

CITY OF ROCKWALL, TEXAS

CONSTRUCTION PLANS FOR:

COUNTRY LANE 2.0 M.G. ELEVATED STORAGE TANK FOR 700 SERVICE AREA

HIGH WATER LEVEL 698.75 FEET

CITY COUNCIL

BILL CECIL, MAYOR
MATT SCOTT, MAYOR PRO-TEM
BOB COTTI
TIM McCALLUM
MARGO NIELSON
STEPHEN STRAUGHAN
CLIFF SEVIER

CITY MANAGER

JULIE COUCH

ASSISTANT CITY MANAGER

RICHARD CROWLEY

CITY ENGINEER

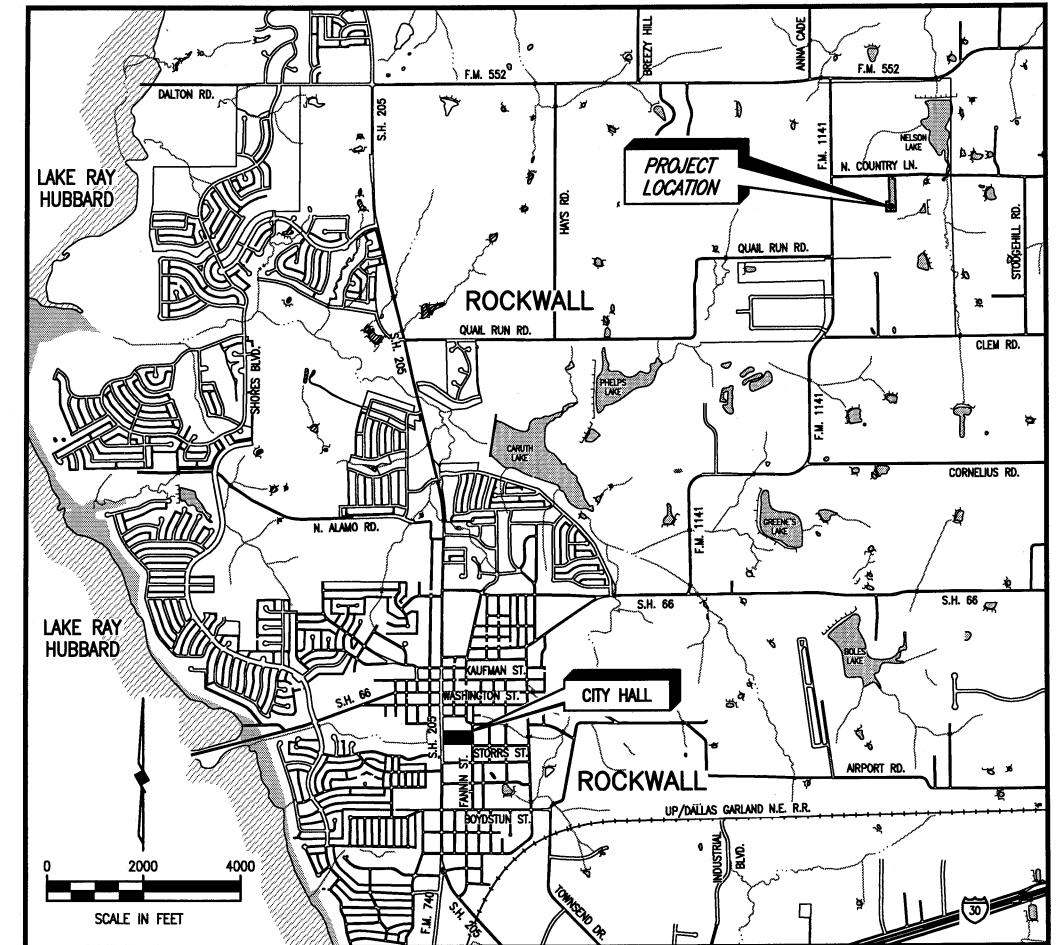
CHUCK TODD, P.E.

FEBRUARY 2007



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BY PAC DATE 12/23/08

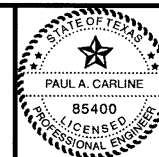


LOCATION MAP

SHEET INDEX

<u>GENERAL</u>		<u>MISCELLANEOUS - CIVIL</u>	
1	COVER SHEET, LOCATION MAP AND SHEET INDEX	22 - 27	MISCELLANEOUS DETAILS
2	CONTROL POINTS AND BORING LOCATIONS	28 - 29	LOG OF BORINGS
3	SITE PLAN		
4 - 6	TANK DRIVE PAVING PLAN-PROFILE		
7	DRAINAGE AREA MAP	E1	ELECTRICAL SITE PLAN
8	CULVERT "A" PLAN-PROFILE	E2	ELECTRICAL PLANS AND SCHEDULES
9 - 10	WATER SUPPLY LINE PLAN-PROFILE	E3	ELECTRICAL DETAILS
11 - 12	PROPOSED GRADING PLAN	E4	ELECTRICAL DETAILS
13	PROPOSED GRADING DETAILS	E5	ELECTRICAL DETAILS
14	EROSION CONTROL PLAN	E6	CONTROL SCHEMATICS
15	SW3P NOTES	M1	HVAC PLANS AND DETAILS
<u>ELEVATED STORAGE TANK - CIVIL</u>			
16	TANK ELEVATION AND DETAILS		
17	TANK GROUND LEVEL PLAN & DETAILS		
18 - 19	TANK GROUND LEVEL SECTIONS & DETAILS		
20	TANK SECOND FLOOR LEVEL PLAN & DETAILS		
21	TANK THIRD FLOOR LEVEL PLAN & DETAILS		

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CONSULTING ENGINEERS
7502 Greenville Ave., Suite 220
Dallas, Texas
(214) 361-7900



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CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
COVER SHEET
LOCATION MAP
AND SHEET INDEX

BHC
PROJECT NO.
2005 149

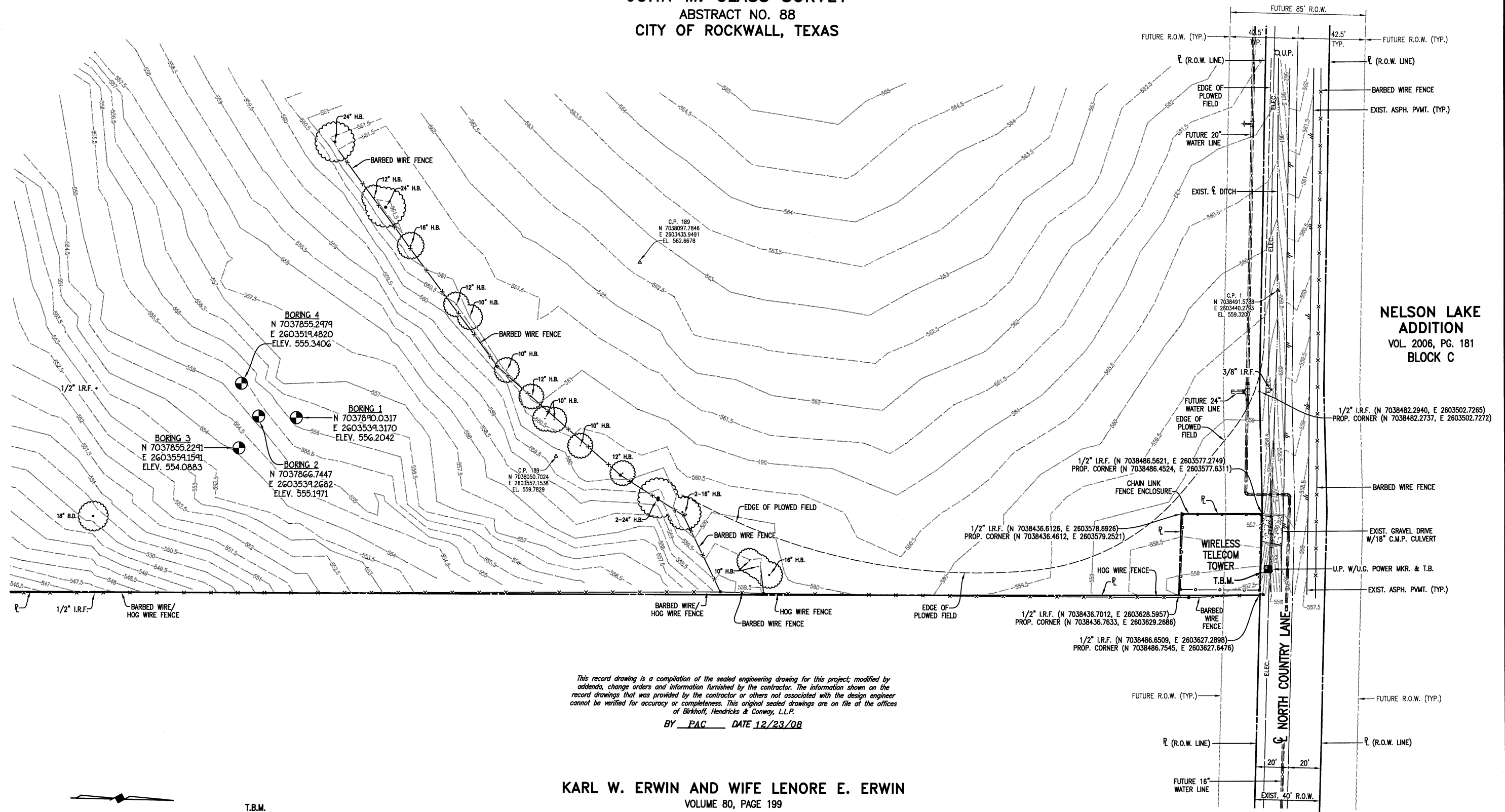
December, 2008

SHEET NO.

1

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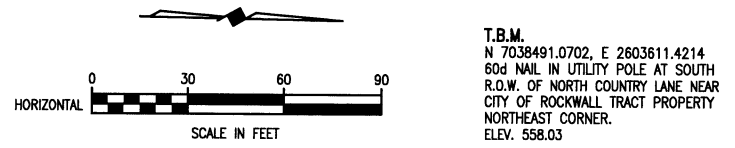
JOHN M. GLASS SURVEY
 ABSTRACT NO. 88
 CITY OF ROCKWALL, TEXAS



**NELSON LAKE
 ADDITION**
 VOL. 2006, PG. 181
 BLOCK C

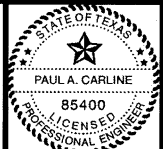
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KARL W. ERWIN AND WIFE LENORE E. ERWIN
 VOLUME 80, PAGE 199



T.B.M.
 N 7038491.0702, E 2603611.4214
 60d NAIL IN UTILITY POLE AT SOUTH
 R.O.W. OF NORTH COUNTRY LANE NEAR
 CITY OF ROCKWALL TRACT PROPERTY
 NORTHEAST CORNER.
 ELEV. 558.03

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 Dallas, Texas
 (214) 361-7900



[Handwritten Signature]
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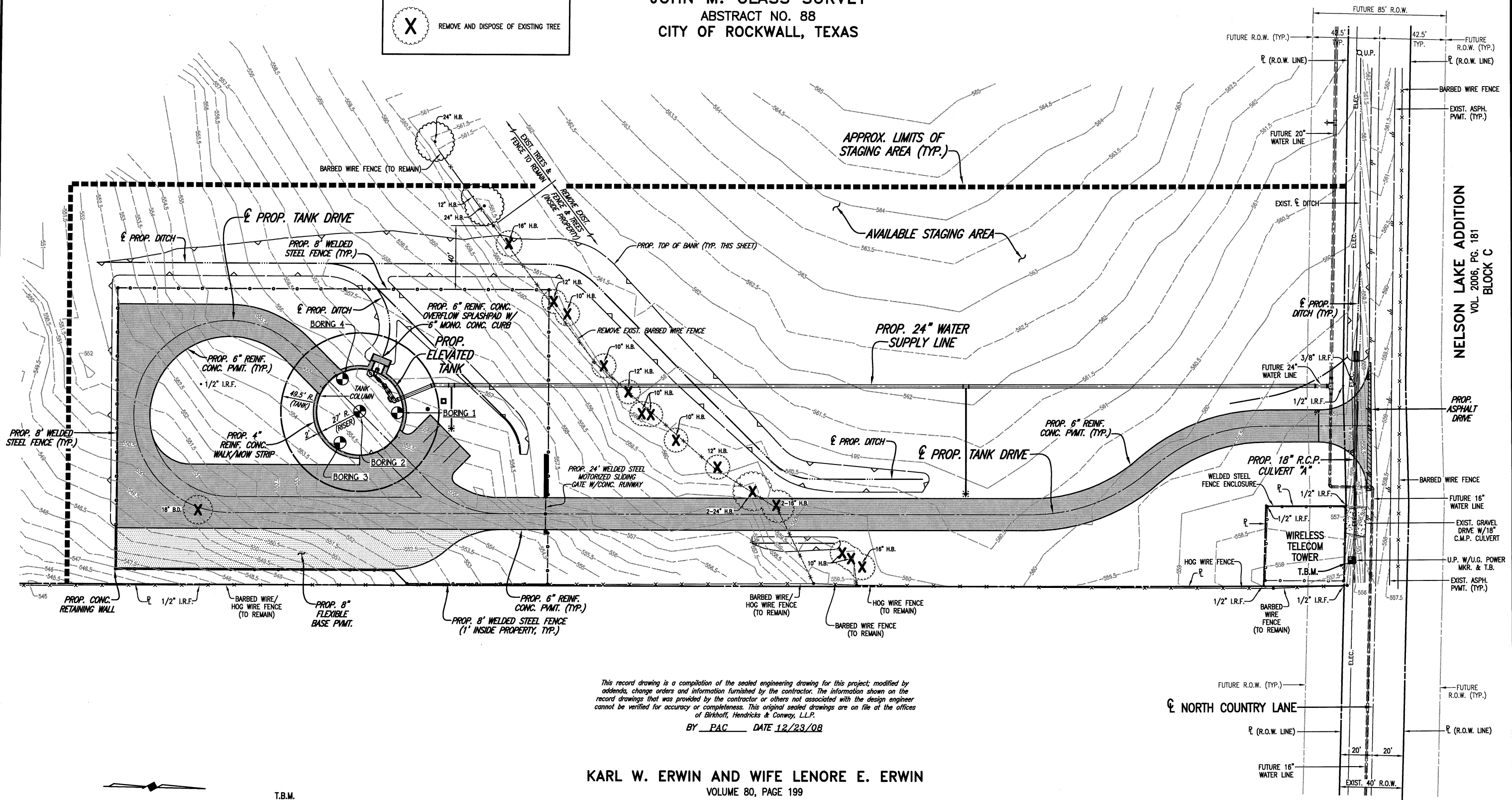
CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 CONTROL POINTS AND BORING LOCATIONS

BHC
 PROJECT NO.
 2005 149
 SHEET NO.
 2
 December, 2008

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JOHN M. GLASS SURVEY
 ABSTRACT NO. 88
 CITY OF ROCKWALL, TEXAS

X REMOVE AND DISPOSE OF EXISTING TREE

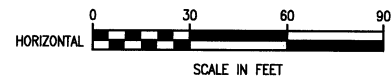


NELSON LAKE ADDITION
 VOL. 2006, PG. 181
 BLOCK C

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CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 PROPOSED SITE PLAN

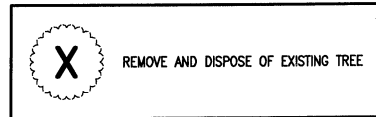
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NELSON LAKE ADDITION
VOL. 2006, PG. 181
BLOCK C

JOHN M. GLASS SURVEY
ABSTRACT NO. 88
KARL W. ERWIN
AND WIFE LENORE E. ERWIN
VOLUME 80, PAGE 199

CONST. 6" REINF. CONC.
PVT. ON 8" LIME-
TREATED SUBGRADE (TYP.)



T.B.M.
N 7038491.0702, E 2603611.4214
604' NAIL IN UTILITY POLE AT SOUTH
R.O.W. OF NORTH COUNTRY LANE NEAR
CITY OF ROCKWALL TRACT PROPERTY
NORTHEAST CORNER.
ELEV. 558.03

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CONST. 5" H.M.A.C.
PVT. ON 8" LIME-
TREATED SUBGRADE (TYP.)

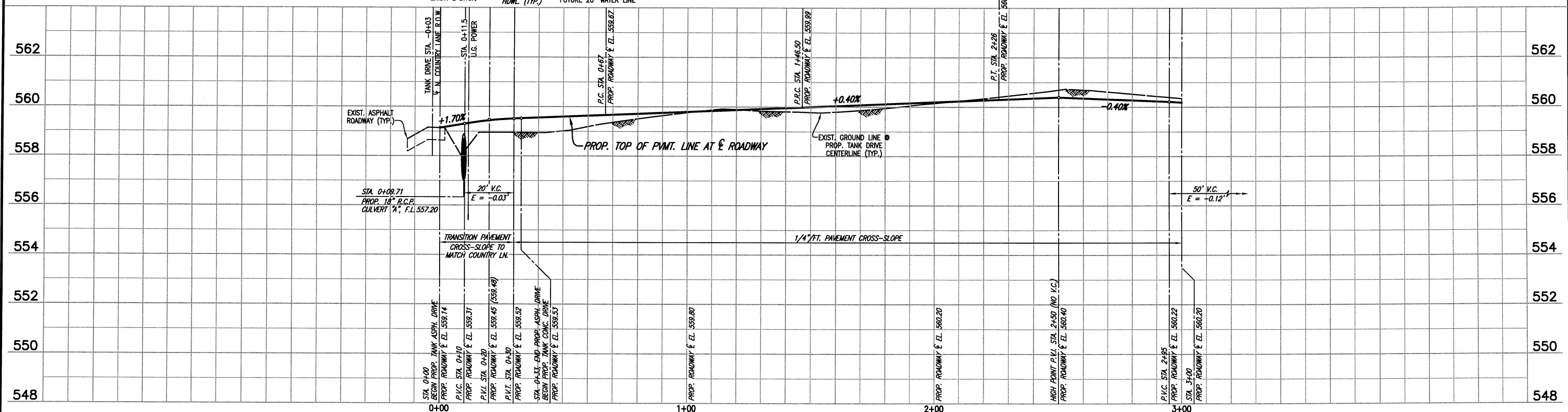
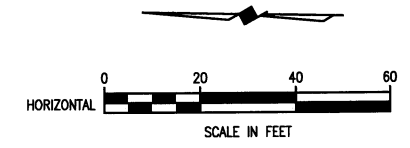
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P.C. STA. 0+67
(N 7038433.6928, E 2603529.3156)
P.I. STA. 1+08.58
(N 7038392.1386, E 2603530.6630)
P.R.C. STA. 1+46.50
(N 7038361.8641, E 2603559.1591)
 $\Delta = 41'24'35" LT.$
R = 110.00'
T = 41.58'
L = 79.50'

TANK DRIVE & CURVE DATA
P.R.C. STA. 1+46.50
(N 7038361.8641, E 2603559.1591)
P.I. STA. 1+88.08
(N 7038331.5896, E 2603587.6552)
P.T. STA. 2+26
(N 7038290.0354, E 2603589.0026)
 $\Delta = 41'24'35" RT.$
R = 110.00'
T = 41.58'
L = 79.50'

N 7038467.6750, E 2603528.2137
PROP. TANK DRIVE STA. 0+33
END PROP. ASPH. DRIVE
BEGIN PROP. CONC. DRIVE

N 7038500.6576, E 2603527.1442
PROP. TANK DRIVE STA. 0+00
BEGIN PROP. ASPH. DRIVE

CITY OF ROCKWALL, TEXAS



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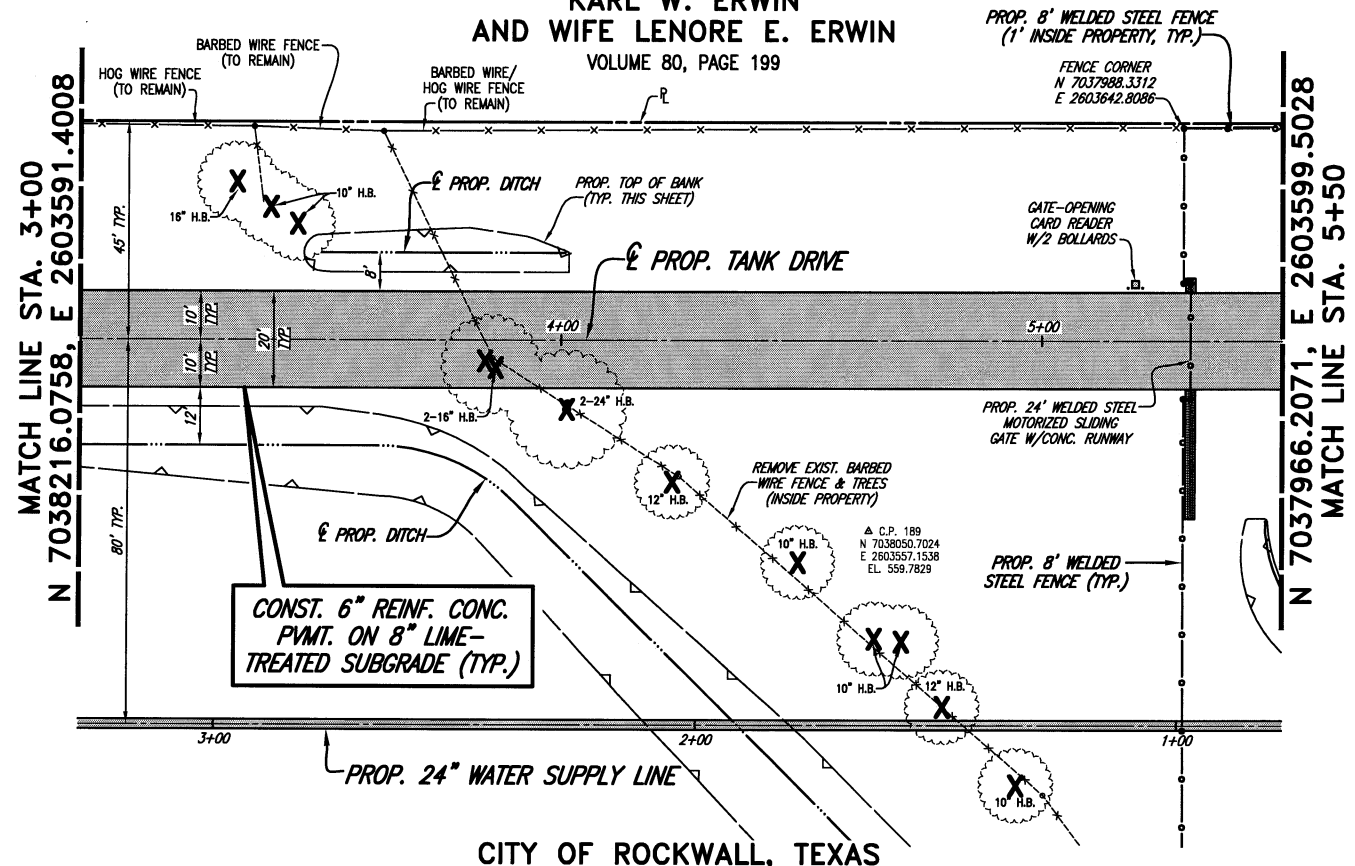
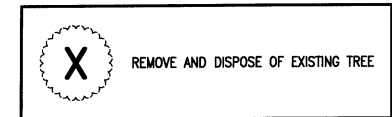


CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
TANK DRIVE PLAN-PROFILE
STA. 0+00 TO STA. 3+00

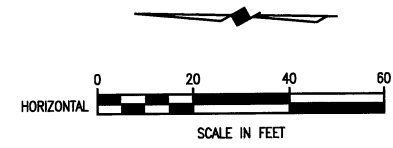
BHC
PROJECT NO.
2005 149
December, 2008
SHEET NO.
4

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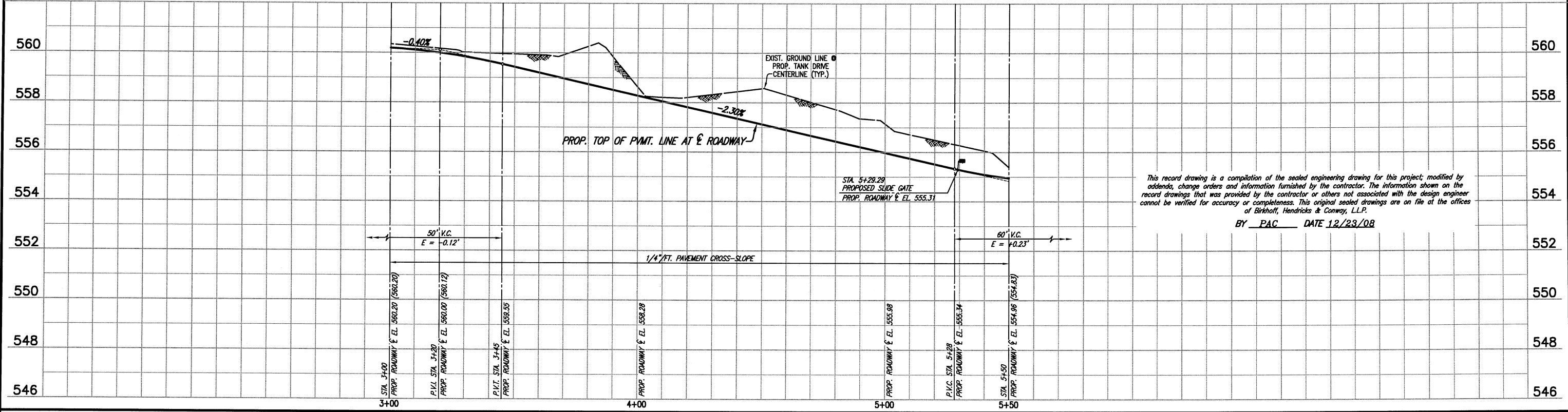
JOHN M. GLASS SURVEY
 ABSTRACT NO. 88
 KARL W. ERWIN
 AND WIFE LENORE E. ERWIN
 VOLUME 80, PAGE 199



T.B.M.
 N 7038491.0702, E 2603611.4214
 60d NAIL IN UTILITY POLE AT SOUTH
 R.O.W. OF NORTH COUNTRY LANE NEAR
 CITY OF ROCKWALL TRACT PROPERTY
 NORTHEAST CORNER.
 ELEV. 558.03



CITY OF ROCKWALL, TEXAS



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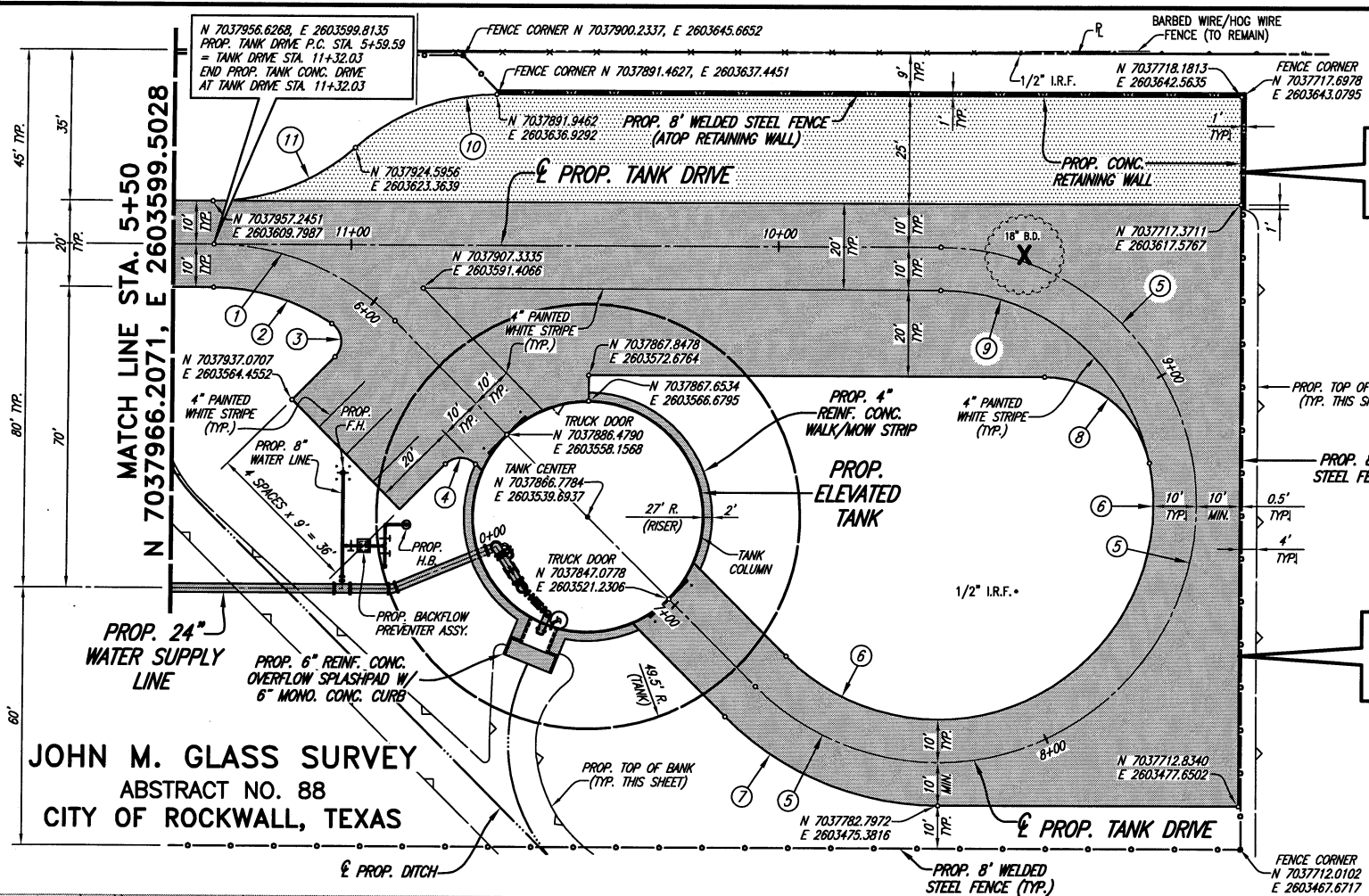


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 12/21/08

CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 TANK DRIVE PLAN-PROFILE
 STA. 3+00 TO STA. 5+50

BHC
 PROJECT NO.
 2005 149
 SHEET NO.
5
 December, 2008

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**CONST. 8" FLEXIBLE
BASE PVMT. ON 6"
COMPACTED SUBGRADE**

**CONST. 6" REINF. CONC.
PVMT. ON 8" LIME-
TREATED SUBGRADE (TYP.)**

X REMOVE AND DISPOSE OF EXISTING TREE

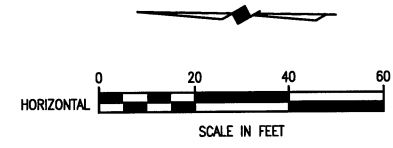
PAVEMENT CURVE DATA

Pavement Curve Number	Description	Point of Curvature Station	Point of Curvature Coordinate	Point of Intersection Coordinate	Point of Tangency Station	Point of Tangency Coordinate	Radius "R" (Feet)	Deflection "Δ" (Degrees)	Tangent "T" (Feet)	Length "L" (Feet)
1	DRIVE E	5+59.59	N 7037956.6268 E 2603599.8135	N 7037931.7870 E 2603600.6189	6+06.71	N 7037913.6531 E 2603583.6241	60.00	45°00'00" RT.	24.85	47.12
2	CONC. E.P.	5+59.59	N 7037956.3027 E 2603589.8187	N 7037941.2667 E 2603590.3063	5+94.66	N 7037928.4580 E 2603582.4160	50.00	33°29'27" RT.	15.04	29.23
3	CONC. E.P.	5+94.66	N 7037928.4580 E 2603582.4160	N 7037923.2467 E 2603579.2058	6+01.31	N 7037927.4322 E 2603574.7398	5.00	101°30'33" RT.	6.12	8.86
4	CONC. E.P.	6+38.73	N 7037900.5460 E 2603550.7825	N 7037893.1269 E 2603554.4308	6+43.73	N 7037893.4786 E 2603551.0117	5.00	90°00'00" RT.	5.00	7.85
5	DRIVE E	7+26.71	N 7037826.0949 E 2603501.5658	NA	9+62.33	N 7037787.0103 E 2603605.3133	60.00	225°00'00" LT.	NA	235.62
6	CONC. E.P.	7+26.71	N 7037819.2567 E 2603508.8623	N 7037897.8966 E 2603395.1252	8+80.16	N 7037736.4258 E 2603556.9273	50.00	146°32'13" LT.	166.33	127.88
7	CONC. E.P.	7+26.71	N 7037832.9331 E 2603494.2693	N 7037811.7769 E 2603474.4419	7+73.83	N 7037782.7972 E 2603475.3816	70.00	45°00'00" LT.	28.99	54.98
8	CONC. E.P.	8+80.16	N 7037736.4258 E 2603556.9273	N 7037741.1543 E 2603576.7845	9+21.25	N 7037761.5560 E 2603576.1229	25.00	78°27'47" LT.	20.41	34.24
9	PVMT. STRIPE	8+80.16	N 7037736.4258 E 2603556.9273	N 7037745.8828 E 2603596.6416	9+62.33	N 7037786.6882 E 2603595.3186	50.00	78°27'47" LT.	40.82	68.47
10	FLEX BASE E.P.	10+66.18	N 7037891.9462 E 2603636.9292	N 7037910.8345 E 2603636.3167	10+89.26	N 7037924.5956 E 2603623.3639	50.00	41°24'35" LT.	18.90	36.14
11	FLEX BASE E.P.	10+99.26	N 7037924.5956 E 2603623.3639	N 7037938.3568 E 2603610.4111	11+32.33	N 7037957.2451 E 2603609.7987	50.00	41°24'35" RT.	18.90	36.14

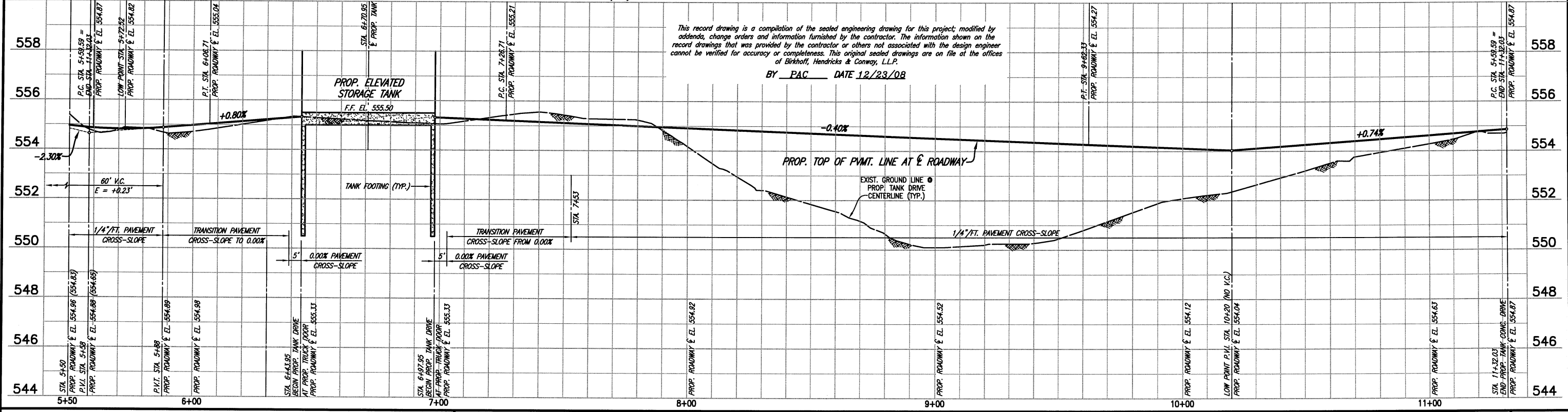
SEE TANK GROUND FLOOR & PIPING PLAN (SHEET 17) FOR ADDITIONAL PAVING COORDINATES IN AND AROUND TANK COLUMN.

