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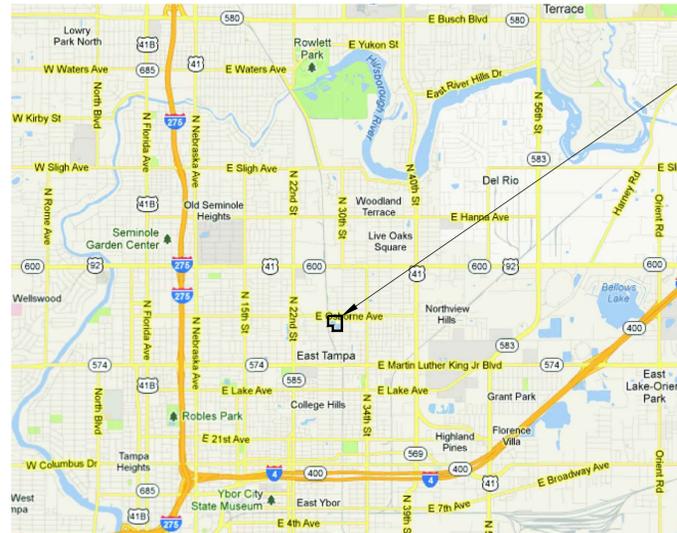
Please Email ALL Questions:
[MailTo:ContractAdministration@TampaGov.net](mailto:ContractAdministration@TampaGov.net)

Please Let Us Know If You Plan To Bid

City of Tampa
Contract Administration Department
306 E. Jackson St. #280A4N
Tampa, FL 33602
(813)274-8456

OSBORNE AVENUE POND PROPOSED BOARDWALK

CITY OF TAMPA PARKS AND RECREATION DEPARTMENT
PLANNING & DESIGN
3402 W. COLUMBUS DRIVE
TAMPA, FL 33607



PROJECT LOCATION
3803 E. OSBORNE AVENUE
TAMPA, FL

VICINITY MAP

S-T-R 5-29-19

INDEX TO DRAWINGS

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BID SET 11/04/13

REVISIONS					
BY	DATE	DESCRIPTION	BY	DATE	DESCRIPTION

MILLS and ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
3242 HENDERSON BOULEVARD - SUITE 300
TAMPA, FLORIDA 33609-3056
TELEPHONE: (813) 876-5869

FOR
CITY OF TAMPA
PARKS AND RECREATION DEPARTMENT
3402 W. COLUMBUS DRIVE
TAMPA, FL 33607

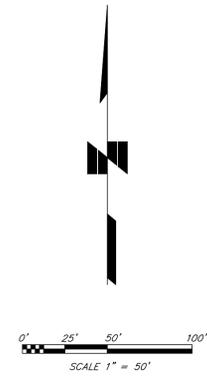
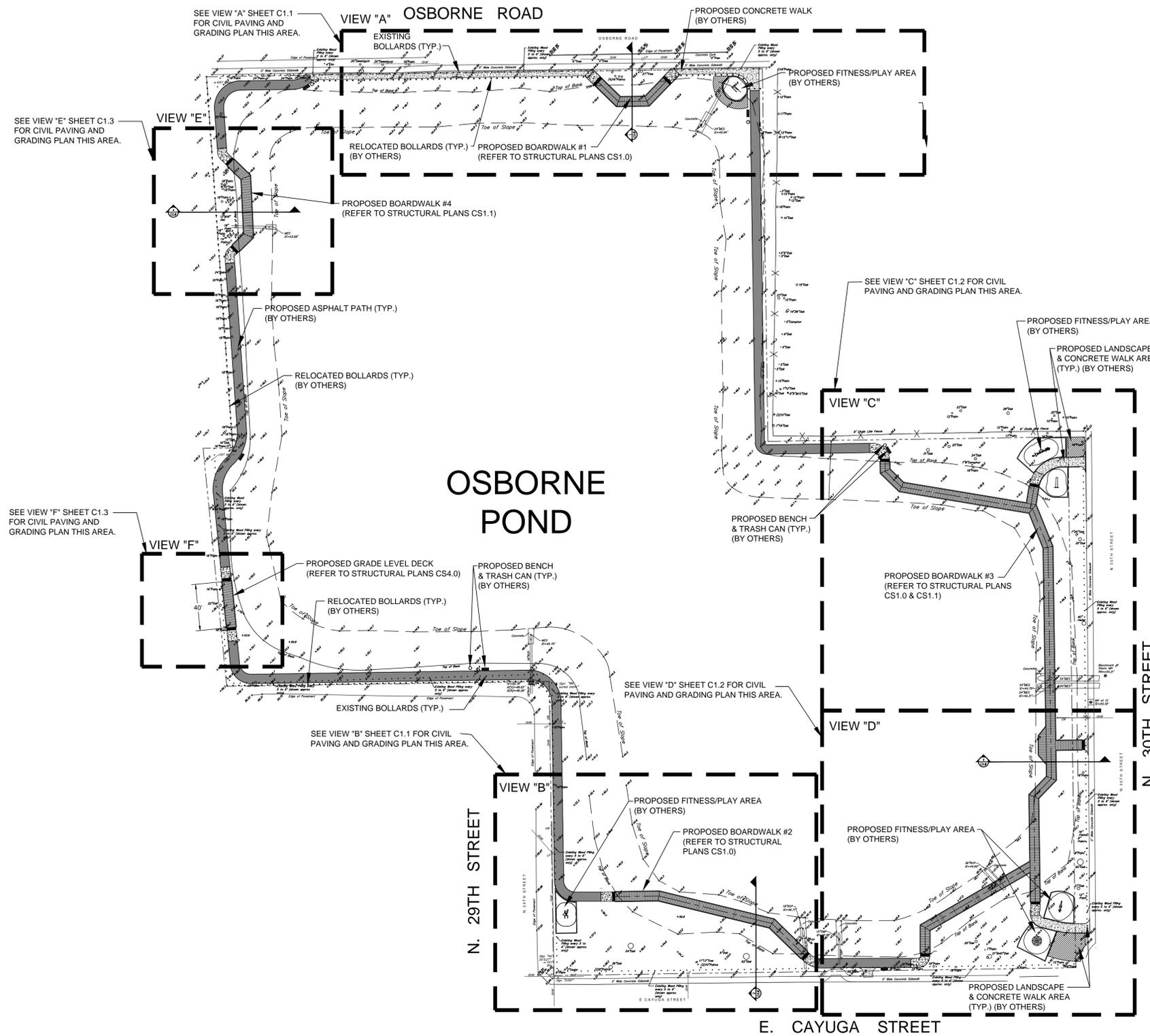
DRWN BY: CVM DATE: 0/16/13
DSGN BY: CVM DATE: 0/16/13
CHKD BY: LEM DATE: 0/16/13
SCALE: NA

LAWRENCE E. MILLS
P.E. NO. 22324 - E.B. NO. 3860
P.L.S. NO. 3141 - L.B. NO. 3868
STATE OF FLORIDA

PROJECT
OSBORNE AVENUE POND
PROPOSED BOARDWALK

COVER SHEET

SHEET
X0.0
JOB NO.
13-016



LEGEND: (AS APPLICABLE)

- approx. = approximate
- F.I.P. = Found Iron Pipe
- S.I.R. = Set 5/8" Iron Rod & LB 3868 Cap
- NO I.D. = No Identification
- Conc. = Concrete
- CMP. = Corrugated Metal Pipe
- ELEV. = Elevation
- el. = elevation
- exist. = existing
- G.T.I. = Grate Top Inlet
- HYD. = Fire Hydrant
- inv. = invert elevation
- LP. = light pole
- loc. = location
- MES. = mitered end section
- MH. = manhole
- OHW. = overhead wire
- PROP. = proposed
- RCP. = reinforced concrete pipe
- rep. = reported data
- R/W. = Right-of-way
- s.s. = Street Sign
- T.B.M. = Temporary Bench Mark
- (TYP.) = Typical
- UGT. = Underground Telephone
- U.P. = Utility Pole
- WM. = Water Main
- WV. = Water Valve
- +17.45 = Existing Grade
- 17.35 = Proposed Grade

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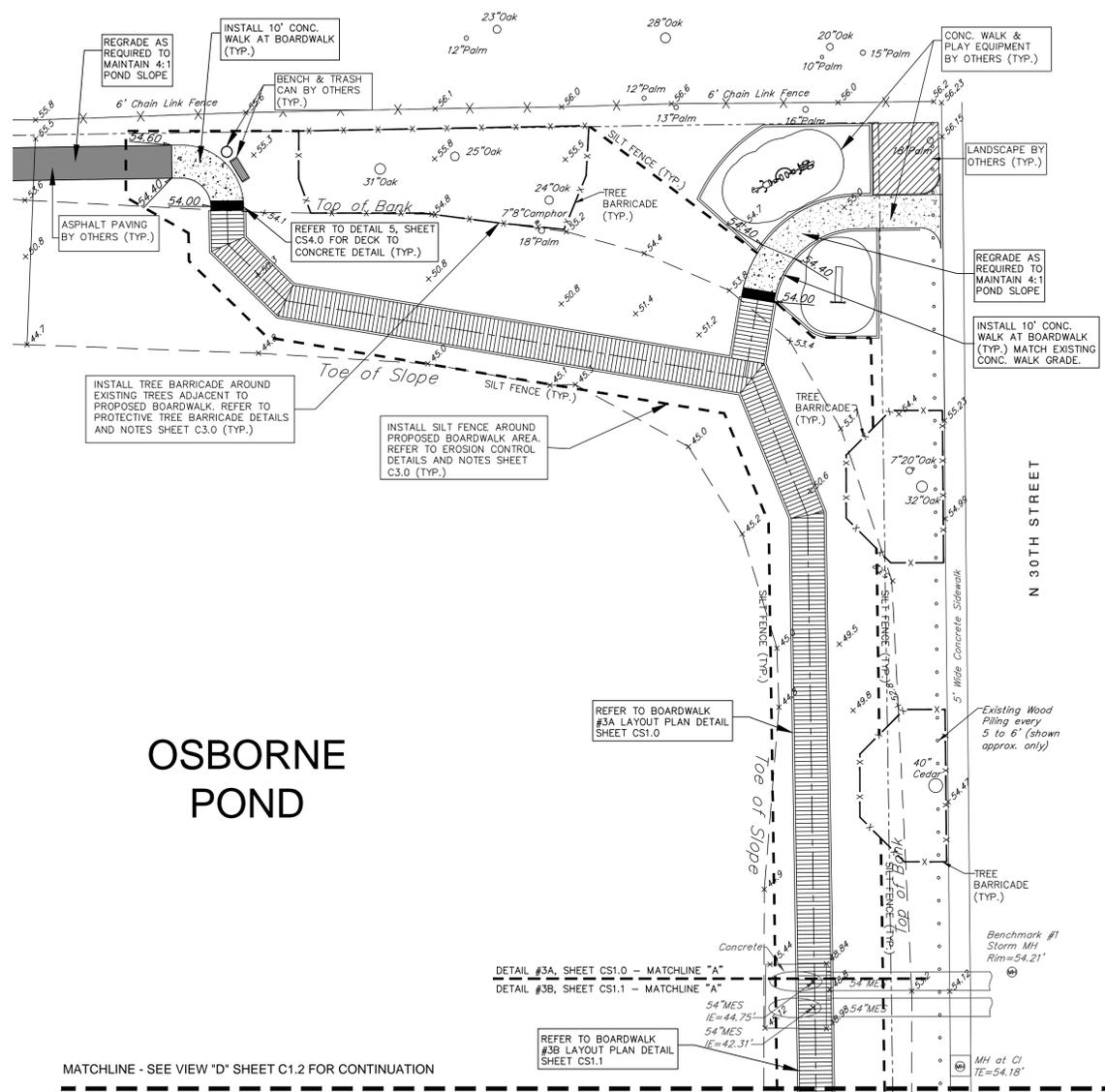
FOR
 CITY OF TAMPA
 PARKS AND RECREATION DEPARTMENT
 3402 W. COLUMBUS DRIVE
 TAMPA, FL 33607

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 SCALE: 1" = 50'

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 P.L.S. NO. 3141 - L.B. NO. 3868
 STATE OF FLORIDA

