



Beckett Bridge

Project Development & Environment (PD&E) Study

from Chesapeake Drive *to* Forest Avenue
Tarpon Springs, Pinellas County, FL



Pinellas County Project ID: PID2161
FDOT Financial Project ID: 424385-1-28-01
Bridge No: 154000

February 2013

Cover Updated January 2016

Final Cultural Resource Assessment Survey Report

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EXECUTIVE SUMMARY

This cultural resource assessment survey (CRAS) for the Project Development and Environment (PD&E) Study for Beckett Bridge (Bridge No. 154000) along Riverside Drive from Chesapeake Drive across Whitcomb Bayou to Forest Avenue in Pinellas County (Pinellas County Project ID: PID2161) was conducted for Pinellas County in coordination with the Florida Department of Transportation (FDOT), District Seven and the Federal Highway Administration (FHWA) (FDOT Financial Project ID No.: 424385-1-28-01).

The objective of this survey was to identify cultural resources within or adjacent to the Area of Potential Effect (APE) and assess their eligibility for listing in the National Register of Historic Places (National Register) according to the criteria set forth in 36 CFR Section 60.4. This assessment was designed and implemented to comply with Section 106 of the *National Historic Preservation Act of 1966 (NHPA)* (Public Law 89-655, as amended), as implemented by 36 CFR 800 (*Protection of Historic Properties*, effective January 2001); Chapter 267, *Florida Statutes*; Section 4(f) of the *Department of Transportation Act of 1966*, as amended (49 USC 303); and the minimum field methods, data analysis, and reporting standards embodied in the Florida Department of Historic Resources (FDHR) *Historic Preservation Compliance Review Program* (November 1990), *Cultural Resource Management Standards and Operational Manual* (February 2003), and Chapter 1A-46 (*Archaeological and Historical Report Standards and Guidelines*), *Florida Administrative Code*. In addition, this report was prepared in conformity with standards set forth in Part 2, Chapter 12 (*Archaeological and Historic Resources*) FDOT *Project Development and Environment Manual* (revised, January 1999). All work conforms to professional guidelines set forth in the *Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716, as amended and annotated).

Principal investigators meet the minimum qualifications for archaeology, history, architecture, architectural history, or historic architecture contained in 36 CFR 61 (*Procedures for Approved State and Local Historic Preservation Programs*, Appendix A, Professional Qualifications Standards). Archaeological investigations were conducted under the direction of James Pepe, M.A., RPA. Historic resource investigations were conducted under the direction of Amy Groover Streelman, M.H.P.

The historic resources survey resulted in the identification of 16 newly recorded historic resources within the APE. The historic resources include one bridge, the Beckett Bridge (8PI12017) and 15 buildings (8PI12043-8PI12055, 8PI12068, 8PI12069). One newly recorded historic resource, the Beckett Bridge (8PI12017), has been determined eligible for listing in the National Register in Pinellas County as an individual historic resource. FHWA concurred that the Beckett Bridge is individually eligible for listing in the National Register on September 17, 2012. The State Historic Preservation Officer (SHPO) also concurred with these findings on October 8, 2012. The remaining resources (8PI12043-8PI12055, 8PI12068, 8PI12069) are considered ineligible for listing in the National Register as individual historic resources or as part of a historic district. Florida Master Site File (FMSF) forms were prepared for each of the sixteen newly recorded historic resources (Appendix A).

A historic resources reconnaissance survey was also undertaken in order to address historic resources along a proposed detour route which would be required for removal of the existing bridge, or during construction for the Beckett Bridge. If any of the build or rehabilitation alternatives are selected, it is anticipated that the existing Beckett Bridge route will be closed for approximately six months to two years; therefore a detour route will be necessary. One National Register-listed historic district and six previously recorded historic resources that are considered individually eligible for inclusion in the National Register were identified. The six individually eligible historic resources were recently recorded as part of the July 2009 *Historic Resources Survey of Tarpon Springs*, conducted by Janus Research and most of these six historic resources were initially recorded as part of the 1988 *Historic Properties Survey, Tarpon Springs*; some of these resources are also located in the Beckett Bridge proposed detour plan route. The historic resources include the National Register-listed Tarpon Springs Historic District (8PI1712), the Edward Newton Knapp House (8PI238), the William T. Fleming House (8PI1617), the George Clemson House (8PI1619), the George Clemson Auxiliary (8PI1620), the Marshall H. Alworth House (8PI1621), and the Bigelow Cottage (8PI1625). The six identified significant buildings are part of the 1990 National Register-listed Tarpon Springs Historic District (8PI1712). As part of the reconnaissance survey, one newly identified resource appears to be individually eligible for the National Register and is located at 115 North Park Avenue.



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1.0 INTRODUCTION

This cultural resource assessment survey (CRAS) for the Project Development and Environment (PD&E) Study for Beckett Bridge (Bridge No. 154000) along Riverside Drive from Chesapeake Drive across Whitcomb Bayou to Forest Avenue in Pinellas County (Pinellas County Project ID: PID2161) was conducted for Pinellas County in coordination with the Florida Department of Transportation (FDOT), District Seven and the Federal Highway Administration (FHWA) (FDOT Financial Project ID No.: 424385-1-28-01).

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2.0 PROJECT DESCRIPTION

Pinellas County, in coordination with FDOT District 7 and the FHWA, is conducting a PD&E Study to evaluate alternatives to remove, rehabilitate or replace the existing Beckett Bridge (Bridge no. 154000) in Tarpon Springs, Pinellas County, Florida. The existing bridge was originally constructed in 1924 as a timber structure with a steel movable span. The fixed timber approach spans were replaced with concrete approach spans in 1956. The existing bridge is 358'-6" long, consisting of 10 spans. On September 17, 2012 the Beckett Bridge was determined to be National Register-eligible by FHWA and on October 8, 2012 the SHPO also determined the bridge to be National Register-eligible. Eligibility is based on the bridge's contribution to early development of the area and because it is one of a few known, pre-1965, highway single-leaf rolling-lift bascule bridges remaining in Florida.

Major repairs, which included construction of crutch bents, repair of machinery, replacement of the electrical system and construction of a new control house, were performed in 1996. Additional repairs to the bridge machinery were needed in 1997 and 2011. Major rehabilitation or replacement of the bridge is needed to keep the bridge open and operating efficiently.

The project limits extend along Riverside Drive from Chesapeake Drive across Whitcomb Bayou to Forest Avenue, a distance of approximately 0.3 mile (Figure 2.1). The existing two-lane bridge connects areas west and north of the Bayou to downtown Tarpon Springs. The bridge is also located on a popular route for access to Fred Howard Park, a Pinellas County park located approximately 3.1 miles west on the Gulf of Mexico. Riverside Drive/North Spring Boulevard is an extension of Tarpon Avenue, which is a designated evacuation route. Beckett Bridge provides access to major north/south arterials including Alternate US 19 and US 19 for coastal residents during hurricane evacuation. The bridge also provides access for emergency vehicles, including police, ambulance and fire.

Beckett Bridge is owned and operated by Pinellas County. A bridge tender is only present when required to open the drawbridge for a vessel, there are no full-time bridge tenders. US Coast Guard drawbridge opening regulation (33CFR117.341) states that "The draw of the Beckett Bridge, mile 0.5, at Tarpon Springs, Florida shall open on signal if at least two hours' notice is given." Whitcomb Bayou connects to the Gulf of Mexico via the Anclote River to the north.

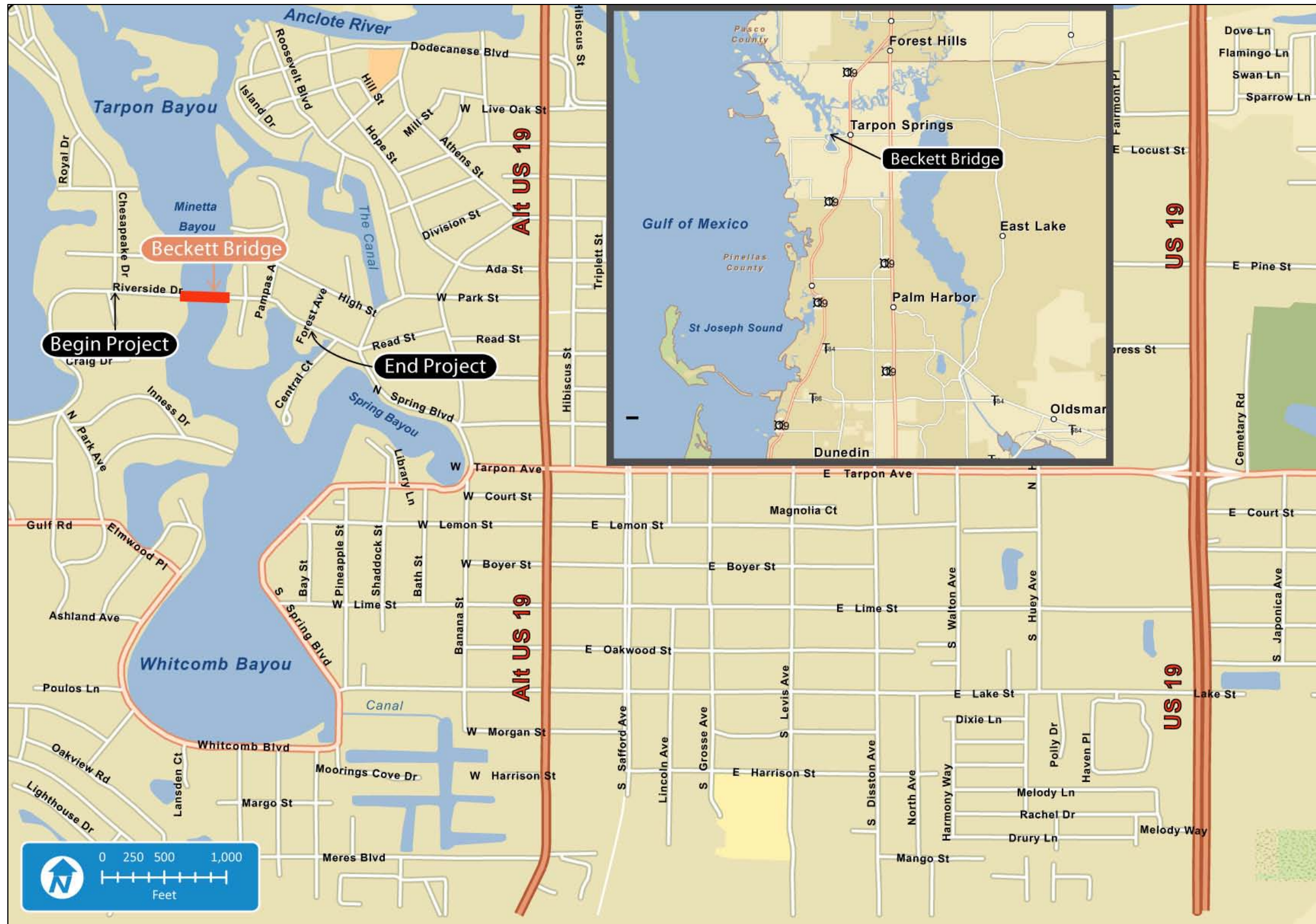


Figure 2.1 – Project Location



Boats docked along Whitcomb, Spring and Minetta Bayous, and along artificial canals which connect to the southeastern portion of the Whitcomb Bayou, must pass the Beckett Bridge to access the Gulf of Mexico.

3.0 EXISTING CONDITIONS

3.1 Project Need

The bridge is considered functionally obsolete. This designation is based primarily on the substandard clear roadway width of only 20 feet and substandard roadway safety features. The existing typical section consists of one, 10-foot wide travel lane in each direction and 2-foot 2-inch-wide sidewalks separated by a curb on both sides of the bridge (Figure 3.1).

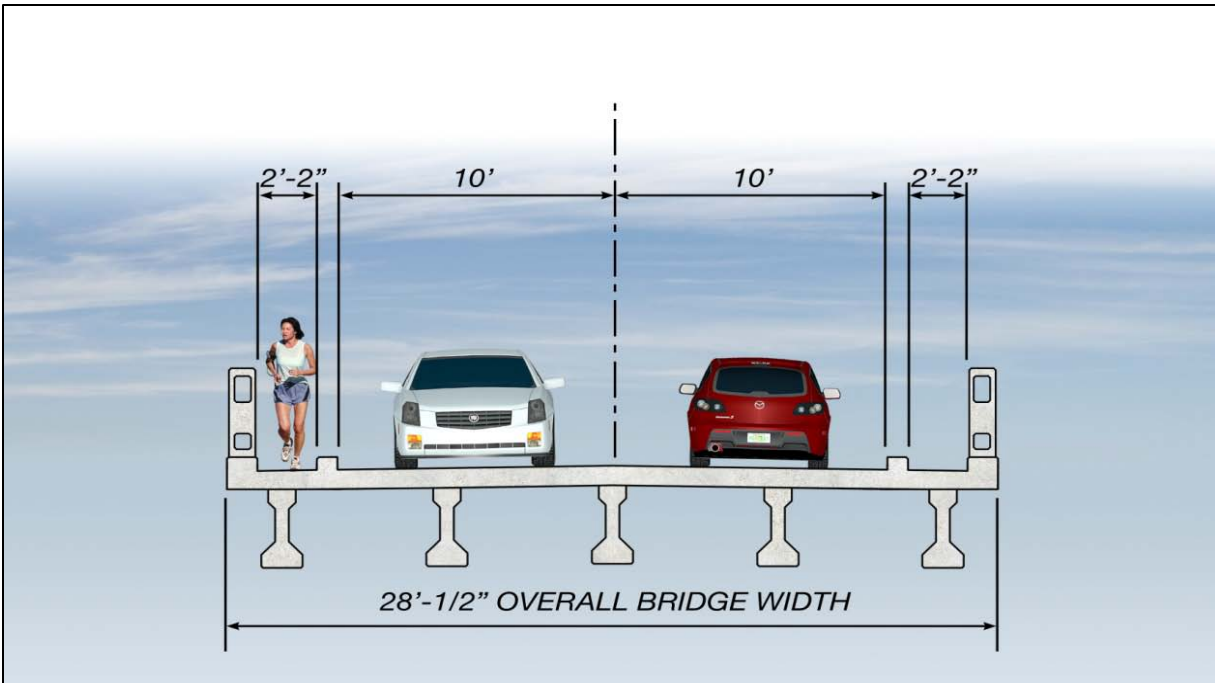


Figure 3.1 – Existing Bridge Typical Section

Minimum required lane and shoulder widths prescribed by the American Association of State Highway and Transportation Officials (AASHTO) are not met. The sidewalks on the bridge are narrow and do not meet current accessibility requirements established by the Americans with Disabilities Act (ADA). The bridge railings do not meet current standards for pedestrian safety or geometric and crash testing safety standards for vehicles. Approach guardrail and transitions and end treatments also do not meet current safety standards.

According to recent (11/30/11) FDOT inspection reports, the existing bridge has an overall Structure Inventory and Appraisal Sufficiency Rating of 44.9 out of 100. (Sufficiency ratings are a method of evaluating highway bridges by calculating a numeric value between 0 and 100,

indicative of bridge sufficiency to remain in service). Although the bridge is not considered Structurally Deficient, the bridge has a substandard load carrying capacity requiring weight restrictions. The bridge is currently posted for legal loads limited to 2-ton Single Unit Trucks and 15-ton Combination Trucks.

The existing vertical clearance at the fenders is six feet. The tip of the bascule leaf overhangs the fender with the leaf fully raised and does not provide unlimited vertical clearance between the fenders. The existing horizontal clearance between the fenders is 25 feet.

3.1.1 ETDM Evaluation

The FDOT's Efficient Transportation Decision Making (ETDM) process provides agencies and the public access to project planning information, as well as potentially affected environmental resources through use of the internet via the Environmental Screening Tool (EST). The tool facilitates interaction among transportation planners, regulatory agencies and affected communities to provide input on projects prior to the PD&E phase. Review of the proposed transportation improvement by agency representatives provides the Department with early input concerning potential impacts to the environment and community. Key features of the ETDM process include:

- Early agency and community involvement
- Early identification of avoidance and mitigation strategies access to comprehensive data in standardized formats
- Reviews and studies focused on key issues
- Maximized use of technology for coordination, project scoping and communication

This project was evaluated through the FDOT's ETDM process and was assigned ETDM project number 13040. Agency comments and a more detailed "Purpose and Need Statement" are available in the ETDM Programming Summary Report, published on June 1, 2011. The issues discussed in the Report will also be addressed in the Preliminary Engineering Report which will be published separately for this project.

Each of the ETAT reviewers, FDOT, SHPO, FHWA, and the Miccosukee Tribe of Indians of Florida, recommended a CRAS document covering the archaeological and historic resources be

prepared, as the project area was not comprehensively covered during earlier survey work. This current CRAS should serve as appropriate documentation of the cultural resources, and an upcoming effects document will also be prepared to satisfy the Section 106 requirements.

3.2 Alternatives Considered

The following alternatives are under consideration.

- No-Build - Maintain Existing Bridge
- No-Build - Remove Existing Bridge (includes alternate routing of traffic)
- Rehabilitation of the Existing Bridge
- Replace with a new Movable Bridge
- Replace with a new Fixed Bridge

The “No-Build” alternative includes only routine maintenance to keep the bridge open to traffic until safety issues would require it to be closed. Evaluation of future improvements would occur at a later date. The “No Build with Removal of the Existing Bridge” would result in routine maintenance in the near future with the intent to demolish the bridge when it is no longer safe for traffic, with no plans to replace it with a new one. The concept plans for this alternative and the replacement bridge build alternatives are included in Appendix C. All bridge replacement alternatives considered will be constructed in approximately the same location as the existing bridge to minimize impacts. Descriptions of the rehabilitation and build alternatives are provided in this section.

3.2.1 Alternative Descriptions

3.2.1.1 *Rehabilitation Alternative*

The existing bridge service life can be extended with extensive repairs, implementation of measures that slow the rate of concrete and structural steel deterioration, and replacement of electrical and mechanical systems. However, even after major rehabilitation, it is anticipated that the bridge will require significant ongoing maintenance and periodic additional major repairs with corresponding disruptions to traffic. Furthermore, it will not be practical to extend the life of the bridge indefinitely.

Rehabilitation to the maximum extent would involve replacement of the bascule leaf, the operating system (electrical and mechanical), and construction of crutch bents at each approach bent. These improvements could extend the service life of the bridge 25 to 30 years. Coordination with the United States Coast Guard (USCG) indicates that a rehabilitation alternative which substantially modifies the superstructure or substructure is typically not permitted by the USCG unless current navigational guidelines are met. However, it is anticipated that this alternative would be permitted by the USCG since existing guide clearances do not exist. Replacement of the fender system would require a USCG permit. The proposed Rehabilitation Alternative would include the following work and would extend the service life of the bridge a maximum of 25-30 years:

- Replace the sand-cement riprap at the abutments.
- Replace substandard approach guardrails.
- Remove all existing pile jackets and install new cathodic protection jackets on all concrete bent piles as well as steel bascule pier helper piles.
- Repair pile bent cap, bascule pier and bascule rest pier deteriorated concrete and provide cathodic protection in the form of zinc spray metalizing.
- Install crutch bents at Bents 2, 3, 4, 5, 8, 9, 10.
- Replace the Bascule Pier and Rest Pier.
- Replace substandard concrete bridge railings with new traffic railings meeting crash testing requirements of NCHRP 350 (i.e. FDOT Standard Index 422 – 42” Vertical Face Traffic Railing).
- Hydro-blast the deteriorated concrete deck surface and install a new concrete overlay.
- Clean and replace the expansion joints.
- Repair deck underside, beam, and diaphragm deteriorated concrete and provide cathodic protection in the form of zinc spray metalizing.
- Rehabilitate the control house including roof, windows and door.
- Replace the bascule leaf including counterweight.
- Replace the open steel and concrete filled grid deck.
- Replace the bascule span main drive machinery as well as the span locks and live load shoes.

- Replace the bascule span electrical system.
- Replace the bascule span traffic gates.
- Replace the bascule span barrier gate.
- Replace the fender system.

3.2.2 Build Alternatives

All bridge replacement alternatives considered will be constructed in approximately the same location (on the same alignment) as the existing bridge to minimize impacts. One movable bridge alternative and two fixed bridge alternatives have been developed. Concept plans and profile exhibits for all build alternatives are included in Appendix C. Alternate corridors for bridge location will not be evaluated due to the extent of development in the vicinity of the existing bridge. Capacity improvements will not be considered.

3.2.2.1 *Movable Bridge Alternative*

The proposed movable span will provide 7.8 feet of vertical clearance at the fenders (in the closed position) and 25 feet of horizontal clearance between fenders for vessels traveling on the waterway. Unlimited vertical clearance will be provided in the open position. The maximum proposed grade is five percent, which meets ADA requirements. The total length of the proposed movable span bridge is 360 feet. The movable span is proposed to be a single leaf bascule span, a less common type of movable span in Florida but more economical for spanning Whitcomb Bayou.

Roadway reconstruction is limited to the bridge approaches. The bridge and roadway will return to existing grade at Pampas Avenue on the east side and east of Chesapeake Drive on the west side. Resurfacing (only) is proposed between Forest and Pampas Avenues.

The proposed roadway profile would be approximately two feet higher than the existing roadway at the west end of the bridge (“Begin Bridge” Station 135+95 as shown on concept plans), and approximately four feet higher at east end of the bridge (“End Bridge” Station 139+55). The proposed improvements can be constructed within the existing right-of-way (ROW); purchase of additional ROW is not required.



The proposed bridge typical section for the Movable Bridge Alternative has a total out-to-out width of 47 feet 1 inch as shown in Figure 3.2. The typical section includes two, 11-foot wide travel lanes with 5.5-foot shoulders that can function as undesignated bicycle lanes. Sidewalks, 5.5 feet wide, are proposed on both sides of the bridge.

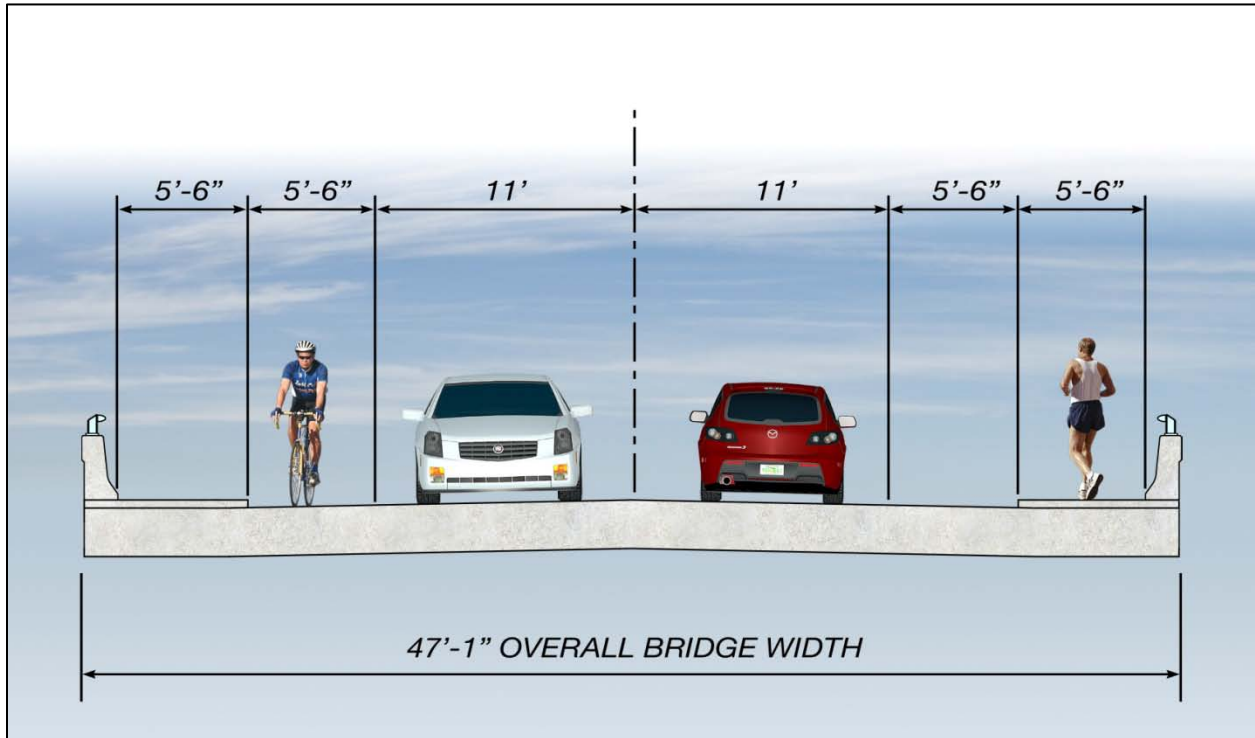


Figure 3.2 – Proposed Movable Bridge Typical Section

The proposed roadway section for the Movable Bridge Alternative west of the bridge consists of two 10-foot wide through lanes, one in each direction, and four-foot wide outside shoulders that can function as undesignated bicycle lanes. Because of the limited ROW, six-foot wide sidewalks are proposed only on the north side of the roadway. No sidewalks are proposed on the south side of the roadway, adjacent to the Bayshore Mobile Home Park (MHP).

East of the bridge, the roadway section consists of two 11-foot wide through lanes, one in each direction, and four-foot wide outside shoulders that will function as undesignated bicycle lanes. Six-foot wide sidewalks are proposed on both sides of the roadway. Figures 3.3 and 3.4 illustrate the proposed roadway sections for the west and east sides of the bridge, respectively.

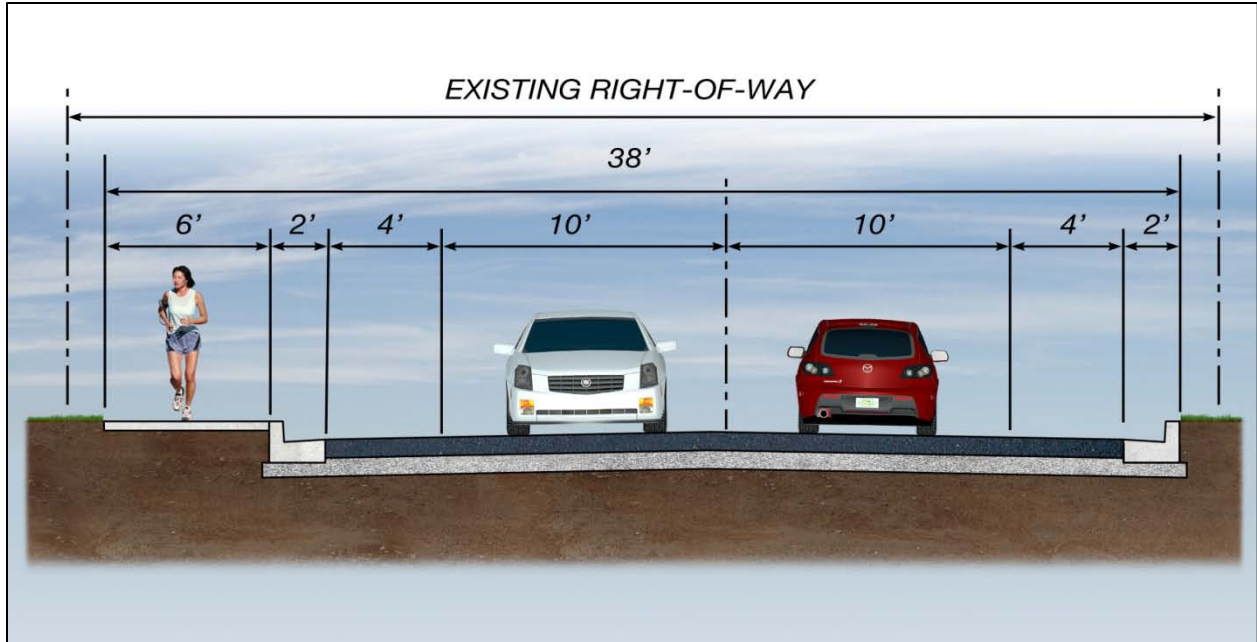


Figure 3.3 – Proposed Roadway Section West of Proposed Movable Bridge

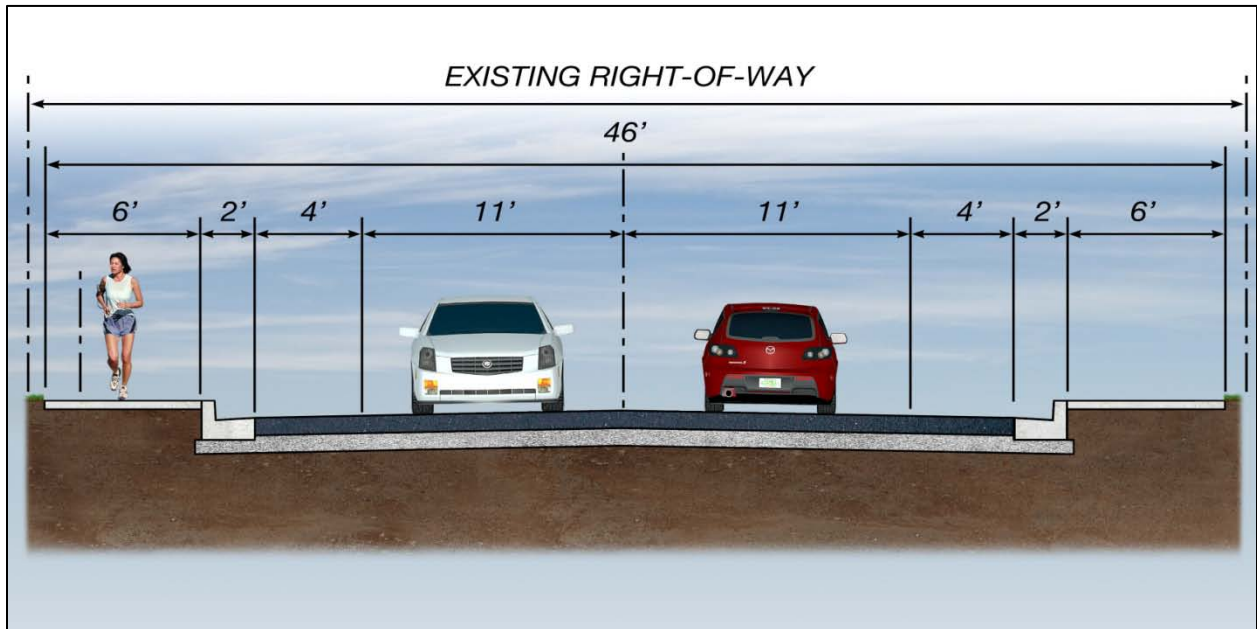


Figure 3.4 – Proposed Roadway Section East of Proposed Movable Bridge

3.2.2.2 *Fixed Bridge Alternatives*

Two options, A and B, for a fixed bridge alternative were developed. Both options provide approximately 28 feet of vertical clearance at the fenders over Whitcomb Bayou and 25 feet of



horizontal clearance between fenders for vessels traveling on the waterway. The proposed maximum grade is five percent. The total length of the proposed fixed span bridge is 720 feet.

The proposed bridge typical section for the fixed bridge alternatives has an out-to-out width of 40 feet. It consists of two, eleven foot travel lanes, five foot shoulders (which can be used as undesignated bicycle lanes) on both sides and a five foot sidewalk on the north side of the bridge. To minimize impacts to property owners, a sidewalk is not proposed on the south side of the bridge. See Figure 3.5.

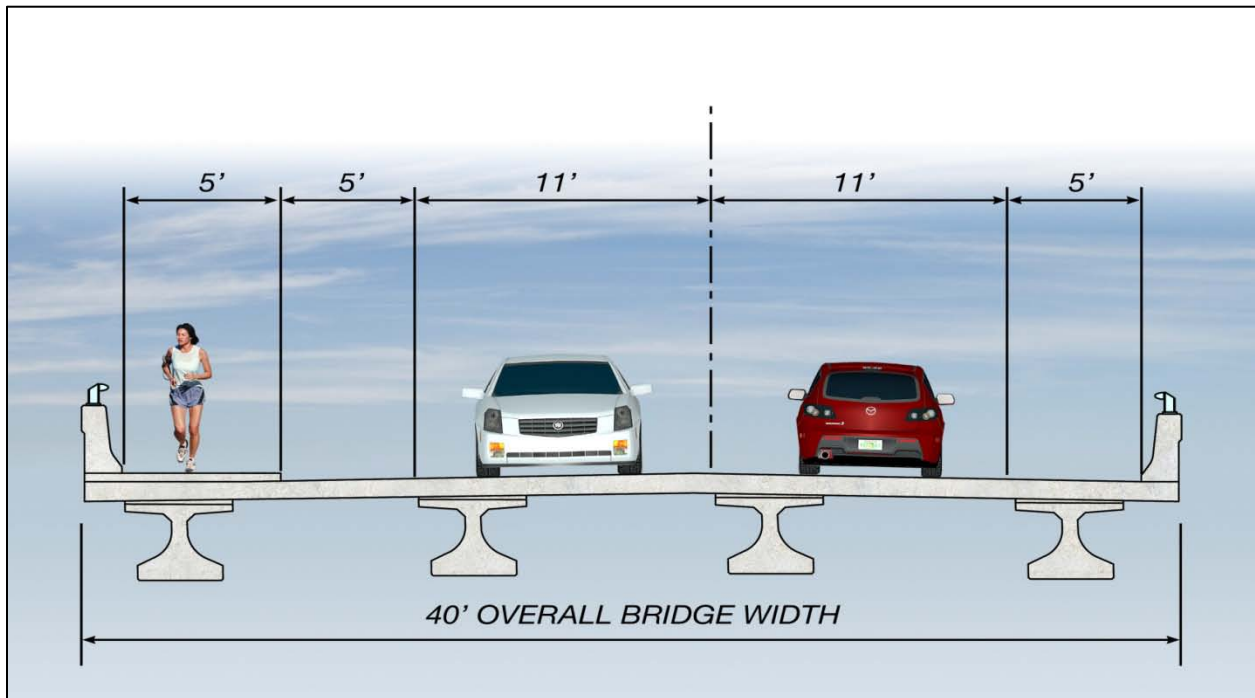


Figure 3.5 – Proposed Fixed Bridge Typical Section

The proposed roadway section west of the bridge consists of two, ten foot travel lanes, a four foot wide shoulder and six foot sidewalk on the north side of the bridge, and a five foot shoulder on the south side of the bridge. Because of limited ROW, a sidewalk is not proposed on the south side of the bridge. The total width of the proposed section is 37 feet which can be constructed in the approximately 40 feet of existing ROW.

East of the bridge, the proposed roadway section provides two, 11 foot travel lanes, a four foot wide shoulder and six foot sidewalk on the north side of the bridge, and a five foot shoulder on the south side of the bridge. A sidewalk is not proposed on the south side of the bridge to



minimize impacts to adjacent property owners. The total width of the proposed section is 39 feet. Figures 3.6 and 3.7 illustrate the proposed roadway sections for the fixed bridge alternatives.

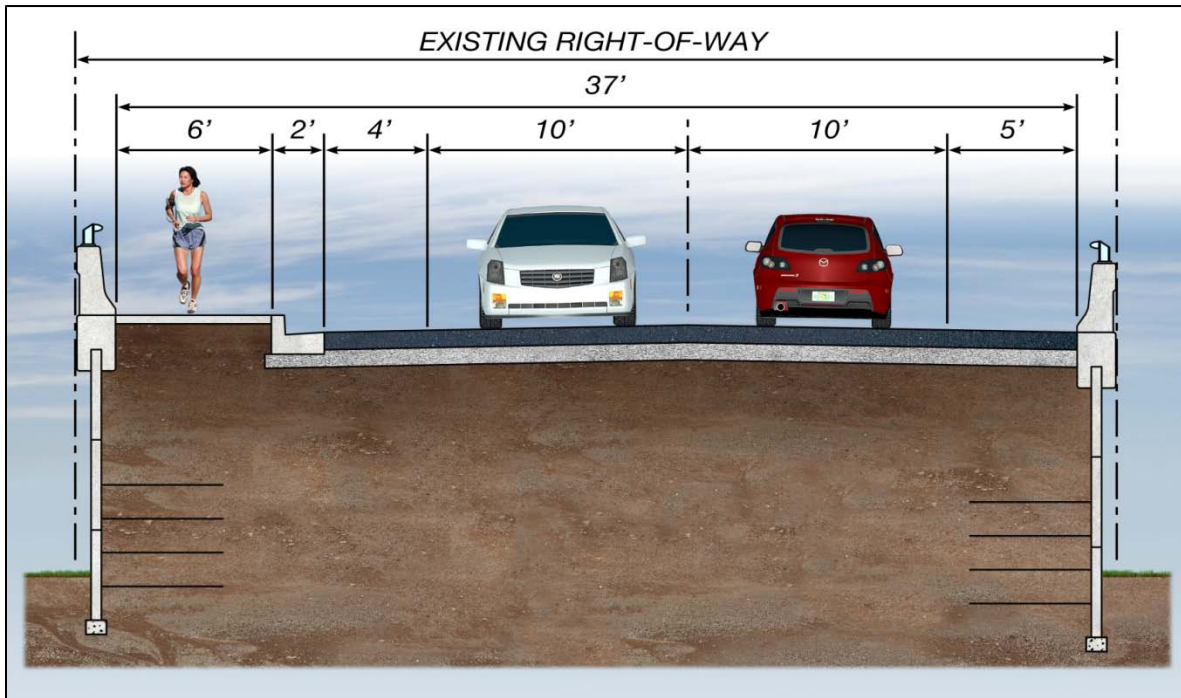


Figure 3.6 – Proposed Roadway Section West of Proposed Fixed Bridge

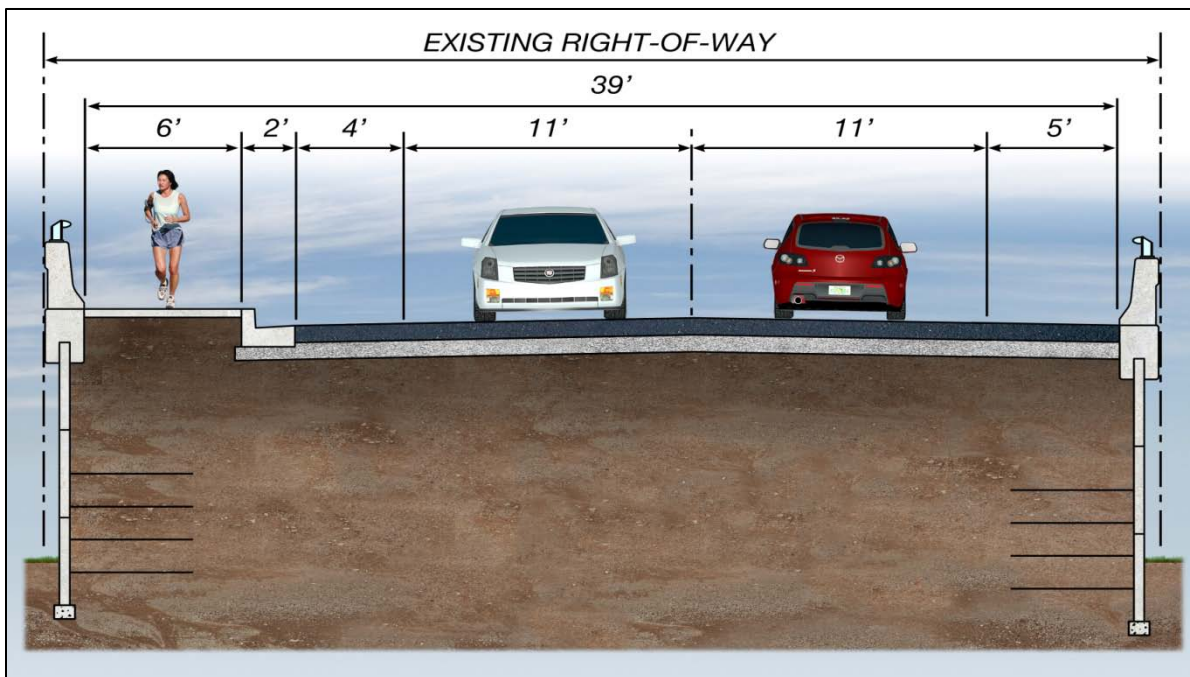


Figure 3.7 – Proposed Roadway Section East of Proposed Fixed Bridge

3.2.2.3 *Fixed Bridge Alternative- Option A*

The roadway profile at the intersection of Chesapeake Drive and Riverside Drive will be only about one foot above existing grade. A proprietary retaining wall system, such as Mechanically Stabilized Earth (MSE), will be required from the Chesapeake Drive to station 134+42, where the bridge begins. The wall will begin just east of Chesapeake Drive on the north side of Riverside Drive and extend approximately 446 feet east. On the south side of the roadway, the wall will begin just west of Chesapeake Drive and extend approximately 420 feet east. The wall will begin just west of Chesapeake Drive and extend approximately 420 feet east. The height of the wall will increase to approximately 19 feet above existing ground, just west of the entrance driveway to the Bayshore MHP. East of the proposed bridge, an MSE wall will extend approximately 340 feet on the north side and about 400 feet on the south side. The wall will end just west of Forest Avenue where the approach roadway will return to the existing grade.

The proposed retaining wall will block access to Riverside Drive for five single family residences west of the bridge, on the north side of the roadway. A new access road for the Bayshore MHP will be constructed north of Riverside Drive. The access road will connect with Chesapeake Drive and extend east through the parcels immediately adjacent to the north side of the roadway. The access road will then turn south and extend under the proposed bridge to connect to the Bayshore MHP driveway. The minimum vertical clearance at the Mobile Home driveway will be 14'6". The five single family residences impacted are expected to require relocation.

On the east side of the bridge, the proposed bridge will eliminate the access to Riverside Drive from Venetian Court and Pampas Avenue. A connector road will be constructed from Pampas Avenue through the vacant lot adjacent to the Tarpon Springs Yacht Club, extend under the proposed bridge, and tie into Venetian Court. A minimum vertical clearance of 14'6" is provided at Venetian Court.

Direct access to Riverside Drive for the single family residence on the corner of Pampas Avenue and Riverside Drive will be eliminated by the proposed retaining wall. Access from this location and from Venetian Court to Riverside Drive can be accomplished by traveling north on Pampas Avenue, turning east on High Street and south on Forest Avenue. The single family residence



driveway located at approximately Station 145+20 will be modified (raised) to provide direct access to Riverside Drive. Vehicular access will be blocked to docks located south of Riverside Drive in this area.

3.2.2.4 *Fixed Bridge Alternative- Option B*

The proposed fixed bridge (Option B) will provide approximately 28 feet of vertical clearance at the fenders over Whitcomb Bayou and 25 feet of horizontal clearance between fenders for vessels traveling on the waterway. The proposed maximum grade is five percent. The total length of the proposed fixed span bridge is 720 feet.

The roadway is raised about two feet above existing grade at Chesapeake Drive. A retaining wall will extend approximately 429 feet east, and vary in height from 1- 22 feet. The height of the wall will be approximately 22 feet at the entrance driveway to the Bayshore MHP. East of the proposed bridge, the retaining wall will extend approximately 320 feet to west of Forest Avenue where the approach roadway will return to the existing grade. The wall will be approximately 14 feet high at Pampas Avenue, eliminating the intersection with Riverside Drive.

The proposed retaining wall will block access to Riverside Drive for five single family residences west of the bridge, immediately north of the roadway. An access road will be constructed through the impacted parcels to provide access to Chesapeake Drive for the two waterfront parcels in this area. It is anticipated that three relocations on the north side of the road will be required. The driveway entrance to Bayshore MHP will be eliminated. Construction of a new entrance and exit at Chesapeake Drive will impact approximately seven mobile home lots on the west end of the development.

As in Alternative A above, the proposed fixed bridge will eliminate the access to Riverside Drive from Venetian Court and Pampas Avenue. A connector road will be constructed from Pampas Avenue through the vacant lot adjacent to the Tarpon Springs Yacht Club, and extend under the proposed bridge with a minimum vertical clearance of 14'6". Although the proposed connector for this option minimizes impacts to the Tarpon Springs Yacht Club property, the connector will extend through the vacant residential lot just east of the Venetian Court intersection south of Riverside Drive and connect to Venetian Court.

Direct access to Riverside Drive for the single family residence on the corner of Pampas Avenue and Riverside Drive will be eliminated by the proposed retaining wall. Access from this location and Venetian Court to Riverside Drive can be accomplished by traveling north on Pampas Avenue, turning east on High Street and south on Forest Avenue. The single family residence driveway at approximately station 145+20 will be modified (raised) to provide direct access to Riverside Drive. Vehicular access will be blocked to docks located south of Riverside Drive in this area.



4.0 AREA OF POTENTIAL EFFECT

According to 36 CFR 800.16(d), the APE is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of the undertaking as well as its geographical setting. The APE and CRAS methodology were coordinated with FHWA and SHPO prior to fieldwork and approved on March 27, 2012.

The APE was determined by evaluating the improvements that may be implemented as part of the bridge construction. The improvements under consideration range from rehabilitation of the existing bridge to the construction of a 28-foot high fixed bridge. The determination also considered the surrounding character of the area and the existing facilities found throughout the corridor. Additionally, a detour would be required for removal of the existing bridge, rehabilitation or replacement alternatives. The proposed detour plan was considered when determining the limits of the APE. The proposed APE for historic and archaeological resources is included Figures 4.1 and 4.2.

The APE for historic resources includes any historic properties adjacent to the current roadway and any new proposed ROW acquisitions beginning at Chesapeake Drive and ending at Forest Avenue. This APE provides appropriate coverage for the alternatives related directly to Beckett Bridge PD&E project. In regard to the higher level fixed bridge alternative that is being studied, the APE includes properties along the riverfront that can physically be seen from a reasonable distance in order to address any viewshed/visual effects. This APE extends two to four parcels on either side of the current bridge location on both sides of the river.

In addition, the proposed detour plan was subjected to a reconnaissance survey to identify significant properties located along this corridor. The proposed detour plan travels along roadways in the historic core of Tarpon Springs, and numerous historic resources are located along this corridor. The limits of this survey consisted of properties located on Riverside Drive, Spring Boulevard, Whitcomb Boulevard, Gulf Road, and North Park Avenue. The majority of these resources have been recorded as part of past survey efforts (including a recent 2009 FDHR grant survey conducted for the City of Tarpon Springs). Based on this, a reconnaissance of the

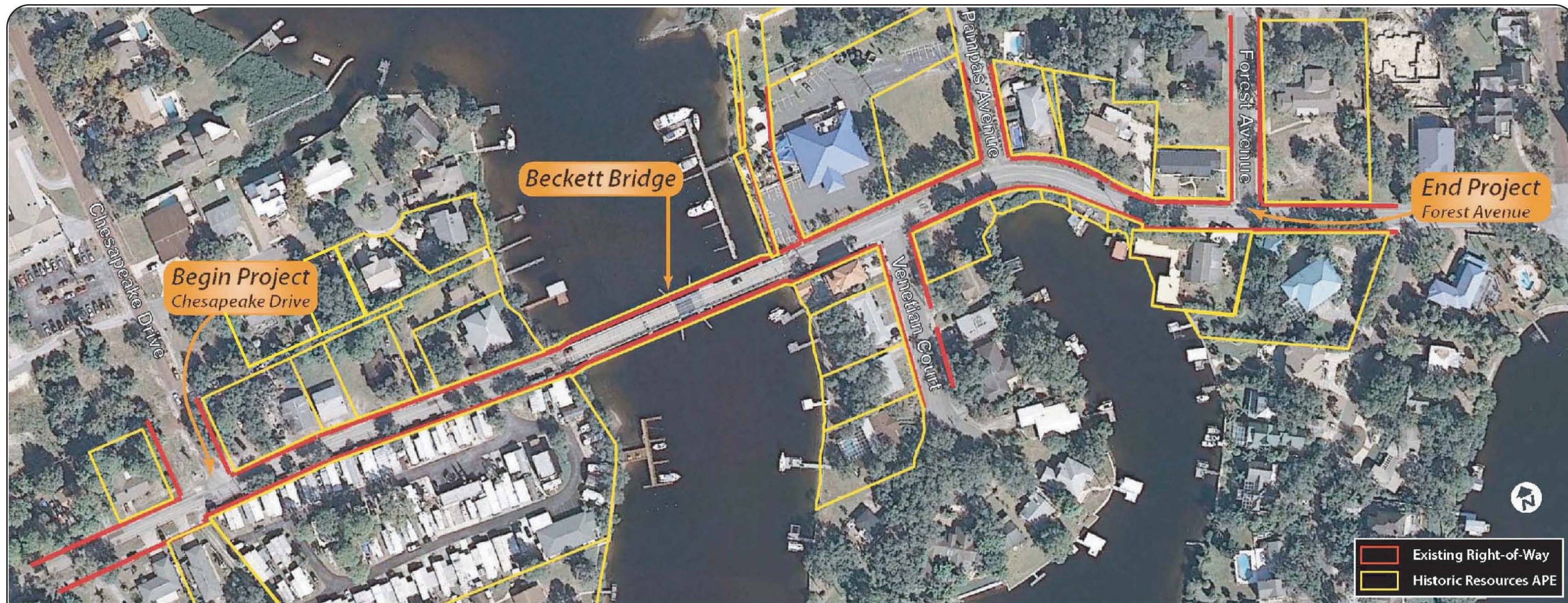


Figure 4.1: Proposed Historic Resources Area of Potential Effect



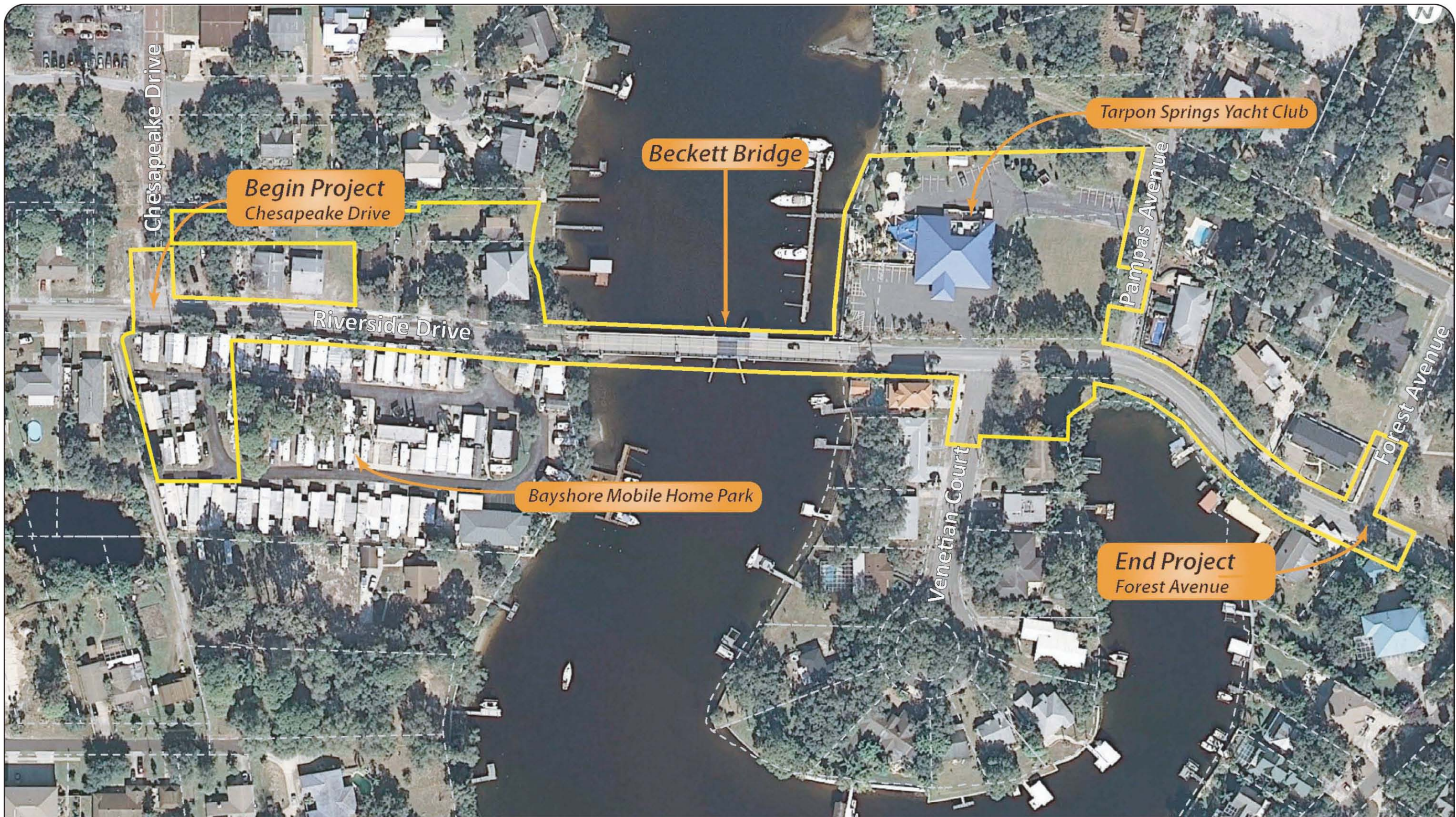


Figure 4.2: Proposed Archaeological Resources Area of Potential Effect



proposed detour plan was a more reasonable approach, and FMSF forms were not prepared for the resources located within the corridor.

Normally, archaeological resources will be affected by ground disturbing activities. The survey for archaeological sites focuses upon identifying and evaluating resources within the geographic limits of the proposed action and associated ground disturbing activities; that is, the existing and proposed ROW for the project. No stormwater treatment ponds or floodplain compensation areas are anticipated at this time. If any are needed, a CRAS will be conducted when identified and prior to construction. The APE for archaeological resources is typically confined to those areas where subsurface construction activity will take place. The proposed archaeological APE for the project considers the improvements that will be implemented as part of the proposed project and the extent of potential ground disturbance. In consideration of these factors, the APE for archaeological resources was determined by evaluating the extent of improvements that may result for the alternative which would require the greatest amount of subsurface disturbance. The maximum bridge width will be 47 feet 1 inch. While no ROW acquisition is required for the Movable Bridge Alternative, both Fixed Bridge Alternatives (Option A and Option B) will require additional ROW, as shown on the concept plans in Appendix C.

Because there will not be sufficient clearance at Venetian Court or at the Bayshore MHP driveway, alternate connections will need to be constructed which will impact the Yacht Club empty lot and the first row of houses between the water and Chesapeake Avenue. Therefore, the entire Yacht Club property was included in the archaeological APE to ensure that any potential connector road locations were considered during the archaeological investigations. The maximum width of the connector road between the water and Chesapeake Avenue will be 50 feet. The maximum width of any subsurface disturbance associated with the bridge and approaches will be 47 feet 1 inch. Any sidewalks or bicycle paths will be included within the 47 feet 1 inch. As illustrated in Appendix C, additional new ROW is proposed for both Fixed Bridge Alternatives (Option A and Option B). Therefore, the archaeological APE for the bridge and approaches will be 47 feet 1 inch and the archaeological APE for the connector roads consists of the areas of existing and newly proposed ROW.

5.0 ENVIRONMENTAL SETTING

Environmental and ecological factors through time have had a direct influence on the choice of occupation sites by precontact populations and early historic settlers. Therefore, factors such as geologic, hydrologic, and meteorological processes that may have affected the APE and its biotic resources are important elements in the formulation of a settlement/subsistence model for precontact and early historic peoples.

5.1 Paleo-Environment and Macro-Vegetational Change

Although a comprehensive paleoenvironmental reconstruction is beyond the scope of this report, a brief description of the large-scale climatic and hydrologic conditions that have occurred since 33,000 BP (years before present, i.e. radiocarbon dates are quoted in uncalibrated form and the present is taken as 1950 calendar years AD) is provided. This description is drawn primarily from the work of W. A. Watts (1969, 1971, 1975, 1980) and Watts and Hansen (1988). Carbone (1983) has promoted the reconstruction of local paleoenvironments, or small-scale environmental change, with an effort towards developing regional paleoenvironmental mosaic landscapes. Vegetation and animals (including humans) either adapt to local areas (microhabitats) or move to preferred locations. The descriptions given here provide some indication of the ecological context of pre-Columbian groups at different times, in particular the environmental limitations. However, these descriptions are general and cannot be used to reconstruct the microhabitats of the project APE.

Since the termination of the Pleistocene Epoch at the end of the Wisconsin glaciation, roughly 13,500 BP, Florida has undergone significant climatic and environmental change. Notable changes in climate, and subsequently in flora and fauna, required human groups to adapt to their surroundings. These adaptations resulted in cultural changes in their hunting/foraging strategies and seasonal migration patterns. Within the archaeological record, these changes can be observed by differences in settlement patterns, midden composition, refuse disposal patterns, and the kinds of stone tools or pottery made.

The first 5,000 years or so of the Holocene (10,000 BP–present) were marked by rapid rises in southern Florida sea levels. This inhibited the development of estuaries along the Gulf Coast and may have had the same impact on the Atlantic coast (Griffin 1988). However, even though sea

levels were rising, they were still considerably lower than present levels. This, combined with low interior water tables, resulted in arid conditions for the interior of southern Florida (Watts 1983; Watts and Hansen 1988). The marshes and swamps for which southern Florida are famous had not yet been formed (Webb 1990).

At about 5,000 BP, give or take 1,000 years, sea levels had risen to within a few meters of their current levels (Griffin 1988). Increased rainfall resulted in the formation of Lake Okeechobee, the Everglades, and other modern ecosystems (Watts and Stuiver 1980; Brooks 1984:38; Gleason et al. 1984:311). The relative sea level stability combined with freshwater discharge allowed for the development of coastal estuaries (Widmer 1988). It is probable that the Loxahatchee came into formation around this time. However, during its earliest history, the river probably ended in a flood plain or freshwater marsh. Eventually, rising sea levels caused tidal waters to flood this marsh, gradually transforming it into the Loxahatchee Estuary (McPherson, Sabanskas, and Long 1982). Around 2700 BP, the rising sea level had slowed to the point that some modern beach ridges in southern Florida, like Cape Sable, began to form. Increased precipitation in the interior made cypress common in many areas, including the Big Cypress Swamp, and made droughts in the Everglades less common (Griffin 1988). The southern rim of Lake Okeechobee reached its maximum height about this time (Brooks 1984:38). Vegetation reached its present distributional patterning and estuaries were fully formed and supplied by enough freshwater drainage to become highly productive (Widmer 1988; Griffin 1988).

5.2 Regional Environment

The project area is located in northwestern Pinellas County, which is part of the Gulf Coastal Lowlands physiographic region, an essentially flat and poorly drained region with topographic relief rarely exceeding 1.5 meters (5 feet) (White 1970: Plate 1C). The Gulf Coastal Lowlands originated as a submarine terrace during a period of higher sea levels during Pamlico times (White 1970). On the west coast of the Florida Peninsula a barrier chain extends from Anclote Key to the north and Naples to the south and is separated from the mainland by lagoon-like areas of open water. The barrier islands are separated by ordinary tidal inlets (White 1970:153–154).

Geologically, the project area is located near the contact of the Hawthorn and Tampa formations. The Tampa formation is primarily composed of limestone and is highly karstic and, thus, susceptible to the formation of sinkholes. The Hawthorn formation, a Miocene Age formation, is

composed of marine sands, clays, marls, and sandy limestones. All of these components are phosphoritic (Puri and Vernon 1964). Both formations contain localized deposits of chert, a silicious stone used by early humans for the manufacture of tools. The precise location of the contact between the two geologic units is not known, however Upchurch et al. (1982:Fig. 5-1) has indicated that the south side of the Tampa Bay is probably situated on the Hawthorn formation while the floor of Old Tampa Bay is probably underlain by the Tampa formation. The embayment itself is a relict sinkhole that has become filled with sand and silt (Upchurch et al. 1982:Fig. 5-2).

Numerous outcrops of replaced limestone, or chert, are known to exist throughout the Tampa Bay area. Upchurch et al. (1982) have grouped the known chert exposures and quarry sites of Florida into geographic units called quarry clusters. These clusters are defined by similarities in rock fabric, fossil content, and geological origin. Three quarry clusters have been identified in the near vicinity of the project area—Hillsborough River, Caladesi, and Turtlecrawl Point. Within these quarry clusters are a number of specific chert and silicified coral outcrops that were exploited prehistorically (Upchurch et al. 1982; Goodyear et al. 1983).

The project area is located within the Caladesi Quarry Cluster, which extends along the Gulf Coast of northern Pinellas and southern Pasco Counties. Diagnostic characteristics of this chert are the presence of quartz sand grains, peloidal material, and foraminiferous fossils (Upchurch et al. 1981:136). The Hillsborough River Quarry Cluster to the southeast extends along the Hillsborough River and its many tributaries west to Hillsborough Bay. Cherts from this cluster vary widely in color and fabric. Cherts from the upper Hillsborough River contain few diagnostic fossils, while to the west both fossil and sand content tends to increase (Upchurch et al. 1982:140; Goodyear et al. 1983). The Turtlecrawl Point cluster is located in the Boca Ciega Bay region of west Pinellas County. The importance of this cluster to pre-Columbian populations is uncertain. However, the two known exposures were precontact quarries and are now submerged beneath the Bay. Chert from this cluster is a dark, opaque gray in color with no discernible fossils (Upchurch et al. 1982:145).

Another quarry cluster that may have been exploited by aboriginal groups inhabiting the Tampa Bay area is the Upper Withlacoochee Quarry Cluster. This cluster extends along the Withlacoochee and Upper Hillsborough Rivers as far south as the Hillsborough-Pasco County

line. This cluster contains numerous aboriginal quarries, many of which contain silicified coral. The eastern extent of this cluster, near Wesley Chapel, is considered the most significant source of silicified coral in peninsular Florida (Upchurch et al. 1982:132).

5.3 Physical Environment of the Project APE

A review of General Land Survey (GLO) historic plat maps and surveyor's field notes (Florida Department of Environmental Protection [FDEP] 1846a, 1846b) was conducted to look at past environmental conditions of the project area. The project corridor was primarily 3rd rate pine and bayou. The land to the east of Beckett Bridge was depicted as an island in 1846.

A review of historic aerials from 1941, 1942, 1951, 1957, 1962, 1970, 1975, and 1980 (University of Florida, George A. Smathers Libraries 2012) was conducted to examine land use during the mid-1900s. In 1941 the shape of the peninsulas at the east and west ends of Beckett Bridge were as they are today. Riverside Drive, Chesapeake Drive, Pampas Avenue, Forest Avenue, High Street, and Venetian Court were all present in their current locations. The eastern end of the project area appears to have been mostly clear with only a few scattered trees. The western end of the project area was more heavily wooded on the western bank of the peninsula. Structures were present along the streets. Between 1951 and 1957 the number of structures in the area had increased and private docks along the shoreline had been constructed. The number of structures in the vicinity of the project area continued to grow through the 1960s and 1970s.

Soils can also provide information about the past environment. The project area is located within the Astatula-St. Lucie soil association. This soil association is found on broad gently sloping areas and nearly level ridgetops and on short steep slopes adjacent to streams and bayous. The deep sandy soils are nearly level and gently sloping; they are excessively drained and acidic (United States Department of Agriculture [USDA] 1972:2-3). The drainage characteristics and environmental association for each detailed soil type within the APE are included in Table 5.1.



**TABLE 5.1 – CHARACTERISTICS OF DETAILED SOIL TYPES WITHIN THE
ARCHAEOLOGICAL APE**

Drainage Characteristics	Soil Type	Environmental Association
Excessively Drained	Astatula fine sand, moderately deep water table	This nearly level to gently sloping sandy soils is found on low ridges and isolated knolls
N/A	Made Land	This consists of mixed sand, clay, hard rock, shells, and shell fragments that have been transported, reworked, and leveled.
	Urban Land-Astatula complex	These soils are largely comprised of Astatula fine sand which has been modified by cutting, grading, and shaping and covered with structures or pavement.

USDA 1972:8, 13, 22

6.0 PRECONTACT OVERVIEW

Precontact peoples have inhabited Florida for at least 14,000 years. The earliest cultural periods are pan-Florida in extent, while later cultures exhibited unique cultural traits. Jerald Milanich and Charles Fairbanks (1980) synthesized the earlier work of John Goggin (1947, 1949, 1952), Irving Rouse (1951), Ripley Bullen (1972), and others for central Florida. Later, Milanich (1994) updated and revised much of the work he and Fairbanks presented earlier.

Tampa Bay lies in the Central Gulf Coast cultural region as defined by Goggin (1947). This area has been divided into two closely related cultural regions by Milanich and Fairbanks (1980:24–26): the North Peninsular Gulf Coast region, stretching from Apalachee Bay to Pasco County, and the Central Peninsular Gulf Coast region, which extends from Pasco County to Charlotte Harbor (Figure 6.1). The dividing line in mid-Pasco County is somewhat arbitrary, but present evidence suggests that the majority of post-AD 100 pre-Columbian pottery to the north of this line consists of limestone-tempered Pasco ware while the majority to the south is tempered with varying amounts of sand (Milanich 1994:211).

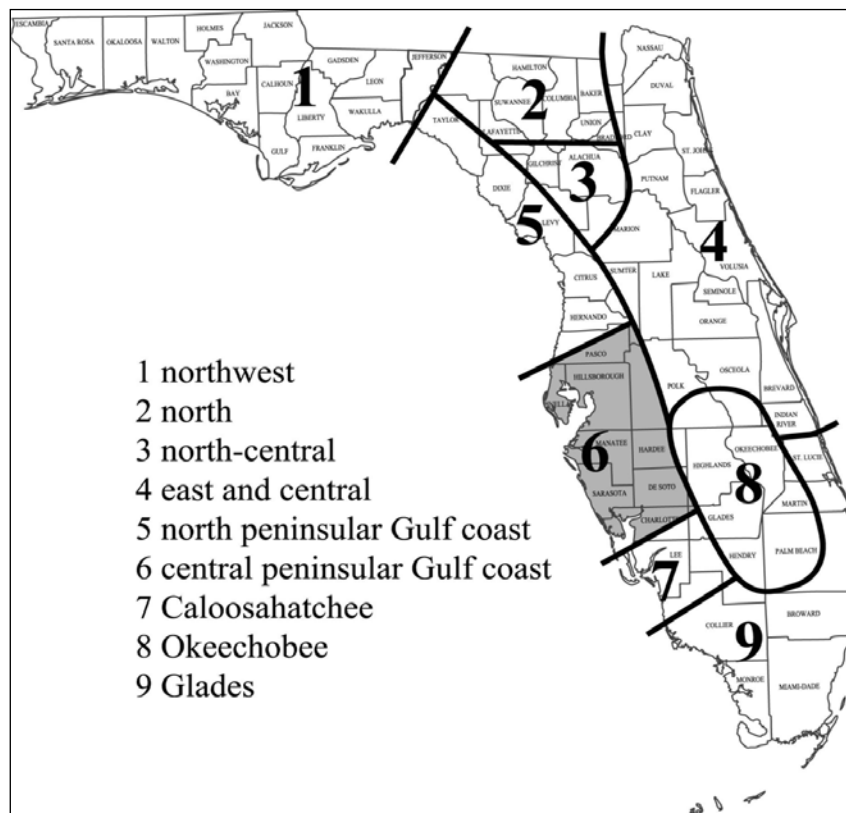


Figure 6.1 – Central Peninsular Gulf Coast Cultural Region

6.1 Paleoindian Period (12,000–7500 BC)

The earliest period of precontact cultural development dates from the time people first arrived in Florida. The greatest density of known Paleoindian sites is associated with the rivers of northern and north-central Florida where distinctive lanceolate projectile points and bone pins have been found in abundance in and along the Santa Fe, Silver, and Oklawaha Rivers (Dunbar and Waller 1983). The majority of these have been found at shallow fords and river crossings where the Native Americans presumably ambushed Pleistocene mammals. The bones of extinct species such as mammoth, mastodon, and sloth are commonly found preserved in the highly mineralized waters of the area's springs and rivers. Despite early claims to the contrary, present evidence strongly supports the contemporaneity of Paleoindians and these extinct mammals.

The climate of Florida during the late Pleistocene was cooler and drier than at present, and the level of the sea was as much as 160 feet lower (Milanich 1994:38–41). Rising sea levels are assumed to have inundated many coastal sites dating to the Paleoindian and Early Archaic periods (e.g., Ruppe 1980; Goodyear and Warren 1972; Goodyear et al. 1980; Dunbar et al. 1988). It is difficult to determine the dependence of Paleoindian groups on estuarine and littoral resources because little is known of these submerged archaeological sites.

The prevailing view of the Paleoindian culture, a view based on the uniformity of the known tool assemblage and the small size of most of the known sites, is that of a nomadic hunting and gathering existence, in which now-extinct Pleistocene megafauna were exploited. Settlement patterns were restricted by availability of fresh water and access to high-quality stone from which the specialized Paleoindian tool assemblages were made. Waller and Dunbar (1977) and Dunbar and Waller (1983), from their studies of the distribution of known Paleoindian sites and artifact occurrences, have shown that most sites of this time period are found near karst sinkholes or spring caverns. This suggests a somewhat more restricted settlement pattern than postulated for other Paleoindian groups in eastern North America. Paleoindian settlement appears to have been “tethered” to sources of fresh water such as rivers and springs (Daniel 1985:264; Daniel and Wisenbaker 1987:169) and to cryptocrystalline lithic sources (Goodyear 1979; Goodyear et al. 1983).

Excavations in Hillsborough County have contributed to the development of increasingly sophisticated models of early hunter-gatherer settlement (e.g., Daniel 1985; Chance 1983), which

take into account the adaptive responses of human populations to both short- and long-term environmental change. These models suggest that some Paleoindian groups may have practiced a more sedentary lifestyle than previously believed (Daniel and Wisenbaker 1987). For instance, evidence from the Harney Flats site in the Hillsborough River drainage basin indicates that Suwannee points were being manufactured from locally available materials (Daniel and Wisenbaker 1987). Although they noted that this was contrary to Gardner's (1977) argument that the availability and location of fine-grade cryptocrystalline materials dictated Paleoindian settlement, their results suggested that Paleoindian peoples, much like those of later cultures, moved about within defined, restricted territories.

The majority of Paleoindian sites in Florida consist of surface finds. The most widely recognized Paleoindian tool in Florida is the Suwannee point, typically found along the springs and rivers of northern Florida. Evidence from Harney Flats has provided information on the manufacturing process of Suwannee points: first, a blank was struck from a chert core; then, the blank was bifacially worked into a preform; finally, the preform was knapped into the finished point (Daniel and Wisenbaker 1987:44–53). Other points, including Simpson and Clovis points, are found in lesser numbers. Some of these, and other Paleoindian lanceolate points, were hafted by attaching them to an ivory shaft that was, in turn, attached to a wooden spear shaft (Milanich 1994:48–49).

Other Paleoindian stone tools are known from the Harney Flats site (Daniel and Wisenbaker 1987:41–97), the Silver Springs site in Marion County (Neill 1958), and other northern Florida sites (Purdy 1981:8–32). These Paleoindian tools tend to be unifacial and plano-convex, with steeply flaked, worked edges (Purdy and Beach 1980:114–118, and Purdy 1981). Bifacial and “hump-backed” unifacial scrapers, blade tools, and retouched flakes, including spokeshaves, have been found at these sites (Purdy 1981; Daniel and Wisenbaker 1987:62–81, 86–87). However, some tools are little more than flakes or blades that were struck from cores, used, and discarded (Milanich 1994:51). Other stone tools include an oval, ground stone weight that was found at the Page/Ladson site from a stratum dated to 12,330 years ago (Dunbar et al. 1989:479). It is thought to represent a bola weight, which is a stone weight attached by a leather thong and thrown to bring down water birds and other game (Milanich 1994:51).

Dunbar et al. (1988) review of Paleoindian site/point locations in western Florida and results from excavations at the Harney Flats site revealed that 60 percent of the site clusters were located in and around mature karst river channels. In fact, 90 percent of all Paleoindian sites/points were located around karst depressions within Tertiary limestones. The most recent distribution maps of Paleoindian points in Florida show that 92 percent of Clovis and Suwannee projectile points are found in the region of Tertiary limestone features (Dunbar 1991).

Data on Paleoindian subsistence is scarce; although, such data is dramatic where encountered. The best evidence consists of the remains of a giant land tortoise recovered from the Little Salt Spring site in Sarasota County (Clausen et al. 1979). Although human skeletal remains were associated with extinct Pleistocene fauna at Devil's Den (Martin and Webb 1974), Milanich (1994) suggests that sloth, mastodon, mammoth, and bison probably formed part of the Paleoindian diet. There is very little information upon which to reconstruct the Paleoindian subsistence base. If, as Daniel and Wisenbaker (1987) suggested, there was seasonal movement along the river valleys, then not only is a seasonal littoral focus likely, but it also becomes likely that the majority of Paleoindian sites exist underwater (Dunbar 1988; Dunbar et al. 1988), rendering subsistence data for half of the Paleoindian year mostly inaccessible.

In addition to Little Salt Spring and Warm Mineral Springs, another Paleoindian inland spring site, a Paleoindian component was identified at the Myakkahatchee site, located in the City of North Port. Reported artifacts recovered from the site include a broken Simpson point, a Tallahassee point, a Bolen Point, a Florida Spike, and three Florida Morrow Mountain Knives (Luer et al. 1987:146).

6.2 Archaic Period (7500–500 BC)

The Archaic period of cultural development was characterized by a shift in adaptive strategies stimulated by the onset of the Holocene and the establishment of increasingly modern climate and biota. It is generally believed to have begun in Florida around 7500 BC (Milanich 1994:63). This period is further divided into three sequential periods: the Early Archaic (7500–5000 BC), the Middle Archaic (5000–3000 BC), and the Late Archaic (3000–500 BC). The Late Archaic is subdivided into the Preceramic Late Archaic (3000–2000 BC) and the Orange Period (2000–500 BC).

6.2.1 Early Archaic (7500–5000 BC)

Cultural changes began after about 8000 BC in the late Paleoindian times with the onset of less arid conditions, which correlates with changes in projectile-point types, specifically a transition from lanceolate to stemmed varieties. Beginning about 7500 BC, Paleoindian points and knives were replaced by a variety of stemmed tools, such as the Kirk, Wacissa, Hamilton, and Arredondo types (Milanich 1994:63).

Kirk points and other Early Archaic diagnostic tools are often found at sites with Paleoindian components, suggesting that Early Archaic peoples and Paleoindians shared similar lifeways (Daniel and Wisenbaker 1987:33–34). However, it appears that the distribution of Early Archaic artifacts is wider than that of Paleoindian materials. Sites having both Paleoindian and Early Archaic components have been found to be largely restricted to natural springs and the extensive perched water sources of northern Florida. Early Archaic points are found in smaller numbers at upland sites in northern Florida where there is a lack of Paleoindian materials (Neill 1964; Janus Research 1999a:58–61). Although this patterning is largely based on evidence from Alachua and Marion Counties, there is no reason to believe that patterning is different elsewhere in interior northern Florida (Milanich 1994:64).

One Early Archaic wetland site that does not have a Paleoindian component is the Windover Pond site near Titusville in Brevard County. This site is a precontact cemetery consisting of over 160 burials in the natural peat deposits of what was, during the Early Archaic, a woody marsh (Stone et al. 1990:177). It is the most thoroughly excavated early precontact site in the East and Central archaeological area of Florida and has produced normally perishable items such as samples of cloth in which the dead were wrapped before burial, wood artifacts, preserved brain and other soft tissue, and samples of proteins and mitochondrial DNA. Radiocarbon dates indicate that the interments were made in discrete episodes of short duration between 6000 and 5000 BC. This indicates that a single social group used the pond to bury their dead in one small area, the location of which was somehow marked or memorized. Later, another group, probably the descendants of the first group, again used the pond for burial. After 5000 BC, increasingly wetter conditions most likely made it too difficult to bury people in the peat of the pond bottom (Doran and Dickel 1988).

With the wetter conditions that began about 8000 BC and the extinction of some of the Pleistocene animal species that helped to sustain earlier populations, Paleoindian subsistence strategies were no longer efficiently adapted to the Florida environment. As environmental conditions changed, surface water levels throughout the state increased and new locales became suitable for occupation. Early Archaic peoples might be viewed as a population changing from the nomadic Paleoindian subsistence pattern to the more sedentary coastal- and riverine-associated subsistence strategies of the Middle Archaic period.

6.2.2 Middle Archaic Period (5000–3000 BC)

Throughout the Middle Archaic, environmental and climatic conditions would become progressively more like modern conditions, which would appear by the end of the period, circa 3000 BC. During this period, rainfall increased, surface water became much less restricted and, as a result, vegetation patterns changed. The Middle Archaic period is characterized by increasing population and a gradual shift toward shellfish, fish, and other food resources from freshwater and coastal wetlands as a significant part of their subsistence strategy (Watts and Hansen 1988:310; Milanich 1994:75–84). Pollen evidence from Florida and south-central Georgia indicates that after about 4000 BC, a gradual change in forest cover took place, with oaks in some regions giving way to pines or mixed forests. The vegetation communities that resulted from these changes, which culminated by 3000 BC, are essentially the same as those found in historic times before widespread land alteration took place (Watts 1969, 1971; Watts and Hansen 1988).

The Middle Archaic artifact assemblage is characterized by several varieties of stemmed, broad-blade projectile points. The Newnan point is the most distinctive and widespread in distribution (Bullen 1975:31). Other stemmed points of this period include the less common Alachua, Levy, Marion, and Putnam points (Bullen 1968; Milanich 1994). In addition to these stemmed points, the Middle Archaic lithic industry, as recognized in Florida, includes production of cores, true blades, modified and unmodified flakes, ovate blanks, hammerstones, “hump-backed” unifacial scrapers, and sandstone “honing” stones (Purdy 1981; Clausen et al. 1975).

Additionally, thermal alteration, a technique in stone tool production, reached its peak during the Middle to Late Archaic periods. This technique was usually used in late stage tool production

(Purdy 1971, 1981:78). However, Austin and Ste. Claire (1982:101–106) observed that, at the Tampa Palms site in Hillsborough County, very few thinning flakes were thermally altered. They noted that at this and other Archaic sites in the region, thermal alteration and the presence of silicified coral were correlated (Austin and Ste. Claire 1982:104; Daniel and Wisenbaker 1981, 1987). It is apparent that there was a preference for thermally altered coral for technological and aesthetic reasons; not only is it more easily worked, but also it may have been valued for its color and luster (Purdy 1971; Austin and Ste. Claire 1982:104). At the Harney Flats site, Daniel and Wisenbaker (1987:33–34) found a Middle Archaic component with corresponding increases in the amounts of silicified coral and heat-treated lithic material.

Middle Archaic settlement patterns are believed to have followed the Early Archaic patterns until after circa 3000 BC, when settlement patterns shifted toward coastal and riverine resources. Daniel (1985:265) postulated that a seasonal dichotomy existed between upland and lowland Middle Archaic sites in the Central Peninsular Gulf Coast archaeological area. According to his model, aggregate base camps were located along the upland boundaries of the Polk Uplands and were occupied during the fall and winter months. These upland sites are thought to be larger and contain a greater variety of functionally defined tools. These sites should also contain tools related to “maintenance” activities.

Dispersed residential camps were occupied in the Coastal Lowlands physiographic zone during the summer months. Daniel (1985) predicted these lowland sites would be smaller, more numerous, and exhibit a smaller number, and a more limited variety, of tool types. These sites are thought to contain tools related to “subsistence” activities. The lack of tool forms at these sites may also reflect an orientation towards activities that did not require the use of stone tools.

Middle Archaic sites are found in a variety of locations, including, for the first time, freshwater shell middens along the St. Johns River and the Atlantic Lagoon. Middle Archaic sites have been found in the Hillsborough River drainage northeast of Tampa Bay, along the southwestern Florida coast, and in South Florida locales such as Little Salt Spring in Sarasota County. In addition, Middle Archaic sites occurred throughout the forests of the interior of northern Florida (Milanich 1994:76).

Three common types of Middle Archaic sites are known in Florida (Bullen and Dolan 1959; Purdy 1975). The first are small, special-use camps, which appear archaeologically as scatters of lithic waste flakes and tools such as scrapers, points, and knives. These sites are numerous in river basins and along wetlands and probably represent sites of tool repair and food processing during hunting and gathering excursions (Milanich 1994:78).

The second common site type is the large base camp. This type of site may cover several acres or more, and contains several thousand or more lithic waste flakes and tools. A good example of this type of site is the Senator Edwards site in Marion County (Purdy 1975; Purdy and Beach 1980). One implication of this type of site is that a greater variety of tools were being used in this period than in the preceding one. It is possible that a more sedentary way of life led to the development of more specialized tools. Some of the tools indicate woodworking activity, possibly related to constructing more permanent houses (Milanich 1994:78–79).

The third common type of site is the quarry-related site that occurs in localities of chert outcrops. Chert deposits often outcrop along rivers or around lakes and wetlands as erosion cuts through the soil to the underlying limestone bed. The resulting outcrops provided opportunities for native peoples to quarry this raw material for stone tool production. Some of these sites have also produced evidence of late period tool production, including large flake blanks, bifacial thinning flakes, blades, and unifacial and bifacial tools (Milanich 1994:78–79; Purdy 1975).

A new site type was later identified in Hillsborough County. The West William site (8HI509) was identified as containing deposits of faunal remains, pit features, and structural remains, while lacking in the typical tool pattern commonly associated with upland sites (Austin et al. 2001:10). With these features, Austin et al. (2001:10) hypothesized that the site represents a seasonal congregation camp for the purpose of “social interaction, ceremonial feasting, and/or mate exchange.”

Other less common site types include cave camps in northern Florida and wetland cemeteries. Examples of the latter site type include the slough burials at Little Salt Spring in Sarasota County (Clausen et al. 1979), the pond burials at the Bay West site in Collier County (Beriault et al. 1981), and the Republic Grove site in Hardee County (Wharton, Ballo, and Hope 1981). Like the Windover site of the Early Archaic peoples, these sites provide a glimpse of the range of objects

used by Middle Archaic peoples such as antler, wood, and bone tools not preserved on land sites (Milanich 1994:82).

Although most of the Early and Middle Archaic cemeteries throughout peninsular Florida appear to have used aquatic environments, at least two exceptions are noted: the Tick Island and Gauthier sites. Interments at the Tick Island site, located in the St. Johns River basin, were made in an existing freshwater shell midden subsequently covered with a mound of sand (Bullen 1962). Over time, this process was repeated as other groups were interred. Later, post-Middle Archaic people re-used the site, depositing shell refuse on top of the burial area (A. K. Bullen 1972:166; Jahn and Bullen 1978).

The other unique Middle Archaic burial site is the Gauthier site, located in Brevard County about six miles from the coast. Interments were made by creating a shallow depression in the soil and laying bodies in it, at times, one on top of another. Artifacts found with the flexed burials include limestone throwing-stick weights, antler “triggers” from throwing sticks, projectile points, tubular *Busycon* shell beads, ornaments of bone, and worked shark teeth that had probably been hafted and used as knives or scrapers (Carr and Jones 1981).

Both of the sites described above contained artifacts securely dating the sites to the Middle Archaic period. It is possible that these two sites represent the development of new burial patterns which correlated with the end of the Middle Archaic period, at which time pond burials fell into disuse and were replaced with the new burial patterns (Milanich 1994:84).

6.2.3 Late Archaic Period (3,000–500 BC)

After 3,000 BC, there was a general shift in settlement and subsistence patterns emphasizing a greater use of wetland and marine food resources than in previous periods. This shift was related to the natural development of food-rich wetland habitats in river valleys and along the Atlantic and Gulf coasts (Bense 1994). By the Late Archaic period, a regionalization of precontact cultures began to occur as human populations became adapted to specific environmental zones. Based on current evidence, it appears that relatively large numbers of Late Archaic peoples lived in some regions of the state but not in others. For example, large sites of this period are uncommon in the interior highland forests of northwestern Florida and northern peninsular Florida, regions where Middle Archaic sites are common. The few Late Archaic sites found in

these areas are either small artifact scatters or components in sites containing artifacts from several other periods. This dearth of sites in the interior forests suggests that non-wetland locales either were not inhabited year-round or were only inhabited by small populations (Milanich 1994:87).

Extensive Late Archaic middens are found along the northeastern coast inland waterway from Flagler County north, along the coast of southwestern Florida from Charlotte Harbor south into the Ten Thousand Islands, and in the braided river-marsh system of the central St. Johns River, especially south of Lake George. The importance of the wetlands in these regions to precontact settlements was probably duplicated in other coastal regions, especially the Central Peninsular Gulf Coast and the Northwest (Milanich 1994:85). However, in many of these coastal areas, such as Tampa Bay, many of the Late Archaic sites are inundated (Warren 1964, 1970; Warren and Bullen 1965; Goodyear and Warren 1972; Goodyear et al. 1980).

6.2.3.1 Orange Period

By about 2000 BC or slightly earlier, the firing of clay pottery was either invented in Florida or the technique diffused from coastal Georgia and South Carolina, where early dates for pottery have been obtained (Milanich 1994:86). At one time, it was thought that the earliest pottery-manufacturing culture in Florida was the Orange culture of the St. Johns region in northeast Florida. But additional evidence from southwest Florida indicates fired clay pottery from northeastern and southwestern Florida is comparable to the early dates from sites in Georgia and South Carolina (Division of Archives 1970; Cockrell 1970; Widmer 1974; McMichael 1982; Russo 1991).

The earliest ceramics in Florida were tempered with plant fibers such as palmetto fiber or Spanish moss. The first use of pottery is well dated to the period from circa 2000 BC to 1000 BC, making fiber-tempered pottery a convenient horizon across the state. Although at first undecorated, various techniques were used to apply surface decoration, starting sometime around 1650 BC, providing an important tool for differentiating sites dating to the second half of the Late Archaic, known as the Orange Period (2000–500 BC) (Milanich 1994:86, 94). Table 6.1 illustrates the long-accepted Orange Period ceramic chronology.



TABLE 6.1 – ORANGE PERIOD CERAMIC CHRONOLOGY	
Orange 5	1000–500 BC
Orange 4	1250–1000 BC
Orange 3	1450–1250 BC
Orange 2	1650–1450 BC
Orange 1	ca. 2000–1650 BC

Milanich (1994) based on Bullen (1955, 1972)

However, data from sites in northeastern Florida suggest a revised Orange period chronology (Sassaman 2003:5-14). Sassaman (2003:9) indicates that “...the four major subperiods of Bullen’s sequence (i.e., Orange 1-4) collapse down into one (Orange 1).” This revised chronology suggests that variations in Orange period ceramic paste, form, and decoration do not represent temporal changes.

Riverine middens in the East and Central cultural region have produced artifacts that illustrate aspects of Late Archaic subsistence technology, such as the throwing stick, use of which is indicated by the presence of steatite throwing-stick weights and stemmed projectile points. Russo (1992:198) suggests that, along the coast, fine-mesh nets were also used to catch fish from the estuarine tidal creeks. Also common in these midden sites were picks and hammers made of shell, pins, points, and other tools made of bone (Milanich 1994:92-93).

Late Archaic period sites, such as middens adjacent to the Gulf and smaller sites back from the coast have been identified in the Central Peninsular Gulf Coast region. The I-75 archaeological surveys and excavations located several sites with Late Archaic components in the wetlands of the Hillsborough River drainage basin. One of these, the Wetherington Island site, is a re-used quarry first used in Early Archaic-times (Chance 1981, 1982). Other inland sites include the Deerstand, Ranch House, and Marita sites (Daniel 1982; Estabrook and Newman 1984).

A cluster of unique Late Archaic sites was identified in Pasco County (Estabrook et al. 2001). The sites within this cluster, referred to as the Enclave sites, contain freshwater midden remains and represent a rarely seen inland site type. The evidence recovered indicates a heavy reliance on aquatic resources and suggests that coastal dietary practices were carried into the interior (Estabrook et al. 2001).

Coastal sites are more common in this region. Many Late Archaic sites in the Central Peninsular Gulf Coast region are probably either inundated or were destroyed around the turn of the century. The once numerous shell middens of all periods were used to provide road materials for towns like Bradenton and Tampa (Milanich 1994:100-101).

As more research is completed and regional differences among Late Archaic peoples in Florida are recognized, it is apparent that specific regional manifestations must be defined. These manifestations will undoubtedly be recognized as closely linked to the post-500 BC regional cultures of the Formative period discussed below.

6.3 Formative and Mississippian Periods (500 BC–AD 1513)

Changes in pottery and technology occurred in Florida during the Late Archaic period, also known as the Florida Transitional period; these changes mark the beginning of the Formative period. Fiber-tempered wares were replaced by sand-tempered, limestone-tempered, and chalky temperless ceramics and three different projectile point styles (basally-notched, corner-notched, and stemmed) occur in relatively contemporaneous contexts. This profusion of ceramic and tool traditions suggests population movement and social interaction between culture areas.

Mississippian cultural development began in the central Mississippi Valley around AD 750 and was adopted by cultures in Florida between AD 800–1000. It was characterized by elaborate community development including truncated pyramidal mounds, large plazas, and a chiefdom-level of socio-political organization. Other distinctive traits include small, triangular-shaped projectile points, the use of the bow, religious ceremonialism, increased territoriality and warfare, and, in some areas, development of agriculture (Milanich 1994:355–412).

6.3.1 Manasota Culture

During the Formative period, the region was dominated by the Manasota culture, primarily a coastal dwelling people. A dominance of sand-tempered plain ceramics as well as shell and bone tools characterized their material culture (Luer and Almy 1982). The identification of interior Manasota sites has been hindered by the difficulty in distinguishing between the various types of undecorated, sand tempered ceramic wares used by the different precontact cultures of South Florida (Milanich 1994: 224–226). A chronology for the Manasota Culture based on variations in ceramics and burial, is presented in Table 6.1.


TABLE 6.2 – MANASOTA CULTURE CHRONOLOGY

Safety Harbor	AD 900–1513
Late Weeden Island	AD 700–900
Early Weeden Island	AD 300–700
Manasota	500 BC–AD 300
Safety Harbor	AD 900–1513

Milanich (1994), modified from Luer and Almy (1980, 1982)

Despite its characterization as a primarily coastal culture, a number of inland Manasota sites have been documented (Deming 1976; Wood 1976; Wharton 1977; Ellis 1977; Wharton and Williams 1980; Piper and Piper 1981; Piper, Hardin, and Piper 1982; Almy 1982; Austin and Ste. Claire 1982; Austin and Russo 1989; Janus Research 1999b). These sites share characteristics that distinguish them from the typical Manasota site, which has been defined using characteristics from coastal sites. However, they are similar to what Luer and Almy define as “inland from the shore” sites. These sites are described as existing in the pine flatwoods, often occurring on a small, low hillock or “mound” of sand near a freshwater source, and having similar artifact assemblages as the coastal sites except for a significantly lesser amount of shell and shell tools (Luer and Almy 1982:39–43). Luer and Almy distinguish these sites from “inland” sites, which are sites situated in interior regions of the peninsula (1982:51). Aside from the occasional shell tool, the one characteristic which precludes the above sites from being defined as “inland from the shore” Manasota culture sites is that they are situated beyond 30 km from the shore (Luer and Almy 1982:51).

6.3.2 Weeden Island–Related Manasota Culture

During its later periods, the Manasota culture was influenced by the extensive Weeden Island socio-political complex, which is best known in northern Florida, southern Georgia, and Alabama—the recognized “heartland” of Weeden Island cultures. Present evidence suggests a date of circa AD 200 for the beginning of the Weeden Island period. Mound burial customs, artifact evidence of an extensive trade network, and settlement pattern data suggest a complex socio-religious organization while technologically and stylistically Weeden Island ceramic types are considered outstanding examples of pre-Columbian pottery. Evidence for the adoption of Weeden Island customs by local Manasota groups appears in the archaeological record around

AD 300–900. This period of Manasota development is often referred to as “Weeden Island–related” (Milanich 1994:227; Luer and Almy 1982:46–47).

Early Manasota period burials were flexed, primary interments in shell middens or in cemeteries. Burial in intentionally constructed burial mounds apparently was not practiced until after AD 100. These early mounds, at least until about AD 300, also contained primary, flexed interments and occasional extended or semi-flexed burials. These mounds are generally located adjacent to villages and often contain locally made ceramics (Luer and Almy 1982:42, 46–47; Milanich 1994:227).

Early Weeden Island burial mounds contained secondary interments accompanied by almost the full range of Weeden Island ceramics and, often, complicated-stamped sherds. These secondary interments were usually bundle burials, indicating that they were placed in a charnel house prior to interment. Late Weeden Island peoples continued these traditions, and their wares often include Wakulla Check Stamped, St. Johns Check Stamped, and occasional Safety Harbor sherds in addition to the Weeden Island ceramics. The inclusion of Safety Harbor wares within these Weeden island mounds indicates they were used for many generations (Luer and Almy 1982:42, 46–47; Milanich 1994:227). The re-use or continued use of mounds was apparently a common practice in the Central Peninsular Gulf Coast region during Manasota and later periods. There are several examples, both inland and coastal, of such continually used or re-used mounds (Fewkes 1924; Willey 1949:332–333; Sears 1960; Bullen 1971; Luer and Almy 1980, 1982; Janus Research 1999b).

6.3.3 Safety Harbor Culture

The final pre-Columbian cultural manifestation to occur in this region was the Safety Harbor culture, which evolved out of the Manasota and later Weeden Island–related Manasota cultures. Although similar to the Mississippian cultures of northern Florida, Safety Harbor peoples apparently borrowed only certain ideas and practices that helped them adjust to larger populations and to maintain the greater level of political complexity needed to support stronger territorialism. Other ideas and practices associated with a fully Mississippian way of life were not adopted because the agricultural economic system at the base of the Mississippian culture was not possible in coastal Florida. Similar to the preceding Manasota and Weeden Island–

related cultures of the region, the Safety Harbor culture had a subsistence economy based on gathering shellfish and other marine resources (Grange et al. 1979; Milanich 1994:412).

A subdivision of the Safety Harbor phase was proposed by Mitchem (1989). Based on the presence of dateable European artifacts, as well as on radiocarbon dates from components with Englewood ceramics, Mitchem suggested dividing the Safety Harbor into two pre-Columbian phases (Englewood [AD 900–1100] and Pinellas [AD 1100–1500]) and two colonial period phases (Tatham [AD 1500–1567] and Bayview [AD 1567–1725]) (Mitchem 1989:557–567).

The Safety Harbor culture, known after Spanish contact to be the culture of the Tocobaga, is typified by ceremonial centers with truncated, pyramidal temple mounds and open village plazas surrounded by middens, as well as burial mounds with associated charnel structures. Most Safety Harbor sites are found along the coast; although inland villages, camps, and mounds are also present (Milanich 1994:395, 403). Although the Safety Harbor culture is centered on the Tampa Bay area and the adjoining river drainages, it extends well to the north into Pasco, Hernando, and Citrus counties, and to the south and west into Sarasota, Polk, Manatee, Hardee, and Desoto counties. Safety Harbor pottery has also been found in mounds south of Charlotte Harbor in the Caloosahatchee archaeological area (Milanich 1994:391). Safety Harbor sites within Sarasota County include site 8SO403, a burial site along the Myakka River (Hazeltine and Luer 1983); the Englewood Mound (8SO1), which dates to the Englewood and Pinellas phases of the Safety Harbor period (Luer 1999); and the Blackburn site, which reportedly contained European glass beads as well as Culbreath and Pinellas points/knives (Deming 1989). This latter site is thought to date to the Englewood Phase of the Safety Harbor period and the later Contact periods.

6.3.3.1 Northern, Inland, Circum-Tampa-Bay, and South-Central Regional Variants

The ceramic traditions of the previous Weeden Island cultures of this region continued into the Safety Harbor phase. Along with differences in settlement patterns and subsistence strategies related to specific environments, ceramic distributions have allowed Mitchem (1989:567–579) to define four sub-regions within the Safety Harbor culture area. These sub-regions shared patterns of burial mound ceremonialism, ideology and perhaps socio-political organization, but different environmental settings allowed for different economic patterns (Milanich 1994:392).

The Northern Safety Harbor variant encompasses Pasco, Hernando, and Citrus counties. Pasco plain pottery is most common at non-mound villages and campsites, along with sand-tempered plain, St. Johns plain, St. Johns Check Stamped, and cord-marked ceramics. Most settlements, including residential sites and isolated mounds, are dispersed. Inland riverine and coastal shell middens are common (Mitchem and Weisman 1987; Mitchem 1989).

Within this sub-region, subsistence strategies both in coastal and inland settings continued to reflect the marine- and freshwater-based economies of the previous Weeden Island period, although some agriculture was apparently present within the cove of the Withlacoochee River (Mitchem 1989:588). At a village site within the cove, excavations produced an array of terrestrial and riverine species, including mollusks, largemouth bass, deer, and freshwater snails as the most common meat sources (Fitzgerald 1987). Evidence for the use of bow and arrow throughout the Safety Harbor culture area is seen in the presence of Pinellas Points, small triangular-shaped points used to tip arrows (Bullen 1975:8; Milanich 1994:394). Except for these points, the types of stone and shell artifacts recovered from Safety Harbor phase sites are much the same as those recovered from Weeden Island period sites (Milanich 1994:399).

The best known of the sub-regions, and what might be considered the heartland of the Safety Harbor culture, the Circum-Tampa-Bay sub-region includes southern Pasco, Pinellas, Hillsborough, and northern Manatee counties. Large and numerous shell middens identified in this sub-region suggest that subsistence strategies resembled those of the preceding Manasota and Weeden Island-related cultures. Data from analyses of materials from five of these sites support this contention (Kozuch 1986).

Utilitarian pottery within the Circum-Tampa-Bay Safety Harbor sub-region is predominantly Pinellas Plain, usually wide-mouthed bowls with serrated rims (Sears 1967; Luer and Almy 1980). The predominance of Pinellas plain around Tampa Bay is in contrast to the limestone-tempered Pasco ware of the Northern sub-region (Mitchem 1989; Milanich 1994:396).

Archaeologists have identified 15 major habitation sites in the Circum-Tampa-Bay sub-region, each consisting of a large platform mound and shell midden deposits thought to reflect associated village areas (Willey 1949:331–335; Bullen 1955:51; Griffin and Bullen 1950; Bushnell 1966; Sears 1967; Bullen et al. 1970; Luer and Almy 1981; Mitchem 1989). These sites occur on the

shoreline in Tampa Bay, especially at the mouths of rivers and streams that drain into the bay, or along those rivers within a short distance of the coast, and along the western coast of Pinellas County. The plan of each is the same: a platform mound, probably the base of a temple or other important building, is placed adjacent to a plaza with surrounding village middens. Burial mounds are also present at the sites (Milanich 1994:396).

Many of the Circum-Tampa-Bay sites along the interior drainages of the Hillsborough, Alafia, Manatee, and Little Manatee rivers that were occupied during the Manasota and Weeden Island-related periods have Safety Harbor period components (Fewkes 1924; Willey 1949:332–333; Sears 1960; Bullen 1971; Luer and Almy 1980, 1982; Janus Research 1999a). It is evident that inhabitants of these inland sites would have relied on freshwater resources for a large part of their sustenance. Some of the burial mounds recorded in the inland portion of the Circum-Tampa-Bay sub-region might have been isolated, as may have some of the habitation sites. Smaller sites, probably short-term hunting and foraging camps, are also located in inland locales in the river drainages (Milanich 1994:396).

The Inland Safety Harbor sub-region encompasses Polk and Hardee counties and the eastern portion of DeSoto County (Mitchem 1989:576–577). Although the density of settlements is sparse in comparison to those in coastal locales, numerous surveys in the phosphate district in Hardee County and surrounding areas indicate that some dispersed settlements and isolated burial mounds are present (Browning 1973; Wharton 1977; Wharton and Williams 1980; Piper et al. 1982; Janus Research 1999a). Most of these sites have not been completely excavated and their cultural affiliations remain uncertain. One site, however, contained a large number of Spanish artifacts along with Safety Harbor ceramics, suggesting the occupation of the Inland sub-region during the colonial period (Benson 1967).

St. Johns Plain and Belle Glade Plain ceramics are most common, possibly a reflection of the ceramic transition to the assemblages of the Okeechobee Basin region and the lake district of central Florida. However, the decorated ceramics found in inland burial mounds are the same types found throughout the Safety Harbor culture area, indicating a zone of peoples who borrowed traits from neighbors to the west, east, and south (Milanich 1994:401).

The South-Central Safety Harbor sub-region (Mitchem [1989] calls this variant the Manasota Safety Harbor) extends from Charlotte Harbor north to southern Manatee County and east to the Peace River drainage (Milanich 1994:400). Dispersed coastal and inland settlements are present, but these have not yet been studied extensively. Utilitarian pottery is predominantly an undecorated quartz sand-tempered ware (Mitchem 1989:575–576).

Marion Almy (1978:87–88) has found that the primary factors for site location in Sarasota County are the distance to water and soil type. This probably reflects the need for potable water, the preference for camping on well- or better-drained soils, and reliance on wetlands, both coastal and freshwater, for subsistence (Milanich 1994:400).

7.0 HISTORICAL OVERVIEW

The intent of this section is to identify the possible locations of any historic sites within the cultural assessment project area and to provide a background for the determination of their historical potential. The *Historic Resources Survey of Tarpon Springs*, conducted by Janus Research in July 2009, was the major source of information utilized for this section.

7.1 European Contact and Colonial Period (ca. 1513–1821)

The earliest contact between the native populations and the Europeans occurred through slave hunting expeditions. “Slaving expeditions,” which provided workers for the mines of Hispaniola and Cuba, were not recorded in official documents as the Spanish Crown prohibited the enslavement of Caribbean natives. Evidence of these slave raids comes from the familiarity with the Florida coast stated by navigators of the earliest official coastal reconnaissance surveys (Cabeza de Vaca 1542:Chapter 4).

Official credit for the European discovery of Florida belongs to Juan Ponce de León, whose voyage of 1513 took him along the eastern coast of the peninsula (Tebeau 1971:21). He is believed to have sailed as far north as the mouth of the St. Johns River before turning south, stopping in the Cape Canaveral area and possibly at Biscayne Bay. The expedition then continued southward following the Florida Keys, making contact with the local Tequesta people en route before turning to the northwest, where they encountered the Calusa along the southwestern Gulf Coast. Other Spanish explorers followed Juan Ponce de León, and over the next 50 years the Spanish government and private individuals financed expeditions hoping to establish a colony in “La Florida.” In 1565, King Philip II of Spain licensed Pedro Menéndez de Avilés to establish a settlement in St. Augustine, Florida. Between 1565 and 1566, Menéndez sailed along the Florida coast placing crosses at various locations and leaving Spaniards “of marked religious zeal” to introduce Christianity to the Native American people (Gannon 1965:29). Settlements with associated missions were established at St. Augustine, San Mateo (Ft. Caroline) and Santa Elena, and smaller outposts and missions were located in Ais, Tequesta, Calusa, and Tocobaga territory (Gannon 1965:29).

Jesuit missions were established in what are now referred to as the Central Peninsular Gulf Coast and Glades archaeological regions, including the mission of Carlos at Charlotte Harbor, the

mission of Tocobaga at Tampa Bay, and a mission at a Tequesta village at the mouth of the Miami River. In March of 1567, Menéndez sailed into the Bay of Tocobaga (now Old Tampa Bay) with a group of 30 soldiers, Captain Martinez de Coz, and Fray Rogel. The mission was established at the village of the cacique known as Tocobaga and consisted of 24 houses (Velasco 1571:161). It was abandoned in January of 1568 due to the hostility of the Native Americans (Solis de Meras 1964:223–230). This Jesuit mission represented the final Spanish attempt to colonize the region.

During the eighteenth century, Cuban fishermen had established seasonal fishing camps or ranchos along the Gulf coast. These fishermen were engaged in catching mullet and drying them for sale in the Havana markets. By the early nineteenth century, Native Americans were often employed as workers in these “ranchos pescados,” which is probably why they were called “Spanish Indians” in Anglo-American documents (Wright 1986:219). The origins and ethnicity of these “Spanish Indians” is not clear and has been a matter of considerable historical debate.

By the end of the eighteenth century, the Seminoles had become the dominant Native American group in the state. Groups of fugitive African-American slaves also had settled among the Seminoles by the early nineteenth century (Brown 1991:5–19). Armed conflict with pioneers, homesteaders, and the United States Army resulted in the removal of most of the Seminoles from Florida. This action forced the withdrawal of the remaining Seminole population to the harsh environment of the Everglades and Big Cypress Swamp by the late nineteenth century.

7.2 The Territorial and Statehood Period (1821–1860)

In 1821, after several years of negotiations with Spain, the U.S. acquired Florida as a territory. The population of the territory at that time was still centered in the northern areas around Pensacola, St. Augustine, and Tallahassee; although by the mid-1820s a few scattered plantations were recorded on the southwest Gulf Coast, as far south as Marco Island. These plantations generally were owned by European-American settlers and employed Native Americans and escaped slaves (Tebeau 1966:33–34).

As more European-American settlers moved into Florida, conflicts arose with the Seminole and Mickasuky people over available land. Pressure began to bear upon the government to remove the Native Americans from northern Florida and relocate them farther south. The Treaty of

Moultrie Creek (1823) restricted the Seminole/Mickasuky people to approximately four million acres of land in the middle of the state, running south from Micanopy to just north of the Peace River (Mahon 1967:Rear foldout map). The Seminoles/Mickasuky did not approve of this treaty because they were reluctant to move from their established homes to an area that they felt could not be cultivated. Other treaties soon followed such as Payne’s Landing (1832) and Fort Gibson (1833), which called for Seminole/Mickasuky immigration to the western territories (Mahon 1967:75, 76, 82, 83). These treaties fostered Seminole resentment of settlers that would culminate in the Second Seminole War in 1835.

The Second Seminole War had a deleterious effect on new settlement in Florida. To encourage settlement in the middle portion of the territory after the war, the Armed Occupation Act of 1842 offered settlers 160 acres of land at no cost, provided they built a house, cleared five acres, planted crops, and resided on the land for five years. Any head of a family or single man over 18 years of age and able to bear arms, was eligible to receive a homestead. This act, plus the end of the Second Seminole War, created a small wave of immigration by Anglo-American pioneers to central Florida. Most of these immigrants were Anglo-American farmers and cattle ranchers, or “crackers,” from the southeastern United States (Gaby 1993).

Florida’s early history is rich with associations with Native Americans and early Spanish settlers, but the development of Tarpon Springs commenced relatively late. While there is evidence of a sporadic Spanish presence in the early days of European exploration in the Tarpon Springs area, no permanent settlements were known to have been established the vicinity (Historic Property Associates 1988:1). The Second Seminole War spurred development in Central and Southern Florida; however, there is no record of any homesteads in the Tarpon Springs area before the Civil War (Historic Property Associates 1988:2).

7.3 Civil War and Post War Period (1860–1898)

With the beginning of the Civil War, cattle were needed to feed the Confederate Army. Herds from as far south as central Florida were driven to railheads near the Georgia border. However, ranchers discovered they could sell herds in Cuba for a greater profit and began dealing with blockade-runners. The Union attempted to stop all shipping from Florida ports, but blockade-runners were too abundant. Cattle ranchers from all over Florida drove their cattle to Punta Rassa to be shipped to Cuba for payment in Spanish gold. Jacob Summerlin, a successful cattle rancher

from the Fort Meade area, gave up his contract with the Confederate government to supply cattle and in 1863 teamed up with James McKay from the Tampa area. McKay, a successful and daring blockade-runner, supplied the schooners and Summerlin the cattle. After the war, it is reported that between 1870 and 1879 over 165,000 head were shipped (Grismer 1949).

The post-war economic conditions of much of the rest of the south contributed to changes in the economy of the Tampa Bay area and communities to the south along the Gulf Coast. An influx of poor farmers coinciding with the southward movement of cattle ranches made the economic stability of the area dependent upon reliable sources of overland freight transport. Beginning about 1870, many settlers began to buy the land on which they had homesteaded for so many years in anticipation of the coming railroad (Hetherington 1980:86).

In the 1880s, interest in the resources of South Florida, including Tarpon Springs, increased due in large part to people like Hamilton Disston (Figure 7.1) and Henry B. Plant. Hamilton Disston, son of a wealthy Philadelphia industrialist, contracted with the State of Florida in two large land deals: the Disston Drainage Contract and the Disston Land Purchase. The Drainage Contract was an agreement between Disston and the State in which Disston and his associates agreed to drain and reclaim all overflow lands south of present-day Orlando and east of the Peace River in exchange for one-half the acreage that could be reclaimed and made fit for cultivation. Disston changed Florida from a wilderness of swamps, heat, and mosquitoes into an area ripe for investment. This enabled Henry B. Plant to move forward with his plans to open the west coast of Florida with a railroad-steamship operation called the Jacksonville, Tampa & Key West Railway (Mann 1983:68, Harner 1973: 18–32).

Captain Samuel E. Hope is the first known settler in the vicinity of what would become Tarpon Springs (Figure 7.2). He and his father arrived in 1864, and shortly afterwards a trickle of settlers to the future Tarpon Springs began. The area's early settlers were largely engaged in industries such as fishing, hunting, and farming, and many were from the Bahamas (Historic Property Associates 1988:2). Ultimately, A. W. Ormond and his daughter Mary were the first known settlers within the modern-day city limits of Tarpon Springs (Historic Property Associates 1988:2). Mary married Joshua Boyer, who came to the area in 1877, the year following the Ormonds' arrival.



Figure 7.1 – Portrait of Hamilton Disston (*Image courtesy the Florida Memory Project*)

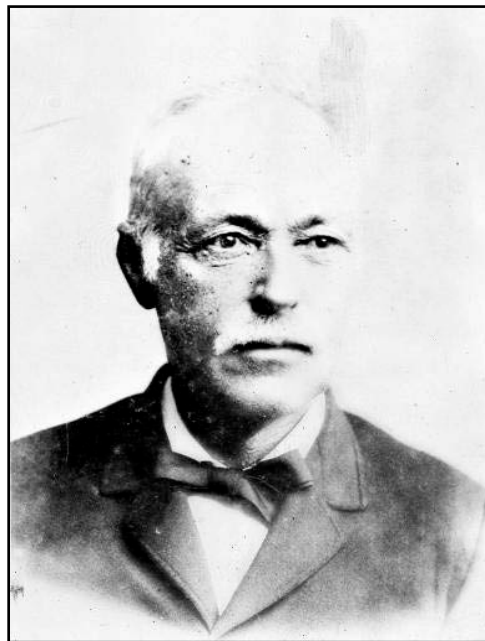


Figure 7.2 – Samuel E. Hope circa 1895 (*Image courtesy the Florida Memory Project*)

Hamilton Disston arrived in the vicinity of Tarpon Springs (specifically Anclote) in 1882 to visit his friends Joshua and Mary Boyer. Impressed with the area, Disston chose to base his development efforts in this coastal region along the major sailing route of Florida's west coast,



and approximately halfway between the already-established towns of Tampa and Cedar Key (Young 1984:36; Shriver 1990:2). Accompanying him was a group of businessmen, which included surveyor Major Mathew Robinson Marks, who was the first to officially survey and lay out the Town of Tarpon Springs (Historic Property Associates 1988:3). The plat of the town was finalized in 1883 by Jonathan Walton (Historic Property Associates 1988:4) (Figure 7.3). The location of the current survey area around the Beckett Bridge is located at the far left of the plat map below.



Figure 7.3 – 1883 Plat Map of Tarpon Springs *(Image Courtesy of the Florida Memory Project)*

Disston established the Lake Butler Villa Company and centered his efforts in Tarpon Springs (Historic Property Associates 1988:3). Disston's friend, Anson P. K. Safford, was also involved in these early plans for the area. Safford had served as governor of Arizona in 1869 and again in 1873. After leaving Arizona due to poor health, Safford went to Philadelphia where he became involved in the purchase of land in Florida with Disston. The two men intended to market Tarpon Springs as a haven to wealthy Northerners in need of a warm vacation spot. This plan was handled by the Lake Butler Villa Company, and when Safford was elected president of the company, he permanently settled in Tarpon Springs (Historic Property Associates 1988:3-4).

In February of 1887, the Town of Tarpon Springs was incorporated with a population of about 300. Later that same year, the railroad arrived in town and spurred development at a more rapid pace than the small town had yet seen. Prior to this point, Tarpon Springs was extremely difficult to access; approach was possible only by boat, or on land by way of poor roads. Once the railroad came, Tarpon Springs gained the reputation as a health resort due to its numerous natural springs and the clever marketing brochures that were in circulation. Early tourists were also attracted to the almost unlimited potential for hunting and fishing (Historic Property Associates 1988:5, 6). During these years of rapid growth, Tarpon Springs was among the most urbanized of the communities that were sprouting up in what would later become Pinellas County (Historic Property Associates 1988:6).

In 1890, the commercial sponge industry came to Tarpon Springs and dramatically changed the town landscape and community. Sponges had been discovered in the region much earlier, but in 1890, Mr. John K. Cheyney commercialized the effort by opening the Anclote and Rock Island Sponge Company across from Tarpon Springs (Historic Property Associates 1988:8) (Figure 8). This was done purposefully, as Mr. Cheyney realized that the current industries could not foster a stable economy to the region (Historic Property Associates 1988:8). The sponge industry had previously been centered around Key West, but gradually migrated north to Tarpon Springs. When the Spanish-American War broke out in 1898, Tarpon Springs' dominance in the industry and reputation as the largest sponge port in the United States was sealed (Historic Property Associates 1988:9). Greek immigrants began trickling into the area in the late 1890s, and a mass migration of approximately 500 Greek divers took place in 1905 (Historic Property Associates 1988:9).



Figure 7.4 – John K. Cheyney, date unknown (*Image courtesy of the Florida Memory Project*)

A review of the Florida Department of Environmental Protection (FDEP) Tract Book Records (n.d.) indicates that settlement in the region began in the late nineteenth century. The majority of land in this area was purchased by The Florida Land and Improvement Company (Table 7.1). This company was formed to help fulfill the Disston Drainage Contract. This Drainage Contract was an agreement between Disston and the State in which Disston and his associates agreed to drain and reclaim all overflow lands south of present day Orlando and east of the Peace River in exchange for one-half the acreage that could be reclaimed and made fit for cultivation.

7.4 Spanish-American War Period/Turn-of-the-Century (1898–1916)

At the turn-of-the-century, Florida's history was marked by the outbreak of the Spanish-American War in 1898. As Florida is the closest state to Cuba, American troops were stationed and deployed from the state's coastal cities. Harbors in Tampa, Pensacola, and Key West were improved as more ships were launched with troops and supplies. "The Splendid Little War" was short in duration, but evidence of the conflict remained in the form of improved harbors, expanded railroads, and military installations (Miller 1990).


TABLE 7.1 – LAND APPORTIONMENT AS RECORDED IN THE TRACT BOOK RECORDS

Township 27 South, Range 15 East			
Section	Portion Owned	Owner	Date of Deed or Sale
11	Lot 1	Hiram F. Pent	September 5, 1883
	10 acres on N corner of Lot 2	Henry T. Ferguson	July 17, 1883
	Lot 2 less 10 acres	Florida Land & Improvement Co.	December 8, 1883
	Lot 3	Henry T. Ferguson	October 15, 1880
	NW ¼ of NW	Florida Land & Improvement Co.	January 5, 1883
	SW¼ of NW ¼	Mayo T. Washington	November 25, 1868
	W ½ of SW ¼	Mayo T. Washington	November 25, 1868
	E ½ of SW ¼	Florida Land & Improvement Co.	January 5, 1883
	SE ¼	Florida Land & Improvement Co.	January 5, 1883
	Portion N and E of the river in Sec11	Mr. F. Baker	December 29, 1915
	Lot 4	Florida Land & Improvement Co.	June 5, 1883
12	Lots 1, 2, 3, 4	Florida Land & Improvement Co.	June 5, 1883
	S ½	Florida Land & Improvement Co.	June 5, 1883

FDEP:n.d.

The Spanish-American War had little economic impact on Pinellas County. However, a large V-shaped island at its southern terminus figured prominently in coastal defense. Mullet and Egmont Key have long been regarded as vital to the protection of Egmont Channel, which provided access to Tampa Bay and the port facilities of Tampa. In the late 1800s, Secretary of War William Endicott headed a special governmental board to review the nation's coastal defense system. The board's recommendations led to a revision of this system utilizing newer weapons and fortification design. The advent of the Spanish-American War in 1898 led to the construction of coastal fortifications at both Mullet and Egmont keys. The Mullet Key military reservation was named Ft. DeSoto after the famous Spanish explorer (Sarles 1960). The war was short-lived and no shots were fired from Ft. DeSoto. The fort continued to serve as a training facility until 1910 when it was inactivated. It was reactivated in 1941 and served as a bombing practice field during World War II for the air base at MacDill Field in Tampa.

During the 1910s, immigration continued and a vast number of new commercial buildings, churches, and private residences were built in Tarpon Springs. By 1913, as many as half of the residents of Tarpon Springs were reputedly Greek and signs at the railroad station were posted both in English and Greek (Burgess 1913:175). Greek residents established churches, stores, coffee shops and restaurants, many displaying Greek flags alongside the American flag (Burgess 1913:176). The downtown along Tarpon Avenue continued to grow and expand (Historic Property Associates 1988:10).

7.5 World War I and Aftermath Period (1917–1920)

The World War I and Aftermath period of Florida’s history begins with the United States’ entry into World War I in 1917. Wartime activity required the development of several training facilities in the state, and protecting the coastlines was a priority at this time. Although the conflict only lasted until November 1918, the economy was boosted greatly by the war. For example, the war brought industrialization to port cities such as Tampa and Jacksonville, where shipbuilding accelerated. These cities also functioned as supply depots and embarkation points. An indirect economic benefit of the war was an increase in agricultural production, as beef, vegetables, and cotton were in great demand (Miller 1990).

The outbreak of war in Europe slowed development in the county, and the U.S. entry in 1917 ended the first boom period in Pinellas. During this period, however, important infrastructure projects were completed that made the post-war boom possible. The Seaboard Air Line Railroad built a new line into the county between 1913 and 1915. Between 1914 and 1917 the county built 75 miles of nine-foot wide brick roads that linked the area’s main towns. These were the first paved roads in Pinellas.

World War I inspired particular patriotism among the Greek population of Tarpon Springs; many formed a battalion even before war was officially announced (Stoughton 1975:82, 83). A speech recorded in the *Tarpon Springs Leader* given by the Greek Community president at the time stated, “To love one’s country is the ideal virtue that ennobles a man, and a true patriot finds always occasion to show his patriotic spirit, regardless as to whether his country is in a war or in time of peace. His first and last duty, when the call to the arms comes, is to shed his blood fighting for the just cause of his country.” (Burgess 1913:180). Wealth flowed into the City, as boat building became the City’s major war effort (Stoughton 1975:84).

7.6 Florida Boom Period (1920–1930)

As World War I ended, prosperity began to spread once again throughout the U.S. Florida, in particular, experienced this upswing as construction, production, and population in the state quickly increased. People were drawn to the year-round warm weather; automobiles and improved roads made the state more accessible; and Florida did not have the state income or inheritance taxes of other states (Curl 1987:77).

Southeastern Florida, including cities such as Miami and Palm Beach, experienced the most activity, although the boom affected most communities in central and South Florida (Weaver 1996:3). Tarpon Springs also experienced the effects of the Florida Land Boom, although its growth did not accelerate at the intense rates experienced by some other Florida communities. New subdivisions were platted to make way for the expected new houses and businesses and previously underdeveloped areas saw more growth.

Tarpon Springs was once again heavily promoted as a tourist destination during the Boom years, and many of its visitors drove and stayed a shorter time than their counterparts at the end of the preceding century (Historic Property Associates 1988:11). Some of those involved in the sponge industry were already searching out other ways to make a living during these years, recognizing that the winter residents were not interested in sponges. The first Greek curio store opened during the 1920s (Stoughton 1975:67).

The Beckett Bridge within the current project APE was first constructed in 1924 and was originally called the Chilito Street Bridge (n.a. 1948). It was designed by C.E. Burlson, a Pinellas County Engineer, as a wooden bridge with a concrete pier and a steel drawbridge span. The Beckett Bridge is an example of a Scherzer rolling lift bascule bridge type, credited to William Scherzer, the Scherzer rolling lift bascule rolls along a curved track as it opens and closes, pulling itself out of the way of water traffic as it does so (Koglin 2003:46). The function of the bridge was to connect east and west Tarpon Springs, carrying travelers over the Whitcomb Bayou. Before construction of the bridge, travelers could only reach the eastern side of Tarpon Springs from the west by taking either Meres Boulevard or Whitcomb Boulevard, located south of Whitcomb Bayou. The Beckett Bridge created a significantly shorter travel route to both the eastern residential areas and the Sunset Hills Country Club.

The Sunset Hills Country Club was the single most prestigious development in Tarpon Springs at the time (Rajtar 1999). The Alex Lonnquist Company of Chicago is credited with construction of the fireproof Mission Style building. The Country Club building was completed in 1926 and opened on December 15, 1926. A 1926 brochure called it “a private club with a selected personnel” (Doris 1985). However, the club was forced to close before the Great Depression (Stoughton 1975). On December 15, 1928, the Sunset Hills Country Club would become the Sunset Hills Hotel, operated under Colonel C.G. Holden and C.L. Holden as a “winter resort hotel of distinguished character at popular rates” (n.a 1928). After the closing of the hotel, the building would become a year-round baseball school for a time. In 1933, the Pinela Colony Club would open in the building. During the late 1940s, the building then became the Upham House Hotel, but soon after in 1953, the building was known as the Anclote Manor Hospital, a psychiatric facility. In 1985, American Medical International purchased the building and owned it for a short while. In 1990, American Health Properties purchased the building and the name was changed to The Manors. The building continued as mental care facility for the Northpointe Behavioral Health System until May 1997 when the doors closed due to filing of bankruptcy (Shepherd 1997). Today, the building is no longer extant.

The Boom period began to decline in August 1925, when the Florida East Coast Railway placed an embargo on freight shipments to South Florida. Ports and rail terminals were overflowing with unused building materials. In addition, northern newspapers published reports of fraudulent land deals in Florida. In 1926 and 1928, two hurricanes hit southeastern Florida, killing hundreds of people and destroying thousands of buildings. The collapse of the real estate market and the subsequent hurricane damage effectively ended the boom. The 1929 Mediterranean fruit fly infestation that devastated citrus groves throughout the state, only worsened the recession (Weaver 1996:4).

7.7 Depression and New Deal Period (1930–1940)

This era begins with the stock market crash of 1929. There were several causes for the economic depression in Florida, including the grossly inflated real estate market, several hurricanes, and the fruit fly infestation. During the Great Depression, Florida suffered significantly. Between 1929 and 1933, 148 state and national banks collapsed, more than half of the state’s teachers were owed back pay, and a quarter of the residents were receiving public relief (Miller 1990).

Tarpon Springs was not immune to the effects of the Depression. Many of its residents were unable to pay their taxes, and the City itself was unable to pay its bills. However, the sponge industry continued to thrive during the first half of the 1930s (Historic Property Associates 1988:12). Due to the survival of its main industry, Tarpon Springs was perhaps less affected by the Depression than other less fortunate cities in Florida, and new construction continued through the mid-1930s (Shriver 1990). Unfortunately, Tarpon Springs experienced its own unique tragedy during these years; in 1938, its sponge beds were infected by blight and large numbers of sponges were killed (Historic Property Associates 1988:12).

Despite the Depression, tourism remained an integral part of the Florida economy during this period and this extended to Tarpon Springs. New highways made automobile travel to Florida easy and affordable (Miller 1990). A 1939 “WPA Guide to Florida” characterizes Tarpon Springs by its sponge operation and tours, Greek population and festivals, and little else. At least publicly, Greek culture and sponges dominated the little town’s reputation during these years (Work Projects Administration 1939).

7.8 World War II and the Post War Period (1940–1950)

World War II brought unique challenges to Tarpon Springs. Sponge beds were not fully replenished, and the industry was further affected by “bombing range activity, the restriction to daylight hours, the leasing of boats to the government, plus the shortage of rubber for diving equipment” coupled with sponge divers leaving town to join the Navy (Stoughton 1975, 103-104). However, for the duration of the war, natural sponges could fetch phenomenal prices, and the industry carried on (Stoughton 1975:104).

The City of Tarpon Springs emerged from World War II in questionable financial shape (Stoughton 1975:111). The sponge industry saw prices decline as European markets reopened and increased worldwide supplies. In 1947, a major event produced a lasting transformation when red tide hit the area and essentially wiped out much of what remained of the sponge industry (History of Tarpon Springs n.d.). Some sponges remained close to the shore, but the water was so heavily polluted that deep sea sponging was no longer possible (Stoughton 1975: 102). This natural calamity was further exacerbated by the introduction of synthetic sponges into the market.

At this point, it was speculated by some that the City would “wither and die” with its sponge industry so severely weakened. A 1949 article in the St. Petersburg Times lamented the collapse of the sponge trade and stated that if the government did not increase import tariffs on natural sponges, Tarpon Springs surely could not survive. It painted a broad picture of Tarpon residents as poor, depressed, and unsure of where to turn now that their livelihood had largely disappeared (St. Petersburg Times 1949).

Nonetheless, Tarpon Springs survived, and in fact, thrived. While tourism had never ceased to play a big role in the City’s commerce, in the late 1940s and early 1950s tourism edged out sponges to become the City’s biggest source of income. In 1948 and 1953, two films featuring the sponge exchange assisted in this transformation by popularizing romantic ideas about the sponge industry and publicizing Tarpon Springs to potential travelers (Stoughton 1975:103).

In 1948, the bridge within the project APE was renamed “Beckett Bridge” after Edward H. Beckett, commending his 34 years of service as a County Commissioner at the time of his retirement (Freedman 1948). A native Floridian born in Clearwater in 1882, Beckett knew the district in which he was elected, having moved to Tarpon Springs in 1901 (Goldman 1996). After opening his own clothing store, Beckett expanded his business to various branches in the state. Then in 1929, in addition to managing his 53-acre orange grove and his 8-acre truck farm, he opened a real estate and insurance business in Tarpon Springs. Beckett served as city councilman in Tarpon Springs and as chief of police in Clearwater before being elected to the Pinellas County Board of County Commissioners in 1916. He was also active in supporting secession from Hillsborough County. For 32 years on the County Commission, 16 of those as chairman, he led the push for public parks and efficient water systems. Beckett often voted for new roads and for paving of those already constructed (Goldman 1996). Beckett died in 1962.

After World War II, residential construction resumed in the neighborhoods in and surrounding the Tarpon Springs area, building out previously undeveloped lots. Figures 7.5–7.7 show the development of the area surrounding the Beckett Bridge. Streets were repaved, the seawall was replaced around Spring Bayou, City Hall was expanded and other City services were improved. The increased development and tourism, combined with the Beckett Bridge being the shortest travel route, lead to a high amount of traffic crossing the bridge on a daily basis.



Figure 7.5 – 1941 Aerial Photograph showing the Beckett Bridge and Surrounding Area

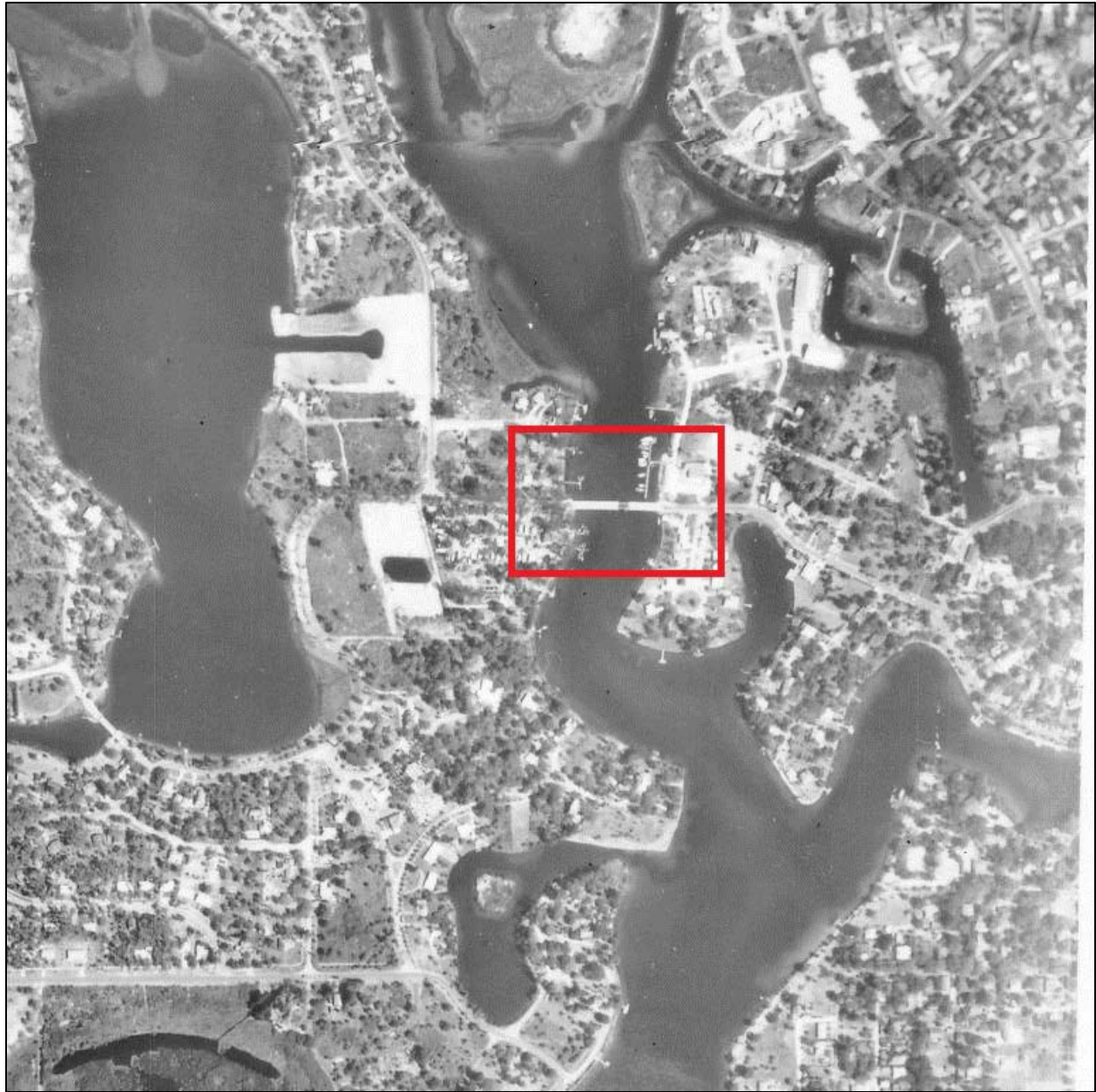


Figure 7.6 – 1957 Aerial Photograph showing the Beckett Bridge and Surrounding Area

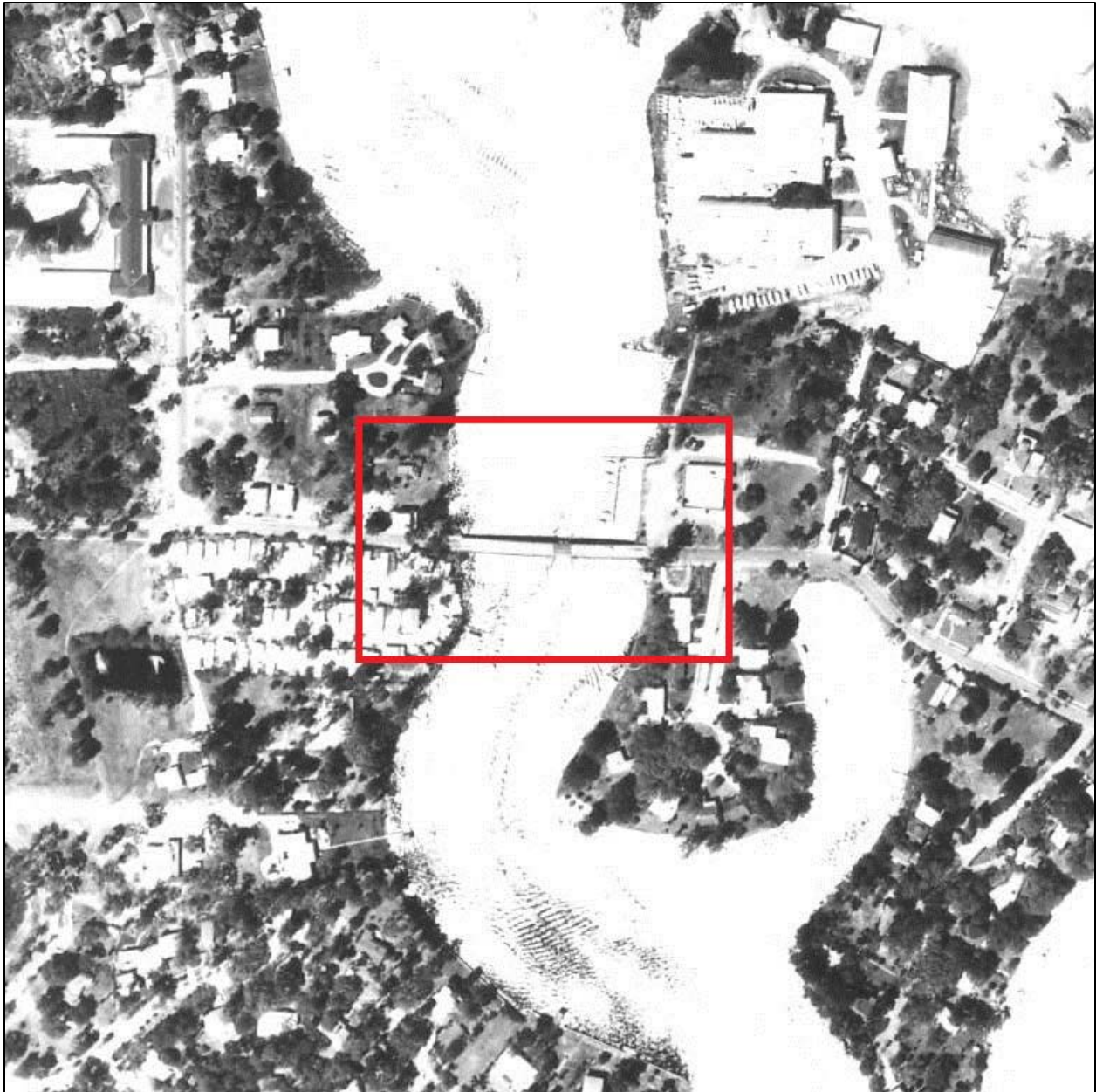


Figure 7.7 – 1974 Aerial Photograph showing the Beckett Bridge and Surrounding Area

7.9 1950 to the Present

Many tourists were drawn to the state for its natural attractions and favorable climate, and post-War advances in transportation made it much easier to either permanently move or travel there. In 1950, the *Panama City News-Herald* reported that the state of Florida traded 4,500 acres of Gulf coast marshland to the federal government in exchange for Anclote Island. The island was

ceded to the City of Tarpon Springs for development into a municipal beach, further enhancing Tarpon Springs as a tourist destination (History of Tarpon Springs n.d.).