**JOHN M. GLASS SURVEY
ABSTRACT NO. 88
CITY OF ROCKWALL, TEXAS**

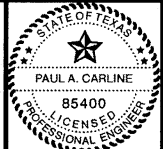
T.B.M.
N 7038491.0702, E 2603611.4214
604 NAIL IN UTILITY POLE AT SOUTH
R.O.W. OF NORTH COUNTRY LANE NEAR
CITY OF ROCKWALL TRACT PROPERTY
NORTHEAST CORNER.
ELEV. 558.03



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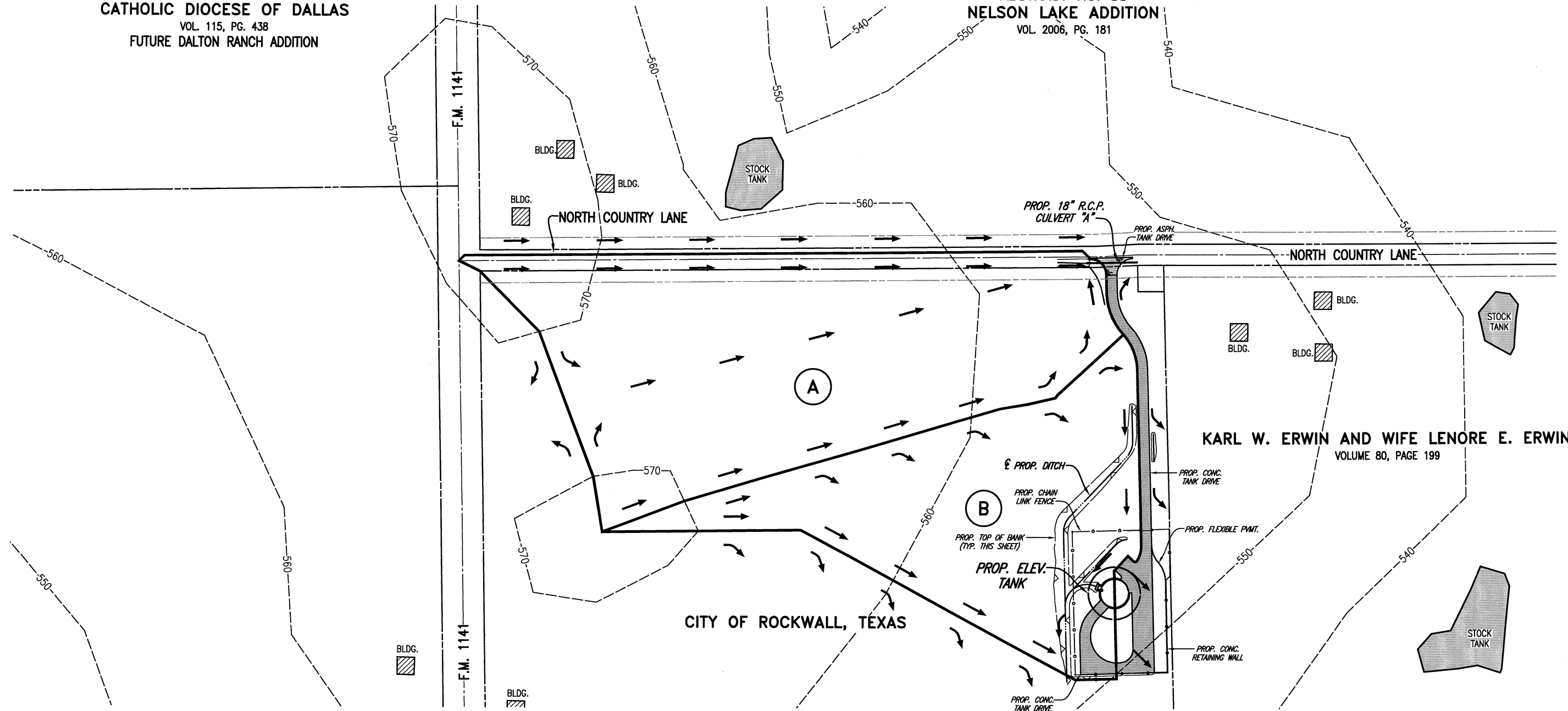
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CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
TANK DRIVE PLAN-PROFILE
STA. 5+50 TO STA. 11+32.03

BHC
PROJECT NO.
2005 149
December, 2008
SHEET NO.
6

CATHOLIC DIOCESE OF DALLAS
VOL. 115, PG. 438
FUTURE DALTON RANCH ADDITION

JOHN M. GLASS SURVEY
ABSTRACT NO. 88
NELSON LAKE ADDITION
VOL. 2006, PG. 181



DRAINAGE AREA CALCULATIONS

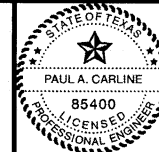
DRAINAGE AREA				Time at Upstream Station (minutes)	Intensity "I" (100 Yr. Storm) (in./hr.)	Runoff "Q" (100 Yr. Storm) (c.f.s.)
Major Drainage Area	Drainage Area "A" (Acres)	Runoff Coeff. "C"	Incremental "CA"			
1	2	3	4	5	6	7
"A"	9.31	0.35	3.297	20.00	8.30	27.05
"B"	6.00	0.35	2.100	20.00	8.30	17.43

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3/16/07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
DRAINAGE AREA MAP

BHC
PROJECT NO.
2005 149

SHEET NO.

December, 2008

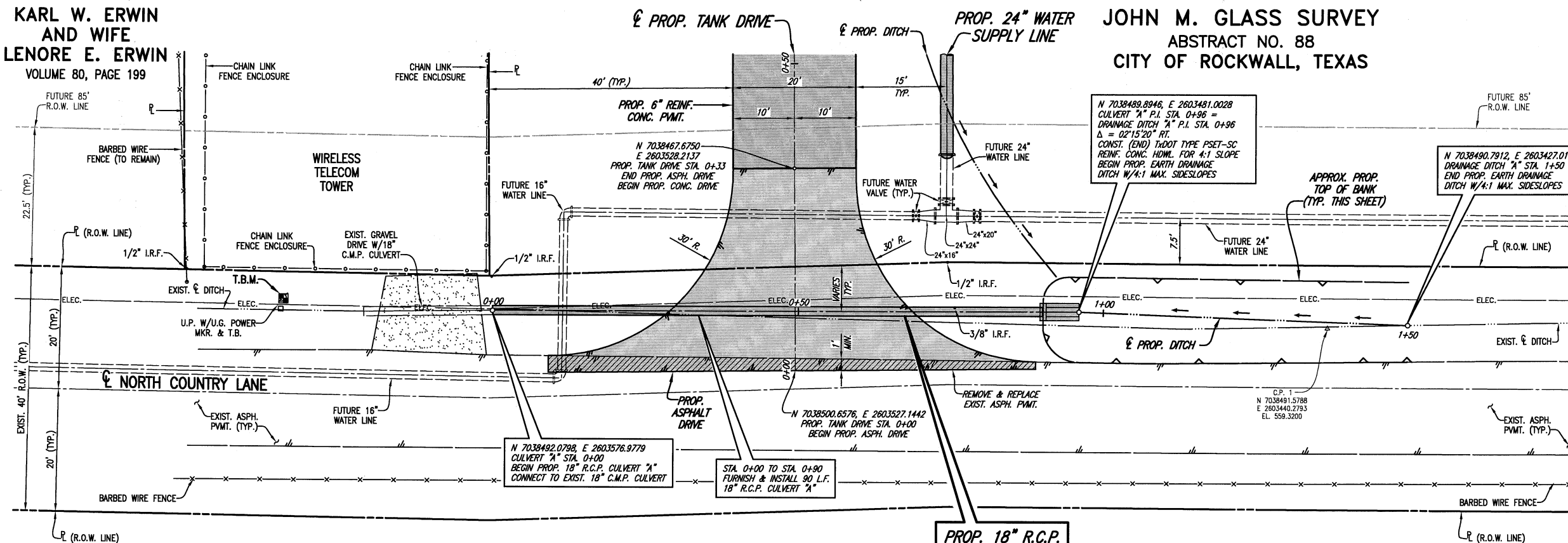
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KARL W. ERWIN
AND WIFE
LENORE E. ERWIN
VOLUME 80, PAGE 199

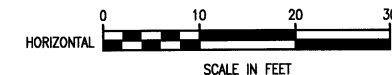
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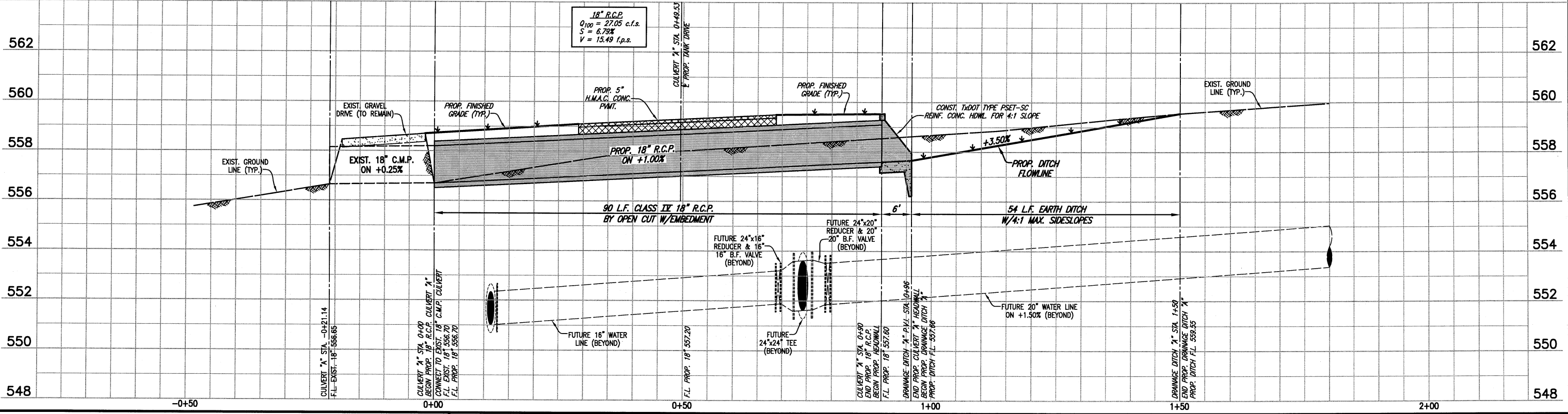


NELSON LAKE ADDITION
VOL. 2006, PG. 181
BLOCK C

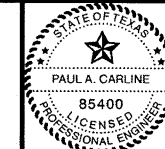
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2/2/09

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
CULVERT "A" PLAN-PROFILE
STA. 0+00 TO STA. 1+50

BHC
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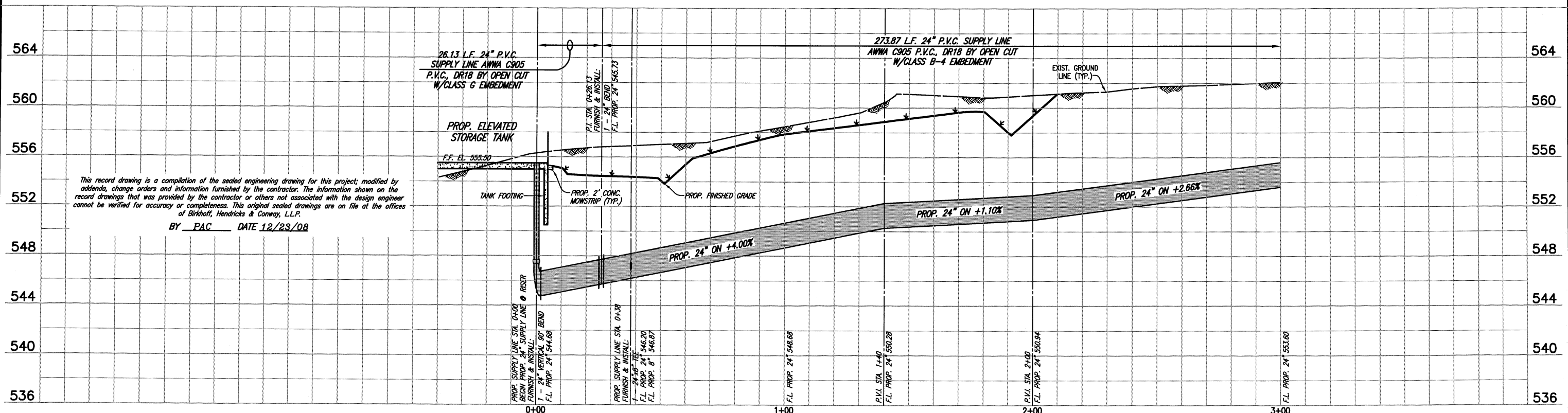
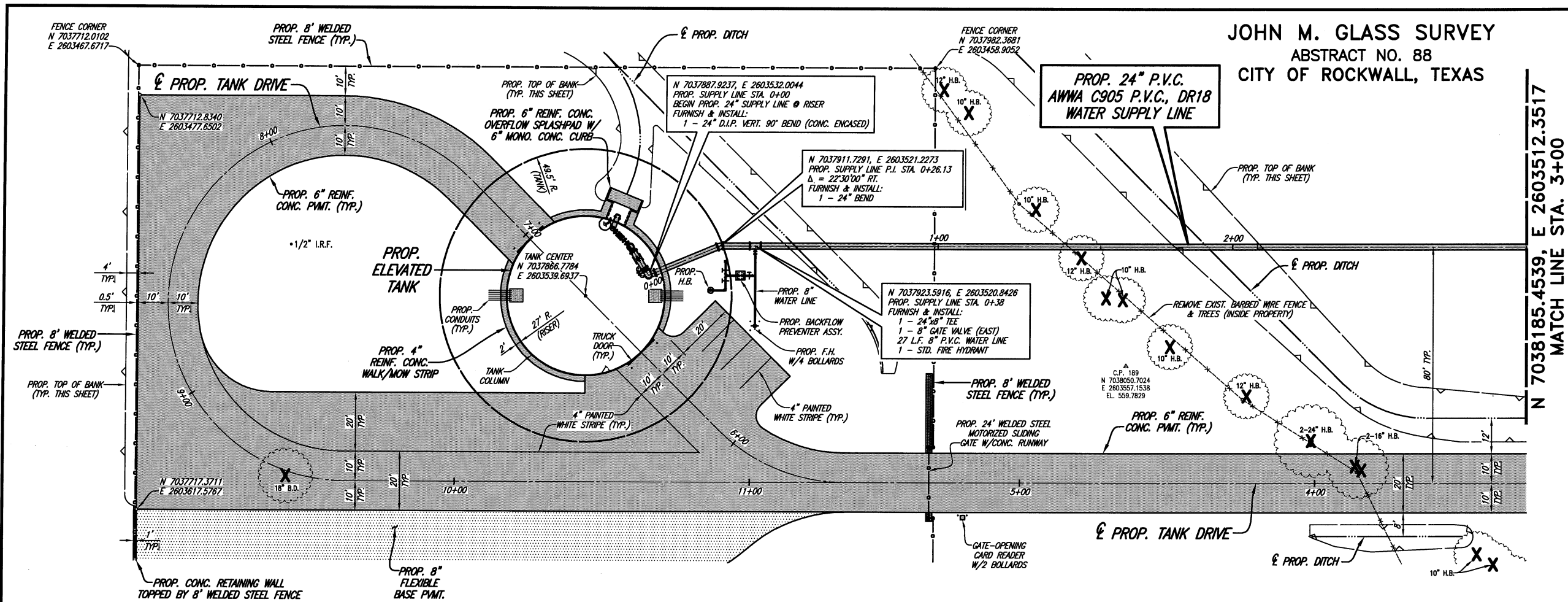
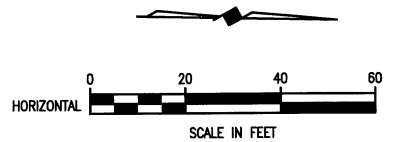
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NORTHEAST CORNER.
ELEV. 558.03

NOTES:

1. ALL TEES, BENDS, ELBOWS, PLUGS AND OTHER FITTINGS SHALL BE RESTRAINED USING MEGA-LUGS OR APPROVED EQUAL. JOINT RESTRAINT SHALL BE SUCH AS TO RESTRAIN TEST PRESSURES.
2. CONTRACTOR SHALL FURNISH & INSTALL BLUE E.M.T. MARKER PADS AT ALL VALVES, CHANGES IN HORIZONTAL DIRECTION & AT EVERY 250- FEET ALONG THE ENTIRE LENGTH OF THE WATER LINE AS SHOWN IN THE CITY OF ROCKWALL STANDARD DETAILS.
3. ALL DUCTILE IRON PIPE SHALL BE POLYWRAPPED & COATED WITH FUSION BOND EPOXY ON EXTERIOR & MORTAR-LINED INTERIOR.
4. ALL DUCTILE IRON FITTINGS SHALL BE POLYWRAPPED & COATED WITH FUSION BOND EPOXY ON INTERIOR & EXTERIOR.



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Dallas, Texas
(214) 361-7900



[Signature]
3/10/07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
WATER SUPPLY LINE PLAN-PROFILE
STA. 0+00 TO STA. 3+00

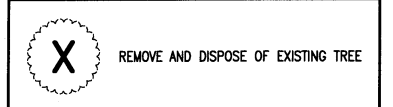
BHC
PROJECT NO.
2005 149
December, 2008

SHEET NO.
9

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JOHN M. GLASS SURVEY
 ABSTRACT NO. 88
 CITY OF ROCKWALL, TEXAS

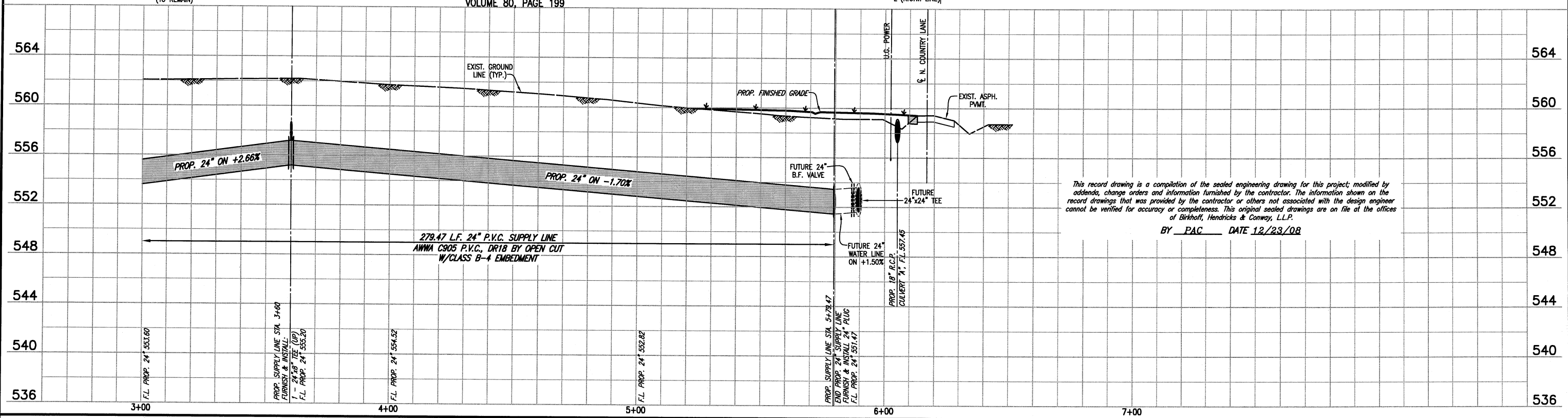
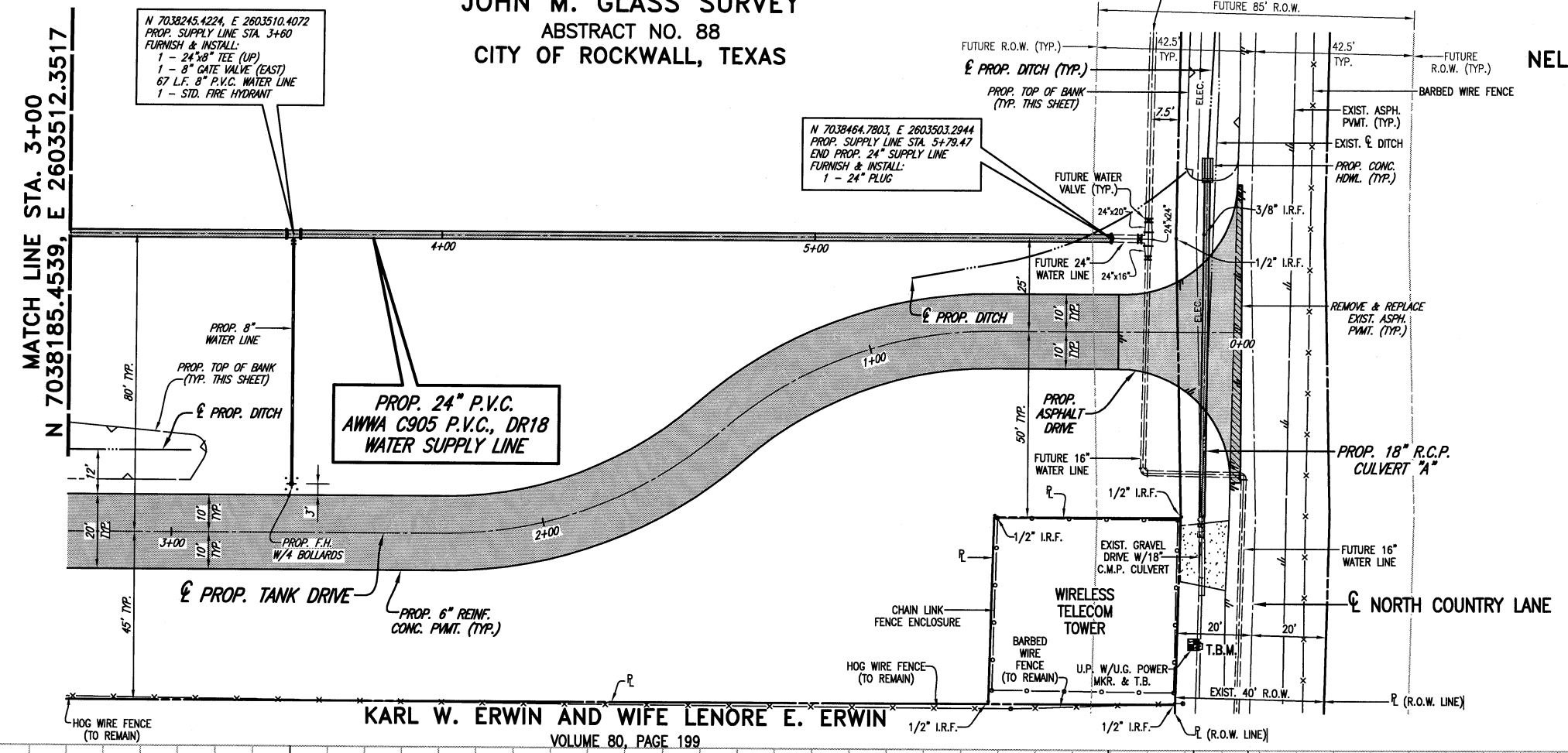
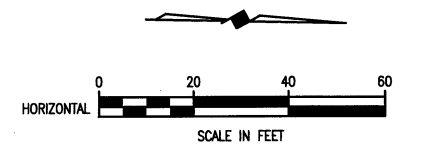
NELSON LAKE ADDITION
 VOL. 2006, PG. 181
 BLOCK C



T.B.M.
 N 7038491.0702, E 2603611.4214
 60d NAIL IN UTILITY POLE AT SOUTH
 R.O.W. OF NORTH COUNTRY LANE NEAR
 CITY OF ROCKWALL TRACT PROPERTY
 NORTHEAST CORNER.
 ELEV. 558.03

NOTES:

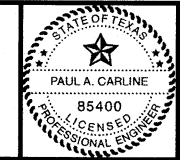
1. ALL TEES, BENDS, ELBOWS, PLUGS AND OTHER FITTINGS SHALL BE RESTRAINED USING MEGA-LUGS OR APPROVED EQUAL JOINT RESTRAINT SHALL BE SUCH AS TO RESTRAIN TEST PRESSURES.
2. CONTRACTOR SHALL FURNISH & INSTALL BLUE E.M.T. MARKER PADS AT ALL VALVES, CHANGES IN HORIZONTAL DIRECTION & AT EVERY 250- FEET ALONG THE ENTIRE LENGTH OF THE WATER LINE AS SHOWN IN THE CITY OF ROCKWALL STANDARD DETAILS.
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 2/21/07

CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 WATER SUPPLY LINE PLAN-PROFILE
 STA. 3+00 TO STA. 6+51.49

BHC
 PROJECT NO.
 2005 149
 December, 2008

SHEET NO.
10

NELSON LAKE ADDITION
VOL. 2006, PG. 181
BLOCK C

JOHN M. GLASS SURVEY
ABSTRACT NO. 88
KARL W. ERWIN
AND WIFE LENORE E. ERWIN
VOLUME 80, PAGE 199

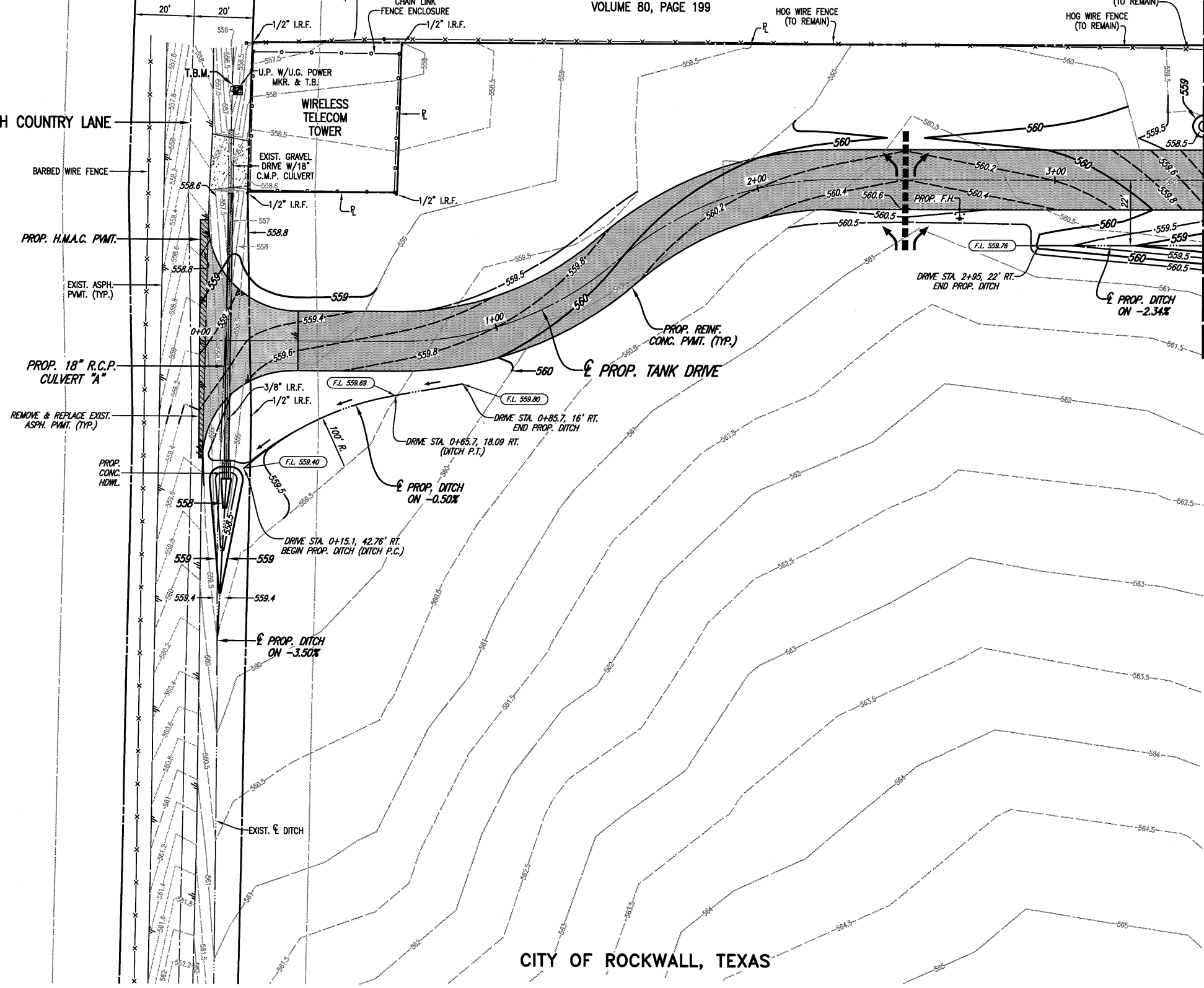
LEGEND
LEGEND APPLICABLE TO ALL PROPOSED GRADING SHEETS

	EXISTING DITCH CENTERLINE
	EXISTING GROUND CONTOUR (1.0 FT.)
	EXISTING GROUND CONTOUR (0.5 FT.)
	EXISTING PAVEMENT CONTOUR (1.0 FT.)
	EXISTING PAVEMENT CONTOUR (0.2 FT.)
	PROPOSED CONC. PAVEMENT, WALK OR STRUCTURE
	PROPOSED CONC. HEADWALL & CULVERT PIPE
	PROPOSED H.M.A.C. PAVEMENT
	REMOVE & REPLACE EXISTING ASPHALT PAVEMENT
	PROPOSED FLEXIBLE BASE PAVEMENT
	PROPOSED CHAIN LINK FENCE OR GATE
	PROPOSED DITCH CENTERLINE
	PROPOSED GROUND CONTOUR (1.0 FT.)
	PROPOSED GROUND CONTOUR (0.5 FT.)
	PROPOSED PAVEMENT CONTOUR (1.0 FT.)
	PROPOSED PAVEMENT CONTOUR (0.2 FT.)
	PROPOSED FINISHED GRADE SPOT ELEVATION

CONTOUR INTERVAL: 0.2' ON PAVEMENT, 0.5' ELSEWHERE.