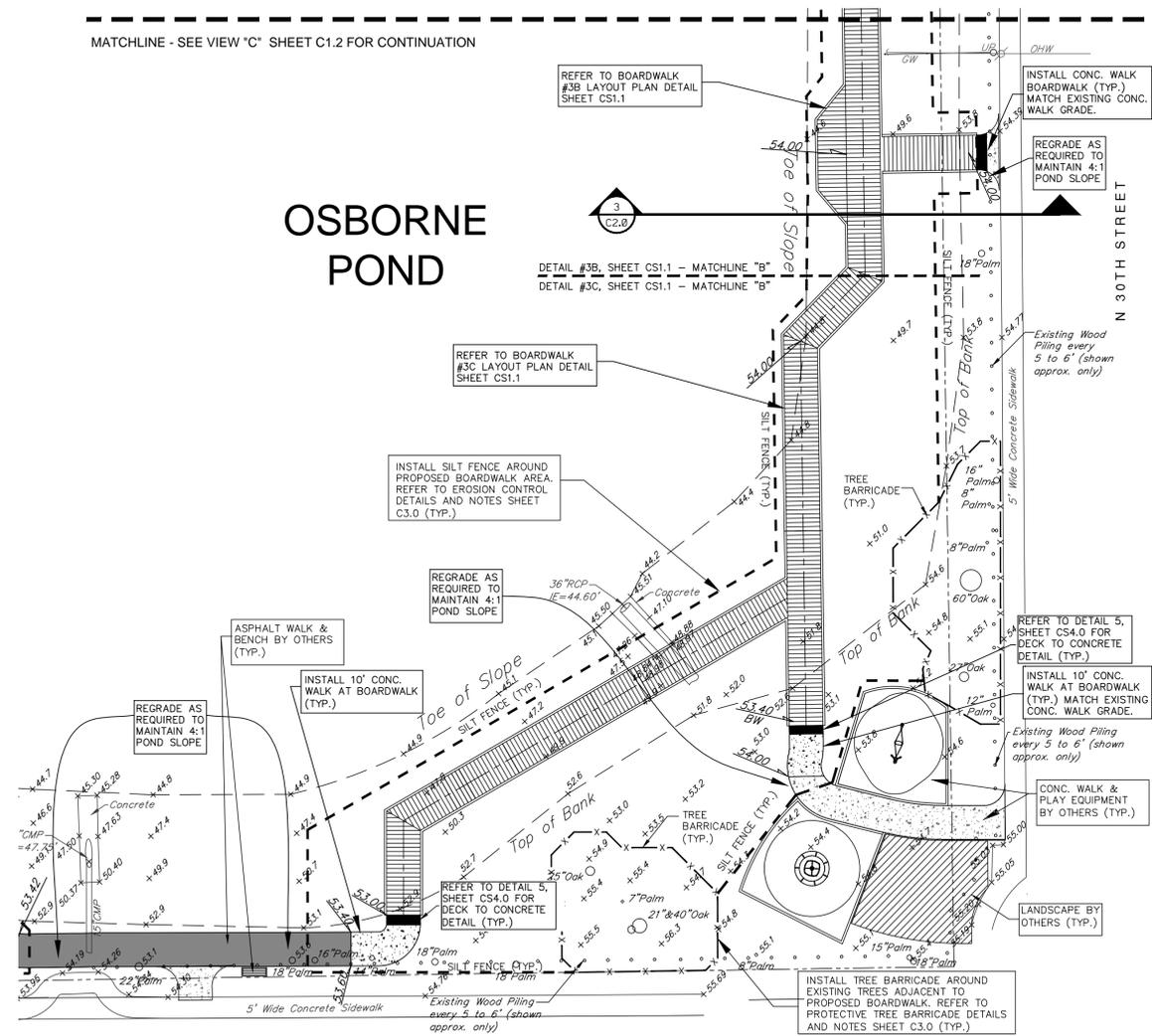
PROJECT
 OSBORNE AVENUE POND
 PROPOSED BOARDWALK
 OVERALL CIVIL SITE

SHEET
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 13-016



OSBORNE POND

VIEW "C" - CIVIL PAVING & GRADING
SCALE 1"=20'



OSBORNE POND

VIEW "D" - CIVIL PAVING & GRADING
SCALE 1"=20'

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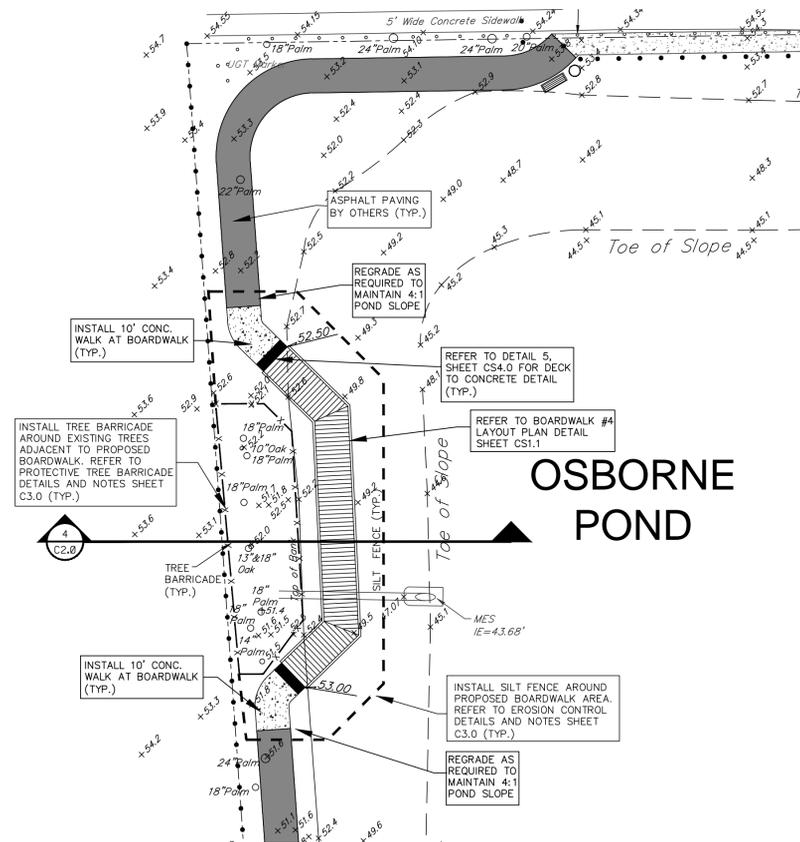
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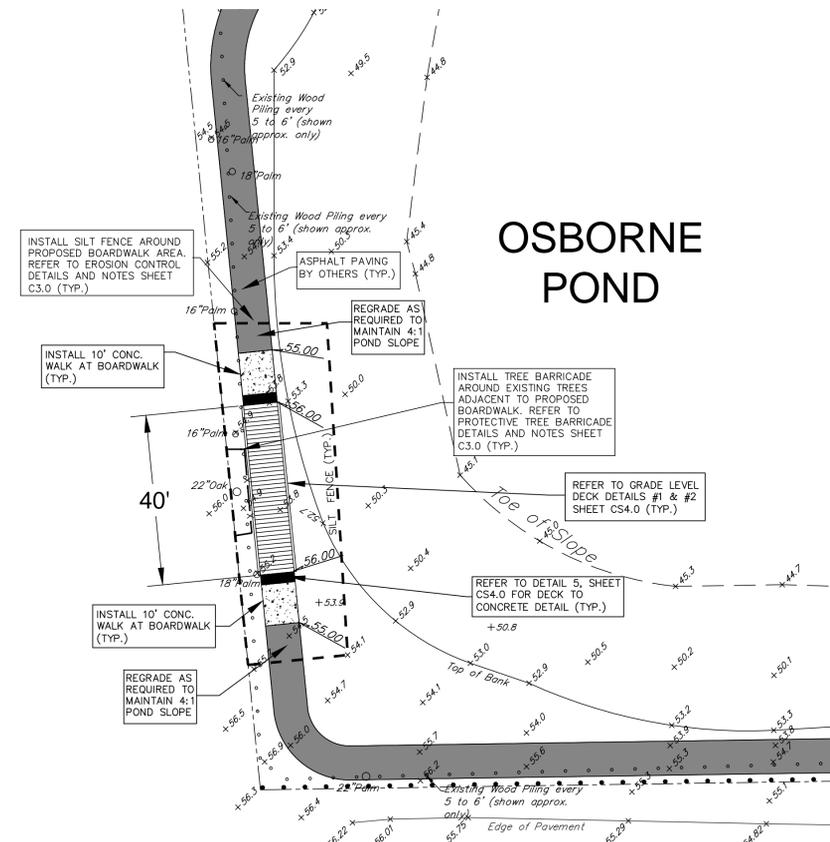
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STATE OF FLORIDA

PROJECT
OSBORNE AVENUE POND
PROPOSED BOARDWALK
ENLARGED BOARDWALK PLAN

SHEET
C1.2
JOB NO.
13-016



VIEW "E" - CIVIL PAVING & GRADING
SCALE 1"= 20'



VIEW "F" - CIVIL PAVING & GRADING
SCALE 1"= 20'

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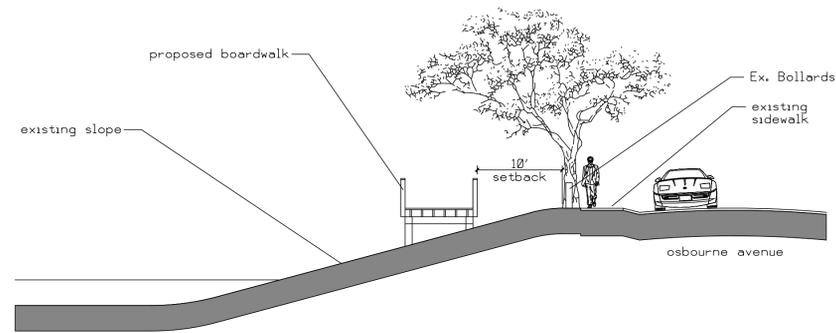
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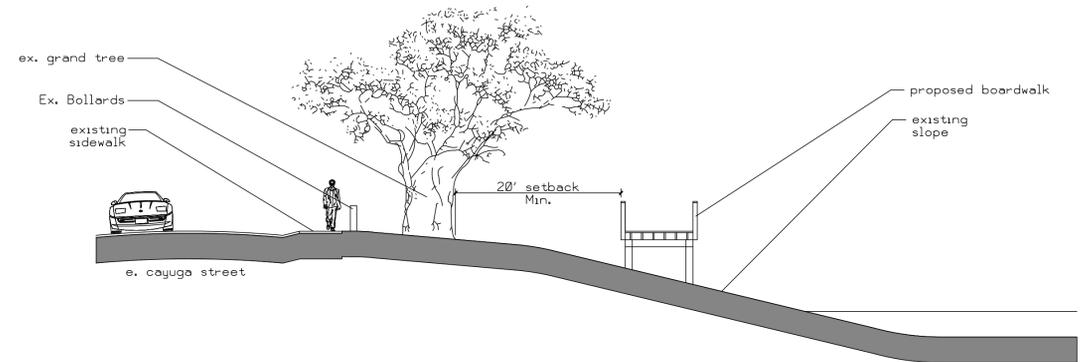
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PROJECT
OSBORNE AVENUE POND
PROPOSED BOARDWALK
ENLARGED BOARDWALK PLAN

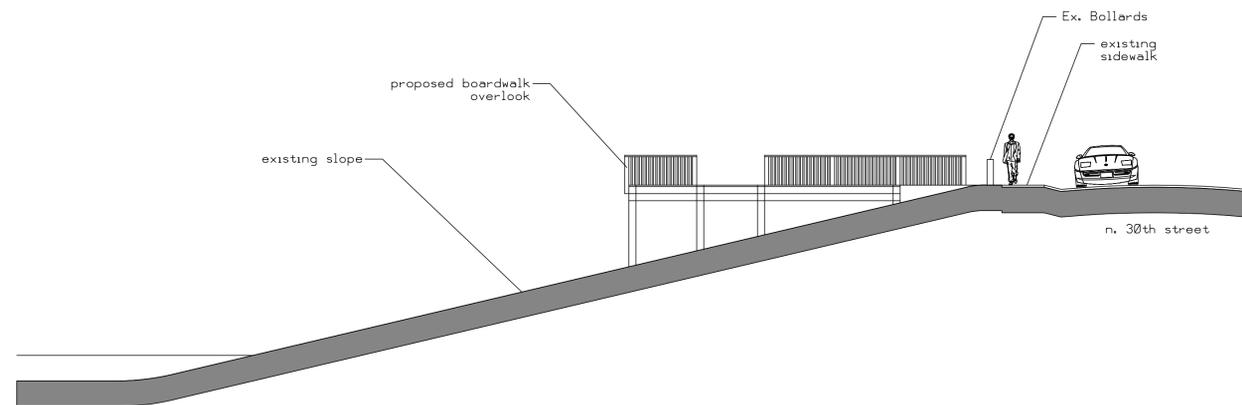
SHEET
C1.3
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13-016



