



10100 ROCKET BOULEVARD • ORLANDO, FLORIDA 32824

Meeting Agenda and Discussion

Perma-Fix of Orlando, Inc., Florida DEP

December 3, 2004

Participants:

Janine Kreamer, Env. Specialist, FDEP
Tom Lubozynski, Program Manager, FDEP

Timothy Keegan, President, Perma-Fix Environmental
John Zawacki, Vice President, Perma-Fix Environmental
Christopher Waechter, General Mgr., Perma-Fix of Orlando

The purpose of this letter is to document Perma-Fix Environmental and Perma-Fix of Orlando's commitment to improve current operations and facilities. As you are aware, Perma-Fix has gone through many changes in Management in the past several months. Current management from the top of our organization down to the bottom is totally committed to these improvements.

It is our request that the Department consider some measure of additional leniency in fines associated with past deficiencies at our Orlando Facility. The following is a sampling of the measures of which we are implementing and facility wide capital investments we are prepared to undertake.

- 1.) **Waste Tracking Enhancements:** As discussed PFO is close to completion of an enhancement to our current Waste Tracking Database. This enhancement will add "real-time" tracking via the use of barcode technology.

Total Estimated Capital Investment: \$ 32,000.00

- 2.) **Jim Kreger** has accepted the Position of Regional Environmental, Health and Safety Manager for Southeastern Operations. Jim brings over 20 years of progressive Hazardous Waste operations and compliance experience. Mr. Kreger will be based out of the Perma-Fix of Orlando facility.

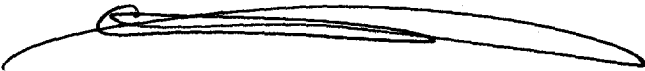
Perma-Fix is further committed to expansion and upgrading of our facility. These upgrades include modifications to both the 10100 Rocket facility and the 10225 General facility. Dock/Warehouse and Processing area expansions at the facilities will not only facilitate increased efficiencies but further protect Human Health and the Environment.

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Additionally, I feel that Perma-Fix of Orlando, Inc. is a vital contributor to Central Florida. We are proud to employ over 60 Florida Residents and contribute over 2,000,000 in payroll to our Florida employees. I greatly appreciate all of the Department's efforts in assisting Perma-Fix over the past several months. I would also ask that the department would further evaluate the option of allowing Perma-Fix to invest a portion of the penalty for cited compliance deficiencies back into our facility.

Should you have any questions please do not hesitate to give me a call at the Orlando facility.

Sincerely,



Christopher R. Waechter
Facility Manager.
Perma-Fix of Orlando, Inc.

CC: T. Keegan, President, PESI

J. Zawacki, Vice President, PESI
J. Kreamer, Env. Specialist, FDEP
T. Lubozynski, Program Manager, FDEP

BARCODE IMPLEMENTATION – PFO

Project Definition

This document describes a portion of the implementation of the EW Barcode system at Perma-Fix. The intent is to capture business process and map the automation of those processes and clearly define the solution.

Primary Objectives

- Meet compliance requirements set by the state of FL for tracking daily real-time inventory
- Improve data accuracy and availability
- Reduce operating costs associated with data entry
- Speed the waste tracking process (IE real time inventory)

Proposed Solution

1. Define the workflow and configuration of a barcode system
2. Develop the BarCode logic in SQL procedures
3. Acquire BarCode devices that meet the EW software requirements
4. Pilot the devices and configuration in Atlanta
5. Utilize the existing hardware, software, and configuration (printers, ReportSmith, etc...)

