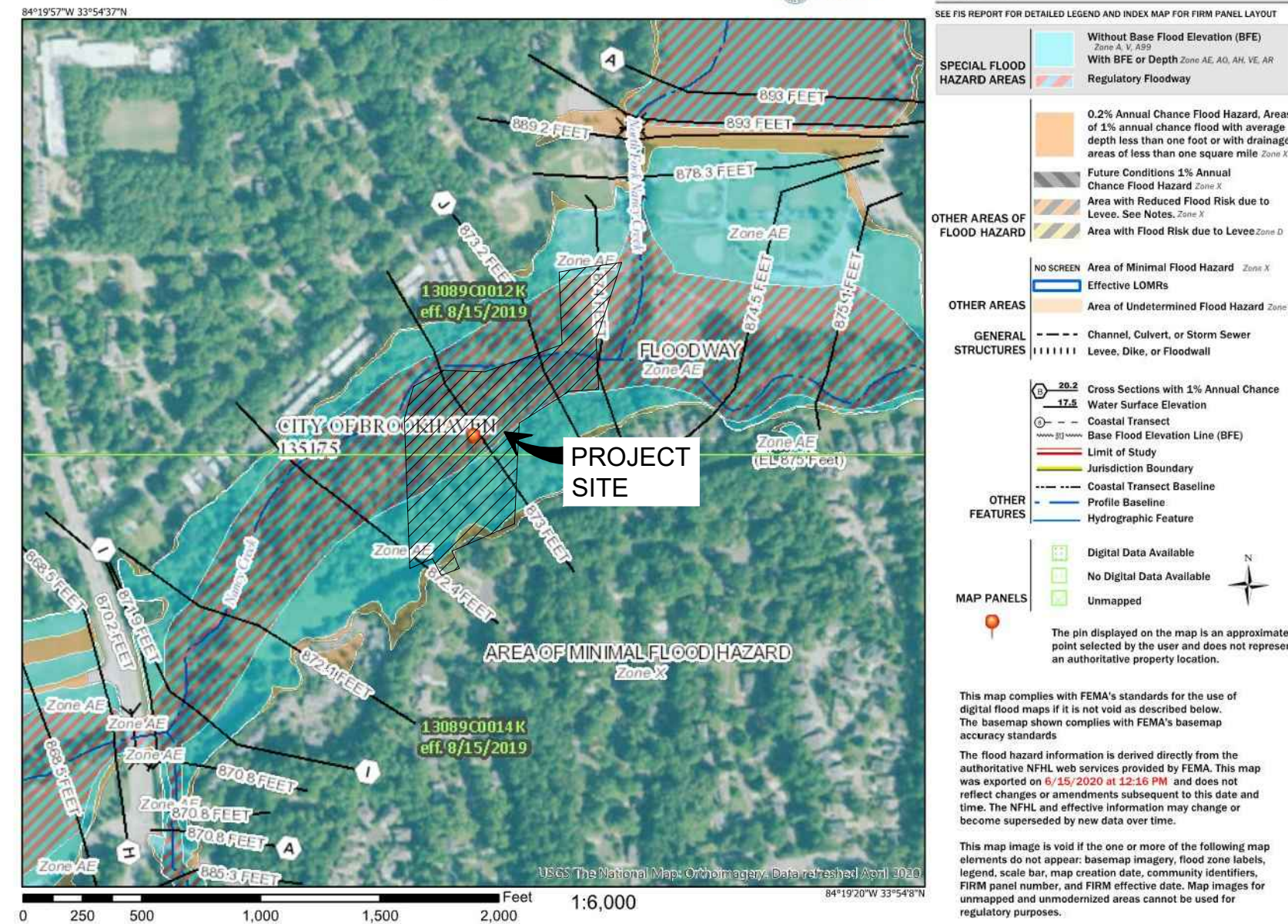
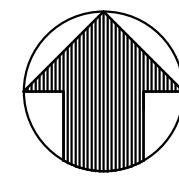


National Flood Hazard Layer FIRMette



FEMA FIRM MAP
N.T.S.

PER FEMA FIRM MAP 13089C0012K AND 13089C0014K (DATED 8/15/2019), THE SITE IS PARTIALLY LOCATED IN ZONE AE (SHADED), WHICH THE AREA DETERMINED TO BE INSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.



THERE IS TO BE NO FILL WITHIN THE LIMITS OF THE DESIGNATED 100-YR FLOOD PLAIN.

Sheet List Table

Sheet Number	Sheet Title	0/19/20			
C-000	COVER SHEET	●			
C-001	GENERAL NOTES	●			
V-001	SURVEY (BY OTHERS) (SHEET 1/13)	●			
V-002	SURVEY (BY OTHERS) (SHEET 5/13)	●			
V-003	SURVEY (BY OTHERS) (SHEET 6/13)	●			
C-100	SITE ACCESS AND STAGING PLAN	●			
C-200	SITE PLAN	●			
C-201	SITE STAKING PLAN	●			
C-220	SITE DETAILS	●			
C-221	BOARDWALK DETAILS	●			
C-222	BOARDWALK DETAILS	●			
C-223	BRIDGE DETAILS	●			
S-001	GENERAL NOTES (BRIDGE ABUTMENT)	●			
S-100	ABUTMENT PLAN & DETAILS	●			
C-300	SITE GRADING PLAN	●			
C-301	GRADING PLAN DETAILS	●			
C-400	EROSION CONTROL PLAN	●			
C-401	EROSION CONTROL DETAILS	●			
C-402	EROSION CONTROL DETAIL	●			
TP-100	TREE PROTECTION PLAN	●			



MURPHEY CANDLER PARK NATURE TRAIL

1551 W. NANCY CREEK DR.
CITY OF BROOKHAVEN
GEORGIA, 30319

LAND LOTS 326 & 327; 18TH DISTRICT DEKALB
COUNTY

TAX PARCEL ID 18-326-01-041

DEKALB CO. PROJECT AP#3061996

BROOKHAVEN PROJECT NO. LDP20-00016

OWNER:

CITY OF BROOKHAVEN

CONTACT: BRIAN BORDEN

PARKS & RECREATION DEPARTMENT

4362 PEACHTREE ROAD

BROOKHAVEN, GA 30319

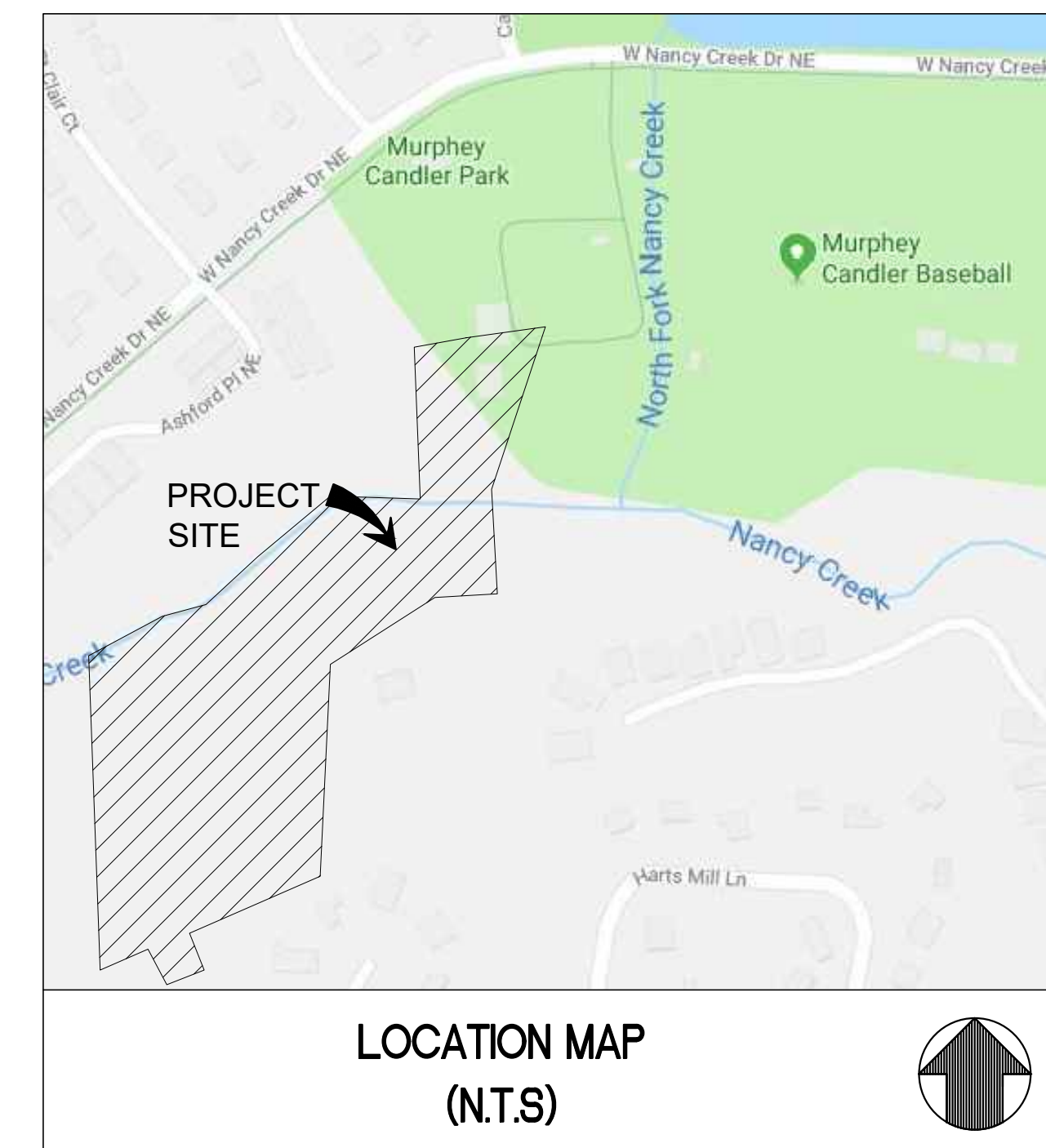
(404) 637-0542

24-HOUR EMERGENCY CONTACT:

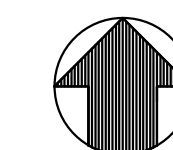
BRIAN BORDEN

(404) 275-9901

BRIAN.BORDEN@BROOKHAVENGA.GOV



LOCATION MAP
(N.T.S)



CONTACTS:

CITY FIRE MARSHAL
JOE BURGE
4362 PEACHTREE RD
BROOKHAVEN, GA 30319
TEL: (404) 637-0564
EMAIL: JOE.BURGE@BROOKHAVENGA.GOV

CITY ARBORIST
BRET D. JEFFERSON, ISA, RLA
4362 PEACHTREE RD
BROOKHAVEN, GA 30319
TEL: (404) 637-0749
EMAIL: BRET.JEFFERSON@BROOKHAVENGA.GOV

CITY PUBLIC WORKS
HARI KARIKARAN
4362 PEACHTREE RD
BROOKHAVEN, GA 30319
TEL: (404) 637-0524
EMAIL: HARI.KARIKARAN@BROOKHAVENGA.GOV

COMMUNITY DEVELOPMENT DIRECTOR PATRICE S. RUFFIN, AICP
4362 PEACHTREE RD
BROOKHAVEN, GA 30319
TEL: (404) 637-0532
EMAIL: PATRICE.RUFFIN@BROOKHAVENGA.GOV

SURVEYOR

BOUNDARY, TOPO & UTILITY SURVEY BY:
TERRAMARK LAND SURVEYING, INC.
CONTACT: BILL WOHLFORD, JR
1396 BELLS FERRY ROAD
MARIETTA, GA 30066
(770) 421-1927

IMPERVIOUS AREA CALCULATIONS		
	EXISTING (SF)	PROPOSED (SF)
CONCRETE TRAIL	0	2,181
TOTAL	0	2,181

TOTAL PROJECT AREA = 2.31 AC.
DISTURBED AREA = 0.25 AC.



Know what's below.
Call before you dig.

ISSUED FOR PERMIT

JOB NO. 20180239.0

DATE: 19 JUNE 2019

NO.	DATE	DESCRIPTION	BY
1	06/19/20	COB PERMIT SUBMITTAL	COB

SURVEY NOTES

EQUIPMENT USED:
A TRIMBLE "S" SERIES TOTAL STATION WAS USED TO OBTAIN ANGULAR MEASUREMENTS AND DISTANCE MEASUREMENTS.
A TRIMBLE R-10 DUAL FREQUENCY GPS UNIT WAS USED FOR ESTABLISHING CONTROL. A NETWORK ADJUSTED RTK SURVEY WAS PERFORMED AND ADJUSTED BY RELATIVE POSITIONAL ACCURACY.

CLOSURE STATEMENT:
TRACT 1 HAS BEEN CALCULATED FOR CLOSURE AND IS ACCURATE WITHIN ONE FOOT IN 897,870 FEET.
TRACT 2 HAS BEEN CALCULATED FOR CLOSURE AND IS ACCURATE WITHIN ONE FOOT IN 239,751 FEET.

THE FIELD DATA UPON WHICH THIS SURVEY IS BASED HAD A CLOSURE OF ONE FOOT IN 31,741 FEET AND AN ANGULAR ERROR OF 1" PER ANGLE POINT AND WAS ADJUSTED USING THE COMPASS RULE.

THE BEARINGS SHOWN ON THIS SURVEY ARE COMPUTED ANGLES BASED ON A GRID BEARING BASE (GA WEST ZONE) NAD83.

ALL HORIZONTAL DISTANCES SHOWN ARE GROUND DISTANCES. MEASURING UNITS OF THIS SURVEY ARE IN U.S. SURVEY FEET.

CONTOURS ARE SHOWN AT ONE FOOT INTERVALS. ELEVATIONS ARE BASED ON NAD 88 DATUM. GLOBAL POSITIONING SYSTEMS OBSERVATION AND ARE RELATIVE TO NAVD 88 DATUM.

FIELD WORK FOR THIS PROPERTY WAS COMPLETED ON AUGUST 17, 2016

DISCLAIMERS:

INFORMATION REGARDING SIZE, LOCATION, AND SPECIES OF EXISTING TREES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE SIZE AND SPECIES OF THE SAID TREES WITHOUT VERIFICATION FROM THE DESIGNATED ARBORIST BY THE LOCAL REGULATORY AUTHORITY. THE OWNER, HIS EMPLOYEES, HIS CONTRACTORS, HIS CONTRACTORS, AND/OR HIS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON EXCEPT BY APPROVAL OF SAID AUTHORITY.

THIS SURVEY MAY NOT REPRESENT OFFSITE PAINT STRIPING TO THE ACCURACY REQUIRED FOR LANE DESIGN. TERRAMARK LOCATES THE EDGE OF PAVING AND CRITICAL POINTS TO REFLECT ACCURATE TOPOGRAPHIC DATA ONLY. ACCURACY OF PAINT LOCATIONS SHOULD BE VERIFIED WITH SURVEYOR PRIOR TO USING THIS SURVEY FOR DESIGN.

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER, AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY TO THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS, HIS CONTRACTORS, AND/OR HIS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON AS TO SUCH UNDERGROUND INFORMATION.

INFORMATION REGARDING STORM SEWER AND SANITARY SEWER AS SHOWN HEREON, IS BASED ON OBSERVATIONS TAKEN BY TERRAMARK EMPLOYEES AT THE GROUND ELEVATION OF THE EXISTING STRUCTURE. TERRAMARK EMPLOYEES ARE NOT AUTHORIZED TO ENTER A CONFINED SPACE AS A STRUCTURE. THEREFORE, THERE IS NO CERTAINTY OF THE PIPE SIZES AND PIPE MATERIAL THAT ARE SHOWN ON THIS SURVEY. EXCAVATION BY A CERTIFIED CONTRACTOR IS THE ONLY WAY TO VERIFY PIPE SIZE AND MATERIAL. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS, HIS CONTRACTORS, AND/OR HIS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON.

STATE WATERS AND BUFFERS AS SHOWN OR NOT SHOWN HEREON ARE SUBJECT TO REVIEW BY LOCAL JURISDICTION OFFICIALS. IT IS THE RESPONSIBILITY OF THE LOCAL AUTHORITY TO DETERMINE SPECIFIC WATER CLASSIFICATION. THEREFORE, TERRAMARK LAND SURVEYING ACCEPTS NO RESPONSIBILITY IN THE IDENTIFICATION OF SAID WATERS OR BUFFERS IDENTIFIED OR NOT IDENTIFIED HEREON.

PROPERTY IS SUBJECT TO RIGHTS OF UPPER AND LOWER RIPIARIAN OWNERS IN AND TO THE WATER OF CREEKS AND BRANCHES CROSSING OR ADJACENT TO SUBJECT PROPERTY AND THE NATURAL FLOW THEREOF, FREE FROM DIMINUTION OR POLLUTION.

THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS OR ENTITY NAMED HEREON. THIS SURVEY DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS OR ENTITY WITHOUT THE EXPRESS CERTIFICATION BY THE SURVEYOR NAMING SAID PERSON, PERSONS OR ENTITY.

TERRAMARK LAND SURVEYING, INC. DOES NOT WARRANT THE EXISTENCE OR NON-EXISTENCE OF ANY WETLANDS OR HAZARDOUS WASTE IN THE SURVEY AREA.

AREA TABLE

TRACT 1 3,630,024 SQ.FT. OR 83.3339 AC.
TRACT 2 1,602,679 SQ.FT. OR 36.7924 AC.
TOTAL AREA 5,232,703 SQ.FT. OR 120.1263 AC.

TITLE NOTES

ACCORDING TO THE "FIRM" (FLOOD INSURANCE RATE MAP) OF DEKALB COUNTY, GEORGIA (PANEL NUMBERS 13089C00121 & 13089C00141), DATED MAY 16, 2013, A PORTION OF THIS PROPERTY LIES WITHIN A SPECIAL FLOOD HAZARDOUS AREA.

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT, WHICH COULD REVEAL ENCUMBRANCES NOT SHOWN ON THIS SURVEY.

SUBJECT PROPERTY HAS ACCESS TO THE PUBLIC RIGHT OF WAY OF WEST NANCY CREEK DRIVE, CANDLER LAKE WEST & CANDLER LAKE EAST.

TRACT 1 PROPERTY DESCRIPTION

Being a tract or parcel of land lying and being in Land Lots 326 & 331, 18th District, DeKalb County, Georgia and being more particularly described as follows:

To find the Point of Beginning, commence at a 1/2 inch capped rebar set representing the intersection of the extension of right of lines of the West Right of Way Line of Candler Lake Circle East (having an apparent 60 feet wide right of way) and the North Right of Way Line of West Nancy Creek Drive (having an apparent 100 feet wide right of way), said right of way lines being shown on a plat of subdivision entitled "Candler Lake Estates, Unit One" and recorded among the Land Records of DeKalb County, Georgia in Plat Book 45, Page 14; thence, leaving the said point and running, 26.38 feet along the arc of a curve deflecting to the right, having a radius of 506.58 feet and a chord bearing and distance of South 47° 01' 01" West, 26.37 feet to a 1/2 inch capped rebar set at the True Point of Beginning of the herein described tract or parcel of land; thence leaving the said Point of Beginning and running with the said line of West Nancy Creek Drive

- 380.40 feet along the arc of a curve deflecting to the right, having a radius of 506.58 feet and a chord bearing and distance of South 70° 01' 15" West, 37.53 feet to a 1/2 inch capped rebar set; thence,
- North 88° 28' 01" West, 1,159.48 feet to a 1/2 inch capped rebar set; thence,
- 146.08 feet along the arc of a curve deflecting to the left, having a radius of 622.95 feet and a chord bearing and distance of South 84° 48' 59" West, 145.72 feet to a 1/2 inch capped rebar set at the intersection of West Nancy Creek Drive and the East Right of Way Line of Candler Lake Circle West (having an apparent variable width right of way); thence, running with the said line of Candler Lake Circle West
- 212.67 feet along the arc of a curve deflecting to the right, having a radius of 773.40 feet and a chord bearing and distance of North 01° 17' 06" East, 212.00 feet to a 1/2 inch capped rebar set; thence,
- North 09° 09' 45" East, 20.00 feet to a 1/2 inch capped rebar set; thence,
- North 24° 06' 45" East, 46.16 feet to a 1/2 inch capped rebar set; thence,
- 408.95 feet along the arc of a curve deflecting to the left, having a radius of 539.87 feet and a chord bearing and distance of North 13° 32' 58" West, 399.24 feet; thence,
- North 35° 18' 01" West, 28.88 feet; thence,
- 435.41 feet along the arc of a curve deflecting to the right, having a radius of 686.20 feet and a chord bearing and distance of North 17° 07' 22" East, 428.14 feet; thence,
- North 01° 03' 18" East, 181.24 feet; thence,
- 523.78 feet along the arc of a curve deflecting to the left, having a radius of 1,794.83 feet and a chord bearing and distance of North 07° 18' 15" West, 521.93 feet; thence,
- North 15° 39' 56" West, 1,182.85 feet to a 1/2 inch capped rebar set; thence, leaving the said line of Candler Lake Circle West and running with the South Right of Way Line of an undeveloped City Street (having an apparent 60 feet right of way) as shown on a plat of subdivision entitled "Ashwoody" and recorded among the aforesaid Land Records in Plat Book 45, Page 35
- 215.29 feet along the arc of a curve deflecting to the right, having a radius of 162.68 feet and a chord bearing and distance of North 40° 23' 23" East, 199.92 feet; thence,
- North 78° 19' 13" East, 98.19 feet; thence,
- 109.79 feet along the arc of a curve deflecting to the right, having a radius of 170.80 feet and a chord bearing and distance of South 76° 39' 12" East, 107.91 feet; thence,
- South 58° 15' 31" East, 39.59 feet; thence,
- 171.51 feet along the arc of a curve deflecting to the right, having a radius of 855.80 feet and a chord bearing and distance of South 52° 34' 08" East, 177.23 feet; thence,
- South 46° 48' 38" East, 109.84 feet; thence,
- 150.99 feet along the arc of a curve deflecting to the right, having a radius of 1,060.00 feet and a chord bearing and distance of South 42° 42' 47" East, 150.86 feet; thence,
- South 38° 37' 57" East, 185.42 feet to a 1/2 inch capped rebar set; thence,
- South 27° 52' 28" East, 267.98 feet; thence,
- 134.69 feet along the arc of a curve deflecting to the right, having a radius of 3,888.00 feet and a chord bearing and distance of South 26° 52' 53" East, 134.68 feet to a 1/2 inch capped rebar set; thence,
- South 25° 53' 21" East, 89.96 feet to a 1/2 inch capped rebar set on the developed West Right of Way Line of Candler Lake Circle East (having an apparent 60 feet wide right of way) as shown on a plat of subdivision entitled "Candler Lake View" and recorded among the aforesaid Land Records in Plat Book 58, Page 161; thence, running with the said line of Candler Lake Circle East
- 87.43 feet along the arc of a curve deflecting to the right, having a radius of 476.00 feet and a chord bearing and distance of South 21° 03' 58" East, 87.31 feet; thence,
- South 17° 19' 19" East, 233.10 feet; thence,
- 576.41 feet along the arc of a curve deflecting to the left, having a radius of 750.28 feet and a chord bearing and distance of South 30° 19' 51" East, 562.34 feet; thence,
- South 61° 20' 23" East, 277.04 feet; thence,
- 372.07 feet along the arc of a curve deflecting to the left, having a radius of 709.22 feet and a chord bearing and distance of South 70° 22' 09" East, 367.82 feet; thence,
- North 88° 39' 05" East, 108.79 feet; thence,
- 428.21 feet along the arc of a curve deflecting to the right, having a radius of 186.47 feet and a chord bearing and distance of South 25° 36' 38" East, 340.13 feet; thence,
- South 40° 10' 38" West, 291.38 feet; thence,
- 397.43 feet along the arc of a curve deflecting to the left, having a radius of 312.01 feet and a chord bearing and distance of South 03° 41' 11" West, 371.10 feet to a 1/2 inch capped rebar set; thence,
- South 32° 48' 19" East, 104.23 feet to a 1/2 inch capped rebar set; thence,
- South 33° 54' 42" East, 127.33 feet to a 1/2 inch capped rebar set; thence,
- 43.16 feet along the arc of a curve deflecting to the right, having a radius of 30.00 feet and a chord bearing and distance of South 07° 17' 54" West, 39.53 feet to the Point of Beginning, containing 3,630,024 square feet or 83.3339 acres of land, more or less.