☉ NORTH COUNTRY LANE

N 7038166.1021, E 2603593.0212
TANK DRIVE MATCH LINE STA. 3+50

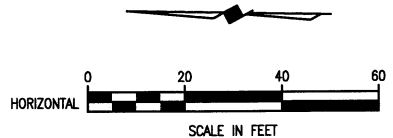


T.B.M.
N 7038491.0702, E 2603611.4214
604 NAIL IN UTILITY POLE AT SOUTH
R.O.W. OF NORTH COUNTRY LANE NEAR
CITY OF ROCKWALL TRACT PROPERTY
NORTHEAST CORNER.
ELEV. 558.03

GRADING PLAN NOTE
EXISTING TOPO IS SHOWN AS IT WOULD APPEAR AT THE
COMPLETION OF CONSTRUCTION. EXISTING TREES AND
FENCING TO BE REMOVED IS SHOWN AS ALREADY HAVING
BEEN REMOVED (TYPICAL ALL PROPOSED GRADING SHEETS).

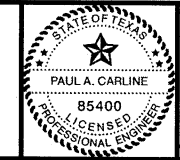
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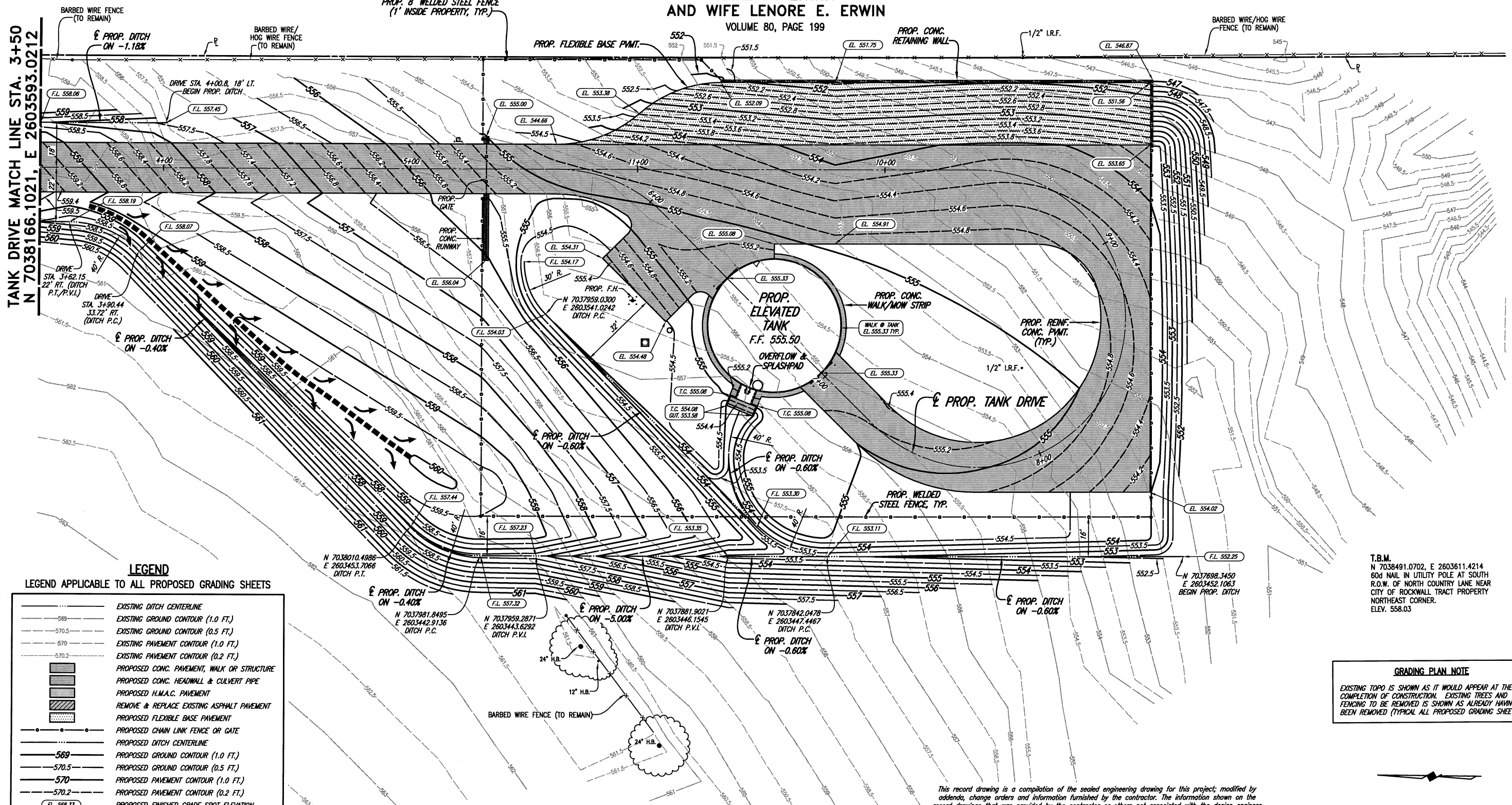
CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
PROPOSED GRADING PLAN

BHC
PROJECT NO.
2005 149
SHEET NO.
11
December, 2008

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JOHN M. GLASS SURVEY
 ABSTRACT NO. 88
 KARL W. ERWIN
 AND WIFE LENORE E. ERWIN
 VOLUME 80, PAGE 199

TANK DRIVE MATCH LINE STA. 3+50
 N 7038166.1021, E 2603593.0212



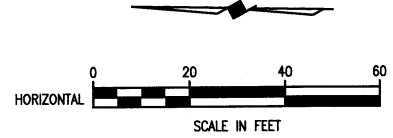
LEGEND

LEGEND APPLICABLE TO ALL PROPOSED GRADING SHEETS

	EXISTING DITCH CENTERLINE
	EXISTING GROUND CONTOUR (1.0 FT.)
	EXISTING GROUND CONTOUR (0.5 FT.)
	EXISTING PAVEMENT CONTOUR (1.0 FT.)
	EXISTING PAVEMENT CONTOUR (0.2 FT.)
	PROPOSED CONC. PAVEMENT, WALK OR STRUCTURE
	PROPOSED CONC. HEADWALL & CULVERT PIPE
	PROPOSED H.M.A.C. PAVEMENT
	REMOVE & REPLACE EXISTING ASPHALT PAVEMENT
	PROPOSED FLEXIBLE BASE PAVEMENT
	PROPOSED CHAIN LINK FENCE OR GATE
	PROPOSED DITCH CENTERLINE
	PROPOSED GROUND CONTOUR (1.0 FT.)
	PROPOSED GROUND CONTOUR (0.5 FT.)
	PROPOSED PAVEMENT CONTOUR (1.0 FT.)
	PROPOSED PAVEMENT CONTOUR (0.2 FT.)
	PROPOSED FINISHED GRADE SPOT ELEVATION

CONTOUR INTERVAL: 0.2' ON PAVEMENT, 0.5' ELSEWHERE.

GRADING PLAN NOTE
 EXISTING TOPO IS SHOWN AS IT WOULD APPEAR AT THE COMPLETION OF CONSTRUCTION. EXISTING TREES AND FENCING TO BE REMOVED IS SHOWN AS ALREADY HAVING BEEN REMOVED (TYPICAL ALL PROPOSED GRADING SHEETS).



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CITY OF ROCKWALL, TEXAS

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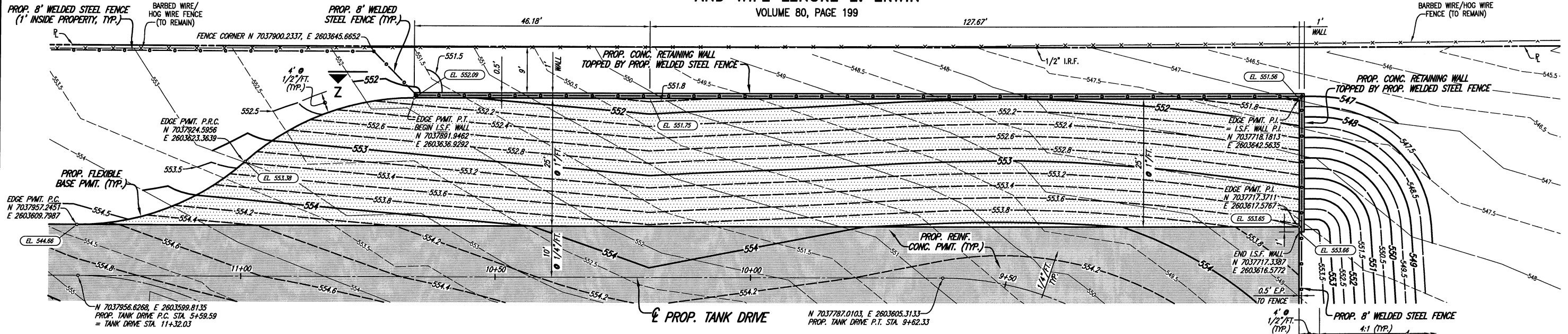
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CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 PROPOSED GRADING PLAN

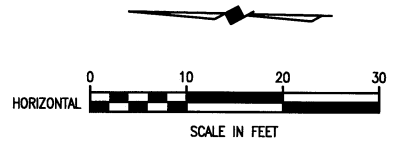
BHC PROJECT NO. 2005 149
 December, 2008
 SHEET NO. 12

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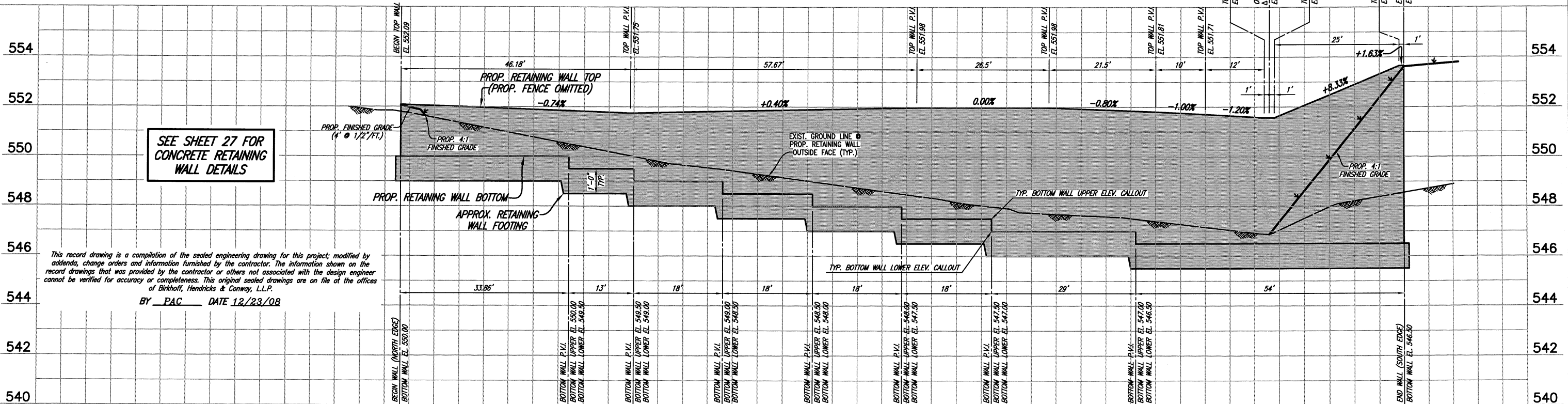
JOHN M. GLASS SURVEY
 ABSTRACT NO. 88
 KARL W. ERWIN
 AND WIFE LENORE E. ERWIN
 VOLUME 80, PAGE 199



T.B.M.
 N 7038491.0702, E 2603611.4214
 60d NAIL IN UTILITY POLE AT SOUTH
 R.O.W. OF NORTH COUNTRY LANE NEAR
 CITY OF ROCKWALL TRACT PROPERTY
 NORTHEAST CORNER.
 ELEV. 558.03



CITY OF ROCKWALL, TEXAS



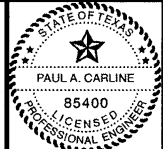
SEE SHEET 27 FOR
 CONCRETE RETAINING
 WALL DETAILS

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RETAINING WALL PROFILE (GRADING PLAN SECTION Z-Z)

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 2/22/09

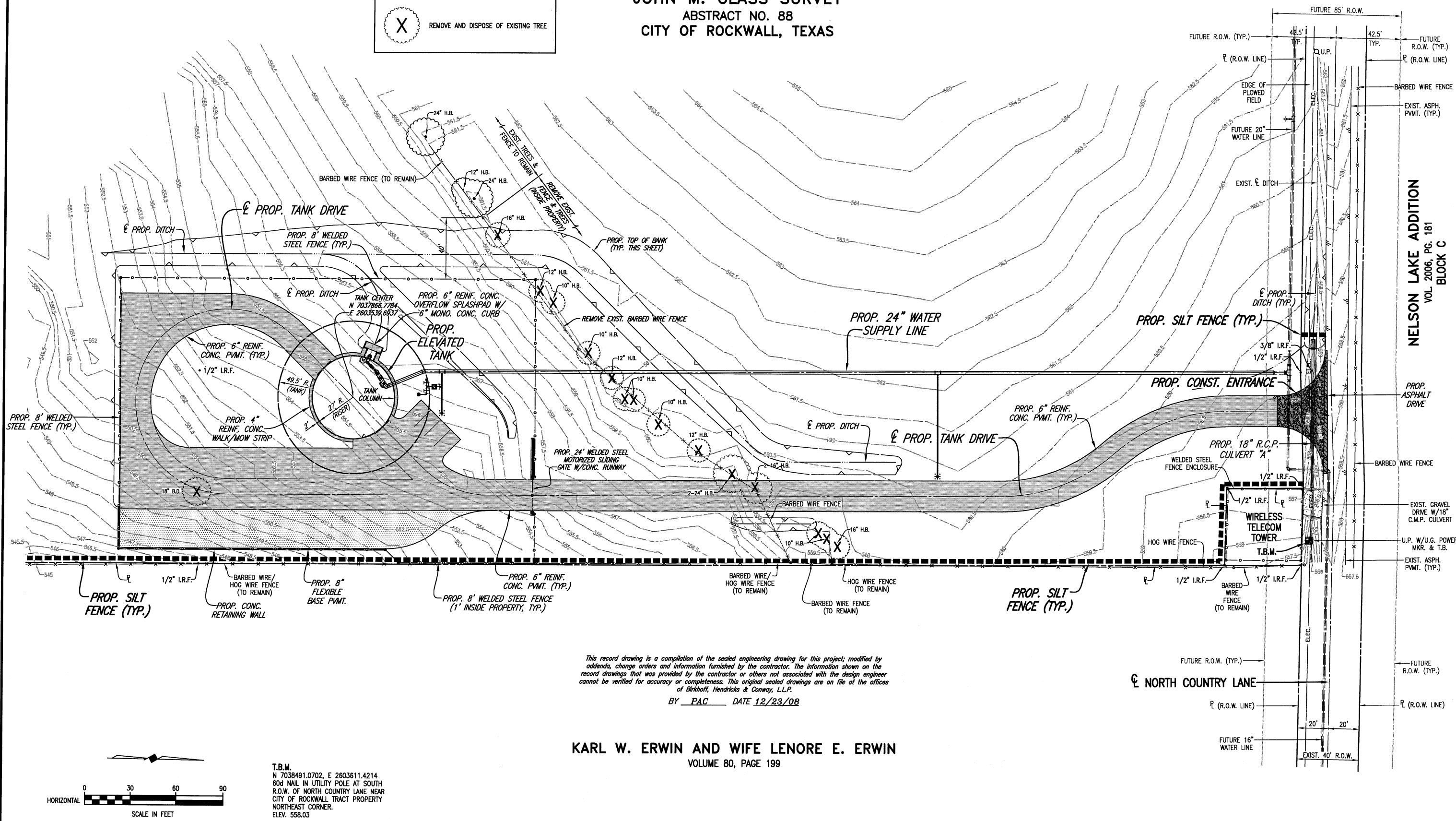
CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 PROPOSED GRADING DETAILS
 RETAINING WALL PLAN-PROFILE
 (GRADING PLAN SECTION Z-Z)

BHC
 PROJECT NO.
 2005 149
 SHEET NO.
13
 December, 2008

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 CITY OF ROCKWALL, TEXAS

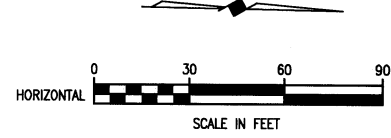
X REMOVE AND DISPOSE OF EXISTING TREE



NELSON LAKE ADDITION
 VOL. 2006, PG. 181
 BLOCK C

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KARL W. ERWIN AND WIFE LENORE E. ERWIN
 VOLUME 80, PAGE 199



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CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 EROSION CONTROL PLAN

BHC
 PROJECT NO.
 2005 149
 SHEET NO.
 14
 December, 2008

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SITE DESCRIPTION

PROJECT LIMITS: COUNTRY LANE ELEVATED STORAGE TANK PROPERTY

PROJECT DESCRIPTION: THE CONSTRUCTION OF AN ELEVATED STORAGE TANK

MAJOR SOIL DISTURBING ACTIVITIES: SOIL DISTURBING ACTIVITIES WILL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: THE GRADING OF THE SITE, THE CONSTRUCTION OF THE PROPOSED DRIVE AND THE CONSTRUCTION OF THE ELEVATED STORAGE TANK.

TOTAL DRAINAGE AREA: 17.25 ACRES

TOTAL DRAINAGE AREA TO BE DISTURBED: 3.30 ACRES

WEIGHTED RUNOFF COEFFICIENT PRIOR TO CONSTRUCTION 0.4
AFTER CONSTRUCTION 0.6

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: SEE SOIL BORINGS AND REPORTS SHOWN IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.

NAME OF RECEIVING WATERS: TRIBUTARY OF NELSON LAKE

WATER QUALITY: WITHIN THE CONSTRUCTION DRAINAGE BASIN ALL KNOWN RUNOFF WILL BE FROM RAINFALL EVENTS.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- TEMPORARY SEEDING
- PERMANENT PLANTING, SODDING, OR SEEDING
- MULCH SOD
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER: DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED (TEMPORARILY OR FINALLY) SHALL BE EITHER SEEDED OR SODDED WITHIN 14 DAYS UNLESS CONSTRUCTION ACTIVITIES ARE SCHEDULED TO RESUME WITHIN 21 DAYS.

STRUCTURAL PRACTICES:

- SILT FENCES
- HAY BALES
- ROCK BERMS
- DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- DIVERSION DIKE AND SWALE COMBINATIONS
- PIPE SLOPE DRAINS
- PAVED FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT
- TIMBER MATTING AT CONSTRUCTION EXIT
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT FILTERS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM SEWERS
- VELOCITY CONTROL DEVICES

OTHER: _____

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

- THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:
- 1) PREPARE THE CONSTRUCTION SITE TO RECEIVE AND INSTALL PERIMETER SILT FENCES AND CONSTRUCTION ENTRANCES AS SHOWN IN THE PLAN.
 - 2) CONSTRUCT ELEVATED STORAGE TANK.
 - 3) GRADE SITE.
 - 4) CONSTRUCT ROADWAY & DRIVE
 - 5) AFTER ALL WORK HAS BEEN COMPLETED, INCLUDING STABILIZATION OF THE SITE, COMPLETION OF A STAND OF GRASS AND AS APPROVED BY THE OWNER, THE CITY SHALL DIRECT THAT ALL TEMPORARY STRUCTURAL EROSION CONTROL DEVICES BE REMOVED AND THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITH PERMANENT SODDING OR HYDROMULCH AS REQUIRED. 4 FOOT SOLID SOD BACK OF CURBS, REMAINDER HYDROMULCHED

STORM WATER MANAGEMENT: MANAGEMENT OF THE STORM WATER RUNOFF WILL BE PROVIDED BY THE CONSTRUCTION OF STORM SEWER.

EARTHWORK: CUT: 3653 CUBIC YARDS (ROADWAY, DRIVE & GENERAL SITE DRAINAGE)
FILL: 2240 CUBIC YARDS (ROADWAY, DRIVE & GENERAL SITE DRAINAGE)

SIDE SLOPES: N/A

OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE: ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT. THE AREAS ADJACENT TO CREEKS AND DRAINAGE WAYS SHALL HAVE PRIORITY FOLLOWED BY DEVICES PROTECTING STORM SEWER INLETS.

INSPECTION: AN INSPECTION WILL BE PERFORMED BY A CONTRACTOR APPROVED INSPECTOR IN ACCORDANCE WITH THE MOST RECENT NPDES REQUIREMENTS. AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER EACH INSPECTION. BASED ON THE INSPECTION RESULTS, THE CONTROLS SHALL BE REVISED PER THE INSPECTION REPORT. CITY SHALL REVIEW ALL CONTRACTOR INSPECTIONS. CITY INSPECTOR TO INSPECT EROSION CONTROL DEVICES EVERY 14 CALENDAR DAYS.

WASTE MATERIALS: ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION, AND THE TRASH WILL BE HAULED TO A LOCAL LANDFILL. NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SPILL COORDINATOR SHOULD BE CONTACTED IMMEDIATELY.

SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

OFF SITE VEHICLE TRACKING:

- HAUL ROADS DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
- EXCESS DIRT ON ROAD REMOVED DAILY
- STABILIZED CONSTRUCTION ENTRANCE

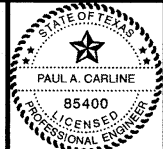
OTHER: THE CONTRACTOR SHALL BE RESPONSIBLE FOR AUGMENTING THESE PLANS WITH OTHER MEASURES FOR ANY OTHER TEMPORARY EROSION CONTROL MEASURES OCCASIONED BY THE WORK, SUCH AS FOR HAUL ROADS AND BORROW PIT ACCESS. ALL CONTINGENT EROSION CONTROL PRACTICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION OR CONSTRUCTION.

REMARKS: DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATER BODY OR STREAM BED CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEARED AS SOON AS PRACTICABLE OF TEMPORARY EMBANKMENTS, TEMPORARY BRIDGES, MATTING, FALSE WORK, PILING, DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK. THERE ARE NO HISTORICAL SITES OR ENDANGERED SPECIES IMPACTED BY THIS PROJECT.

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12/23/08

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK

SW3P NOTES

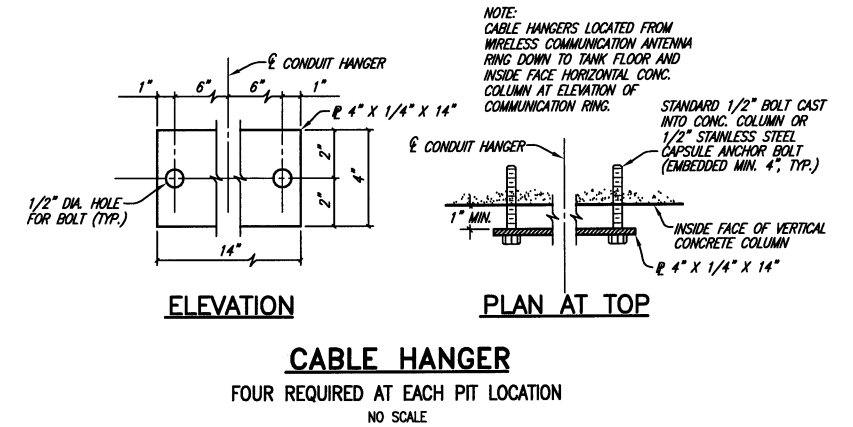
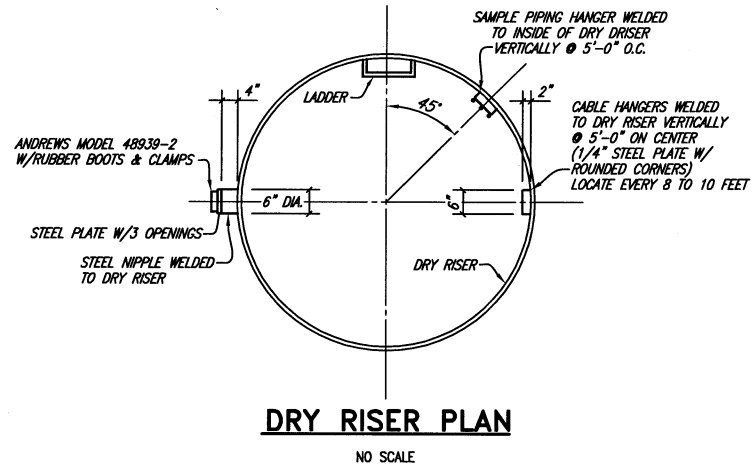
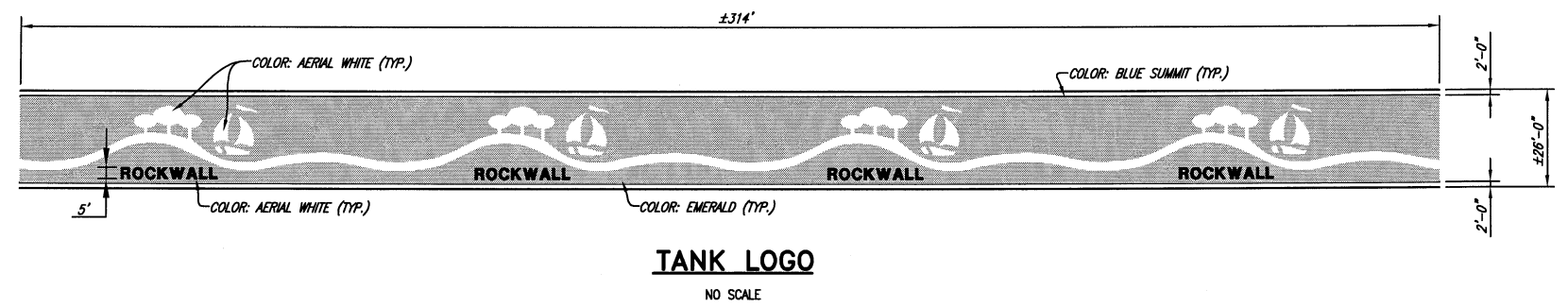
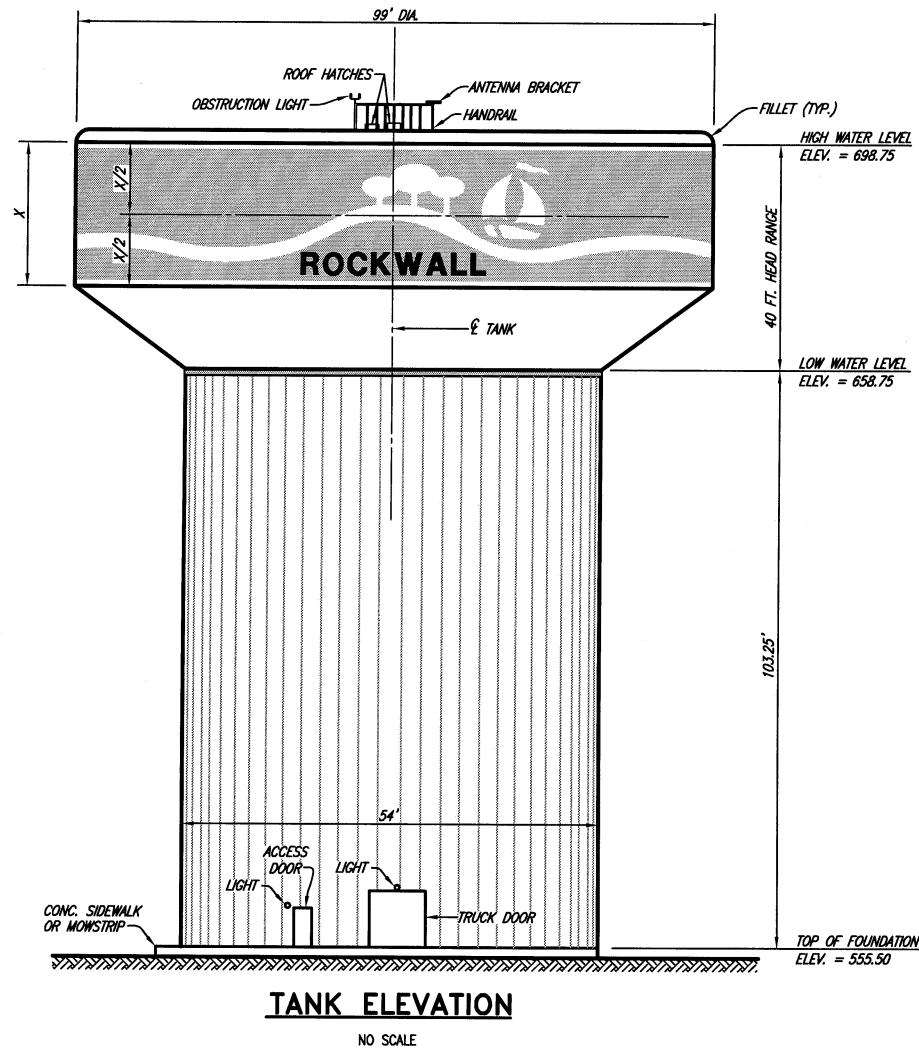
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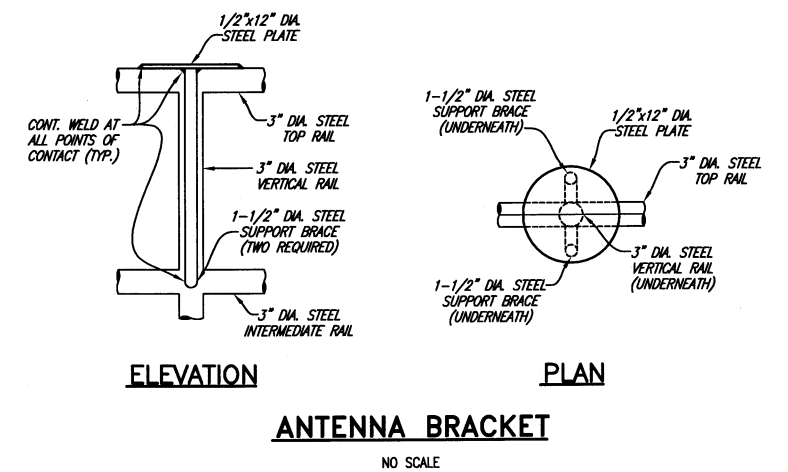
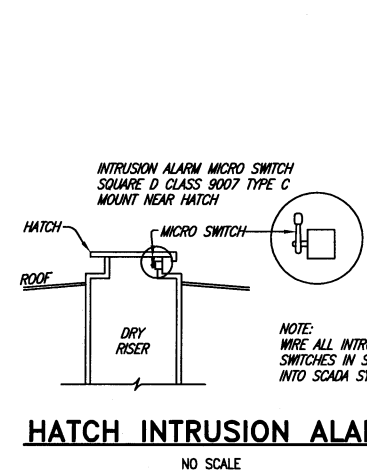
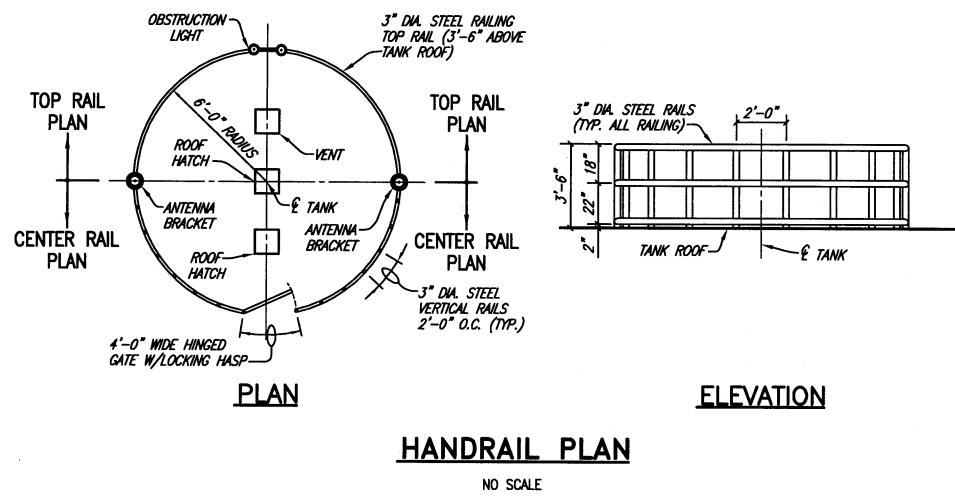
SHEET NO.