Project Plan

1. Project Definition – Outline requirements through implementation
2. EW Application Pilot test
3. Solution Design
4. Hardware and Label test (ISDH)
5. Development – Est. 40 hrs of application development (Est. Dec 10)
6. Install of WiFi devices at PFO - (Est Dec 3)
7. Report Development – Real Time Inventory Report - (Est Dec 17)
8. Production implementation and training Est. Dec 24

Cost Estimate

• 3 Scanners	\$2500 ea	\$ 7,500
• Oracle DB License	DB One (2 proc)	\$10,000
• Changes to the software	40hrs @\$100/hr	\$ 4,000
• Wifi Setup	Access Point, Installation, etc..	\$ 8,000
• Thermal Printer	\$2,500 ea	\$ 2,500

EST TOTAL:	\$32,000
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EW Barcode Application Evaluation

Hand.exe – C program written by CTi that provides linear processing of key operations functions. This application will be run on the Server (ntflorida) and accessed via a TELNET session on that server. Any VT emulation device on the network can access the application (hand.exe) in this configuration. This application requires a \$5000 per facility license + 25% annual maintenance fee.

Installation

1. Run the following scripts on the Oracle DB in the EW schema:
create_customized_object_error_log.sql, hand.sql, create_barcode_pkg_s.sql,
create_barcode_pkg_b.plb
2. Update the License key with the correct value for the BarCode system

Pilot results

1. Move – Basic functionality will work for moving inventory with minor changes
2. Decant – Several significant bugs (proper update of location and history, drum disposition)
3. Weigh – Significant level of change required (update and Weigh/Volume)
4. Ship - Untested

Next Steps

CTi acknowledges the hand.exe is old and needs much work to be a usable solution for Perma-Fix. The following design has been presented to CTi and several 3rd party vendors for estimates. Building the application custom for Perma-Fix will enable Perma-Fix to modify, enhance and support the Barcode system for future sites as well as additional operational tasks at the same or less initial investment.

Solution Design

Barcode Server

The NTFLOIDA Server will be used to run the BarCode application in a terminal window using Win2000 Telnet server. The Application runs on the server and requires installation of the Oracle Client (per EW Client install procedures).

Win2000 Telnet configuration

1. Install the 2000 Server Telnet system
2. Set telnet service to automatic startup
3. Configure telnet server to use a custom login script (Ewlogin.cmd). This script will set the drive, directory, and executable for the BarCode application.

Barcode Client

The Barcode Client is a Hand held computer terminal with the following capabilities:

- Scan capability for bar codes
- Durability for industrial use
- WiFi capability (802.11b standard with multiple access point negotiation capability)
- Telnet capability (Terminal emulation of DOS or VT100) The application actually runs on the server via a telnet (DOS mode) window session. The pilot system is an Intermec Trakker 2425, approx. \$3000 each.

WiFi Setup

Bar Code hardware vendors insist that custom WiFi access points are preferred / recommended for setup and installation of a solution due to many factors. Some devices do support standard networking access points (The pilot system is a Cisco Aironet 1200 series – Approx. \$900). We expect 1 access point in the Haz warehouse at PFO.

PESI Barcode Application Design

Perma-Fix will build a custom application that will operate as a Telnet (DOS mode) application and perform all database updates and transactions directly.

Architecture

- The application will operate from a DOS prompt and will run in a Telnet session
- The application will prompt the user for login information and establish a persistent connection to the Oracle DB
- All DB updates will be performed by calls to Oracle Stored Procedures
- If possible, make the main program a PLSQL procedure