Property is subject to all easements and rights of way recorded and unrecorded.

BOUNDARY AND TOPOGRAPHIC SURVEY FOR THE CITY OF BROOKHAVEN (MURPHEY CANDLER PARK) LOCATED IN LAND LOTS 326, 327 & 331, 18TH DISTRICT DEKALB COUNTY, GEORGIA

SITE MAP



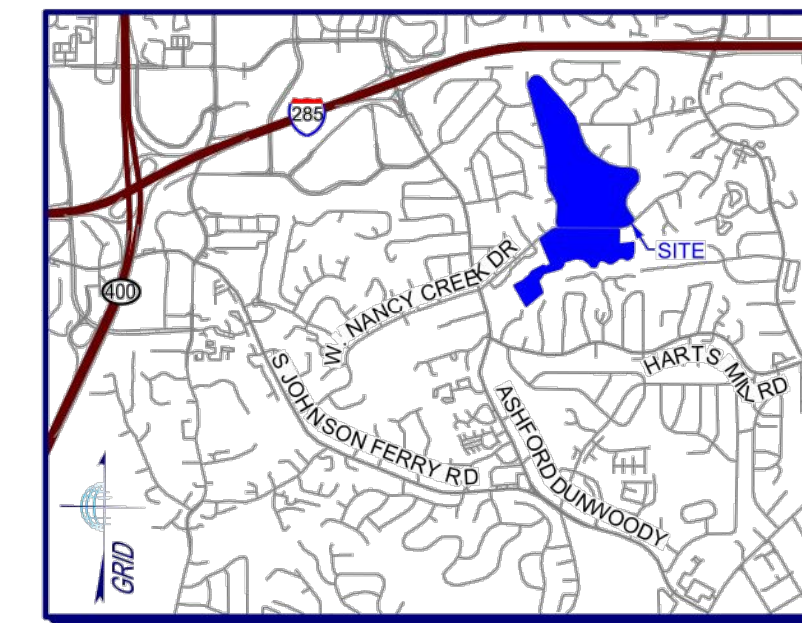
TRACT 2 PROPERTY DESCRIPTION

Being a tract or parcel of land lying and being in Land Lots 326 & 327, 18th District, DeKalb County, Georgia and being more particularly described as follows:

To find the Point of Beginning, commence at a 1/2 inch capped rebar set representing the intersection of the extension of right of lines of the West Right of Way Line of Candler Lake Circle East (having an apparent 60 feet wide right of way) and the North Right of Way Line of West Nancy Creek Drive (having an apparent 100 feet wide right of way), said right of way lines being shown on a plat of subdivision entitled "Candler Lake Estates, Unit One" and recorded among the Land Records of DeKalb County, Georgia in Plat Book 45, Page 14; thence, leaving the said point and running, 26.38 feet along the arc of a curve deflecting to the right, having a radius of 506.58 feet and a chord bearing and distance of South 47° 01' 01" West, 26.37 feet to a 1/2 inch capped rebar set; thence, running with the said line of West Nancy Creek Drive, 380.40 feet along the arc of a curve deflecting to the right, having a radius of 506.58 feet and a chord bearing and distance of South 70° 01' 15" West, 37.53 feet to a 1/2 inch capped rebar set; thence, leaving said line of West Nancy Creek Drive and running across West Nancy Creek Drive, South 01° 31' 59" West, 100.00 feet to a 1/2 inch capped rebar set on the South Right of Way Line of said West Nancy Creek Drive, said point being the True Point of Beginning of the herein described tract or parcel of land; thence leaving the said Point of Beginning and the said line of West Nancy Creek Drive and running with Lots 1 & 2 of said Candler Lake Estates

- South 07° 53' 34" East, 251.24 feet to a 1/2 inch rebar found; thence,
- South 63° 13' 35" East, 114.76 feet to a 1/2 inch rebar found; thence,
- South 63° 13' 35" East, 90.56 feet to the centerline of Nancy Creek; thence, running with the said centerline of Nancy Creek
- South 16° 56' 36" West, 42.41 feet; thence,
- South 18° 32' 17" West, 29.82 feet; thence,
- South 20° 58' 38" West, 35.95 feet; thence,
- South 04° 30' 15" West, 35.95 feet; thence,
- South 22° 41' 01" West, 38.11 feet; thence,
- South 21° 49' 30" West, 30.95 feet; thence,
- South 24° 10' 59" West, 68.61 feet; thence,
- South 17° 16' 24" West, 60.36 feet; thence,
- South 04° 30' 25" West, 31.46 feet; thence,
- South 16° 16' 46" West, 80.59 feet; thence,
- South 49° 29' 49" West, 73.16 feet; thence,
- North 52° 54' 36" West, 59.22 feet; thence,
- North 54° 48' 17" West, 47.01 feet; thence,
- South 22° 41' 01" West, 38.11 feet; thence,
- South 21° 49' 30" West, 30.95 feet; thence,
- South 24° 10' 59" West, 68.61 feet; thence,
- South 17° 16' 24" West, 60.36 feet; thence,
- South 04° 30' 25" West, 31.46 feet; thence,
- North 47° 28' 51" West, 29.90 feet; thence,
- North 19° 33' 10" West, 13.84 feet; thence,
- South 49° 29' 49" West, 40.09 feet; thence,
- North 87° 08' 50" West, 35.40 feet; thence,
- North 85° 17' 50" West, 23.34 feet; thence,
- South 52° 18' 49" West, 58.88 feet; thence,
- North 58° 43' 09" West, 53.32 feet; thence,
- South 59° 20' 23" West, 153.25 feet; thence,
- North 64° 57' 35" West, 56.55 feet; thence,
- North 39° 39' 17" West, 33.84 feet; thence,
- South 61° 31' 24" West, 12.23 feet; thence,
- North 44° 39' 48" West, 60.27 feet; thence,
- South 63° 17' 35" West, 63.38 feet; thence,
- South 63° 17' 35" West, 63.38 feet; thence,
- North 67° 33' 36" West, 67.19 feet; thence,
- North 62° 19' 41" West, 51.10 feet; thence,
- North 85° 21' 02" West, 42.12 feet; thence,
- North 89° 46' 50" West, 32.85 feet; thence,
- South 04° 02' 10" West, 199.78 feet to a 1/2 inch rebar found; thence,
- North 76° 17' 54" West, 19.75 feet to the intersection with the West Line of Lot 5, Block B as shown on a Final Plat entitled "Ashford Glen, Unit IV" and recorded among the aforesaid Land Records in Plat Book 8, Page 14
- North 76° 17' 54" West, 19.75 feet; thence, leaving the aforesaid centerline of Nancy Creek and running through Lots 8 & 7, Block B of said Ashford Glen, Unit IV
- North 12° 19' 25" West, 71.01 feet to a 1/2 inch capped rebar set; thence,
- 80.04 feet along the arc of a curve deflecting to the right, having a radius of 65.00 feet and a chord bearing and distance of South 47° 35' 06" West, 75.08 feet; thence,
- South 83° 52' 52" West, 43.47 feet to a 1/2 inch rebar found; thence,
- South 82° 43' 05" West, 223.17 feet to a 1/2 inch rebar found; thence,
- South 02° 02' 10" West, 199.78 feet to a 1/2 inch rebar found; thence, running with the West Line of said Lot 7
- South 04° 11' 57" East, 218.65 feet to a 1/2 inch rebar found at the Northwest Corner of Lot 8 of said Ashford Glen, Unit IV; thence, running with the West Line of Lot 8
- South 04° 16' 01" East, 121.17 feet to an axle found at the rear angle point of Lot 14, Block A of a subdivision entitled "Fox Glen" and recorded among the aforesaid Land Records in Plat Book 46, Page 87; thence, running with northwesterly lines of the said Fox Glen subdivision
- South 59° 14' 40" West, 139.41 feet to a 1/2 inch rebar found at the common corner of Lot 14 and Lot 15; thence, continuing
- South 59° 43' 56" West, 228.48 feet to a 1/2 inch rebar found (disturbed), thence, running with the property now or formerly owned by the Ashford Lake Condominium Association and as shown on a Condominium Plat recorded among the aforesaid Land Records in Condo Plat 6, Page 9
- North 21° 20' 40" West, 531.83 feet to the centerline of Nancy Creek; thence, running with the said centerline of Nancy Creek
- North 71° 54' 28" East, 7.91 feet; thence,
- North 68° 19' 18" East, 62.67 feet; thence,
- North 64° 36' 33" East, 53.19 feet; thence,
- North 75° 47' 51" East, 43.73 feet; thence,
- North 62° 37' 49" East, 37.34 feet; thence,
- North 57° 08' 00" East, 40.21 feet; thence,
- North 37° 54' 19" East, 43.48 feet; thence,
- North 17° 22' 00" East, 38.87 feet; thence,
- North 41° 58' 49" East, 36.15 feet; thence,
- North 49° 59' 25" East, 71.28 feet; thence,
- North 69° 07' 51" East, 58.11 feet; thence,
- North 70° 12' 41" East, 44.21 feet; thence,
- North 75° 17' 14" East, 36.78 feet; thence,
- South 81° 48' 34" East, 46.21 feet; thence,
- South 88° 02' 50" East, 73.21 feet; thence,
- North 71° 58' 41" East, 16.87 feet; thence,
- North 88° 16' 49" East, 17.50 feet; thence,
- North 78° 09' 07" East, 38.74 feet; thence,
- North 79° 38' 04" East, 19.32 feet; thence,
- North 67° 27' 55" East, 52.14 feet; thence, leaving the centerline of Nancy Creek and running with the property now or formerly owned by the Ashford Place Condominium Association as described in a deed recorded among the aforesaid Land Records in Deed Book 3529, Page 379
- North 25° 16' 40" West, 37.04 feet; thence,
- North 25° 16' 40" West, 525.00 feet to a 1/2 inch rebar found on the aforesaid South Line of West Nancy Creek Drive; thence, running with the said line of West Nancy Creek Drive
- North 49° 33' 44" East, 170.58 feet; thence,
- 382.39 feet along the arc of a curve deflecting to the right, having a radius of 522.95 feet and a chord bearing and distance of North 70° 35' 08" East, 373.93 feet to a 1/2 inch capped rebar set; thence,
- South 88° 28' 01" East, 1,159.48 feet to the Point of Beginning, containing 1,602,679 square feet or 36.7924 acres of land, more or less.

Property is subject to all easements and rights of way recorded and unrecorded.



LOCATION MAP

NOT TO SCALE
LAT - 33°54'34.29"N
LONG - 84°19'34.42"W

BENCHMARK 1 BENCHMARK 2 DETAIL



UTILITY NOTES

THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON LOCATION OF MARKINGS PROVIDED BY:

UTILISURVEY, LLC
154 GRANT ROAD
FAYETTEVILLE, GA. 30215
PHONE: 404-312-6912
ATTENTION: HANS WANNENBERGER

THE UNDERGROUND UTILITIES (EXCEPT THE LOCATION OF EXISTING DRAINAGE, SEWER, AND IRRIGATION UTILITIES AS WELL AS UNDERGROUND STORAGE TANKS) WERE LOCATED BY UTILISURVEY, LLC, UTILIZING RADIO FREQUENCY TECHNIQUE AND IN ACCORDANCE TO LEVEL "B" UTILITY LOCATION CRITERIA. THIS TECHNIQUE IS CAPABLE OF LOCATING METALLIC UTILITIES AND TRACER WIRES. ANY NON-METALLIC UTILITIES (WITHOUT TRACER WIRE) ARE NOT LOCATED.

THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN-SERVICE OR ABANDONED, UNDERGROUND UTILITIES NOT OBSERVED OR LOCATED UTILIZING THIS TECHNIQUE MAY EXIST ON THIS SITE BUT ARE NOT SHOWN, AND MAY BE FOUND UPON EXCAVATION. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.

INFORMATION REGARDING MATERIAL AND SIZE OF UTILITIES IS BASED ON RECORDS ACQUIRED FROM THE UTILITY OWNERS.

UTILITY PROVIDERS

GAS	COMMUNICATION
ATLANTA GAS LIGHT COMPANY AGL 10 PEACHTREE STREET NE DALLAS, TX 75202 (210) 821-4105 MARTIN MAREK (404) 584-4126	AT&T 208 S. AKARD ST. DALLAS, TX 75202 (210) 821-4105 ANGELO HINES (770) 794-3972
POWER	COMCAST (770) 559-6979 SANDRA ANDREWS
DEKALB COUNTY WATER AND SEWER DEPARTMENT 1580 ROADHAVEN DR. STONE MOUNTAIN, GA. 30083 (770) 612-7222 JEFF WOODS (770) 724-1460 JDWOODS@DEKALBCOUNTYGA.GOV	LEVEL 3 COMMUNICATIONS, INC 1025 ELDORADO BOULEVARD BROOMFIELD, CO 80021 (877) 368-8344 EXT. 3
VERIZON / MCI 2400 N GLENVILLE RICHARDSON, TX 75082 (972) 471-1042 DENNIS RAINY	CENTURYLINK 100 CENTURYLINK DRIVE MONROE, LA 71203 (888) 723-8010
ZAYO FIBER SOLUTIONS 400 CENTENNIAL PKWY, SUITE 200 LOUISVILLE, CO 80027 (878) 686-2463 NICK FLORES	

SURVEYOR'S CERTIFICATE

THIS SURVEY WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE RULES OF GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN THE GEORGIA SURVEY ACT C.O.G.A. 15-6-67, AUTHORITY C.O.G.A. SECS. 15-6-67, 43-15-4, 43-15-6, 43-15-19, 43-15-21

WILLIAM C. WOHLFORD, JR., RLS
REGISTERED NUMBER: 2577

SITE INFORMATION

CURRENT OWNER: CITY OF BROOKHAVEN
DB, 24965 PG. 50

TAX PARCEL ID # 18 331 01 005 & 18 326 01 041

ADDRESS: 1551 WEST NANCY CREEK DRIVE
ZONING: R-100 (MULTI-FAMILY RESIDENTIAL)
JURISDICTION: CITY OF BROOKHAVEN

SETBACKS: FRONT 35'
SIDE 20' (UNLESS ADJOINER IS ANY R LOT THEN 50')
REAR 40' (UNLESS ADJOINER IS ANY R LOT THEN 50')

PARKING COUNT:

REGULAR PARKING - 228
HANDICAPPED PARKING - 5
TOTAL PARKING COUNT - 233

REFERENCE MATERIAL

- PLAT FOR CANDLER LAKE ESTATES, UNIT ONE
RECORDED IN PB. 45 PG. 14
AMONG THE LAND RECORDS OF DEKALB COUNTY
- PLAT FOR ASHWOODY SUBDIVISION
RECORDED IN PB. 45 PG. 35
AFORSAID RECORDS
- PLAT FOR CANDLER LAKE VIEW SUBDIVISION
RECORDED IN PB. 88 PG. 161
AFORSAID RECORDS
- FINAL PLAT FOR ASHFORD GLEN, UNIT 4
RECORDED IN PB. 84 PG. 29
AFORSAID RECORDS
- PLAT FOR FOX GLEN SUBDIVISION
RECORDED IN PB. 46 PG. 87
AFORSAID RECORDS
- CONDOMINIUM PLAT FOR ASHFORD LAKE CONDOMINIUM ASSOCIATION
RECORDED IN PB. 6 PG. 9
AFORSAID RECORDS
- DEED FOR ASHFORD PLACE CONDOMINIUM ASSOCIATION
RECORDED IN DB. 3529 PG. 379
AFORSAID RECORDS



PHOTO #1

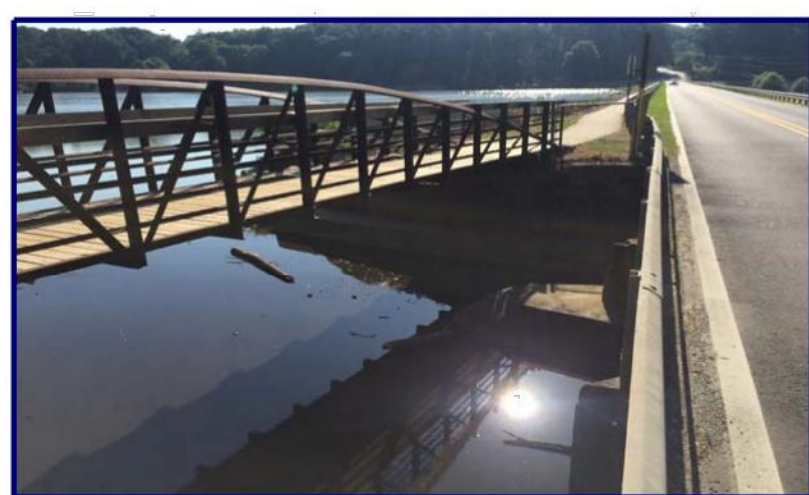


PHOTO #2



PHOTO #3

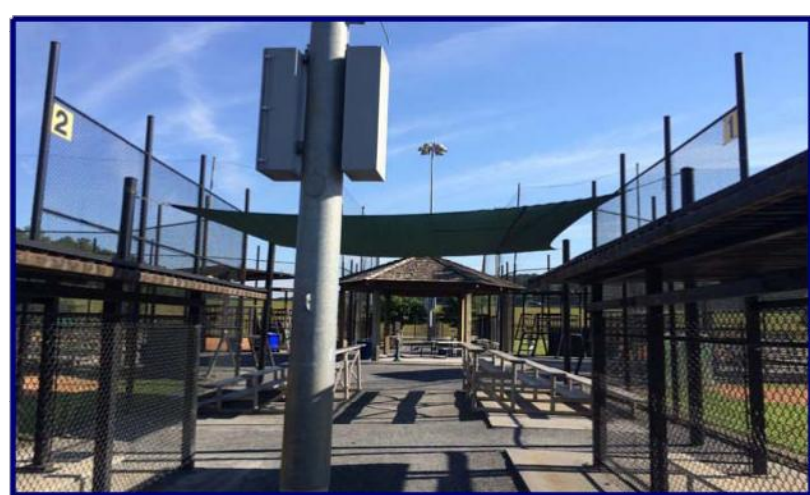


PHOTO #4



PHOTO #5



PHOTO #6

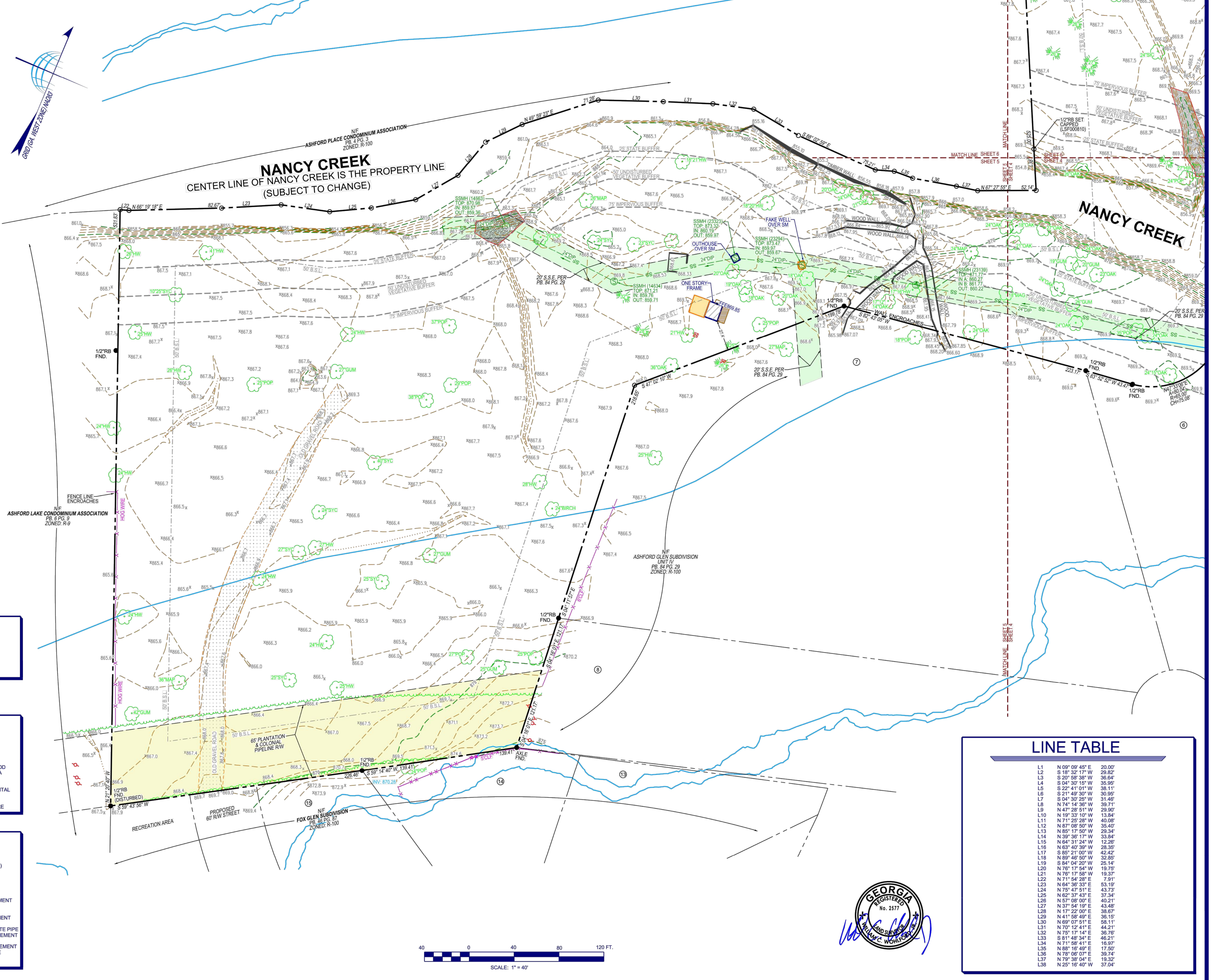


PHOTO #7

BOUNDARY AND TOPOGRAPHIC SURVE

LEGEND

- CURB AND GUTTER (C&G)
- FENCE
- HANDRAIL
- STORM DRAIN LINE
- SANITARY SEWER
- WATER LINE
- GAS LINE
- UNDERGROUND POWER LINE
- OVERHEAD POWER LINE
- COMMUNICATION
- TOPOGRAPHIC CONTOUR
- PROPERTY LINE
- GUARD RAIL
- WET WEATHER DITCH
- WATER SPIGOT
- CATCH BASIN (DWCB)
- CATCH BASIN (SWCB)
- DROP INLET (DI)
- JUNCTION BOX (JB)
- HEAD WALL (HW)
- CURB INLET (CI)
- FLARED END SECTION (FES)
- OUTLET CONTROL STRUCTURE
- YARD DRAIN INLET
- SS MANHOLE (MH)
- CLEAN OUT (CO)
- IRRIGATION CONTROL VALVE
- FIRE HYDRANT (FH)
- WATER VALVE (WV)
- WATER METER (WM)
- FIRE DEPT. CONNECTION (FDC)
- WATER VALVE MARKER
- TRANSFORMER BOX (TX)
- AIR CONDITIONER (AC)
- ELECTRIC METER (EM)
- ELECTRIC UTILITY
- LIGHT POLE (LP)
- POWER POLE WITH LIGHT
- POWER POLE (PP)
- UTILITY MANHOLE (UM)
- SPOTLIGHT
- GAS METER (GM)
- GAS VALVE (GV)
- TELEPHONE PEDESTAL
- COMMUNICATION BOX
- BOLLARD (BO)
- MAIL BOX
- SIGN
- SPOT ELEVATION
- CONCRETE AREA
- OVERHANG AREA
- RIP-RAP AREA
- BRICK AREA
- TREELINE



