COMMUNITY OF AMBERWOOD H.O.A.
WALKING TRAIL

SITE PLAN DEVELOPMENT PERMIT
CITY OF KYLE
HAYS COUNTY, TEXAS

KNOWN AS LOT 27, BLOCK T, AMBERWOOD SUBDIVISION, PHASE 5
HAYS COUNTY, TEXAS.

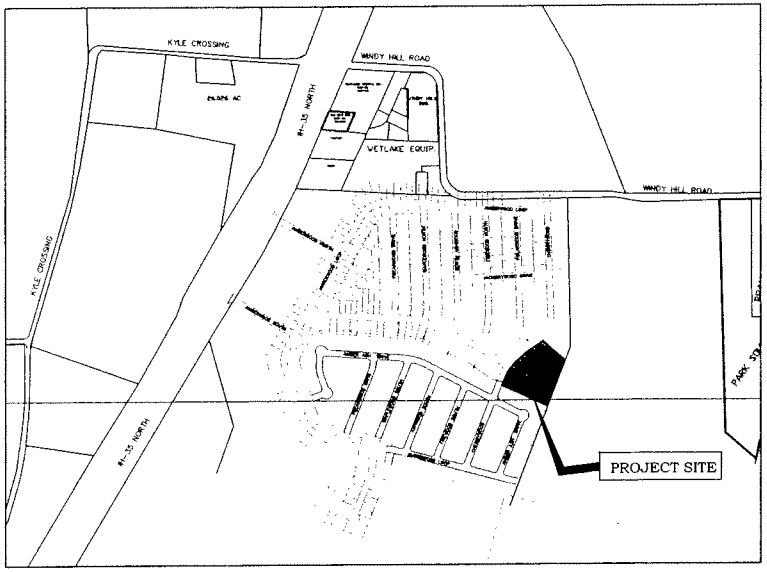
DRAWING INDEX:

SHEET 1	COVER SHEET
SHEET 2	SITE PLAN/ DETAILS
SHEET 3	BRIDGE DETAILS

MAYOR:
MIGUEL GONZALEZ

MAYOR PRO-TEM:
MICHELLE LOPEZ

CITY COUNCIL MEMBERS
BECKY SELBERA
DAVID SALAZAR
DAVID WILSON
LUCY JOHNSON
RAY BRYANT



LOCATION MAP
1" = 1000'

OWNER: AMBERWOOD SUBDIVISION P.O.A.
ADDRESS : P.O. BOX 1618, BUDA, TEXAS 78610
PHONE: (512) 825-5595

ACREAGE: 4.90 ACRES
SURVEY: L.K. MILLER, SURVEY NO. 2, HAYS COUNTY, TEXAS.
NUMBER OF LOTS AND PROPOSED USE: 1 LOT AS EXISTING DRAINAGE EASEMENT/ ADD WALKING TRAIL AROUND POND.
ENGINEER: HUGO ELIZONDO JR., P.E.
PHONE: (512) 312-5040 FAX: (512) 312-5399

OWNER:

COMMUNITY OF AMBERWOOD H.O.A.
C/O REAL MANAGE
10800 PECAN PARK BLVD., STE. 100
AUSTIN, TEXAS 78750
1-800-473-2573

DATE:

PREPARED BY:

STATE OF TEXAS
HUGO ELIZONDO, JR.
69781
LICENSED PROFESSIONAL ENGINEER

2/1/10

HUGO ELIZONDO, JR., P.E. #69781
CUATRO CONSULTANTS, LTD.
3601 KYLE CROSSING, SUITE B.
KYLE, TEXAS 78640
(512) 312-5040
(512) 312-5399 FAX

DATE:

REVIEWED BY:

CITY ENGINEER:

JOHN A. BARTLE, P.E.
NEPTUNE WILKINSON AND ASSOCIATES, INC.