In 1954, The Tarpon Springs Yacht Club building was constructed. The Club had formed in 1949 but did not obtain funding for a clubhouse until 1954. Until 1954, meetings of the Club were held in the Upham House Hotel, previously known as the Sunset Hills Country Club (Rajtar 1999). The 1954 clubhouse is located on the east side of Tarpon Springs and north of the Beckett Bridge, on North Spring Boulevard. The Club designed a nautical themed burgee after 1954 and an auxiliary called the “Windjammers” was formed to assist the Club. In 1961, the Tarpon Springs Yacht Club and thirteen other such clubs facilitated a program for boating enthusiasts wishing to cruise the Florida coasts. Incorporation articles were filed with the Florida Council of Yacht Clubs (FCYC). Circa 2002 the building was completely renovated. Services of the Yacht Club have continued to expand over the years and in 2010 the building sustained renovation once again to improve the facility. The Tarpon Springs Yacht Club was contacted via email on January 17, 2013 for information regarding the extent of renovation work in 2010. On January 18, 2013, Mr. Richard Pease, Commodore of the Tarpon Springs Yacht Club, contacted Janus Research via telephone and stated that he was not able to provide information regarding the 2010 renovation work.

In 1955, Pinellas County deemed the Beckett Bridge unsafe and decided repairs to the original wooden structure would be wasteful (Twitty 1955). On February 21, 1955, the County Commission approved an \$81,292 contract to W.L. Cobb Construction Company of Tampa, Florida to reconstruct the bridge (n.a. 1956). The new structure retained the original steel draw and machinery for operation, with the remainder being built from steel-reinforced concrete.

New industries also trickled into Tarpon Springs after World War II, which employed both its retired spongers and new residents. A Victor Chemical Plant to process phosphate was built along the Anclote River, and the Florida Sportswear Company, Gallagher Cotton Mill, ABC Package Machine Corporation, and Bee Bee Togs followed (Stoughton 1975:113, 114). Some Tarpon Avenue stores were “modernized” with new storefronts and updated façades. However, during the 1970s, the downtown saw a loss of businesses as strip malls and box stores began to pull local businesses away from the downtown (Joyne 2009).

In 1975, a book by Gertrude Stoughton chronicling the history of Tarpon Springs was published that spurred interest in local history. The Old City Hall was transformed into a Cultural Center and City government was relocated to the historic Pine Street high school, as new businesses developed along Tarpon Avenue (Stoughton 1975:vii).

Within the project APE in 1979 and 1988, the Beckett Bridge once again was repaired. These repairs included installation of crutch bents due to settlement and lateral stability concerns.

Today, tourism in Tarpon Springs continues to be the main industry. While this industry is heavily based around the sponge docks and the Greek heritage of Tarpon Springs, as of 2000, only 11.8 percent of its residents reported Greek ancestry (U.S. Census Bureau 2000). The area's history is also apparent in the numerous historic structures, and the downtown is known for its historic atmosphere and quaint restaurants and shops. On December 6, 1990, the Tarpon Springs Historic District was listed in the National Register, further recognizing the City's significant history. The district is comprised of the commercial buildings along Tarpon Avenue and the residential area to the north, east, and west encompassing both winter cottages along Spring Boulevard and the historic homes surrounding them, illustrating the City's rich history.

Within the project APE, Beckett Bridge underwent repairs again in 1996. Twelve new steel pilings were added under the bridge and much of the then 76-year old steel bascule was so corroded it had to be replaced (Headrick 1997). Electrical components, a concrete counterbalance to raise the drawbridge, a new tender station, new sidewalks, and guardrails were also installed in 1996 (Headrick 1997). Repairs on the Beckett Bridge were performed to correct issues with the operating machinery and the movable bridge span within the APE in 2011.



8.0 LITERATURE AND SITE FILE REVIEW

The work of previous investigators was reviewed to gather information about the types of resources that could be expected to occur within the project area (Table 8.1). The FMSF search served as a guide to the field investigations by identifying the possible locations of any archaeological sites and historic resources within the project area and providing expectations regarding the potential historic significance of any such sites. An extensive search of pertinent literature and records of the surrounding region was conducted to determine the locations of previously recorded National Register-listed and eligible resources within the general vicinity of the project corridor, as well as any archaeological and historical assessments of other tracts of land near the project corridor.

TABLE 8.1 – SURVEYS CONDUCTED WITHIN 200 FEET OF THE PROJECT CORRIDOR

Survey #	Title	Date	Author(s)
1732	Historic Properties Survey, Tarpon Springs	1988	Adams, William R., Historic Property Associates, and Stephen Olausen
2827	An Archaeological and Historical Survey of the Unincorporated Areas of Pinellas County, Florida	1991	Austin, Robert J., Charles Fuhrmeister, and Howard F. Hansen
6824	Sponge Dock Cultural District Survey	1999	Engelhardt, Hammer Assoc.
11118	Assessment of Potential Effects Upon Historic Properties: Proposed 150-Foot Tarpon Springs Wireless Telecommunications Tower (Ridan Industries FL-1002), Pinellas County, Florida	2004	Florida Archaeological Consulting, Inc.
16115	Countywide Cultural Resources Survey, Pinellas County, Florida	2008	Pinellas County Planning Department. Mary Beth Reed, and Greg C. Smith
16770	Historic Resources Survey of Tarpon Springs, Pinellas County, Florida	2009	Janus Research



8.1 Previously Recorded Archaeological Sites

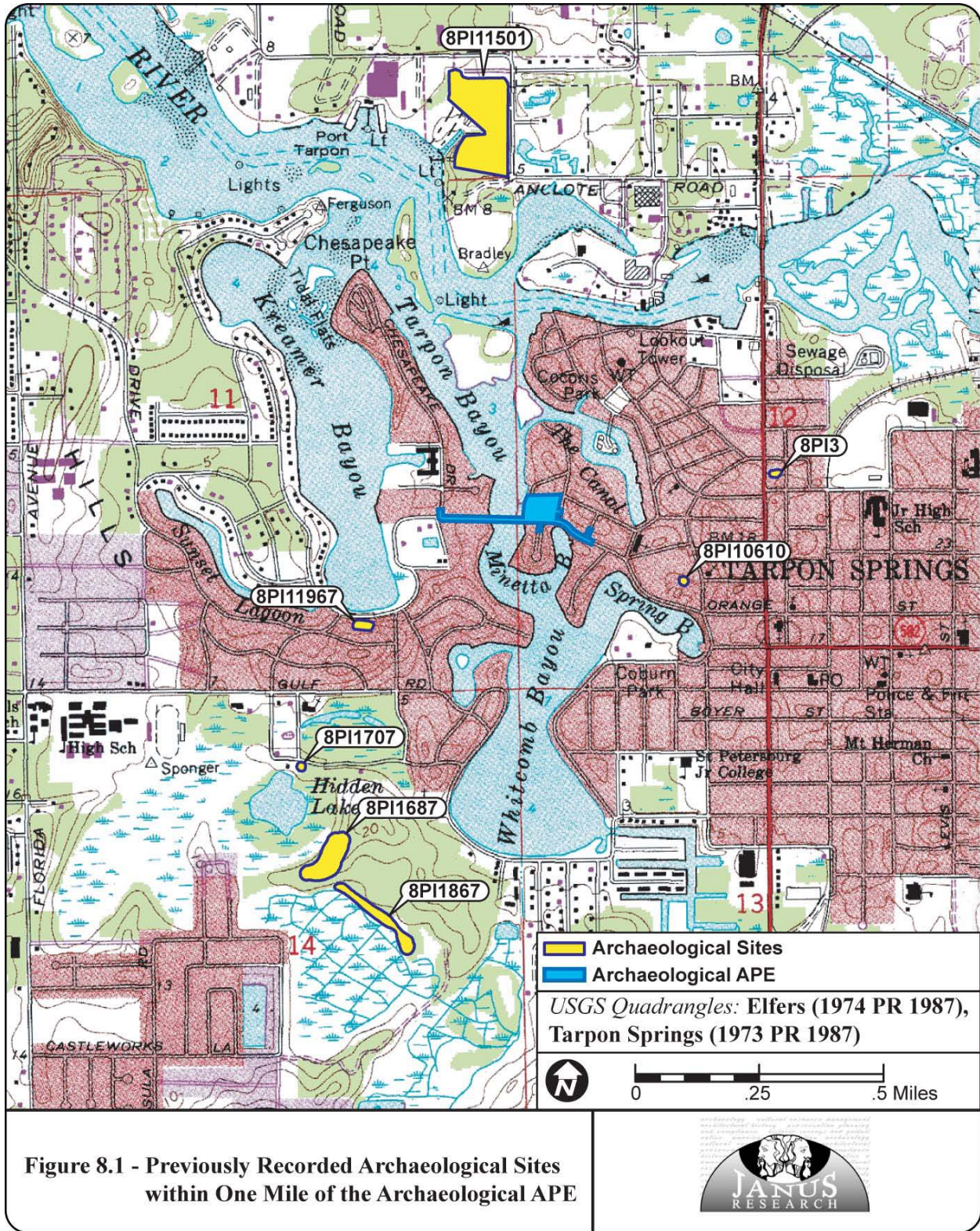
A search of the FMSF records identified no previously recorded archaeological sites within or adjacent to the APE. Seven archaeological sites are located within one mile of the APE. The characteristics of each site are listed in Table 8.2 and the locations of the previously recorded archaeological sites are illustrated in Figure 8.1.

TABLE 8.2 – ARCHAEOLOGICAL SITES LOCATED WITHIN ONE MILE OF THE ARCHAEOLOGICAL APE			
FMSF #	Site Name	Site Type	National Register Evaluation*
8PI3	Safford Mound	Weeden Island Burial Mound	Not Evaluated by SHPO
8PI1687	Meres Boulevard	Prehistoric artifact scatter	Not Evaluated by SHPO
8PI1707	Ashland Estates	Lithic scatter	Not Evaluated by SHPO
8PI1867	Meres Boulevard	Prehistoric artifact scatter	Not Evaluated by SHPO
8PI10610	Safford House	Late 19 th and early 20 th century historic housesite with late prehistoric and Archaic period artifact scatters	Not Evaluated by SHPO
8PI11501	Linger Longer	Prehistoric lithic scatter	Potentially Eligible
8PI11967	Kreamer Bayou South	Prehistoric lithic scatter	Not Evaluated by SHPO

* As recorded in the FMSF, may require re-evaluation

8.2 Previously Recorded Historic Resources

A search of the FMSF identified one National Register-listed resource and six individually National Register-eligible historic resources. The historic resources include the National Register-listed Tarpon Springs Historic District (8PI1712), the Edward Newton Knapp House (8PI238), the William T. Fleming House (8PI1617), the George Clemson House (8PI1619), the George Clemson Auxiliary (8PI1620), the Marshall H. Alworth House (8PI1621), and the Bigelow Cottage (8PI1625). Additionally, the six individually eligible buildings are located within the 1990 National Register-listed Tarpon Springs Historic District (8PI1712).



9.0 PROJECT RESEARCH DESIGN AND SITE LOCATION MODEL

The background research and literature review, in conjunction with pertinent environmental variables, contributed to the formulation of project-specific field methods to locate and evaluate previously unrecorded archaeological sites and historic structures within the project APE.

9.1 Precontact Archaeological Site Location Model

Based on the archaeological literature concerning the validity of site predictive models and the various environmental variables used to formulate such predictions, four environmental variables were used to predict archaeological site potential: distance to fresh water, soil type (soil drainage), distance to hardwood hammocks, and relative elevation. Soil type and relative elevation relate to the water drainage pattern found in a particular area.

Fresh water is obviously an important resource, as the need for water is universal. This variable would have been of greater importance during the Paleoindian and Early Archaic periods (12,000–5000 BC) when the perched water system was more restricted. Access to water during these early periods would have been from sinkholes and aquifer-fed rivers. The project is located on the brackish waters of the Tarpon and Minetta Bayous south of the Anclote River. Other freshwater sources in the area include wetlands.

The characteristics of soils have been used successfully by several researchers in the formulation of predictive models for precontact site location. In general, soils with an organic pan, with underlying marl or clays, and with slow to moderate internal drainage tend to retain water or be inundated. Areas with a low elevation relative to perched water systems tend to be wet or inundated. Although wet areas can contain abundant wildlife and plant resources, they make poorer habitation areas when better-drained locations are available.

Based on the soil characteristics, the project APE has a low to moderate potential for containing archaeological sites. The area adjacent to the bayou is made land and therefore has no potential for archaeological sites. Further from the water the soils are excessively drained, but have been modified by urban development. The elevation within the archaeological APE ranges from 0 to 1.5 meters (0–5 feet). The proximity to the bayou would have provided the native population with abundant food resources. Due to the lower elevation, the portions of the project area which are not on made land has a moderate potential for the presence of archaeological sites.

9.2 Historic Archaeological Site Location Model

The historic plat maps were also reviewed for evidence of homesteads or other early settlement. During the nineteenth century (post-1821), historic settlement tended to follow the isolated homestead or farmstead pattern. Individual families or groups of related families often built homesteads on the better-drained, hardwood hammocks. There were usually several miles between these settlements to allow room for farm fields. The review of the historic plat maps and surveyors' notes identified no military forts, roads, encampments, battlefields, homesteads, or historical Native American villages or trails were located within the vicinity of the project APE.

10.0 FIELD METHODS

10.1 Archaeological Field Methods

Archaeological field survey included a pedestrian survey. No subsurface testing could be conducted due to the presence of sidewalks, buried utilities, standing water, or lack of access to private property. Buried utilities in the archaeological APE included water, county sewage, telecommunications, and private irrigation sprinklers.

10.2 Historic Resources Field Methods

An architectural historian conducted a historic resources survey in order to ensure that resources built during or before 1964 within the project area were identified, properly mapped, and photographed. The historic resources survey used standard field methods to identify and record historic resources. Resources within the APE received a preliminary visual reconnaissance. Resources with features indicative of 1964 or earlier construction materials, building methods, or architectural styles were noted on aerial photographs and a USGS Quadrangle map.

For each resource identified in the preliminary assessment, FMSF forms were filled out with field data, including notes from site observations and research findings. The estimated date of construction, distinctive features, and architectural style were noted. Photographs were taken with a high resolution digital camera. A log was kept to record the building's physical location and compass direction of each photograph.

In addition to a search of the FMSF, Geographic Information Systems (GIS) Data Sets were utilized in conjunction with the Pinellas County Property Appraiser information to approximate building construction dates within the project area. Together, the GIS Data Sets and property appraiser information usually yield the dates of the majority of the historic resources located within the project area. The project architectural historian identifies any resource not accounted for by this information in the field based on the aforementioned methods.

Each resource's individual significance was then evaluated for its potential eligibility for listing in the National Register. Historic physical integrity was determined from site observations, field data, and photographic documentation.

Concentrations of historic resources within the APE for the project were noted in terms of the potential for inclusion in a historic district. Each resource's present condition, location relative to other resources, and distinguishing neighborhood characteristics were noted and photographed for accurate assessment of National Register Historic District eligibility.

In addition, a historic resources reconnaissance survey was performed by an architectural historian in order to provide preliminary cultural resource information for a proposed detour route of Beckett Bridge outside the established APE. Prior to this reconnaissance, a search was conducted for previously identified significant properties along the detour route. This was done utilizing GIS data and a search of the FMSF. The limits of this survey consisted of properties which are located alongside the proposed Beckett Bridge detour route on Riverside Drive, Spring Boulevard, Whitcomb Boulevard, Gulf Road, and North Park Avenue (Figure 11.22). The *Historic Resources Survey of Tarpon Springs* was conducted in July 2009 by Janus Research which identified individually eligible resources for inclusion in the National Register; some of these resources are also located in the Beckett Bridge proposed detour route.

10.3 Certified Local Governments Coordination and Local Informants

In accordance with Chapter 1A-46, attempts were made to contact local informants. The City of Tarpon Springs is listed on the March 2012 list of Certified Local Governments (CLG) posted on the FDHR website (2012). Coordination was conducted with Ms. Renea Vincent, Director of Planning and Zoning for the City of Tarpon Springs, and she indicated that she did not have any cultural resource concerns. Ms. Vincent did provide input for participants in the Cultural Resources Committee (CRC) meetings.

In addition, the Tarpon Springs Area Historical Society was contacted for further research. Coordination was conducted with Ms. Phyllis Kolianos and the Historical Society was visited to assist with historical research in August 2012.

11.0 RESULTS

11.1 Archaeological Resources Results

No shovel tests were excavated in the archaeological APE due to the presence of sidewalks, buried utilities, and standing water (Figures 11.1–11.3) or due to lack of access to private property. However, the APE was subjected to windshield and pedestrian survey. No precontact or historic period archaeological sites were encountered during these investigations. For those areas of proposed new ROW associated with Fixed Bridge Alternatives Option A and B, archaeological testing was not conducted due to a lack of access. If these alternatives are selected for further analysis, archaeological testing will be conducted where warranted.



Figure 11.1 – Standing Water West of Pampas Avenue, facing north



Figure 11.2 – Buried Utilities along Riverside Drive, facing east



Figure 11.3 – Buried Utilities on Riverside Drive at Forest Avenue, facing east

11.2 Historic Resources Results

The historic resources survey identified 16 historic resources within the project APE including one bridge and 15 buildings. FMSF forms were prepared for all 16 newly recorded historic resources: Beckett Bridge (8PI12017), 435 Doric Court (8PI12069), 425 Doric Court (8PI12068), 438 Riverside Drive (8PI12043), 434 Riverside Drive (8PI12044), 412 Riverside Drive (8PI12045), 403 Riverside Drive (8PI12046), 438 Craig Drive (8PI12047), The Tarpon Springs Yacht Club/350 North Spring Boulevard (8PI12048), 6 Venetian Court (8PI12049), 8 Venetian Court (8PI12050), 12 Venetian Court (8PI12051), 101 Pampas Avenue (8PI12052), 330 North Spring Boulevard (8PI12053), 302 North Spring Boulevard (8PI12054), and 301 North Spring Boulevard (8PI12055).

Beckett Bridge (8PI12017) was determined individually eligible for listing in the National Register. FHWA concurred that the Beckett Bridge is individually eligible for listing in the National Register on September 17, 2012 and SHPO also concurred with these findings on October 8, 2012. The remaining 15 resources (8PI12043–8PI12055, 8PI12068, 8PI12069) are all considered ineligible for listing in the National Register either individually or as part of a district. Some of these ineligible historic resources were constructed in the 1920s, but the majority of the resources are examples of construction from the 1950s. The majority of these houses exhibited significant non-historic exterior alterations that have compromised historic integrity. According to *National Register Bulletin 15*, historic integrity is evidenced by the survival of physical characteristics that existed during the property's historic period. Further, these historic resources are types commonly found in the State of Florida. For these reasons, and the lack of historical associations with significant events or persons, these 15 resources are considered ineligible for listing on the National Register on an individual basis or as part of a historic district. A table identifying each historic resource is included below (Table 11.1) and their locations are illustrated in Figure 11.4.

The physical description and evaluation of National Register eligibility are included in the narrative for each surveyed historic resource. This results section also includes photographs and a map with the locations of historic resources within the project area. For clarity, the National Register-eligible resource is presented first; narratives of those resources considered ineligible follow.


TABLE 11.1 – HISTORIC RESOURCES IDENTIFIED WITHIN THE PROJECT APE

FMSF #	Site Name / Address	Style	Const. Date	National Register Status
8PI12017	Beckett Bridge Riverside Drive/Spring Boulevard	Bascule Bridge	1924/1956	Determined Eligible by FHWA (9/17/2012) and SHPO (10/8/2012)
8PI12069	435 Doric Court	Masonry Vernacular	c. 1947	Ineligible
8PI12068	425 Doric Court	Frame Vernacular	c. 1954	Ineligible
8PI12043	438 Riverside Drive	Craftsman	c. 1925	Ineligible
8PI12044	434 Riverside Drive	Frame Vernacular	c. 1929	Ineligible
8PI12045	412 Riverside Drive	Masonry Vernacular	c. 1946	Ineligible
8PI12046	403 Riverside Drive	Mission Revival	c. 1949	Ineligible
8PI12047	438 Craig Drive	Frame Vernacular	c. 1940	Ineligible
8PI12048	Tarpon Springs Yacht Club/350 North Spring Boulevard	Masonry Vernacular	1954	Ineligible
8PI12049	6 Venetian Court	Ranch	c. 1952	Ineligible
8PI12050	8 Venetian Court	Ranch	c. 1954	Ineligible
8PI12051	12 Venetian Court	Masonry Vernacular	c. 1953	Ineligible
8PI12052	101 Pampas Avenue	Masonry Vernacular	c. 1954	Ineligible
8PI12053	330 North Spring Boulevard	Masonry Vernacular	c. 1956	Ineligible
8PI12054	302 North Spring Boulevard	Masonry Vernacular	c. 1950	Ineligible
8PI12055	301 North Spring Boulevard	Frame Vernacular	c. 1953	Ineligible

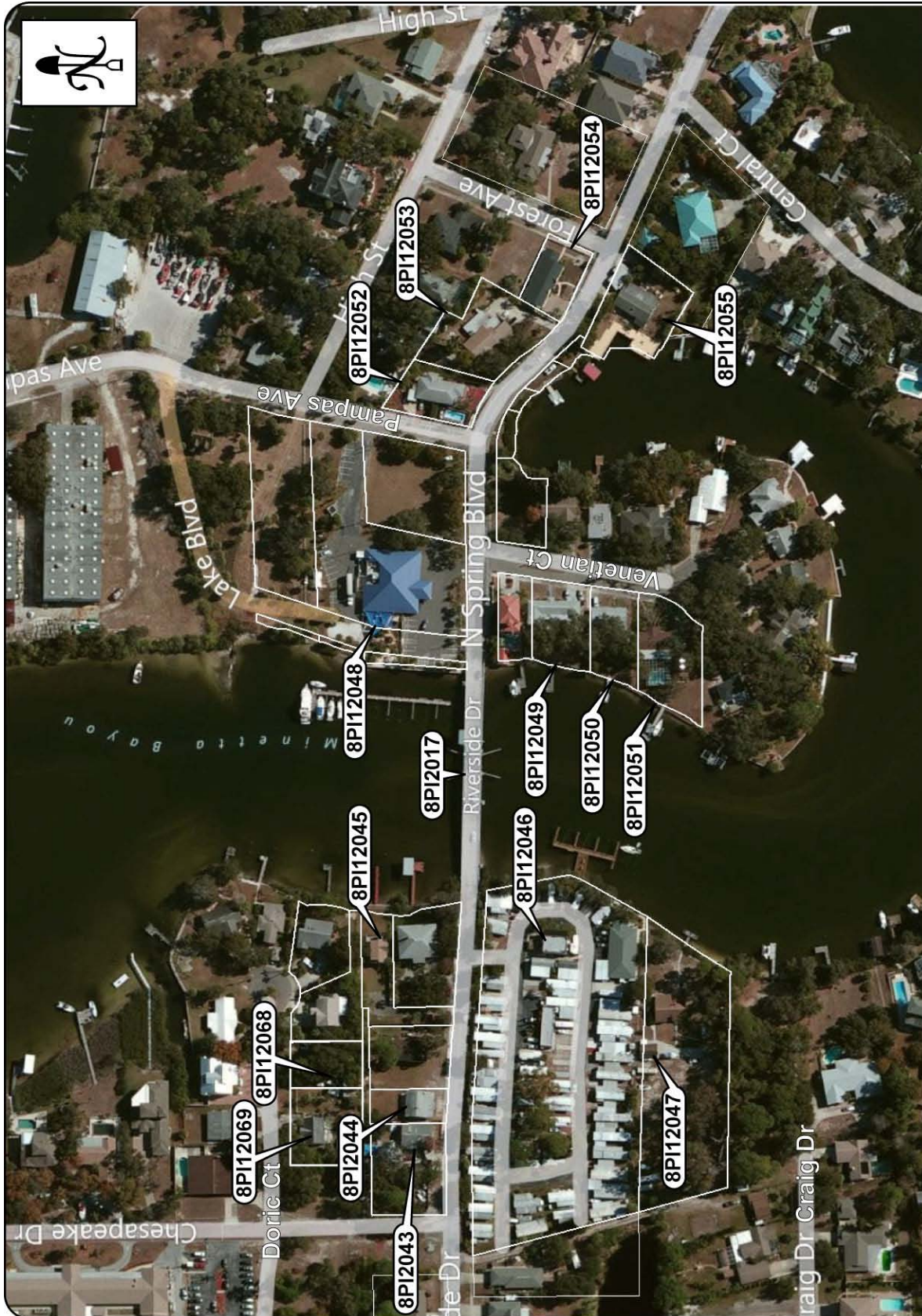


Figure 11.4 - Locations of Newly Identified Historic Resources

11.2.1 Resource Determined Eligible for Listing in the National Register



Figure 11.5 – Beckett Bridge (8PI12017) in Pinellas County, facing southwest



Figure 11.6 – Beckett Bridge (8PI12017) in Pinellas County, facing west

11.2.1.1 8PII2017 (Beckett Bridge)

The Beckett Bridge (Figures 11.5 and 11.6) is located in Township 27 South, Range 15 East, and Sections 11 and 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The bridge is a steel, single-leaf, bottom counterweight, Scherzer rolling lift bascule bridge spanning approximately 360 feet in total length and approximately 28 feet in width. It carries Riverside Drive/North Spring Boulevard over Whitcomb Bayou in Tarpon Springs, Florida. The existing typical section of the bridge consists of two vehicular lanes measuring approximately 20 feet and a sidewalk measuring approximately 3 feet, with concrete railing on both sides. Nine approach spans and one main span are present. The main bridge span is a steel structure with a cast concrete deck. Railings flank the bridge approaches and the bascule span; these are simple concrete guardrail with concrete posts. Concrete piers support the pre-stressed concrete girder approach spans of this bridge. A galvanized pipe staircase with handrails leads to the bridge substructure from a utilitarian bridge tender's station that consists of a simple one-story rectangular building with a steel shed roof and Plexiglas windows. This structure, built in 1996, is located on the north side of the bridge.

Beckett Bridge was originally built in 1924 and called the Chilito Street Bridge until it was renamed in 1948 for Edward H. Beckett to honor him for his 34 years of service as a County Commissioner (Freedman 1948). The original bridge was of wood construction with a concrete pier and a steel drawbridge span. The bridge was the shortest way of connecting east and west Tarpon Springs. In 1956, the Beckett Bridge was almost entirely reconstructed after it was deemed unsafe. The new structure retained the original steel draw span and machinery for operation with the remainder (new approach spans) being built from steel-reinforced concrete. Repairs would follow in 1979 and 1988. In 1996, additional repairs were needed; twelve new steel pilings were added under the bridge and much of the then 76-year old steel bascule was so corroded it had to be replaced (Headrick 1997). Electrical components, a concrete counterbalance to raise the drawbridge, a new tender station, new sidewalks, and guardrails were installed (Headrick 1997). In 2011, repairs were performed to correct issues with the operating machinery and the movable bridge span.

The Beckett Bridge is a Scherzer rolling lift bridge and remains as one of seven pre-1965 single-leaf bascule bridges in Florida. The bridge has been determined eligible for listing in the

National Register under Criterion A for its contributions to the patterns of development and transportation in the State, as well as Criterion C for its distinct engineering. The Determination of Eligibility (DOE) for the Beckett Bridge was coordinated with FHWA and SHPO. On September 17, 2012 FHWA concurred that the Beckett Bridge is individually National Register-eligible and on October 8, 2012 SHPO also concurred that the bridge is National Register-eligible. The DOE for this resource is included in Appendix B.

11.2.2 Resources Considered Ineligible for Listing in the National Register

11.2.2.1 *8PII2069 (435 Doric Court)*



Figure 11.7 – 435 Doric Court (8PII2069) in Pinellas County, facing southwest

435 Doric Court (Figure 11.7) is located to the north of Riverside Drive at the end of Doric Court, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987) in Pinellas County, Florida. The building was constructed in approximately 1947 and is a one-story, stuccoed Masonry Vernacular house. The building plan is rectangular and it is constructed of concrete blocks. It sits on a concrete slab foundation. The roof is side gabled with a front gabled projection on the north façade and sheathed in composition shingles.

Windows are metal four-over-four single hung sash and two-light sliding. Vents are a notable feature of this building at the gable ends. An unattached storage building is visible on aerial photographs and located to the south of the property. Windows and doors have been replaced as well as the entire building restuccoed.

This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.2 *8PI12068 (425 Doric Court)*



Figure 11.8 – 425 Doric Court (8PI12068) in Pinellas County, facing southwest

425 Doric Court (Figure 11.8) is located to the north of Riverside Drive at the end of Doric Court, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987) in Pinellas County, Florida. The building was constructed in approximately 1954 and is a one-story Frame Vernacular house clad in vertical plank and vinyl siding. The building plan is irregular and the building is wood framed. It sits on a continuous concrete block foundation. The roof is front gabled and sheathed in composition shingles. Windows are wood one-over-one and eight-over-eight double-hung sash. Vents are a notable feature of this building

at the north façade. Windows and doors have been replaced and it appears that the north façade may have a porch enclosure to increase living space.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.3 8PI12043 (438 Riverside Drive)



Figure 11.9 – 438 Riverside Drive (8PI12043) in Pinellas County, facing northeast

438 Riverside Drive (Figure 11.9) is located on the north side of Riverside Drive between Chesapeake Drive and the Beckett Bridge, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1925 and is a one-story Craftsman house with wood siding. The building plan is irregular and construction is wood frame. It sits on a concrete foundation, but has an incorporated pier system. A front gable roof is present with a cross-gable intersecting to the back of the house. The roof is composition shingle. The porch is full width and includes wooden supports on brick piers with a railing situated between supports, except for an open portion at the front facade. Windows are metal two-over-two single hung sash.

Cornerboards and vents are a notable feature of this building. To the northwest there is a gabled roof wood frame storage building that appears to be historic. The windows and doors have been replaced, shutters have been added to the porch, and the configuration of the porch railing appears to have been changed.

The building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.4 *8PI12044 (434 Riverside Drive)*



Figure 11.10 – 434 Riverside Drive (8PI12044) in Pinellas County, facing northeast

434 Riverside Drive (Figure 11.10) is located to the north of Riverside Drive between Chesapeake Drive and the Beckett Bridge, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed circa 1929 and is a one-story Frame Vernacular house that is clad in stucco. The building plan is rectangular and construction is wood frame. The building sits on a pier system and the foundation material is concrete. The roof is a clipped gable with a shed overhang and composition shingle. Windows are metal one-over-one single hung sash. A small

porch is at the front façade. In roughly the 1990s, the building was stuccoed and the original porch was enclosed with brick and stucco.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.5 *8PI12045 (412 Riverside Drive)*



Figure 11.11 – 412 Riverside Drive (8PI12045) in Pinellas County, facing west

412 Riverside Drive (Figure 11.11) is located to the north of Riverside Drive between Chesapeake Drive and the Beckett Bridge, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed circa 1946 and is a two-story Masonry Vernacular house. It has an irregular plan and features both concrete block and wood siding. The building sits on a continuous concrete block foundation and has a concrete block structural system. The roof is a cross-gable of composition shingles. Windows are metal one-over-one single hung sash and a six-light louvered window is also observed. The main entrance is likely on the south side of the

building, but was not able to be observed during the survey. The east deck is constructed of wood. There are two shed roof additions to the north.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.6 *8PI12046 (403 Riverside Drive)*



Figure 11.12 – 403 Riverside Drive (8PI12046) in Pinellas County, facing south

403 Riverside Drive (Figure 11.12) is located to the south of Riverside Drive between Chesapeake Drive and the Beckett Bridge, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1949 and is a one-story Mission Revival style building that is clad in stucco. The building plan is rectangular and constructed with concrete blocks. It sits on a continuous foundation of concrete blocks. The roof is built-up and flat. Parapets are present on the building and scuppers present within the north façade. Windows are metal one-over-one and two-over-two single hung sash. The building was probably once a residential house, but is now appears to either be offices or storage for the Bayshore MHP. Non-

historic circa 1970 mobile homes are located on the same parcel as 403 Riverside Drive. A two-story 1966 Mission Revival style building is also located to the east of the historic 1949 building.

This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.7 8PI12047 (438 Craig Drive)



Figure 11.13 – 438 Craig Drive (8PI12047) in Pinellas County, facing east

438 Craig Drive (Figure 11.13) is located to the south of Riverside Drive at the end of Craig Drive, east of Chesapeake Drive, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County Florida. The building was constructed in approximately 1940 and is a one-story Frame Vernacular house with board and batten siding. It is simple and unadorned. The building has a wood frame, irregular plan, and sits on a concrete slab foundation. The roof consists of three separate gables of composition shingles. The main entrance is on the west side of the building and consists of a glass door under a shed overhang. Windows are one-over-one single hung sash. A one-car garage is present to the northwest of the building. The building is owned by the same company that owns the Bayshore

MHP currently located immediately north. However, the house is not located on the same parcel of land as the mobile home park. There are two large gable additions and replacement doors, windows, and siding.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.8 8PI12048 (The Tarpon Springs Yacht Club/350 North Spring Boulevard)



Figure 11.14 – The Tarpon Springs Yacht Club/350 North Spring Boulevard (8PI12048), facing north

The Tarpon Springs Yacht Club/350 North Spring Boulevard (Figure 11.14) is located at the intersection of Spring Boulevard and Pampas Avenue, Township 27 South, 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in 1954 after a group of Tarpon Springs boaters founded the Yacht Club in 1949. It is a one-story Masonry Vernacular building that is clad in stucco. The building has a concrete block structural system, a rectangular plan, and the foundation is slab on grade. The building features a hip roof with an added hip roof extension entrance way set on square

masonry supports, which appear to be clad in stucco. The entrance way door is glass and sits under an arch made of modern wood. A standing seam metal roof is present. Windows are vinyl one-light. The building is surrounded by an asphalt parking lot.

After the building was financed and built in 1954 by the Tarpon Springs Yacht Club, a burgee, which is a distinguishing flag for a recreational boating organization, was designed with a white tarpon on a blue field and a ship's wheel in red for a nautical appearance. This burgee is attached to the south façade exterior of the building. An auxiliary called the "Windjammers" was formed to assist the Club in moving ahead. In 1961, thirteen yacht clubs, including the Tarpon Springs Yacht Club, facilitated a program for boating enthusiasts wishing to cruise the Florida coasts. Incorporation articles were filed with the Florida Council of Yacht Clubs (FCYC) in this same year. Circa 2002 the building was completely renovated with a stucco exterior treatment and the south hip roof extension added. Services of the Yacht Club have expanded and in 2010 the building sustained renovation work to improve the facility. The Tarpon Springs Yacht Club was contacted via email on January 17, 2013 for information regarding the extent of renovation work in 2010. On January 18, 2013, Mr. Richard Pease, Commodore of the Tarpon Springs Yacht Club, contacted Janus Research via telephone and stated that he was not able to provide information regarding the 2010 renovation work.

No historic exterior fabric remains on the building. Due to these modifications and the fact that it does not possess sufficient significance; it is not eligible for inclusion in the National Register, individually or as part of a district.

11.2.2.9 8PI12049 (6 Venetian Court)



Figure 11.15 – 6 Venetian Court (8PI12049) in Pinellas County, facing southwest

6 Venetian Court (Figure 11.15) is located to on the west side of Venetian Court between Spring Boulevard and the dead end of Venetian Court, Township 27 South, Range 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1952 and is an example of a one-story Ranch house that is clad in stucco. The building is simple and unadorned. It has a rectangular plan, concrete block construction, and sits on a continuous concrete block foundation. The roof is hip and a small hip roof extension is located over the front door. This hip roof extension is supported by what appears to be arched decorative wrought iron supports. The stoop porch has a wheel chair access ramp leading up to it. Windows are metal one-over-one single hung sash and a tripartite window unit on the front façade in also present. Below the windows are concrete sills. A carport is incorporated into the main building.

This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.10 8PI12050 (8 Venetian Court)



Figure 11.16 – 8 Venetian Court (8PI12050) in Pinellas County, facing southwest

8 Venetian Court (Figure 11.16) is located to the west of Venetian Court between Spring Boulevard and the dead end of Venetian Court, Township 27 South, Range 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1954 and is an example of a one-story, stucco clad Ranch house. It is simple and unadorned with a rectangular plan. The building is constructed of concrete blocks and is on a continuous concrete block foundation. The roof is a side facing gable of composition shingles. A small cupola is positioned on the center of the roof ridgeline. The door is set flush with the building. Multiple types of metal windows are present on the building and they include; a tripartite window unit with 4-lights to the right and left of the main picture window, one-over-one single hung sash, two-light awning windows, 8-light casement windows, and 4-light casement windows. Concrete sills are positioned beneath the windows.

Faux shutters have been added to the building as well as replacement windows and doors. The house appears to have been restuccoed and there is a possible garage or carport enclosure at the north end of the building. Due to these modifications and that the building does not possess sufficient significance, it is not considered eligible for inclusion in the National Register, individually or as part of a district.

11.2.2.11 8PI12051 (12 Venetian Court)



Figure 11.17 – 12 Venetian Court (8PI12051) in Pinellas County, facing west

12 Venetian Court (Figure 11.17) is located to the west of Venetian Court between Spring Boulevard and the dead end of Venetian Court, Township 27 South, Range 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1953 and is a one-story, concrete block Masonry Vernacular house. The building form is rectangular. Vinyl siding is present at the gable ends. The foundation is continuous concrete block. The roof is a side facing gable with a front gable extension. A porch is present under the gable roof extension on wood faux Craftsman supports to the east. A porch is evident from aerial photographs to the west as well as an in ground pool. Windows are one-over-one single hung sash and a 3-light sliding window is also present. A

modern garage is attached to the southwest of the building. Windows and doors have been replaced and the gable siding is also a modern replacement.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.12 8PI12052 (101 Pampas Avenue)



Figure 11.18 – 101 Pampas Avenue (8PI12052) in Pinellas County, facing east

101 Pampas Avenue (Figure 11.18) is located at the northeast corner of Pampas Avenue and Spring Boulevard, Township 27 South, Range 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1954 and is an example of a one-story, stucco clad Masonry Vernacular house. The exterior system is composed of concrete blocks and the foundation is a continuous concrete block. The plan of the building is irregular. The hip roof has a flat roof carport addition to the north of the building and consists of composition shingles. The porch is attached with decorative wood supports. Windows are metal one-over-one single hung sash and 2-light sliding with concrete sills. Windows and doors have been replaced. A garage is also present with a modern

door. A concrete and metal fence is in front of the building façade and a pool has been added to the front yard.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.13 8PI12053 (330 North Spring Boulevard)



Figure 11.19 – 330 North Spring Boulevard (8PI12053) in Pinellas County, facing north

330 North Spring Boulevard (Figure 11.19) is located on the north side of Spring Boulevard between Pampas Avenue and Forest Avenue, Township 27 South, Range 15 East, Section 11 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1956 and is an example of a one-story, stucco clad Masonry Vernacular house. The building is composed of concrete blocks and is on a continuous concrete block foundation. The roof is a side facing gable with a front gable extension and is composition shingle. The porch encompasses much of the front façade and is supported by non-historic columns. Windows have been replaced and are metal one-over-one single hung sash, 2-

light sliding, and six-over-six awning set on concrete sills. There appears to be a garage type feature behind the building from aerial views, but no outbuildings were observed.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.14 8PI12054 (302 North Spring Boulevard)



Figure 11.20 – 302 North Spring Boulevard (8PI12054) in Pinellas County, facing northeast

302 North Spring Boulevard (Figure 11.20) is located on the northwest corner of North Spring Boulevard and Forest Avenue, Township 27 South, Range 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1950 and is an example of a one-story, stucco clad Masonry Vernacular house. The walls are composed of concrete blocks and the building sits on a continuous concrete block foundation. The roof is a side facing gable with composition shingles. The porch features wood supports set on stuccoed piers. Windows are metal one-over-one single hung sash and a glass block window is also present. Numerous alterations have taken place on the building and no historic fabric remains. The façade was completely redone, windows and doors replaced, new supports were added, and the building was restuccoed and decoratively

scored. Circa 2000, the carport was enlarged and storage space added to the west. There is a room addition at the east.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.2.2.15 8PI12055 (301 North Spring Boulevard)



Figure 11.21 – 301 North Spring Boulevard (8PI12055) in Pinellas County, facing southwest

301 North Spring Boulevard (Figure 11.21) is located on the south side of North Spring Boulevard across from Forest Avenue, Township 27 South, Range 15 East, Section 12 (USGS Quadrangle Tarpon Springs 1973, Photorevised 1987), in Pinellas County, Florida. The building was constructed in approximately 1953 and is an example of a one-story Frame Vernacular house with wood siding. It has an irregular form and sits on a continuous concrete foundation. The roof is a front gable with composition shingles. A stucco clad chimney is present at the interior slope of the roof. Two large garages have been added to the northeast side of the building. These additions have a flat roof and brick veneer. The porch is on the southwest side of

the building and sits under a shed roof with brick supports. Windows are metal one-over-one single hung sash as well as glass block and decorative fixed windows on the garages. Windows, doors, and siding have been replaced.

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

11.3 Reconnaissance Survey Results



Figure 11.22 – 115 North Park Avenue in Pinellas County, facing south

In addition to the CRAS, a Cultural Resource Reconnaissance Survey was performed to provide preliminary cultural resource information for the proposed detour plan route of Beckett Bridge outside the established APE (Figure 11.23). Prior to this reconnaissance, a search was conducted for previously identified significant resources along the detour route. This was done utilizing GIS data and a search of the FMSF. The limits of this survey consisted of properties which are located alongside the proposed detour plan route on Riverside Drive, Spring Boulevard, Whitcomb Boulevard, Gulf Road, and North Park Avenue. The six individually eligible historic resources were recently recorded as part of the July 2009 *Historic Resources Survey of Tarpon Springs*, conducted by Janus Research and most of these six historic resources were initially

recorded as part of the 1988 *Historic Properties Survey, Tarpon Springs*; some of these resources are also located in the Beckett Bridge proposed detour plan route. One National Register-listed historic district and six National Register-eligible resources were identified. The seven previously identified resources include the National Register-listed Tarpon Springs Historic District (8PI1712), the Edward Newton Knapp House (8PI238), the William T. Fleming House (8PI1617), the George Clemson House (8PI1619), the George Clemson Auxiliary (8PI1620), the Marshall H. Alworth House (8PI1621), and the Bigelow Cottage (8PI1625). The six individually eligible buildings are part of the National Register-listed Tarpon Springs Historic District (8PI1712). In addition, the eligible buildings are also located within the City of Tarpon Springs local Historic District, which has boundaries that extend beyond the National Register-listed Tarpon Springs Historic District (8PI1712) (Figure 11.23). Only one new property along this route was identified as potentially National Register-eligible during the reconnaissance survey and is located at 115 North Park Avenue (Figure 11.22). All significant resources are detailed below in Table 11.2 and Figure 11.23, where the locations of these significant resources are shown. A FMSF form was not completed for the newly identified resource.



**TABLE 11.2 – RESOURCES IDENTIFIED DURING THE CULTURAL RESOURCE
RECONNAISSANCE SURVEY**

FMSF #	Site Name	Site Type	National Register Evaluation*
PI1712	Tarpon Springs Historic District	District	National Register-Listed
8PI238	Edward Newton Knapp House/115 S. Spring Boulevard	Building	National Register–Eligible
8PI1617	William T. Fleming House/22 N. Spring Boulevard	Building	National Register–Eligible
8PI1619	George Clemson House/110 N. Spring Boulevard	Building	National Register–Eligible
8PI1620	George Clemson Auxiliary/134 N. Spring Boulevard	Building	National Register–Eligible
8PI1621	Marshall H. Alworth House/144 N. Spring Boulevard	Building	National Register–Eligible
8PI1625	The Bigelow Cottage/184 N. Spring Boulevard	Building	National Register–Eligible
Not Assigned	115 N. Park Avenue	Building	Considered National Register–Eligible

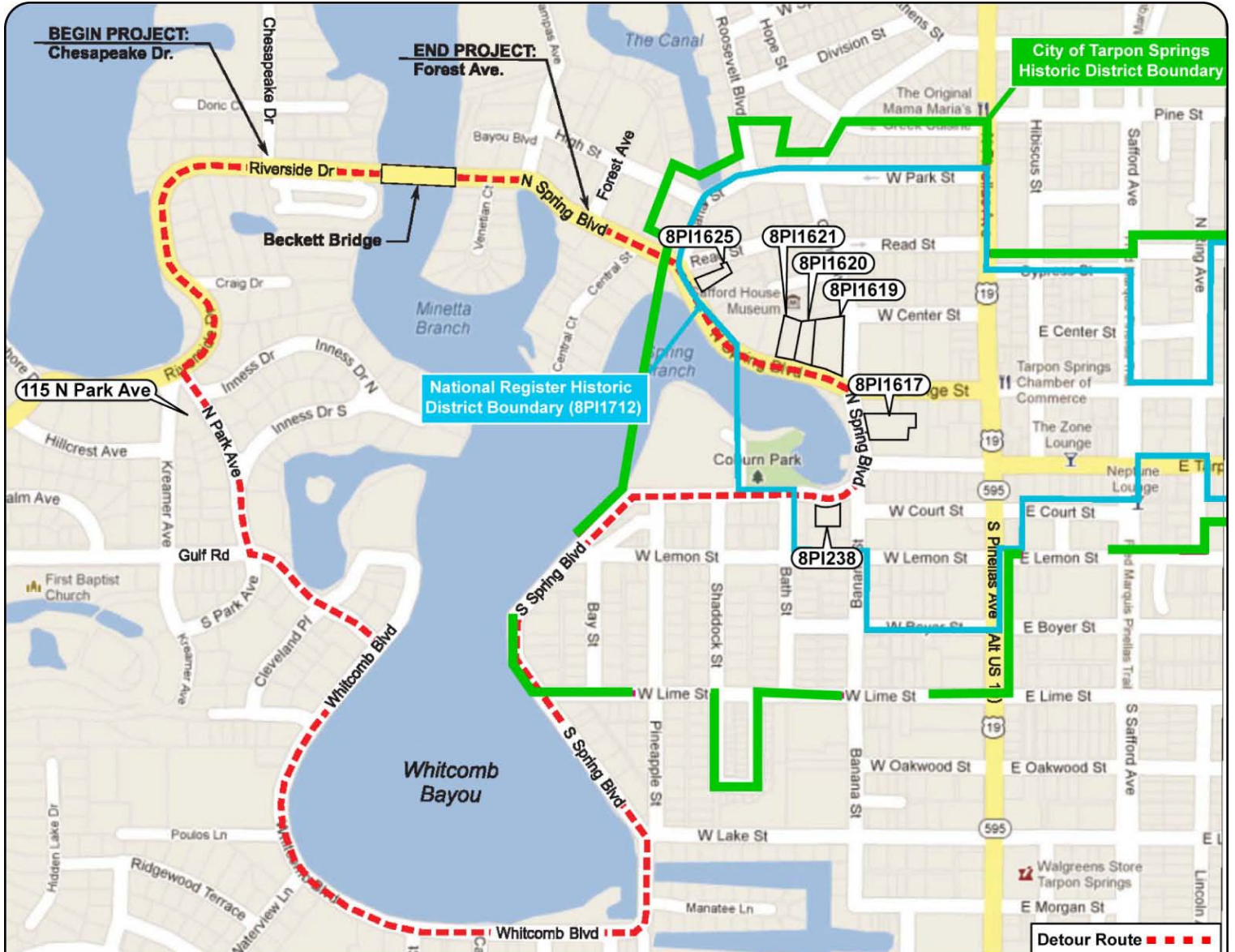


Figure 11.23: Locations of Resources Identified during the Cultural Resource Reconnaissance Survey for the Detour Route





12.0 CONCLUSIONS

This survey resulted in the identification of 16 newly recorded historic resources within the APE including one bridge (8PII2017) and 15 buildings (8PII2043-8PII2055, 8PII2068, 8PII2069). One of these newly recorded historic resources, Beckett Bridge (8PII2017), is considered eligible for listing in the National Register. The DOE was coordinated with FHWA and SHPO. FHWA concurred that the Beckett Bridge is individually eligible for listing in the National Register on September 17, 2012. SHPO also concurred on these findings on October 8, 2012. The remaining resources (8PII2043-8PII2055, 8PII2068, 8PII2069) are considered ineligible for listing in the National Register as individual historic resources or as contributing resources to a historic district. FMSF forms for each newly identified resource are included in Appendix A.

In addition to the CRAS, a Cultural Resource Reconnaissance Survey was performed to provide preliminary cultural resource information for a proposed detour route of Beckett Bridge outside the established APE. One previously recorded historic district was identified that is National Register-listed and six previously recorded historic resources were identified that are considered individually eligible for inclusion in the National Register. The six individually eligible historic resources were recently recorded as part of the July 2009 *Historic Resources Survey of Tarpon Springs*, conducted by Janus Research and most of these six historic resources were initially recorded as part of the 1988 *Historic Properties Survey, Tarpon Springs*; some of these resources are also located in the Beckett Bridge proposed detour plan route. These seven previously identified resources include the National Register-listed Tarpon Springs Historic District (8PII712), the Edward Newton Knapp House (8PII238), the William T. Fleming House (8PII617), the George Clemson House (8PII619), the George Clemson Auxiliary (8PII620), the Marshall H. Alworth House (8PII621), and the Bigelow Cottage (8PII625). The six individually eligible buildings are part of the 1990 National Register-listed Tarpon Springs Historic District (8PII712). Only one new property along this route was identified as potentially National Register-eligible during the reconnaissance survey and is located at 115 North Park Avenue.

No archaeological sites were newly identified within or adjacent to the project corridor during the current survey and no previously recorded archaeological sites were located within the archaeological APE.



12.1 Unanticipated Finds

Should construction activities uncover any archaeological remains, it is recommended that activity in the immediate area of the remains be stopped while a professional archaeologist evaluates the remains. In the event that human remains are found during construction or maintenance activities, Chapter 872.05 of the *Florida Statutes* will apply and FDOT's Standard Specifications for Road and Bridge Construction require that all construction cease. Chapter 872.05 states that, when human remains are encountered, all activity that might disturb the remains shall cease and may not resume until authorized by the District Medical Examiner or the State Archaeologist. The District Medical Examiner has jurisdiction if the remains are less than 75 years old or if the remains are involved in a criminal investigation. The State Archaeologist has jurisdiction if the remains are 75 years of age or more.

12.2 Curation

Original FMSF forms (Appendix A), Survey Log sheets (Appendix D), and photographs are curated at the FMSF, along with a copy of this report. Field notes and other pertinent project records are temporarily stored at Janus Research until their transfer to the FDOT storage facilities.

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APPENDIX A:

FLORIDA MASTER SITE FILE FORMS



HISTORICAL BRIDGE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 PI12017
Field Date 2-22-2012
Form Date 8-9-2012
Recorder # 14
FDOT Bridge # 154000

Original
 Update

Consult *Guide to the Historical Bridge Form* for detailed instructions

Bridge Name(s) Beckett Bridge, FDOT #154000 Multiple Listing (DHR only) _____
Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Route(s) Carried/Feature(s) Crossed Carries N. Spring Blvd./Riverside Dr. over Whitcomb Bayou
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City/Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11,12 ¼ section: NW SW SE NE Irregular-name: _____
Township _____ Range _____ Section _____ ¼ section: NW SW SE NE
Landgrant _____ Tax Parcel # _____
UTM Coordinates: Zone 16 17 Easting 326659 Northing 3115085
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Year Built 1924 approximately year listed or earlier year listed or later
Still in use? yes no restricted use (describe) _____
Prior Fords, Ferries, or Bridges at this Location None

Bridge Use: original and current with dates (standard descriptions: auto, railway, pedestrian, fishing pier, abandoned) Bridge 1924-Present

Ownership history Pinellas County has owned the bridge from 1924 until present.

Designers/Engineers C.E. Burlson, Pinellas County Engineer

Builders/Contractors W.L. Cobb Construction Company

Text of Plaque or Inscription The bridge is inscribed with the year 1956 on concrete posts at the end of the bridge and adjacent to the tender's station is a metal plaque signifying the original date of construction and engineer for the bridge.

Narrative History (How did bridge come to be built? How was it financed?, etc.) See continuation sheet.

DESCRIPTION

GENERAL

Overall Bridge Design 1. Movable--Bascule 2. _____

Overall Condition excellent good fair deteriorated ruinous

Style and Decorative Details See continuation sheet.

Tender Station Description See continuation sheet.

Alterations: Dates and Descriptions See continuation sheet.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin</i> 15, p. 2)				

DESCRIPTION (continued)

SUPERSTRUCTURESpans: Number 10 Total Length(ft) 358Main Spans: Number 1 Length(ft) 40 Width(ft) _____ Roadway width(ft) 20Main Span Design Movable--BasculeMain Span Materials 1. Steel 2. Pre-cast ConcreteApproach Spans: Number 9 Length(ft) _____ Width(ft) _____ Roadway width(ft) 20Approach Span Design Movable--BasculeApproach Span Materials 1. Steel 2. ConcreteDeck Materials 1. Pre-cast Concrete 2. _____**SUBSTRUCTURE**Abutment Materials 1. Concrete 2. _____

Abutment Description _____

Pier Materials 1. Concrete 2. _____

Pier Description _____

RESEARCH METHODS (check all that apply)

- FDOT database search Fla. Archives / photo collection newspaper files informal archaeological inspection
 HABS/HAER record search property appraiser / tax records city directory formal archaeological survey
 FMSF record search (sites/surveys) library research Public Lands Survey (DEP) cultural resource survey
 Other methods (specify) Aerial photographs, historical society

Bibliographic References (give FMSF manuscript # if relevant, use separate sheet if needed) See continuation sheet.

OPINION OF RESOURCE SIGNIFICANCE

Potentially eligible individually for National Register of Historic Places? yes no insufficient informationPotentially eligible as contributor to a National Register district? yes no insufficient informationExplanation of Evaluation (required, use separate sheet if needed) See continuation sheet.Area(s) of historical significance (See *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)1. Community planning & development 3. Engineering 5. _____2. Transportation 4. _____ 6. _____

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field & analysis notes, photos, plans, other important documents

1) Document type Field notes Maintaining organization Janus Research
Document description _____ File or accession #'s _____2) Document type Field maps Maintaining organization Janus Research
Document description _____ File or accession #'s _____

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus ResearchRecorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)**Required Attachments****① USGS 7.5' TOPO MAP WITH BRIDGE LOCATION MARKED****② PHOTO OF BRIDGE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE**If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable).
Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

SITE NAME: The Beckett Bridge/Bridge No. 154000

A. NARRATIVE DESCRIPTION OF SITE

The Beckett Bridge (Bridge No. 154000), constructed in 1924, is located in Township 27 South, Range 15 East, Sections 11-12 (USGS Tarpon Springs Quadrangle 1987), and carries Riverside Drive/North Spring Boulevard over Whitcomb Bayou in Tarpon Springs, Florida. The Tarpon Bayou is to the north of the bridge while the Whitcomb Bayou is to the south of the bridge.

The Beckett Bridge is a steel, single-leaf, bottom counterweight, Scherzer rolling lift bascule and has an overall bridge length of approximately 360 feet. The bridge width is approximately 28 feet, including the road and sidewalks. The bridge carries two lanes of traffic, one eastbound and one westbound. The existing typical section of the bridge consists of two vehicular lanes measuring approximately 20 feet and a sidewalk measuring approximately 3 feet, with concrete railing on both sides. There are nine approach spans and one main span. The main draw span of the bridge is a steel structure with a cast concrete deck. The bridge railings, which flank the bridge approaches and the bascule span, are simple concrete guardrail with concrete posts. The date "1956" is inscribed in the concrete posts at each end of the bridge. The length of the bascule span is approximately 40 feet. Concrete piers support the pre-stressed concrete girder spans of this bridge, which replaced the original timber approach spans in 1956. A galvanized pipe staircase with handrails leads to the bridge substructure from the base of the bridge tender's station. The bridge tender's station is situated on the north side of the bridge. This one-story station is a simple rectangular building without architectural ornamentation. The tender station was constructed with a galvanized steel frame and Plexiglas windows. It features a shed roof sheathed in 22-gage, wide rib galvanized steel. Adjacent to the tender's station is a metal plaque signifying the original date of construction and engineer for the bridge. The station dates from the 1996 repairs to the bridge.

The Beckett Bridge was originally called the Chilito Street Bridge. It was designed by C.E. Burleson, a Pinellas County Engineer, as a wooden bridge with a concrete pier and a steel drawbridge span. The function of the bridge was to connect east and west Tarpon Springs, carrying travelers over the Whitcomb Bayou. The Beckett Bridge created a significantly shorter travel route to both the eastern residential areas and the Sunset Hills Country Club.

In 1948, the bridge was renamed "Beckett Bridge" after Edward H. Beckett, commending his 34 years of service as a County Commissioner at the time of his retirement (Freedman 1948). The Beckett Bridge was almost completely reconstructed in 1956 after Pinellas County decided repairs to the original wooden structure would be wasteful (Twitty 1955). County Engineer Leighton Heston recommended that steel and concrete slabs replace the wooden substructure and that the top roadway be cemented. The new structure utilized the original steel bascule, draw, and machinery for operation, though the remainder of the bridge employed concrete that spanned 350 feet.

SITE NAME: The Beckett Bridge/Bridge No. 154000

Since the major alterations to the bridge in 1956, additional repairs have taken place in 1979 and 1988. In 1996, additional repairs were needed; twelve new steel pilings were added under the bridge and much of the then 76-year old steel bascule was so corroded it had to be replaced (Headrick 1997). Electrical components, a concrete counterbalance to raise the drawbridge, a new tender station, new sidewalks, and guardrails were installed (Headrick 1997). In 2011, repairs were performed to correct issues with the operating machinery and the movable bridge span. Recent repairs in 2011 were performed to correct issues with the operating machinery and the movable bridge span.

A further discussion of the Beckett Bridge is found in the Determination of Eligibility (DOE) of the CRAS of the Beckett Bridge PD&E Study.

B. DISCUSSION OF SIGNIFICANCE

The Beckett Bridge was determined individually eligible for listing in the National Register by FHWA on September 17, 2012 and by SHPO on October 8, 2012. The bridge is determined eligible under Criterion A in the areas of Community Planning & Development and Transportation as well as under Criterion C in the area of Engineering. In the area of Community Planning and Development, the bridge is linked to the evolution of the City of Tarpon Springs, as its initial construction was necessitated by the City's expansion westward toward the Gulf of Mexico from the Florida Land Boom period onward. Its significance in the area of Transportation is supported by its initial construction in 1924 to serve as the shortest route from east to west Tarpon Springs. Its rehabilitation is evidence of the growth in population and the increasing number of tourists traveling in the area, which required an automobile bridge to accommodate a greater number of vehicles. In the area of Engineering, the Beckett Bridge is a Scherzer rolling lift bridge and remains as one of seven pre-1965 single-leaf bascule bridges in Florida.

Despite rehabilitations and the replacement of building materials in both 1956 and 1996, the Beckett Bridge retains its integrity as a Scherzer rolling lift single-leaf bascule bridge. The changes that took place and the materials used during the 1956 rehabilitation are now historic.

C. HISTORY AND BIBLIOGRAPHY OF PAST WORK AT SITE

"Beckett Bridge File." *Miscellaneous clippings*. Tarpon Springs Historical Society Archives, misc. dates.

Florida Department of Transportation (FDOT)

2004 *Historic Highway Bridges of Florida*. FDOT. Tallahassee, Florida.

SITE NAME: The Beckett Bridge/Bridge No. 154000

Freedman, Morty

1948 Bridge Name Changed. *St. Petersburg Times*, 24 November 1948.

Headrick, Christina

1996 Signs lied; bridge to be shut awhile. *St. Petersburg Times*, North Pinellas Times:1.

1997 Bridge ends long trip to reopening. *St. Petersburg Times*, North Pinellas Times: 1.

Pinellas County

2012 *Beckett Bridge Project Development and Environment Study*, electronic document, <http://www.pinellascounty.org/beckettbridge/>, accessed October 1, 2012.

Twitty, Tom

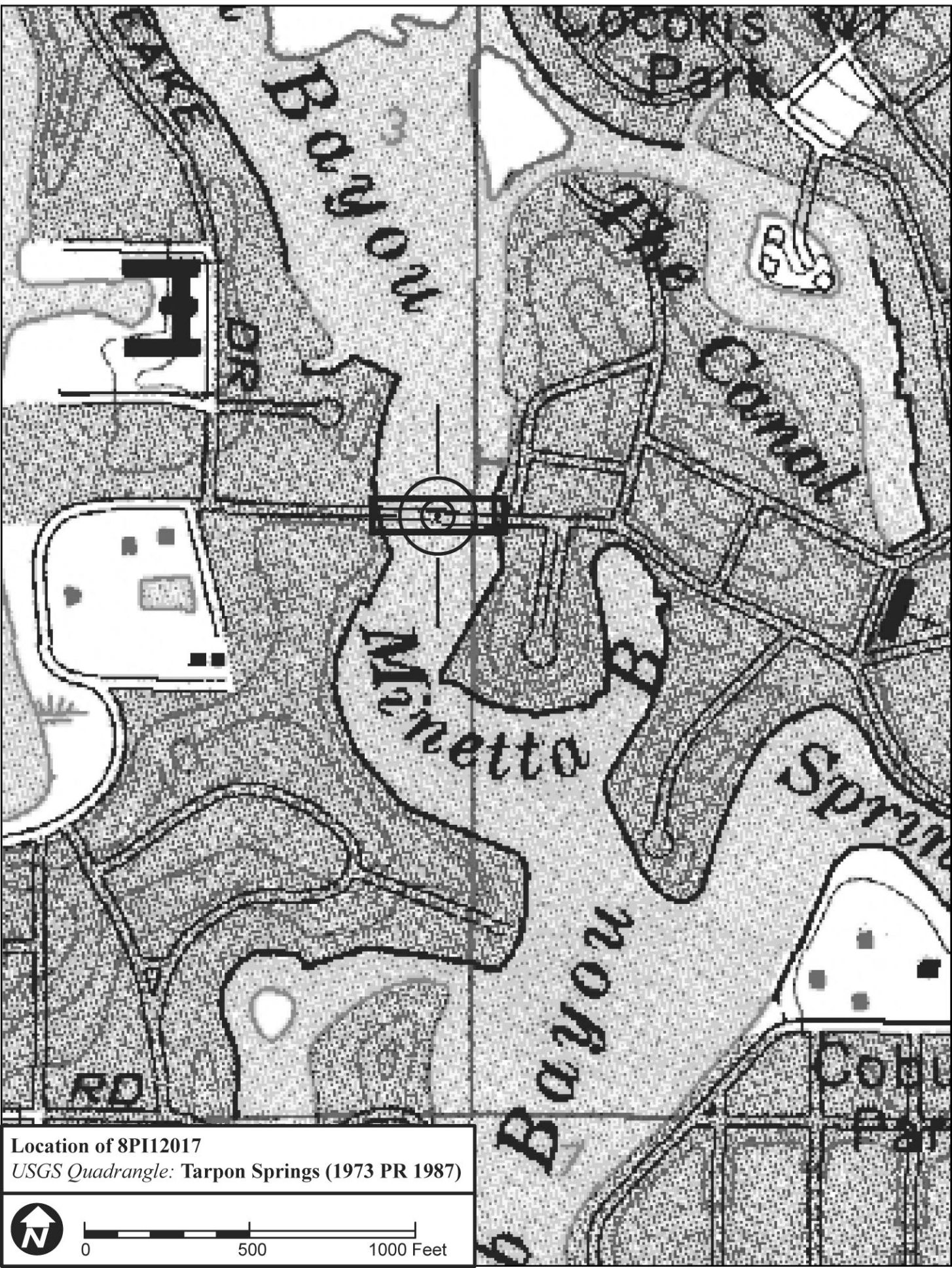
1955 Road Projects for New Year Born Without Benefit of Spotlight. *St. Petersburg Times*,
10 October 1955.



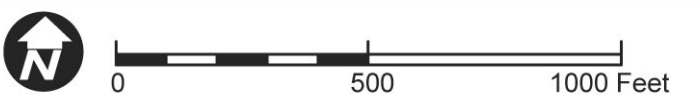
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12017
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12069**
Field Date 7-20-2012
Form Date 9-5-2012
Recorder # 15

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 435 Doric Ct. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 435 Direction _____ Street Name Doric Street Type Court Suffix Direction _____
Address: _____
Cross Streets (nearest/between) N. of Riverside Dr. at the end of Doric Ct.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 1/4 section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-03834-000-0230 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326494 Northing 3115157
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1947 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1947 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: c.2000s Nature Windows & doors replaced, restuccoed.
Additions: yes no unknown Date: _____ Nature _____
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) 4/4 SHS and 2 pane sliding.
Distinguishing Architectural Features (exterior or interior ornaments) Vents are present at the gable ends.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) An unattached storage building is visible on aerial photographs and located to the S. of the property.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2. Slab
Structural System(s): 1. Concrete block 2. Slab 3.
Foundation Type(s): 1. Slab 2.
Foundation Material(s): 1. Concrete, Generic 2.
Main Entrance (stylistic details) Modern door with side lights set into the N. facade.

Porch Descriptions (types, locations, roof types, etc.) A porch was not visible from the ROW.

Condition (overall resource condition): [] excellent [x] good [] fair [] deteriorated [] ruinous

Narrative Description of Resource This Masonry Vernacular building is concrete block and sits on a slab foundation. The roof is a side gable with a front gable projection. Windows are 2-light sliding and 4/4 SHS. Windows and doors are replaced and the building has been restuccoed.

Archaeological Remains [] Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x] FMSF record search (sites/surveys) [] library research [] building permits [] Sanborn maps
[] FL State Archives/photo collection [] city directory [] occupant/owner interview [] plat maps
[x] property appraiser / tax records [] newspaper files [] neighbor interview [] Public Lands Survey (DEP)
[] cultural resource survey (CRAS) [] historic photos [] interior inspection [] HABS/HAER record search
[x] other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? [] yes [x] no [] insufficient information

Appears to meet the criteria for National Register listing as part of a district? [] yes [x] no [] insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

- 1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research

Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

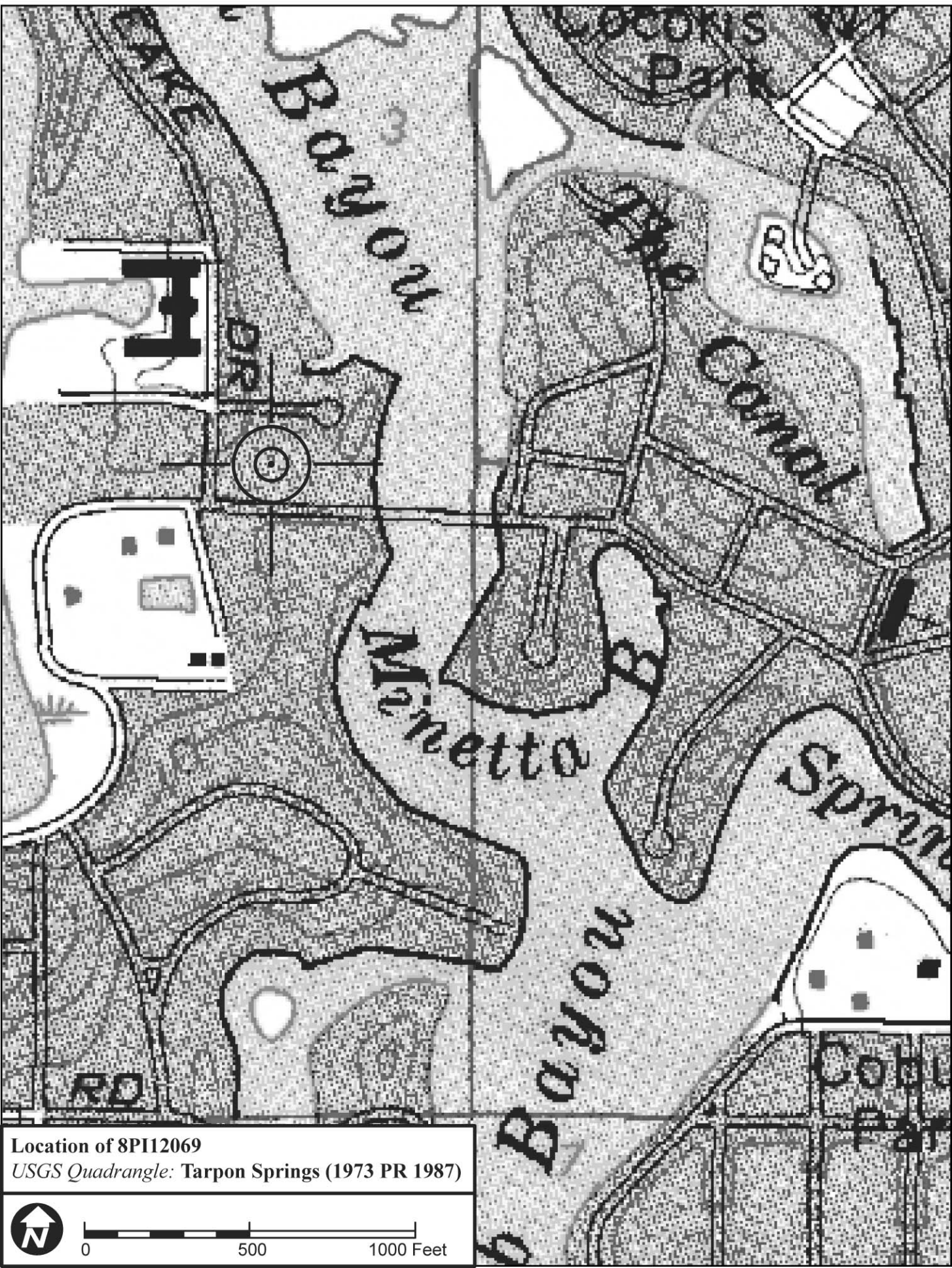
PHOTOGRAPH



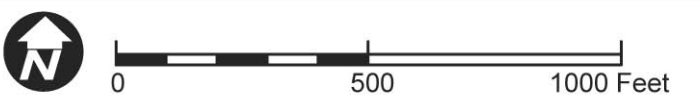
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12069
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12068**
Field Date 7-20-2012
Form Date 9-5-2012
Recorder # 14

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 425 Doric Ct. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 425 Direction _____ Street Name Doric Street Type Court Suffix Direction _____
Address: _____
Cross Streets (nearest/between) N of Riverside Dr. at end of Doric Ct.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-03834-000-0250 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326525 Northing 3115150
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1954 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1954 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: c. 2000s Nature Windows, siding, porch enclosure
Additions: yes no unknown Date: _____ Nature _____
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Frame Vernacular Exterior Plan Irregular Number of Stories 1
Exterior Fabric(s) 1. Vertical plank 2. Vinyl 3.
Roof Type(s) 1. Gable 2. 3.
Roof Material(s) 1. Composition shingles 2. 3.
Roof secondary strucs. (dormers etc.) 1. 2.
Windows (types, materials, etc.) 1/1 and 8/8 DHS

Distinguishing Architectural Features (exterior or interior ornaments) A vent is present on the N. elevation.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) No outbuildings were observed from the ROW.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date		Init.	
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Wood frame 2.
Structural System(s): 1. Wood frame 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) Modern door set beneath a gabled projection on the N. facade.

Porch Descriptions (types, locations, roof types, etc.) A porch is present beneath a gabled roof projection. The projection is supported by Doric columns and the porch is accessed by concrete steps. Simple metal railings are also present.

Condition (overall resource condition): [] excellent [x] good [] fair [] deteriorated [] ruinous

Narrative Description of Resource This Frame Vernacular building is wood frame, sits on a continuous concrete block foundation, and is clad in vertical planks and vinyl siding. The roof is gabled and windows are 1/1 and 8/8 DHS. The porch may have been enclosed to add interior space.

Archaeological Remains [] Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x] FMSF record search (sites/surveys) [] library research [] building permits [] Sanborn maps
[] FL State Archives/photo collection [] city directory [] occupant/owner interview [] plat maps
[x] property appraiser / tax records [] newspaper files [] neighbor interview [] Public Lands Survey (DEP)
[] cultural resource survey (CRAS) [] historic photos [] interior inspection [] HABS/HAER record search
[x] other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? [] yes [x] no [] insufficient information
Appears to meet the criteria for National Register listing as part of a district? [] yes [x] no [] insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

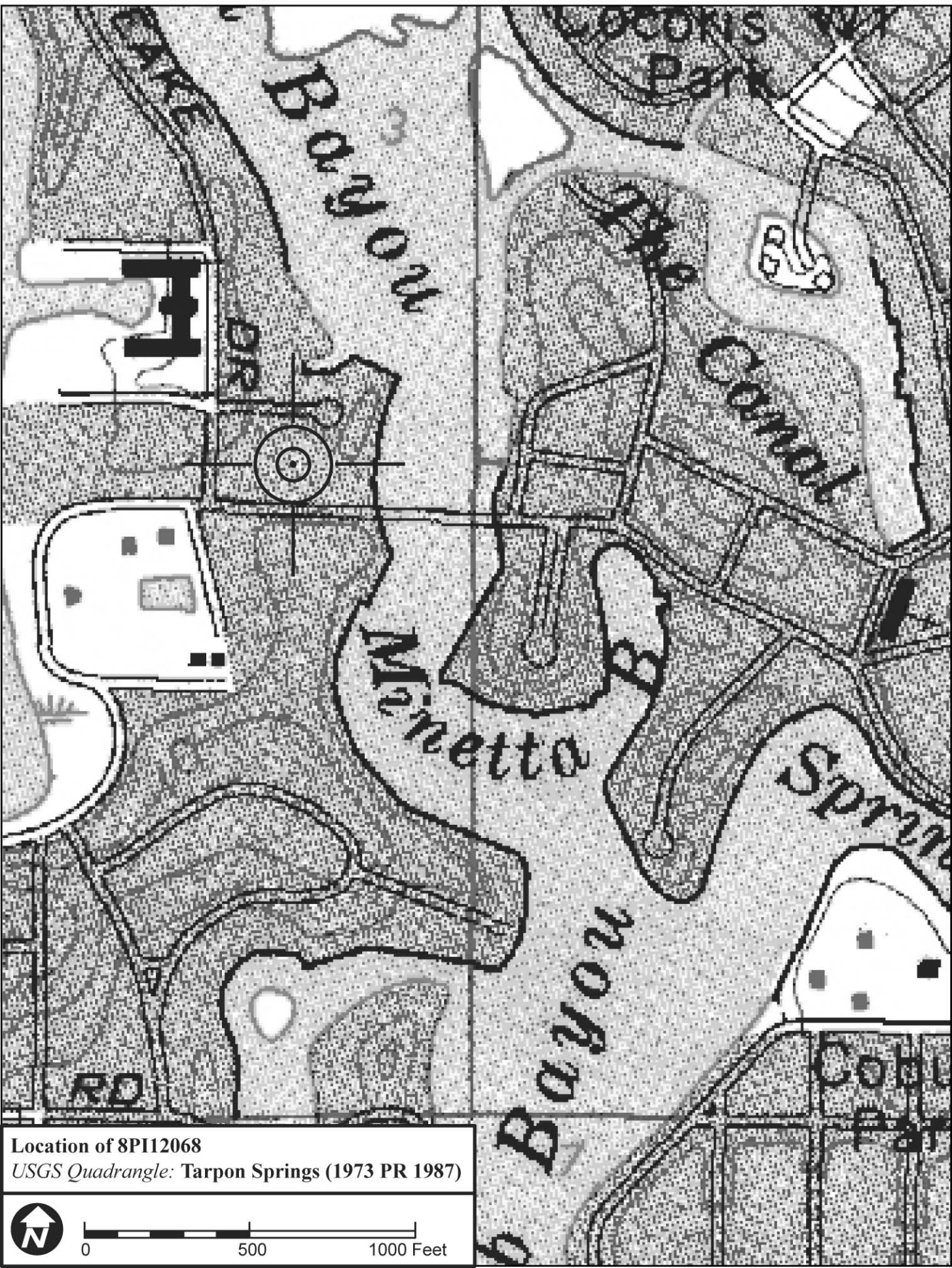
PHOTOGRAPH



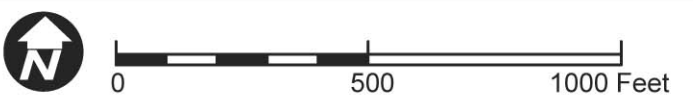
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12068
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12043**
Field Date 7-20-2012
Form Date 7-30-2012
Recorder # 3

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 438 Riverside Dr. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 438 Direction _____ Street Name Riverside Street Type Drive Suffix Direction _____
Address: _____
Cross Streets (nearest / between) Between Chesapeake Dr. and Beckett Bridge
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-82962-000-0050 Landgrant _____
Subdivision Name Smith's E.M. Bayou Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326470 Northing 3115112
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1925 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1925 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Windows and doors replaced.
Additions: yes no unknown Date: _____ Nature _____
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Craftsman Exterior Plan Irregular Number of Stories 1
Exterior Fabric(s) 1. Wood siding 2. _____ 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 2/2 single hung sash.

Distinguishing Architectural Features (exterior or interior ornaments) Cornerboards and vents are present on the building.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) To the NW there is a gable roof, wood frame storage building. It appears to be historic.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Init.	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date	_____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. _____ 2. _____
 Structural System(s): 1. Wood frame 2. _____ 3. _____
 Foundation Type(s): 1. Piers 2. _____
 Foundation Material(s): 1. Concrete Block 2. _____
 Main Entrance (stylistic details) The main entrance is on the S. side of the building and is central to the porch.

Porch Descriptions (types, locations, roof types, etc.) A gable roof extension sits on square supports that are situated on what appears to be concrete block piers. A wood railing is present on the porch.

Condition (overall resource condition): excellent good fair deteriorated ruinous

Narrative Description of Resource The Craftsman style building is of wood frame construction, is set on piers with a concrete block foundation, and has had few alterations. Windows are 2/2 single hung sash. It retains its historic form.

Archaeological Remains _____ Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

FMSF record search (sites/surveys) library research building permits Sanborn maps
 FL State Archives/photo collection city directory occupant/owner interview plat maps
 property appraiser / tax records newspaper files neighbor interview Public Lands Survey (DEP)
 cultural resource survey (CRAS) historic photos interior inspection HABS/HAER record search
 other methods (describe) Historic aerial photographs

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) _____

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? yes no insufficient information
 Appears to meet the criteria for National Register listing as part of a district? yes no insufficient information
 Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

1. _____ 3. _____ 5. _____
 2. _____ 4. _____ 6. _____

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

1) Document type Field notes Maintaining organization Janus Research
 Document description _____ File or accession #'s _____
 2) Document type Field maps Maintaining organization Janus Research
 Document description _____ File or accession #'s _____

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
 Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
 (address / phone / fax / e-mail)

Required Attachments

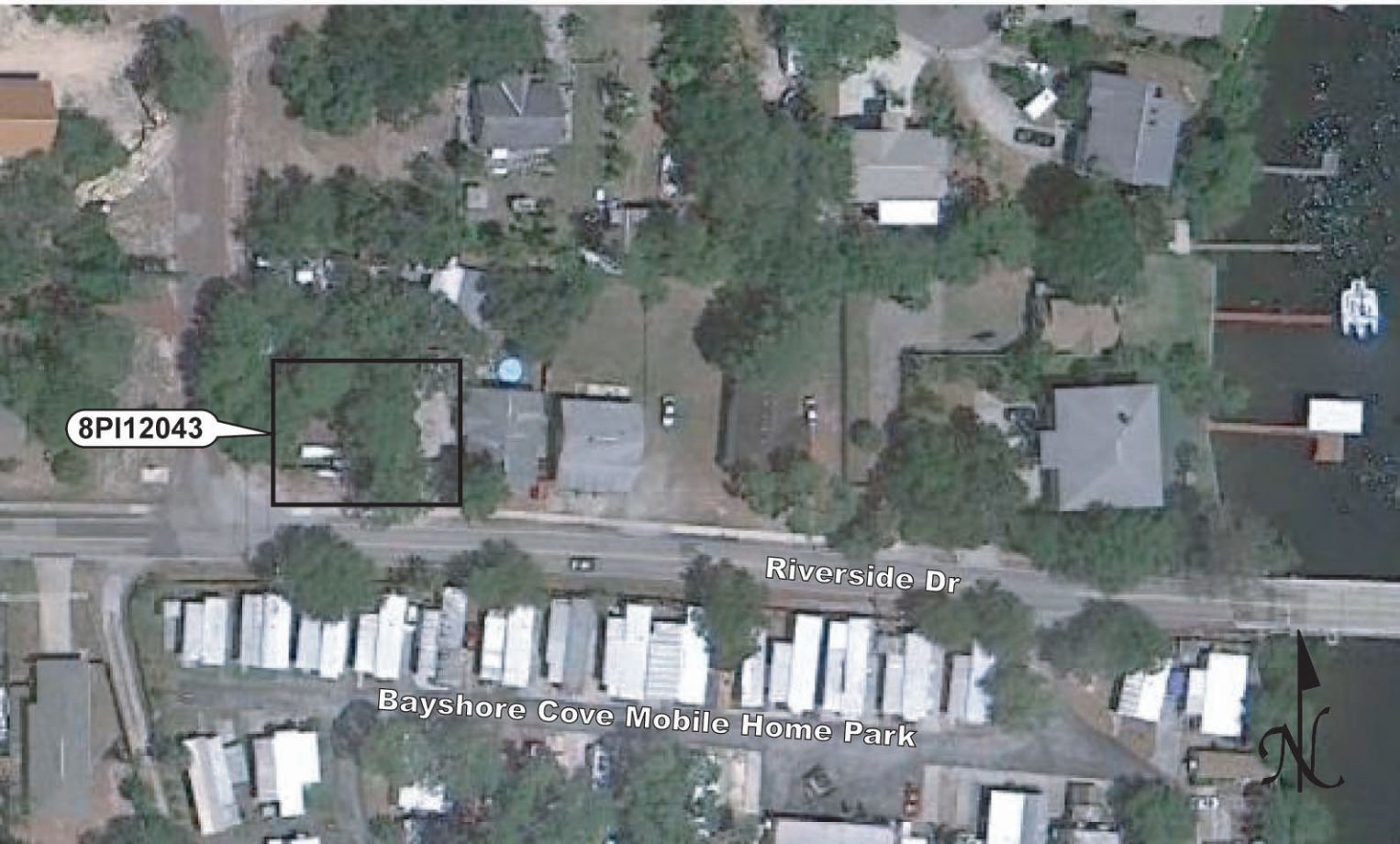
- ① USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
- ② LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- ③ PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE

If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable).
 Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

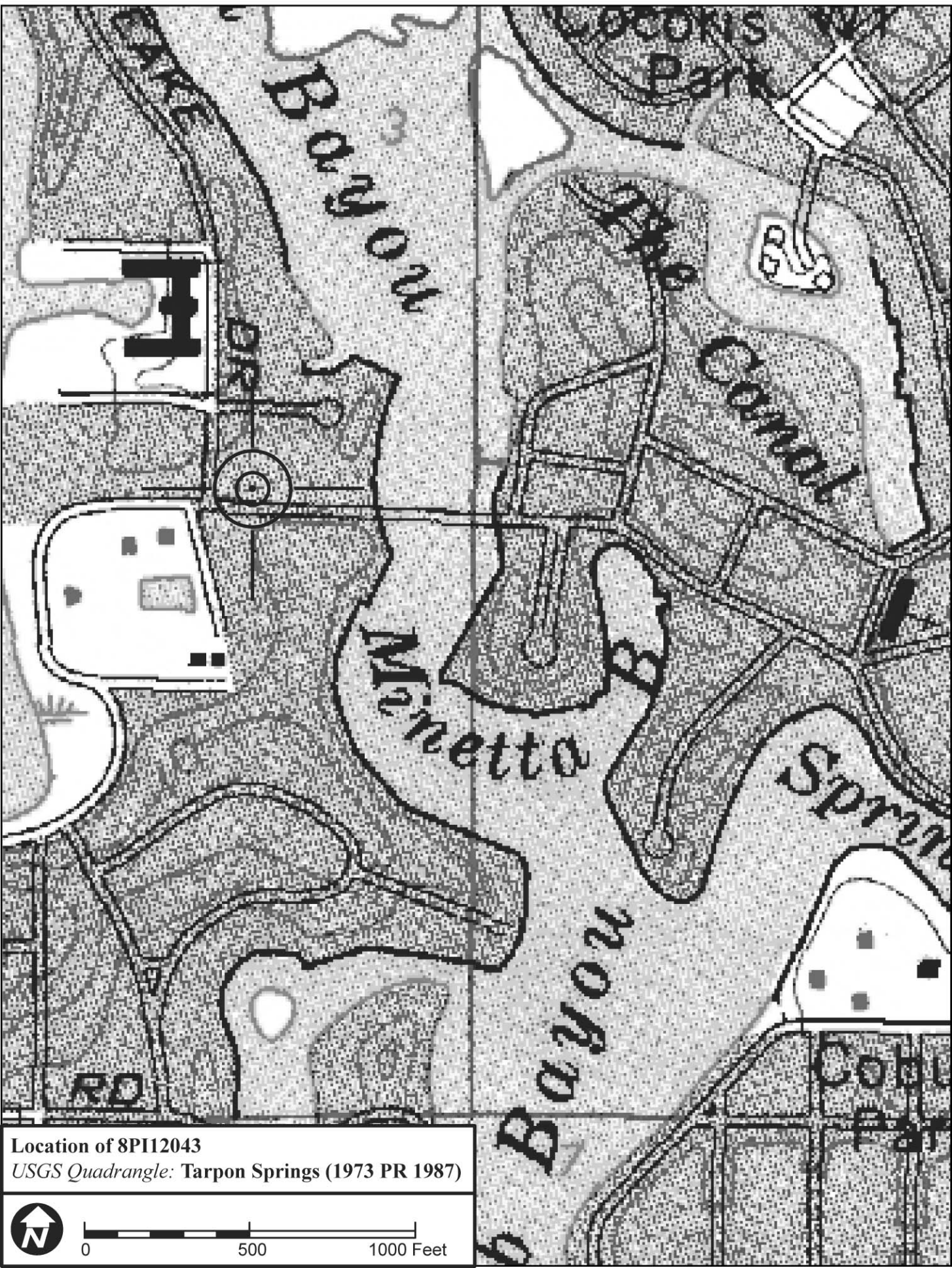
PHOTOGRAPH



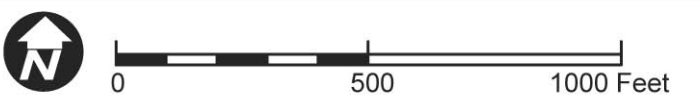
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12043
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12044**
Field Date 7-20-2012
Form Date 7-30-2012
Recorder # 4

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 434 Riverside Dr. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 434 Direction _____ Street Name Riverside Street Type Drive Suffix Direction _____
Address: _____
Cross Streets (nearest / between) Between Chesapeake Drive and Beckett Bridge
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-82962-000-0040 Landgrant _____
Subdivision Name Smith's E.M. Bayou Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326492 Northing 3115110
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1929 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1929 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Stuccoed, front porch enclosed
Additions: yes no unknown Date: _____ Nature Small entry porch
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Frame Vernacular Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. Brick 3. _____
Roof Type(s) 1. Clipped gable 2. Shed 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash.

Distinguishing Architectural Features (exterior or interior ornaments) There is a clipped gable roof with a shed roof overhang and a brick facade at the enclosed porch.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) None observed.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 1 Chimney Material(s): 1. Brick 2.
Structural System(s): 1. Wood frame 2. 3.
Foundation Type(s): 1. Piers 2.
Foundation Material(s): 1. Concrete, Generic 2.
Main Entrance (stylistic details) S/9-light non-historic door

Porch Descriptions (types, locations, roof types, etc.) There is a non-historic porch addition with wood railings.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The building is a Frame Vernacular bungalow with a clipped gable roof and shed roof overhang. Walls are clad with stucco except for the front enclosed porch where the facade has a brick veneer. Windows are metal 1/1 single hung sash.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information

Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

- 1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research

Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

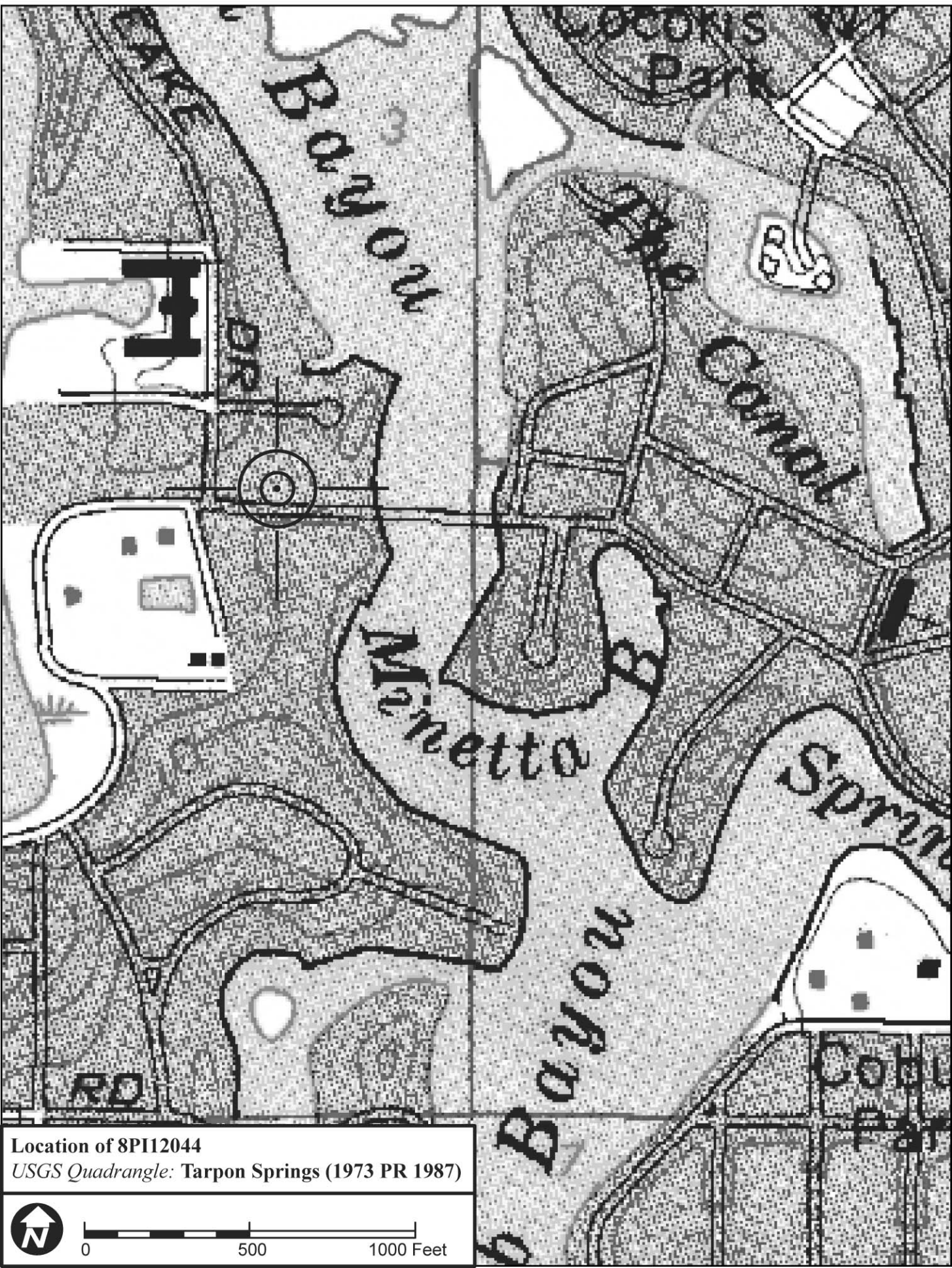
PHOTOGRAPH



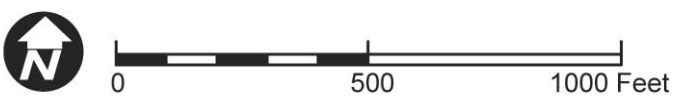
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12044
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12045**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 5

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 412 Riverside Dr. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 412 Direction _____ Street Name Riverside Street Type Drive Suffix Direction _____
Address: _____
Cross Streets (nearest/between) N. side Riverside Dr. b/w Chesapeake Dr. & bridge.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-00000-410-2100 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326581 Northing 3115125
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1946 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1946 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Windows and doors are replaced.
Additions: yes no unknown Date: 1990s Nature Two shed roof additions to the N.
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Irregular Number of Stories 2
Exterior Fabric(s) 1. Concrete 2. Wood siding 3. _____
Roof Type(s) 1. Cross-gabled 2. Shed 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. Gable dormer 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash and 6-light louvered windows are present.

Distinguishing Architectural Features (exterior or interior ornaments) There are two shed roof additions to the N. Multiple window types as well as combination clapboard and concrete block exterior fabric is distinct.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) None observed.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 1 Chimney Material(s): 1. Metal 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete, Generic 2.
Main Entrance (stylistic details) The main entrance is likely on the south side of the building but was not able to be observed during the survey.
Porch Descriptions (types, locations, roof types, etc.) The deck is on the east side and features wood railings.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous
Narrative Description of Resource The building was constructed with the use of concrete blocks. The exterior also features wood siding. Multiple windows are present, including 1/1 single hung sash and a 6-light louvered panel window. The building has been altered with two additions.
Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

[x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.
Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

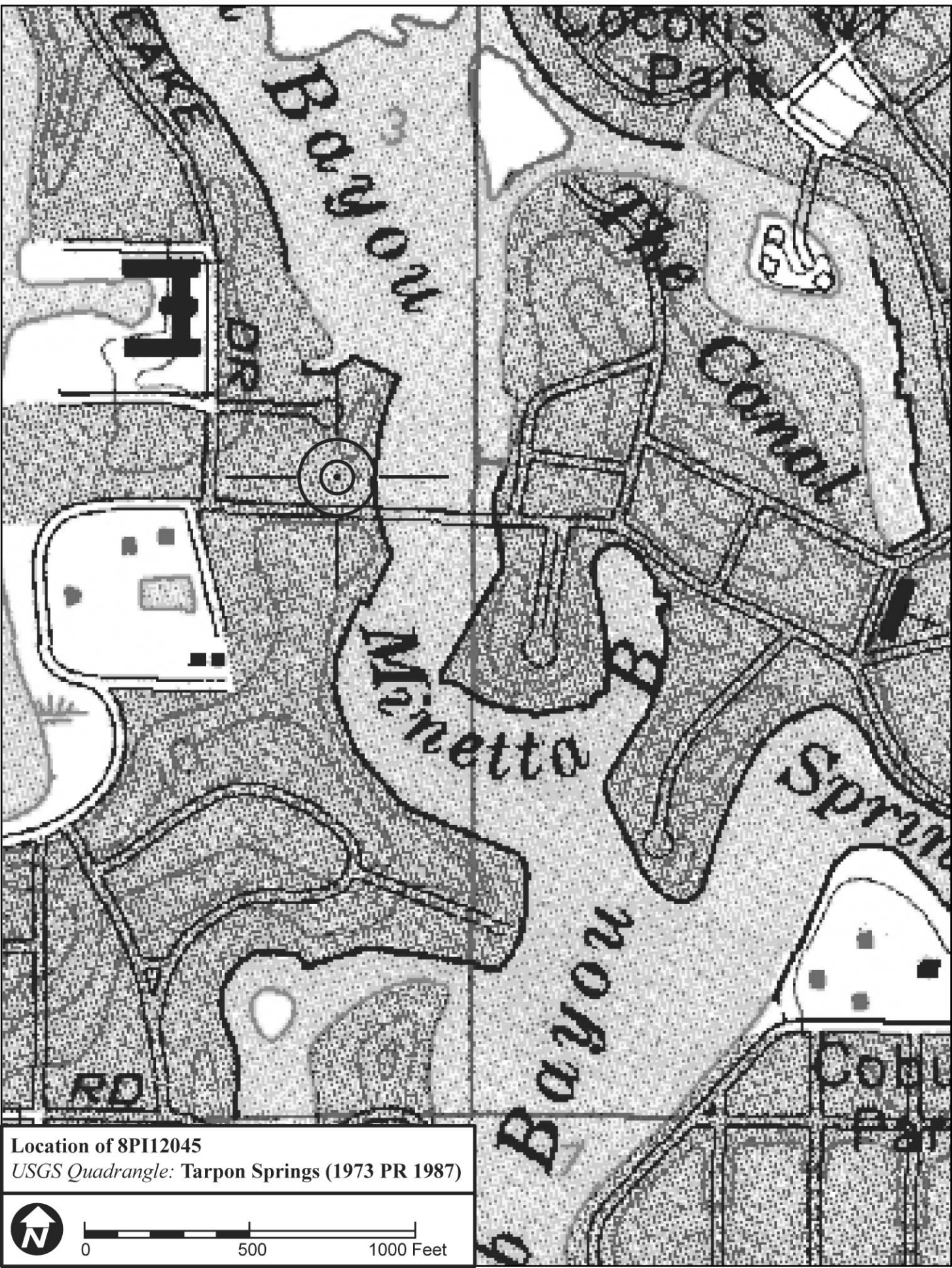
PHOTOGRAPH



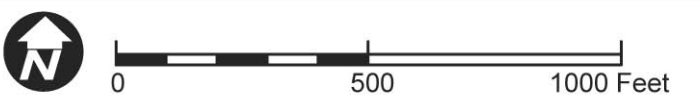
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12045
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12046**
Field Date 7-20-2012
Form Date 7-30-2012
Recorder # 2

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 403 Riverside Dr. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 403 Direction _____ Street Name Riverside Street Type Drive Suffix Direction _____
Address: _____
Cross Streets (nearest / between) Between Chesapeake Drive and Beckett Bridge
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-00000-410-1900 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326542 Northing 3115046
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1949 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1949 To (year): 1970s
Current Use Outbuilding From (year): 1970s To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Windows and doors replaced
Additions: yes no unknown Date: _____ Nature _____
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Other Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Flat 2. _____ 3. _____
Roof Material(s) 1. Built-up 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 and 2/2 SHS windows are present.

Distinguishing Architectural Features (exterior or interior ornaments) Parapets are present at the roof with scuppers at the N façade.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) Multiple NH mobile home residences are on the property as well as a 1966 2-story Mission Revival style office building.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Init.	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date	_____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) On the N facade are two modern panel doors.

Porch Descriptions (types, locations, roof types, etc.) None observed

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The building is rectangular in form and constructed of concrete blocks. It is clad in stucco and in the Mission Revival style. Windows are metal 1/1 and 2/2 SHS and scuppers are featured on the N facade.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information

Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

- 1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research

Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

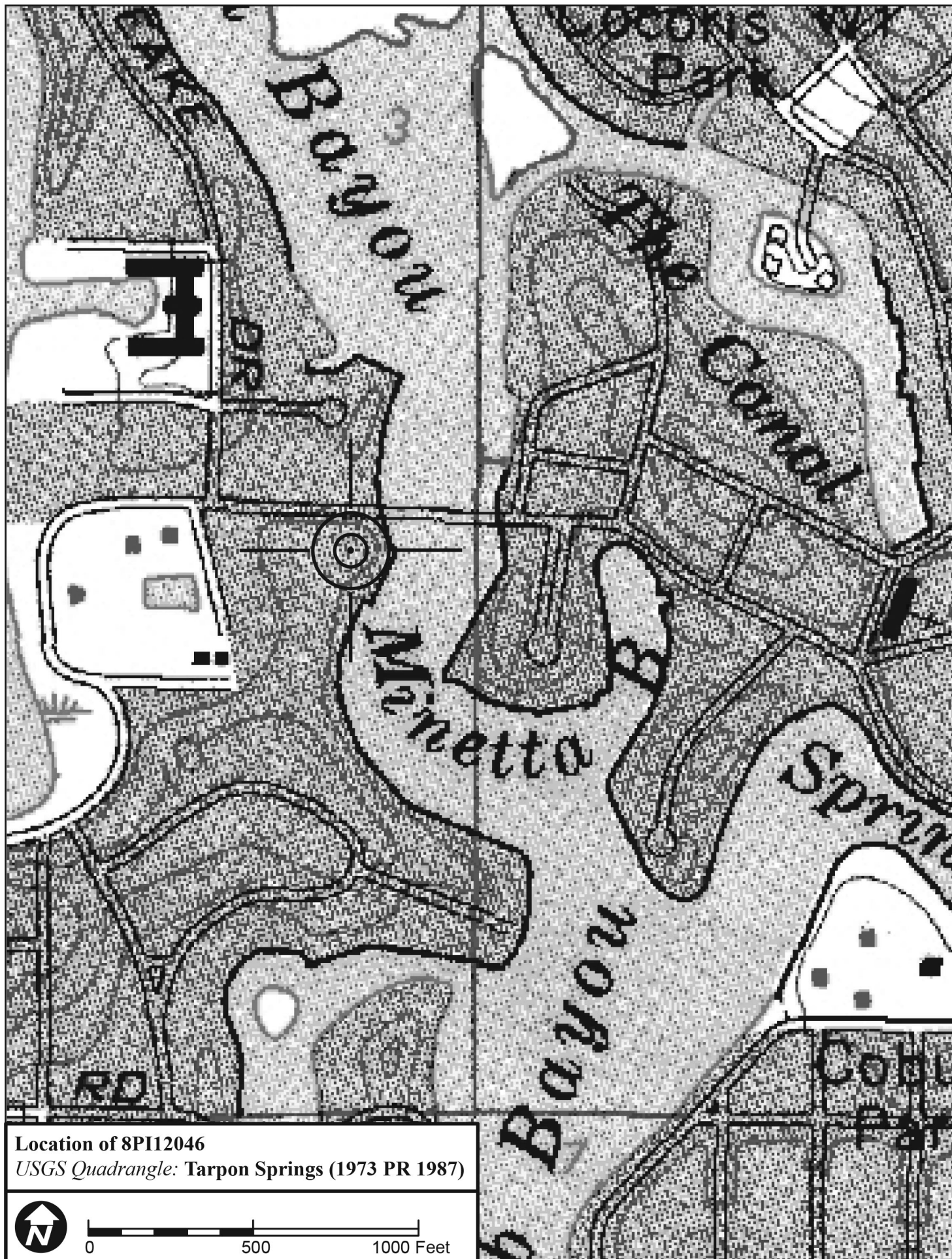
PHOTOGRAPH



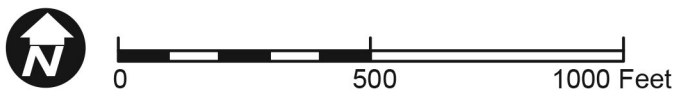
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12046
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12047**
Field Date 7-20-2012
Form Date 7-30-2012
Recorder # 1

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 438 Craig Dr. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 438 Direction _____ Street Name Craig Street Type Drive Suffix Direction _____
Address: _____
Cross Streets (nearest / between) Between Riverside and Craig Dr.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 11 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 11-27-15-00000-410-1800 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326529 Northing 3114998
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1940 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1940 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Windows, doors, and siding replaced
Additions: yes no unknown Date: 1990s Nature 2 large gable roof addition to the south
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Frame Vernacular Exterior Plan Irregular Number of Stories 1
Exterior Fabric(s) 1. Board and batten 2. _____ 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash.

Distinguishing Architectural Features (exterior or interior ornaments) The building is simple and unadorned.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) A one-car garage is present to the NW of the building. The garage has a wood frame and a gable roof.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Init.	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date	_____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. 2.
Structural System(s): 1. Wood frame 2. 3.
Foundation Type(s): 1. Slab 2.
Foundation Material(s): 1. Concrete, Generic 2.
Main Entrance (stylistic details) The main entrance is on the west side of the building and consists of a glass door under a shed overhang.
Porch Descriptions (types, locations, roof types, etc.) A porch was not visible from the right of way.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous
Narrative Description of Resource The building is Frame Vernacular and clad in simple board and batten siding. The roof is side gabled with composite shingles. Windows are 1/1 single hung sash. It is owned by the mobile home park company at 403 Riverside Drive, but not located within.
Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

[x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs
Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

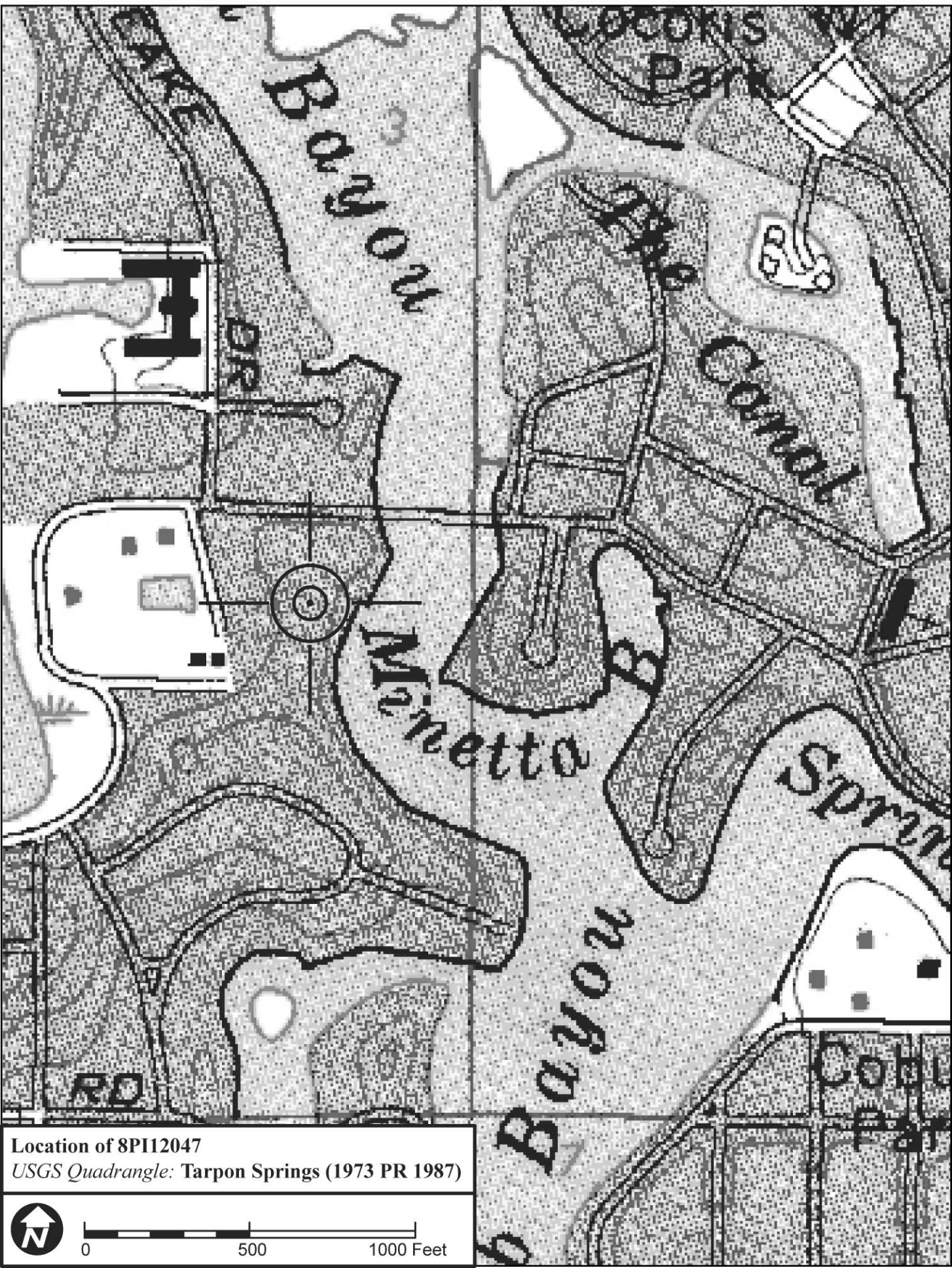
PHOTOGRAPH



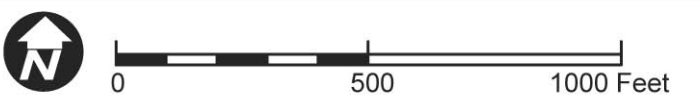
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12047
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12048**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 6

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) Tarpon Springs Yacht Club Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 350 Direction N Street Name Spring Street Type Boulevard Suffix Direction _____
Address: _____
Cross Streets (nearest/between) N side of Spring Blvd. across from Venetian Ct.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-27774-000-0041 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326762 Northing 3115114
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1954 approximately year listed or earlier year listed or later
Original Use Club or Lodge building From (year): 1954 To (year): _____
Current Use Club or Lodge building From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 2000s Nature See continuation sheet.
Additions: yes no unknown Date: 2000s Nature See continuation sheet.
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) The Tarpon Springs Yacht Club has owned the building from 1954 to 2012.
Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Hip 2. _____ 3. _____
Roof Material(s) 1. Sheet metal:standing seam 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Windows are vinyl 1-light.

Distinguishing Architectural Features (exterior or interior ornaments) The building has undergone a total renovation and no historic exterior fabric is visible.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) None

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Slab 2. Continuous
Foundation Material(s): 1. Poured Concrete Footing 2.
Main Entrance (stylistic details) See continuation sheet.

Porch Descriptions (types, locations, roof types, etc.) See continuation sheet.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource See continuation sheet.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs, internet search.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) See continuation sheet.

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) See continuation sheet.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable).
Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

SITE NAME: Tarpon Springs Yacht Club

A. NARRATIVE DESCRIPTION OF SITE

The Tarpon Springs Yacht Club building was constructed in 1954 after a group of Tarpon Springs boaters founded the Yacht Club in 1949. The present Yacht Club building has a concrete block structural system, a rectangular plan, and is clad in stucco. The building is of the Masonry Vernacular style. It features a main hip roof with an added hip roof extension entrance way set on square masonry supports, which appear to be clad in stucco. The entrance way door is glass and sits under an arch made of modern wood. The system is composed of what appears to be a metal standing seam roof. Windows are vinyl 1-light. The foundation is slab on grade. After the building was financed and built in 1954 by the Tarpon Springs Yacht Club, a burgee, which is a distinguishing flag for a recreational boating organization, was designed with a white tarpon on a blue field and a ship's wheel in red for a nautical appearance. This burgee is attached to the south façade exterior wall of the building. An auxiliary called the "Windjammers" was formed to assist the Club in moving ahead. In 1961, thirteen yacht clubs, including the Tarpon Springs Yacht Club, facilitated a program for boating enthusiasts wishing to cruise the Florida coasts. Incorporation articles were filed with the Florida Council of Yacht Clubs (FCYC) in this same year. Circa 2002 the building was completely renovated with a stucco exterior treatment and the south hip roof extension was added.

Services of the Yacht Club have expanded and the building sustained new renovation work in 2010 to improve the facility. The Tarpon Springs Yacht Club was contacted via email on January 17, 2013 for information regarding the extent of renovation work in 2010. On January 18, 2013, Mr. Richard Pease, Commodore of the Tarpon Springs Yacht Club, contacted Janus Research via telephone and stated that he was not able to provide information regarding the 2010 renovation work.

B. DISCUSSION OF SIGNIFICANCE

This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district. No historic exterior fabric remains visible on the building.

C. HISTORY AND BIBLIOGRAPHY OF PAST WORK AT SITE

2010 Tarpon Springs Yacht Club, Inc.
A History of TSYC Since 1949. Available online at
<http://www.tsyc.info/history.html>.

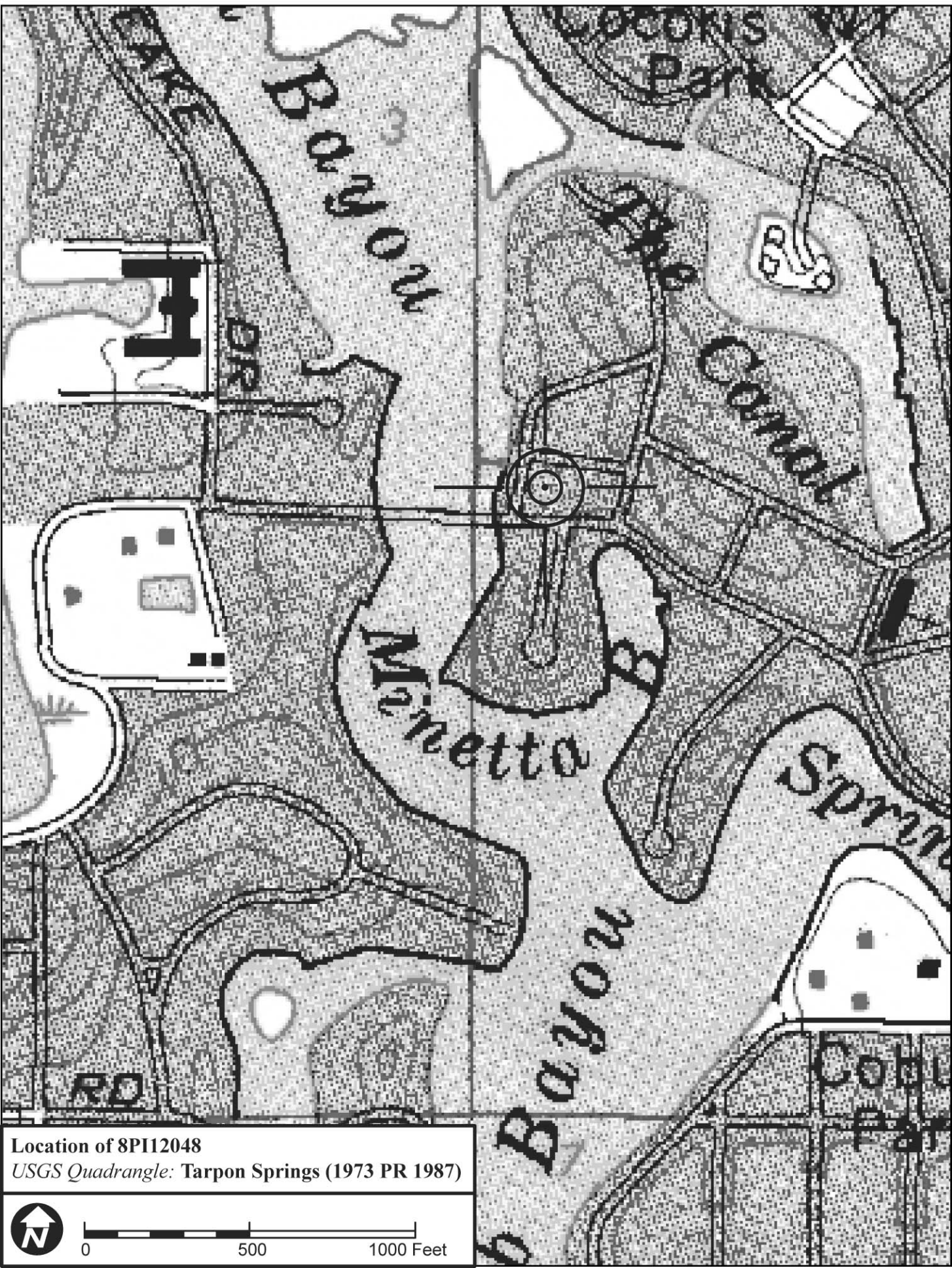
PHOTOGRAPH



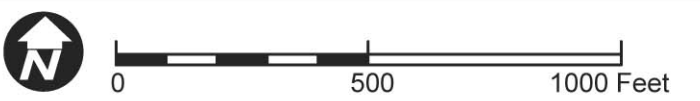
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12048
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12049**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 7

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 6 Venetian Ct. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 6 Direction _____ Street Name Venetian Street Type Court Suffix Direction _____
Address: _____
Cross Streets (nearest / between) B/w N. Spring Blvd. and dead end of Venetian Ct.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-93867-000-0200 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326742 Northing 3115036
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1952 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1952 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 2000s Nature Windows and door replaced.
Additions: yes no unknown Date: C. 2005 Nature Wheel chair ramp at entry.
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Ranch Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Hip 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Vinyl 1/1 single hung sash and a tripartite window unit are present. Below windows are concrete stucco sills.
Distinguishing Architectural Features (exterior or interior ornaments) A carport is incorporated into the building under the main hip roof. This incorporation of the car is important to the Ranch house.
Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) None visible.

DHR USE ONLY		OFFICIAL EVALUATION	DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____	
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)			

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. _____ 2. _____
 Structural System(s): 1. Concrete block 2. _____ 3. _____
 Foundation Type(s): 1. Continuous 2. _____
 Foundation Material(s): 1. Concrete Block 2. _____
 Main Entrance (stylistic details) Glass door under a small hip roof extension that sits on what appears to be decorative arched wrought iron supports.
 Porch Descriptions (types, locations, roof types, etc.) None

Condition (overall resource condition): excellent good fair deteriorated ruinous

Narrative Description of Resource The building is a simple, unadorned Ranch house in rectangular form, set under a hip roof. It is clad in stucco and constructed of concrete blocks on a continuous concrete block foundation. Windows are 1/1 single hung sash and one tripartite.

Archaeological Remains _____ Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

FMSF record search (sites/surveys) library research building permits Sanborn maps
 FL State Archives/photo collection city directory occupant/owner interview plat maps
 property appraiser / tax records newspaper files neighbor interview Public Lands Survey (DEP)
 cultural resource survey (CRAS) historic photos interior inspection HABS/HAER record search
 other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) _____

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? yes no insufficient information
 Appears to meet the criteria for National Register listing as part of a district? yes no insufficient information
 Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

1. _____ 3. _____ 5. _____
 2. _____ 4. _____ 6. _____

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

1) Document type Field notes Maintaining organization Janus Research
 Document description _____ File or accession #'s _____
 2) Document type Field maps Maintaining organization Janus Research
 Document description _____ File or accession #'s _____

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
 Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
 (address / phone / fax / e-mail)

Required Attachments

- ① USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
- ② LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
- ③ PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE

If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable).
 Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

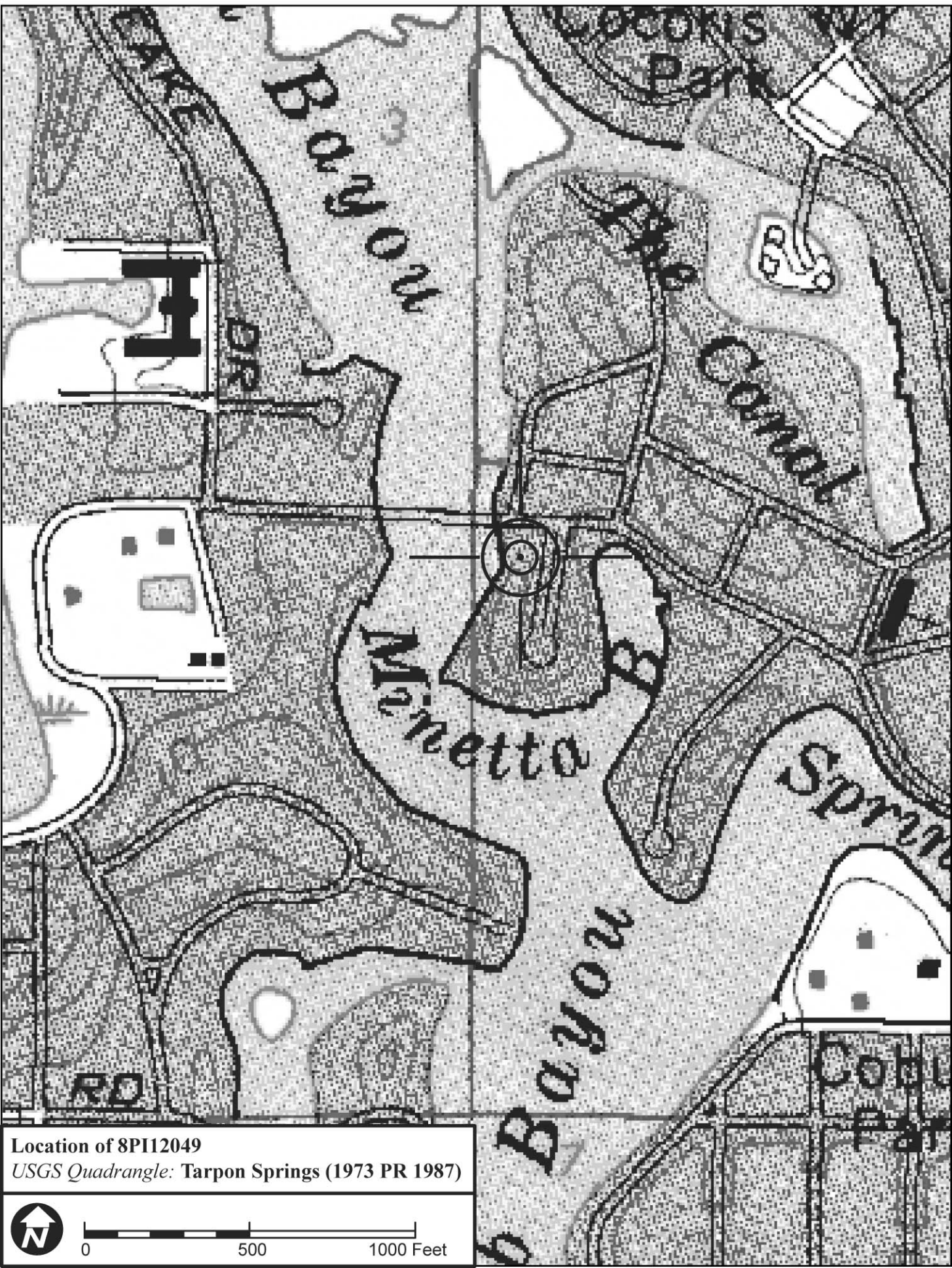
PHOTOGRAPH



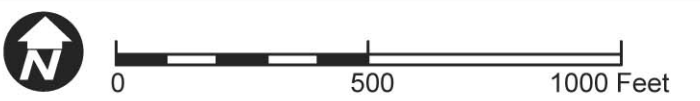
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12049
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12050**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 8

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 8 Venetian Ct. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 8 Direction _____ Street Name Venetian Street Type Court Suffix Direction _____
Address: _____
Cross Streets (nearest / between) B/w N. Spring Blvd. and dead end of Venetian Ct.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-93867-000-0190 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326738 Northing 3115014
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1954 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1954 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 2000s Nature Shutters, windows, doors, enclosed porch
Additions: yes no unknown Date: _____ Nature _____
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Ranch Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. Cupola 2. _____
Windows (types, materials, etc.) Metal Tripartite unit, 1/1 single hung sash, two awning windows, 8-light casement windows, four-light casement windows.
Distinguishing Architectural Features (exterior or interior ornaments) The building is simple and unadorned.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) None observed.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Init.	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date	_____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) The main entrance is to the E. and consists of a simple door and screen door.
Porch Descriptions (types, locations, roof types, etc.) None observed.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous
Narrative Description of Resource The building is a Ranch house constructed of concrete blocks and clad in stucco. The roof is a gable with a shed roof extension to the back of the building. It sits on a continuous concrete block foundation. Multiple window types are featured.
Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

[x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.
Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

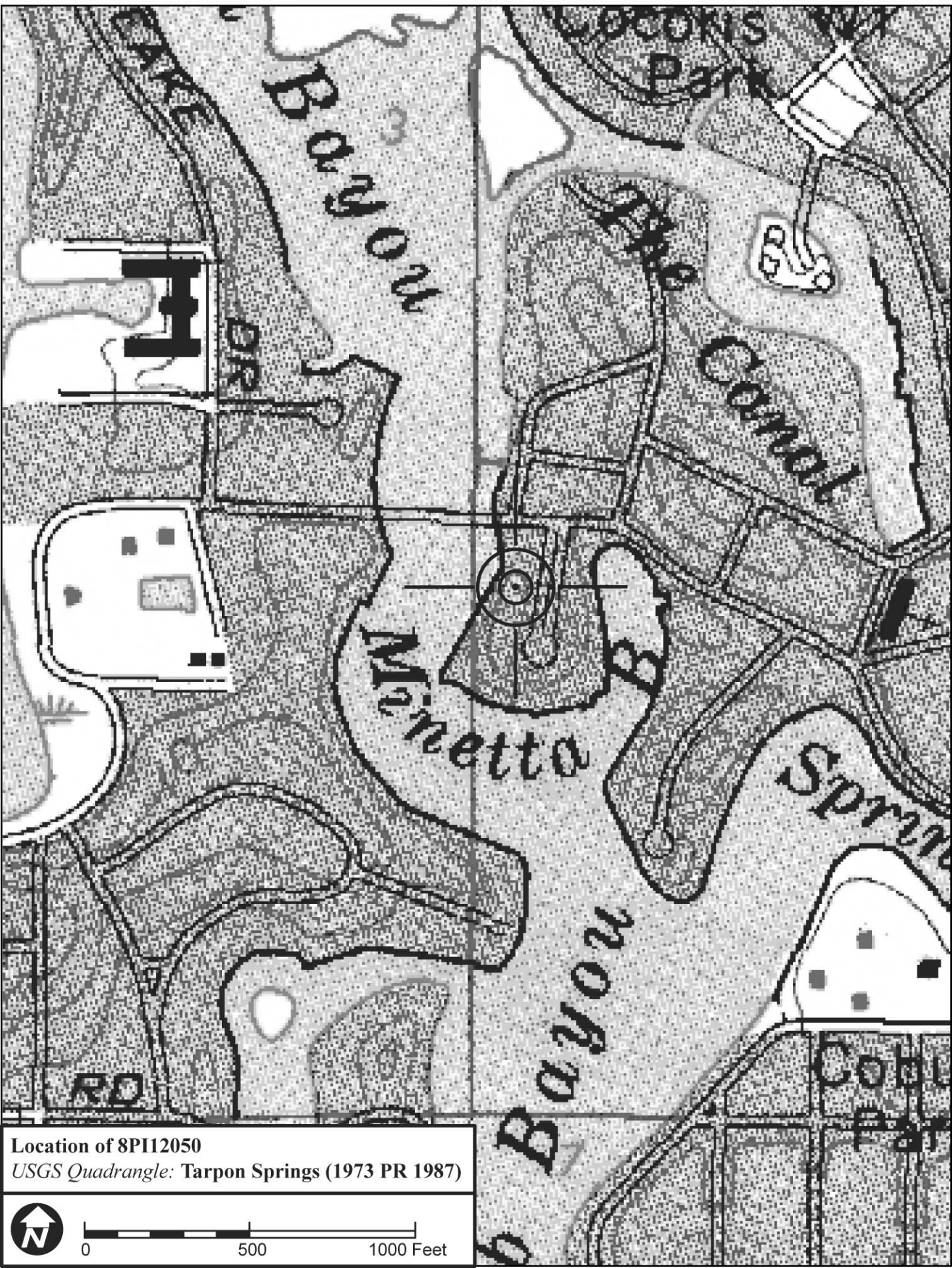
PHOTOGRAPH



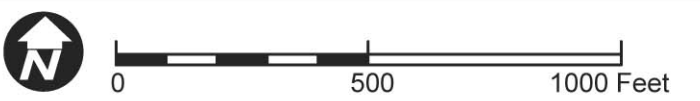
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12050
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12051**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 9

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 12 Venetian Ct. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 12 Direction _____ Street Name Venetian Street Type Court Suffix Direction _____
Address: _____
Cross Streets (nearest / between) B/w N. Spring Blvd. and dead end of Venetian Ct.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 1/4 section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-93867-000-0170 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326717 Northing 3114990
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1953 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1953 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 2000s Nature Replacement doors, windows, gable siding
Additions: yes no unknown Date: 2000s Nature SW garage addition
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Concrete block 2. Aluminum 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. Gable extension 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash and a 3-light sliding window.

Distinguishing Architectural Features (exterior or interior ornaments) A gable roof extension at the entry way has been added with faux Craftsman wood supports.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) A large screened in back porch and pool have been added to the property.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) A fanlight door sits under a gable roof extension.

Porch Descriptions (types, locations, roof types, etc.) The front porch is beneath a gable roof extension on wood Craftsman supports to the E. A porch is evident from aerial photographs to the west, where an in ground pool is located.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The building is Masonry Vernacular with added aluminum siding. The roof is gabled with a gable roof extension over the porch area with wood column supports. Windows are 1/1 single hung sash with a sliding 3-light window. SW is a large garage addition.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

PHOTOGRAPH



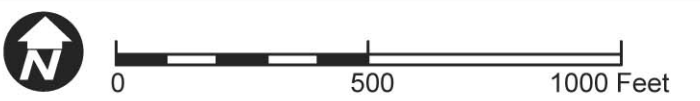
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12051
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12052**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 10

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 101 Pampas Ave. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 101 Direction _____ Street Name Pampas Street Type Avenue Suffix Direction _____
Address: _____
Cross Streets (nearest / between) NE corner of Pampas Ave. and N. Spring Blvd.
USGS 7.5 Map Name TARPON SPRINGS USGS Date _____ Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-27792-002-0050 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326850 Northing 3115090
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1954 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1954 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 2000s Nature Replaced windows, doors, garage door.
Additions: yes no unknown Date: 2000s Nature Carport addition at north.
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Irregular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Hip 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash and 2-light sliding with concrete sills.

Distinguishing Architectural Features (exterior or interior ornaments) The building is simple and unadorned except for wood support posts and railing at the entrance way porch. An incorporated garage is present.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) An in ground pool has been added to the front yard to the west of the building and a concrete fence with an iron gate is present at the façade.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) East at the porch with an oval-light door.

Porch Descriptions (types, locations, roof types, etc.) A recessed porch is present at the entry. The porch has rounded wood supports and a railing connects the supports to the building. Steps access the building.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The building is constructed of concrete blocks on a continuous concrete block foundation. The roof is hip and a flat roof carport has been added. The building is stucco clad with metal 1/1 single sash windows and 2-light sliding windows.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

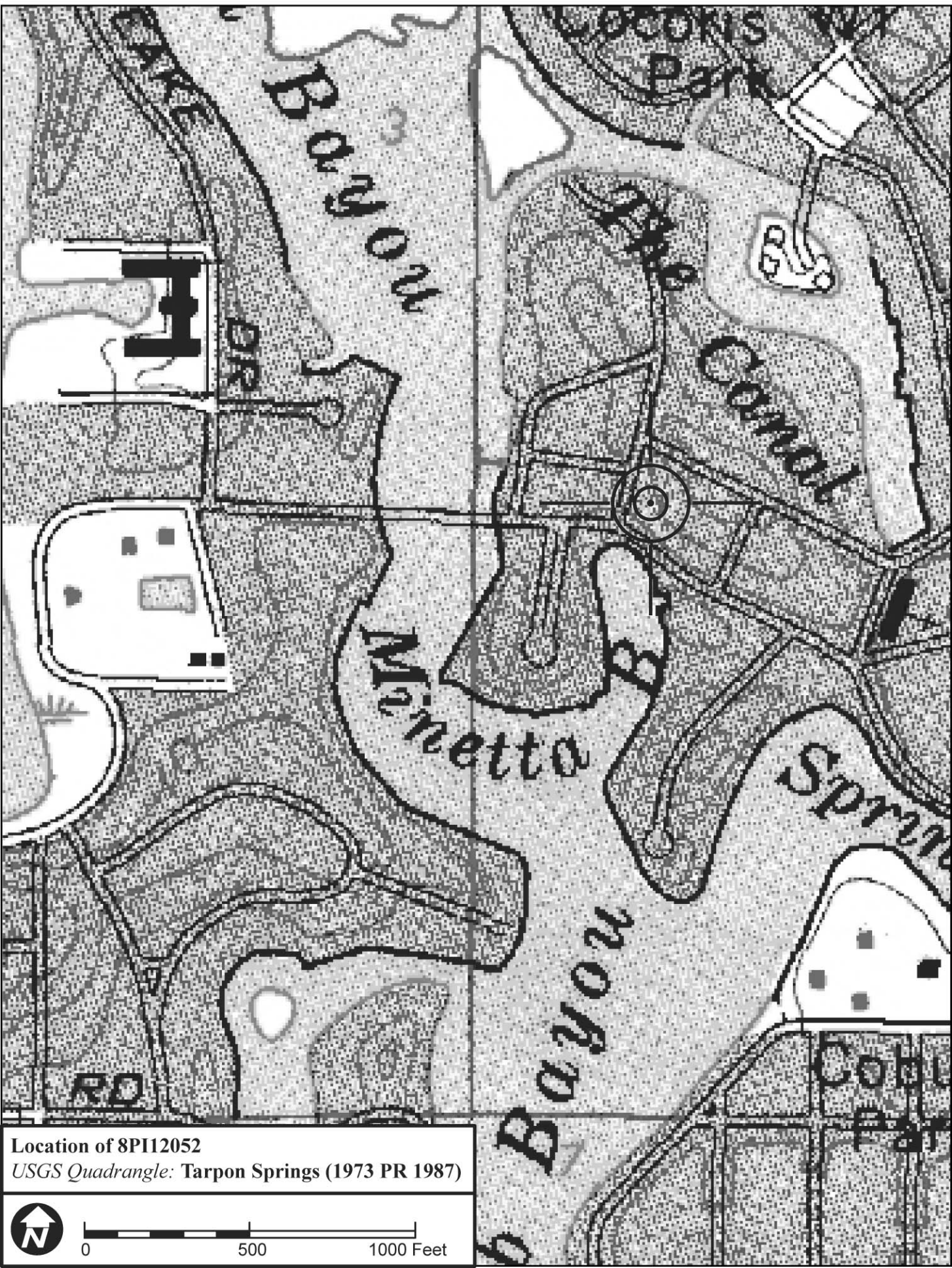
PHOTOGRAPH



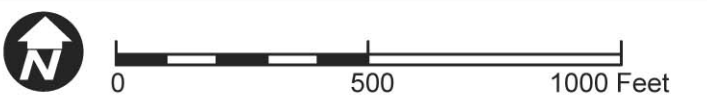
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12052
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12053**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 11

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 330 N. Spring Blvd. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 330 Direction N Street Name Spring Street Type Boulevard Suffix Direction _____
Address: _____
Cross Streets (nearest/between) N side Spring Blvd b/w Pampas Ave and Forest Ave.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-27792-002-0030 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326871 Northing 3115064
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1956 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1956 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Some windows replaced, replaced columns
Additions: yes no unknown Date: _____ Nature _____
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Irregular Number of Stories 1
Exterior Fabric(s) 1. Concrete block 2. _____ 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash, 2-light sliding, and 6/6 awning set on concrete sills.