FLOOD ZONE LEGEND

FLOOD ZONE AREA
(SEE SHEET 13 FOR FLOOD ZONE DETAIL)

TREE LEGEND (ABBREVIATIONS)

DECIDUOUS (TREE)	BIR	BIRCH	HLI	HOLLY
CONIFEROUS (TREE)	CM	BESCH	HW	HARDWOOD
	CHY	CRPE	MYR	MAG
	CYP	CHRY	MYR	MAP
	FIR	CYRS	MAP	MAPLE
	GUM	ORN	ORN	ORNA
	HIC	ORNA	ORN	ORNAM
		SYC	SYC	SYCAM

ABBREVIATIONS

A	ARC LENGTH	IPS	IRON PIN SET (CAPPED)
AC	ACRE	NIF	NOW OR FORMERLY
AE	ACCESS EASEMENT	OTF	OPEN TOP PIPE
BSL	BUILDING SETBACK LINE	PB	PLAT BOOK
BW	BARBWARE	PG	PAGE
CH	CHORD LENGTH	POB	POINT OF BEGINNING
CLF	CHAIN LINK FENCE	POC	POINT OF COMMENCEMENT
CMF	CONCRETE MONUMENT FOUND	R	RADIUS LENGTH
CMP	CORRUGATED METAL PIPE	RW	RIGHT OF WAY
CCNC	CONCRETE	RWM	RIGHT OF WAY MONUMENT
CTP	CRIMP TOP PIPE	RB	REBAR
DB	DEED BOOK	RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE	SD	STORM DRAINAGE EASEMENT
FDC	FIRE DEPARTMENT CONNECTION	SO. FT.	SQUARE FEET
FND	FOUND	SSE	SANITARY SEWER EASEMENT
HDPE	HIGH DENSITY POLYETHYLENE PIPE	WPF	WOOD PRIVACY FENCE
IPF	IRON PIN FOUND		

LINE TABLE

L1	N 09° 09' 45" E	20.00'
L2	S 18° 32' 17" W	29.82'
L3	S 20° 58' 38" W	36.64'
L4	S 04° 30' 15" W	35.55'
L5	S 22° 41' 01" W	38.11'
L6	S 21° 49' 30" W	30.55'
L7	S 04° 30' 25" W	31.48'
L8	N 74° 14' 36" W	39.71'
L9	N 47° 28' 51" W	39.50'
L10	N 19° 33' 10" W	13.84'
L11	N 71° 25' 28" W	40.08'
L12	N 87° 08' 50" W	35.40'
L13	N 85° 17' 50" W	29.34'
L14	N 39° 36' 17" W	33.84'
L15	N 64° 31' 24" W	12.28'
L16	N 63° 40' 39" W	28.35'
L17	S 85° 21' 00" W	42.42'
L18	N 69° 46' 50" W	32.85'
L19	S 84° 04' 20" W	25.14'
L20	N 76° 17' 54" W	19.78'
L21	N 76° 17' 58" W	19.37'
L22	N 71° 54' 28" E	7.91'
L23	N 64° 36' 33" E	53.18'
L24	N 75° 47' 51" E	43.73'
L25	N 62° 37' 43" E	37.34'
L26	N 57° 08' 00" E	40.21'
L27	N 37° 54' 19" E	43.48'
L28	N 17° 22' 00" E	38.87'
L29	N 41° 58' 49" E	36.15'
L30	N 69° 07' 51" E	58.11'
L31	N 70° 12' 41" E	44.21'
L32	N 75° 17' 14" E	36.76'
L33	S 81° 48' 34" E	46.21'
L34	N 71° 06' 41" E	16.87'
L35	N 88° 16' 49" E	17.50'
L36	N 78° 08' 07" E	39.74'
L37	N 79° 38' 04" E	19.32'
L38	N 25° 16' 40" W	37.04'

TerraMark Land Surveying, Inc.
 1000 Peachtree Street, N.E.
 Atlanta, Georgia 30308
 Phone No. (770) 421-1927
 Fax No. (770) 421-0552
 www.TerraMark.com
 Professional Land Surveying C. O. A. #LSF000810

TerraMark

Professional Land Surveying

Project No.	20161687	No.	1	Date
Survey	VM, DW	#1		
Drawn By	NEC	#2		
Approved By	WCV	#3		
Date	08/29/16	#4		
Scale	1"=40'	#5		
		#6		
		#7		
		#8		
		#9		
		#10		
		#11		
		#12		
		#13		
		#14		
		#15		
		#16		
		#17		
		#18		
		#19		
		#20		
		#21		
		#22		
		#23		
		#24		
		#25		
		#26		
		#27		
		#28		
		#29		
		#30		
		#31		
		#32		
		#33		
		#34		
		#35		
		#36		
		#37		
		#38		
		#39		
		#40		
		#41		
		#42		
		#43		
		#44		
		#45		
		#46		
		#47		
		#48		
		#49		
		#50		
		#51		
		#52		
		#53		
		#54		
		#55		
		#56		
		#57		
		#58		
		#59		
		#60		
		#61		
		#62		
		#63		
		#64		
		#65		
		#66		
		#67		
		#68		
		#69		
		#70		
		#71		
		#72		
		#73		
		#74		
		#75		
		#76		
		#77		
		#78		
		#79		
		#80		
		#81		
		#82		
		#83		
		#84		
		#85		
		#86		
		#87		
		#88		
		#89		
		#90		
		#91		
		#92		
		#93		
		#94		
		#95		
		#96		
		#97		
		#98		
		#99		
		#100		

BOUNDARY AND TOPOGRAPHIC SURVEY FOR THE CITY OF BROOKHAVEN (MURPHEY CANDLER PARK) LOCATED IN LAND LOTS 326, 327 & 331, 18TH DISTRICT DEKALB COUNTY, GEORGIA

SHEET NO. 5/13
 DRAWING# TM 16 097

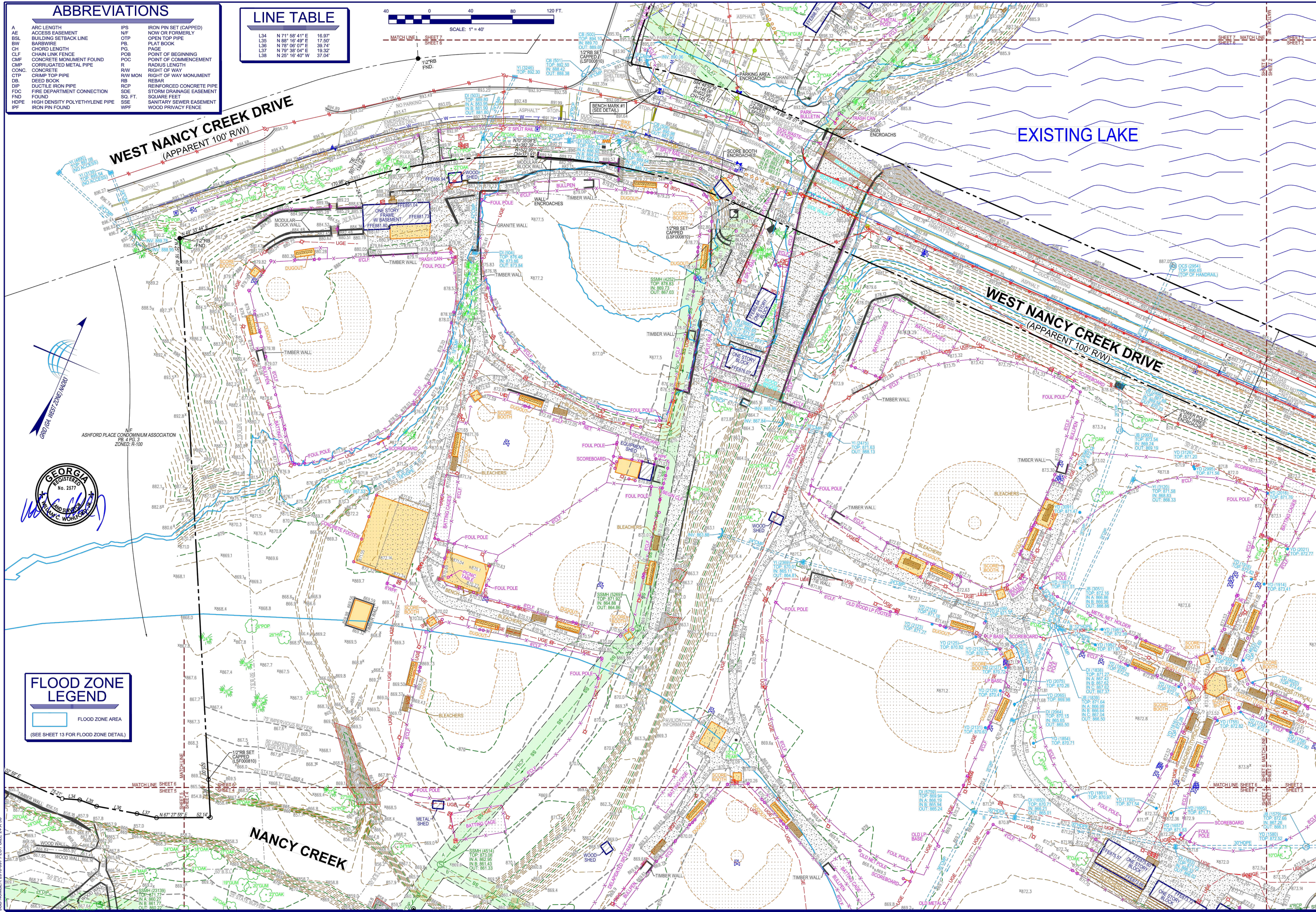
V-002

ABBREVIATIONS

A	ARC LENGTH	IPS	IRON PIN SET (CAPPED)
AE	ACCESS EASEMENT	N/P	NOW OR FORMERLY
BSL	BUILDING SETBACK LINE	OTF	OPEN TOP PIPE
BW	BARBWARE	PG.	PLAT BOOK
CH	CHORD LENGTH	PB.	PAGE
CLF	CHAIN LINK FENCE	POB	POINT OF BEGINNING
CMF	CONCRETE MONUMENT FOUND	POC	POINT OF COMMENCEMENT
CMP	CORRUGATED METAL PIPE	R	RADIUS LENGTH
CONC.	CONCRETE	R/W	RIGHT OF WAY
CTP	CRIMP TOP PIPE	R/W MON	RIGHT OF WAY MONUMENT
DB	DEED BOOK	RB	REBAR
DIP	DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
FDC	FIRE DEPARTMENT CONNECTION	SD	STORM DRAINAGE EASEMENT
FND	FOUND	SQ. FT.	SQUARE FEET
HDPE	HIGH DENSITY POLYETHYLENE PIPE	SSE	SANITARY SEWER EASEMENT
IPF	IRON PIN FOUND	WPF	WOOD PRIVACY FENCE

LINE TABLE

L34	N 71° 58' 41" E	16.97'
L35	N 88° 16' 49" E	17.50'
L36	N 78° 08' 07" E	39.74'
L37	N 79° 38' 04" E	19.32'
L38	N 25° 16' 40" W	37.04'



EXISTING LAKE

WEST NANCY CREEK DRIVE
(APPARENT 100' RW)

WEST NANCY CREEK DRIVE
(APPARENT 100' RW)

NANCY CREEK

FLOOD ZONE LEGEND

FLOOD ZONE AREA
(SEE SHEET 13 FOR FLOOD ZONE DETAIL)



TerraMark Land Surveying, Inc.
1000 Peachtree Street, NE
Atlanta, Georgia 30308
Phone No. (770) 421-1927
Fax No. (770) 421-0552
www.TerraMark.com
Professional Land Surveying C. O. A. #LSF000810

TerraMark
Professional Land Surveying

Project No.	No.	Date	Revision
20160307	#1		
Sungu Crnk	#2		
Drawn By:	MEC		
Approved By:	WCV		
Date:	08/29/16		
Scale:	1"=40'		

BOUNDARY AND TOPOGRAPHIC SURVEY
FOR
THE CITY OF BROOKHAVEN
(MURPHEY CANDLER PARK)
LOCATED IN
LAND LOTS 326, 327 & 331, 18TH DISTRICT
DEKALB COUNTY, GEORGIA

SHEET NO.
6
13
DRAWING# TM 16 097

V-003

MURPHEY CANDLER PARK - PHASE II (MCP PHII)

GENERAL NOTES

- This structure has been designed in accordance with the project architects plan layout and guidelines. Suitability for access and intended usage shall be the responsibility of the architect.
- Vehicular access larger than the design live load shall be limited by permanent physical means.
- Prior to construction the contractor shall verify all elevations through the project architect.
- Only PermaTrak North America may provide the precast structure shown on these plans.

DESIGN DATA

- Boardwalk shall be designed in accordance with the AASHTO LRFD bridge design specifications and the LRFD guide specification for the design of pedestrian bridges.
- Design Live Load:
 Pedestrian Loading - 90 PSF Uniform
 Vehicular Loading - H-5 TRUCK (10,000 LB. VEHICLE LOAD)
 Construction Equipment Loading - The loader used for analysis was a Caterpillar 279C Multi Terrain Loader weighing 9892 lbs.

Notes for Construction Equipment Loading:

PermaTrak has designed for the above equipment to be used to construct via top-down methods. The precast components have been designed to accommodate the exact equipment above. The contractor shall abide by the following notes and shall contact PermaTrak for further analysis if different equipment will be used in top-down method. If a different equipment type is selected, PermaTrak shall be informed prior to shop drawing creation for analysis.

- Equipment shall be limited to an additional weight of 3000 lbs including operator weight and construction materials.
- Equipment shall run parallel to the beams and remain towards the boardwalk centerline during construction.
- Contractors shall provide 1/2" thick plywood under vehicle, spanning the length of (3) treads or 6'-0" minimum.
- The contractor shall not stockpile precast materials on the boardwalk.
- Beams shall be secured per the approved installation drawings prior to loading of construction equipment.

- Piers shall be designed for lateral earth pressure, live load surcharge, structure loads and stream debris.

Pier Reactions Due To Pedestrian/Vehicular Loads:

Vertical Reaction = 13.2 Kips (Service)
 Lateral Reaction = 1.0 Kip (Service - Due to Wind)

Pier Reactions Due To Construction Loads:

Vertical Reaction = 19.9 Kips (Service - See Notes For Construction Equipment Loading Above)
 Lateral Reaction = 2.0 Kips (Service - See Notes For Construction Equipment Loading Above)

Note: Lateral Stability Of Helical Pier For Actual Construction Loads Must Be Considered And Designed For By The Helical Pier Engineer. Cross Bracing May Be Required.

- At the time these drawings were created, geotechnical information was unavailable for analysis of the substructure. Helical pier design to be verified by the contractor prior to construction.

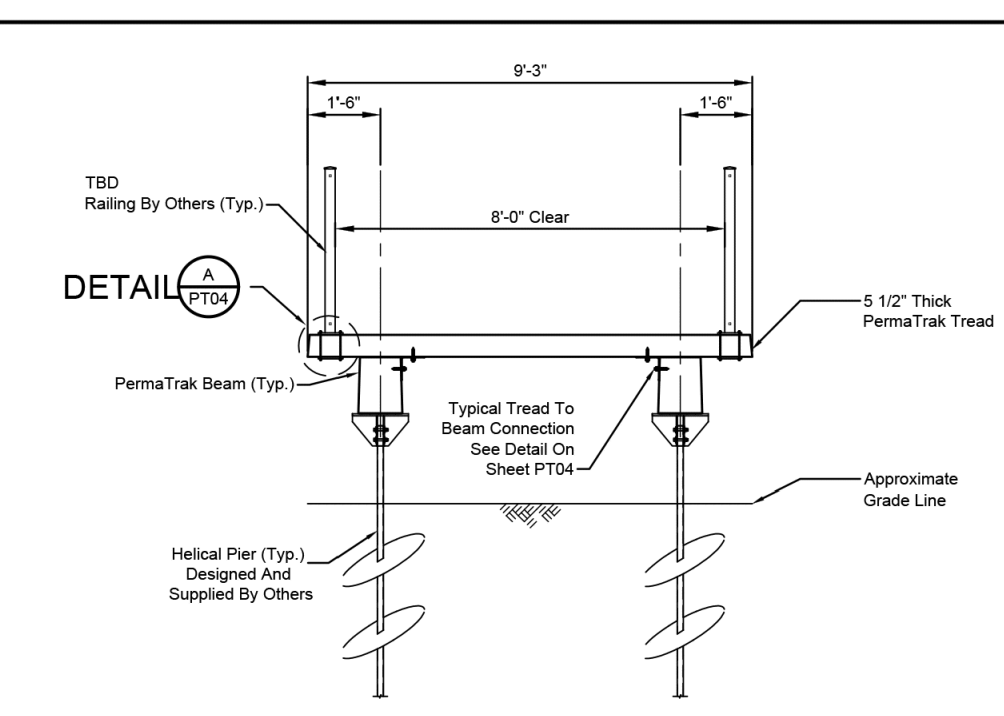
MATERIAL

- All bolts, nuts, washers, and hardware shall be hot dipped galvanized after fabrication in accordance with ASTM A153.
- Cast-in-place concrete shall have a 28-day concrete compressive strength of 4000 psi.