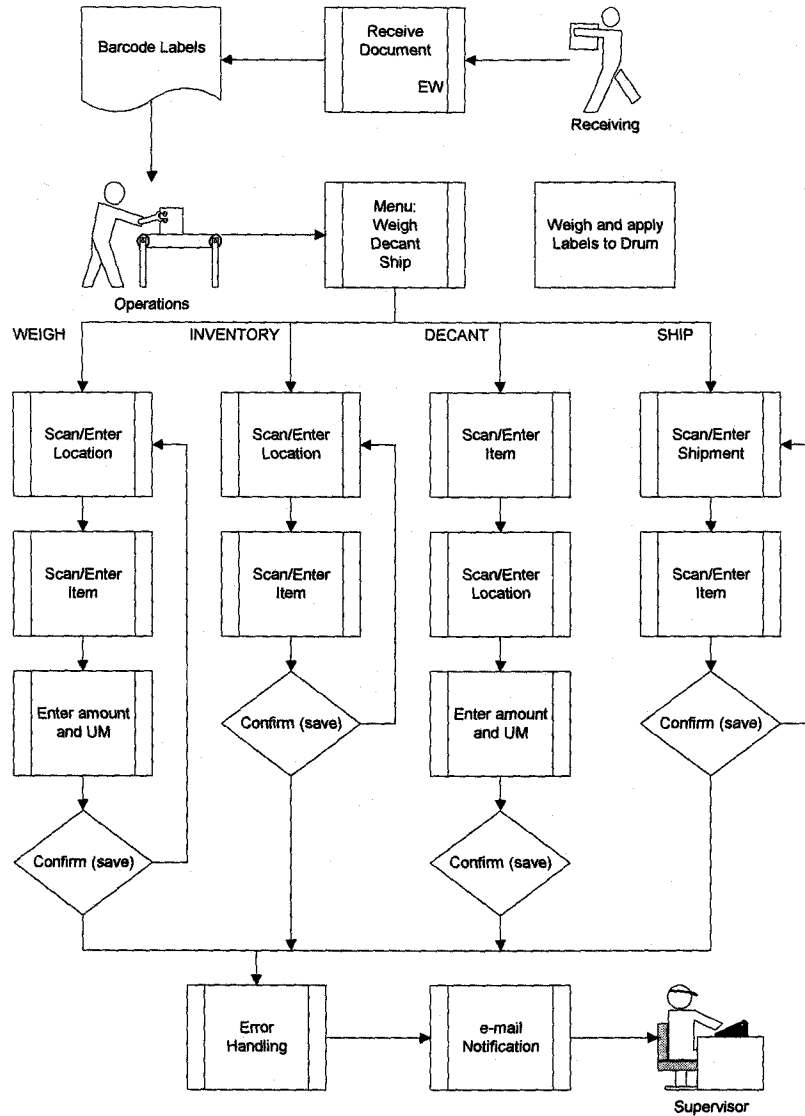
Stored Procedures

- **PF_BCMENU** – Main routine that reads menu items from VALIDATION. The VALIDATION entries control what user has permissions to each menu item and limits the application to those menu items.
 - Open Connection, login (user id and password)
 - Initialize variables
 - Select from VALIDATION where And USER = \$USERID
 - Case select menu items, call procedure
 - WEIGH ITEMS – PF_BCWEIGH
 - INVENTORY – PF_BCINVENTORY
 - DECANT ITEMS – PF_BCDECANT
 - SHIP ITEMS – PF_BCSHIP
 - EXIT
- **PF_BCWEIGH** – Weigh items that have been received into inventory. This will remove the use of the Weigh screen for most weigh operations.
Procedure
Begin transaction
 Prompt for Location
 If location not in select valid locations
 then PF_BCERROR('bad_loc'), return
 Prompt for Document and item
 If item is NULL return else
 If item.received = NULL or item.disposed <> NULL or item.destroyed <> NULL
 or item.inventoried = NULL then PF_BCERROR('bad_item'), return
 Prompt Amount and UM
 If UM = GAL then compute WT, else if UM=LBS, then compute VOL
 If UM = EA, then compute WT and VOL
 If neither above, PF_BCERROR('bad_UM'), return
 Location does NOT exist
 Insert Location, wt, vol, um, etc....
 Insert History "WEIGH"
 Return
 Location does exist
 Update Location, Wt, and Vol
 Insert History "WEIGH UPDATE"
End transaction
If transaction fail then PF_BCERROR('wt_tran_fail'), return
Commit, return