15

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 BY PAC DATE 12/23/08



T.B.M.
 N 7038491.0702, E 2603611.4214
 60d NAIL IN UTILITY POLE AT SOUTH R.O.W. OF NORTH COUNTRY LANE NEAR CITY OF ROCKWALL TRACT PROPERTY NORTHEAST CORNER.
 ELEV. 558.03

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 CONSULTING ENGINEERS
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 Dallas, Texas
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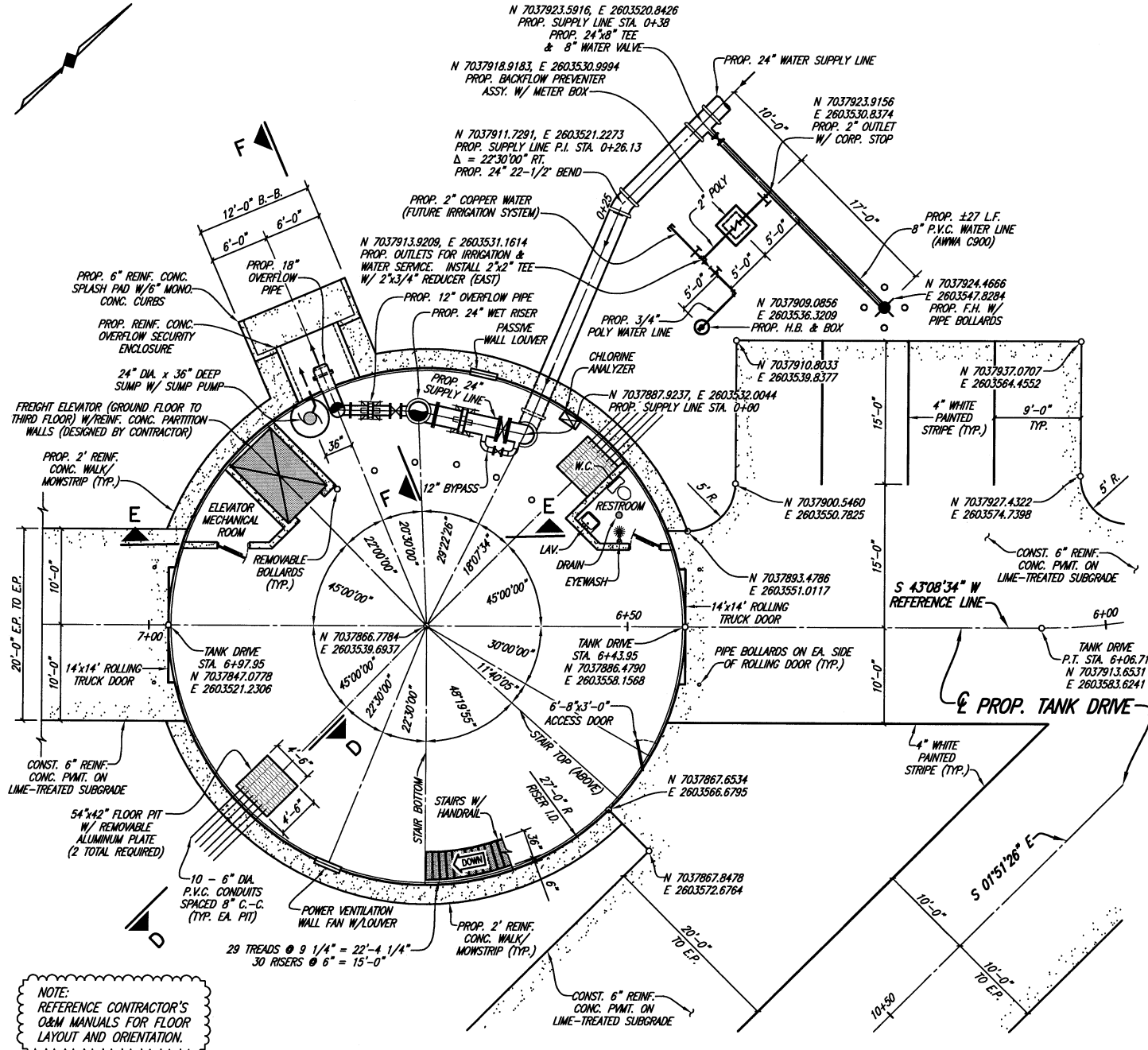
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 12/22/08

CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 TANK ELEVATION & DETAILS

BHC
 PROJECT NO.
 2005 149
 December, 2008

SHEET NO.
16

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GROUND FLOOR & PIPING PLAN

NO SCALE

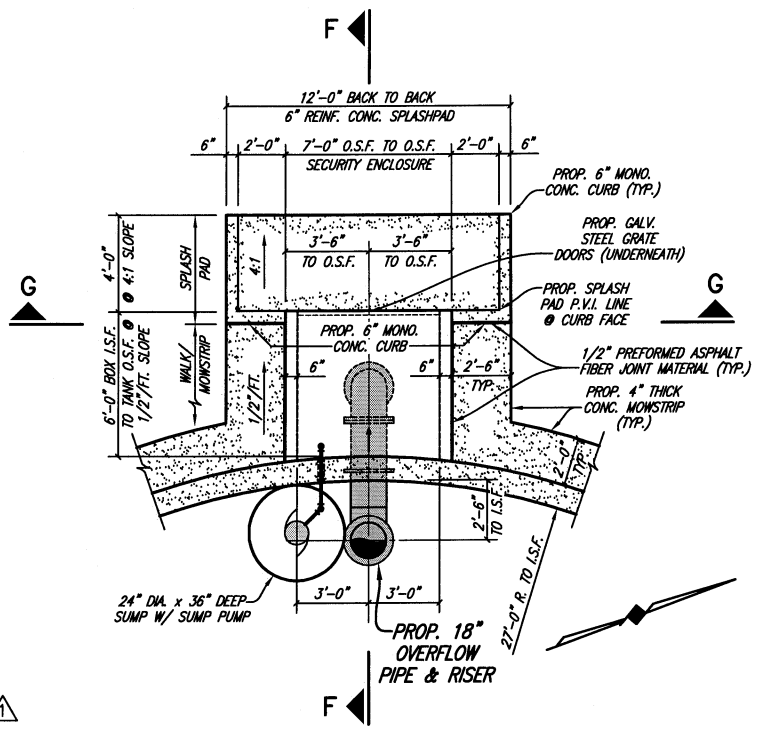
NOTE: REFERENCE CONTRACTOR'S O&M MANUALS FOR FLOOR LAYOUT AND ORIENTATION.

T.B.M.
N 7038491.0702, E 2603611.4214
60d NAIL IN UTILITY POLE AT SOUTH
R.O.W. OF NORTH COUNTRY LANE NEAR
CITY OF ROCKWALL TRACT PROPERTY
NORTHEAST CORNER.
ELEV. 558.03

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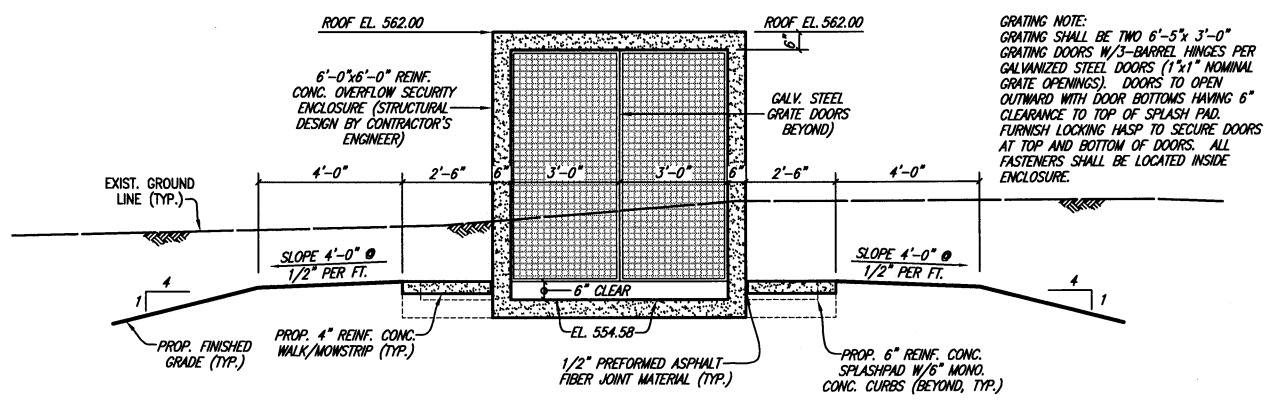
BY PAC DATE 12/23/08

- GROUND FLOOR PLAN NOTES:**
- COORDINATES AND DIMENSIONS ARE BASED UPON AN ELEVATED TANK RADIUS OF 49.5' AND A TANK RISER RADIUS OF 27.0'. ACTUAL DIMENSIONS MAY VARY ACCORDING TO TANK MFR'S SHOP DRAWINGS.
 - COORDINATES ARE UNIQUE TO THIS PROJECT ONLY.
 - ROLLING TRUCK DOOR, ACCESS DOOR, LADDER AND SAFETY CAGE SHALL BE GALVANIZED STEEL.
 - SEE DETAIL ON SHEET 26 FOR REMOVABLE PIPE BOLLARDS (INSIDE TANK) AND STATIONARY BOLLARDS (OUTSIDE OF TANK).
 - ELEVATOR SHAFT, RESTROOM AND MECHANICAL ROOM SHALL BE ENCLOSED BY CAST IN PLACE REINFORCED CONCRETE WALLS & CEILING OR CMU. ELEVATOR SHAFT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,200 P.S.I. AT 28 DAYS. REINFORCING SHALL BE DESIGNED BY THE CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER AND BE SUBMITTED TO OWNER FOR REVIEW DURING THE SHOP DRAWING SUBMITTAL PROCESS.
 - RESTROOM WILL CONTAIN (AT A MINIMUM) A WATER CLOSET, LAVATORY, EMERGENCY EYEWASH STATION AND A GRATED FLOOR DRAIN.
 - CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER SHALL DESIGN RESTROOM INTERIOR FRESH WATER PLUMBING AND SANITARY SEWAGE PIPING FROM WATER CLOSET AND LAVATORY. DESIGN SHALL BE SUBMITTED TO OWNER FOR REVIEW DURING THE SHOP DRAWING SUBMITTAL PROCESS. SANITARY SEWER SHALL EXTEND FROM RESTROOM NORTHWARDS TO 20'-FEET OUTSIDE OF THE TANK FOUNDATION AND THEN SHALL BE PLUGGED.
 - CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER SHALL DESIGN TANK INTERIOR DRAINAGE LINES AS FOLLOWS:
A. 4" P.V.C. DRAIN LINE FROM EACH WIRELESS COMMUNICATIONS PIT TO SUMP PIT AND SUMP PUMP NEAR 18" TANK OVERFLOW PIPE.
B. 4" P.V.C. DRAIN LINE FROM FLOOR DRAIN IN RESTROOM TO SUMP PIT AND SUMP PUMP NEAR 18" TANK OVERFLOW PIPE. DESIGN SHALL BE SUBMITTED TO OWNER FOR REVIEW DURING THE SHOP DRAWING SUBMITTAL PROCESS.
 - 6'-8"x3'-0" ACCESS DOOR REQUIRED AT ENTRANCES TO ELEVATOR MECHANICAL ROOM AND RESTROOM.
 - MECHANICAL ROOM ACCESS DOOR SHALL BE 1-HOUR FIRE RATED & EQUIPPED WITH SELF-CLOSURE & SEALS.
 - MECHANICAL ROOM SHALL BE VENTILATED WITH A POWER VENTILATION SYSTEM.



OVERFLOW SECURITY ENCLOSURE PLAN

NO SCALE



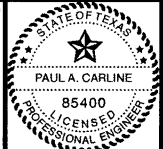
OVERFLOW SECURITY ENCLOSURE SECTION G-G

NO SCALE

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FIELD CHANGE: <input type="checkbox"/> BUILDING INSPECTION COMMENTS

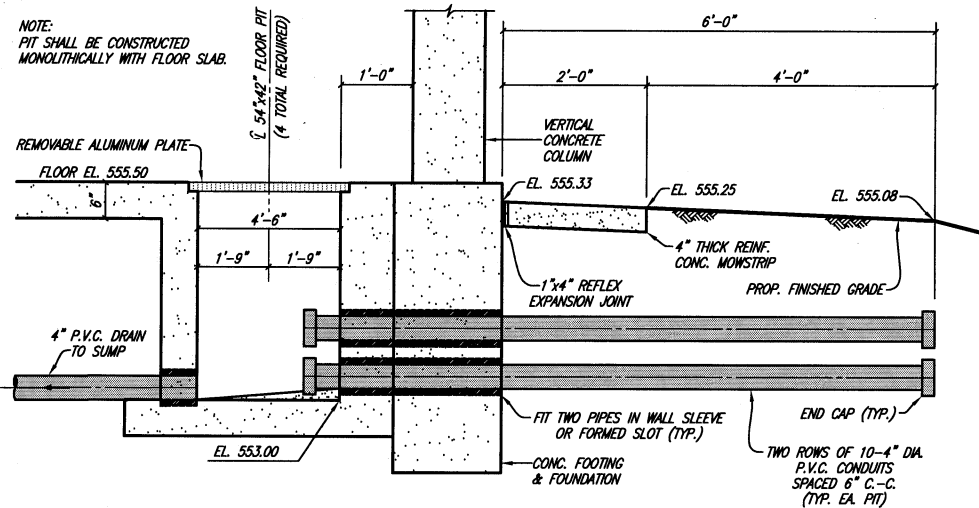
BIRKHOFF, HENDRICKS & CONWAY, L.L.P.
CONSULTING ENGINEERS
7502 Greenville Ave., Suite 220
Dallas, Texas
(214) 361-7900



[Signature]
2/2/07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
TANK GROUND LEVEL PLAN & DETAILS

BHC PROJECT NO. 2005 149
December, 2008
SHEET NO. 17

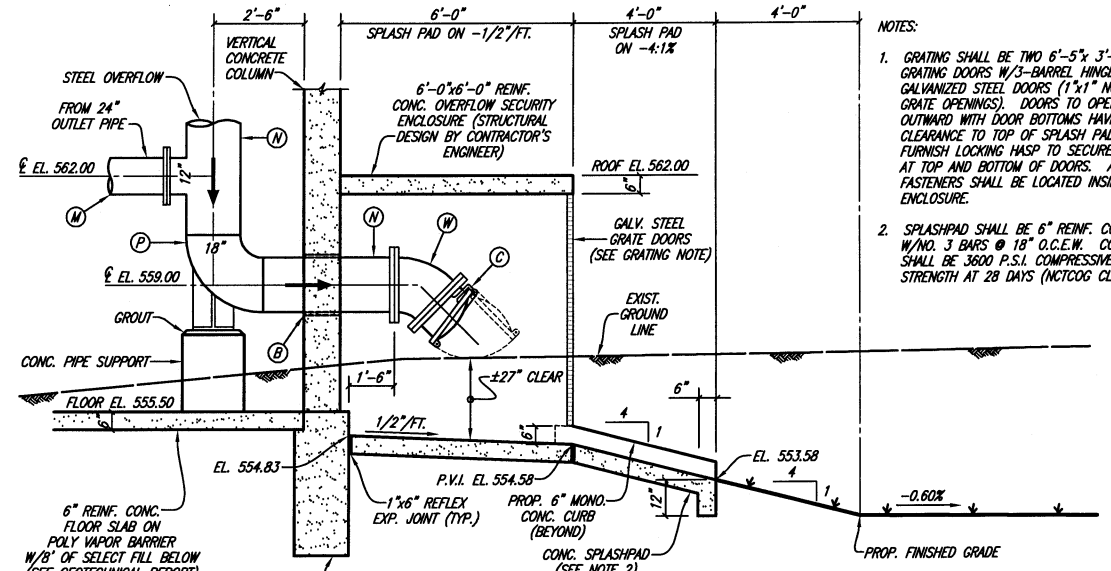


TANK SECTION D-D
WIRELESS COMMUNICATIONS CONDUIT PIT
NO SCALE

LEGEND

LETTER	PIPE TYPE	JOINT	DESCRIPTION
A	-	-	GALV. STEEL ADJUSTABLE PIPE SUPPORT
B	-	P.E.-P.E.	PIPE WALL SLEEVE
C	-	FLG.-FLG.	FLAP VALVE W/ ADJUSTABLE COUNTERWEIGHT
D	-	THREADED	ELECTRIC SUMP PUMP
E	-	FLG.-FLG.	RESILIENT SEAT GATE VALVE
F	-	-	STAINLESS STEEL WELDED THRUST HARNESS ASSY.
G	-	-	UNION
H	-	THREADED	CHECK VALVE
I	-	THREADED	GATE VALVE
J	BRASS	THREADED	CORPORATION STOP
K	BRASS	THREADED	HOSE BIBB (ANTI-SIPHON)
L	STEEL	WELDED	PIPE
M	STEEL	FLG.-P.E.	PIPE SPOOL
N	STEEL	WELDED-FLG.	PIPE SPOOL
O	STEEL	FLG.-FLG.	90° BEND
P	STEEL	WELDED	90° BASE BEND
Q	CONC. ENCASED P.V.C.	PUSH ON	PIPE
R	CONC. ENCASED D.I.P.	FLG.-P.E.	PIPE SPOOL
S	CONC. ENCASED D.I.P.	HUB-HUB	PIPE SPOOL
T	P.V.C.	THREADED	PIPE SPOOL
U	P.V.C.	THREADED	90° BEND
V	STEEL	FLG.-FLG.	BUTTERFLY VALVE
X	STEEL	FLG.-FLG.	45° BEND
Y	STEEL	FLG.-FLG.	CHECK VALVE
Z	STEEL	FLG.-FLG.	TEE
			PIPE SPOOL

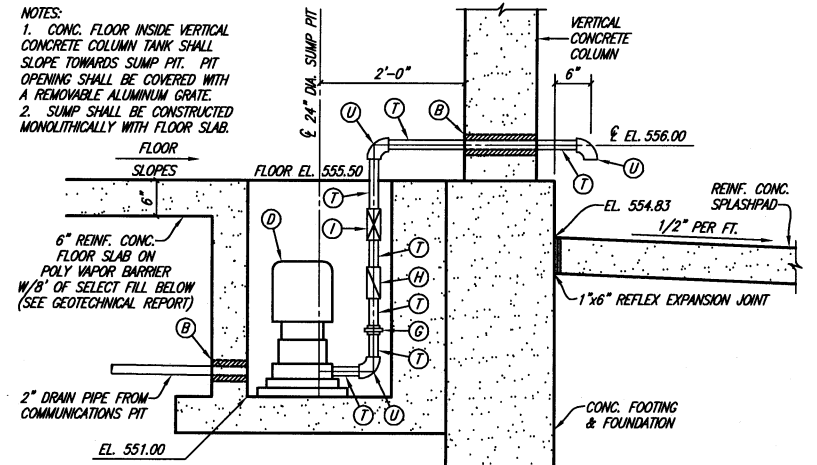
- NOTES:
- ALL PIPE SIZES NOTED ARE INSIDE PIPE DIAMETERS.
 - CONCRETE FOUNDATION LEAVE-OUT SHALL INCLUDE APPROVED MASTIC COMPOUND FOR THE TOP 4". THE REMAINING THICKNESS OF SLAB SHALL BE SAND AND CEMENT MIX (MINIMUM OF 4" THICK). GEOTEXTILE FABRIC SHALL BE USED TO SEPARATE THE SAND/CEMENT MIX FROM THE SUB-BASE.
 - WET RISER SHALL HAVE EXPANSION FITTING.
 - INSULATING KIT SHALL BE INSTALLED AT ALL UNIONS OF DISSIMILAR METALS.
 - 1" AND 2" OUTLETS SHALL BE STEEL PIPE WITH THREADED JOINTS.
 - FLOOR DRAIN SHALL BE 12" SQUARE WITH A HINGED GRATE (NEENAH MODEL R-4937-C OR APPROVED EQUAL).
 - FLAP VALVE (ITEM C) SHALL BE A WATERMAN MODEL F25F WITH BRONZE SEATS AND A 45° BOLT PATTERN.
 - GATE VALVE (ITEM E) SHALL HAVE A MANUAL (HANDWHEEL) OPERATOR. BUTTERFLY VALVE (ITEM V) SHALL HAVE AN ELECTRIC OPERATOR.



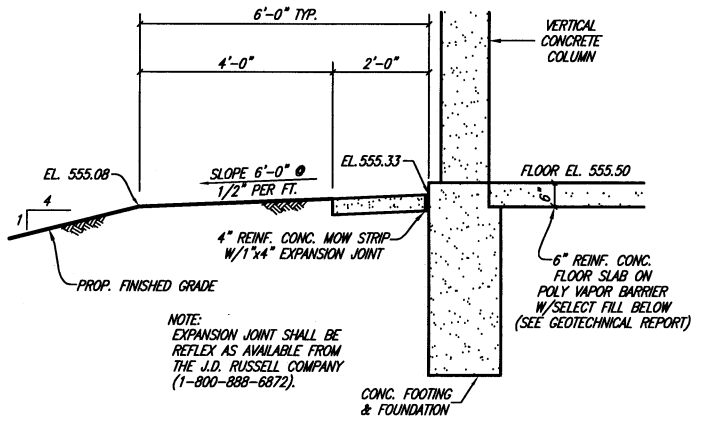
SECTION F-F
OVERFLOW PIPE AT SPLASH PAD
NO SCALE - PIPES ROTATED FOR CLARITY

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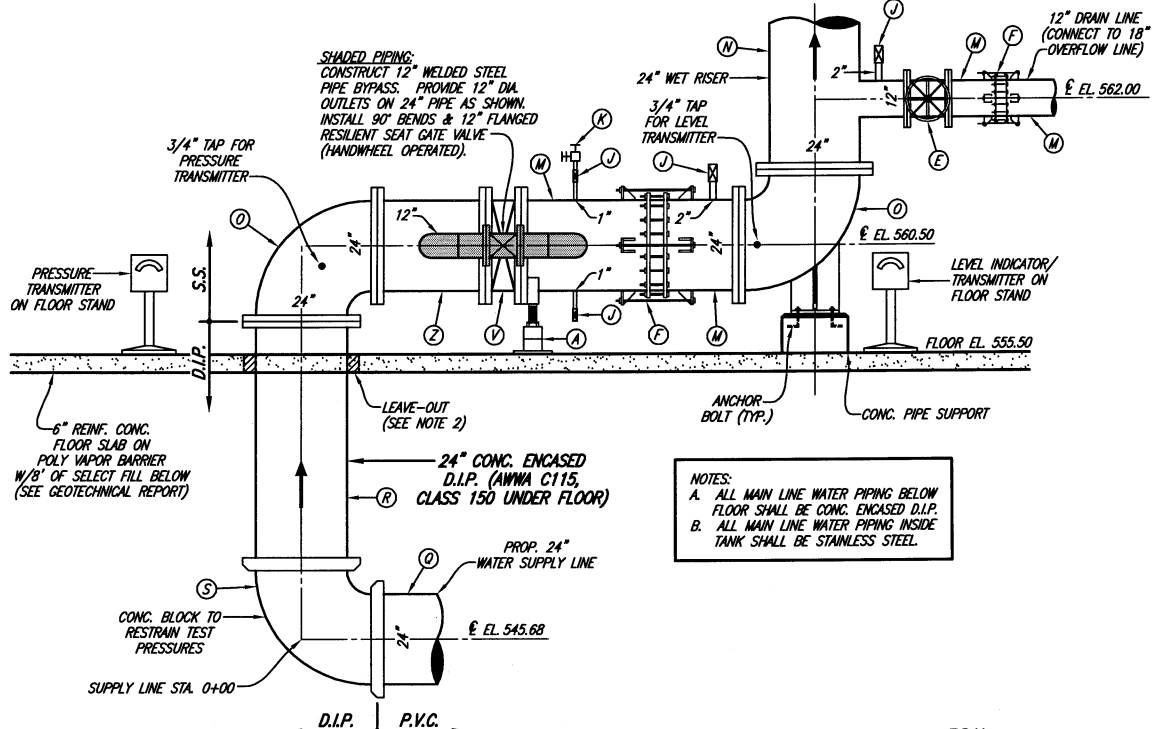
BY PAC DATE 12/23/08



SECTION F-F
SUMP PUMP AT SPLASHPAD
NO SCALE



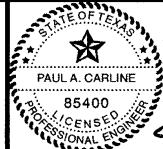
TYPICAL WALL SECTION
NO SCALE



SECTION E-E
SUPPLY LINE, INLET & OUTLET PIPES AND WET RISER
NO SCALE - PIPES ROTATED FOR CLARITY

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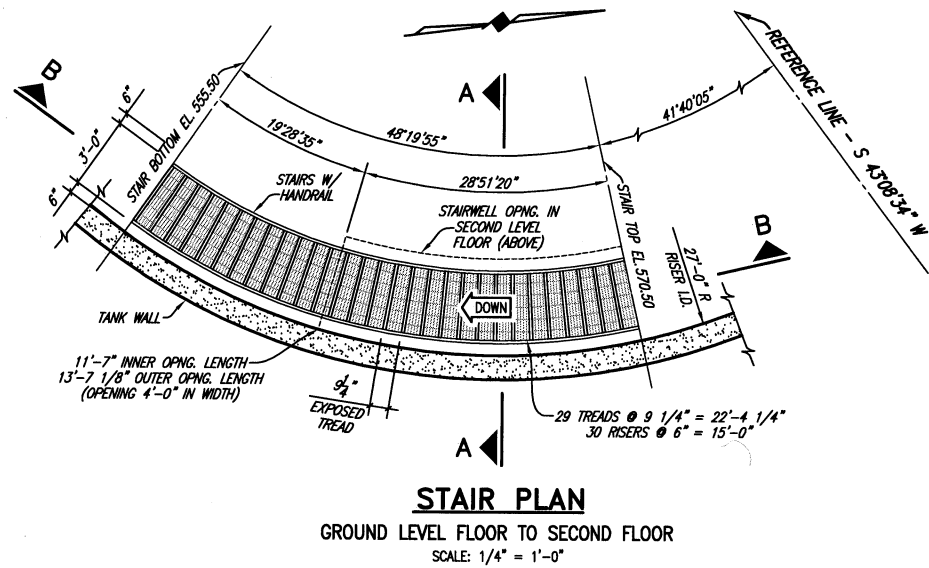
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CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
TANK GROUND LEVEL SECTIONS & DETAILS

BHC
PROJECT NO.
2005 149
December, 2008

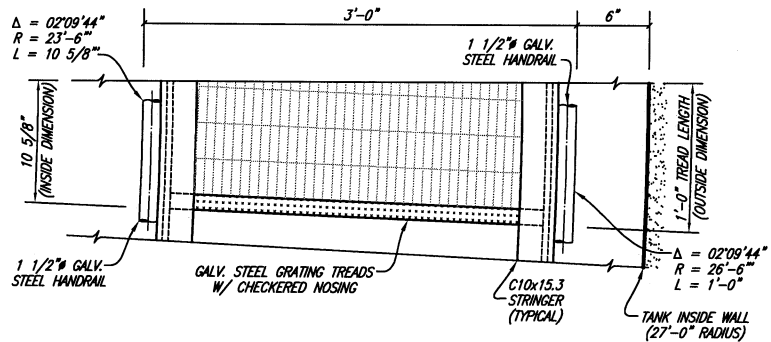
SHEET NO.
18

T.B.M.
N 7038491.0702, E 2603611.4214
604 NAIL IN UTILITY POLE AT SOUTH
R.O.W. OF NORTH COUNTRY LANE NEAR
CITY OF ROCKWALL TRACT PROPERTY
NORTHEAST CORNER.
ELEV. 558.03



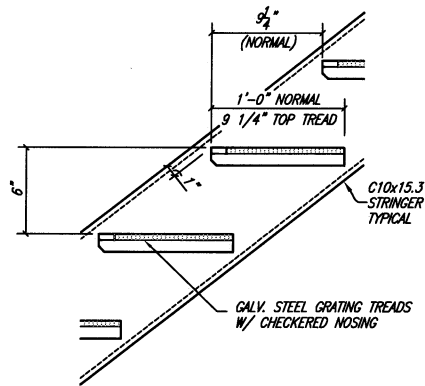
T.B.M.
 N 7038491.0702, E 2603611.4214
 60d NAIL IN UTILITY POLE AT SOUTH
 R.O.W. OF NORTH COUNTRY LANE NEAR
 CITY OF ROCKWALL TRACT PROPERTY
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 ELEV. 558.03

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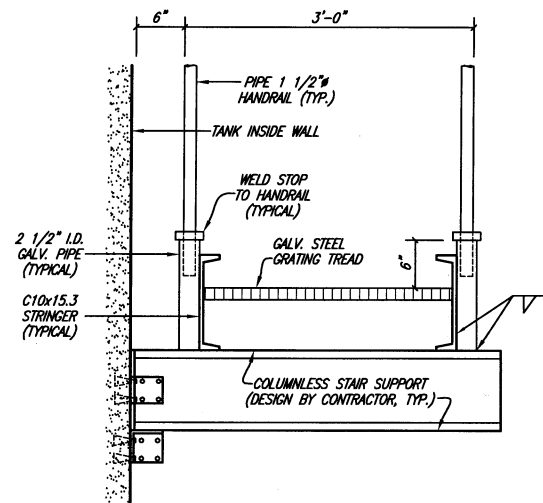


TREAD PLAN
 TYPICAL FOR ALL STAIRS INSIDE TANK
 SCALE: 1 1/2" = 1'-0"

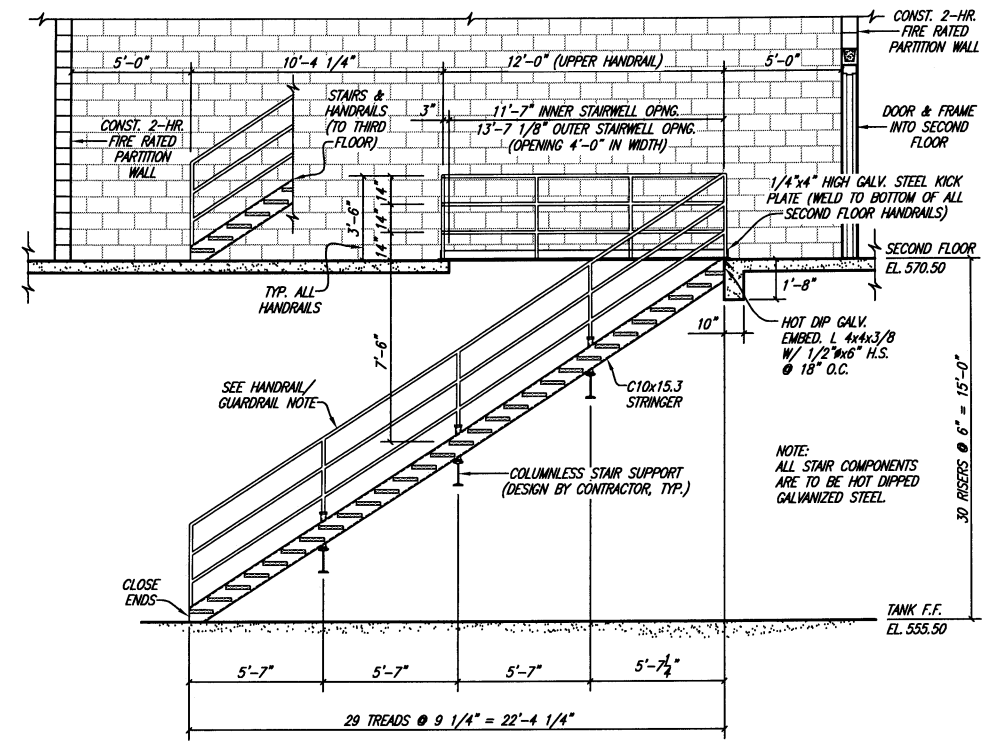
HANDRAIL AND GUARDRAIL NOTE:
 VERIFY WITH BUILDING CODE - U.B.C.
 REQUIRES AN INTERMEDIATE RAIL PATTERN
 SUCH THAT A 12" SPHERE MAY NOT
 PASS THROUGH.