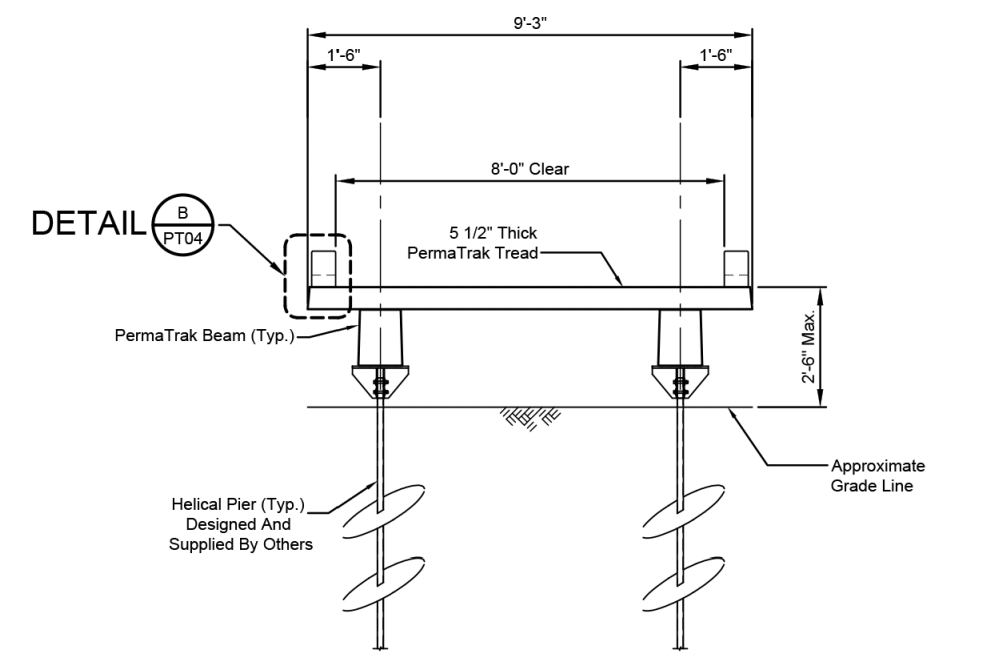
PROJECT COMPONENTS

SUPPLIED BY PERMATRAK	
PRECAST CONCRETE TREADS	
PRECAST CONCRETE BEAMS	
PRECAST CONCRETE CAPS	
RUBBER LEVELING PADS	
COMPOSITE CLIP ANGLES WITH 3/4" DIAMETER RODS, WASHERS AND NUTS (6x3x8x0"4")	
3/4" DIAMETER THREADED BARS WITH NUTS AND WASHERS (BEAM TO PIER/CAP CONNECTIONS)	
3/4" x 10" LONG THREADED RODS WITH NUTS AND OVERSIZED WASHERS (ALL GALVANIZED) (CURB TO TREAD CONNECTION)	

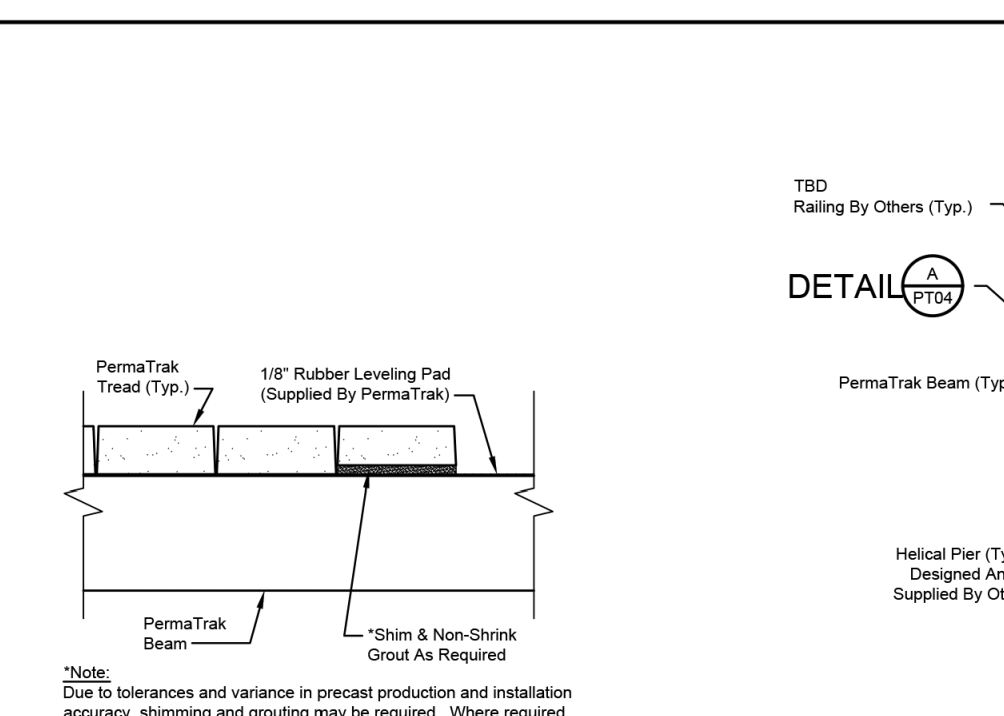
SUPPLIED BY CONTRACTOR	
HLTI HY-200 EPOXY ADHESIVE (ANCHORING SYSTEM CONNECTION)	
CAST-IN-PLACE CONCRETE	
SHIMS AND NON-SHRINK GROUT (LEVELING FOR PRECAST COMPONENTS)	
RAILING AND CONNECTION HARDWARE	
HELICAL PIERS AND CONNECTION HARDWARE	
1/2" EXPANSION JOINT MATERIAL	
STEEL TRANSITION PLATE	
SIKAFLEX-11 FC EXPANSIVE FILLER MATERIAL (CURB TO TREAD CONNECTION)	



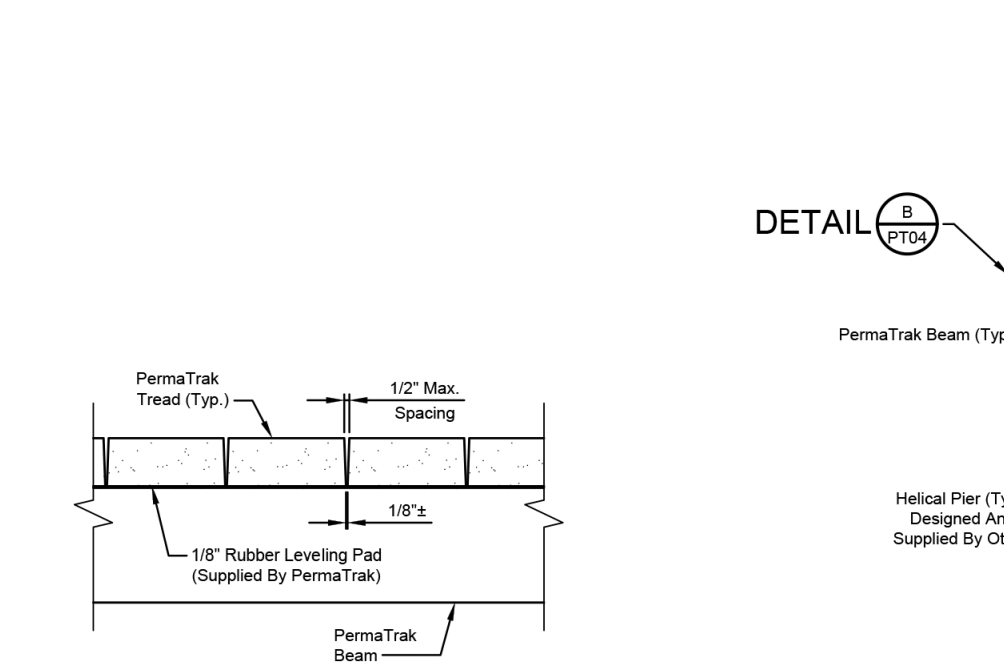
TYPICAL SECTION - 9'-3" WIDE w/RAILING
Scale = 1/2" = 1'-0"



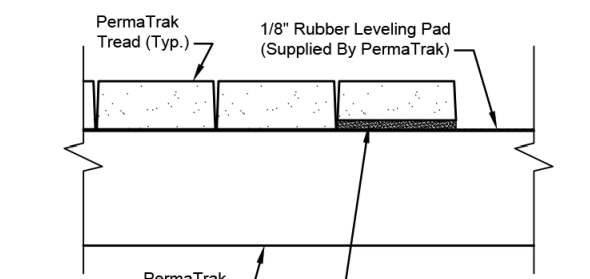
TYPICAL SECTION - 9'-3" WIDE w/CURB
Scale = 1/2" = 1'-0"



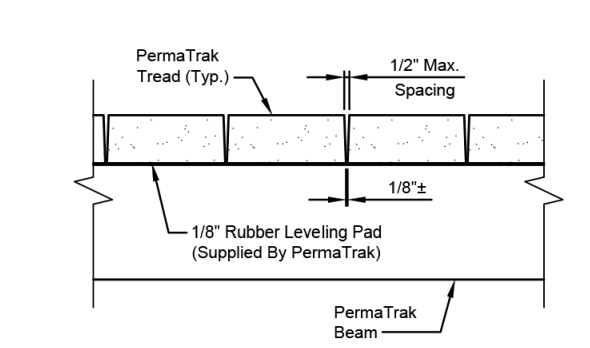
TYPICAL SECTION - 11'-3" WIDE w/RAILING
Scale = 1/2" = 1'-0"



TYPICAL SECTION - 11'-3" WIDE w/CURB
Scale = 1/2" = 1'-0"



TYPICAL SHIM/GROUT DETAIL
Scale: Not To Scale
(UNDER TREAD)



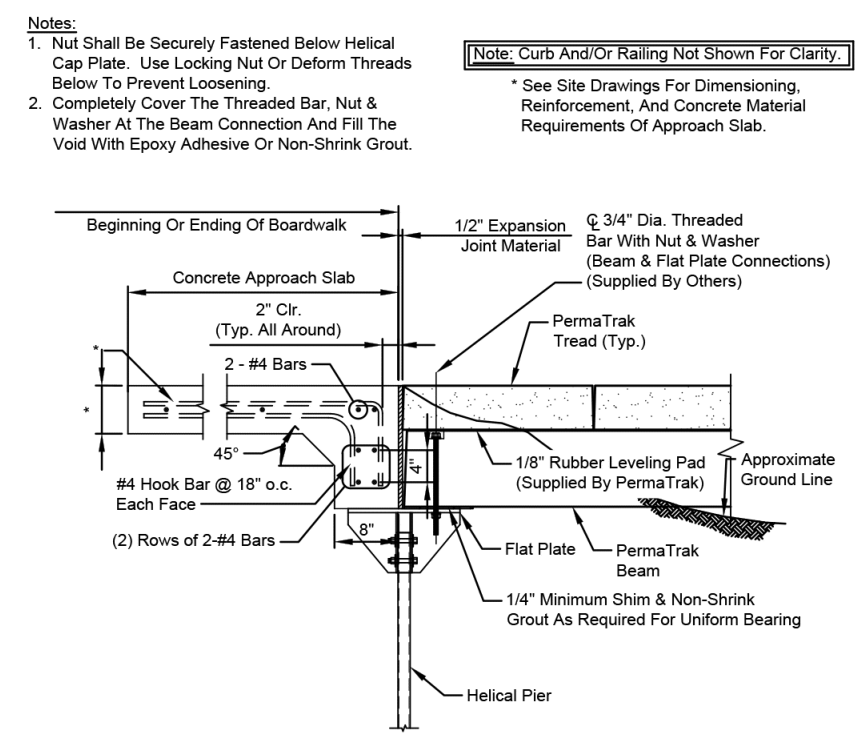
TYPICAL TREAD SPACING DETAIL
Scale: Not To Scale

NO.	DATE	DESCRIPTION	BY:
6			
5			
4			
3			
2			
1			

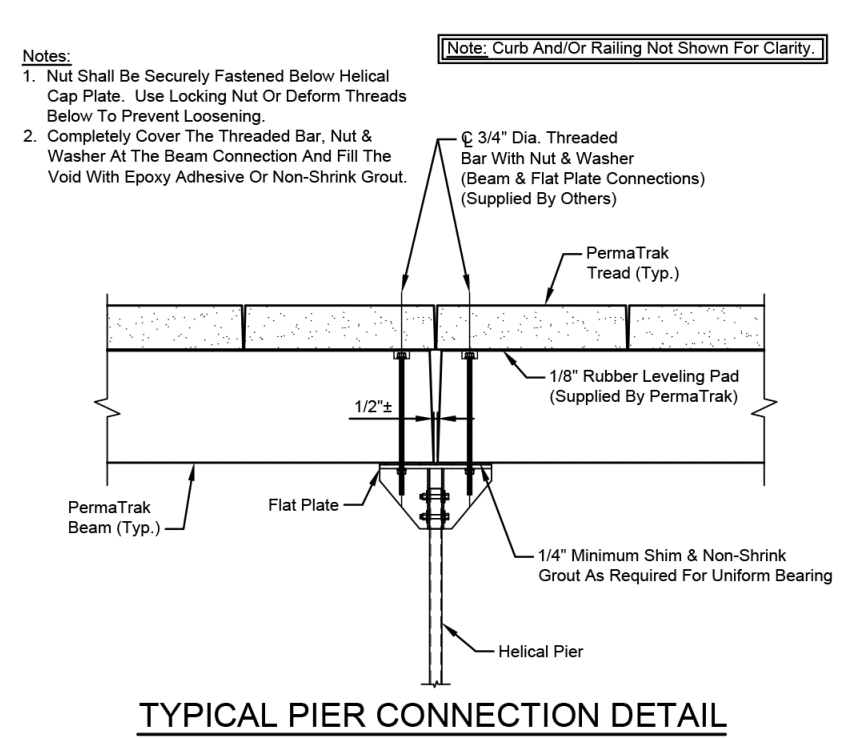
PREPARED FOR:	GREENBERG FARROW
FOR BIDDING PURPOSES ONLY	
OFFICE LOCATIONS:	FLORIDA, TEXAS, LOUISIANA, NORTH CAROLINA, OHIO
PROJECT TITLE:	MURPHEY CANDLER PARK - PHASE II BROOKHAVEN, GEORGIA
DATE:	5/20/2020
DESIGNED BY:	KAS
DRAWN BY:	KAS
CHECKED BY:	RPJ
SHEET NO.:	PT01

NO.	DATE	DESCRIPTION	BY:
6			
5			
4			
3			
2			
1			

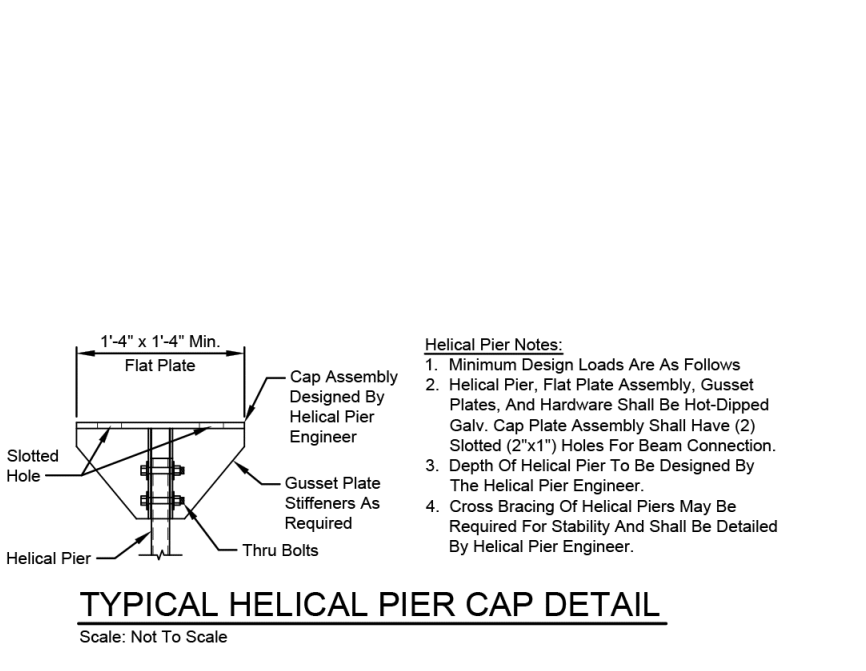
PREPARED FOR:	GREENBERG FARROW
FOR BIDDING PURPOSES ONLY	
OFFICE LOCATIONS:	FLORIDA, TEXAS, LOUISIANA, NORTH CAROLINA, OHIO
PROJECT TITLE:	MURPHEY CANDLER PARK - PHASE II BROOKHAVEN, GEORGIA
DATE:	5/20/2020
DESIGNED BY:	KAS
DRAWN BY:	KAS
CHECKED BY:	RPJ
SHEET NO.:	PT02



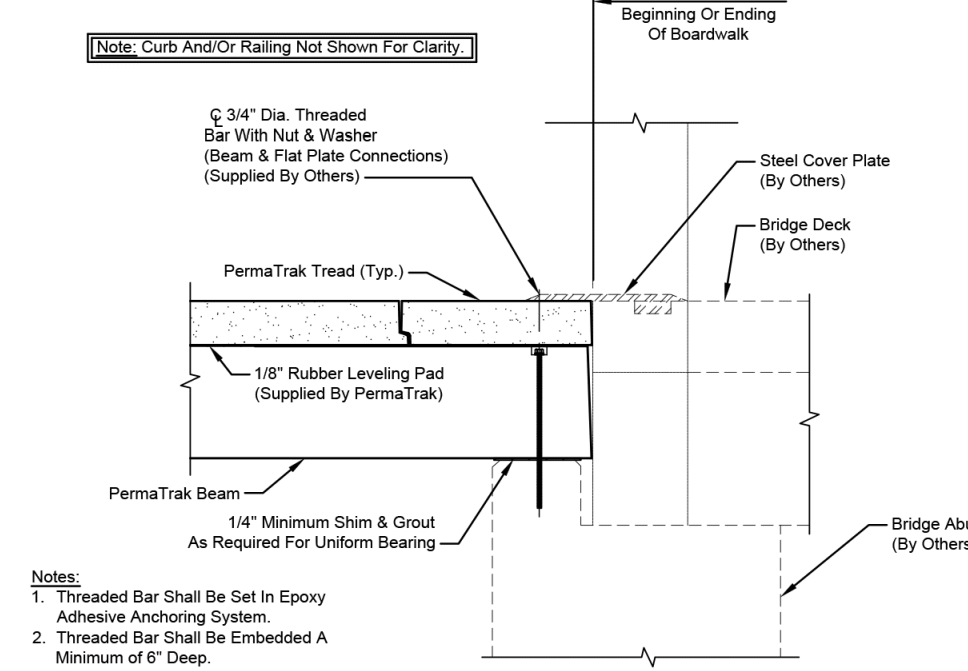
TYPICAL APPROACH DETAIL
Scale: Not To Scale



TYPICAL PIER CONNECTION DETAIL
Scale: 1" = 1'-0"



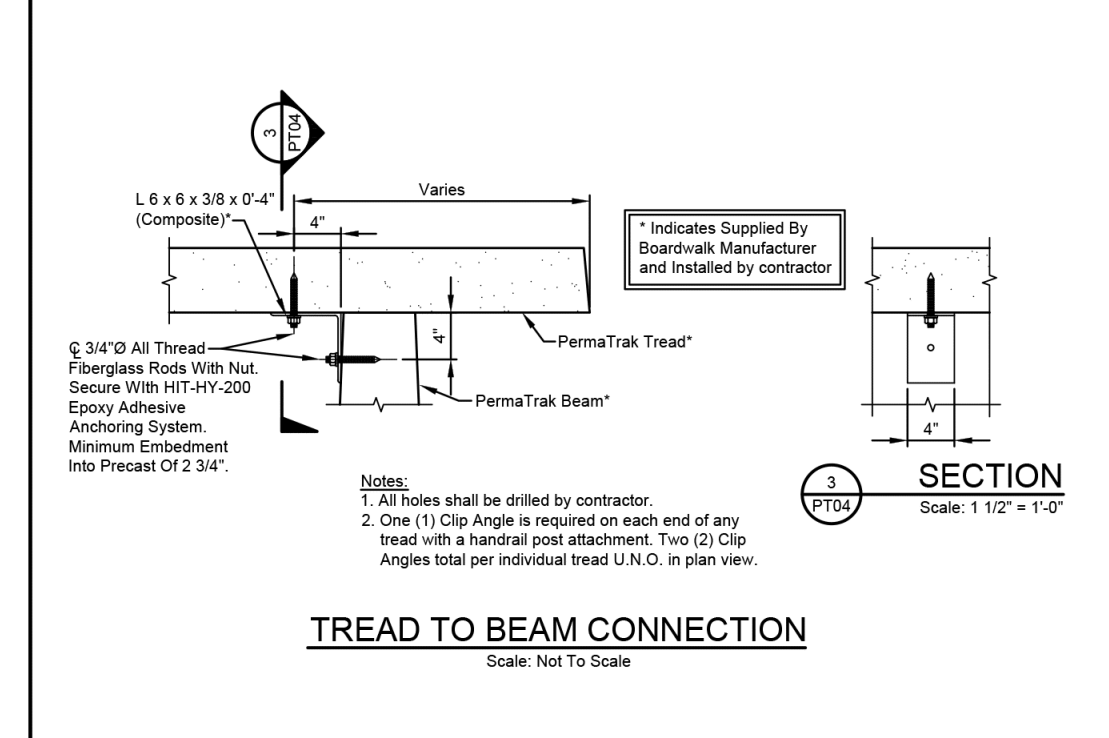
TYPICAL HELICAL PIER CAP DETAIL
Scale: Not To Scale



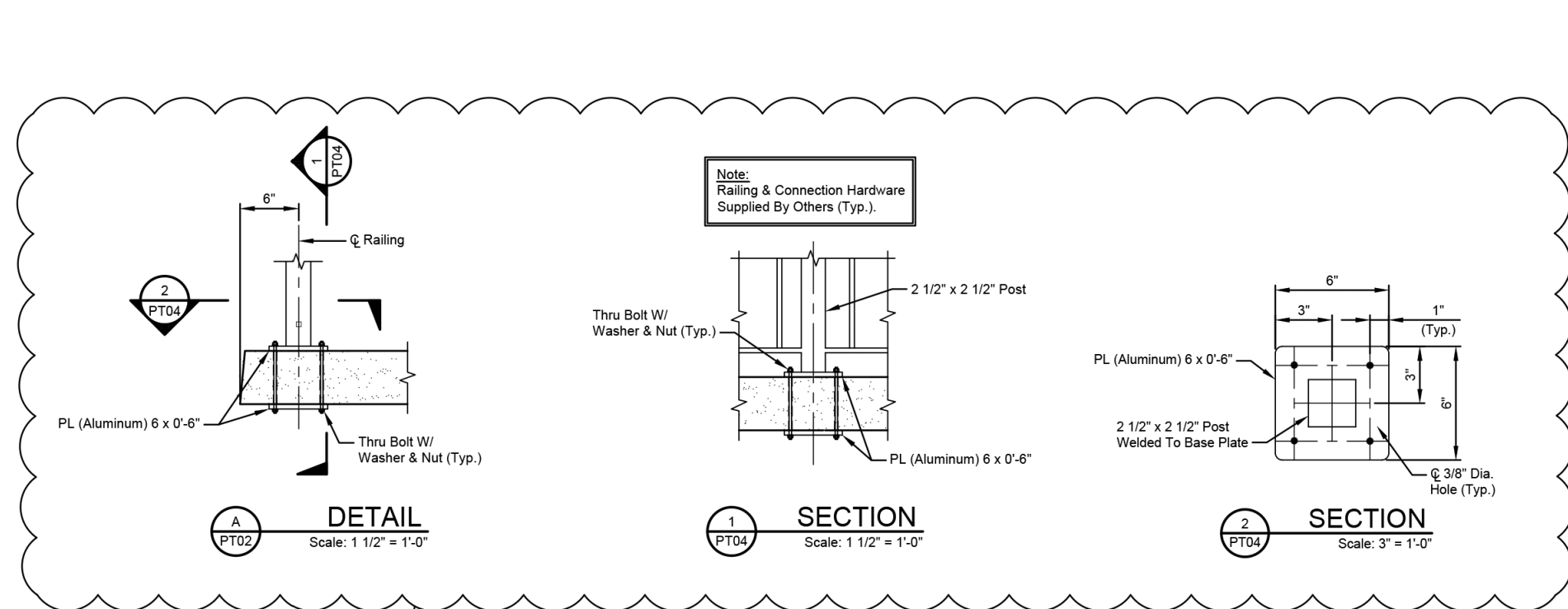
TYPICAL TRUSS TO PERMATRAK BOARDWALK DETAIL
Scale: 1" = 1'-0"