Distinguishing Architectural Features (exterior or interior ornaments) The building retains a simple form and has a large porch with classical styled columns. Scored stucco is also featured on the building.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) Appears to have a garage type feature behind the building from aerial views, but no outbuildings were observed from the right of way.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Init.	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date	_____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) The entrance is to the S. at the porch and features a 1-light door.

Porch Descriptions (types, locations, roof types, etc.) The porch is large and includes much of the front facade of the building except for a front gable roof extension. The porch is concrete with classical style wood supports.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The building is Masonry Vernacular on a continuous concrete block foundation. The building features scored stucco and multiple types of windows. The roof is gabled with a front gable extension. The porch spans much of the building facade.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information

Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

- 1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research

Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

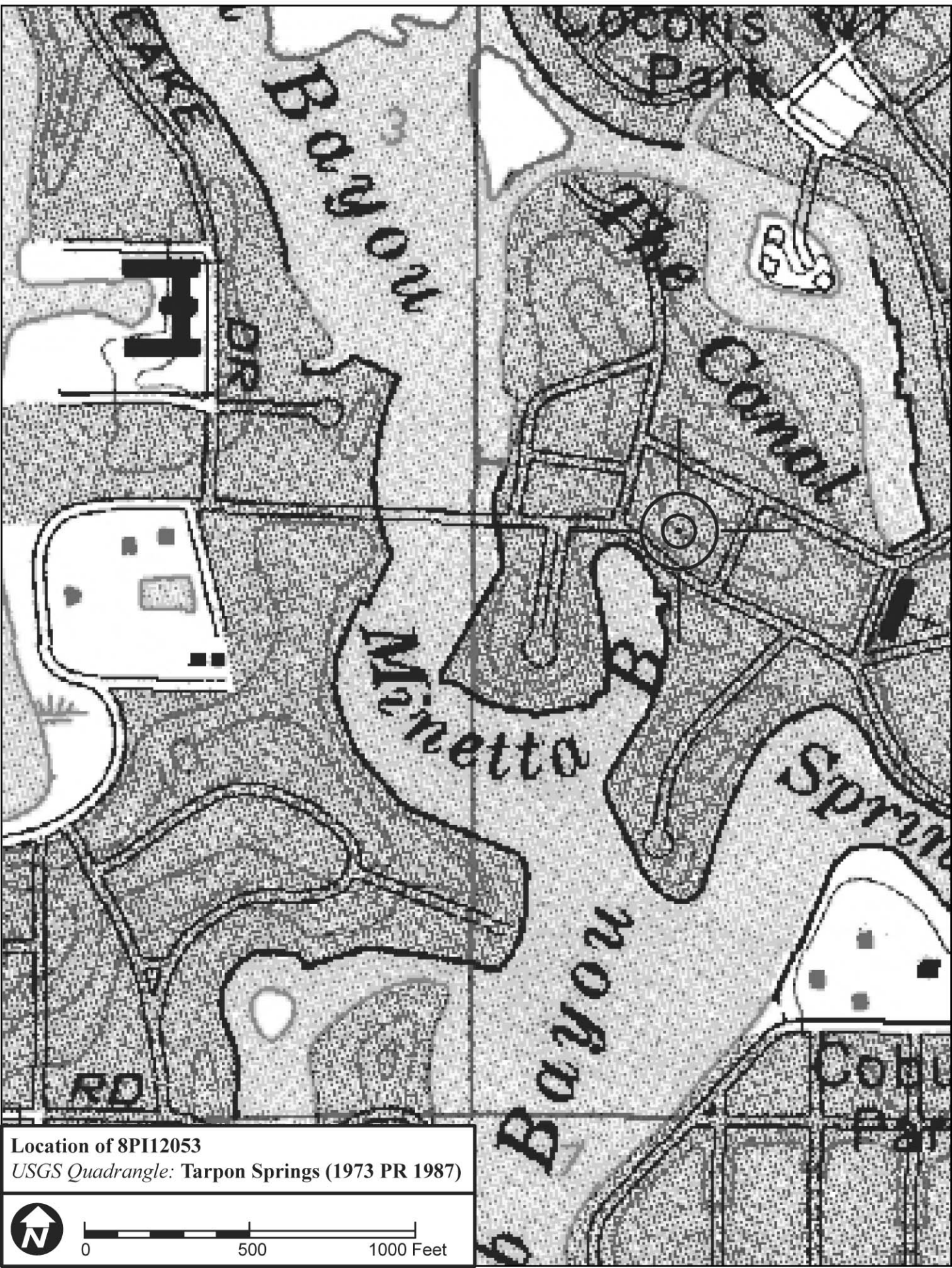
PHOTOGRAPH



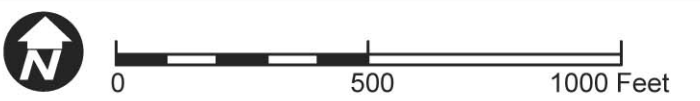
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12053
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12054**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 12

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 302 N. Spring Blvd. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Address: 302 N Spring Boulevard
Street Number Direction Street Name Street Type Suffix Direction
Cross Streets (nearest / between) NW corner of N. Spring and Forest Ave.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 27S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-27792-002-0010 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326901 Northing 3115036
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1950 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1950 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 2000s Nature Windows, doors, supports, restuccoed.
Additions: yes no unknown Date: 2000s Nature Enclosed carport, storage space, E room
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Masonry Vernacular Exterior Plan Rectangular Number of Stories 1
Exterior Fabric(s) 1. Stucco 2. _____ 3. _____
Roof Type(s) 1. Gable 2. _____ 3. _____
Roof Material(s) 1. Composition shingles 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash and a glass block window is also present.

Distinguishing Architectural Features (exterior or interior ornaments) No historic exterior fabric remains.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) None observed.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Init.	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date	_____		
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. Concrete block 2.
Structural System(s): 1. Concrete block 2. 3.
Foundation Type(s): 1. Continuous 2.
Foundation Material(s): 1. Concrete Block 2.
Main Entrance (stylistic details) Modern door addition.

Porch Descriptions (types, locations, roof types, etc.) The porch features modern columns, and is accessed by concrete steps.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The building is rectangular and Masonry Vernacular, including non-historic Mission style detailing in the form of parapets on the facade. It sits on a continuous concrete block foundation. Windows are metal 1/1 single hung sash and glass block.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information

Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

- 1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research

Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

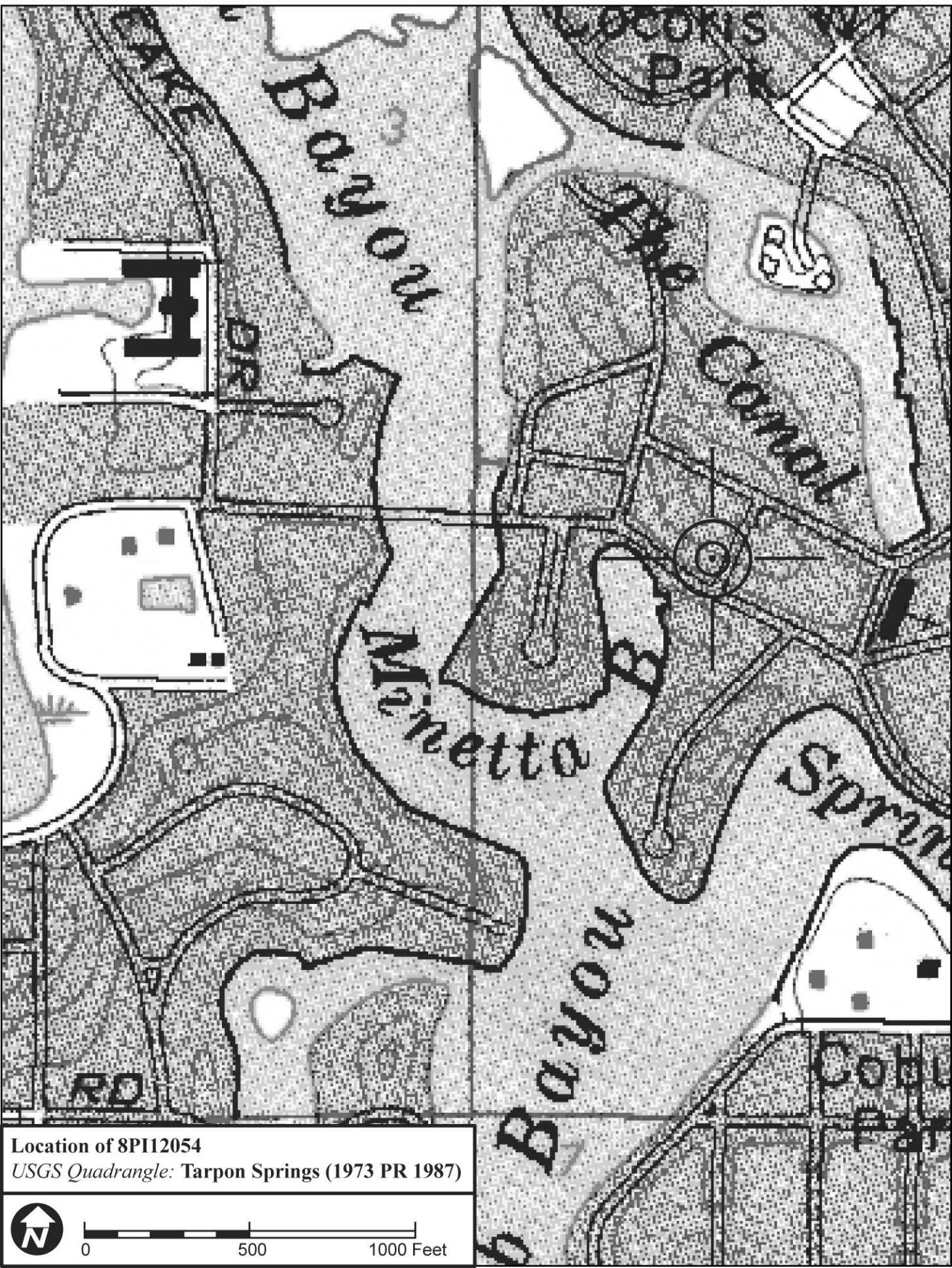
PHOTOGRAPH



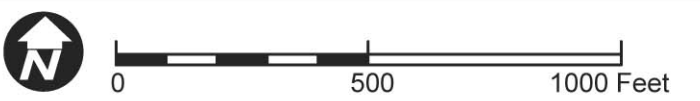
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12054
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **PI12055**
Field Date 7-20-2012
Form Date 7-31-2012
Recorder # 13

Shaded Fields represent the minimum acceptable level of documentation.
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) 301 N. Spring Blvd. Multiple Listing (DHR only) _____
Survey Project Name CRAS of the Beckett Bridge PD&E Study Survey # (DHR only) _____
National Register Category (please check one) building structure district site object
Ownership: private-profit private-nonprofit private-individual private-nonspecific city county state federal Native American foreign unknown

LOCATION & MAPPING

Street Number 301 Direction N Street Name Spring Street Type Boulevard Suffix Direction _____
Address: _____
Cross Streets (nearest/between) S. side of N. Spring Blvd across from Forest Ave.
USGS 7.5 Map Name TARPON SPRINGS USGS Date 1987 Plat or Other Map _____
City / Town (within 3 miles) Tarpon Springs In City Limits? yes no unknown County Pinellas
Township 26S Range 15E Section 12 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # 12-27-15-93708-000-0011 Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 326887 Northing 3114990
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year: 1953 approximately year listed or earlier year listed or later
Original Use Private Residence (House/Cottage/Cabin) From (year): 1953 To (year): _____
Current Use Private Residence (House/Cottage/Cabin) From (year): _____ To (year): 2012
Other Use _____ From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1990s Nature Replacement windows, doors, siding.
Additions: yes no unknown Date: 1970s Nature Garages to the NE of the building.
Architect (last name first): Unknown Builder (last name first): Unknown
Ownership History (especially original owner, dates, profession, etc.) _____

Is the Resource Affected by a Local Preservation Ordinance? yes no unknown Describe _____

DESCRIPTION

Style Frame Vernacular Exterior Plan Irregular Number of Stories 1
Exterior Fabric(s) 1. Vinyl 2. Masonry veneer-artificial 3. _____
Roof Type(s) 1. Gable 2. Flat 3. _____
Roof Material(s) 1. Composition shingles 2. Built-up 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Metal 1/1 single hung sash, glass block, and decorative fixed garage windows.

Distinguishing Architectural Features (exterior or interior ornaments) Two garages have been fused onto the NE side of the building and are non-historic. These garages extend diagonally from the building.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) A brick wall faces N. Spring Blvd.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date _____	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no	Date _____			
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued)

Chimney: No. 1 Chimney Material(s): 1. Stucco 2. Interior Slope
Structural System(s): 1. Wood frame 2. 3.
Foundation Type(s): 1. Continuous 2. Slab
Foundation Material(s): 1. Concrete, Generic 2.
Main Entrance (stylistic details) Diamond cut glass door to the E.

Porch Descriptions (types, locations, roof types, etc.) The porch is on the SW side of the building and sits under a shed roof with brick supports.

Condition (overall resource condition): []excellent [x]good []fair []deteriorated []ruinous

Narrative Description of Resource The Frame Vernacular building has an irregular form. The foundation is concrete slab and the roof is front gabled. Windows are metal 1/1 single hung and glass block. Garages have been attached to the NE of the house.

Archaeological Remains []Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x]FMSF record search (sites/surveys) []library research []building permits []Sanborn maps
[]FL State Archives/photo collection []city directory []occupant/owner interview []plat maps
[x]property appraiser / tax records []newspaper files []neighbor interview []Public Lands Survey (DEP)
[]cultural resource survey (CRAS) []historic photos []interior inspection []HABS/HAER record search
[x]other methods (describe) Historic aerial photographs.

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed)

OPINION OF RESOURCE SIGNIFICANCE

Appears to meet the criteria for National Register listing individually? []yes [x]no []insufficient information
Appears to meet the criteria for National Register listing as part of a district? []yes [x]no []insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) This building exhibits modifications and does not possess sufficient significance for inclusion in the National Register, individually or as part of a district.

Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. 3. 5.
2. 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Field notes Maintaining organization Janus Research
Document description File or accession #'s
2) Document type Field maps Maintaining organization Janus Research
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Janus Research Affiliation Janus Research
Recorder Contact Information 1107 N. Ward St., Tampa FL 33607 / (813) 636-8200 / janus@janus-research.com
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

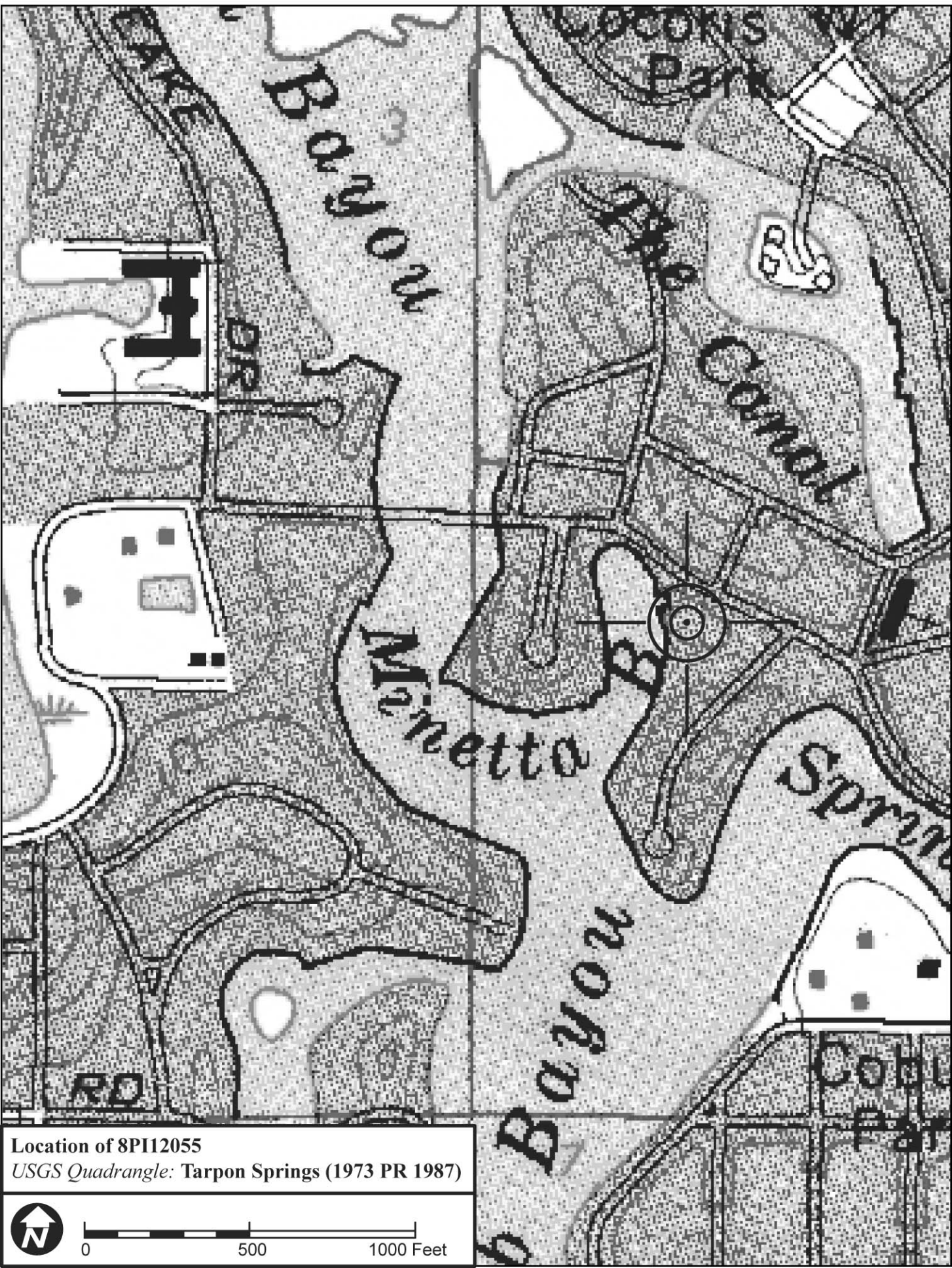
PHOTOGRAPH



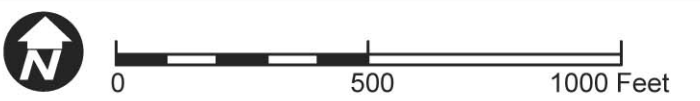
SKETCH MAP



USGS QUADRANGLE MAP



Location of 8PI12055
USGS Quadrangle: Tarpon Springs (1973 PR 1987)



APPENDIX B:

BECKETT BRIDGE DETERMINATION OF ELIGIBILITY

**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
REGISTRATION FORM**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Beckett Bridge

other names/site number Beckett Bridge, 8PI12017, Bridge No. 154000

2. Location

street & number Riverside Drive/North Spring Boulevard not for publication

city or town Tarpon Springs vicinity

state FLORIDA code FL countv Pinellas code PI zip code 34689

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

Florida State Historic Preservation Officer, Division of Historical Resources
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:	Signature of the Keeper	Date of Action
<input type="checkbox"/> entered in the National Register <input type="checkbox"/> See continuation sheet	_____	_____
<input type="checkbox"/> determined eligible for the National Register <input type="checkbox"/> See continuation sheet.	_____	_____
<input type="checkbox"/> determined not eligible for the National Register <input type="checkbox"/> See continuation sheet.	_____	_____
<input type="checkbox"/> removed from the National Register.	_____	_____
<input type="checkbox"/> other, (explain) _____	_____	_____

Beckett Bridge
Name of Property

Pinellas County, Florida
County and State

5. Classification

Ownership of Property

(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property

(Check only one box)

- buildings
- district
- site
- structure
- object

Number of Resources within Property

(Do not include any previously listed resources in the count)

Contributing		Noncontributing	
0		1	buildings
0		0	sites
1		0	structures
0		0	objects
1		1	total

Name of related multiple property listings

(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

TRANSPORTATION/road-related (vehicular)

Current Functions

(Enter categories from instructions)

TRANSPORTATION/road-related (vehicular)

7. Description

Architectural Classification

(Enter categories from instructions)

OTHER: Bascule Bridge

Materials

(Enter categories from instructions)

foundation N/A
walls N/A

roof N/A
other METAL: Steel; Concrete

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 36) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____

Areas of Significance

(Enter categories from instructions)

- Community Planning and Development
- Transportation
- Engineering
- _____
- _____
- _____

Period of Significance

1924-1962

Significant Dates

1924; 1956

Significant Person

N/A

Cultural Affiliation

Architect/Builder

C.E. Burlison, Pinellas County Engineer
W.L. Cobb Construction Company

Name of Repository
City of Tarpon Springs

recorded by Historic American Engineering Record

Beckett Bridge
Name of Property

Pinellas County, Florida
County and State

10. Geographical Data

Acreage of Property less than one

UTM References

(Place additional references on a continuation sheet.)

1	1 7	3 2 6 6 5 9	3 1 1 5 0 8 5
	Zone	Easting	Northing
2			

3			
	Zone	Easting	Northing
4			

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Amy Streelman

organization Janus Research date April 23, 2012

street & number 1107 N. Ward Street telephone (813) 636-8200

city or town Tampa state FL zip code 33607

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Pinellas County

street & number 315 Court Street telephone (727) 464-3000

city or town Clearwater state Florida zip code 33756

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and amend listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

**United States Department of the Interior
National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number 7 Page 1

Beckett Bridge
Pinellas County, Florida

SECTION 7: DESCRIPTION

SUMMARY

The Beckett Bridge (Bridge No. 154000) was originally constructed in 1924 and carries Riverside Drive/North Spring Boulevard over Whitcomb Bayou in Tarpon Springs, Florida. The Beckett Bridge provides the shortest route connecting the eastern and western sides of Tarpon Springs. The bascule span is a steel single-leaf bottom counterweight Scherzer rolling lift bascule from 1924. Due to extensive usage and deterioration, the Beckett Bridge underwent major repairs in 1956 and 1996. The fixed timber approach spans were replaced with concrete approach spans in 1956. Major repairs, which included construction of crutch bents, repair of machinery, replacement of the electrical system and construction of a new control house, were performed in 1996. Additional repairs to the bridge machinery were needed in 1997 and 2011. Despite multiple rehabilitations and the replacement of building materials, the bridge, including the historic metal lift portion, retains its historic integrity. It is a rare example of a historic Scherzer rolling lift, single-leaf bascule bridge remaining in the State.

PHYSICAL DESCRIPTION

Completed in 1924, the Beckett Bridge (Bridge No. 154000) is located in Township 27 South, Range 15 East, Sections 11-12 (USGS Tarpon Springs Quadrangle 1987), carrying Riverside Drive/North Spring Boulevard over Whitcomb Bayou in Tarpon Springs, Florida. Appendix A shows the 1923 construction plans for the Beckett Bridge. The existing roadway, Riverside Drive/North Spring Boulevard, is two lanes running in a roughly east/west direction (Figure 1). The Minetta and Whitcomb Bayous are directly to the south of Beckett Bridge; the Tarpon Bayou is to the north.

The Beckett Bridge has an overall bridge length of approximately 360 feet. The bridge width is approximately 28 feet, including the road and sidewalks (Figures 2-3). The bridge carries two lanes of traffic, one eastbound and one westbound. The existing typical section of the bridge consists of two vehicular lanes measuring 20.21 feet and a sidewalk measuring approximately 3 feet, with concrete railing on both sides. There are nine approach spans and one main span. The main span of the bridge is a steel structure with a cast concrete deck. The bridge railings, which flank the bridge approaches and the bascule span, are simple concrete guardrail with concrete posts, which according to a historic photograph appear to be part of the 1956 rehabilitation project (Figures 4-5). The date "1956" is inscribed in the concrete posts at each end of the bridge (Figure 6). The bridge is a steel, single-leaf, bottom counterweight, Scherzer rolling lift bascule. The length of the bascule span is approximately 40 feet (Figures 7-8). The substructure of the bridge includes the supporting elements under the superstructure. Concrete piers support the prestressed concrete girder spans of

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National Park Service**

**NATIONAL REGISTER OF HISTORIC PLACES
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Section number 7 Page 2

Beckett Bridge
Pinellas County, Florida

this bridge, which replaced the original timber approach spans in 1956 (Figure 9). A galvanized pipe staircase with handrails leads to the bridge substructure from the base of the bridge tender's station. The bridge tender's station is situated on the north side of the bridge. This one-story station is a simple rectangular building without architectural ornamentation (Figure 10). The tender station was constructed with a galvanized steel frame and Plexiglas windows. It features a shed roof sheathed in 22-gage, wide rib galvanized steel. Adjacent to the tender's station is a metal plaque signifying the original date of construction and engineer for the bridge (Figure 11). The station dates from the 1996 repairs to the bridge, and is utilitarian in construction and form. It is considered a non-contributing structure. A bridge tender is only present when required to open the drawbridge for a vessel, there are no full-time bridge tenders. US Coast Guard drawbridge opening regulations (33CFR117.341) states that "the draw of the Beckett Bridge, mile 0.5, at Tarpon Springs, Florida shall open on signal if at least two hours notice is given."

HISTORIC ALTERATIONS

The Beckett Bridge was almost completely reconstructed in 1956 after Pinellas County decided repairs to the original wooden structure would be wasteful (Twitty 1955). County Engineer Leighton Heston recommended that steel and concrete slabs replace the wooden substructure and that the top roadway be cemented (n.a. 1955). The new structure utilized the original steel bascule, draw, and machinery for operation, though the remainder of the bridge employed concrete, spanning 350 feet (n.a. 1956). The 1956 plans have not been located.

NON-HISTORIC ALTERATIONS

Since the major alterations to the bridge in 1956, the Beckett Bridge underwent repairs again in 1996. The rehabilitation repairs included the addition of steel crutch bents to stabilize settlement, repair of the steel draw span as well as the concrete approach spans, refurbishment of the machinery, replacement of the electrical system, and construction of the tender station. The tender station is a non-historic alteration because it was built after the historic period in 1996; it is considered a non-contributing resource (Figure 10). The traffic and barrier gates were also added during the 1996 repairs. Plans for the 1996 repairs can be found in Appendix B of this document.

In 1997, the main machinery drive shafts failed during testing of the draw span subsequent to the 1996 repairs. Repairs were completed in December 1997. Recent repairs in 2011 were performed to correct issues with the operating machinery and the movable bridge span.

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Section number 8 Page 1

Beckett Bridge
Pinellas County, Florida

SECTION 8: SIGNIFICANCE

SUMMARY STATEMENT OF SIGNIFICANCE

The Beckett Bridge is considered potentially eligible for listing in the National Register under Criterion A in the areas of Community Planning and Development and Transportation. The bridge is also eligible under Criterion C in the area of Engineering. In the area of Community Planning and Development, the bridge is linked to the evolution of the City of Tarpon Springs, as its initial construction was necessitated by the City's expansion westward toward the Gulf of Mexico from the Florida Land Boom period onward. Its significance in the area of Transportation is supported by its initial construction in 1924 to serve as a route from east to west Tarpon Springs. Its rehabilitation is evidence of the growth in population and the increasing number of tourists traveling in the area, which required an automobile bridge to accommodate a greater number of vehicles. In the area of Engineering, the Beckett Bridge is a Scherzer rolling lift bridge and, according to available research, remains as one of seven pre-1965 single-leaf bascule bridges remaining in Florida.

STATEMENT OF SIGNIFICANCE (Criteria A and C)

Community Planning and Development/Transportation

As World War I ended, prosperity began to spread throughout the United States. Florida, in particular, experienced this upswing as construction, production, and population in the state quickly increased. People were drawn to the year-round warm weather; automobiles, and improved roads made the state more accessible. Florida also did not have the state income or inheritance taxes of other states (Curl 1987, 77).

Southeastern Florida, including cities such as Miami and Palm Beach, experienced the most activity, although the Florida Land Boom affected most communities in central and South Florida (Weaver 1996, 3). Tarpon Springs also experienced the effects of the Florida Land Boom, although its growth did not accelerate at the intense rates experienced by some other Florida communities. However, Tarpon Springs offered an attractive setting, nearby railroads, and access to modern amenities, such as gift shops, restaurants, and new streetlights and sidewalks. In the 1920s, dozens of new subdivisions were platted tripling the original area of the town, and many important buildings were constructed including the Tarpon Arcade Hotel, a new high school, and the city's first hospital (Adams 1988). A local real estate exchange called Tarpon Springs Enterprises was created to help stimulate development. The most important development was the Sunset Hills Country Club, located on the rolling hills along the Anclote River and the Gulf of Mexico northwest of the bridge (Figure 16).

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Beckett Bridge
Pinellas County, Florida

The Beckett Bridge was first constructed in 1924 and originally called the Chilito Street Bridge (n.a. 1948). Original site plans for the bridge exist from 1923 and are included in Appendix A. It was designed by C.E. Burleson, a Pinellas County Engineer, as a wooden bridge with a concrete pier and a steel drawbridge span. The function of the bridge was to connect east and west Tarpon Springs, carrying travelers over the Whitcomb Bayou. Before construction of the bridge, travelers could only reach the eastern side of Tarpon Springs from the west by taking either Meres Boulevard or Whitcomb Boulevard, located south of Whitcomb Bayou (Figure 12). The Beckett Bridge created a significantly shorter travel route to both the eastern residential areas and the Sunset Hills Country Club.

The Sunset Hills Country Club was the single most prestigious development in Tarpon Springs at the time (Rajtar 1999). The Alex Lonquist Company of Chicago is credited with construction of the fireproof Mission style building. The Country Club building was completed in 1926 and opened on December 15, 1926. A 1926 brochure called it “a private club with a selected personnel” (Doris 1985). However, the club was forced to close before the Great Depression (Stoughton 1975). On December 15, 1928, the Sunset Hills Country Club would become the Sunset Hills Hotel, operated under Colonel C.G. Holden and C.L. Holden as a “winter resort hotel of distinguished character at popular rates” (n.a 1928). After the closing of the hotel, the building would become a year-round baseball school for a time. In 1933, the Pinella Colony Club would open in the building. During the late 1940s, the building then became the Upham House Hotel, but soon after in 1953, the building was known as the Anclote Manor Hospital, a psychiatric facility. In 1985, American Medical International purchased the building and owned it for a short while. In 1990, American Health Properties purchased the building and the name was changed to The Manors. The building continued as mental care facility for the Northpointe Behavioral Health System until May 1997 when the doors closed due to filing of bankruptcy (Shepherd 1997). Today, the building is no longer extant.

Despite development of the 1920s, mature tree growth is notable on the land surrounding the bridge to the east and west, as evident from a postcard dating prior to the construction of the 1924 bridge, and continued to be observed in a 1941 aerial, especially to the western side of the bridge (Figures 12-13).

In 1948, the bridge was renamed “Beckett Bridge” after Edward H. Beckett, commending his 34 years of service as a County Commissioner at the time of his retirement (Freedman 1948). A native Floridian born in Clearwater in 1882, Beckett knew the district in which he was elected, having moved to Tarpon Springs in 1901 (Goldman 1996). After opening his own clothing store, Beckett expanded his business to various branches in the state. Then in 1929, in addition to managing his 53-acre orange grove and his 8-acre truck farm, he opened a real estate and insurance business in Tarpon

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Beckett Bridge
Pinellas County, Florida

Springs. Beckett served as city councilman in Tarpon Springs and as chief of police in Clearwater before being elected to the Pinellas County Board of County Commissioners in 1916. He was also active in supporting secession from Hillsborough County. For 32 years on the County Commission, 16 of those as chairman, he led the push for public parks and efficient water systems. Beckett often voted for new roads and for paving of those already constructed (Goldman 1996). Beckett died in 1962.

After World War II, residential construction resumed in the neighborhoods in and surrounding the Tarpon Springs area, building out previously undeveloped lots. Figures 13-17 are historic aerials showing the development of the area surrounding the Beckett Bridge. Streets were repaved, the seawall was replaced around Spring Bayou, City Hall was expanded and other City services were improved. The sheer number of residential dwellings extant today from this period attests to the growth of the land surrounding Beckett Bridge, including a large trailer court off of Riverside Drive developed after 1957. While tourism had never ceased to play a big role in the City's commerce, in the late 1940s and early 1950s, tourism edged out sponges to become the City's biggest source of income. The increased development and tourism, combined with the Beckett Bridge being the shortest travel route between Tarpon Springs and the Gulf Coast, led to a high amount of traffic crossing the bridge on a daily basis.

Figure 14, a 1942 historical aerial photograph of the Tarpon Springs area, shows that the Beckett Bridge was the shortest route from downtown Tarpon Springs to the Gulf of Mexico. A more direct road south of the Whitcomb Bayou was not developed until many years after the construction of the bridge. 1950s historic aerial photographs of Tarpon Springs further show the route as the quickest means of travel to the Gulf (Figure 15).

Figure 15, a historic aerial from 1957, shows an increase in the building of boat docks along the east and west banks of the bridge. By 1957, much of the banks of Whitcomb Bayou by the Beckett Bridge were lined with boat docks, especially alongside the 1954 built Tarpon Springs Yacht Club building, located on present day North Springs Boulevard. The Yacht Club was initially founded in 1949 by business and civil leaders of the community. Meetings were held in the Upham House Hotel until funding was obtained to build the clubhouse, which is visible in Figure 14. The Tarpon Springs Yacht Club, in conjunction with 13 other yacht clubs, formed the Florida Council of Yacht Clubs (FCYC) to facilitate a program of boating interests between individual yacht clubs wishing to cruise the Florida coast. The Yacht Club building still stands today (8PI12048), but it has been greatly modified and no longer retains its historic fabric.

In 1955, Pinellas County deemed the Beckett Bridge unsafe and decided repairs to the original wooden structure would be wasteful (Twitty 1955). On February 21, 1955, the County Commission

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Beckett Bridge
Pinellas County, Florida

approved an \$81,292 contract to W.L. Cobb Construction Company of Tampa, Florida to reconstruct the bridge (n.a. 1956). The new structure retained the original steel draw and machinery for operation, with the remainder being built from steel-reinforced concrete. In 1996, additional repairs were needed. Steel crutch bents were added, the draw span and approach spans were repaired, the machinery was refurbished, the electrical system was replaced, and the tender station was constructed (Appendix B).

New residential housing construction has taken place since the initial wave of construction during the post World War II period, causing the area to increase in density. New construction consists of mainly residential housing. During the 1990s and 2000s the parking lot of the Tarpon Springs Yacht Club has been continuously expanded and now directly fronts the water by the Beckett Bridge.

ENGINEERING

With Florida's profusion of navigable waterways and its historical reliance on these routes for transportation, the ability to move bridges to let water traffic pass and the ability of automobile traffic to cross bodies of water was an imperative feature of each bridge. The movable bridge was most popular in Florida and consisted of three types: the swing, the vertical lift, and the bascule (FDOT 2004:72).

The Beckett Bridge is an example of the Scherzer rolling lift bascule bridge type. Credited to William Scherzer, the Scherzer rolling lift bascule rolls along a curved track as it opens and closes, pulling itself out of the way of water traffic as it does so (Koglin 2003:46). The Scherzer rolling lift bridge rotates and moves away from the channel like a simple rocking chair on a track as the bridge deck is raised. Scherzer claimed that his rolling-lift type operated with less friction and therefore, reduced power (FDOT 2004:90).

The Beckett Bridge is also an example of the single-leaf bascule bridge type. The bascule, or drawbridge, provides an open channel with unlimited clear headway, swift and dependable operation, and simple mechanisms with few moving parts. The defining characteristic of the bascule is the upward rotating leafs, which can be single or double. The Beckett Bridge consists of a single-leaf with rotates from a horizontal to a near vertical position. In a single-leaf, the entire span lifts above one end (FDOT 2004:90).

Bascule bridges are the most common type of moveable bridge, due to their ability to open quickly and requirement of little energy to operate. Single-leaf bascule bridges are less common than the double-leaf design, as they span smaller waterways. Though a common design that is still utilized

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Beckett Bridge
Pinellas County, Florida

today, historic rolling lift bascule bridges are rare resources in the state of Florida. Additionally, the Beckett Bridge is the only bascule bridge in Pinellas County that is not on the Intracoastal Waterway (Hornik 2012). Table 1 lists the known single-leaf bascule roadway bridges remaining in Florida; this table includes historic as well as non-historic single-leaf bascule bridges. This data was provided by Richard I. Kerr, Bridge Management Inspection Engineer at the FDOT. The information provided by FDOT did not specify if the bridges are rolling lift type bridges.

Table 1: Known Single-Leaf Bascule Roadway Bridges Remaining in Florida

Bridge #	County	Facility Carried	Feature Intersected	Date of Construction
154000	Pinellas	N. Spring Blvd	Minetta Branch	1924
105503	Hillsborough	Laurel Street	Hillsborough River	1926
910054	Okeechobee	US441/US98 (SR700)	Taylor Creek	1948
460053	Bay	Beach Drive	Massalina Bayou	1951
860008	Broward	SR-84	So. Fork New River	1956
130057	Manatee	SR 789	Longboat Key Pass	1957
930060	Palm Beach	A1A	Boca Inlet	1963
120028	Lee	CR 865	Big Carlos Pass	1965
860011	Broward	SR-A1A	Hillsboro Inlet	1966
120050	Lee	CR 78 Pine Island Rd	Matlacha Pass	1968
930318	Palm Beach	EB SR 802 Lake Ave	Intracoastal Waterway	1973
870085	Dade	SR-934 WB	East Biscayne Bay	1973
870551	Dade	SR-934 EB	East Biscayne Bay	1973
110077	Lake	SR-40	St. Johns River	1980
860319	Broward	South Andrews Ave	New River & New River Dr	1981
900077	Monroe	SR-5 (US-1)	Snake Creek Canal	1981
170158	Sarasota	SR-789	New Pass	1986
790172	Volusia	SR-44	IWW Indian River	1997
930453	Palm Beach	EB SR706	Intracoastal Waterway	1999
930454	Palm Beach	WB SR 706	Intracoastal Waterway	1999
934160	Palm Beach	Donald Ross Road WB	Intracoastal Waterway	1999
934161	Palm Beach	Donald Ross Road RD EB	Intracoastal Waterway	1999

In addition, Archaeological Consultants, Inc. (ACI) provided a summary of information on bascule bridges that they obtained during research conducted on highway bridges in Florida for the Central Environmental Management Office of the FDOT. This research conducted by ACI shows that out of 87 bascule bridges included in their field survey, only 10 are rolling lifts, and one has been

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Beckett Bridge
Pinellas County, Florida

demolished since 2000. Of the extant rolling lift bascules documented by ACI, the nine are double-leaf types. Two are located in Duval County, three are located in Palm Beach County, three are located in Broward County, and one is located in Hillsborough County. Of these nine rolling lifts, one dates to the 1910s, two date to the 1920s, two date to the 1930s, one dates to the 1940s, and three date to the 1960s. The three 1960s rolling lifts are all located in Broward County. Single-leaf bascule bridges are extremely rare as the survey by ACI only included two trunnion type bascules (ACI did not document the Beckett Bridge according to provided information)(ACI 2012). Trunnion type bridges eventually became a dominant bascule bridge type over the rolling lift; with this bridge type, the bascule span rotates around a trunnion or axle and uses a heavy counterweight (FDOT 2004:90).

The Beckett Bridge is an example of a Scherzer rolling lift single-leaf bascule bridge. This rare bridge is one of seven pre-1965 single-leaf bridges remaining in Florida. However, the results of the research were not intended to be exhaustive and it is possible that there are additional movable bridges which have not yet been identified. Despite rehabilitations and the replacement of building materials in both 1956 and 1996, the Beckett Bridge retains its integrity as a Scherzer rolling lift single-leaf bascule bridge. The changes that took place and the materials used during the 1956 rehabilitation are now historic. Consequently, this bridge is considered eligible for inclusion in the National Register.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section number 9 Page 1

Beckett Bridge
Pinellas County, Florida

SECTION 9: MAJOR BIBLIOGRAPHICAL REFERENCES

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Beckett Bridge
Pinellas County, Florida

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Beckett Bridge
Pinellas County, Florida

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Beckett Bridge
Pinellas County, Florida

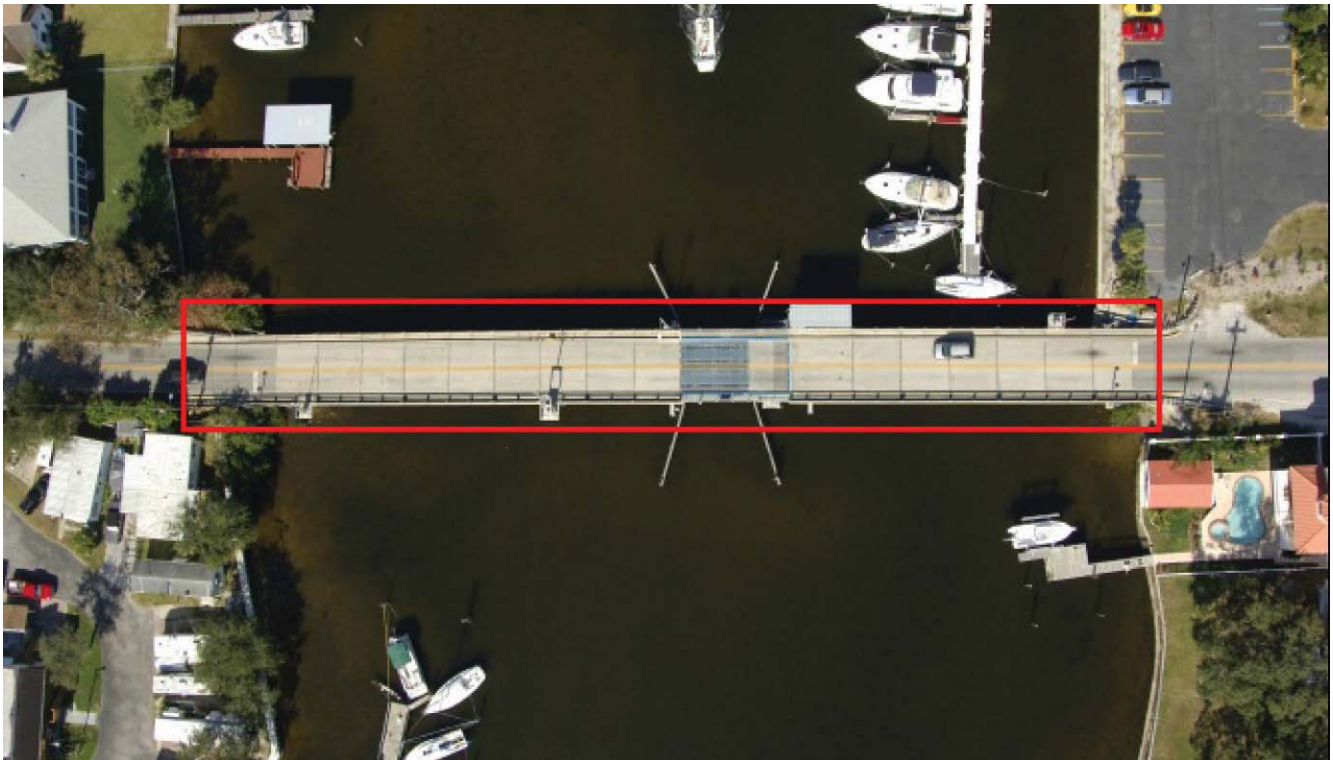
SECTION 10: GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The proposed boundary includes the physical structure (substructure, main span, approach spans, railings, and deck) of the Beckett Bridge along with the associated bridge tender's station.

BOUNDARY JUSTIFICATION

The boundary includes the aforementioned bridge systems, and bridge tender's station associated with the Beckett Bridge.



Beckett Bridge



Figure 1
Map of Project Boundaries

Beckett Bridge



Figure 2
Bridge Roadway, Facing East

Beckett Bridge



Figure 3
Sidewalk, Facing East

Beckett Bridge



Figure 4
Beckett Bridge in 1965, facing Southwest

Beckett Bridge



Figure 5
Beckett Bridge in 2012, facing Southwest

Beckett Bridge



Figure 6
Concrete Inscription at West End, Facing East

Beckett Bridge



Figure 7
Bascule Span, Facing South

Beckett Bridge



Figure 8
Bascule Span Detail, Facing Southwest

Beckett Bridge



Figure 9
Bridge Substructure, Facing Northeast

Beckett Bridge



Figure 10
Bridge Tender Station, Built in 1996, Facing Northeast

Beckett Bridge



Figure 11
Plaque on Railing, Facing North

Beckett Bridge

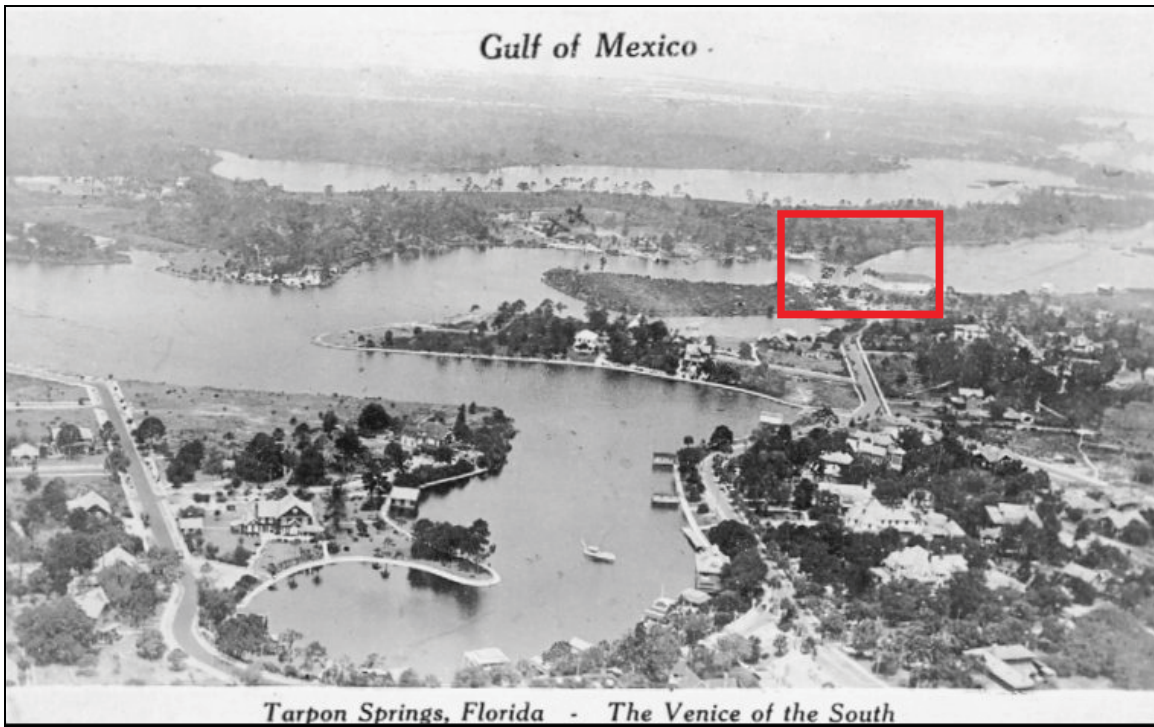


Figure 12
Historic Postcard Looking West, Showing Future
Location of Beckett Bridge

Beckett Bridge



Figure 13
Historic Aerial of Beckett Bridge and Surrounding Tarpon
Springs in 1941

Beckett Bridge



Figure 14
Historic Aerial of Beckett Bridge and Surrounding Tarpon
Springs in 1942

Beckett Bridge



Figure 15
Historic Aerial of Beckett Bridge and Surrounding Tarpon
Springs in 1957

Beckett Bridge



Figure 16
Historic Aerial showing Beckett Bridge to the southeast,
the Country Club to the northwest, and surrounding
Tarpon Springs in 1957

Beckett Bridge



Figure 17
1974 Aerial of Beckett Bridge and Surrounding Tarpon
Springs

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Section number _____ Page 1

Beckett Bridge
Pinellas County, Florida

INVENTORY OF PHOTOGRAPHS

1. Beckett Bridge
2. Pinellas County, Florida
3. Holly Schwarzmann
4. February 2012
5. Janus Research
6. Beckett Bridge, Facing Southwest
7. Photograph 1 of 17

(Items 1-5 are the same for the remaining photographs)

6. Bridge Roadway, Facing East
7. Photograph 2 of 17

6. Sidewalk, Facing East
7. Photograph 3 of 17

6. Beckett Bridge in 1965, facing Southwest
7. Photograph 4 of 17

6. Beckett Bridge in 2012, facing Southwest
7. Photograph 5 of 17

6. Concrete Inscription at West End, Facing East
7. Photograph 6 of 17

6. Bascule Span, Facing South
7. Photograph 7 of 17

6. Bascule Span Detail, Facing Southwest
7. Photograph 8 of 17

6. Bridge Substructure, Facing Northeast
7. Photograph 9 of 17

6. Bridge Tender Station, Facing Northeast
7. Photograph 10 of 17

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Section number _____ Page 2

Beckett Bridge
Pinellas County, Florida

6. Plaque on Railing, Facing North
7. Photograph 11 of 17

6. Historic Postcard Showing Future Location of Beckett Bridge
7. Photograph 12 of 17

6. Historic Aerial of Beckett Bridge and Surrounding Tarpon Springs in 1941
7. Photograph 13 of 17

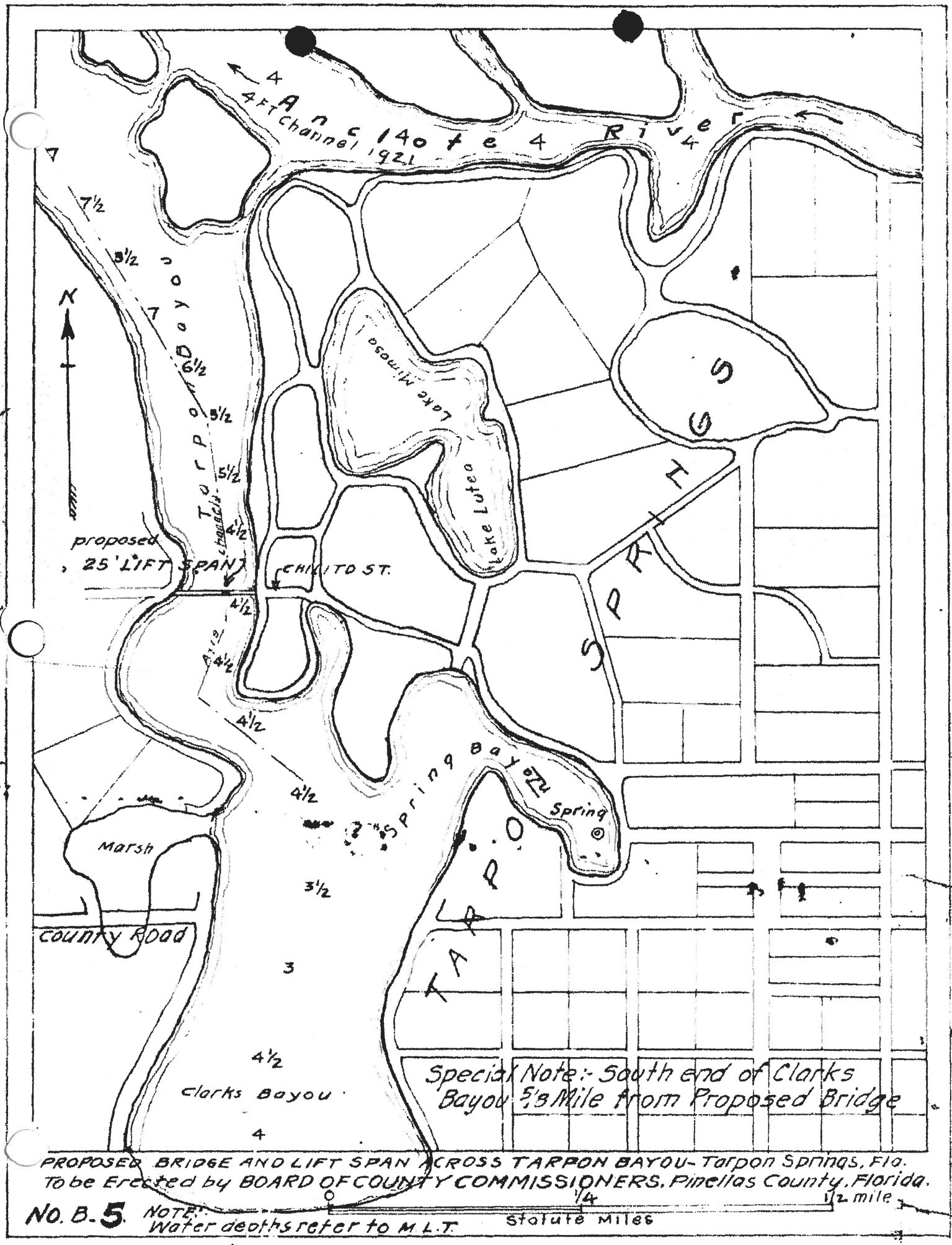
6. Historic Aerial of Beckett Bridge and Surrounding Tarpon Springs in 1942
7. Photograph 14 of 17

6. Historic Aerial of Beckett Bridge and Surrounding Tarpon Springs in 1957
7. Photograph 15 of 17

6. Historic Aerial showing Beckett Bridge to the southeast, the Country Club to the northwest, and surrounding Tarpon Springs in 1957
7. Photograph 16 of 17

6. 1974 Aerial of Beckett Bridge and Surrounding Tarpon Springs
7. Photograph 17 of 17

APPENDIX A:
1923 ENGINEERING PLANS



PROPOSED BRIDGE AND LIFT SPAN ACROSS TARPON BAYOU-Tarpon Springs, Fla.
 To be Erected by BOARD OF COUNTY COMMISSIONERS, Pinellas County, Florida.

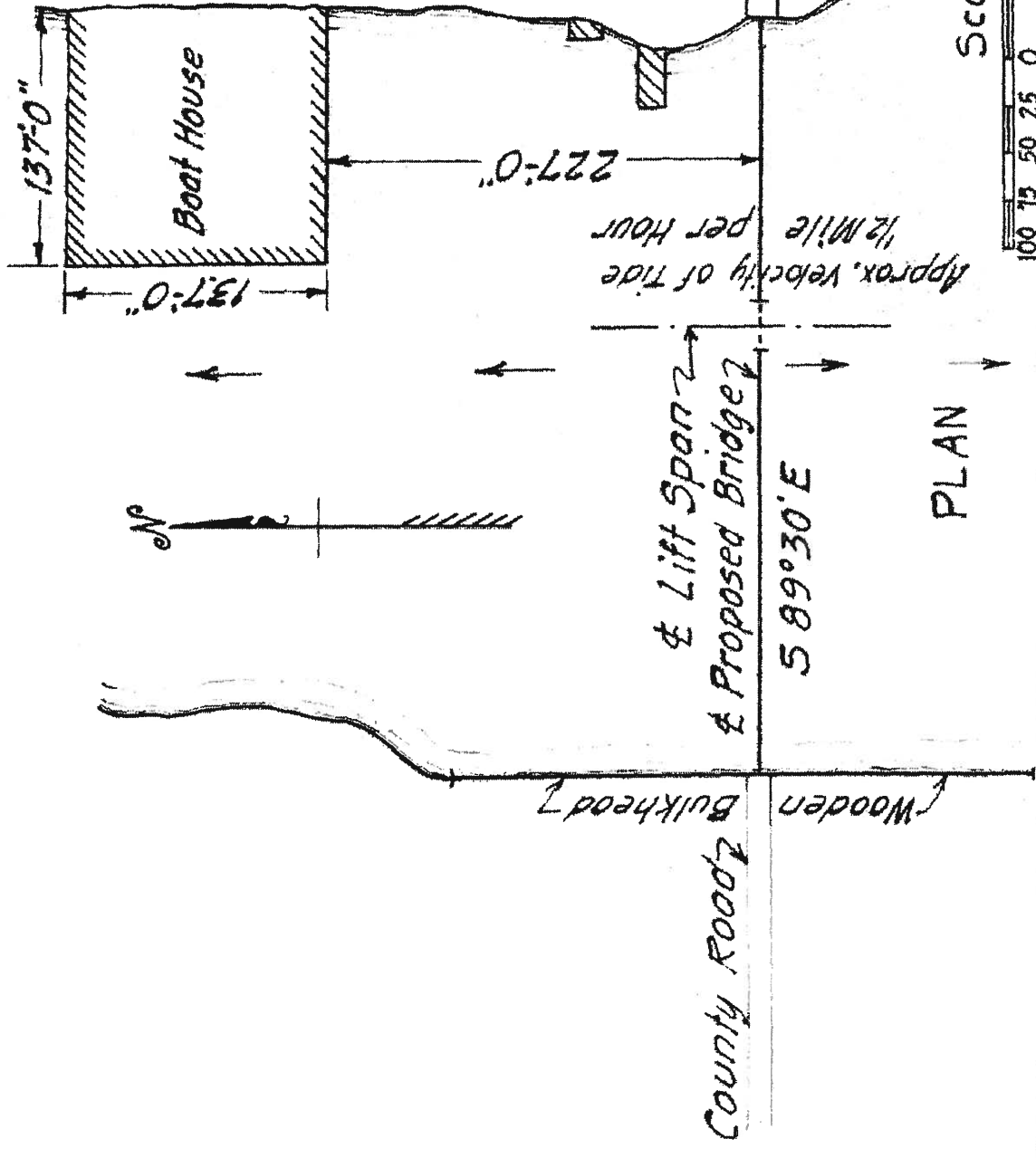
NO. B-5 NOTE: Water depths refer to M.L.T. 1/4 1/2 mile
 statute miles

PROPOSED BRIDGE AND LIFT SPAN ACROSS TARPON BAYOU
 AT TARPON SPRINGS, FLORIDA

TO BE ERRECTED BY

BOARD OF COUNTY COMMISSIONERS - PINELLAS COUNTY, FLORIDA

OFFICE OF COUNTY ENGINEER		CLEARWATER, FLORIDA.	
APPROVED		10-14-23	
<i>Loe G. Butcher</i>		Country Engineer.	
DRAWN	E.V.A.	9-14-23	NO.
CHECKED	C.E.B.	10-12-23	B. 2



Engr. Cert. #178
 Pinellas Co. Fla.

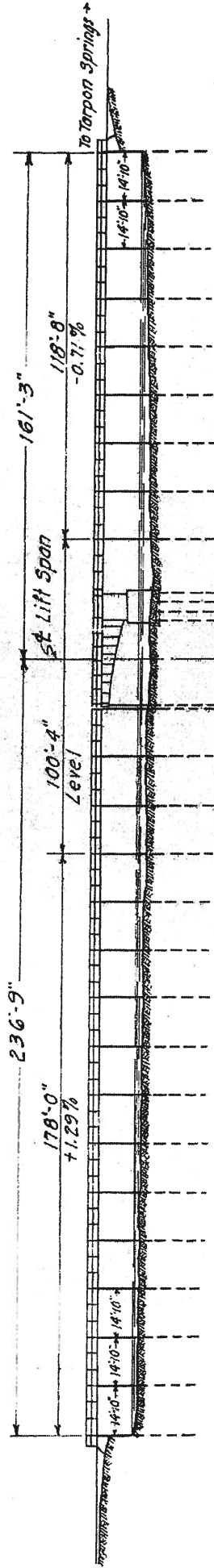
To Tarpon Springs
 18'-0" Pavement

Scale in Feet



PLAN

PROPOSED BRIDGE AND LIFT SPAN ACROSS TARPON BAYOU
 AT TARPON SPRINGS, FLORIDA
 TO BE ERRECTED BY
 BOARD OF COUNTY COMMISSIONERS - PINELLAS COUNTY, FLORIDA



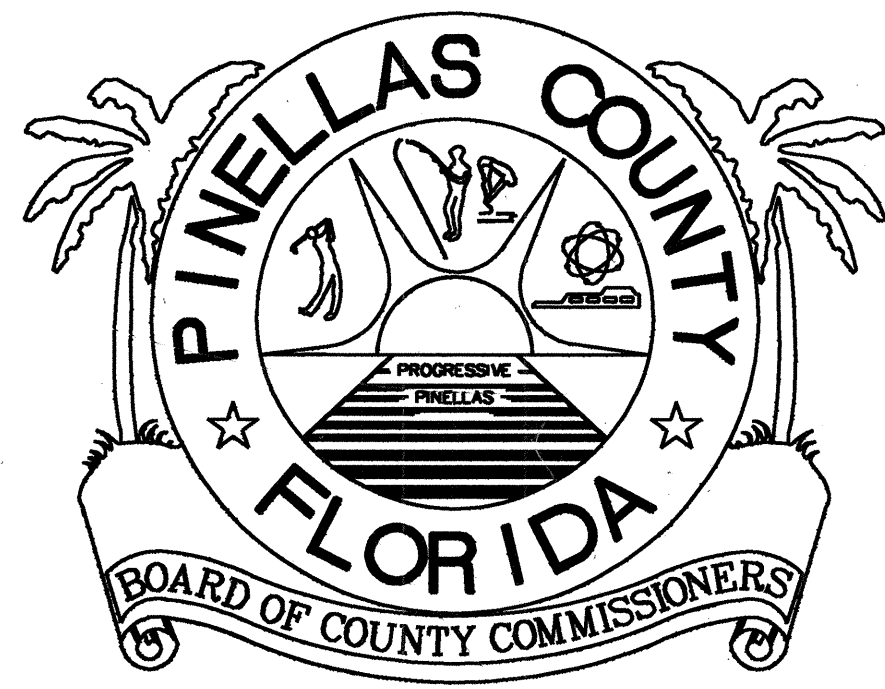
GENERAL ELEVATION
 Scale: 1" = 25'-0"



OFFICE OF COUNTY ENGINEER CLEARWATER, FLORIDA	
APPROVED	<i>[Signature]</i> COUNTY ENGINEER
DRAWN	E. V. A.
CHECKED	C. E. B.
	10-14-23
	10-12-23
	BT 3

State Certificate #170
 State of Fla.

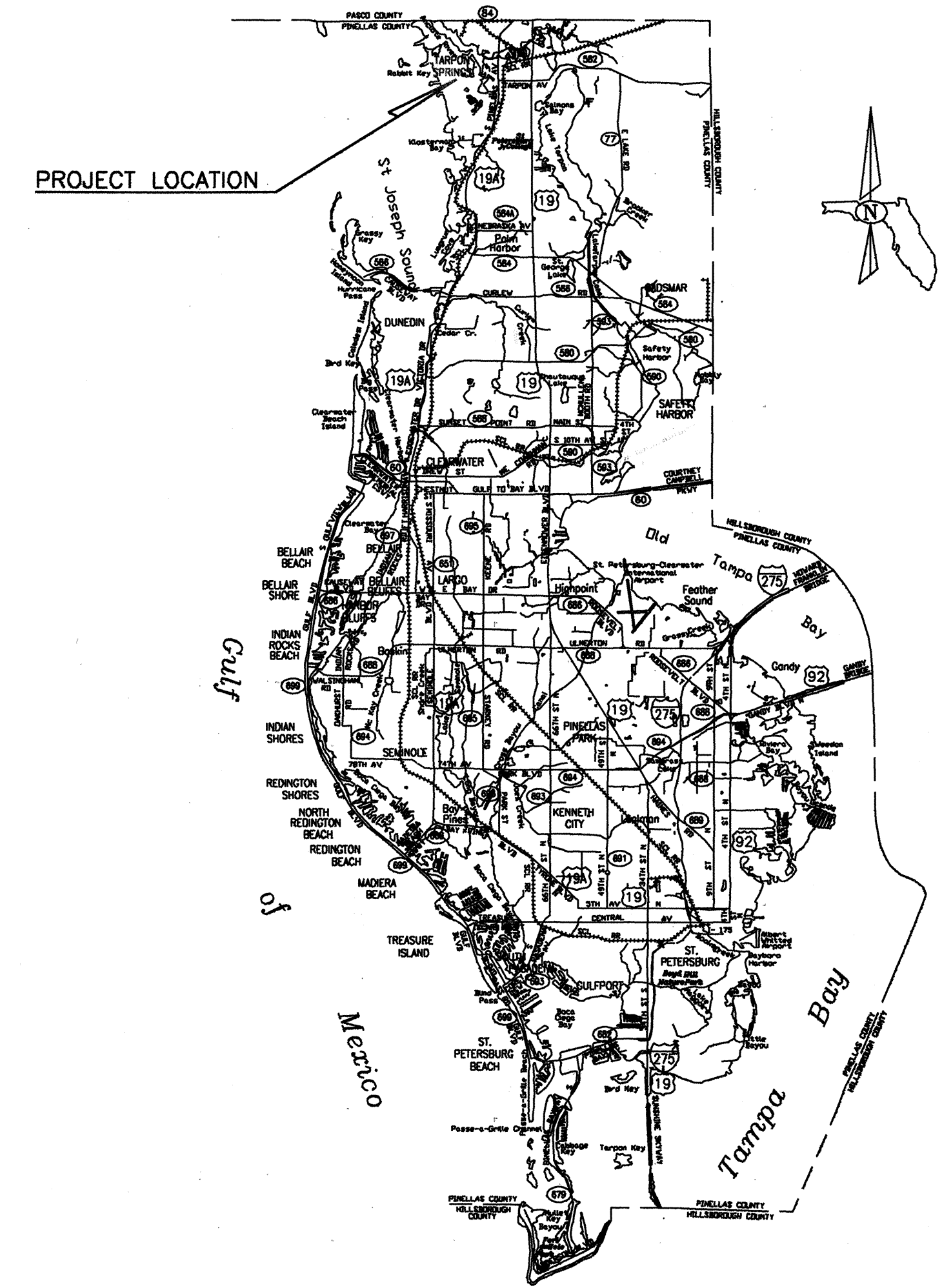
APPENDIX B:
1996 REHABILITATION PLANS



PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

PLANS OF PROPOSED BECKETT BRIDGE REPAIRS

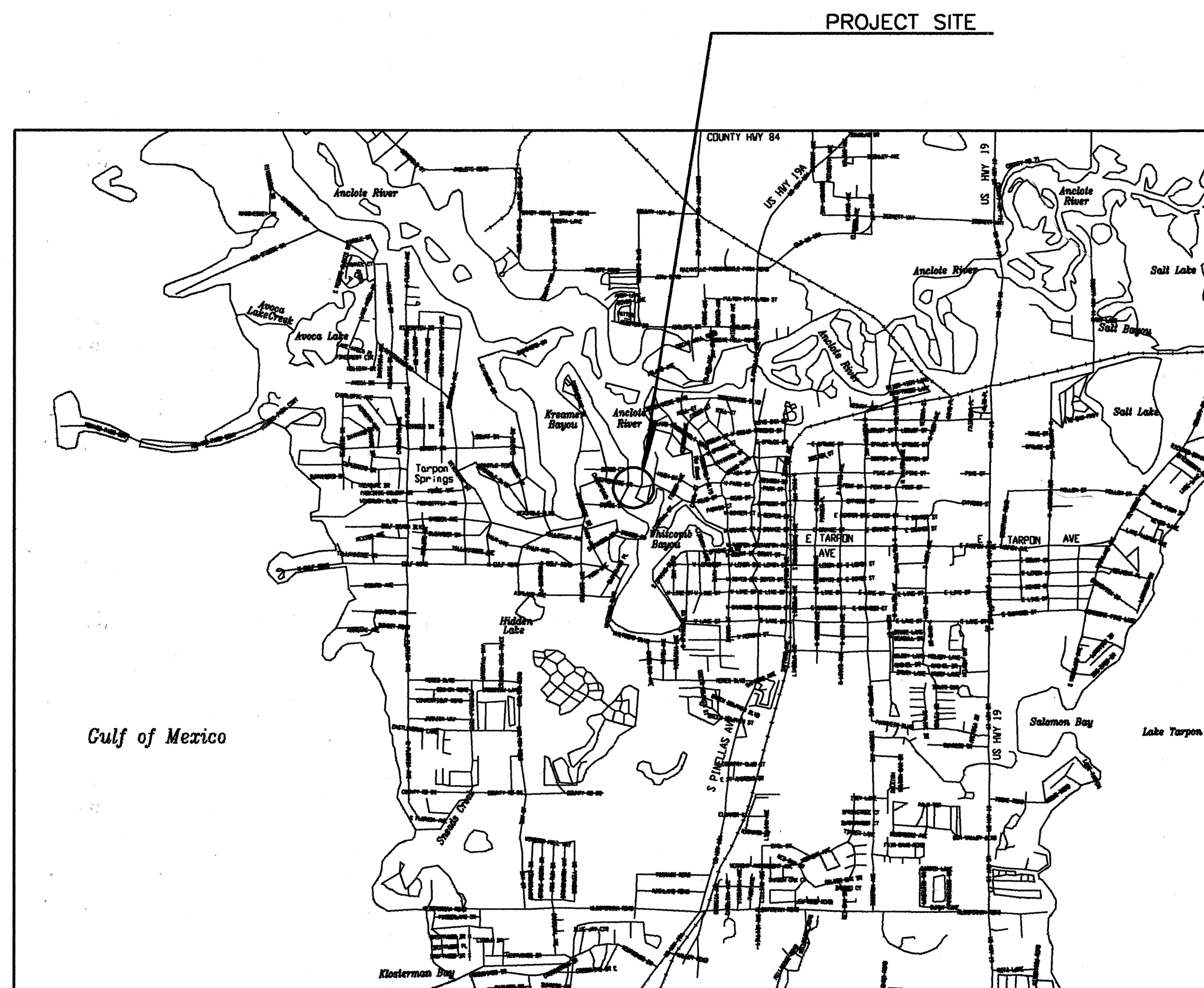
BRIDGE NO. 154000
P.I.D. NO. 106147
CONTRACT NO. 95002



PINELLAS COUNTY, FLORIDA
LOCATION MAP

INDEX OF BRIDGE REPAIR PLANS

DRAWING NO.	DESCRIPTION
A-1	TITLE SHEET AND INDEX OF DRAWINGS
A-2	GENERAL NOTES
A-3	SUMMARY OF QUANTITIES
A-4	KEY SHEET
A-5	TRAFFIC CONTROL DEVICES FOR MOVABLE SPAN BRIDGE SIGNALS
A-6	TRAFFIC CONTROL DEVICES FOR MOVABLE SPAN BRIDGE SIGNALS
A-7	NAVIGATION LIGHT SYSTEM DETAILS
A-8	REPORT OF CORE BORINGS
A-9	TRAFFIC CONTROL PLANS (1)
A-10	TRAFFIC CONTROL PLANS (2)
A-11	TRAFFIC CONTROL PLANS (3)
S-1	FOUNDATION LAYOUT
S-2	BULKHEAD DETAILS - END BENT 1
S-3	BULKHEAD DETAILS - END BENT 11
S-4	CRUTCH BENT DETAILS
S-5	BASCULE PIER STABILIZER DETAILS
S-6	CONTROL PLATFORM DETAILS
S-7	CONCRETE REPAIR DETAILS
S-8	BARRIER GATE SUPPORT DETAILS
S-9	TRAFFIC GATE SUPPORT AND PILASTER DETAILS
S-10	ACCESS LADDERS AND PLATFORM DETAILS
S-11	BASCULE SPAN REPAIRS
S-12	BASCULE SPAN - SIDEWALK AND HANDRAIL DETAILS
S-13	STRUCTURAL STEEL REPAIR DETAILS
S-14	COUNTERWEIGHT DETAILS
S-15	CONCRETE DECK REPLACEMENT AND JOINT DETAILS
S-16	APPROACH SLAB DETAILS
S-17	REINFORCING BAR LIST
E-1	ELECTRICAL SYMBOLS AND ABBREVIATIONS
E-2	ELECTRICAL SITE PLAN
E-3	RISER DIAGRAM
E-4	CONDUIT AND CABLE SCHEDULE
E-5	SPAN ELECTRICAL PLAN
E-6	CONTROL PANEL DETAILS & NOTES
E-7	SCHEDULES
E-8	ELECTRICAL DETAILS
E-9	TRAFFIC GATE DETAILS
E-10	BARRIER GATE DETAILS
M-1	MACHINERY PLAN
M-2	MACHINERY PLAN AND SCHEDULES
M-3	SPAN LOCK DETAILS
M-4	SPAN LOCK DETAILS
M-5	MISCELLANEOUS DETAILS
M-6	SECTIONS AND ELEVATIONS
M-7	HYDRAULIC SYSTEM SCHEMATIC
M-8	MECHANICAL SITE PLAN
M-9	MACHINERY DEMOLITION



VICINITY MAP



REVIEWED BY:	<i>Enrique Mazas</i>	8-14-95
	ENRIQUE MAZAS, P.E., PROJECT MANAGER	DATE
RECOMMENDED FOR APPROVAL BY:	<i>Robert L. Warren</i>	8-14-95
	ROBERT L. WARREN, DIRECTOR OF HIGHWAY DEPARTMENT	DATE
RECOMMENDED FOR APPROVAL BY:	<i>Thomas W. McGrew</i>	8-18-95
	THOMAS W. MCGREW, P.E., DIRECTOR OF ENGINEERING	DATE
APPROVED BY:	<i>J. Keith Wicks</i>	8/13/95
	J. KEITH WICKS, P.E., DIRECTOR OF PUBLIC WORKS	DATE

BY 94089 CADD BRIDGE
CO. WORKS, BECHER 07/31/95 15:46:46 REV. PRODUCED BY DSA CADD SYSTEM

REVISIONS		REVISIONS		SEAL:	DRAWN BY		 DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607	 PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	Drawing No.
Date	By	Date	By	Description	Date	Home			TITLE SHEET AND INDEX OF DRAWINGS PROJECT NAME: BECKETT BRIDGE REPAIRS	A-1

Timothy J. Farrell

GENERAL NOTES

SCOPE OF WORK:

THIS CONTRACT REQUIRES WORK WHICH IS DEFINED IN THESE PLANS AND THE CONTRACT SPECIFICATIONS. SOME TASKS ARE PARTIALLY OR COMPLETELY DEFINED IN THE SPECIFICATIONS. REFERENCE TO THE "SPECIFICATIONS" INCLUDES REFERENCE TO ALL SUPPLEMENTAL SPECIFICATIONS, TECHNICAL SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS REFERENCED THEREIN. CONTRACT WORK INCLUDES THE FOLLOWING ITEMS AS DETAILED IN THESE PLANS AND THE SPECIFICATIONS:

STRUCTURAL:

1. REPAIR STRUCTURAL STEEL AND REPLACE BRACING ON THE BASCULE LEAF.
2. FURNISH AND INSTALL NEW CRUTCH BENTS AT BENTS 6 AND 7.
3. CLEAN AND PAINT STRUCTURAL STEEL AND MACHINERY.
4. REPLACE SIDEWALK AND HANDRAIL ON NORTH SIDE OF BASCULE SPAN. FURNISH AND INSTALL NEW SIDEWALK AND HANDRAIL ON SOUTH SIDE OF BASCULE SPAN.
5. FURNISH AND INSTALL NEW FENDER SYSTEM ACCESS LADDERS.
6. PROVIDE NEW OPERATOR PLATFORM ON THE NORTH SIDE OF SPAN 7.
7. INSTALL NEW SHEET PILE BULKHEADS AT END BENTS 1 AND 11.
8. FURNISH AND INSTALL BASCULE PIER STABILIZER.
9. CONSTRUCT NEW CONCRETE APPROACH SLABS.
10. REPLACE PART OF CONCRETE DECK IN SPAN 7.
11. CLEAN AND SEAL OPEN DECK JOINTS.
12. CLEAN AND PATCH CONCRETE SPALLS.

MACHINERY:

1. REMOVE EXISTING DRIVE MACHINERY AND MISCELLANEOUS COMPONENTS NO LONGER IN USE.
2. REPLACE SPAN LOCKS, GUIDES, AND RECEIVERS. FURNISH AND INSTALL NEW HYDRAULICALLY OPERATED SYSTEM.
3. RECONDITION AND ADJUST ALL LOAD SHOES.
4. REPLACE COUNTERWEIGHT AND BALANCE BASCULE SPAN.
5. FURNISH AND INSTALL NEW GEAR DRIVE SYSTEM.
6. ALIGN MACHINERY AND SPAN.
7. FURNISH AND INSTALL NEW BRAKE SYSTEM.
8. FURNISH AND INSTALL EMERGENCY DRIVE SYSTEM.
9. RECONDITION FLAT TRACK PLATES.
10. PROVIDE A FUNCTIONAL CHECKOUT OF OPERATING SYSTEMS.

ELECTRICAL:

1. REMOVE EXISTING CONTROL SYSTEM AND UTILITY SERVICE.
2. FURNISH AND INSTALL NEW DUAL DRIVE MOTORS.
3. FURNISH AND INSTALL NEW ELECTRICAL SERVICE.
4. REPLACE EXISTING WIRING, CONDUIT, AND JUNCTION BOXES.
5. FURNISH AND INSTALL NEW SUBMARINE CABLE.
6. FURNISH AND INSTALL NEW CONTROL CONSOLE.
7. FURNISH AND INSTALL NEW CONTROL PANEL / MOTOR CONTROLLERS.
8. FURNISH AND INSTALL NEW EMERGENCY POWER RECEPTACLE AND TRANSFER SWITCH.
9. FURNISH AND INSTALL NEW TRAFFIC SIGNALS.
10. FURNISH AND INSTALL NEW TRAFFIC GATES AND A BARRIER GATE.
11. FURNISH AND INSTALL NEW NAVIGATION LIGHTS.
12. FURNISH AND INSTALL LIGHTNING AND SURGE SUPPRESSION DEVICES.
13. FURNISH AND INSTALL NFPA LIGHTNING PROTECTION SYSTEM.

FIELD VERIFICATION OF DIMENSIONS:

DIMENSIONS OF EXISTING STRUCTURES, MECHANICAL AND ELECTRICAL COMPONENTS ARE PROVIDED FOR INFORMATION ONLY. THEY ARE DERIVED FROM OBSERVATIONS AND A FIELD SURVEY. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. DISCREPANCIES FROM THE DIMENSIONS SHOWN IN THE PLANS MUST BE SHOWN IN THE SHOP DRAWINGS. DISCREPANCIES FROM THE DIMENSIONS SHOWN IN THE PLANS OR FAILURE BY THE CONTRACTOR TO VERIFY DIMENSIONS SHALL NOT BE JUSTIFICATION FOR CLAIMS.

CONSTRUCTION SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1991 EDITION, AND SUPPLEMENTS THERETO.

DESIGN SPECIFICATIONS:

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1992 EDITION WITH INTERIMS THROUGH 1994.

STANDARD SPECIFICATIONS FOR MOVABLE HIGHWAY BRIDGES, 1988 AND ALL APPLICABLE INTERIMS THROUGH 1991.

FDOT STRUCTURES DESIGN GUIDELINES, 1987, WITH REVISIONS THROUGH UPDATE "H".

SHOP DRAWINGS:

THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS AND/OR CATALOG CUTS OF ALL NEW STRUCTURES, WELDMENTS, CASTINGS, SHIM PLATES, WEAR PLATES, PINS, TURNED BOLTS, LUBE LINES, LUBE FITTINGS, COMPONENTS, AND INCIDENTALS. SUCH DRAWINGS SHALL INCLUDE FITS, FINISHES, DIMENSIONS, AND MATERIALS FOR FABRICATED AND MANUFACTURED ELEMENTS. DIMENSIONS OF EXISTING ELEMENTS SUPPORTING OR CONTACTING THE NEW PARTS SHALL ALSO BE SHOWN. SEE THE SPECIFICATIONS FOR DETAILS ON SHOP DRAWING PREPARATION AND SUBMITTAL.

DESIGN LOADS:

THE ORIGINAL BRIDGE DESIGN LOAD IS UNKNOWN. REHABILITATION DESIGN LOAD BASED ON AASHTO HS-20.

PLATFORM LOADS: 85 psf. LIVE LOAD

OPERATIONAL REQUIREMENTS:

MOVABLE SPAN OPERATIONS CRITERIA FOR DESIGN AND REHABILITATION IS AS FOLLOWS:

TIME FOR "NORMAL OPERATION" = 60 SECONDS
SPAN ROTATION TO FULL OPEN = 49 DEGREES
EMERGENCY STOP TIME = 5 SECONDS (NORMAL SPEED)

ENVIRONMENT:

DESCRIPTION: SUPERSTRUCTURE CORROSIVE (EXTREMELY AGGRESSIVE)
SUBSTRUCTURE CORROSIVE (EXTREMELY AGGRESSIVE)
LOCATION: COASTAL

MATERIALS:

THE FOLLOWING GENERAL MATERIAL REQUIREMENTS SHALL APPLY. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REFERENCED SPECIFICATIONS WHERE APPLICABLE.

STRUCTURAL STEEL:

STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH ASTM A709, GRADE 36 OR AS DETAILED IN THE PLANS. STRUCTURAL STEEL SHALL BE PAINTED OR GALVANIZED AS DETAILED IN THE PLANS.

STRUCTURAL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 460 OF THE STANDARD SPECIFICATIONS.

BOLTS:

WHERE NOTED, BOLTS FOR FASTENING OF MACHINERY COMPONENTS SHALL BE ASTM A-325 TURNED BOLTS, MACHINED TO AN ANSI B46.1 SURFACE FINISH OF 63 MICROINCHES AND AN ANSI B4.1 LC-6 FIT. BOLTS SHALL BE PROVIDED WITH A POSITIVE MEANS OF NUT RESTRAINT (BY COTTER PIN, SET SCREW, ETC.) OR SHALL BE SUPPLIED WITH DOUBLE NUTS.

BOLTS FOR STRUCTURAL STEEL CONNECTIONS SHALL BE 3/4"Ø ASTM A325 TYPE 1, HIGH STRENGTH BLACK BOLTS UNLESS OTHERWISE NOTED. ALL BOLTED CONNECTIONS ARE FRICTION TYPE.

INSTALLATION OF BOLTS SHALL BE IN ACCORDANCE WITH SECTION 460 OF THE STANDARD SPECIFICATIONS.

REINFORCING STEEL:

REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. ALLOWABLE TENSILE STRESS = 24,000 PSI. REINFORCING STEEL SHALL BE UNCOATED. ALL DIMENSIONS SHOWN ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN FROM FACE OF CONCRETE TO OUTSIDE EDGE OF BAR. REINFORCING DETAIL DIMENSIONS ARE OUT-TO-OUT OF BARS.

PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH SECTION 415 OF THE STANDARD SPECIFICATIONS.

CONCRETE:

ITEM	CONCRETE CLASS (FDOT)	MIN. 28-DAY COMP. STRENGTH (PSI)	MAX. COMP. STRESS (PSI)	DESIGN MODULUS OF ELASTICITY
DECK SLABS, APPROACH SLABS, CONTROL PLATFORM AND OTHER SUPERSTRUCTURE DETAILS	IV	f _c = 5,500 *	f _c = 2,200	3,900
SUBSTRUCTURE COMPONENTS	IV	f _c = 5,500 *	f _c = 2,200	3,900
CONCRETE COUNTERWEIGHT	II	f _c = 3,400	f _c = 1,400	3,000

* ACTUAL DESIGN WAS BASED ON 3,400 PSI
** ASSUMES FLORIDA LIMESTONE AGGREGATE

CONCRETE SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 346 OF THE SUPPLEMENTAL SPECIFICATIONS.

CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 400 OF THE STANDARD SPECIFICATIONS.

PLATFORM GRATING:

PLATFORM GRATING SHALL BE PRESSURE LOCKED RECTANGULAR DESIGN, TYPE B, AS MANUFACTURED BY IKG INDUSTRIES OR AN APPROVED EQUAL. MATERIAL TO BE ASTM A-569 STEEL. MAIN BARS TO BE 1 1/2" X 1/8" SPACED 1 3/16" CENTER TO CENTER. CROSS BARS TO BE OF RECTANGULAR CROSS SECTION, FLUSH TOP AND SPACED 4 INCHES CENTER TO CENTER. MAIN BARS AND CROSS BARS TO BE SLOTTED AT THEIR INTERSECTIONS SO AS NOT TO REMOVE EXCESSIVE MATERIAL FROM THE LOAD SUSTAINING MEMBERS. MAIN BARS TO BE DOVETAIL SLOTTED AND HAVE THEIR SLOTS SOLIDLY FILLED BY THE CROSS BARS. GRATING SHALL BE BOLTED TO SUPPORTING MEMBERS WITH FASTENERS SUPPLIED BY THE MANUFACTURER. FINISH SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. GRATING SHALL WEIGH APPROXIMATELY 7.6 LB/SQ FT.

SIDEWALK PLATE:

SIDEWALK PLATE SHALL BE 3/8" ALUMINUM TREAD PLATE OF ALUMINUM ALLOY 6061-T6. ALUMINUM: f_y = 35,000 psi, f_o = 15,000 psi. THE CONTACT SURFACES BETWEEN THE ALUMINUM PLATE AND STEEL MEMBERS SHALL BE COATED WITH CHROMATE PAINT. THE ALUMINUM PLATE SHALL BE FASTENED TO THE STEEL MEMBERS WITH 1/2" DIAMETER COUNTERSUNK STAINLESS STEEL BOLTS AT 2'-0" SPACING ALONG THE MEMBER.

STEEL SHEET PILES:

STEEL SHEET PILES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 328 (f_y = 38,500 psi).

ALLOWABLE DESIGN STRESS = 25,000 psi.

STEEL SHEET PILES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION A455 OF THE SUPPLEMENTAL SPECIFICATIONS.

PAINTING:

PAINT ON THE EXISTING STRUCTURE CONTAINS LEAD. THE EXISTING STRUCTURE SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH SECTION 561 OF THE TECHNICAL SPECIAL PROVISIONS.

NEW STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH SECTION 561 OF THE TECHNICAL SPECIAL PROVISIONS.

GALVANIZING:

ALL LADDERS, PLATFORMS, HANDRAILS, AND STRUCTURAL AND MISCELLANEOUS STEEL AS DESIGNATED IN THE PLANS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.

ALL NUTS, BOLTS, WASHERS, ANCHOR BOLTS, AND MISCELLANEOUS CONNECTION PIECES FOR THE ABOVE ITEMS SHALL BE HOT DIP GALVANIZED WITH ASTM A153.

PIPE HANDRAIL:

RAILS AND POSTS SHALL BE MADE OF SCHEDULE 40 STEEL PIPE OF THE SIZE SHOWN IN THE PLANS AND SHALL MEET THE REQUIREMENTS OF ASTM A53 FOR STANDARD WEIGHT PIPE. POSTS SHALL BE ATTACHED TO SUPPORTING MEMBERS BY DETAILS SHOWN IN THE PLANS AT INTERVALS SHOWN IN THE PLANS. RAIL TO POST CONNECTIONS SHALL BE MADE BY ELECTRIC ARC WELDING. FINISH SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.

STEEL PILING:

STEEL PILES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. SEE THE FOUNDATION LAYOUT SHEET FOR PILE LOAD INFORMATION.

STEEL PILES SHALL BE INSTALLED IN ACCORDANCE WITH SECTION A455 OF THE SUPPLEMENTAL SPECIFICATIONS AND THESE PLANS.

LUBRICATION:

PIPING FOR LUBRICATION SHALL BE ASTM B-43 BRONZE AND FITTINGS SHALL BE ASTM B-62 BRONZE.

LUBRICATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH SECTION 465 OF THE TECHNICAL SPECIFICATIONS.

WELDING:

EXCEPT AS NOTED IN THE PLANS OR SPECIFICATIONS, FIELD WELDING IS PROHIBITED. ALL WELDING AND NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND THE ANSI/AASHTO/AWS D1.5-92 BRIDGE WELDING CODE. UNLESS OTHERWISE NOTED, ALL WELDS SHALL BE 5/16" CONTINUOUS FILLET WELDS.

WELD INSPECTION:

WELDS ARE TO BE INSPECTED BY NON DESTRUCTIVE METHODS AS REQUIRED BY THE SPECIFICATIONS.

MAINTENANCE OF TRAFFIC PLANS:

REHABILITATION MUST BE COORDINATED WITH THE MOT PLAN. SEE PLANS AND SPECIFICATIONS FOR DETAILS.

BRIDGE TENDER:

THE CONTRACTOR SHALL HAVE A QUALIFIED BRIDGE TENDER ON CALL DURING ALL PHASES OF CONSTRUCTION FOR WHICH THE BRIDGE IS OPERATIONAL.

OPERATION TESTING:

OPERATIONAL TESTING OF REHABILITATED MACHINERY IS REQUIRED, SEE TECHNICAL SPECIAL PROVISIONS FOR DETAILS.

BASIS OF PAYMENT:

FOR A DETAILED DEFINITION OF THE BASIS OF PAYMENT, SEE EACH WORK ITEM IN THE SPECIFICATIONS.

25-10000 (REV. 07/97) 15-10000 REV. PRODUCED BY DSA CAD SYSTEM

REVISIONS		REVISIONS		SEAL:	<table border="1" style="font-size: small;"> <tr><td>Drawn by</td><td>KTL</td><td>5-95</td></tr> <tr><td>Checked by</td><td>MRC</td><td>5-95</td></tr> <tr><td>Designed by</td><td>MRC</td><td>5-95</td></tr> <tr><td>Checked by</td><td>TJF</td><td>5-95</td></tr> <tr><td>Approved by</td><td>T.J. FARRELL</td><td></td></tr> </table>	Drawn by	KTL	5-95	Checked by	MRC	5-95	Designed by	MRC	5-95	Checked by	TJF	5-95	Approved by	T.J. FARRELL		DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607	PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	SHEET
Drawn by	KTL	5-95																						
Checked by	MRC	5-95																						
Designed by	MRC	5-95																						
Checked by	TJF	5-95																						
Approved by	T.J. FARRELL																							
Date	By	Date	By				GENERAL NOTES	A-2																
							PROJECT NAME: BECKETT BRIDGE REPAIRS																	


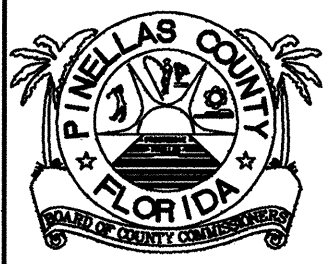
Timothy J. Farrell

BID ITEM NOTES:

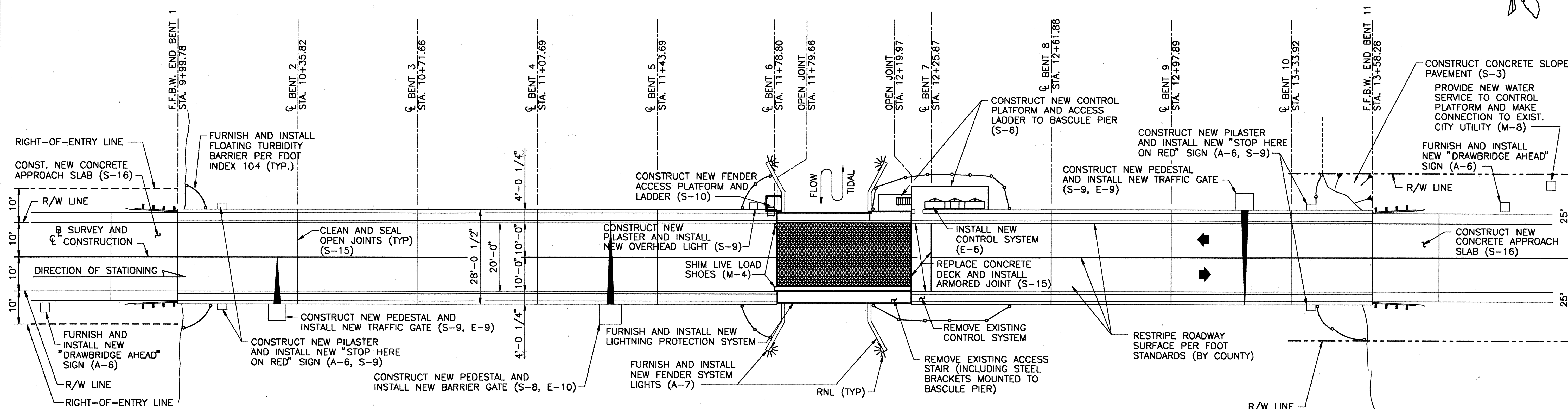
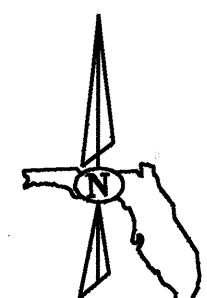
1. PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL PAY (BID) ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAY (BID) ITEMS.
2. FOR MAINTENANCE OF TRAFFIC NOTES, SEE "TRAFFIC CONTROL PLANS."
3. THE TOTAL PLAN AREA OF THE APPROACH SLABS REQUIRED IS 115 S.Y. FOR DETAILS, SEE "APPROACH SLAB DETAILS."
4. COST OF SIDEWALK PLATE SHALL BE INCLUDED IN ITEM NO. 460-2-5, STRUCTURAL STEEL (BASCULE LEAVES).
5. PAYMENT FOR CONCRETE TO FILL BASCULE LEAF GRATING SHALL BE INCLUDED IN ITEM NO. 400-4-4, CONCRETE (SUPERSTRUCTURE).

SUMMARY OF QUANTITIES				
PAY ITEM NO.	PAY ITEM	UNIT	ORIGINAL QUANTITY	FINAL QUANTITY
101-1	MOBILIZATION	LS	1	
102-1	MAINTENANCE OF TRAFFIC (180 CONSTRUCTION DAYS)	LS	1	
102-74-1	BARRICADE (TEMPORARY-TYPE I, II, VP & DRUM)	ED	574	
102-74-2	BARRICADE (TEMPORARY-TYPE III) (6)	ED	1,680	
102-75	CONSTRUCTION SIGNS (TEMPORARY-POST MOUNTED)	ED	2,534	
102-77	HIGH INTENSITY FLASHING LIGHTS (TEMPORARY-TYPE B)	ED	2,428	
102-90	BRIDGE OPERATOR	DA	7	
102-96	TEMPORARY REGULATORY SIGNS (POST MOUNTED)	ED	600	
102-99	SIGN VARIABLE MESSAGE (TEMPORARY)	ED	260	
104-11	TURBIDITY BARRIER FLOATING	LF	440	
350-72	CLEANING AND RESEALING DECK JOINTS	LF	252	
360-1	APPROACH SLABS CONCRETE	EA	2	
400-2-6	CONCRETE CLASS II (COUNTERWEIGHT)	CY	18.0	
400-4-4	CONCRETE CLASS IV (SUPERSTRUCTURE)	CY	10.3	
400-135	INJECT AND SEAL CRACKS	LF	10	
401-70-1	RESTORE SPALLED AREAS	CF	10	
415-1-4	REINFORCING STEEL (SUPERSTRUCTURE)	LB	3,145	
455-7-5	PILING FURNISHED (HP 14x73)	LF	428	
455-8-5	PILING DRIVEN (HP 14x73)	LF	428	
455-133	SHEET PILING STEEL (FURNISHED & INSTALLED)	SF	853	
456-1	PILE ENCAPSULATION	LF	40	
460-2-1	STRUCTURAL STEEL (CARBON)	LB	25,500	
460-2-5	STRUCTURAL STEEL (BASCULE LEAVES)	LB	14,000	
460-3-101	MACHINERY & CASTINGS (F&I)(SPEED REDUCER AND GEAR TRAIN)	LS	1	
460-3-106	MACHINERY & CASTINGS (RECONDITION)(COMPONENTS)	LS	1	
460-3-108	MACHINERY AND CASTINGS (F&I)(LIVE LOAD SHOES)	LS	1	
460-3-401	MACHINERY AND CASTINGS (REMOVE)(GEAR TRAIN)	LS	1	
460-3-506	MACHINERY & CASTINGS (ALIGN)(COMPONENTS)	LS	1	
460-3-810	MACHINERY AND CASTINGS (RECONDITION) (FLAT TRACKS)	LS	1	
461-6	ACCESS LADDERS, PLATFORMS, HANDRAILS	LB	3,900	
460-7-42	EXPANSION JOINT	LF	20	
460-101-121	HYDRAULIC SYSTEM (F&I)(PERMANANT SYSTEM)	LS	1	
460-101-124	HYDRAULIC SYSTEM (F&I) (SPAN LOCK)	EA	2	
460-121-50	COUNTERWEIGHT MOVABLE BRIDGE (BALANCE)	EA	1	
465-71-1	MOVABLE BRIDGE FUNCTIONAL CHECKOUT	LS	1	
508-70-1	ELECTRICAL SYSTEM (F&I)	LS	1	
508-70-4	EXISTING ELECTRICAL SYSTEM (REMOVE)	LS	1	
508-73-1	SUBMARINE CABLE ASSEMBLY (F&I)	LF	85	
508-76-1	SPAN MOTORS AND AUXILLARY (F&I)	LS	1	
508-79-1	CONTROL CONSOLE (F&I)	EA	1	
508-80-1	BRAKE SYSTEM (F&I)	EA	2	
508-81-1	LIMIT SWITCHES (F&I) (LIMIT AND SEATING)	EA	8	
508-82-1	CONTROL PANEL / MOTOR CONTROL (F&I)	EA	1	
510-1	NAVIGATION LIGHTS	LS	1	
512-1	TENDER FACILITIES AND EQUIPMENT	LS	1	
524-2-1	SLOPE PAVEMENT CONCRETE	SY	18	
560-1	PAINT STRUCTURAL STEEL	TN	34	
712-70-111	MOVABLE BRIDGE TRAFFIC SIGNALS	EA	6	
712-71-13	MOVABLE BRIDGE TRAFFIC GATES (F&I)	AS	2	
712-72-122	MOVABLE BRIDGE BARRIER GATE (F&I)	AS	1	
750-711-100	LIGHTNING PROTECTION SYSTEM (POINT DISCHARGE) (F&I)	EA	1	
750-711-332	LIGHTNING PROTECTION (SURGE SUPPRESSION) (F&I)	LS	1	
900-1	OFFICE FOR THE ENGINEER	LS	1	

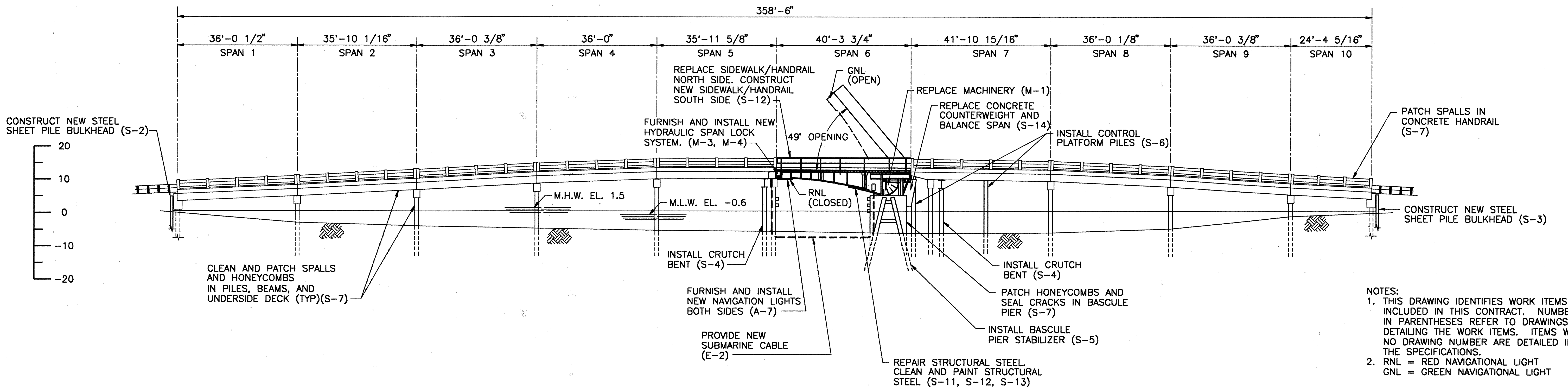
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Drawn by	KTL	5-95																								
Checked by	MRC	5-95																								
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Checked by	BGW	5-95																								
Approved by	T.J. FARRELL																									
Date	By	Description	Date	By	Description	SUMMARY OF QUANTITIES	A-3																			
									PROJECT NAME:	BECKETT BRIDGE REPAIRS																

Timothy J. Farrell



PLAN



ELEVATION

- NOTES:
1. THIS DRAWING IDENTIFIES WORK ITEMS INCLUDED IN THIS CONTRACT. NUMBERS IN PARENTHESES REFER TO DRAWINGS DETAILING THE WORK ITEMS. ITEMS WITH NO DRAWING NUMBER ARE DETAILED IN THE SPECIFICATIONS.
 2. RNL = RED NAVIGATIONAL LIGHT
GNL = GREEN NAVIGATIONAL LIGHT

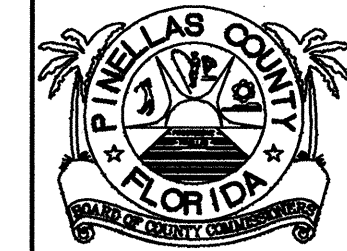
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REVISIONS		REVISIONS	
Date	By	Date	By

Name	Date
Drawn by CLM	5-95
Checked by TJF	5-95
Designed by MRC	5-95
Checked by TJF	5-95
Approved by T.J. FARRELL	



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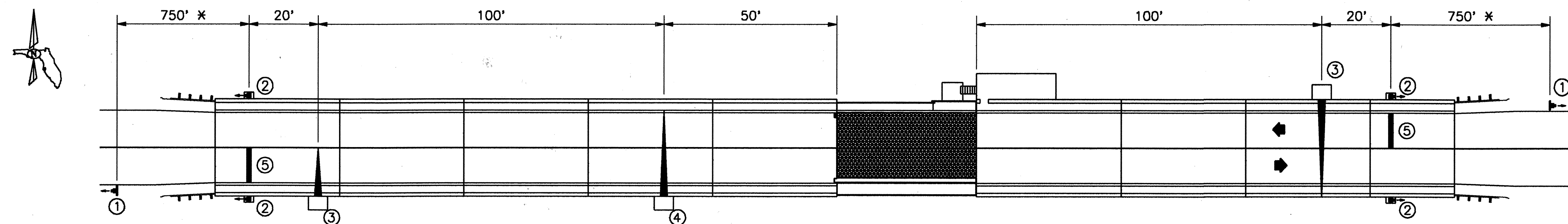


PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

BRIDGE NO. 154000	SHEET TITLE: KEY SHEET	SHEET: A-4
	PROJECT NAME: BECKETT BRIDGE REPAIRS	

Timothy J. Farrell

BRIDGE MOUNTS

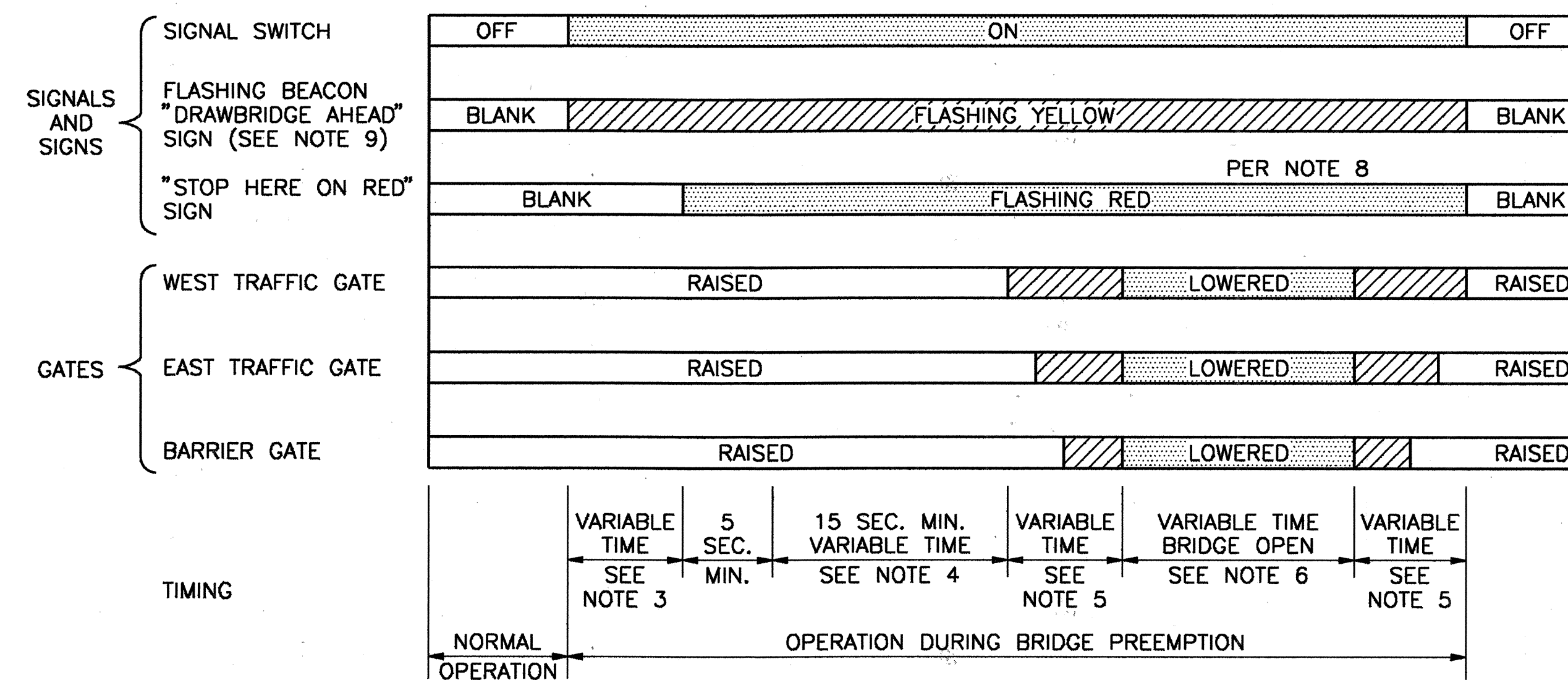


* = FIELD CONDITIONS MAY REQUIRE ADJUSTMENT OF THIS STANDARD DISTANCE.

PLAN

LEGEND

- ① "DRAWBRIDGE AHEAD" SIGN
- ② "STOP HERE ON RED" SIGN
- ③ TRAFFIC GATE
- ④ BARRIER GATE
- ⑤ 24" THERMOPLASTIC STOP BAR



SEQUENCE CHART

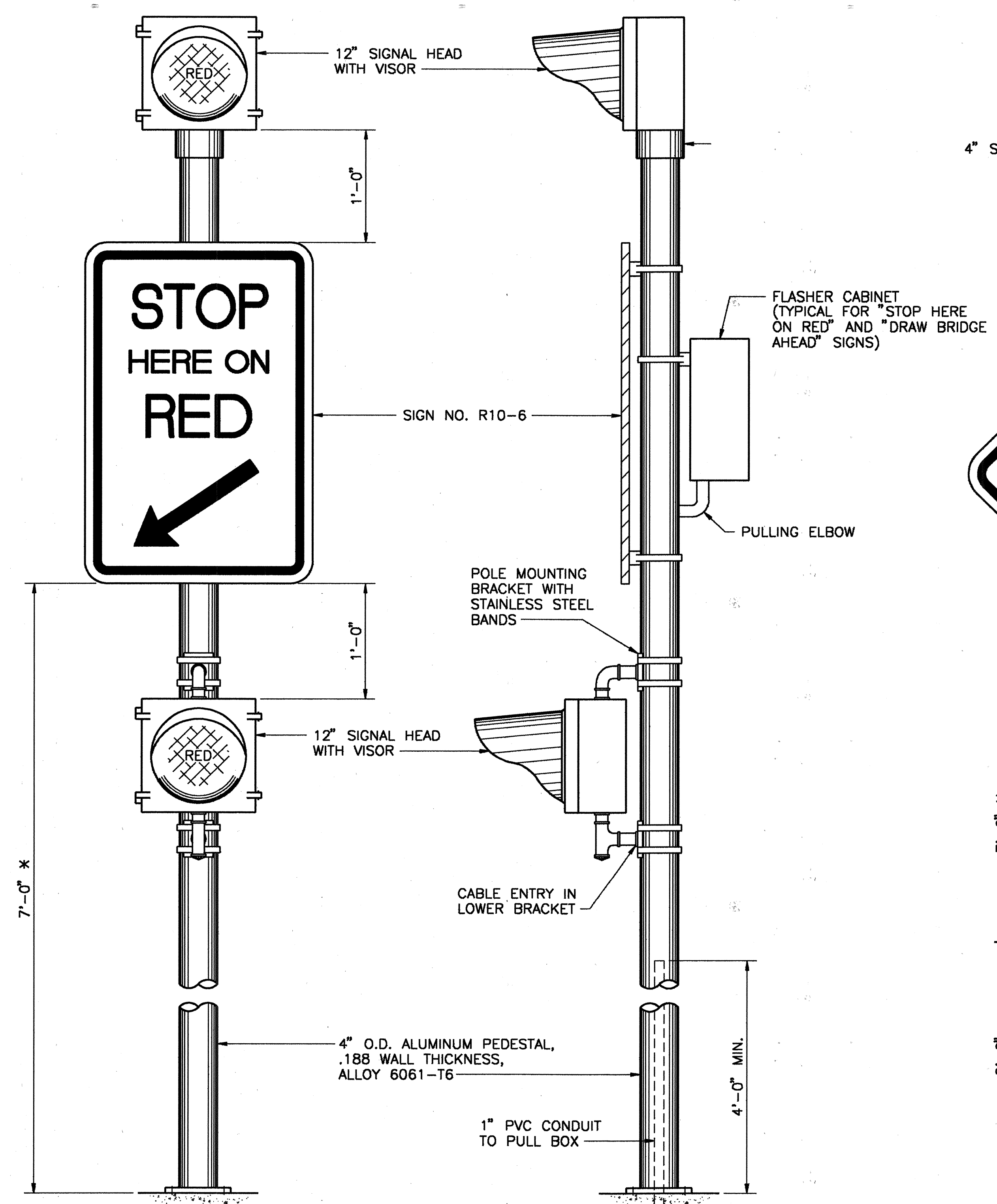
NOTES:

1. THE OPERATOR FOR THIS BRIDGE IS ON CALL.
2. A KEY LOCK SWITCH SHALL BE INSTALLED TO OVERRIDE EACH TIMING INTERVAL IN CASE OF MALFUNCTION.
3. THE TIME BETWEEN BEGINNING OF FLASHING YELLOW ON "DRAWBRIDGE AHEAD" SIGN AND THE CLEARANCE OF THE TRAFFIC SIGNAL TO RED, OR BEGINNING OF FLASHING RED, SHOULD NOT BE LESS THAN THE TRAVEL TIME OF A PASSENGER CAR, FROM THE SIGN LOCATION TO THE STOP LINE, TRAVELING AT THE 85 PERCENTILE APPROACH SPEED.
4. BEGINNING OF OPERATION OF DRAWBRIDGE GATES SHALL NOT BE LESS THAN 15 SECONDS AFTER STEADY RED OR 20 SECONDS AFTER FLASHING RED (ACTUAL TIME MAY BE DETERMINED BY THE BRIDGE TENDER).
5. TIME OF GATE LOWERING AND RAISING IS DEPENDENT UPON GATE TYPE.
6. TIME OF BRIDGE OPENING IS DETERMINED BY THE BRIDGE TENDER.
7. EACH GATE SHALL BE OPERATED BY A SEPARATE SWITCH.
8. ON EACH APPROACH, ALL FOUR RED SIGNALS SHALL BE ON THE SAME TWO CIRCUIT FLASHER, WITH THE TWO TOP SIGNALS ON ONE CIRCUIT AND THE TWO BOTTOM SIGNALS ON THE ALTERNATELY FLASHING CIRCUIT.
9. A "DRAWBRIDGE AHEAD" SIGN IS REQUIRED FOR BOTH TYPES OF SIGNAL OPERATION. HOWEVER, A FLASHING BEACON SHALL BE ADDED TO THE SIGN WHEN PHYSICAL CONDITIONS PREVENT A DRIVER TRAVELING AT THE 85 PERCENT APPROACH SPEED FROM HAVING CONTINUOUS VIEW OF AT LEAST ONE SIGNAL INDICATION FOR APPROXIMATELY 10 SECONDS.
10. REQUIREMENTS ON GATE INSTALLATION ARE CONTAINED IN SECTION 4E-14 THROUGH 4E-17 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS REVISED BY OFFICIAL RULINGS, VOLUME VII RULING SG 67.

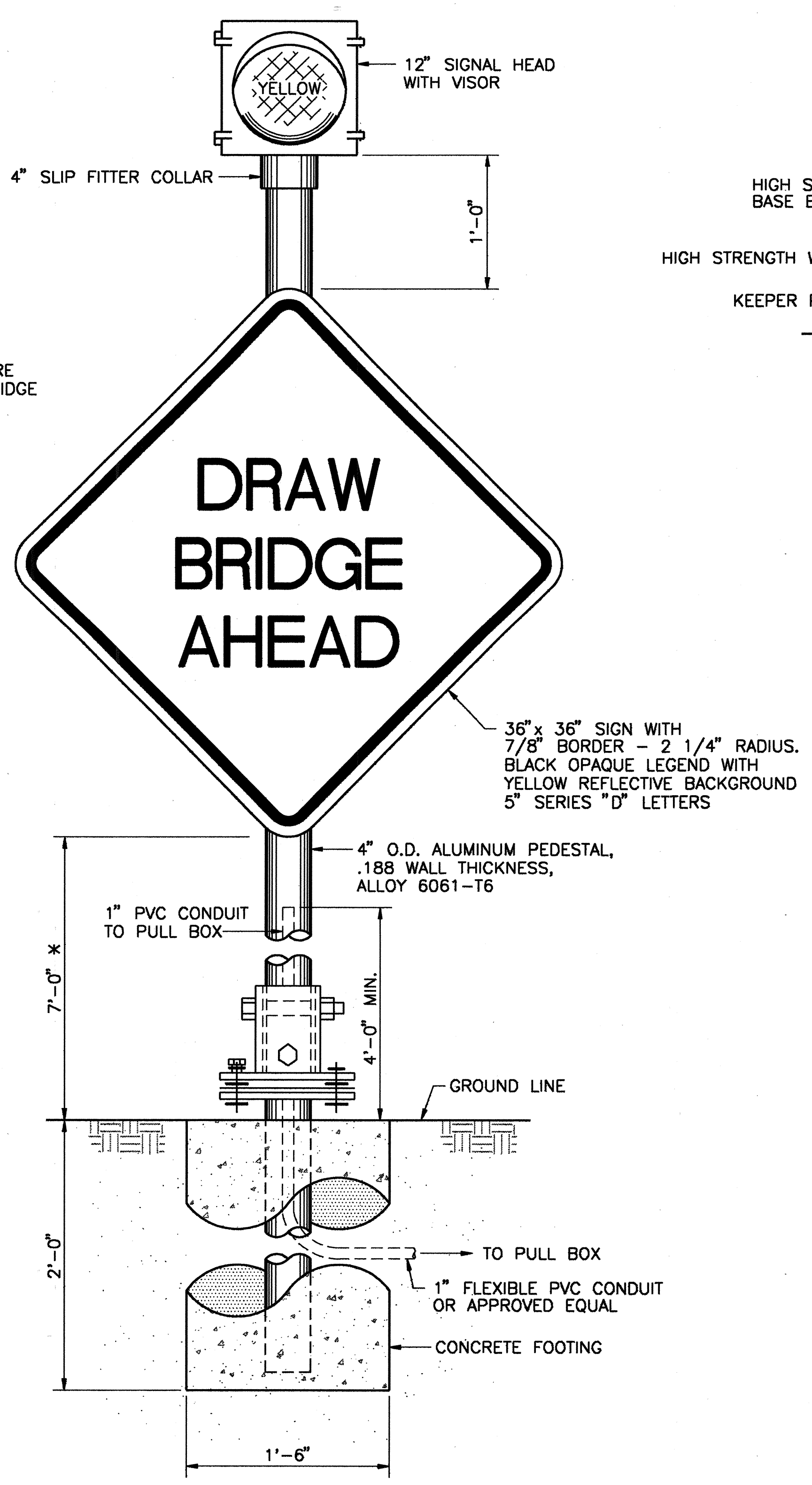
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REVISIONS			REVISIONS			SEAL:	Drawn by	Name	Date		DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607		PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	SHEET		
Date	By	Description	Date	By	Description		Checked by	MRC	5-95					A-5	TRAFFIC CONTROL DEVICES FOR MOVABLE SPAN BRIDGE SIGNALS	PROJECT NAME: BECKETT BRIDGE REPAIRS	
						Designed by	TJF	5-95									
						Checked by	RMC	5-95									
						Approved by	T. J. FARRELL										

Timothy J. Farrell

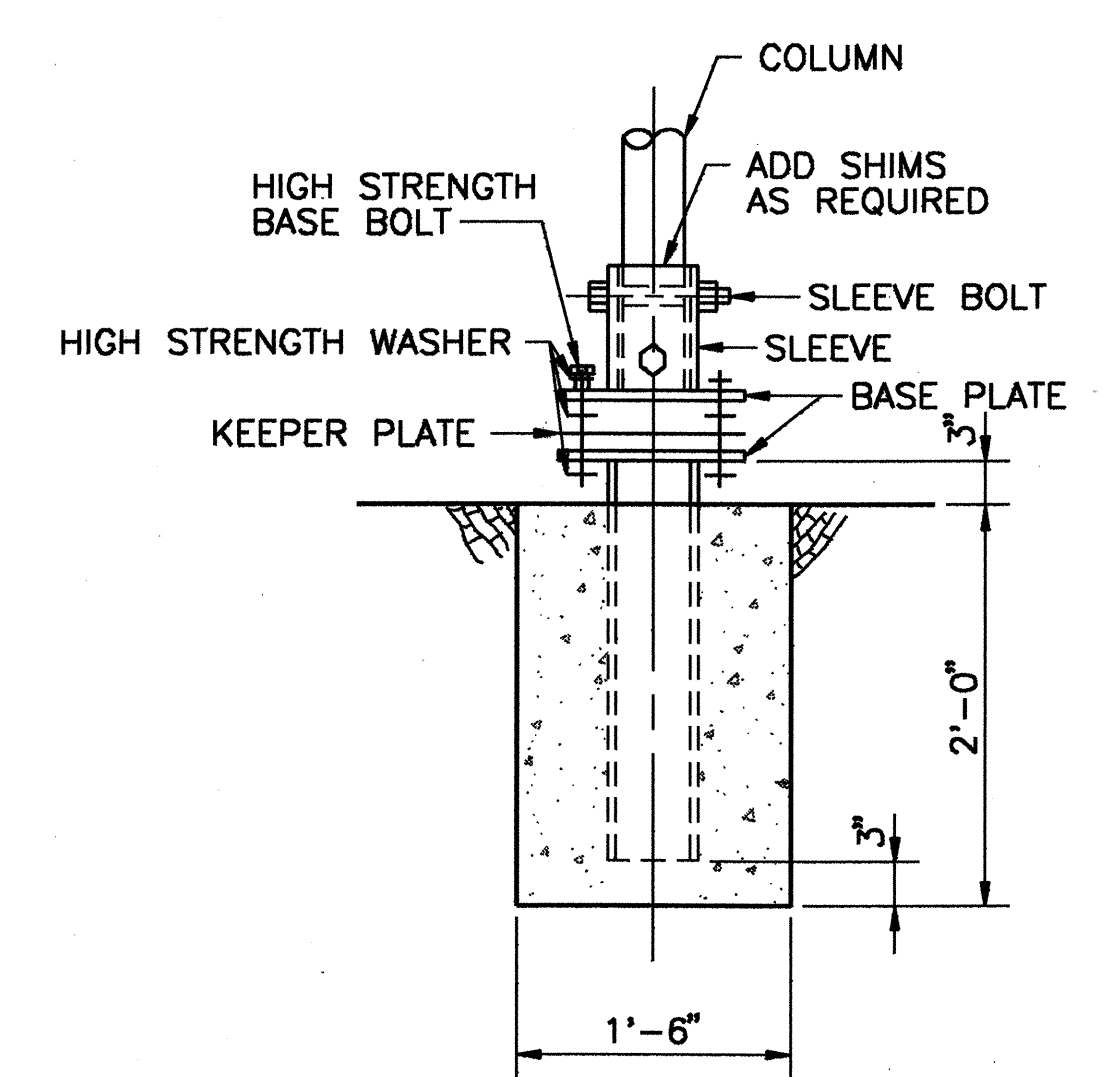


"STOP HERE ON RED" SIGN
(SEE PLANS FOR BRIDGE MOUNTING DETAILS)

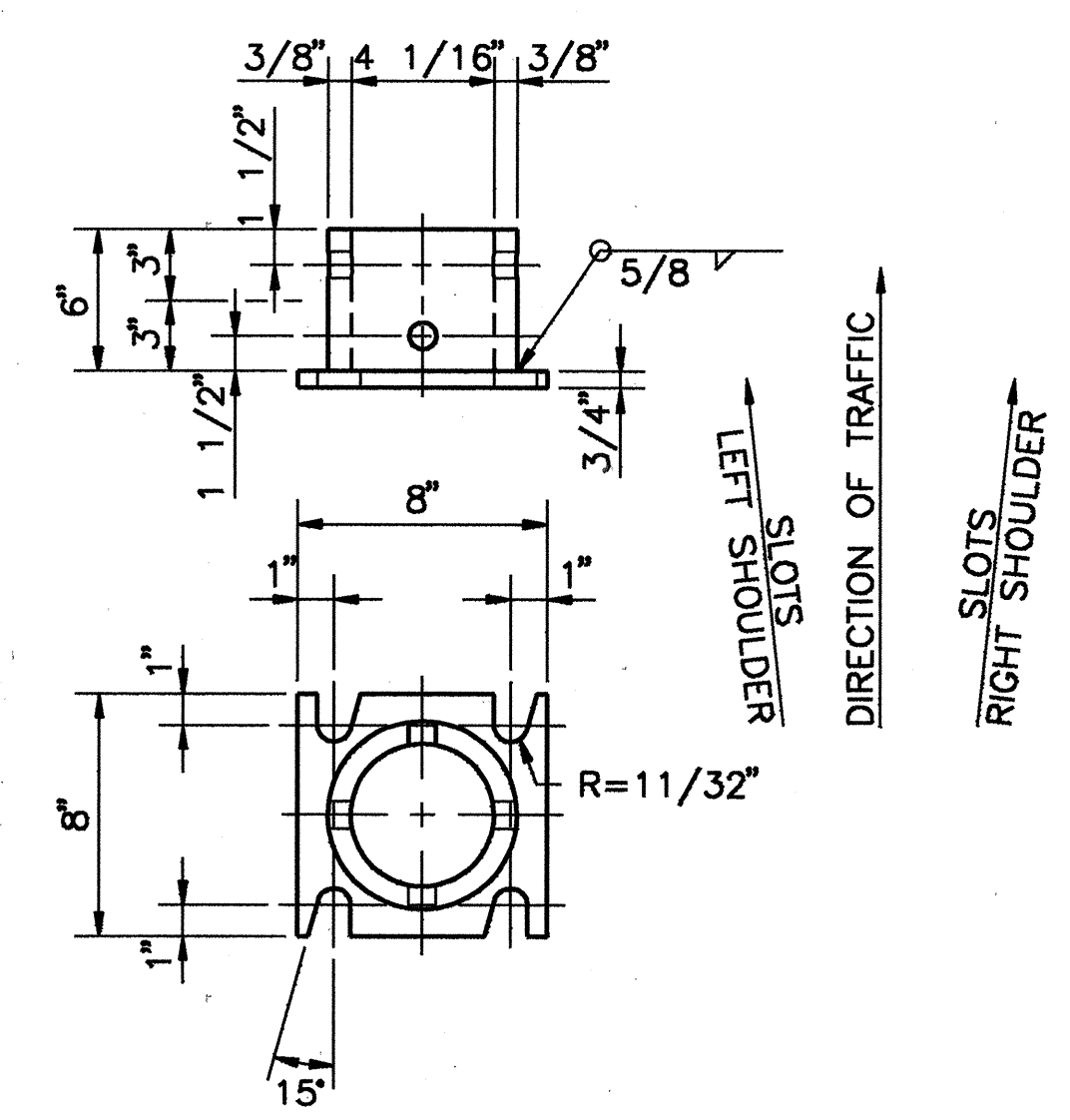


"DRAW BRIDGE AHEAD" SIGN

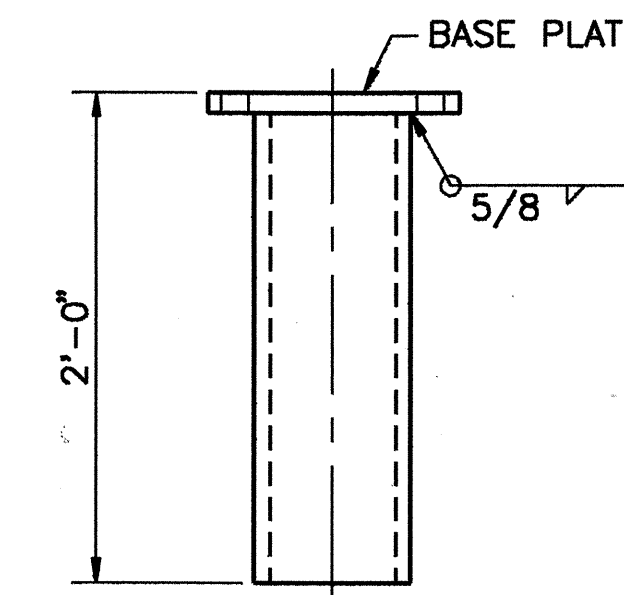
* = MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT. HORIZONTAL DISTANCE BETWEEN EDGE OF PAVEMENT AND INSIDE EDGE OF SIGN WILL VARY WITH CONDITION AT JOB SITE.



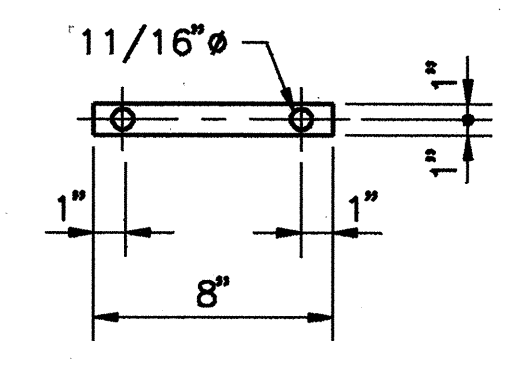
BASE DETAIL



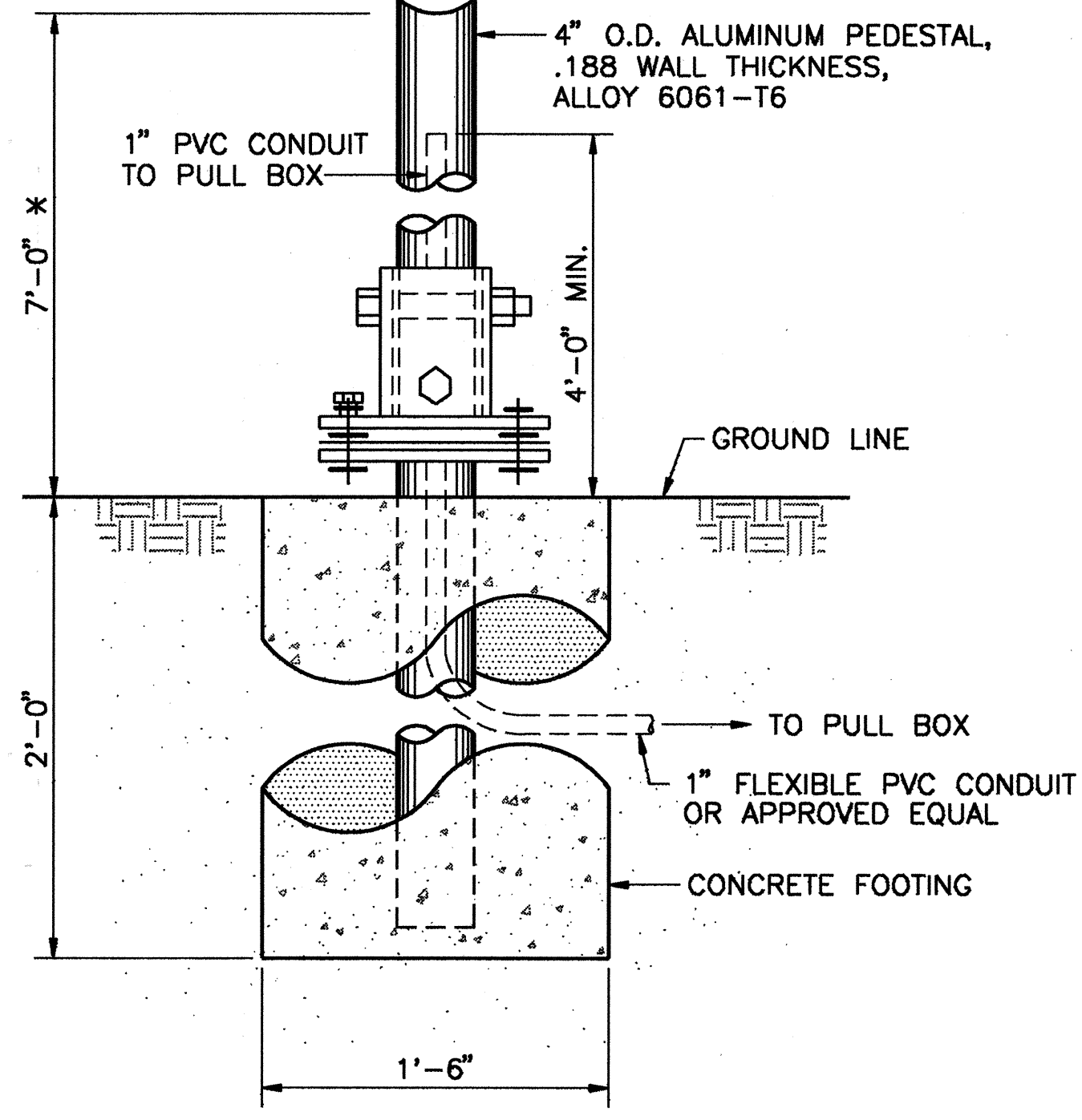
SLEEVE AND BASE PLATE DETAILS



STUB DETAIL



BOLT KEEPER DETAIL



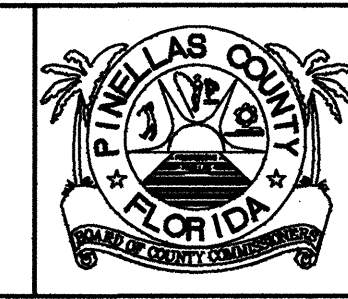
SIGN POST BREAK AWAY DETAILS

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Names	Dates

DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
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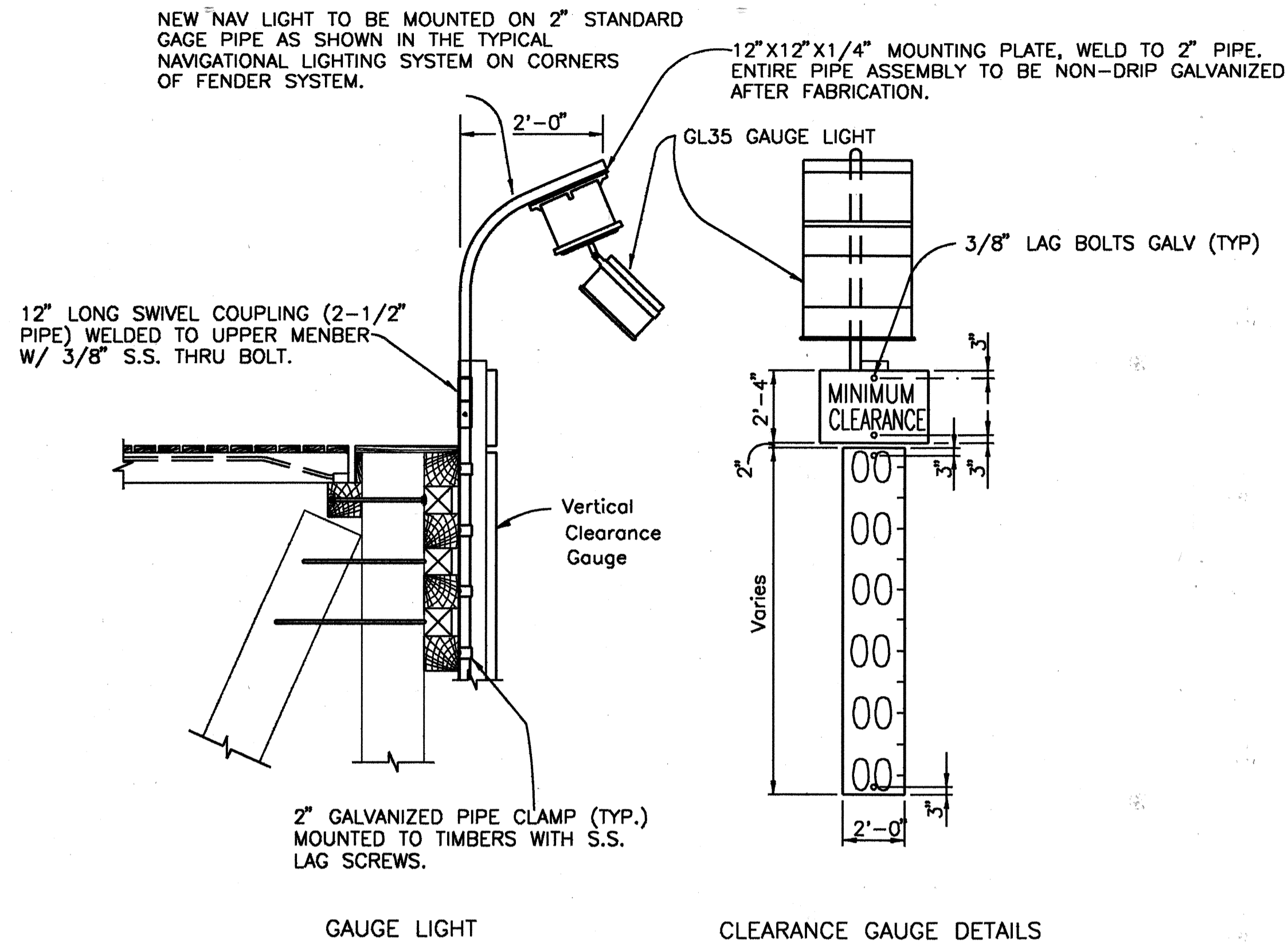


PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

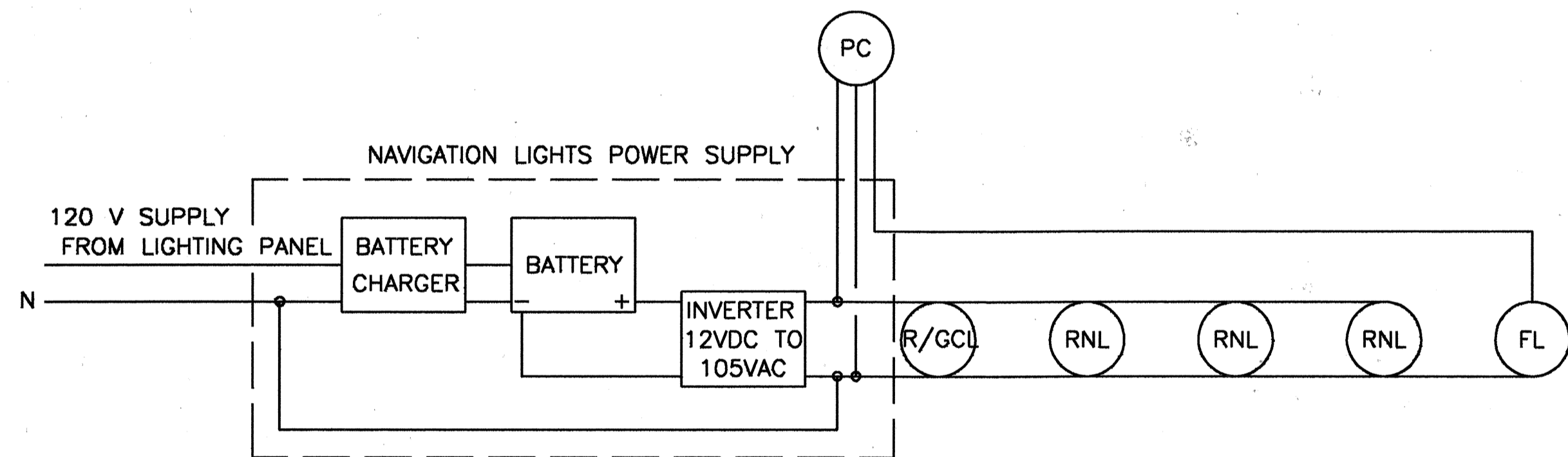
SHEET TITLE:
TRAFFIC CONTROL DEVICES FOR MOVABLE SPAN BRIDGE SIGNALS
 PROJECT NAME:
BECKETT BRIDGE REPAIRS

SHEET
A-6

Timothy J. Farrell



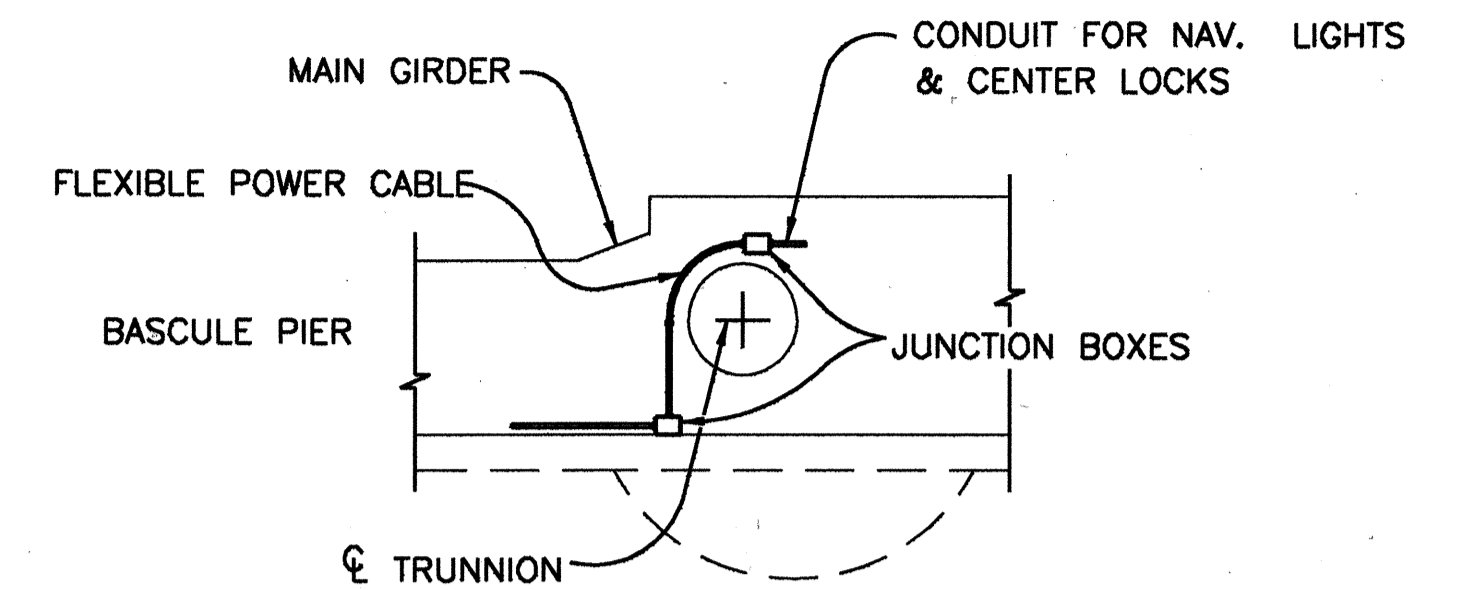
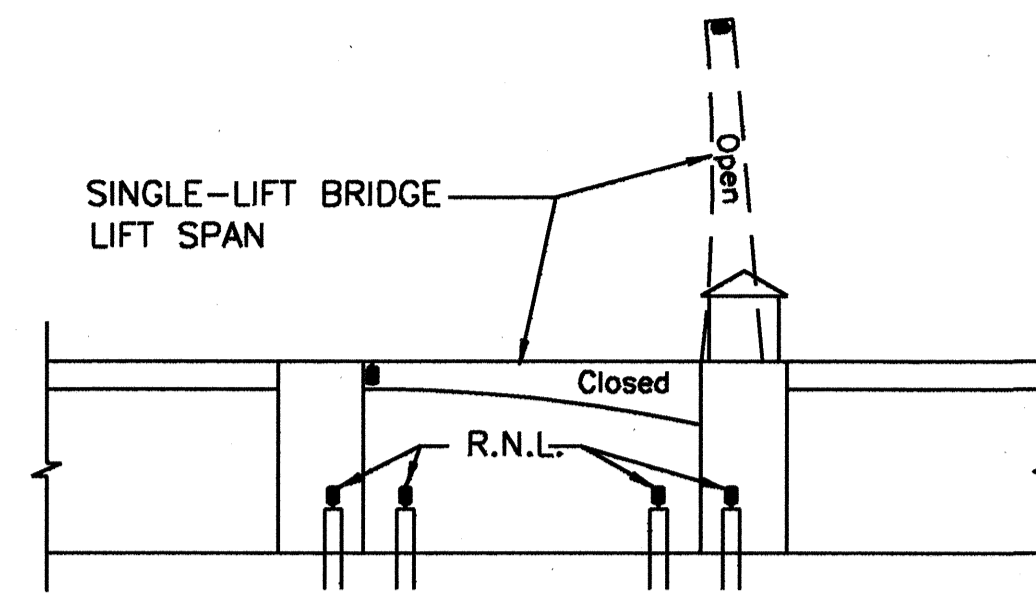
NUMBERED CLEARANCE GAUGE TO BE FURNISHED BY THE CONTRACTOR. CONTRACTOR SHALL VERIFY IN FIELD THAT THE CLEARANCE OF THE BRIDGE AGREES WITH READINGS OF TARGET. IF NOT, THE TARGET WILL BE RESET.