- **PF_BCINVENTORY** – Inventory reconciliation. This operation will remove the need to use the Move screen and will enable fast and efficient update of inventory at any time.
Procedure
Begin transaction
 Prompt for Location
 If location not in select valid locations
 then PF_BCERROR('bad_loc'), return
 Prompt for Document and item
 If item is NULL then return
 If item.received = NULL or item.disposed < NULL or item.destroyed < NULL
 or item.inventoried = NULL then PF_BCERROR('bad_item'), return
 Location does NOT exist
 PF_BCERROR('no_location'), return
 Location does exist
 Update Location, time and date
 Insert History "INVENTORY"
End transaction
If transaction fail then PF_BCERROR('inv_tran_fail'), return
Commit, return
- **PF_BCSHIP** – Add item to Shipment. This requires a shipment with profile lines. This operation only places items onto the shipment line.
Procedure
Begin transaction
 Prompt for Shipment and Shipment Line (document and document Line)
 If Shipment and line not valid
 then PF_BCERROR('bad_ship'), return
 Prompt for Document and item
 If item is NULL then return
 If item.received = NULL or item.disposed < NULL or item.destroyed < NULL
 or item.inventoried = NULL then PF_BCERROR('bad_item'), return
 Else Delete Location, time and date
 Insert into History "SHIP"
 Update item: Outbound Manifest, Sets Facility #, Disposal. Facility,
 Creates Ship History
End transaction
If transaction fail then PF_BCERROR('ship_tran_fail'), return
Commit, return
- **PF_BCERROR (?)** – User to handle all errors and calling of the e-mail procedure.
 - Function
 - Input: Error Code, procedure, document, item, location
 - Process: Select Error Message from validation, fire e-mail notification
 - Output: Display message and values and send e-mail, or fail
- **PF_BCEMAIL** (template exists) – Handles send of notification to the Receiving dept for errors in the data.
 - Function
 - Input: To: email address list, subject, body,
 - Process: Generate a notification e-mail
 - Output: success or fail

Barcode Workflow

v 1.2 rev. 11/16/2004





Pre Engineered & Post Frame Design/Build Specialists

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www.cornerstonebuildingsystems.net • e-mail: csbsi@earthlink.net • State Certification # CBC 028 988

FACSIMILE TRANSMITTAL

DATE: Wednesday, August 04, 2004 / FROM: Chuck Smith
TO: Chris Waechter, Plant Manager and Mike Avery, Transportation Manager
VOICE#: 407.859.4441 / FX#: 407.855.2812

Please deliver the following (3) pages, including cover sheet. **If there are questions or problems regarding this transmission, please contact us immediately.**

NOTES:

Chris,

Please see item #4 for additional pricing as per our meeting yesterday. A two-page sketch is attached for your review. The single slope version we discussed will not work due to inadequate height clearance. If you would like to proceed let us know ASAP. As discussed, PermaFix is to provide CSBSI a current survey for simple site plan by CSBSI on same that we will provide at no extra charge to PermaFix. If civil design services are required, extra charges for same will apply.