NO.	DATE	DESCRIPTION	BY:
6			
5			
4			
3			
2			
1			

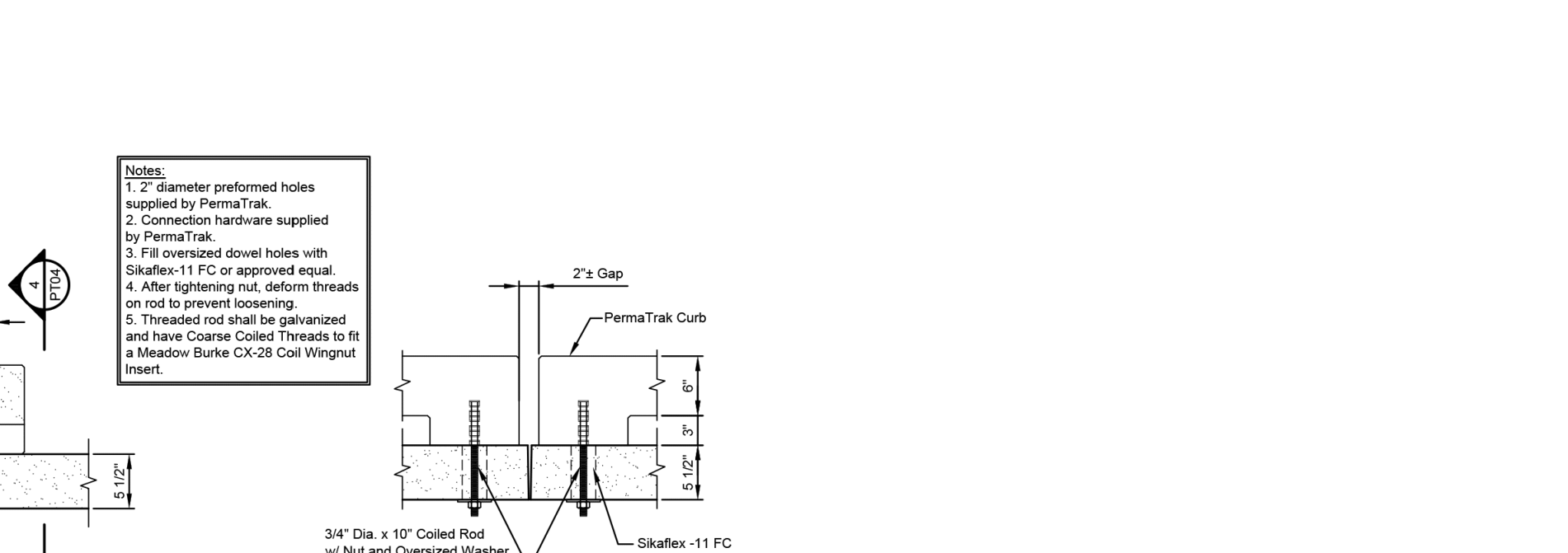
PREPARED FOR:	GREENBERG FARROW
FOR BIDDING PURPOSES ONLY	
OFFICE LOCATIONS:	FLORIDA, TEXAS, LOUISIANA, NORTH CAROLINA, OHIO
PROJECT TITLE:	MURPHEY CANDLER PARK - PHASE II BROOKHAVEN, GEORGIA
DATE:	5/20/2020
DESIGNED BY:	KAS
DRAWN BY:	KAS
CHECKED BY:	RPJ
SHEET NO.:	PT03



TREAD TO BEAM CONNECTION
Scale: Not To Scale



Sample Connections For Reference



PermaTrak Curb Details

NO.	DATE	DESCRIPTION	BY:
6			
5			
4			
3			
2			
1			

PREPARED FOR:	GREENBERG FARROW
FOR BIDDING PURPOSES ONLY	
OFFICE LOCATIONS:	FLORIDA, TEXAS, LOUISIANA, NORTH CAROLINA, OHIO
PROJECT TITLE:	MURPHEY CANDLER PARK - PHASE II BROOKHAVEN, GEORGIA
DATE:	5/20/2020
DESIGNED BY:	KAS
DRAWN BY:	KAS
CHECKED BY:	RPJ
SHEET NO.:	PT04

HELICAL PIER/ANCHOR NOTES

V2.2 LAST MODIFIED MAY, 2020

1. Design and Performance Requirements

- A. Helical piers shall be designed to support the nominal compressive and lateral loads as shown on the project plans. The overall length, helix configuration and minimum effective tensile resistance of a helical pier shall be such that the required geotechnical capacity is developed by the helix (piers) in an appropriate bearing stratum(s).
- B. All end extension pier components shall be designed within the limits provided by the American Institute of Steel Construction (AISC), Allowable Stress Design (ASD) or Load and Resistance Factor Design (LRFD) as applicable methods of analysis.
- C. Design shall include observations on the project plans. All piers shall be installed by a minimum factor of safety against ultimate compressive resistance of 2.0, a maximum axial deflection at design compressive load of 0.5 inches, and must satisfy the deflection criteria as noted on the plans or drawings.
- D. Design where axial observations on the project plans, such pier shall be designed to meet a minimum service life of 50 years.
- E. The anchorage design shall take into account each pier grouting, soil modification, corrosion and dust compatibility issues as are present for the project.

2. Qualifications of Installing Contractor and Designer

- A. The installing contractor and pier designer shall submit to the owner or owner's representative a proposal including the following documentation. Work shall not begin until all the submittals have been received and approved by the owner. All costs associated with incomplete or nonacceptable submittals shall be the responsibility of the installing contractor.
- B. Evidence of installing contractor's competency in installation of helical piers shall be provided to the owner's satisfaction and may include any or all of the following:
 1. Pier manufacturer's certificate of competency in installation of helical piers, or
 2. A list of at least three projects completed within the previous three years wherein the installing contractor installed helical piers similar to those shown in the project plans, such list to include names and phone numbers of three project owner's representatives who can verify the installing contractor's participation in those projects, or
 3. A letter from the pier manufacturer, distributor or manufacturer's representative expressing ability and intent to provide owner supervision of the pier installation.
- B. A listing of all safety violations reported against the installing contractor within the previous three years and the current status on final resolutions thereof. Descriptions of safety improvements instituted within the previous three years may also be submitted, at the installing contractor's discretion.
- C. Evidence of pier designer's competence in the design of helical piers shall be provided to the owner's satisfaction and shall include all of the following:
 1. Registration as a professional engineer or recognition by the local jurisdictional authority.
 2. A list of at least three projects completed within the previous three years wherein the pier designer designed helical piers similar to those shown in the project plans, such list to include names and phone numbers of three project owner's representatives who can verify the engineer's participation in those projects.
 3. Recommendation from the pier manufacturer, distributor or manufacturer's representative.

3. Pre-Construction Submittals

- A. Within two weeks of receiving the contract award, the installing contractor and pier designer shall submit the following helical pier design documentation:
 1. Shop drawings submitted including all dimensions, the helical pier and specific helical pier pier size, which shall be signed and sealed by a structural engineer.
 2. Certification from the pier designer that the proposed plans meet the requirements stated herein.
 3. Identification of pier number per section 2A and 2B.
 4. Qualification of pier designer per section 2C.
 5. Product designation for helix and extension sections and all ancillary products to be supplied at each helical pier location.
 6. Individual anchorage restraint load.
 7. Individual anchorage pre-tensioning requirements (if any).
 8. Manufacturer's published allowable corrosion capacities for the pier assemblies, including load transfer devices.
 9. Calculated theoretical geotechnical capacity of piers.
 10. Minimum effective tensile resistance criteria.
 11. Maximum allowable installation torque of pier.
 12. Minimum embedment lengths and other site-specific embedment depth requirements that may be appropriate for the site soil profiles.
 13. Installation angle and location tolerance requirement.
 14. Copies of certified calibration reports for torque measuring equipment and load test measuring equipment to be used on the project. The calibrations shall have been performed within one year of the proposed testing date for helical pier installation or as recommended by the equipment manufacturer based on the proposed testing date.

4. Placement Requirements

- A. When helical pier placement is shown on the project plans, production piers shall be placed such that the sector head is within 1 inch laterally and 1 inch longitudinally, and the pier shaft alignment is within 2 degrees of the installation angle, shown on the project plans.
- B. When pier placement is not shown on the project plans, the placement, alignment and their respective tolerances shall be included on part of the design submittal.

5. Pier Installation

- A. Helical pier installation shall only begin after review and approval of the submitted testing data.
- B. Before starting the construction on to begin work, the installing contractor shall provide proof of insurance coverage as stated in the general specifications and/or contract.
- C. Installing contractor shall finish and install all helical piers per the project plans and approved exchange design documentation. In the event of conflict between the project plans and the approved exchange design documentation, the installing contractor shall not begin construction on any affected areas until such conflict has been resolved.
- D. The installing contractor shall conduct his construction operations in a manner to ensure the safety of persons and property in the vicinity of the work. The installing contractor's personnel shall comply with safety procedures in accordance with OSHA standards and any established project safety plan.
- E. The installing contractor shall report marking of underground utilities as required by law and shall avoid contact with all marked underground facilities.
- F. The portion of the construction site occupied by the installing contractor, his equipment and his material stockpiles shall be kept reasonably clean and orderly.
- G. Installation of helical piers may be observed by representatives of the owner for quality assurance purposes. The installing contractor shall give the owner's representative at least 24 hours prior notice of pier installation operations.
- H. The helical pier installation technique shall be such that it is consistent with the geotechnical, logistical, environmental, and load carrying conditions of the project. The helical pier shall be positioned at the location as shown on the pier design drawings. The helical pier sections shall be engaged and advanced into the soil in a smooth, continuous manner at a rate of rotation of 5 to 25 rpm. Sufficient drive pressure (torque) shall be applied to uniformly advance the helical pier sections a distance approximately equal to the pitch of the helix (pitch typically 1 inch) per revolution. The rate of rotation and magnitude of drive pressure shall be adjusted for different soil conditions and depths. Extension sections shall be provided to obtain the required minimum overall length and minimum effective tensile resistance as shown on the project plans.

6. Termination Criteria

- A. The minimum overall length criteria and the minimum effective tensile resistance criteria is specified in the pre-construction submittals must be satisfied prior to terminating the pier installation. In the event any helical pier fails to meet these production quality control criteria, the following pre-qualified remedies are authorized:
 - A. If the installation fails to meet the minimum effective tensile resistance criteria at the minimum embedment length:
 1. Continue the installation to greater depths until the tensile resistance criteria is met, provided that, if a maximum length constraint is applicable, continued installation does not exceed said maximum length constraint.
 2. Demonstrate acceptable pier performance through proof testing, or
 3. Replace the pier with one having a different helix configuration. The replacement pier must not exceed any applicable maximum embedment length and either (a) be embedded to a length that places its last helix at least three times its own diameter beyond the position of the first helix of the replaced pier and meet the minimum effective tensile resistance criteria, or (b) pass proof testing.
 - B. If the tensile resistance during installation exceeds the helical pier's maximum allowable torque rating prior to satisfaction of the minimum embedment length criterion:
 1. Terminate the installation at the depth obtained if allowed by the owner's representative, or
 2. Replace the pier with one having a shaft with a higher tensile strength rating. This replacement pier must be installed to satisfy the minimum embedment length criterion. It must also be embedded to a length that places its last helix at least three times its own diameter beyond the position of the helix of the replaced pier without exceeding any applicable maximum embedment length requirement and it must meet the minimum effective tensile resistance criteria, or
 3. Replace the pier with one having a different helix configuration. This replacement pier must be installed to satisfy the minimum embedment length criterion. It must also be embedded to a length that places its last helix at least three times its own diameter beyond the position of the first helix of the replaced pier without exceeding any applicable maximum embedment length requirement, and it must meet the minimum effective tensile resistance criteria, or
 4. If allowed by the pier location tolerance as approved by the owner's representative, remove and reinstall the pier at a position at least three times the diameter of the larger helix away from the initial location. Original embedment length and tensile resistance criteria must be met. This pre-empting option requires the installation of additional helical piers with nominal loads adjusted for these spacing changes.
 - C. If the installation reaches a specified minimum embedment length without achieving the minimum effective tensile resistance criterion:
 1. If allowed by the pier location tolerance as approved by the owner's representative, remove and reinstall the pier at a position at least three times the diameter of the larger helix away from the initial location. Original embedment length and tensile resistance criteria must be met. This pre-empting option requires the installation of additional helical piers with nominal loads adjusted for these spacing changes, or
 2. Demonstrate acceptable pier performance through proof testing, or
 3. Over-size the load capacity of the helical pier and install additional piers, as necessary. The over-sized capacity and additional pier location shall be subject to the approval of the owner's representative, or
 4. Replace the pier with one having a different helix configuration. This replacement pier must be installed to satisfy the minimum embedment length criterion and it must meet the minimum effective tensile resistance criteria.

- D. If a helical pier fails to meet acceptance criteria in a performance or proof test:
 1. Install the pier to a greater depth and installation torque and re-test provided that, if a maximum embedment length constraint is applicable, continued installation will not exceed said maximum length constraint, or
 2. Replace the pier with one having more and/or larger helix piers. It must be embedded to a length that places its last helix at least three times its own diameter beyond the position of the first helix of the replaced pier without exceeding any applicable maximum embedment length requirement. This replacement pier must be tested, or
 3. If approved by the owner's representative, over-size the load capacity of the helical pier and install additional piers. Additional piers must be installed at positions that are at least three times the diameter of the larger helix away from any other pier locations and are approved by the owner's representative. Piers installed in concrete shafts shall not be spaced closer than four helix diameters.

- E. Proof testing to qualify a pier under any of the foregoing remedial actions shall not be used to satisfy proof testing frequency requirements shown on the project plans or the design documentation. If a helical pier fails a production quality control criterion for any other reason, any proposed remedy must be approved by the owner's representative prior to installing in implementation of the project site.

7. Installation Submittals

- A. The installing contractor shall provide the owner, or his authorized representative, copies of individual helical pier installation records within 24 hours after each installation is completed. Final reports shall be submitted within 7 days. These installation records shall include, but are not limited to, the following information:
 1. Date and time of installation.
 2. Location of helical pier.
 3. Actual helical pier type and configuration.
 4. Pier record.
 5. Total length of installed pier.
 6. Actual inclination of the pier.
 7. Actual effective tensile resistance.
 8. Calculated geotechnical capacity based on actual tensile resistance.
 9. Comments pertaining to interruptions, obstructions, or other relevant information.


8. Pier Testing

- A. Load tests shall be performed in accordance with the latest version of ASTM D1143 and the following criteria:
 1. Load tests shall be performed on two (2) helical piers after installation in accordance with the plans. The static load capacity test shall be conducted one at a time and shall consist of the following: An initial static setting time of 1:00 hour shall be applied to the helical pier or helical pile. Load increments of 10 to 25% of the design allowable load shall be subsequently applied with a constant time interval between each increment, in accordance with ASTM D1143 quick load test method for individual piles, until the proof load specified on the plans is reached. After the final hold period, the maximum pile load displacement shall be recorded. The test shall be deemed successful provided helical pier and helical pile maximum pile load displacement is less than one half (1/2) inch of the design load. In the event of an unsatisfactory test, the helical pier or helical pile shall be installed to additional length and re-test until a successful proof load capacity test has been completed. Axial load shall be applied to the helical pier and helical pile during the proof load capacity test utilizing the final break assembly configuration. Through the duration of installation and testing, the horizontal movement of the structure to which the helical piers are attached shall be limited as shown on the plans.
 2. If proof testing is required, the installing contractor shall furnish all labor, equipment and pre-production helical piers necessary to accomplish the testing as shown in the approved pier design documentation. Installing contractor shall apply the specified loads and record the specified data, for the specified number of piers. No deviations from the test plan(s) will be allowed without explicit approval in writing from the owner's representative.
- B. The installing contractor shall provide the owner, or owner's representative, copies of raw field test data or reports within 24 hours after completion of each load test. Final test reports shall be submitted within 7 days following test completion. Final test reports shall include, but are not limited to, the following information:
 1. Name of project and installing contractor.
 2. Name of installing contractor's supervisor during installation.
 3. Name of field party test name, if any.
 4. Pre-production or production test.
 5. Date, time, and duration of test.
 6. Usage identifier and location of helical pier tested.
 7. Type and test performance of proof.
 8. Description of calibrated testing equipment and test setup.
 9. Actual helical pier type and configuration.
 10. Steps and duration of each load increment.
 11. Cumulative pier load movement at each load step.

9. Cleanup

- A. Within 2 weeks of completion of the work, the installing contractor shall remove any and all material, equipment, tools, building materials, concrete forms, debris, or other items belonging to the installing contractor or used under the installing contractor's direction.

6	PREPARED FOR:	
5	GREENBERG FARROW	
4		
3	FOR BIDDING PURPOSES ONLY	
2		
1		
NO.	DATE	DESCRIPTION

 <p>PermaTrak The Concrete Boardwalk Company www.permatrak.com TEL: 877-332-7862</p>	<p>OFFICE LOCATIONS</p> <ul style="list-style-type: none"> FLORIDA TEXAS LOUISIANA NORTH CAROLINA OHIO 	<p>PROJECT TITLE:</p> <p>MURPHEY CANDLER PARK - PHASE II</p> <p>BROOKHAVEN, GEORGIA</p>	<p>Patented Product: U.S. Patent #5,906,084 #6,302,362 #6,522,556 #6,839,589 #9,096,975</p> <p>JOB NUMBER: 2020-1411</p> <p>DATE: 5/20/2020</p> <p>DESIGNED BY: KAS</p> <p>DRAWN BY: KAS</p> <p>CHECKED BY: RPU</p> <p>SHEET NO.</p> <p>Helical Notes</p>
---	---	--	---

ELEVATED PRECAST CONCRETE BOARDWALK PROJECT SPECIFICATIONS
V3.6 UPDATED APRIL 2020

PRECAST CONCRETE BOARDWALK SYSTEM PART 1-GENERAL

1.1 SUMMARY

- A. These specifications are for a precast concrete boardwalk and shall be regarded as minimum standards for this project. These specifications are based upon products designed and supplied by:
 - PermaTrak North America LLC
Ph: (864) 334-4870
Ph: 877-332-7862
Fax: 704-541-3875
www.permatrak.com
Contact Mr. John Fyfe
jfyfe@permatrak.com
- This item shall also include the design, specification, and construction of a railing and foundation system that is attached to the proposed boardwalk system.

1.2 ALTERNATE REQUIREMENTS: Alternates are allowed provided that the following minimum standards and these "Precast Concrete Boardwalk System" specifications are met.

- A. "Minimum Standards" as outlined in section 1.3 below must be met.
- B. A drawing of the precast boardwalk system (including tread layout, structural details designed for the design loads shown on the contract documents, foundation design and layout) must be submitted 2 weeks before the bid date and signed and sealed by a Professional Engineer in the state of the project location.
- C. Submittal must meet the requirements set forth in section 1.6a.

1.3 MINIMUM STANDARDS: The selected boardwalk shall have the following minimum characteristics:

- 1. Ragged or irregular surfaces.
- 2. Excessive air voids (commonly called bug holes) larger than 1/4 in. evident on the top surface of the tread or curbs (if applicable).
- 3. Adjacent flat and return surfaces with greater texture and/or color differences than the approved samples or mockups.
- 4. Casting and/or aggregate segregation (evident from different concrete placement lifts and consolidation).
- 5. Visible mold joints or irregular surfaces.
- 6. Rust stains on exposed surfaces.
- 7. Units with excessive variation in texture and/or color from the approved samples, within the unit or compared with adjacent units.
- 8. Blocking stains evident on exposed surfaces.
- 9. Areas of backup concrete bleeding through the facing concrete.
- 10. Foreign material embedded in the surface.
- 11. Visible repairs at a 20 ft. viewing distance.
- 12. Reinforcement shadow lines.
- 13. Cracks visible at a 20 ft. viewing distance.
- D. Installer Qualifications: Firm with 3 years experience in installation of systems similar in complexity to those required for this Project.
- E. Final Submission: Provide, if required by Architect/Engineer, a mock-up for evaluation of the boardwalk showing the surface preparation techniques and application workmanship.
- F. DESIGN LOADS: See PT01 for pedestrian and vehicular design live loads.
- G. Treads shall maintain a "boardwalk appearance" specifically meaning each tread shall have a width/length ratio ranging from a minimum of 3:1 to a maximum of 14:1. Width is defined as the tread dimension perpendicular to the normal direction of travel. Length is defined as the tread dimension measured in the direction of travel.
- I. Tread width shall be as noted on the contract drawings. Alignment should follow the horizontal and vertical alignment shown on the contract plans.

- J. Connectors for curbs (if applicable) to treads shall not be visible to boardwalk users while viewed from the top of the walkway.
- K. All tread-to-beam connectors shall be non-corrosive, and hidden from view. Metallic tread-to-beam connectors are not acceptable for this project.
- L. Boardwalk supplier shall provide a field representative on site for a minimum of 3 days. Field representative shall be knowledgeable in the installation of precast concrete boardwalks.

1.4 QUALITY ASSURANCE

- A. The contractor performing the installation of the pile foundations shall have installed piles of size and length similar to those shown on the plans for a minimum of three (3) years prior to the bid date for this project. The contractor shall submit a list containing at least three (3) projects completed in the last three (3) years on which the contractor has installed piles of a size and length similar to those shown on the plans. The list of projects shall contain names and phone numbers of owner's representatives who can verify the Contractor's participation on those projects.
- B. Manufacturer Qualifications: Not less than 10 years experience in the actual production of precast products as described below.
 1. Components shall be factory fabricated and engineered by single entity. This entity shall be registered to do business in the State of the project location.
 2. Boardwalk supplier (Precaster) for the boardwalk shall have in-house color mixing facilities, for color pigmentation.
 3. Boardwalk supplier (Precaster) shall have either a minimum experience of 5 years or 50 boardwalk projects in design, production, and field consultation.
 4. Boardwalk supplier (Precaster) must be certified by PCI or NPCA.
 5. Precast components must be manufactured with the use of hot rolled steel skin in reinforced steel forms. Temporary (i.e., Timber) and/or single use forms are unacceptable unless approved in writing by the Boardwalk Engineer.