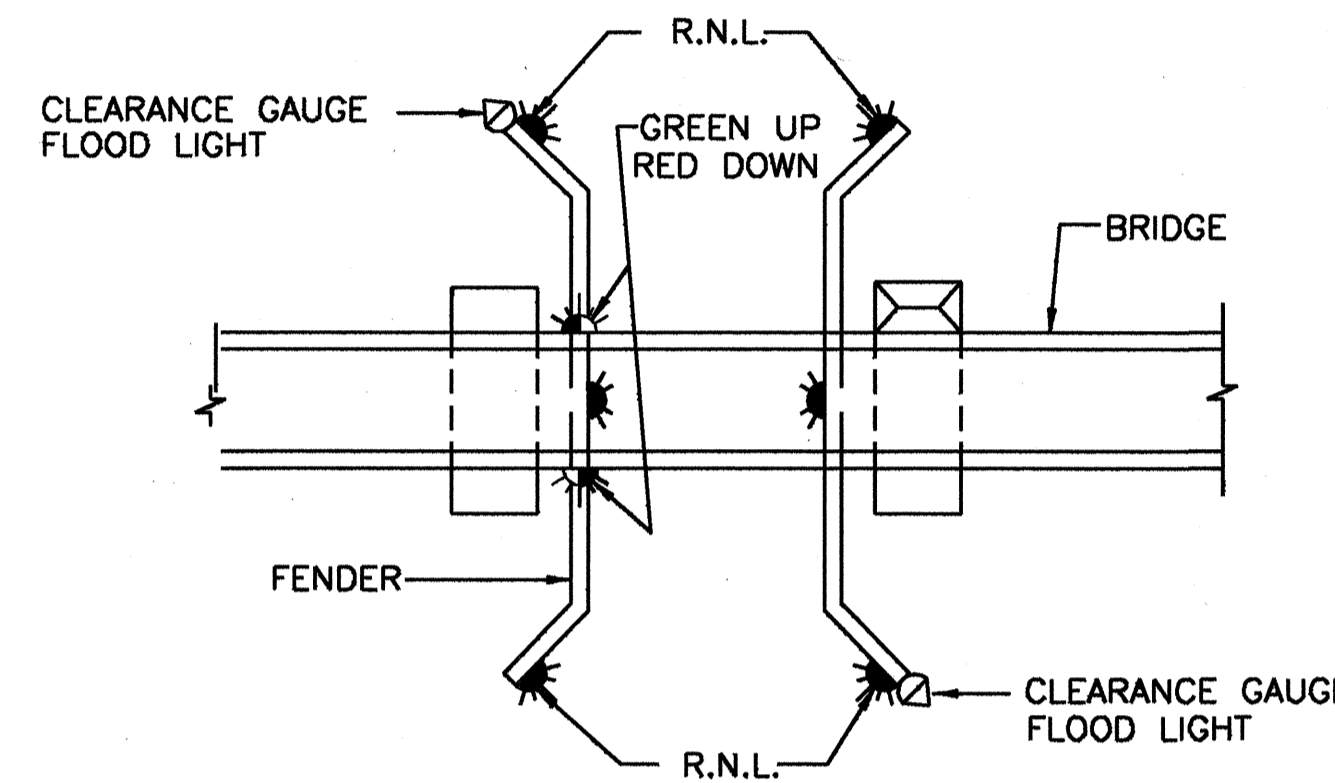
1. OUTPUT VOLTAGE SHALL BE ADJUSTABLE BETWEEN 120 VOLTS.
2. BATTERY SHALL BE SIZED FOR 12 HOURS OF FULL, CONTINUOUS LOAD.
3. INVERTER SHALL BE SIZED FOR 1.25 TIMES THE CALCULATED LOAD.
4. BATTERY CHARGER SHALL BE RATED TO FULLY RECHARGE BATTERIES IN 12 HOURS.
5. EQUIP EACH NAV. LIGHT CIRCUIT WITH A LAMP-OUT INDICATOR.

R/GCL - RED/GREEN CHANNEL LIGHT RNL - RED NAVIGATION LIGHT
 FL - CLEARANCE GAUGE FLOODLIGHT PC - PHOTOCELL

TYPICAL LAYOUT OF NAVIGATION LIGHTS FOR BASCULE BRIDGE



BASCULE BRIDGE FLEXIBLE CABLE ARRANGEMENT



TYPICAL BASCULE BRIDGE NAVIGATION LIGHT SYSTEM SINGLE LEAF

NOTE: SEE FENDER SYSTEM DRAWINGS & CONTROL HOUSE DRAWINGS FOR THEIR ACTUAL CONFIGURATION & LOCATION.

NOTES FOR BASCULE BRIDGES

RED NAVIGATION LIGHT: 180°, 120 VOLT, 60 WATT, MINIMUM 155 MM FRESNEL LENS, VANDAL PROOF. LUMINOUS INTENSITY FOR HORIZONTAL BEAM 30 CANDELA (MIN.). VERTICAL DIVERGENCE AT 15 CD INTENSITY, 6" MAXIMUM. SHALL BE EQUIPPED WITH A DUAL LAMP AND TRANSFER RELAY OPTION AND BULBS RATED MINIMUM 32,000 HOURS EXTENDED LIFE @ 110 VOLTS. LANTERN SHALL BE MOUNTED ON A STAINLESS STEEL POST INCLUDING FITTINGS WITH A TOTAL HEIGHT OF 24" ABOVE FENDER.

RED/GREEN CHANNEL LIGHT: RED 180° LENS, GREEN 180° LENS, 120 VOLT, 60 WATT, MINIMUM 155 MM FRESNEL LENS. LUMINOUS INTENSITY FOR HORIZONTAL BEAM 30 CANDELA (MIN.). VERTICAL DIVERGENCE AT 15 CD INTENSITY, 6" MAXIMUM. SHALL BE EQUIPPED WITH A DUAL LAMP AND TRANSFER RELAY OPTION AND BULBS RATED MINIMUM 32,000 HOURS EXTENDED LIFE @ 110 VOLTS. EQUIP WITH A PIVOT MOUNT AND RETRIEVAL CHAIN SO THAT THE BASE CAN BE MOUNTED OUTSIDE OF BRIDGE BARRIER AND LANTERN CAN BE SERVICED BY REACHING OVER THE BARRIER FROM INSIDE. HANGER STEM SHALL BE LONG ENOUGH SO THAT LANTERN DOES NOT EXTEND BELOW THE BOTTOM OF THE GIRDER.

CLEARANCE GAUGE LIGHT: ANGLE OF ILLUMINATION DEPENDING ON FIXTURE CONTOUR. BALLAST WITH HIGH POWER FACTOR USING A 35 WATT HIGH PRESSURE SODIUM LAMP. ENCLOSURE TO BE NEMA 3R CAST ALUMINUM HOUSING WITH EPOXY FINISH ENAMEL. JUNCTION BOX SHALL BE HEAVY CAST ALUMINUM WITH HEAVY CAST COVER, ALL HARDWARE SHALL BE STAINLESS STEEL. FIXTURE SHALL BE B&B #GL-35-115V OR APPROVED EQUAL. VOLTAGE SHALL BE 115 VOLTS, 60 HZ.

NAVIGATION LIGHT SYSTEM SHALL COMPLY WITH THE LATEST EDITION OF THE CODE OF FEDERAL REGULATIONS, NAVIGATION AND NAVIGABLE WATERS, CFR 33 PART 118, BRIDGE LIGHTING AND OTHER SIGNALS.

THE NAVIGATION LIGHT SYSTEM SHALL HAVE ITS OWN ELECTRICAL SYSTEM, INDEPENDENT FROM OTHER LIGHTING SYSTEMS.

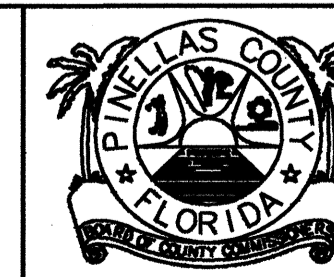
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REVISIONS			REVISIONS			SEAL:
Date	By	Description	Date	By	Description	

Drawn by	Name	Date
AEV	AEV	5-95
TJF	TJF	5-95
GMM	GMM	5-95
RMC	RMC	5-95
T.J. FARRELL	T.J. FARRELL	



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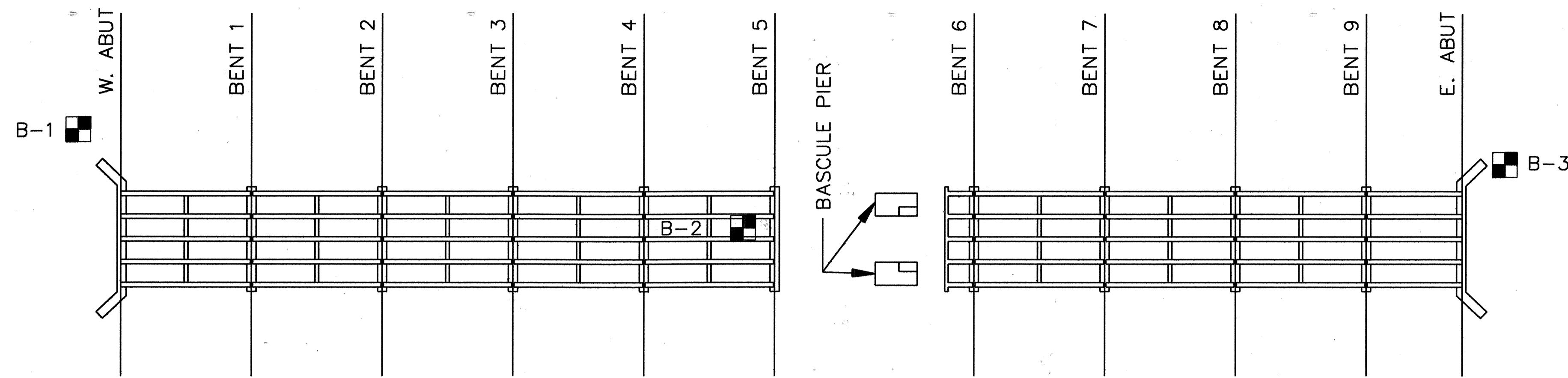


PINELLAS COUNTY
 DEPARTMENT OF
 PUBLIC WORKS

SHEET TITLE: NAVIGATION LIGHT SYSTEM DETAILS	SHEET
PROJECT NAME: BECKETT BRIDGE REPAIRS	

A-7

Rev. M. Moore



PLAN

LEGEND

- = SP, SP-SM and SP-SC, Sands and slightly clayey sands
- = CH, Inorganic clays of low plasticity
- = SC, Clayey sands and very sandy clays
- = LS, Limestone

GENERAL NOTES

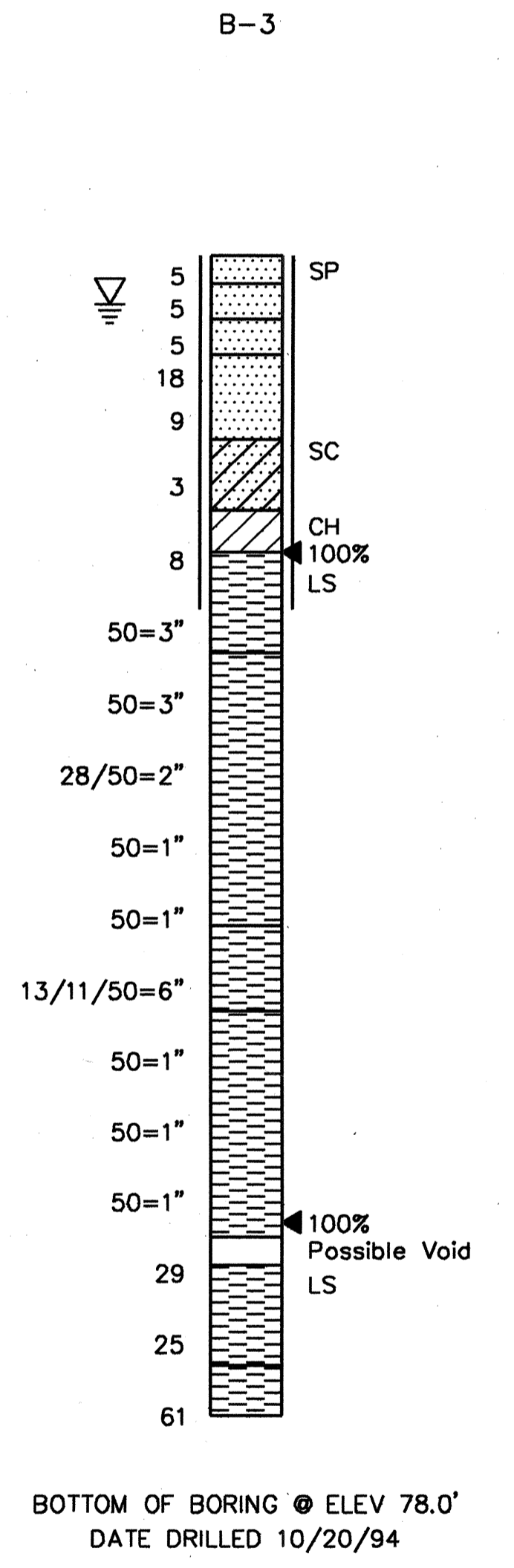
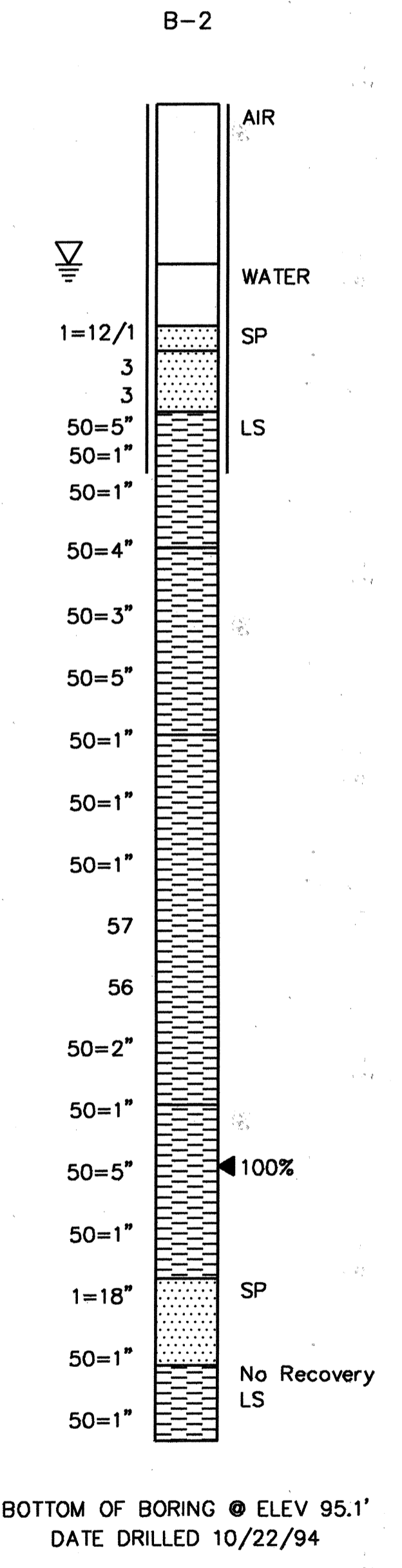
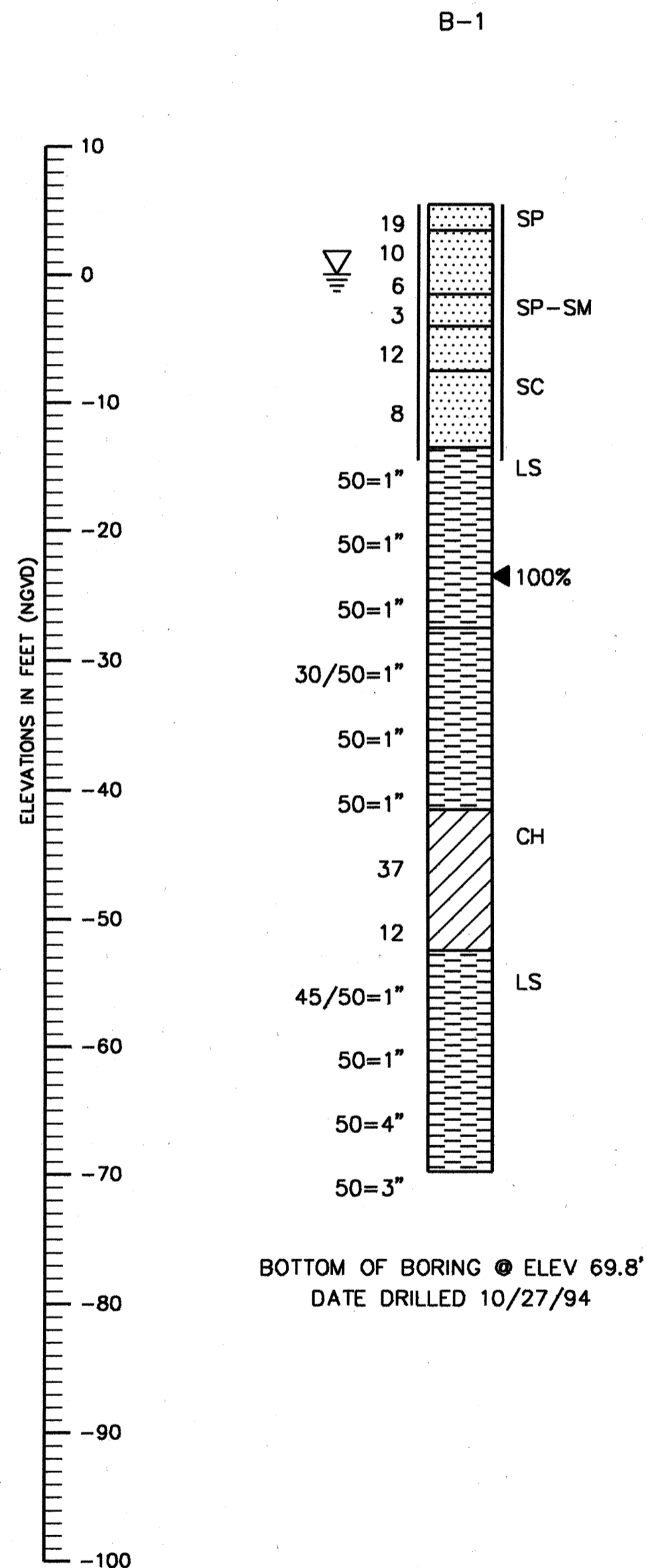
DRILL AND PENETRATION TESTING WERE PERFORMED IN ACCORDANCE WITH ASTM D 1586. NUMBER TO LEFT OF BORING INDICATES BLOWS OF 1 3/8" I.D., 2" O.D. SPLIT-SPoon FOR 12" OF PENETRATION (UNLESS OTHERWISE NOTED) WITH A 140 LB. HAMMER DROPPED 30 INCHES.

THE BORING LOGS SHOWN REPRESENT SUBSURFACE CONDITIONS WITHIN THE BOREHOLE AT THE TIME OF DRILLING. NO WARRANTY AS TO THE SUBSURFACE CONDITION, STRATA DEPTH OR SOIL CONSISTENCY BETWEEN OR OUTSIDE BORING LOCATIONS IS EXPRESSED OR IMPLIED BY THIS DRAWING.

ELEVATIONS SHOWN ARE APPROXIMATED BY WATER LEVEL AND WATER TABLE MEASURED AT TIME AND DATE BORINGS WERE COMPLETED.

REFER TO FINAL REPORT FOR ADDITIONAL BORING INFORMATION.

CREW CHIEF: SPOON
 DRILLER: PATTERSON
 DRILL RIG TYPE: FAILING 250



LEGEND

- = Water Table @ end of drilling
- = Casing used
- = Shelby Tube
- = 100% Percent Loss of Circulation

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: CORROSIVE (EXTREMELY AGGRESSIVE)
 SUBSTRUCTURE: CORROSIVE (EXTREMELY AGGRESSIVE)

Granular Materials- Relative Density	SPT (Blows/Ft)
Very Loose	Less than 4
Loose	4 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	Greater than 50

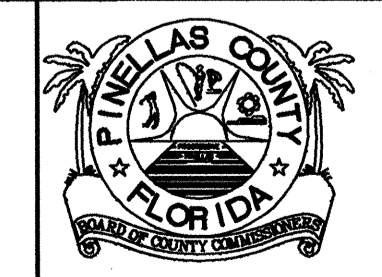
Silts and Clays- Consistency	SPT (Blows/Ft)
Very Soft	Less than 2
Soft	2 - 4
Firm	5 - 8
Stiff	9 - 15
Very Stiff	16 - 30
Hard	Greater than 30

R:\14085\CAD\BRIDGE
 SOLIDORE

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

SEAL:	
Drawn by	TEJ 11-94
Checked by	LDS 11-94
Designed by	LDS 11-94
Checked by	KDB 11-94
Approved by	K. D. BENNETT

WILLIAMS EARTH SCIENCES, INC.
 CORPORATE OFFICE:
 10600 Endeavour Way, Largo, FL 34647
 Large Jacksonville (904) 252-8952 Fax (904) 252-8954
 Panama City (904) 747-9419 Fax (904) 743-2454



**PINELLAS COUNTY
 DEPARTMENT OF
 PUBLIC WORKS**

SHEET TITLE: REPORT OF CORE BORINGS	SHEET
PROJECT NAME: BECKETT BRIDGE REPAIRS	

A-8

[Signature]
 8/15/95

TRAFFIC CONTROL NOTES

PHASE II

GENERAL NOTES:

1. THE CONTRACTOR SHALL, AT ALL TIMES, ADHERE TO THE REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD, 1988) AND FDOT'S ROADWAY AND TRAFFIC DESIGN STANDARDS (JANUARY 1994, AS AMENDED).
2. IT IS NOT THE INTENT OF THESE PLANS TO SHOW ALL TEMPORARY DRAINAGE AND INCIDENTAL CONSTRUCTION NECESSARY TO MAINTAIN TRAFFIC. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY DRAINAGE. THERE WILL BE NO DIRECT PAY FOR THIS WORK.
3. THE WORK AREA SHALL BE PROTECTED BY BARRIERS, WARNING DEVICES, PAVEMENT MARKINGS AND SIGNS SHOWN IN THE TRAFFIC CONTROL PLANS AND AS DIRECTED BY THE ENGINEER. ALL SIGNING AND TEMPORARY PAVEMENT MARKINGS FOR A PHASE SHALL BE INSTALLED AND APPROVED BY THE ENGINEER BEFORE CONSTRUCTION OF THAT PHASE COMMENCES AND SHALL BE MAINTAINED IN ACCORDANCE WITH INDEX 600.
4. WHENEVER CONSTRUCTION EQUIPMENT IS BEING DRIVEN OR TRANSPORTED ON THE OPEN TRAVEL LANES. THE CONTRACTOR SHALL UTILIZE FDOT STANDARD INDEX 627.
5. DESIRABLE LANE WIDTHS FOR MAINTENANCE OF TWO-WAY TRAFFIC SHOULD BE 10' BUT NOT LESS THAN LANE WIDTHS OF THE EXISTING FACILITY.
6. THE LOCATION OF SIGNS, AND BARRICADES ARE APPROXIMATE ONLY AND SHALL BE PLACED ACCORDING TO CONSTRUCTION REQUIREMENTS WITH THE APPROVAL OF THE ENGINEER IN CHARGE.
7. THE CONTRACTOR SHALL PLACE TYPE I OR TYPE II BARRICADES TO OUTLINE THE RADIUS AREA FOR DRIVEWAYS FOR ACCESS AND TO PREVENT TRAFFIC IN THE CONSTRUCTION AREA.
8. TRAFFIC SHALL BE MAINTAINED ON PAVED SURFACES AT ALL TIMES.
9. THE CONTRACTOR SHALL NOTIFY ALL LOCAL LAW ENFORCEMENT AGENCIES AND MEDIA APPROXIMATELY ONE MONTH PRIOR TO THE BRIDGE CLOSURE.
10. CONFLICTING OR EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY WATERBLASTING OR OTHER METHODS APPROVED BY THE ENGINEER. ALL EXISTING PAVEMENT MARKINGS OUTSIDE THE LIMITS OF CONSTRUCTION WHICH ARE ALTERED SHALL BE REPLACED UPON COMPLETION OF THE PROJECT. ALL COSTS FOR REMOVAL SHALL BE INCLUDED IN THE BID PRICE FOR MAINTENANCE OF TRAFFIC. THE REPLACEMENT OF MARKINGS SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM.
11. REGULATORY SPEEDS OF THE EXISTING ROADWAYS SHALL BE MAINTAINED. WHEN NECESSARY, SUPPLEMENTAL SIGNS SHALL BE ADDED WITHIN THE LIMITS OF THE DETOUR.
12. EXISTING SIGNS THAT CONFLICT WITH THE DETOUR ROUTE SHALL BE ADJUSTED, COVERED OR REMOVED DURING THE DETOUR ROUTE AND REPLACED IN THEIR ORIGINAL CONDITION UPON COMPLETION.
13. THE DETOUR ROUTE MAY AFFECT SOME SIGNALIZED INTERSECTIONS. AT THOSE LOCATIONS THE CONTRACTOR SHALL COORDINATE WITH THE CITY OF TARPON SPRINGS OR PINELLAS COUNTY TRAFFIC OPERATIONS TO DETERMINE IF ANY NECESSARY SEQUENCE ADJUSTMENTS ARE TO BE MADE DURING THE DETOUR.
14. UPON COMPLETION OF THE DETOUR ROUTE THE CONTRACTOR SHALL RESTORE THE ENTIRE ROUTE BACK TO ITS ORIGINAL CONDITION. ALL COSTS SHALL BE INCLUDED IN THE BID ITEM # 102-1, MAINTENANCE OF TRAFFIC (LUMP SUM).
15. THE CONTRACTOR SHALL MAINTAIN A SAFE PASSAGE THROUGH THE CONSTRUCTION AREA AT ALL TIMES FOR PEDESTRIANS IN ACCORDANCE WITH INDEX # 660, WITH THE EXCEPTION OF THE BRIDGE CLOSURE, WHERE PEDESTRIANS SHALL NOT BE ALLOWED TO CROSS THE BRIDGE. ALL COSTS ASSOCIATED SHALL BE INCLUDED IN THE BID ITEM 102-1, MAINTENANCE OF TRAFFIC (LUMP SUM).

FDOT SPECIAL USE PERMIT STIPULATIONS:

1. ALL SIGNS ERECTED ON FDOT R/W SHALL BE ERECTED PER FDOT SIGN INDEX #17302, COSTS TO BE INCLUDED IN MAINTENANCE OF TRAFFIC LUMP SUM, BID ITEM 102-1.
2. NO SIGN PLACEMENT SHALL BE PERMITTED WITHIN THE LIMITS OF THE PEDESTRIAN SIDEWALK AREAS. SHOULD SUCH SIGN PLACEMENT BECOME NECESSARY PRIOR APPROVAL OF THE LOCAL MAINTENANCE ENGINEER IS NECESSARY.
3. ANY DAMAGED CONCRETE CAUSED BY SIGN INSTALLATION SHALL BE REMOVED AND REPLACED BY SAW OUT OR TOOLED AT 5' INTERVALS (BY SECTION) WITH EXPANSION REQUIRED AT ALL COLD JOINTS, COSTS TO BE INCLUDED IN THE MAINTENANCE OF TRAFFIC LUMP SUM BID ITEM # 102-1.
4. THIS LOCAL MAINTENANCE OFFICE SHALL BE NOTIFIED 48 HOURS PRIOR TO IMPLEMENTATION OF THE MAINTENANCE OF TRAFFIC PLAN ON FDOT R/W :

FLORIDA DEPARTMENT OF TRANSPORTATION
5211 ULMERTON ROAD
CLEARWATER, FLORIDA 34620
PH. (813) 560-5101

TRAFFIC CONTROL NOTES

THE DETOUR SHALL REMAIN IN EFFECT FOR 120 CALENDAR DAYS AND THE TOTAL PROJECT CALENDAR DAYS ARE 180. THEREFORE MORE THAN ONE OPERATION MAY BE REQUIRED TO BE UNDER CONSTRUCTION AT A TIME IN ORDER TO COMPLETE THIS PROJECT WITH THESE CONSTRAINTS.

PHASE I

1. THE EXISTING VEHICULAR TRAFFIC PATTERN ACROSS BECKETT BRIDGE SHALL REMAIN THE SAME DURING THE FOLLOWING CONSTRUCTION ACTIVITIES.
2. ADVANCE SIGNING FOR PHASE I SHALL CONSIST OF THE FOLLOWING AND SHALL BE PLACED PRIOR TO PHASE I CONSTRUCTION AND REMOVED FOR PHASE II CONSTRUCTION:
 - 2 - " ROAD CONSTRUCTION 1000 FT " W20 1B
 - 2 - " ROAD CONSTRUCTION 500 FT " W20 1A

THESE SIGNS SHALL BE PLACED PRIOR TO BECKETT BRIDGE AND SUPPLEMENTED WITH A HIGH INTENSITY LIGHT AND AN 18"x18" ORANGE FLAG.

 - 2 - " END CONSTRUCTION " G20 2

THESE SIGNS SHALL BE PLACED 500 FEET BEYOND BECKETT BRIDGE.
3. THE CONTRACTOR SHALL COORDINATE NAVIGATIONAL TRAFFIC WITH THE APPROPRIATE AGENCIES DURING THESE CONSTRUCTION ACTIVITIES. REFER TO THE SPECIFICATIONS FOR AGENCIES RESPONSIBLE FOR REGULATION OF THIS WATERWAY.
4. THERE SHALL BE A BRIDGE OPERATOR PRESENT DURING THIS PHASE OF WORK.
5. THE FOLLOWING CONSTRUCTION ACTIVITIES SHALL BE PERFORMED FROM A BARGE:

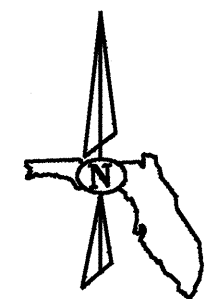
CLEAN AND PATCH SPALLS AND HONEYCOMBS IN PILES, BEAMS AND UNDERSIDE DECK

INSTALL CRUTCH BENTS
FURNISH AND INSTALL NEW NAVIGATION LIGHTS
PROVIDE NEW SUBMARINE CABLE
INSTALL BASCULE PIER STABILIZER
PATCH HONEYCOMBS AND SEAL CRACKS IN BASCULE PIER

1. THE CONTRACTOR SHALL REMOVE OR COVER CONFLICTING EXISTING SIGNS AND PLACE DETOUR SIGNS (SEE PLAN VIEW) ALONG THE DETOUR ROUTE IN ACCORDANCE WITH F.D.O.T. INDEX #602, PRIOR TO REROUTING THE EXISTING TRAFFIC.
2. REROUTE TRAFFIC TO THE DETOUR ROUTE.
3. DURING DISABLED MACHINERY THE BASCULE LEAF SHALL BE MAINTAINED IN AN OPEN POSITION AND SECURED, A BRIDGE OPERATOR SHALL NOT BE NECESSARY DURING THIS PHASE.
4. THE FOLLOWING CONSTRUCTION ACTIVITIES SHALL BE PERFORMED DURING THE DETOUR :
 - o INSTALL NEW "DRAWBRIDGE AHEAD" SIGNS
 - o INSTALL NEW "STOP AHEAD" SIGNS
 - o REPAIR SLOPE PROTECTION
 - o DRIVE SHEET PILING
 - o CONSTRUCT NEW PEDESTALS AND NEW TRAFFIC GATES
 - o REPAIR CONCRETE DECK AND INSTALL ARMORED JOINT
 - o INSTALL NEW CONTROL SYSTEM
 - o REMOVE EXISTING CONTROL SYSTEM AND ACCESS STAIR TO BASCULE PIER
 - o INSTALL NEW CONTROL PLATFORM AND ACCESS LADDER TO BASCULE PIER
 - o CLEAN AND SEAL OPEN JOINTS
 - o EXPANSION JOINTS
 - o REMOVE AND REPLACE COUNTER WEIGHT
 - o PATCH SPALLS IN CONCRETE HANDRAIL
 - o REMOVAL OF PAINT
 - o PAINT
 - o COMPLETE NECESSARY REPAIR, REPLACEMENT AND REMOVAL OF MACHINERY
 - o PAVEMENT MARKINGS

PHASE III

1. THE CONTRACTOR SHALL REMOVE SIGNS AND ANY INCIDENTAL ITEMS ALONG THE DETOUR ROUTE IN ACCORDANCE WITH F.D.O.T. INDEX # 602.



IMPORTANT !!!

REQUIRED BRIDGE OPENINGS:

MARINE TRAFFIC:
THE BRIDGE LEAF IS REQUIRED TO BE OPEN TO ALLOW BOAT TRAFFIC TO PASS ON DECEMBER 16, 1995.

THE BRIDGE IS REQUIRED TO BE OPEN TO ALLOW BOTH VEHICULAR AND PEDESTRIAN TRAFFIC TO CROSS ON JANUARY 6, 1996.

SUMMARY OF MAINTENANCE OF TRAFFIC
(PAY ITEM 102-1)

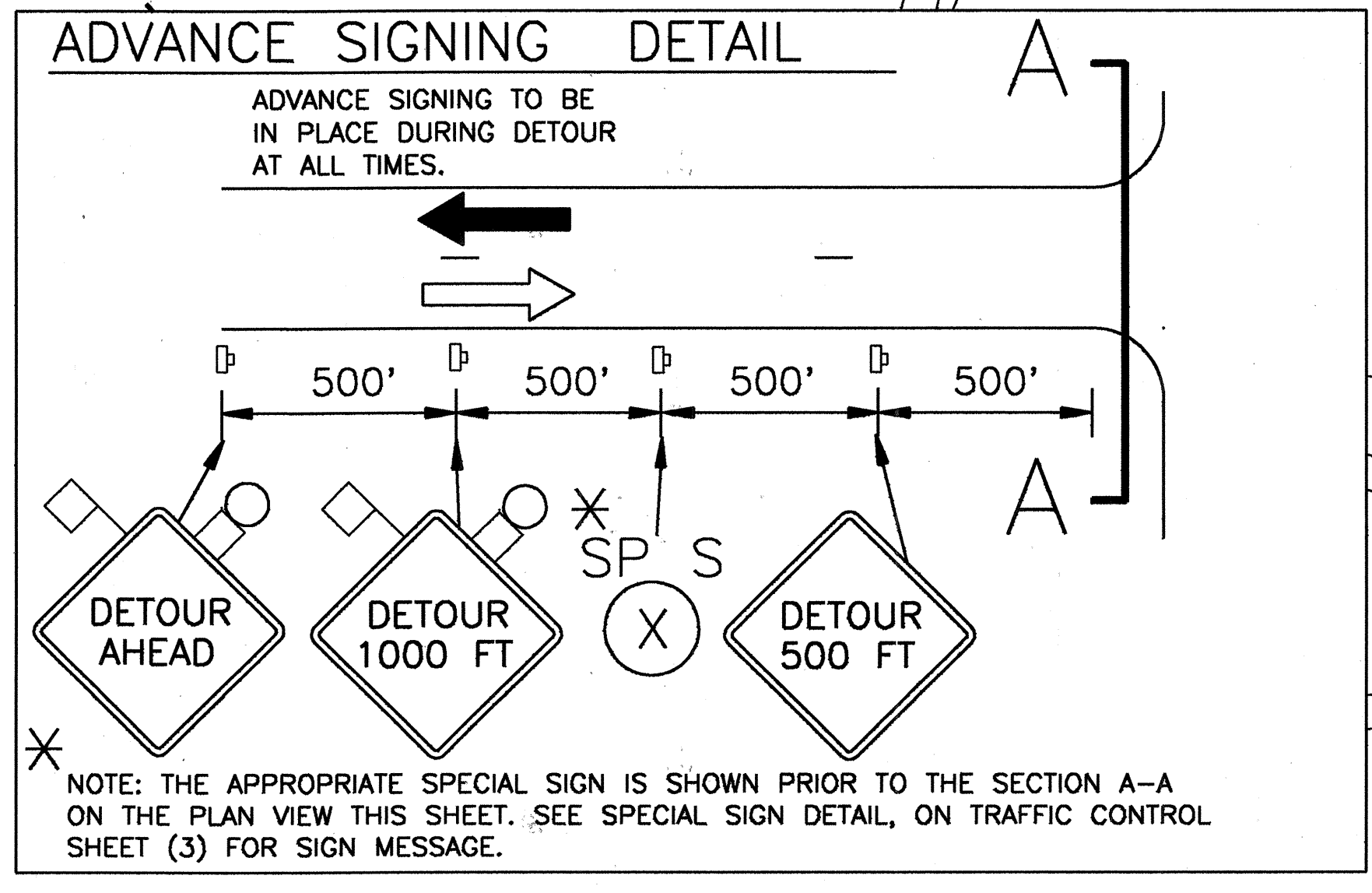
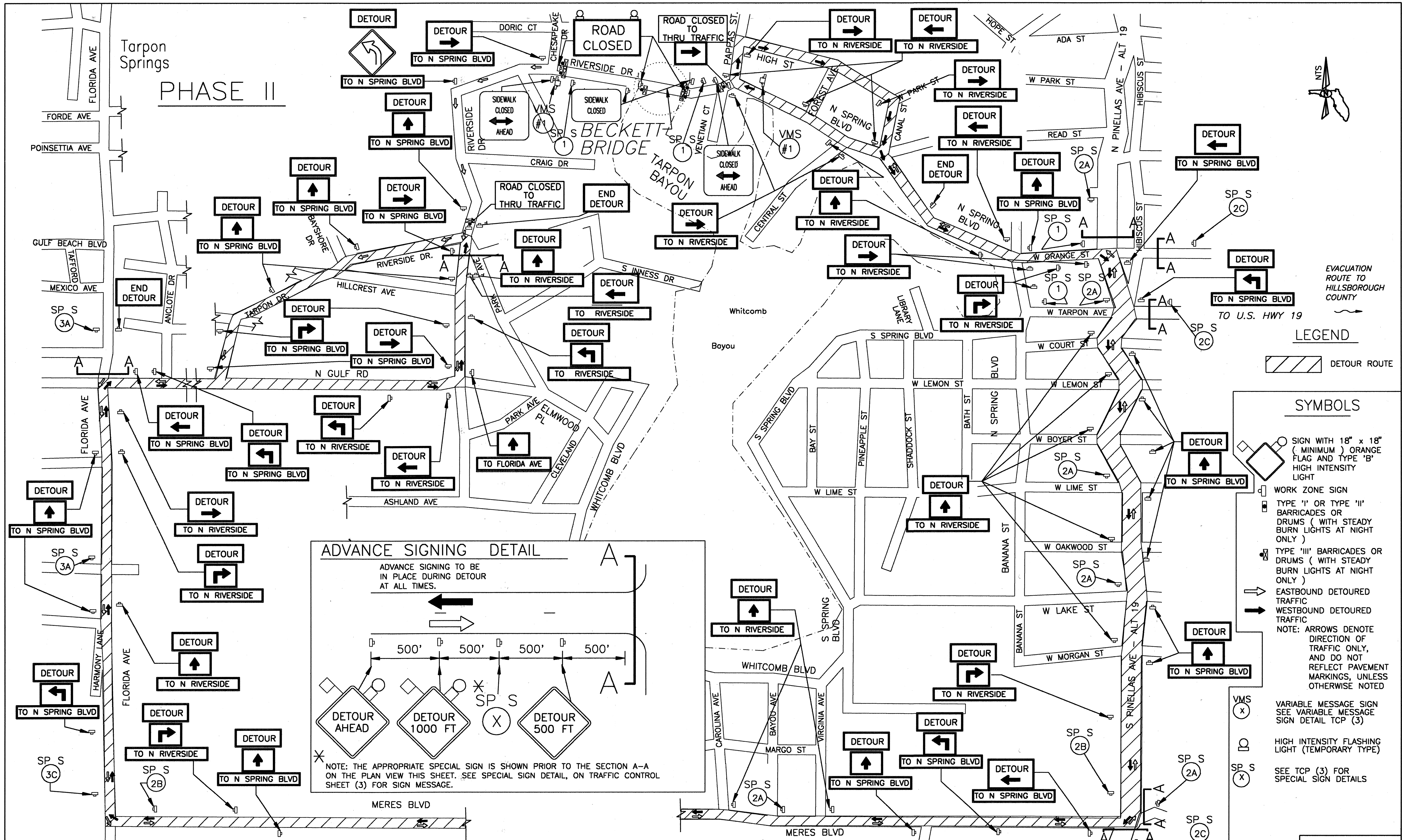
ITEM	UNIT	QUANTITY	
		P	F
SPECIAL SIGNS < 12 SF	EA	60	
SPECIAL SIGNS 12-25 SF	EA	18	
CONSTRUCTION SIGNS < 9 SF - 107 @120 DAYS	EA	12840	
MISC. CONCRETE	CY	1	

BRIDGE NO. 154000

R:\4406\CAD\DETOUTR
C:\WORK\1020105 08/08/95 10:14:15 AEV PRODUCED BY DSA CADD SYSTEM

REVISIONS		REVISIONS		SEAL:	<table border="1" style="font-size: x-small;"> <tr><td>Drawn by</td><td>BST</td><td>5-95</td></tr> <tr><td>Checked by</td><td>AAS</td><td>5-95</td></tr> <tr><td>Designed by</td><td>BST</td><td>5-95</td></tr> <tr><td>Checked by</td><td>AAS</td><td>5-95</td></tr> <tr><td>Approved by</td><td>ALAN SOROORY</td><td></td></tr> </table>	Drawn by	BST	5-95	Checked by	AAS	5-95	Designed by	BST	5-95	Checked by	AAS	5-95	Approved by	ALAN SOROORY		DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607	PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	Drawing No. A-9
Drawn by	BST	5-95																						
Checked by	AAS	5-95																						
Designed by	BST	5-95																						
Checked by	AAS	5-95																						
Approved by	ALAN SOROORY																							
Date	By	Date	By	TRAFFIC CONTROL PLAN (1) PROJECT NAME: BECKETT BRIDGE REPAIRS																				

Alan Soroory



EVACUATION ROUTE TO HILLSBOROUGH COUNTY
TO U.S. HWY 19

LEGEND
 DETOUR ROUTE

- SYMBOLS**
- SIGN WITH 18" x 18" (MINIMUM) ORANGE FLAG AND TYPE 'B' HIGH INTENSITY LIGHT
 - WORK ZONE SIGN
 - TYPE 'I' OR TYPE 'II' BARRICADES OR DRUMS (WITH STEADY BURN LIGHTS AT NIGHT ONLY)
 - TYPE 'III' BARRICADES OR DRUMS (WITH STEADY BURN LIGHTS AT NIGHT ONLY)
 - EASTBOUND DETOURED TRAFFIC
 - WESTBOUND DETOURED TRAFFIC
 - NOTE: ARROWS DENOTE DIRECTION OF TRAFFIC ONLY, AND DO NOT REFLECT PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED
 - VARIABLE MESSAGE SIGN SEE VARIABLE MESSAGE SIGN DETAIL TCP (3)
 - HIGH INTENSITY FLASHING LIGHT (TEMPORARY TYPE)
 - SEE TCP (3) FOR SPECIAL SIGN DETAILS

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REVISIONS	
Date	By

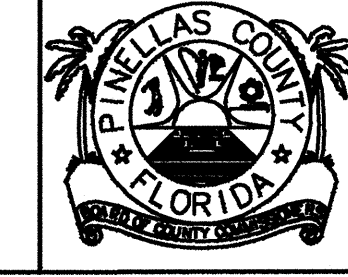
REVISIONS	
Date	By

REVISIONS	
Date	By

SEAL:

Drawn by	Norms	Dates
BST		5-95
Checked by	AAS	5-95
Designed by	BST	5-95
Checked by	AAS	5-95
Approved by	ALAN SOROORY	

DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



PINELLAS COUNTY
 DEPARTMENT OF
 PUBLIC WORKS

SHEET TITLE:	BRIDGE NO. 154000
TRAFFIC CONTROL PLAN (2)	Drawing No.
PROJECT NAME:	A-10
BECKETT BRIDGE REPAIRS	

VARIABLE MESSAGE SIGN DETAIL

VMS #1 PRIORITY

VARIABLE MESSAGE SIGN	
DISPLAY 1	DISPLAY 2
BRIDGE WILL BE CLOSED	SEPT XX THROUGH JAN XX

STEP 1

THIS SIGN SHALL BE IN PLACE 10 DAYS PRIOR TO BRIDGE CLOSING. THE MESSAGE SHALL CHANGE TO THE STEP 2 MESSAGE DURING THE BRIDGE CLOSURE.

VMS #1 DURING

VARIABLE MESSAGE SIGN		
DISPLAY 1	DISPLAY 2	DISPLAY 3
BECKETT BRIDGE CLOSED	USE ALT ROUTE	FOLLOW DETOUR

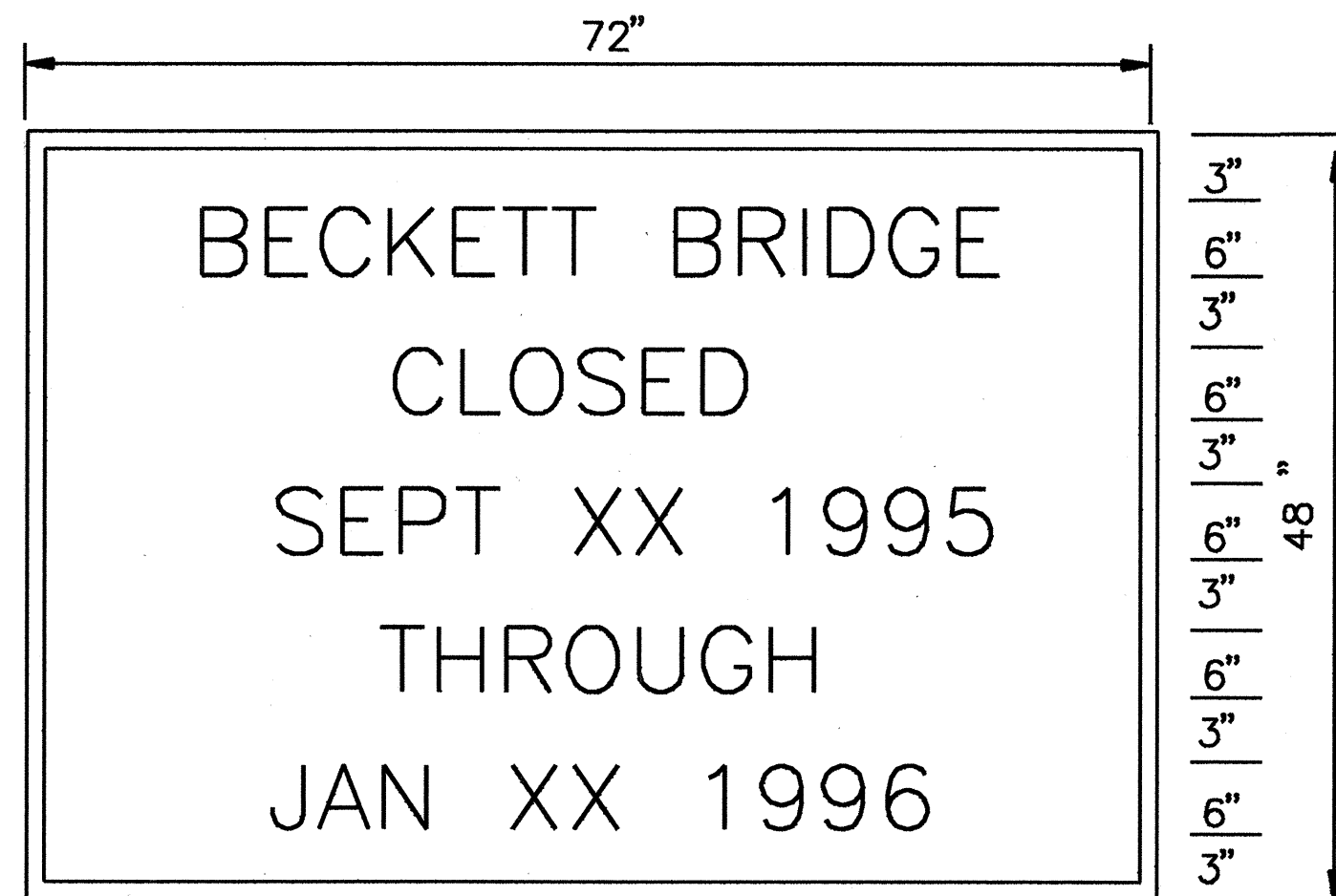
STEP 2
TO BE IN PLACE DURING DETOUR

GENERAL NOTES

- SEE SYMBOL ON PLAN VIEW FOR LOCATION, SEE TCP (2).
- ANY ADJUSTMENTS TO MESSAGES SHALL BE INCLUDED IN THE COST OF THE VARIABLE MESSAGE SIGN (TEMP) BID ITEM # 102-99.

SPECIAL SIGN DETAIL

SP S
1



6" D SERIES LETTERING

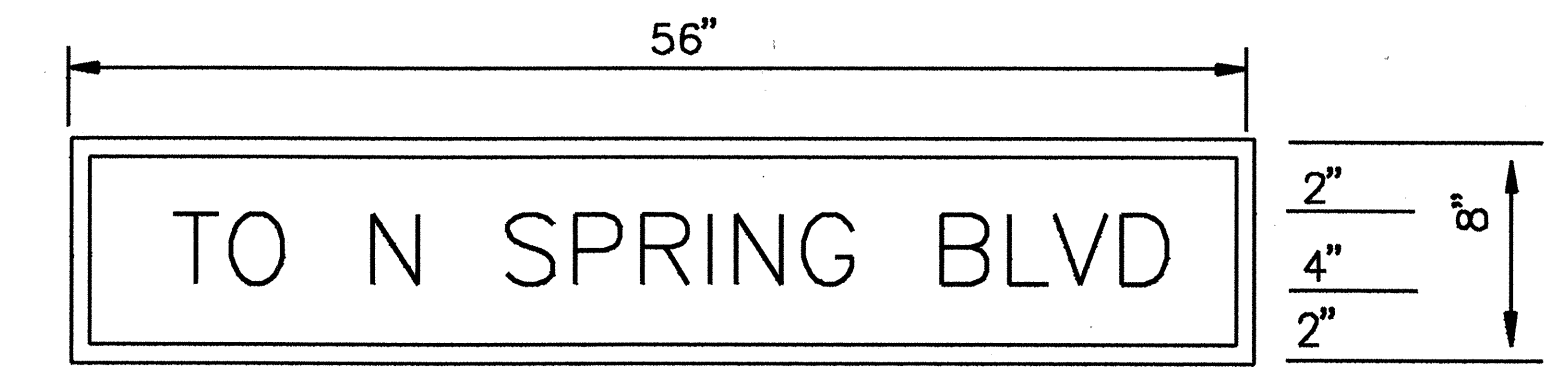
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	5.5	4.8	5.2	5.3	4.4	4.4	3.7	6	5.5	5.5	2.4	5.2	5.5	3.7
21.2"	C L O S E D												21.2"	
	5.2	4.8	5.3	5.5	4.8	4.0								
7.4"	S E P T X X 1 9 9 5												7.4"	
	5.5	4.8	4.8	3.7	6	4.8	4.0	6	2.9	5.2	5.5	4.0		
17.95"	T H R O U G H												17.95"	
	4.8	5.5	5.2	5.6	5.5	5.5	4.0							
9.45"	J A N X X 1 9 9 6												9.45"	
	4.9	6.1	4.0	6	4.8	4.0	6	2.9	5.2	5.2	4.0			

6" D SERIES LETTERING

LT MARGIN	LETTERS/DIMENSION						RT MARGIN
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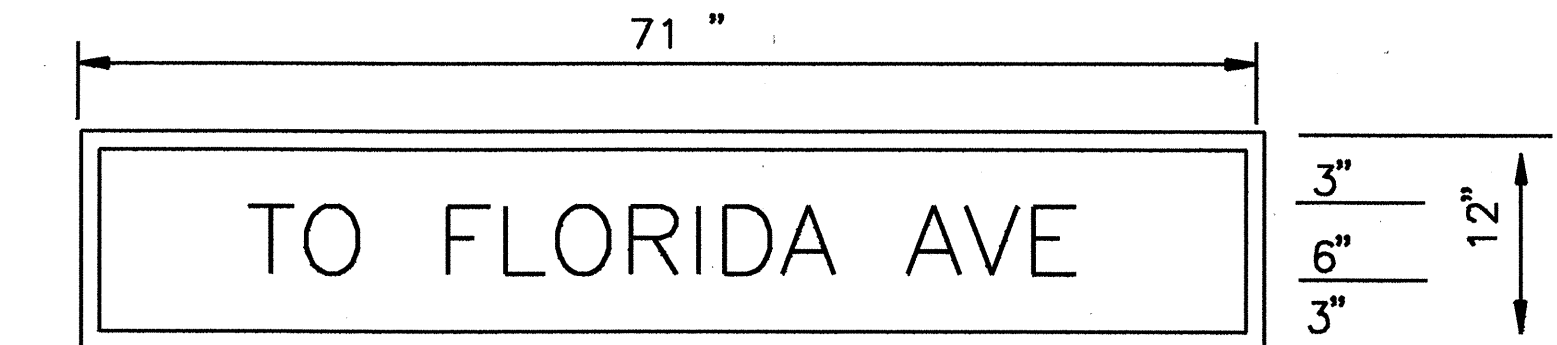
4" D SERIES LETTERING

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	2.7	4.1	3.6	3.4	3.8	2.7	4	3.6	3.6	3.6	1.6	3.6	3.4	2.7		
2.3"	F R E D H O W A R D P A R K												2.2"			
	3.2	3.6	3.2	2.7	4	3.6	3.6	3.8	4.1	3.6	2.7	4	2.9	4.1	3.6	2.8
9.8"	S U N S E T B E A C H												9.8"			
	3.6	3.6	3.6	3.6	2.9	2.4	4.0	3.6	2.9	4.1	3.4	2.7				
8.2"	N R I V E R S I D E D R												8.2"			
	2.7	4.0	3.6	1.4	3.8	3.2	3.4	3.6	1.6	3.6	2.4	4.0	3.6	2.7		
21.1"	A L T 1 9												21.1"			
	4.1	2.7	2.4	4.0	1.9	2.7										
8.9"	N S P R I N G B L V D												8.9"			
	2.7	4.0	3.6	3.6	3.6	1.6	3.6	2.7	4.0	3.6	2.7	3.8	2.7			



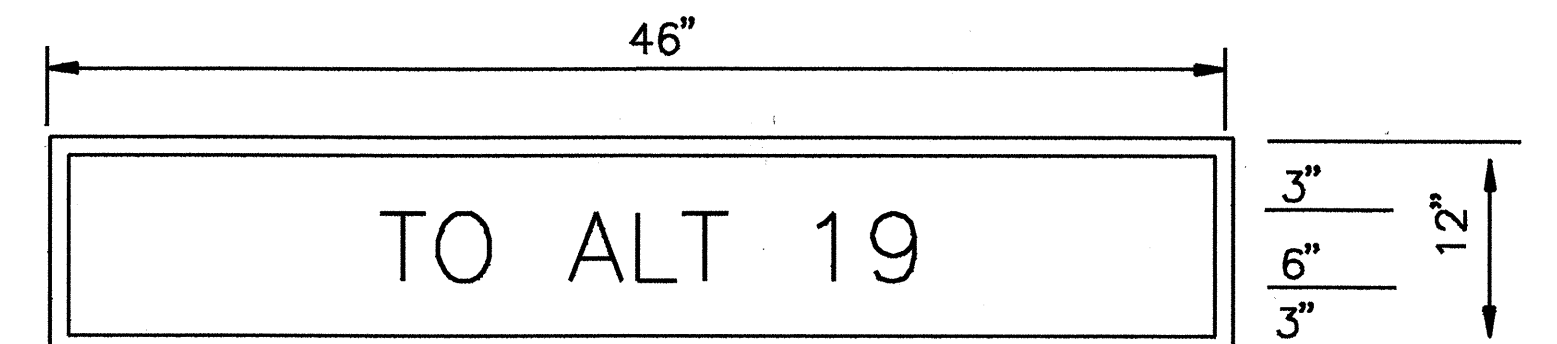
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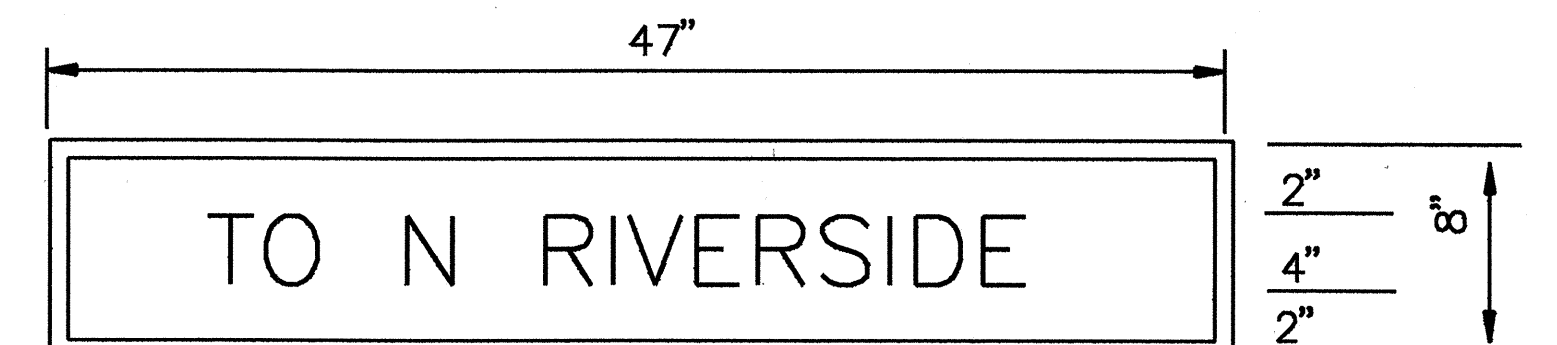
6" D SERIES LETTERING

LT MARGIN	LETTERS/DIMENSION												RT MARGIN			
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	4.8	4.2	6	4.8	4.8	5.3	5.5	2.4	5.2	5	6	5.4	5.6	3.7		



6" D SERIES LETTERING

LT MARGIN	LETTERS/DIMENSION						RT MARGIN				
2.15"	T	O	A	L	T	1	2.15"				
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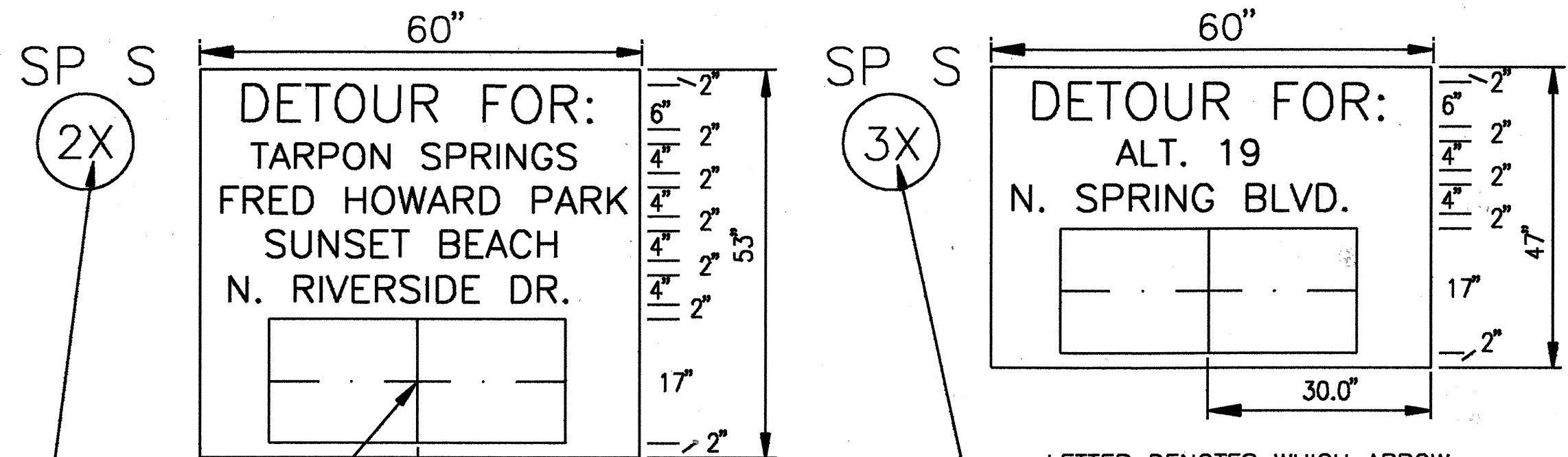


4" D SERIES LETTERING

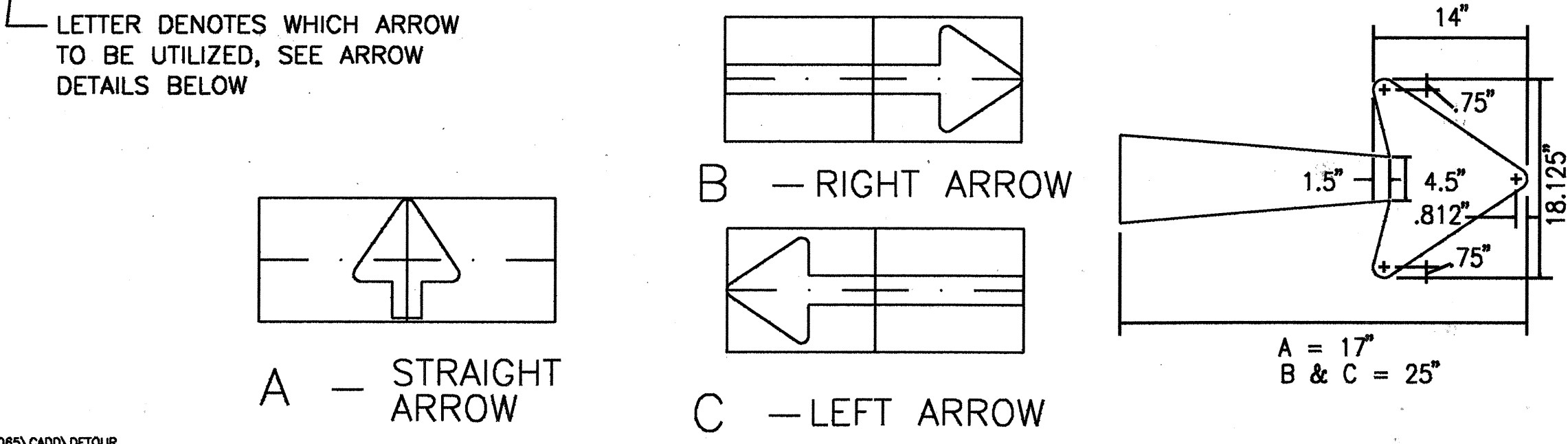
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	3.2	2.8	4	2.7	4	3.6	1.4	3.8	3.2	3.4	3.6	1.6	3.6	2.4		

GENERAL NOTES

- ALL SPECIAL SIGNS CONSIST OF BLACK MESSAGE AND BORDER ON REFLECTORIZED ORANGE BACKGROUND
- ALL COSTS FOR FABRICATION OF THESE SIGNS ARE TO BE INCLUDED IN THE PRICE FOR MAINTENANCE OF TRAFFIC (ITEM 102-1, LUMP SUM).
- SEE SYMBOL ON PLAN VIEW FOR LOCATION, SEE TCP (2).



DETAILS

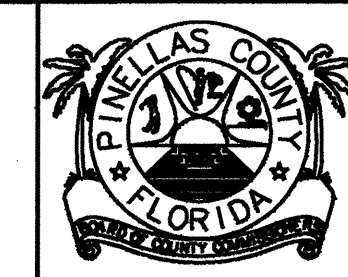


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REVISIONS		REVISIONS		SEAL:
Date	By	Date	By	

Drawn by	Checked by	Designed by	Checked by	Approved by
BST	AAS	BST	AAS	ALAN SOROORY
5-95	5-95	5-95	5-95	

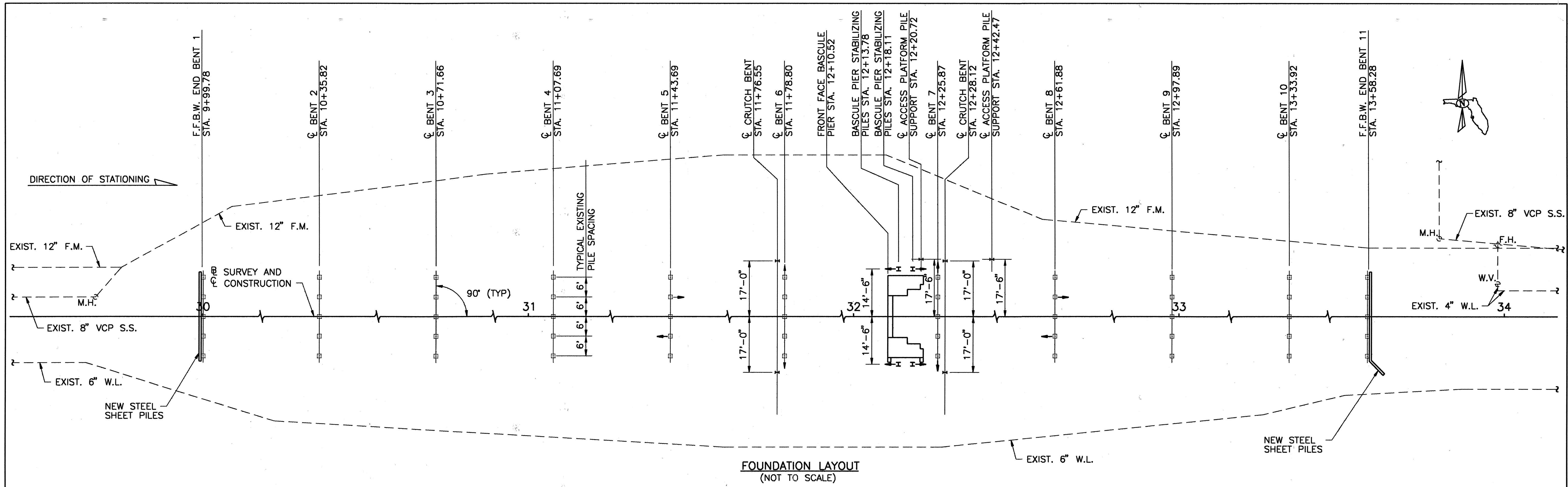
DSA GROUP INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



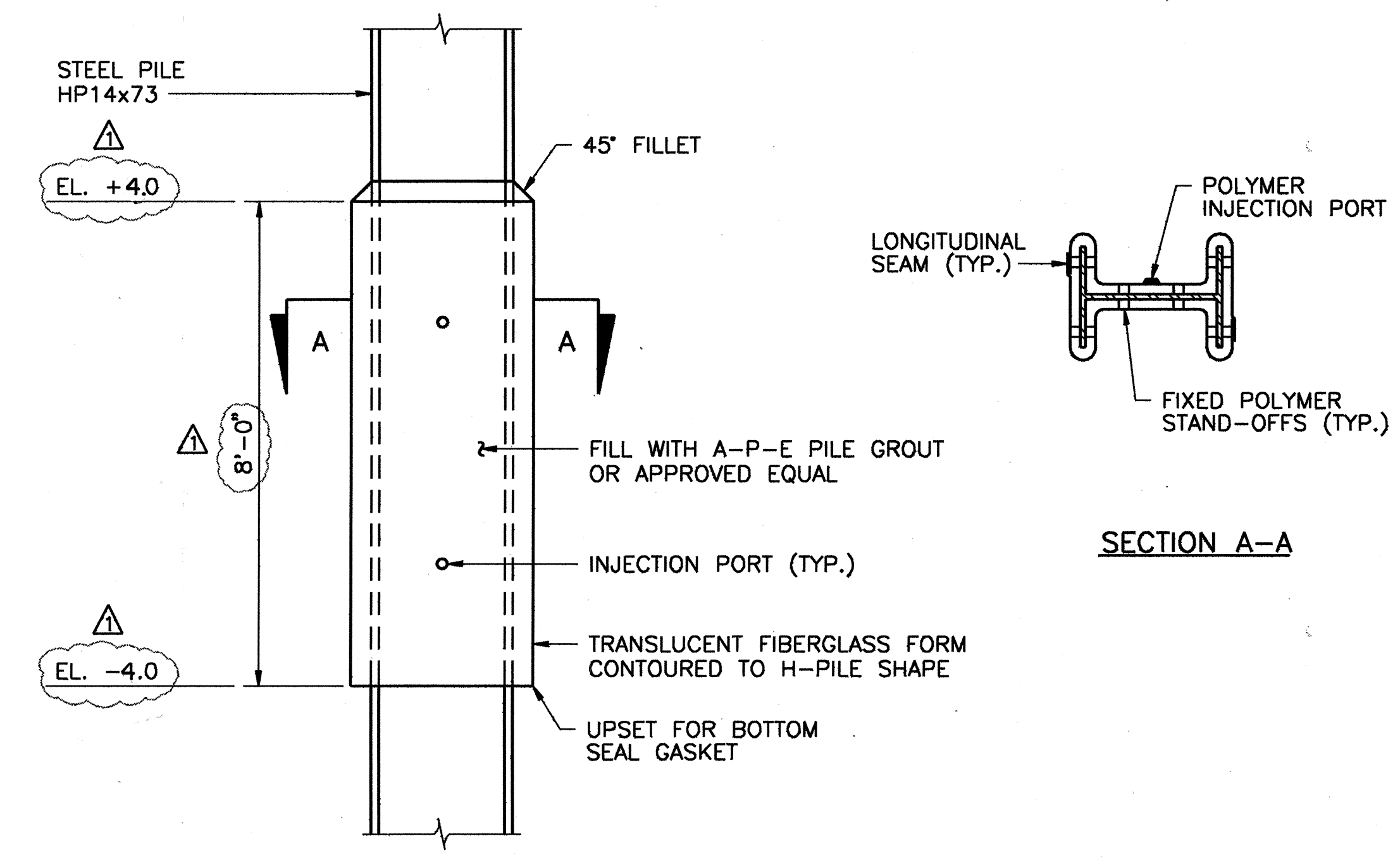
PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

SHEET TITLE: TRAFFIC CONTROL PLAN (3)	Drawing No. A-11
PROJECT NAME: BECKETT BRIDGE REPAIRS	

BRIDGE NO. 154000



PILE INSTALLATION TABLE				
LOCATION	STATION	PILE SIZE (IN.)	DESIGN LOAD (TONS)	MIN. TIP EL. (FT.)
CRUTCH BENT-BENT 6	11+76.55	HP14x73	70	-35.0
BASCULE PIER STABILIZING	12+13.78	HP14x73	70	-35.0
BASCULE PIER STABILIZING	12+18.11	HP14x73	70	-35.0
ACCESS PLATFORM	12+20.72	HP14x73	70	-35.0
ACCESS PLATFORM	12+42.47	HP14x73	70	-35.0
CRUTCH BENT-BENT 7	12+28.12	HP14x73	70	-35.0



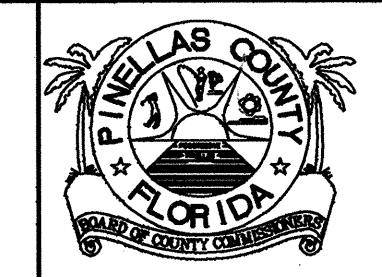
- NOTES:
- Existing 14" square prestressed concrete pile.
 - Indicates the direction of batter of the piles.
 - New steel HP 14x73 pile.
 - Indicates 3" per foot batter.
 - All new steel piles to have protective jackets, see details, this sheet.
 - For report of core borings, see sheet "REPORT OF CORE BORINGS".
 - Pile spacing given at pile cut off elevations.
 - For steel sheet pile installation details, see sheets "BULKHEAD DETAILS - END BENT 1" and "BULKHEAD DETAILS - END BENT 11".
 - Exposed parts of steel piling, bracing and connections shall be painted in accordance with the provisions for painting structural steel, as specified in section 561 of the specifications. A three coat system is required (each coat shall have a color contrast to the previous coat).
 - A minimum of one PDA test pile shall be performed. Drive one steel HP14x73 unloaded test pile (length = 50 ft.) in the position of a permanent plumb pile. The location shall be approved by the engineer. The unloaded test pile shall be evaluated using a pile driving analyzer (PDA). Payment for the test pile shall be included in item no. 455-8-5.
 - The contractor shall use protective devices for pile tips to avoid damage to piles during driving operation. Requirements for pile tips shall be in accordance with subarticle A455-6.5 of the supplemental specifications. Payment for pile tips shall be included in item no. 455-7-5.

REVISIONS		REVISIONS	
Date	By	Description	Date
2/12/96	RMC	PILE JACKET DIMENSION INCREASED ADDENDUM NO. 2	

REVISIONS		REVISIONS	
Date	By	Description	Date

SEAL:		Names		Dates	
		Drawn by	TJL	5-95	
		Checked by	TJF	5-95	
		Designed by	MRC	5-95	
		Checked by	BCW	5-95	
		Approved by	T. J. FARRELL		

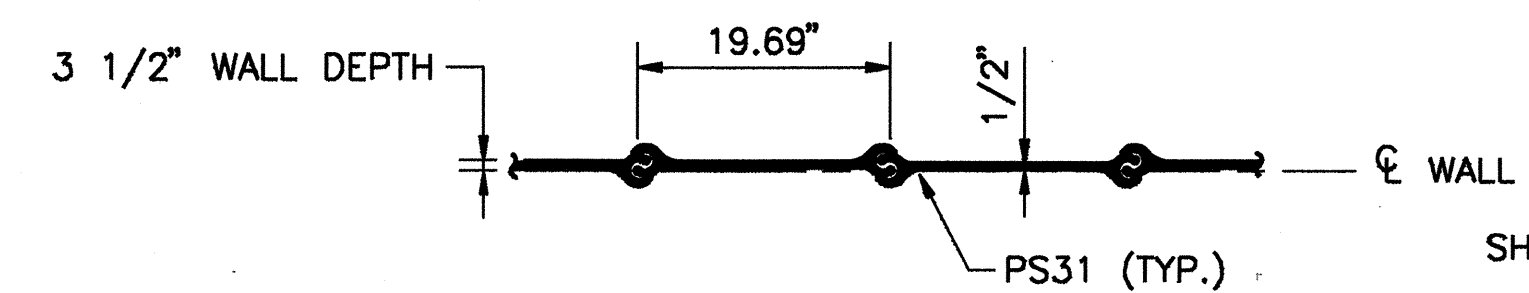
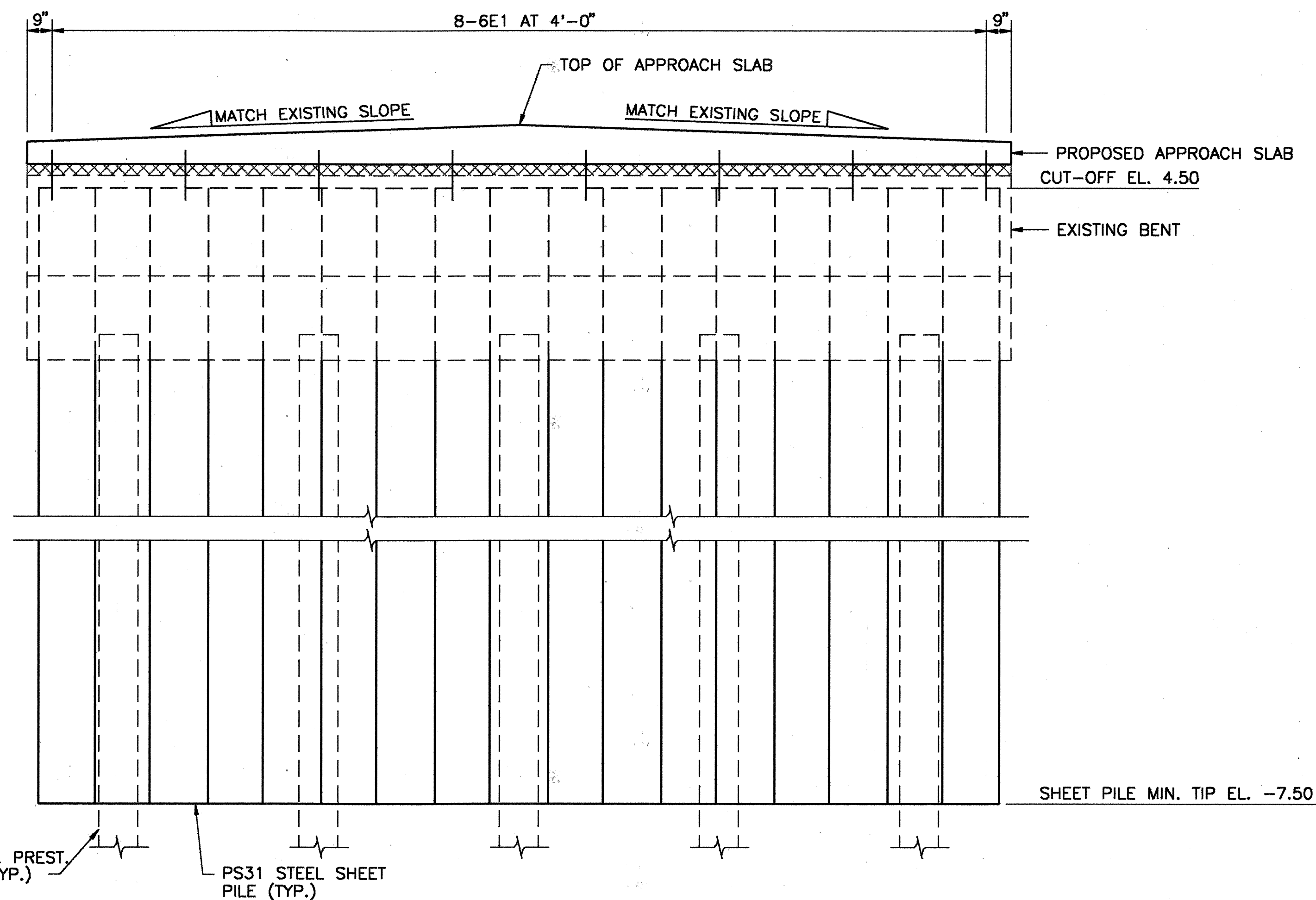
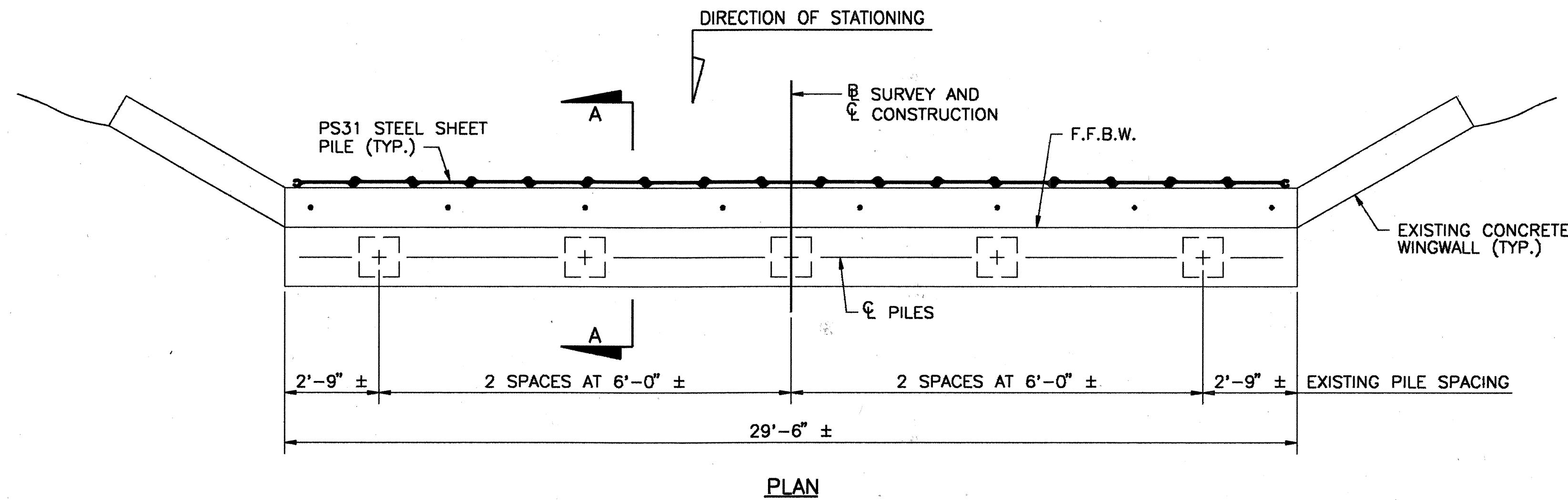
DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



PINELLAS COUNTY
 DEPARTMENT OF
 PUBLIC WORKS

SHEET TITLE:	FOUNDATION LAYOUT AND PILE JACKET DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

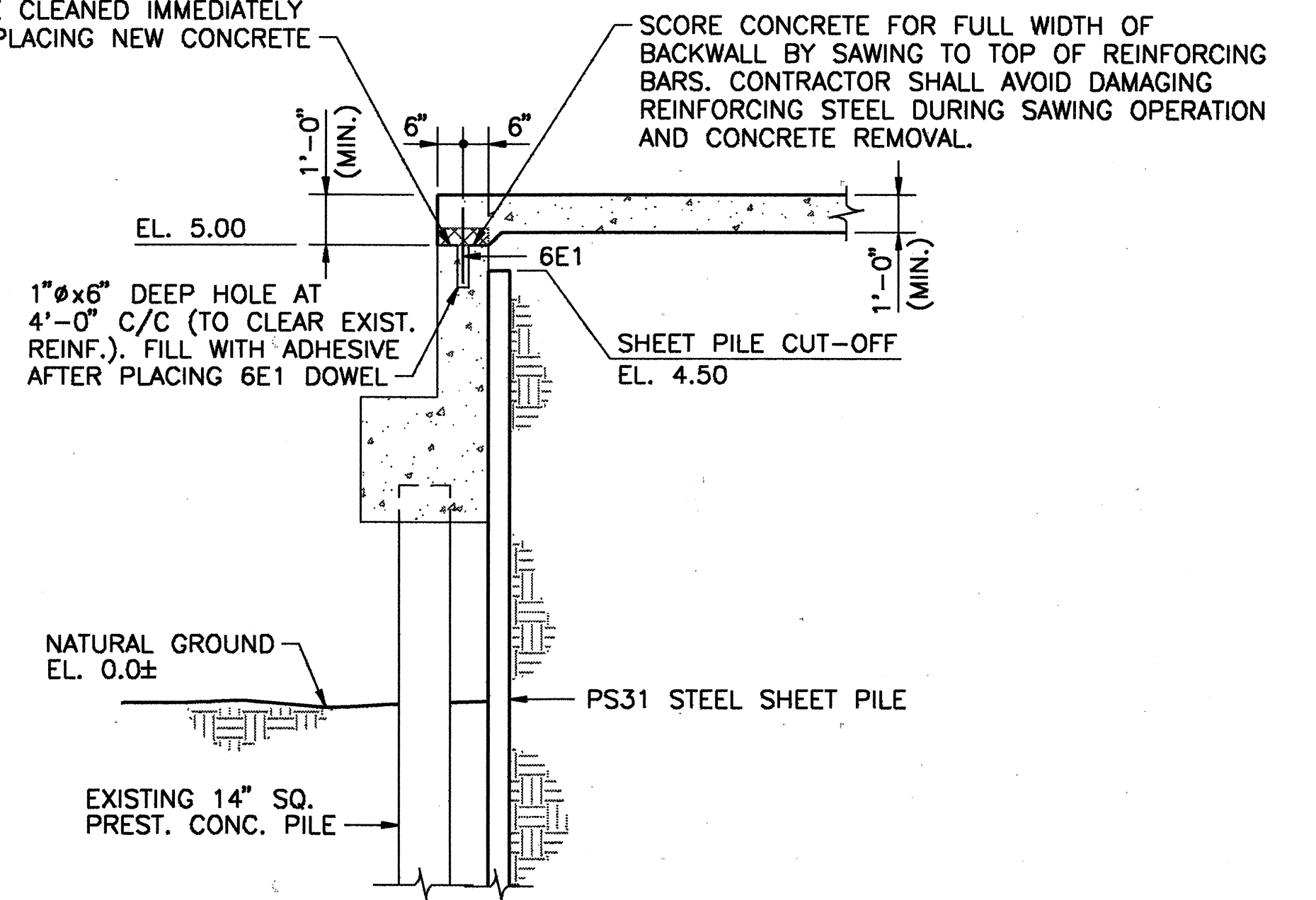
SHEET
S-1



SHEET PILE PROPERTIES:
 A = 14.96 in.²
 S = 3.30 in.³
 I = 5.30 in.⁴

STEEL SHEET PILE DETAILS

ALL CONTACTING SURFACES BETWEEN OLD AND NEW CONCRETE SHALL BE CLEANED IMMEDIATELY BEFORE PLACING NEW CONCRETE



SECTION A-A

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
SHEET PILING STEEL	SF	335

NOTES:

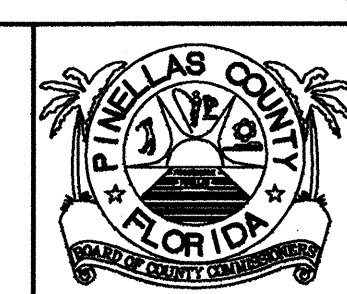
1. DENOTES EXISTING CONCRETE TO BE REMOVED.
2. TOP OF APPROACH SLAB SHALL MATCH TOP OF CONCRETE DECK AT FFBW.
3. COST OF CONCRETE REMOVAL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR APPROACH SLABS CONCRETE, ITEM NO. 360-1.
4. FOR APPROACH SLAB DETAILS, SEE SHEET S-16.

8/14/05 10:00 AM DSA GROUP, INC. KTL PRODUCED BY DSA CADD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Name	Date
Checked by	MRC	5-95
Designed by	MRC	5-95
Checked by	TJF	5-95
Approved by	T.J. FARRELL	

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 TAMPA, FLORIDA 33607

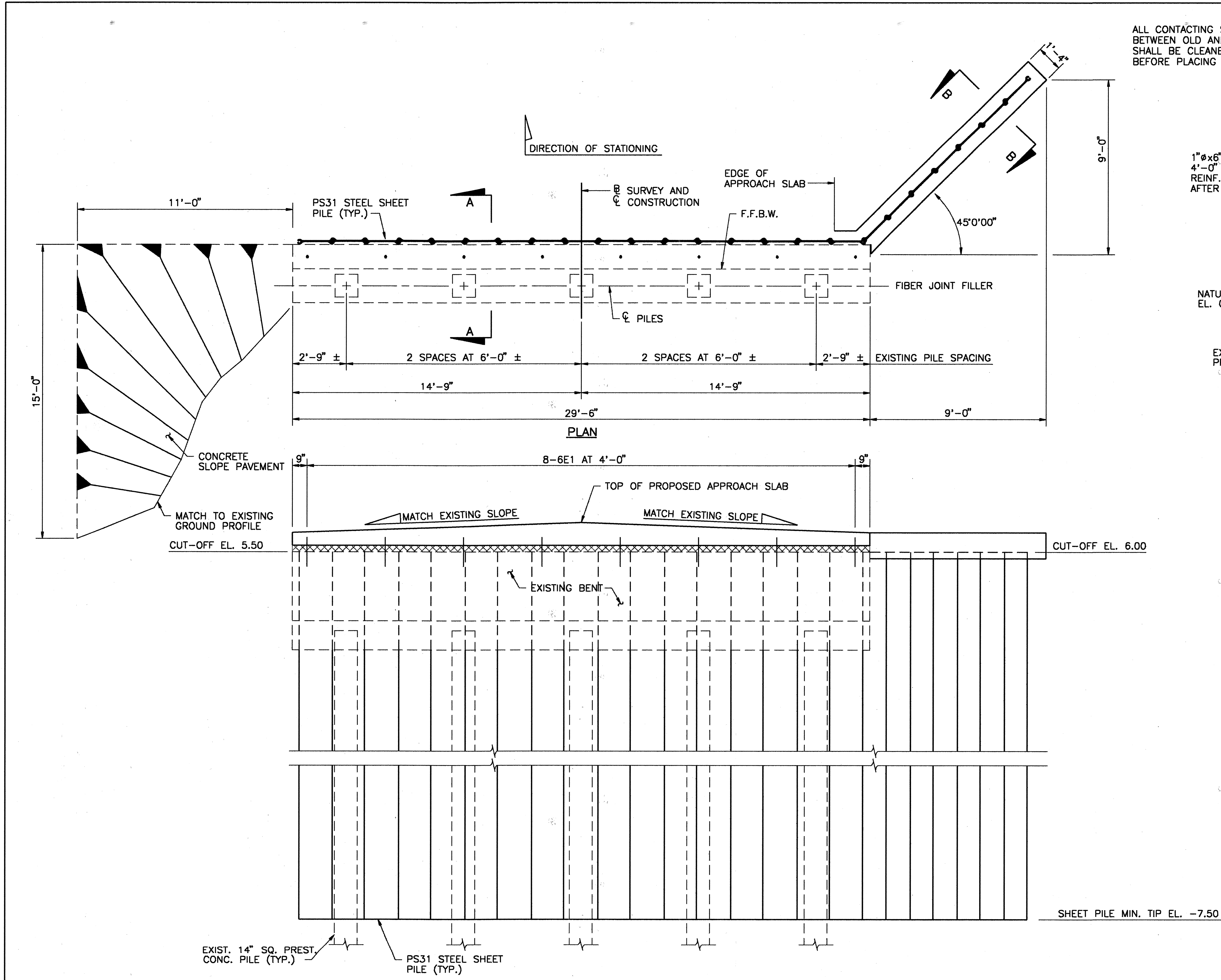


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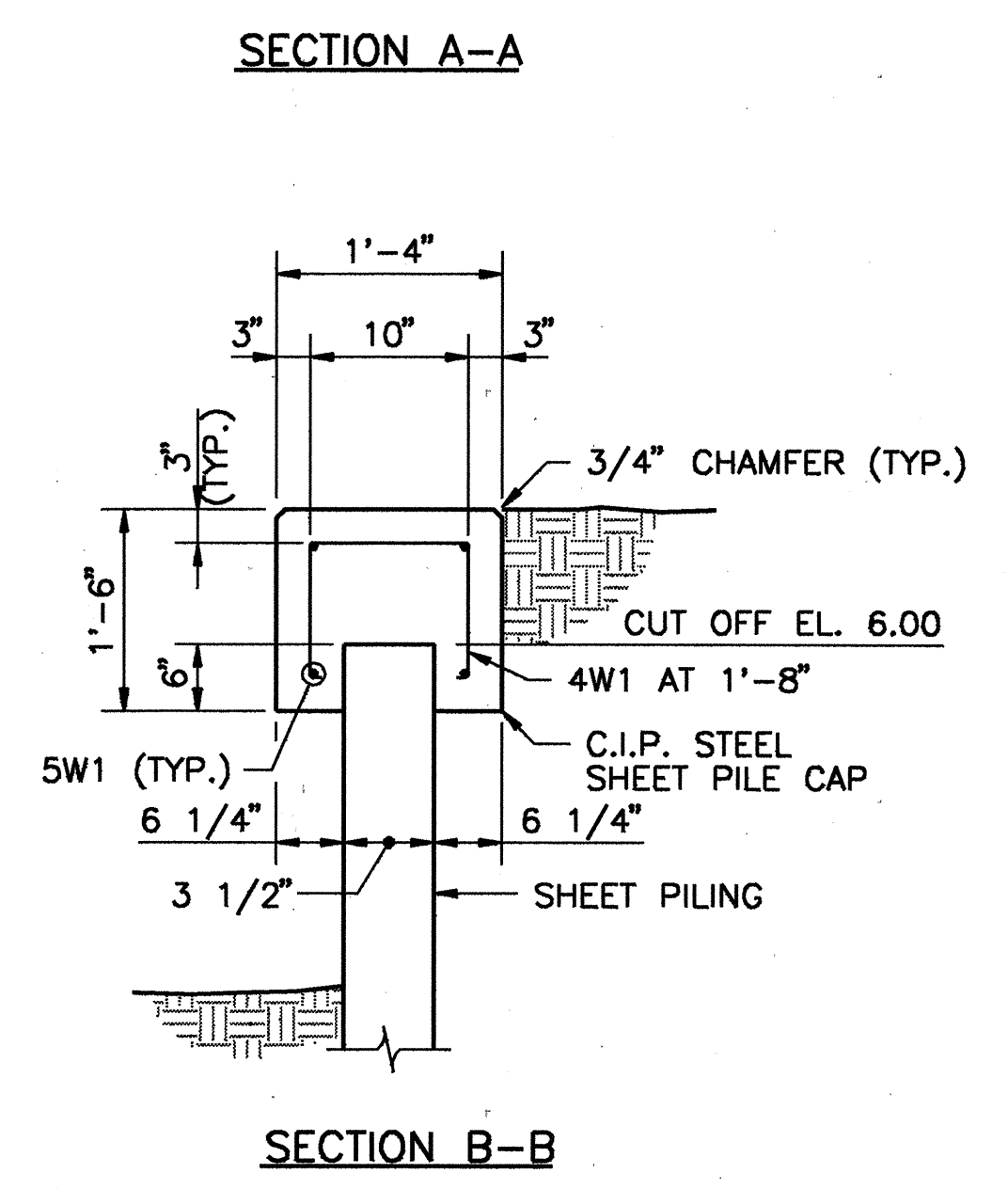
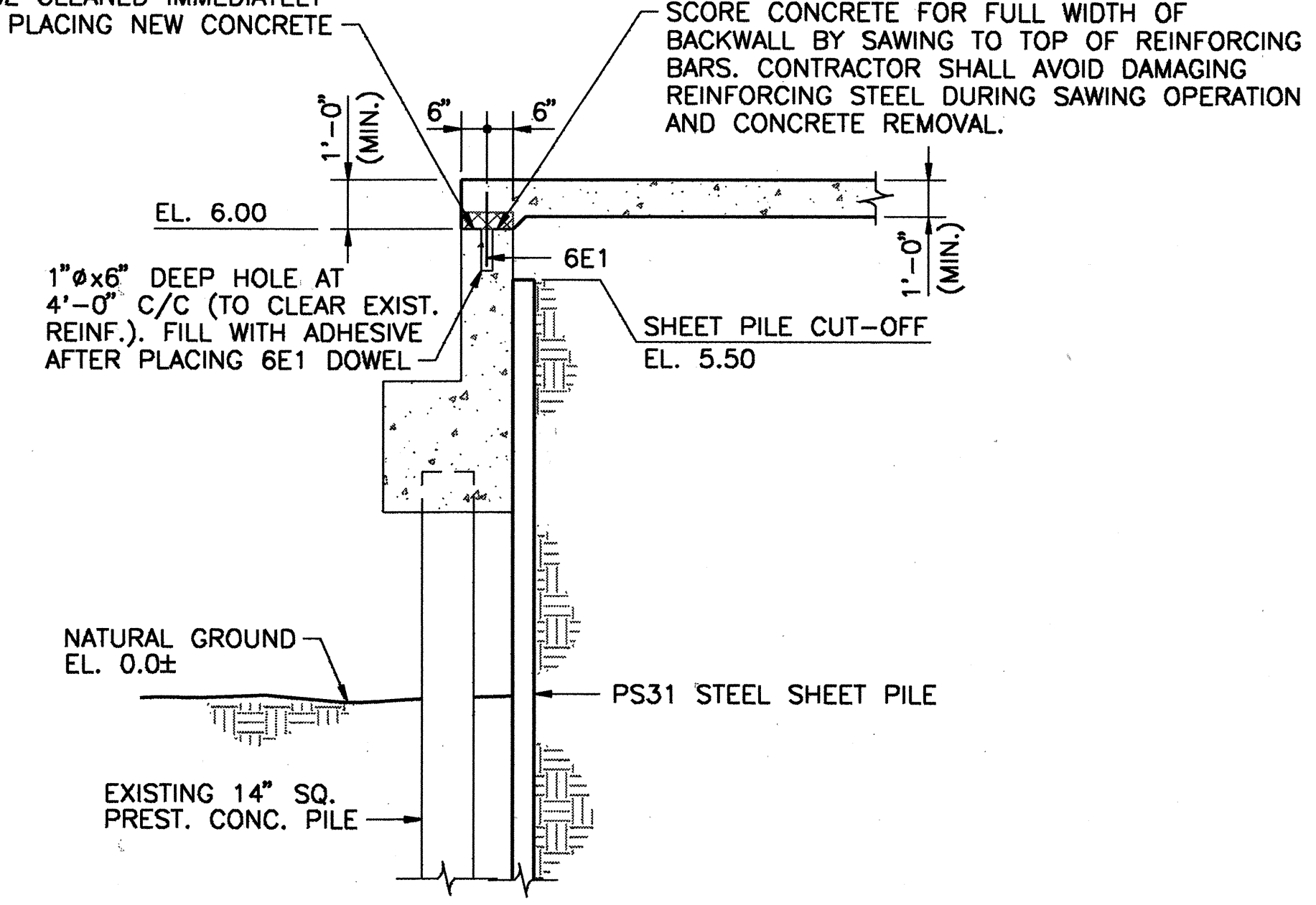
SHEET TITLE:	BULKHEAD DETAILS END BENT 1
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
S-2

Timothy J. Farrell



ALL CONTACTING SURFACES BETWEEN OLD AND NEW CONCRETE SHALL BE CLEANED IMMEDIATELY BEFORE PLACING NEW CONCRETE



ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
SHEET PILING STEEL	SF	518
SLOPE PAVEMENT CONCRETE	SY	18

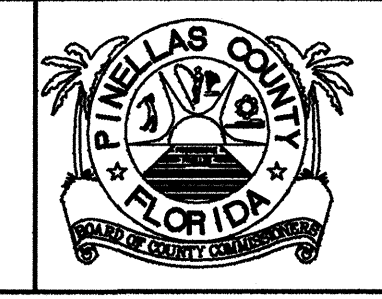
- NOTES:
- FOR STEEL SHEET PILE DETAILS SEE SHEET S-2
 - COST OF C.I.P. STEEL SHEET PILE CAP INCLUDING REINFORCING STEEL SHALL BE INCLUDED IN UNIT COST FOR SHEET PILING STEEL ITEM NO. 455-133.
 - COST OF CONCRETE REMOVAL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR APPROACH SLABS CONCRETE, ITEM NO. 360-1.

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Notes	Date
KTJ		5-95
TJF		5-95
BGW		5-95
MRC		5-95
T. J. FARRELL		

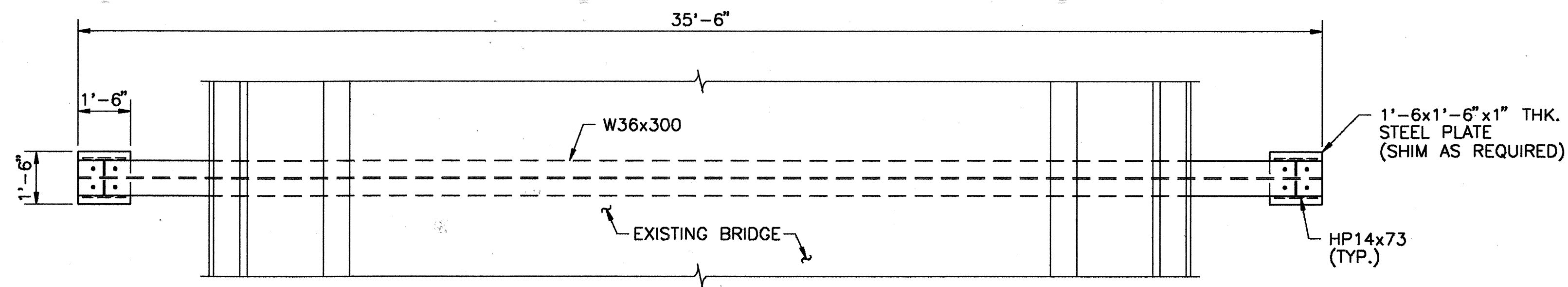
DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



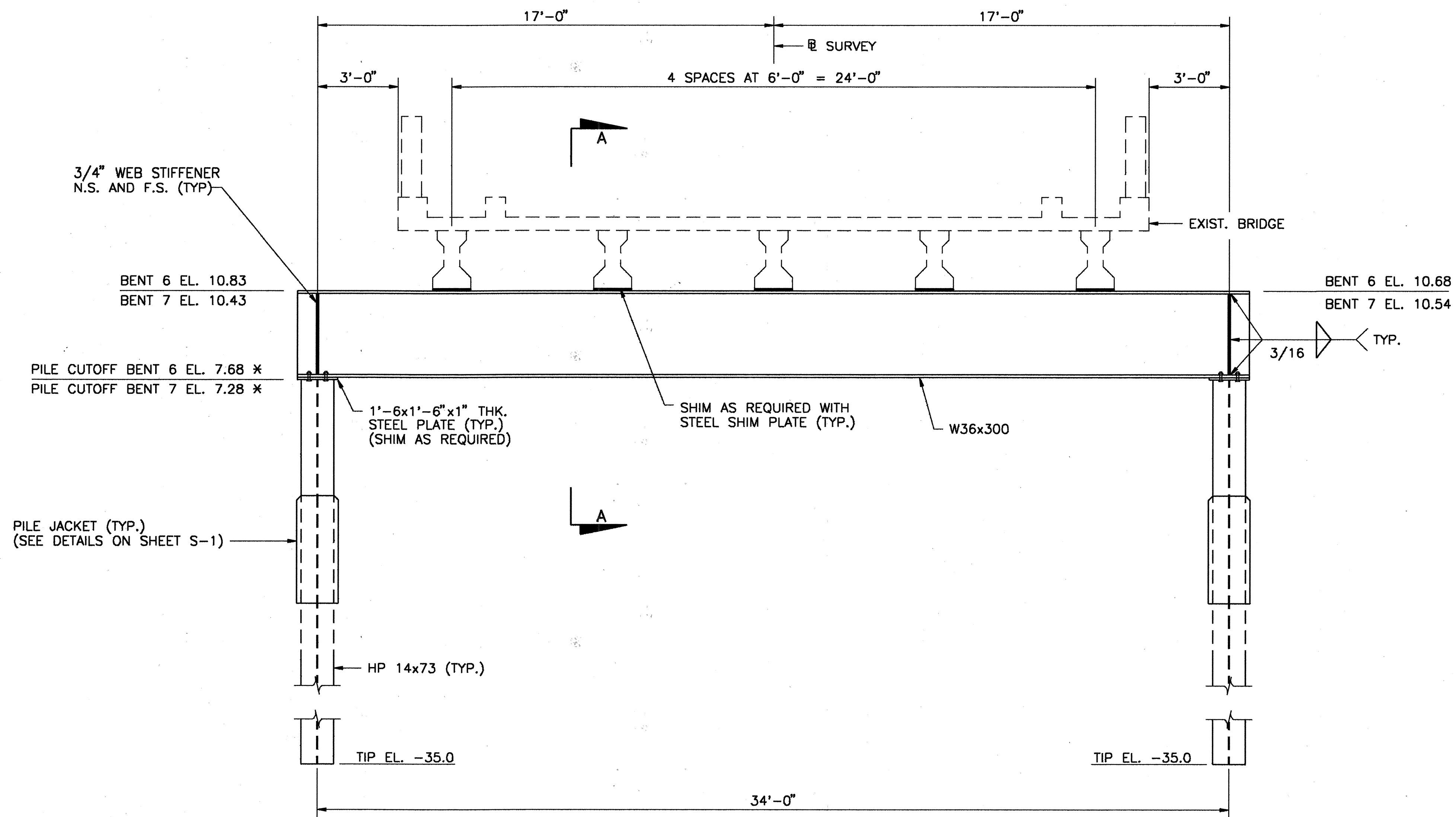
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: BULKHEAD DETAILS END BENT 11	SHEET S-3
PROJECT NAME: BECKETT BRIDGE REPAIRS	

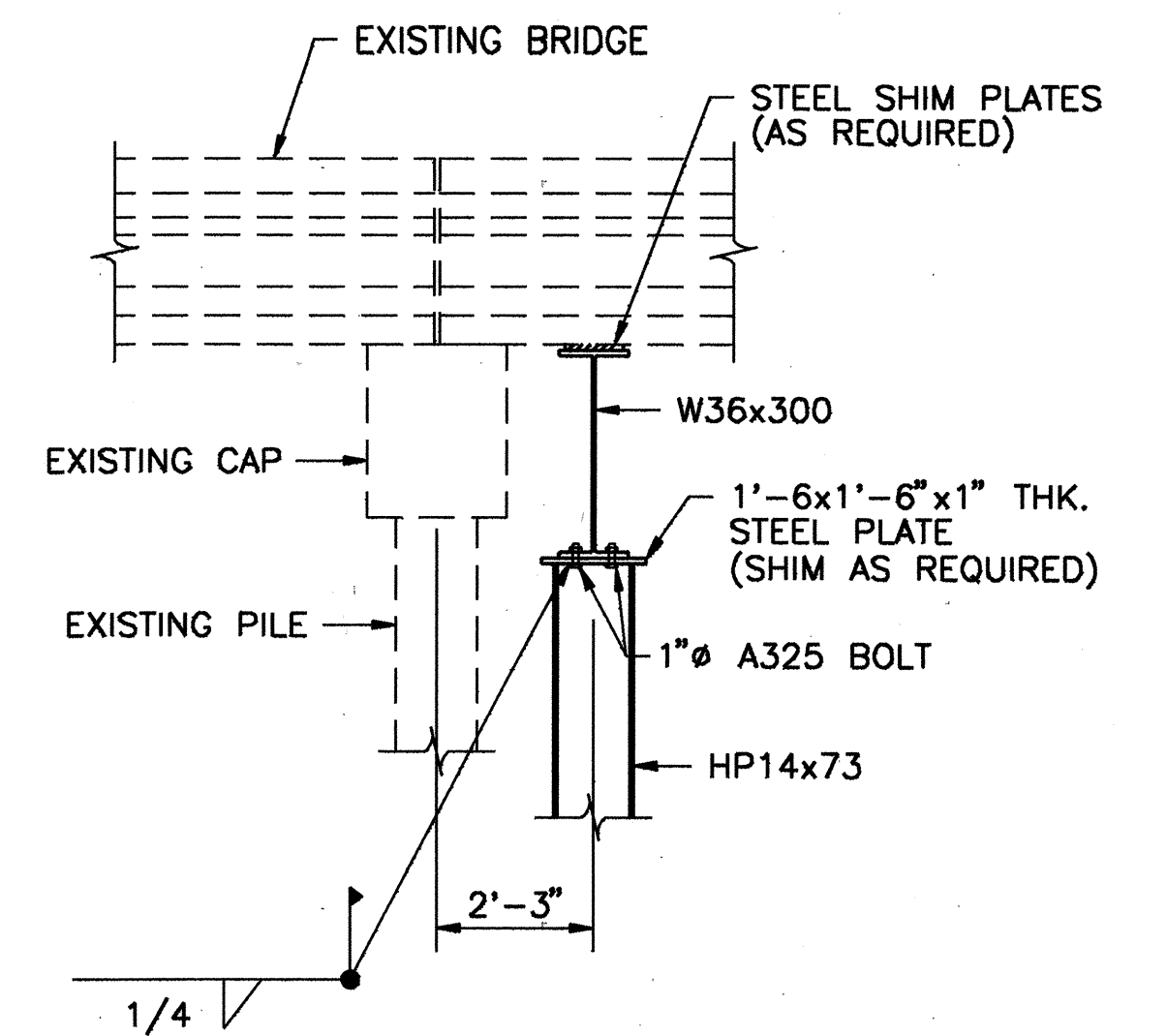
T. J. Farrell



PLAN



ELEVATION



SECTION A-A

* THE CONTRACTOR SHALL ADJUST THESE ELEVATIONS IN ORDER TO ATTAIN FULL CONTACT BETWEEN THE EXISTING PRESTRESSED CONCRETE BEAMS AND THE W36x300.

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REVISIONS		
Date	By	Description

REVISIONS		
Date	By	Description

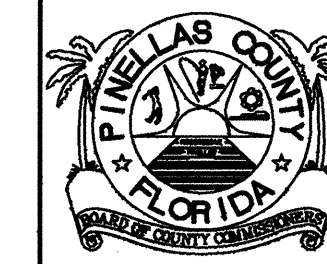
SEAL:

Names	Date
Drawn by TJL	4-95
Checked by MRC	4-95
Designed by MRC	4-95
Checked by BGW	4-95
Approved by T. J. FARRELL	

Timothy J. Farrell



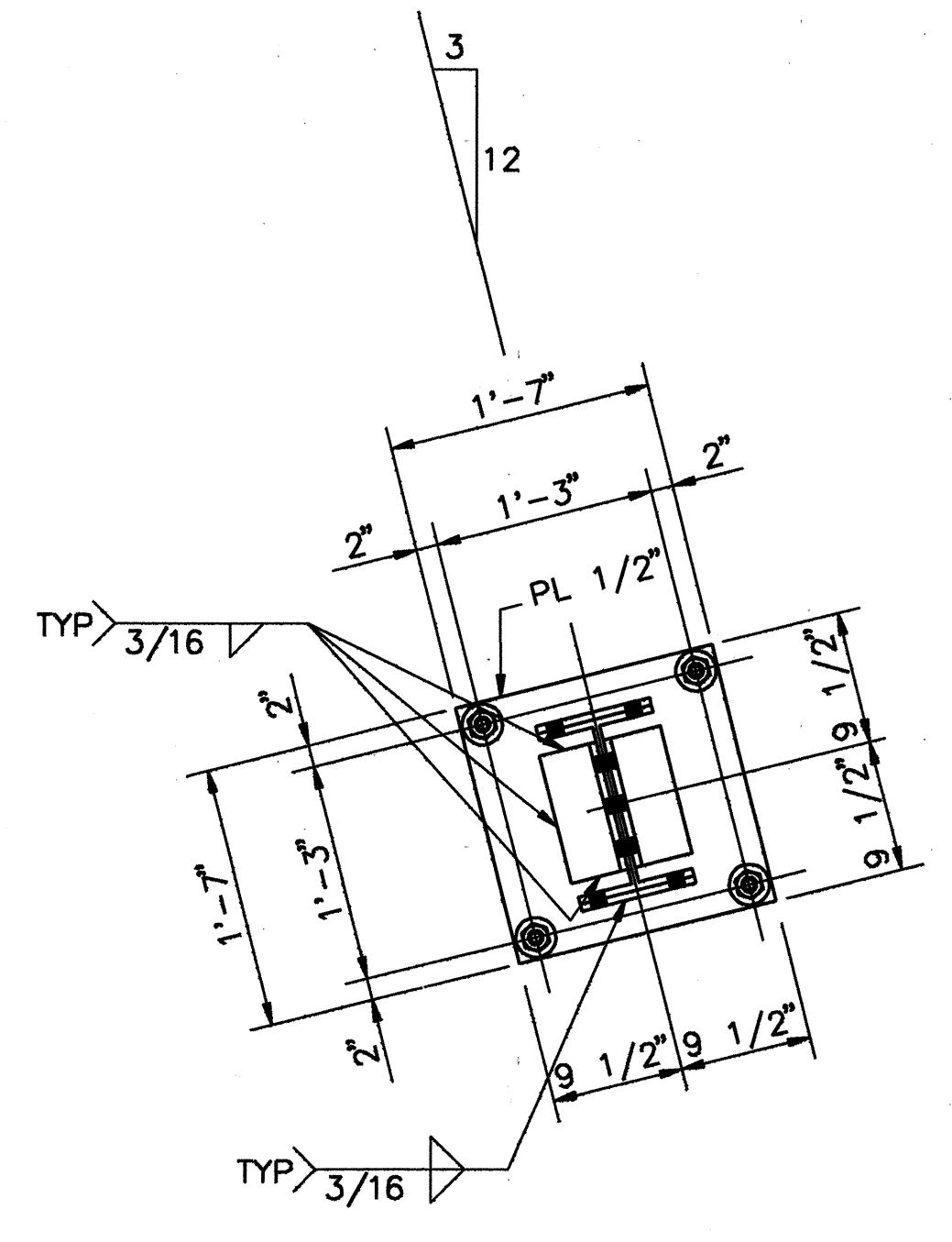
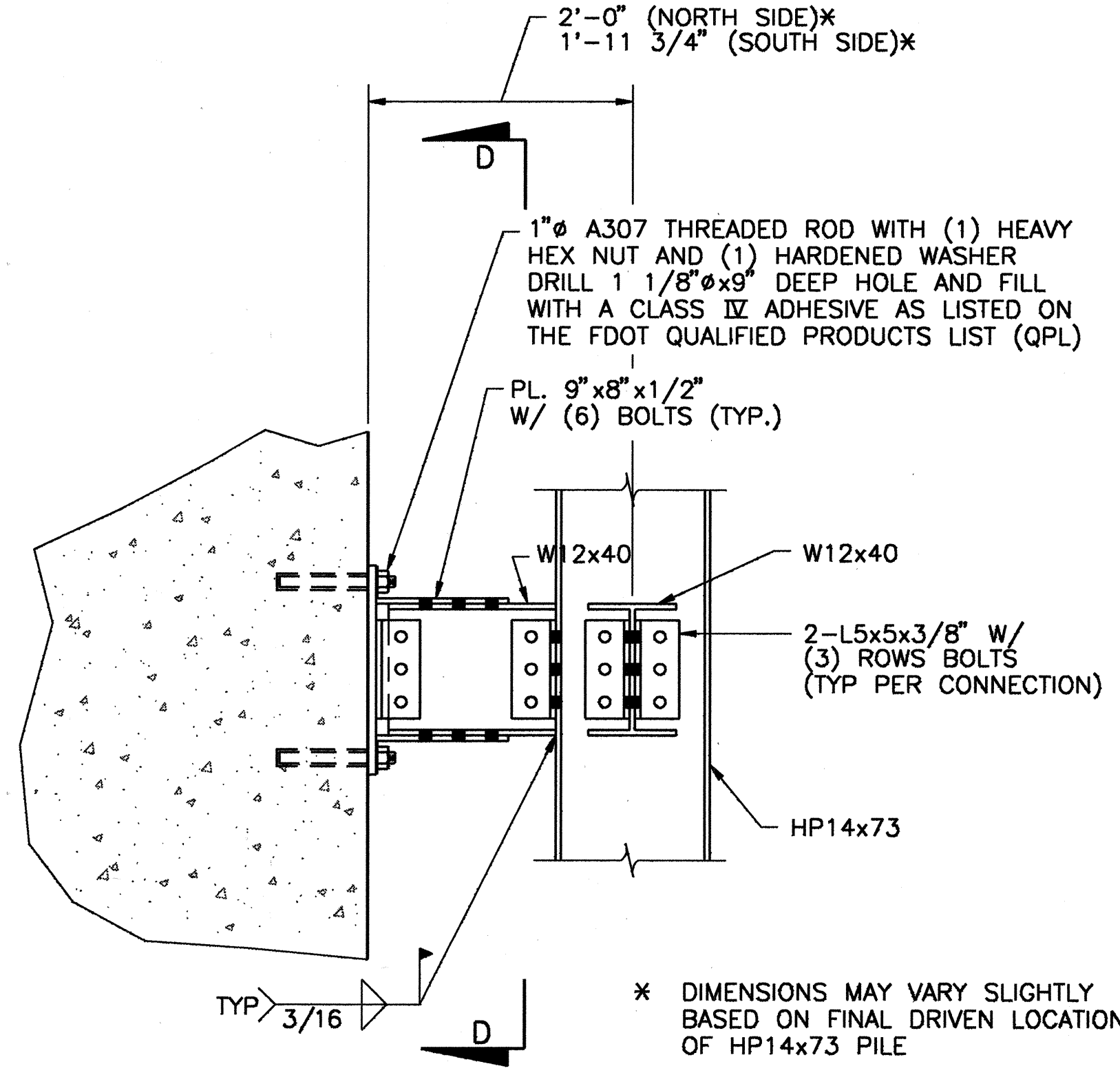
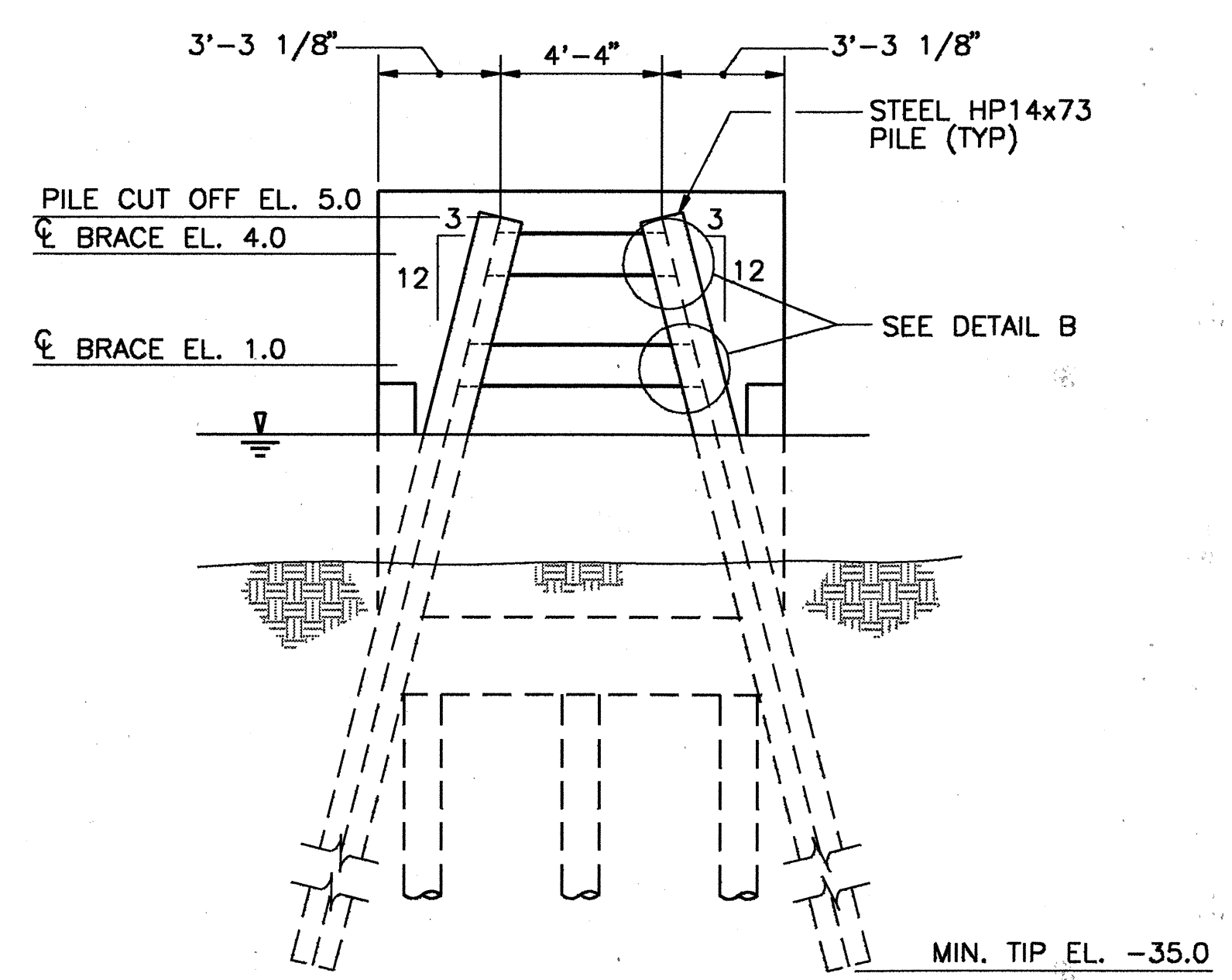
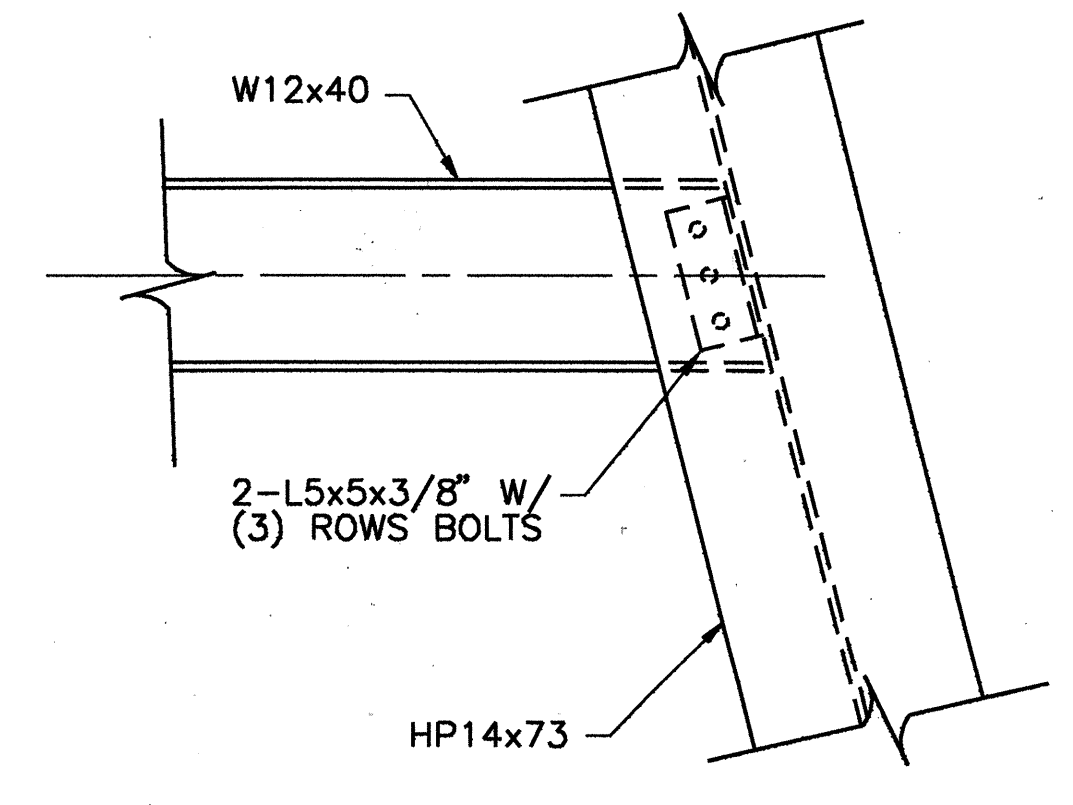
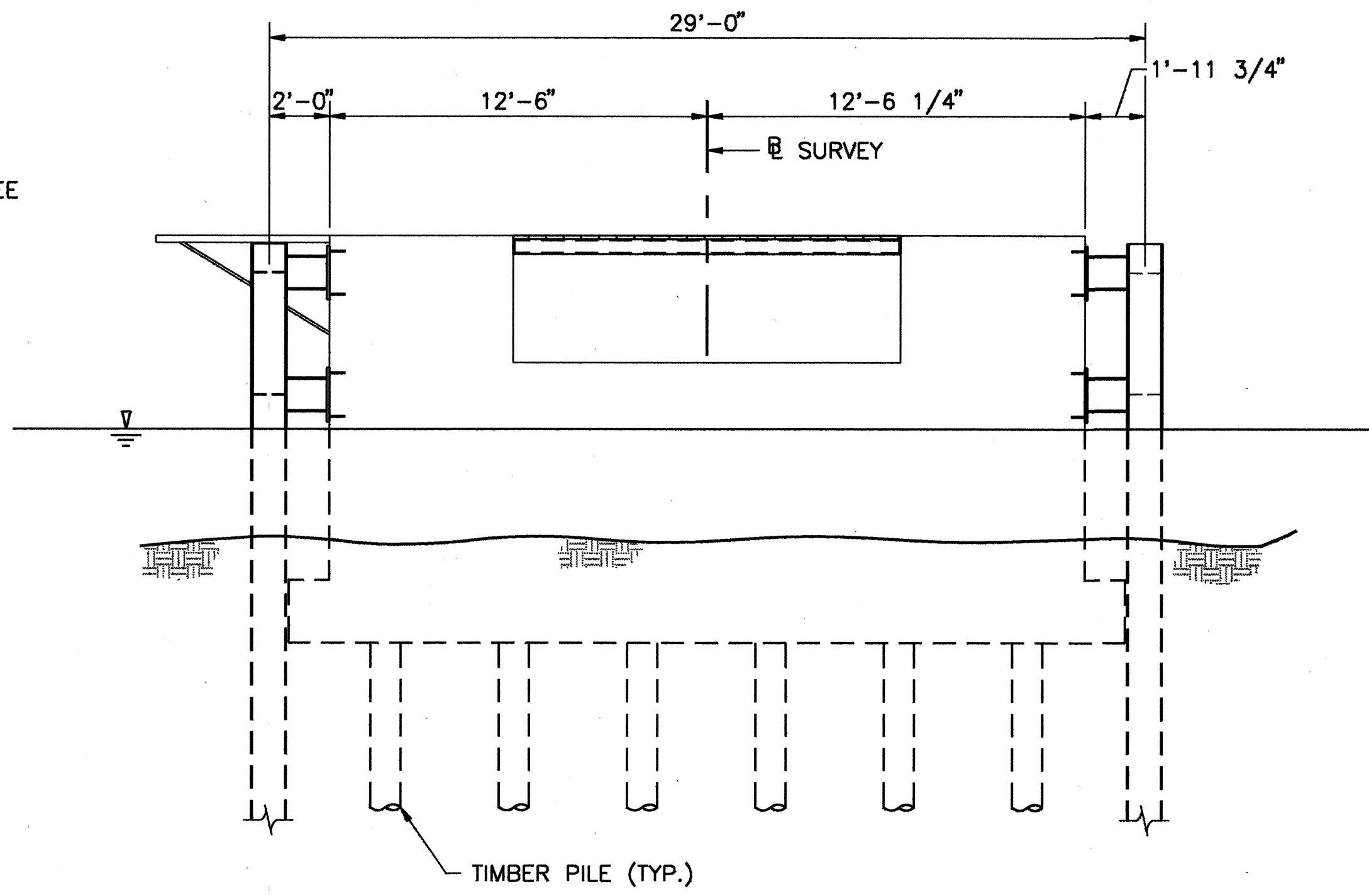
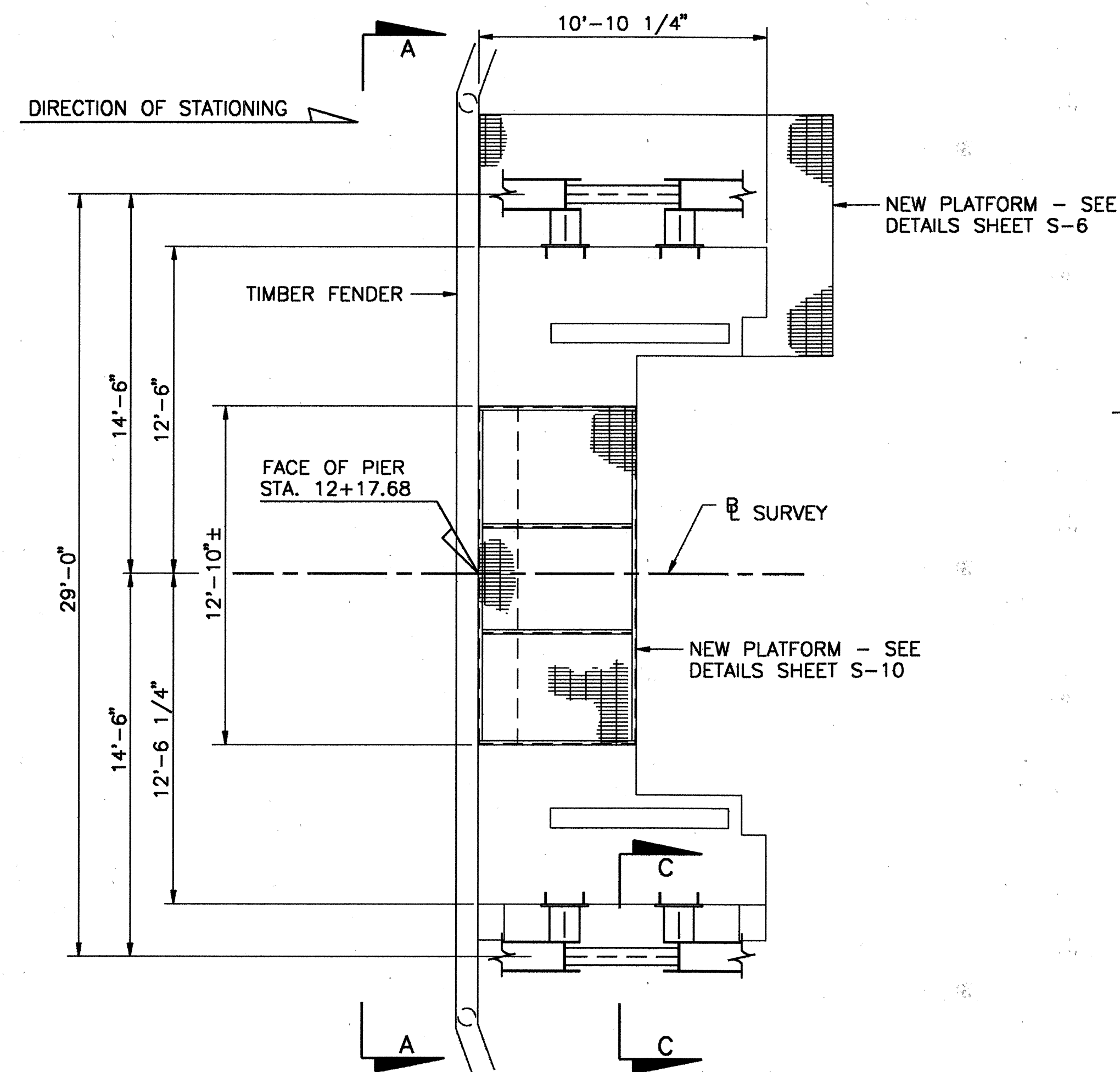
DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

SHEET TITLE:	CRUTCH BENT DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
S-4



* DIMENSIONS MAY VARY SLIGHTLY BASED ON FINAL DRIVEN LOCATION OF HP14x73 PILE

NOTE:
1. PAYMENT FOR BASCULE PIER STABILIZER BRACING AND CONNECTIONS SHALL BE PAID FOR UNDER PAY ITEM NO. 460-2-5 "STRUCTURAL STEEL (BASCULE LEAVES)".