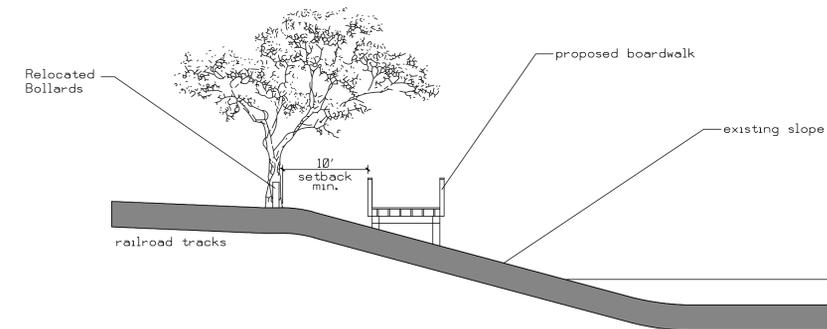
1 proposed section view - slope along osborne avenue
 C2.0 scale 1" = 10'



2 proposed section view - slope along e.cayuga street
 C2.0 scale 1" = 10'



3 proposed section view - slope along n. 30th street
 C2.0 scale 1" = 10'



4 proposed section view - slope along railroad tracks
 C2.0 scale 1" = 10'

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 P.L.S. NO. 3141 - L.B. NO. 3868
 STATE OF FLORIDA

PROJECT
 OSBORNE AVENUE POND
 PROPOSED BOARDWALK
 BOARDWALK SECTION VIEWS

SHEET
 C2.0
 JOB NO.
 13-016

GENERAL NOTES:

- All work shall comply with the regulations, requirements and ordinances of the various governing agencies having jurisdiction over said work, including, and not limited to, Hillsborough County, City of Tampa, F.D.E.P., F.D.H.R.S., S.W.F.W.M.D., and F.D.O.T.
- Location, dimension, elevation and identification of existing utilities, structures and other topographic features are approximate only, according to the best information available at the time of preparation of these plans. There may be additional existing details on-site and off-site, the presence of which is not known or detected at this time. Engineer/Surveyor shall not be held responsible for undetected underground utilities. Prior to construction, it is the contractor's responsibility to verify the location, dimension, elevation and identification of all utilities, structures and topographic features (i.e. buildings, sidewalks, canopy supports, fences, pavement, underground utilities, utility poles/guy wires, manholes, inlets, a/c units, trees, landscaping, etc.). If any of the existing or proposed conditions either: a) conflict with the proposed improvements, or b) are not shown or shown incorrectly on the plans, it is the contractor's responsibility to contact the Engineer prior to the commencing any work activities.
- The construction testing/inspection shall be the contractor's responsibility to schedule and complete any and all tests as required with all site civil improvements constructed on and off site. It shall also be the contractor's responsibility to pre-test these improvements prior to giving the Engineer-of-Record any governing agency field representative 48 hours advance notice of any formal tests.
- Engineer/Surveyor shall not be held responsible for undetected underground utilities and/or soil conditions. Site preparation to be in accordance with a geotechnical engineers recommendations and as a minimum standard must conform with the following: a) Unsuitable material to be removed; b) Fill material to be clean with no organics, muck, clay, etc.; c) Fill to be placed 12" lifts or less and compacted to 98% modified proctor.
- All elevations refer to National Geodetic Vertical Datum.
- The Contractor shall notify the appropriate public agency(ies) and utility companies prior to commencing work within their jurisdiction(s).
- All pipe lengths are plus or minus and are measured from center of fittings and/or structures.
- The Contractor shall maintain copies of all applicable permits on-site and shall be responsible to adhere to all permit conditions during construction.
- Florida Statute 553.851 (1979) requires a minimum of 2 days and maximum of 5 days notice before excavation. Call SUNSHINE STATE ONE-CALL OF FLORIDA at 1-800-432-4773.
- The Contractor shall use appropriate measures to prevent erosion and transport of sediment to surface drains. The Contractor shall use hay bales and/or silt barriers to mitigate adverse impacts to existing surface water quality.
- The Contractor shall check plans for conflicts and discrepancies prior to construction. The Contractor shall notify the owner's Engineer of any conflict before performing any work in the affected area.
- Reinforced concrete pipe (RCP) shall be a minimum of Class III pipe as designated in ASTM C-76.
- Any relocation or modification of proposed storm sewer system shall not be made without the approval of the Engineer-of-Record.
- Drainage shall be maintained during construction.
- All mitered end sections (M.E.S.) shall be per F.D.O.T. Index #272 unless otherwise noted.
- Storm drain inlets and manholes shall be traffic bearing suitable for H-20 Loading.
- The Contractor is responsible for repairing any damage to existing facilities, above or below ground, that may occur as a result of the work performed by the Contractor called for in this contract.
- All underground utilities must be in place and tested or inspected prior to base and surface construction.
- All inspections and documents referred to shall be of latest revision.
- The Contractor shall submit for approval to the Owner's Engineer shop drawings on all precast and manufactured items, failure to obtain approval before installation may result in removal and replacement at Contractor's expense.
- At least 3 working days prior to construction, the Contractor shall notify the Engineer and appropriate Agencies and supply them with all required shop drawings, the Contractor's name, starting date, projected schedule and other information as required. Any work performed prior to notifying the Engineer or without an Agency Inspector present may be subject to removal and replacement at the Contractor's expense.
- Mills & Associates, Inc. makes no representations or guarantees pertaining to easements, rights of way, set back lines, reservations, agreements and other similar matters.
- All mechanical equipment shall be screened.
- SAFETY:**
 - During the construction and/or maintenance of this project, all safety regulations are to be enforced. The Contractor or his representative shall be responsible for the control and safety of the traveling public and the safety of his personnel.
 - Labor safety regulations shall conform to the provisions set forth by OSHA in the Federal Register of the Department of Transportation.
 - The minimum standards as set forth in the current edition of "The State of Florida, Manual on Traffic Control and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations" shall be followed in the design application, installation, maintenance and removal of all traffic control devices, warning devices and barriers necessary to protect the public and workmen from hazards within the project limits.
 - All traffic control markings and devices shall conform to the provisions set forth in the manual on uniform traffic control devices prepared by the U.S. Department of Transportation Federal Highway Administration.

it shall be the sole responsibility of the Contractor to comply and enforce all applicable safety regulations. The above information has been provided for the Contractor's information only and does not imply the Owner or Engineer will inspect and/or enforce safety regulations.

CITY OF TAMPA INSPECTION REQUIREMENTS INSTRUCTION FOR TREE REMOVAL AND SITE CLEARING ON SITE INSPECTION

WHERE PROTECTED TREES ARE TO BE REMOVED DURING LAND ALTERATION AND SITE CLEARING PURSUANT TO SEC. 45-376 THROUGH 45-378 OF THE CITY OF TAMPA CODE, THE TREES TO BE REMOVED SHALL BE IDENTIFIED BY RED-FLAGGING, AND THE RIGHTS-OF-WAY OF PROPOSED ROADS, THE CORNERS OF PROPOSED BUILDINGS, THE LOCATION OF PROPOSED DRAINAGE BASINS, MAN-MADE LAKES, AREAS THAT REQUIRE FILL AND OTHER IMPROVEMENTS SHALL BE ROUGH STAKED AND PROTECTIVE BARRICADES INSTALLED PRIOR TO ON-SITE INSPECTION. IF UPON INSPECTION, TREES TO BE REMOVED, ROAD RIGHTS-OF-WAY, BUILDING CORNERS, FILL AREAS AND OTHER IMPROVEMENTS HAVE NOT BEEN IDENTIFIED, THE INSPECTION SHALL BE SUSPENDED UNTIL THESE PREPARATIONS HAVE BEEN COMPLETED.

TREE PROTECTION STANDARDS (SEC. 13.164)

DEVELOPMENT ON PARCELS SHALL COMPLY WITH THE FOLLOWING TREE PROTECTION REQUIREMENTS:

- PROTECTIVE BARRICADES SHALL BE PLACED AROUND ALL PROTECTED TREES AND GRAND TREES DURING SITE CLEARING TO CREATE A PROTECTIVE ROOT ZONE AND SHALL REMAIN IN PLACE UNTIL LAND ALTERATION, SITE CLEARING AND CONSTRUCTION ACTIVITIES ARE COMPLETE. BARRICADES FOR THE PROTECTIVE ROOT ZONE SHALL BE ERRECTED AT A MINIMUM DISTANCE OF TEN (10) FEET FROM THE EDGE OF TRUNK OF PROTECTED TREES AND TWENTY (20) FEET FROM THE EDGE OF TRUNK OF GRAND TREES.
- A MINIMUM DISTANCE OF TEN (10) FEET FROM ALL PROTECTED TREES AND TWENTY (20) FEET FROM ALL GRAND TREES SHALL BE MAINTAINED WHEN INSTALLING UNDERGROUND UTILITIES. IF THIS RESULTS IN UNREASONABLE HARDSHIP, A SOIL AUGER SHALL BE USED TO TUNNEL UNDER THE ROOT SYSTEMS.
- INSTALLATION OF ARTIFICIAL BARRIERS SUCH AS PROTECTIVE BARRICADES, FENCES, POSTS OR WALLS SHALL NOT DESTROY OR IRREVERSIBLY HARM THE ROOT SYSTEM OF PROTECTED TREES AND GRAND TREES. FOOTERS FOR WALLS SHALL END AT THE POINT WHERE LARGER ROOTS ARE ENCOUNTERED, AND THE ROOTS SHALL BE BRIDGED. POST HOLES AND TRENCHES LOCATED CLOSE TO PROTECTED TREES OR GRAND TREES SHALL BE ADJUSTED TO AVOID DAMAGE TO MAJOR ROOTS.
- ALL ROOTS TO BE REMOVED DURING THE SITE CLEARING PHASE SHALL BE SEVERED CLEAN AT THE PERIMETER OF THE DESIGNATED PROTECTIVE ROOT ZONE.
- A TWO-INCH LAYER OF MULCH SHALL BE APPLIED OVER THE SURFACE OF EXPOSED ROOTS OF PROTECTED TREES AND GRAND TREES DURING THE SITE CLEARING PHASE.
- A PROTECTIVE DRY WELL AND DRAINAGE/AERATION SYSTEM SHALL BE PROVIDED WHERE PROTECTED TREES OR GRAND TREES WILL BE ADVERSELY AFFECTED BY RAISING THE GRADE.
- A PROTECTIVE RETAINING WALL SHALL BE CONSTRUCTED AT THE PERIMETER OF THE PROTECTIVE ROOT ZONE AROUND A PROTECTED TREE OR GRAND TREE WHERE THE PROTECTED TREE OR GRAND TREE WILL BE ADVERSELY AFFECTED BY LOWERING THE GRADE.
- ALL TRIMMING OF PROTECTED TREES AND GRAND TREES DURING DEVELOPMENT SHALL BE DONE BY A QUALIFIED, LICENSED TREE SERVICE.

INSPECTION FOR COMPLIANCE

EACH PERMIT FOR SITE CLEARING SHALL STATE THAT THE APPLICANT SHALL NOTIFY THE PARKS DEPARTMENT WITHIN FORTY-EIGHT (48) HOURS AFTER SITE CLEARING ACTIVITY HAS BEEN COMPLETED. THE PARKS DEPARTMENT SHALL INSPECT THE SITE, AND, IF THE DIRECTOR OF THE PARKS DEPARTMENT DETERMINES NO VIOLATIONS HAVE OCCURRED, PARKS DEPARTMENT SHALL ISSUE A FINAL INSPECTION RELEASE. NO FURTHER DEVELOPMENT ACTIVITY OF ANY NATURE SHALL COMMENCE OR BE CARRIED OUT ON THE PARCEL THAT IS THE SUBJECT OF THE PERMIT FOR SITE CLEARING UNTIL THE FINAL RELEASE HAS BEEN ISSUED.