1.5 DESIGN

- A. For applications requiring minimum disturbance due to tree roots or other existing objects specified by the Owner, the contractor shall provide a field representative to review the Contractor or Engineer/Architect to provide a survey of the proposed boardwalk location identifying items of interest including tree roots that cannot be disturbed per the Owner.
- B. The designer of the boardwalk, foundation and railing system shall be a qualified registered Professional Engineer licensed in the State of the project location and having a minimum of 20 years of experience in the design of concrete structures, foundation and railing systems.
- C. The foundation design shown on the boardwalk drawings are based recommendations found in the geotechnical report entitled referenced on PT01 (if applicable).
- D. DESIGN CRITERIA: The design of the boardwalk and railing system shall comply with the following guidelines:
 1. AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition with 2015 Interim Revisions.
 2. Latest Version of AASHTO LRFD Bridge Design Specifications for Highway Bridges.
 3. Latest Version of American Concrete Institute - Building Code and Commentary.
 4. In addition to the dead loads of the system, the structure shall be designed for the live loads defined in Section 1.3.G above.

1.6 SUBMISSIONS: Prior to the start of fabrication or construction, the Contractor shall submit to the Engineer a design package, which shall include, but is not limited to, the following:

- A. PRELIMINARY SUBMISSIONS: Prior to the start of fabrication or construction, the Contractor shall submit to the Engineer a design package, which shall include but not limited to the following:
 1. DETAILED PLANS:
 - a. REGISTRATION / SEAL: Sealed by a licensed Professional Engineer in the state of the project location.
 - b. PLAN VIEW: Full plan view of the boardwalk, foundation and railing system drawn to scale. The plan view must reflect the proposed horizontal alignment as shown on the design plans.
 - c. ELEVATION VIEW: Full elevation view of the boardwalk, railing and foundation system drawn to scale which reflect the actual vertical alignment. Elevation views shall indicate the elevation at the top and bottom of the boardwalk and foundation system components, horizontal and vertical break points, and location of the finished grade.
 - d. DETAILS: Details of all boardwalk and railing system components and their connections such as length, size and where changes occur; connections, etc.
 - e. CODE REFERENCE: Design parameters used along with AASHTO references.

1.7 WARRANTY:

- A. Contractor will be responsible for installation defects associated with the boardwalk and abutment components, foundation system, and railings for a period of 12 calendar months from the date of final acceptance by the Owner.
- B. Boardwalk manufacturer shall warranty all precast concrete components against defects in material and workmanship for a period of 10 years.
- C. Railing manufacturer shall warranty the railing against defects in materials and workmanship for a period of 12 months.

1.8 MEASUREMENT AND PAYMENT

- A. Precast concrete boardwalk, railings, and foundations shall be paid for at the contract lump sum price as listed in the bid proposal for "Precast Concrete Boardwalk". This price shall include all materials, equipment, labor and work necessary for and incidental to the design, construction, delivery, unloading, assembly, and placement of the boardwalk and foundation as shown in the contract plans including all railings on the superstructure.

PART 2-MATERIALS & TESTING

- 2.1 PRECAST CONCRETE shall conform to the following:
 - a. The minimum compressive strength of the concrete shall be 4000 psi measured at 28 days.
 - b. All precast concrete shall contain structural steel reinforcement as designed by the Engineer of record.
 - c. All precast concrete components shall be air entrained composed of Portland cement, fine and coarse aggregates, admixtures and water. The air-entraining feature may be obtained by the use of either an air-entraining Portland cement or an air-entraining admixture. The entrained air content shall be not less than four percent or more than seven percent.
 - d. All reinforcing steel shall be standard uncoated steel conforming to ASTM A615

3. CONSTRUCTION SPECIFICATIONS:


- A. Construction methods specific to the boardwalk vendor chosen. Submittal requirements such as certification, quality and acceptance/rejection criteria shall be included. Details on connection of boardwalk units and foundation system such that assurance of uniform load transfer shall be checked.
- B. FINAL SUBMISSION: Once a boardwalk, foundation and railing system design has been reviewed and accepted by the Owner, the Contractor shall submit the final plans. The designer of the boardwalk, foundation and railing system is responsible for the review of any drawings prepared for loading per Section 1.3.F.

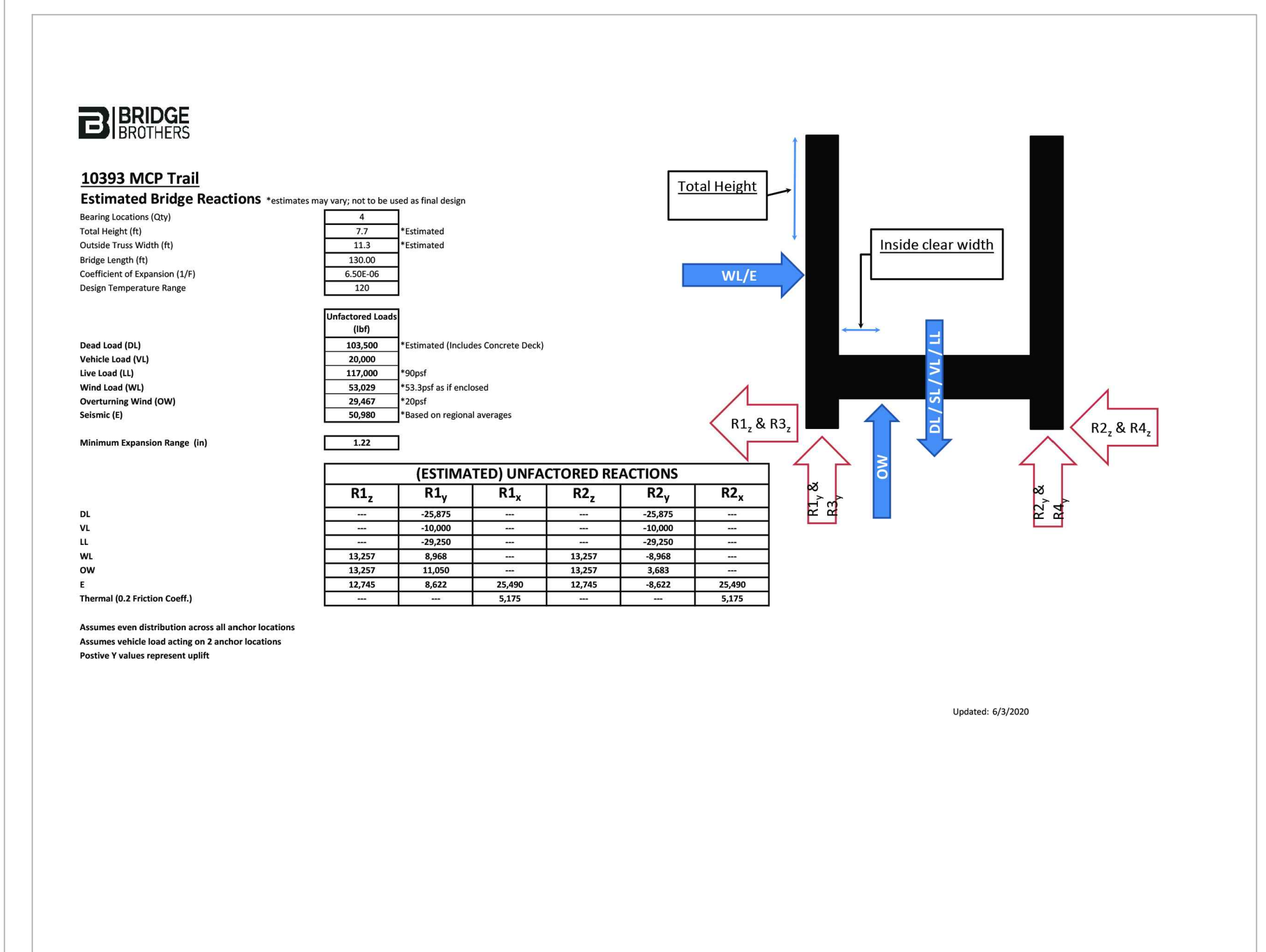
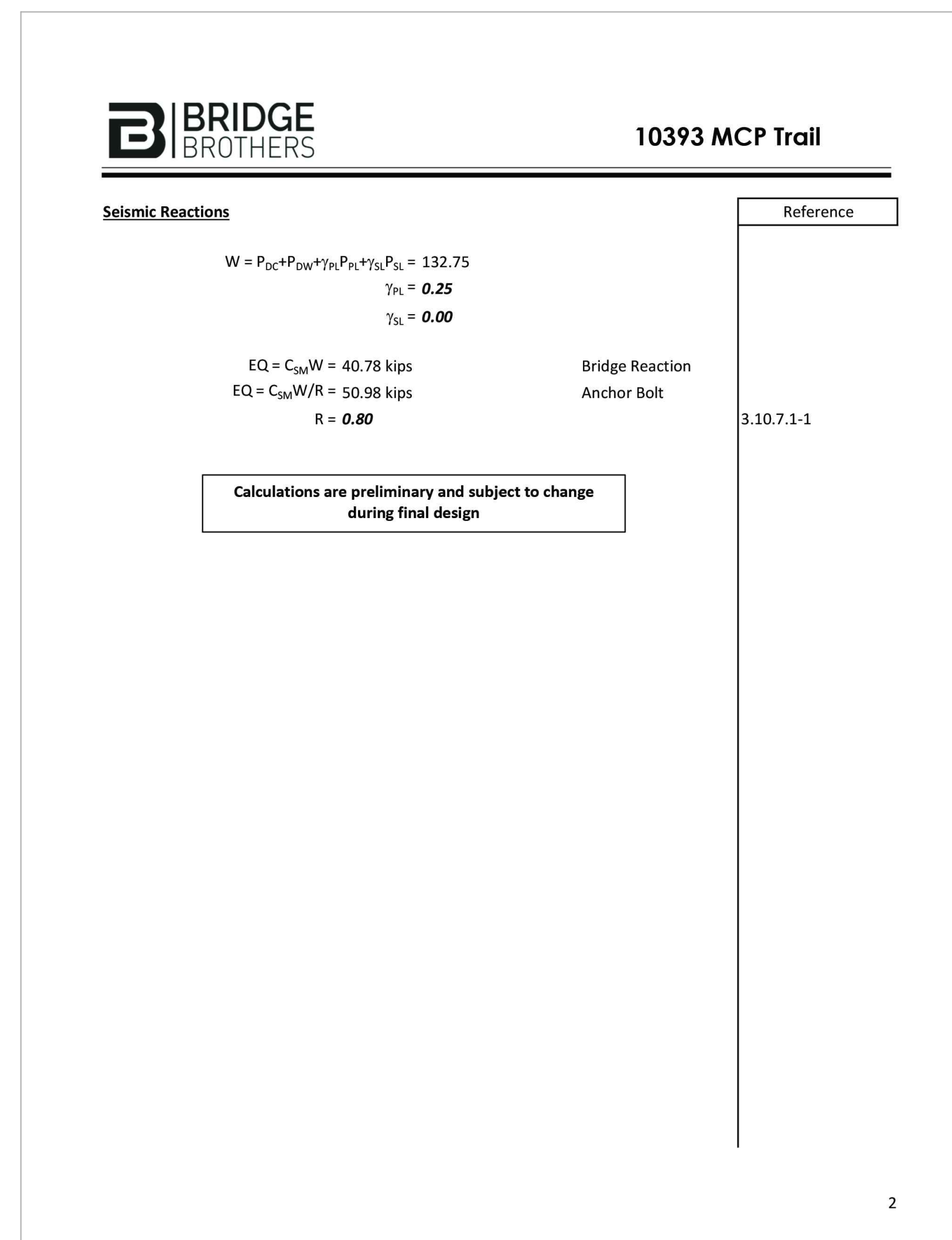
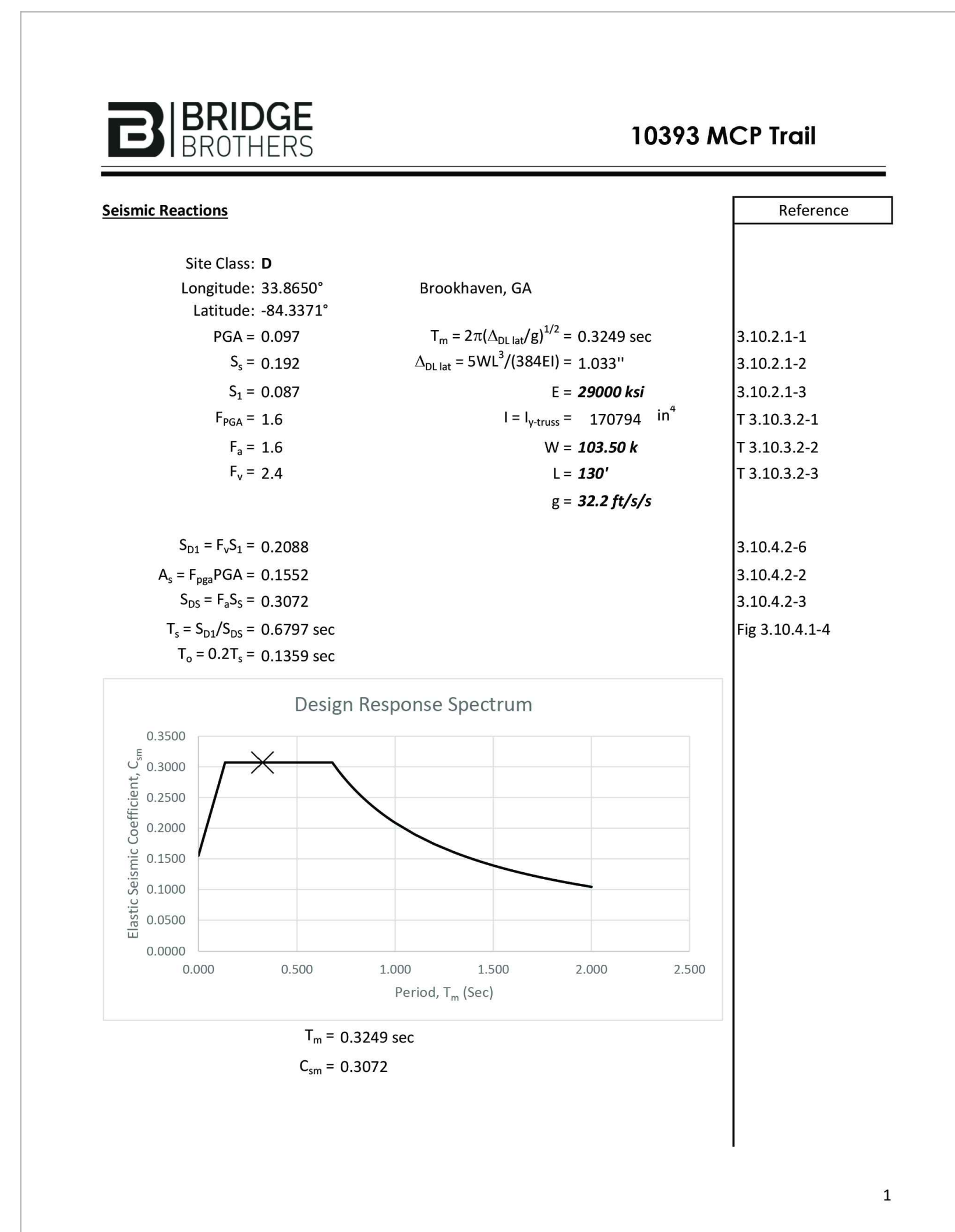
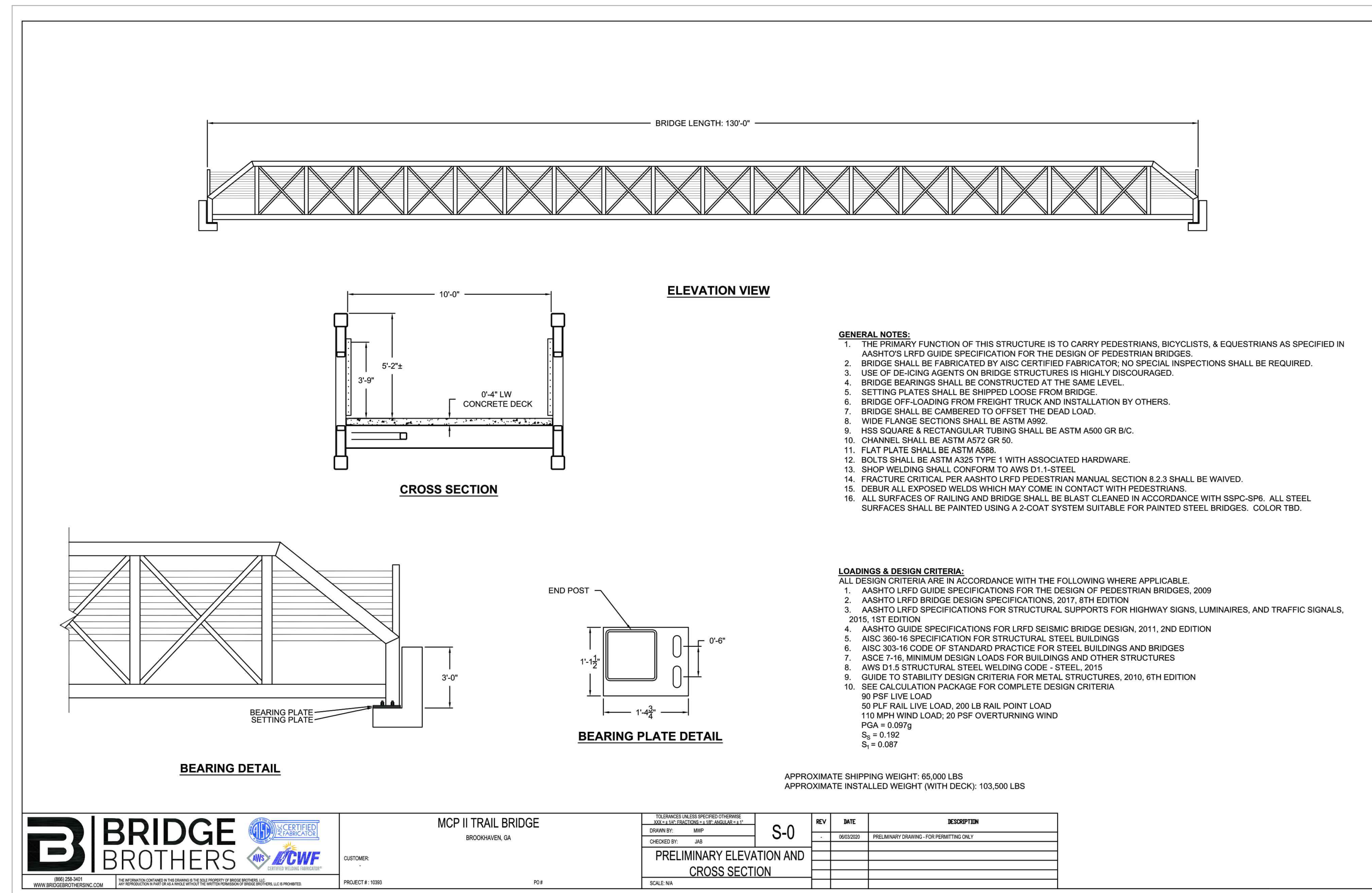
3. SUBMITTALS: Product Data: Submit Manufacturer's technical product data for railing components and accessories.

3.1 PRECAST CONCRETE BOARDWALK

- A. Installation of the precast concrete boardwalk system and railings, if applicable, shall be performed in accordance to the approved plans and manufacturer's installation instructions. Boardwalk manufacturer shall provide a field representative to review installation instructions with the Contractor and Engineer and to certify that the installation has been performed according to the approved drawings and manufacturer's instructions.