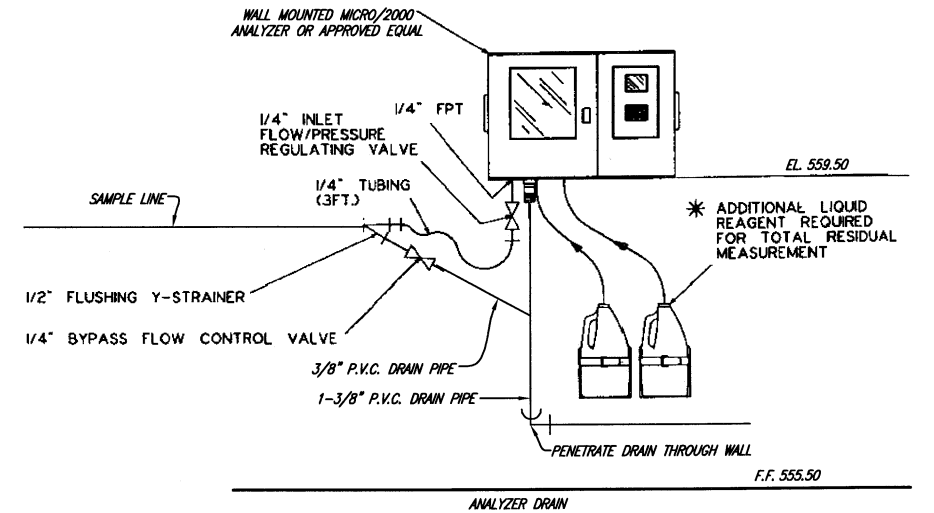
STAIR SECTION B-B DETAIL
 TYPICAL FOR ALL STAIRS INSIDE TANK
 SCALE: 1 1/2" = 1'-0"



STAIR SECTION A-A
 TYPICAL FOR ALL STAIRS INSIDE TANK
 SCALE: 1" = 1'-0"



STAIR SECTION B-B
 GROUND LEVEL FLOOR TO SECOND FLOOR
 SCALE: 1/4" = 1'-0"



CHLORINE ANALYZER FRONT ELEVATION
 NO SCALE

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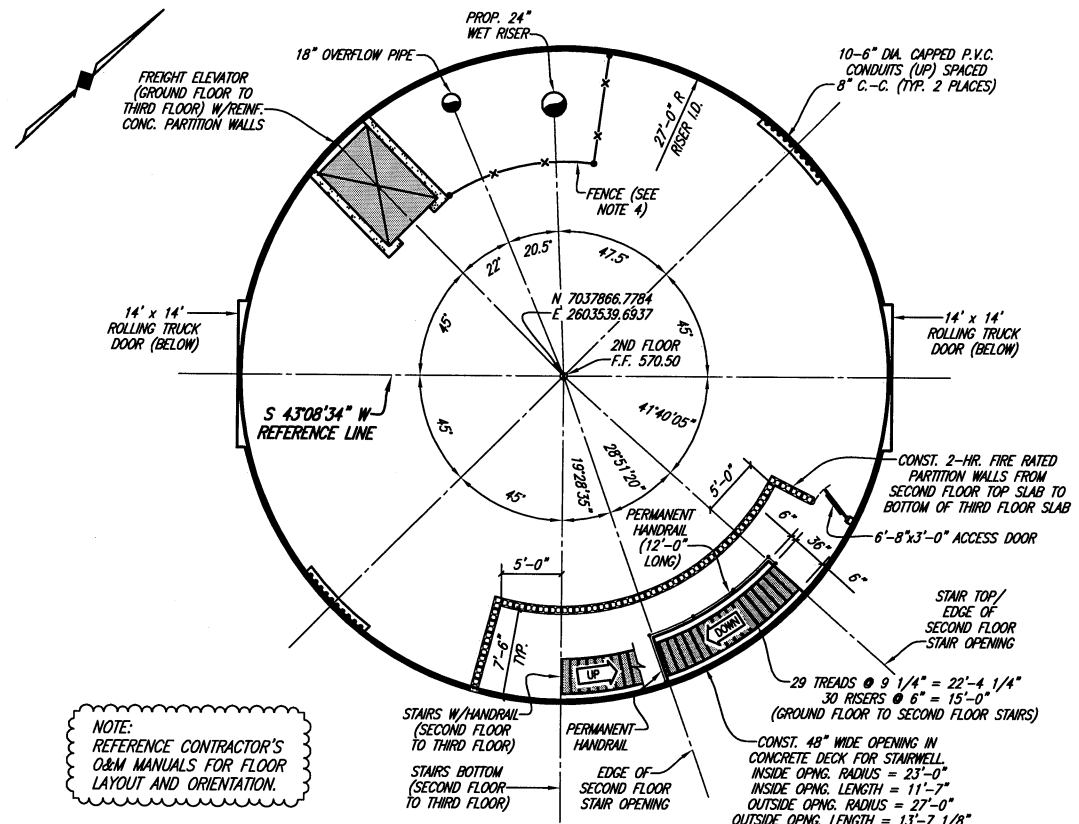


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CITY OF ROCKWALL, TEXAS
 COUNTRY LANE ELEVATED STORAGE TANK
 TANK GROUND LEVEL SECTIONS & DETAILS

BHC
 PROJECT NO.
 2005 149
 December, 2008

SHEET NO.
19

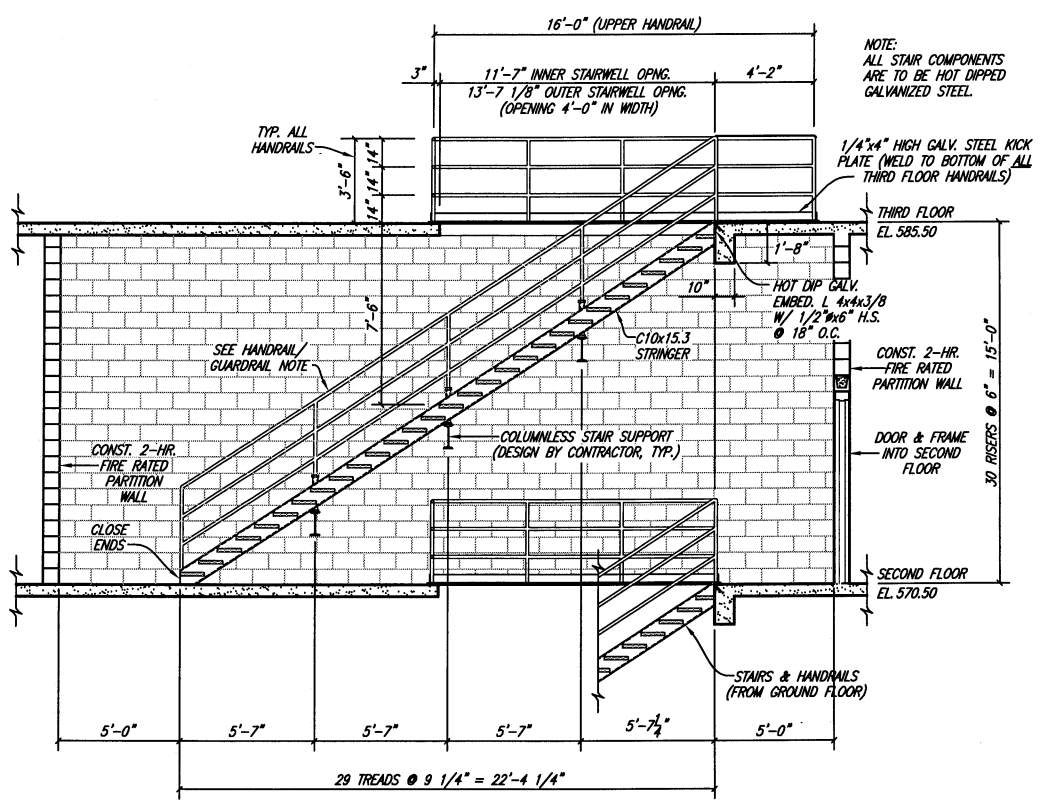


SECOND LEVEL FLOOR & PIPING PLAN
NO SCALE

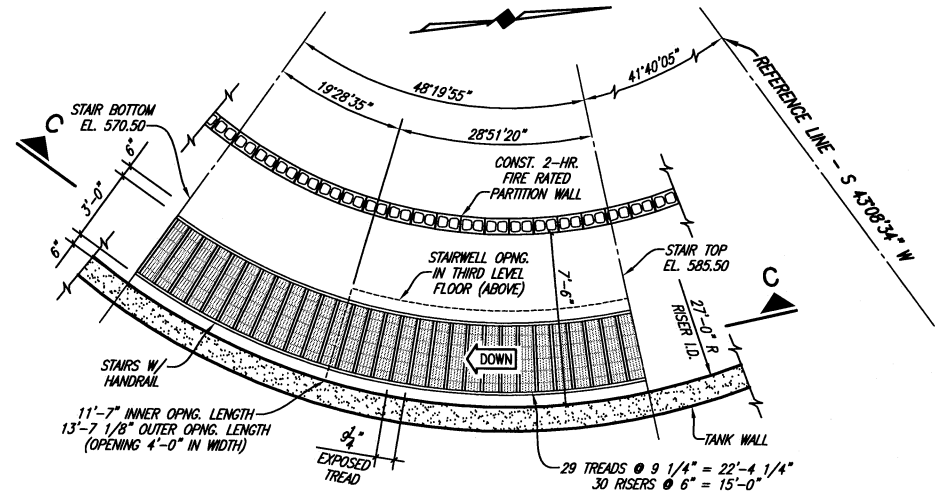
HANDRAIL AND GUARDRAIL NOTE:
VERIFY WITH BUILDING CODE - U.B.C.
REQUIRES AN INTERMEDIATE RAIL PATTERN
SUCH THAT A 12" SPHERE MAY NOT
PASS THROUGH.

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NORTHEAST CORNER.
ELEV. 558.03

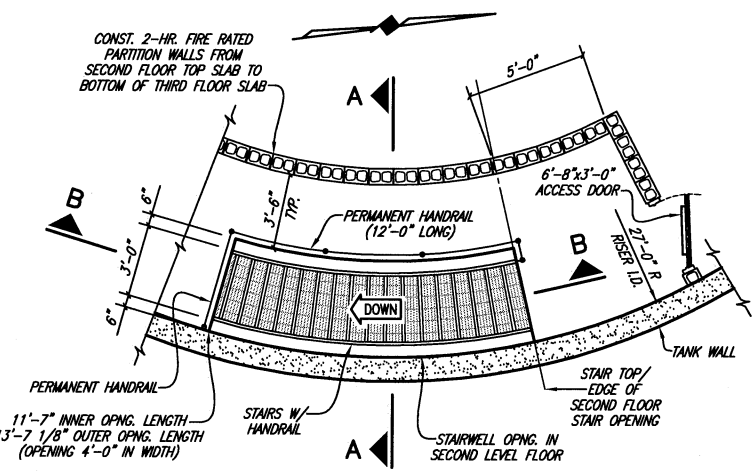
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STAIR SECTION C-C
SECOND LEVEL FLOOR TO THIRD FLOOR
SCALE: 1/4" = 1'-0"



STAIR PLAN
SECOND LEVEL FLOOR TO THIRD FLOOR
SCALE: 1/4" = 1'-0"

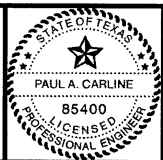


STAIR RAIL PLAN
AT SECOND FLOOR LANDING
SCALE: 1/4" = 1'-0"

- SECOND LEVEL FLOOR NOTES:**
- COORDINATES AND DIMENSIONS ARE BASED UPON AN ELEVATED TANK RADIUS OF 49.5' AND A TANK RISER RADIUS OF 27.0'. ACTUAL DIMENSIONS MAY VARY ACCORDING TO TANK MFR'S SHOP DRAWINGS.
 - COORDINATES ARE UNIQUE TO THIS PROJECT ONLY.
 - HANDRAILS, ACCESS DOOR, LADDER AND SAFETY CAGE SHALL BE GALVANIZED STEEL.
 - INTERIOR FENCE SHALL BE A 6'-0" HIGH, BLACK VINYL-COATED WIRE MESH PARTITION WITH A LOCKING HINGED GATE. PARTITIONS SHALL BE MECHANICALLY SECURED TO THE TANK FLOOR AND INTERIOR WALLS.
 - ELEVATOR SHALL BE ENCLOSED BY A CAST IN PLACE REINFORCED CONCRETE SHAFT. WALLS OF THE ELEVATOR SHAFT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,200 P.S.I. AT 28 DAYS. REINFORCING SHALL BE DESIGNED BY CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER AND BE SUBMITTED TO OWNER FOR REVIEW DURING THE SHOP DRAWING SUBMITTAL PROCESS.
 - CONCRETE UPPER FLOOR DECKS:
 - SYSTEM - COMPOSITE CONCRETE SLAB/ STEEL FLOOR DECK (CLEAR SPAN).
 - DESIGN STANDARDS -
 - SDI - SPECIFICATION AND COMMENTARY
 - AISC - ALLOWABLE STRESS DESIGN
 - DESIGN LIVE LOAD - 125 p.s.f.
 - DESIGN DEAD LOAD - 60 p.s.f. MIN.
 - FINISH - GALVANIZE ALL EXPOSED METAL AND FRAMING. STEEL TROWEL CONCRETE SLAB FINISH.
 - CONCRETE STRENGTH - 4,200 p.s.i. @ 28 DAYS.
 - SECOND LEVEL ROOF (UNDERSIDE OF THIRD LEVEL FLOOR) SHALL BE INSULATED WITH R49 RIGID INSULATION.
 - WALL LOUVERS SHALL BE INSTALLED ABOVE THIRD FLOOR FOR VENTILATION. LOUVERS SHALL BE CONSTRUCTED OF GALVANIZED STEEL WITH 16 MESH INSECT RESISTANT SCREEN. LOUVERS SHALL BE INSTALLED 8 FEET ABOVE FINISHED FLOOR.

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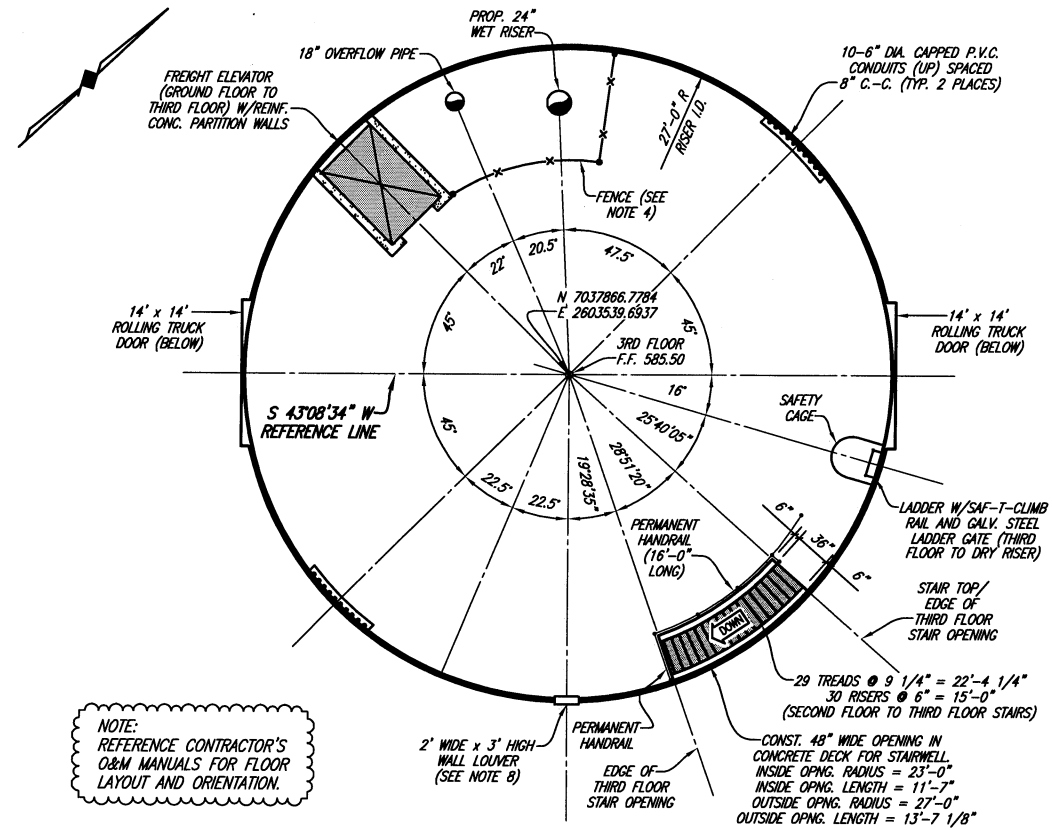


[Signature]
2/2/10

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
TANK SECOND FLOOR LEVEL PLAN & DETAILS

BHC
PROJECT NO.
2005 149
December, 2008

SHEET NO.
20



THIRD LEVEL FLOOR & PIPING PLAN

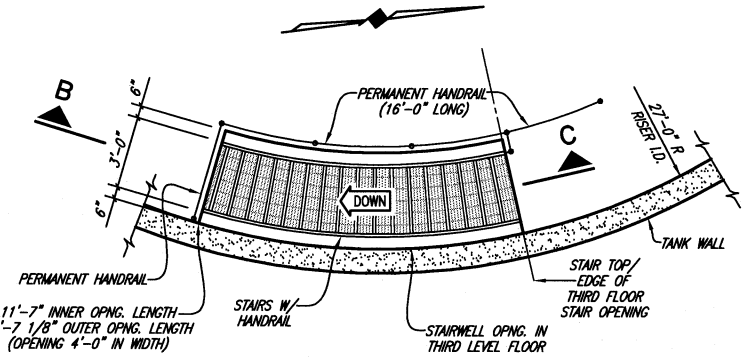
NO SCALE

NOTE:
REFERENCE CONTRACTOR'S
O&M MANUALS FOR FLOOR
LAYOUT AND ORIENTATION.

- THIRD LEVEL FLOOR NOTES:**
- COORDINATES AND DIMENSIONS ARE BASED UPON AN ELEVATED TANK RADIUS OF 49.5' AND A TANK RISER RADIUS OF 27.0'. ACTUAL DIMENSIONS MAY VARY ACCORDING TO TANK MFR'S SHOP DRAWINGS.
 - COORDINATES ARE UNIQUE TO THIS PROJECT ONLY.
 - HANDRAILS, ACCESS DOOR, LADDER AND SAFETY CAGE SHALL BE GALVANIZED STEEL.
 - INTERIOR FENCE SHALL BE A 6'-0" HIGH, BLACK VINYL-COATED WIRE MESH PARTITION WITH A LOCKING HINGED GATE. PARTITIONS SHALL BE MECHANICALLY SECURED TO THE TANK FLOOR AND INTERIOR WALLS.
 - ELEVATOR SHALL BE ENCLOSED BY A CAST IN PLACE REINFORCED CONCRETE SHAFT. WALLS OF THE ELEVATOR SHAFT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,200 P.S.I. AT 28 DAYS. REINFORCING SHALL BE DESIGNED BY CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER AND BE SUBMITTED TO OWNER FOR REVIEW DURING THE SHOP DRAWING SUBMITTAL PROCESS.
 - CONCRETE UPPER FLOOR DECKS:
 - SYSTEM - COMPOSITE CONCRETE SLAB/ STEEL FLOOR DECK (CLEAR SPAN).
 - DESIGN STANDARDS -
 - SD - SPECIFICATION AND COMMENTARY
 - AISC - ALLOWABLE STRESS DESIGN
 - DESIGN LIVE LOAD - 125 p.s.f.
 - DESIGN DEAD LOAD - 80 p.s.f. MIN.
 - FINISH - GALVANIZE ALL EXPOSED METAL AND FRAMING. STEEL TROWEL CONCRETE SLAB FINISH.
 - CONCRETE STRENGTH - 4,200 p.s.i. @ 28 DAYS.
 - LADDER AT THIRD FLOOR SHALL BE EQUIPPED WITH A GALVANIZED STEEL LOCKING DOOR ON SAFETY CAGE TO PREVENT UNAUTHORIZED ACCESS TO LADDERS.
 - WALL LOUVERS SHALL BE INSTALLED ABOVE THIRD FLOOR FOR VENTILATION. LOUVERS SHALL BE CONSTRUCTED OF GALVANIZED STEEL WITH 16 MESH INSECT RESISTANT SCREEN. LOUVERS SHALL BE INSTALLED 8 FEET ABOVE FINISHED FLOOR.

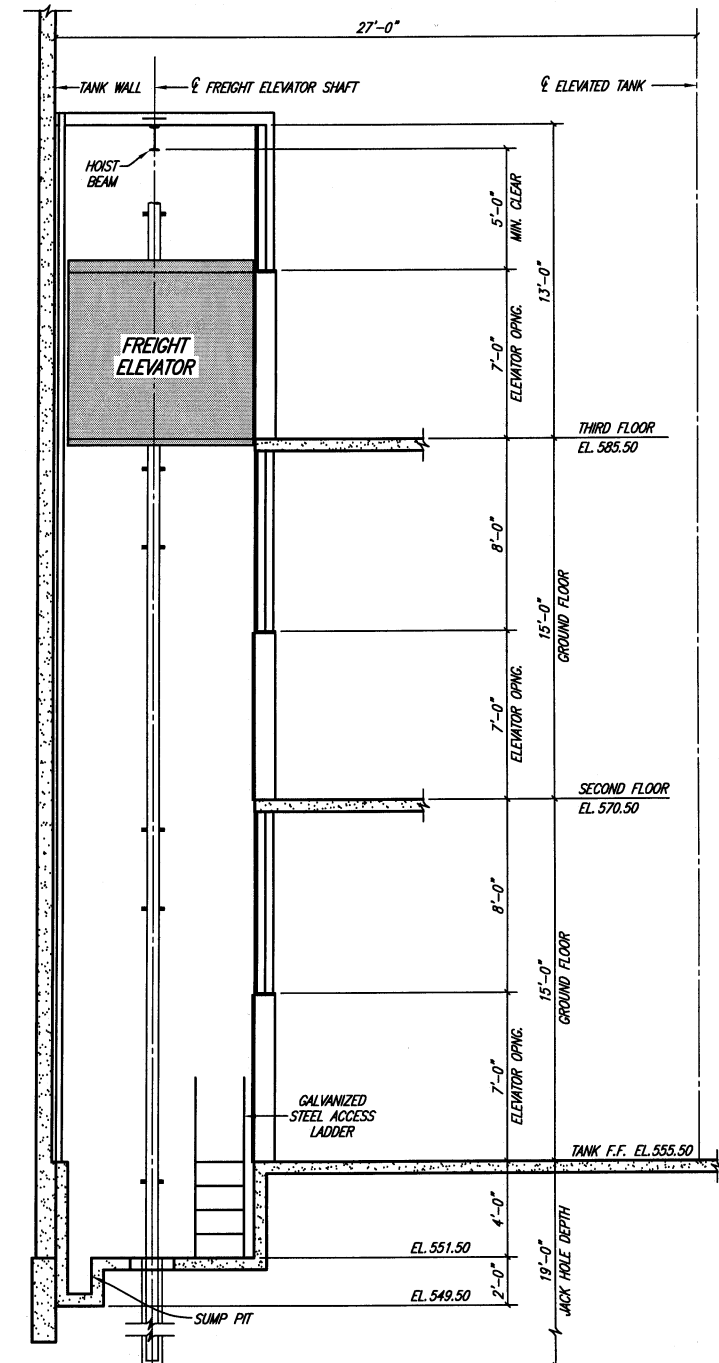
HANDRAIL AND GUARDRAIL NOTE:
VERIFY WITH BUILDING CODE - U.B.C.
REQUIRES AN INTERMEDIATE RAIL PATTERN
SUCH THAT A 12" SPHERE MAY NOT
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CITY OF ROCKWALL TRACT PROPERTY
NORTHEAST CORNER.
ELEV. 558.03



STAIR RAIL PLAN

AT THIRD FLOOR LANDING
SCALE: 1/4" = 1'-0"



FREIGHT ELEVATOR SECTION

SCALE: 1/4" = 1'-0"

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Dallas, Texas
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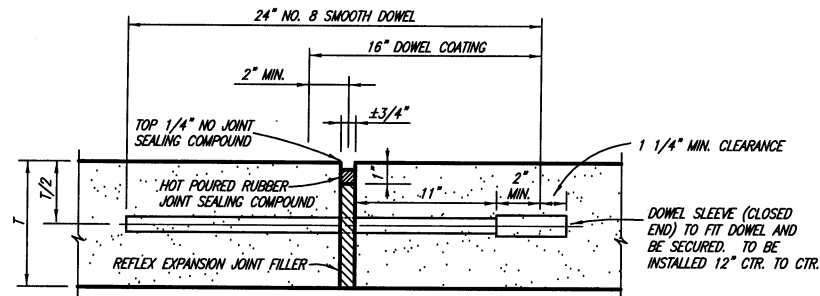
[Signature]
2/20/07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
TANK THIRD FLOOR LEVEL PLAN & DETAILS

BHC
PROJECT NO.
2005 149
December, 2008

SHEET NO.
21

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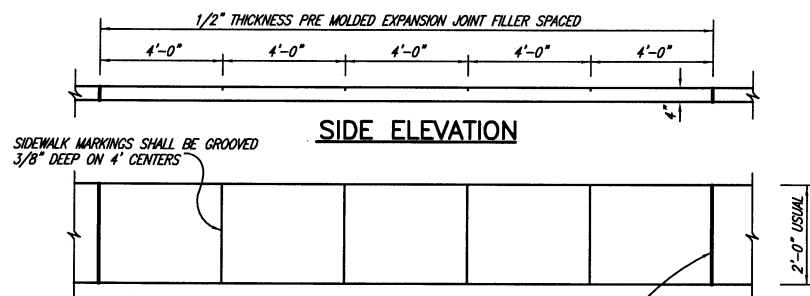


TRANSVERSE EXPANSION JOINT NOTES:

1. DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.
2. TRANSVERSE EXPANSION JOINTS SHALL BE SPACED AT 400 FT. MAXIMUM AND AT ALL INTERSECTIONS.

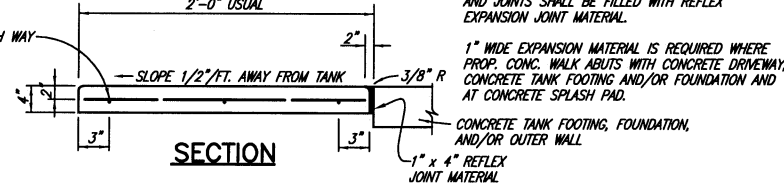
TRANSVERSE EXPANSION JOINT

NO SCALE



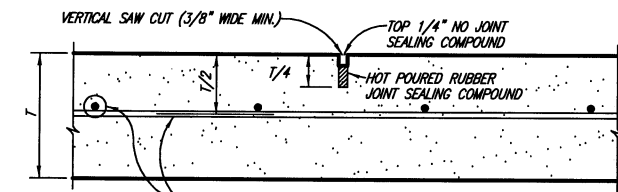
SIDE ELEVATION

PLAN



CONCRETE MOW STRIP

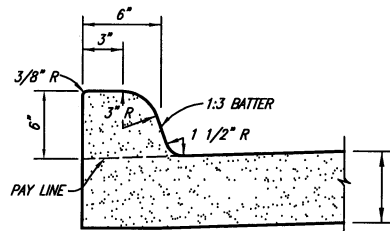
NO SCALE



TRANSVERSE JOINTS SPACED 15 FT. C.-C. (MAX.)
LONGITUDINAL JOINTS SPACED 20 FT. C.-C. (MAX.)

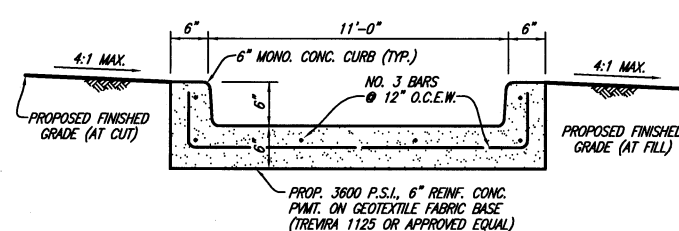
SAWED DUMMY JOINT

NO SCALE



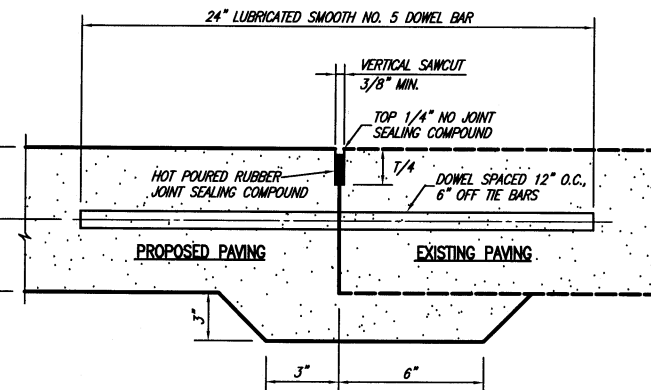
6" MONOLITHIC CURB

NO SCALE



CONCRETE OVERFLOW SPLASHPAD SECTION

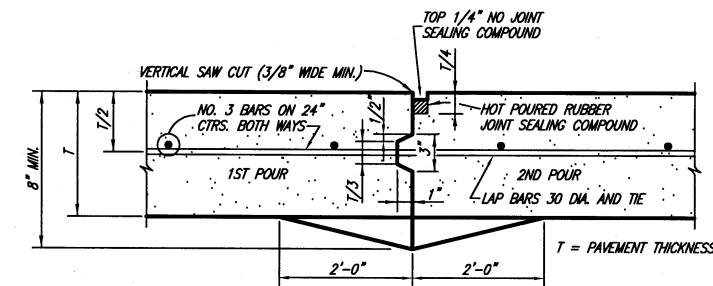
NO SCALE



NOTE: DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG. DRILLING BY HAND IS NOT ACCEPTABLE. PUSHING DOWEL BARS INTO GREEN CONCRETE IS NOT ACCEPTABLE.

LONGITUDINAL BUTT JOINT

NOT TO SCALE

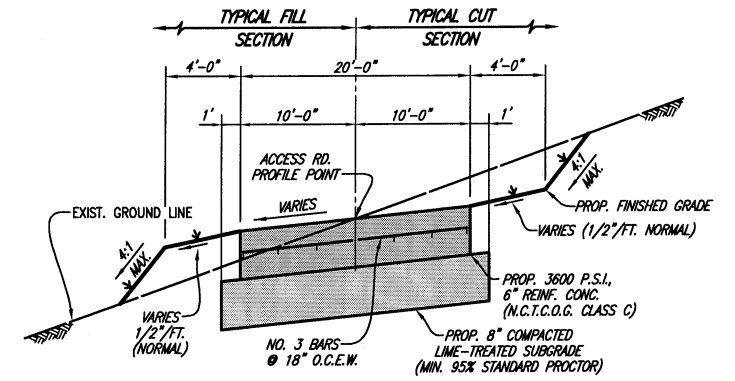


CONSTRUCTION JOINT NOTES:

1. CONTRACTOR SHALL PROTECT KEYWAY PRIOR TO SECOND POUR. IF LONGITUDINAL KEYWAY IS DAMAGED, CONTRACTOR SHALL REPAIR WITH THE USE OF LONGITUDINAL BUTT JOINT (DRILL DOWELS INTO FIRST POUR).
2. THICKENED EDGES ARE REQUIRED FOR FUTURE WIDENING ONLY.

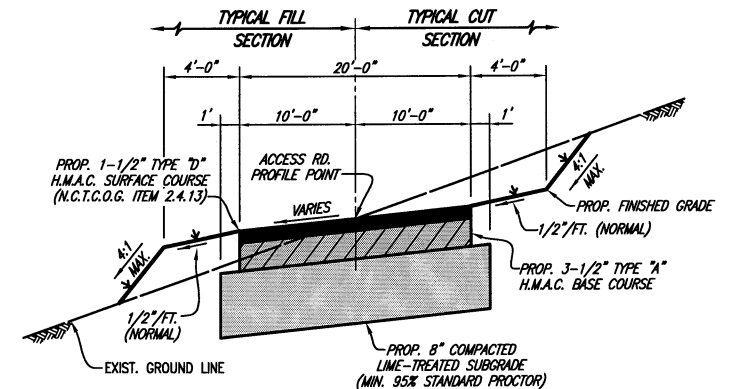
CONSTRUCTION JOINT

NO SCALE



TYPICAL SECTION - 6" CONCRETE DRIVE

NO SCALE

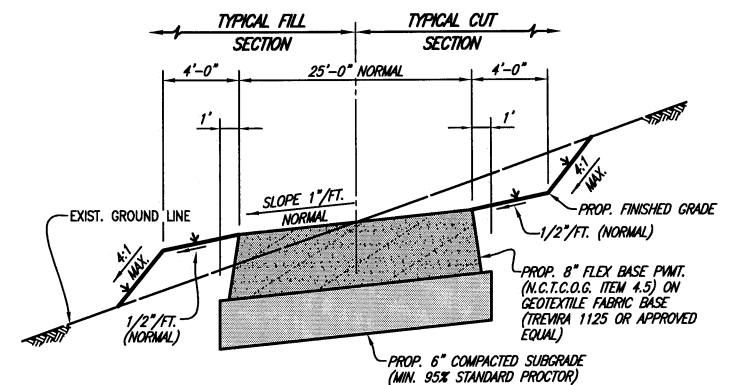


TYPICAL SECTION - ASPHALT DRIVE

NO SCALE

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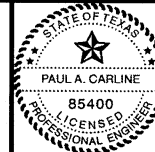
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TYPICAL SECTION - FLEXIBLE BASE PAVEMENT

NO SCALE

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CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK

MISCELLANEOUS DETAILS

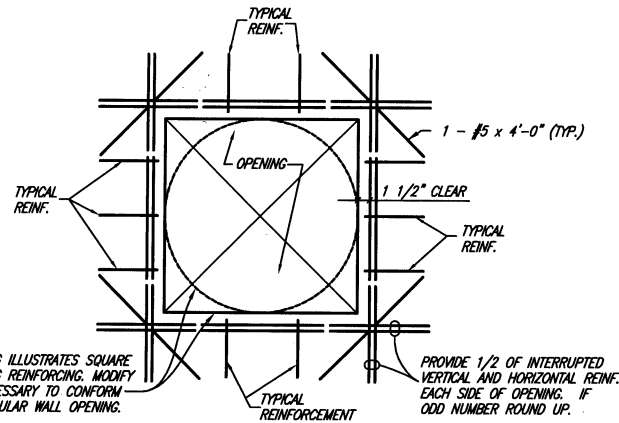
BHC
PROJECT NO.
2005 149

December, 2008

SHEET NO.