DATE:

REVISION	DESCRIPTION	BY:	DATE:

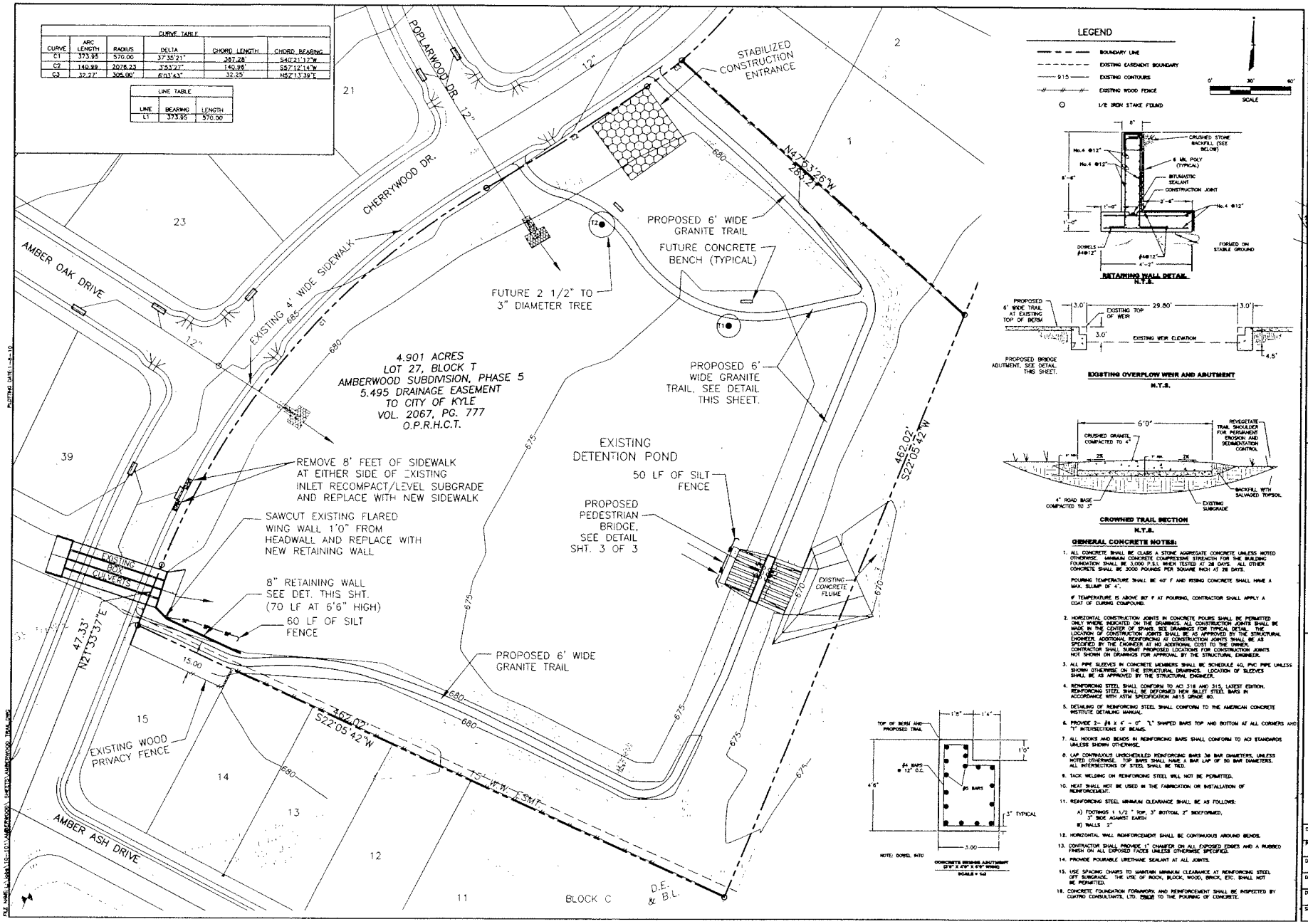
4 CUATRO Consultants, LTD
1701 Directors Blvd., Suite D, Austin, Texas 78744 Phone (512) 312-5040 Fax (512) 312-5399