6	PREPARED FOR:	
5	GREENBERG FARROW	
4		
3	FOR BIDDING PURPOSES ONLY	
2		
1		
NO.	DATE	DESCRIPTION

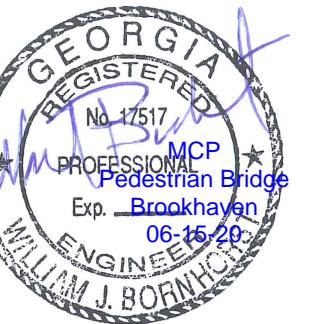
 <p>PermaTrak The Concrete Boardwalk Company www.permatrak.com TEL: 877-332-7862</p>	<p>OFFICE LOCATIONS</p> <ul style="list-style-type: none"> FLORIDA TEXAS LOUISIANA NORTH CAROLINA OHIO 	<p>PROJECT TITLE:</p> <p>MURPHEY CANDLER PARK - PHASE II</p> <p>BROOKHAVEN, GEORGIA</p>	<p>Patented Product: U.S. Patent #5,906,084 #6,302,362 #6,522,556 #6,839,589 #9,096,975</p> <p>JOB NUMBER: 2020-1411</p> <p>DATE: 5/20/2020</p> <p>DESIGNED BY: KAS</p> <p>DRAWN BY: KAS</p> <p>CHECKED BY: RPU</p> <p>SHEET NO.</p> <p>Precast Specs</p>
--	---	--	---



ISSUE/REVISION RECORD

DATE	DESCRIPTION
06-19-20	COB PERMIT SUBMITTAL

PROFESSIONAL SEAL



PROFESSIONAL IN CHARGE

WILLIAM BORNHORST
PROFESSIONAL ENGINEER
LICENSE NO. PE017517

PROJECT MANAGER

W. BORNHORST

QUALITY CONTROL

F. BERNAL

DRAWN BY

S. SARMIENTO

PROJECT NAME

**MURPHEY
CANDLER PARK
NATURE TRAIL**

**BROOKHAVEN
GEORGIA**

**WEST NANCY CREEK
DRIVE AND CANDLER
LAKE CIRCLE WEST
BROOKHAVEN, GA 30341
DEKALB COUNTY**



PROJECT NUMBER

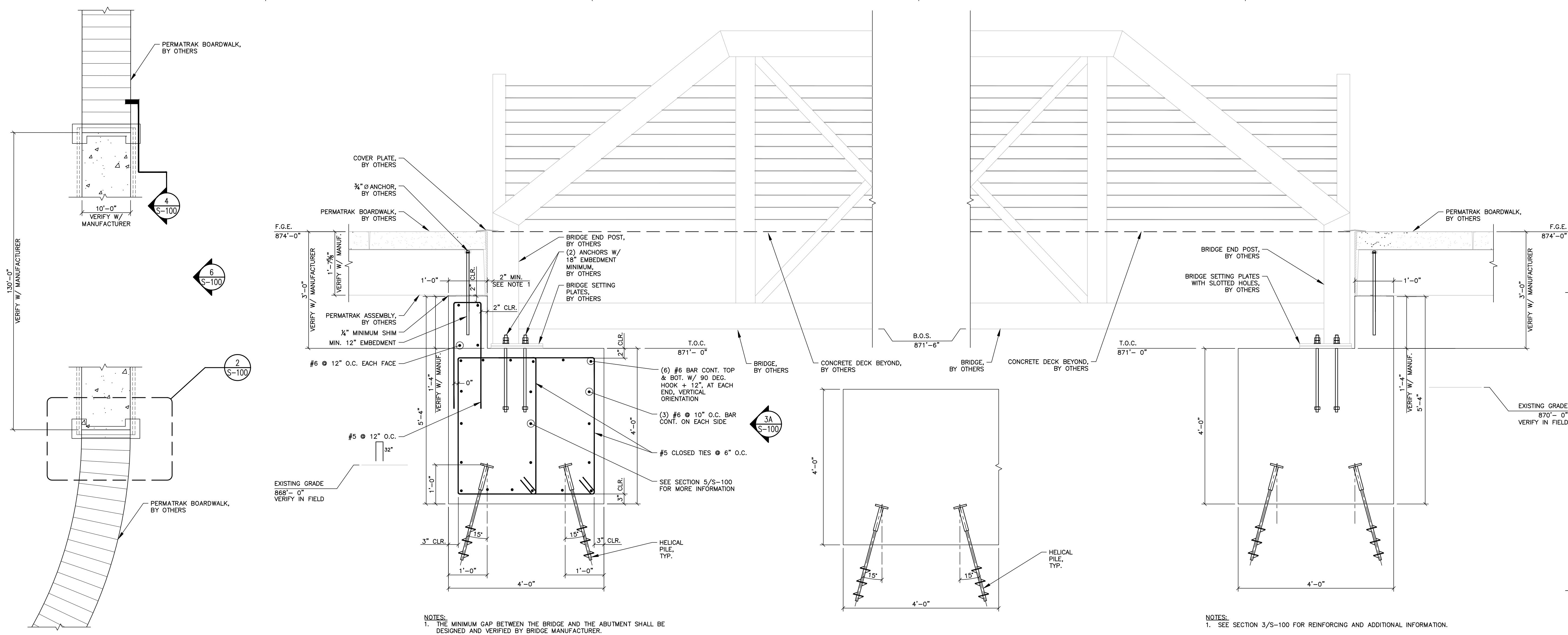
20191332.0

SHEET TITLE

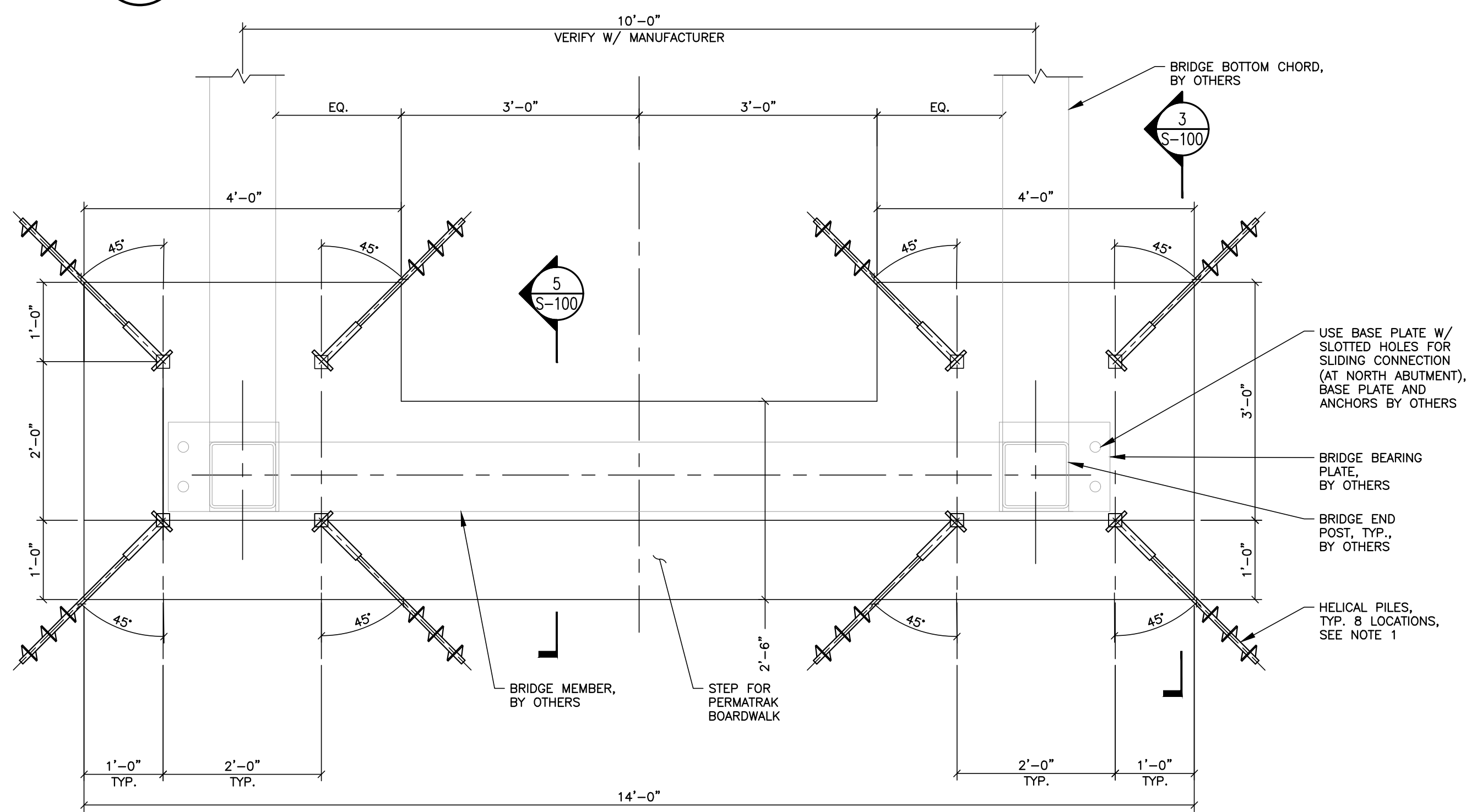
**ABUTMENT
PLAN & DETAILS**

SHEET NUMBER

S-100



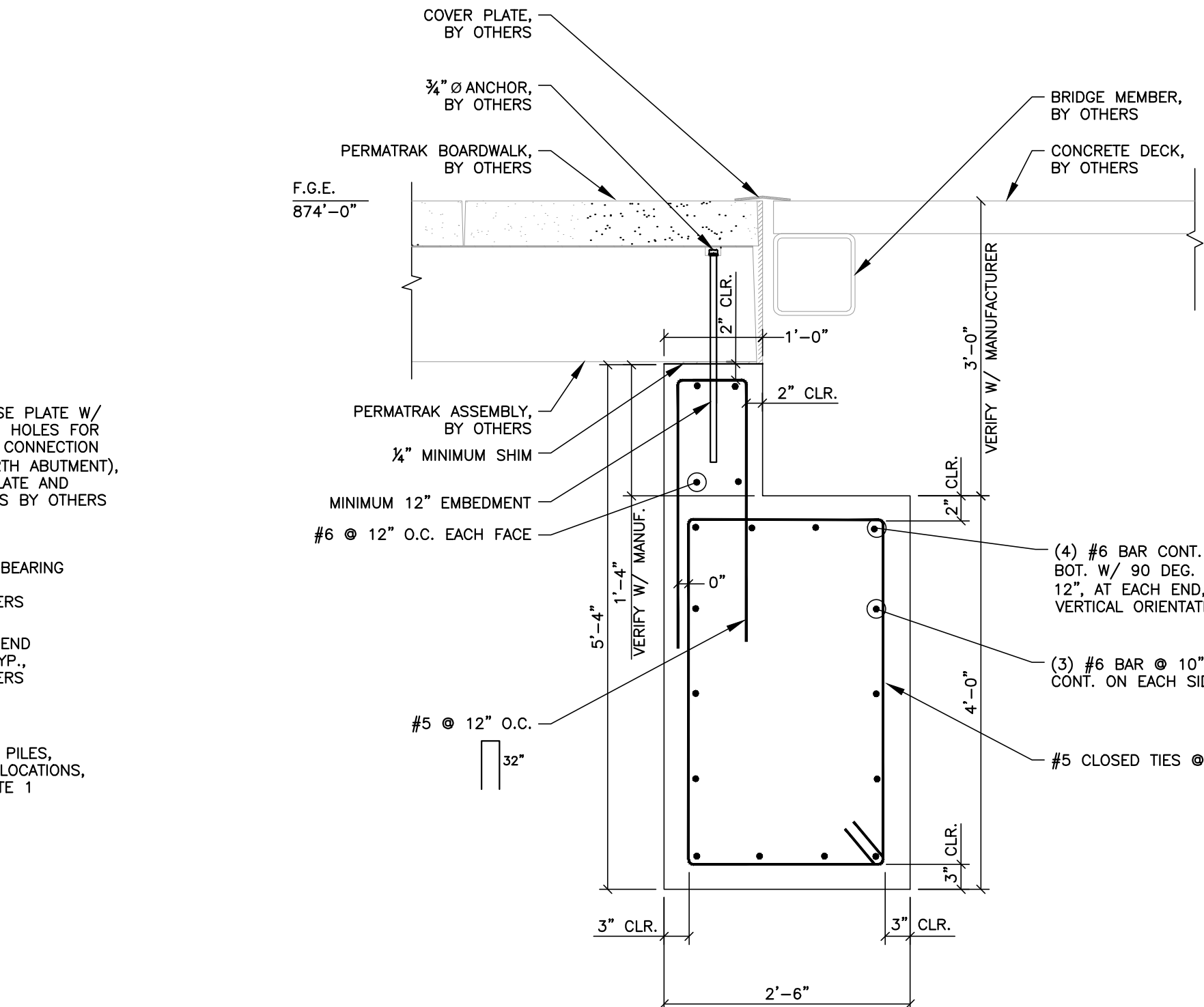
1 PEDESTRIAN BRIDGE PLAN
S-100 SCALE: 3/32" = 1'-0"



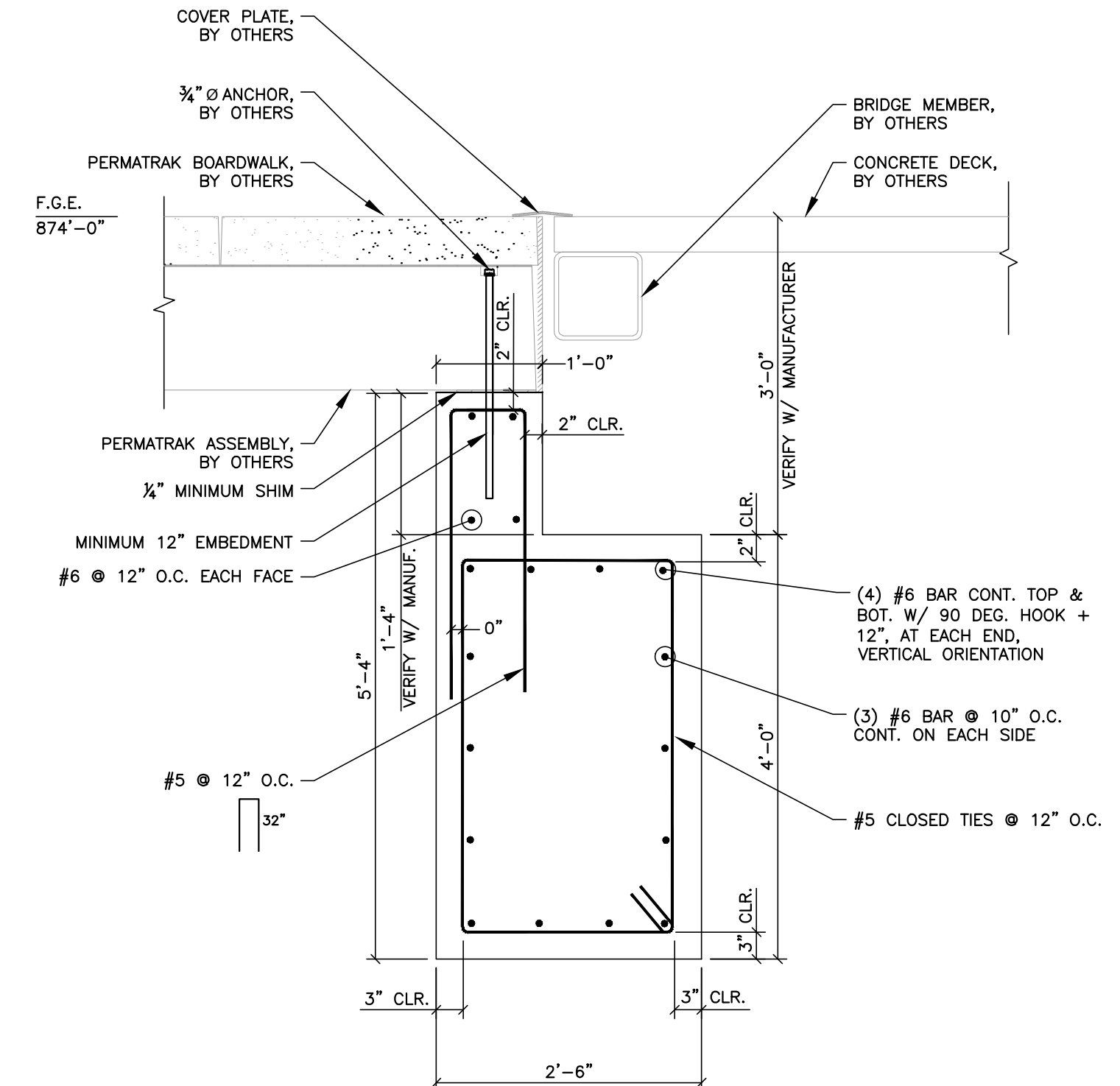
NOTES:
1. FOR HELICAL PILE REQUIREMENTS, SEE S-001, SECTION 5, HELICAL PILES.

2 BRIDGE ABUTMENT PLAN
S-100 SCALE: 3/4" = 1'-0"

3 ABUTMENT SECTION
S-100 SCALE: 3/4" = 1'-0"

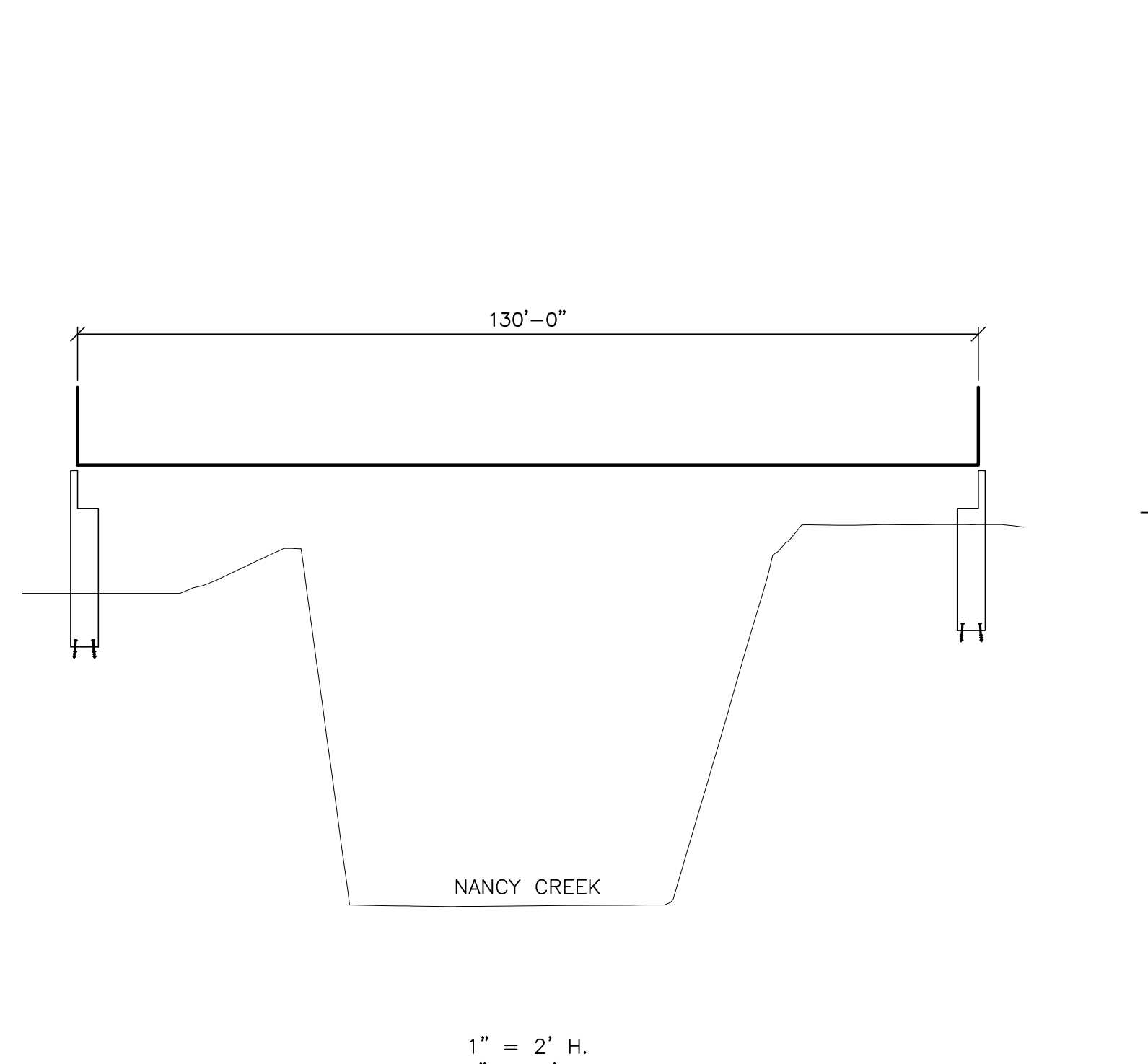


3A ABUTMENT SECTION
S-100 SCALE: 3/4" = 1'-0"



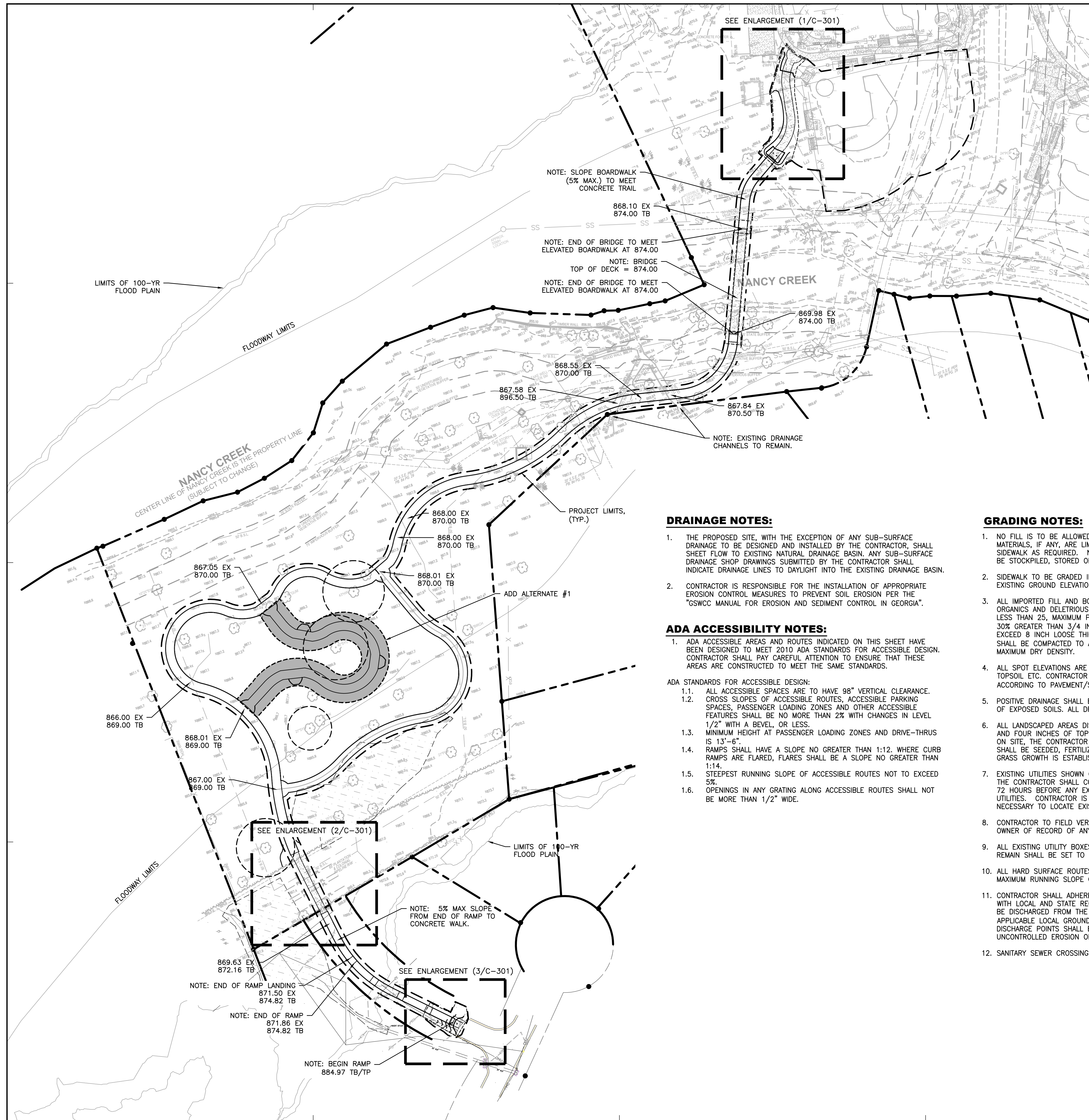
5 ABUTMENT SECTION
S-100 SCALE: 3/4" = 1'-0"

4 ABUTMENT SECTION
S-100 SCALE: 3/4" = 1'-0"



6 BRIDGE AND CREEK ELEVATION
S-100 SCALE: 1:20

1" = 2' H.
1" = .5' V.