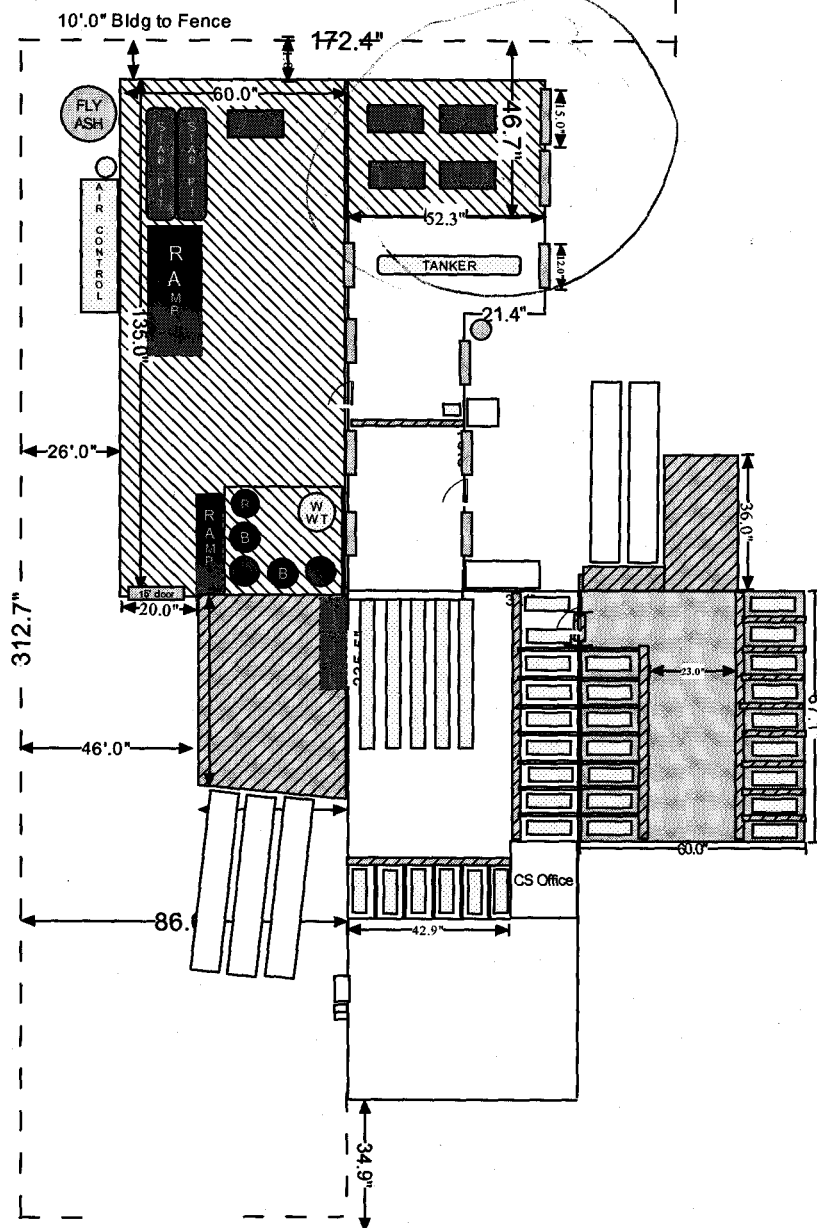
The "Budgetary" Design/Build costs for the following (3) projects per our meeting at site are as follows:

1. New 60'x75'x16' Shop Building with additional 60'x25'x5" concrete slab, foundation and structure only:
\$ 184,500.00
 2. New +/- 36'x60'x16' Covered Loading Dock extension with +/- 18'x60'x4'-8" loading dock with guardrails at end and (1) side only:
\$ 75,580.00
 3. New +/- 40'x60'x16' with 5' cantilevered overhang at low side, Covered Loading Dock warehouse extension with +/- 40'x65'x match existing F.F.E. concrete loading dock with one end skewed +/- 5' and (1) new 3070 personnel and (1) 10x10 rollup door at existing sidewall.
\$ 104,940.00
 4. New +/- 60'x60'x20' double-sloped roof only addition to other existing warehouse as per attached sketch and 8-3-04 meeting at site with owner's Chris Waechter. All structural columns to be set on new footings through existing asphalt paving with patching of same up to existing finish grade. Columns adjacent to existing building to be set through existing metal roof overhang so as to leave existing building intact as much as possible.
\$ 57,540.00
- Alternate #1, Change building size to 80'x60'x20':
+ 11,700.00

No civil site design or any work associated with same included. Any questions or comments, please advise. Thank you.