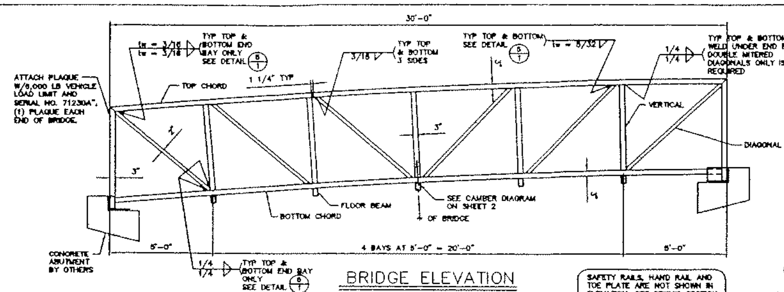
AMBERWOOD SUBDIVISION
KYLE, TEXAS

OWNER:
COMMUNITY OF AMBERWOOD H.O.A.
C/O REAL MANAGE
10800 PECAN PARK BLVD., STE. 100
AUSTIN, TEXAS 78750
1-800-473-2573

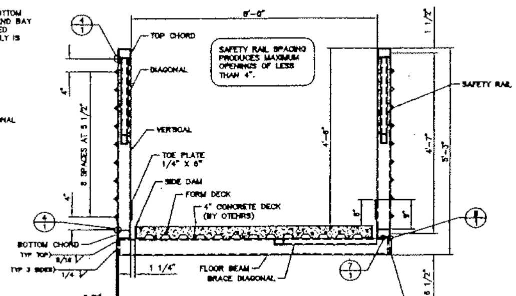
DATE: JANUARY, 2010
PROJECT: 10-001 TRAIL
DRAWING'S NAME: AMBERWOOD_COVER
DESIGN: H.E.J. | CHECKED: R.E.Jr.
DRAWN: RLE | APPROVED: H.E.J.
SHEET: 1 OF 3