ABBREVIATION LEGEND

- EX - EXISTING
- TP - TOP OF PAVING
- TB - TOP OF BOARDWALK

EXISTING LEGEND

- EXISTING HARDWOOD
- EXISTING PINE
- EXISTING PROPERTY LINE
- MAJOR (5') CONTOUR
- MINOR (1') CONTOUR
- EXISTING FENCE
- EXISTING SANITARY SEWER
- EXISTING PIPE LINE
- EXISTING WETLAND

PROPOSED LEGEND

- LIMITS OF PROJECT
- LIMITS OF DISTURBANCE
- DOUBLE ROW TYPE-C SILT FENCE
- MAJOR CONTOUR
- MINOR CONTOUR
- PROPOSED ELEVATED BOARDWALK ON HELICAL PIERS
- PROPOSED CONCRETE TRAIL/WALK

DRAINAGE NOTES:

1. THE PROPOSED SITE, WITH THE EXCEPTION OF ANY SUB-SURFACE DRAINAGE TO BE DESIGNED AND INSTALLED BY THE CONTRACTOR, SHALL SHEET FLOW TO EXISTING NATURAL DRAINAGE BASIN. ANY SUB-SURFACE DRAINAGE SHOP DRAWINGS SUBMITTED BY THE CONTRACTOR SHALL INDICATE DRAINAGE LINES TO DAYLIGHT INTO THE EXISTING DRAINAGE BASIN.
2. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF APPROPRIATE EROSION CONTROL MEASURES TO PREVENT SOIL EROSION PER THE "GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

ADA ACCESSIBILITY NOTES:

1. ADA ACCESSIBLE AREAS AND ROUTES INDICATED ON THIS SHEET HAVE BEEN DESIGNED TO MEET 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN. CONTRACTOR SHALL PAY CAREFUL ATTENTION TO ENSURE THAT THESE AREAS ARE CONSTRUCTED TO MEET THE SAME STANDARDS.
- ADA STANDARDS FOR ACCESSIBLE DESIGN:
- 1.1. ALL ACCESSIBLE SPACES ARE TO HAVE 98" VERTICAL CLEARANCE.
 - 1.2. CROSS SLOPES OF ACCESSIBLE ROUTES, ACCESSIBLE PARKING SPACES, PASSENGER LOADING ZONES AND OTHER ACCESSIBLE FEATURES SHALL BE NO MORE THAN 2% WITH CHANGES IN LEVEL 1/2" WITH A BEVEL, OR LESS.
 - 1.3. MINIMUM HEIGHT AT PASSENGER LOADING ZONES AND DRIVE-THRU IS 13'-6".
 - 1.4. RAMPS SHALL HAVE A SLOPE NO GREATER THAN 1:12. WHERE CURB RAMPS ARE FLARED, FLARES SHALL BE A SLOPE NO GREATER THAN 1:14.
 - 1.5. STEEPEST RUNNING SLOPE OF ACCESSIBLE ROUTES NOT TO EXCEED 5%.
 - 1.6. OPENINGS IN ANY GRATING ALONG ACCESSIBLE ROUTES SHALL NOT BE MORE THAN 1/2" WIDE.

GRADING NOTES:

1. NO FILL IS TO BE ALLOWED WITHIN LIMITS OF 100-YEAR FLOOD PLAIN. IMPORTED MATERIALS, IF ANY, ARE LIMITED TO BASE MATERIALS FOR STABILIZATION OF SIDEWALK AS REQUIRED. NO EXCAVATED MATERIALS FROM LIMITS OF PROJECT TO BE STOCKPILED, STORED OR SPREAD WITHIN LIMITS OF 100-YEAR FLOOD PLAIN.
2. SIDEWALK TO BE GRADED IN A MANNER TO ALLOW FINISH GRADE TO MATCH EXISTING GROUND ELEVATION WITHIN LIMITS OF 100-YEAR FLOOD PLAIN.
3. ALL IMPORTED FILL AND BORROW SOILS SHALL BE CLEAN AND FREE OF DEBRIS, ORGANICS AND DELETERIOUS MATERIAL. SUITABLE FILL SHALL HAVE PLASTICITY INDEX LESS THAN 25, MAXIMUM PARTICLE SIZE OF FOUR INCHES WITH NOT MORE THAN 30% GREATER THAN 3/4 INCH. FILL SHALL BE PLACED IN THIN LIFTS NOT TO EXCEED 8 INCH LOOSE THICKNESS, AND COMPACTED. FILL WITHIN TOP TWO FEET SHALL BE COMPACTED TO AT LEAST 98% STANDARD PROCTOR (ASTM D698) MAXIMUM DRY DENSITY.
4. ALL SPOT ELEVATIONS ARE TO TOP OF PAVEMENT, TOP OF CURB, TOP OF TOPSOIL ETC. CONTRACTOR TO ADJUST SUBGRADE ELEVATION AS NECESSARY ACCORDING TO PAVEMENT/SLAB THICKNESS.
5. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES TO PREVENT SATURATION OF EXPOSED SOILS. ALL DRAINAGE SHALL BE AWAY FROM STRUCTURES.
6. ALL LANDSCAPED AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL AS NEEDED. THESE AREAS SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS.
7. EXISTING UTILITIES SHOWN ON THESE PLANS MAY NOT BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO VERIFY EXACT FIELD LOCATION OF UTILITIES. CONTRACTOR IS RESPONSIBLE FOR HIRING PRIVATE LOCATOR AS NECESSARY TO LOCATE EXISTING UTILITIES.
8. CONTRACTOR TO FIELD VERIFY ELEVATIONS OF ALL TIE-IN POINTS AND NOTIFY THE OWNER OF RECORD OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
9. ALL EXISTING UTILITY BOXES, METER BOXES AND VALVE BOXES THAT ARE TO REMAIN SHALL BE SET TO FLUSH WITH PROPOSED GRADE.
10. ALL HARD SURFACE ROUTES DESIGNATED AS ADA ACCESSIBLE SHALL HAVE MAXIMUM RUNNING SLOPE OF 4.9% AND MAXIMUM CROSS SLOPE OF 1.5%.
11. CONTRACTOR SHALL ADHERE TO PROPER DEWATERING PRACTICES IN ACCORDANCE WITH LOCAL AND STATE REGULATIONS. ONLY UNCONTAMINATED GROUNDWATER CAN BE DISCHARGED FROM THE SITE, AS ALLOWED BY AND IN ACCORDANCE WITH APPLICABLE LOCAL GROUNDWATER DEWATERING PERMITS/REGULATIONS. ALL DISCHARGE POINTS SHALL BE MONITORED TO ENSURE IT DOES NOT CAUSE UNCONTROLLED EROSION OF THE SOIL DURING DISCHARGE.
12. SANITARY SEWER CROSSINGS TO BE PROTECTED DURING CONSTRUCTION.

COPYRIGHT NOTICE
This drawing is the property of the above referenced Professional and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from the Professional.

ISSUE/REVISION RECORD

DATE	DESCRIPTION
10/21/2020	MODIFY PIPELINE CROSSING

PROFESSIONAL SEAL

PROFESSIONAL IN CHARGE

PROJECT MANAGER

QUALITY CONTROL

DRAWN BY

PROJECT NAME

**MURPHEY
CANDLER PARK
NATURE TRAIL**

**BROOKHAVEN
GEORGIA**

**WEST NANCY CREEK
DRIVE AND CANDLER
LAKE CIRCLE WEST
BROOKHAVEN, GA 30341
LAND LOTS 326 & 327
18TH DISTRICT
DEKALB COUNTY**



PROJECT NUMBER

SHEET TITLE

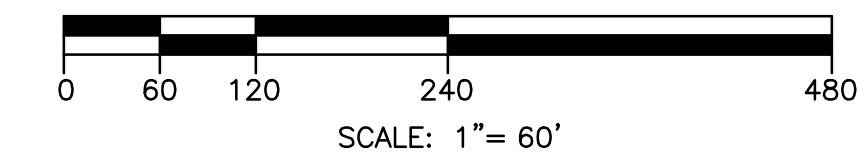
SITE GRADING PLAN

SHEET NUMBER

C-300



Know what's below.
Call before you dig.



DATE PLOTTED: 10/21/2020 10:58 AM



CITY OF BROOKHAVEN EROSION CONTROL NOTES:

1. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH ENTRY TO OR EXIT FROM THE SITE.
2. THE CONSTRUCTION EXIT(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ON TO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH STONE, AS CONDITIONS DEMANDS, AND REPAIR AND/OR CLEAN-OUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAIN MUST BE REMOVED IMMEDIATELY. THE CONTRACTOR SHALL INSPECT THE CONTROL MEASURES AT THE END OF EACH WORK DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
3. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS. THE LOCATION AND EXTENT OF ALL AUTHORIZED LAND DISTURBANCE SHALL OCCUR WITHIN THE APPROVED LIMITS INDICATED ON THE APPROVED PLANS.
4. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION ENTRANCE/EXIT(S), ALL PERIMETER EROSION CONTROL DEVICES AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
5. OWNER AGREES TO PROVIDE AND MAINTAIN OFF-STREET PARKING ON THE SUBJECT PROPERTY DURING THE ENTIRE CONSTRUCTION PERIOD.
6. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES WHILE ROADWAY FRONTAGE IMPROVEMENTS ARE BEING MADE.
7. THE CONSTRUCTION OF THE SITE WILL INITIATE WITH THE INSTALLATION OF EROSION CONTROL MEASURES SUFFICIENT TO CONTROL SEDIMENT DEPOSITS AND EROSION. ALL SEDIMENT CONTROL WILL BE MAINTAINED UNTIL ALL UPSTREAM GROUND WITHIN THE CONSTRUCTION AREA HAS BEEN COMPLETELY STABILIZED WITH PERMANENT VEGETATION AND ALL ROADS/DRIVEWAYS HAVE BEEN PAVED.
8. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED CONSISTENT WITH THE CITY OF BROOKHAVEN EROSION CONTROL ORDINANCE.
9. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBANCE ACTIVITY IS IN PROGRESS.
10. ALL SEWER EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION.
11. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE AS NECESSARY.
12. ANY DISTURBED AREA LEFT EXPOSED SHALL BE TEMPORARILY STABILIZED WITH MULCH OR TEMPORARY SEEDING AS SOON AS POSSIBLE AFTER ROUGH GRADING IS COMPLETED BUT WITHIN 14 DAYS AFTER DISTURBANCE. PERMANENT VEGETATION SHALL BE PLANTED IF THE AREA IS TO BE LEFT UNDISTURBED FOR GREATER THAN 6 MONTHS.
13. IF CONCRETE WORK IS DONE ON SITE, THEN A CONCRETE WASHDOWN BMP SHALL BE PROVIDED OR A NOTE "CONCRETE WASHDOWN IS NOT ALLOWED ON SITE." THE CONCRETE WASHDOWN AREA, IF ALLOWED SHALL BE FOR THE TOOLS, CONCRETE MIXER CHUTES, HOPPERS AND THE REAR OF VEHICLES. WASHOUT OF THE DRUM AT THE CONSTRUCTION SITE IS PROHIBITED.

SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	HSG
PuE	Pacolet-URBAN LAND COMPLEX, 10 TO 25 PERCENT SLOPES	B

ESC NOTES:

1. SEE SHEET C-001 FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS.
2. SEE SHEET C-400 FOR EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND SHEET C-401-402 FOR EROSION CONTROL DETAILS AND LEGEND.
3. STORM STRUCTURES MAY EXIST THAT ARE NOT SHOWN ON PLANS. ALL EXISTING STORM STRUCTURES LOCATED IN THE FIELD WITHIN AND ADJACENT TO LIMITS OF DISTURBANCE SHALL HAVE FILTER FABRIC INLET PROTECTION.
4. CONCRETE WASHOUT WILL NOT BE REMOVED UNTIL ALL CONCRETE WORK IS COMPLETE.

ESC PHASING NOTES:

1. DISTURBED AREA IN INITIAL EROSION CONTROL PLAN (C-400):
- .25 ACRES
2. WORK TO BE COMPLETED/IMPLEMENTED IN THE EROSION CONTROL PLAN (C-400):
 - 2.1. CONSTRUCTION ENTRANCE
 - 2.2. CONCRETE WASH-OUT AREA
 - 2.3. TREE PROTECTION FENCE
 - 2.4. COMPOST FILTER SOCK
 - 2.5. SILT FENCE
 - 2.6. HAY BALES WITHIN CRITICAL ROOT ZONES
 - 2.7. TEMPORARY MULCHING
 - 2.8. PERMANENT MULCHING
 - 2.9. PERMANENT SEEDING

EROSION CONTROL BMP LEGEND

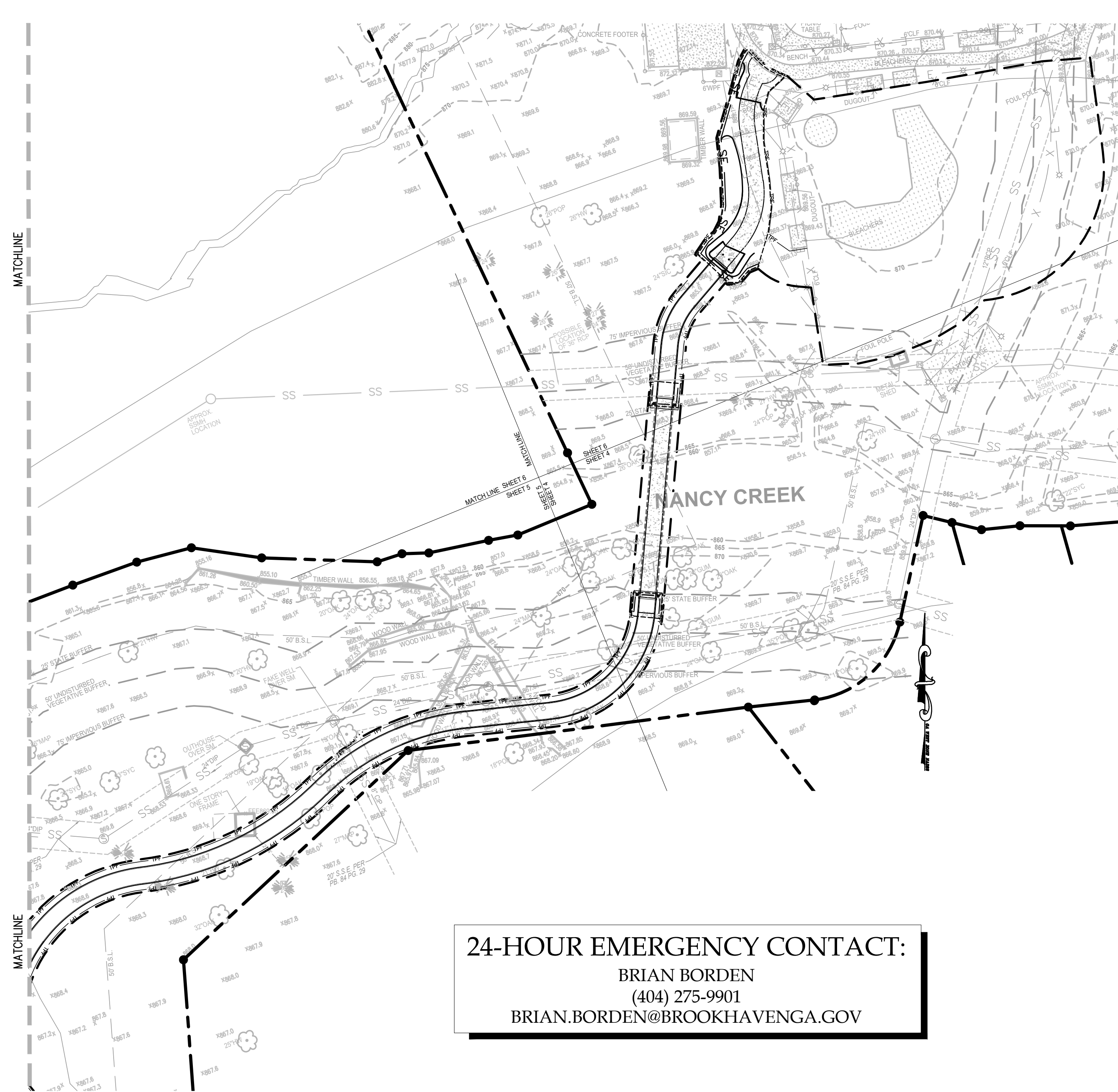
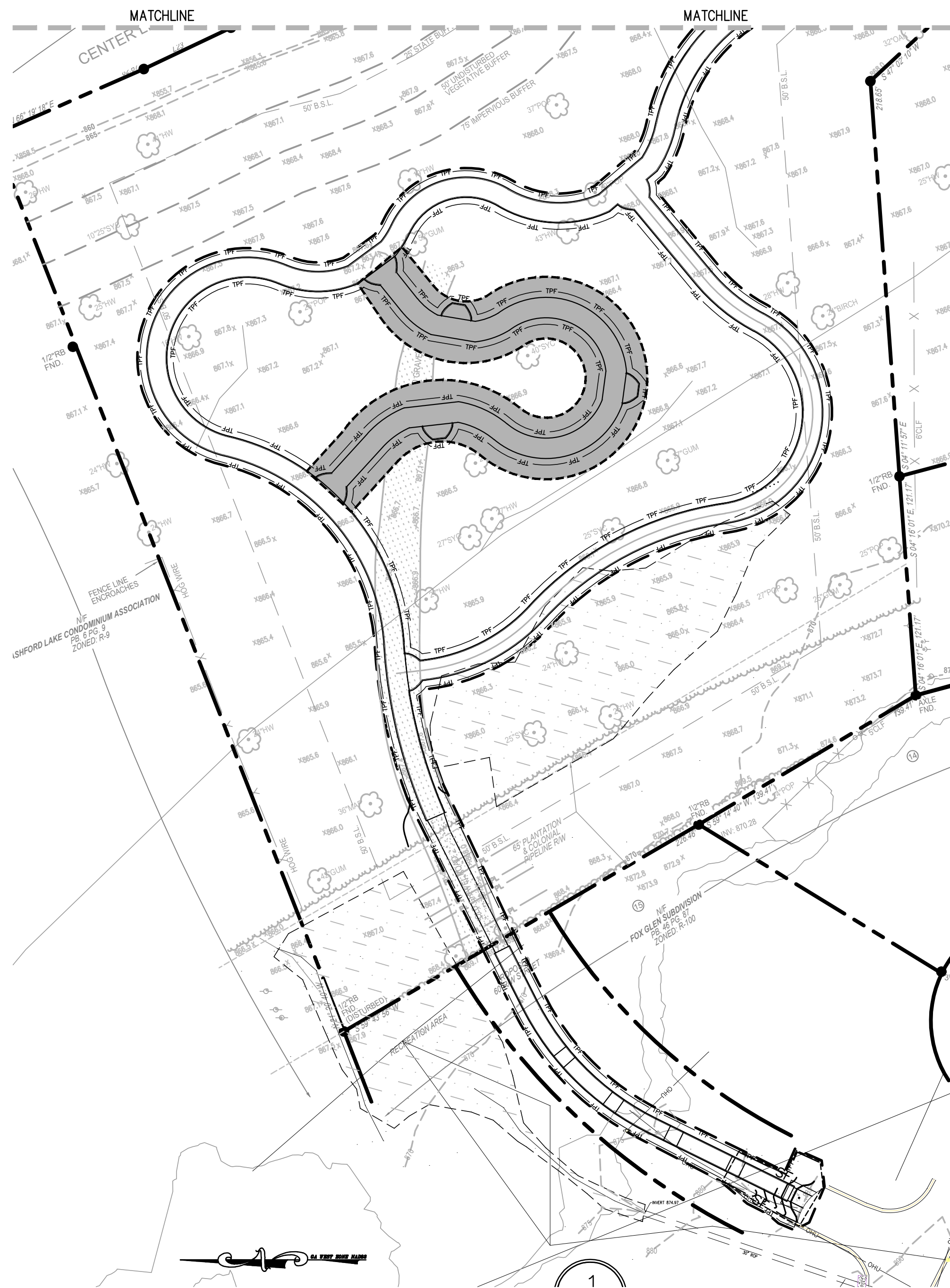
- Du DUST CONTROL ON DISTURBED AREAS
- Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)
- Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)
- Sd1-S SEDIMENT BARRIER (SENSITIVE AREAS) - TYPE "C"
- Sd1-NS COMPOST FILTER SOCK
- Co CONSTRUCTION EXIT

EXISTING LEGEND

- EXISTING HARDWOOD
- EXISTING PINE
- EXISTING PROPERTY LINE
- MAJOR (5') CONTOUR
- MINOR (1') CONTOUR
- EXISTING FENCE
- EXISTING SANITARY SEWER
- EXISTING PIPE LINE
- EXISTING WETLAND

PROPOSED LEGEND

- LIMITS OF PROJECT
- LIMITS OF DISTURBANCE
- DOUBLE ROW TYPE-C SILT FENCE
- COMPOST FILTER SOCK
- TREE PROTECTION FENCE
- MAJOR CONTOUR
- MINOR CONTOUR
- PROPOSED ELEVATED BOARDWALK ON HELICAL PIERS
- PROPOSED CONCRETE TRAIL/WALK



24-HOUR EMERGENCY CONTACT:
 BRIAN BORDEN
 (404) 275-9901
 BRIAN.BORDEN@BROOKHAVENGA.GOV



Know what's below.
Call before you dig.



COPYRIGHT NOTICE
This drawing is the property of the above referenced Professional and is not to be used for any purpose other than the specific project and site named herein, and cannot be reproduced in any manner without the express written permission from the Professional.

ISSUE/REVISION RECORD

DATE	DESCRIPTION
10/21/2020	MODIFY PIPELINE CROSSING

PROFESSIONAL SEAL

PROFESSIONAL IN CHARGE

PROJECT MANAGER

QUALITY CONTROL

DRAWN BY

PROJECT NAME

**MURPHEY
CANDLER PARK
NATURE TRAIL**

**BROOKHAVEN
GEORGIA**

**WEST NANCY CREEK
DRIVE AND CANDLER
LAKE CIRCLE WEST
BROOKHAVEN, GA 30341
LAND LOTS 326 & 327
18TH DISTRICT
DEKALB COUNTY**



PROJECT NUMBER

SHEET TITLE

**EROSION
CONTROL PLAN**

SHEET NUMBER

C-400