23

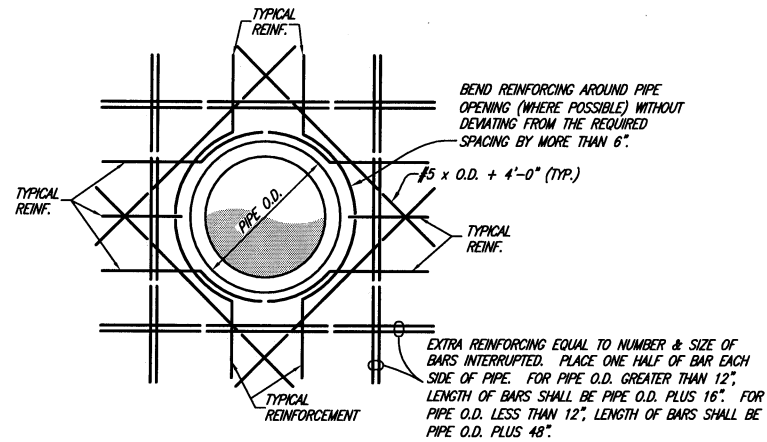
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NOTE: DRAWING ILLUSTRATES SQUARE OPENING REINFORCING. MODIFY AS NECESSARY TO CONFORM TO CIRCULAR WALL OPENING.

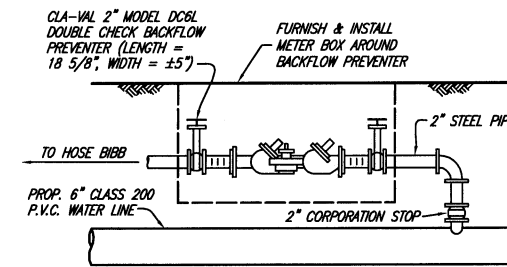
TYPICAL REINFORCING AT OPENINGS IN CONCRETE JUNCTION BOX STRUCTURE (ELEVATION VIEW)

TYPICAL FOR ALL STRUCTURES THIS PROJECT
NO SCALE



TYPICAL REINFORCING AT CAST IN PLACE WALL PIPE OPENINGS

TYPICAL FOR ALL STRUCTURES THIS PROJECT
NO SCALE



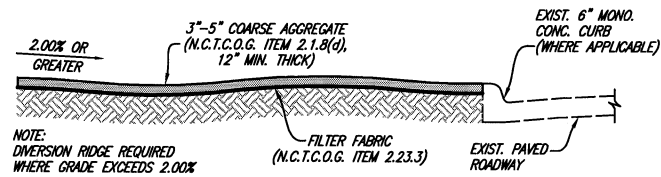
BACKFLOW PREVENTER ASSEMBLY

NO SCALE

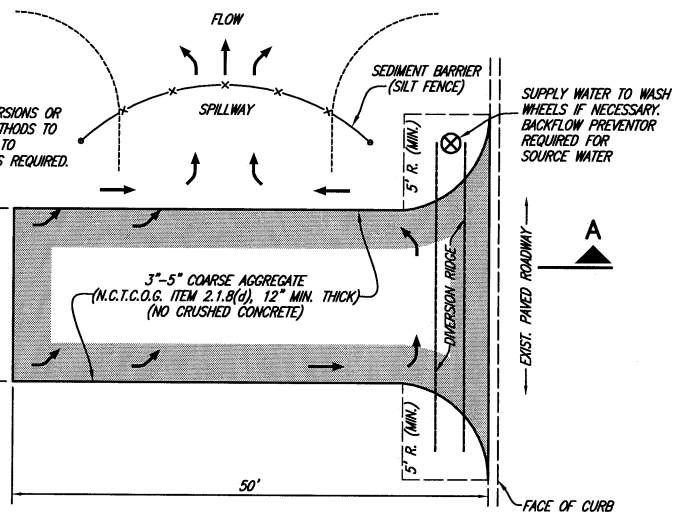
NOTE: BACKFLOW PREVENTER SHALL BE INSTALLED IN A 3x3' PRECAST JUNCTION BOX (WITH LID) AS MANUFACTURED BY AMERICAN INDUSTRIAL PRECAST OF ALVARADO, TEXAS (817-477-5286) OR APPROVED EQUAL. BACKFLOW PREVENTER SHALL BE TESTED BY CERTIFIED PERSONNEL OF THE MANUFACTURER AND SUCH TEST RESULTS PROVIDED TO THE OWNER (WATER PRODUCTION DIVISION).

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BY PAC DATE 12/23/08

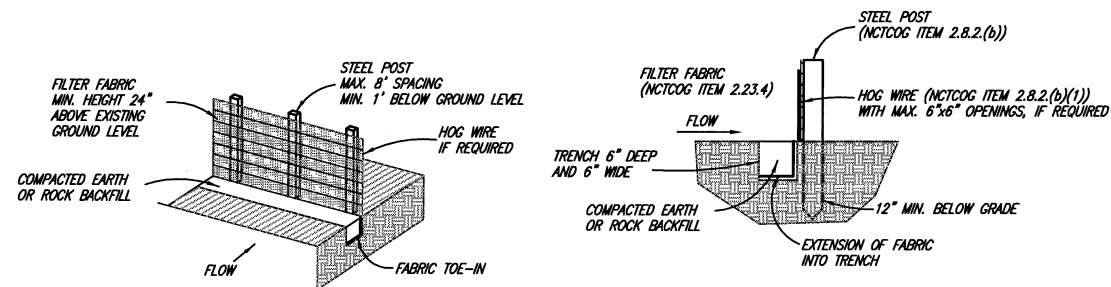


SECTION A-A



CONSTRUCTION ENTRANCE ROAD FOR EROSION CONTROL

NO SCALE



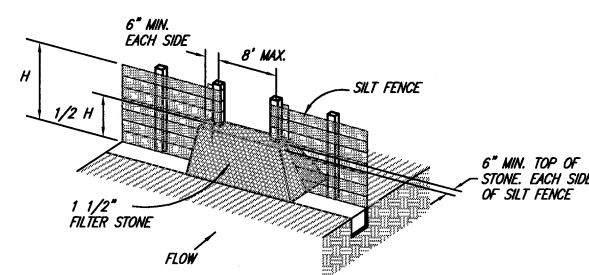
ISOMETRIC VIEW

SECTION VIEW

SILT EROSION CONTROL FENCE

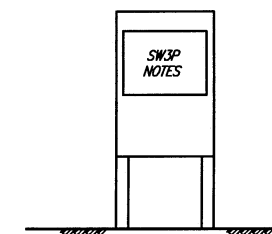
NO SCALE

- SILT FENCE NOTES**
1. THE CONTRACTOR SHALL INSPECT SILT FENCE WEEKLY AND AFTER MAJOR RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY.
 2. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM BEHIND FENCE WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE.
 3. THE CONTRACTOR SHALL INSPECT THE BASE OF THE FENCE TO ENSURE THAT NO GAPS HAVE DEVELOPED AND RETRENCH AS NECESSARY.
 4. THE CONTRACTOR SHALL INSPECT FENCE POSTS TO ENSURE THAT THEY ARE PROPERLY SUPPORTING THE FENCE. IF NECESSARY, THE CONTRACTOR SHALL RESET AND ADD POSTS.
 5. IF FILTER FABRIC IS RIPPED, DAMAGED OR DETERIORATED, THE CONTRACTOR SHALL REPLACE IT IN ACCORDANCE



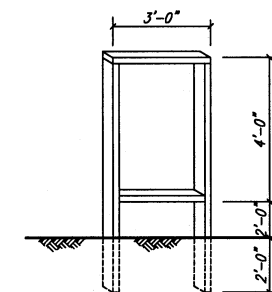
STONE OVERFLOW STRUCTURE

NO SCALE



SIGN PANEL 3/4" EXTERIOR PLYWOOD PAINTED LIGHT BLUE FRAME 2"x4" STOCK FRAME TO BE PAINTED WHITE

ALL PAINT TO BE "EXTERIOR GRADE"



SIGN FRAME

SW3P SIGN

NO SCALE

STORM WATER POLLUTION PREVENTION NOTES

1. CONTRACTOR SHALL PROVIDE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY A REGISTERED PROFESSIONAL ENGINEER, FOR THE ENTIRE PROJECT UTILIZING EITHER OF THE ALTERNATES SHOWN ABOVE.
2. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE SWPPP AND TO MAINTAIN THE SILT FENCE THROUGHOUT THE PERIOD OF CONSTRUCTION. PAYMENT SHALL BE BASED ON TWO TIMES THE ACTUAL LENGTH OF PIPE INSTALLED BY OPEN CUT.

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CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK

MISCELLANEOUS DETAILS

BHC
PROJECT NO.
2005 149

December, 2008

SHEET NO.

24

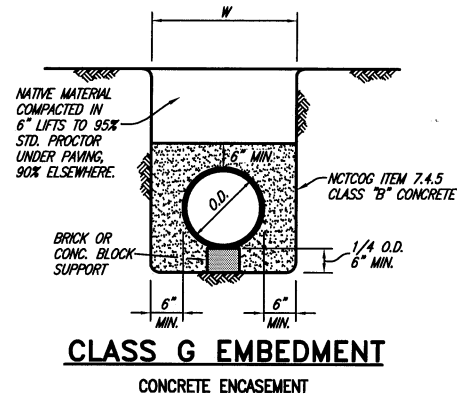
APPURTENANCE & EMBEDMENT NOTES FOR YARD PIPING

- IN GENERAL ALL FIRE HYDRANTS SHALL CONFORM TO ANMA STANDARDS SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE FOR WATER AND SANITARY SEWER IMPROVEMENTS. FIRE HYDRANTS SHALL HAVE A 5-1/4" MINIMUM VALVE OPENING AND WITH A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL HYDRANTS SHALL BE APPROVED BY THE CITY OF ROCKWALL.
- ENTIRE FIRE HYDRANT SHALL BE PAINTED USING 2 COATS OF PAINT (COLOR TO BE SELECTED BY THE CITY OF ROCKWALL).
- APPROVED FIRE HYDRANTS
 - MUELLER (CENTURION)
 - WATERLOUS (PACER)
 - DRESSER M & H (929 RELIANT)
 - KENNEDY (GUARDIAN)
 - CLOW CORP. (MEDALLION)
- ALL WATER LINES SHALL BE AS SPECIFIED IN THE STANDARD SPECIFICATIONS AND/OR SPECIAL PROVISIONS.
- ALL WATER MAINS SHALL HAVE THE FOLLOWING MIN. COVER OR SUFFICIENT COVER TO CLEAR OTHER UTILITIES:
 - 42" MIN. COVER FOR 6" PIPE & SMALLER
 - 48" MIN. COVER FOR 8" PIPE
 - 54" TO 80" MIN. COVER FOR PIPE LARGER THAN 8"
- REMOVE ALL BLEEDER LINES UPON COMPLETION OF TESTING.

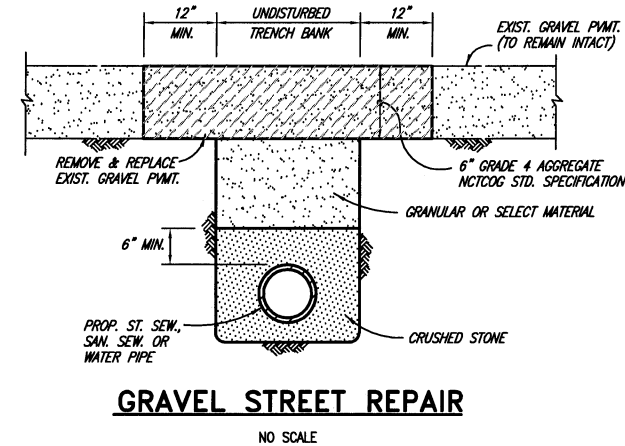
EMBEDMENT NOTES:

- DEPTH OF TRENCH BELOW PIPE:
 - 3" MIN. FOR 27" PIPE & SMALLER
 - 4" MIN. FOR 30" TO 60" PIPE
 - 6" MIN. FOR 66" PIPE & LARGER
- TRENCH WIDTH ("W") SHALL BE 24" PLUS O.D. FOR PIPE > 24" I.D. AND 16" PLUS O.D. FOR PIPE ≤ 24" I.D.
- ALL COMPACTION SHALL BE ACCOMPLISHED BY MECHANICAL MEANS.
- NATIVE BACKFILL: NATIVE BACKFILL MATERIAL TO BE COMPACTED AND BROUGHT BACK TO EXISTING GRADE. THE TOP 8" IS TO BE TOP SOIL.
- SELECT MATERIAL (NCTCOG ITEM 2.1.8 (b) or (c)): SELECT MATERIAL SHALL BE GRAVEL, FINE ROCK CUTTINGS (LESS THAN 2" DIA.), SAND, OR SANDY LOAM. MATERIAL SHALL BE FREE OF CLAY. MECHANICALLY COMPACT IN 6" LIFTS TO 90% OF TEXAS METHOD TEX 113-E.
- CRUSHED STONE (NCTCOG ITEM 2.1.8 (a)) FOR EMBEDMENT SHALL BE GRADE 4, STANDARD GRADATION:

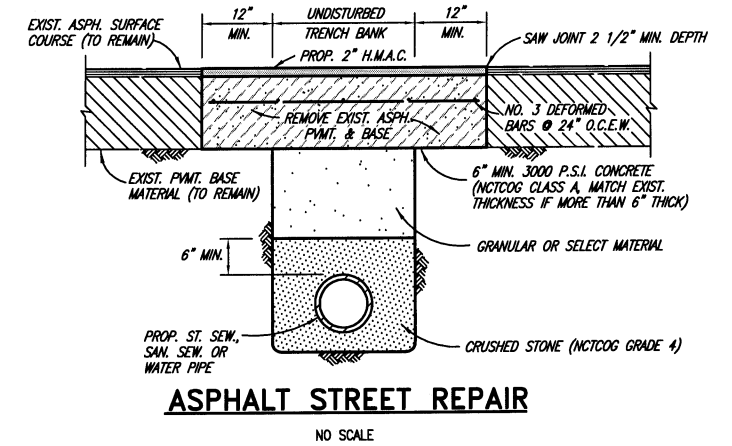
SIEVE SIZE	PERCENT RETAINED
1 1/2"	0%
1"	0-5%
1/2"	40-75%
NO. 4	90-100%
NO. 8	95-100%



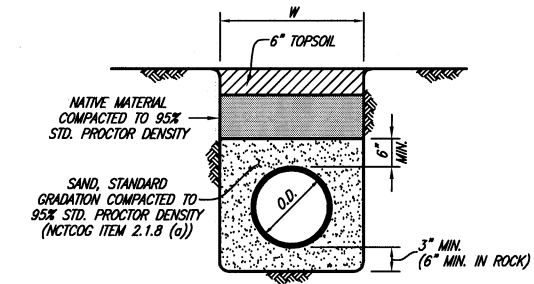
CLASS G EMBEDMENT
CONCRETE ENCASUREMENT



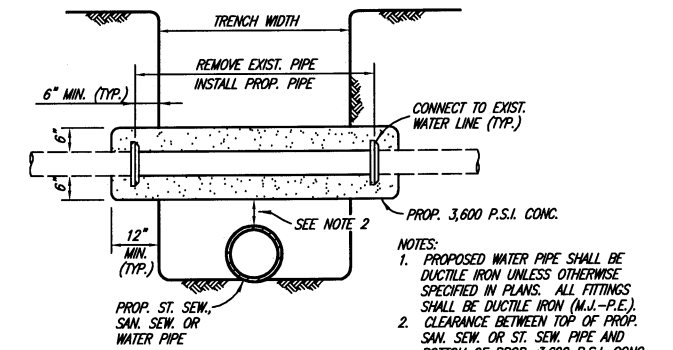
GRAVEL STREET REPAIR



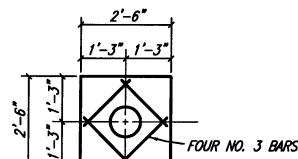
ASPHALT STREET REPAIR



CLASS B-4 EMBEDMENT
UNDER PROPOSED PAVEMENT



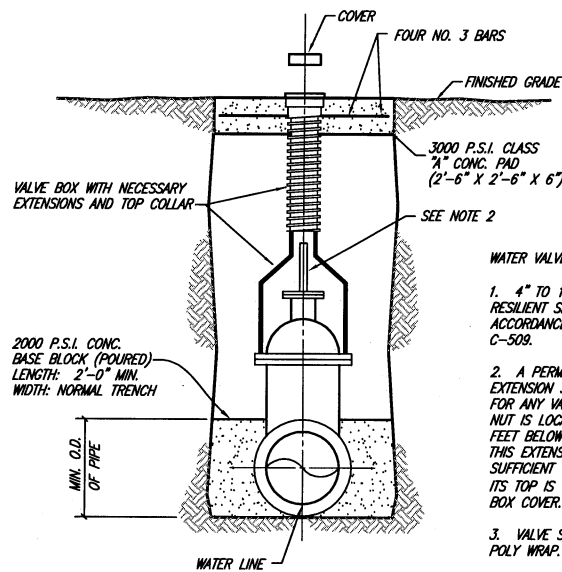
UTILITY SUPPORT



VALVE BOX PAD PLAN

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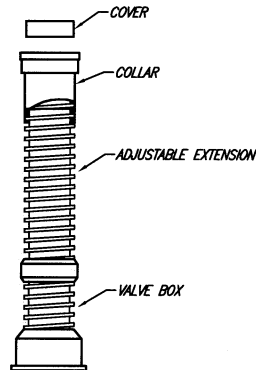
VALVE SETTING & BOX

NO SCALE

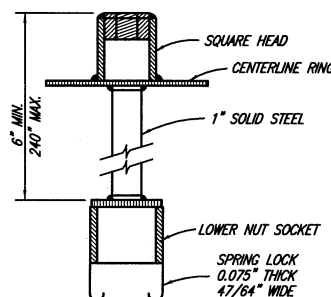
WATER VALVE NOTES:

- 4" TO 12" GATE VALVE SHALL BE RESILIENT SEATED WEDGE GATE VALVES ACCORDANCE WITH ANMA STANDARD C-509.
- A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE WHOSE OPERATING NUT IS LOCATED IN EXCESS OF 4 FEET BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 4" OF THE VALVE BOX COVER.
- VALVE SHALL BE WRAPPED IN POLY WRAP.

VALVE BOX WITH EXTENSION

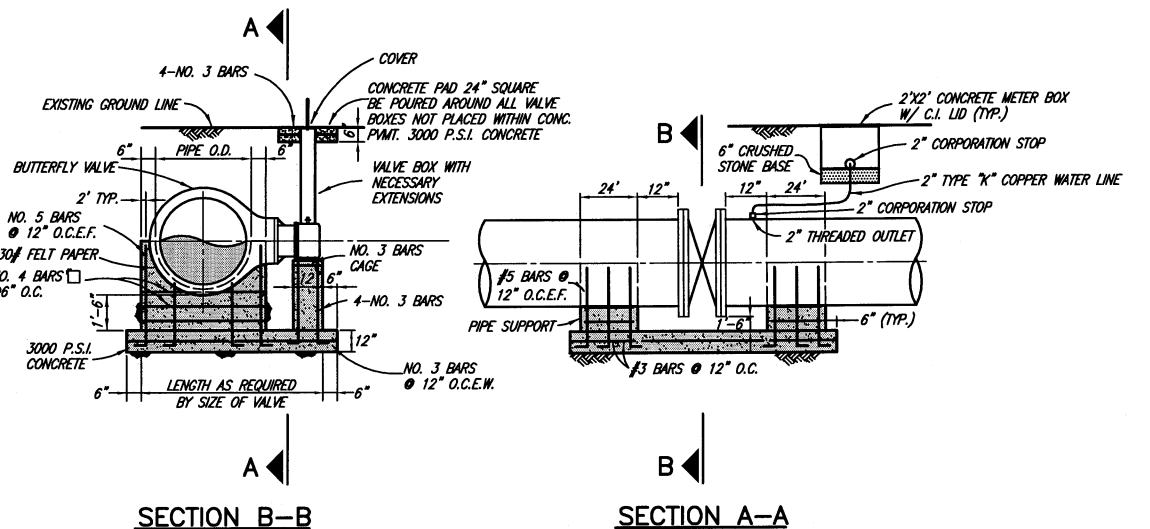


NO SCALE



SPRING LOCK VALVE EXTENSION

NO SCALE



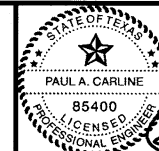
SECTION B-B

SECTION A-A

BUTTERFLY VALVE INSTALLATION

NO SCALE

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(214) 361-7900



Paula A. Carlisle

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK

MISCELLANEOUS DETAILS

BHC
PROJECT NO.
2005 149

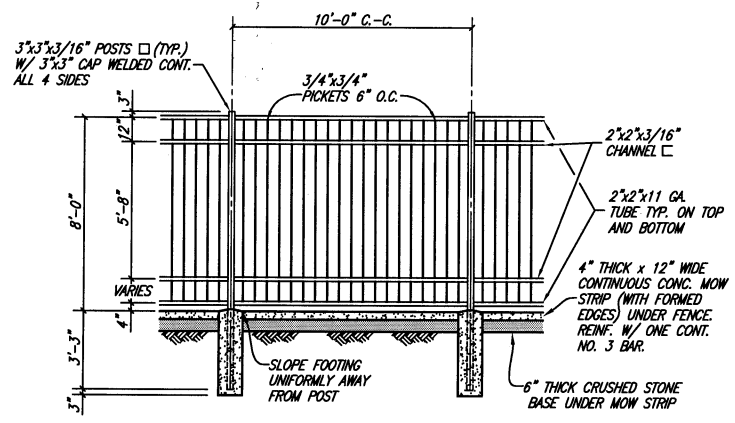
December, 2008

SHEET NO.

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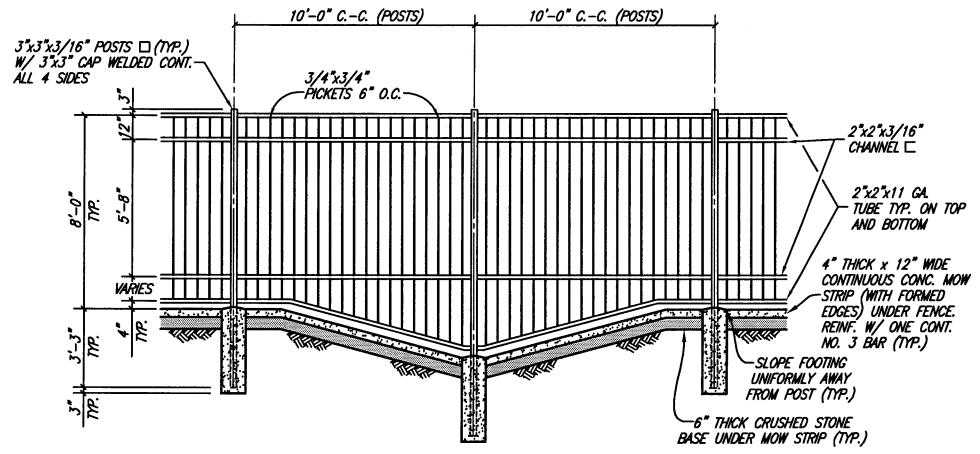
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SECURITY FENCE ELEVATION
NO SCALE

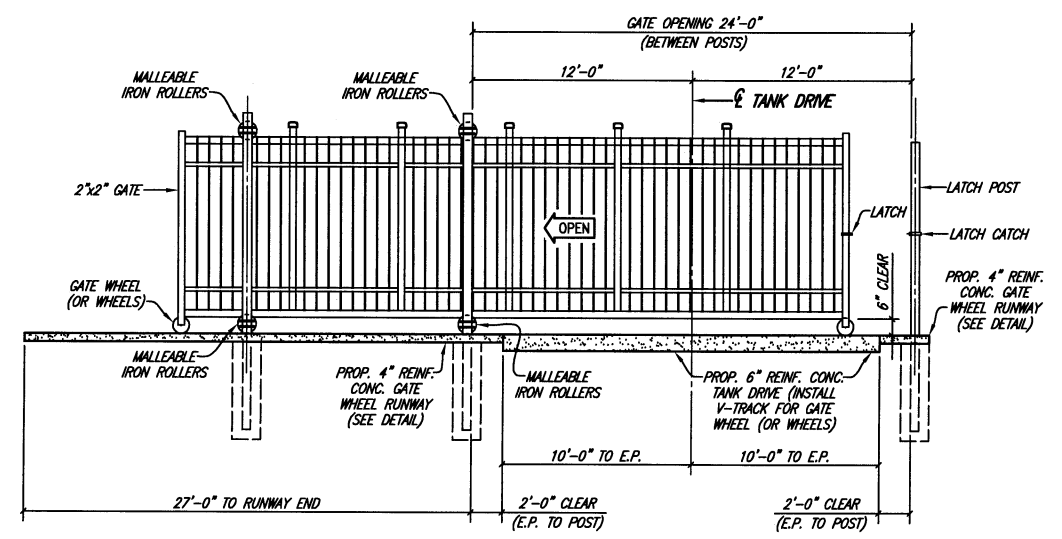
- FENCE NOTES:**
- FENCE SHALL BE MADE OF STEEL AND BE PAINTED WITH TWO COATS OF BLACK PAINT.
 - SHOP DRAWINGS FOR ALL FENCING SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.



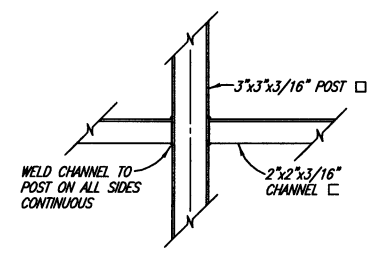
SECURITY FENCE ELEVATION AT DITCH CROSSING
NO SCALE

SLIDING GATE NOTES:

- GATE SHALL BE A TUBULAR STEEL GATE SIMILAR TO AMERICAN "CLASSIC" OR EQUAL, GALVANIZED WITH FACTORY APPLIED FLAT BLACK FINISH.
- PAVEMENT AND CONCRETE GATE WHEEL RUNWAY SHALL BE CONSTANT (NO HIGH POINTS, LOW POINTS OR CHANGES OF GRADE) AND SHALL NOT EXCEED 1/4" PER FOOT (2.08% CROSS-SLOPE GRADE).
- GATE SHALL BE CONSTRUCTED SIMILAR TO 8" FENCE WITH APPROPRIATE CROSS BRACING WHERE NECESSARY. GATE SHALL BE DESIGNED TO ROLL PARALLEL TO FENCE AND SHALL INCLUDE A LATCH PLATE WHICH MAY ACCEPT A PADLOCK. THE GATE SHALL BE CONNECTED AND MADE OPERATIONAL WITH AUTOMATIC GATE OPENER.
- CONTRACTOR SHALL FURNISH & INSTALL AN AUTOMATIC GATE OPENER (ELITE MODEL SE-3000-UL-1 GEAR HEAD, A SENTEX SECURA KEY CARD READER, AND A SARASOTA VEHICLE DETECTOR 4 MILLER PNEUMATIC GATE EDGE. ALL EXTERIOR MOUNTING OF EQUIPMENT SHALL BE IN WEATHERPROOF ENCLOSURES. INSTALLATION OF GATE SHALL INCLUDE CONCRETE RUNWAY, RAILS AND ALL APPURTENANCES.
- SHOP DRAWINGS FOR GATES AND ALL FENCING SHALL BE SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION.