PLOTTING DATE: 1/28/10
FILE NAME: C:\Projects\10-001 AMBERWOOD\

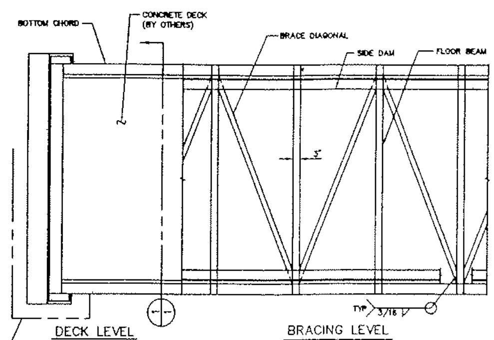

CURVE TABLE
CURVE | ARC LENGTH | RADIUS | DELTA | CHORD LENGTH | CHORD BEARING
C1 | 373.95 | 570.00 | 37°35'21" | 367.28' | S40°21'17"W
C2 | 140.99 | 2026.23 | 3°53'27" | 140.96' | S57°12'14"W
C3 | 32.27' | 305.00' | 6°03'43" | 32.25' | N62°13'39"E
LINE TABLE
LINE | BEARING | LENGTH
L1 | 373.95' | 570.00'
LEGEND
BOUNDARY LINE
EXISTING EASEMENT BOUNDARY
915 EXISTING CONTOURS
EXISTING WOOD FENCE
1/2 IRON STAKE FOUND
SCALE
0' 30' 60'
STABILIZED CONSTRUCTION ENTRANCE
POPLARWOOD DR.
CHERRYWOOD DR.
AMBER OAK DRIVE
AMBER ASH DRIVE
EXISTING 4' WIDE SIDEWALK
PROPOSED 6' WIDE GRANITE TRAIL
FUTURE CONCRETE BENCH (TYPICAL)
FUTURE 2 1/2" TO 3" DIAMETER TREE
4.901 ACRES
LOT 27, BLOCK T
AMBERWOOD SUBDIVISION, PHASE 5
5.495 DRAINAGE EASEMENT
TO CITY OF KYLE
VOL. 2067, PG. 777
O.P.R.H.C.T.
EXISTING DETENTION POND
PROPOSED 6' WIDE GRANITE TRAIL, SEE DETAIL THIS SHEET.
REMOVE 8' FEET OF SIDEWALK AT EITHER SIDE OF EXISTING INLET RECOMPACT/LEVEL SUBGRADE AND REPLACE WITH NEW SIDEWALK
SAWCUT EXISTING FLARED WING WALL 1'0" FROM HEADWALL AND REPLACE WITH NEW RETAINING WALL
EXISTING BOX CULVERTS
8" RETAINING WALL SEE DET. THIS SHT. (70 LF AT 6'6" HIGH)
60 LF OF SILT FENCE
50 LF OF SILT FENCE
PROPOSED PEDESTRIAN BRIDGE, SEE DETAIL SHT. 3 OF 3
EXISTING CONCRETE FLUME
PROPOSED 6' WIDE GRANITE TRAIL
EXISTING WOOD PRIVACY FENCE
15' WTW ESMT
D.E. & B.L.
BLOCK C
N47°53'26"W 280.37'
N21°53'37"E 47.33'
S22°05'42"W 462.02'
S22°05'42"W 457.02'
RETAINING WALL DETAIL
N.T.S.
EXISTING OVERFLOW WEIR AND ABUTMENT
N.T.S.
CROWNED TRAIL SECTION
N.T.S.
GENERAL CONCRETE NOTES:
1. ALL CONCRETE SHALL BE CLASS A STONE AGGREGATE CONCRETE UNLESS NOTED OTHERWISE. MINIMUM CONCRETE COMPRESSIVE STRENGTH FOR THE BUILDING FOUNDATION SHALL BE 3,000 P.S.I. WHEN TESTED AT 28 DAYS. ALL OTHER CONCRETE SHALL BE 3000 POUNDS PER SQUARE INCH AT 28 DAYS.
POURING TEMPERATURE SHALL BE 40° F AND PISING CONCRETE SHALL HAVE A MAX. SLUMP OF 4".
IF TEMPERATURE IS ABOVE 80° F AT POURING, CONTRACTOR SHALL APPLY A COAT OF CURING COMPOUND.
2. HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS SHALL BE PERMITTED ONLY WHERE INDICATED ON THE DRAWINGS. ALL CONSTRUCTION JOINTS SHALL BE MADE IN THE CENTER OF SPANS. SEE DRAWINGS FOR TYPICAL DETAIL. THE LOCATION OF CONSTRUCTION JOINTS SHALL BE AS APPROVED BY THE STRUCTURAL ENGINEER. ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS SHALL BE AS SPECIFIED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL SUBMIT PROPOSED LOCATIONS FOR CONSTRUCTION JOINTS NOT SHOWN ON DRAWINGS FOR APPROVAL BY THE STRUCTURAL ENGINEER.
3. ALL PIPE SLEEVES IN CONCRETE MEMBERS SHALL BE SCHEDULE 40, PVC PIPE UNLESS SHOWN OTHERWISE ON THE STRUCTURAL DRAWINGS. LOCATION OF SLEEVES SHALL BE AS APPROVED BY THE STRUCTURAL ENGINEER.
4. REINFORCING STEEL SHALL CONFORM TO ACI 318 AND 315, LATEST EDITION. REINFORCING STEEL SHALL BE DEFORMED NEW BILLET STEEL BARS IN ACCORDANCE WITH ASTM SPECIFICATION A615 GRADE 60.
5. DETAILING OF REINFORCING STEEL SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE DETAILING MANUAL.
6. PROVIDE 2- #4 x 4' - 0" "L" SHAPED BARS TOP AND BOTTOM AT ALL CORNERS AND "T" INTERSECTIONS OF BEAMS.
7. ALL HOOKS AND BENDS IN REINFORCING BARS SHALL CONFORM TO ACI STANDARDS UNLESS SHOWN OTHERWISE.
8. LAP CONTINUOUS UNSCHEDULED REINFORCING BARS 36 BAR DIAMETERS, UNLESS NOTED OTHERWISE. TOP BARS SHALL HAVE A BAR LAP OF 70 BAR DIAMETERS. ALL INTERSECTIONS OF STEEL SHALL BE TIED.
9. TACK WELDING ON REINFORCING STEEL WILL NOT BE PERMITTED.
10. HEAT SHALL NOT BE USED IN THE FABRICATION OR INSTALLATION OF REINFORCEMENT.
11. REINFORCING STEEL MINIMUM CLEARANCE SHALL BE AS FOLLOWS:
A) FOOTINGS 1 1/2 " TOP, 3" BOTTOM, 2" SIDEFORMED,
3" SIDE AGAINST EARTH
B) WALLS 2"
12. HORIZONTAL WALL REINFORCEMENT SHALL BE CONTINUOUS AROUND BENDS.
13. CONTRACTOR SHALL PROVIDE 1" CHAMFER ON ALL EXPOSED EDGES AND A RUBBED FINISH ON ALL EXPOSED FACES UNLESS OTHERWISE SPECIFIED.
14. PROVIDE POURABLE URETHANE SEALANT AT ALL JOINTS.
15. USE SPACING CHAIRS TO MAINTAIN MINIMUM CLEARANCE AT REINFORCING STEEL OFF SUBGRADE. THE USE OF ROCK, BLOCK, WOOD, BRICK, ETC. SHALL NOT BE PERMITTED.
16. CONCRETE FOUNDATION FORMWORK AND REINFORCEMENT SHALL BE INSPECTED BY CUATRO CONSULTANTS, LTD. PRIOR TO THE POURING OF CONCRETE.
OWNER:
COMMUNITY OF AMBERWOOD H.O.A.
C/O REAL MANAGE
10800 PECAN PARK BLVD., STE. 100
AUSTIN, TEXAS 78750
1-800-473-2573
SITE PLAN
AMBERWOOD SUBDIVISION
KYLE, TEXAS
DATE: JANUARY, 2010
PROJECT: 10-001 TRAIL
DRAWING'S NAME: AMBERWOOD TRAIL
DESIGN: H.E.V. CHECKED:
DRAWN: RLK APPROVED: H.E.V.
SHEET: 2 OF 3