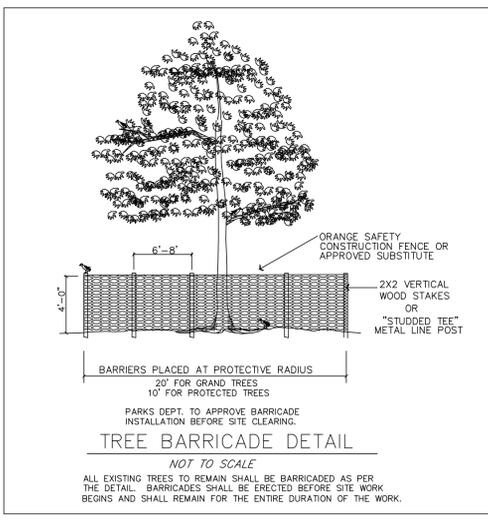
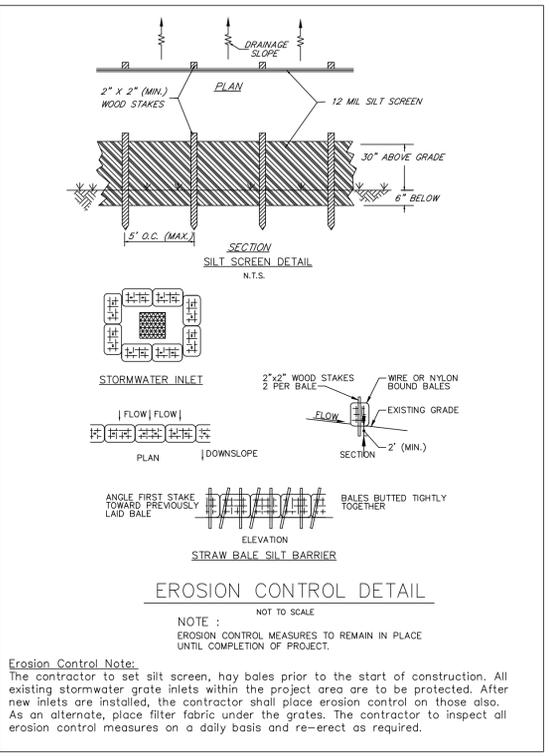
NOTE: NO SITE PREPARATION SHALL BEGIN UNTIL SITE INSPECTION REQUIREMENTS HAVE BEEN COMPLETED AND APPROVED. FAILURE TO MEET THESE REQUIREMENTS WILL RESULT IN STOP WORK ORDERS AND APPLICABLE REINSPECTION FEES BEING PAID. FOR ALL INSPECTIONS CALL 223-8257 - PARKS DEPARTMENT.

TREE PROTECTION

- ALL TREES TO REMAIN MUST BE PROTECTED BY BARRICADES TO MEET THE MINIMUM STANDARDS BY THE CITY OF TAMPA. PROTECTIVE BARRIERS MUST REMAIN IN PLACE UNTIL LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED.
- DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIFTLINE OF THE TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE CITY.
- IN ORDER TO MINIMIZE SOIL EROSION AND CONTRIBUTE TO WATER QUALITY, PROPOSED LAND ALTERATION ACTIVITIES SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION AND ALTER EXISTING TOPOGRAPHY. ADEQUATE PROTECTION MEASURES SHALL BE PROVIDED, AS NECESSARY, TO MINIMIZE EROSION AND DOWNSTREAM SEDIMENTATION CAUSED BY SURFACE WATER RUNOFF ON EXPOSED LAND SURFACES.
- PAVEMENT AERATION WILL BE PROVIDED AROUND ALL PROTECTED TREES TO CREATE AN EFFECTIVE PERMEABLE RADIUS OF TEN FEET (10').
- IN AREAS WHERE FILL IS TO BE PLACED IN OR AROUND PROTECTED TREES, DESIGNATED AERATION ZONES SHALL BE BARRICADED UNTIL SYSTEM IS INSTALLED.
- A SOIL AUGER WILL BE USED TO BORE UNDER ROOT SYSTEMS WHEN UTILITIES ARE TO BE INSTALLED WITHIN TEN FEET (10') OF A PROTECTED TREE.
- PROTECTED TREES IN CONFLICT WILL BE RELOCATED ON SITE (UP TO 8" IN DIAMETER).
- ALL TRIMMING WILL BE DONE BY A QUALIFIED TREE SERVICE DURING DEVELOPMENT.
- ALL ROOTS TO BE REMOVED DURING THE SITE CLEARING PHASE SHALL BE SEVERED CLEAN AT THE PERIMETER OF THE DESIGNATED PROTECTED RADIUS.
- NO SITE PREPARATION WORK SHALL BEGIN WHERE TREE PRESERVATION MEASURES HAVE BEEN COMPLETED AND APPROVED.

PROTECTIVE BARRICADE

A PHYSICAL STRUCTURE NOT LESS THAN (3') FEET IN HEIGHT, LIMITING ACCESS TO PROTECTED TREES AND GRAND TREES, A SUITABLE PROTECTIVE BARRIER MAY BE COMPOSED OF WOOD OR OTHER MATERIAL WHICH INSURES PROTECTION OF THE PROTECTED TREES AND GRAND TREES DURING CONSTRUCTION.



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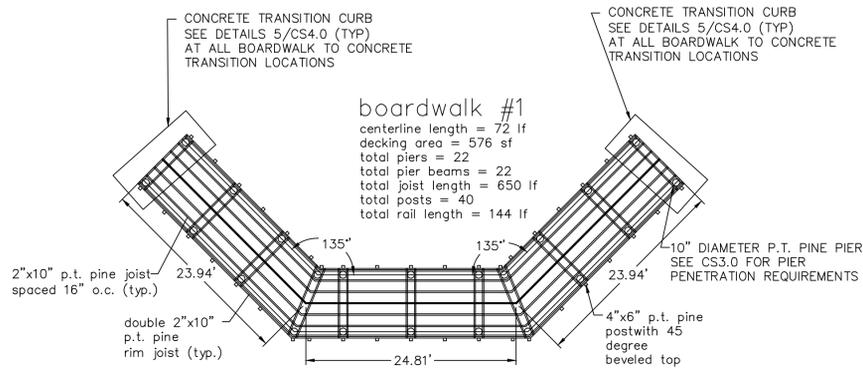
PROJECT
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SHEET
C3.0

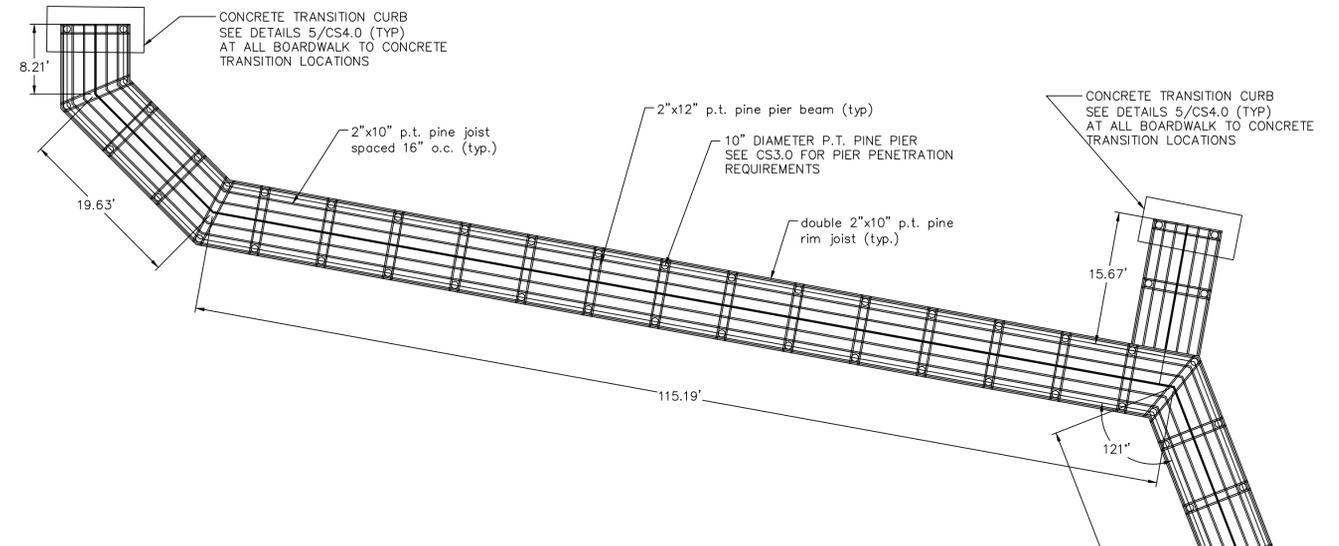
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CIVIL DETAILS & NOTES

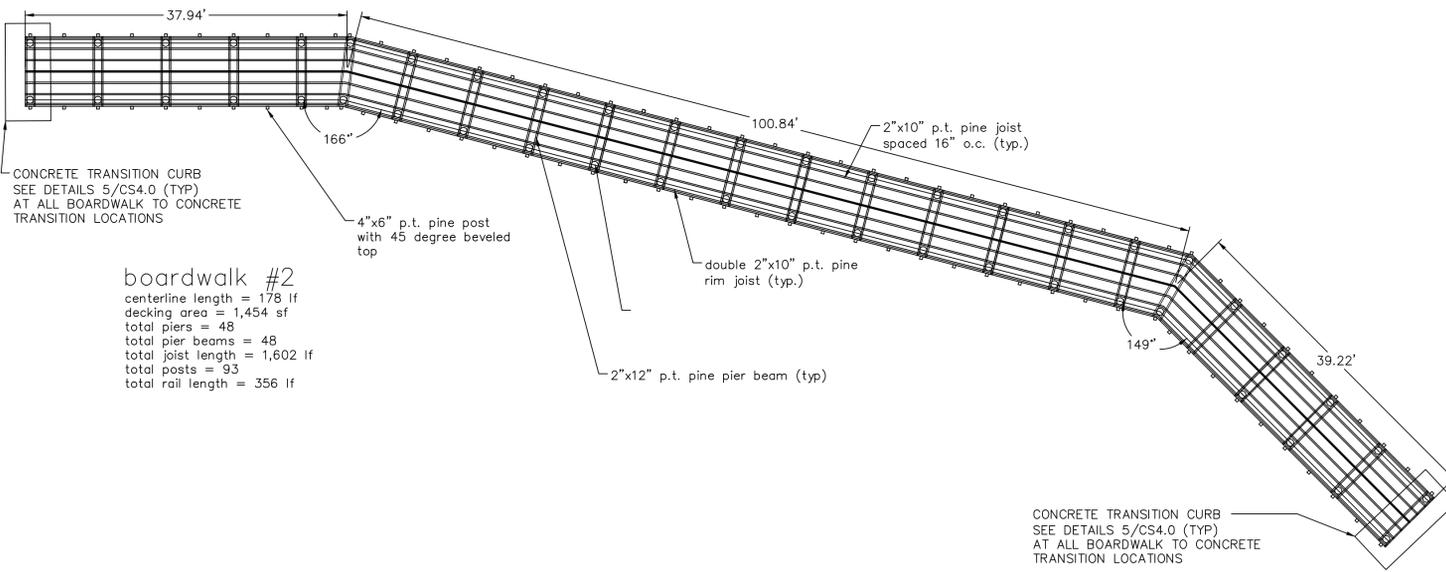
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 STATE OF FLORIDA



1 boardwalk #1 - layout plan
CS1.0 scale 1" = 10'



boardwalk #3
centerline length = 597 lf
decking area = 5,533 sf
total piers = 177
total pier beams = 178
total joist length = 6,055 lf
total posts = 358
total rail length = 1,236 lf



2 boardwalk #2 - layout plan
CS1.0 scale 1" = 10'

3.A boardwalk #3.A - layout plan
CS1.0 scale 1" = 10'