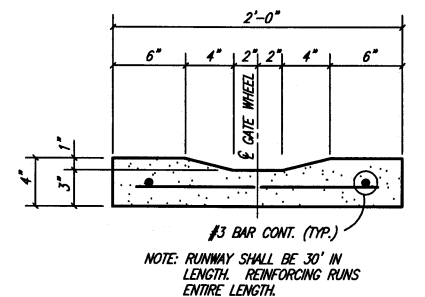
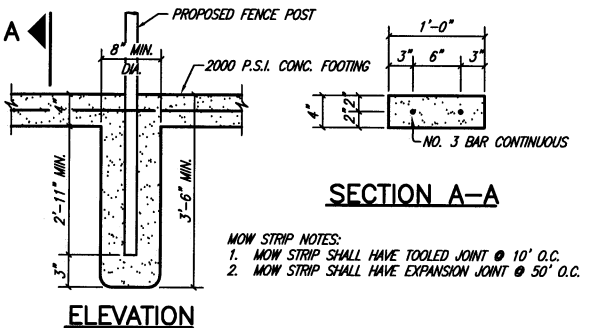
WELDED STEEL SLIDE GATE ELEVATION
NO SCALE



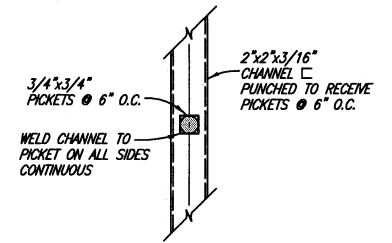
ELEVATION - FENCE RAIL AT POST
NO SCALE

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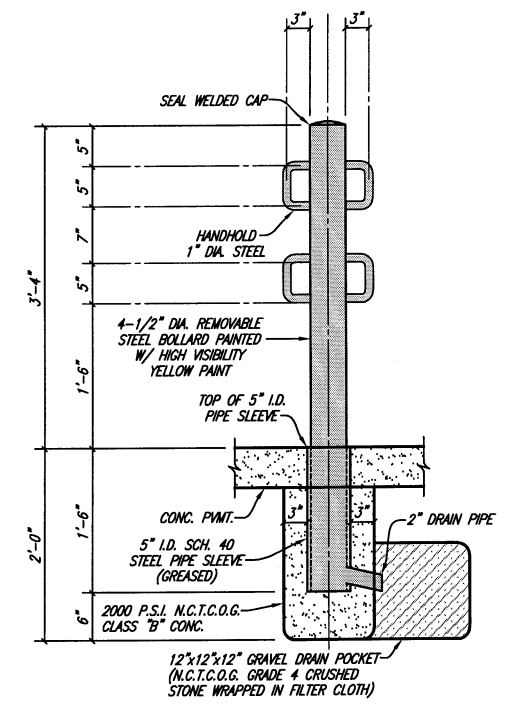
BY PAC DATE 12/23/08



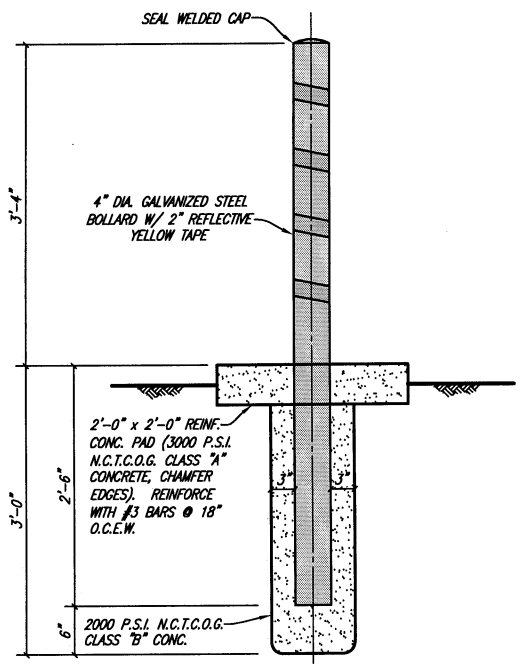
CONCRETE GATE WHEEL RUNWAY
NO SCALE



PLAN - FENCE RAIL AT PICKET
NO SCALE



REMOVABLE PIPE BOLLARD
NO SCALE



STATIONARY PIPE BOLLARD
NO SCALE

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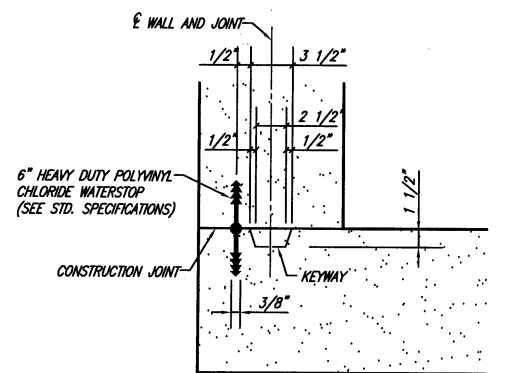
Signature
2/21/07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
MISCELLANEOUS DETAILS

BHC PROJECT NO. 2005 149
December, 2008

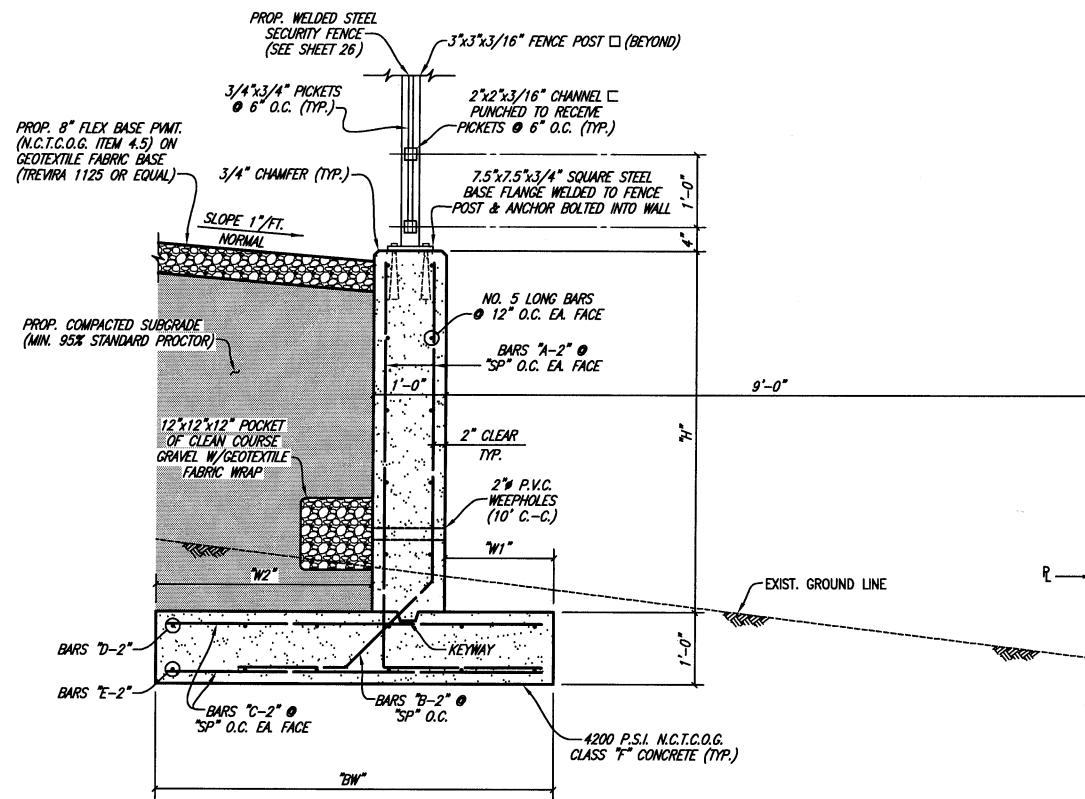
SHEET NO. 26

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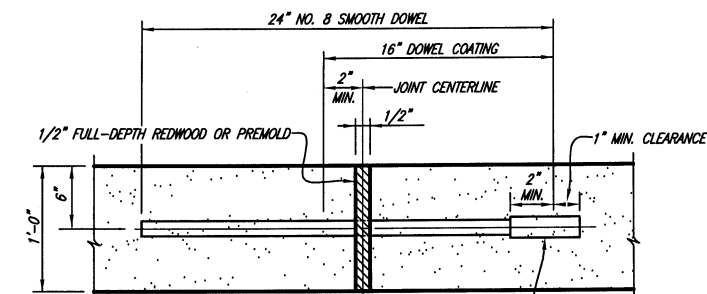
KEYWAY WITH WATERSTOP

NO SCALE



CONCRETE RETAINING WALL SECTION

LOOKING NORTH
NO SCALE



RETAINING WALL EXPANSION JOINT NOTES:

1. DOWELS AND REINFORCING BARS SHALL BE SUPPORTED BY AN APPROVED DEVICE.
2. 1/2" REDWOOD OR PREMOLDED EXPANSION JOINTS WITH DOWELS (AS SHOWN) SHALL BE SPACED AT 25'-0" ON CENTER FOR FULL DEPTH OF ALL WALLS AND FOOTINGS.

5" LONG DOWEL SLEEVE (CLOSED END) TO FIT DOWEL AND BE SECURED. INSTALL @ 12" CTR. TO CTR.

RETAINING WALL EXPANSION JOINT

NO SCALE

RETAINING WALL REINFORCING

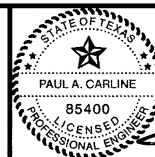
FOR MODIFIED TYPE "B" RETAINING WALL

DIMENSION "H"		DIMENSION "BW"	DIMENSION "W1"	DIMENSION "W2"	BAR SPACING "Sp"	BARS "A-2" SIZE	BARS "B-2" SIZE	BARS "C-2" SIZE	BARS "D-2"		BARS "E-2"	
GREATER THAN	BUT LESS THAN								SIZE	QUANTITY	SIZE	QUANTITY
	3'-0"	3'-0"	6"	1'-6"	16"	NO. 4	NO. 3	NO. 4	NO. 4	4	NO. 4	4
3'-0"	4'-0"	3'-6"	8"	1'-10"	16"	NO. 4	NO. 3	NO. 4	NO. 4	4	NO. 4	4
4'-0"	5'-0"	4'-6"	1'-4"	2'-2"	16"	NO. 4	NO. 3	NO. 4	NO. 4	5	NO. 4	5
5'-0"	6'-0"	5'-6"	1'-6"	3'-0"	12"	NO. 4	NO. 4	NO. 4	NO. 5	5	NO. 5	5
6'-0"	7'-0"	6'-6"	1'-6"	4'-0"	16"	NO. 5	NO. 4	NO. 4	NO. 5	6	NO. 5	6
7'-0"	8'-0"	7'-6"	1'-6"	5'-0"	16"	NO. 5	NO. 4	NO. 4	NO. 5	6	NO. 5	6
8'-0"	9'-0"	8'-6"	1'-6"	6'-0"	12"	NO. 5	NO. 4	NO. 4	NO. 5	7	NO. 5	7
9'-0"	10'-0"	9'-6"	1'-6"	7'-0"	12"	NO. 6	NO. 4	NO. 4	NO. 5	7	NO. 5	7

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BY PAC DATE 12/23/08

BIRKHOFF, HENDRICKS & CONWAY, L.L.P.
CONSULTING ENGINEERS
7502 Greenville Ave., Suite 220
Dallas, Texas
(214) 361-7900



[Signature]
12/22/08

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK

MISCELLANEOUS DETAILS

BHC
PROJECT NO.
2005 149

December, 2008

SHEET NO.

27

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without written authorization of Birkhoff, Hendricks & Conway, L.L.P.

HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 1 SHEET 1 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 556.2±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (BPT) ± INFLATION TEST ← POCKET PENETROMETER READING 1 (lb)
				DRILLED	RECOVERED	
2.5		CLAY, with calcareous and iron nodules, very stiff, dark brown				X
5.0			550.7			X
7.5		CLAY, with calcareous nodules and trace of iron nodules, very stiff, dark brown and brown	549.7			X
10.0		CLAY, slightly silty, with shale seams, very stiff, brown				X
12.5			542.0			X
15.0		SHALE, blocky, calcareous, firm, gray				X
20.0				10.0	9.0	RQD = 90%
22.5						

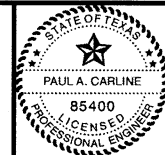
HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 1 SHEET 2 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 556.2±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (BPT) ± INFLATION TEST ← POCKET PENETROMETER READING 1 (lb)
				DRILLED	RECOVERED	
27.5		SHALE, blocky, calcareous, firm, gray				
30.0				10.0	8.4	RQD = 84%
32.5						
35.0						
37.5						
40.0				10.0	9.7	RQD = 97%
42.5						
45.0			511.2			
47.5						
TOTAL DEPTH: 45.0'						

HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 2 SHEET 1 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 555.2±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (BPT) ± INFLATION TEST ← POCKET PENETROMETER READING 2 (lb)
				DRILLED	RECOVERED	
2.5		CLAY, with calcareous and iron nodules, very stiff, dark brown				X
5.0		CLAY, with calcareous and iron nodules, very stiff, brown and dark brown	552.2			X
7.5		CLAY, with calcareous and iron nodules, very stiff, brown	550.2			X
10.0						X
12.5						X
15.0		SHALE, blocky, calcareous, firm, gray	541.2			X
20.0				10.0	9.1	RQD = 91%
22.5						

HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 2 SHEET 2 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 555.2±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (BPT) ± INFLATION TEST ← POCKET PENETROMETER READING 1 (lb)
				DRILLED	RECOVERED	
27.5		SHALE, blocky, calcareous, firm, gray				
30.0				10.0	9.7	RQD = 97%
32.5						
35.0						
37.5						
40.0				10.0	9.6	RQD = 96%
42.5						
45.0			510.2			
47.5						
TOTAL DEPTH: 45.0'						

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BY PAC DATE 12/23/08

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CONSULTING ENGINEERS
7502 Greenville Ave., Suite 220
Dallas, Texas
(214) 361-7900



[Signature]

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
LOG OF BORINGS
BORINGS 1 & 2

BHC
PROJECT NO.
2005 149
December, 2008

SHEET NO.
28

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HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 3 SHEET 1 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 554.1±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (SPT) ±
				DRILLED	RECOVERED	
2.5		CLAY, with calcareous and iron nodules, very stiff, dark brown	550.1			X
5.0		CLAY, with calcareous nodules and trace of iron nodules, very stiff, brown				
7.5						X
10.0						X
12.5						
15.0		SHALE, blocky, calcareous, firm, gray	539.1			X
17.5						
20.0				10.0	4.8	RQD = 48%
22.5						

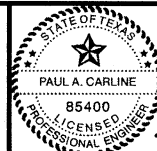
HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 4 SHEET 1 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 555.3±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (SPT) ±
				DRILLED	RECOVERED	
2.5		CLAY, with calcareous and iron nodules, very stiff, dark brown				X
5.0			549.8			X
7.5		CLAY, with calcareous and iron nodules, very stiff, dark brown	548.8			X
10.0		CLAY, with trace of calcareous nodules and shale seams, very stiff, brown and gray				X
12.5						
15.0						X
17.5		SHALE, blocky, calcareous, firm, gray	539.3			
20.0				9.0	8.6	RQD = 96%
22.5						

HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 3 SHEET 2 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 554.1±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (SPT) ±
				DRILLED	RECOVERED	
27.5		SHALE, blocky, calcareous, firm, gray				
30.0			10.0	9.8		RQD = 98%
32.5						
35.0						
37.5						
40.0			10.0	7.5		RQD = 75%
42.5						
45.0		TOTAL DEPTH: 45.0'	509.1			
47.5						

HENLEY-JOHNSTON & ASSOCIATES, INC. engineering geoscience consultants		LOG OF BORING COUNTRY LANE ELEVATED STORAGE TANK ROCKWALL, TEXAS		PROJECT No.: 8598 BORING No.: 4 SHEET 2 of 2 LOCATION: SEE PLATE 1 GROUND ELEVATION: 555.3±		
DEPTH (feet)	SYMBOL SAMPLES	MATERIAL DESCRIPTION	ELEVATION, (feet)	CORE		STANDARD PENETRATION (SPT) ±
				DRILLED	RECOVERED	
27.5		SHALE, blocky, calcareous, firm, gray				
30.0			10.0	9.6		RQD = 96%
32.5						
35.0						
37.5						
40.0			10.0	9.9		RQD = 99%
42.5						
45.0		TOTAL DEPTH: 45.0'	510.3			
47.5						

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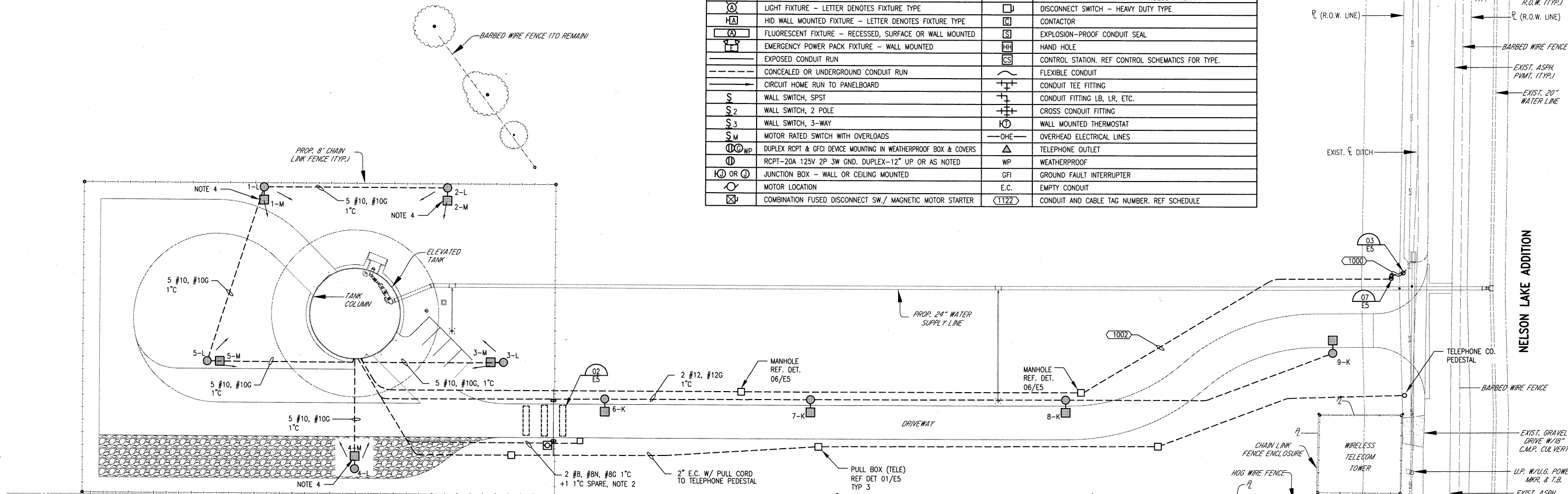
Handwritten signature of Paul A. Carlisle

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
LOG OF BORINGS
BORINGS 3 & 4

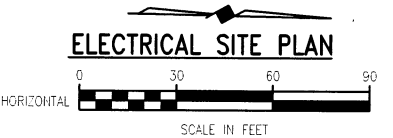
BHC
PROJECT NO.
2005 149
December, 2008

SHEET NO.
29

ELECTRICAL SITE & PLAN SYMBOL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	LIGHT FIXTURE - LETTER DENOTES FIXTURE TYPE		DISCONNECT SWITCH - HEAVY DUTY TYPE
	HID WALL MOUNTED FIXTURE - LETTER DENOTES FIXTURE TYPE		CONTACTOR
	FLUORESCENT FIXTURE - RECESSED, SURFACE OR WALL MOUNTED		EXPLOSION-PROOF CONDUIT SEAL
	EMERGENCY POWER PACK FIXTURE - WALL MOUNTED		HAND HOLE
	EXPOSED CONDUIT RUN		CONTROL STATION, REF CONTROL SCHEMATICS FOR TYPE.
	CONCEALED OR UNDERGROUND CONDUIT RUN		FLEXIBLE CONDUIT
	CIRCUIT HOME RUN TO PANELBOARD		CONDUIT TEE FITTING
	WALL SWITCH, SPST		CONDUIT FITTING LB, LR, ETC.
	WALL SWITCH, 2 POLE		CROSS CONDUIT FITTING
	WALL SWITCH, 3-WAY		WALL MOUNTED THERMOSTAT
	MOTOR RATED SWITCH WITH OVERLOADS		OVERHEAD ELECTRICAL LINES
	DUPLEX RCPT & GFCI DEVICE MOUNTING IN WEATHERPROOF BOX & COVERS		TELEPHONE OUTLET
	RCPT-20A 125V 2P 3W GND. DUPLEX-12" UP OR AS NOTED		WEATHERPROOF
	JUNCTION BOX - WALL OR CEILING MOUNTED		GROUND FAULT INTERRUPTER
	MOTOR LOCATION		EMPTY CONDUIT
	COMBINATION FUSED DISCONNECT SW./ MAGNETIC MOTOR STARTER		CONDUIT AND CABLE TAG NUMBER, REF SCHEDULE



- NOTES:
1. LOCATION OF GATE OPERATOR AND GATE COMPONENTS IS APPROXIMATE.
 2. CONDUIT, CONDUCTORS, PEDESTAL, ETC. FOR A COMPLETE GATE OPERATING SYSTEM SHALL BE PROVIDED BY THE GATE VENDOR.
 3. REFER TO DETAIL 03, SHEET E3 AND SPECIFICATIONS FOR MOTORIZED GATE.
 4. PROVIDE HOUSE SIDE SHIELD ON FIXTURES 1-M, 2-M AND 4-M.



LOGO/AREA LIGHTING									
Luminaire Schedule									
PROJECT: ROCKWALL, COUNTRY LANE ELEVATED STORAGE TANK									
Symbol	Qty	Volt	Label	Arrangement	Lamp	Lumens	LLF	Manufacturer	Description
	10	240	L	DOUBLE	1000W MH	110,000	0.770	BEGA	8398MH W/ CONCENTRIC RING LOUVER
	5	240	M	SINGLE	70W MH	5,000	0.770	HUBBELL	MAGNUSPEC MSSA070H3W81
POLE KW SSP-30-5.0-7-K813-XHH-BC/FASQ2180-36-2-K813-2									

Area Light Luminaire Location Summary						
PROJECT: ROCKWALL, COUNTRY LANE ELEVATED STORAGE TANK						
SeqNo	Label	MTG. HEIGHT	Orient	Tilt	DISTRIBUTION	Comment
1	M	20'	90°	0	TYPE V	SEMI-SPECULAR ALANOD 1510 ENCL., CLEAR, FLAT LENS, FULL CUTOFF
2	M	20'	90°	0	TYPE V	SEMI-SPECULAR ALANOD 1510 ENCL., CLEAR, FLAT LENS, FULL CUTOFF
3	M	20'	180°	0	TYPE V	SEMI-SPECULAR ALANOD 1510 ENCL., CLEAR, FLAT LENS, FULL CUTOFF
4	M	20'	270°	0	TYPE V	SEMI-SPECULAR ALANOD 1510 ENCL., CLEAR, FLAT LENS, FULL CUTOFF
5	M	20'	0°	0	TYPE V	SEMI-SPECULAR ALANOD 1510 ENCL., CLEAR, FLAT LENS, FULL CUTOFF
6	K	20'	90°	0	TYPE I	SEMI-SPECULAR ALUMINUM ENCL., CLEAR, FLAT LENS
7	K	20'	90°	0	TYPE I	SEMI-SPECULAR ALUMINUM ENCL., CLEAR, FLAT LENS
8	K	20'	90°	0	TYPE I	SEMI-SPECULAR ALUMINUM ENCL., CLEAR, FLAT LENS
9	K	20'	270°	0	TYPE I	SEMI-SPECULAR ALUMINUM ENCL., CLEAR, FLAT LENS

Logo Light Luminaire Location Summary						
PROJECT: ROCKWALL, COUNTRY LANE ELEVATED STORAGE TANK						
SeqNo	Label	MTG. HEIGHT	Orient	Tilt	DISTRIBUTION	Comment
1-5	L	30'			N/A	REF. DET. 01/E3
* REF. NOTE 1, DETAIL 01/E3						

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BY JJK DATE 12/23/08

CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM

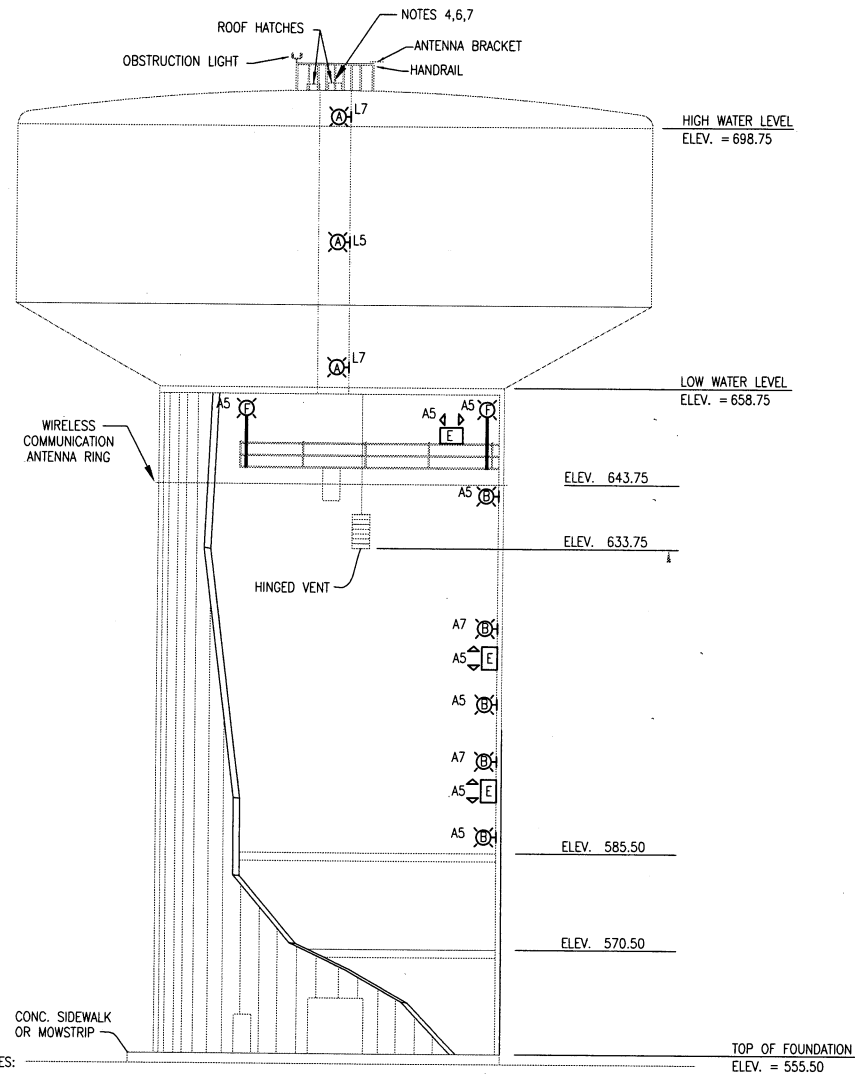
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CONSULTING ENGINEERS
7502 Greenville Ave., Suite 220
Dallas, Texas
(214) 361-7900



THESE DOCUMENTS ARE FOR BIDDING, CONSTRUCTION, AND PERMIT PURPOSES.
DATE: 2-19-07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
ELECTRICAL SITE PLAN

BHC PROJECT NO. 2005 149
FEBRUARY, 2007
SHEET NO. E1



- NOTES:
1. INSTALL CONDUIT DRAIN FITTINGS AT LOW POINTS OF CONDUIT RUNS ON THOSE CONDUITS RISING UP LADDER. INSTALL DRAIN FITTINGS AT BASE OF LADDER.
 2. INSTALL CONDUIT DRAIN FITTINGS AT LOW POINT WHERE CONDUITS LEAVE DRYWELL AND TURN ONTO WALKWAY.
 3. LADDERS & LANDINGS ARE SCHEMATIC. REFER TO VENDOR'S DRAWINGS FOR CONSTRUCTION.
 4. PROVIDE ALARM CONTACT FOR DRY WELL ROOF HATCH. REFER TO CIVIL DRAWINGS.
 5. PROVIDE CATHODIC PROTECTION CONDUIT AND WIRE PER MANUFACTURER'S INSTRUCTIONS.
 6. PROVIDE OBSTRUCTION LIGHTING CONDUIT AND WIRE AS REQUIRED. REFER TO CIVIL DRAWING DETAILS AND DET. 04, SHEET E6.
 7. PROVIDE ONE 120V DUPLEX GFCI WP RECEPTACLE (5-20R) ON ROOF.
 8. PROVIDE ANTENNA FEED CONNECTIONS PER CIVIL DRAWINGS.

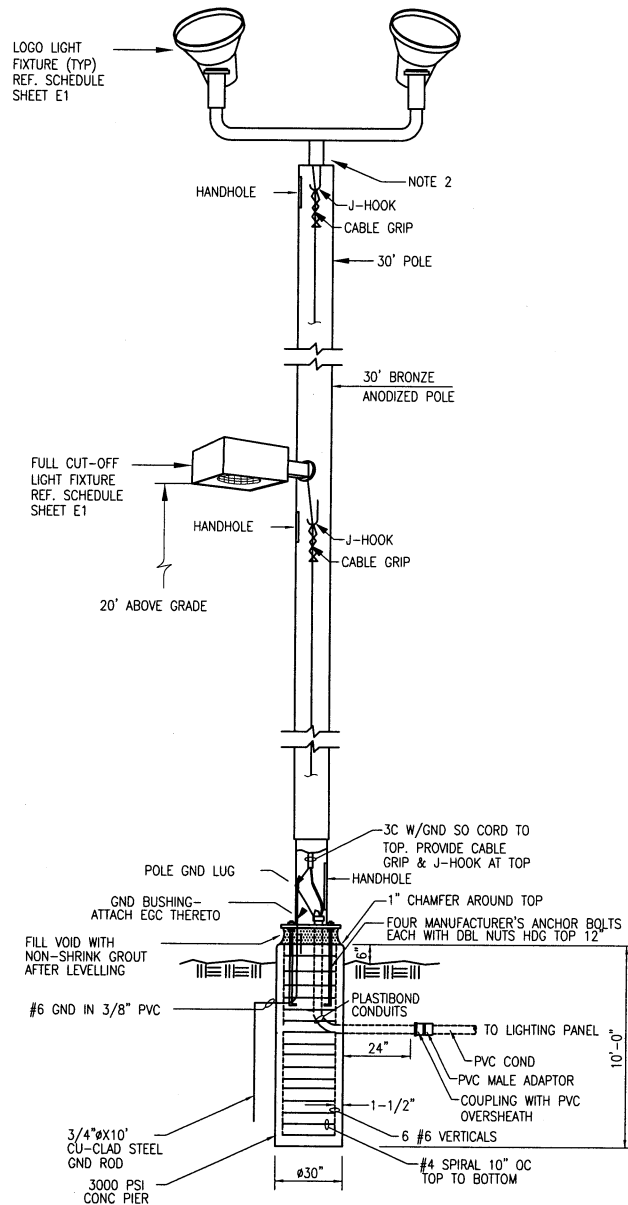
TANK ELEVATION

NO SCALE

CONDUIT AND CABLE SCHEDULE NOTE 1

TAG	WIRING	CONDUIT	SOURCE	DESTINATION	COMMENTS
1000	4#3/0	4"	UTILITY TRANSFORMER	UTILITY TRANSOCKET	
1001	4#3/0	2"	UTILITY TRANSOCKET	S.E. FUSED SWITCH	
1002	4#3/0, #4G	2"	S.E. FUSED SWITCH	MAIN SWITCH AT ET	
1002A	4#3/0, #4G	2"	MAIN SWITCH AT ET	PANEL "H"	
1003	3#4, #8G	1 1/4"	PANEL "H"	LIGHTING TRANSFORMER	
1004	4#1/0, #6G	2"	LIGHTING TRANSFORMER	PANEL "L"	
1005	4#10, #10G	1"	PANEL "L"	GATE OPERATOR	
1006	4#6, #10G	1"	PANEL "H"	ELEVATOR	
1007	2#10, #10G	3/4"	PANEL "H"	PARKING LOT LTG CONTACTOR	
1008	2#12, #12G	1"	PARKING LOT LTG CONTACTOR	PARKING LOT LIGHTS	
1009	EMPTY CONDUIT	5-2"	REF. PLANS	STUB OUT	3 LANDSCAPE, 2 SPARE
1010	EMPTY CONDUIT	2"	TELEPHONE BOARD	TELEPHONE PEDESTAL	TELEPHONE, RTU
1011	3#12, #12G	1"	PANEL "L"	24" MOTOR OPERATED VALVE	POWER
1012	2-2C/S#16, 8#14,	2"	24" MOTOR OPERATED VALVE	RTU PANEL	CONTROL & REPORT BACK
1013	1-2C/S#16	1"	LEVEL TRANSMITTER	RTU PANEL	LEVEL SIGNAL
1014	3#10, #10G	1"	PANEL "H"	LOGO LIGHTS	
1015	2#12, #12G	1"	PANEL "H"	IR HEATER	
1016	2-2C/S#16, 8#14,	2"	12" MOTOR OPERATED VALVE	RTU PANEL	CONTROL & REPORT BACK
1017	3#12, #12G	1"	PANEL "L"	12" MOTOR OPERATED VALVE	POWER
1018	3#8, #8G	1"	PANEL "H"	AHU-1	
1019	3#10, #10G	1"	PANEL "H"	CU-1	

- NOTES:
1. CONDUIT AND CABLE HAVE NOT BEEN SCHEDULED FOR INTERIOR LIGHTS, HEATERS, CONTROLS, OBSTRUCTION LIGHTS, VALVES, RTU PANEL, ETC. REF. NOTE 6, SHEET E2.



- NOTES:
1. AIM LOGO LUMINAIRES AT NIGHT AND SET FOR MAXIMUM COVERAGE.
 2. COORDINATE POLE TOP TENON & FLOODLIGHT SLIPFITTER SIZE.
 3. BRING CONDUITS TO HANDHOLE LEVEL & EQUIP EACH END WITH GND BUSHINGS. BOND LUGS TO POLE GND.
 4. PROVIDE CONCENTRIC RING LOUVER ON LOGO LIGHT FIXTURES.
 5. TYPICAL FOR 10 FIXTURES.

01 LIGHTING FIXTURES ON POLE

NOT TO SCALE

PANELBOARD SCHEDULE														
DESIGNATION	H											VOLTS	480Y/277V 3Ø, 4W	
	NEMA 12 (SURFACE MOUNT)											MAIN C.B.	125 A MCB	
												INT. RATING	18 KA SYM.	
CIRCUIT DESCRIPTION	PHASE A	PHASE B	PHASE C	BKR	CKT #	CKT #	CKT #	CKT #	PHASE A	PHASE B	PHASE C	CIRCUIT DESCRIPTION		
ELEVATOR	9300	9300	9300	60/3	1	2	3	4	15000	15000	15000	45 KVA LIGHTING PNL. TRANSFORMER		
ROADWAY LIGHTING	3656	3656		20/2	5	6	7	8	4416		15000	LOGO LIGHTS		
SPARE					9	10	11	12		4416		LOGO LIGHTS		
IR HEATER	2500	2500		20/2	13	14	15	16	45/3			AHU-1		
CU-1					17	18	19	20				SPARE		
OUTDOOR PEDESTAL LIGHTING					21	22	23	24				SPARE		
SPARE					25	26	27	28	125/3			SPARE		
SPARE					29	30						SPARE		
PHASE SUBTOTALS	15456	15456	9300						PHASE	19416	19416	19416		
									TOTAL	34872	34872	28716		
									PANELBOARD VA TOTAL	98460				
480Y/277V, 3Ø, 4W, 225 A BUS 30 CKT. MCB POWER PNL. SQ D CLASS 1670 NF430L2C/MH50WP													LOCATION: ROCKWALL COUNTRY LANE ET.	PROVIDE INTEGRAL TVSS UNIT WITH 65 KA SURGE RATING SURGE COUNTER AND ALARM CONTACTS

PANELBOARD SCHEDULE														
DESIGNATION	L											VOLTS	208Y/120V 3Ø, 4W	
	NEMA 12 (SURFACE MOUNT)											150 A MCB		
CIRCUIT DESCRIPTION	PHASE A	PHASE B	PHASE C	BKR	CKT #	CKT #	CKT #	CKT #	PHASE A	PHASE B	PHASE C	CIRCUIT DESCRIPTION		
GROUND FLOOR LIGHTS	1680			20/2	1	2	3	4	20/2	1680		SECOND FLOOR LIGHTS		
LADDER, WALKWAY, MANWAY LIGHTS		1680		20/1	5	6	7	8	20/2		1200	THIRD FLOOR LIGHTS		
LADDER, WALKWAY, MANWAY LIGHTS	600		600	20/1	9	10	11	12	20/1		250	INSTRUMENT PANEL		
CATHODIC PROTECTION		500		20/1	13	14	15	16	20/1		100	CHLORINE ANALYZER		
RECEPTACLES, FIRST FLOOR LIGHTS			1440	20/1	17	18	19	20	20/1		1440	HEAT TRACE LT		
SUMP PUMP	1200			20/1	21	22	23	24	20/1	300		RECEPTACLES		
GATE OPERATOR		1100		20/3	25	26	27	28	20/2	1200		THIRD FLOOR LIGHTS		
		1100	1100		29	30	31	32				HEAT TRACE PT		
24" MOV		500	500	20/3	33	34	35	36	20/1	300	540	OUTSIDE & ROOF RECPT.		
OBSTRUCTION LIGHT		250		20/1	37	38	39	40	20/1		500	FIRE ALARM PANEL		
MECHANICAL ROOM LIGHT				20/1	41	42						12" MOV		
RESTROOM LIGHT				20/1						500		SPARE		
SPARE				20/1								SPARE		
SPARE				20/1								SPARE		
SPARE				20/1								SPARE		
SPARE				20/1								SPARE		
PHASE SUBTOTALS												SPARE		
SQUARE D NOOD 430L225CU OR EQUAL													PROVIDE INTEGRAL TVSS UNIT WITH 65 KA SURGE RATING SURGE COUNTER AND ALARM CONTACTS	PANELBOARD VA TOTAL
													NEUTRAL	GROUND

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Joseph J. Kotrla
DATE: 2-19-07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
ELECTRICAL
DETAILS
SHEET I

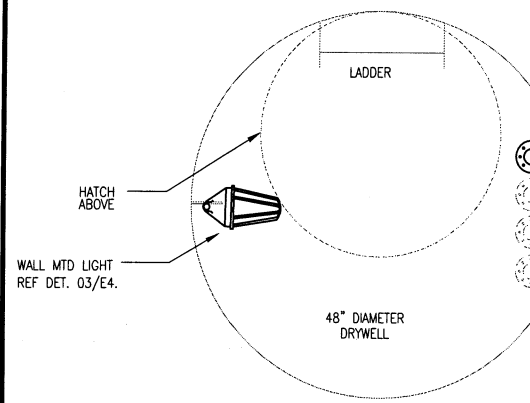
BHC
PROJECT NO.
2005 149

SHEET NO.