30'-0"
ATTACH PLAQUE W/6,000 LB VEHICLE LOAD LIMIT AND SERIAL NO. 71230A". (1) PLAQUE EACH END OF BRIDGE.
TYP TOP & BOTTOM END BAY ONLY SEE DETAIL
TYP TOP & BOTTOM 3 SIDES
TYP TOP & BOTTOM SEE DETAIL
TYP TOP & BOTTOM WELD UNDER END BAY DOUBLE MITERED DIAGONALS ONLY IS REQUIRED
TOP CHORD
1 1/4" TYP
VERTICAL
DIAGONAL
FLOOR BEAM
BOTTOM CHORD
SEE CAMBER DIAGRAM ON SHEET 2
OF BRIDGE
CONCRETE ABUTMENT BY OTHERS
5'-0"
4 BAYS AT 5'-0" = 20'-0"
5'-0"
TYP TOP & BOTTOM END BAY ONLY SEE DETAIL
SAFETY RAILS, HAND RAIL AND TOE PLATE ARE NOT SHOWN IN ELEVATION, SEE BRIDGE SECTION FOR CORRECT NUMBER & LOCATION.

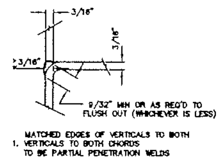
BRIDGE ELEVATION


6'-0"
TOP CHORD
DIAGONAL
SAFETY RAIL SPACING PRODUCES MAXIMUM OPENINGS OF LESS THAN 4".
SAFETY RAIL
VERTICAL
TOE PLATE 1/4" X 6"
SIDE DAM
FORM DECK
4" CONCRETE DECK (BY OTHERS)
8 SPACES AT 5 1/2"
BOTTOM CHORD
1 1/4"
FLOOR BEAM
BRACE DIAGONAL
3/8" STIFFENER TYP EVERY FLOOR BEAM NOTCH CORNERS FOR DRAINAGE

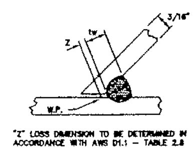
BRIDGE SECTION



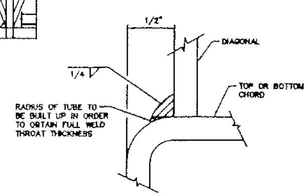
BRIDGE PLAN



WELD DETAIL

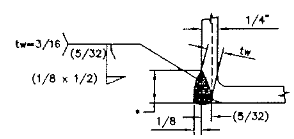


WELD DETAIL



WELD DETAIL

HSS 3 x 2 x 3/16 DIAGONALS

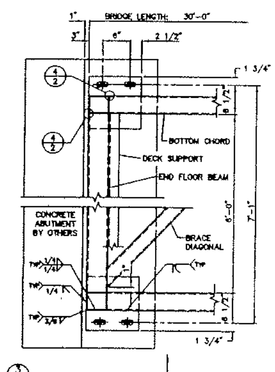


WELD DETAIL

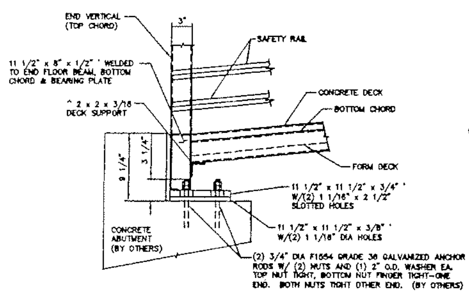
1/4" WALL THICKNESS, 3/16 WELD

* 1/2" MINIMUM OR AS REQUIRED TO FLUSH OUT RADIUS, WHICHEVER IS GREATER

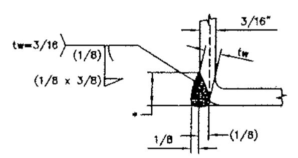
NOTE: IF THE OUTSIDE RADIUS OF THE TUBE IS LESS THAN 1.5 TIMES THE WALL THICKNESS, CONTACT THE ENGINEER FOR APPROPRIATE WELD MODIFICATIONS.