Chuck Smith

\$ 69,240

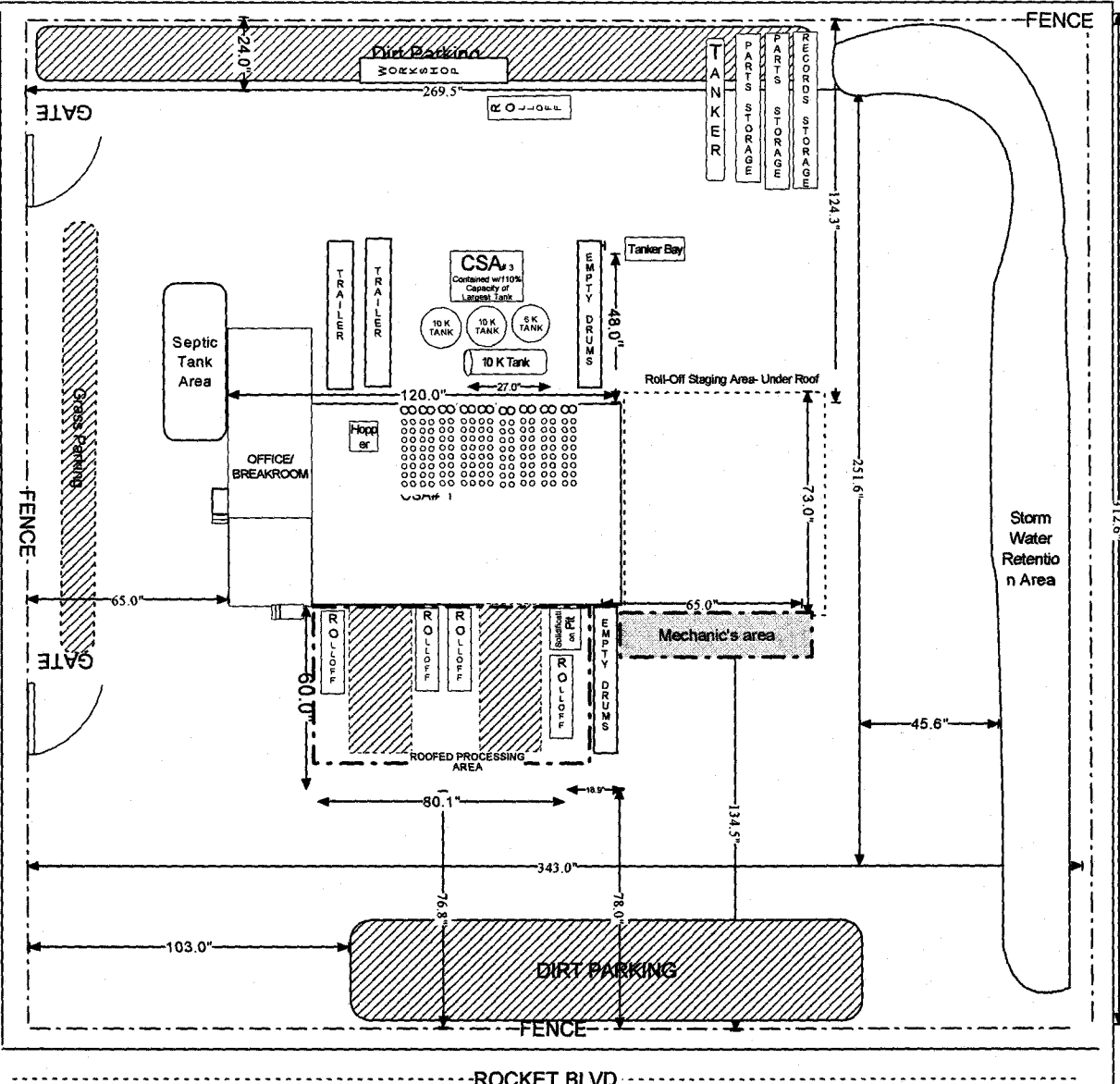


ROCKET BLVD

Perma-Fix of Orlando, RCRA Facility 10100 Rocket
Bldg(Proposed Facility Layout).
Orlando, Fl. 32824 [FLD 980 55 9728]

407-859-4441

Project Designer:	
Chris Waechter	
Project Contact:	
Chris Waechter	
Project #	WO#
PFO-HW	
Date:	Rev. Date:
07-20-2004	07-21-2004



Not to Scale

Perma-Fix of Orlando, SW Facility 10225 General Dr
(Proposed Facility Layout).
Orlando, Fl. 32824 [SO48-0152516-002]

407-859-4441

Project Designer:	
John Jones P.E	
Project Contact:	
Chris Waechter John Jones, P.E	
Project #	WO#
PFO-SWF	
Date:	Rev. Date:
07-20-2004	07-21-2004