MATCHLINE "A"—SEE SHEET CS1.1 FOR CONTINUATION

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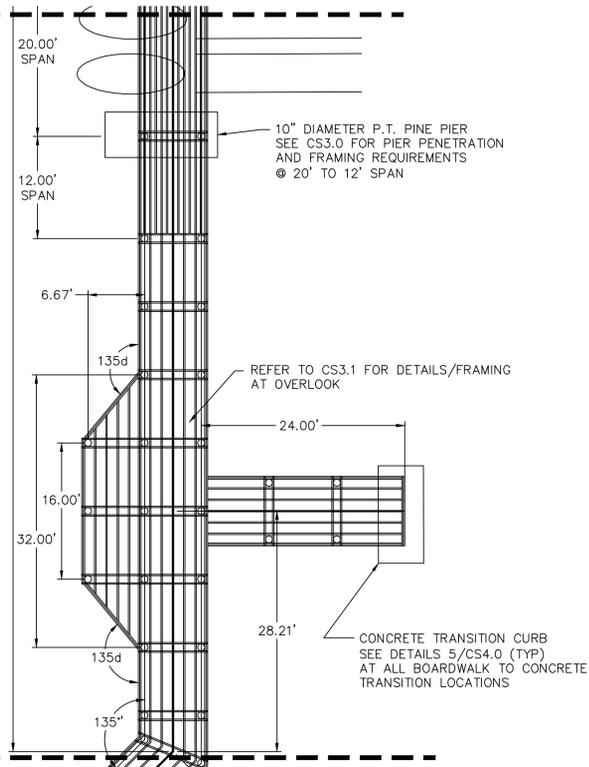
JOSEPH W. BELT P.E.
CONSULTING ENGINEER
REGISTRATION NUMBER 45147
5004-C W. LINEBAUGH AVE.
TAMPA, FLORIDA 33624
PHONE: (813) 961-3075
FAX: (813) 961-1031
email: jbelt@jwbeltingeering.com

I CERTIFY THAT TO THE BEST OF MY
KNOWLEDGE AND BELIEF ALL OF THE
STRUCTURAL ELEMENTS AND SYSTEMS FOR
THIS STRUCTURE HAVE BEEN DESIGNED TO
BE IN COMPLIANCE WITH THE 2010 FLORIDA
BUILDING CODE, ALL OTHER ELEMENTS,
SYSTEMS AND ASSEMBLIES ARE THE TOTAL
RESPONSIBILITY OF OTHERS.

PROJECT
OSBORNE AVENUE POND
PROPOSED BOARDWALK
BOARDWALK LAYOUT PLAN DETAILS

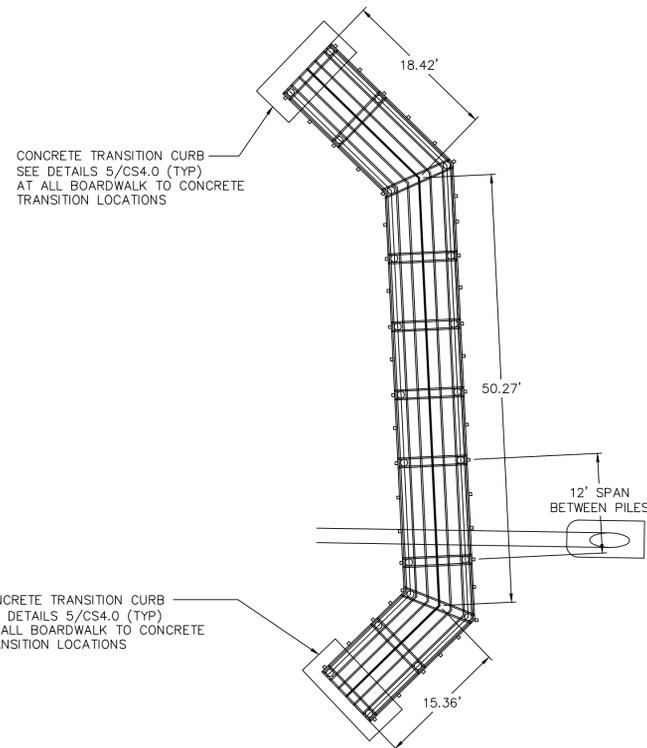
SHEET
CS1.0
JOB NO.
13-016

MATCHLINE "A"—SEE SHEET CS1.0 FOR CONTINUATION



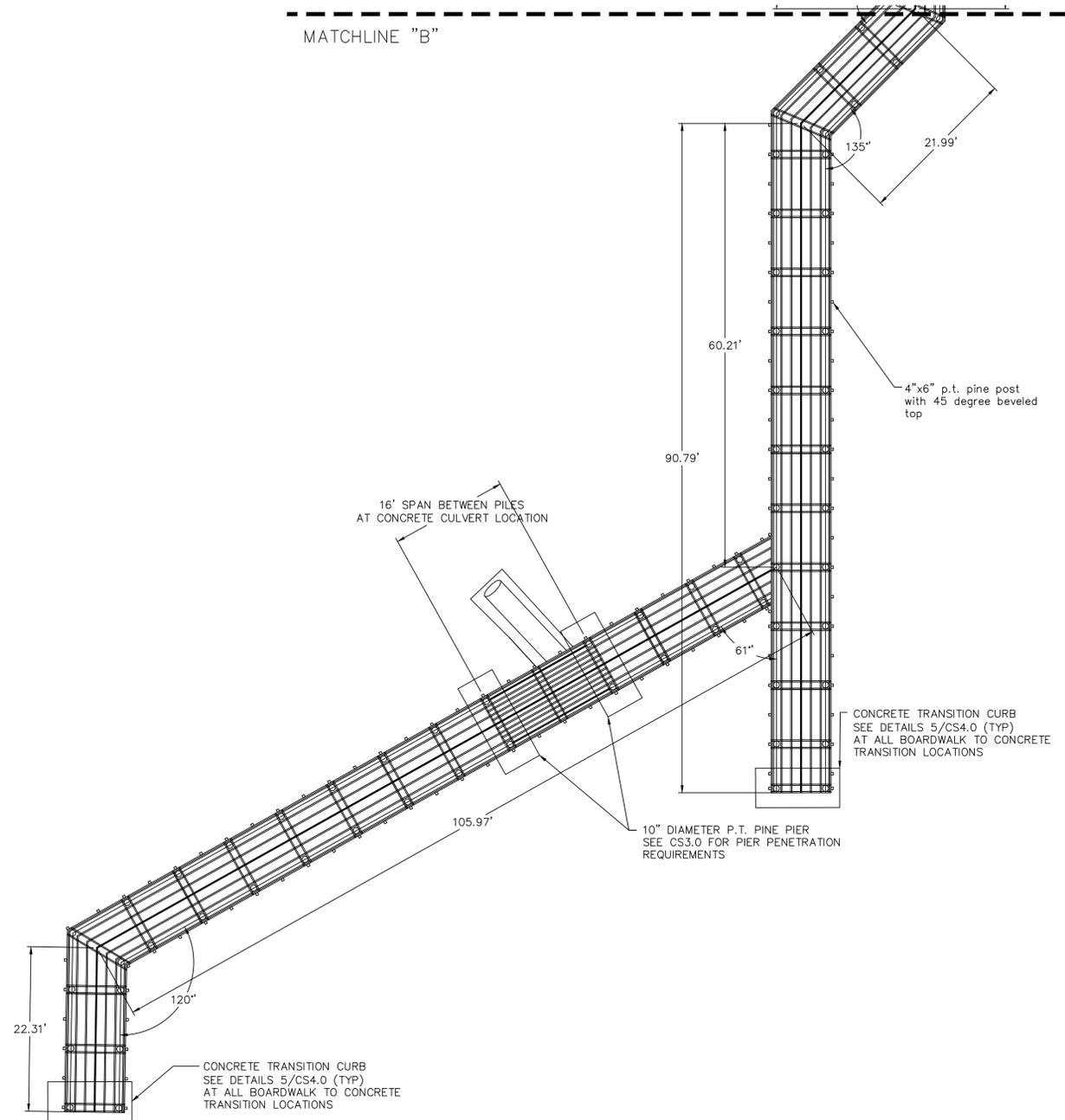
3.B boardwalk #3.B — layout plan (cont.)
CS1.1 scale 1" = 10'

MATCHLINE "B"



4 boardwalk #4 — layout plan
CS1.1 scale 1" = 10'

MATCHLINE "B"



3.C boardwalk #3.C — layout plan (cont.)
CS1.1 scale 1" = 10'

BID SET 11/04/13

REVISIONS					
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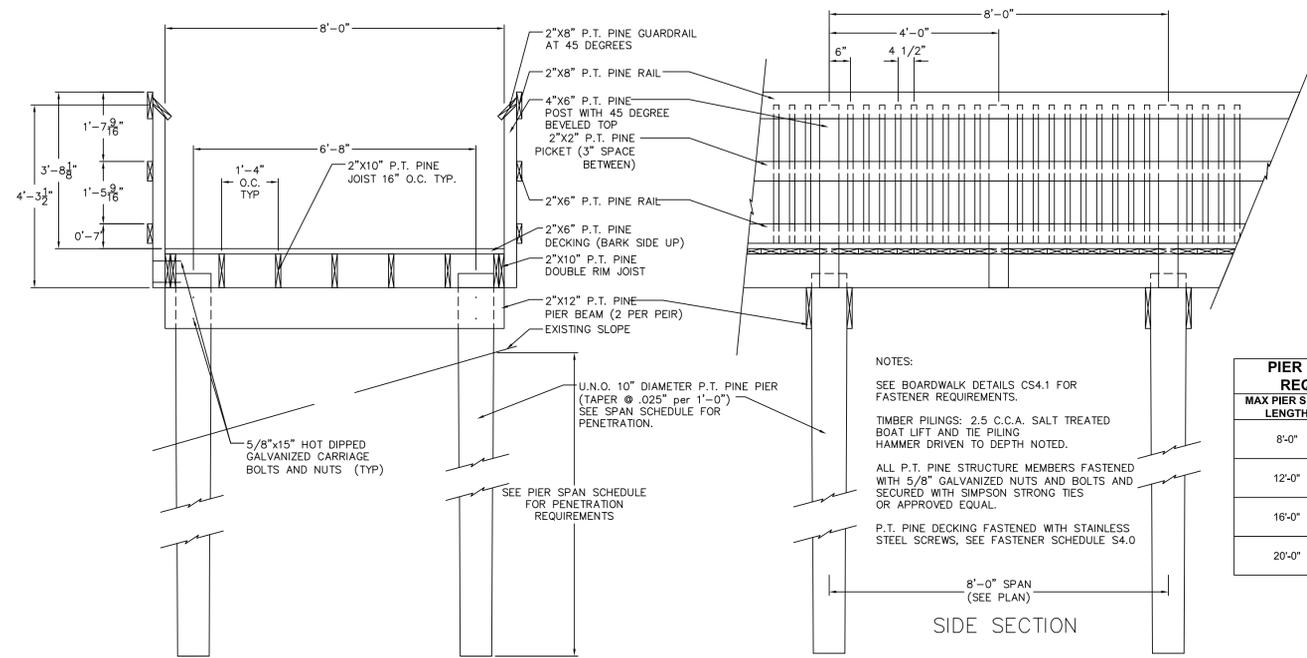
MILLS and ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
3242 HENDERSON BOULEVARD — SUITE 300
TAMPA, FLORIDA 33609-3056
TELEPHONE: (813) 876-5869

FOR
CITY OF TAMPA
PARKS AND RECREATION DEPARTMENT
3402 W. COLUMBUS DRIVE
TAMPA, FL 33607

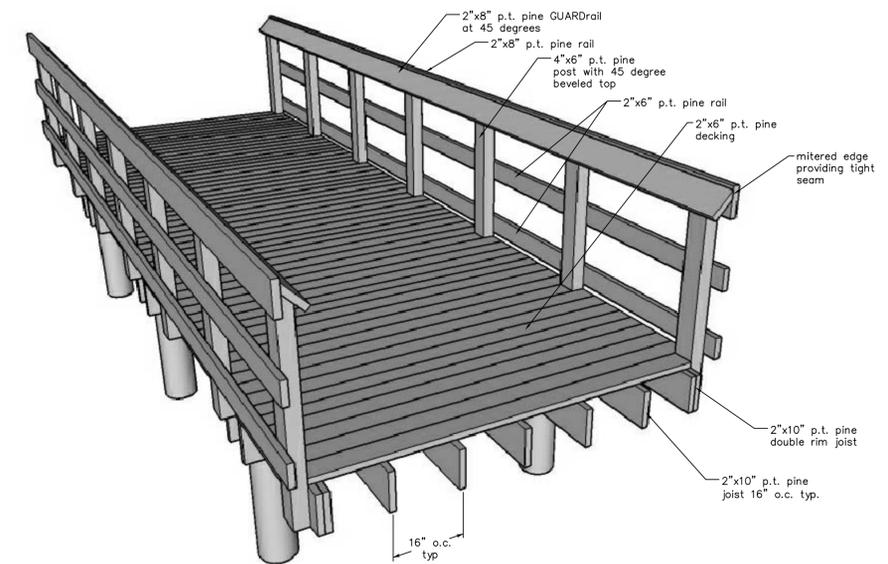
JOSEPH W. BELT P.E.
CONSULTING ENGINEER
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5004-C W. LINEBAUGH AVE.
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PHONE: (813) 961-3075
FAX: (813) 961-1031
email: jbelt@jwbelteengineering.com
I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF ALL OF THE STRUCTURAL ELEMENTS AND SYSTEMS FOR THIS STRUCTURE HAVE BEEN DESIGNED TO BE IN COMPLIANCE WITH THE 2010 FLORIDA BUILDING CODE, ALL OTHER ELEMENTS, SYSTEMS AND ASSEMBLIES ARE THE TOTAL RESPONSIBILITY OF OTHERS.