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REVISIONS		REVISIONS	
Date	By	Date	By

Drawn by	Checked by	Designed by	Checked by	Approved by
CLM	TJF	TJF	TJF	T. J. FARRELL

SEAL:

DSA GROUP INC.

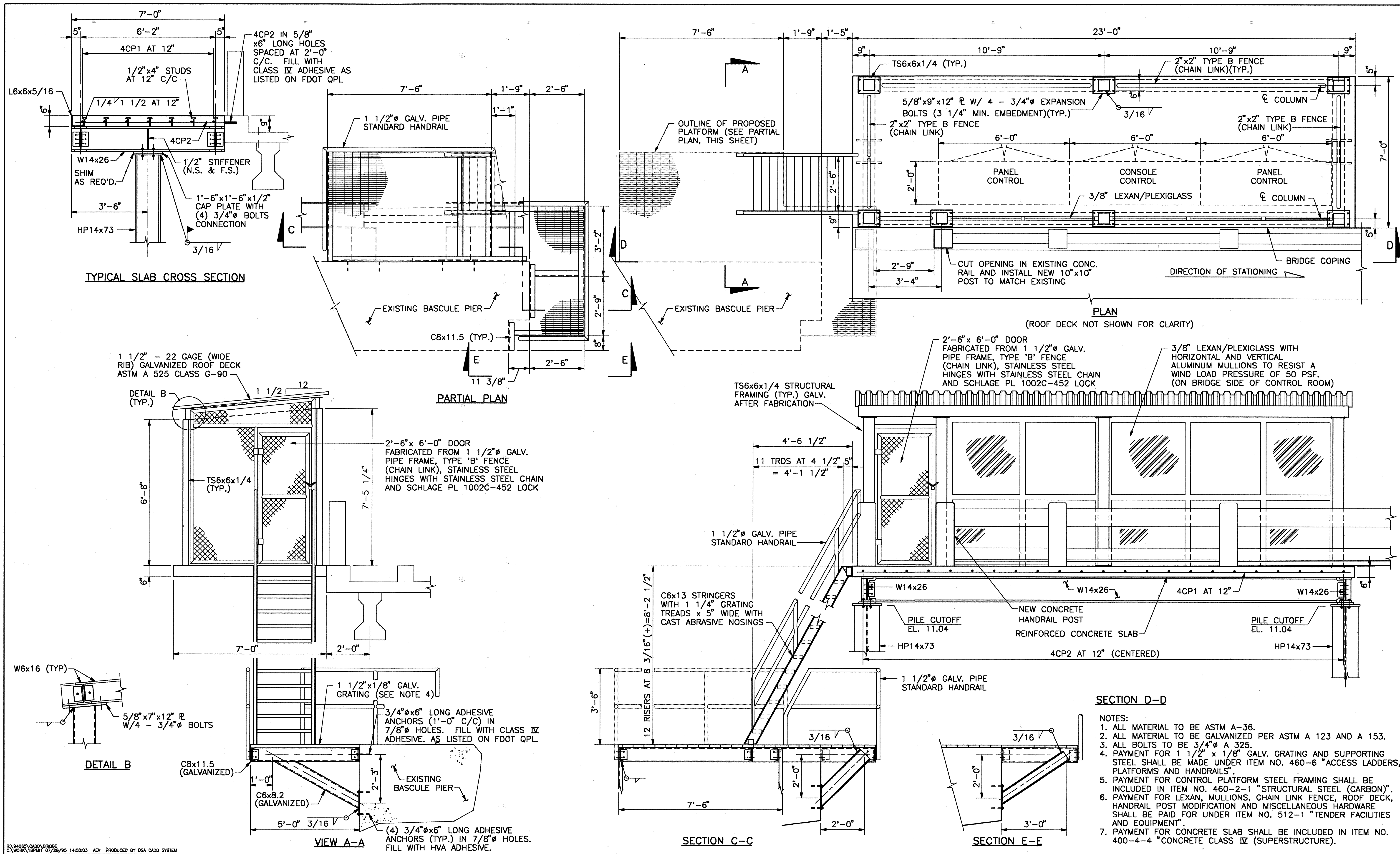
DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607

PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: BASCULE PIER STABILIZING DETAILS
PROJECT NAME: BECKETT BRIDGE REPAIRS

SHEET
S-5

Timothy J. Farrell



- NOTES:**
1. ALL MATERIAL TO BE ASTM A-36.
 2. ALL MATERIAL TO BE GALVANIZED PER ASTM A 123 AND A 153.
 3. ALL BOLTS TO BE 3/4" Ø A 325.
 4. PAYMENT FOR 1 1/2" x 1/8" GALV. GRATING AND SUPPORTING STEEL SHALL BE MADE UNDER ITEM NO. 460-6 "ACCESS LADDERS, PLATFORMS AND HANDRAILS".
 5. PAYMENT FOR CONTROL PLATFORM STEEL FRAMING SHALL BE INCLUDED IN ITEM NO. 460-2-1 "STRUCTURAL STEEL (CARBON)".
 6. PAYMENT FOR LEXAN, MULLIONS, CHAIN LINK FENCE, ROOF DECK, HANDRAIL POST MODIFICATION AND MISCELLANEOUS HARDWARE SHALL BE PAID FOR UNDER ITEM NO. 512-1 "TENDER FACILITIES AND EQUIPMENT".
 7. PAYMENT FOR CONCRETE SLAB SHALL BE INCLUDED IN ITEM NO. 400-4-4 "CONCRETE CLASS IV (SUPERSTRUCTURE)".

REVISIONS

Date	By	Description

REVISIONS

Date	By	Description

SEAL:

Drawn by	Home	Date
CLM		5-95
MRC		5-95
MRC		5-95
JMR		5-95
T. J. FARRELL		

DSA GROUP INC.

DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607

PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

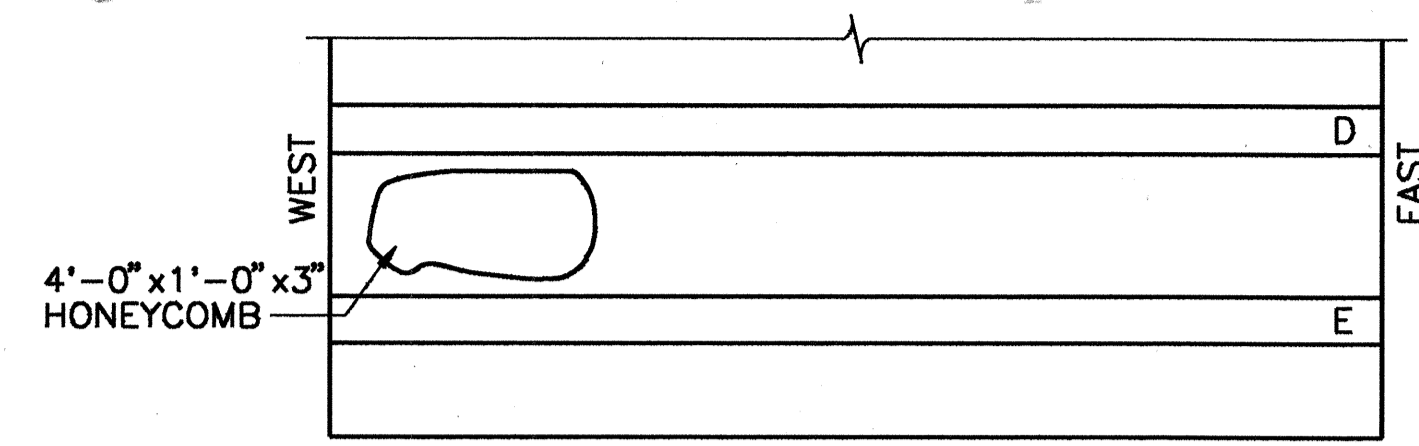
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PROJECT NAME: BECKETT BRIDGE REPAIRS

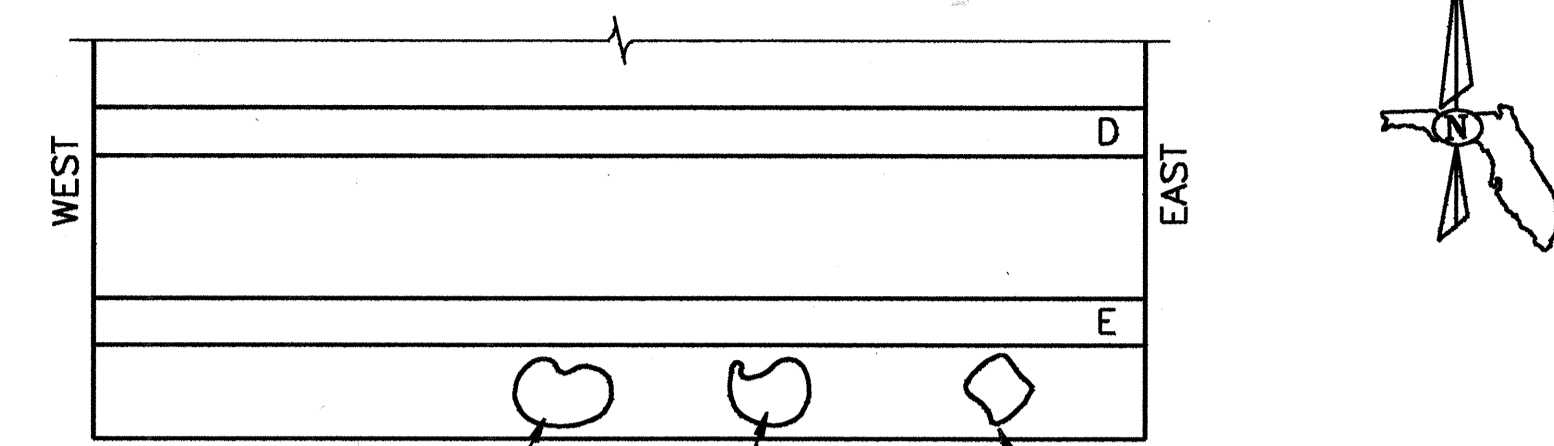
SHEET: S-6

T. J. Farrell

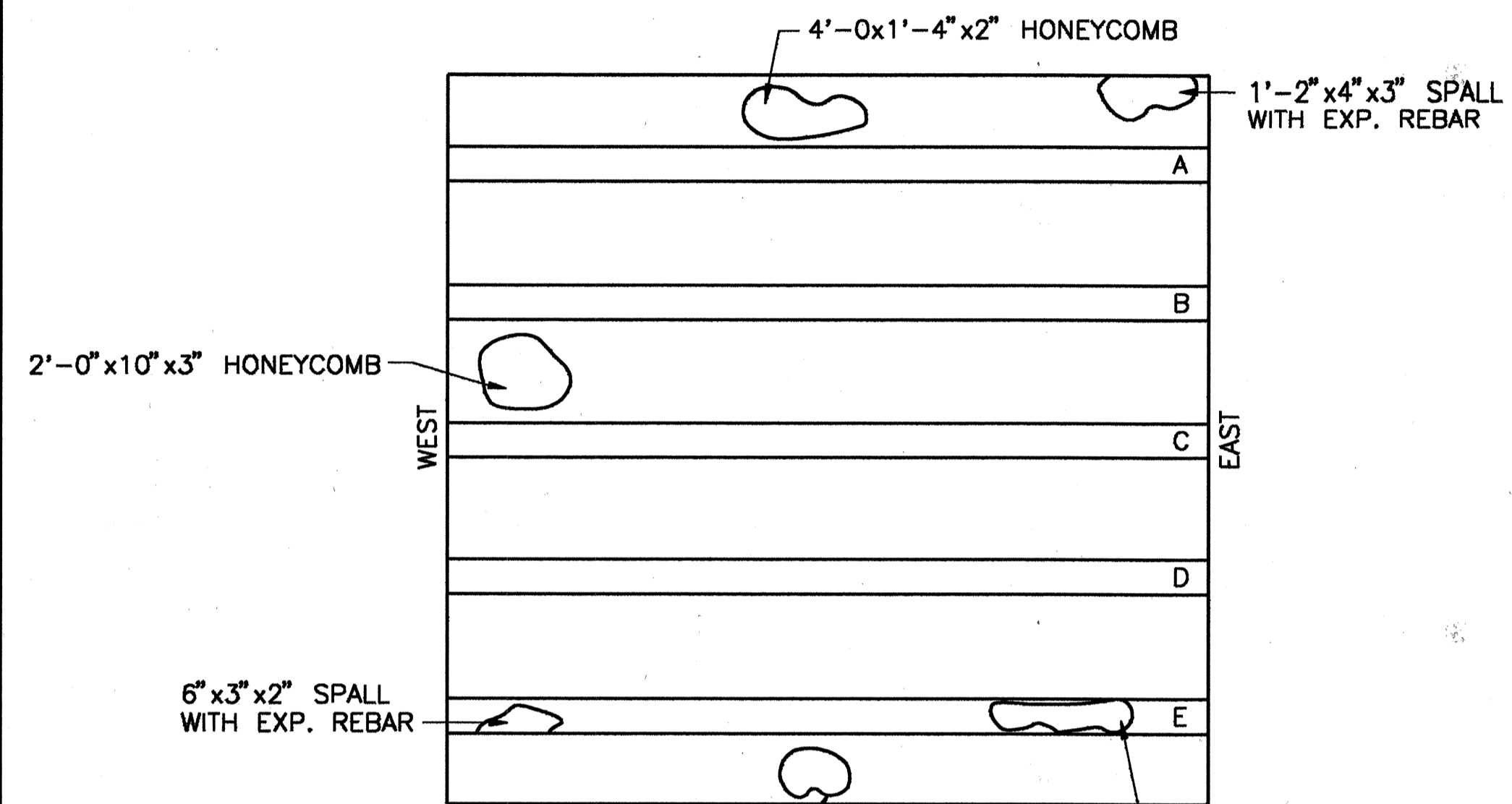
REPAIR NOTES



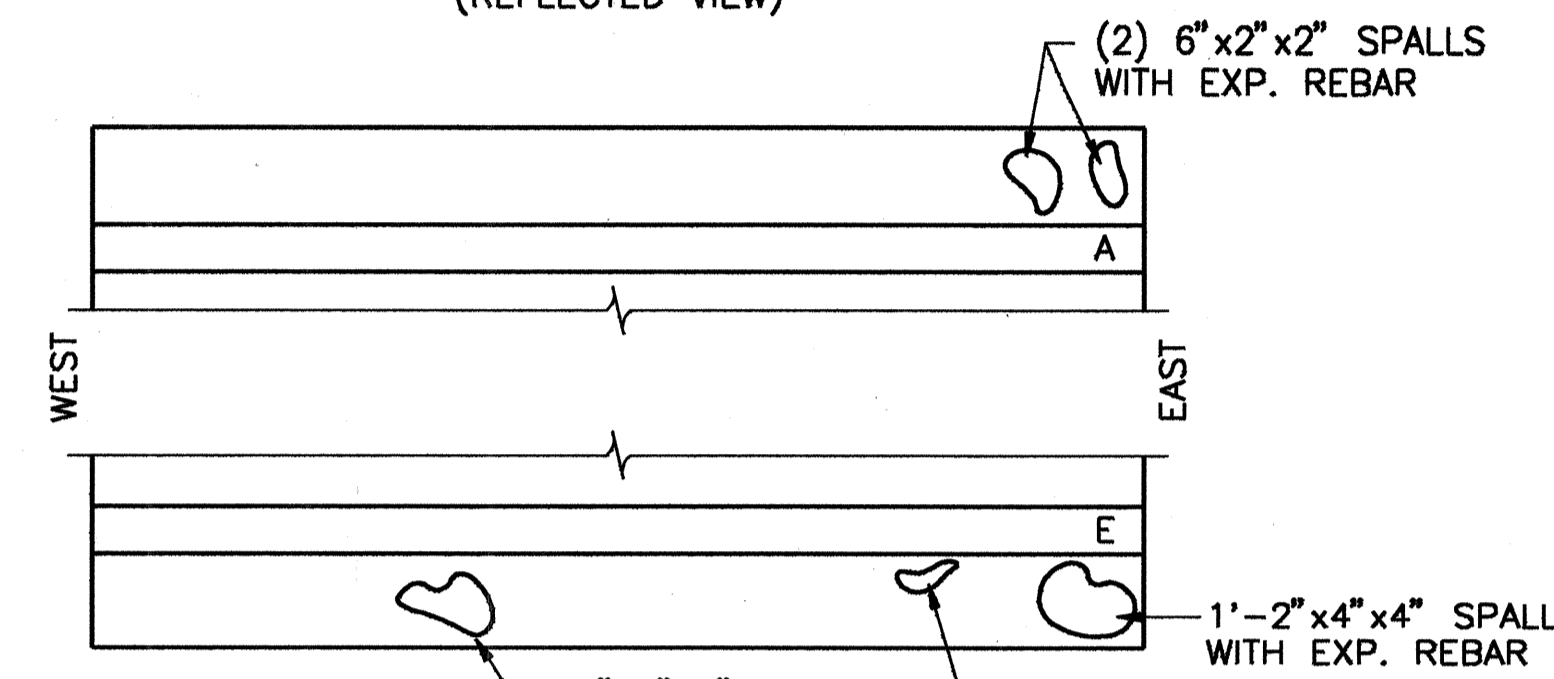
BOTTOM OF DECK-SPAN 2
(REFLECTED VIEW)



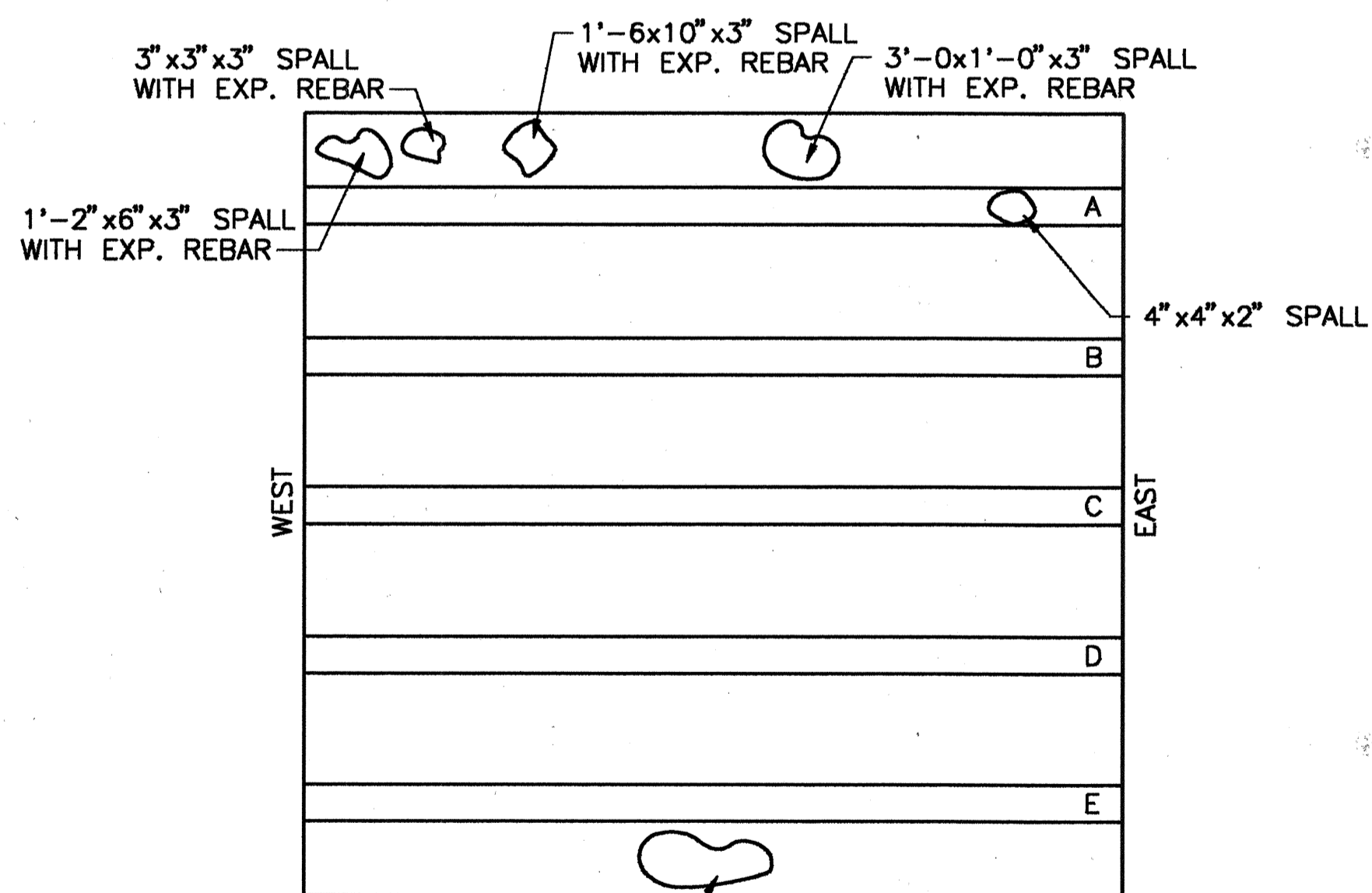
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(REFLECTED VIEW)



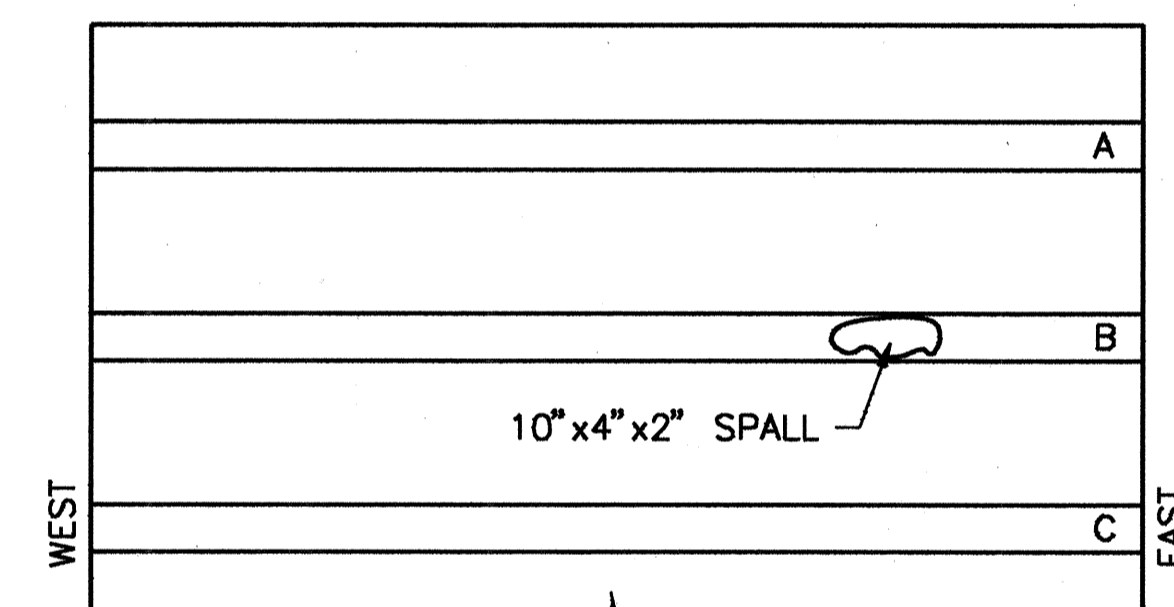
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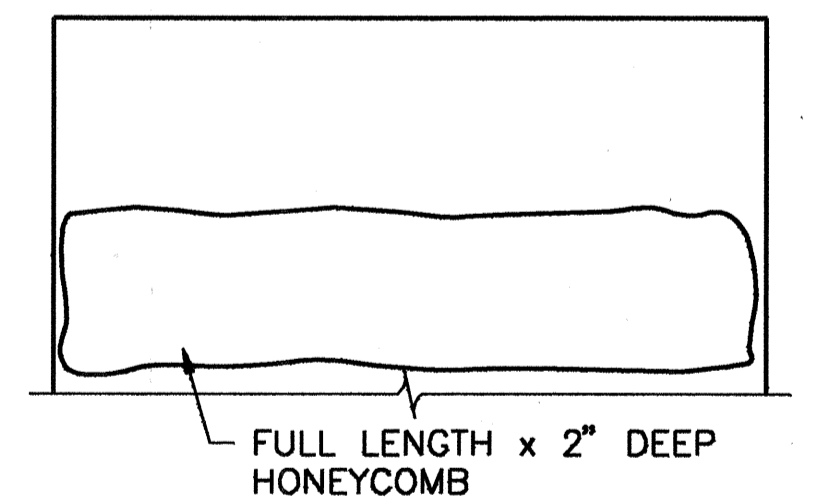
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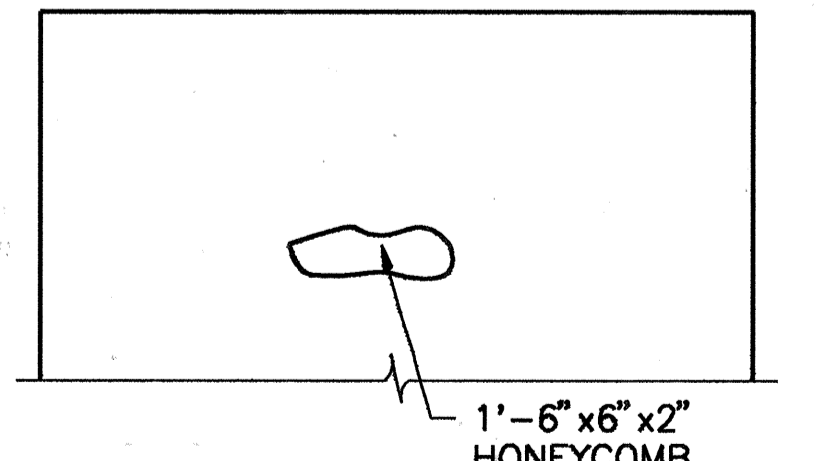
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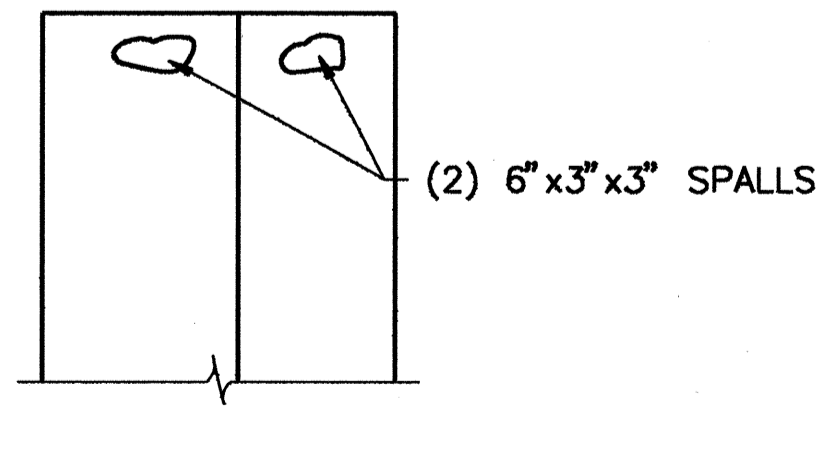
BOTTOM OF DECK-SPAN 10
(REFLECTED VIEW)



NORTH BASCULE PIER - NORTH FACE



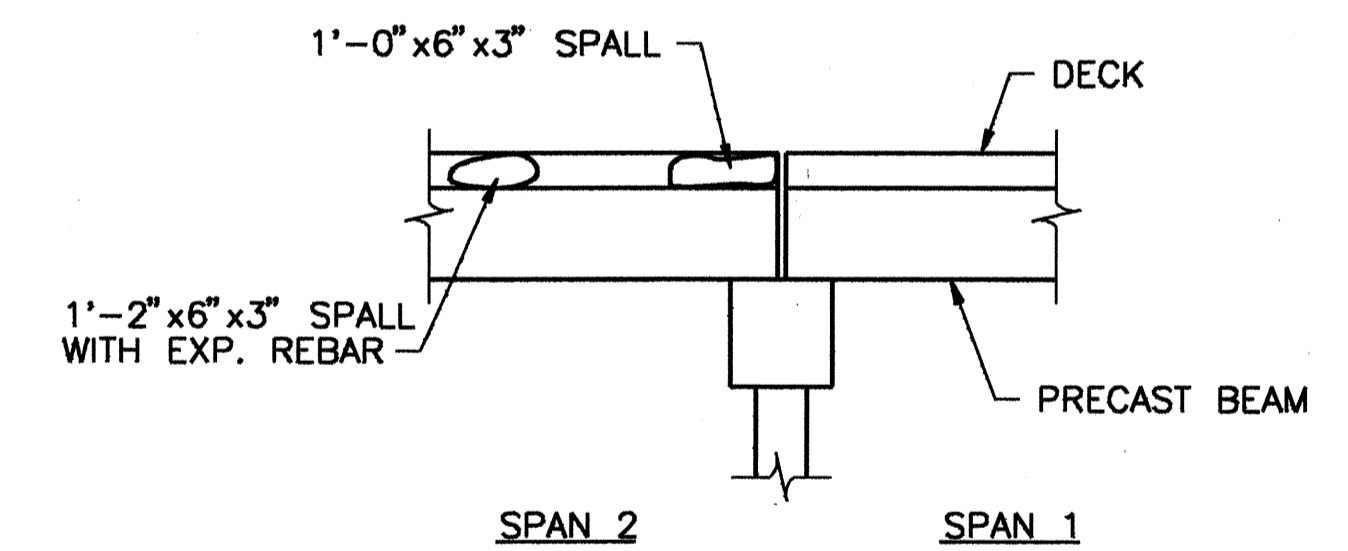
SOUTH BASCULE PIER - SOUTH FACE



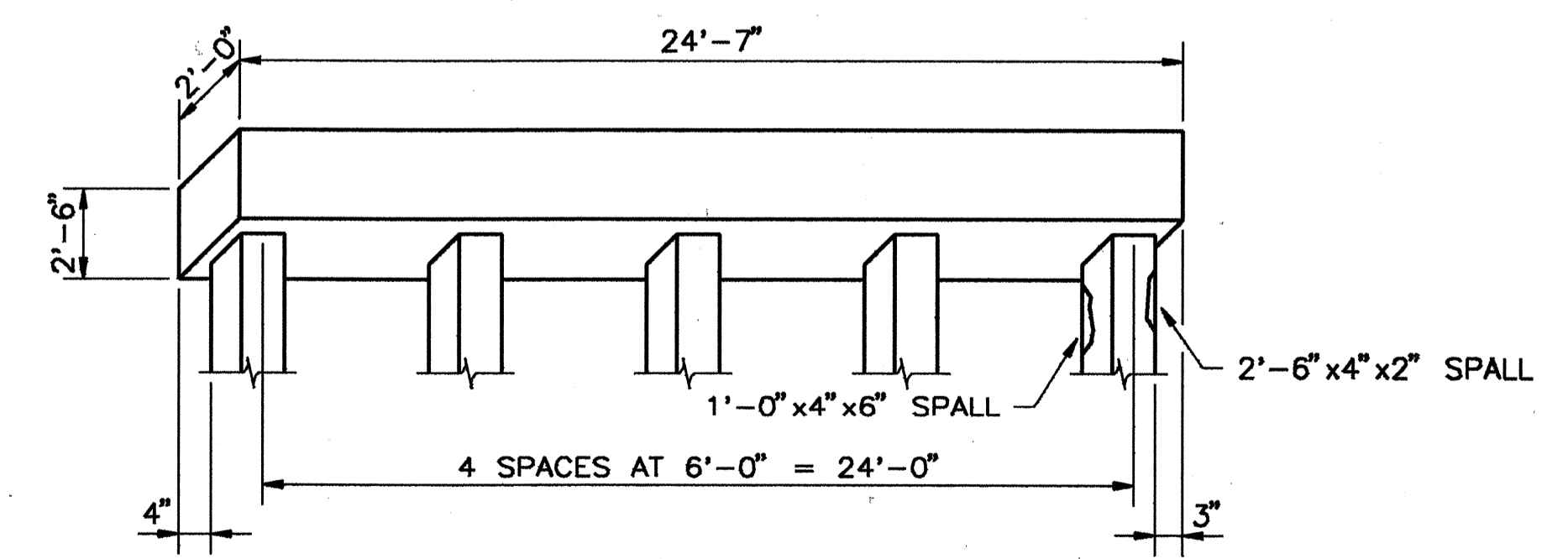
SOUTH BASCULE PIER - WEST FACE

- PATCHING OF CONCRETE SPALLS:**
- SPALL WITHOUT EXPOSED REINFORCING STEEL:** REPAIRING SPALLED CONCRETE SHALL INCLUDE ALL WORK REQUIRED TO REPAIR DETERIORATED CONCRETE SURFACES WHERE INDICATED OR AS DIRECTED BY THE ENGINEER, AND CONFORM TO MANUFACTURER'S SPECIFICATIONS. THIS WORK CONSISTS OF THE REMOVAL AND DISPOSAL OF LOOSE AND DISINTEGRATED CONCRETE, SAW-CUTTING, THE PREPARATION OF THE SURFACE AND PLACING OF POLYMER MODIFIED MORTAR. THE FOLLOWING STEPS SHALL BE USED IN ADDITION TO MANUFACTURER'S RECOMENDATIONS:
- REMOVE UNSOUND CONCRETE FROM SPALLED AREA. POWER CHIPPING TOOLS MAY BE USED, BUT NOT TO EXCEED 30 POUNDS.
 - CLEAN CONCRETE SURFACES OF ALL LOOSE CONCRETE, DUST, AND ANY OTHER FOREIGN MATERIAL. BE SURE REPAIR AREA IS NOT LESS THAN 1/2 IN. IN DEPTH. PREPARE AREA TO OBTAIN AN AGGREGATE FRACTURED SURFACE WITH A MINIMUM SURFACE PROFILE OF ± 1/16 IN.
 - USE A POLYMER MODIFIED MORTAR (MASTERPATCH 230 VP AS MANUFACTURED BY MASTER BUILDERS, INC. OR APPROVED EQUAL) WHILE STILL TACKY. THE MATERIAL SHALL COMPLETELY FILL THE AREA, THOROUGHLY COMPACT THE COMPOUND ELIMINATING ALL AIR POCKETS. ALLOW THE MATERIAL TO STIFFEN ENOUGH BETWEEN LIFTS TO SUPPORT ITS OWN WEIGHT.
 - AFTER THE NEW CONCRETE IS IN PLACE, THE SURFACE SHALL BE FINISHED TO MATCH THE ADJACENT EXISTING AREAS.

- SPALL WITH EXPOSED REINFORCING STEEL:** REPAIRING SPALLED CONCRETE SHALL INCLUDE ALL WORK REQUIRED TO REPAIR DETERIORATED CONCRETE SURFACES WHERE INDICATED OR AS DIRECTED BY THE ENGINEER, AND CONFORM TO MANUFACTURER'S SPECIFICATIONS. THIS WORK CONSISTS OF THE REMOVAL AND DISPOSAL OF LOOSE AND DISINTEGRATED CONCRETE, SAW-CUTTING, THE PREPARATION OF THE SURFACE AND PLACING OF A POLYMER MODIFIED MORTAR. THE FOLLOWING STEPS SHALL BE USED IN ADDITION TO MANUFACTURER'S RECOMENDATIONS:
- REMOVE UNSOUND CONCRETE FROM SPALLED AREA. PNEUMATIC TOOLS SHALL NOT BE PLACED IN DIRECT CONTACT WITH THE REINFORCING STEEL. EXTREME CARE SHALL BE TAKEN AS NOT TO DAMAGE THE STEEL OR ITS BOND IN THE SURROUNDING SOUND CONCRETE.
 - THE REMOVAL SHALL CONTINUE UNTIL AT LEAST 3/4 OF THE BAR'S CIRCUMFERENCE IS EXPOSED. IF UNSOUND CONCRETE IS ENCOUNTERED AT OR BELOW THE MID-DEPTH OF REINFORCEMENT BARS, REMOVAL SHALL EXTEND TO AT LEAST 3/4 INCHES BEYOND BARS.
 - CLEAN CONCRETE SURFACE AND EXPOSED REINFORCING STEEL OF ALL LOOSE CONCRETE, DUST, AND ANY FOREIGN MATERIAL. RUST SCALE SHALL BE REMOVED BY HYDROBLASTING.
 - THE REMAINING STEPS ARE SIMILAR TO THOSE USED FOR REPAIRING SPALLS WITHOUT EXPOSED REINFORCING STEEL. THE MATERIAL USED TO REPAIR CONCRETE SPALLS SHALL BE THE SAME TYPE USED FOR REPAIRING SPALLS WITHOUT EXPOSED REINFORCING STEEL.
 - WHEN REMOVING SPALLS AND UNSOUND CONCRETE, EDGES SHALL REMAIN VERTICAL (HORIZONTAL) WITH A MINIMUM DEPTH (WIDTH) OF 1/4" SUCH THAT THE NEW CEMENT IS NOT FEATHERED TO MATCH THE EXISTING CONCRETE SURFACE.



BENT NO. 2
(NORTH FASCIA)



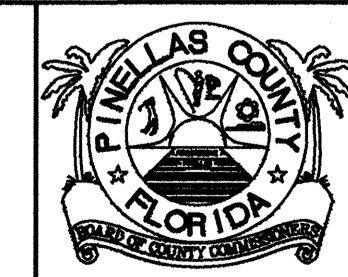
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REVISIONS		REVISIONS	
Date	By	Date	By

Drawn by	Names	Dates
CLM	CLM	5-95
MRC	MRC	5-95
MRC	MRC	5-95
BGW	BGW	5-95
T. J. FARRELL	T. J. FARRELL	

DSA GROUP INC.
 DSA GROUP, INC.
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 TAMPA, FLORIDA 33607

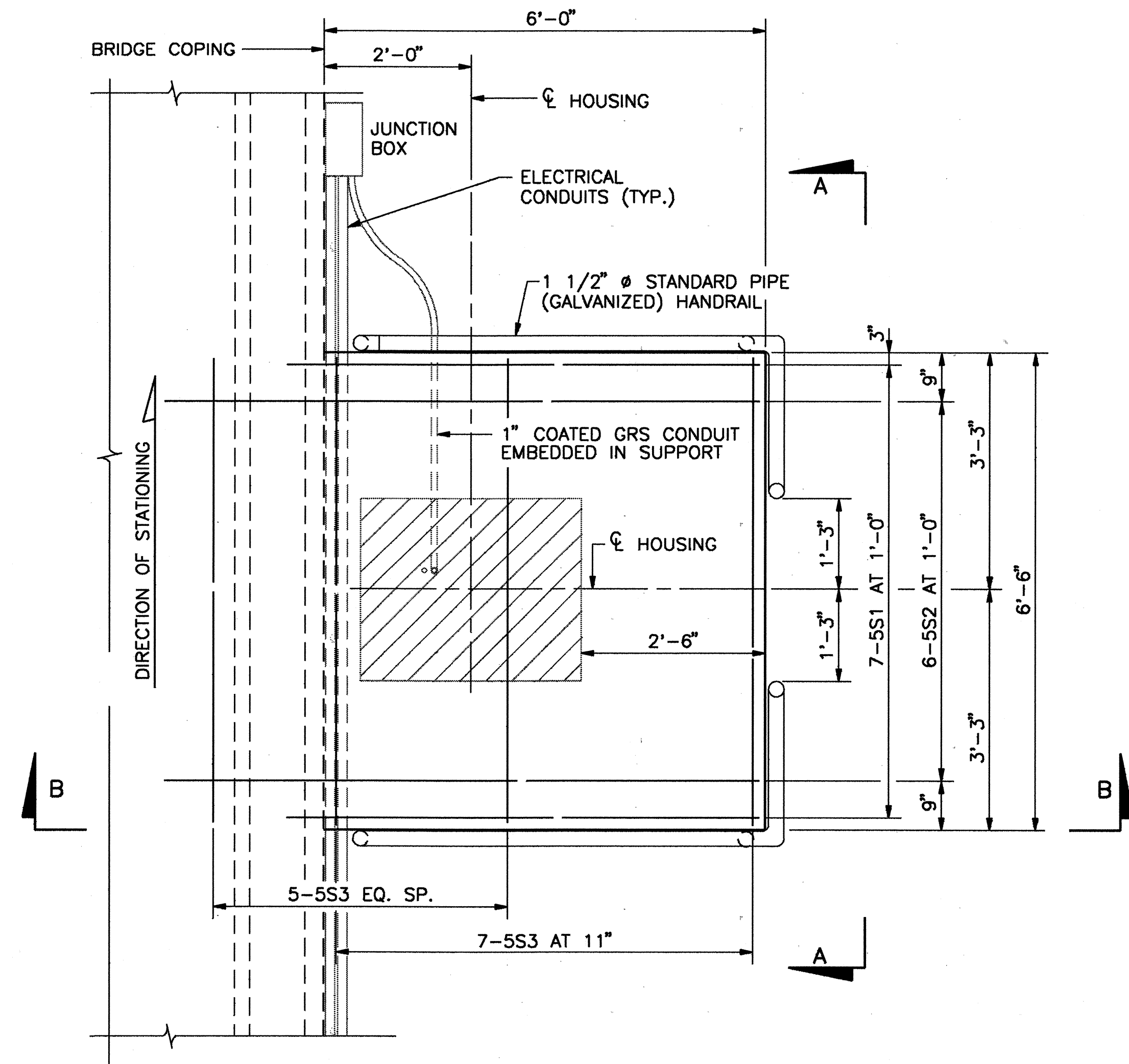
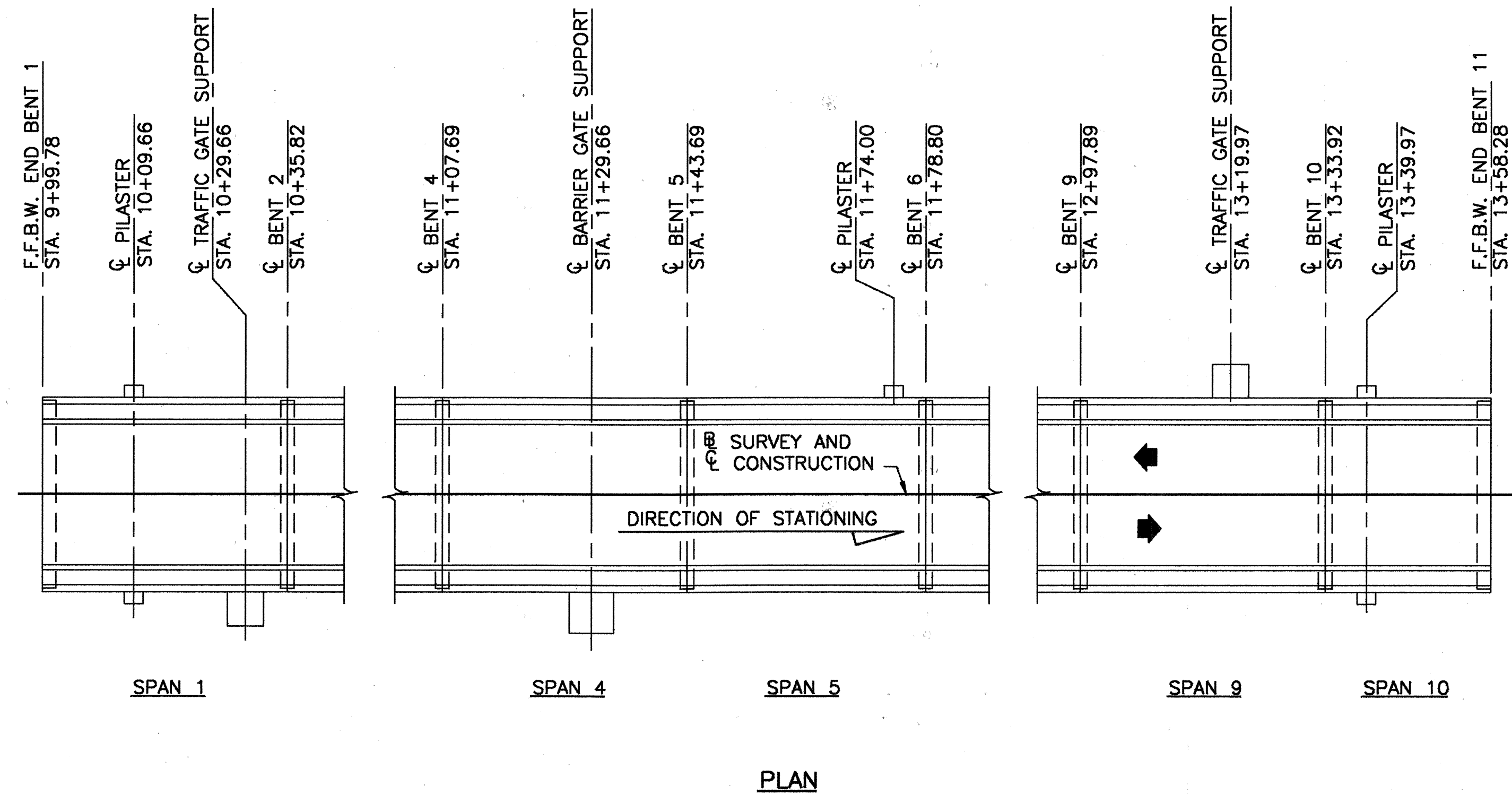
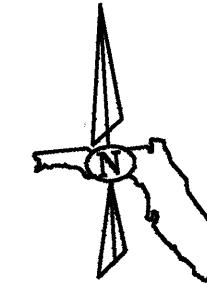


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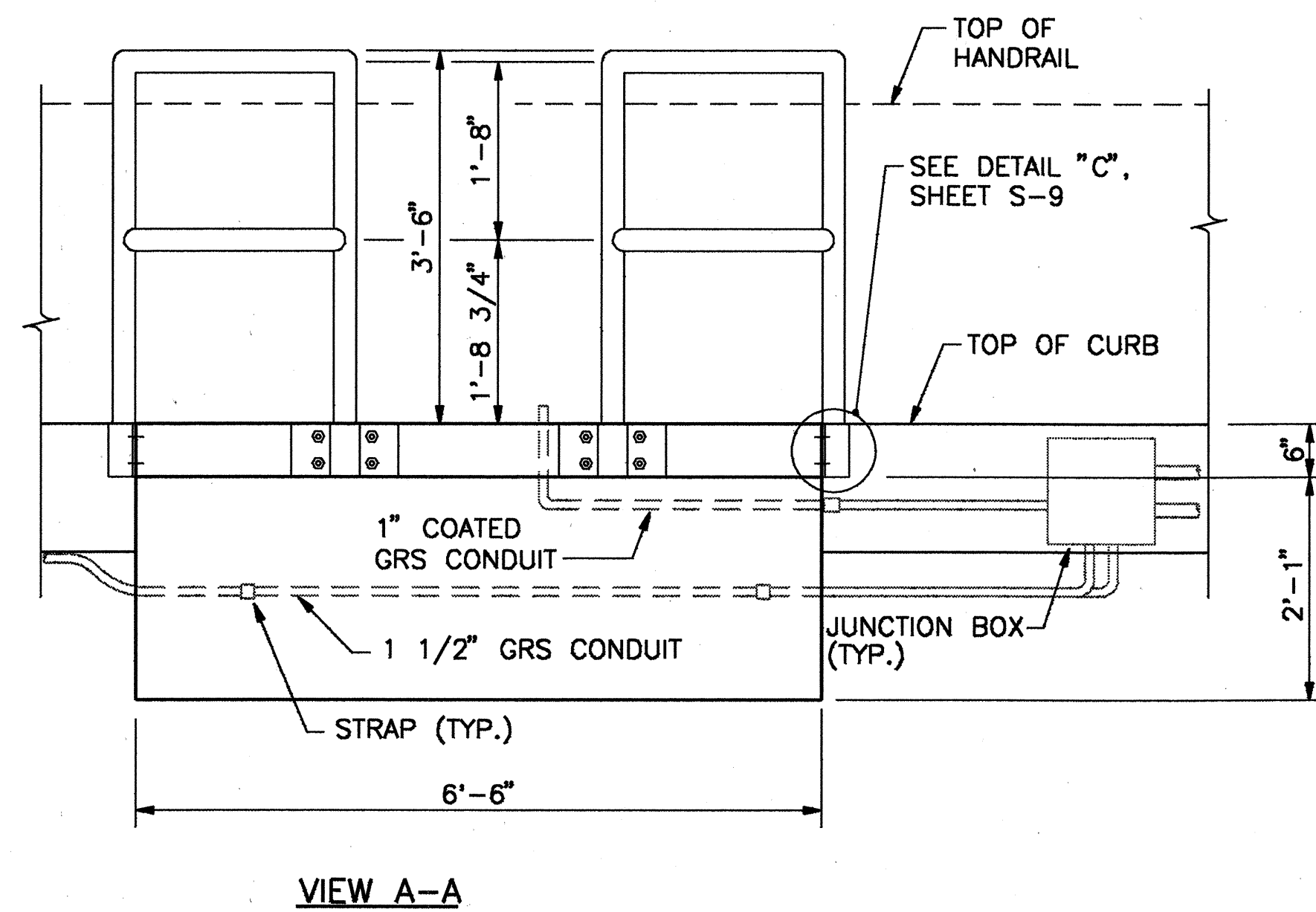
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PROJECT NAME: BECKETT BRIDGE REPAIRS

SHEET
S-7

Timothy J. Farrell

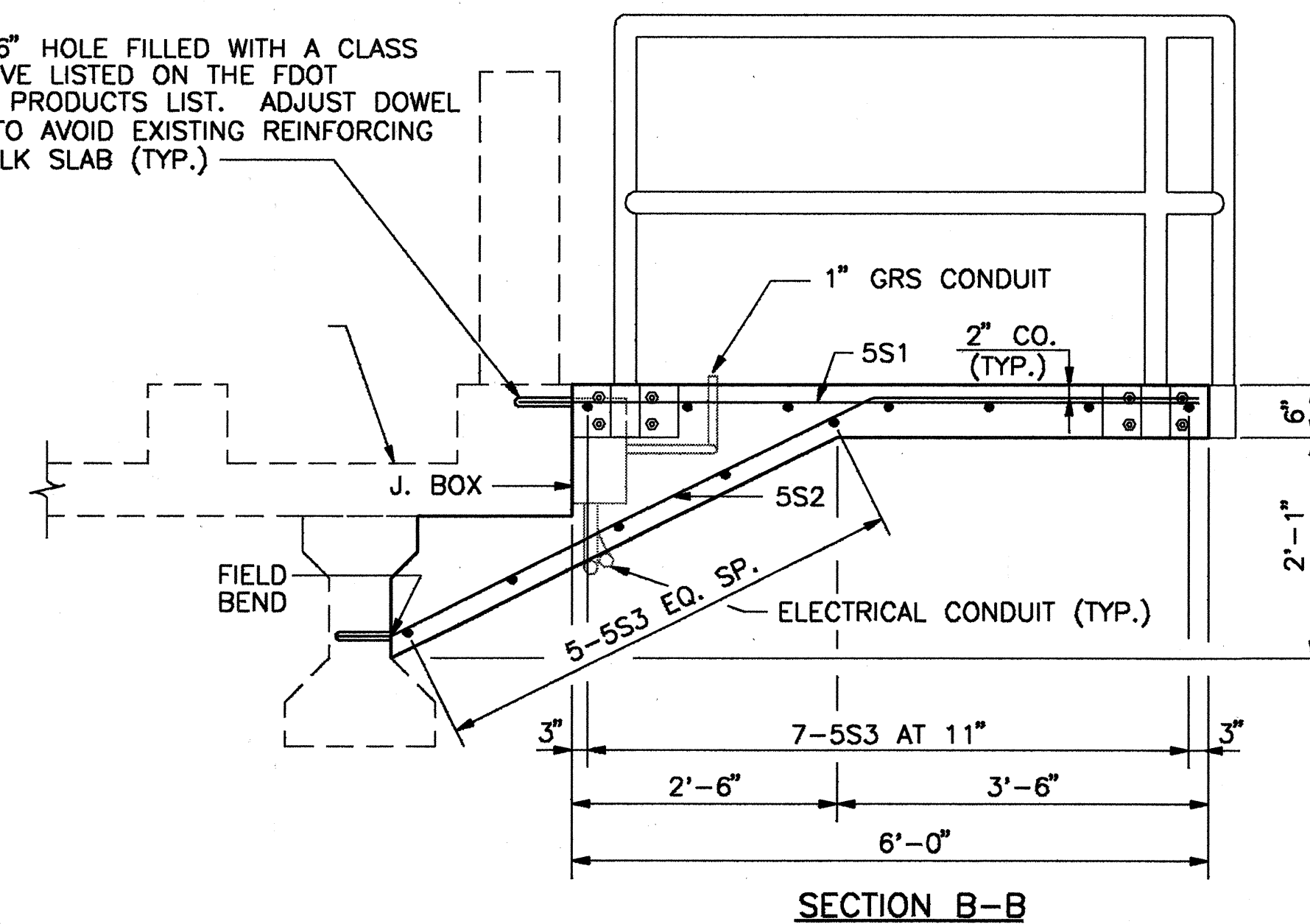


PLAN-BARRIER GATE SUPPORT



VIEW A-A

3/4" x 6" HOLE FILLED WITH A CLASS IV ADHESIVE LISTED ON THE FDOT QUALIFIED PRODUCTS LIST. ADJUST DOWEL SPACING TO AVOID EXISTING REINFORCING IN SIDEWALK SLAB (TYP.)



SECTION B-B

* ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CONCRETE CLASS IV (SUPERSTRUCTURE)	CY	5.1
REINFORCING STEEL (SUPERSTRUCTURE)	LB	796
HANDRAILS	LB	400

* QUANTITIES INCLUDE BARRIER GATE SUPPORT, TRAFFIC GATE SUPPORTS AND PILASTERS.

NOTES:

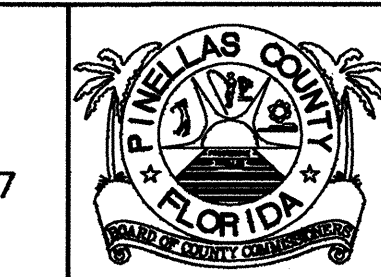
- FOR HANDRAIL NOTES, LIGHT POLE PILASTER DETAILS AND DETAIL 'C', SEE SHEET S-9.
- FOR REINFORCING BAR LIST, SEE SHEET S-16.
- COST FOR PIPE HANDRAIL AND MISCELLANEOUS CONNECTION PIECES SHALL BE PAID FOR UNDER THE CONTRACT PRICE FOR ACCESS LADDERS, PLATFORMS, HANDRAILS, ITEM NO. 460-6.

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Names	Dates
Drawn by CLM	5-95
Checked by MRC	5-95
Designed by MRC	5-95
Checked by BGW	5-95
Approved by T. J. FARRELL	

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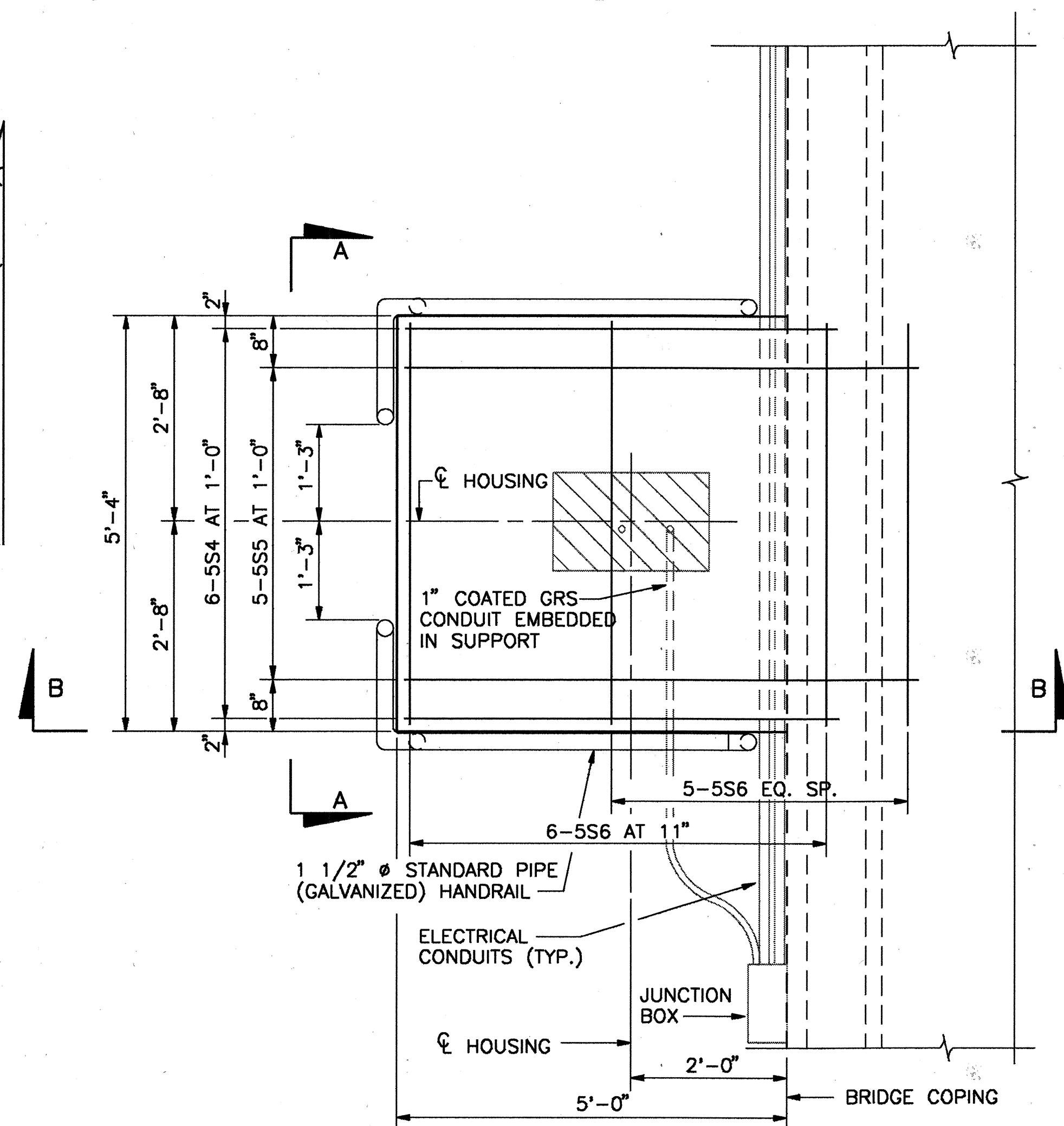
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: BARRIER GATE SUPPORT DETAILS
PROJECT NAME: BECKETT BRIDGE REPAIRS

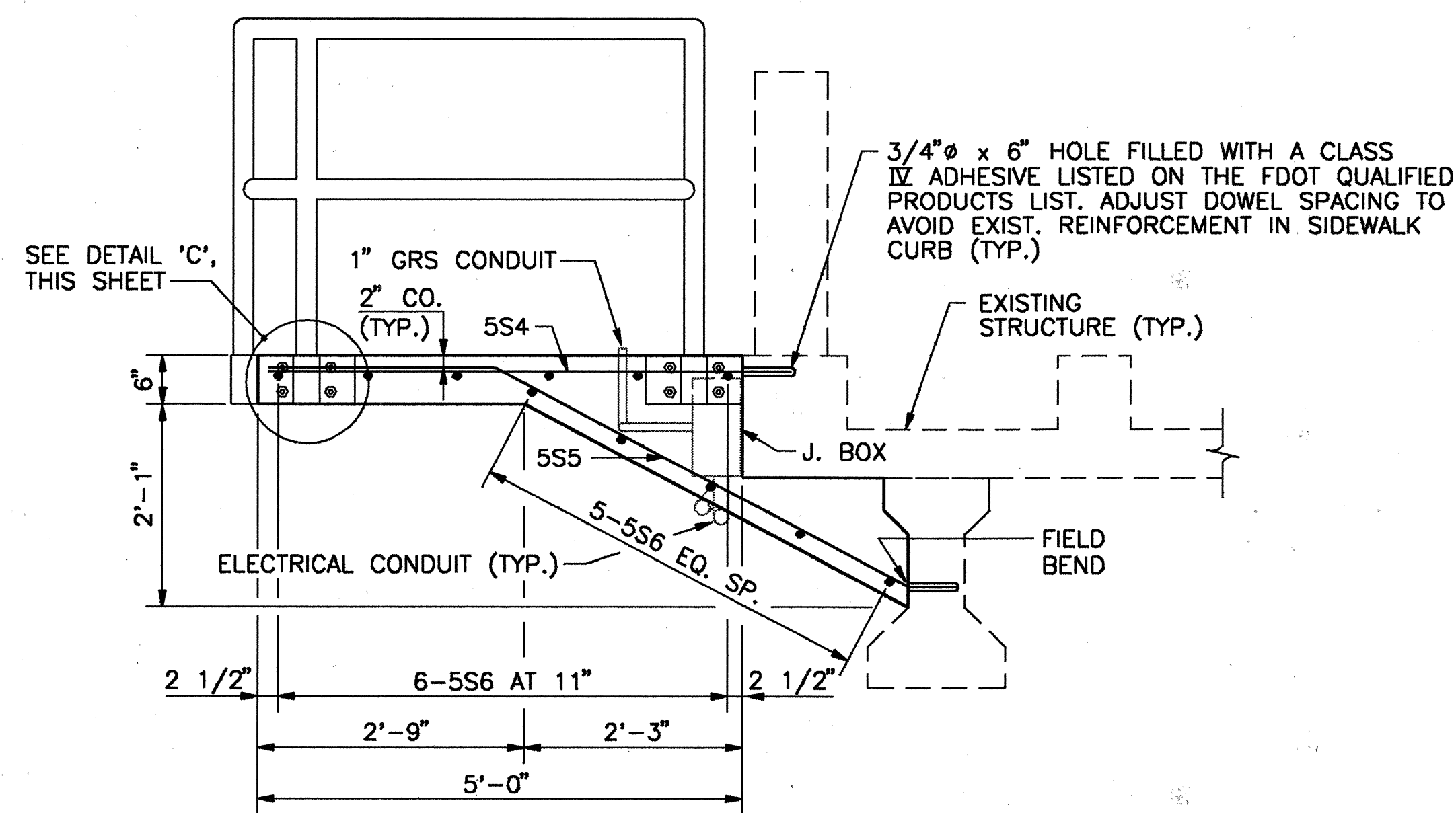
SHEET
S-8

Timothy J. Farrell

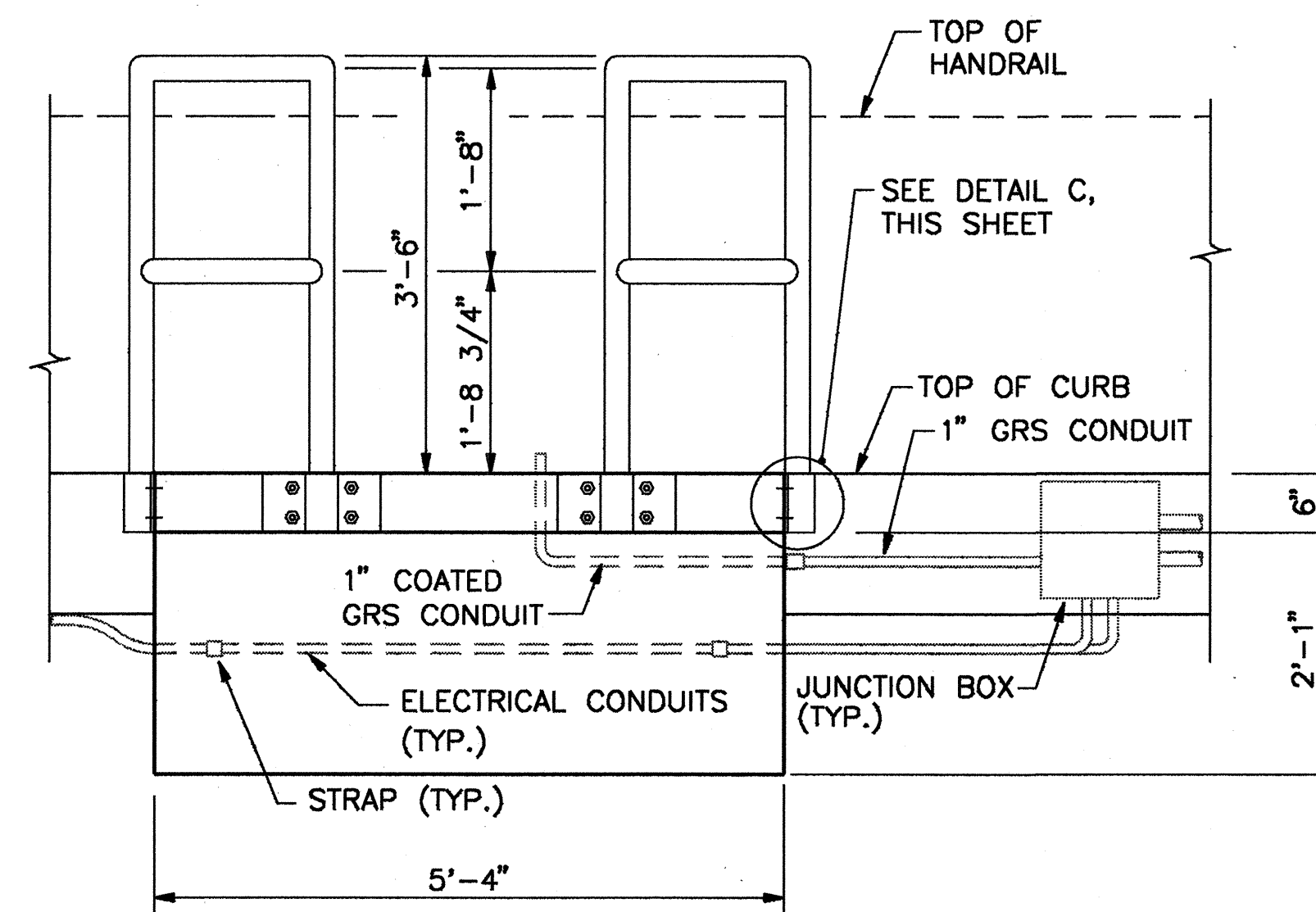
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DIRECTION OF STATIONING (SPAN 9)



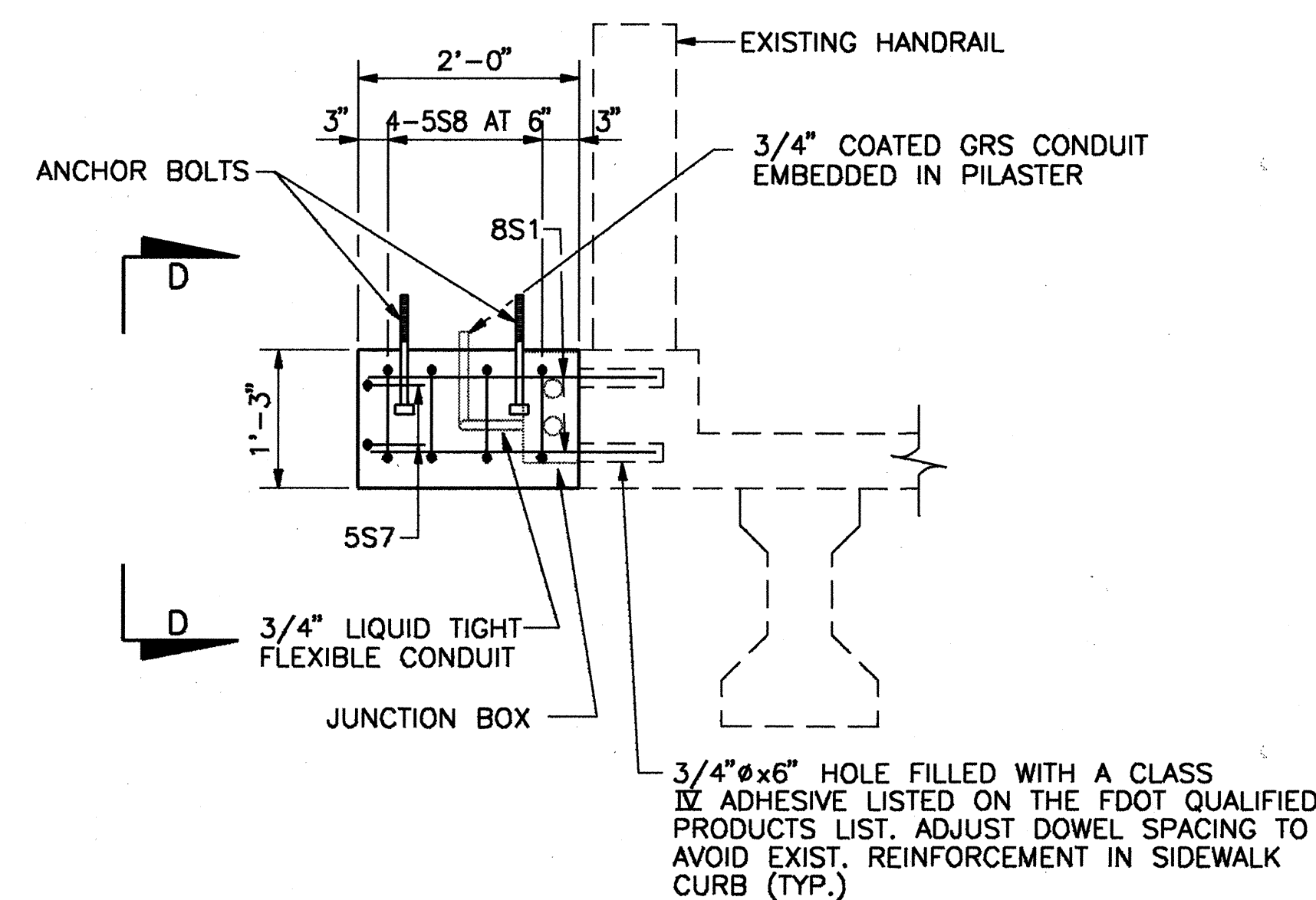
PLAN - TRAFFIC GATE SUPPORT



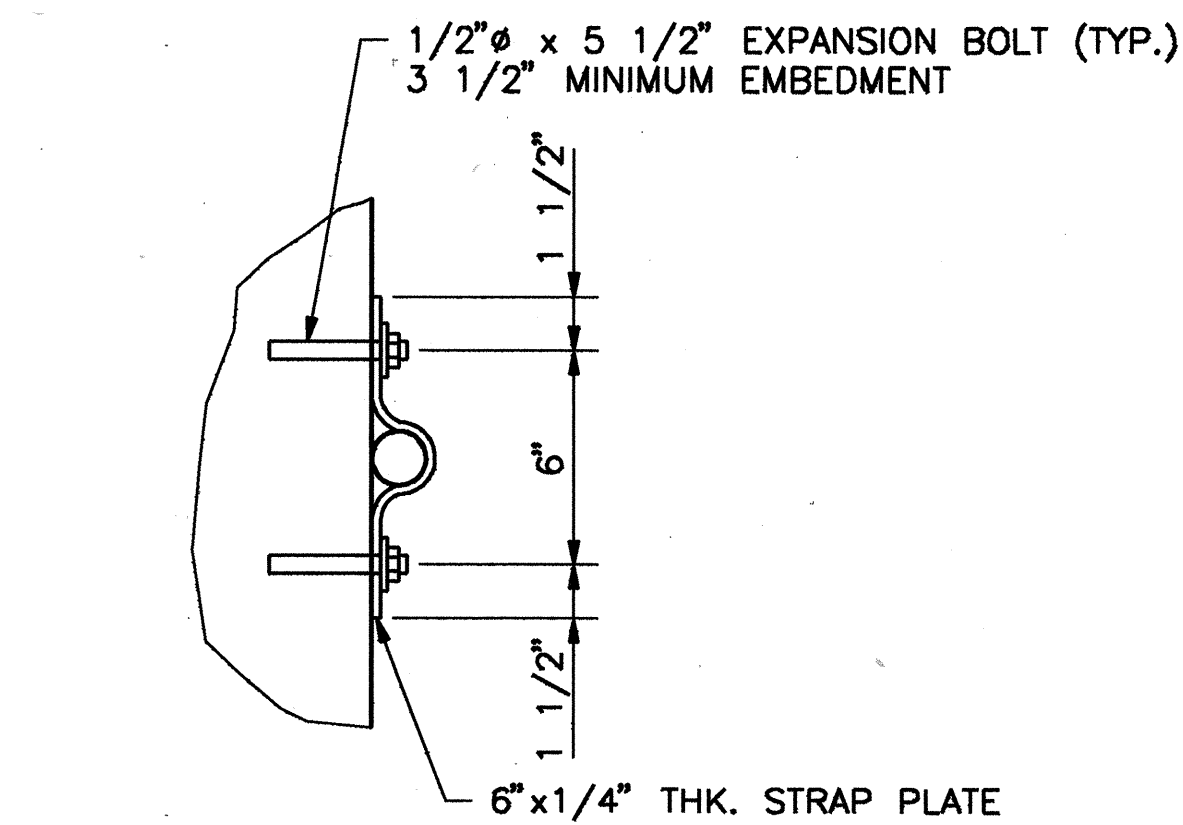
SECTION B-B



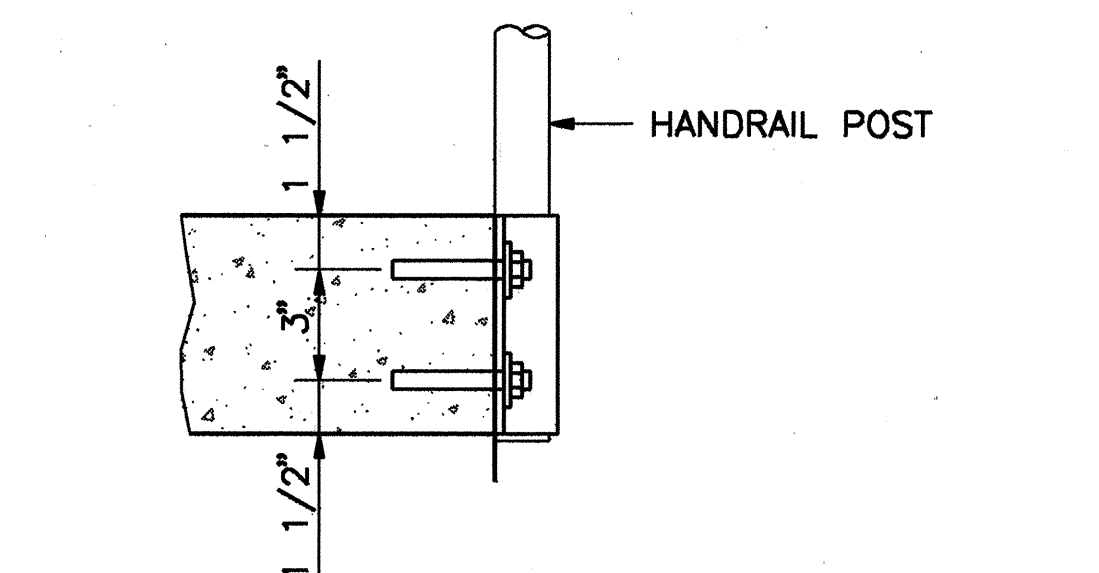
VIEW A-A



TYPICAL PILASTER SECTION



DETAIL C



VIEW D-D

NOTES:

1. ANCHOR BOLTS TO BE HEADED BOLTS WITH A MINIMUM EMBEDMENT OF 6". ANCHOR BOLT SIZE AND LOCATION BASED ON LIGHT POLE AND TRAFFIC SIGNAL MANUFACTURER'S MOUNTING DETAILS.
2. AFTER NUTS HAVE BEEN TIGHTENED, ALL EXTERIOR HANDRAIL SUBJECT TO POSSIBLE VANDALISM SHALL HAVE THE THREADS ON THE ANCHOR BOLTS KNURLED TO PREVENT REMOVAL OF THE NUTS.
3. FOR REINFORCING BAR LIST, SEE SHEET S-16.
4. COST FOR HANDRAIL AND MISCELLANEOUS CONNECTION PIECES SHALL BE PAID FOR UNDER THE CONTRACT PRICE FOR ACCESS LADDERS, PLATFORMS, HANDRAILS, ITEM NO. 460-6.
5. FOR ESTIMATED QUANTITIES, SEE SHEET S-8.

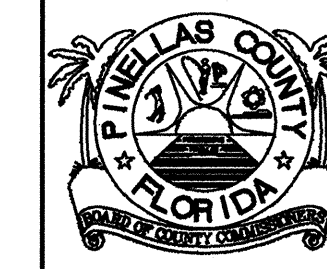
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REVISIONS		REVISIONS	
Date	By	Date	By

Drawn by	Home	Date
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MRC		5-95
MRC		5-95
BGW		5-95
T. J. FARRELL		



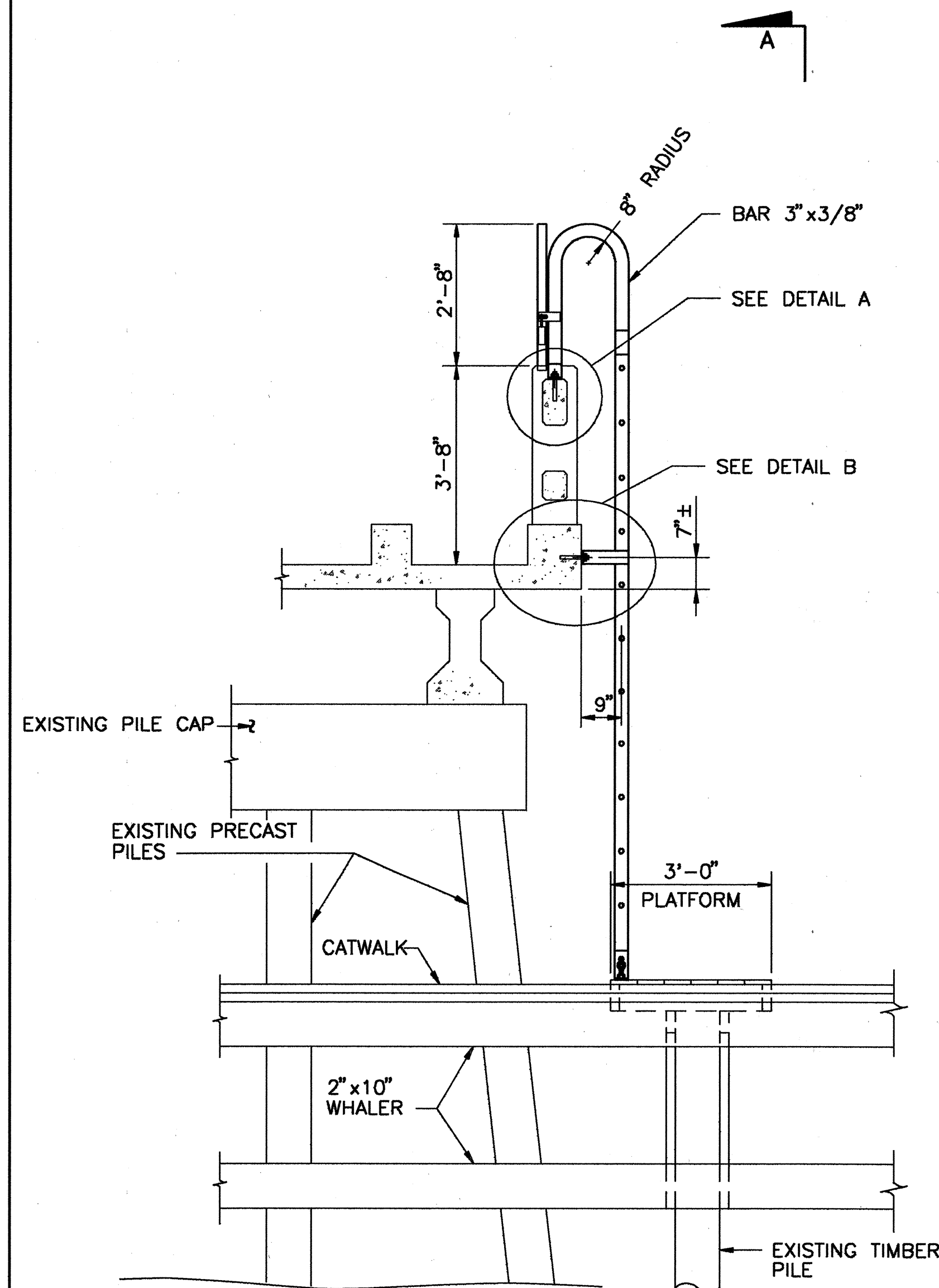
DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



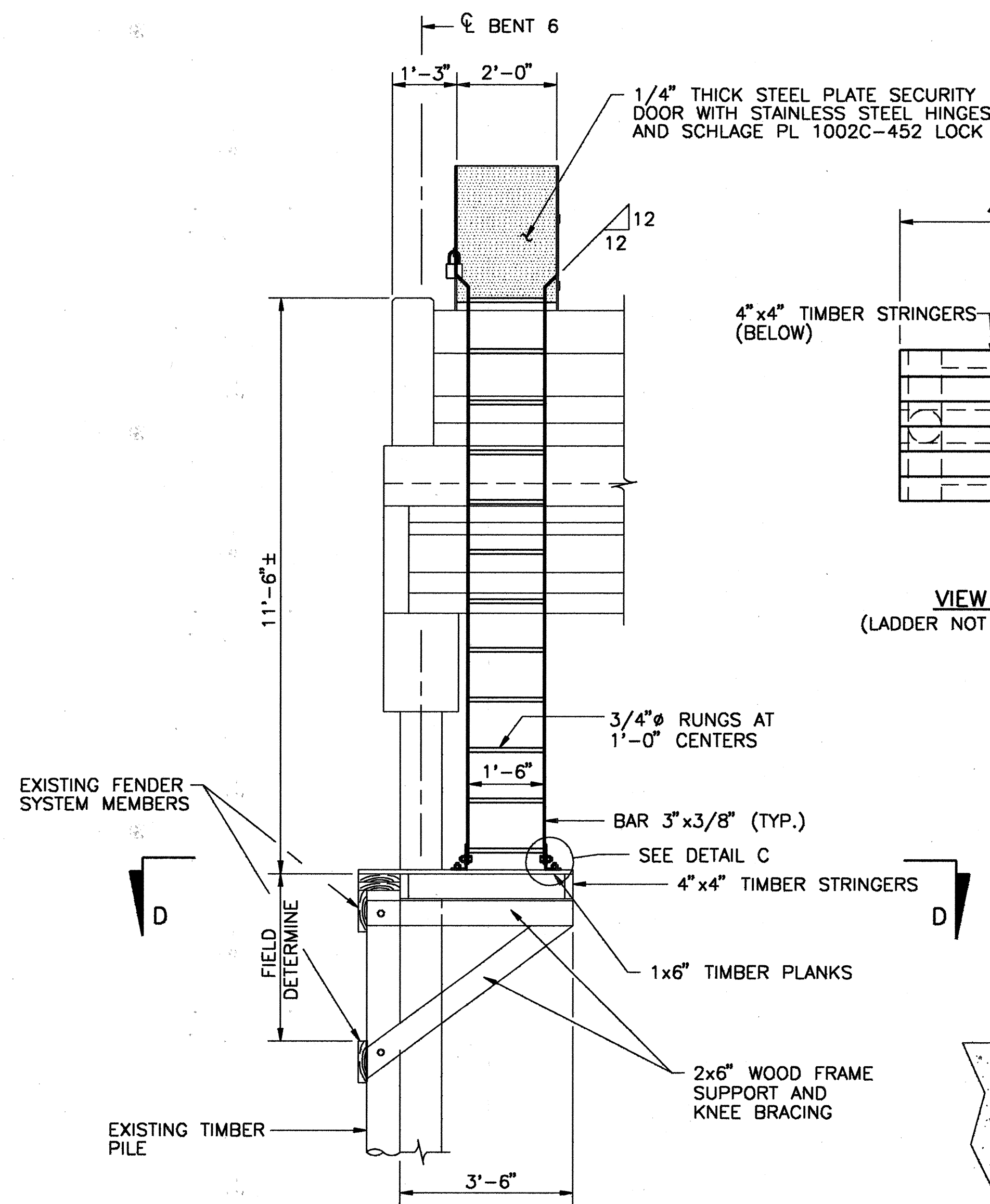
PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

SHEET TITLE:	TRAFFIC GATE SUPPORT AND PILASTER DETAILS	SHEET	S-9
PROJECT NAME:	BECKETT BRIDGE REPAIRS		

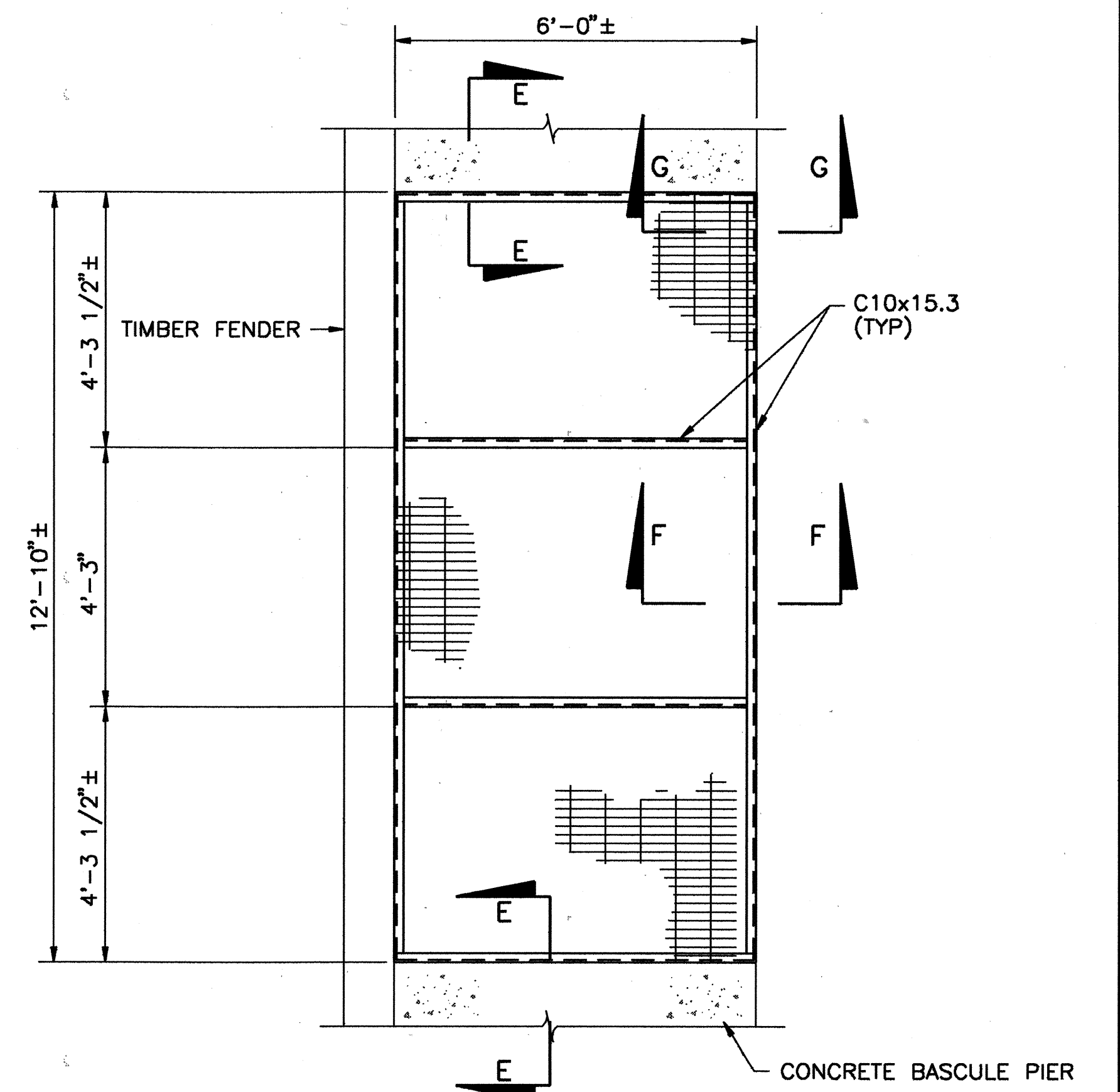
T. J. Farrell



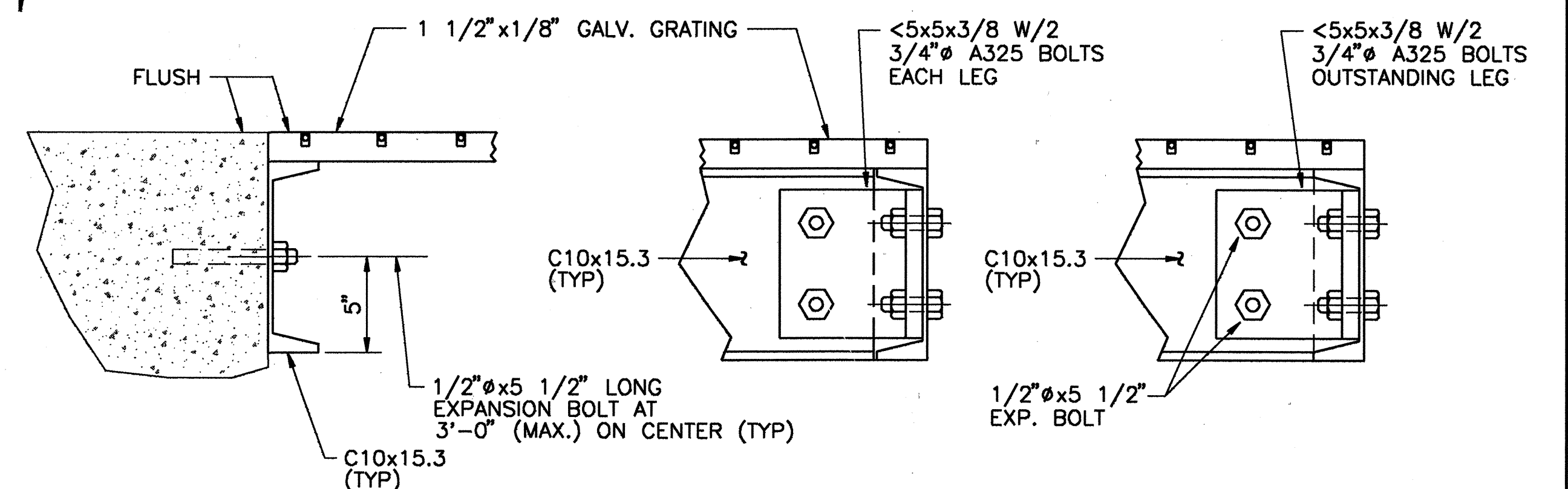
FENDER ACCESS LADDER DETAIL



VIEW A-A



BASCULE PIER PLATFORM DETAIL



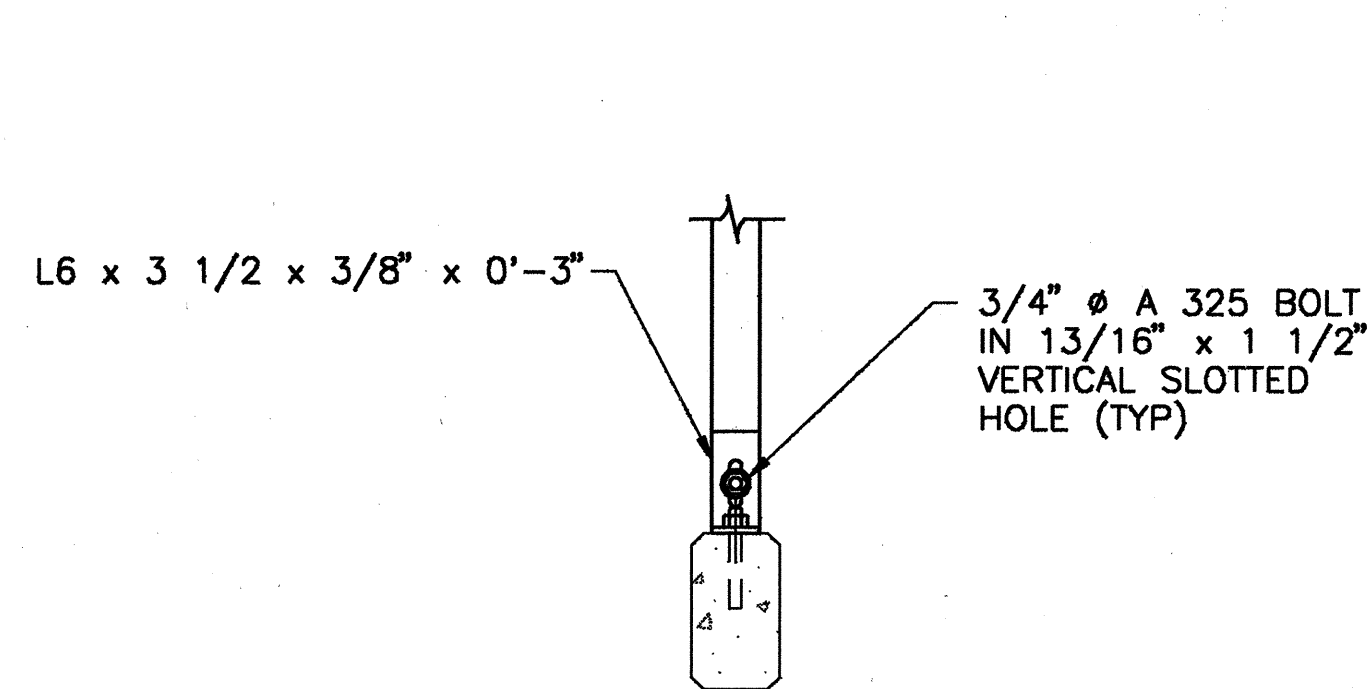
SECTION E-E

SECTION F-F

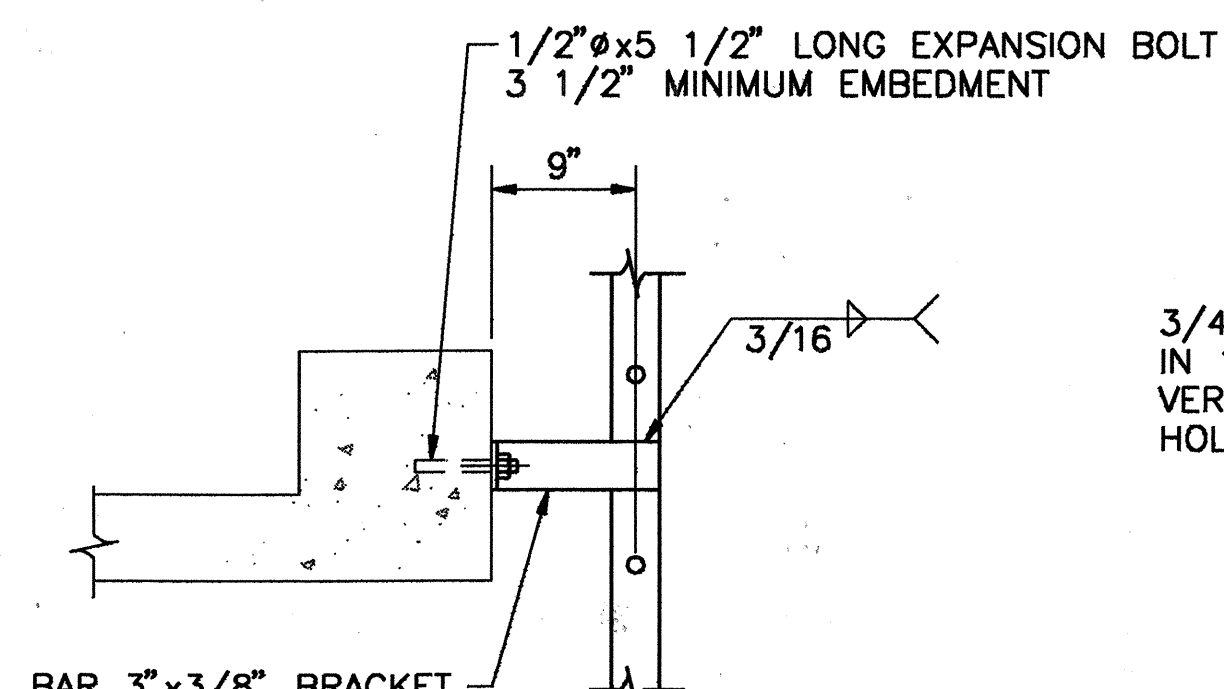
SECTION G-G

NOTES:

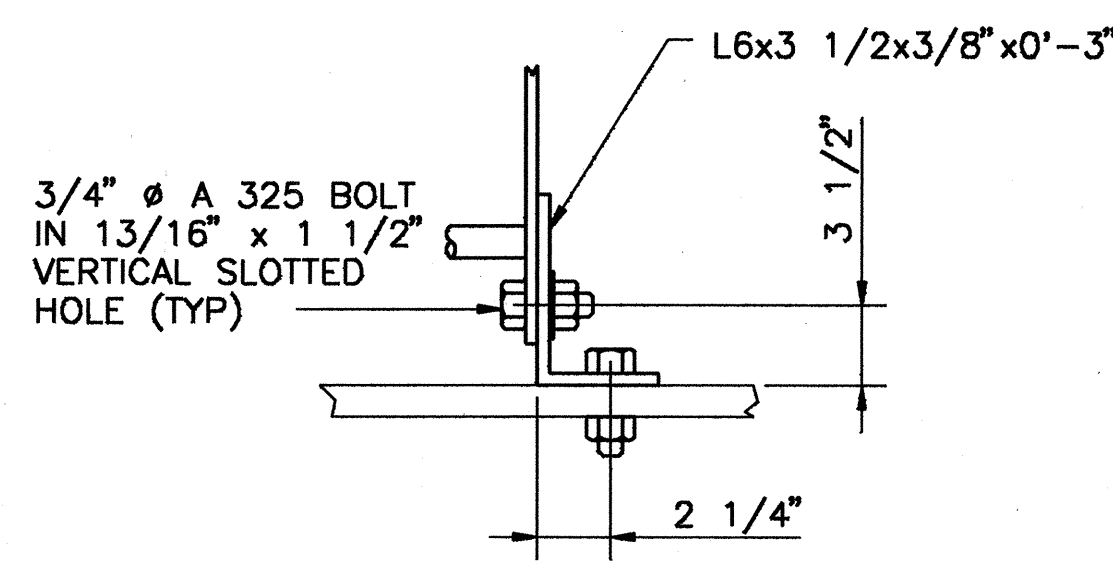
1. ALL STEEL MATERIAL TO BE ASTM A 36 HOT DIP GALVANIZED PER ASTM A123.
2. THE LOCATION OF TIMBER LANDING SHOWN IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION AND MODIFY THE PLATFORM AS REQUIRED WITH PRIOR APPROVAL OF THE ENGINEER.
3. ALL DIMENSIONS TO BE FIELD VERIFIED PRIOR TO THE START OF ANY FABRICATION.
4. ALL TIMBER SHALL BE ROUGH AND TREATED IN ACCORDANCE WITH SECTION 955 OF THE STANDARD SPECIFICATIONS.
5. ALL TIMBER SHALL BE CUT TO DIMENSIONS REQUIRED PRIOR TO TREATMENT.
6. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A153.
7. DOMEHEAD BOLTS SHALL BE PROVIDED WITH FINNS OR SQUARE SHANKS TO PREVENT UNWANTED TURNING.
8. DOMEHEAD BOLTS AND DRIVE SPIKES SHALL HAVE SLOTS OR HOLES ON HEADS FOR 6d NAILS. DRIVE SPIKES SHALL BE 7/8 inch.
9. NO SEPARATE PAYMENT SHALL BE MADE FOR THE TIMBER LANDING PLATFORM OR SECURITY DOOR AND THE COST THEREOF SHALL BE INCLUDED UNDER "LADDERS, PLATFORMS, HANDRAILS, PAY ITEM NO. 460-6".
10. PAYMENT FOR BASCULE PIER PLATFORM AND SUPPORTING STEEL SHALL BE MADE UNDER ITEM NO. 460-6 "ACCESS LADDERS, PLATFORMS, HANDRAILS".



DETAIL A



DETAIL B



DETAIL C

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Checked by	Designed by	Checked by	Approved by
CLM	MRC	MRC	TJF	T. J. FARRELL

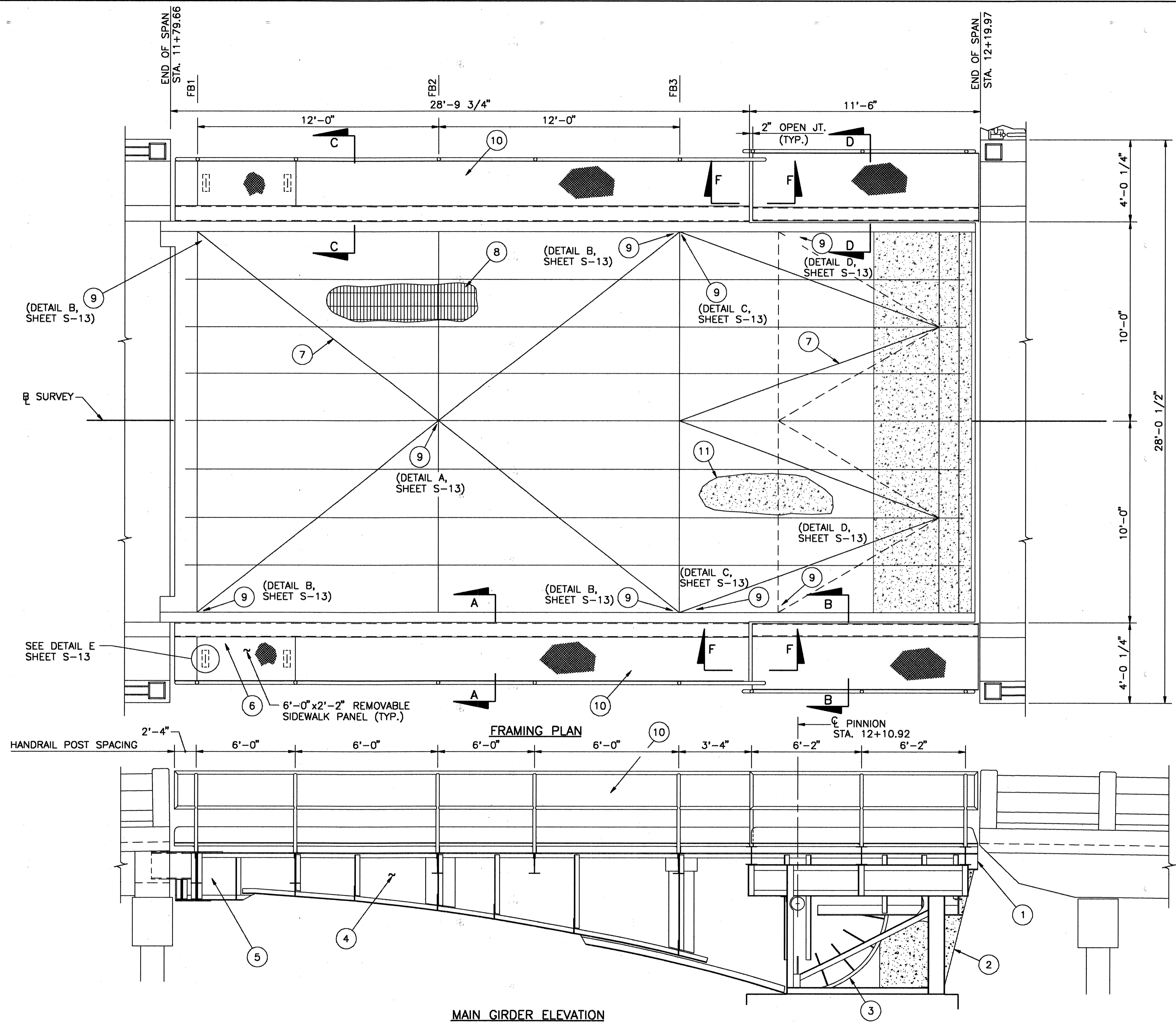
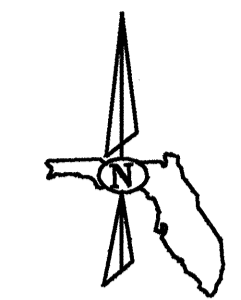
DSA GROUP INC.
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SHEET TITLE: ACCESS LADDERS AND PLATFORM DETAILS
 PROJECT NAME: BECKETT BRIDGE REPAIRS

SHEET **S-10**

Timothy J. Farrell



LEGEND

- ① REPLACE DETERIORATED COUNTERWEIGHT SUPPORT MEMBERS.
- ② REPLACE CONCRETE COUNTERWEIGHT.
- ③ REHABILITATE WEAR PLATES.
- ④ CLEAN AND PAINT STRUCTURAL STEEL
- ⑤ FURNISH AND INSTALL NEW NAVIGATION LIGHTS.
- ⑥ REMOVE EXISTING HAND OPERATED SPAN LOCK SYSTEM.
- ⑦ REPLACE STEEL BRACING ANGLES (TYP.).
- ⑧ CLEAN AND PAINT OPEN STEEL GRATING.
- ⑨ REPLACE DIAGONAL BRACING GUSSET PLATES.
- ⑩ FURNISH AND INSTALL NEW SIDEWALK AND HANDRAILS.
- ⑪ FILL EXISTING OPEN STEEL GRATING WITH CONCRETE TO FB3

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
STRUCTURAL STEEL (BASCULE LEAVES)	LBS.	11,750
PAINT STRUCTURAL STEEL	TN.	34

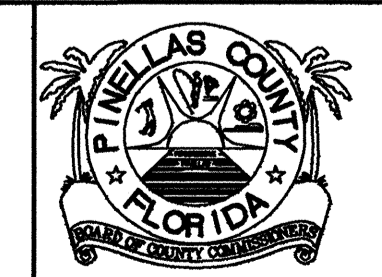
NOTE:
FOR SECTIONS A-A, B-B, C-C, D-D AND F-F, SEE SHEET S-12.

RA 84089 CADD BRIDGE
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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Names	Date
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Checked by TJF	5-95
Designed by MRC	5-95
Checked by TJF	5-95
Approved by T.J. FARRELL	

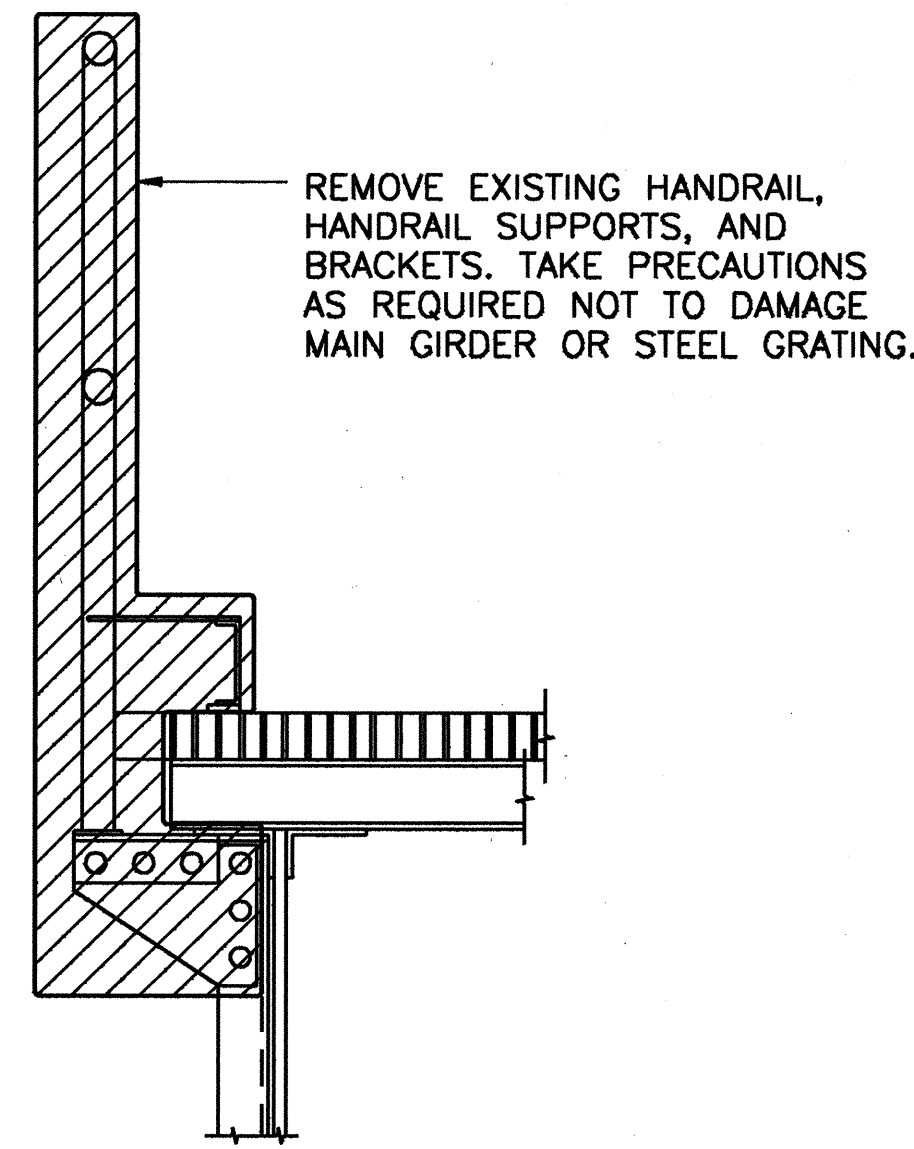
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 DSA GROUP, INC.
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 TAMPA, FLORIDA 33607



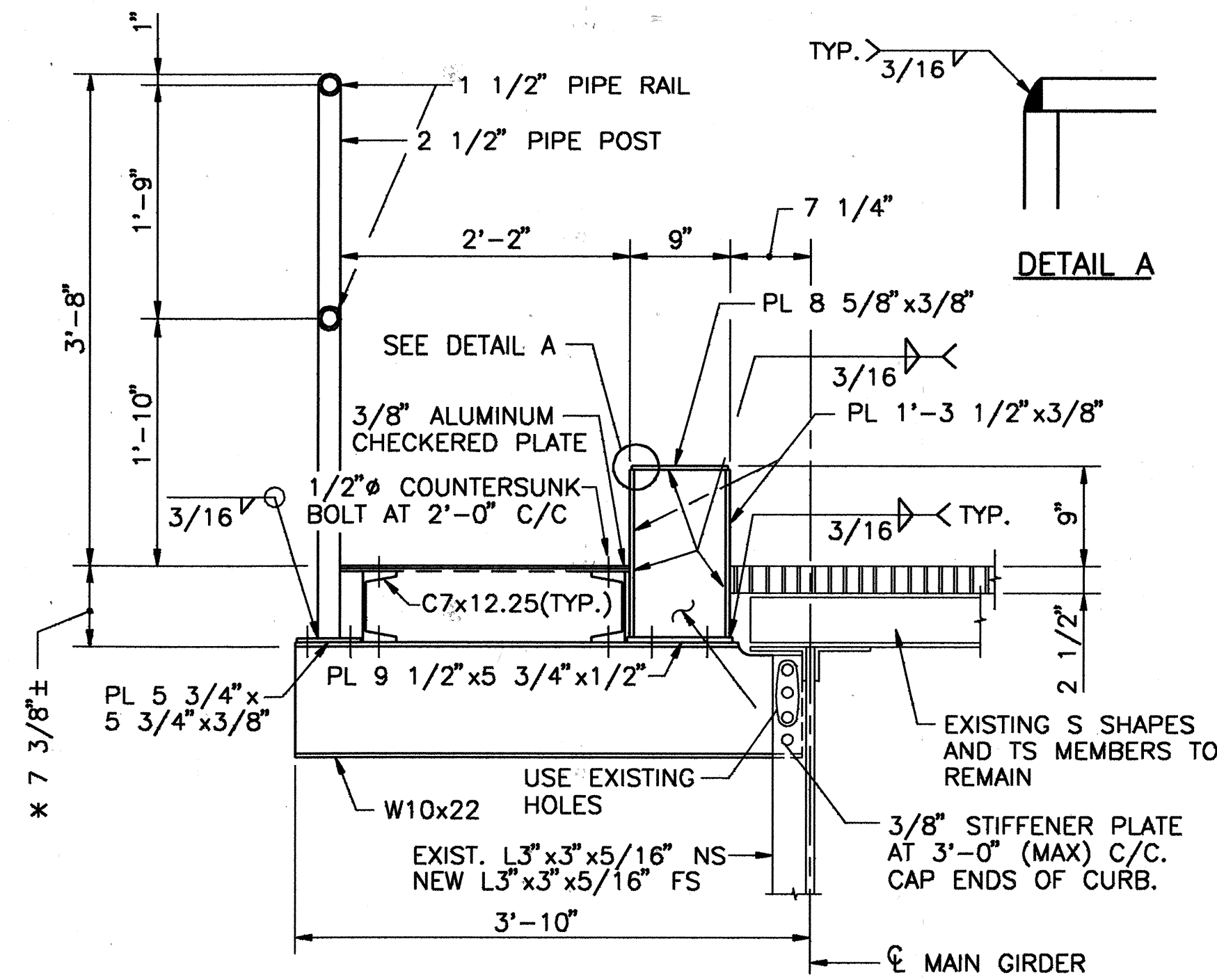
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: BASCULE SPAN REPAIRS	SHEET S-11
PROJECT NAME: BECKETT BRIDGE REPAIRS	

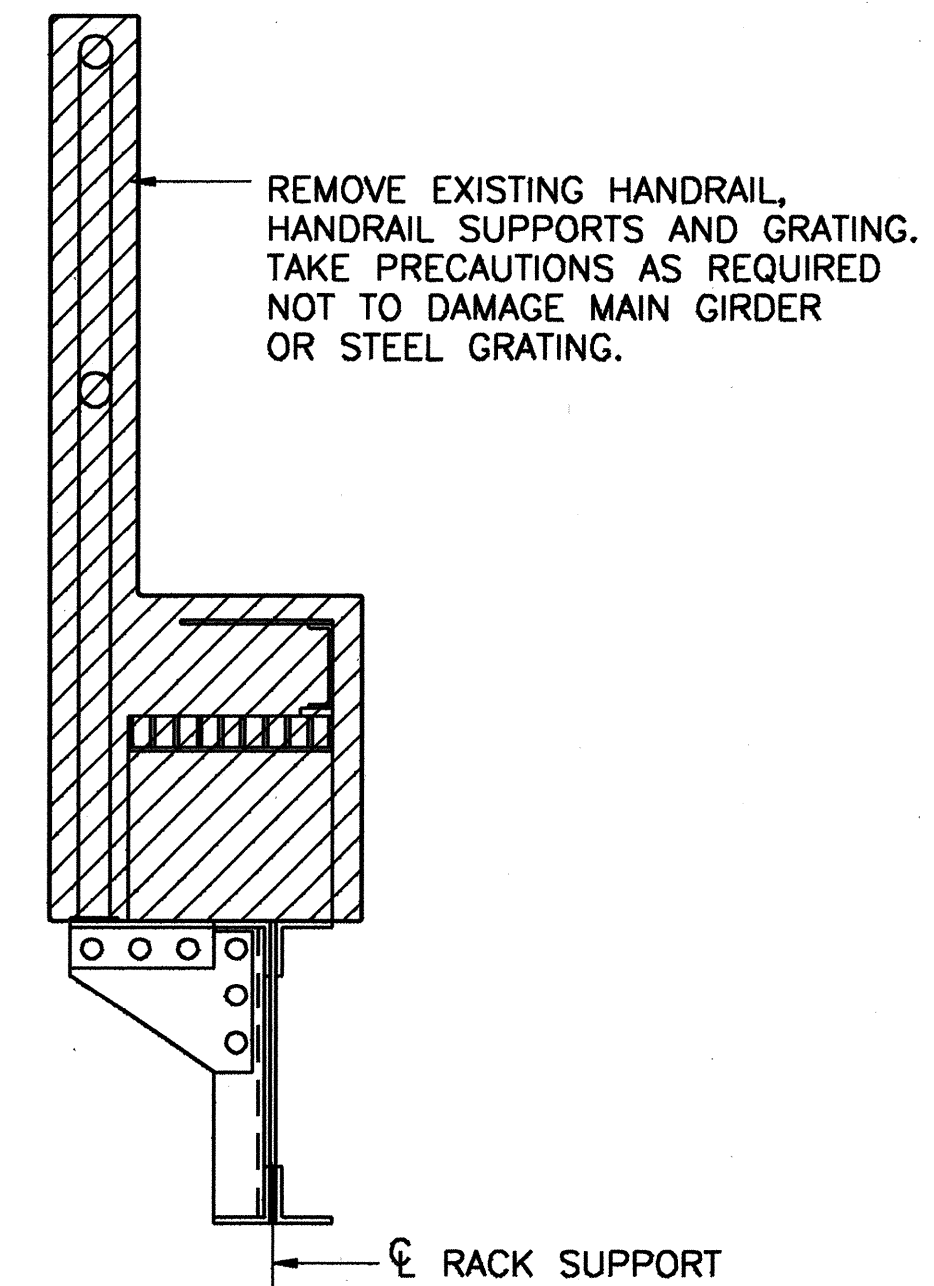
Timothy J. Farrell



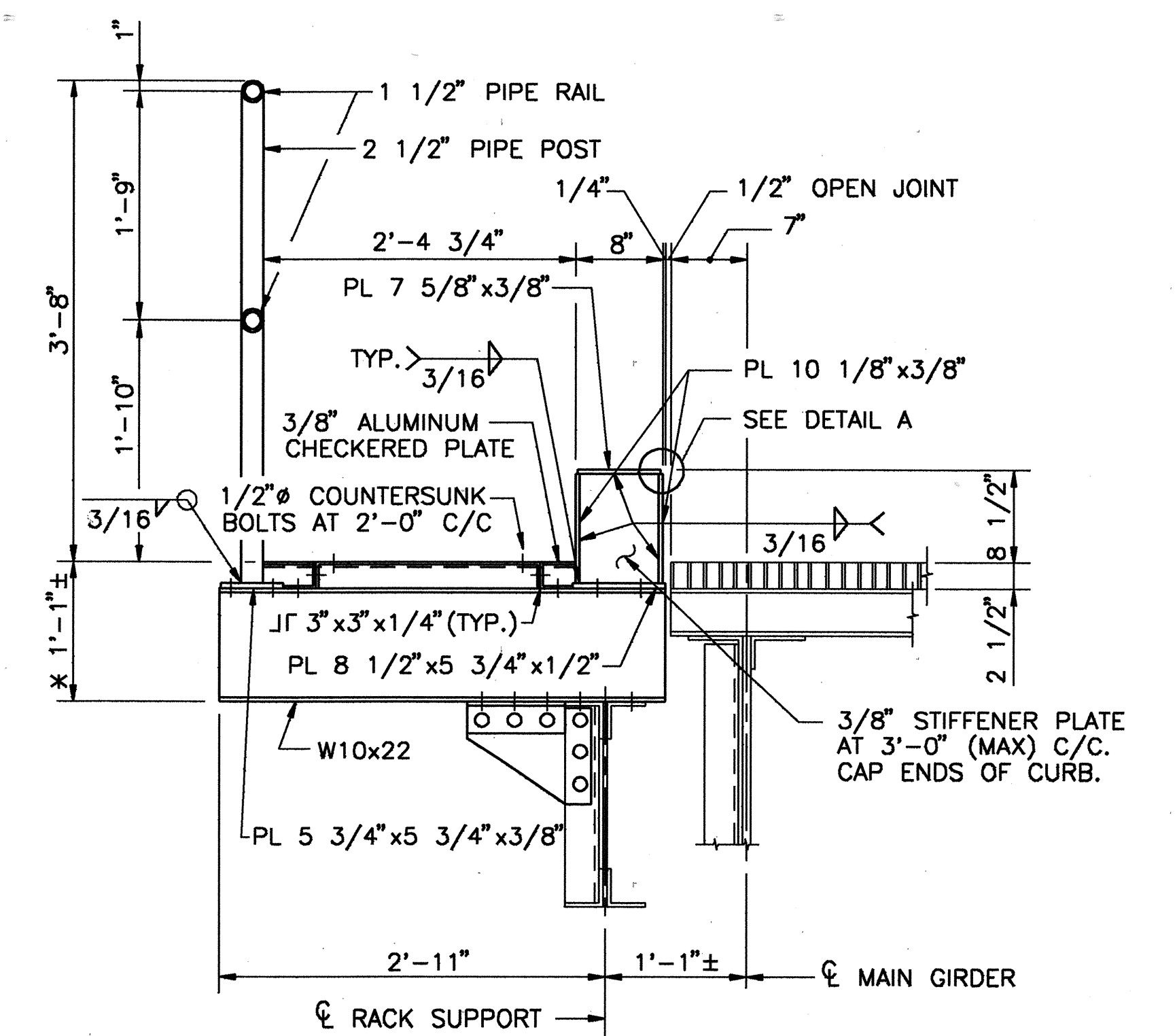
SECTION A-A DEMOLITION



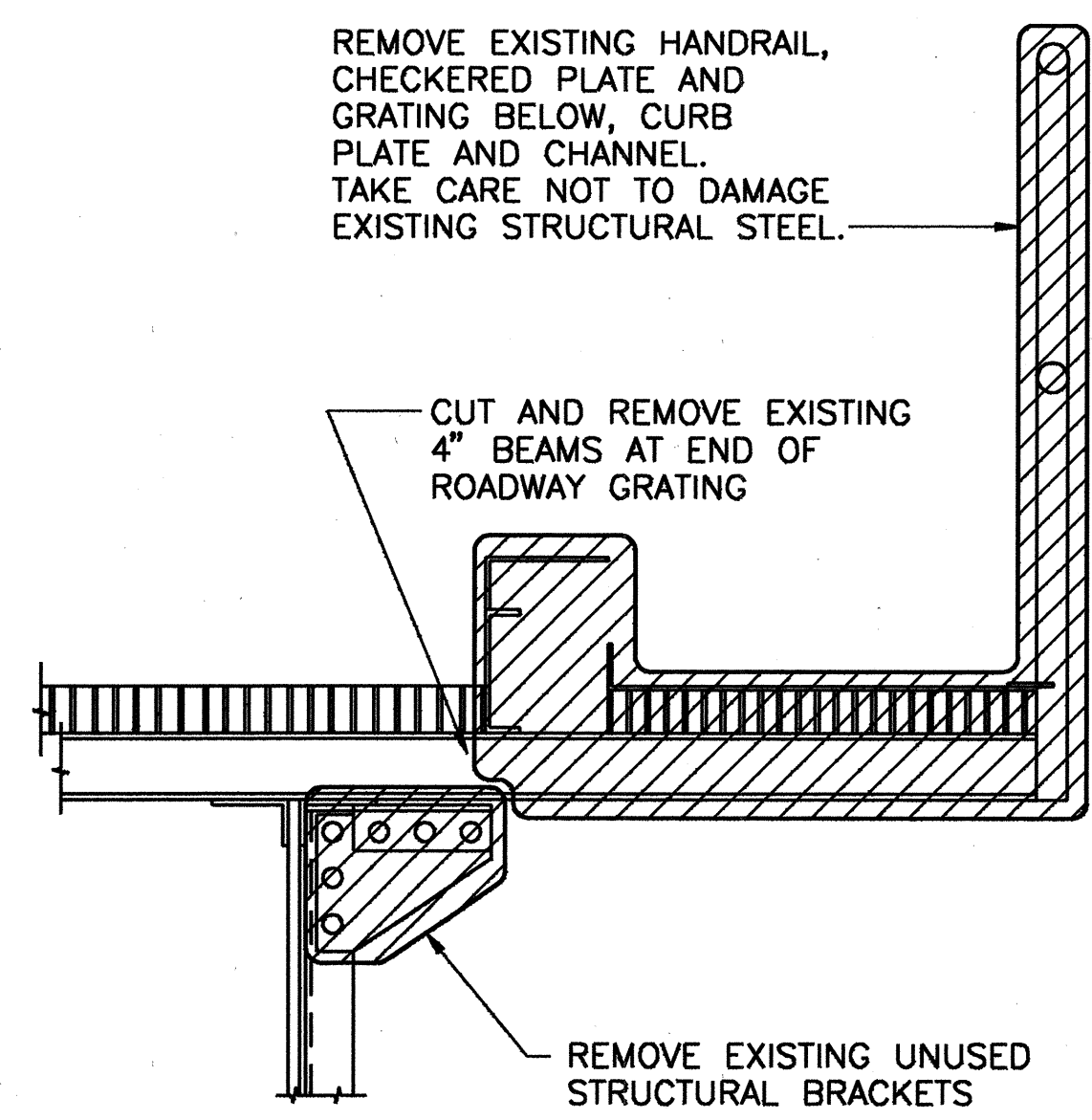
SECTION A-A REHABILITATION
(REQ'D. AT 3 LOCATIONS)



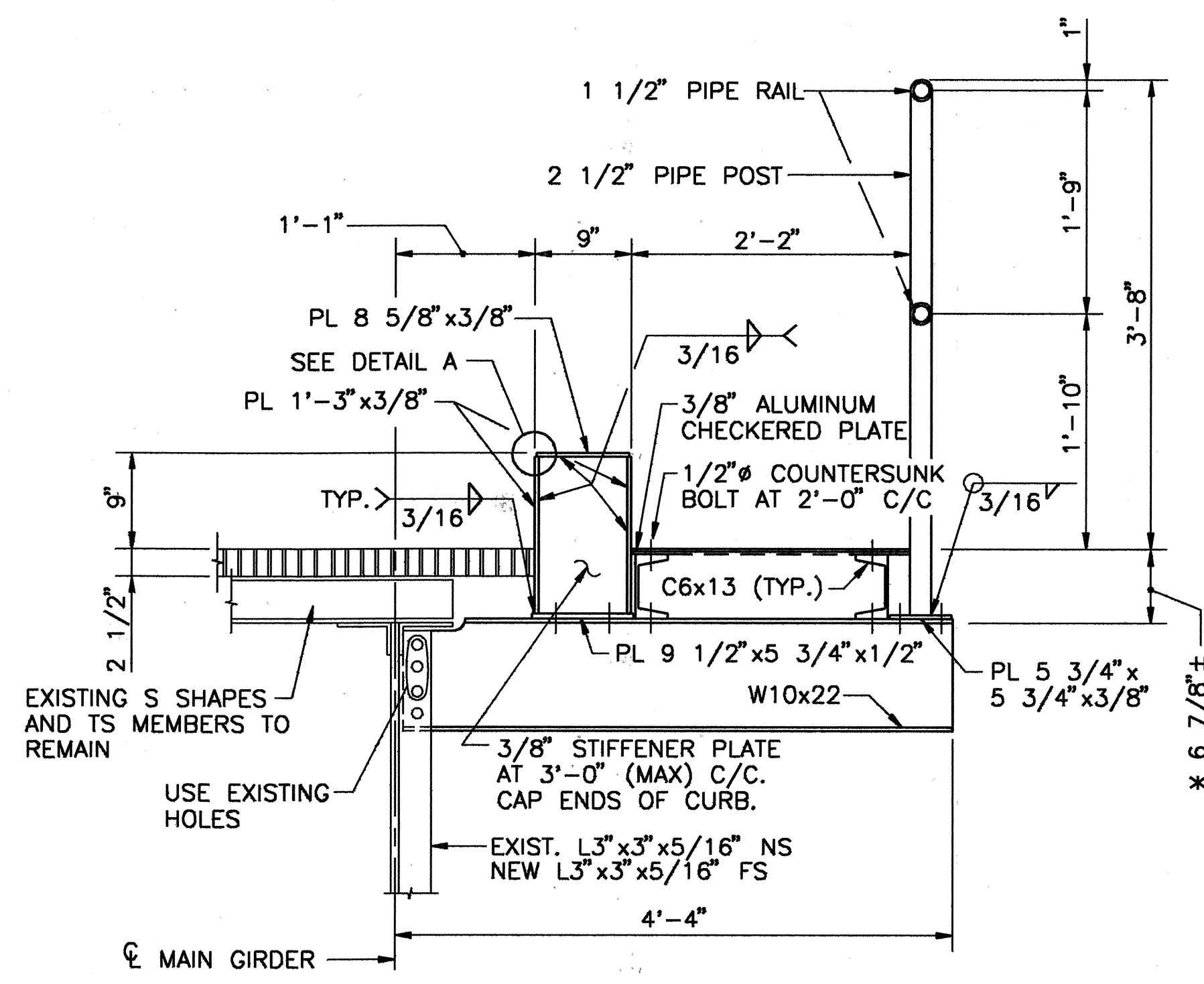
SECTION B-B DEMOLITION



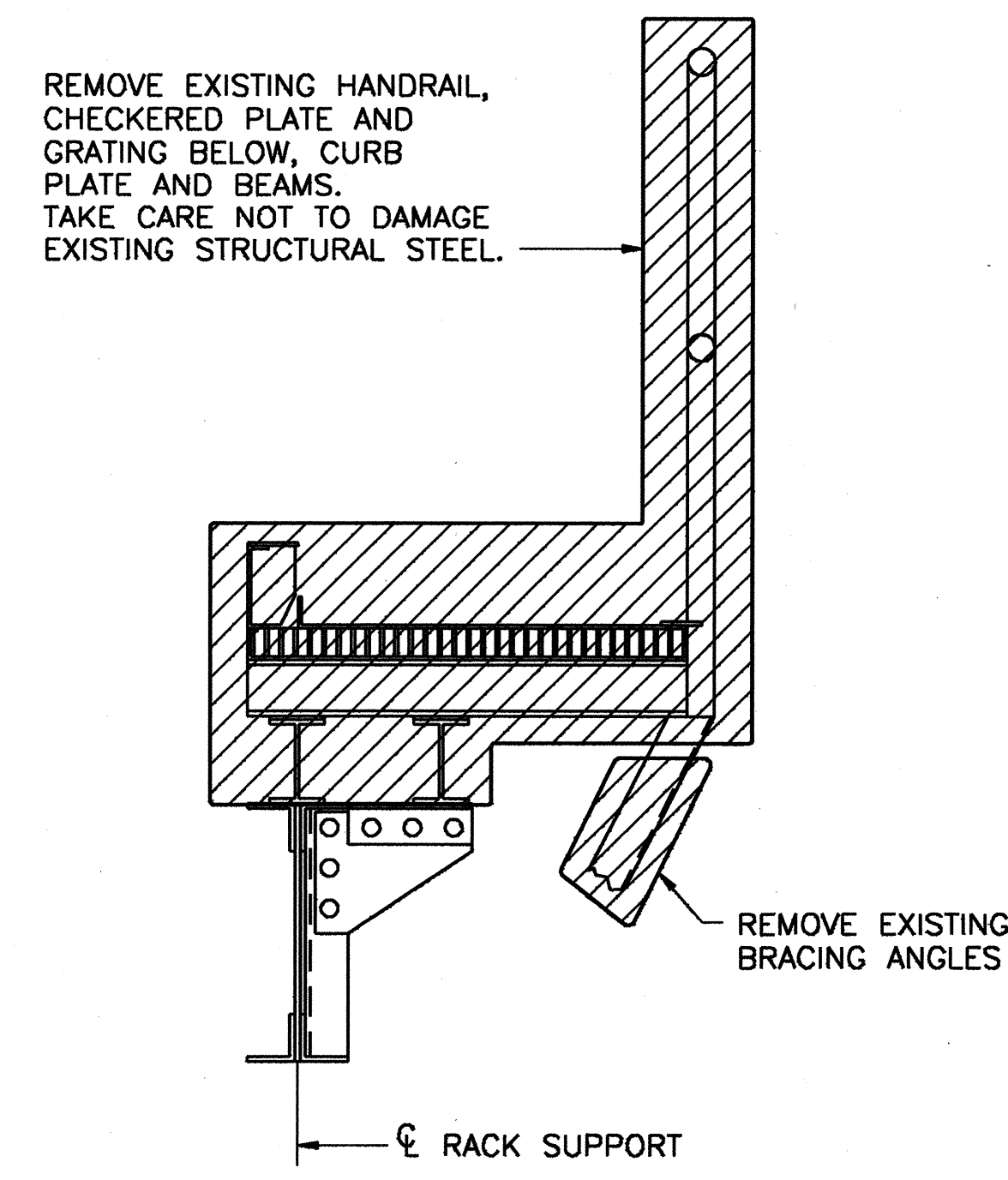
SECTION B-B REHABILITATION
(REQ'D. AT 3 LOCATIONS)



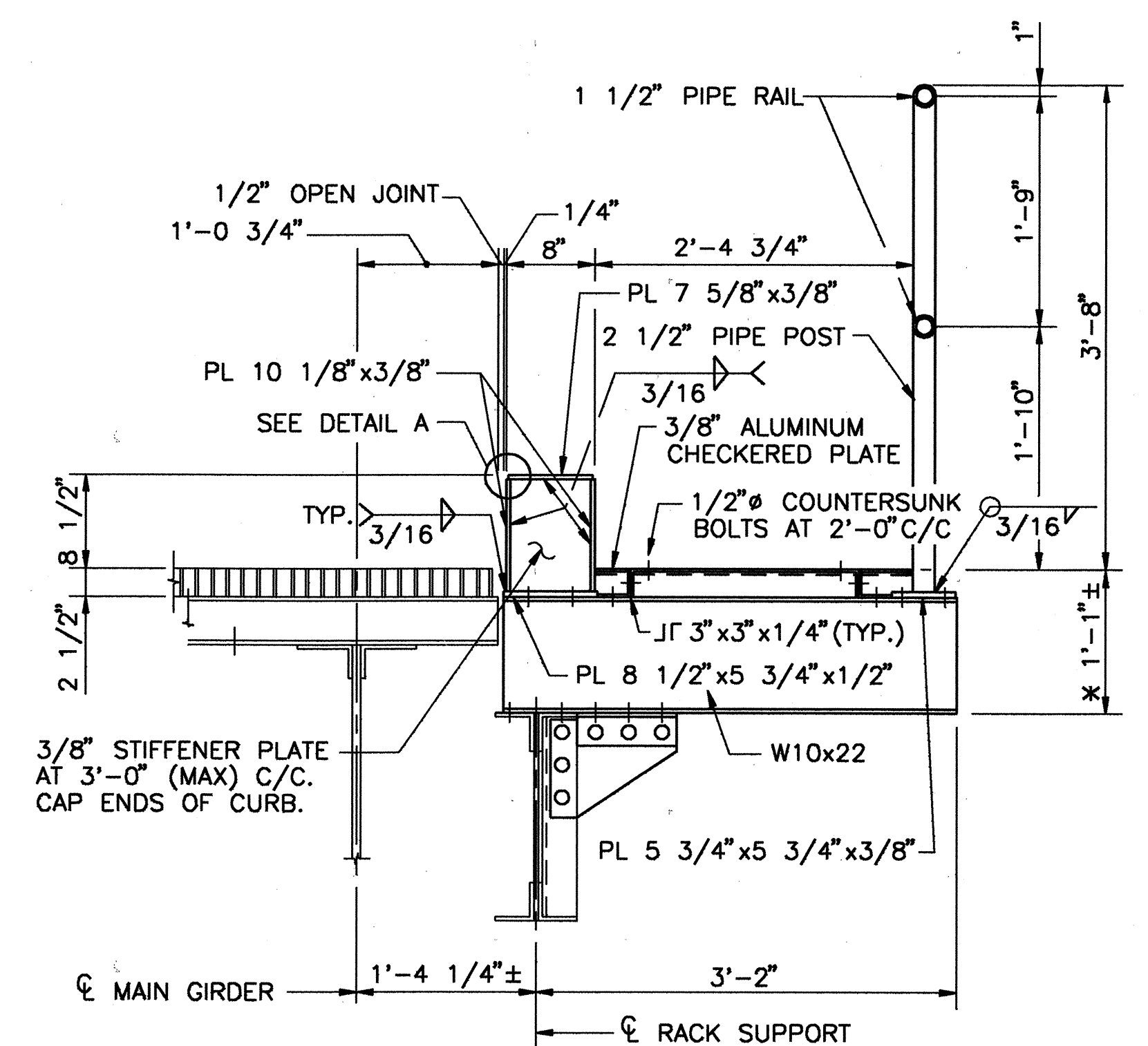
SECTION C-C DEMOLITION



SECTION C-C REHABILITATION
(REQ'D. AT 3 LOCATIONS)

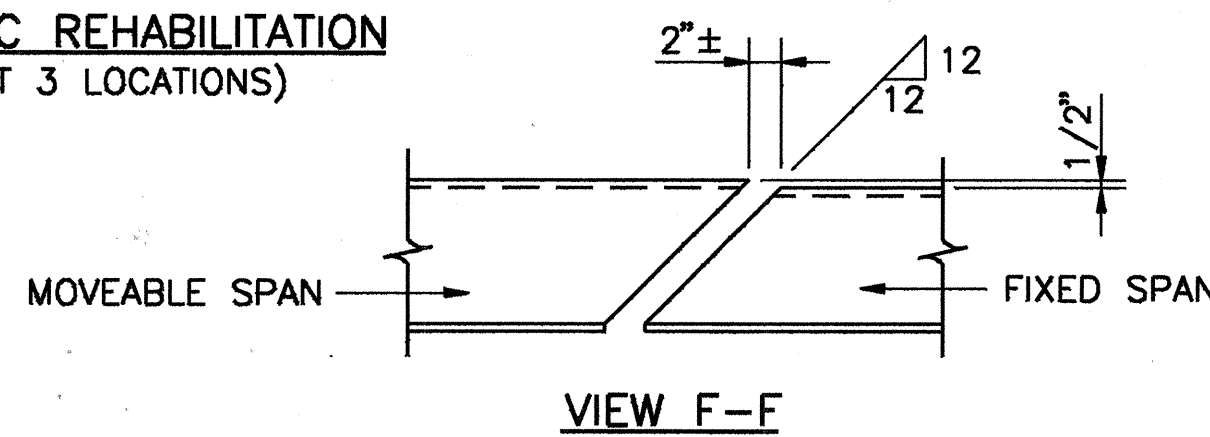


SECTION D-D DEMOLITION



SECTION D-D REHABILITATION
(REQ'D. AT 3 LOCATIONS)

* CONTRACTOR SHALL ADJUST THIS DIMENSION SUCH THAT THE TOP OF BASCULE SPAN SIDEWALK IS LEVEL WITH THE TOP OF CONCRETE APPROACH SPAN SIDEWALK BY PROVIDING FULL BEARING SHIMS BETWEEN W10x22 AND SIDEWALK SUPPORT MEMBERS.