PLAN – BEARING ASSEMBLY


END VERTICAL (TOP CHORD)
3"
SAFETY RAIL
11 1/2" x 8" x 1/2" WELDED TO END FLOOR BEAM, BOTTOM CHORD & BEARING PLATE
2 x 2 x 3/16 DECK SUPPORT
CONCRETE DECK
BOTTOM CHORD
FORM DECK
11 1/2" x 11 1/2" x 3/4" W/(2) 1 1/16" x 2 1/2" SLOTTED HOLES
11 1/2" x 11 1/2" x 3/8" W/(2) 1 1/16" DIA HOLES
CONCRETE ABUTMENT (BY OTHERS)
(2) 3/4" DIA F1554 GRADE 36 GALVANIZED ANCHOR RODS W/ (2) NUTS AND (1) 2" O.D. WASHER EA. TOP NUT TIGHT, BOTTOM NUT FINGER TIGHT–ONE END. BOTH NUTS TIGHT OTHER END. (BY OTHERS)

SIDE VIEW – BEARING ASSEMBLY



WELD DETAIL

3/16" WALL THICKNESS

* 3/8" MINIMUM OR AS REQUIRED TO FLUSH OUT RADIUS, WHICHEVER IS GREATER

GENERAL NOTES

1. DESIGN STRESSES ARE IN ACCORDANCE WITH THE MANUAL OF STEEL CONSTRUCTION FOR ALLOWABLE STRESS DESIGN AS ADOPTED BY THE AMERICAN STEEL INSTITUTE OF STEEL CONSTRUCTION (AISC), LATEST EDITION.
2. BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A242 PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).
3. CONCRETE DECK:
   GALVANIZED FORM DECK SUPPLIED BY CONTINENTAL. CONCRETE, REINFORCING AND EXPANSION MATERIAL SUPPLIED BY OTHERS. SEE CONCRETE DECK SHEET.
4. THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED.
5. ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE COMPLETE PENETRATION TYPE WELDS ON BOTH SIDES WITH A PARTIAL PENETRATION GROOVE WELD ON THE TOP SIDE AND A FILLET WELD ON THE BOTTOM SIDE.
6. UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:
   A. BOTH ENDS OF VERTICALS, DIAGONALS, BRACE DIAGONALS AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
   B. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS.
7. BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
   A. 85 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 6,000 POUND VEHICLE LOAD. THE VEHICLE LOAD SHALL BE EQUALLY DISTRIBUTED AS A FOUR-WHEEL VEHICLE. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 4'-0" AND THE WHEEL BASE SHALL BE 5'-6". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESS IN EACH MEMBER, INCLUDING DECKING.
   B. 35 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
   C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.15.3).
8. CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPERATION SPECIFICATIONS NO. 7 BRUSH OFF BLAST CLEANING. SSPC-SP7-LATEST EDITION.

CONTECH BRIDGE SOLUTIONS INC.

ALEXANDRIA, MN 320-852-7500

CONTINENTAL BRIDGE

REV. BY:	DATE:	LEVEL:	REVISION:

30'-0" X 6'-0"
COMMUNITY OF AMBERWOOD H.O.A.
PEDESTRIAN BRIDGE
KYLE, TEXAS

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ARKANSAS

DATE:

REG. NO. 8780

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
CBT	BAJ	CBT	CBT

4 CUATRO Consultants, LTD.

DETAILS

AMBERWOOD SUBDIVISION
KYLE, TEXAS

OWNER:
COMMUNITY OF AMBERWOOD H.O.A.
C/O REAL MANAGE
10800 PECAN PARK BLVD., STE. 100
AUSTIN, TEXAS 78750
1-800-473-2573

DATE: JANUARY, 2010
PROJECT: 10-001 TRAIL
DRAWING'S NAME: AMBERWOOD TRAIL
DESIGN: H.E.J. CHECKED: H.E.J.
DRAWN: RLE APPROVED: H.E.J.