PROJECT
OSBORNE AVENUE POND
PROPOSED BOARDWALK
BOARDWALK LAYOUT PLAN DETAILS

SHEET
CS1.1
JOB NO.
13-016

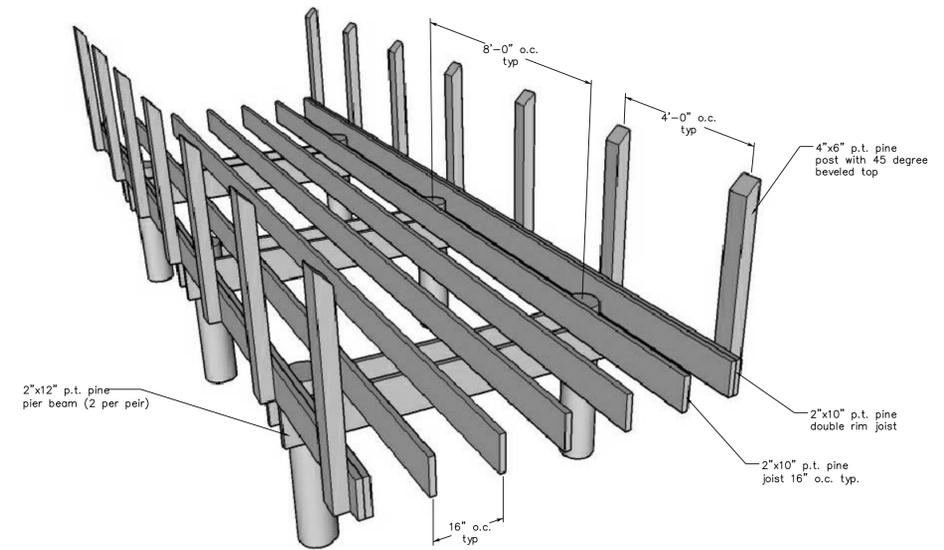
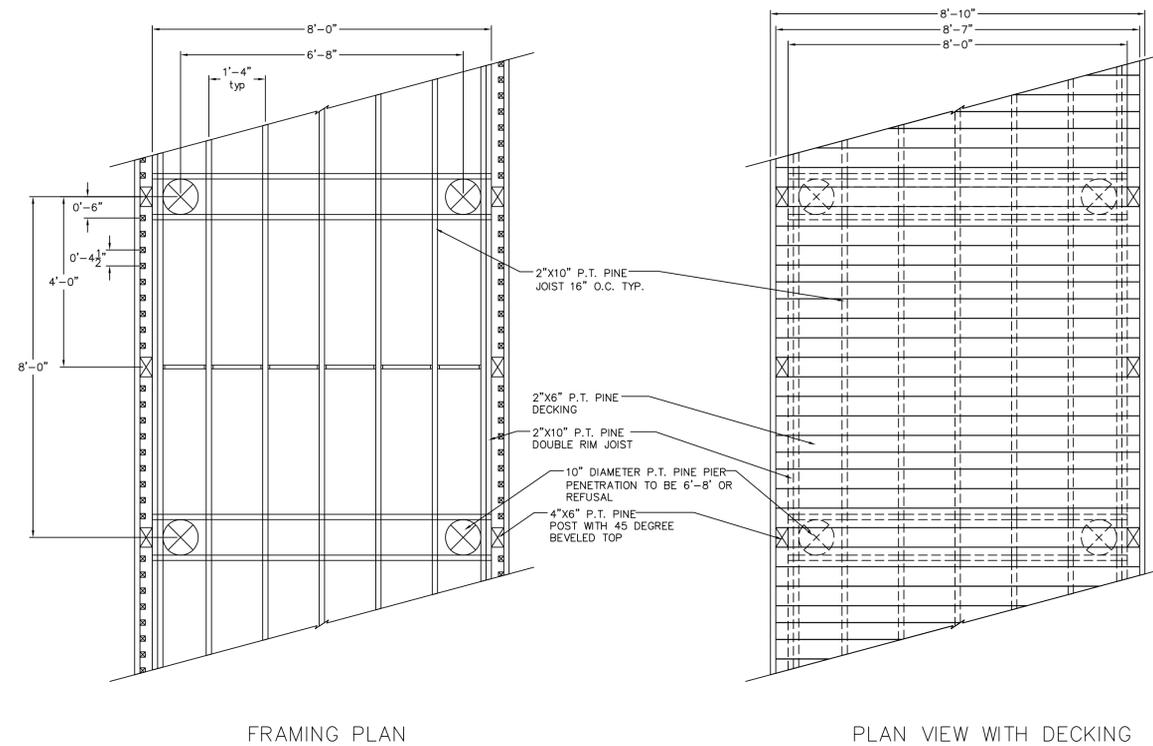


PIER PENETRATION REQUIREMENTS	
MAX PIER SPAN LENGTH	REQUIRED PENETRATION
8'-0"	MIN 8'-0" & MIN 7 BLOWS PER FOOT OR REFUSAL
12'-0"	MIN 10'-0" & MIN 10 BLOWS PER FOOT OR REFUSAL
16'-0"	MIN 14'-0" & MIN 12 BLOWS PER FOOT OR REFUSAL
20'-0"	MIN 18'-0" & MIN 14 BLOWS PER FOOT OR REFUSAL



1 PROPOSED 8'-0" BOARDWALK FRAMING DETAILS - TYPICAL SECTION VIEWS
 CS3.0 scale 1/2" = 1'-0"

2 PROPOSED BOARDWALK - TYPICAL 8' SPAN SCHEMATIC VIEW
 CS3.0 scale: n.t.s.



3 PROPOSED 8'-0" SPAN BOARDWALK FRAMING DETAILS - TYPICAL PLAN VIEWS
 CS3.0 scale 1/2" = 1'-0"

4 PROPOSED BOARDWALK - TYPICAL 8' SPAN SCHEMATIC FRAMING VIEW
 CS3.0 scale: n.t.s.

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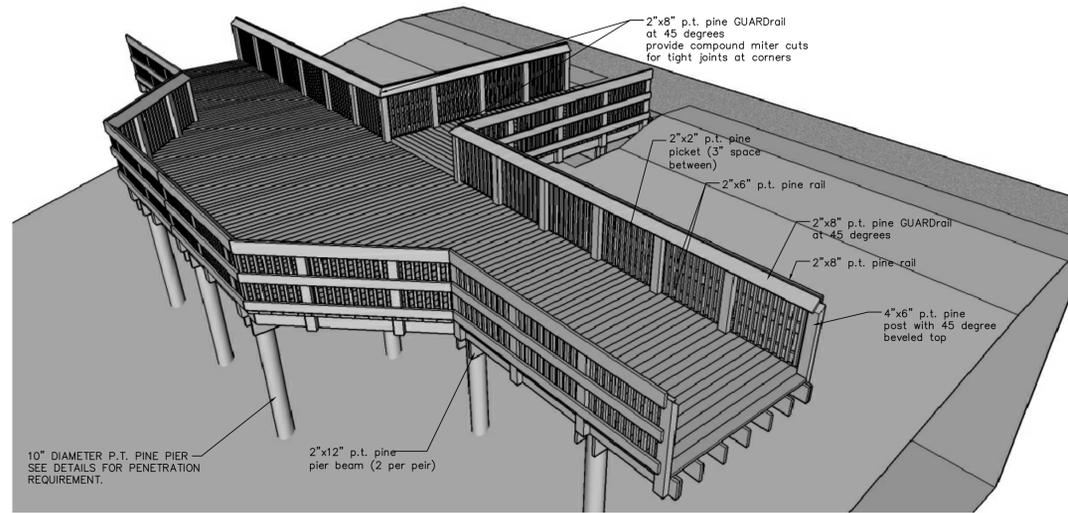
FOR
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 TAMPA, FL 33607

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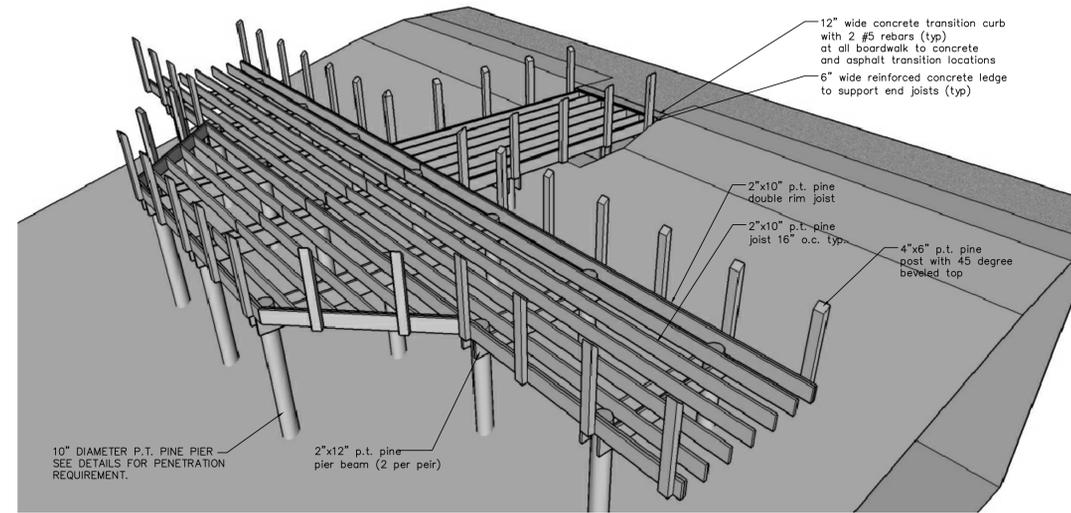
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 OSBORNE AVENUE POND
 PROPOSED BOARDWALK
 BOARDWALK FRAMING DETAILS