VIEW F-F

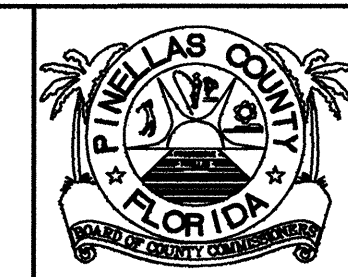
- NOTES:
- SEE SHEET A-2 FOR GENERAL NOTES REGARDING MATERIAL AND FABRICATION REQUIREMENTS.
 - ALL BOLTED CONNECTIONS TO BE FRICTION TYPE UTILIZING 3/4" A325 BOLTS (TYPE 1).
 - SEE SHEET M-3 FOR SIDEWALK BRACKET DETAILS AT SPAN LOCKS.
 - COST OF PIPE RAILS AND POSTS SHALL BE INCLUDED IN ITEM NO. 460-2-5, "STRUCTURAL STEEL (BASCULE LEAVES)".

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Names	Date
CLM	CLM	5-95
TJF	TJF	5-95
MRC	MRC	5-95
TJF	TJF	5-95
T. J. FARRELL	T. J. FARRELL	

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 TAMPA, FLORIDA 33607

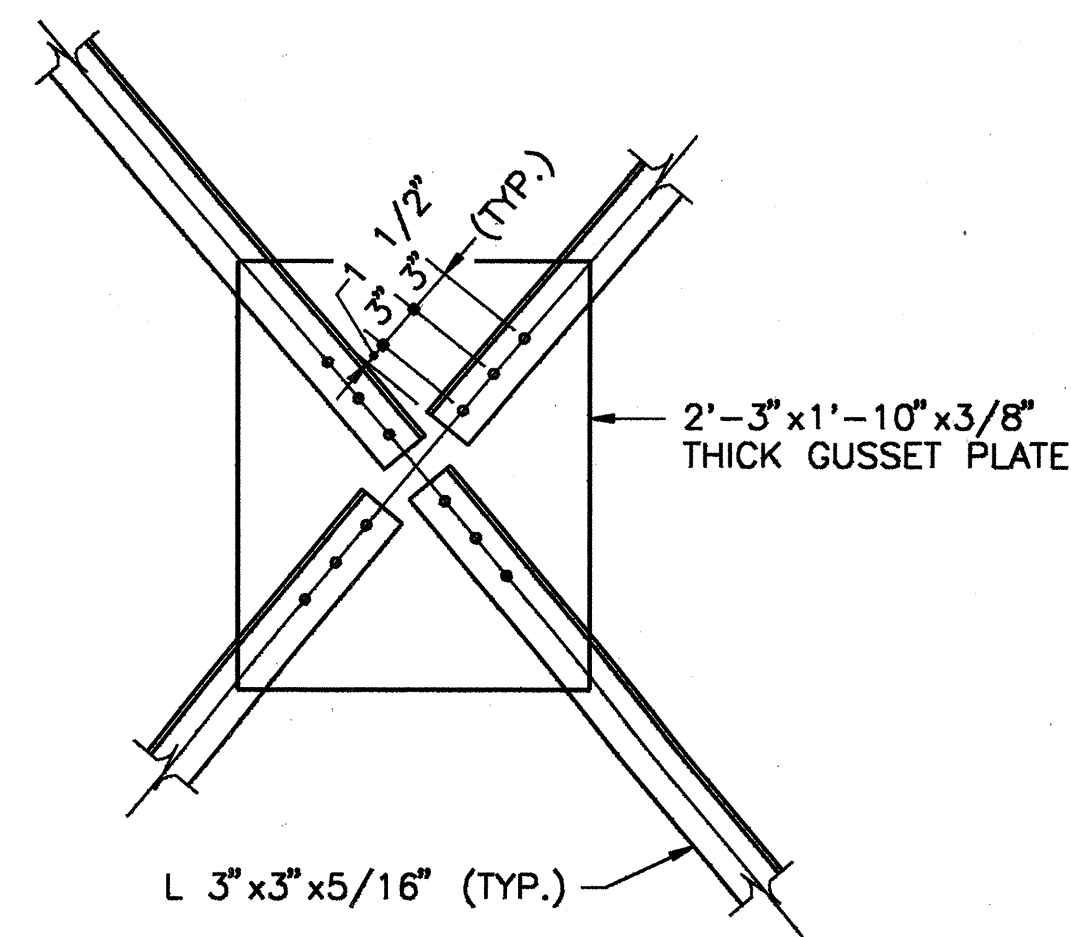


PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

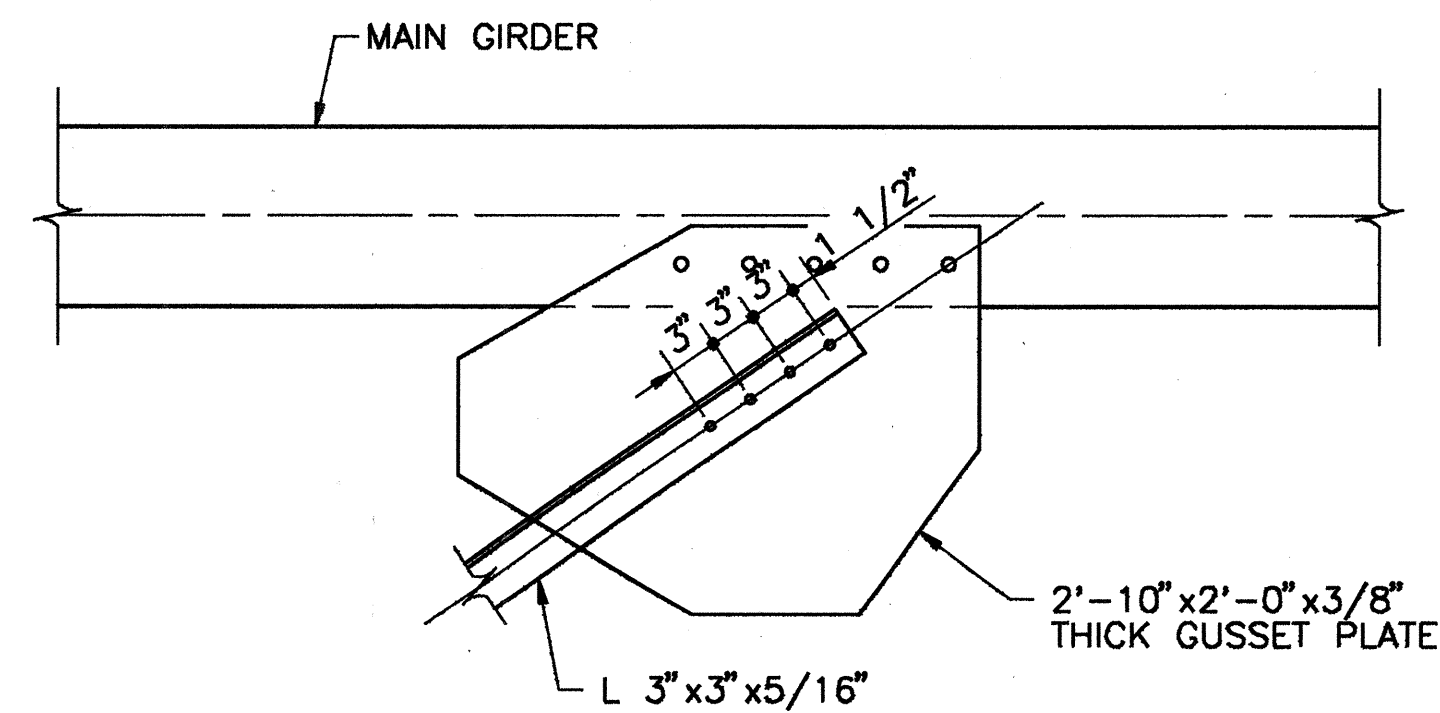
SHEET TITLE: **BASCULE SPAN-SIDEWALK AND HANDRAIL DETAILS**
 PROJECT NAME: **BECKETT BRIDGE REPAIRS**

SHEET **S-12**

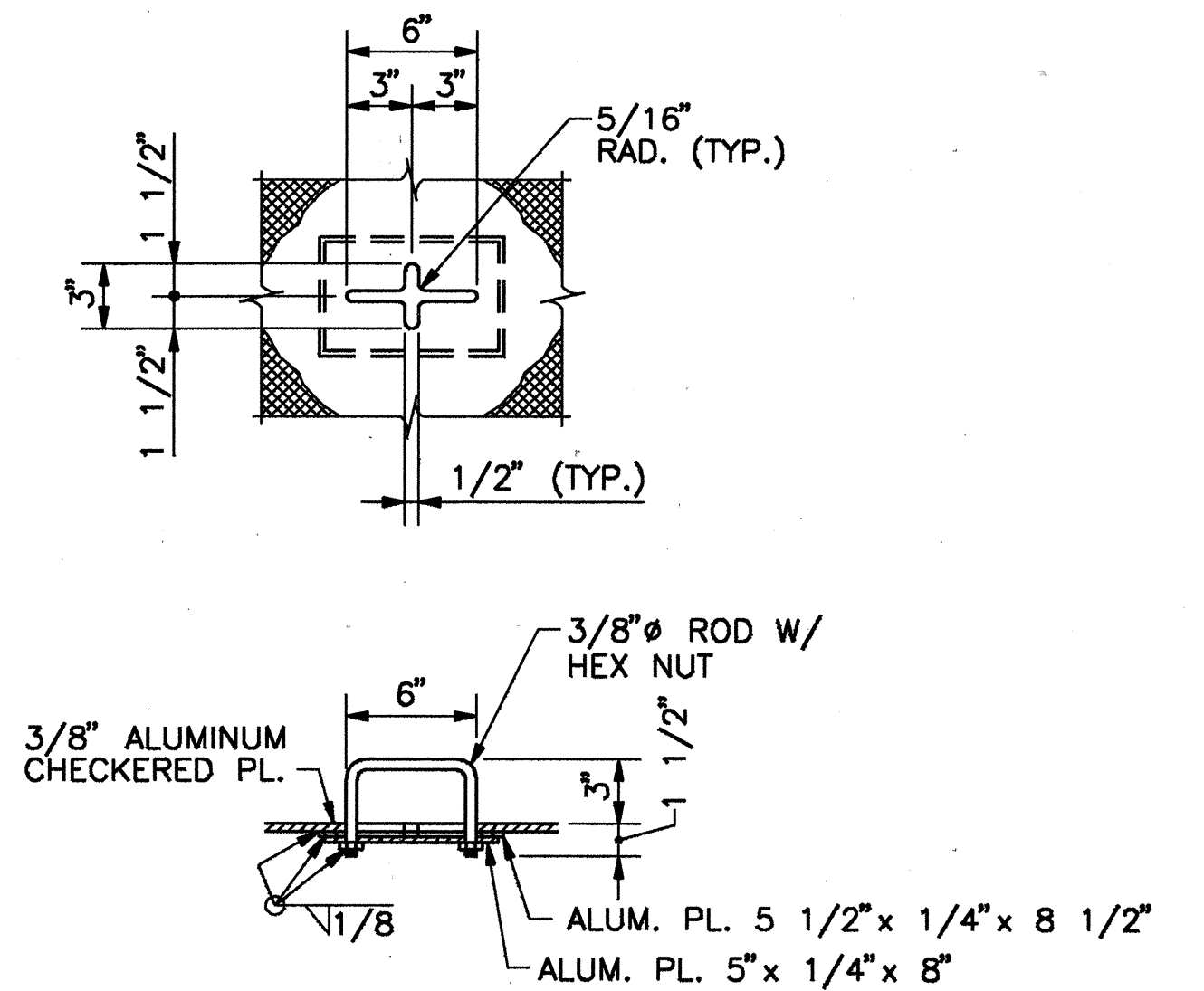
Timothy J. Farrell



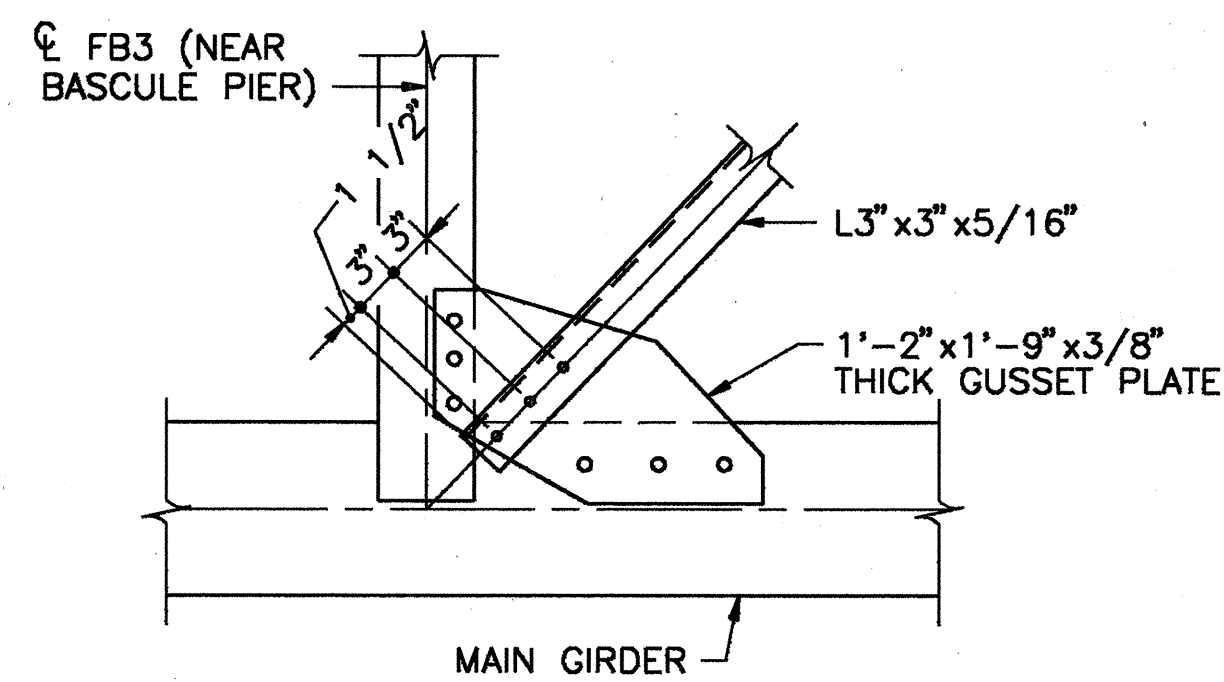
DETAIL "A"



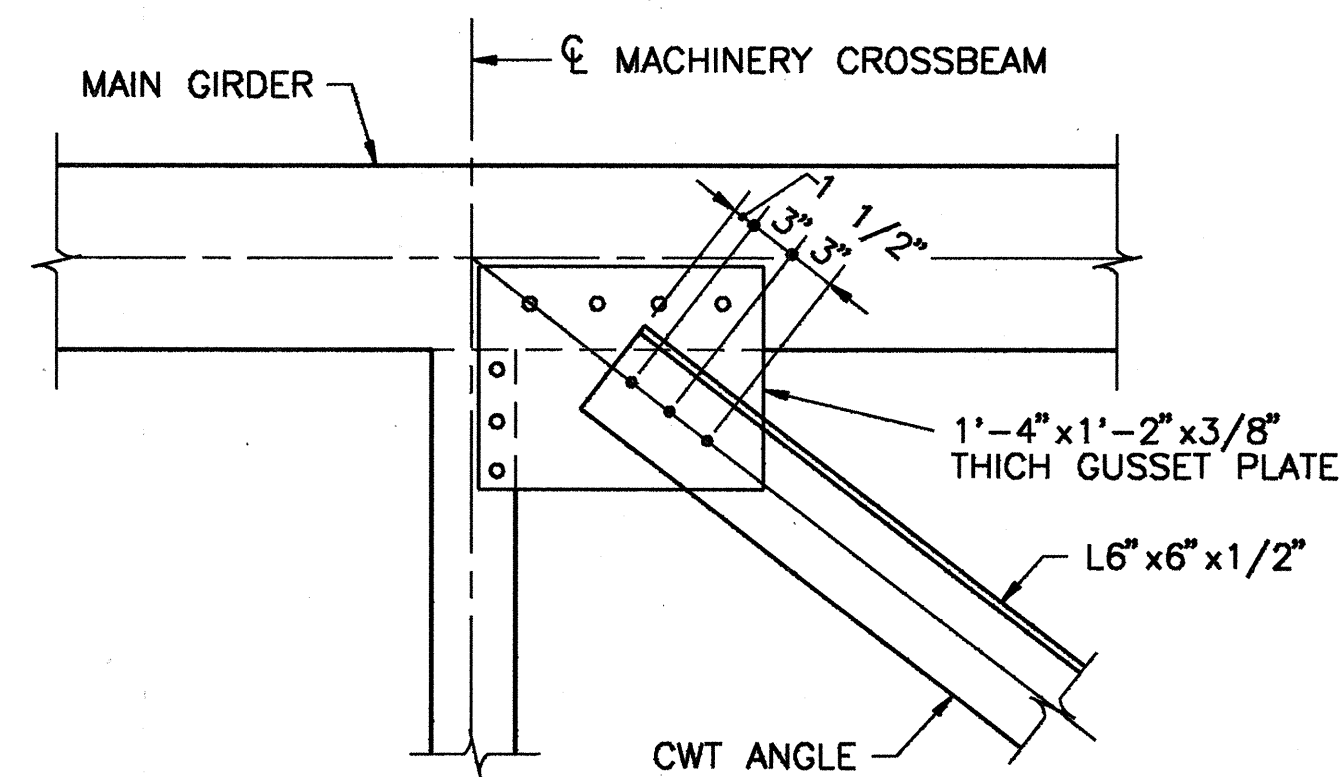
DETAIL "B"



DETAIL E



DETAIL "C"



DETAIL "D"

- NOTES:
1. THE NEW BRACING GUSSET PLATES SHALL BE CONSTRUCTED FROM ASTM A709 GRADE 36 STEEL.
 2. REMOVE EXISTING RIVETS IN LATERAL BRACING AS REQUIRED. RIVETS SHALL BE REPLACED BY 7/8" HIGH STRENGTH BOLTS.
 3. NEW HOLES IN EXISTING BRACING ANGLES AND CORRESPONDING HOLES IN NEW GUSSET PLATES SHALL BE FIELD DRILLED.
 4. FOR FRAMING PLAN, SEE SHEET S-11.

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REVISIONS		Date	By	Description

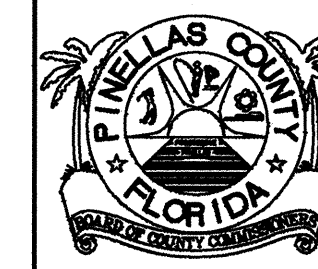
SEAL:

	Name	Date
Drawn by	KTL	5-95
Checked by	MRC	5-95
Designed by	MRC	5-95
Checked by	TJF	5-95
Approved by	T.J. FARRELL	

T. J. Farrell



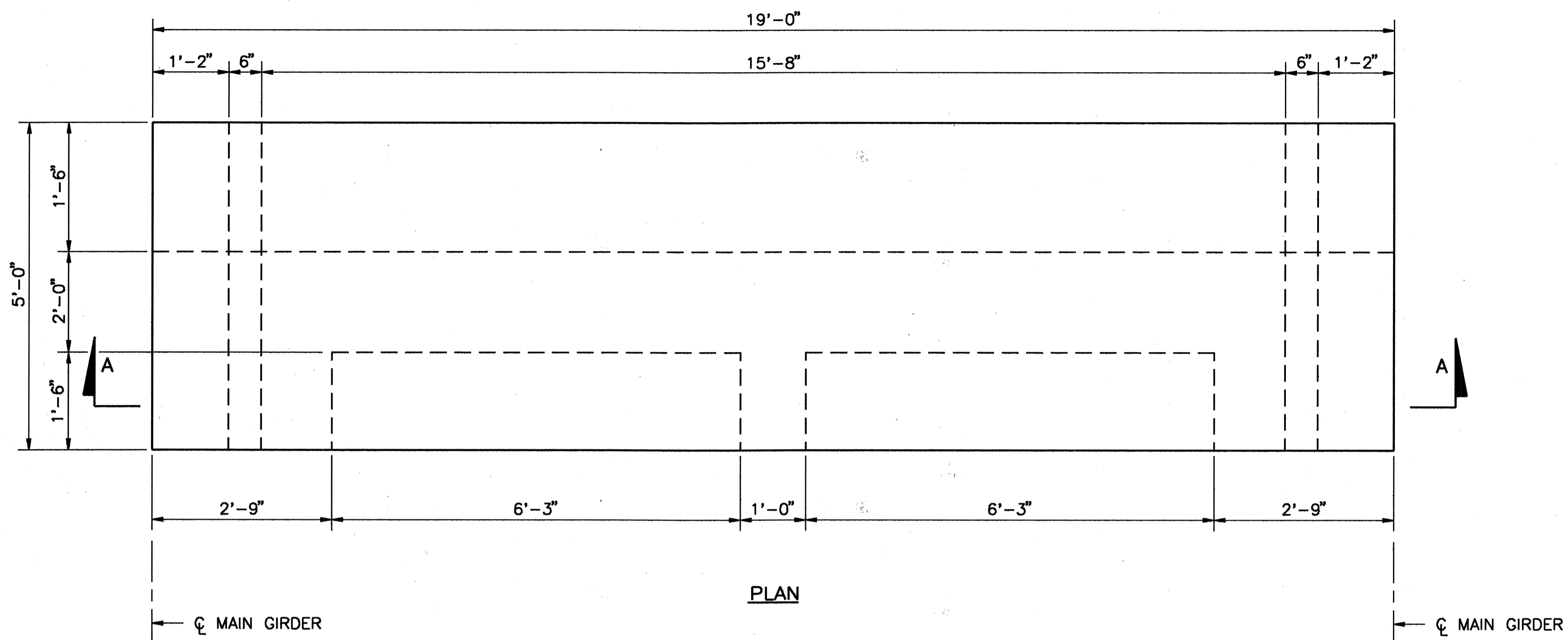
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2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



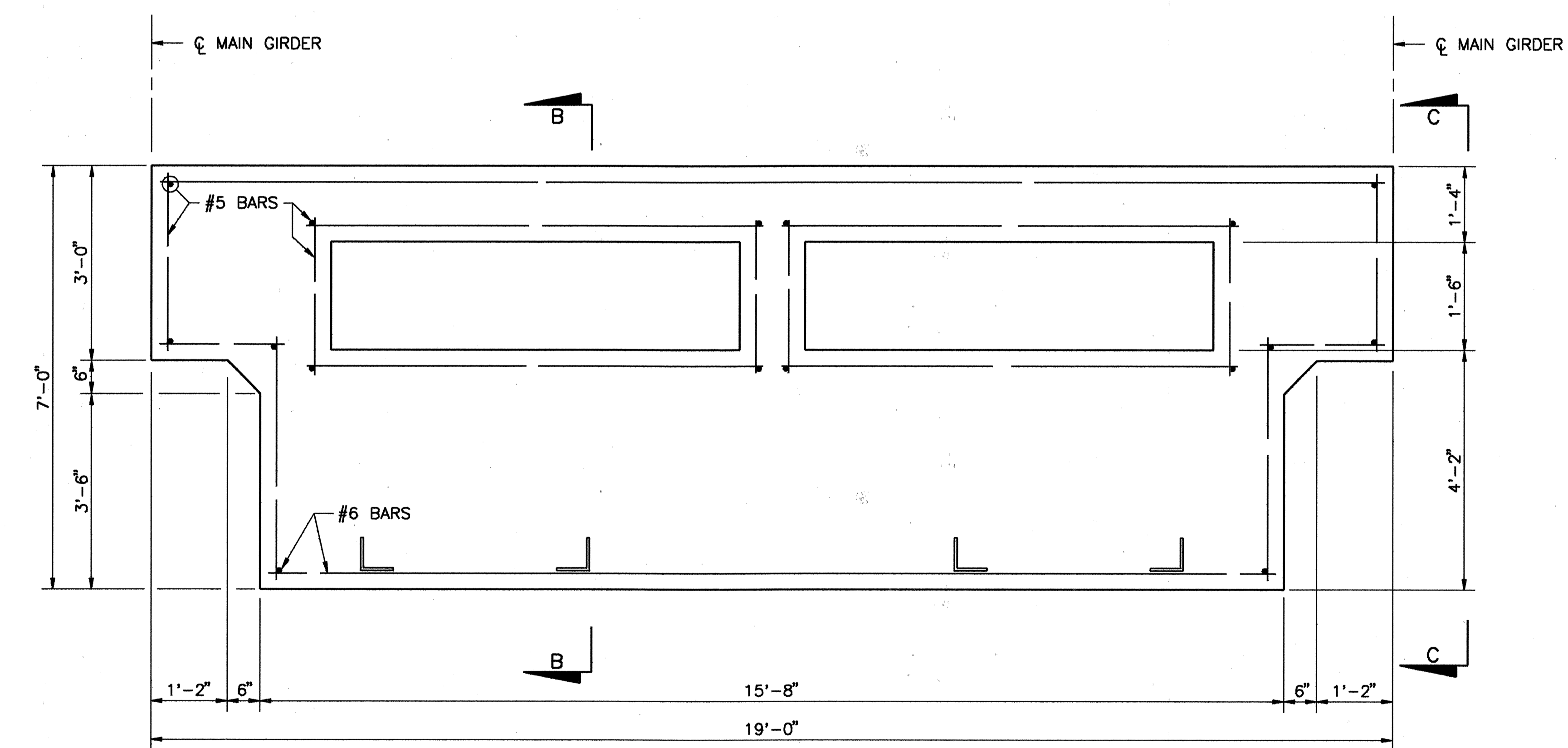
PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

SHEET TITLE:	STRUCTURAL STEEL REPAIR DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

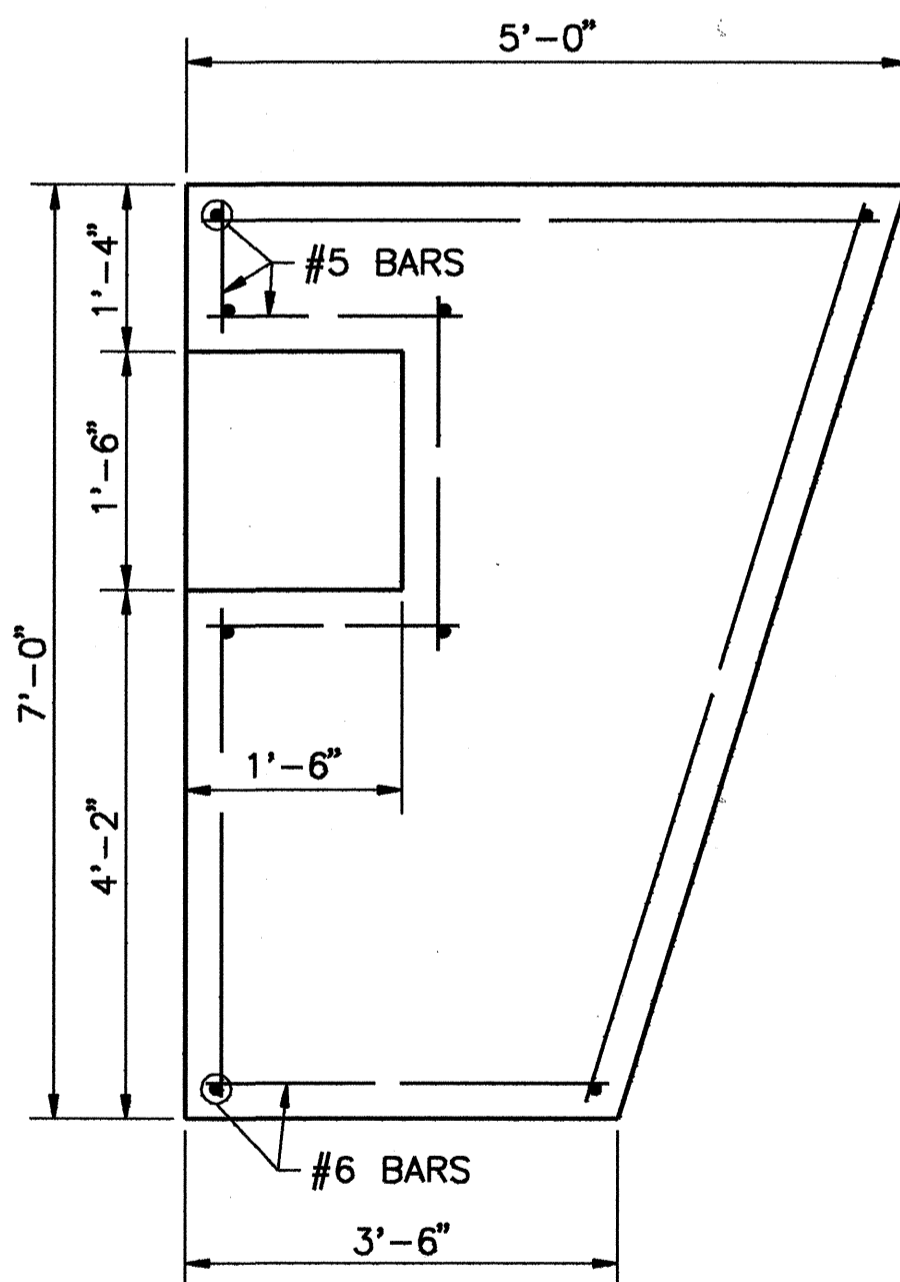
SHEET
S-13



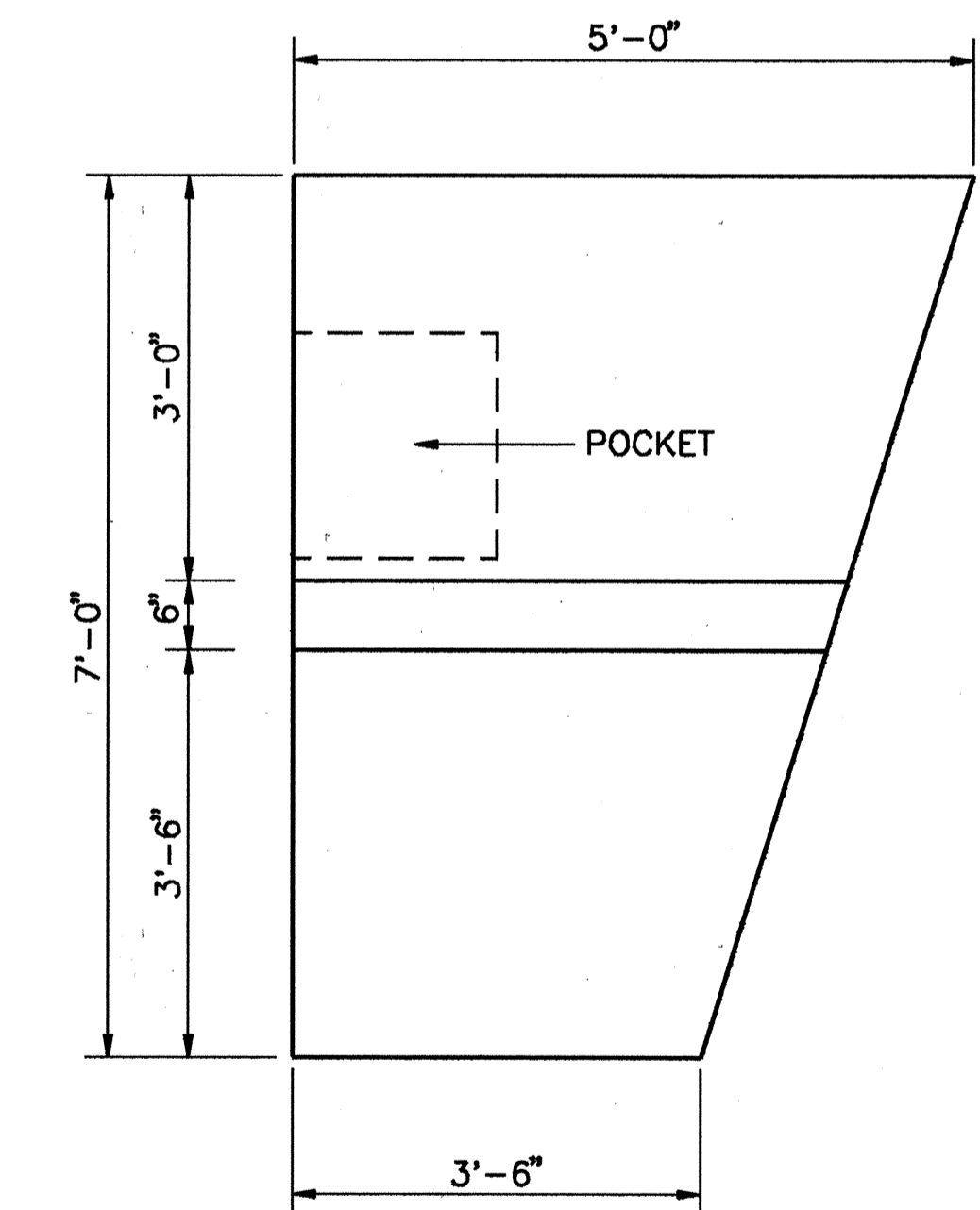
PLAN



SECTION A-A



SECTION B-B



VIEW C-C

- NOTES:
1. FOR GENERAL NOTES, SEE SHEET A-2.
 2. ALL REINFORCING SHALL HAVE 3" COVER UNLESS OTHERWISE SHOWN.
 3. REINFORCING: #5 BARS AT 12" SPACING (TOP AND AROUND POCKETS); #6 BARS AT 6" SPACING (BOTTOM).
 4. COUNTERWEIGHT DIMENSIONS AND CENTER OF GRAVITY SHALL BE CHECKED BY THE CONTRACTOR USING WEIGHT DETERMINED FROM APPROVED SHOP DRAWINGS (SEE SECTION 481 OF THE TECHNICAL SPECIAL PROVISIONS).
 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL BALANCING OF LEAF (SEE SECTION 481 OF THE TECHNICAL SPECIAL PROVISIONS).
 6. THIS SHEET IS INTENDED AS A GUIDE ONLY. CONTRACTOR WILL BE REQUIRED TO SUBMIT SHOP DRAWINGS SHOWING DETAILS OF COUNTERWEIGHT AND SHALL SUBMIT CALCULATIONS SHOWING BALANCE OF LEAF (SEE SECTION 481 OF THE TECHNICAL SPECIAL PROVISIONS).
 7. DESIGN CALCULATIONS TO DETERMINE THE DIMENSIONS OF THE COUNTERWEIGHT CONCRETE NECESSARY TO BALANCE THE MOMENT PRODUCED BY THE STRUCTURAL STEEL AND MACHINERY ASSUME A UNIT WEIGHT OF 245 POUNDS PER CUBIC FOOT FOR CONCRETE. THE CONTRACTOR SHALL ADJUST THE DIMENSIONS OF THE COUNTERWEIGHT BASED ON THE DESIGN CALCULATIONS TO PRODUCE A MOMENT BALANCE USING THE ACTUAL UNIT WEIGHT OF THE CONCRETE TO BE USED IN THE CONSTRUCTION OF THE COUNTERWEIGHT. IRON ORE OR STEEL PUNCHINGS OR FILINGS OR OTHER HEAVY MATERIAL SHALL BE MIXED WITH THE AGGREGATE TO ASCERTAIN THE REQUIRED WEIGHT OF CONCRETE. STEEL PLATES (6'-0" x 1'-4" x 1/4" THK.) SHALL BE USED IN THE POCKETS TO BALANCE THE LEAF. PLATES EQUAL TO 5% OF CALCULATED COUNTERWEIGHT SHALL BE PROVIDED. METHODS OF MIXING AND PLACING SHALL BE DEVISED TO GIVE CLOSE CONTROL AND UNIFORMITY OF UNIT WEIGHT OF THE CONCRETE THROUGHOUT THE COUNTERWEIGHT CONCRETE MASS. THE CONCRETE SHALL BE PLACED IN LAYERS AND CONSOLIDATED WITH VIBRATORS OR TAMPERS. THE CONCRETE IN THE COUNTERWEIGHT SHALL HAVE A 28 DAY STRENGTH OF 3,400 PSI.
 8. THE CONTRACTOR MAY USE OTHER METHODS OF PROVIDING THE COUNTERWEIGHT MASS PROVIDED THEY MEET THE REQUIREMENTS OF THESE GENERAL NOTES AND ARE APPROVED BY THE ENGINEER.
 9. COST OF BALANCING STEEL PLATES AND REINFORCING STEEL SHALL BE INCLUDED IN ITEM NO. 400-2-6 "CONCRETE CLASS II (COUNTERWEIGHT)".

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CONCRETE - COUNTERWEIGHT	CY	18.0
REINFORCING STEEL	LBS	1,800

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

SEAL:		
Drawn by	Names	Dates
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	MRC	5-95
	MRC	5-95
	TJF	5-95
	T. J. FARRELL	

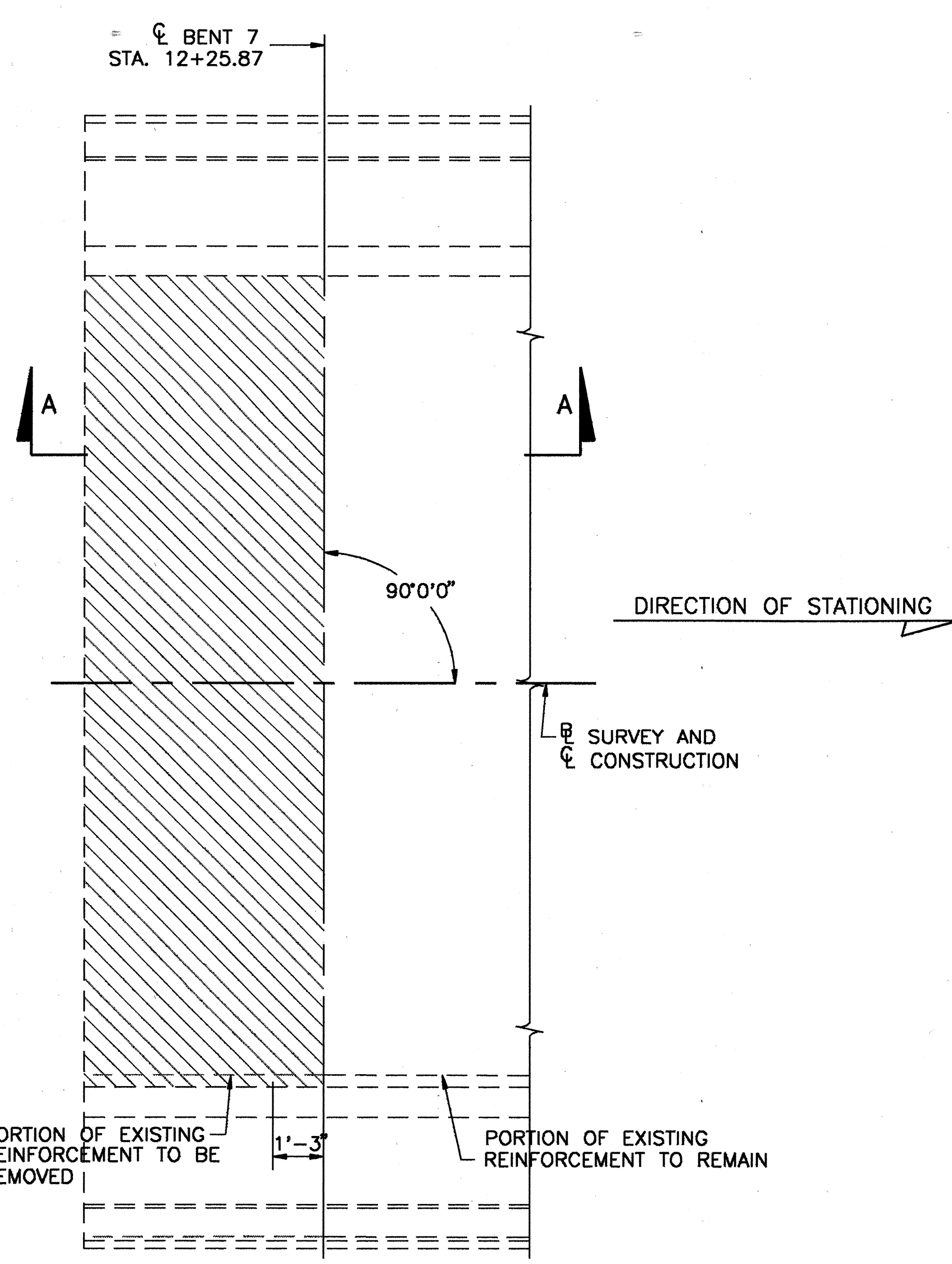
DSA GROUP INC.
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 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607

PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

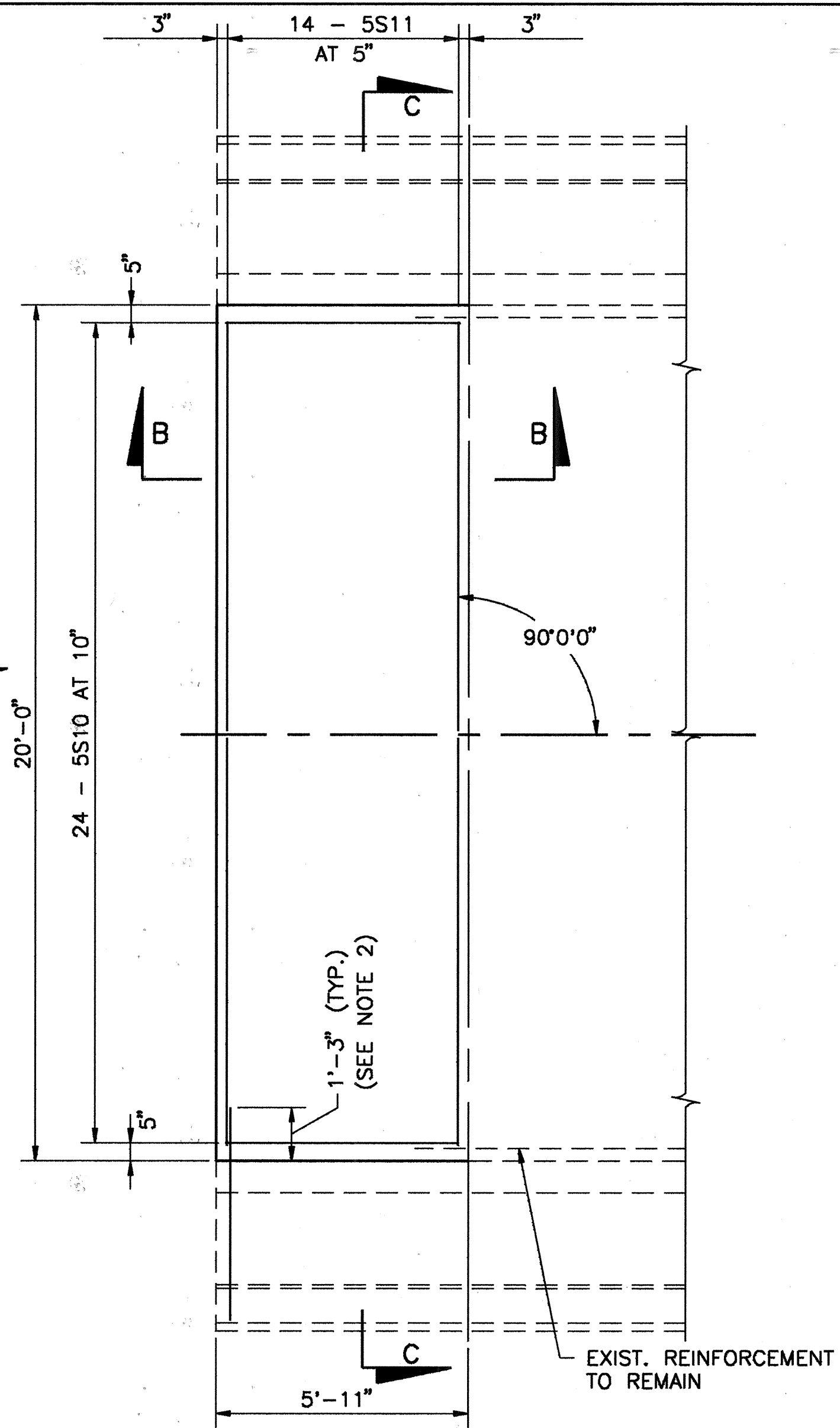
SHEET TITLE: COUNTERWEIGHT DETAILS
PROJECT NAME: BECKETT BRIDGE REPAIRS

SHEET
S-14

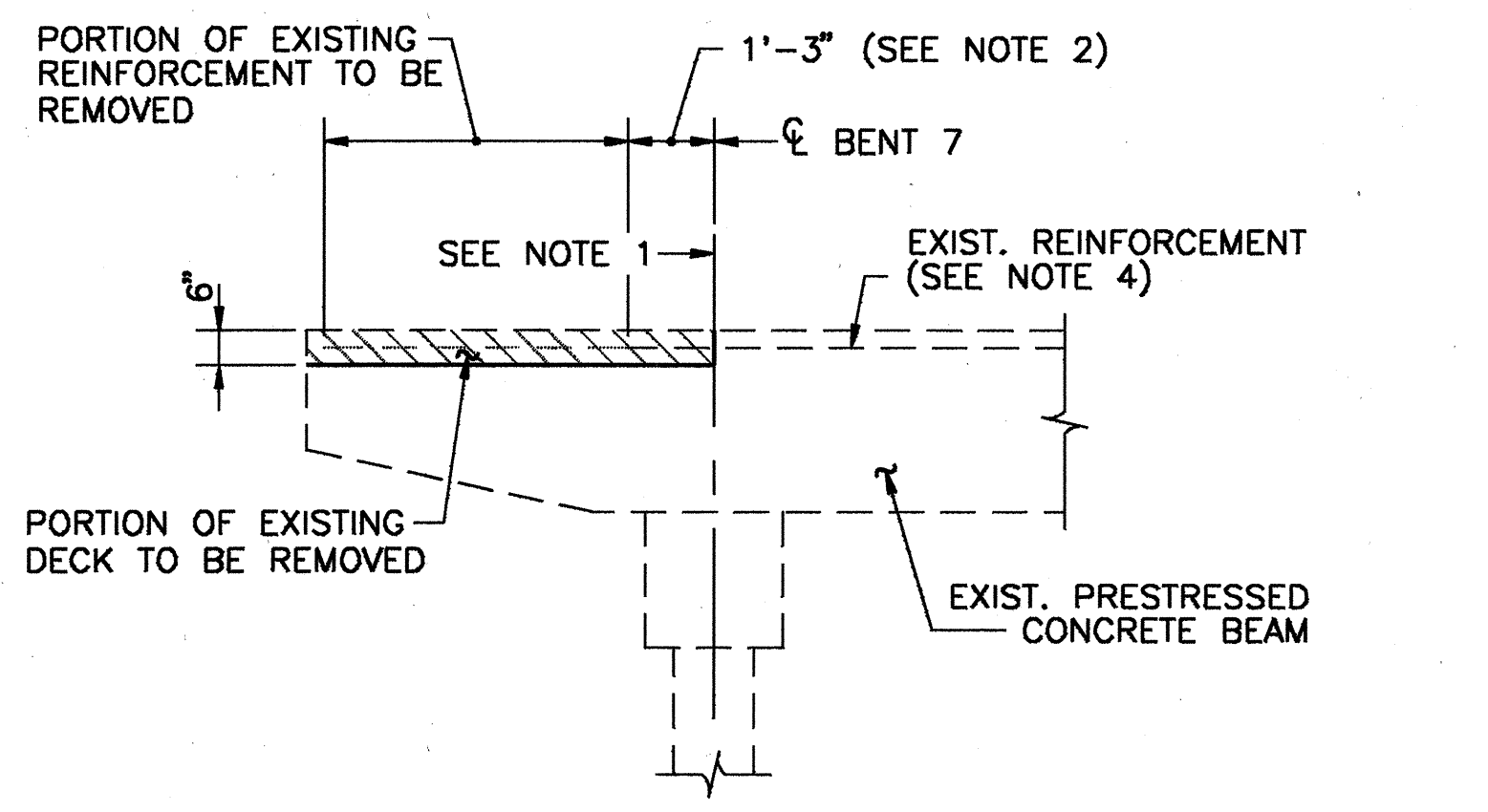
Timothy J. Farrell



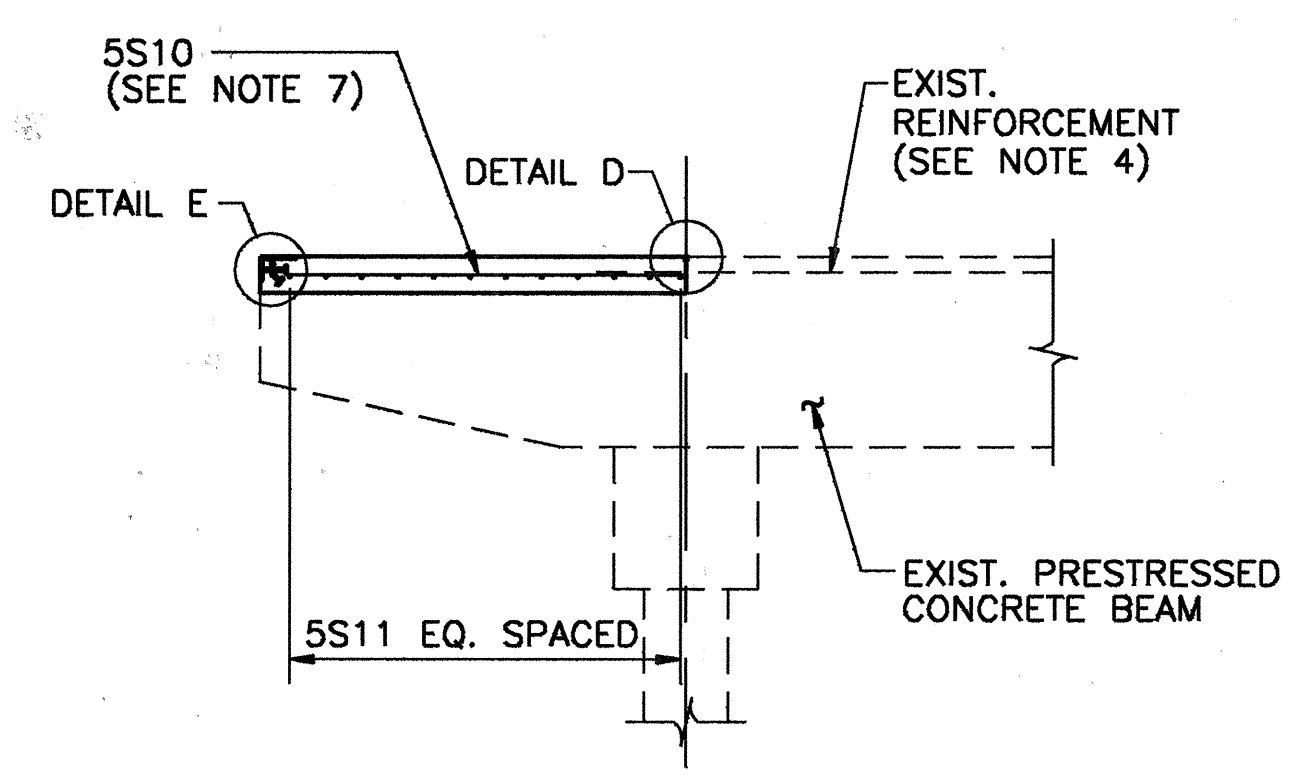
PLAN



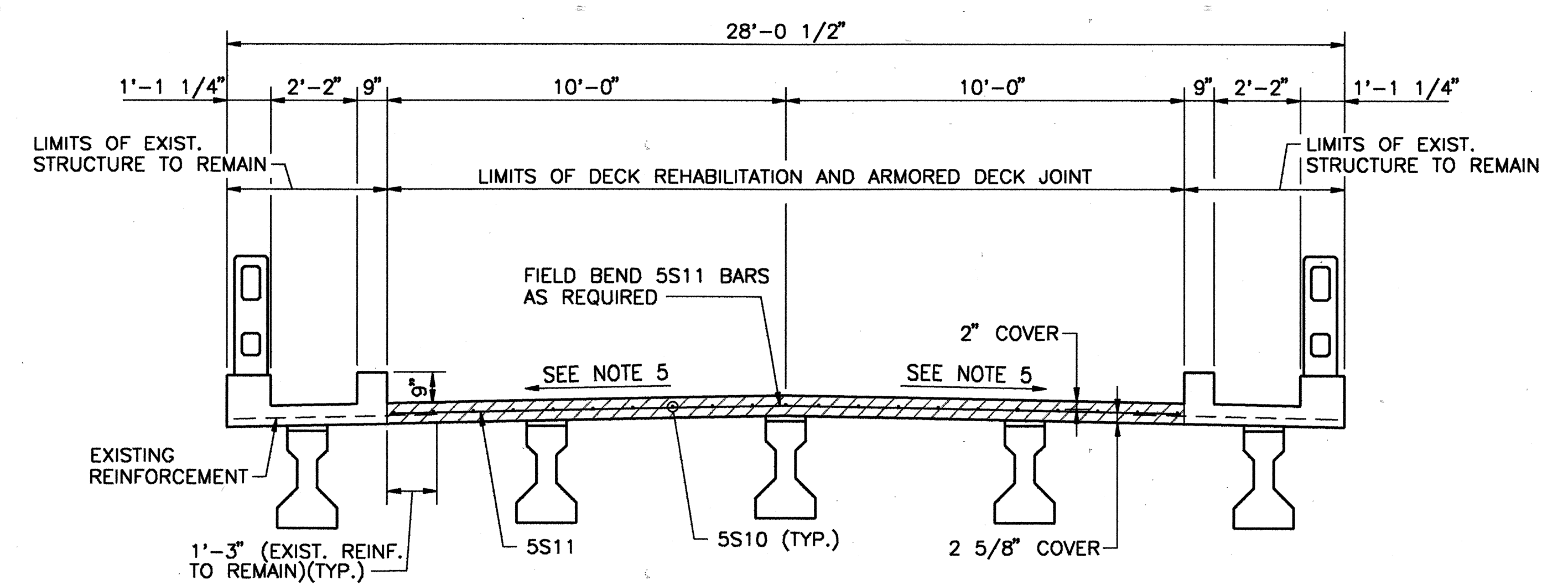
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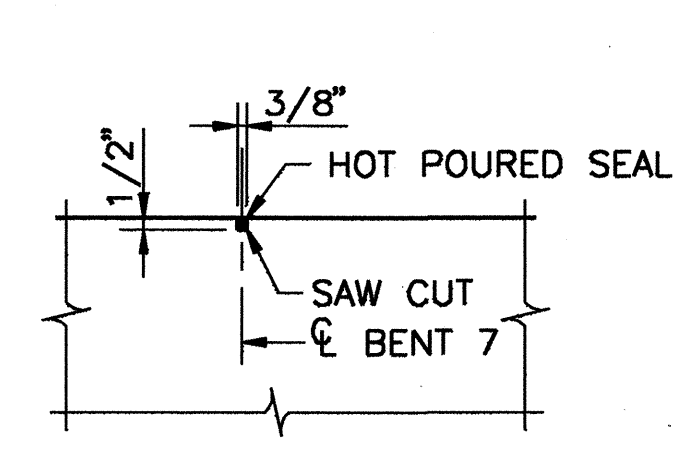
SECTION A-A
DEMOLITION PHASE



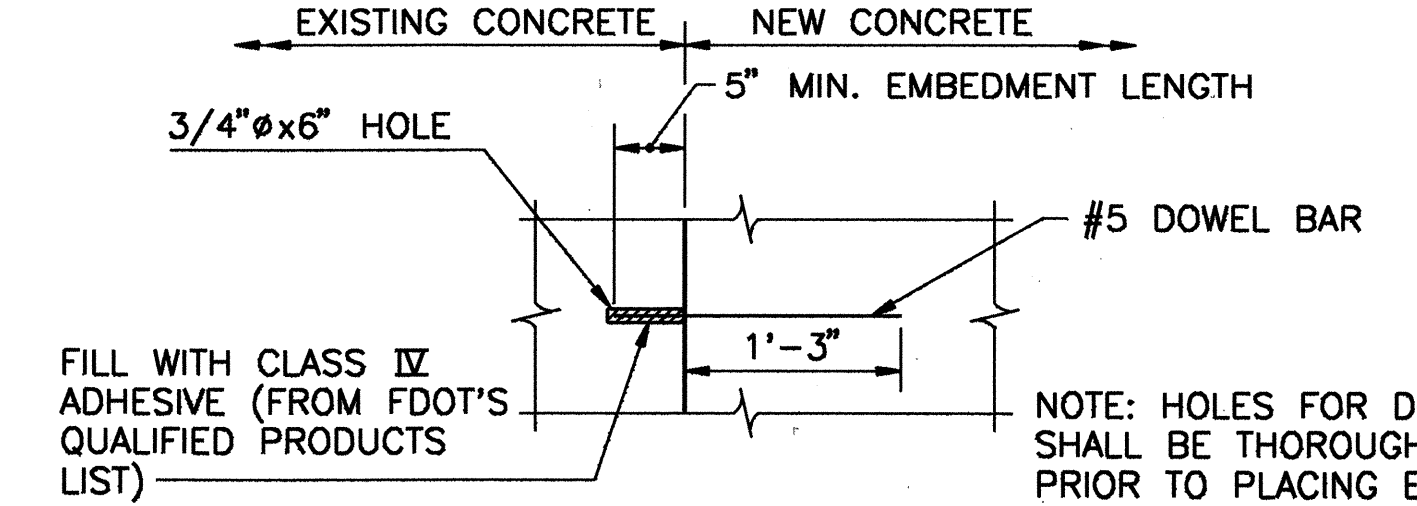
SECTION B-B
CONSTRUCTION PHASE



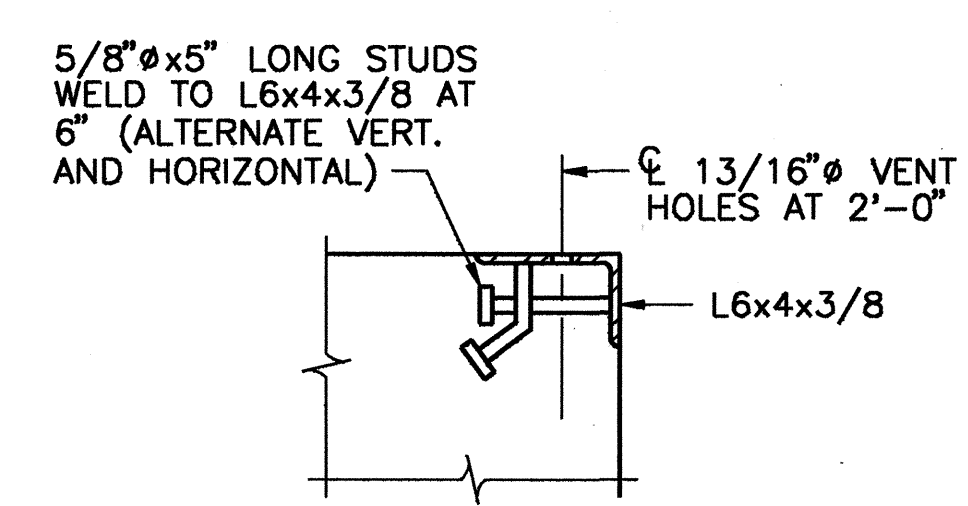
SECTION C-C



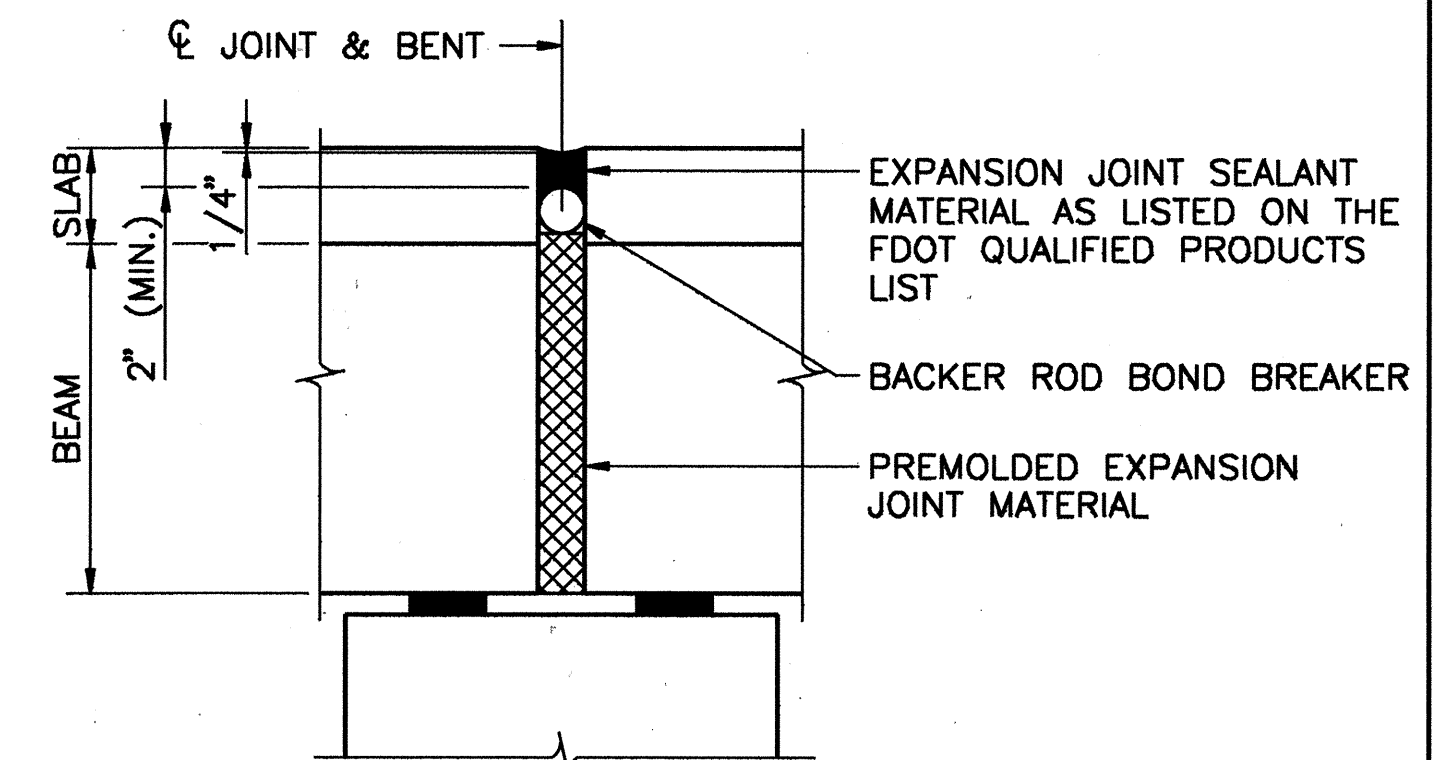
DETAIL D



DETAIL F



DETAIL E



OPEN JOINT REPAIR DETAIL
(REQ'D. AT EB1, BENTS 2,3,4,5,8,9,10, EB11)

- NOTES:
- SCORE CONCRETE FOR FULL LENGTH OF SPAN BEING REPLACED BY SCORING TO THE TOP OF REINFORCING BARS. CONTRACTOR SHALL AVOID DAMAGE TO REINFORCING STEEL DURING SCORING OPERATION AND SLAB REMOVAL.
 - THE CONTRACTOR SHALL REMOVE THE DECK IN THE AREA SHOWN, LEAVING THE EXISTING REINFORCEMENT. THE EXPOSED REINFORCEMENT SHALL BE WIRE BRUSH CLEANED, STRAIGHTENED AND EMBEDDED IN NEW SLAB. IF BARS ARE BROKEN OR OTHERWISE DETERMINED TO BE UNSATISFACTORY BY THE ENGINEER, THEY SHALL BE REPLACED BY DOWEL BARS (SEE DETAIL F).
 - ALL CONTACTING SURFACES BETWEEN OLD AND NEW CONCRETE SHALL BE CLEANED IMMEDIATELY BEFORE CASTING CONCRETE.
 - THE EXISTING REINFORCEMENT IS ASSUMED TO BE #4 BARS AT 12". THE CONTRACTOR SHALL FIELD VERIFY AND ADJUST THE SPACING OF NEW REINFORCEMENT TO SPLICE WITH EXISTING REINFORCEMENT.
 - MATCH DIMENSIONS, CROSS SLOPE AND LONGITUDINAL SLOPE WITH THE EXISTING DECK.
 - [ZZ] DENOTES EXISTING STRUCTURE TO BE REMOVED.
 - IF THE EXISTING REINFORCEMENT SPACING DOES NOT ACCOMMODATE THE PROPOSED REINFORCEMENT SPACING, THE CONTRACTOR SHALL SUBMIT THE DECK SLAB DESIGN (BASED ON THE SPACING OF THE EXISTING REINFORCEMENT) TO THE ENGINEER FOR APPROVAL (OR) THE CONTRACTOR SHALL MEET THE FOLLOWING CRITERIA:
 - A. MAIN REINFORCEMENT (PERPENDICULAR TO TRAFFIC) = 0.74 SQ. IN. PER FT. WIDTH OF SLAB.
 - B. DISTRIBUTION REINFORCEMENT (LONGITUDINAL TO TRAFFIC) = 0.33 SQ. IN. PER FT. WIDTH OF SLAB.

* ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CONCRETE CLASS IV (SUPERSTRUCTURE)	CY	13.40
REINFORCING STEEL (SUPERSTRUCTURE)	LB	1,100
CLEANING AND SEALING DECK JOINTS	LF	252
EXPANSION JOINT	LF	20

* QUANTITIES ARE FOR DECK REPAIRS ONLY.

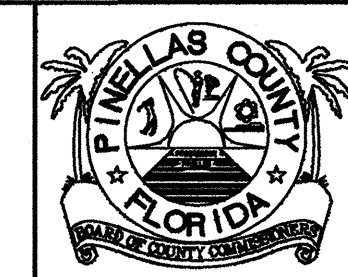
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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Names	Date
Drawn by TJL	5-95
Checked by MRC	5-95
Designed by MRC	5-95
Checked by TJF	5-95
Approved by T.J. FARRELL	



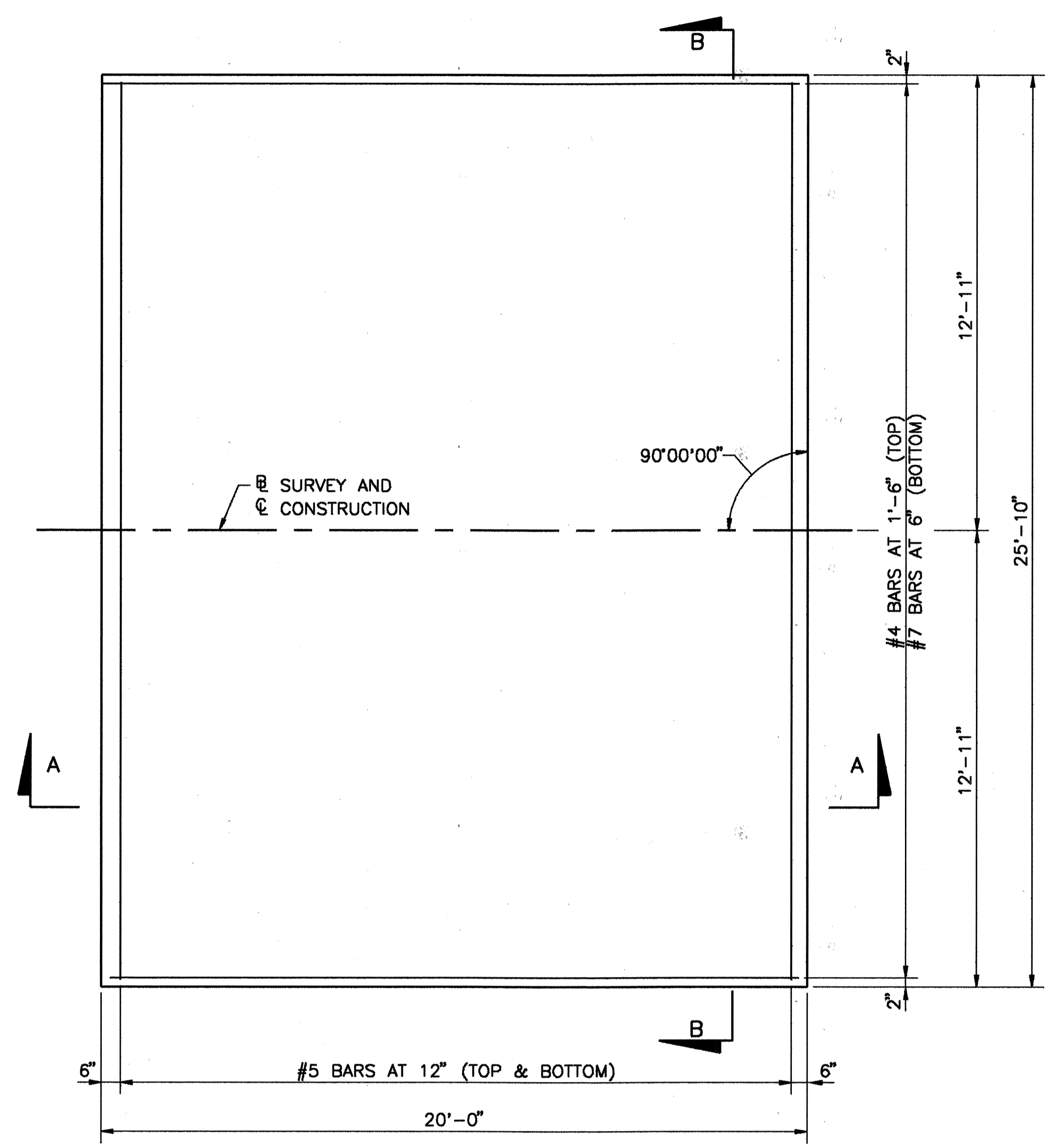
DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



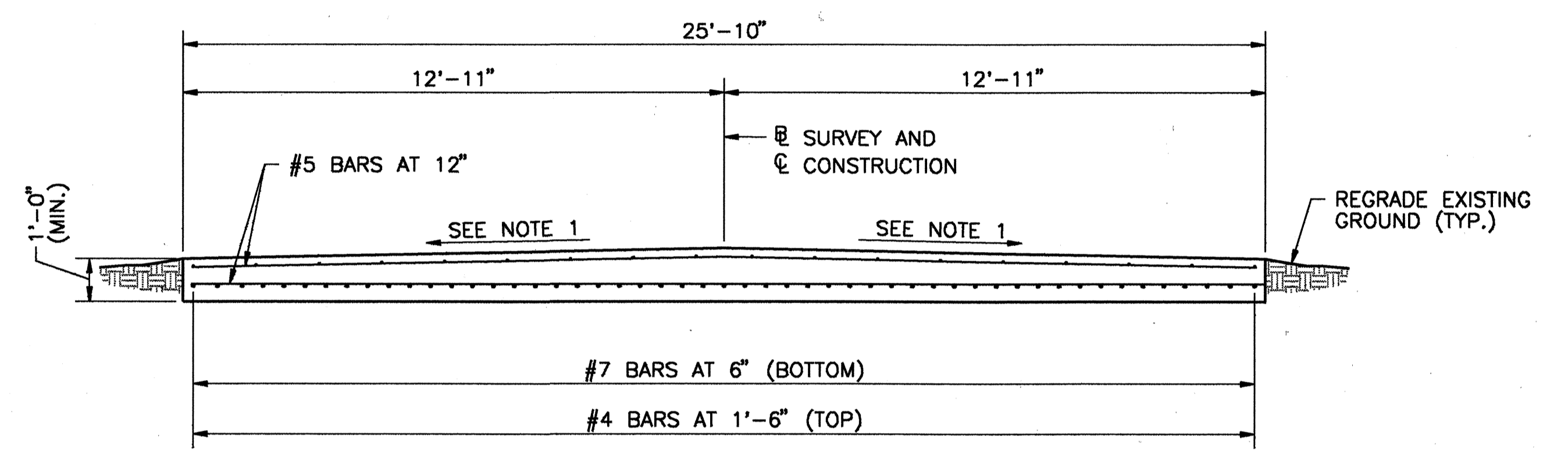
PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

SHEET TITLE: CONCRETE DECK REPLACEMENT AND JOINT DETAILS	SHEET S-15
PROJECT NAME: BECKETT BRIDGE REPAIRS	

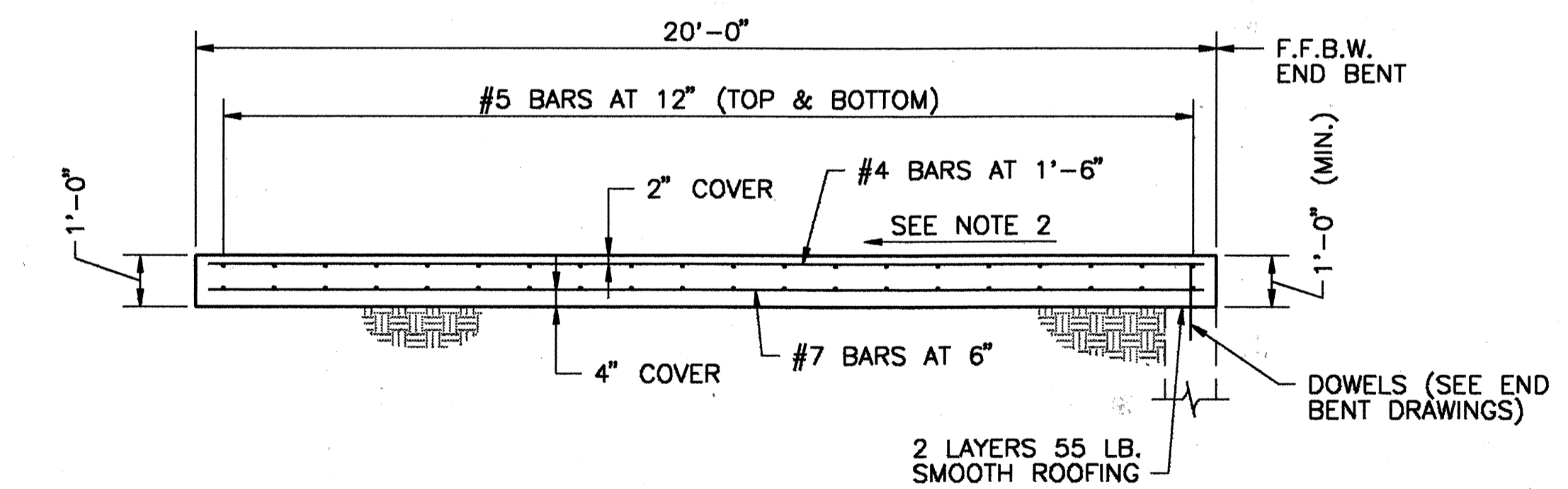
T.J. Farrell



PLAN



SECTION B-B



SECTION A-A

* ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
CONCRETE	CY	19.1
REINFORCING STEEL	LB	3,111

* QUANTITIES FOR ONE APPROACH SLAB ONLY

- NOTES:
1. MATCH WITH EXISTING CROSS SLOPE.
 2. MATCH WITH EXISTING LONGITUDINAL SLOPE.
 3. PAYMENT FOR APPROACH SLAB CONCRETE, REINFORCING STEEL AND THE INCIDENTALS RELATING THERETO SHALL BE PAID UNDER UNIT PRICE FOR APPROACH SLABS, ITEM NO. 360-1.
 4. THE COST FOR REGRADEING THE EXISTING GROUND TO THE ELEVATION OF APPROACH SLABS SHALL BE INCLUDED IN THE UNIT PRICE FOR APPROACH SLABS.

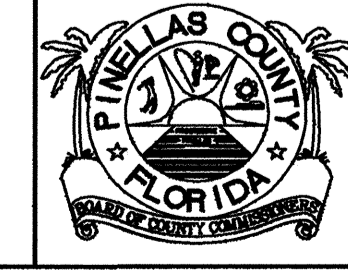
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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

SEAL:		
Names	Date	
Drawn by	TJL	5-95
Checked by	MRC	5-95
Designed by	MRC	5-95
Checked by	TJF	5-95
Approved by	T. J. FARRELL	



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PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

SHEET TITLE:	APPROACH SLAB DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
S-16

T. J. Farrell

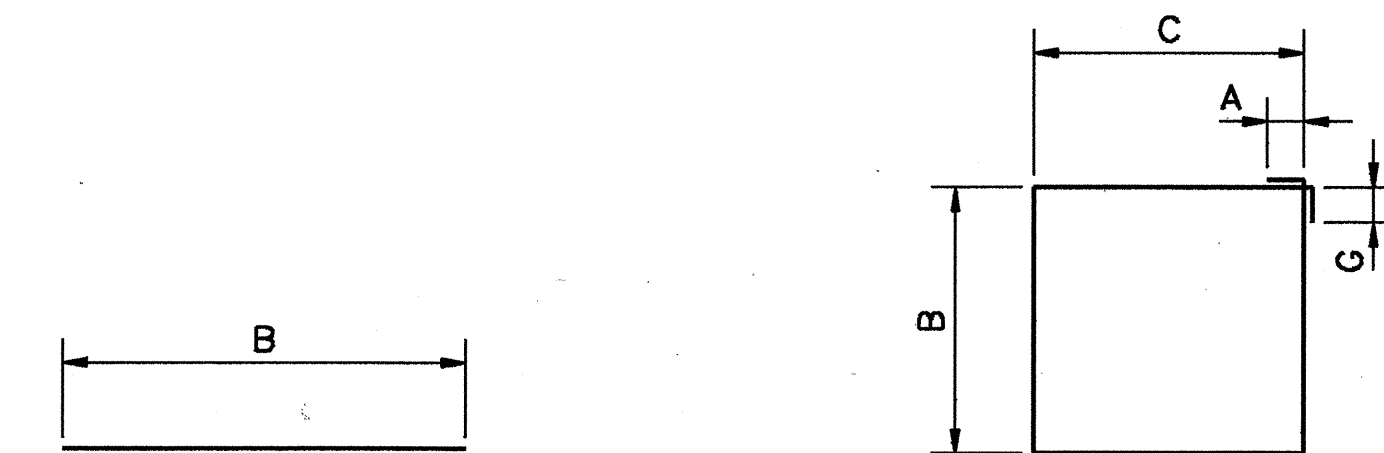
BARRIER GATE SUPPORT														(NO. REQ'D. = 1)		
MARK	LENGTH	NO. BARS	TYPE BAR	STYLE		B	C	D	E	F	H	J	K	N	θ	
SIZE	DES.			FT.-IN.	A	G	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	NO.	ANG.
5	S1	5-8	7	1		5-8										
5	S2	8-9	6	12		3-4	5-5									30
5	S3	6-2	12	1		6-2										

TRAFFIC GATE SUPPORT														(NO. REQ'D. = 2)		
MARK	LENGTH	NO. BARS	TYPE BAR	STYLE		B	C	D	E	F	H	J	K	N	θ	
SIZE	DES.			FT.-IN.	A	G	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	NO.	ANG.
5	S4	4-8	6	1		4-8										
5	S5	7-9	5	12		2-7	5-2									31
5	S6	5-0	11	1		5-0										

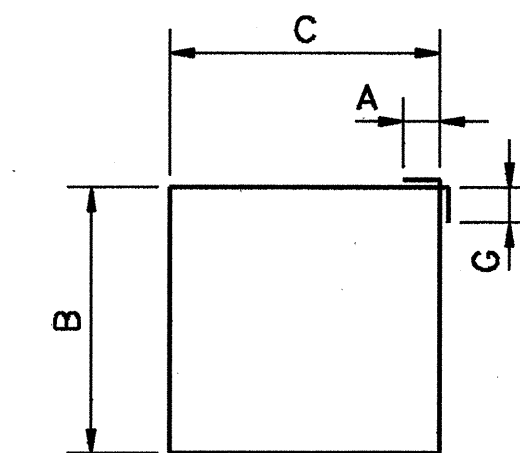
LIGHT POLE PILASTERS														(NO. REQ'D. = 1)		
MARK	LENGTH	NO. BARS	TYPE BAR	STYLE		B	C	D	E	F	H	J	K	N	θ	
SIZE	DES.			FT.-IN.	A	G	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	NO.	ANG.
5	S7	3-2	2	11		2-2	0-6	0-6								
5	S8	7-2	4	4	6	6	0-11	2-2								
8	S1	2-4	6	1		2-4										

DECK SLAB - SPAN 7														(NO. REQ'D. = 1)		
MARK	LENGTH	NO. BARS	TYPE BAR	STYLE		B	C	D	E	F	H	J	K	N	θ	
SIZE	DES.			FT.-IN.	A	G	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	NO.	ANG.
5	S10	5-7	24	1		5-7										
5	S11	20-0	14	1		20-0										

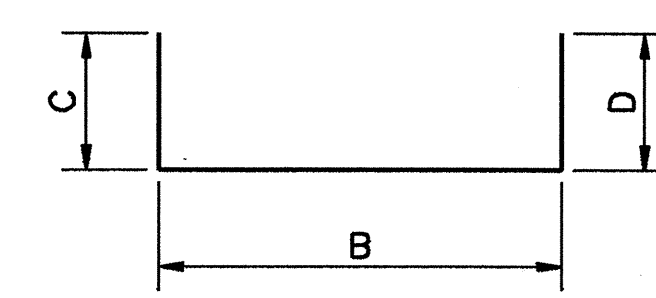
CONTROL PLATFORM														(NO. REQ'D. = 1)		
MARK	LENGTH	NO. BARS	TYPE BAR	STYLE		B	C	D	E	F	H	J	K	N	θ	
SIZE	DES.			FT.-IN.	A	G	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	FT.-IN.	NO.	ANG.
4	CP1	22-6	7	1		22-6										
4	CP2	7-3	23	1		7-3										



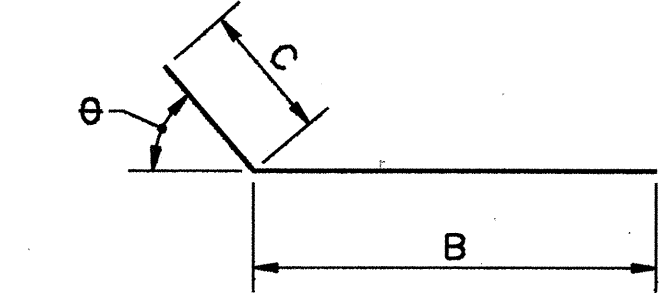
TYPE 1



TYPE 4



TYPE 11



TYPE 12

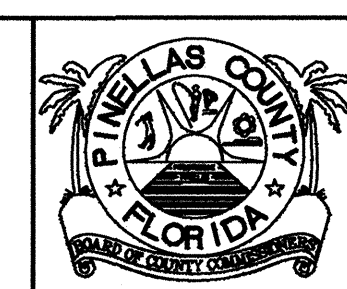
BAR BENDING DETAILS

SCALE: 1/8" = 1'-0" (AS SHOWN)
 DATE: 07/24/95 10:58:23 AEV PRODUCED BY DSA CAD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Name	Date
TJL	T. J. FARRELL	5-95
MRC	M. R. C.	5-95
MRC	M. R. C.	5-95
TJF	T. J. FARRELL	5-95
T. J. FARRELL	T. J. FARRELL	

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 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:	REINFORCING BAR LIST
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
S-17

Timothy J. Farrell

ELECTRICAL SYMBOLS AND ABBREVIATIONS

SYMBOL	DESCRIPTION	MOUNTING
	FENDER NAVIGATION LIGHT (RED)	FENDERS
	CLEARANCE GAUGE FLOODLIGHT, (ARROW SHOWS AIMING)	FENDERS
	LIGHTING FIXTURE, (SQUARE) CEILING TYPE	SEE FIXTURE SCHEDULE
	LIGHTING FIXTURE, WALL BRACKET TYPE	SEE FIXTURE SCHEDULE
	FLUORESCENT FIXTURE	SEE FIXTURE SCHEDULE
	FLUORESCENT STRIP	SEE FIXTURE SCHEDULE
	INDICATOR LIGHT - WALL BRACKET TYPE	SEE FIXTURE SCHEDULE
	SINGLE POLE SWITCH - LETTER IF SHOWN INDICATES LIGHT CONTROLLED, 20A	☉ 48" AFF OR AS NOTED
	THREE-WAY SWITCH, 20A	☉ 48" AFF OR AS NOTED
	KEY OPERATED SWITCH, 20A	☉ 48" AFF OR AS NOTED
	SWITCH WITH PILOT LIGHT, 20A	☉ 48" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 20A	☉ 18" AFF OR AS NOTED
	QUADRAPLEX RECEPTACLE, 125V, 20A	AS NOTED
	RECEPTACLE, 250V, 30A	☉ 18" AFF OR AS NOTED
	SPECIAL RECEPTACLE AS NOTED	☉ 18" AFF OR AS NOTED

SYMBOL	DESCRIPTION	MOUNTING
	ELECTRICAL PANEL 480 VOLT	SEE PANEL SCHEDULE
	ELECTRICAL PANEL 208 OR 240 VOLT	SEE PANEL SCHEDULE
	TRANSFORMER	AS REQUIRED
	HEAVY DUTY DISCONNECT SWITCH INDICATES FUSE SIZE, NF=NONFUSED, X=SIZE PER MOTOR NAMEPLATE INDICATES NEMA TYPE ENCLOSURE, IF NONE SHOWN=NEMA 1 INDICATES FRAME SIZE INDICATES # OF POLES	AS REQUIRED
	MANUAL MOTOR STARTER	AS REQUIRED
	MAGNETIC MOTOR STARTER	AS REQUIRED
	COMBINATION MAGNETIC MOTOR STARTER INDICATES FUSE OR CIRCUIT BREAKER SIZE, NF=NONFUSED INDICATES NEMA TYPE ENCLOSURE, IF NONE SHOWN=1 INDICATES STARTER SIZE INDICATES # OF POLES	AS REQUIRED
	FRACTIONAL HORSEPOWER RATED TOGGLE SWITCH, WITH THERMAL ELEMENTS, # = POLES	AS REQUIRED
	MOTOR, CONNECTION, NUMERIAL = H.P. F = FRACTIONAL	AS REQUIRED
	TELEPHONE OUTLET WITH MIN. 3/4" CONDUIT TO TELEPHONE TERMINAL BOARD U.O.N.	☉ 18" AFF W = ☉ 48" AFF
	TELEPHONE OUTLET (P.S. FOR PAY STATION) W/MIN. 3/4" C. TO TELE. TER. BOARD U.O.N.	☉ 54" AFF OR AS NOTED
	INTERCOM OUTLET AND DESK SET	☉ 18" AFF OR AS NOTED
	INTERCOM SET, WALL MOUNTED	☉ 54" AFF OR AS NOTED
	ALARM BELL OR GONG	AS REQUIRED

SYMBOL	DESCRIPTION	MOUNTING
	CONTACTOR	AS REQUIRED
	PHOTO ELECTRIC CONTROL	CEILING MOUNTED
	RELAY	AS REQUIRED
	JUNCTION BOX	AS REQUIRED
	PULL BOX	AS REQUIRED
	DRIVEN GROUND, 3/4" x 10' COPPERWELD U.O.N.	
	CONDUIT, CONCEALED IN CEILING SPACE, WALL OR FLOOR	
	CONDUIT RUN UNDERGROUND	
	CONDUIT RUN EXPOSED	
	HOME RUN TO PANEL (NO. OF CKT'S ARE INDICATED BY NO. OF ARROWS)	
	CONDUIT RUN-UP OR RUN-DOWN	
	HOME RUN TO TELEPHONE TERMINAL CABINET	
	NO. OF SLASHES EQUAL NO. OF WIRES NO. SLASHES=2 #12 AWG MIN. W/GROUND, OTHER SIZES NOTED. EQUIPMENT GREEN GRND. WIRE NOT SHOWN BUT REQUIRED AS SPECIFIED.	

SYMBOL	DESCRIPTION	MOUNTING
	FUSED SWITCH	AS REQUIRED
	MOLDED CASE CIRCUIT BREAKER TRIP AND FRAME RATING AS INDICATED	AS REQUIRED
	FUSE	AS REQUIRED
	TRANSIENT VOLTAGE SURGE SUPPRESSOR, GROUNDED	AS REQUIRED
	VOLTMETER SWITCH	AS REQUIRED
	AMMETER SWITCH	AS REQUIRED
	AMMETER	AS REQUIRED
	VOLTMETER	AS REQUIRED
	KILOWATT METER	AS REQUIRED
	WATT-HOUR METER	AS REQUIRED
	LIGHTNING ARRESTER	AS REQUIRED
	PUSH-BUTTON STATION OR SWITCH K = KEY OPERATED	AS REQUIRED
	POTENTIAL, CONTROL OR POWER TRANSFORMER	AS REQUIRED
	3/4"Øx10' LG. COPPERWELD GROUND ROD.	MOUNTED MINIMUM 18" BELOW GRADE
	CADWELD CONNECTION	
	AIR TERMINAL	AS REQUIRED
	GENERAL NOTE NO.	
	CONTACTOR OR CONTACT	
	MANUAL CONTROLLERS ON-OFF / START-STOP	
	LIMIT SWITCH	
	TACHOMETER FEEDBACK	

ABBREVIATIONS:

- AF - AMPERE FRAME
- AFF - ABOVE FINISHED FLOOR
- AT - AMPERE TRIP
- ATS - AUTOMATIC TRANSFER SWITCH
- BFG - BELOW FINISHED GRADE
- C - CONDUIT
- CB,C/B - CIRCUIT BREAKER
- CKT - CIRCUIT
- CLF - CURRENT LIMITING FUSE
- CLG - CEILING
- CPT - CONTROL POWER XFMR.
- DISC - DISCONNECT
- DN - DOWN
- ELEC - ELECTRIC
- EMERG - EMERGENCY
- ENCL - ENCLOSURE
- EP - EMERGENCY PANEL
- EQ - EQUIPMENT
- EX - EXISTING PROOF
- EXIST - EXISTING
- FA - FIRE ALARM
- FAA - FIRE ALARM ANNUNCIATOR
- FACP - FIRE ALARM CONTROL PANEL
- FC - FLEX CABLE
- FIXT - FIXTURE
- FLA - FULL LOAD AMPERES
- FS - FLOAT SWITCH
- G - GROUNDED, GROUNDING
- GRND - GROUND
- GF1 - GROUND FAULT INTERRUPTER
- GRS - GALVANIZED RIGID STEEL
- HID - HIGH INTENSITY DISCHARGE
- d - DEDICATED OUTLET/CIRCUIT
- HOA - HAND OFF AUTOMATIC
- HP - HORSEPOWER
- HORIZ - HORIZONTAL
- JB - JUNCTION BOX
- LRA - LOCKED ROTOR AMPERES
- LS - LIMIT SWITCH
- LTG - LIGHTING
- LTS - LIGHTS
- MCB - MAIN CIRCUIT BREAKER
- MCC - MOTOR CONTROL CENTER
- MCP - MOTOR CIRCUIT PROTECTOR
- MH - MANHOLE
- MLO - MAIN LUGS ONLY
- MS - MOTOR STARTER
- MTD - MOUNTED
- MTG - MOUNTING
- N - NEUTRAL
- NO. - NUMBER
- OL - OVERLOAD
- PB - PULL BOX
- P/D - PULLED/DRIVEN
- PL - PILOT LIGHT
- PNL - PANEL
- PWR - POWER
- RC - REEL CABLE
- RECEPT - RECEPTACLE
- SC - SUBMARINE CABLE
- SPEC - SPECIFICATIONS
- SW - SWITCH
- TEL - TELEPHONE
- TF - TACHOMETER FEEDBACK
- TL - TWISTLOCK
- TVSS - TRANSIENT VOLTAGE SURGE SUPPRESSOR
- U.O.N. - UNLESS OTHERWISE NOTED
- UPS - UNINTERRUPTIBLE POWER SUPPLY
- VSD - VARIABLE SPEED DRIVE
- VERT - VERTICAL
- W/G - PROTECTIVE WIRE GUARD
- WHM - WATT HOUR METER
- WP - WEATHER PROOF
- XDCR - TRANSDUCER
- XFMR - TRANSFORMER
- 3P - 3 POLES
- 3W - 3 WIRES

SCHEMATIC DIAGRAM SYMBOLS

<p>TERMINALS</p> <ul style="list-style-type: none"> MOTOR STARTER CONTROL PANEL CONTROL DESK DRIVE SYSTEM PANEL GATE OPERATOR SPANLOCK OPERATOR SUBMARINE CABLE (CABINET-CABLE-CABINET) PANEL WIRING FIELD WIRING 	<p>LIMIT SWITCH - LS</p> <ul style="list-style-type: none"> NORMALLY CLOSED NORMALLY CLOSED HELD OPEN NORMALLY OPEN NORMALLY OPEN HELD CLOSED <p>(LIMIT SWITCHES ARE SHOWN WITH BRIDGE DOWN, LOCKS DRIVEN AND TRAFFIC GATES UP)</p> <p>PRESSURE OR VACUUM SWITCH - PS</p> <ul style="list-style-type: none"> NORMALLY OPEN CLOSURES ON RISING PRESSURE NORMALLY CLOSED OPENS ON RISING PRESSURE 	<p>TEMPERATURE SWITCH OR THERMOSTAT - TS</p> <ul style="list-style-type: none"> NORMALLY OPEN CLOSURES ON RISING TEMPERATURE NORMALLY CLOSED OPENS ON RISING TEMPERATURE <p>FLOAT SWITCH - FS</p> <ul style="list-style-type: none"> NORMALLY OPEN CLOSURES ON RISING LEVEL NORMALLY CLOSED OPENS ON RISING LEVEL <p>TIME DELAY RELAY CONTACTS</p> <ul style="list-style-type: none"> TIME DELAY CLOSE ON ENERGIZATION TIME DELAY OPEN ON ENERGIZATION TIME DELAY CLOSE ON DEENERGIZATION TIME DELAY OPEN ON DEENERGIZATION 	<p>HAND SWITCH - HS</p> <ul style="list-style-type: none"> TOGGLE SWITCH HAND-OFF-AUTO (LOCAL-OFF-REMOTE) PUSHBUTTON NORMALLY OPEN NORMALLY CLOSED <p>INDICATOR LIGHT - IL</p> <ul style="list-style-type: none"> R - RED G - GREEN A - AMBER O - ORANGE B - BLUE W - WHITE <p>RELAY COIL</p> <ul style="list-style-type: none"> 27 - UNDERVOLTAGE CR - CONTROL RELAY TR - TIME DELAY RELAY M - MOTOR CONTACTOR MF - MOTOR FORWARD CONTACTOR MR - MOTOR REVERSE CONTACTOR PE - PHOTOELECTRIC RELAY
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RELAY CONTACTS

- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT

NEMA STYLE OPERATORS

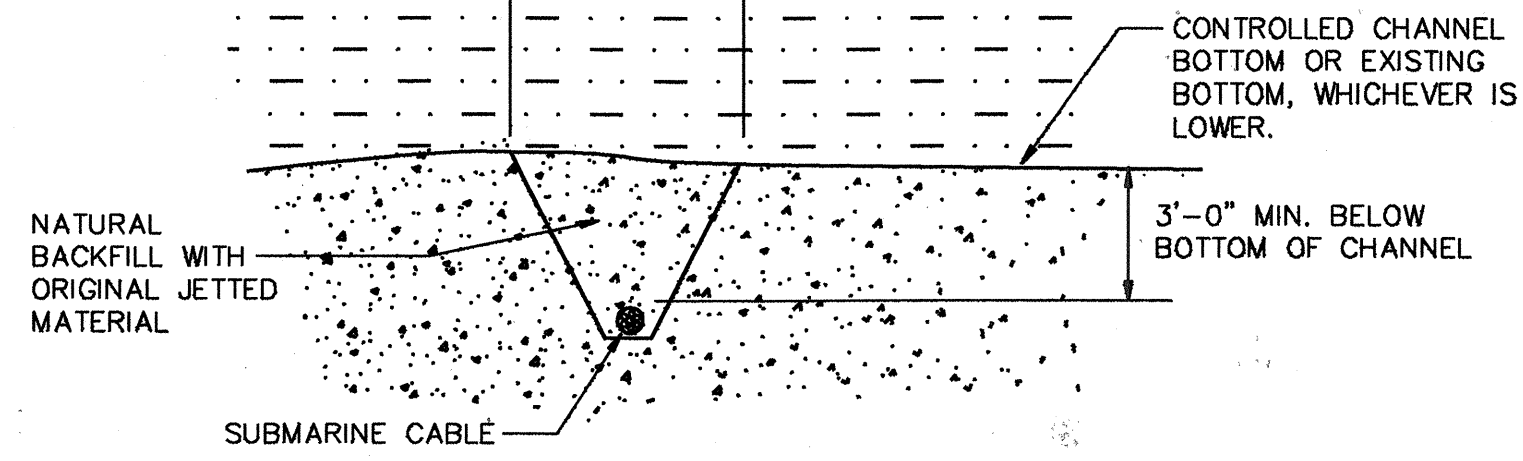
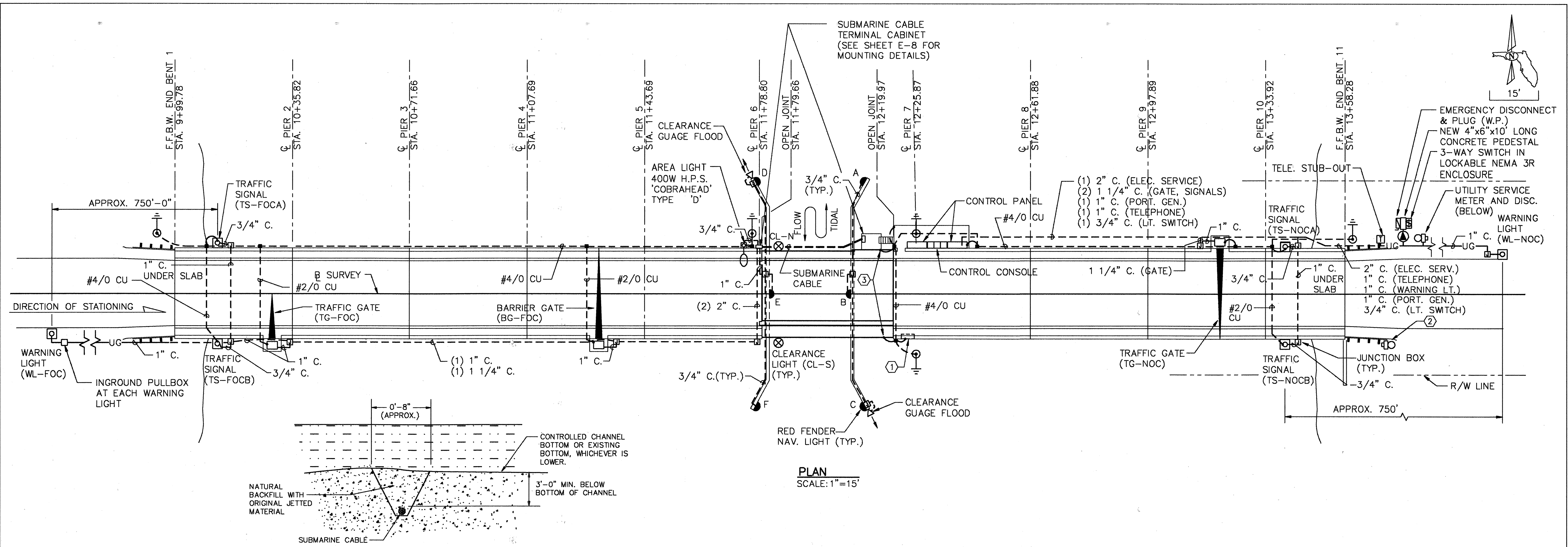
- MUSHROOM HEAD BUTTON PUSH/PULL OPERATION
- PUSHBUTTON STATION MOMENTARY OPERATION
- SELECTOR SWITCH, POSITIONS AS INDICATED
- KEY OPERATED SWITCH

- NOTES:**
1. ALL SYMBOLS SHOWN ON DRAWINGS IN DASHED LINES OR WITH (E) ARE EXISTING. U.O.N.
 2. EQUIPMENT AND DEVICES SHOWN HATCHED SHALL BE REMOVED.
 3. THESE ARE STANDARD SYMBOLS AND MAY NOT APPEAR ON THE PROJECT DRAWINGS; HOWEVER, WHEREVER THE SYMBOL ON THE PROJECT DRAWING OCCURS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

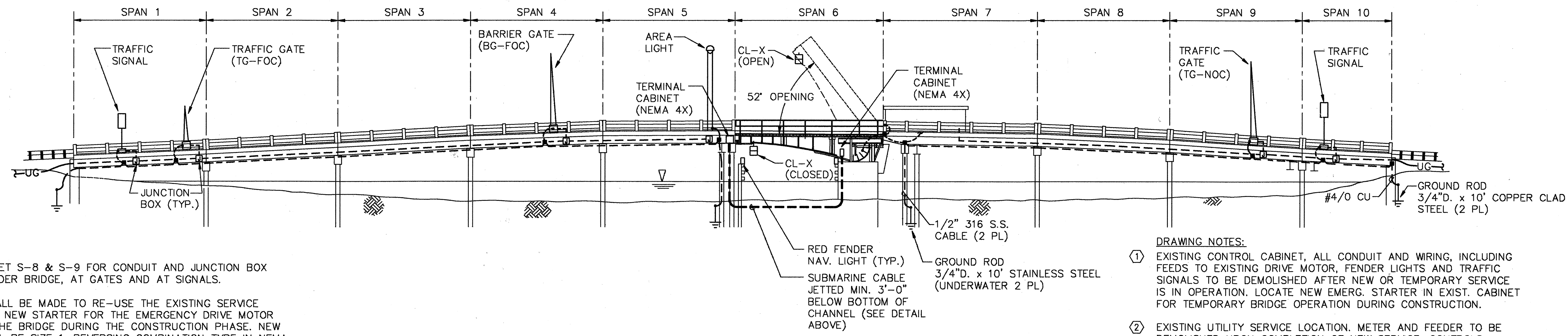
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Date	By	Description	Date	By	Description									ELECTRICAL SYMBOLS AND ABBREVIATIONS	E-1
														PROJECT NAME:	BECKETT BRIDGE REPAIRS

G.M. Moscinski



SUBMARINE CABLE INSTALLATION DETAIL
SCALE: NONE



ELEVATION
SCALE: 1"=15'

NOTES:

- REFER TO SHEET S-8 & S-9 FOR CONDUIT AND JUNCTION BOX LOCATIONS UNDER BRIDGE, AT GATES AND AT SIGNALS.
- PROVISION SHALL BE MADE TO RE-USE THE EXISTING SERVICE ALONG WITH A NEW STARTER FOR THE EMERGENCY DRIVE MOTOR TO OPERATE THE BRIDGE DURING THE CONSTRUCTION PHASE. NEW STARTER SHALL BE SIZE 1, REVERSING COMBINATION TYPE IN NEMA 4X ENCLOSURE WITH LOCKABLE DISCONNECT AND SURFACE MOUNTED CONTROLS.

DRAWING NOTES:

- EXISTING CONTROL CABINET, ALL CONDUIT AND WIRING, INCLUDING FEEDS TO EXISTING DRIVE MOTOR, FENDER LIGHTS AND TRAFFIC SIGNALS TO BE DEMOLISHED AFTER NEW OR TEMPORARY SERVICE IS IN OPERATION. LOCATE NEW EMERG. STARTER IN EXIST. CABINET FOR TEMPORARY BRIDGE OPERATION DURING CONSTRUCTION.
- EXISTING UTILITY SERVICE LOCATION, METER AND FEEDER TO BE DEMOLISHED UPON COMPLETION OF NEW SERVICE, CONTROLS AND DRIVE MOTOR INSTALLATION.
- PROVIDE FLEXIBLE BOND AT TRUNNION. BOND ALL METAL HANDRAILS, CONTROL SHED AND PANELS.

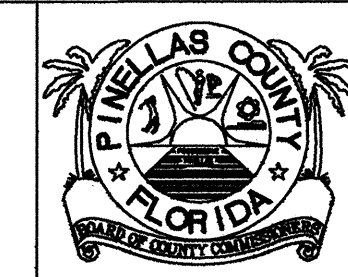
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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Names	Dates
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Checked by GMM	5-95
Designed by GMM	5-95
Checked by RMC	5-95
Approved by G.M. MOSCINSKI	

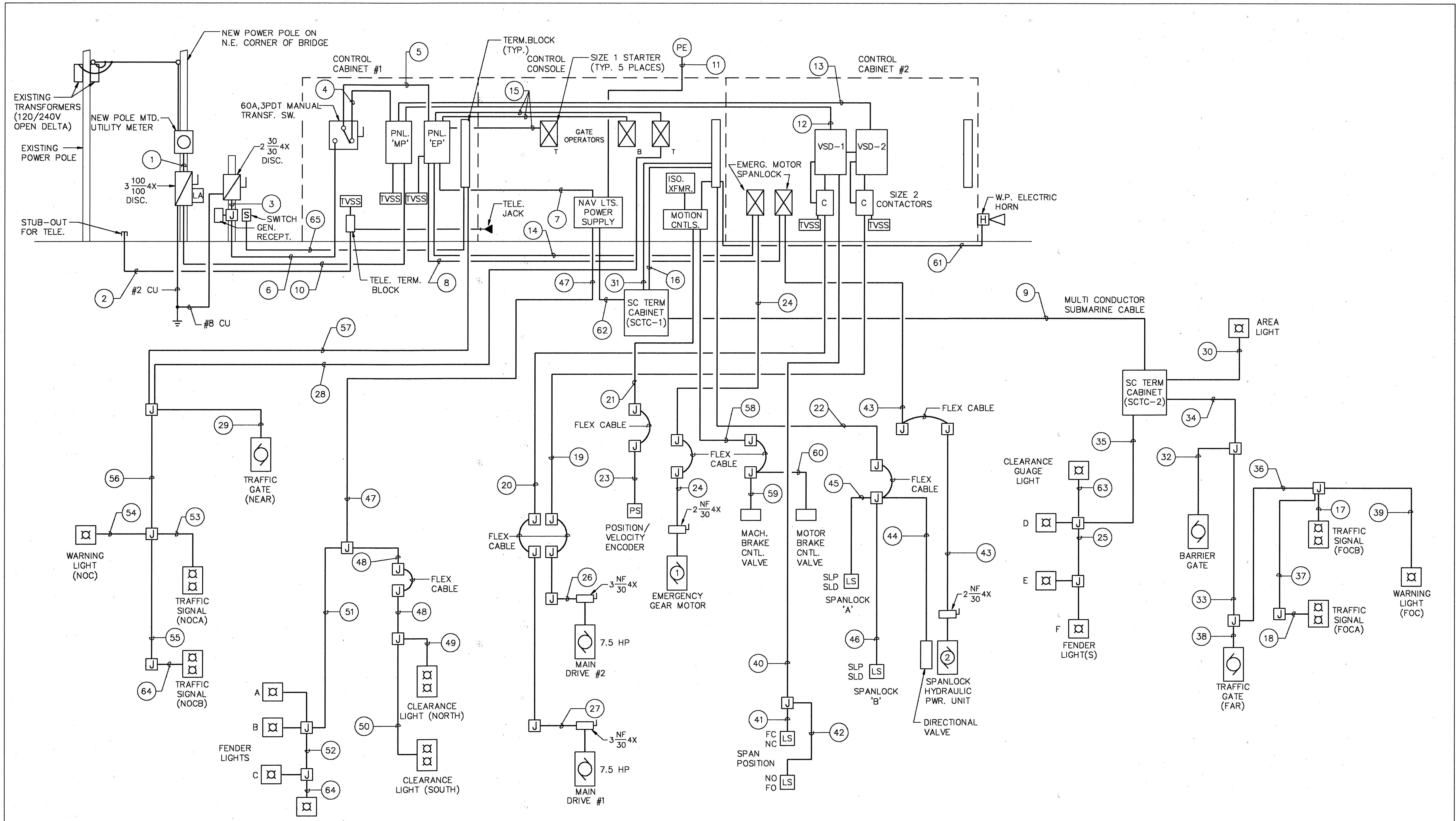


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2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

BRIDGE NO. 154000		SHEET	
SHEET TITLE: ELECTRICAL SITE PLAN		E-2	
PROJECT NAME: BECKETT BRIDGE REPAIRS			



EXISTING BRIDGE PROPOSED NEW RISER DIAGRAM
N.T.S.

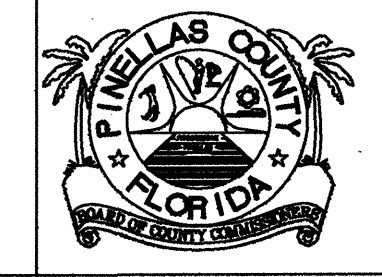
NOTES:
1. REFER TO SHEET E-4 FOR CONDUIT AND CABLE SCHEDULE.

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

SEAL:		Names	Dates
		Drawn by	ALC 5-95
		Checked by	GMM 5-95
		Designed by	GMM 5-95
		Checked by	RMC 5-95
		Approved by	G.M. MOSCINSKI

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DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:	RISER DIAGRAM
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
E-3

G.M. Mosinski

COND. NO.	SIZE	FROM	TO	CONDUCTORS		
				NO.	SIZE	DESIGNATION
1	2	UTILITY METER	SERVICE DISCONNECT (NORMAL)	4	1/0	L1,L2,L3,N
				1	2	GND
2	1	TELEPHONE PEDESTAL	TEL. TERM. BLOCK	6 PR	24	TELEPHONE
3	3/4	EMERG. RECEPTACLE	EMERG. DISCONNECT	3	10	E1,E2,N
				1	10	GND
4	1	PANEL 'MP'	MAN. XFER. SWITCH	3	6	MP-2,4,N
				1	10	GND
5	1	MAN. XFER. SWITCH	EMERG. PANEL 'EP'	3	6	X1,X2,N
				1	10	GND
6	1	EMERG. DISCONNECT 3-WAY SWITCH	MAN. XFER. SWITCH CONTROL CONSOLE	3	6	E1,E2,N
				1	10	GND
7	②	EMERG. PANEL 'EP'	NAV. LTS. POWER SUPPLY	2	12	EP-13,N
				1	12	GND
8	②	EMERG. PANEL 'EP'	EMERG. DRIVE STARTER	2	10	EP-10,12
				1	12	GND
9	SUBM. CABLE	SCTC-1	SCTC-2	24	10	POWER (9 SPARE)
				48	12	CONTROL (12 SPARE)
				4	10	GND (1 SPARE)
10	2	SERVICE DISCONNECT	SERVICE PANEL 'MP'	4	1/0	L1,L2,L3,N
				1	2	GND
11	1/2	NAV. LTS. POWER SUPPLY	P.E. SWITCH	3	14	-
				1	12	GND
12	②	SERVICE PANEL 'MP'	VSD-1	3	10	MP-1,3,5
				1	10	GND
13	②	SERVICE PANEL 'MP'	VSD-2	3	10	MP-7,9,11
				1	10	GND
14	②	EMERG. PANEL 'EP'	SPANLOCK STARTER	2	10	EP-2,4
				1	12	GND
15	②	EMERG. PANEL 'EP'	GATE OPERATOR STARTER (TYP.)	2	10	EP-1,3 (EP-5,7) (EP-9,11)
				1	12	GND
16	2	CONTROL CONSOLE	SCTC-1	12	10	NAV-1,N,EP-5,7,9,11,N,TS-1,N,WS-1,N,MP-12,SW,N
				6	10	SPARE
				4	10	GND
17	3/4	JUNCTION BOX	TRAFFIC SIGNAL (FOCB)	2	10	TS-1,N
				2	12	CONTROL
				1	10	GND
18	3/4	JUNCTION BOX	TRAFFIC SIGNAL (FOCB)	2	10	TS-1,N
				2	12	CONTROL
				1	10	GND
19	3/4	VSD-2 CONTACTOR	JUNCTION BOX	3	10	MP-7,9,11
				1	10	GND
20	3/4	VSD-1 CONTACTOR	JUNCTION BOX	3	10	MP-1,3,5
				1	10	GND
21	3/4	MOTION CONTROLLER	JUNCTION BOX (OPTICAL ENCODER)			PER ENCODER MFR. REQMT'S
22	1	JUNCTION BOX (SPANLOCK)	TERMINAL BLOCK	19	14	SPANLOCK LIMIT SW'S, DIR. VALVE
23	3/4	JUNCTION BOX	POSITION/VELOCITY ENCODER	4	18 SH	ENCODER SIGNALS
24	3/4	EMERG. MOTOR STARTER	DISCONNECT SWITCH (EMERG. GEAR MOTOR)	2	10	EP-10,12
				1	12	GND

COND. NO.	SIZE	FROM	TO	CONDUCTORS		
				NO.	SIZE	DESIGNATION
25	3/4	JUNCTION BOX	(JUNCTION BOX) (FENDER LIGHTS, CLEARANCE GAUGE LIGHT)	3	10	NAV-1,PE,N
				2	12	CONTROL
				1	10	GND
26	3/4	JUNCTION BOX	DISCONNECT SWITCH (MAIN DRIVE #2)	3	10	MP-7,9,11
				1	10	GND
27	3/4	JUNCTION BOX	DISCONNECT SWITCH (MAIN DRIVE #1)	3	10	MP-1,3,5
				1	10	GND
28	1 1/4	GATE OPERATOR STARTER (NEAR TRAFFIC)	JUNCTION BOX	2	10	EP-1,3
				8	12	CONTROL
				1	12	GND
29	1	JUNCTION BOX	NEAR TRAFFIC GATE	2	10	EP-1,3
				8	12	CONTROL
				1	12	GND
30	3/4	SCTC-2	AREA LIGHT	3	10	MP-12,SW,N
				1	12	GND
31	2	SCTC-1	CONTROL CONSOLE	48	12	CONTROLS
32	1 1/4	JUNCTION BOX	BARRIER GATE	3	10	EP-9,11,N
				16	12	CONTROL
				1	10	GND
33	1 1/4	JUNCTION BOX	JUNCTION BOX (GATE, SIGNALS, WARNING LIGHT)	7	10	EP-5,7,N,TS-1,N,WS-1,N
				12	12	CONTROL
				2	10	GND
34	(2) 2	SCTC-2	JUNCTION BOX (GATES, SIGNALS)	9	10	EP-5,7,9,11,N,TS-1,N,WS-1,N
				32	12	CONTROL
				3	10	GND
35	1	SCTC-2	JUNCTION BOX (FENDER LIGHTS AND CLEARANCE GAUGE LIGHT)	3	10	NAV-1,PE,N
				4	12	CONTROL
				1	10	GND
36	1	JUNCTION BOX	JUNCTION BOX (TRAFFIC SIGNALS, WARNING LIGHT)	4	10	TS-1,N,WS-1,N
				4	12	CONTROL
				1	10	GND
37	1	JUNCTION BOX	JUNCTION BOX (TRAFFIC SIGNAL (FOCA) (FOCB))	2	10	TS-1,N
				2	12	CONTROL
				1	10	GND
38	1	JUNCTION BOX	TRAFFIC GATE (FAR)	3	10	EP-5,7,N
				8	12	CONTROL
				1	10	GND
39	1	JUNCTION BOX	WARNING LIGHT (FOC)	2	10	WS-1,N
				1	10	GND
40	3/4	VSD-1	JUNCTION BOX (SPAN LIMIT SWITCHES)	8	14	FC-1,2,NC-1,2,NO-1,2,FO-1,2
41	3/4	JUNCTION BOX	LIMIT SWITCH FC/NC	4	14	FC-1,FC-2,NC-1,NC-2
42	3/4	JUNCTION BOX	LIMIT SWITCH NO/FO	4	14	NO-1,NO-2,FO-1,FO-2
43	3/4	SPANLOCK STARTER	DISCONNECT SWITCH (HYD. PWR. UNIT)	2	10	EP-2,4
				1	12	GND

COND. NO.	SIZE	FROM	TO	CONDUCTORS		
				NO.	SIZE	DESIGNATION
44	3/4	SPANLOCK HYDRAULIC POWER UNIT (DIRECTIONAL VALVE)	JUNCTION BOX (LIMIT SWITCHES)	3	14	-
45	3/4	JUNCTION BOX	LIMIT SWITCHES SPANLOCK 'A'	8	14	SLAP-1,2,3,4,SLAD-1,2,3,4
46	3/4	JUNCTION BOX	LIMIT SWITCHES SPANLOCK 'B'	8	14	SLBP-1,2,3,4,SLBD-1,2,3,4
47	1	NAV. LTS. POWER SUPPLY	JUNCTION BOX (NAVIGATION LIGHTS)	3	12	NAV-2,PE,N
				8	12	CONTROLS
				1	12	GND
48	3/4	JUNCTION BOX (FLEX CABLE)	CLEARANCE LIGHTS	2	12	NAV-2,N
				2	12	CONTROLS
				1	12	GND
49	3/4	JUNCTION BOX	CLEARANCE LIGHT (NORTH)	2	12	NAV-2,N
				2	12	CONTROLS
				1	12	GND
50	3/4	JUNCTION BOX	CLEARANCE LIGHT (SOUTH)	2	12	NAV-2,N
				2	12	CONTROLS
				1	12	GND
51	3/4	JUNCTION BOX	JUNCTION BOX (FENDER LIGHTS & CLEARANCE GAUGE LIGHT)	3	12	NAV-2,PE,N
				4	12	CONTROLS
				1	12	GND
52	3/4	FENDER LIGHT	CLEARANCE GAUGE LIGHT	3	12	NAV-2,PE,N
				1	12	GND
53	1	JUNCTION BOX	TRAFFIC SIGNAL (NOCA)	2	12	TS-2,N
				2	12	CONTROLS
				1	12	GND
54	1	JUNCTION BOX	WARNING LIGHT (NOC)	2	10	WS-2,N
				1	12	GND
55	1	JUNCTION BOX	JUNCTION BOX (TRAFFIC SIGNAL (NOCB))	2	12	TS-2,N
				2	12	CONTROLS
				1	12	GND
56	1	JUNCTION BOX	JUNCTION BOX (NEAR TRAFFIC SIGNALS)	3	10	TS-2,WS-2,N
				4	12	CONTROLS
				1	12	GND
57	1 1/4	CONTROL CABINET #1	JUNCTION BOX	3	10	TS-2,WS-2,N
				4	12	CONTROLS
				1	12	GND
58	1	MOTION CONTROLLER	JUNCTION BOX (BRAKE CONTROLS)	8	14	CONTROLS
				(2)4	18 SH	CONTROLS
59	3/4	JUNCTION BOX	MACHINE BRAKE SOLENOID	5	14	CONTROLS
				4	18 SH	CONTROLS
60	3/4	JUNCTION BOX	MOTOR BRAKE SOLENOID	3	14	CONTROLS
				4	18 SH	CONTROLS
61	3/4	CONTROL CONSOLE	ELECTRIC HORN	2	12	POWER
				1	12	GND
62	1	NAV. LTS. POWER SUPPLY	SCTC-1	3	10	NAV-1,PE,N
				8	12	CONTROLS
				1	12	GND
63	3/4	JUNCTION BOX	CLEARANCE GAUGE LIGHT	3	10	PE,N
				2	12	CONTROLS
63	3/4	JUNCTION BOX	CLEARANCE GAUGE LIGHT	3	10	PE,N
				2	12	CONTROLS
				1	12	GND
64	3/4	JUNCTION BOX	TRAFFIC SIGNAL (NOCB)	2	12	TS-2,N
				2	12	CONTROLS
				1	12	GND
65	3/4	LIGHT SWITCH	CONTROL CABINET #1	2	12	MP-12,SW LEG
				1	12	GND

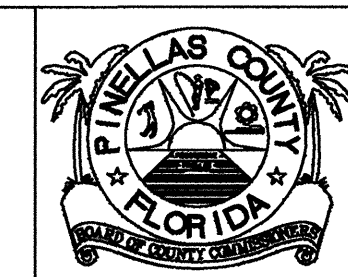
DRAWING NOTES:
 ① QUANTITIES SHOWN ARE MINIMUM. PROVIDE REQUIRED QUANTITIES AND SIZES OF CONDUCTORS BASED ON SUBMITTED CONTROL DIAGRAMS.
 ② INTERNAL CONSOLE/CABINET WIRING.

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REVISIONS		REVISIONS	
Date	By	Description	

Drawn by	Name	Date
ALC	ALC	5-95
Checked by	GMM	5-95
Designed by	GMM	5-95
Checked by	RMC	5-95
Approved by	G.M. MOSCINSKI	

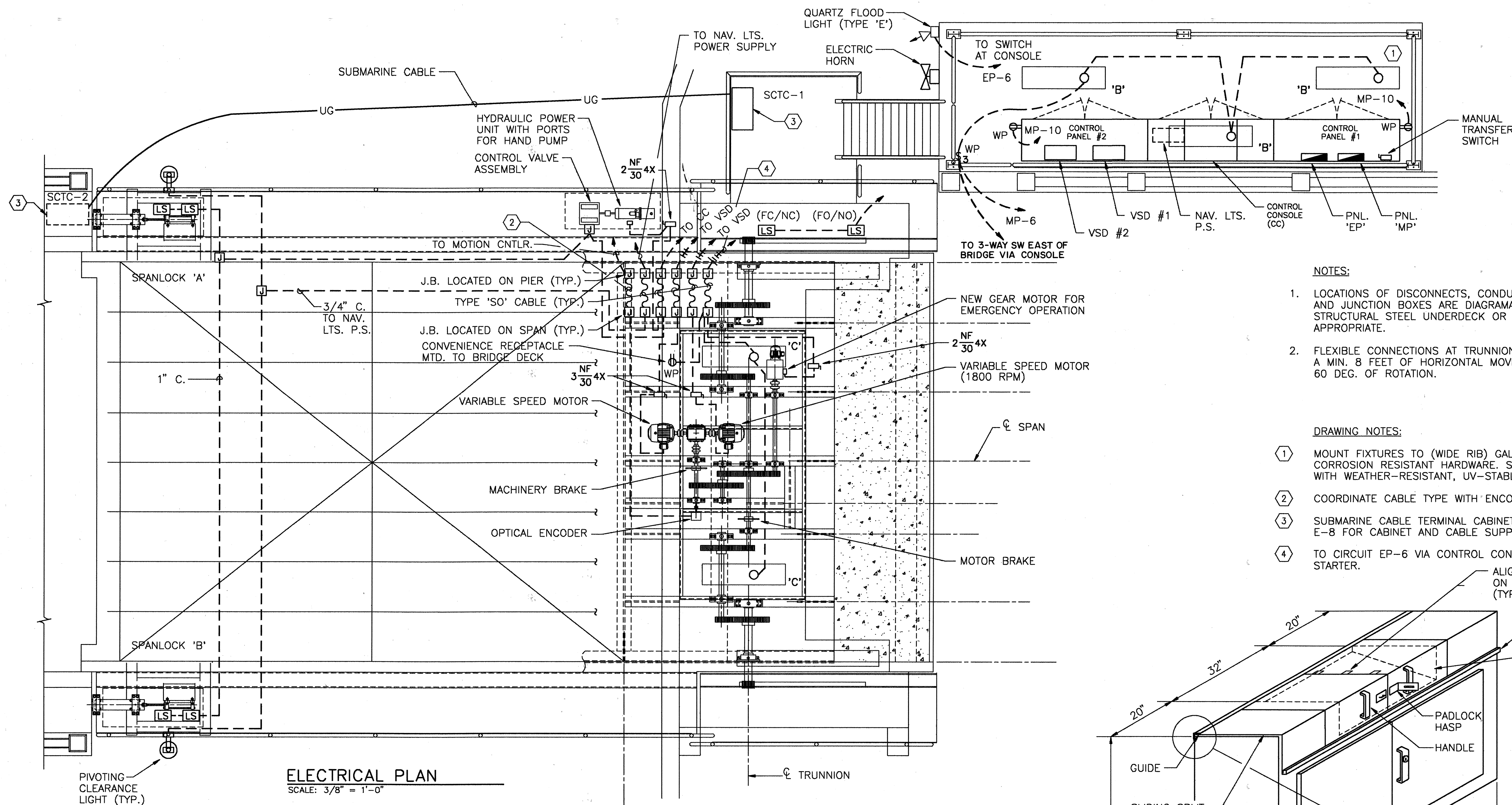
DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



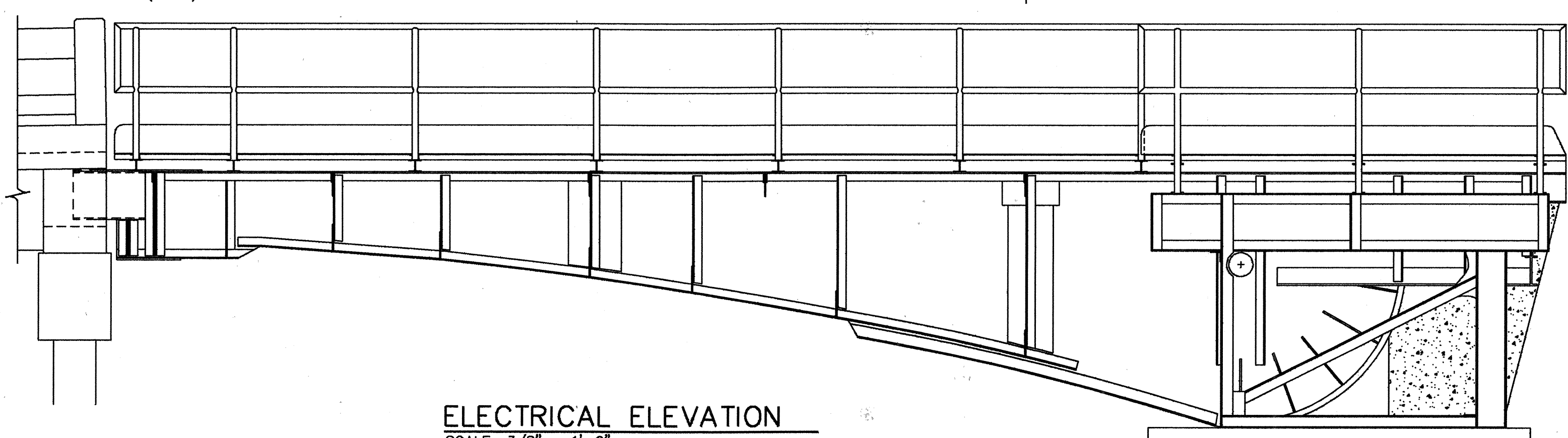
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:
 CONDUIT AND CABLE SCHEDULE
 PROJECT NAME:
 BECKETT BRIDGE REPAIRS

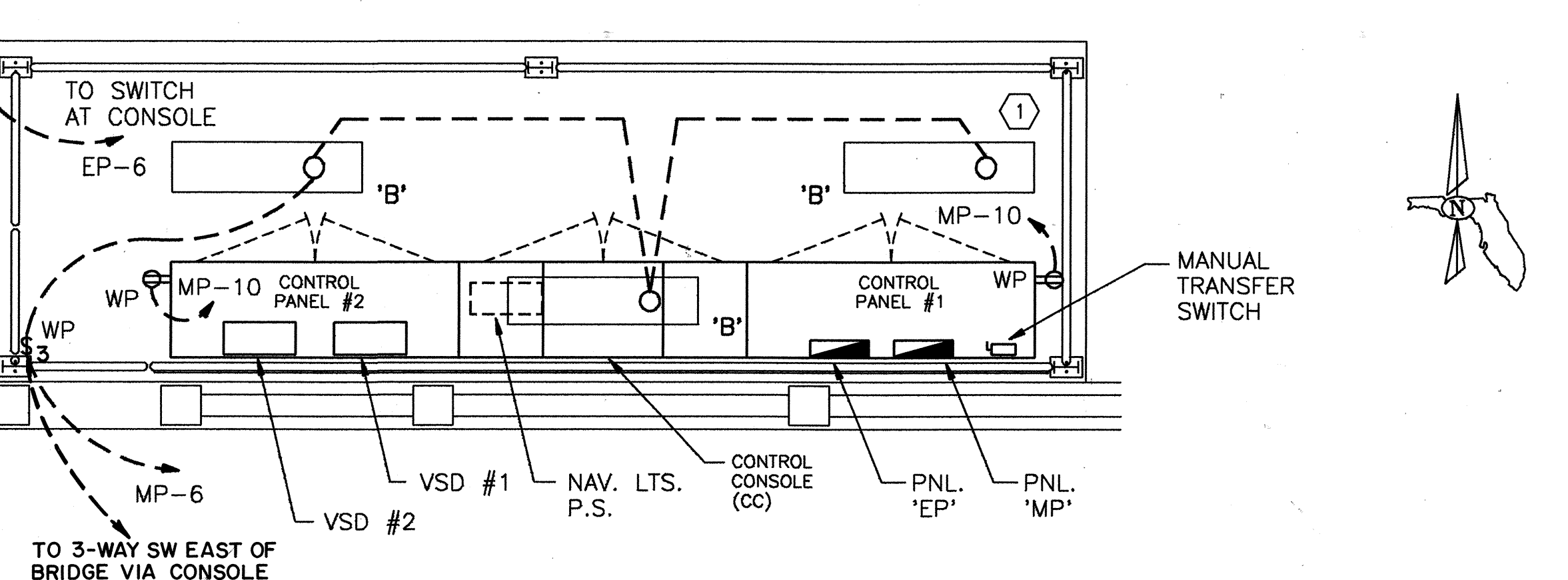
SHEET
E-4



ELECTRICAL PLAN
SCALE: 3/8" = 1'-0"



ELECTRICAL ELEVATION
SCALE: 3/8" = 1'-0"



- NOTES:**
1. LOCATIONS OF DISCONNECTS, CONDUIT, LIGHT FIXTURES AND JUNCTION BOXES ARE DIAGRAMATIC; MOUNT TO SPAN STRUCTURAL STEEL UNDERDECK OR ON PIER AS APPROPRIATE.
 2. FLEXIBLE CONNECTIONS AT TRUNNIONS SHALL ALLOW FOR A MIN. 8 FEET OF HORIZONTAL MOVEMENT AS WELL AS 60 DEG. OF ROTATION.

