =	\$665,600
overlay existing roadways	8,500 linear feet	@	\$25 =	\$208,250

**SANITARY SEWER:**

sanitary sewer	6,000 linear feet	@	\$16 =	\$96,000
manholes	24 each	@	\$2,000 =	\$48,000

**POTABLE WATER:**

water line	9,500 linear feet	@	\$14 =	\$133,000
valves	24 each	@	\$900 =	\$21,600
fire hydrants	24 each	@	\$2,000 =	\$48,000

**STORMWATER MANAGEMENT:**

pond excavation and grading (15 acres)	87,500 cubic yards	@	\$18 =	\$1,575,000
storm sewer	10,000 linear feet	@	\$45 =	\$450,000
inlets	50 each	@	\$2,000 =	\$100,000

**RECLAIMED WATER IRRIGATION:**

reclaimed waterline	16,000 linear feet	@	\$14 =	\$224,000
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SUBTOTAL				\$3,780,650
PLUS CONTINGENCIES		@	20%	\$756,130

<b>GRAND TOTAL</b>				<b>\$4,536,780</b>
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## **8.0 REDEVELOPMENT ISSUES**

### **8.1 Flow of Ownership and Land Use Issues**

The ETC property itself is currently in tax arrears and the former operator of the ETC site is in bankruptcy. The EPA currently maintains control of the ETC property as it relates to site access and cleanup activities. When completed with the community relocation and ultimately the ETC site soil cleanup, an estimated 90 acres, will be transferred to the State of Florida Department of Environmental Protection. The ultimate ownership of the property, whether it is in public control, i.e. the City of Pensacola or Escambia County, or under private ownership and development, will depend on the ultimate redevelopment scenario established for the Palafox Commerce Park. This flow of ownership issue must be considered in order to facilitate redevelopment either as a public sector or private sector project.

Due to the use of commercial and industrial risk-based cleanup levels, by EPA the site will require institutional controls including a deed restriction that will ultimately limit the use to certain commercial and or industrial land uses. The Palafox Redevelopment Plan prepared by Escambia County Community Redevelopment Agency, proposes rezoning those areas of the northern and southern portions of the ETC site located in Escambia County to Gateway ID-CP Palafox Commerce Park District. This district zoning is intended to provide relatively large-scale light industrial, commercial, and business park areas. The overall objective of the District is to provide zoning that is more compatible with the current uses and facilitates redevelopment of the Brownfields Sites along the gateway commercial corridor. It is important that the land use restrictions being placed on the site after cleanup is completed be compatible with the proposed Gateway ID-CP zoning.

Another issue relating to the established land use and ultimate cleanup level involves Resolution No. R2000-25 dated 2/10/2000 and passed by the Board of County Commission of Escambia County regarding the cleanup of the ETC site. The resolution requests that the "EPA perform a complete, thorough and permanent cleanup of onsite and offsite contamination to Residential standards, not Industrial standards, including surface and subsurface soil, sludge, surface water, ...". This resolution is inconsistent with the current cleanup plans established by EPA and inconsistent with the proposed commercial and industrial reuse of the property. However, the goals are to stop any recurring source of contamination to groundwater, provide for plume remediation not just monitoring (in conformance with State statutes) and ensure workers safety at the new Commerce Park.

### **8.2 Integration into Existing Palafox Redevelopment Plan**

The project is currently located in two separate political jurisdictions, approximately half in Escambia County and half in the City of Pensacola. Those northern and southern portions of the project which are located in Escambia County are also located in the Palafox Redevelopment Area which is a County designated Community Redevelopment Area and Federal and State Brownfields Redevelopment Area. Each of these designated redevelopment areas qualifies a potential developer or end-user for specific economic incentives that are aimed at facilitating reuse of the Palafox Commerce Park. It is recommended that the remaining area (within the City of Pensacola) not currently included in the aforementioned designated areas be considered for inclusion in these programs. The Palafox Redevelopment Plan also addresses the issue of the ETC cleanup and relocation, which is an integral part of redevelopment for the Palafox area. According to the plan, 42



acres of residential properties associated with the EPA relocation project are located within the Palafox Redevelopment Area, and will be restricted to future commercial or industrial use only. This same type of designation should apply to the portions of the Park which are in the City of Pensacola.

The Palafox Redevelopment Plan states the following:

*The presence of the Escambia Treating Company Superfund Site and its associated residential relocations is a unique aspect to the Palafox Redevelopment Area. A description of the resulting impact of this facility is included in Section 4. The unique issues are:*

- *Fair compensation to the former/current property owners, timing of the relocation, role of New Hope Missionary Church;*
- *Public input for the EPA Escambia Treating Record of Decision for cleanup levels;*
- *Job training and creation for the anticipated commercial redevelopment;*
- *Designation as a national Pilot Superfund Redevelopment Project;*
- *Planning for the Eco-commercial redevelopment initiative;*
- *And coordinating site cleanup with redevelopment.*

*While integral to the successful redevelopment of the Palafox corridor, the issues of planning for the site redevelopment will be addressed in more detail in the Escambia Treating Superfund Site Redevelopment Plan and Eco-Commerce Park Proposal. This plan is scheduled for completion in the late summer/fall of 2000. Several issues of great importance will be included in the Superfund Plan and not be completely addressed in the Palafox Redevelopment Plan. The County does understand that the residents of Rosewood Terrace, Pearl and Herman Streets and Escambia Arms are determined to be fairly compensated for their land and that it not be "seized" or gentrified for profit by redevelopers.*

*The County is also working with the New Hope Missionary Baptist Church to keep the membership intact and provide for a larger role in the community. Some of these efforts will be to:*

*Create a buffer of land around the church not to be resold to developers and to provide for an expanded community purpose;*

*Assist in providing for expanded community oriented programs offered from the church facility such as health care, community meetings and educational programs;*

*Lease the additional land to the church using a 99-year renewable lease.*

### **8.3 Recommendations for Further Evaluation Pertaining to Redevelopment**

The following is an outline of potential follow-up issues and recommendations relating to redevelopment of the Palafox Commerce Park:

- Develop a plan that addresses flow of ownership issues as it relates to the ultimate objective of public vs. private sector development of the ECT site.

- Adopt the special zoning for the ETC site and verify that the cleanup levels and land use restrictions to be imposed by EPA and FDEP are compatible with the proposed zoning and redevelopment.
- Resolve the political jurisdictional issues relating to the overlap of City of Pensacola and Escambia County as it relates to permitting, zoning, economic development, incentives, etc.
- Research the various permitting, concurrency and Development of Regional Impact issues relating to the redevelopment of the Palafax Commerce Park and resolve those issues upfront in order to facilitate the redevelopment of the park
- Develop a marketing and economic development plan that details the types of economic and other incentives available for potential developers or end users
- Continue to coordinate closely with EPA on the remedy selection and implementation of the ETC site to assure that cleanup operations, schedules, and results meet the redevelopment criteria establish for this project
- Further evaluate the establishment of an Eco-Industrial Park and the integration of green design and building techniques into the permitted uses, site and building requirements, construction, landscaping, performance standards, etc.
- Further explore and address the environmental liability relief mechanisms such as prospective purchaser agreements and state Brownfields designation available to address both the federal and state liability obligations resulting from the ETC onsite soil and groundwater contamination and off-site groundwater contamination plume. Issues such as liability release for subsequent owners and reopeners should be evaluated
- Ensure that established community involvement program remains an integral part of the redevelopment process