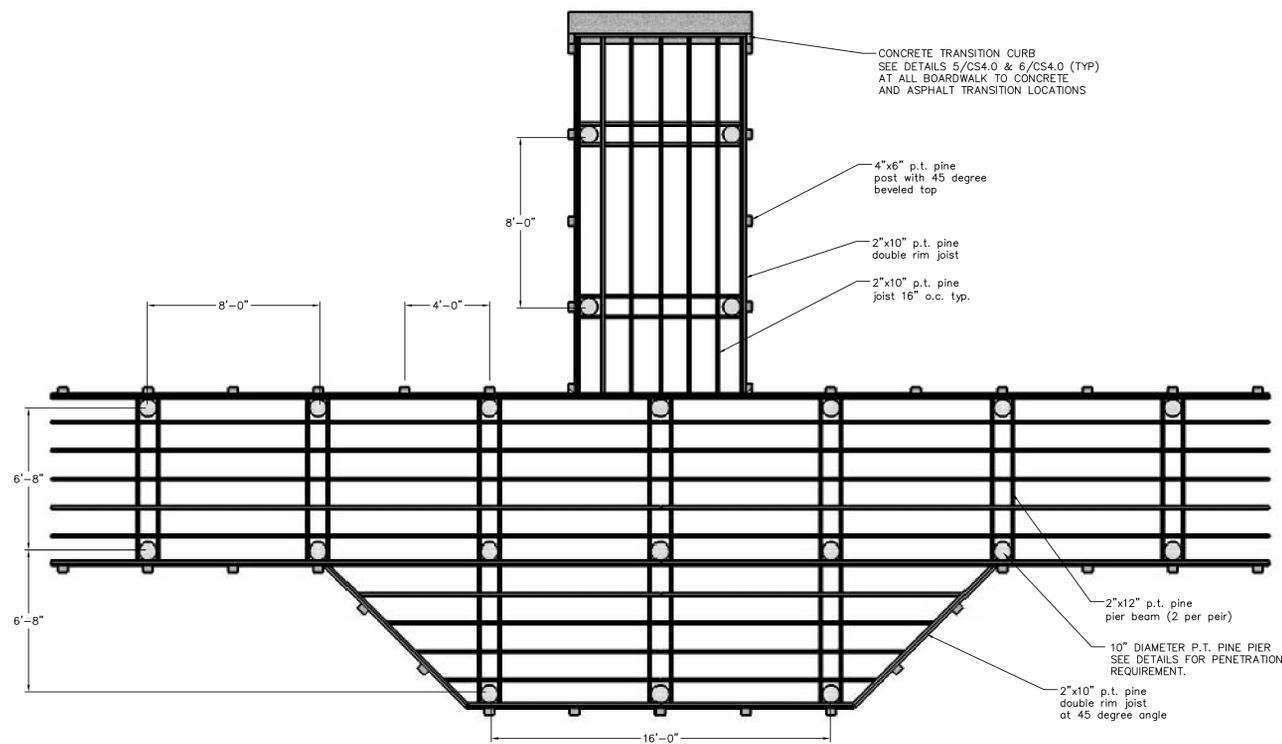
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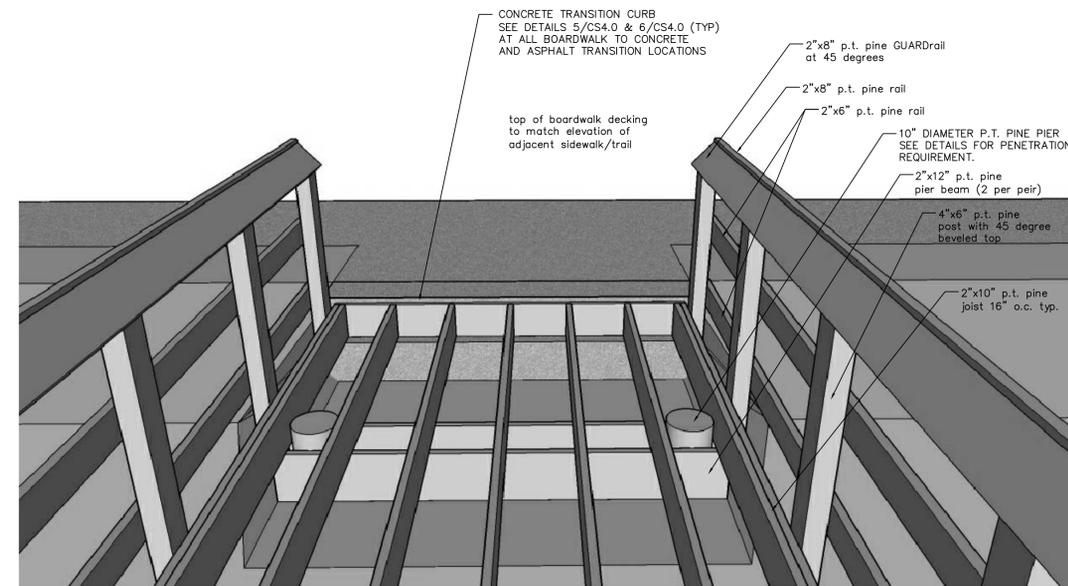
1 PROPOSED BOARDWALK OVERLOOK – SCHEMATIC VIEW
CS3.1 scale: n.t.s.



2 PROPOSED BOARDWALK OVERLOOK – SCHEMATIC FRAMING VIEW
CS3.1 scale: n.t.s.



3 PROPOSED BOARDWALK OVERLOOK – FRAMING PLAN
CS3.1 scale: 1/4" = 1'-0"



4 PROPOSED BOARDWALK – CONNECTION TO SIDEWALK SCHEMATIC VIEW
CS3.1 scale: n.t.s.

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PROJECT

OSBORNE AVENUE POND
PROPOSED BOARDWALK

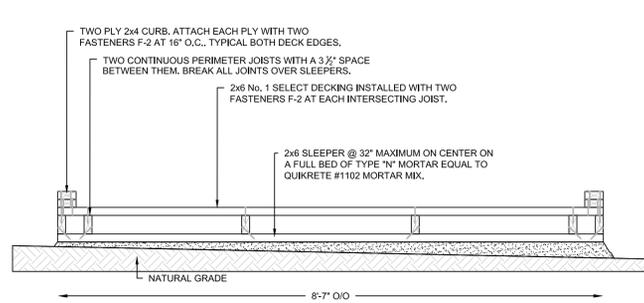
OVERLOOK FRAMING DETAILS

SHEET

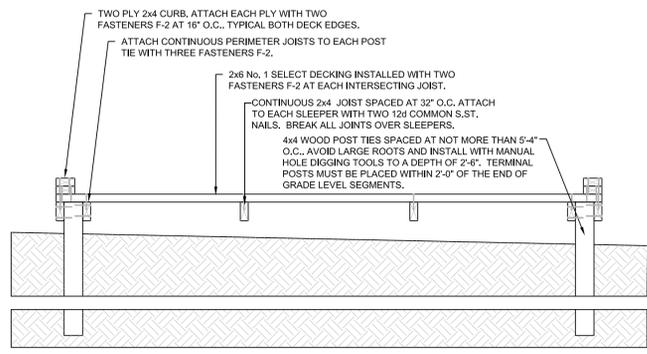
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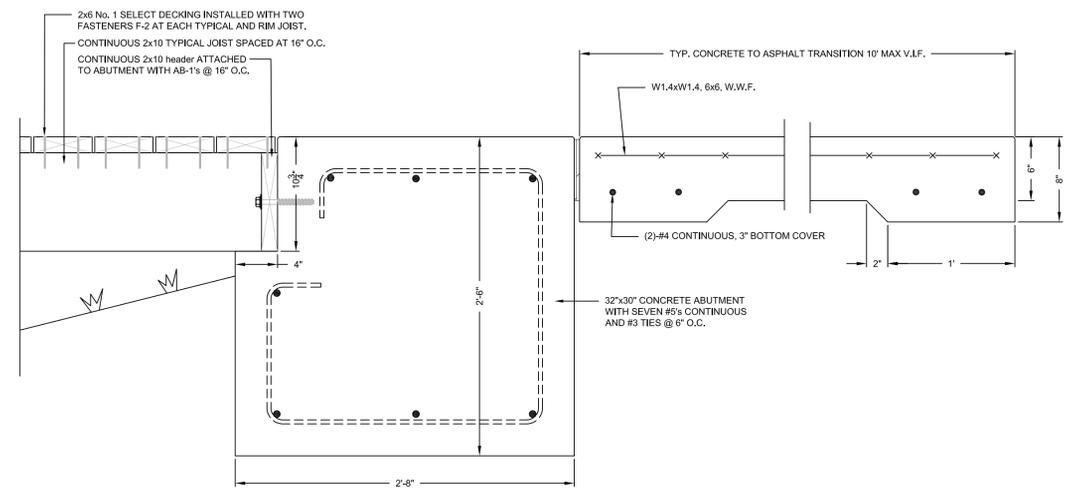
13-016



1 TYPICAL GRADE LEVEL DECK AT SLEEPERS
 CS4.0 SCALE 3/4" = 1'-0"



2 TYPICAL GRADE LEVEL DECK AT POST TIES
 CS4.0 SCALE 3/4" = 1'-0"



5 TYPICAL DECK TO CONCRETE DETAIL
 CS4.0 SCALE 1-1/2" = 1'-0"

**FASTENER SCHEDULE
 FULL SCALE**

- AB-1 1/2" x 4" TYPE 410 S. ST. CONCRETE SCREW WITH FLAT WASHER
- F-1 FLAT HEAD TYPE 305 S. ST.#10x2 1/2" WOOD SCREW TYPE 17 POINT
- F-2 FLAT HEAD TYPE 305 S. ST.#10x3" WOOD SCREW TYPE 17 POINT

- CB-1 1/2" x 15" H.D.G. CARRIAGE BOLT WITH NUT AND FLAT WASHER
- CB-2 1/2" x 17" H.D.G. CARRIAGE BOLT WITH NUT AND FLAT WASHER
- CB-3 1/2" x 7 1/2" TYPE 305 S. ST. CARRIAGE BOLT WITH NUT AND FLAT WASHER
- CB-4 1/2" x 10" TYPE 305 S. ST. CARRIAGE BOLT WITH NUT AND FLAT WASHER
- CB-5 1/2" x 12" TYPE 305 S. ST. CARRIAGE BOLT WITH NUT AND FLAT WASHER
- CB-6 1/2" x 14" TYPE 305 S. ST. CARRIAGE BOLT WITH NUT AND FLAT WASHER

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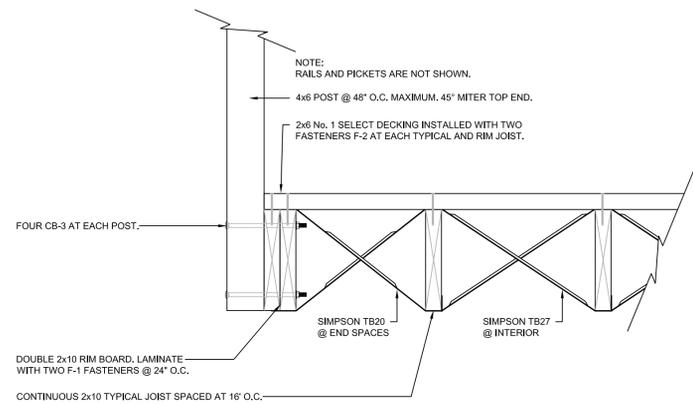
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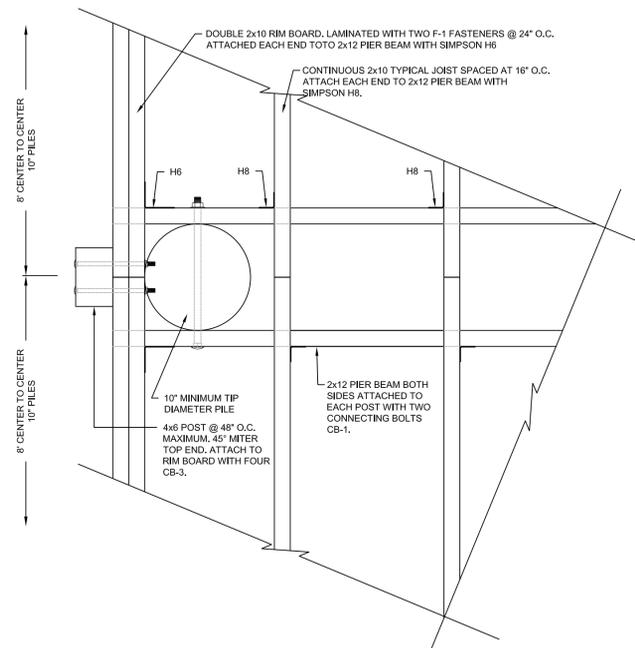
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**OSBORNE AVENUE POND
 PROPOSED BOARDWALK**
 BOARDWALK FRAMING DETAILS