- DRAWING NOTES:**
- 1 MOUNT FIXTURES TO (WIDE RIB) GALVANIZED ROOF WITH CORROSION RESISTANT HARDWARE. SEAL ALL PENETRATIONS WITH WEATHER-RESISTANT, UV-STABLE SEALANT.
 - 2 COORDINATE CABLE TYPE WITH ENCODER SUPPLIER.
 - 3 SUBMARINE CABLE TERMINAL CABINET. REFER TO SHEET E-8 FOR CABINET AND CABLE SUPPORT.
 - 4 TO CIRCUIT EP-6 VIA CONTROL CONSOLE AND EP-10 VIA STARTER.

NOTE:
PROTECTIVE COVER DESIGN IS DIAGRAMATIC.
CONTRACTOR MAY PROVIDE SUITABLE, COMPARABLE ARRANGEMENT FOR APPROVAL.

CONTROL CONSOLE DETAIL
N.T.S.

PLANNING & DESIGN GROUP, INC. 02/19/95 15:13:48 ALC. PRODUCED BY DSA CADD SYSTEM

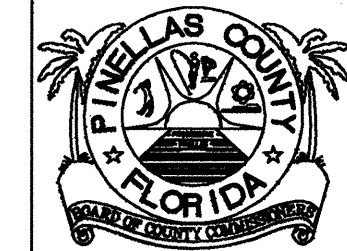
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Date	By	Date	By

REVISIONS		REVISIONS	
Date	By	Date	By

Drawn by	Home	Date
AEV	5-95	5-95
Checked by	GMM	5-95
Designed by	GMM	5-95
Checked by	RMC	5-95
Approved by	G.M. MOSCINSKI	



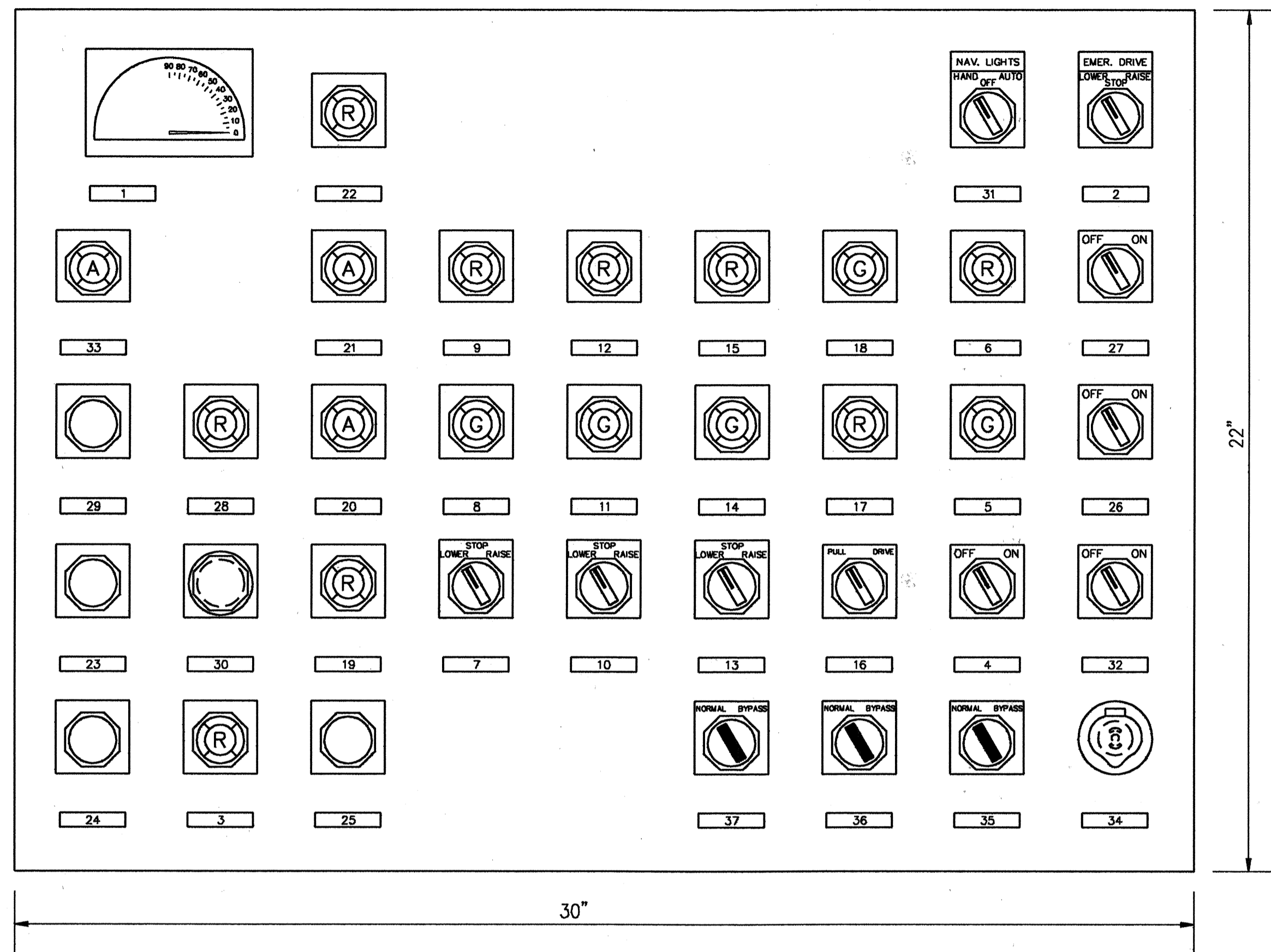
DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



PINELLAS COUNTY
DEPARTMENT OF
PUBLIC WORKS

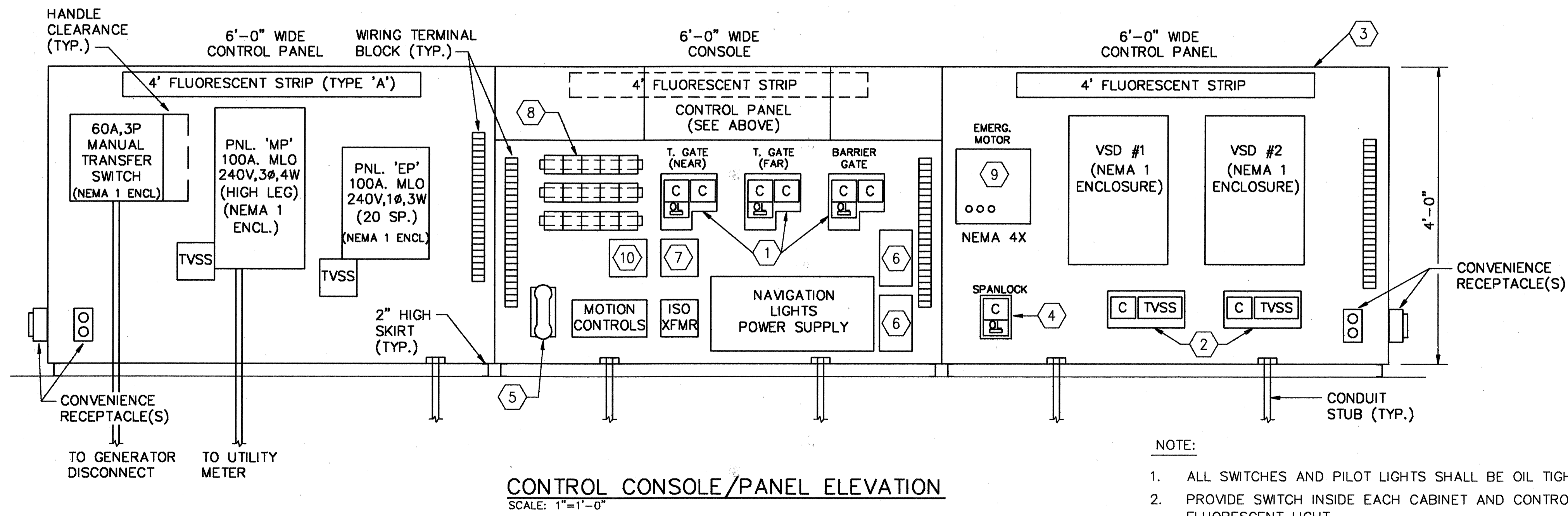
SHEET TITLE:	SPAN ELECTRICAL PLAN
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
E-5



CONTROL PANEL NAMEPLATE
SCALE: 3/8"=1"

- DRAWING NOTES:**
- 1 SIZE 1 REVERSING STARTER IN OPEN FRAME, HORIZONTAL MOUNT. SQUARE 'D' #8736 OR APPROVED EQUAL.
 - 2 SIZE 2 CONTACTOR IN OPEN FRAME, HORIZONTAL MOUNT. SQUARE 'D' #8736 OR APPROVED EQUAL, WITH TRANSIENT VOLTAGE SURGE SUPPRESSOR ON LOAD SIDE OF CONTACTOR.
 - 3 STAINLESS STEEL CABINET, WELDED CONSTRUCTION, GASKETED DOUBLE DOORS. CONTINUOUS HINGE PINS AND LOCKING LATCH HANDLES.
 - 4 SIZE 0 FULL VOLTAGE STARTER IN OPEN FRAME, VERTICAL MOUNT. SQUARE 'D' #8536 OR APPROVED EQUAL.
 - 5 PORTABLE TELEPHONE HANDSET, STORAGE CRADLE MOUNTED ON INSIDE OF DOOR. PROVIDE WEATHERPROOF TELEPHONE RECEPTACLE ON CONSOLE (HUBBELL PH6596 OR EQUAL) WITH TELEPHONE CABLE ASSEMBLY (HUBBELL PH6599 OR EQUAL). PROVIDE MATCHING PLUG AND CABLE ON HANDSET.
 - 6 LOW VOLTAGE TVSS DEVICE, 10-PAIR UNIT EQUAL TO APT TE/DA20B-XX. SUITABLE FOR 24V DC SIGNALS.
 - 7 POWER SUPPLY FOR MOTION CONTROLLER.
 - 8 RAIL MOUNTED CONTROL RELAYS.
 - 9 SIZE 1 STARTER FOR EMERGENCY DRIVE MOTOR. RELOCATED FROM SOUTH SIDE OF BRIDGE (SEE SITE PLAN).
 - 10 24 VOLT, 400W POWER SUPPLY FOR EMERGENCY DRIVE CLUTCH.



CONTROL CONSOLE/PANEL ELEVATION
SCALE: 1"=1'-0"

- NOTE:**
1. ALL SWITCHES AND PILOT LIGHTS SHALL BE OIL TIGHT, CORROSION-RESISTANT.
 2. PROVIDE SWITCH INSIDE EACH CABINET AND CONTROL CONSOLE FOR THE FLUORESCENT LIGHT.

CONTROL PANEL NAME PLATE SCHEDULE		
NO.	FIRST LINE	SECOND LINE
1	LEAF POSITION	
2	EMERGENCY DRIVE	MOTOR
3	DRIVE FAILURE	
4	TRAFFIC	SIGNALS
5	TRAFFIC LIGHTS	OFF (GREEN)
6	TRAFFIC LIGHTS	ON (RED)
7	WEST TRAFFIC	GATE CONTROL
8	WEST TRAFFIC	GATE OPEN
9	WEST TRAFFIC	GATE CLOSED
10	EAST TRAFFIC	GATE CONTROL
11	EAST TRAFFIC	GATE OPEN
12	EAST TRAFFIC	GATE CLOSED
13	BARRIER	GATE CONTROL
14	BARRIER	GATE OPEN
15	BARRIER	GATE CLOSED
16	NOSE LOCK	CONTROL
17	NOSE LOCK	LOCK PULLED
18	NOSE LOCK	LOCK DRIVEN
19	BRIDGE SPAN	FULLY CLOSED
20	BRIDGE SPAN	NEARLY CLOSED
21	BRIDGE SPAN	NEARLY OPEN
22	BRIDGE SPAN	FULLY OPEN
23	BRIDGE SPAN	RAISE
24	BRIDGE SPAN	LOWER
25	WARNING HORN	PUSHBUTTON
26	BRIDGE LIGHT	
27	DESK LIGHT	
28	BRAKE FAILURE	
29	NORMAL STOP	(MOTOR BRAKE)
30	EMERGENCY STOP	(MACHINE BRAKE)
31	NAVIGATION LIGHTS	
32	MACHINE AREA	LIGHT
33	LEAF OVERSPEED	
34	TELEPHONE RECEPTACLE	
35	SPAN LOCK	BYPASS
36	SPAN LIMIT	SWITCH BYPASS
37	GATE LIMIT	SWITCH BYPASS

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

SEAL:

Names	Dates
Drawn by ALC	5-95
Checked by GMM	5-95
Designed by GMM	5-95
Checked by RMC	5-95
Approved by G.M. MOSCINSKI	

DSA GROUP INC.
DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:
CONTROL PANEL DETAILS & NOTES

PROJECT NAME:
BECKETT BRIDGE REPAIRS

SHEET
E-6

SUMMARY OF QUANTITIES		
ITEM	UNIT	QUANTITY
ELECTRICAL SYSTEM	L.S.	1
TYPE 'A' LIGHT FIXTURE	EA.	3
TYPE 'B' LIGHT FIXTURE	EA.	2
TYPE 'C' LIGHT FIXTURE	EA.	1
TYPE 'D' LIGHT FIXTURE	EA.	1
TOGGLE LIGHT SWITCH	EA.	1
GENERATOR RECEPTACLE, WP	EA.	1
METER SOCKET	EA.	1
DISCONNECT SWITCHES		
3P-100-100-4X	EA.	1
2P-NF-30-4X	EA.	3
3P-NF-30-4X	EA.	2
STARTER SIZE 0	EA.	1
STARTER SIZE 1	EA.	4
CONTACTOR SIZE 2	EA.	2
PULLBOX (12" SQ.)	EA.	8
LIGHTNING ARRESTOR (TVSS)	EA.	5
PANEL 'MP' (240/120V, 3Ø)	EA.	1
PANEL 'EP' (240/120V, 1Ø)	EA.	1
JUNCTION BOX (4" SQ.)	EA.	46
W.P. ELECTRIC HORN 95dB @ 10'	EA.	1
DEMOLITION	L.S.	1
CONTROL CABINET	EA.	2
CONTROL CONSOLE	EA.	1
LIMIT SWITCH	EA.	4
GROUNDING ELECTRODE (COPPERWELD)	L.F.	30
GROUNDING ELECTRODE (STAINLESS STEEL)	L.F.	20
(CONDUCTOR) #14 CU THHN/MTW	L.S.	1
(CONDUCTOR) #12 CU THWN	L.S.	1
(CONDUCTOR) #10 CU THWN	L.S.	1
(CONDUCTOR) #6 CU THWN	L.S.	1
(CONDUCTOR) #4/0 (BARE)	L.S.	1
(CONDUIT) 1" PVC SCH. 80	L.S.	1
(CONDUIT) 3/4" FIBERGLASS REINFORCED EPOXY	L.S.	1
(CONDUIT) 1" FIBERGLASS REINFORCED EPOXY	L.S.	1
(CONDUIT) 1 1/2" FIBERGLASS REINF. EPOXY	L.S.	1
(CONDUIT) 2" FIBERGLASS REINFORCED EPOXY	L.S.	1
(CONDUIT) 1" RIGID GALVANIZED STEEL	L.S.	1
SUBMARINE CABLE	L.F.	90

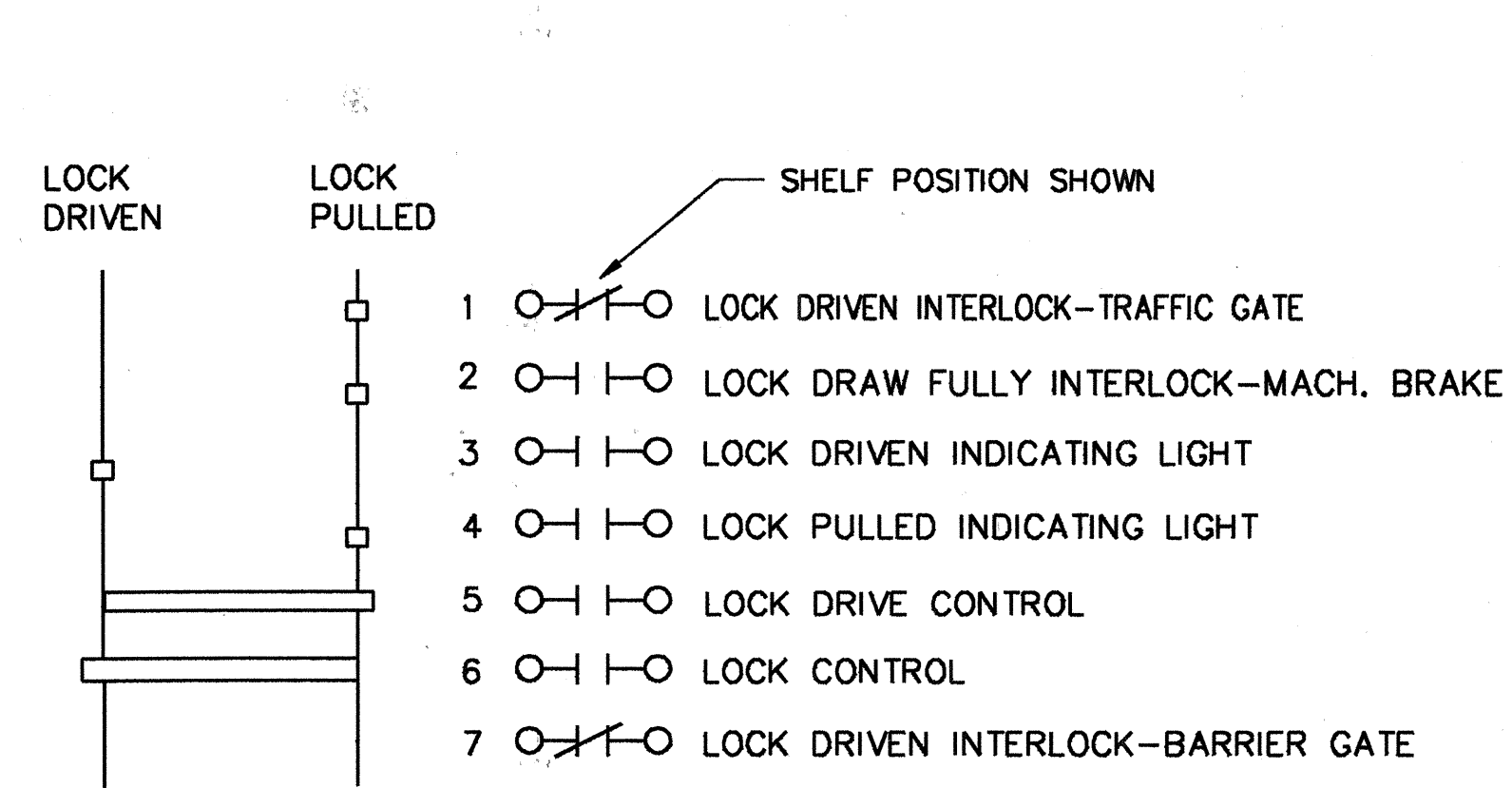
SCHEDULE - PANEL 'MP'													
LOAD SERVED DESCRIPTION	CND. SIZE	WIRE SIZE	CT	BKR	CT	AØ	BØ	CØ	CT	BKR	WIRE SIZE	CND. SIZE	LOAD SERVED DESCRIPTION
MAIN DRIVE #1		#10	50	3	1	3.00							
		#10			3	6.2	3.00		2	60	#6		PANEL 'EP'
		#10			5		5.5	3.00	4		#6		(MAIN XFER. SW.)
MAIN DRIVE #2		#10	50	3	7	3.00		0.5	6	1	20	#12	LIGHTING
		#10			9	0.5	3.00		8	1	20	#12	SPARE
		#10			11		1.0	3.00	10	1	20	#12	CONV. RECEPTACLES
SPARE			20	1	13	0.5		0.5	12	1	20	#10	AREA LIGHT
SPARE			20	1	15		0.5		14	3	30	#10	TVSS
SPARE			20	1	17			0.5	16				
SPARE			20	1	19	0.5			18				
SPACE					21	0.5			20	1	20		SPARE
SPACE					23		0.5		22	1	20		SPARE
SPACE					25				24				SPARE
SPACE					27				26				SPACE
SPACE					29				28				SPACE
									30				SPACE
PANEL TYPE: 3Ø 4 WIRE 120/240 VOLTS						14.2	13.5	7.5	DEMAND FACTOR: NONE				
MANUFACTURER: SQUARE 'D'						35.2/42 = 84A/Ø			TOTAL DEMAND AMPS:				
CATALOG NO.: QO LOAD CENTER						TOTAL CONNECTED AMPS			TOTAL DEMAND KVA:				
MAIN: LOCATION: TOP						LUGS: 100 AMP							
ENCLOSURE: NEMA 1 MOUNTING: SURFACE													
PANEL SHORT CIRCUIT INTERRUPTING CAPACITY: 10,000						AMPS SYMMETRICAL (MINIMUM)							
MODIFICATIONS:													

REFER TO RISER DIAGRAM (SHEET E-3) AND CONDUIT SCHEDULE (SHEET E-4) FOR ADDITIONAL CONDUIT AND CABLE INFO.

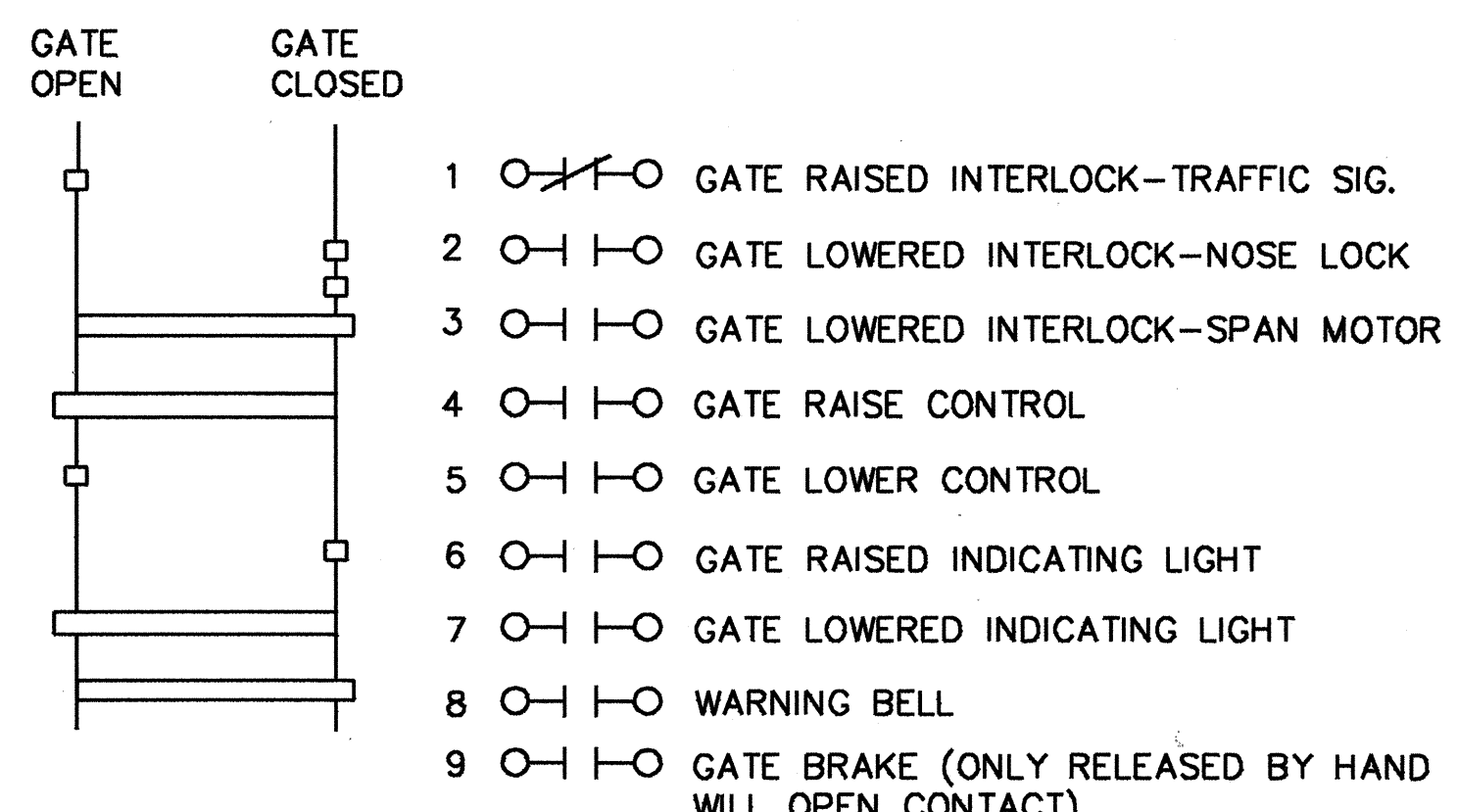
SCHEDULE - PANEL 'EP'													
LOAD SERVED DESCRIPTION	CND. SIZE	WIRE SIZE	CT	BKR	CT	AØ	BØ	CØ	CT	BKR	WIRE SIZE	CND. SIZE	LOAD SERVED DESCRIPTION
TRAFFIC GATE (NEAR)		#10	20	2	1	.75							
		#10			3	.75	.75		2	20	#10		SPANLOCK HYD. POWER UNIT
TRAFFIC GATE (FAR)		#10	20	2	5	.75	.75		4		#10		
		#10			7	.75	1.0		6	1	20	#12	CONV. RECEPT. & LIGHTING
BARRIER GATE		#10	20	2	9	0.5	0.5		8	1	20		SPARE
		#10			11	0.5	0.5		10	2	20	#10	EMERGENCY DRIVE MOTOR
NAV. LIGHTS P.S.		#12	20	1	13	1.0	0.5		12		#10		
TRAFFIC/WARNING SIGNALS		#10	20	1	15	.7	0.5		14	1	20	#12	ISOLATION XFMR.
SPARE			20	1	17	0.5	0.5		16	2	30	#10	TVSS
SPACE					19		0.5		18				
									20				
PANEL TYPE: 1Ø 3 WIRE 120/240 VOLTS						6.2	5.5	DEMAND FACTOR:					
MANUFACTURER: SQUARE 'D'						11.7/.24 = 49A/Ø			TOTAL DEMAND AMPS:				
CATALOG NO.: QO LOAD CENTER						TOTAL CONNECTED AMPS			TOTAL DEMAND KVA:				
MAIN: MLO LOCATION: -						LUGS: 100 AMP							
ENCLOSURE: NEMA 1 MOUNTING: SURFACE													
PANEL SHORT CIRCUIT INTERRUPTING CAPACITY: 10,000						AMPS SYMMETRICAL (MINIMUM)							
MODIFICATIONS:													

FIXTURE SCHEDULE								
MARK	MANUFACTURER	CATALOG NO.	VOLTAGE	LAMPS PER FIXTURE			MOUNTING REMARKS	
				NO.	WATTS	COLOR		
A	COLUMBIA	K148-120-PAF	120	1	40	F40T12/RS	W.W.	SURFACE
B	COLUMBIA	LUN-240-WL-120-SSLTP	120	2	40	F40T12/RS	W.W.	SURFACE, WP
C	PARAMOUNT	71438-MD-120	120	2	40	F40T12/RS	W.W.	SURFACE, WP
D	G.E.	M400A2 'POWRDOOR', MEDIUM SEMI-CUTOFF TYPE II DISTRIB.	120	1	400	LU400		25' TAPERED ALUM. POLE W/6' ARM
E	G.E.	QHF-300	120	1	300	Q300T3		SURFACE, CAST BOX

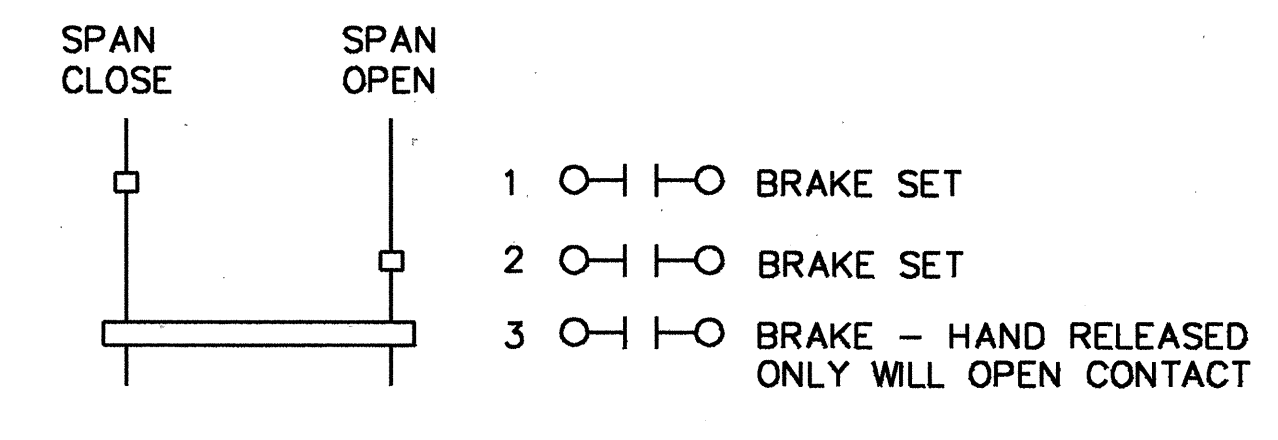
* BRASS LAMP SOCKETS AND VIBRATION RESISTANT LAMP SUPPORTS.



NOSE LOCK LIMIT SWITCH DEVELOPMENT



TRAFFIC GATE LIMIT SWITCH DEVELOPMENT



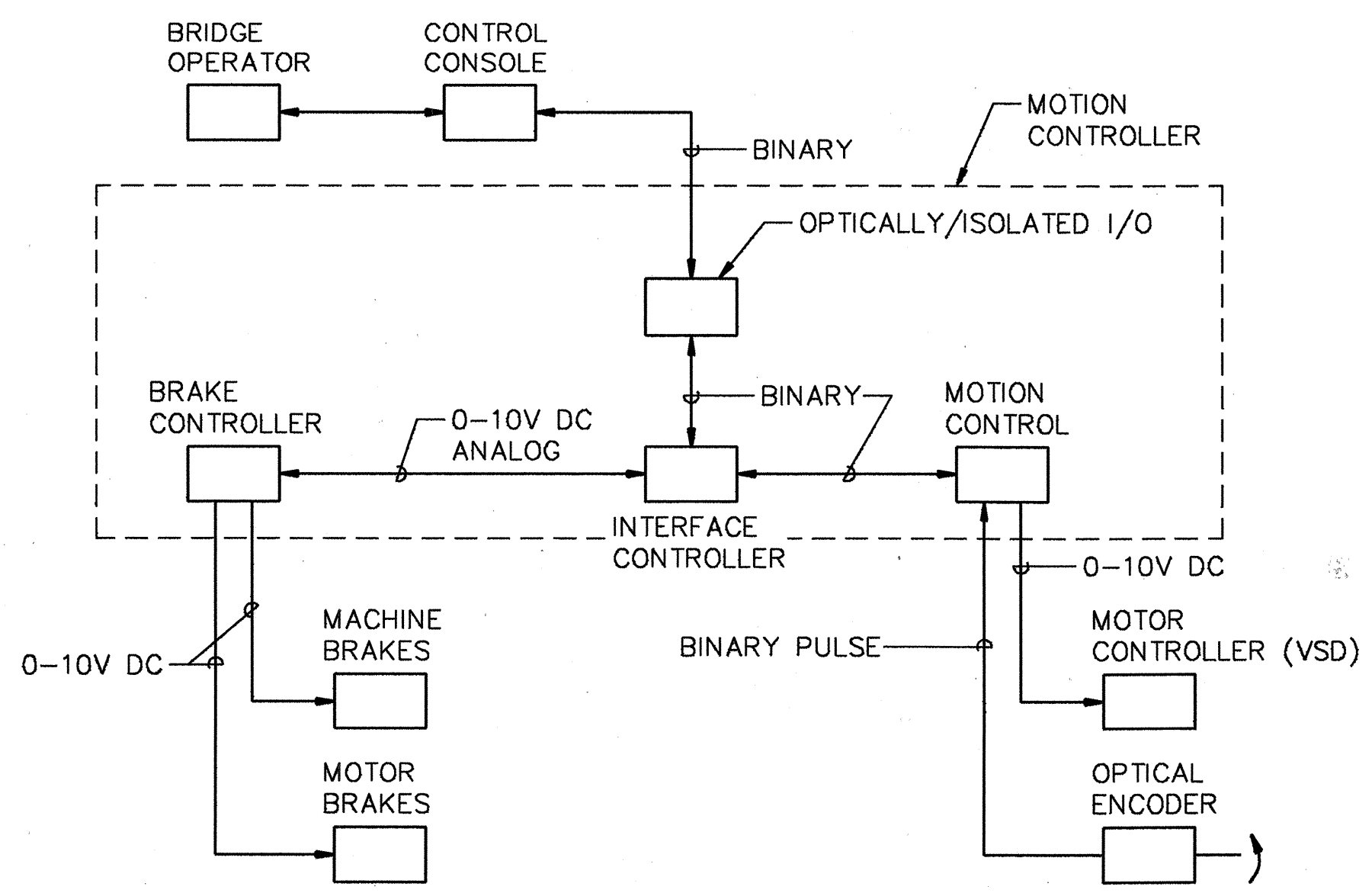
SERVICE BRAKE LIMIT SWITCH DEVELOPMENT

NOTE: QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL PROVIDE TOTAL QUANTITIES NEEDED TO COMPLETE PROJECT.

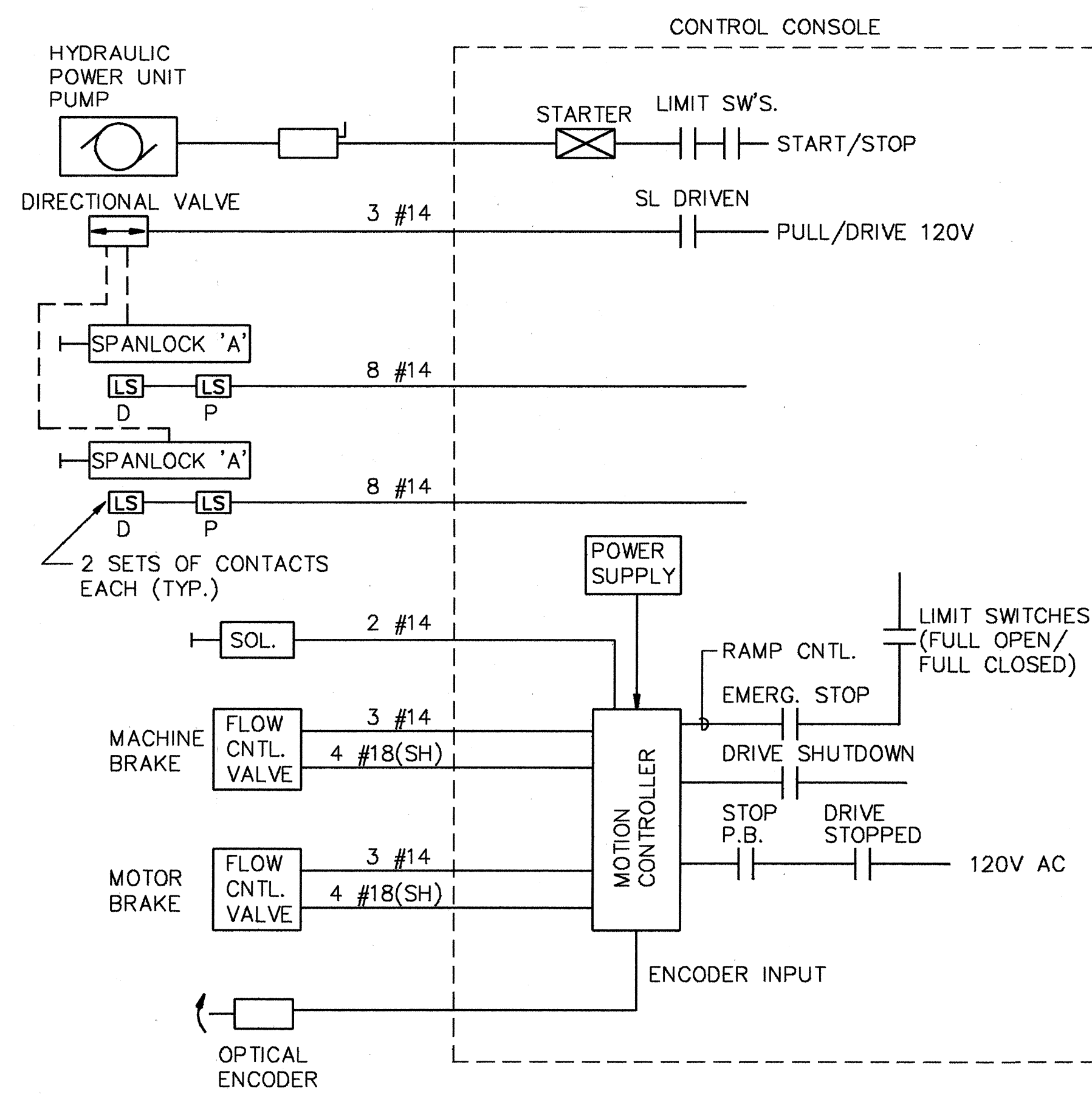
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REVISIONS		REVISIONS		SEAL:	Names	Date		DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607		PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	SHEET				
Date	By	Date	By	Description	Description	Description										
					Drawn by	ALC					5-95				SCHEDULES	E-7
					Checked by	GMM					5-95				PROJECT NAME:	
					Designed by	GMM	5-95				BECKETT BRIDGE REPAIRS					
					Checked by	RMC	5-95									
					Approved by	G.M. MOSCINSKI										

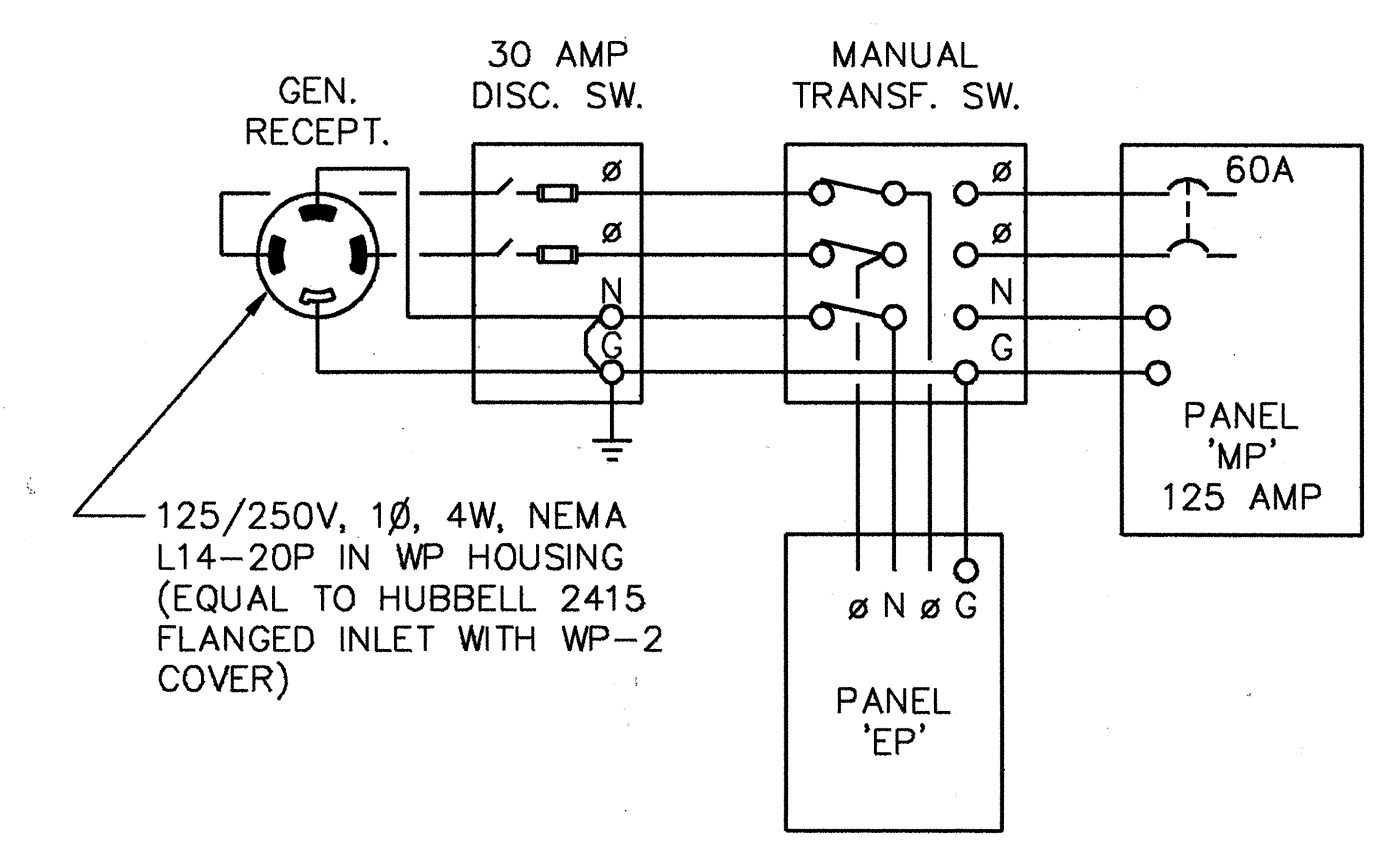
Gene M. Mosinski



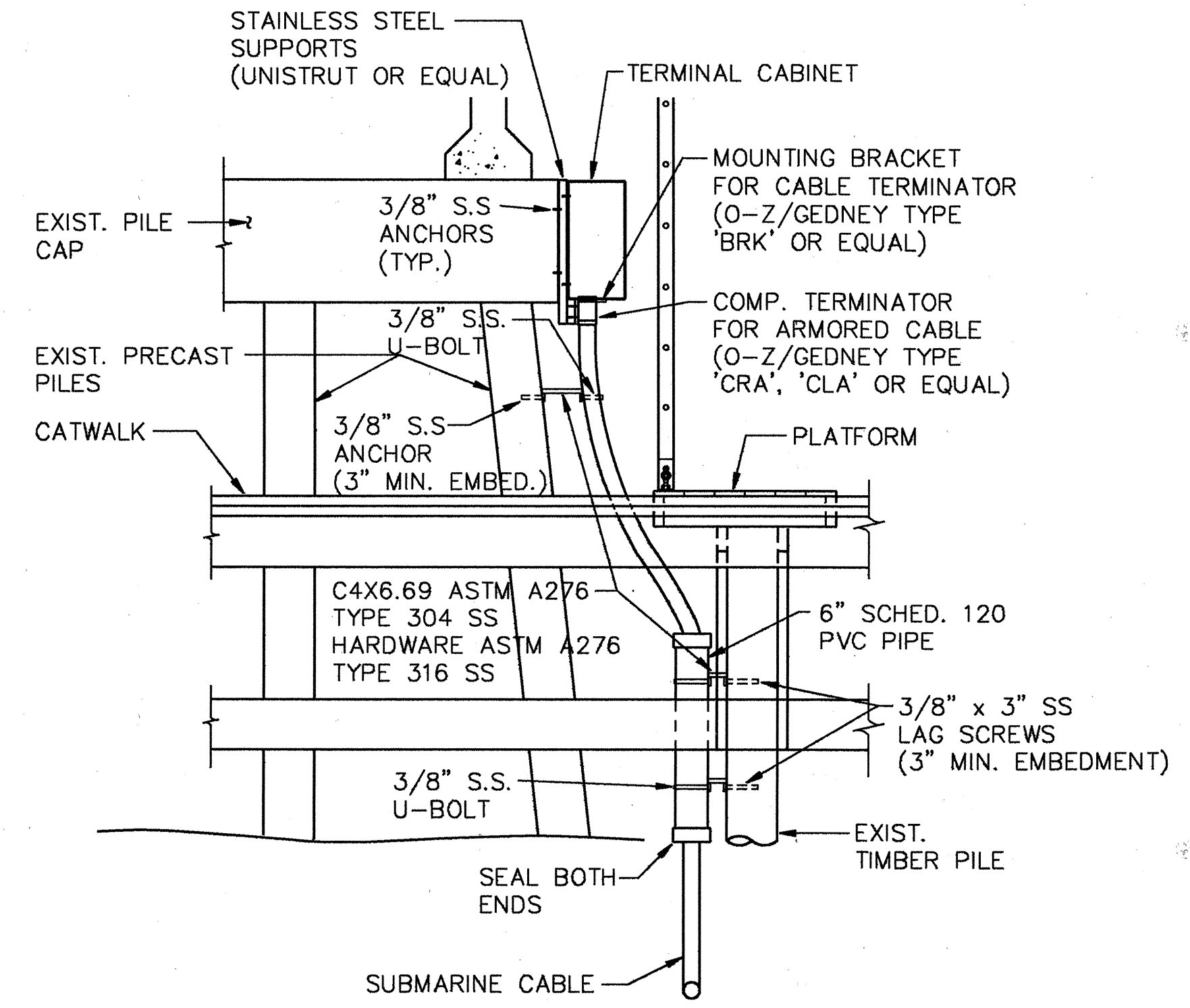
ADAPTIVE MOTION CONTROL WITH ENCODER FEEDBACK
NOT TO SCALE



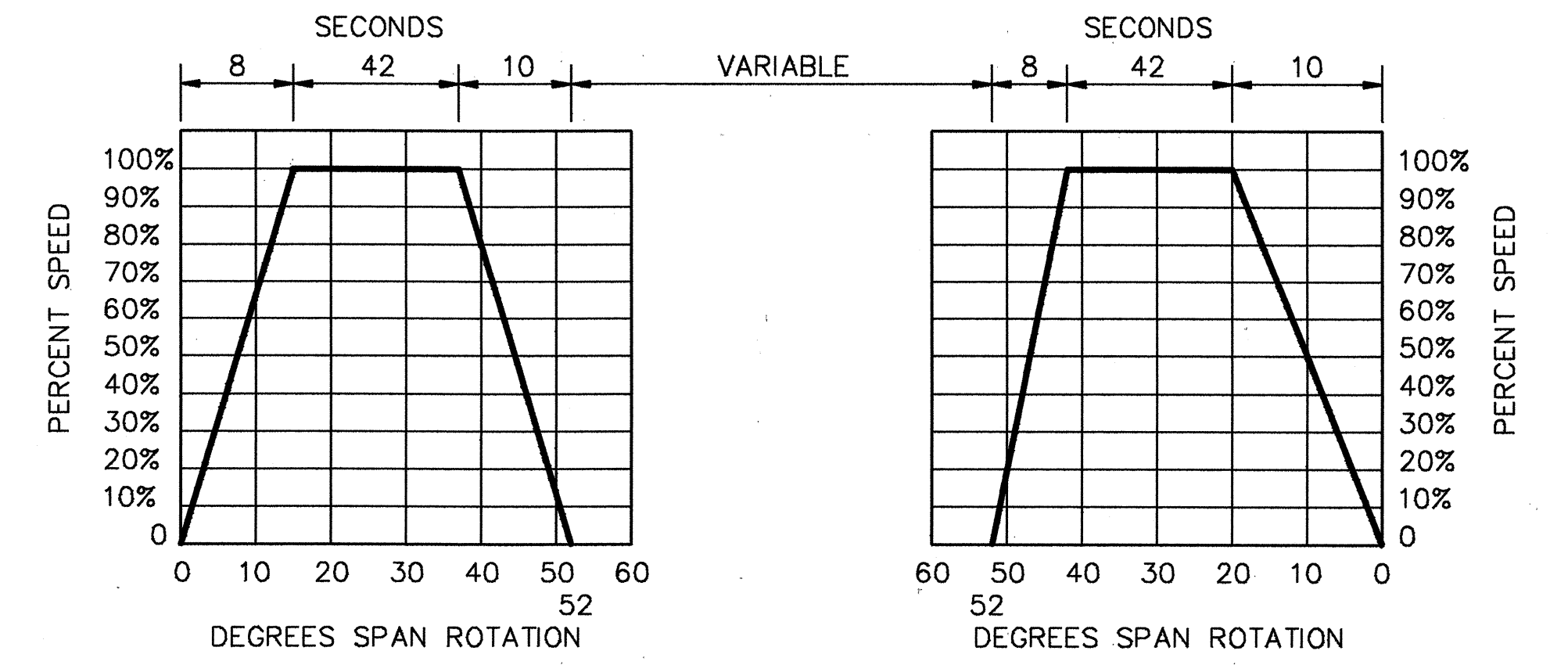
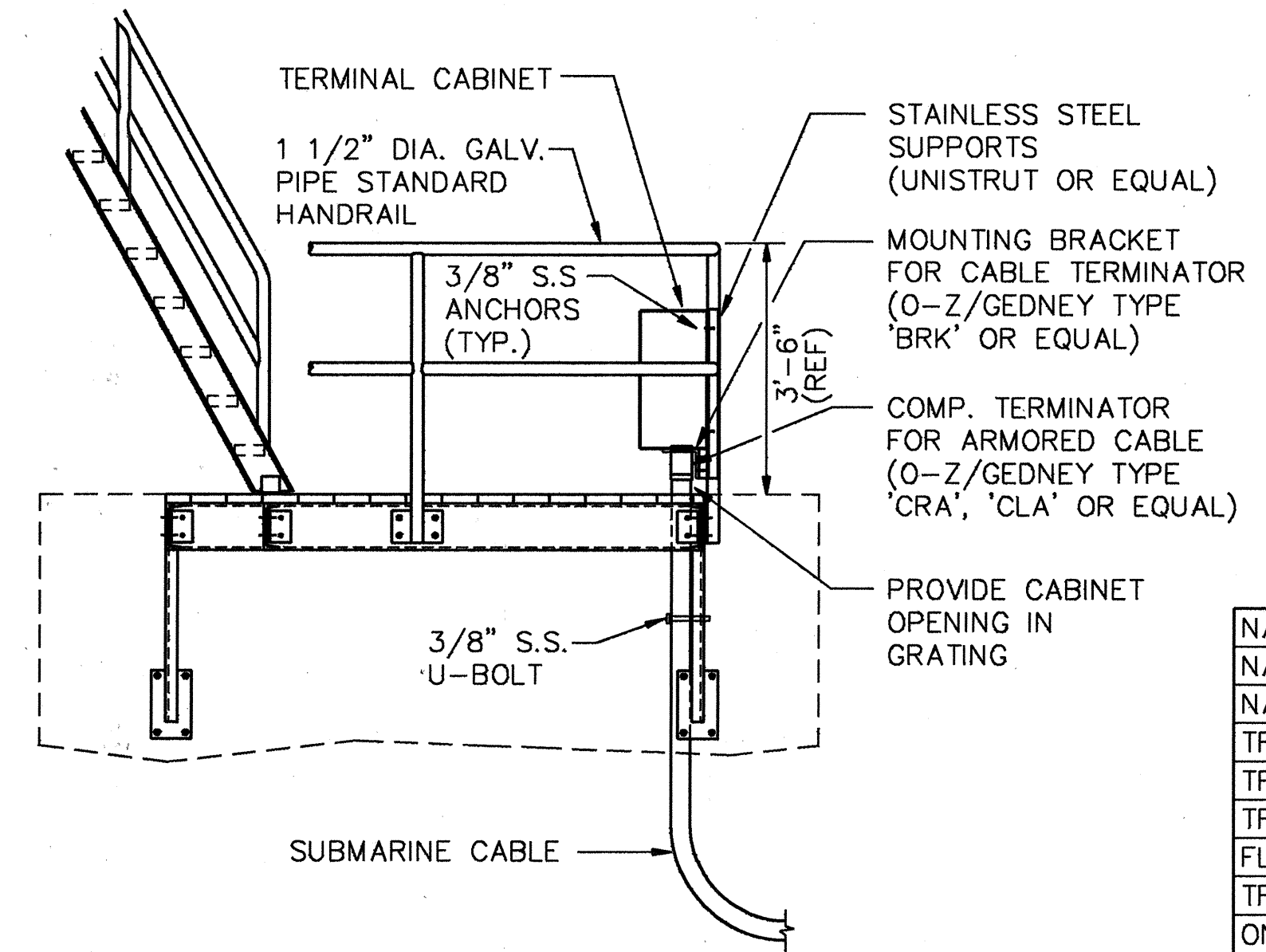
SPANLOCK/BRAKE HYDRAULIC POWER UNIT
NOT TO SCALE



EMERGENCY POWER SUPPLY WIRING
NOT TO SCALE



SCTC MOUNTING DETAIL
TYPICAL SUBMARINE CABLE SUPPORT



Event	Start	End	Duration
NAVIGATION HORN	0	10	10
NAVIGATION LIGHTS-GREEN	0	10	10
NAVIGATION LIGHTS-RED	0	10	10
TRAFFIC LIGHTS-GREEN	0	10	10
TRAFFIC LIGHTS-YELLOW	0	10	10
TRAFFIC LIGHTS-RED	0	10	10
FLASHING YELLOW WARNING	0	10	10
TRAFFIC GATE BELLS	0	10	10
ON-COMING GATES UP	0	10	10
ON-COMING GATES DOWN	0	10	10
SPANLOCKS DRIVEN	10	52	42
SPANLOCKS PULLED	52	60	8
DRIVES DE-ENERGIZED	52	60	8
DRIVES ENERGIZED	60	60	0

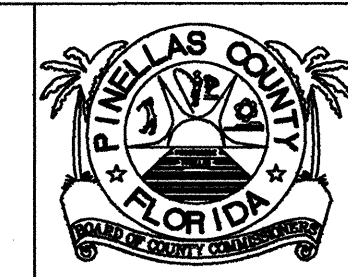
SEQUENCE TIME DIAGRAM
NOT TO SCALE

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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Names	Dates
ALC	ALC	5-95
GMM	GMM	5-95
GMM	GMM	5-95
RMC	RMC	5-95
G.M. MOSCINSKI	G.M. MOSCINSKI	

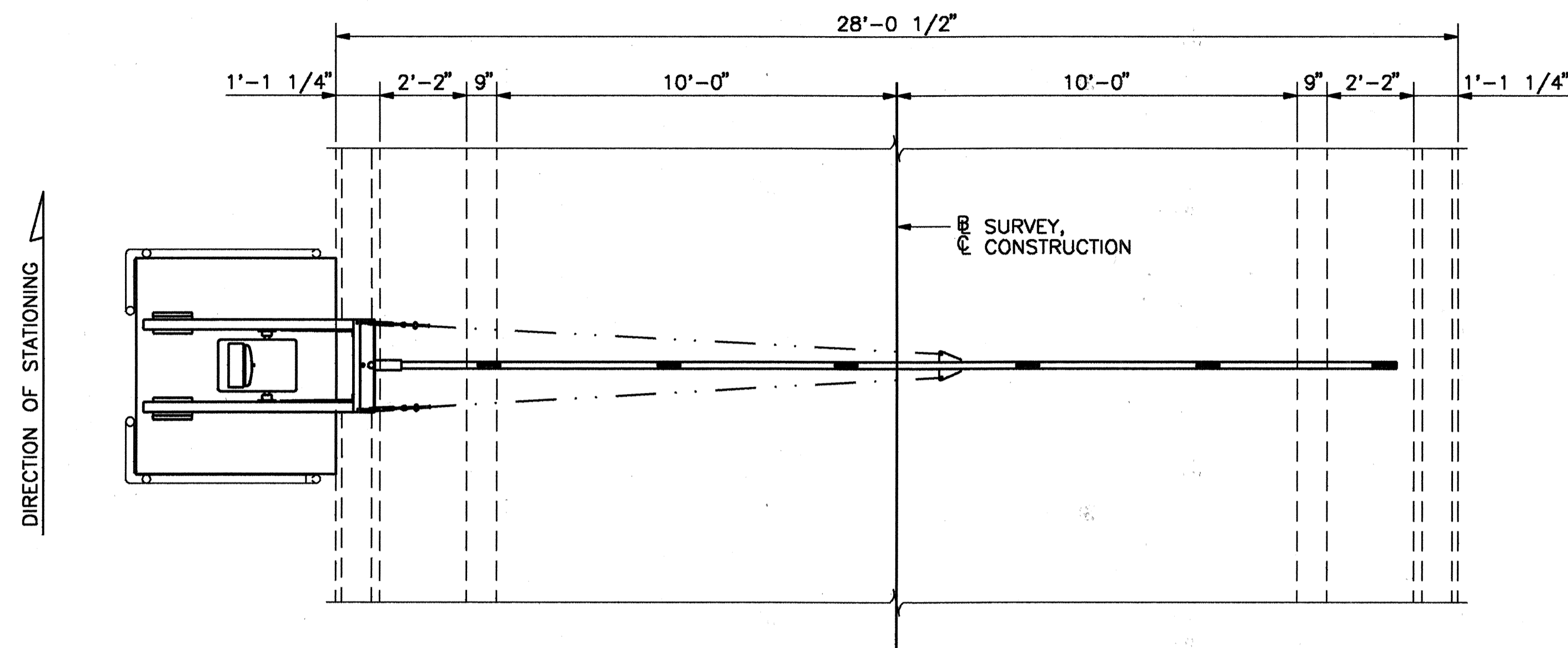
DSA GROUP INC.
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2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607



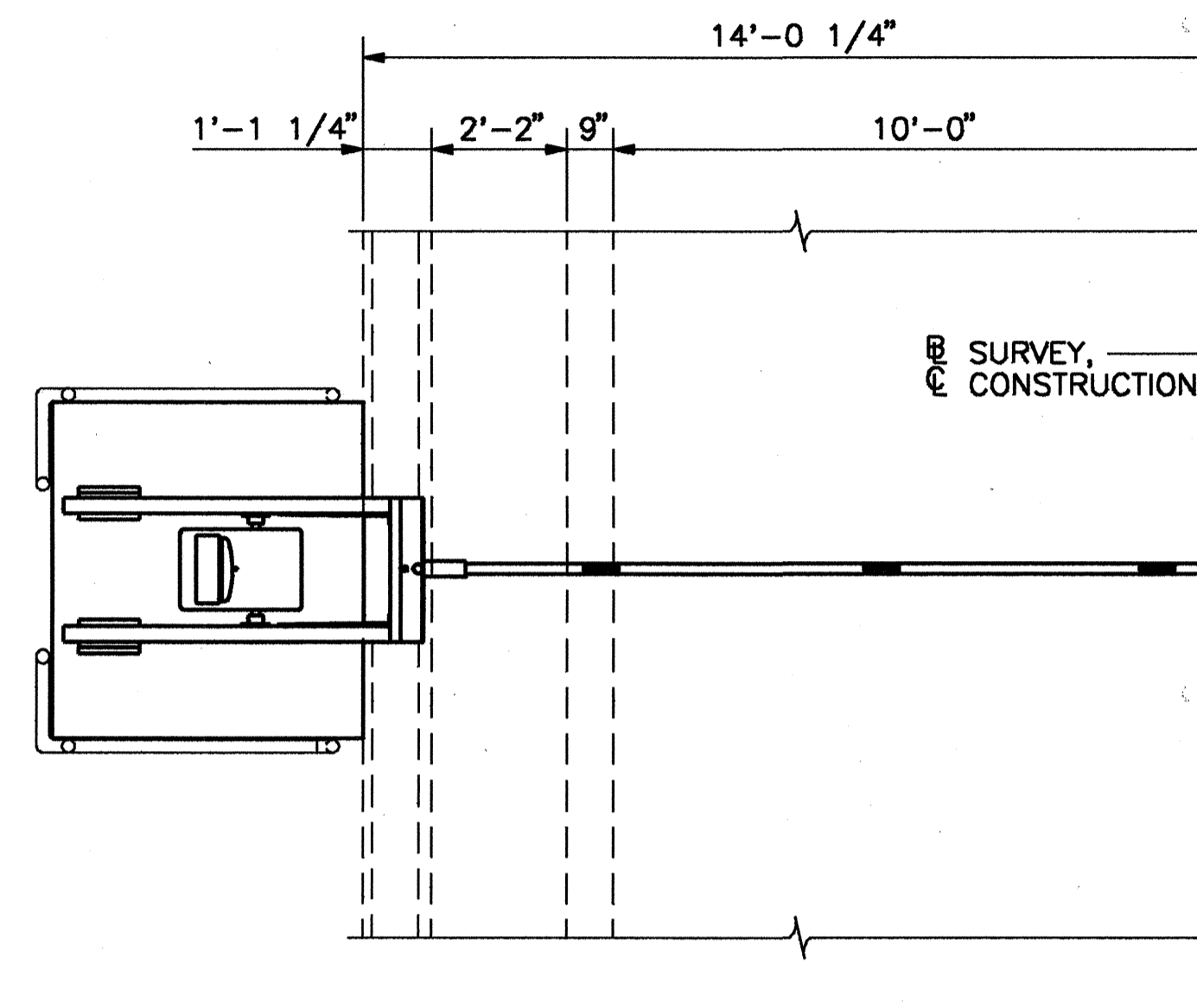
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:	ELECTRICAL DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

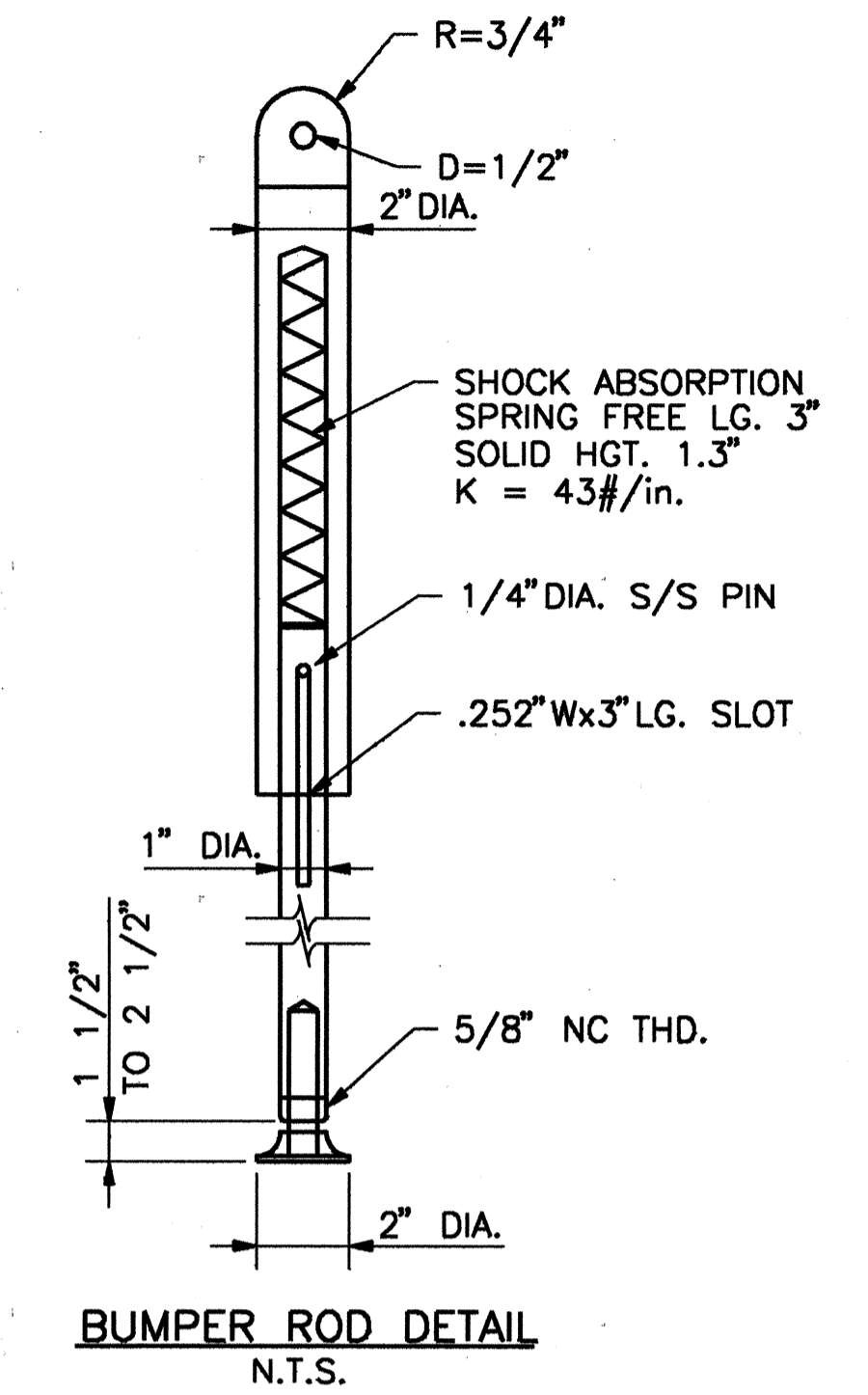
SHEET
E-8



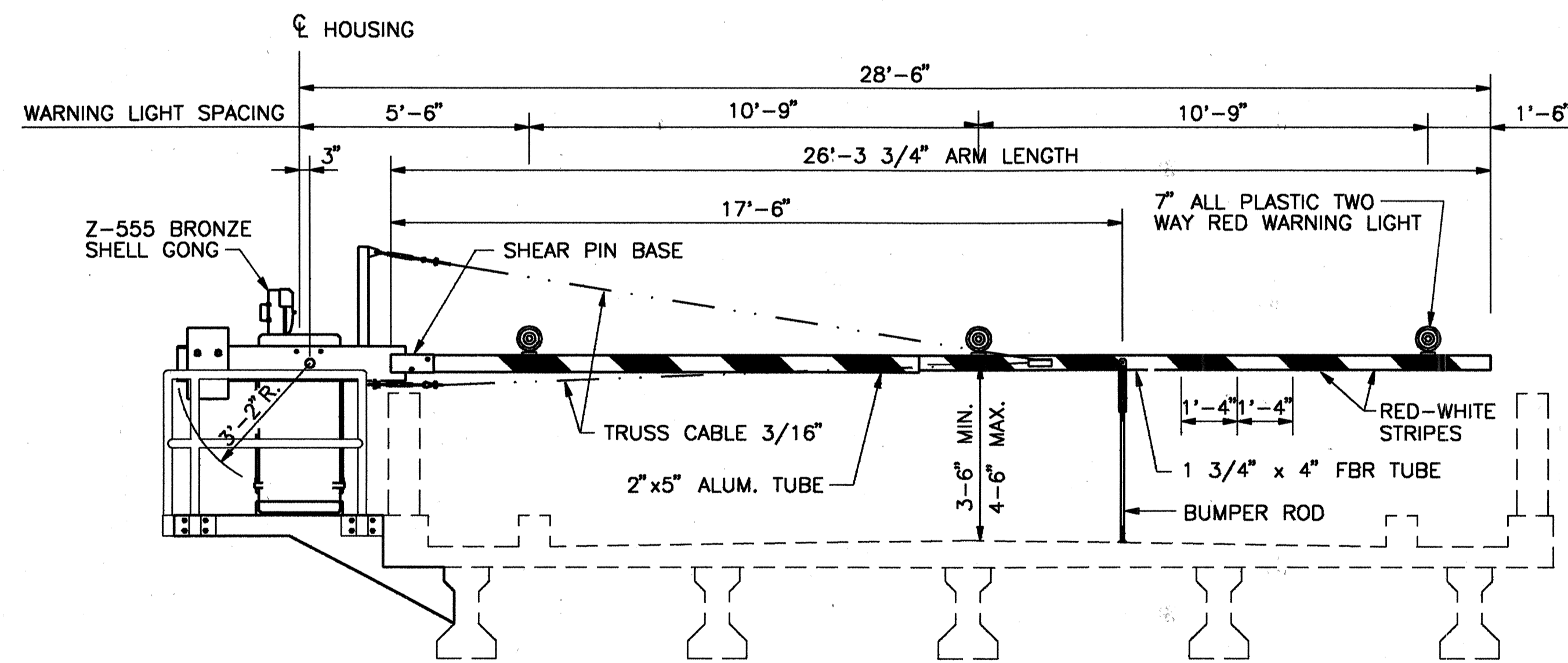
PLAN



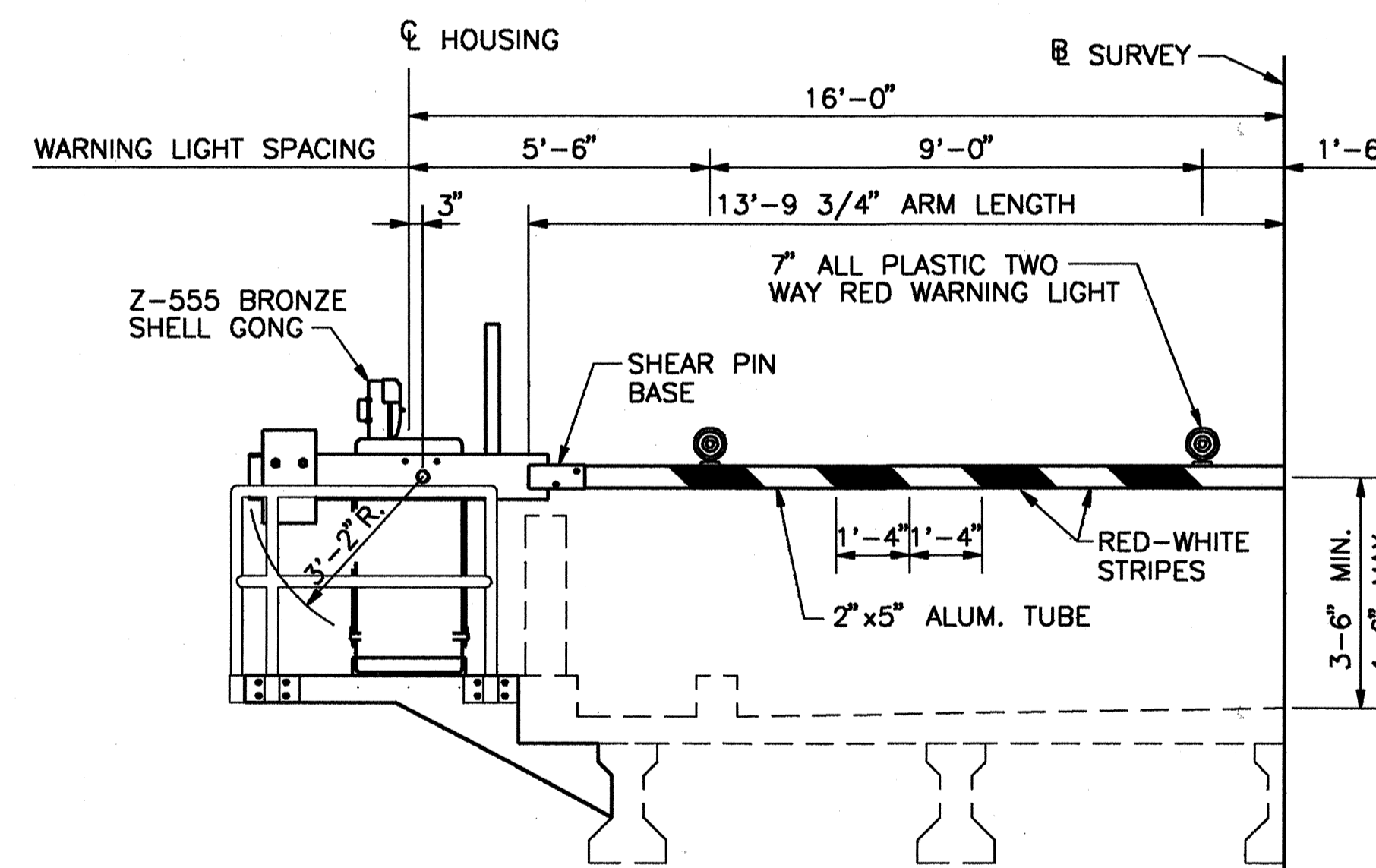
PLAN



BUMPER ROD DETAIL
N.T.S.



ELEVATION



ELEVATION

- NOTES:
- GATE ARM, STANDARD ALUMINUM POLE, ALLOY 6063-T6 WITH CAST 6061-T6 BASE, ARM, ARM BRACKETS AND ALL ALUMINUM PARTS SHALL BE CLEANED AND PRIMED ONE COAT ON ZINC CHROMATE PRIMER. FINAL FINISH SHALL BE BY GENERAL CONTRACTOR AFTER ERECTION, TEST AND FINAL INSPECTION.
 - GATE ARM CONNECTIONS AT SIDEWALK SHALL BE STRUCTURAL STEEL ASTM A588, HOT DIPPED GALVANIZED, FASTENERS SHALL BE ASTM A325 UNLESS OTHERWISE NOTED.
 - STAINLESS STEEL FASTENERS SHALL BE ASTM A240, TYPE 316 AND ASTM A320 GRADE BB, STRAIN HARDENED.
 - TURN BUCKLES AND WIRE ROPE HARDWARE SHALL BE STEEL HOT DIP GALVANIZED.
 - GUY CABLE SHALL BE PREFORMED 7x19 STAINLESS STEEL 18-8, .312 DIA. MINIMUM BREAKING STRENGTH 9,000 LBS. FITTINGS SHALL BE STAINLESS STEEL.
 - ENERGY ABSORPTION CABLES SHALL BE 3/8" DIA. 7x19 ANNEALED AUSTENITIC STAINLESS STEEL WIRE ROPE WITH STAINLESS STEEL MALE THREADED ROD ENDS.
 - GATE HOUSING, SIDE ARM TUBES, CABLE ANCHORAGE AND ALL EXPOSED STEEL PARTS EXCEPT FASTENERS SHALL BE HOT DIPPED GALVANIZED. STEEL FASTENERS SHALL BE CAD PLATED.
 - JACK BOLTS SHALL BE HI-TEN STEEL UNF .750-16 THD. WITH CASE HARDENED TIP, CAD PLATED.
 - ARM REST BUMPER SHALL BE ALUMINUM, 6061-T6 WITH STAINLESS STEEL PIVOT PIN.
 - WIRING BETWEEN THE GATE ARM AND HOUSING SHALL BE WATERTIGHT, FLEXIBLE AND BE ENCLOSED WITH INTERLOCKED ARMOR OF GALVANIZED STEEL. ALL WIRING ON THE GATE ARM SHALL BE IN RIGID METAL CONDUIT.
 - GONG SHALL BE 12" BRONZE SHELL.
 - CONTRACTOR SHALL PROVIDE THE FOLLOWING SPARE PARTS:
1 COMPLETE GATE ARM INCLUDING LIGHTS, TRUSS AND BUMPER ROD.

NOTE:
1. FOR PEDESTAL DETAILS, SEE DWG. NO. S-9

RA 84085 CADD/ELEC
WORK SHEET 05/22/95 08:14:18 ALC PRODUCED BY DSA CADD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

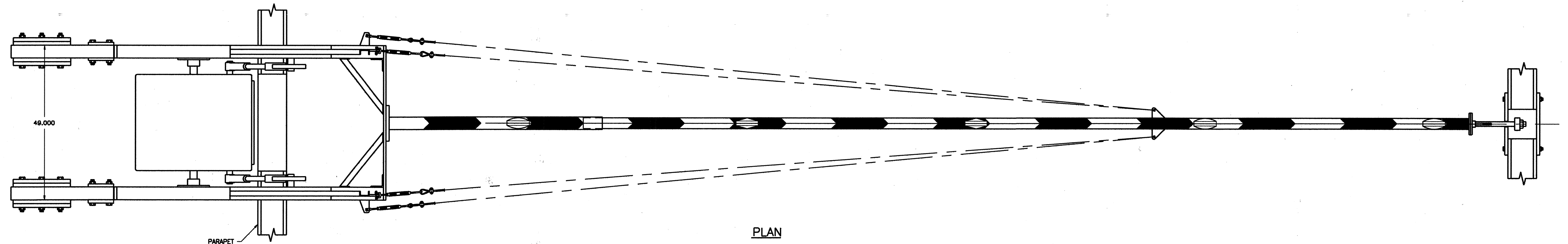
Drawn by	Name	Date

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 TAMPA, FLORIDA 33607

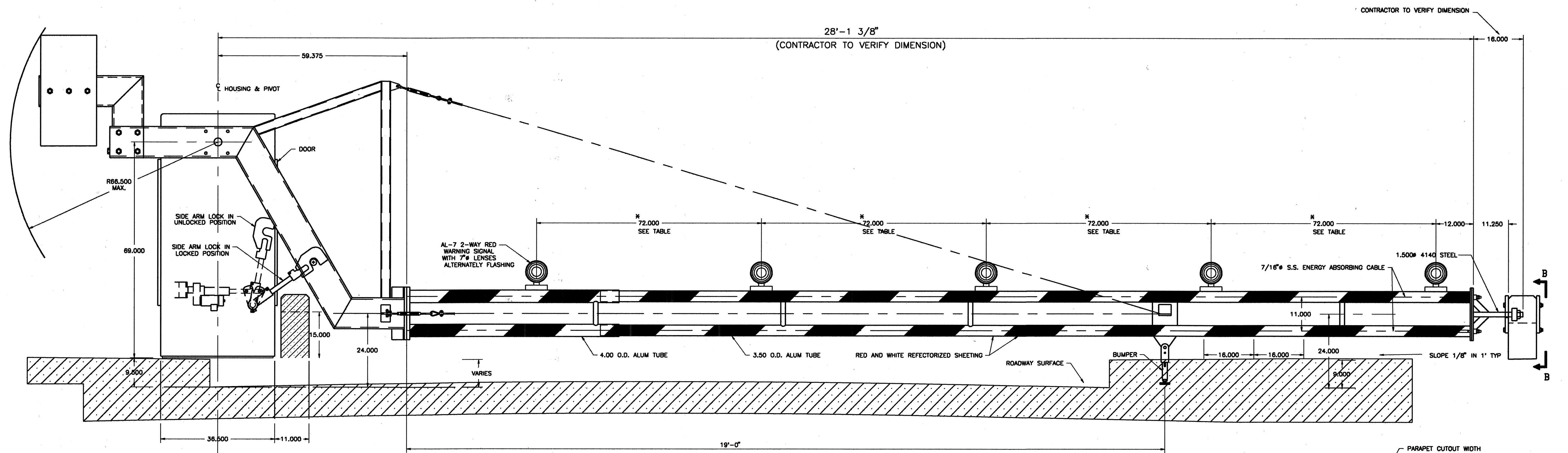
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: TRAFFIC GATE DETAILS	SHEET E-9
PROJECT NAME: BECKETT BRIDGE REPAIRS	

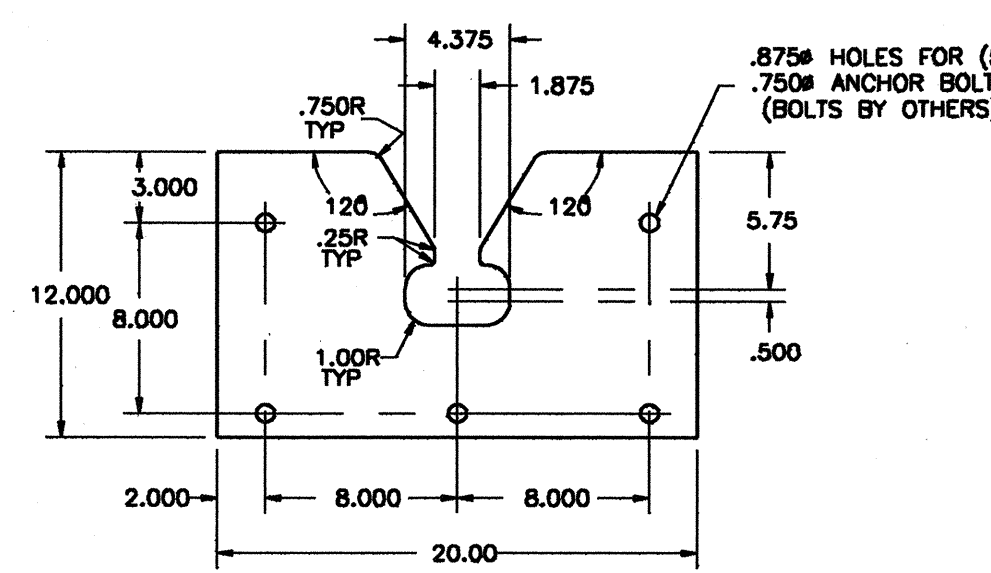
T. J. Farrell



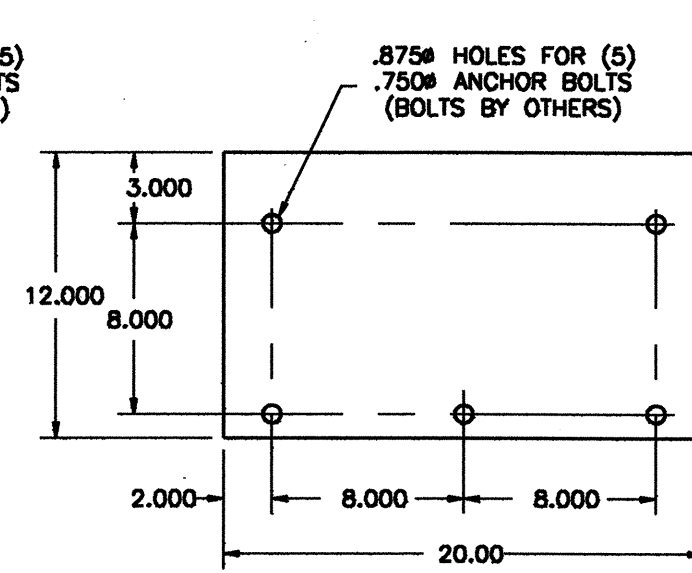
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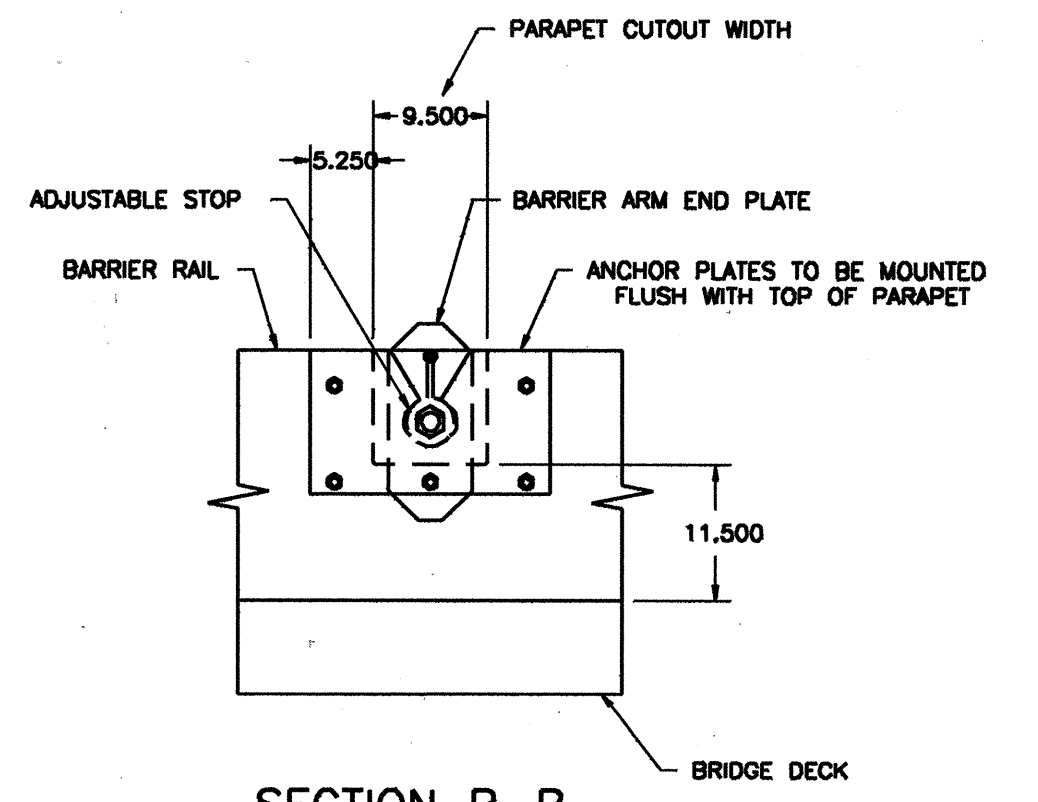
ELEVATION



END LOCK ANCHOR PLATE
1.000 THICK PLATE



END LOCK BACKUP PLATE
1.000 THICK PLATE



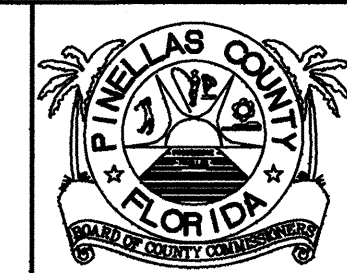
SECTION B-B
(END VIEW OF END LOCK)

BY SAATCHI GARDNER
ON WORK, REVISED 05/03/95 11:15:00 ALC PRODUCED BY DSA CAD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Drawn by	Checked by	Designed by	Checked by	Approved by
KTL	TJF	TJF	GMM	<i>Joseph J. Farnell</i>

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DSA GROUP, INC.
2005 PAN AM CIRCLE
TAMPA, FLORIDA 33607

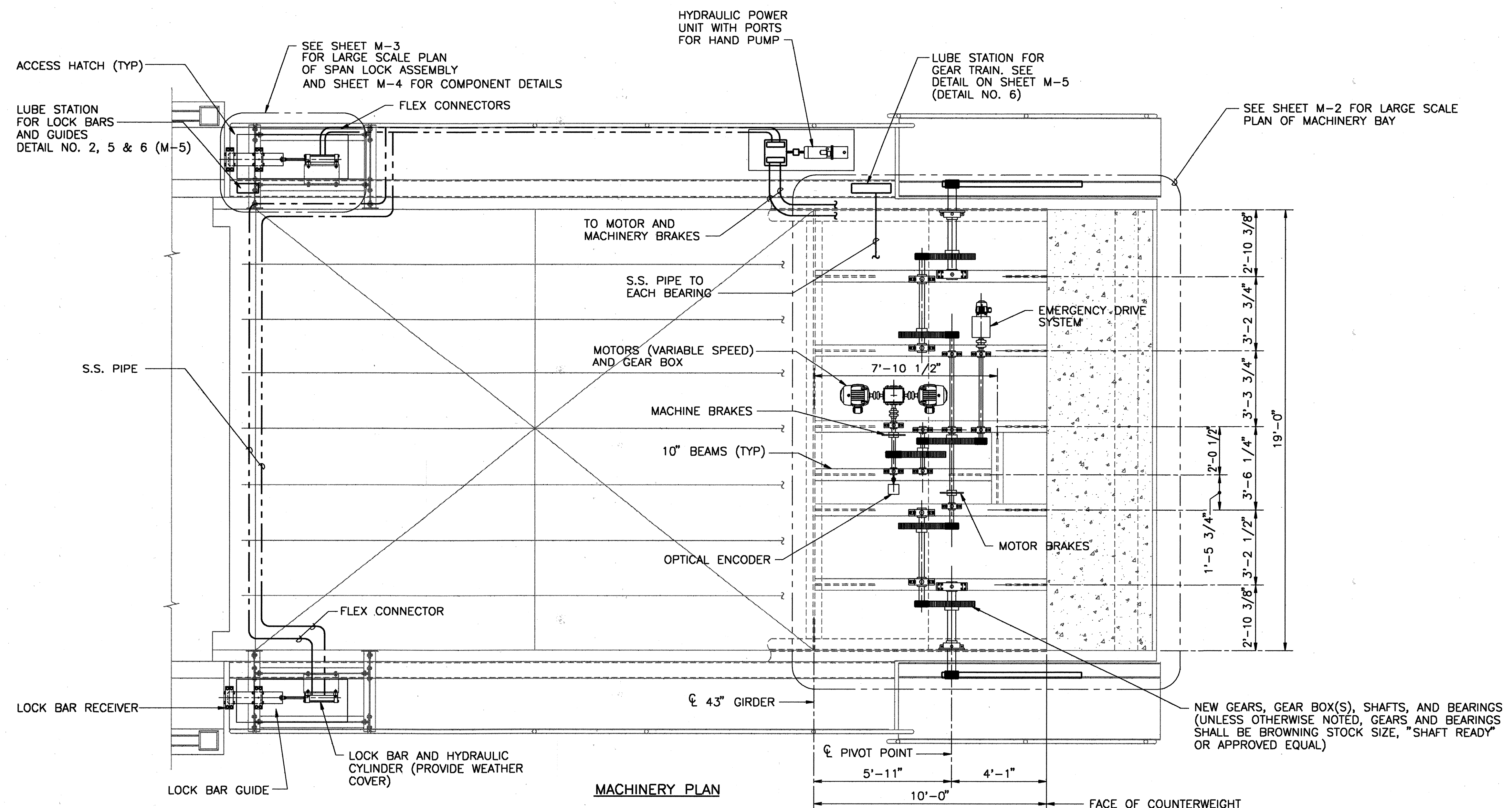
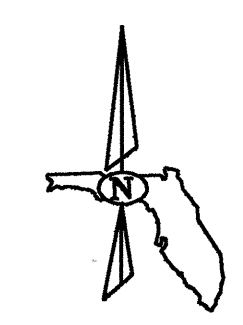


PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

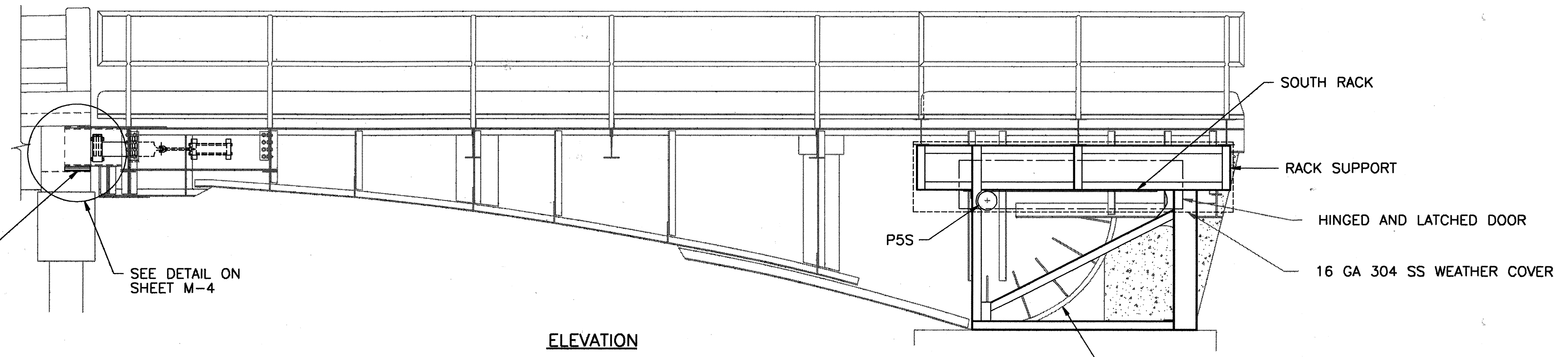
SHEET TITLE:
BARRIER GATE DETAILS
PROJECT NAME:
BECKETT BRIDGE REPAIRS

SHEET
E-10

Joseph J. Farnell



MACHINERY PLAN



ELEVATION

- NOTES:**
1. MOTORS TO BE TEFC CHEMICAL SERVICE (CORROSION RESISTANT). POWER UNIT AND CYLINDERS TO BE EPOXY COATED. SEE DRAWING M-9 FOR DEMOLITION WORK.
 2. PROVIDE 1/8" THICK ALUM. WEATHER COVER (HINGED) FOR ALL BRAKE ROTORS.

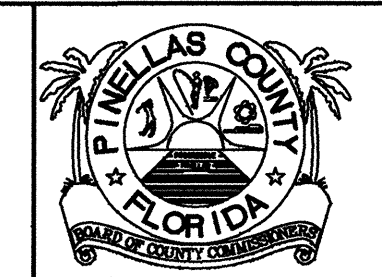
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REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

SEAL:

Names	Date
Drawn by CLM	5-95
Checked by LET	5-95
Designed by LET	5-95
Checked by RMC	5-95
Approved by R.M. COURET	

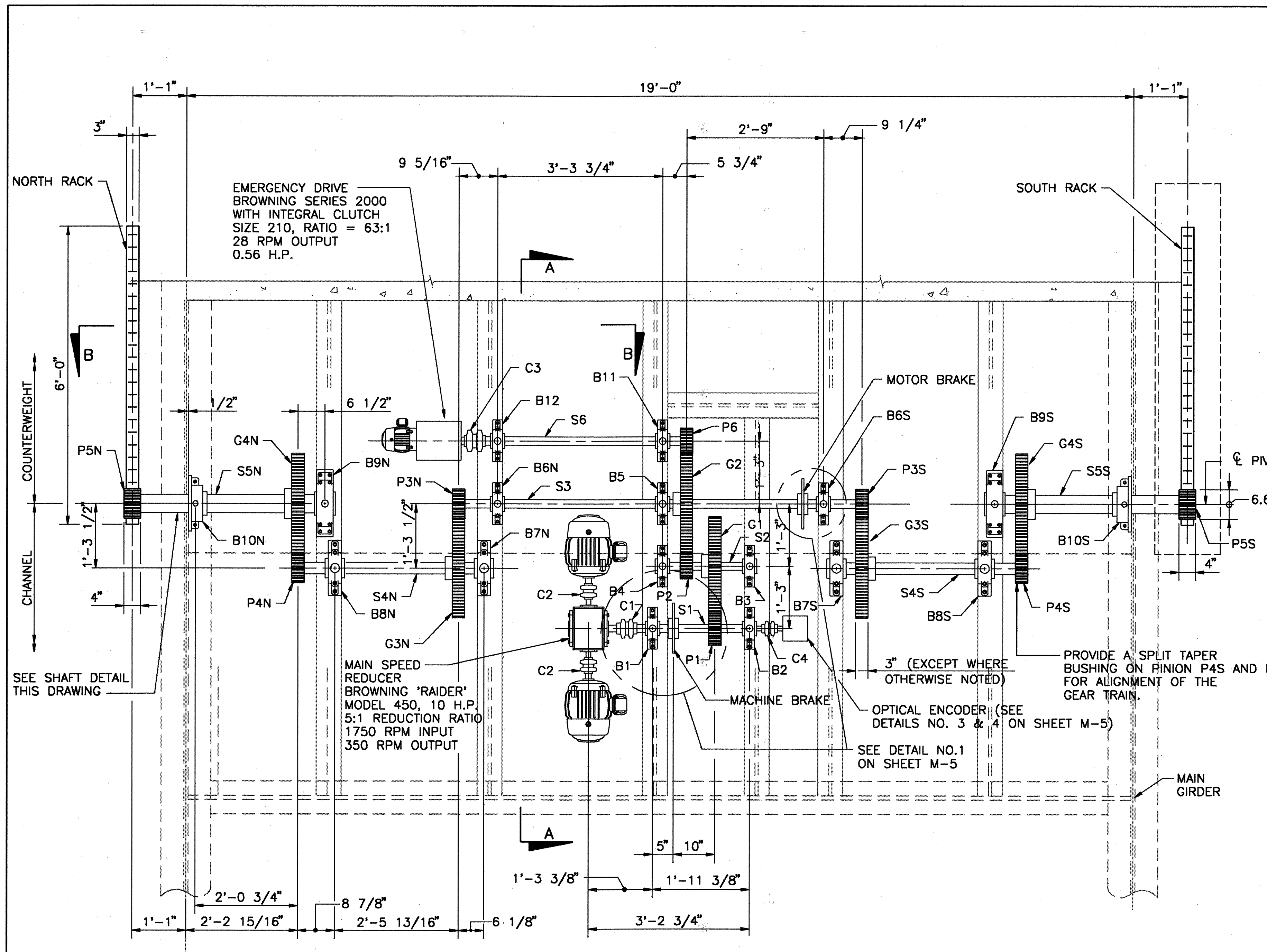
DSA GROUP INC.
 DSA GROUP, INC.
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 TAMPA, FLORIDA 33607



PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:	MACHINERY PLAN
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
M-1



PLAN OF MACHINERY BAY

- NOTES:**
- DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
 - SEE SHEET M-6 FOR SECTIONS A-A AND B-B.

TABLE OF GEARS

ID NUMBER	QUANTITY	NUMBER OF TEETH	DP	WIDTH	TORQUE (# INCH)	RPM (OLD)	RPM (NEW)	BORE	PART NUMBER	KEY SEAT
P1	1	18	3	3"	228	417	350	1.875"	NSS318	1/2" x 1/4"
G1	1	72	3	3"	NA	143.7	87.5	1.875"	NCS372	1/2" x 1/4"
P2	1	18	3	3"	455	143.7	87.5	1.875"	NSS318A	1/2" x 1/4"
G2	1	72	3	3"	NA	26.0	21.9	2.0"	NCS372	1/2" x 1/4"
P3 N&S	2	21	3	3"	1,822	26.0	21.9	2.0"	NSS321A	1/2" x 1/4"
G3 N&S	2	72	3	3"	NA	7.69	6.4	2.75"	NCS372	5/8" x 5/16"
P4 N&S	2	24	3	3"	6,250	7.69	6.4	2.75"	NSS324A	5/8" x 5/16"
G4 N&S	2	72	3	3"	NA	2.27	2.13	3.25"	NCS372	1" x 1/2"
P5 N&S *	2	14	2	4"	18,750	2.27	2.13	3.1875"	NA	1" x 1/2"
P6	1	16	3	3"	1,305	N/A	28	2.0"	NSS316A	1/2" x 1/4"
RACK N&S *	2	N/A	2	3"	18,750	NA	NA	NA	NA	NA

- NOTE:**
- ALL NEW AND EXISTING GEARS ARE 14.5° PA. EXCEPT P5 N&S AND RACK N&S WHICH ARE 20° PA.
 - ALL GEAR PART NUMBERS ARE BROWNING.
 - * = SHOP MACHINED

TABLE OF BEARINGS

ID NUMBER	QUANTITY	RPM	BORE(D)	PART NUMBER
B1	1	350	1.875"	PB970, TYPE SR
B2	1	350	1.875"	PB970, TYPE SR
B3	1	87.5	1.875"	PB970, TYPE SR
B4	1	87.5	1.875"	PB970, TYPE SR
B5	1	21.9	1.875"	PB970, TYPE SR
B6 N&S	2	21.9	2"	PB970, TYPE SR
B7 N&S	2	6.4	2.75"	PB970, TYPE SR
B8 N&S	2	6.4	2.75"	PB970, TYPE SR
B9 N&S	2	2.13	3.1875"	PB970, TYPE SR
B10 N&S	2	2.13	3.1875"	SFC1000NE x 3 3/16"
B11	1	28	2"	PB970, TYPE SR
B12	1	28	2"	PB970, TYPE SR

- NOTE:**
- RC 6 FIT (D +d)

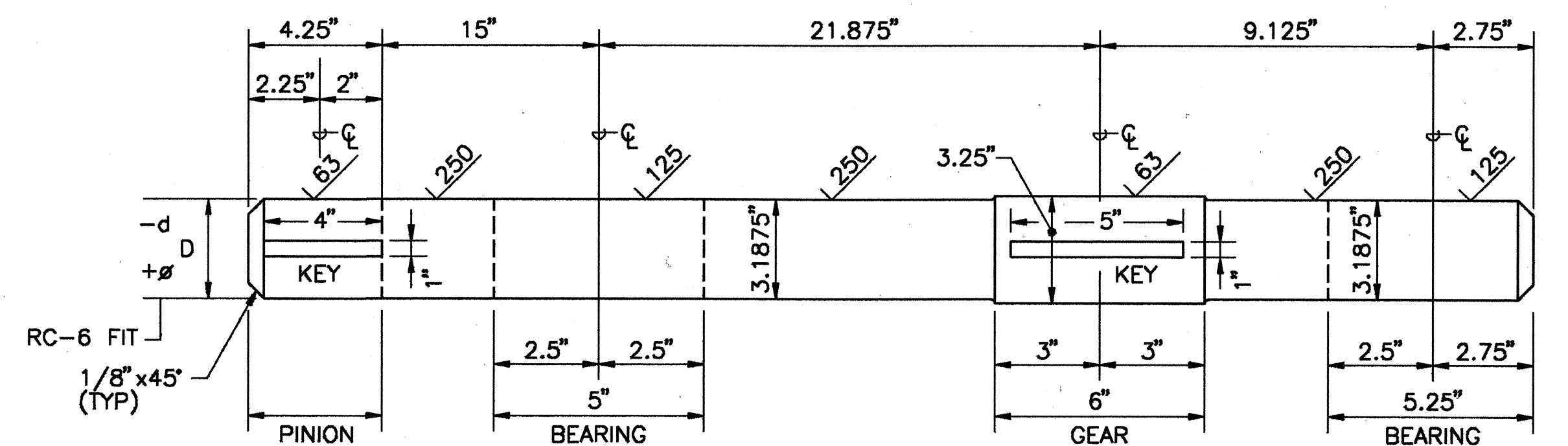
TABLE OF COUPLINGS

ID NUMBER	QUANTITY	KEY	TORQUE RATING (# INCH)	RPM	BORE	PART NO.
C1	1	REFER TO REDUCER	5,500	350	1.625"	1060T
C2	2	REFER TO REDUCER	3,500	1750	1.375"	1050T
C3	1	REFER TO GEAR MOTOR	1,200	28	1.5"	1030T
C4	1	NONE	-	-	.375"	CS-08X

* INDICATES BROWNING MANUFACTURER. ALL OTHER COUPLINGS ARE FALK.

TABLE OF SHAFTS

ID NUMBER	QUANTITY	LENGTH	DIA.(D)	KEY SEAT 1	KEY SEAT 2	KEY SEAT 3	NOTES
S1	1	32"	1.875"	1/2" x 1/4" x 3 1/2"	1/2" x 1/4" x 4"	1/2" x 1/4" x 2 1/2"	
S2	1	26"	1.875"	1/2" x 1/4" x 3 1/2"			
S3	1	103.5"	2"	1/2" x 1/4" x 3 1/2"	1/2" x 1/4" x 3 1/2"	1/2" x 1/4" x 3 1/2"	
S4 N&S	2	53"	2.75"	5/8" x 5/16" x 5 1/2"			
S5 N&S	2	53"	3.25"	1" x 1/2" x 5"	1" x 1/2" x 4"		
S6	1	53"	2"	1/2" x 1/4" x 3 1/2"	1/2" x 1/4" x 2"		



SHAFT DETAIL FOR S5 N & S
OTHER SHAFTS SIMILAR

1/24/05 CAD/MECH
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REVISIONS			REVISIONS		
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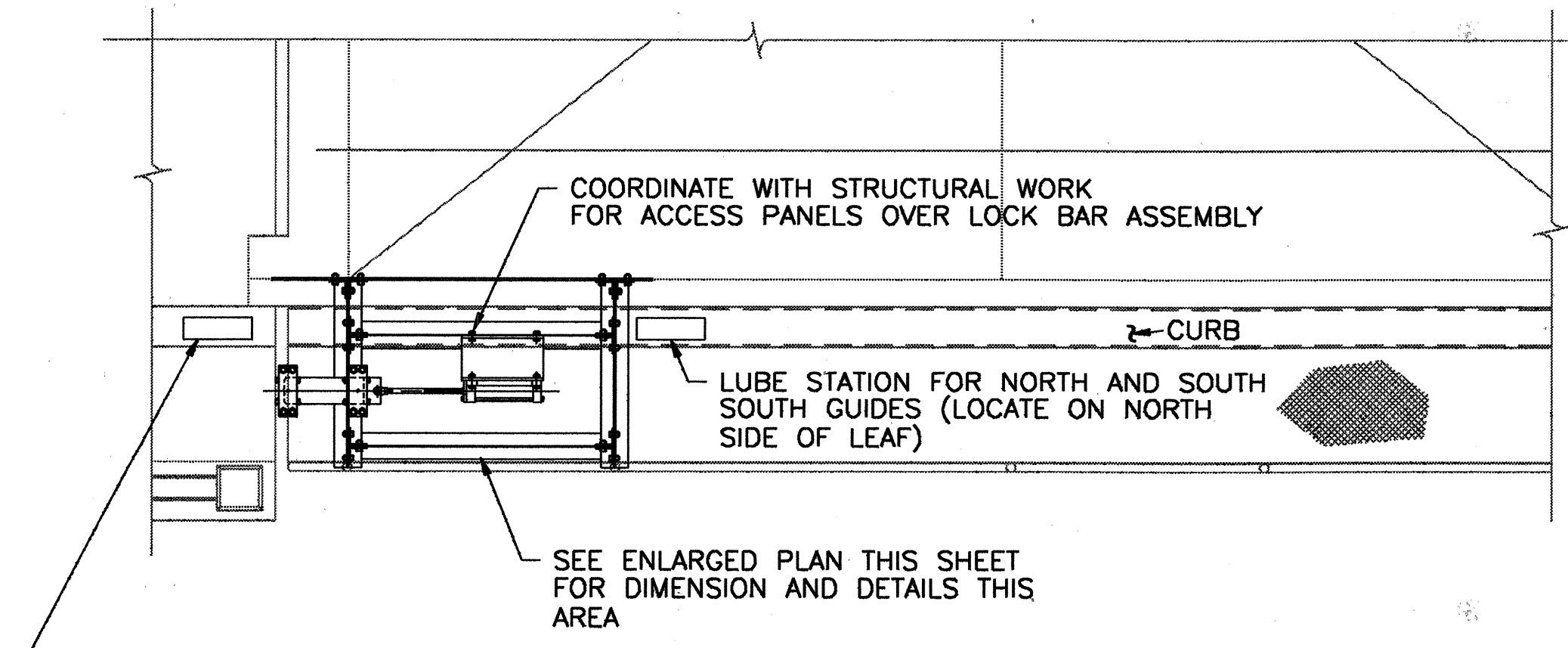
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Approved by	R.M. COURET	

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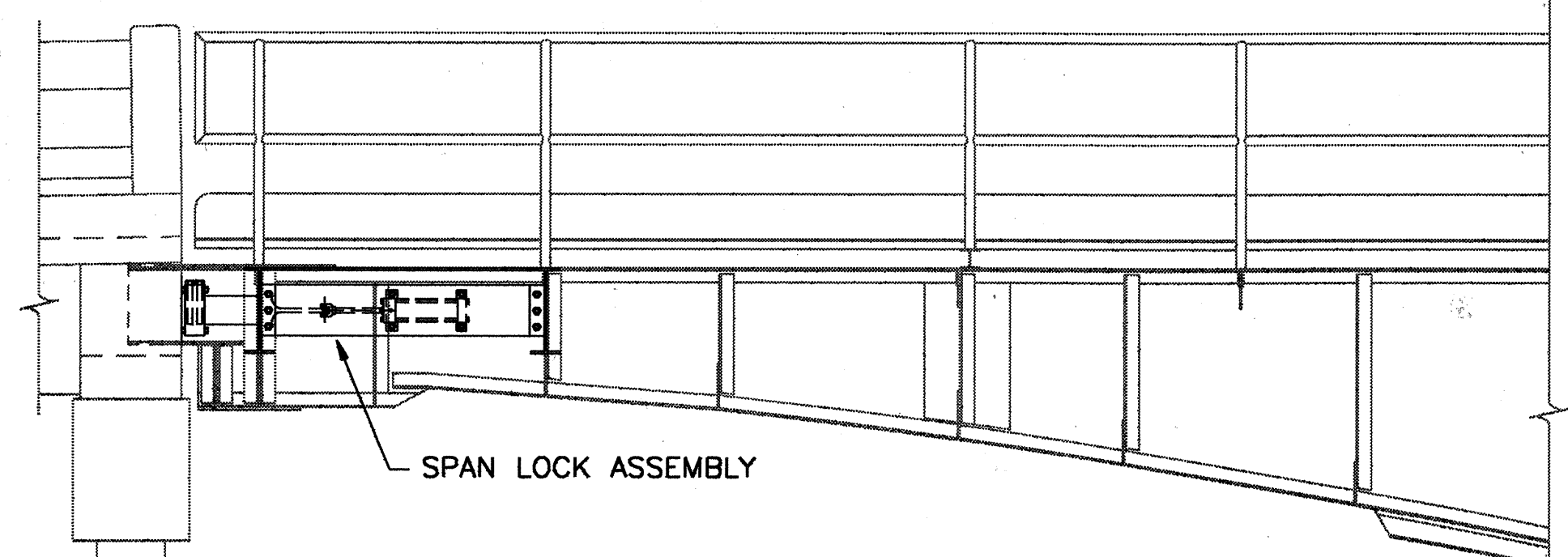
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: MACHINERY PLAN AND SCHEDULES
PROJECT NAME: BECKETT BRIDGE REPAIRS

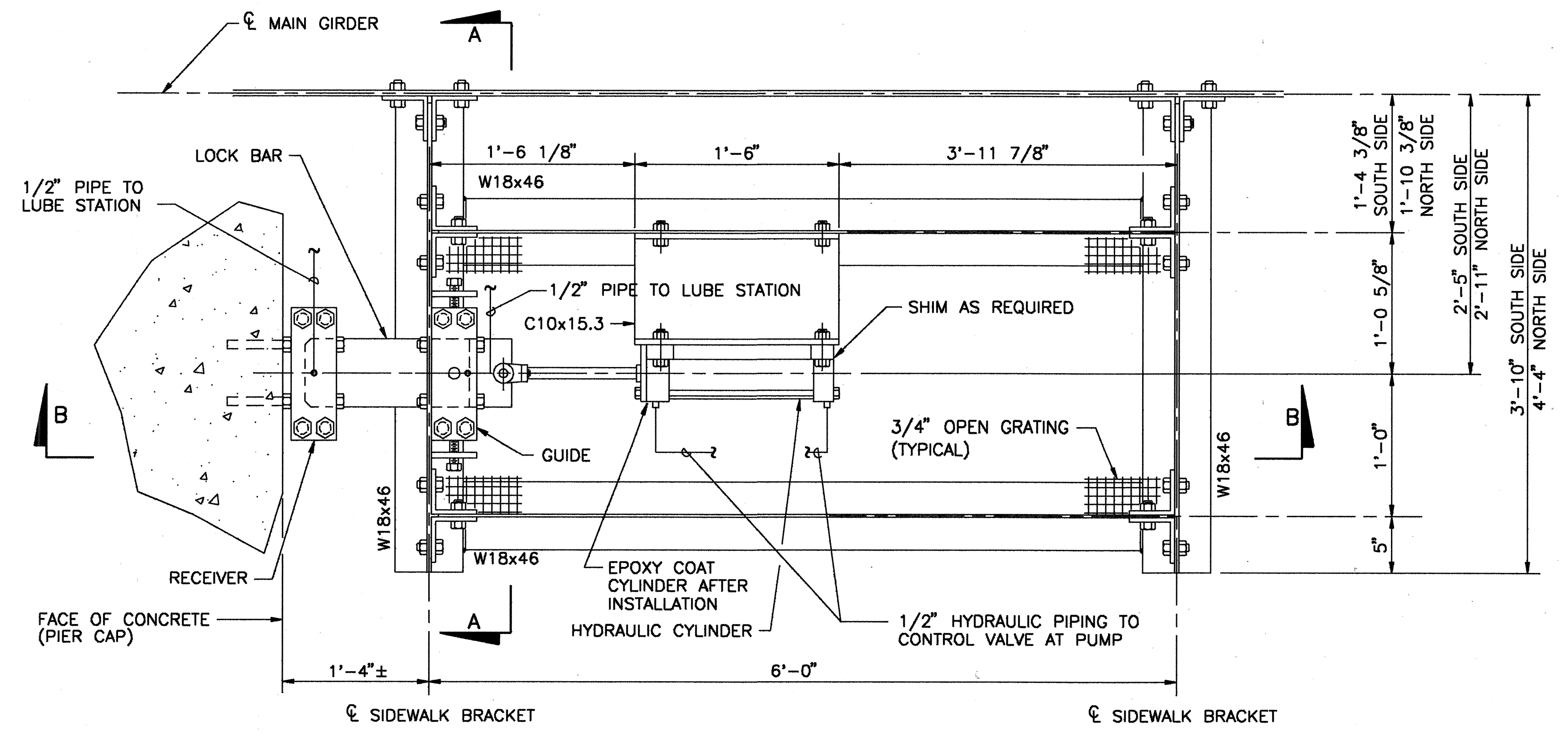
SHEET
M-2



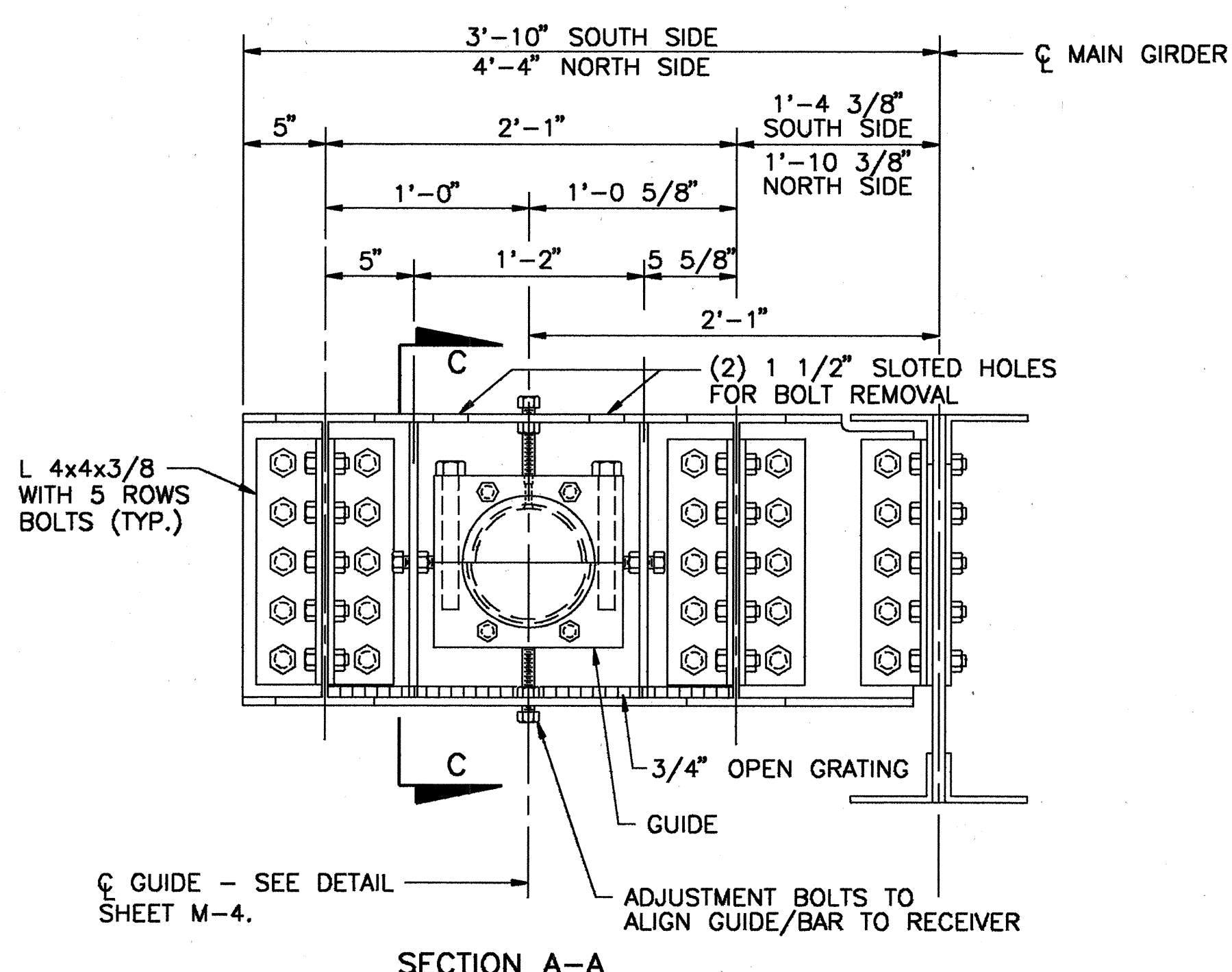
PLAN AT SPANLOCK



ELEVATION AT SPANLOCK
(NORTH SIDE SIMILAR)



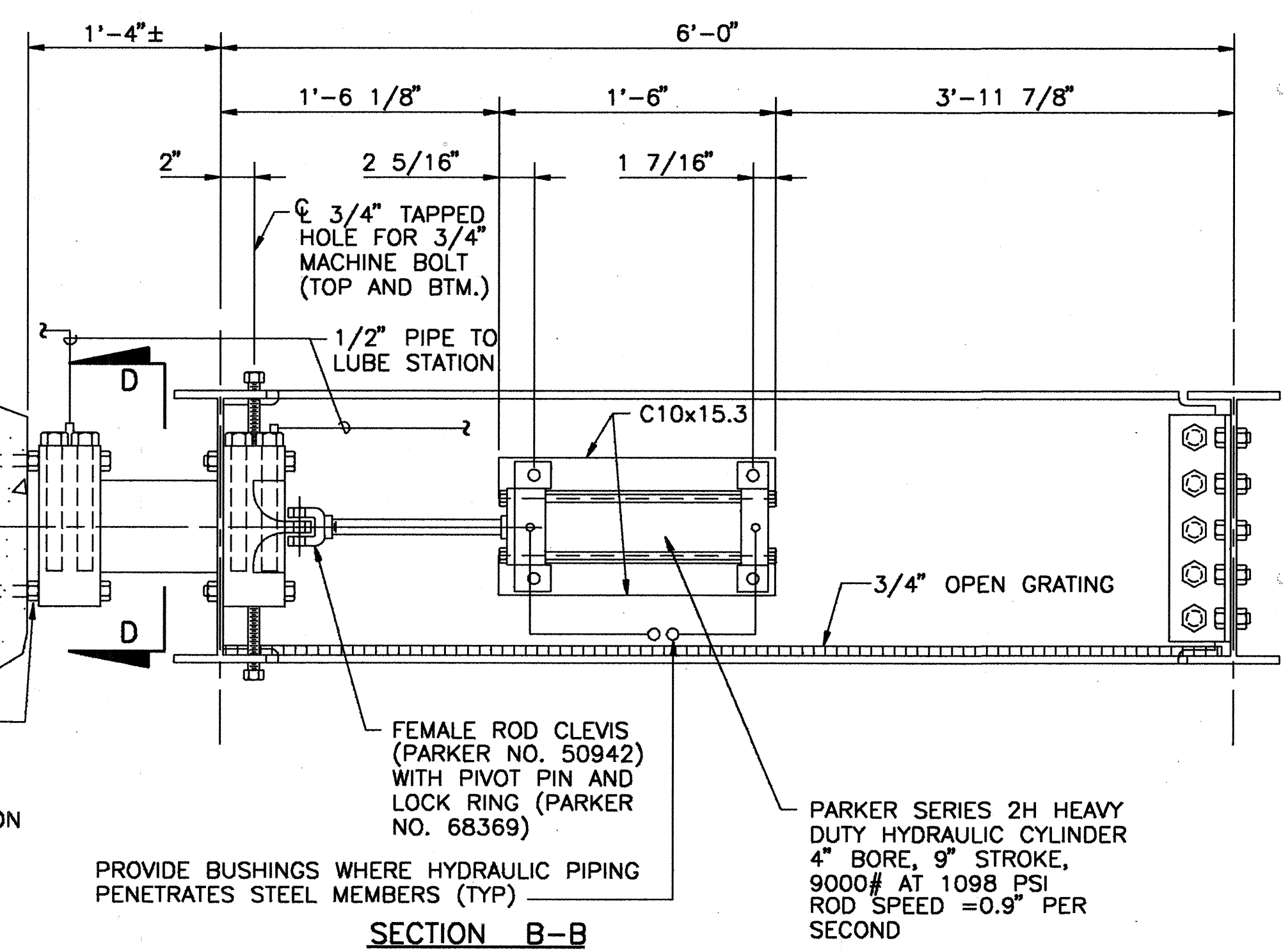
ENLARGED PLAN



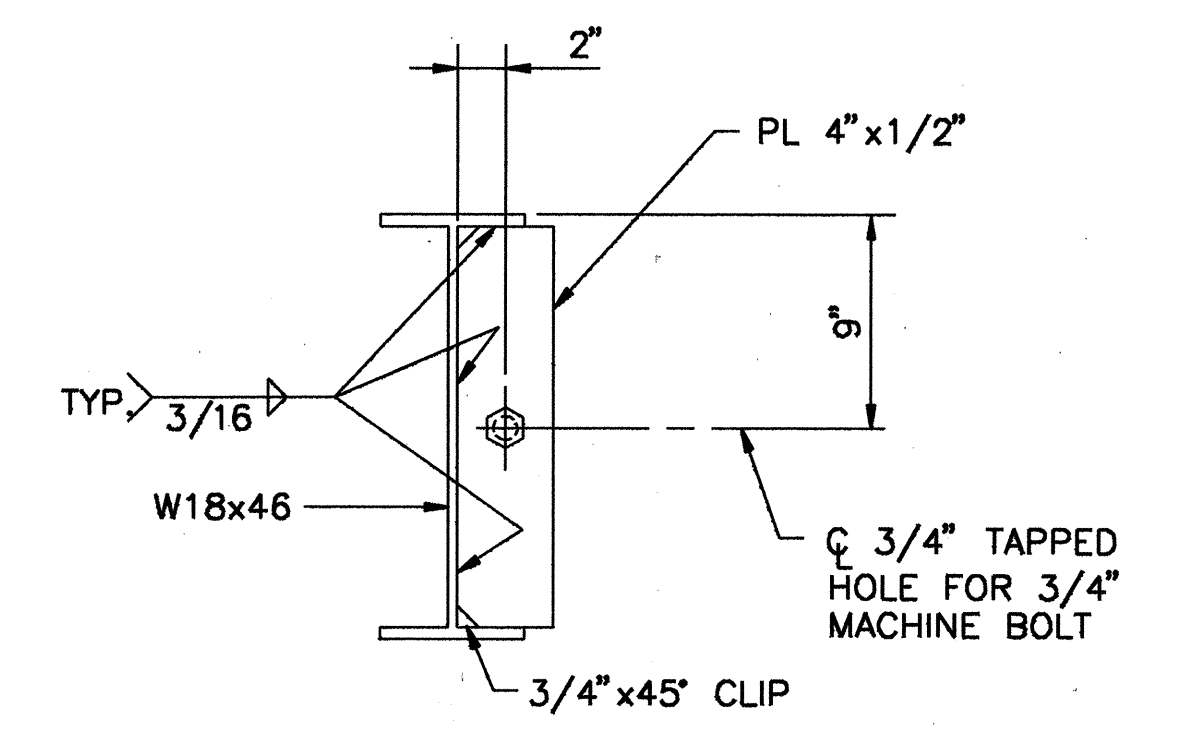
SECTION A-A

(4) 3/4" HVA EXPANSION ANCHORS WITH (1) LEVELING NUT AND (1) HEAVY HEX NUT EACH (6" MIN. EMBED)

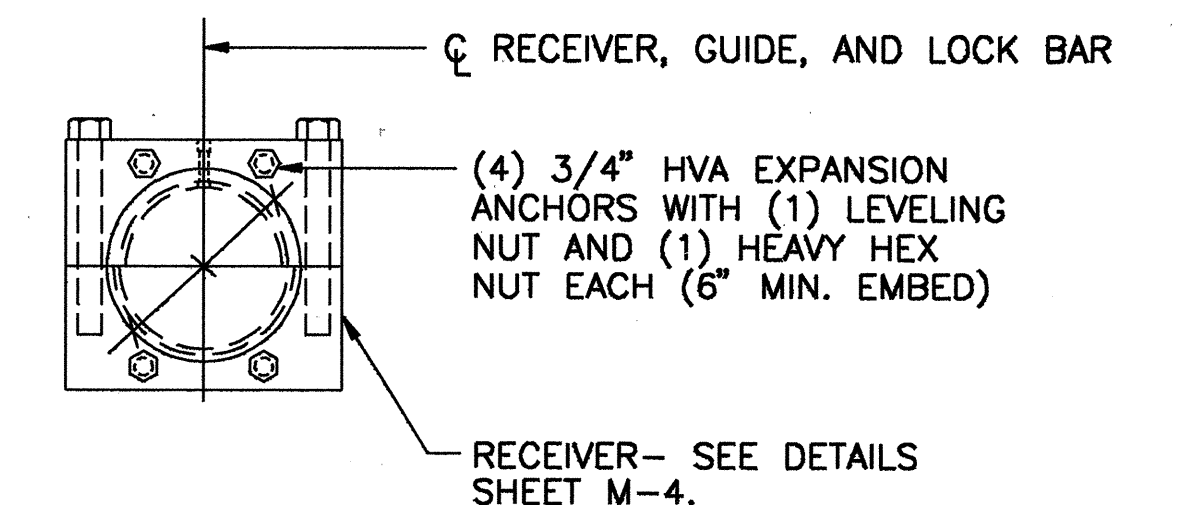
SHIM BETWEEN RECEIVER AND FACE OF CONCRETE TO OBTAIN FULL SURFACE CONTACT. SEE SECTION 468 FOR SHIM INFORMATION



SECTION B-B



SECTION C-C



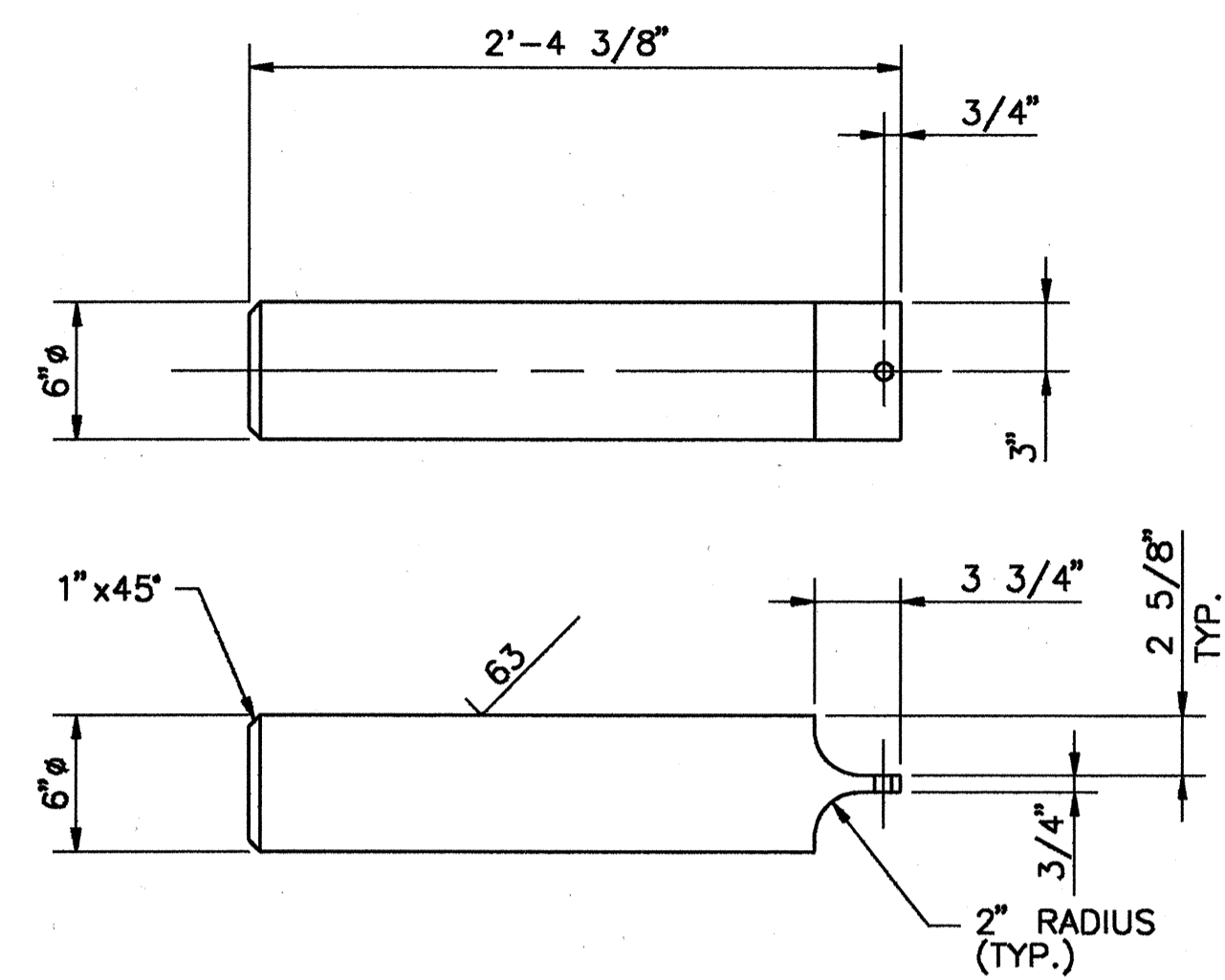
SECTION D-D

NOTES:
1. WORK THIS SHEET IN CONJUNCTION WITH SHEET M-4.

13-21-01 ALC PRODUCED BY DSA CAD SYSTEM

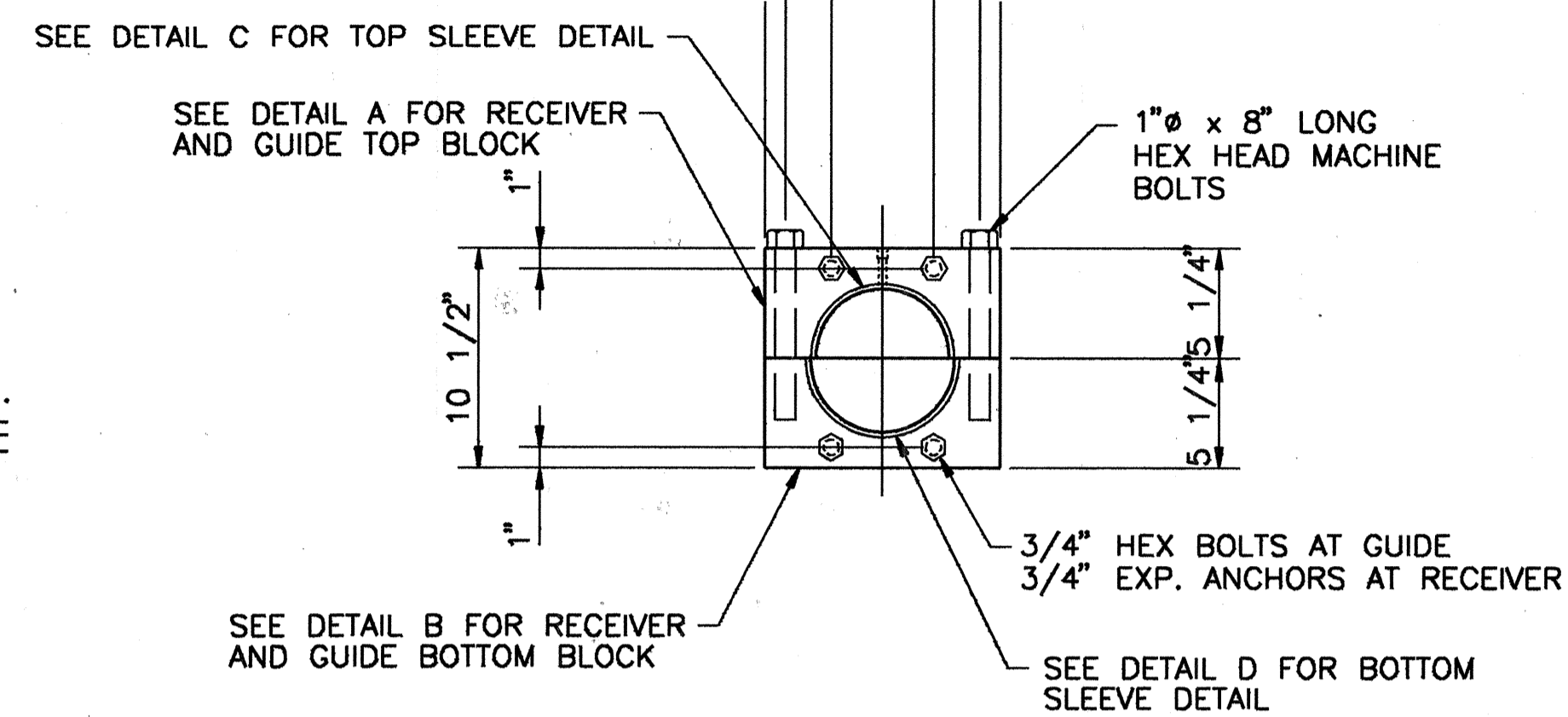
REVISIONS		REVISIONS		SEAL:	Drawn by	Checked by	Designed by	Checked by	Approved by	Notes	Dates		DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607		PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	SHEET
Date	By	Description	Date	By	Description												
					CLM	LET	LET	RMC	R.M. COURET		5-95					SPAN LOCK DETAILS	M-3
PROJECT NAME: BECKETT BRIDGE REPAIRS																	

R.M. Couret

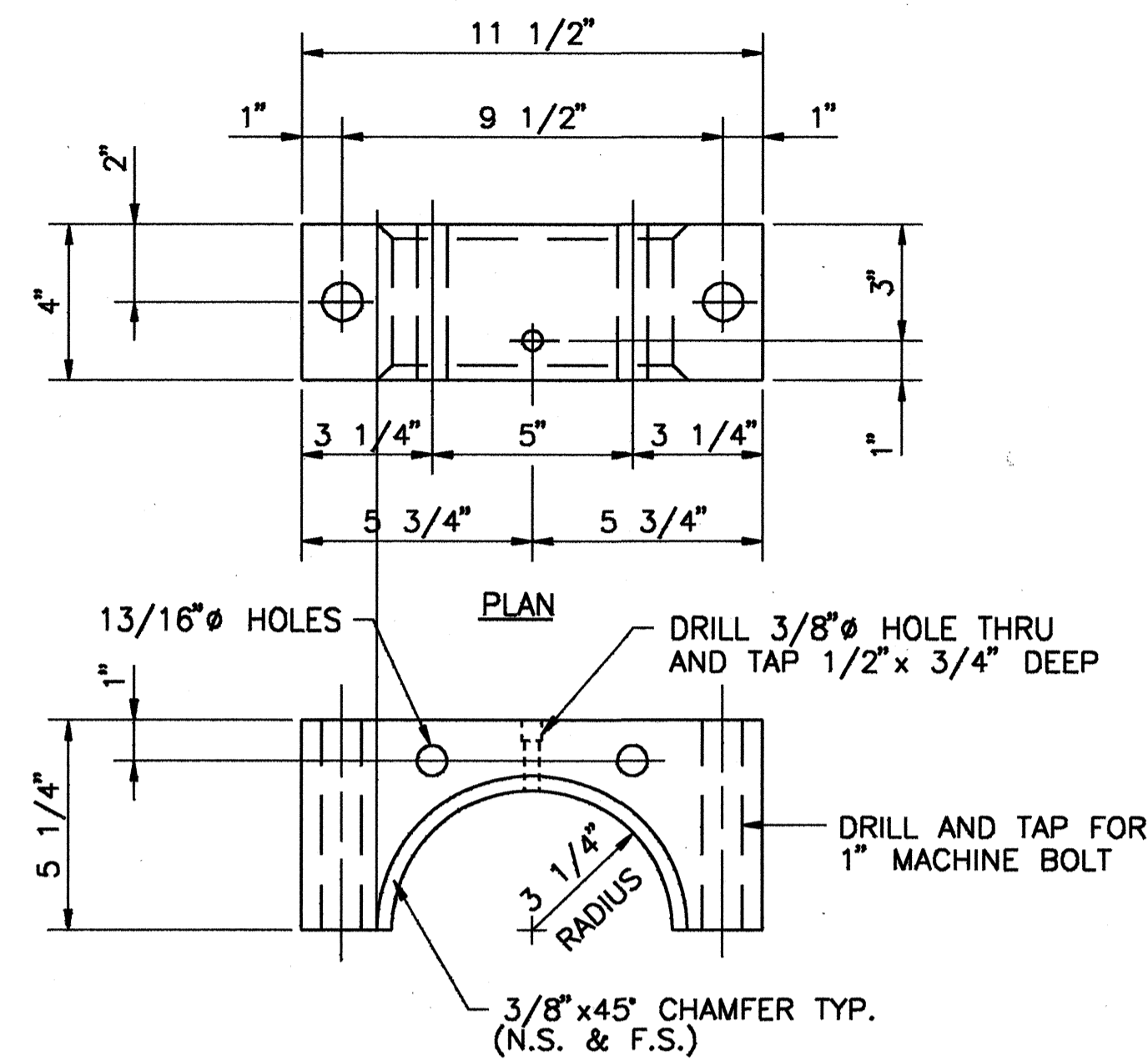


LOCK BAR DETAILS

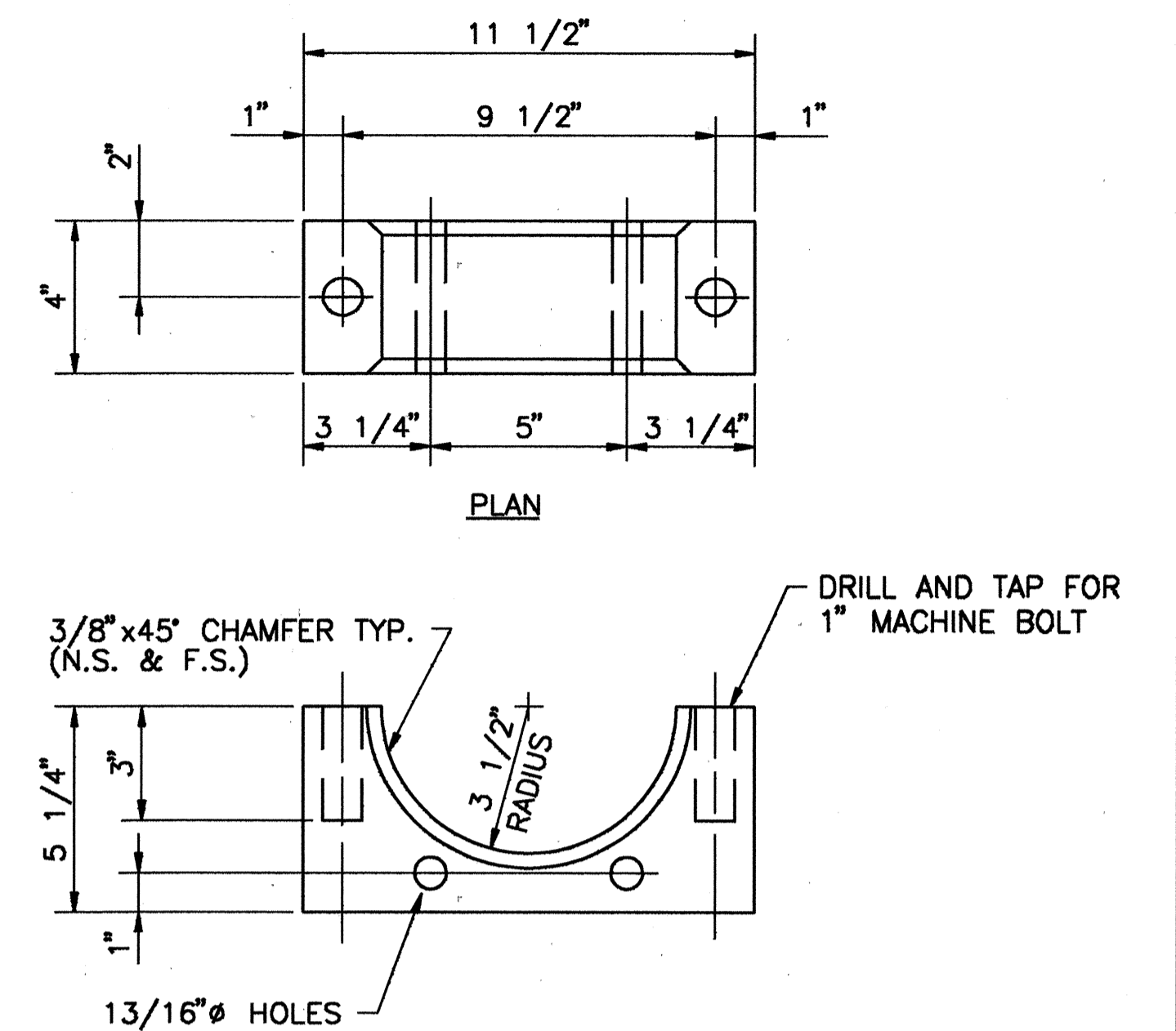
MATERIAL OF CONSTRUCTION TO BE SAE51440 S/S.



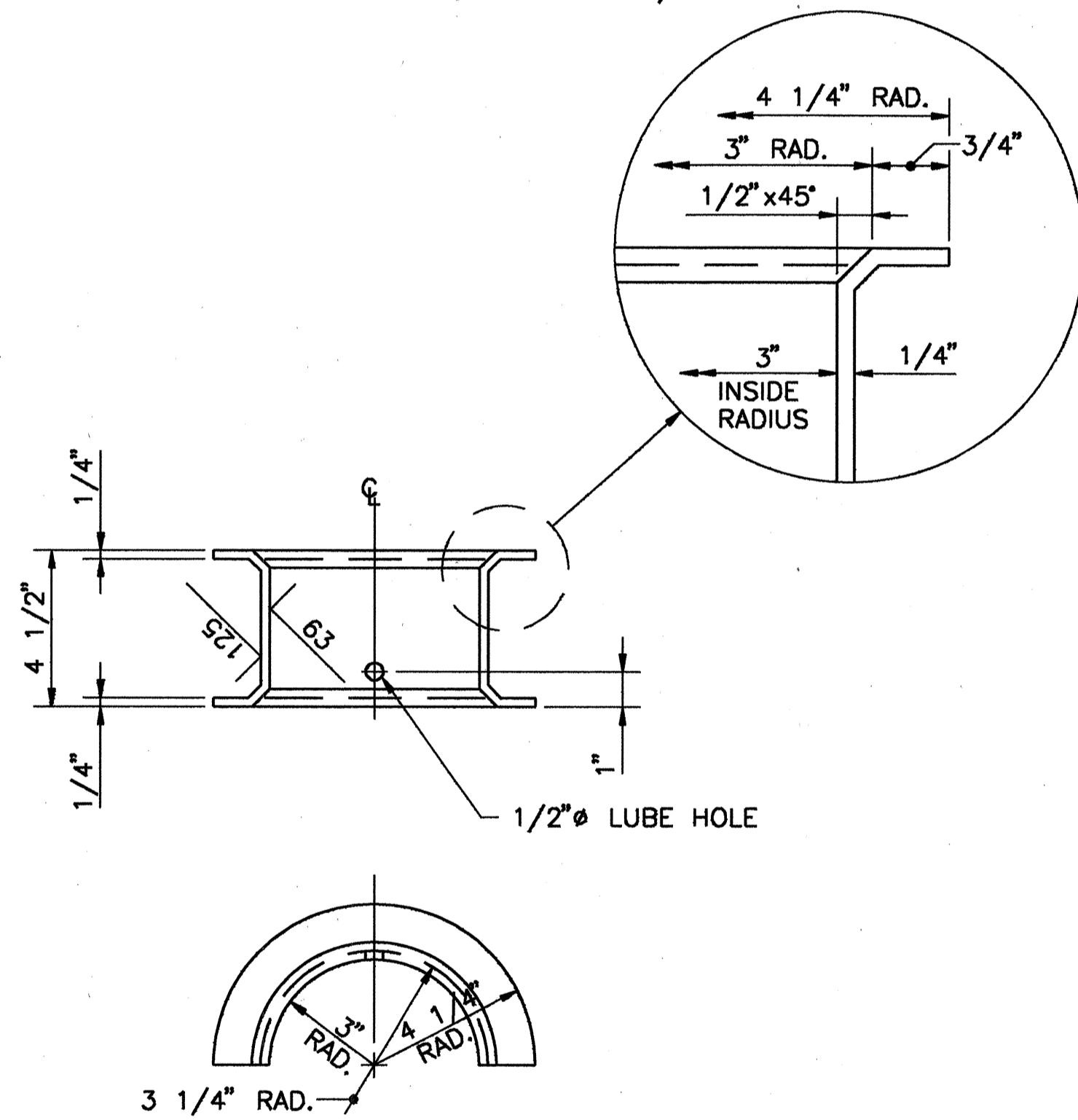
RECEIVER AND GUIDE BLOCK DETAIL



DETAIL A - RECEIVER AND GUIDE TOP

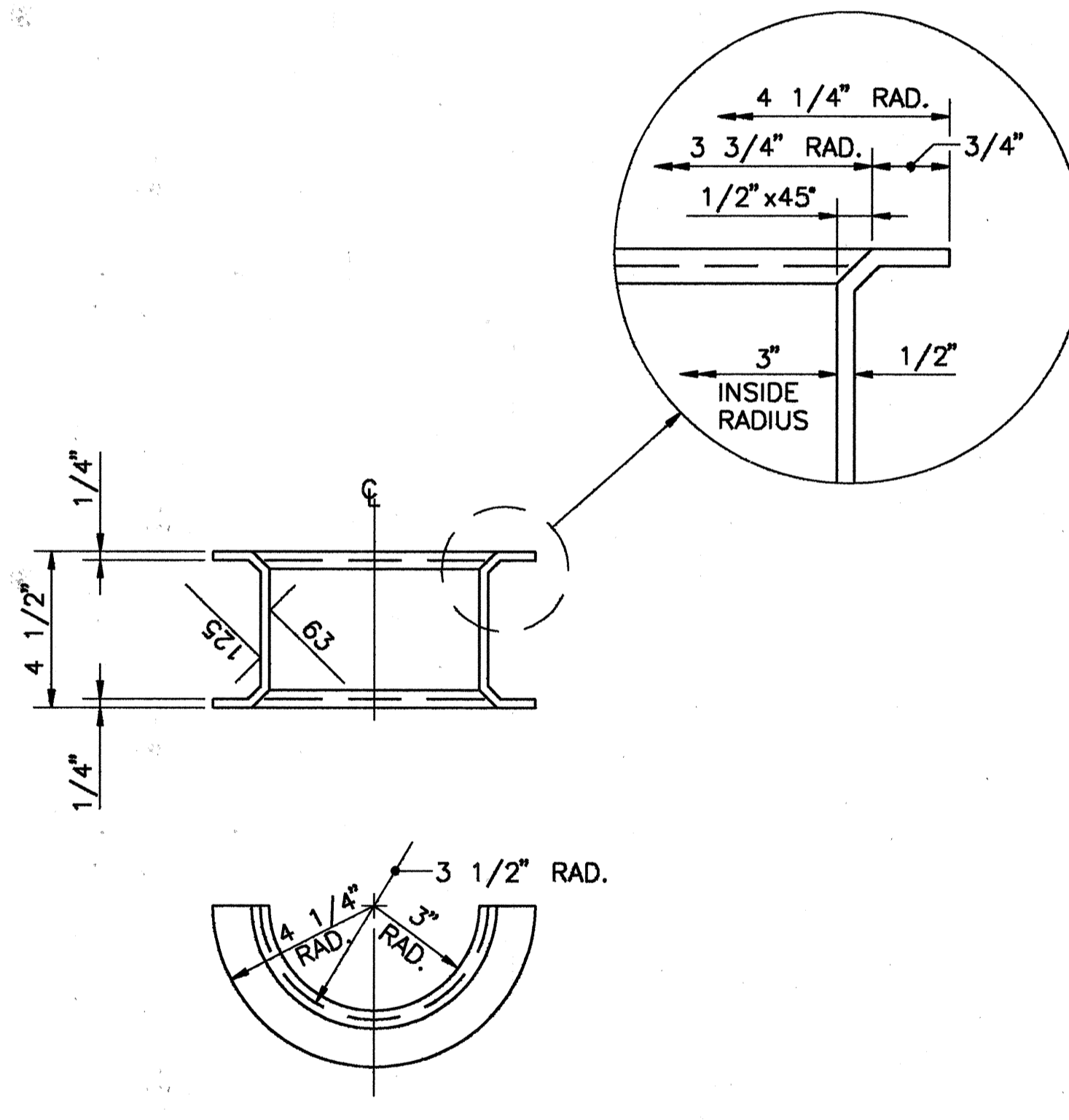


DETAIL B - RECEIVER AND GUIDE BOTTOM



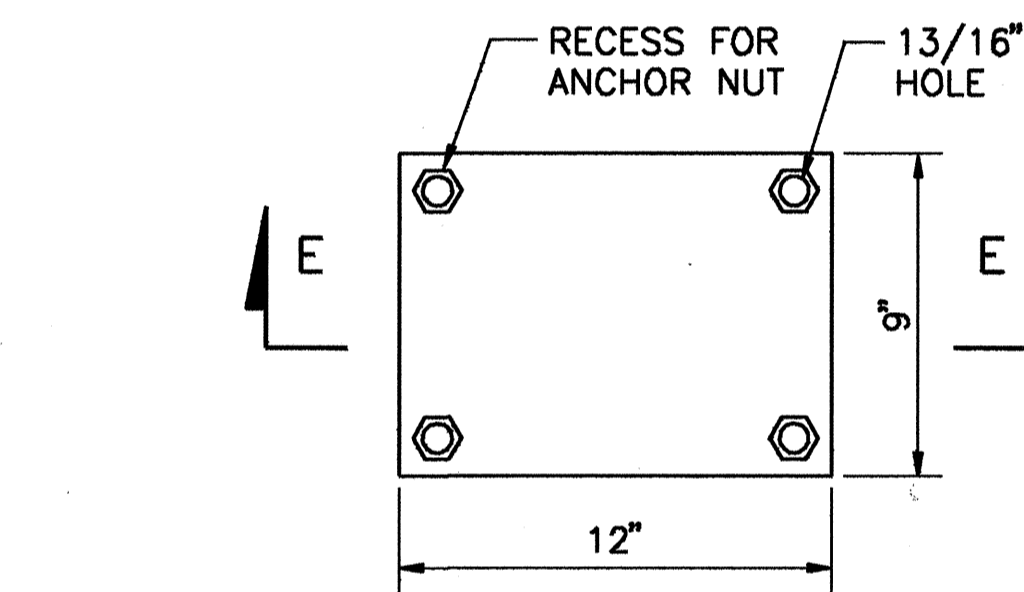
DETAIL C - RECEIVER AND GUIDE SLEEVE TOP

MATERIAL OF CONSTRUCTION TO BE SAE30905 STEEL. MACHINE TO ACCOMMODATE RC6 FIT, INSIDE AND OUTSIDE SURFACES.

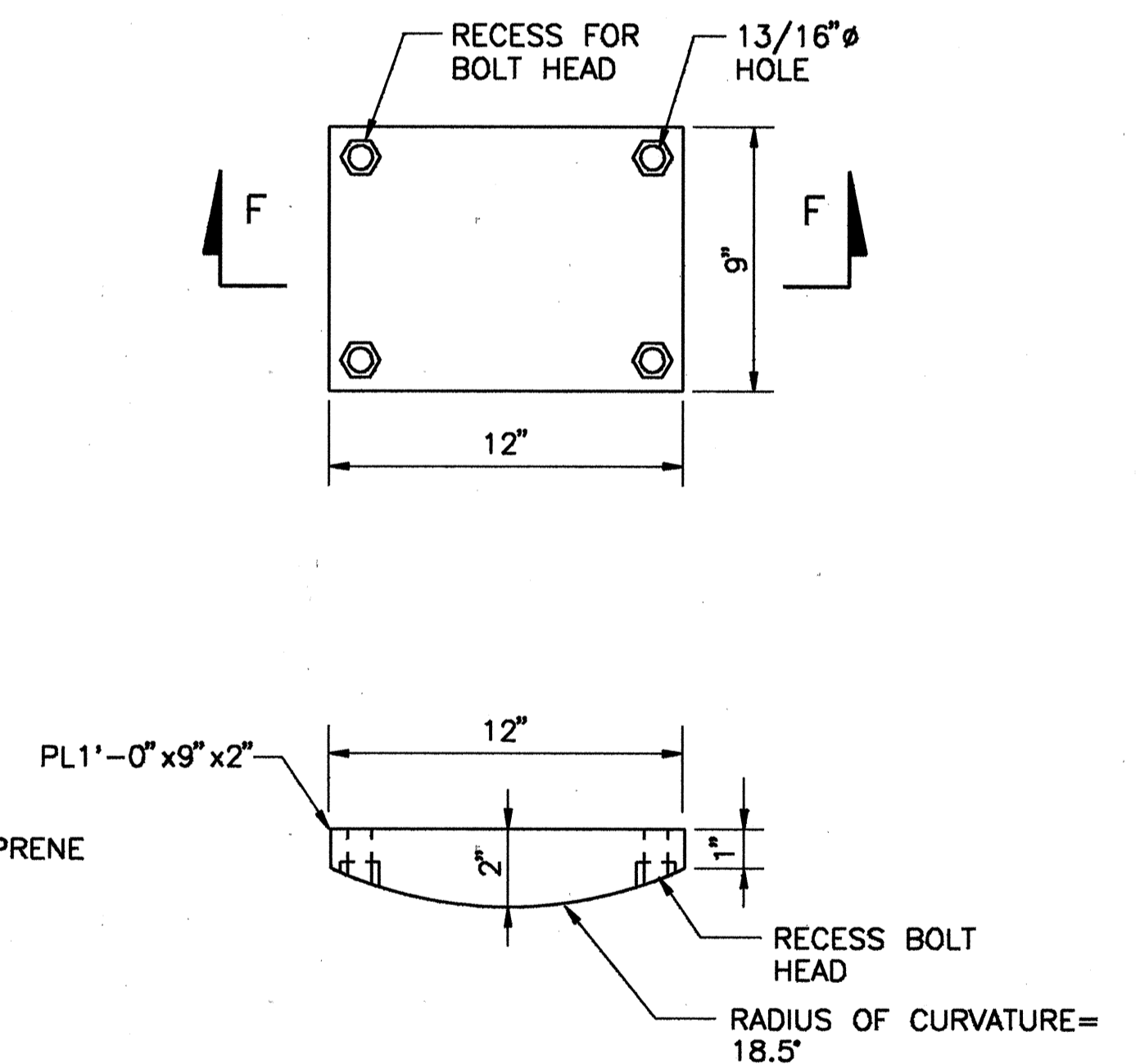


DETAIL D - RECEIVER AND GUIDE SLEEVE BOTTOM

MATERIAL OF CONSTRUCTION TO BE SAE30905 STEEL. MACHINE TO ACCOMMODATE RC6 FIT, INSIDE AND OUTSIDE SURFACES.



**SECTION E-E
STRIKE PLATE - TWO REQ'D.**



**SECTION F-F
LIVE LOAD SHOE - TWO REQ'D.**

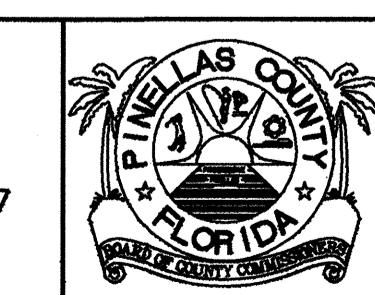
NOTE:
 1. ALL MATERIAL TO BE ASTM A36 U.O.N.
 2. ALL BOLTS TO BE A325 U.O.N.
 3. PROVIDE RC-6 FIT FOR LOCK BAR, WEAR INSERTS, RECEIVER AND GUIDE.
 4. PROVIDE ONE SPARE SET OF TOP AND BOTTOM WEAR INSERTS FOR EACH GUIDE AND RECEIVER. PREPARE FOR STORAGE, TAG WITH BRIDGE NAME, NUMBER AND LOCATION. TURN OVER TO COUNTY AT END OF PROJECT.

R:\4408\CAO\MECH\WORK\BMMECH4 06/16/95 14:58:01 KTL PRODUCED BY DSA CADD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Names	Dates
Drawn by CLM	5-95
Checked by LET	5-95
Designed by LET	5-95
Checked by RMC	5-95
Approved by R.M. COURET	

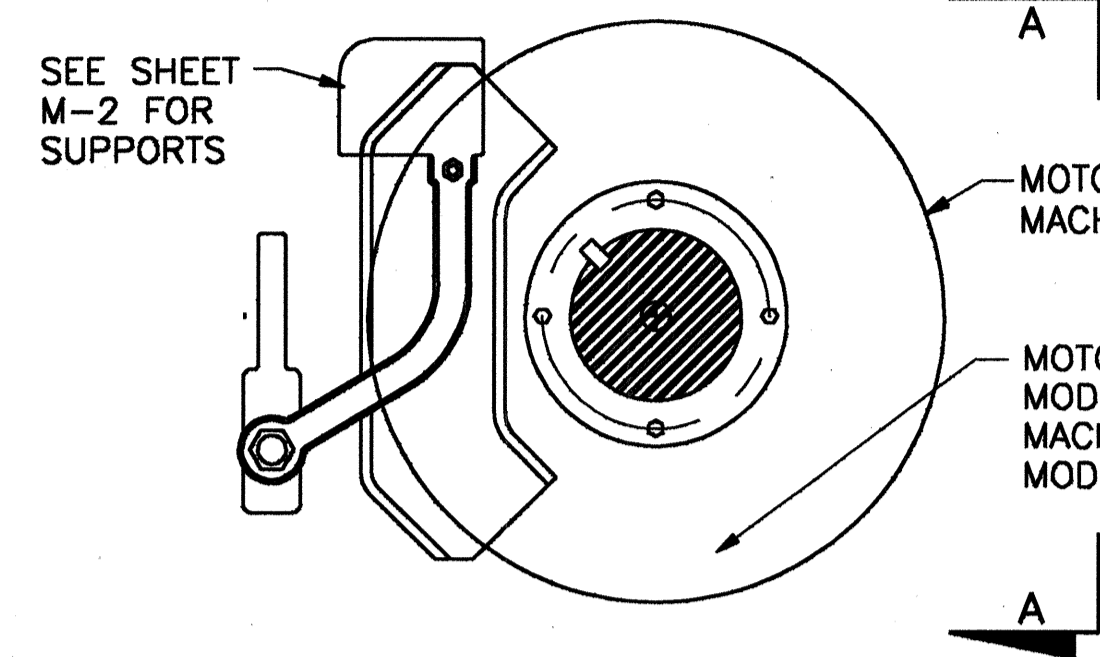
DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



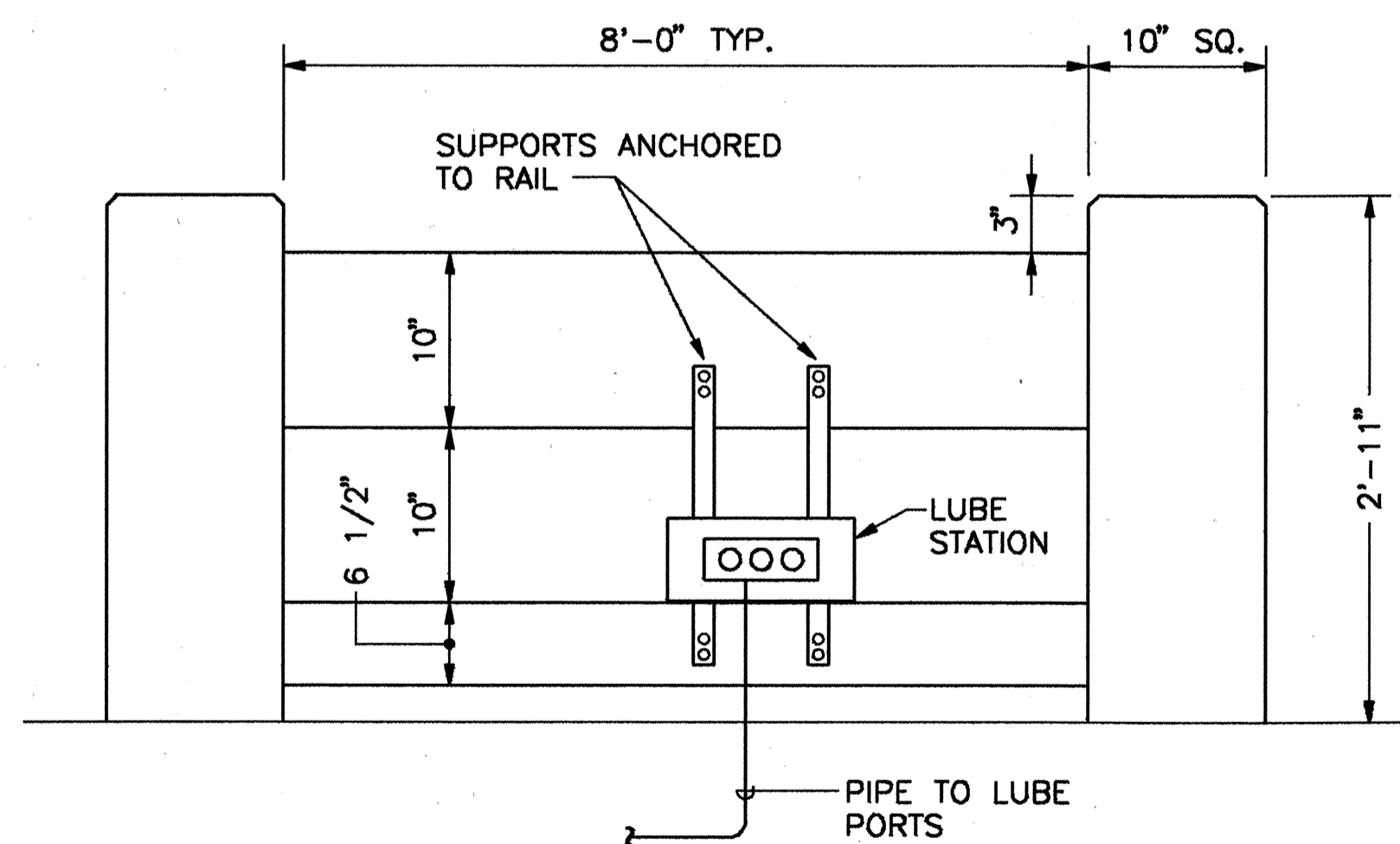
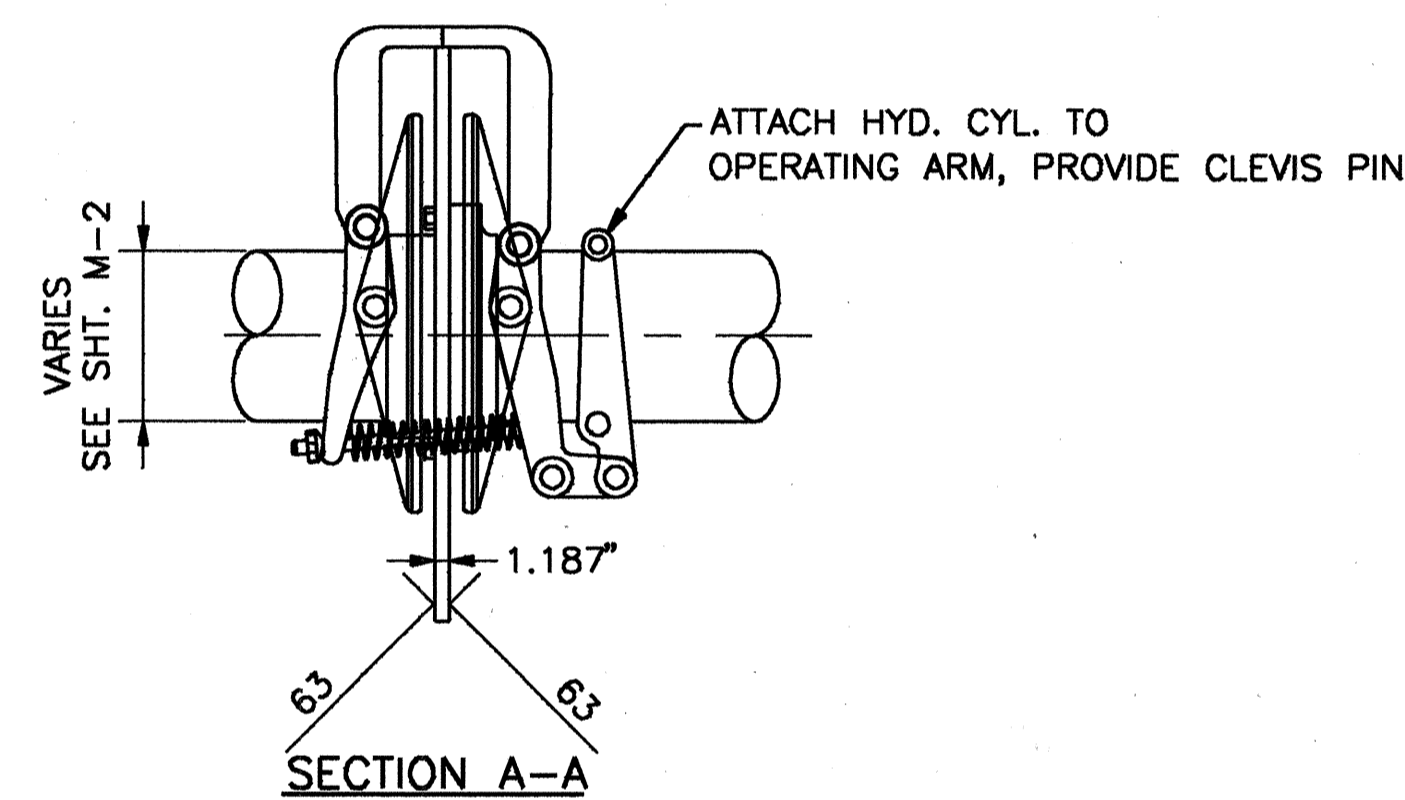
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE:	SPAN LOCK DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

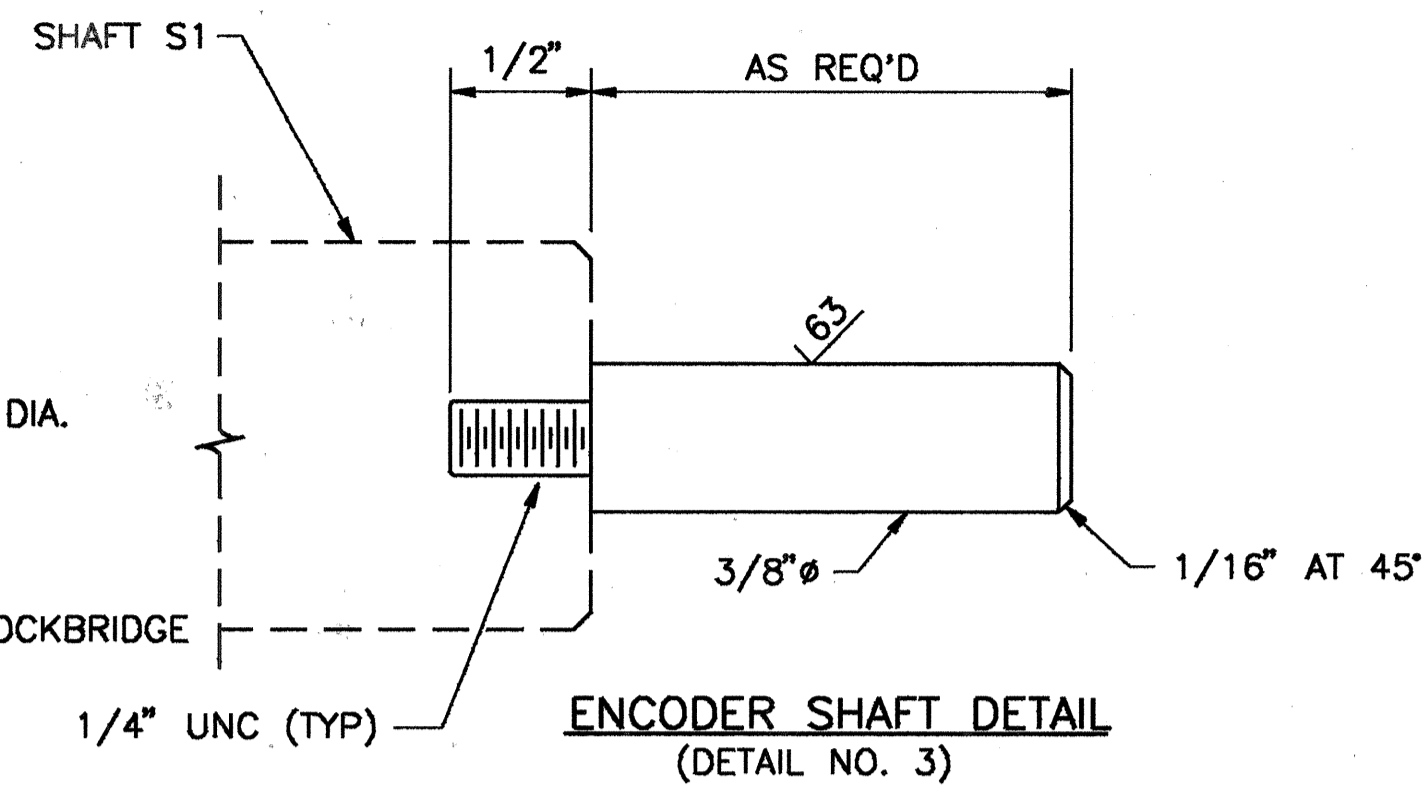
SHEET
M-4



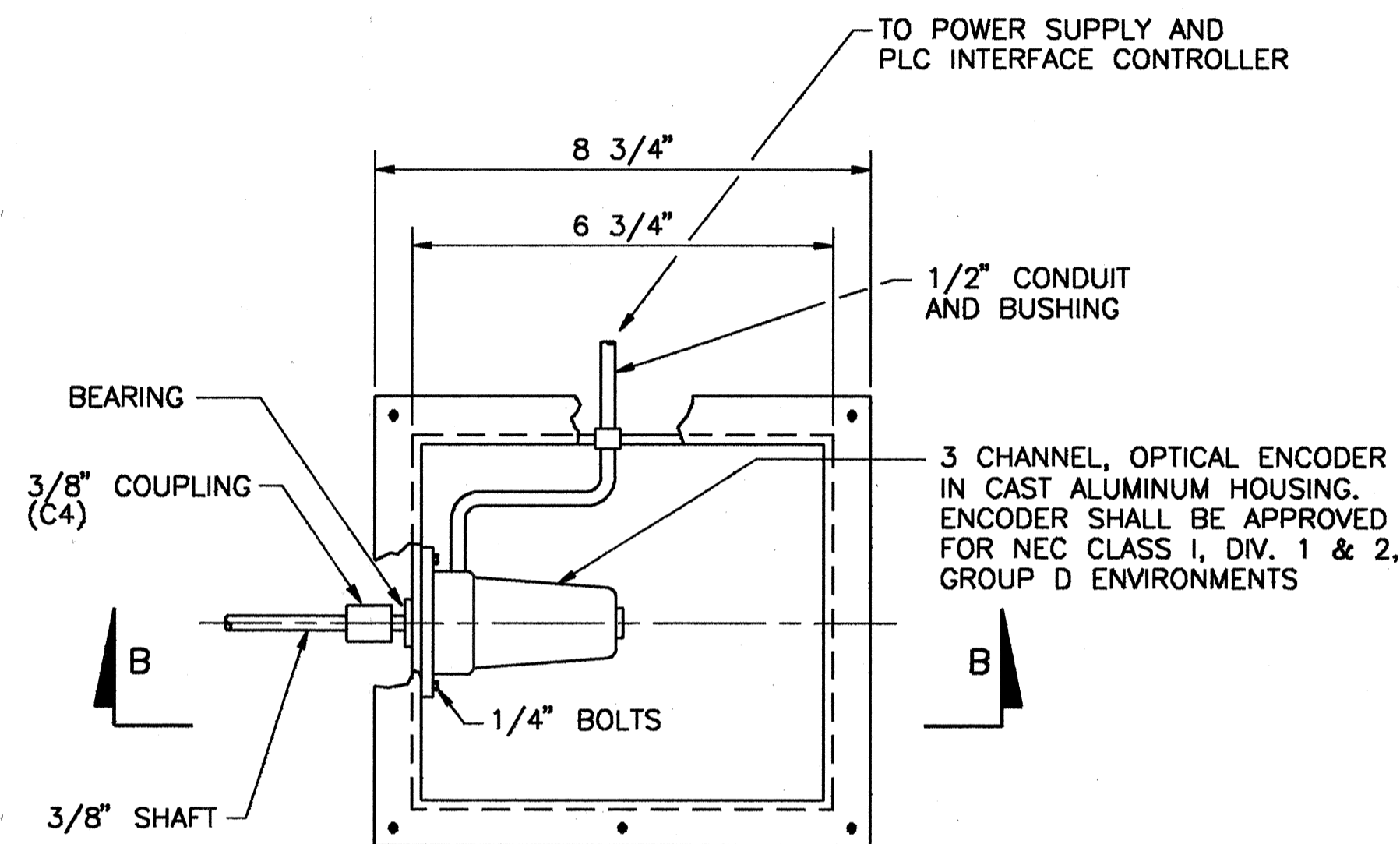
MOTOR AND MACHINERY BRAKE DETAIL
 (MACH.=SPRING APPLY, HYDRAULIC RELEASE, 905 PSI RELEASE PRESSURE)
 (MOTOR=HYDRAULIC APPLY, 300 PSI HYDRAULIC PRESSURE, SPRING RELEASE)
 (DETAIL NO. 1)



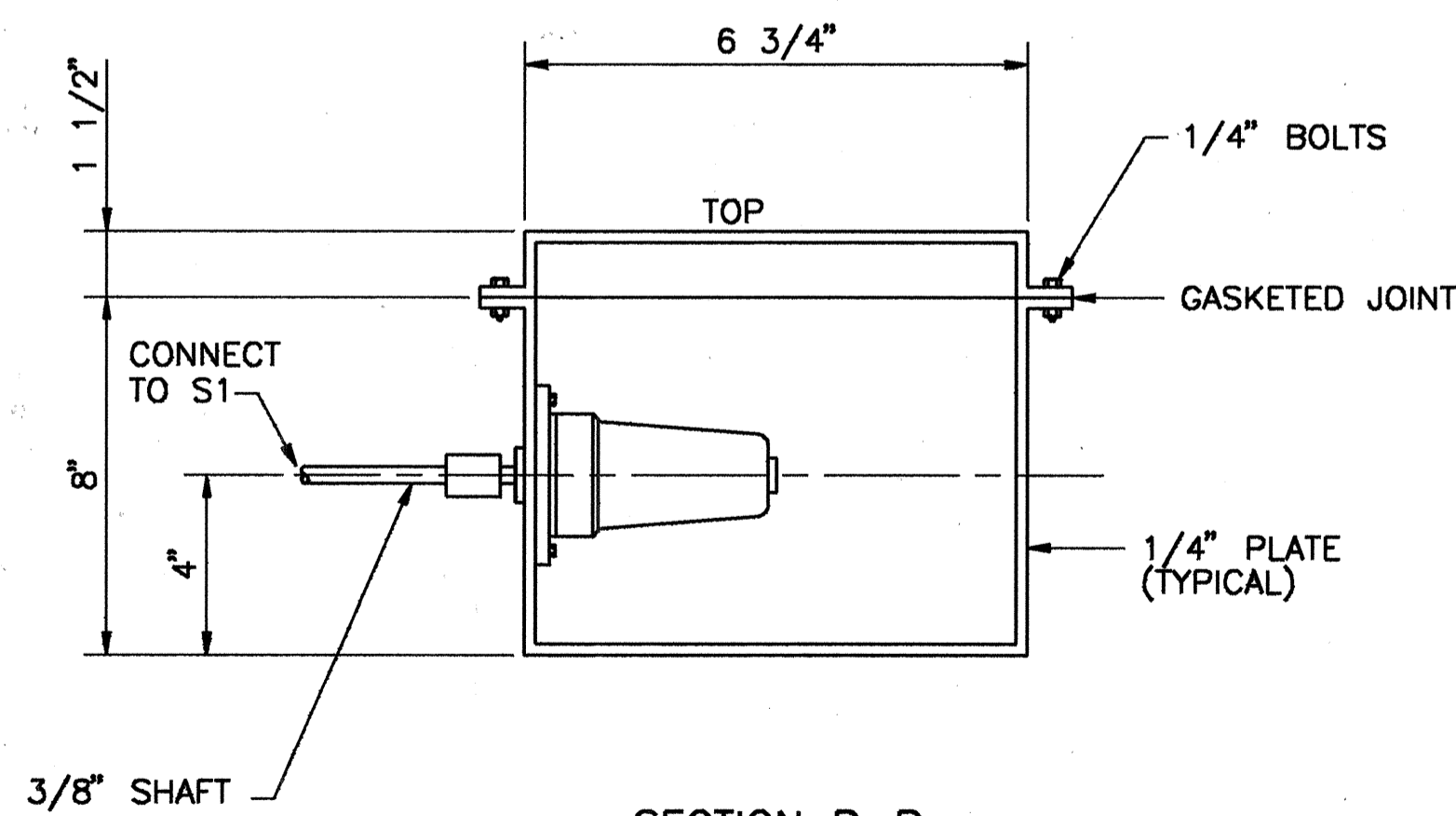
DETAIL OF LUBE STATION MOUNTED ON RAIL
 (DETAIL NO. 5)



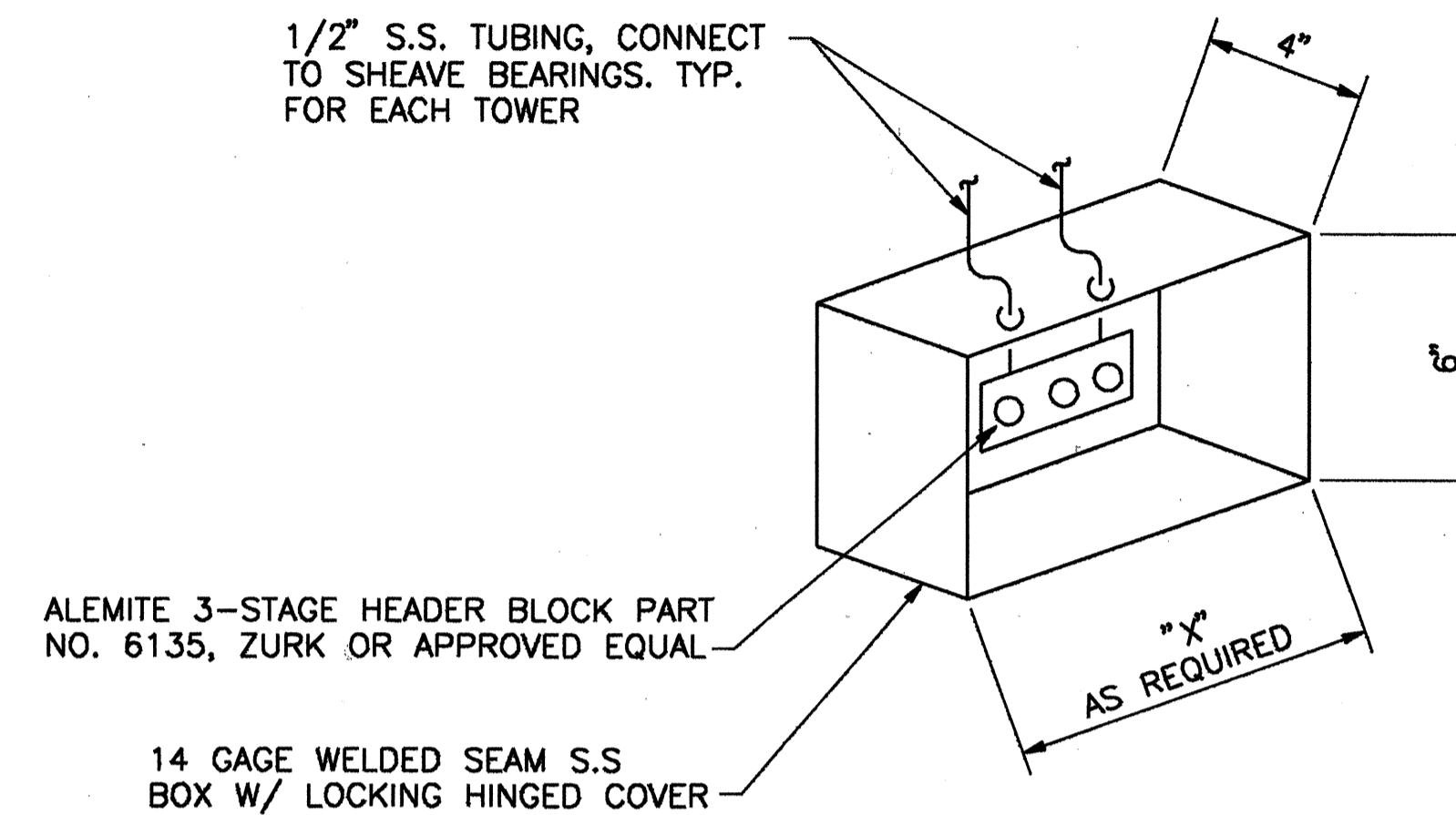
ENCODER SHAFT DETAIL
 (DETAIL NO. 3)



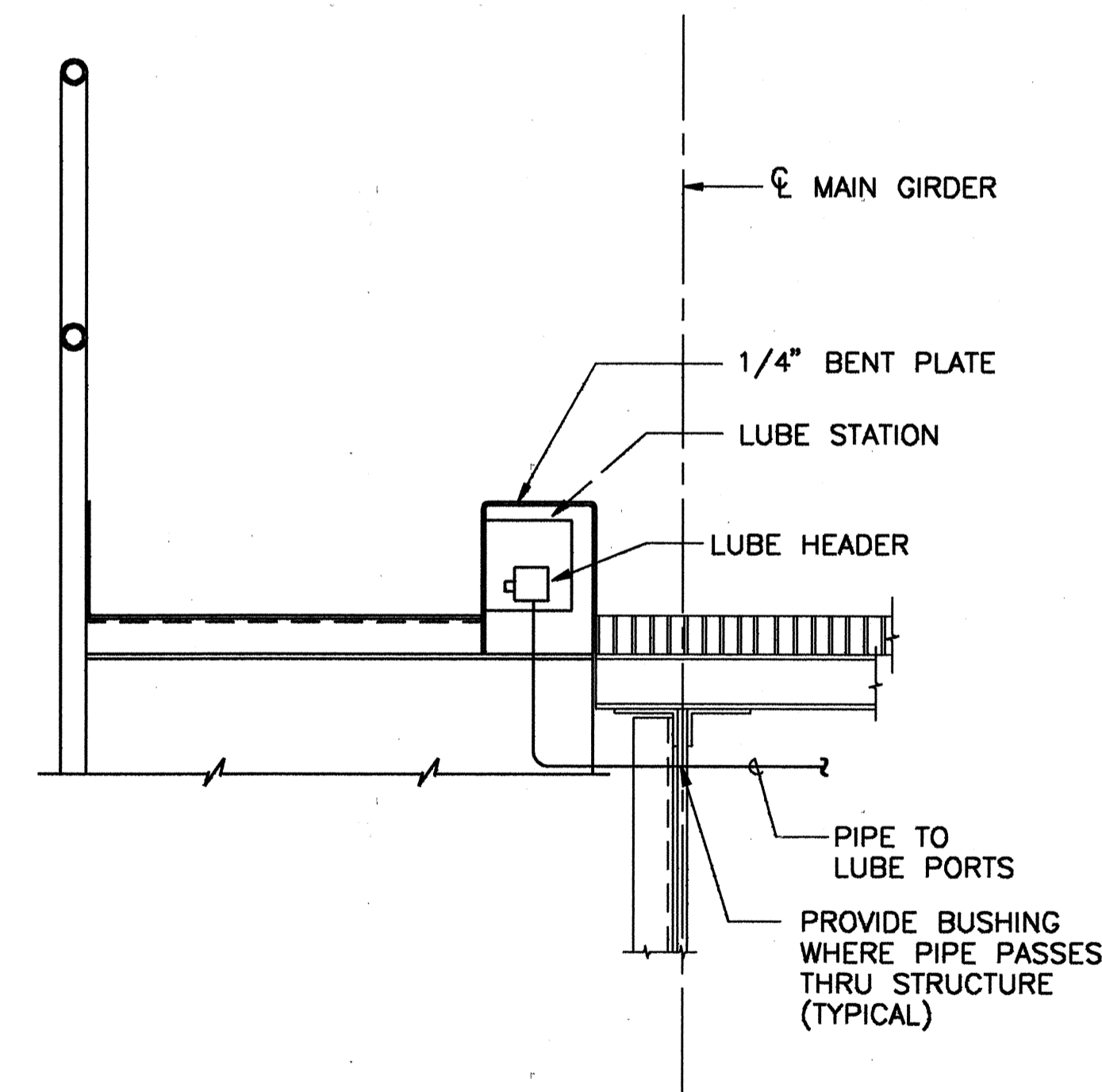
ENCODER GEAR DETAILS
 (TYPICAL FOR ONE SHAFT)
 (DETAIL NO. 4)



SECTION B-B



LUBRICATION STATION DETAIL
 (DETAIL NO. 2)



DETAIL OF LUBE STATION MOUNTED IN METAL CURB
 (DETAIL NO. 6)

R:\04085\CADD\MECH
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REVISIONS		
Date	By	Description

REVISIONS		
Date	By	Description

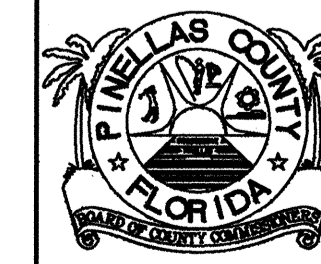
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Names	Dates
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Checked by LET	5-95
Designed by LET	5-95
Checked by RMC	5-95
Approved by R.M. COURET	

R.M. Couret



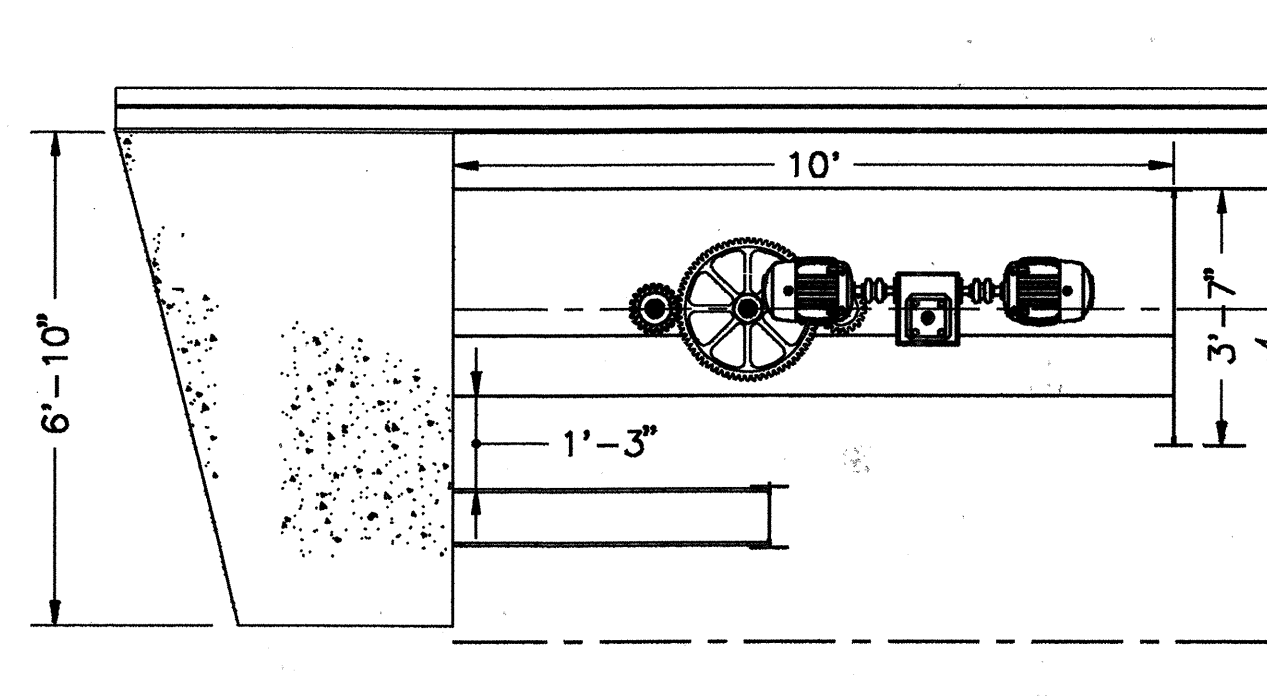
DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



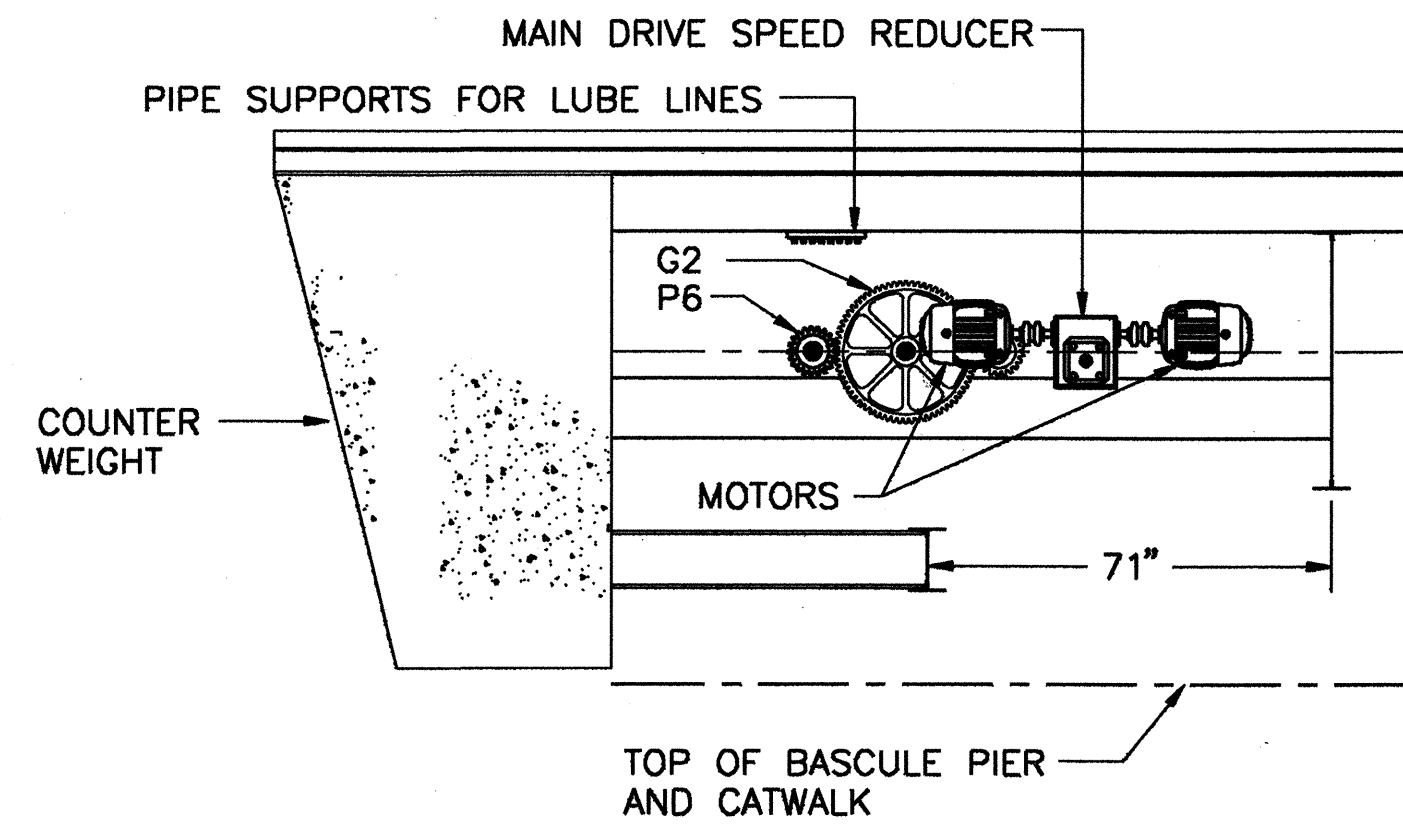
PINELLAS COUNTY
 DEPARTMENT OF
 PUBLIC WORKS

SHEET TITLE:	MISCELLANEOUS DETAILS
PROJECT NAME:	BECKETT BRIDGE REPAIRS

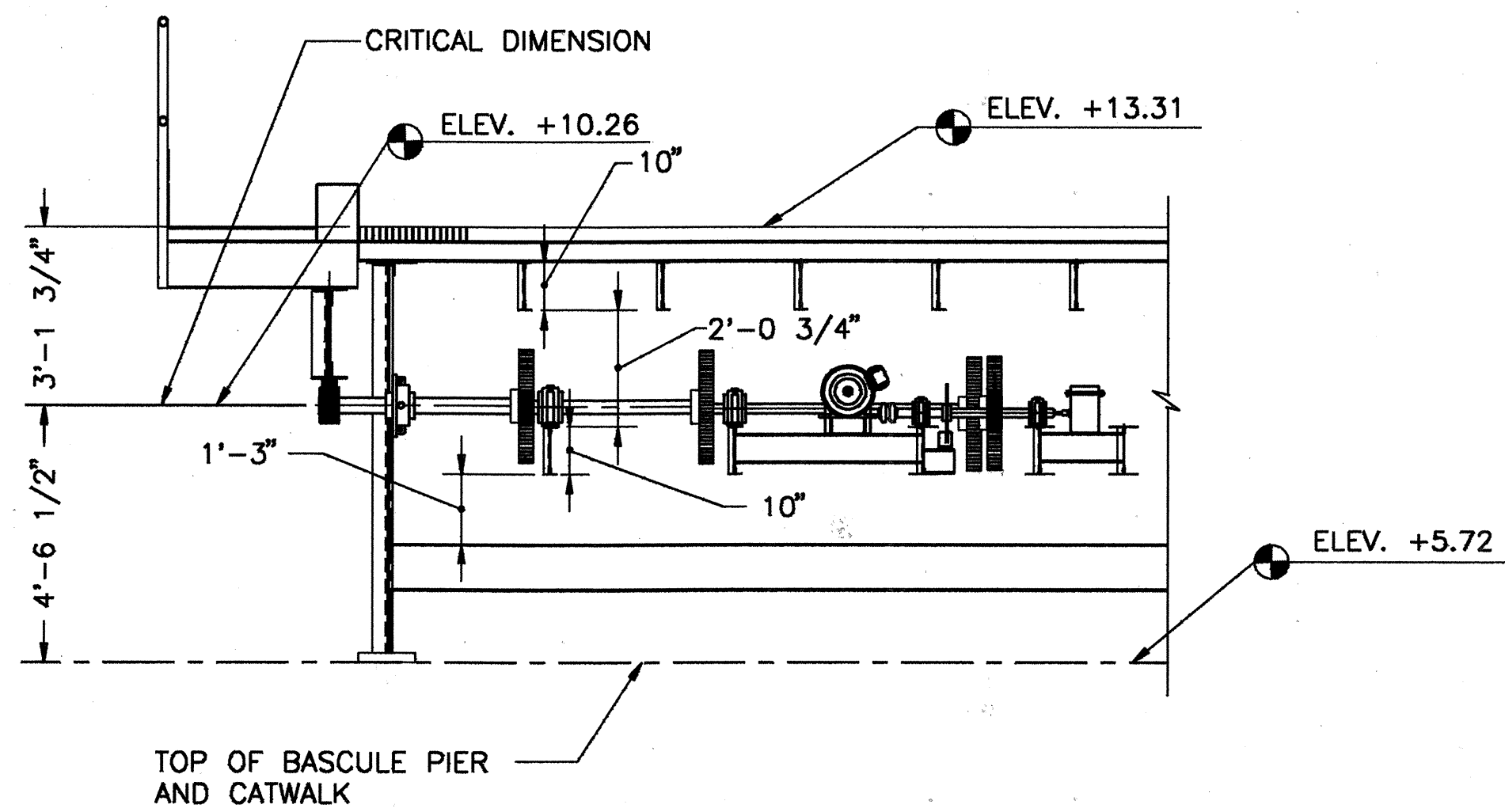
SHEET
M-5



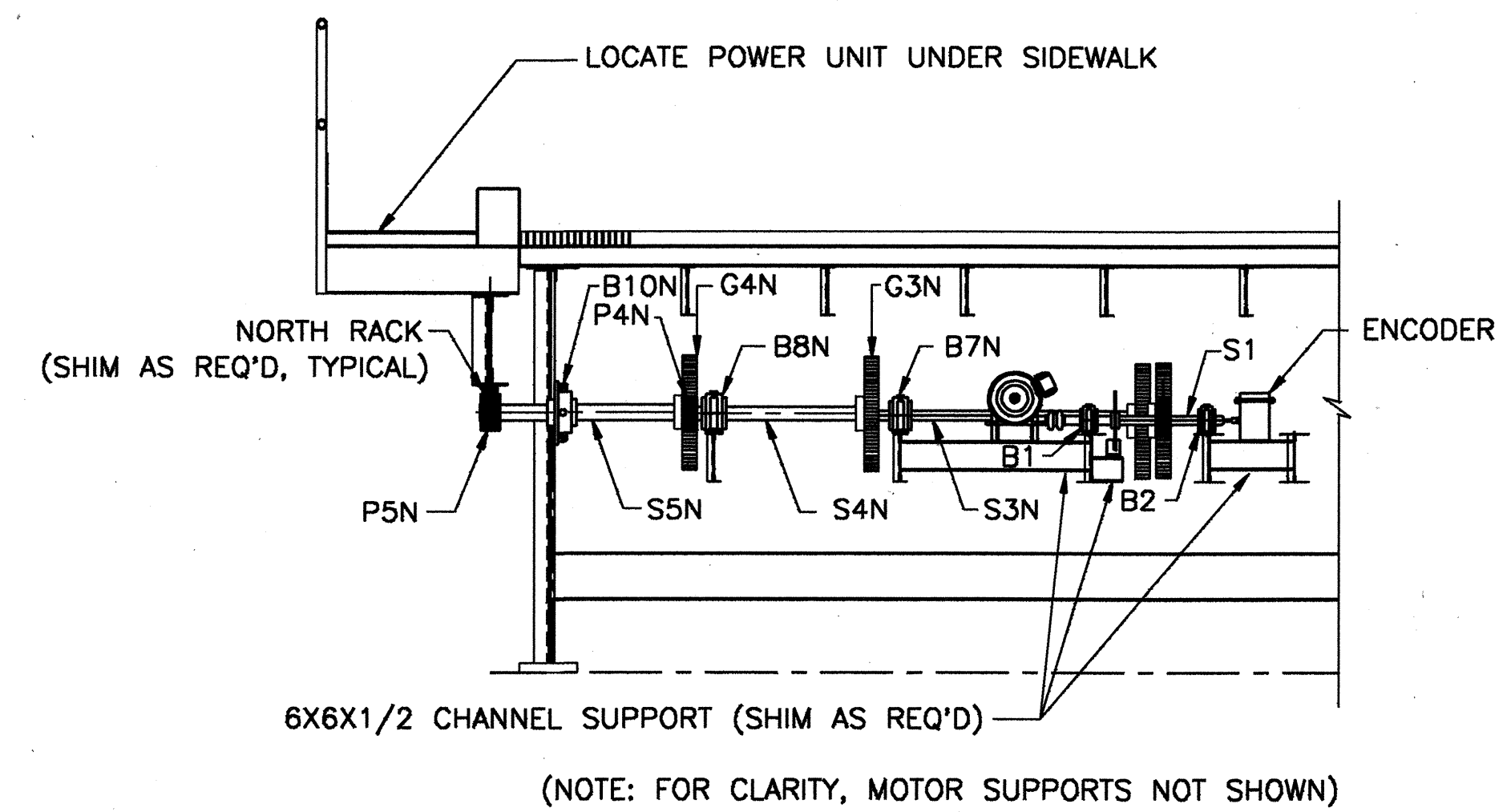
SECTION A-A (DIMENSIONS)
SCALE: 3/8" = 1'-0"



SECTION A-A (PARTS/NOTES)
SCALE: 3/8" = 1'-0"



SECTION B-B (DIMENSIONS)
SCALE: 3/8" = 1'-0"



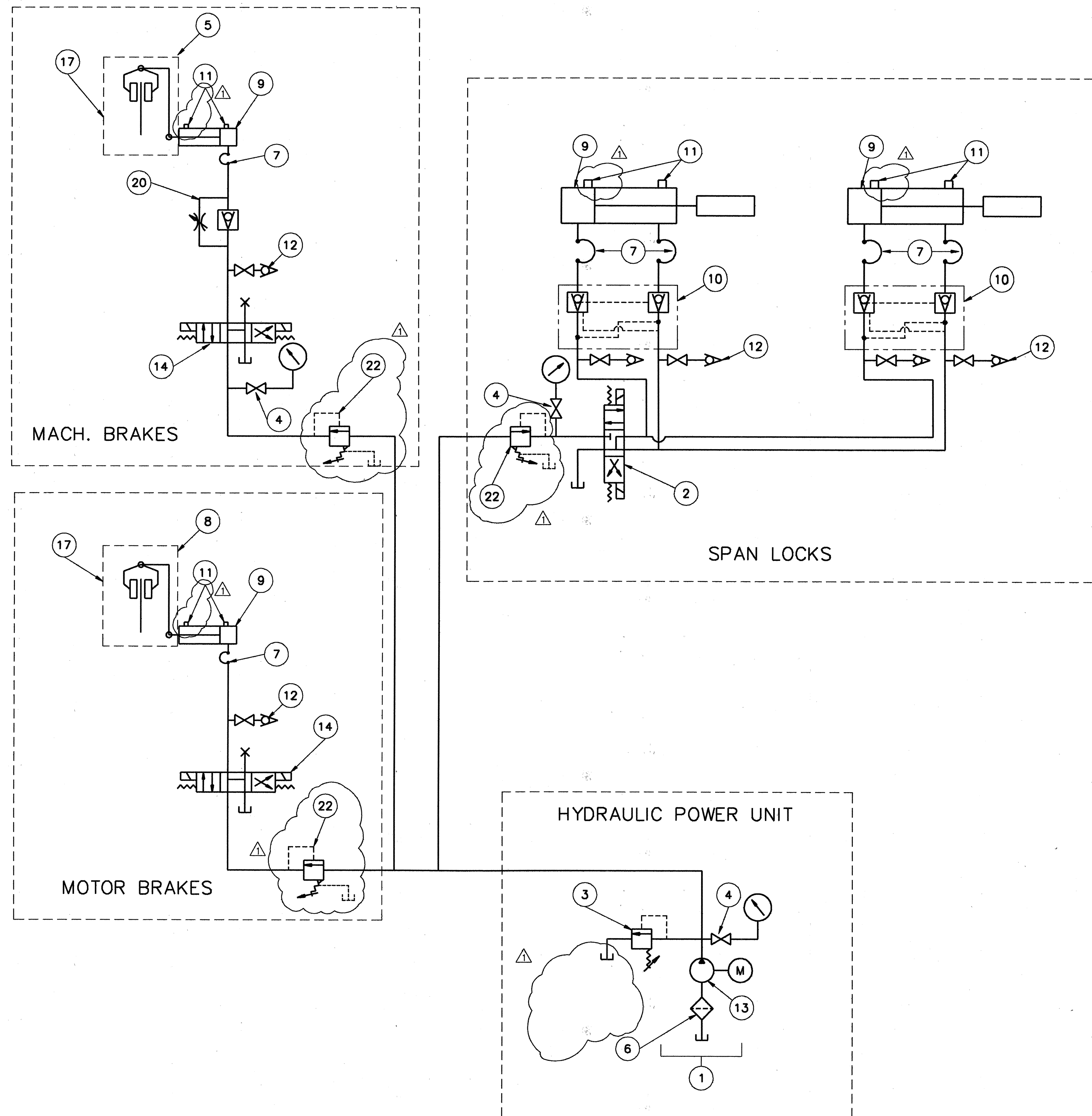
SECTION B-B (PARTS/NOTES)
SCALE: 3/8" = 1'-0"

NOTE:
REFER TO SHEET M-2 FOR LOCATION OF SECTION CUTS

PLANNING & DESIGN
CONSTRUCTION SERVICES
06/01/95 06:44:30 AEV PRODUCED BY DSA CAD SYSTEM

REVISIONS			REVISIONS			SEAL:	Drawn by AEV 5-95 Checked by LET 5-95 Designed by LET 5-95 Checked by RMC 5-95 Approved by R.M. COURET	 DSA GROUP, INC. 2005 PAN AM CIRCLE TAMPA, FLORIDA 33607	 PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS	SHEET TITLE:	SHEET
Date	By	Description	Date	By	Description					SECTIONS AND ELEVATIONS	M-6
										PROJECT NAME: BECKETT BRIDGE REPAIRS	

R.M. Couret



BRAKES & SPANLOCK HYDRAULIC SYSTEM DIAGRAM

BILL OF MATERIAL					
ITEM NO.	NO. REQ'D.	PART NUMBER	DESCRIPTION	BASE MFR	ALTERNATE MFR *
1	1	JIC 10 A	10 GALLON JIC RESERVOIR W/DRIP STAND	MARCO	
**	2	1 D2FWE C	PROPORTIONAL DIRECTIONAL VALVE	PARKER	SUN
**	3	1 D03	3 STATION MANIFOLD W/RELIEF VALVE	PARKER	SUN
**	4	3 PG3000 W/ NVG250B	GAUGE W/ NEEDLE VALVE	HSI	PARKER
	5	1 L-11	MACHINERY BRAKE	STOCKBRIDGE	MICO
**	6	1 40CN110B	RETURN FILTER	PARKER	SUN
	7	12	FLEXIBLE HOSE	PARKER	GOODYEAR
	8	1 L-11	MOTOR BRAKE	STOCKBRIDGE	MICO
	9	4 4CC2HLUS14AC9	4" BORE x 9" STROKE HYDRAULIC CYLINDER	PARKER	SUN
**	10	2	DUAL PILOT OPERATED CHECK VALVE MODULE	PARKER	HSI
+	11	8 AB-3	LIMIT SWITCH	PARKER	HONEYWELL
	12	6	CONNECTION FOR HAND PUMP	PARKER	SUN
	13	1 Q25145A	1 1/2 HP HYDRAULIC POWER UNIT	PARKER	MONARCH
	14	2 D1F-EC	PROPORTIONAL DIRECTIONAL VALVE	PARKER	SUN
	15	2	ROTOR/CALIPER SYMBOL	STOCKBRIDGE	MICO
**	16	1 RCVA	RELIEF VALVE MODULE	PARKER	SUN
***	17	2 9662K34	1.125" X 7.58" RETURN SPRING, K=168	MCMMASTER	STOCKBRIDGE
***	18	2 NA	11" DIA. VENTILATED ROTOR	STOCKBRIDGE	HAYES
***	19	2 NA	28 SQ. INCH CALIPER PADS	STOCKBRIDGE	HAYES
	20	1 SHOP	COMBINATION CHECK VALVE AND NEEDLE VALVE	PARKER	SUN
	21	3 EW55	DRIVER BOARD FOR DIRECTIONAL VALVES	PARKER	SUN
	22	3 PR4005	PRESSURE REDUCING VALVE	PARKER	SUN

- * DENOTES "OR APPROVED EQUAL"
- ** DENOTES ITEM INCLUDED AS PART OF ITEM 13
- + DENOTES ITEM INCLUDED AS PART OF ITEM 18
- * DENOTES ITEM LOCATED IN CONTROL CONSOLE
- *** DENOTES ITEM INCLUDED AT PART OF ITEMS 5 AND 8

NOTES:

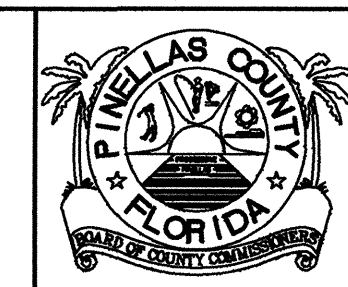
1. HYDRAULIC POWER UNIT ROTATES WITH LEAF. PROVIDE TOTALLY ENCLOSED UNIT.
2. PROVIDE HAND PUMP FOR MANUAL RELEASE OF BRAKE AND SPAN LOCKS.
3. REPLACE STOCKBRIDGE K 25.5 SPRING WITH ITEM 17

R:\BROOKS\CADD\MECH
C:\WORK\BMECH7 01/30/96 16:38:49 ALC PRODUCED BY DSA CADD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description
1/31/96	RMC	ADDEND. 2-ADDED PRV & DEL. PROP. CNTL. VALVE ADDED SUBSYSTEM TITLES ADDED ITEM 22 CHANGED PART NO'S FOR ITEMS 2,14,20 CHANGED QTY'S FOR ITEMS 9,11,12,14,20			

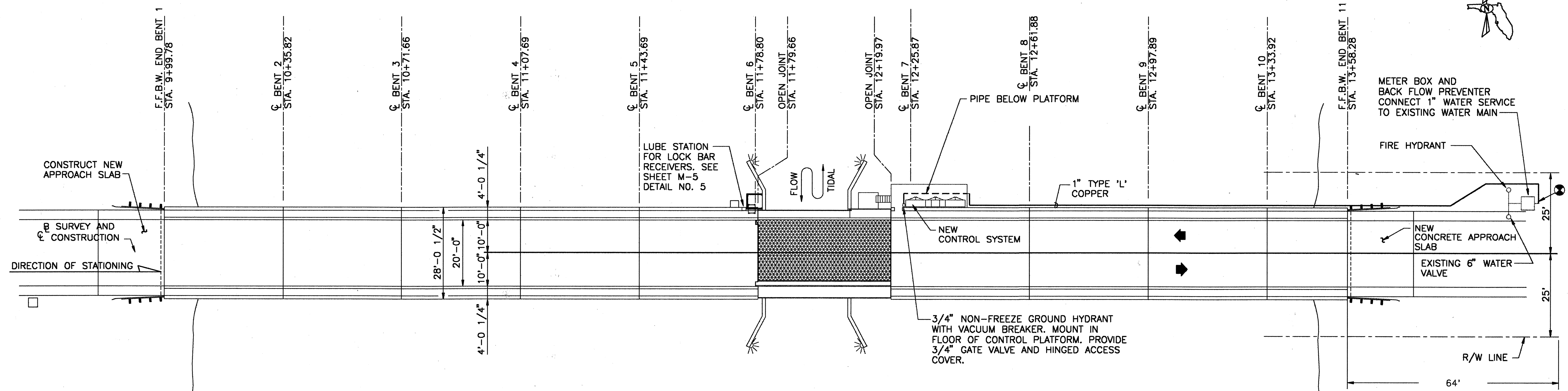
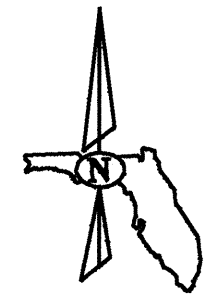
Drawn by	Names	Dates
ALC	ALC	5-95
LET	LET	5-95
LET	LET	5-95
RMC	RMC	5-95
R.M. COURET	R.M. COURET	

DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



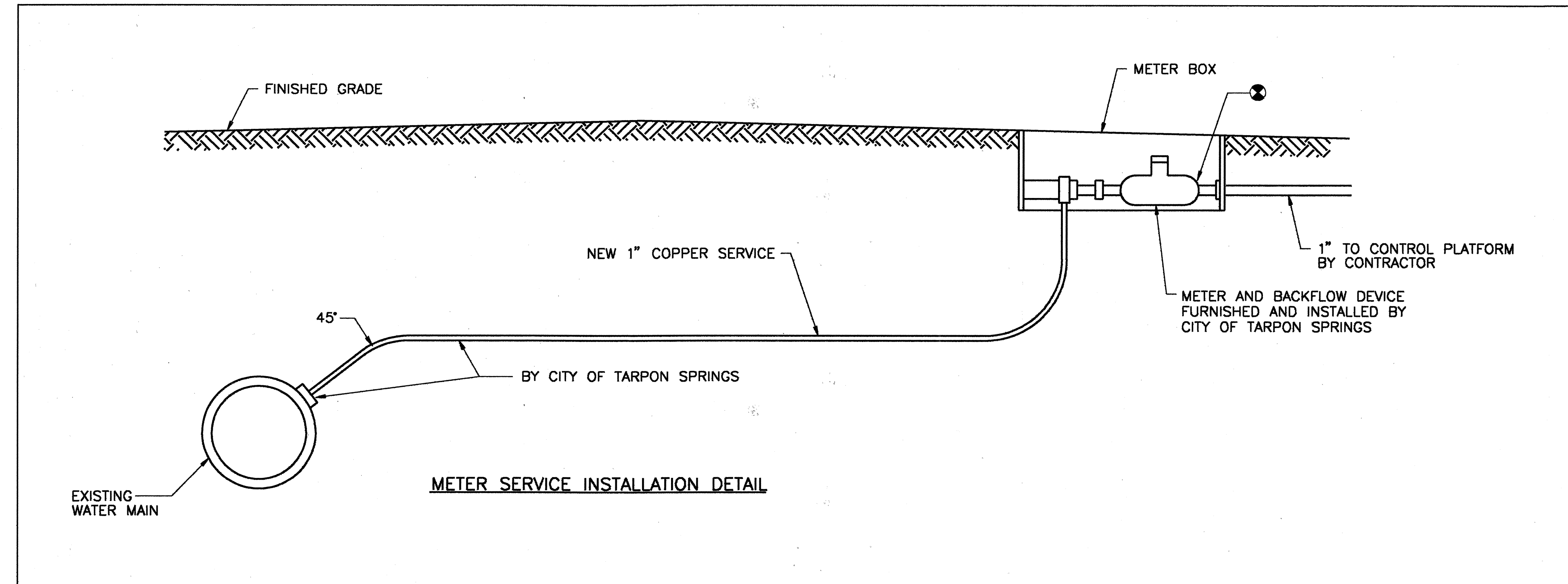
PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: HYDRAULIC SYSTEM SCHEMATIC	SHEET NO. M-7
PROJECT NAME: BECKETT BRIDGE REPAIRS	



PLAN

SYMBOLS USED
 ● = POINT OF CONNECTION



METER SERVICE INSTALLATION DETAIL

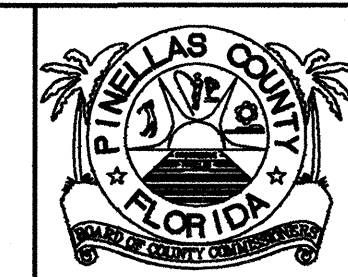
- NOTES:
1. MAKE CONNECTION IN ACCORDANCE WITH THESE DRAWINGS AND CITY OF TARPON SPRINGS WATER DEPT. STANDARD SPECIFICATIONS. PROVIDE CATHODIC PROTECTION FOR UNDERGROUND TYPE "L" COPPER SERVICE PIPE. COAT EXPOSED AND UNDERGROUND PIPING WITH 50 MIL DRY COATING OF BITUMASTIC.
 2. PAYMENT FOR SERVICE CONNECTION AND MATERIALS TO PROVIDE WATER SERVICE AT THE CONTROL PLATFORM SHALL BE INCLUDED IN ITEM NO. 512-1 "TENDER FACILITIES AND EQUIPMENT".

RA 94085 CADD/BRIDGE
 CA WORK/BMECH/8 08/01/95 07:13:00 AEW PRODUCED BY DSA CADD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

Names	Dates
Drawn by CLM	5-95
Checked by LET	5-95
Designed by LET	5-95
Checked by RMC	5-95
Approved by R.M. COURET	

DSA GROUP INC.
 DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607

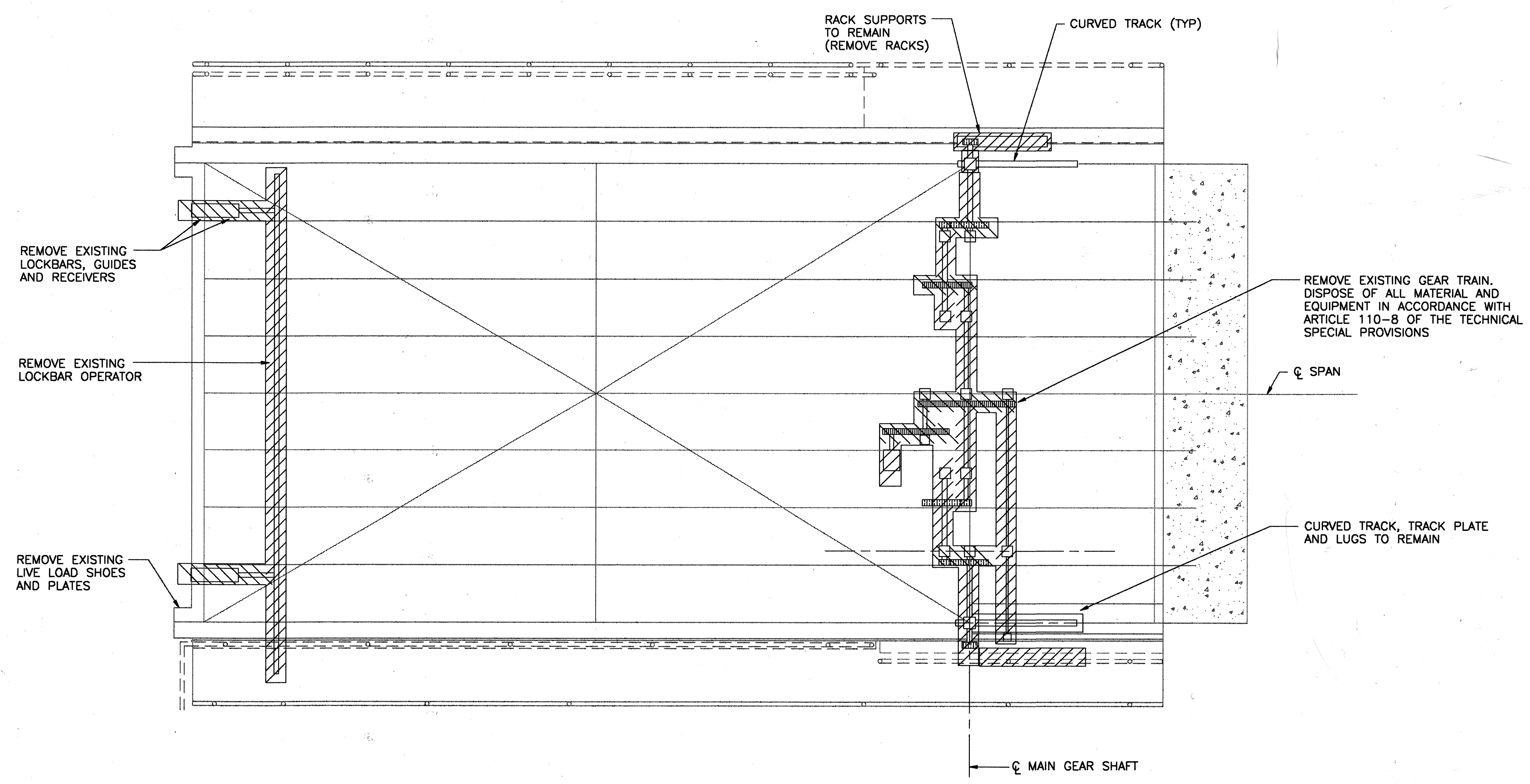
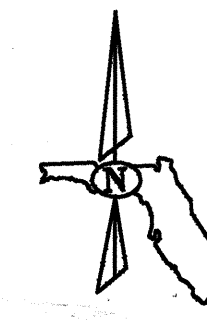


PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS

SHEET TITLE: MECHANICAL SITE PLAN
PROJECT NAME: BECKETT BRIDGE REPAIRS

SHEET
M-8

R.M. Couret



DEMOLITION PLAN

DS GROUP CAD/MECH
 WORK REVISED 05/19/95 09:45:21 AEV PRODUCED BY DSA CAD SYSTEM

REVISIONS			REVISIONS		
Date	By	Description	Date	By	Description

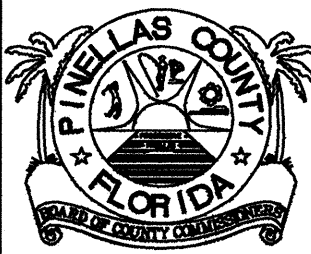
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Drawn by	Home	Date
ALC		5-95
Checked by	LET	5-95
Designed by	LET	5-95
Checked by	RMC	5-95
Approved by	R.M. COURET	

R.M. Couret



DSA GROUP, INC.
 2005 PAN AM CIRCLE
 TAMPA, FLORIDA 33607



PINELLAS COUNTY
 DEPARTMENT OF
 PUBLIC WORKS

SHEET TITLE:	MACHINERY DEMOLITION
PROJECT NAME:	BECKETT BRIDGE REPAIRS

SHEET
M-9

APPENDIX C:

CONCEPT PLANS AND PROFILES



MATCHLINE STA. 134+60.00

LEGEND

→ DEMOTES DIRECTION OF TRAVEL

ECDriver
 500 N. WESTSHORE BOULEVARD
 SUITE 500
 TAMPA, FL 33609
 CERT. OF AUTHORIZATION #3838

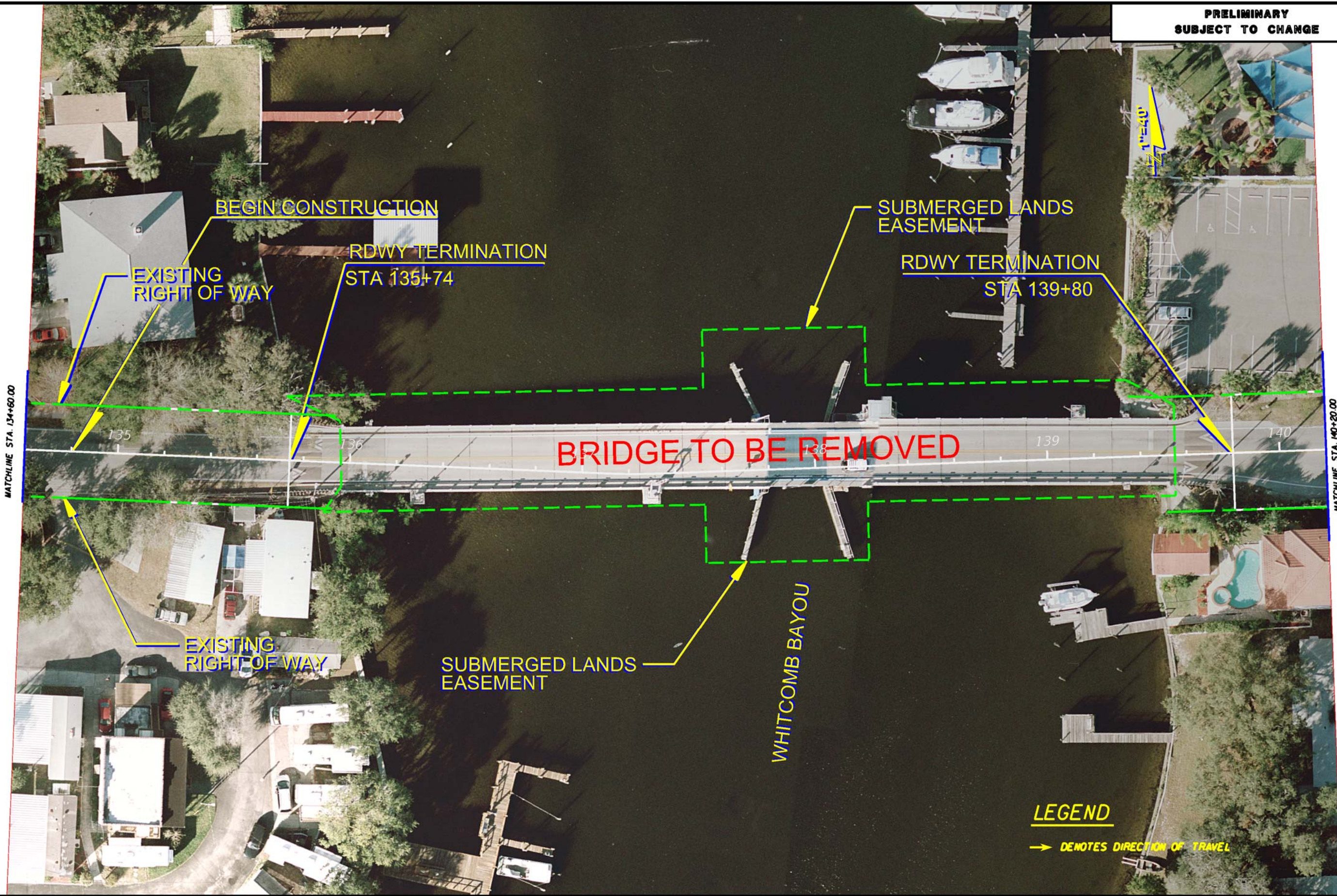


BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161
FDOT FPN: 424385-1-28-01

DATE

**PERMANENT REMOVAL OF BRIDGE
 CONCEPT PLANS**

SHEET NO.
1



PRELIMINARY
SUBJECT TO CHANGE



ECDriver
ASSOCIATES
 500 N. WESTSHORE BOULEVARD
 SUITE 500
 TAMPA, FL 33609
 CERT. OF AUTHORIZATION #3838



BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161
FDOT FPN: 424385-1-28-01

DATE

PERMANENT REMOVAL OF BRIDGE
CONCEPT PLANS

SHEET NO.
 3



MATCHLINE STA. 145+80.00



BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161
FDOT FPN: 424385-1-28-01

DATE

PERMANENT REMOVAL OF BRIDGE
CONCEPT PLANS

SHEET NO.
4

ECDriver
 500 N. WESTSHORE BOULEVARD
 SUITE 500
 TAMPA, FL 33609
 CERT. OF AUTHORIZATION #3838



BEGIN PROJECT

CHESAPEAKE DR.

EXISTING
RIGHT OF WAY

PROP. SIDEWALK

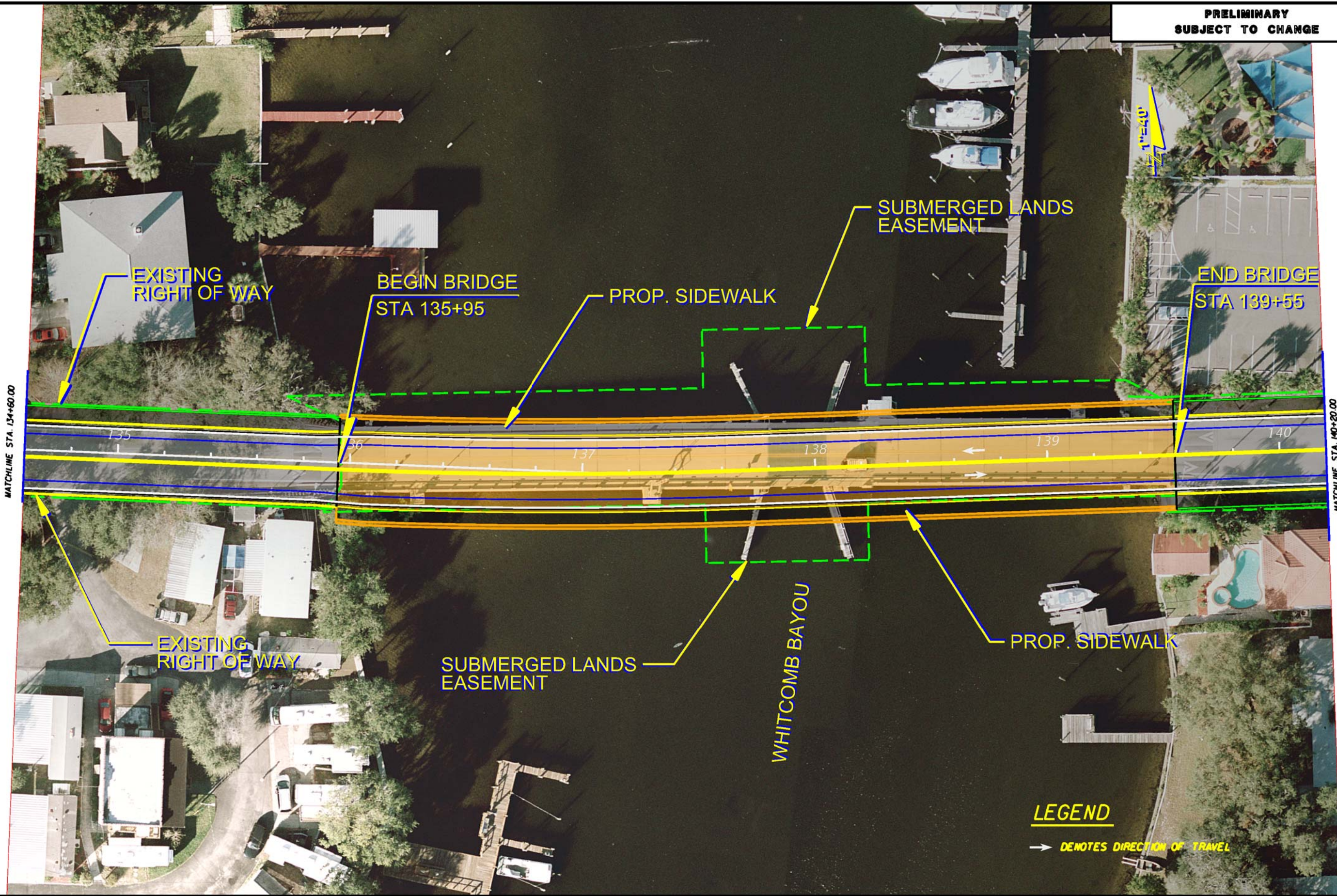
EXISTING
RIGHT OF WAY

LEGEND

→ DEMOTES DIRECTION OF TRAVEL

MATCHLINE STA. 134+60.00

PRELIMINARY
SUBJECT TO CHANGE



PRELIMINARY
SUBJECT TO CHANGE



ECDriver
 500 N. WESTSHORE BOULEVARD
 SUITE 500
 TAMPA, FL 33609
 CERT. OF AUTHORIZATION #3838



BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161
FDOT FPN: 424385-1-28-01

DATE

LOW-LEVEL MOVABLE BRIDGE ALTERNATIVE
CONCEPT PLANS

SHEET NO.
3



MATCHLINE STA. 145+80.00

FOREST AVE.

END RESURFACING
END PROJECT

EXISTING
RIGHT OF WAY

EXISTING
RIGHT OF WAY

LEGEND

DENOTES DIRECTION OF TRAVEL

146

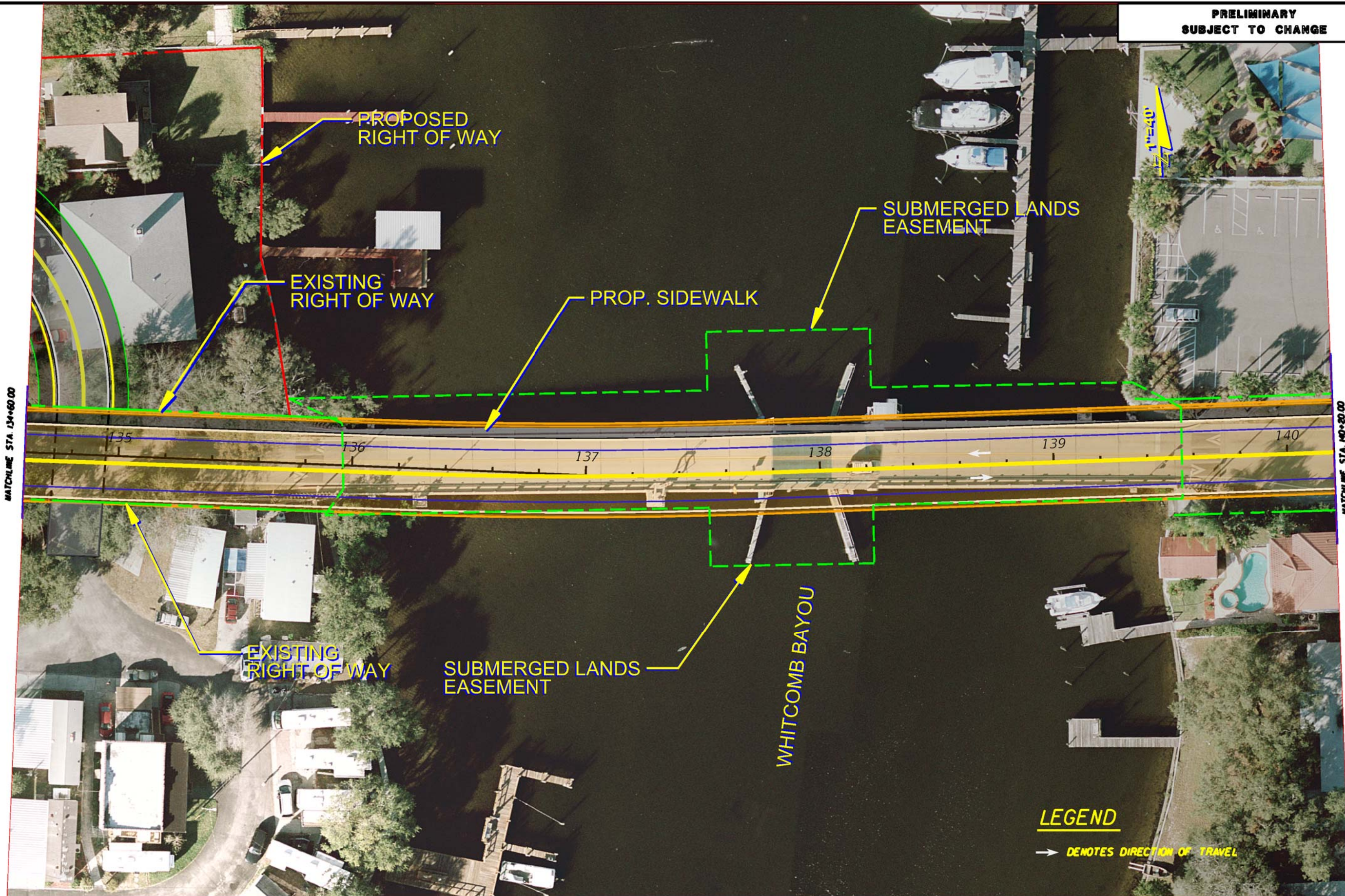
148



LEGEND

→ DEMOTES DIRECTION OF TRAVEL

PRELIMINARY
SUBJECT TO CHANGE



LEGEND

→ DENOTES DIRECTION OF TRAVEL

ECDriver
ASSOCIATES
500 N. WESTSHORE BOULEVARD
SUITE 500
TAMPA, FL 33609
CERT. OF AUTHORIZATION #3838

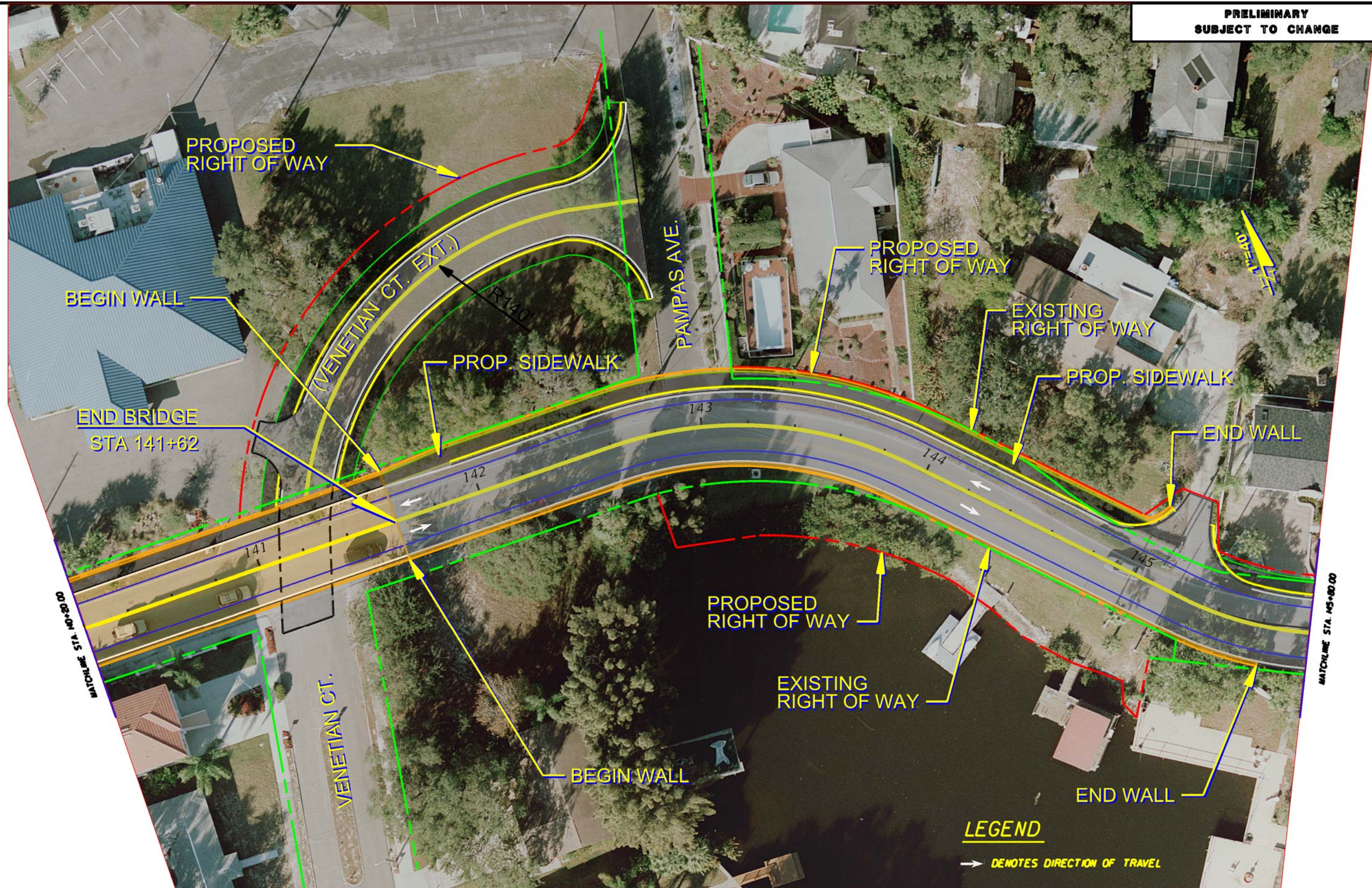


BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161
FDOT FPN: 424385-1-28-01

DATE

MID-LEVEL FIXED BRIDGE OPTION A
CONCEPT PLANS

SHEET NO.
2



PRELIMINARY
SUBJECT TO CHANGE



MATCHLINE STA. 45+80.00

LEGEND
→ DENOTES DIRECTION OF TRAVEL

ECDriver
ASSOCIATES
500 N. WESTSHORE BOULEVARD
SUITE 500
TAMPA, FL 33609
CERT. OF AUTHORIZATION #3838

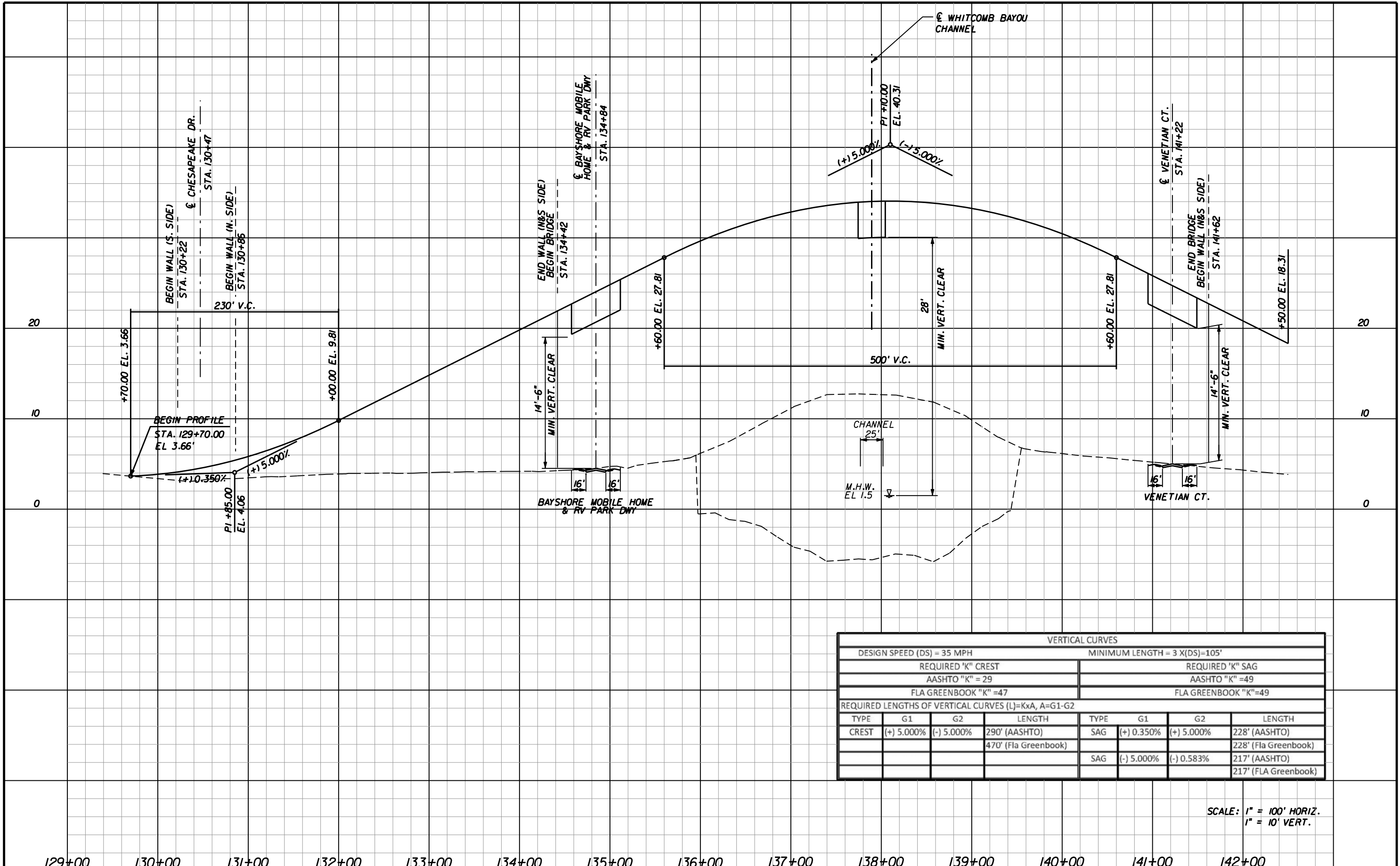


BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161
FDOT FPN: 424385-1-28-01

DATE

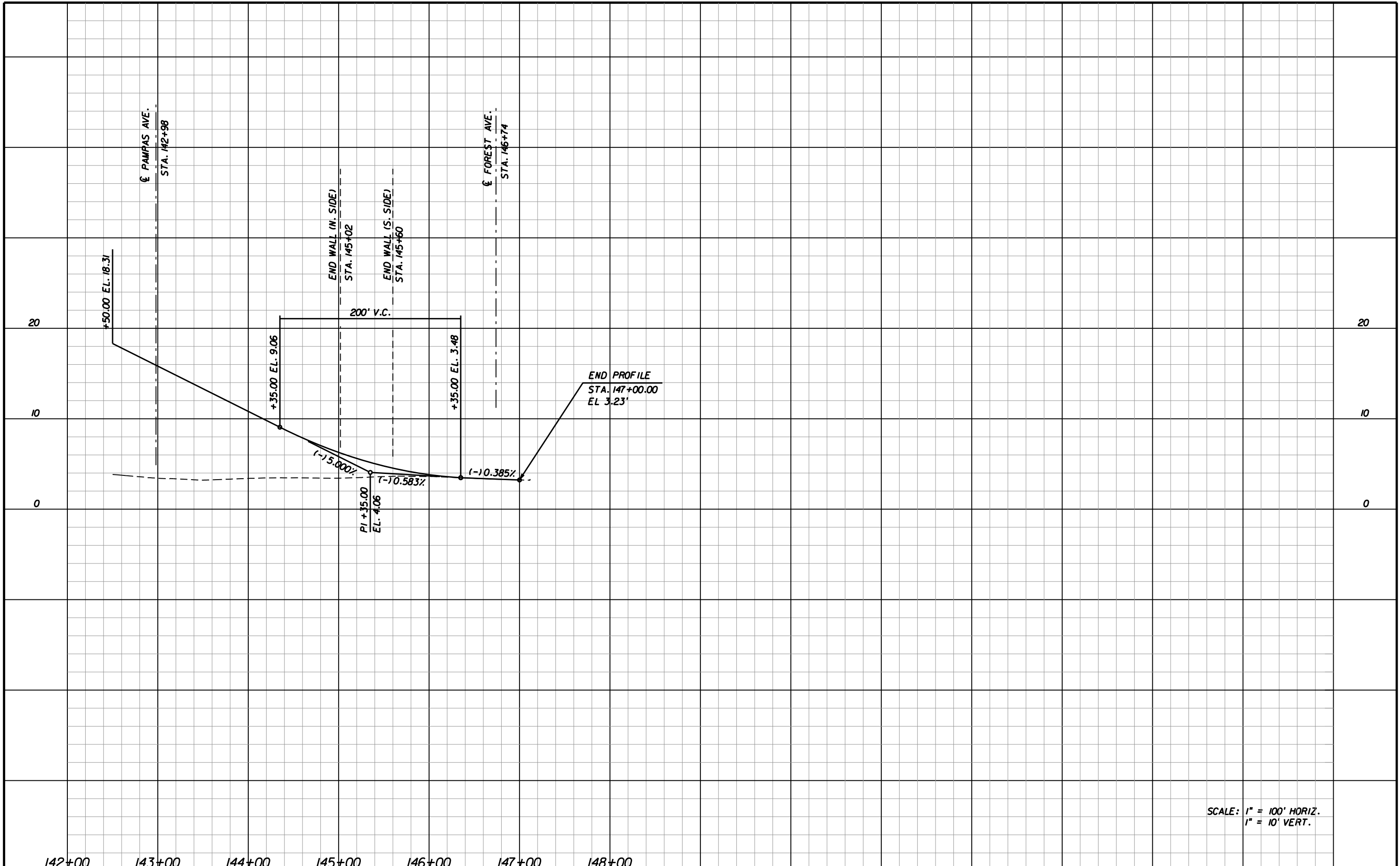
MID-LEVEL FIXED BRIDGE OPTION A
CONCEPT PLANS

SHEET NO.
4



VERTICAL CURVES							
DESIGN SPEED (DS) = 35 MPH				MINIMUM LENGTH = 3 X(DS)=105'			
REQUIRED "K" CREST				REQUIRED "K" SAG			
AASHTO "K" = 29				AASHTO "K" = 49			
FLA GREENBOOK "K" = 47				FLA GREENBOOK "K" = 49			
REQUIRED LENGTHS OF VERTICAL CURVES (L)=KxA, A=G1-G2							
TYPE	G1	G2	LENGTH	TYPE	G1	G2	LENGTH
CREST	(+) 5.000%	(-) 5.000%	290' (AASHTO)	SAG	(+) 0.350%	(+) 5.000%	228' (AASHTO)
			470' (Fla Greenbook)				228' (Fla Greenbook)
				SAG	(-) 5.000%	(-) 0.583%	217' (AASHTO)
							217' (FLA Greenbook)

SCALE: 1" = 100' HORIZ.
1" = 10' VERT.



SCALE: 1" = 100' HORIZ.
1" = 10' VERT.

142+00 143+00 144+00 145+00 146+00 147+00 148+00

ECDriver
 500 N. WESTSHORE BOULEVARD
 SUITE 500
 TAMPA, FL 33609
 CERT. OF AUTHORIZATION #3838



BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161

DATE

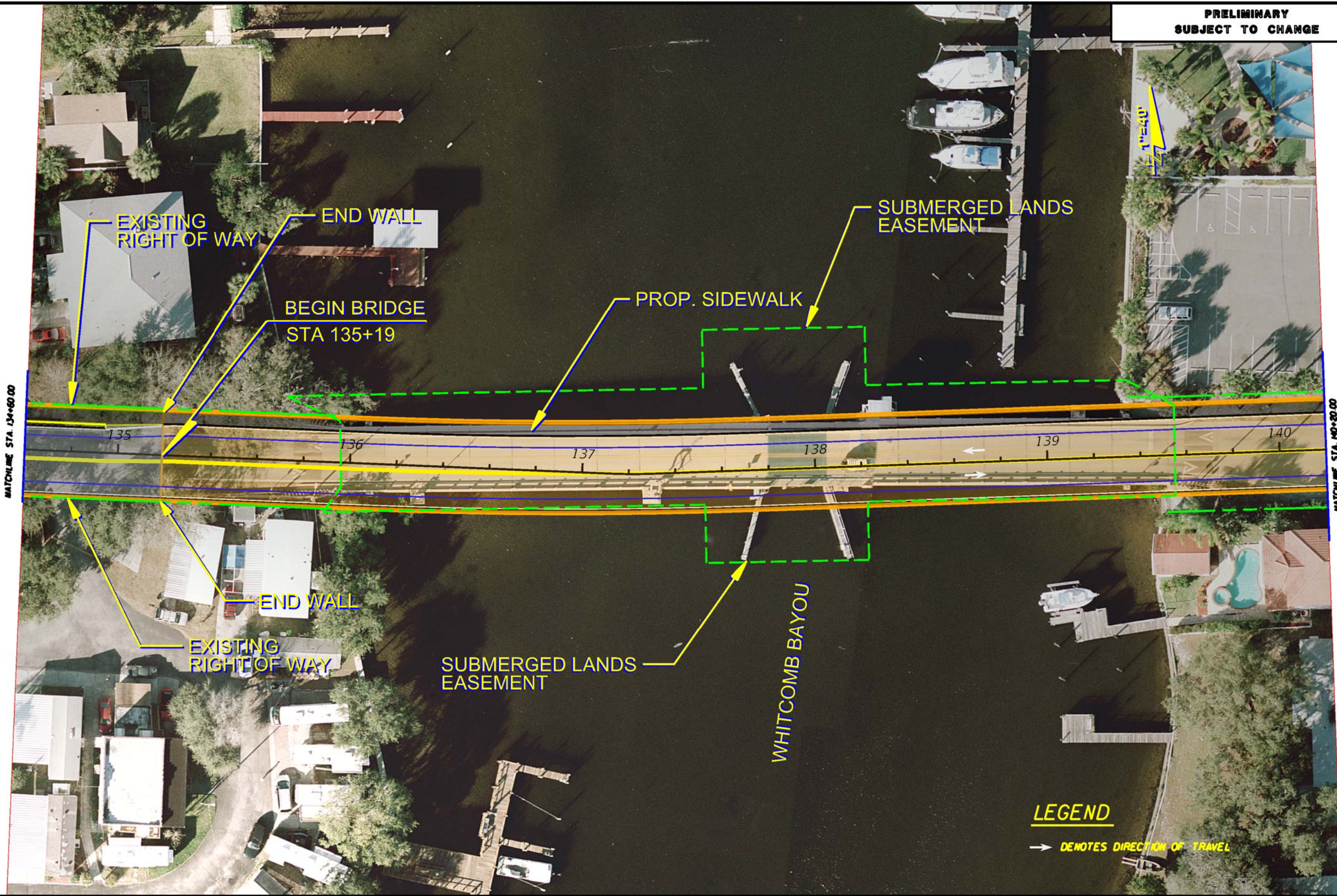
BECKETT BRIDGE PROFILE
MID-LEVEL FIXED BRIDGE ALTERNATIVE A

SHEET NO.
2

PRELIMINARY
SUBJECT TO CHANGE



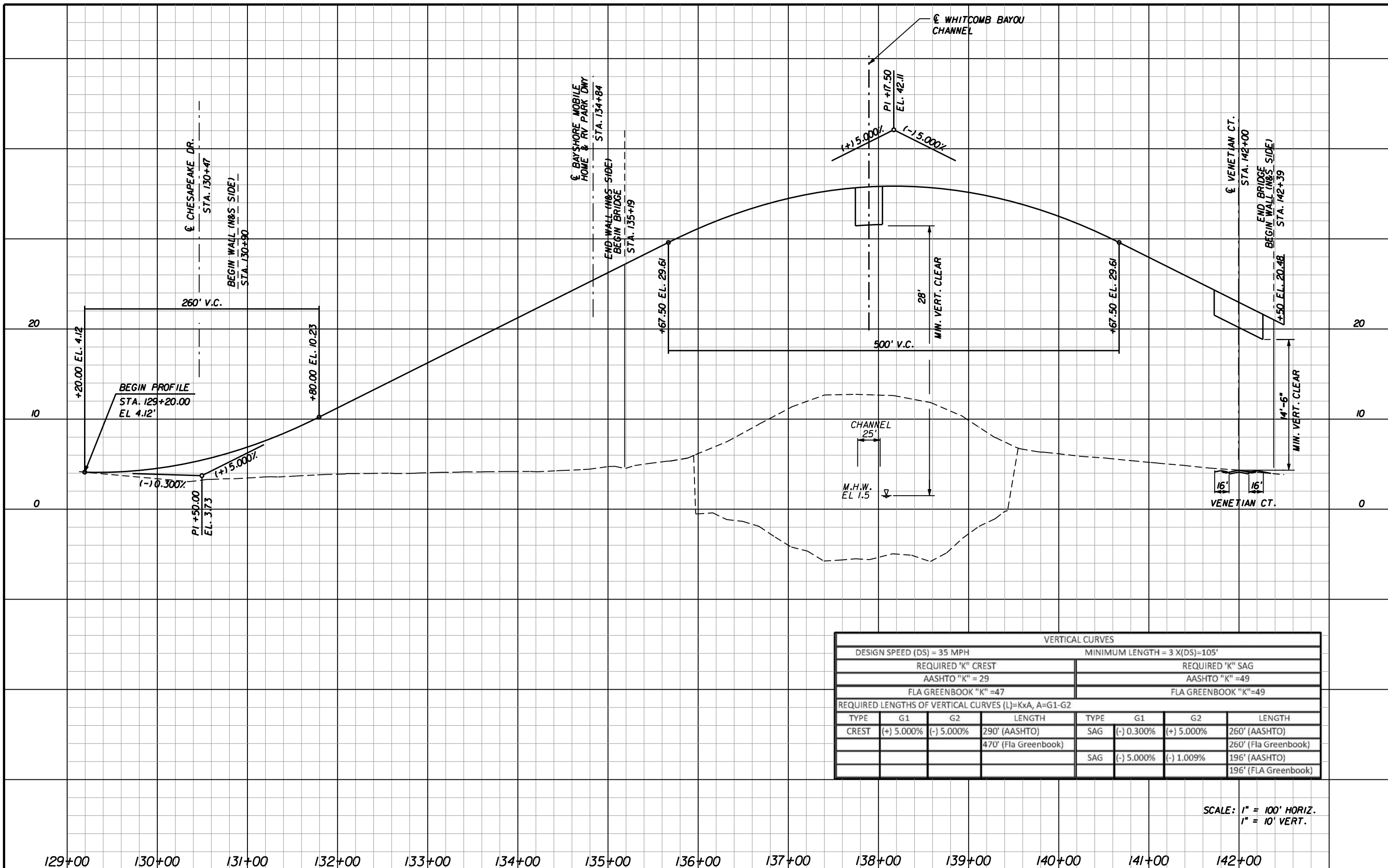
PRELIMINARY
SUBJECT TO CHANGE



PRELIMINARY
SUBJECT TO CHANGE

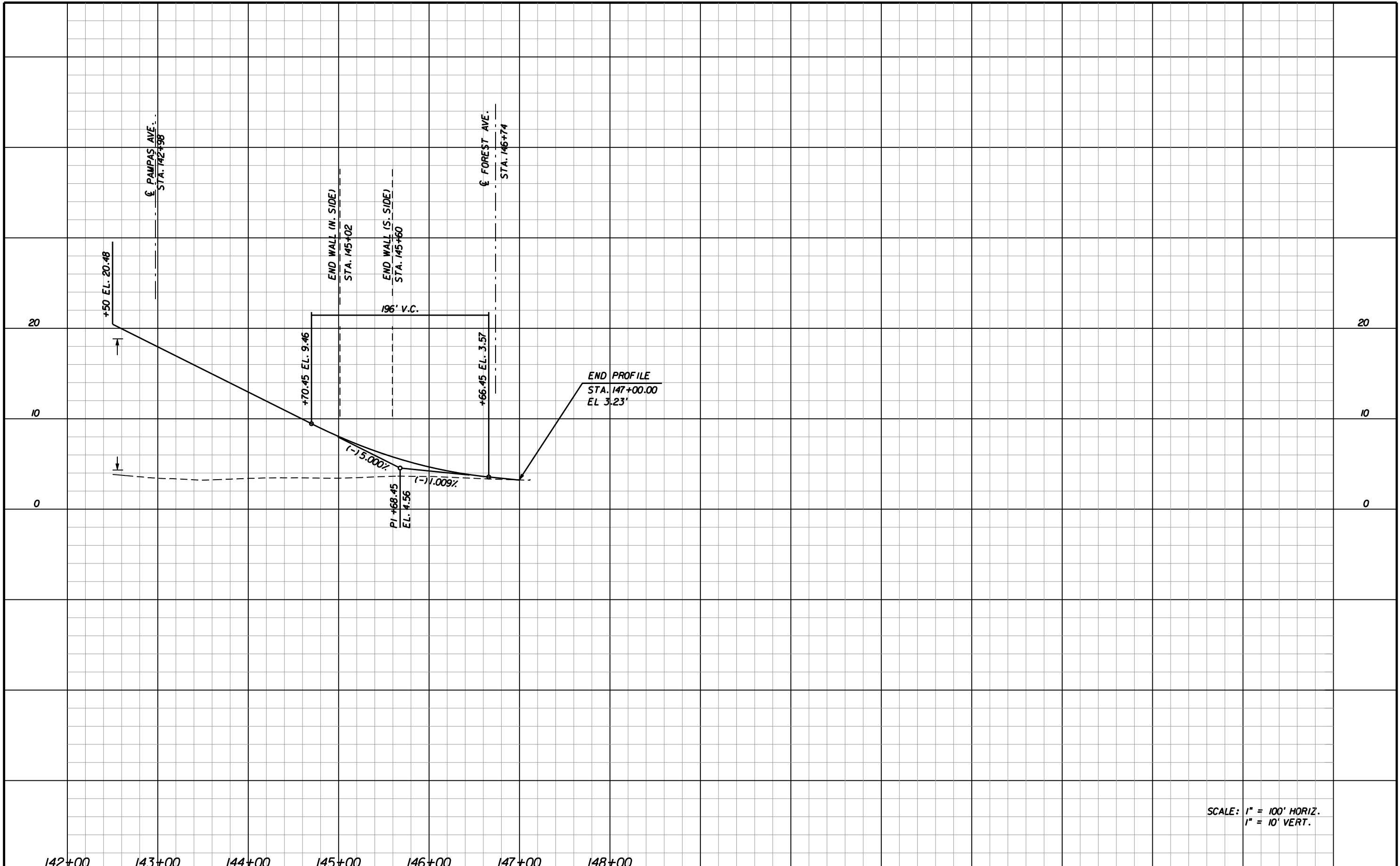






VERTICAL CURVES							
DESIGN SPEED (DS) = 35 MPH				MINIMUM LENGTH = 3 X(DS)=105'			
REQUIRED "K" CREST				REQUIRED "K" SAG			
AASHTO "K" = 29				AASHTO "K" = 49			
FLA GREENBOOK "K" = 47				FLA GREENBOOK "K" = 49			
REQUIRED LENGTHS OF VERTICAL CURVES (L)=KxA, A=G1-G2							
TYPE	G1	G2	LENGTH	TYPE	G1	G2	LENGTH
CREST	(+) 5.000%	(-) 5.000%	290' (AASHTO)	SAG	(-) 0.300%	(+) 5.000%	260' (AASHTO)
			470' (Fla Greenbook)				260' (Fla Greenbook)
				SAG	(-) 5.000%	(-) 1.009%	196' (AASHTO)
							196' (FLA Greenbook)

SCALE: 1" = 100' HORIZ.
1" = 10' VERT.



SCALE: 1" = 100' HORIZ.
1" = 10' VERT.

142+00 143+00 144+00 145+00 146+00 147+00 148+00

ECDriver
 500 N. WESTSHORE BOULEVARD
 SUITE 500
 TAMPA, FL 33609
 CERT. OF AUTHORIZATION #3838



BECKETT BRIDGE (PD&E) STUDY
PINELLAS COUNTY PROJECT NO.: PID 2161

DATE

BECKETT BRIDGE PROFILE
MID-LEVEL FIXED BRIDGE ALTERNATIVE B

SHEET NO.
2

APPENDIX D:
SURVEY LOG SHEET

Ent D (FMSF only) _____



Survey Log Sheet

Florida Master Site File
Version 4.1 1/07

Survey # (FMSF only) _____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (name and project phase) Beckett Bridge PD&E Study from Chesapeake Drive to Forest Avenue
Tarpon Springs, Pinellas County, FL

Report Title (exactly as on title page) Beckett Bridge PD&E Study from Chesapeake Drive to Forest Avenue Tarpon
Springs, Pinellas County, FL

Report Authors (as on title page, last names first) 1. Janus Research 3. _____
2. _____ 4. _____

Publication Date (year) 2013 Total Number of Pages in Report (count text, figures, tables, not site forms) 121

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
Janus Research, 1107 N. Ward Street, Tampa FL 33607

Supervisors of Fieldwork (even if same as author) Names Hoffman, Kate and Streelman, Amy

Affiliation of Fieldworkers: Organization Janus Research City _____

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)

1. Tarpon Springs 3. Chesapeake Drive 5. Whitcomb Bayou 7. N. Spring Boulevard
2. Beckett Bridge 4. Forest Avenue 6. N. Riverside Drive 8. _____

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)

Name Pinellas County Organization Florida Dept of Transportation - District 7

Address/Phone/E-mail 14 South Ft Harrison Avenue Clearwater, FL 33756

Recorder of Log Sheet Janus Research Date Log Sheet Completed 8-16-2012

Is this survey or project a continuation of a previous project? No Yes: Previous survey #s (FMSF only) _____

Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)

1. Pinellas 3. _____ 5. _____
2. _____ 4. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

1. Name <u>TARPON SPRINGS</u>	Year <u>1987</u>	4. Name _____	Year _____
2. Name _____	Year _____	5. Name _____	Year _____
3. Name _____	Year _____	6. Name _____	Year _____

Description of Survey Area

Dates for Fieldwork: Start 7-20-2012 End 7-20-2012 Total Area Surveyed (fill in one) _____ hectares 19 acres

Number of Distinct Tracts or Areas Surveyed 2

If Corridor (fill in one for each) Width: _____ meters _____ feet Length: _____ kilometers _____ miles

Research and Field Methods

Types of Survey (check all that apply): archaeological architectural historical/archival underwater
damage assessment monitoring report other(describe): _____

Scope/Intensity/Procedures Visually inspected all potentially historic resources within the project Area of Potential Effect.

Preliminary Methods (check as many as apply to the project as a whole)

Florida Archives (Gray Building) library research- local public local property or tax records other historic maps
Florida Photo Archives (Gray Building) library-special collection - nonlocal newspaper files soils maps or data
Site File property search Public Lands Survey (maps at DEP) literature search windshield survey
Site File survey search local informant(s) Sanborn Insurance maps aerial photography
other (describe): Janus Library

Archaeological Methods (check as many as apply to the project as a whole)

Check here if NO archaeological methods were used.
surface collection, controlled shovel test-other screen size block excavation (at least 2x2 m)
surface collection, uncontrolled water screen soil resistivity
shovel test-1/4" screen posthole tests magnetometer
shovel test-1/8" screen auger tests side scan sonar
shovel test 1/16" screen coring pedestrian survey
shovel test-unscreened test excavation (at least 1x2 m) unknown
other (describe): _____

Historical/Architectural Methods (check as many as apply to the project as a whole)

Check here if NO historical/architectural methods were used.
building permits demolition permits neighbor interview subdivision maps
commercial permits exposed ground inspected occupant interview tax records
interior documentation local property records occupation permits unknown
other (describe): _____

Survey Results (cultural resources recorded)

Site Significance Evaluated? Yes No

Count of Previously Recorded Sites _____ Count of Newly Recorded Sites 16

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) _____

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) PI12017, PI12043, PI12044, PI12045, PI12046, PI12047, PI12048, PI12049, PI12050, PI12051, PI12052, PI12053, PI12054, PI12055, PI12068, PI12069

Site Forms Used: Site File Paper Form Site File Electronic Recording Form

REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)

SHPO USE ONLY SHPO USE ONLY SHPO USE ONLY
Origin of Report: 872 CARL UW 1A32 # _____ Academic Contract Avocational
Grant Project # _____ Compliance Review: CRAT # _____
Type of Document: Archaeological Survey Historical/Architectural Survey Marine Survey Cell Tower CRAS Monitoring Report
Overview Excavation Report Multi-Site Excavation Report Structure Detailed Report Library, Hist. or Archival Doc
MPS MRA TG Other: _____
Document Destination: _____ Plotability: _____