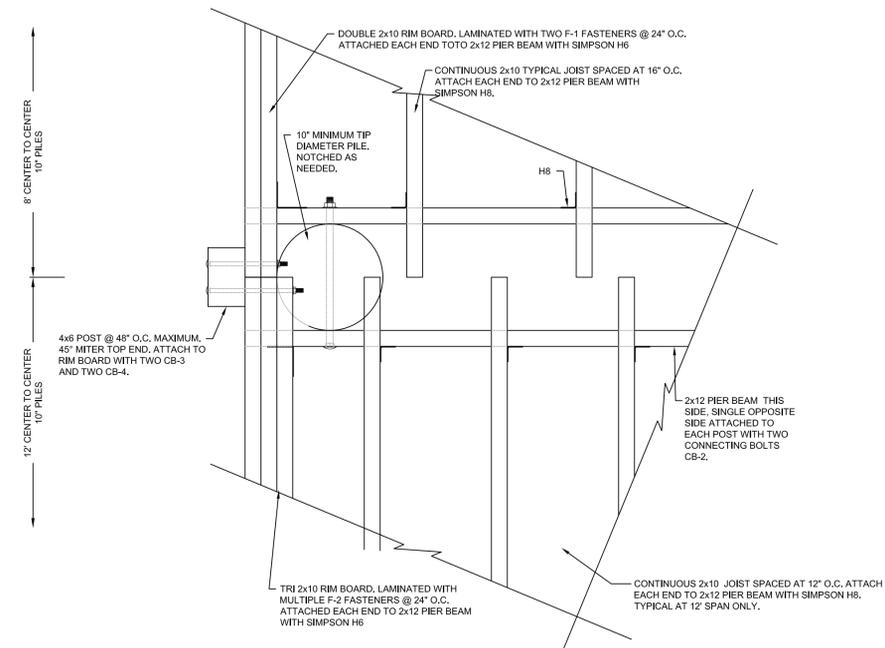
SHEET
CS4.0
 JOB NO.
13-016



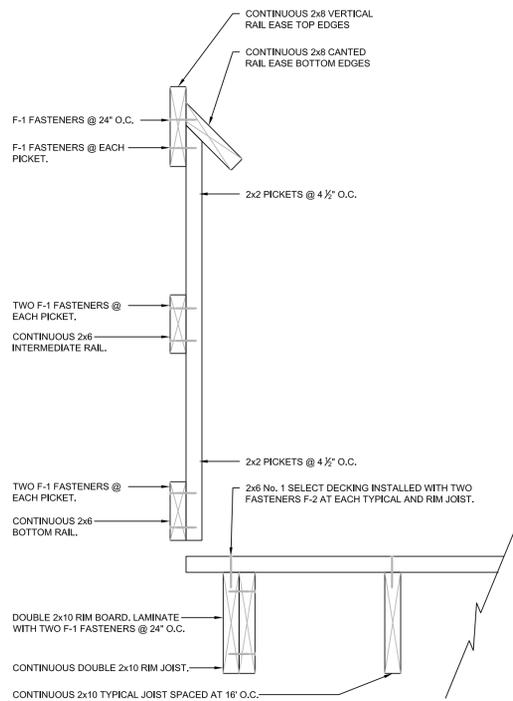
1 TYP BOARDWALK INTERIOR JOIST BRACING DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"



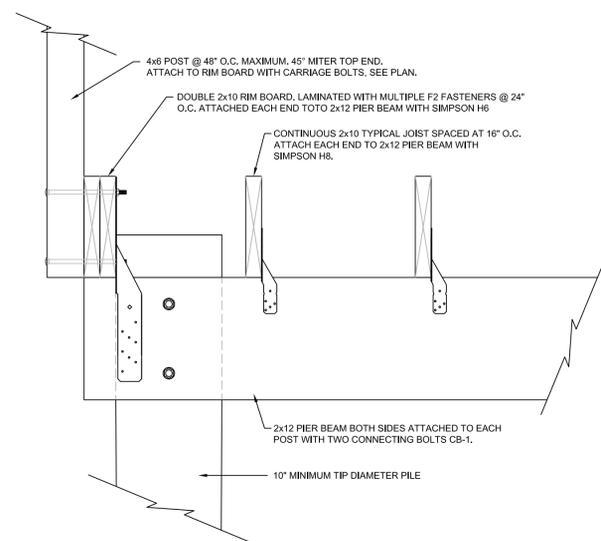
2 TYP. 8'-0" SPAN BOARDWALK FRAMING PLAN DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"



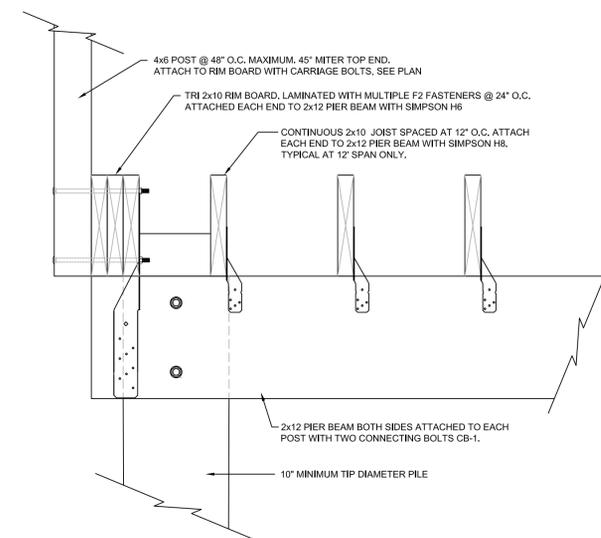
3 12'-0" TO 8'-0" SPAN BOARDWALK FRAMING PLAN DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"



4 TYP. BOARDWALK RAILING DETAIL (SHOWN @ 8'-0" SPAN)
 CS4.1 SCALE 1-1/2" = 1'-0"



5 8'-0" SPAN BOARDWALK JOIST FRAMING DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"



6 12'-0" SPAN BOARDWALK JOIST FRAMING DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"

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OSBORNE AVENUE POND
 PROPOSED BOARDWALK

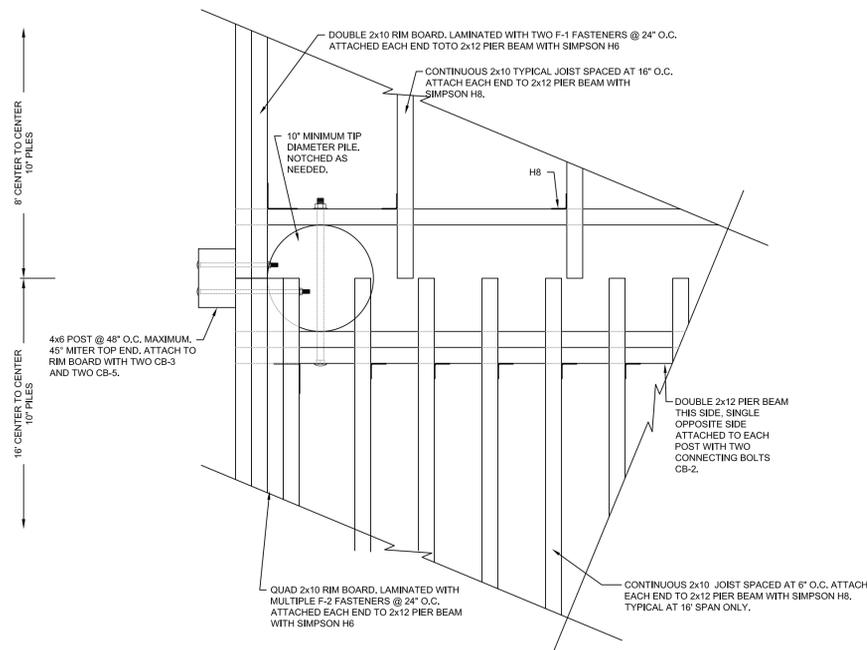
BOARDWALK FRAMING DETAILS

SHEET

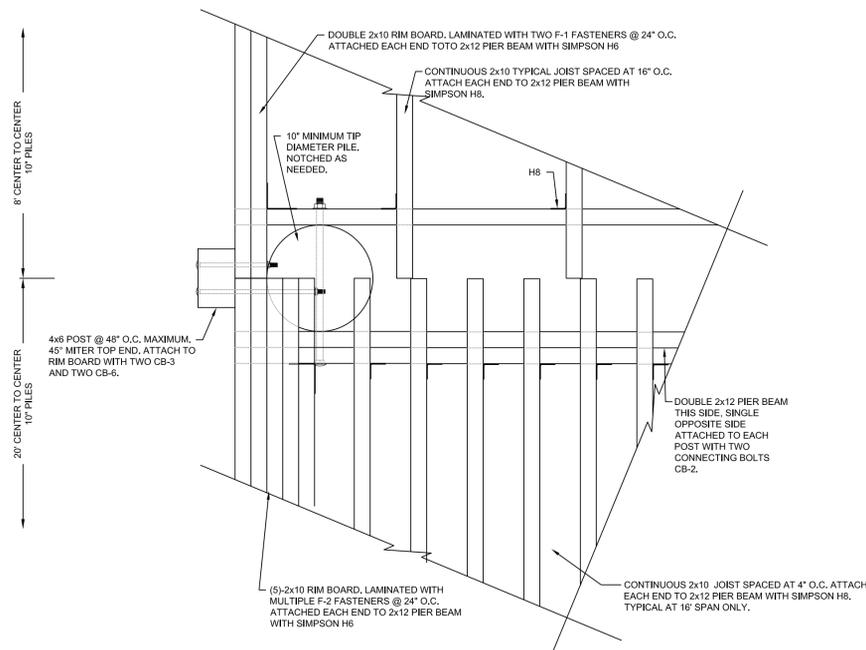
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JOB NO.

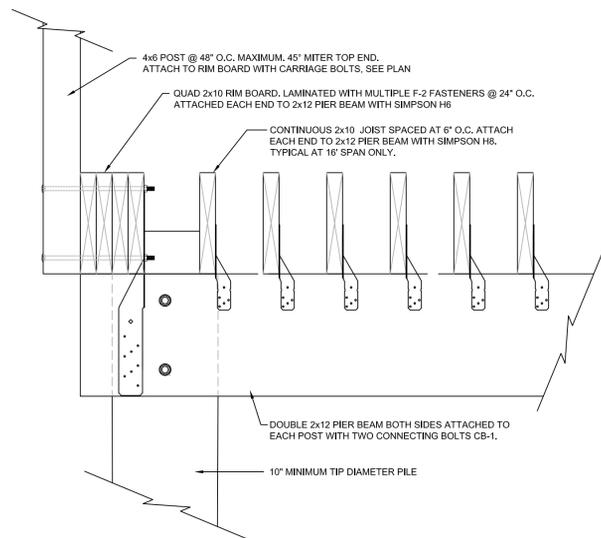
13-016



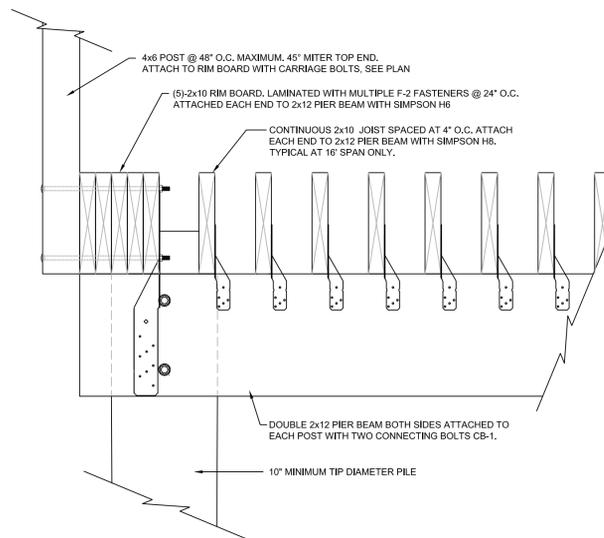
3 16'-0" TO 8'-0" SPAN BOARDWALK FRAMING PLAN DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"



3 20'-0" TO 8'-0" SPAN BOARDWALK FRAMING PLAN DETAIL
 CS4.1 SCALE 1-1/2" = 1'-0"



1 16'-0" SPAN BOARDWALK JOIST FRAMING DETAIL
 CS4.2 SCALE 1-1/2" = 1'-0"



1 20'-0" SPAN BOARDWALK JOIST FRAMING DETAIL
 CS4.2 SCALE 1-1/2" = 1'-0"

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OSBORNE AVENUE POND
 PROPOSED BOARDWALK

BOARDWALK FRAMING DETAILS

SHEET

CS4.2

JOB NO.

13-016