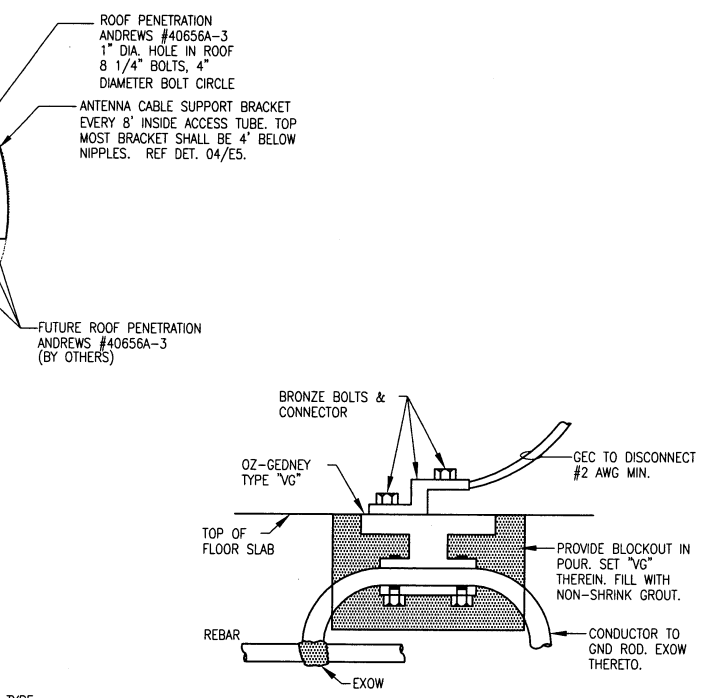
FEBRUARY, 2007

E3

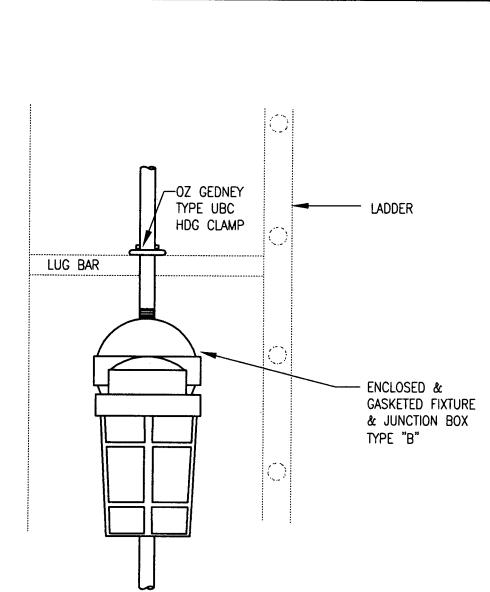
CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM



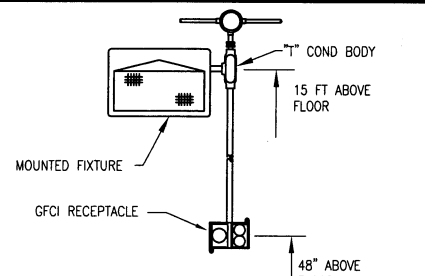
01 PLANVIEW-DRYWELL
NOT TO SCALE



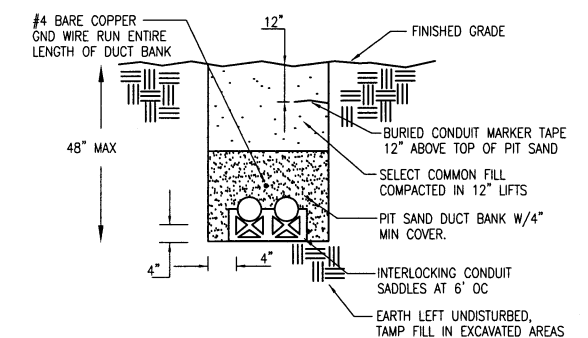
02 IN-SLAB GROUNDING CONDUCTOR
NOT TO SCALE



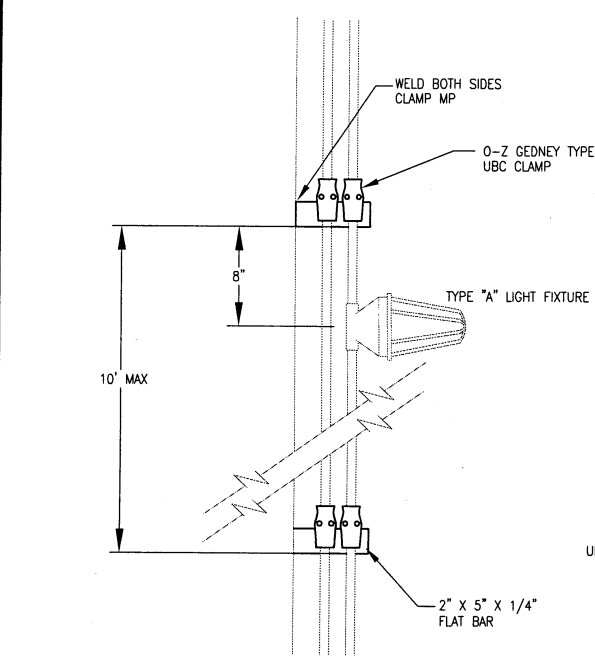
05 LADDER LIGHT FIXTURE
NOT TO SCALE TYP. FOR 6



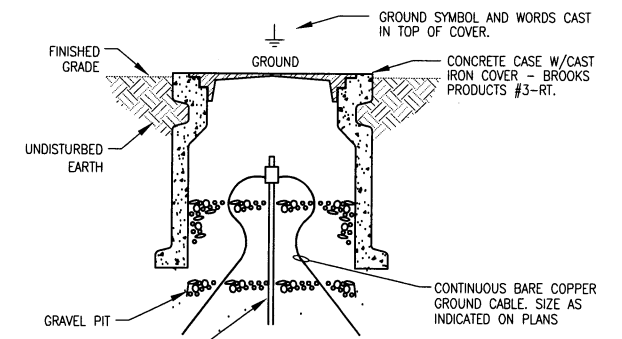
11 TYPICAL LTG FIXTURE "D"
MTG DETAIL
NOT TO SCALE



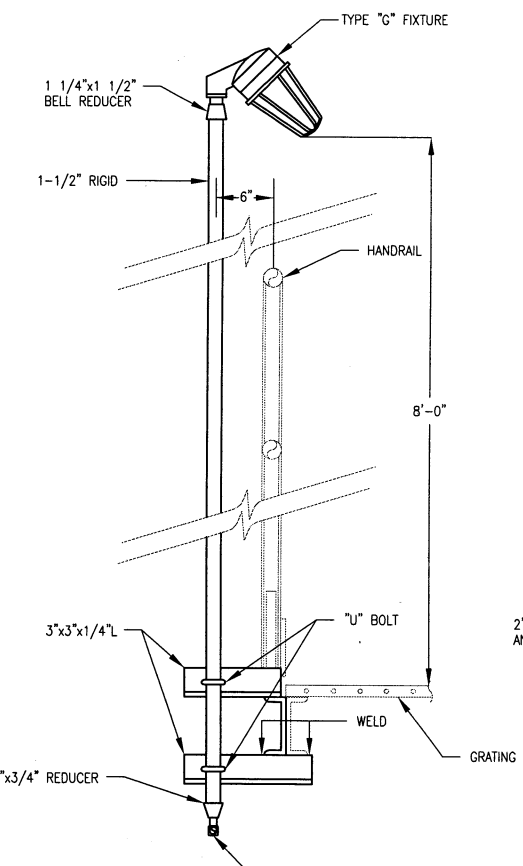
12 PIT SAND ENCASED UNDERGROUND DUCTBANK
NOT TO SCALE



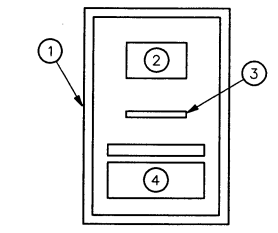
03 DETAIL-DRYWELL LIGHT
NOT TO SCALE



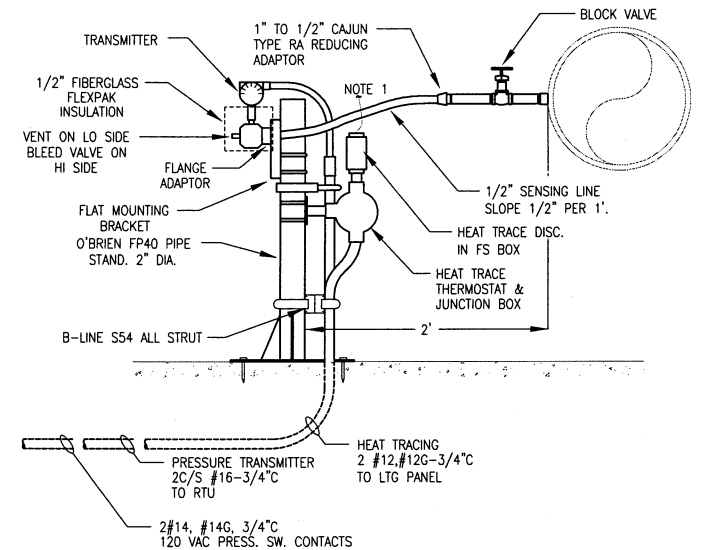
06 GROUND ROD & WELL
NOT TO SCALE



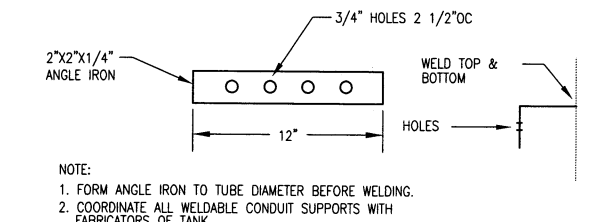
10 HANDRAIL MOUNTED LIGHT FIXTURE
NOT TO SCALE TYP. FOR 2



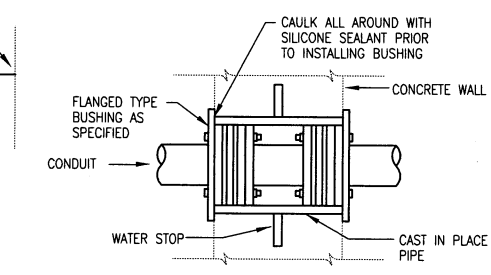
13 RTU CABINET



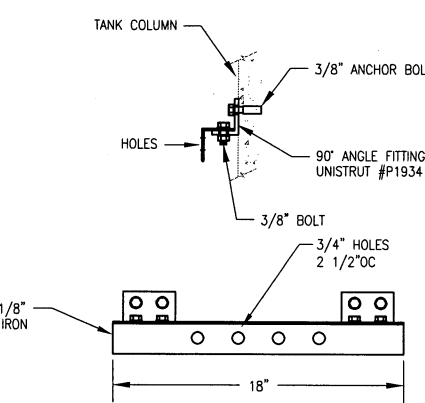
14 DETAIL- PRESSURE TRANSMITTER
NOT TO SCALE



04 DETAIL-DRYWELL ANTENNA BRACKET



07 WATERTIGHT CONDUIT PENETRATION
NOT TO SCALE



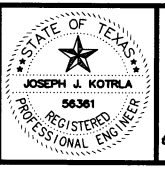
08 DETAIL- ANTENNA BRACKET TANK COLUMN
NOT TO SCALE

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BY JKK DATE 12/23/08

CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM

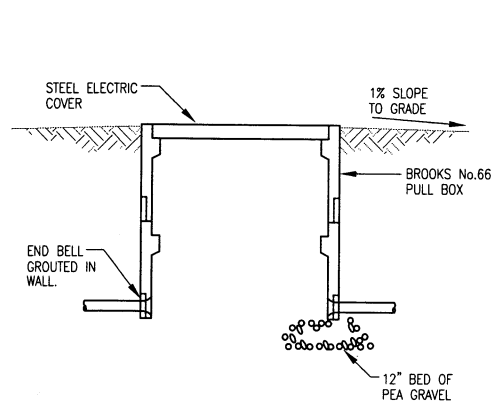
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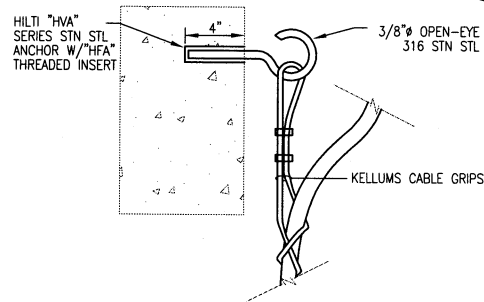
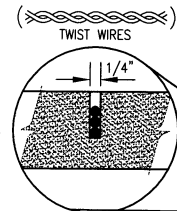
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Joseph J. Kotrla
DATE: 2-19-07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
ELECTRICAL
DETAILS
SHEET II

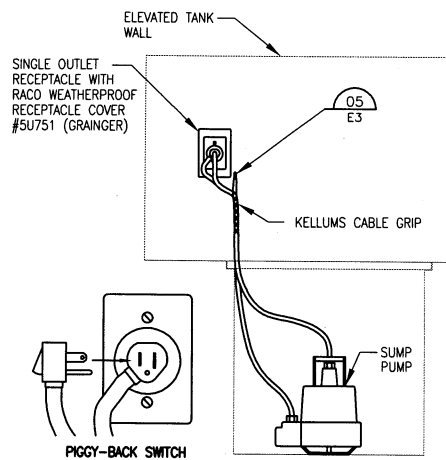
BHC
PROJECT NO. 2005 149
FEBRUARY, 2007
SHEET NO. **E4**



01 PULL BOX
NOT TO SCALE

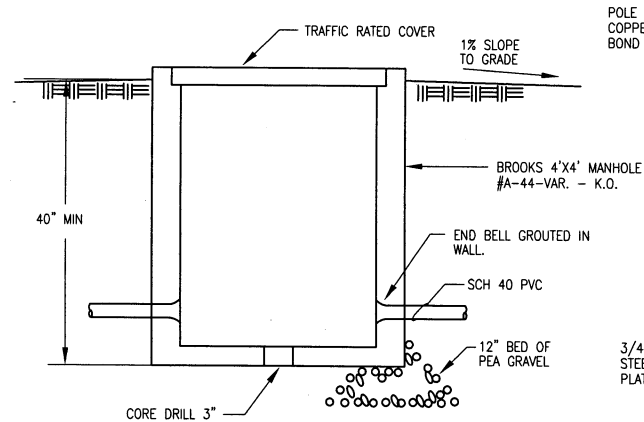


05 TYPICAL CABLE SUPPORT
NOT TO SCALE

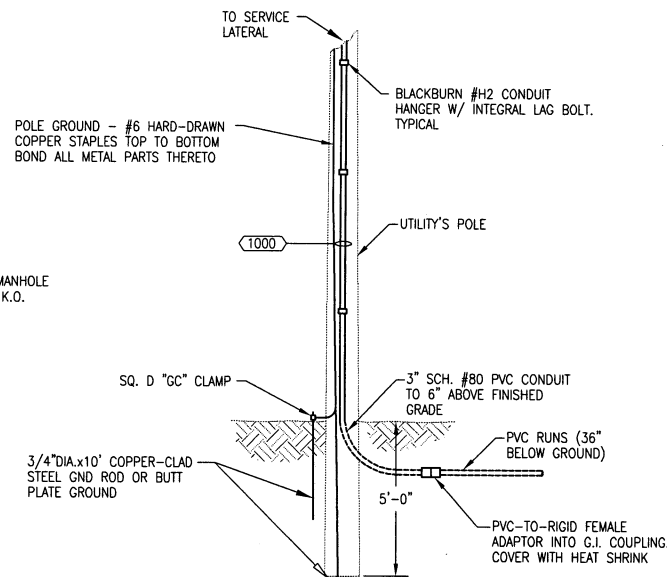


NOTES:
1. TYPICAL FOR ELEVATED TANK SUMP PUMPS.

04 DETAIL - SUMP PUMP
NOT TO SCALE

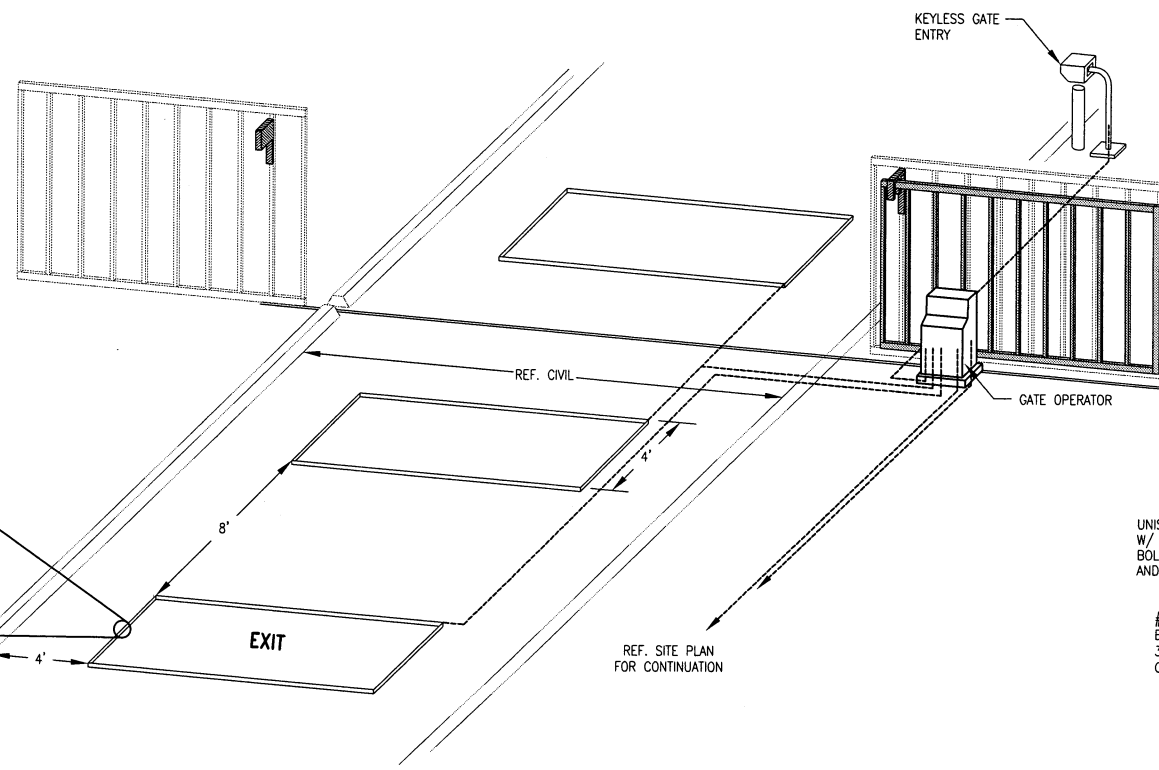


06 DETAIL - HANDHOLE
NOT TO SCALE

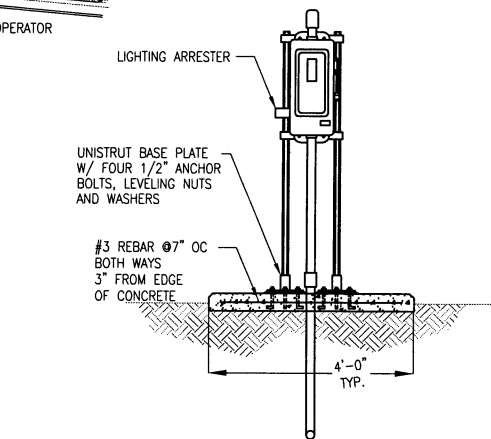


NOTES:
1. CONSTRUCT PER ONCOR STANDARDS.

03 ELECTRICAL SERVICE POLE
NOT TO SCALE

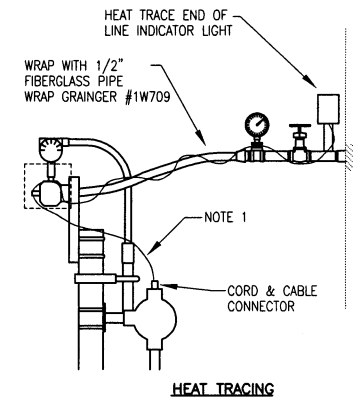


02 MOTORIZED GATE
NOT TO SCALE



- NOTES:
- SERVICE ENTRANCE RATED 480/277V, 4W (3 BLADES & FUSE HOLDERS, 1-S/N) 200A HEAVY DUTY NEMA 4X VISIBLE BLADE, LOCKABLE SAFETY SWITCH WITH 200A FR-S R BUSSMAN FUSES, GROUNDING LUG, LOCK-ON PROVISION & SOLID NEUTRAL. SQUARE D CLASS 3110 H364NDS, H200, GL, SPLD, CLR OR EQUAL.
 - REF SITE PLAN FOR CONTINUATION.
 - 4" SCH.#40 PVC TO UTILITY TRANSFORMERS.
 - GROUNDING ELECTRODE CONDUCTOR SHALL BE #2 TW GREEN, PROTECT WITH SCH.#80 PVC CONDUIT.
 - PROVIDE 480V 3Ø LIGHTNING ARRESTER. DELTA LA-603 OR EQUAL.

07 ELECTRICAL SERVICE ENTRANCE
NOT TO SCALE



- NOTES:
- RUN HEAT TRACE CABLE FROM THERMOSTAT TO LEVEL TRANSMITTER, LOOP ONCE AND PROCEED DOWN 1/2" SENSING LINE, STOP AT WET RISER AND TERMINATE WITH END TERMINATION KIT. INSULATE 1/2" SENSING LINE WITH SPECIFIED INSULATION.
 - TWO CONDUIT HANGERS BOLTED TOGETHER, ONE 2" AND ONE 3/4", TYP.
 - SENSING LINE AND FITTINGS SHALL BE 1/2" STAINLESS STEEL SEAMLESS TUBING.
 - CONNECT SENSING LINE TO HI PRESSURE PORT.

08 DETAIL - LEVEL TRANSMITTER

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BY JJK DATE 12/23/08

CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM

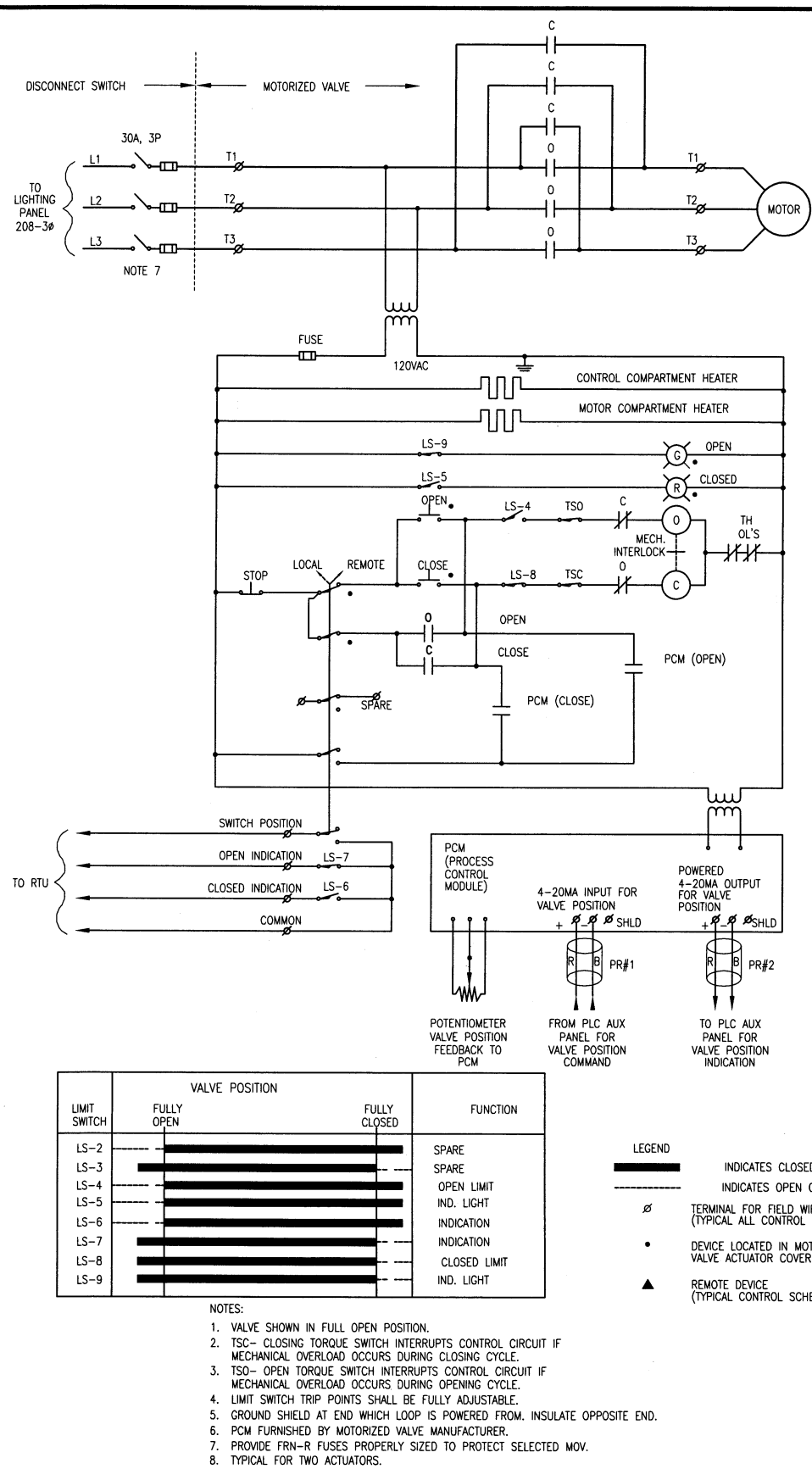
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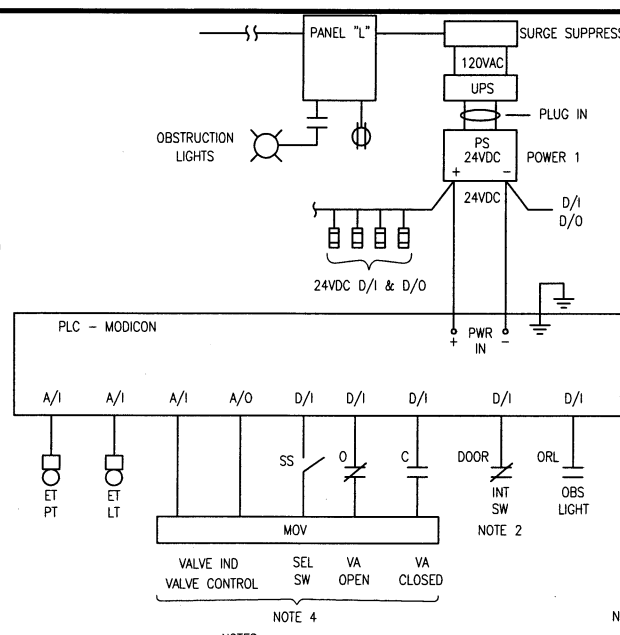
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DATE: 2-19-07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
ELECTRICAL
DETAILS
SHEET III

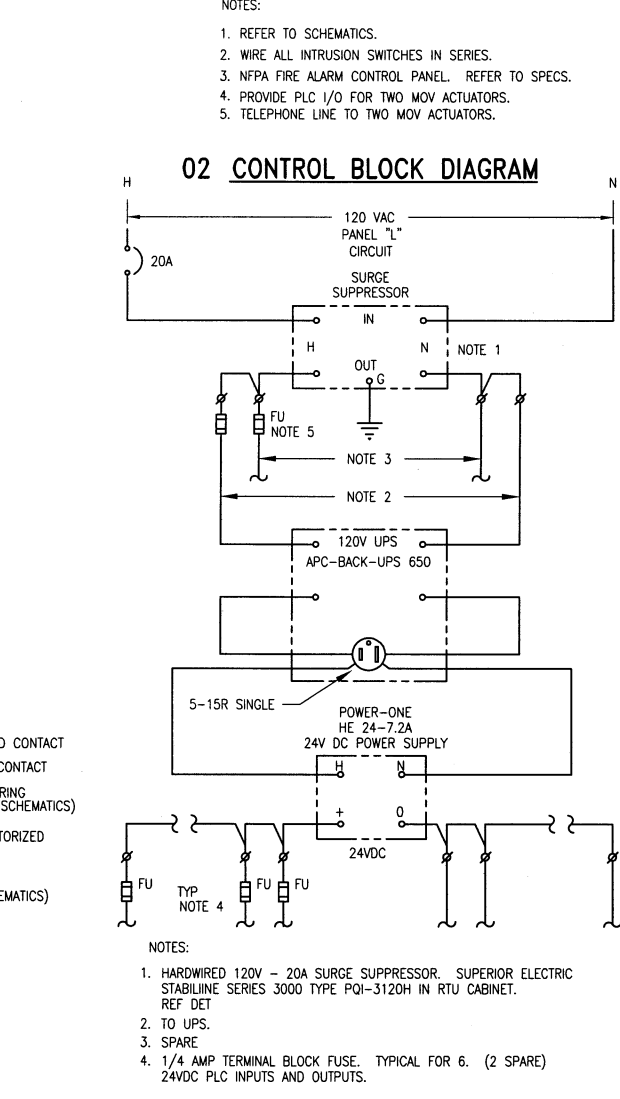
BHC
PROJECT NO.
2005 149
FEBRUARY, 2007
SHEET NO.
E5



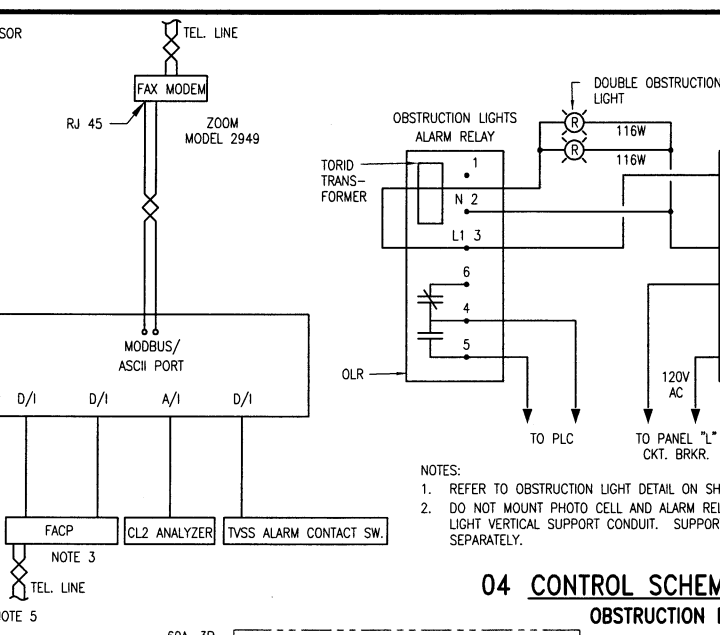
01 CONTROL SCHEMATIC-MOTORIZED VALVE ACTUATOR
TYPICAL FOR TWO



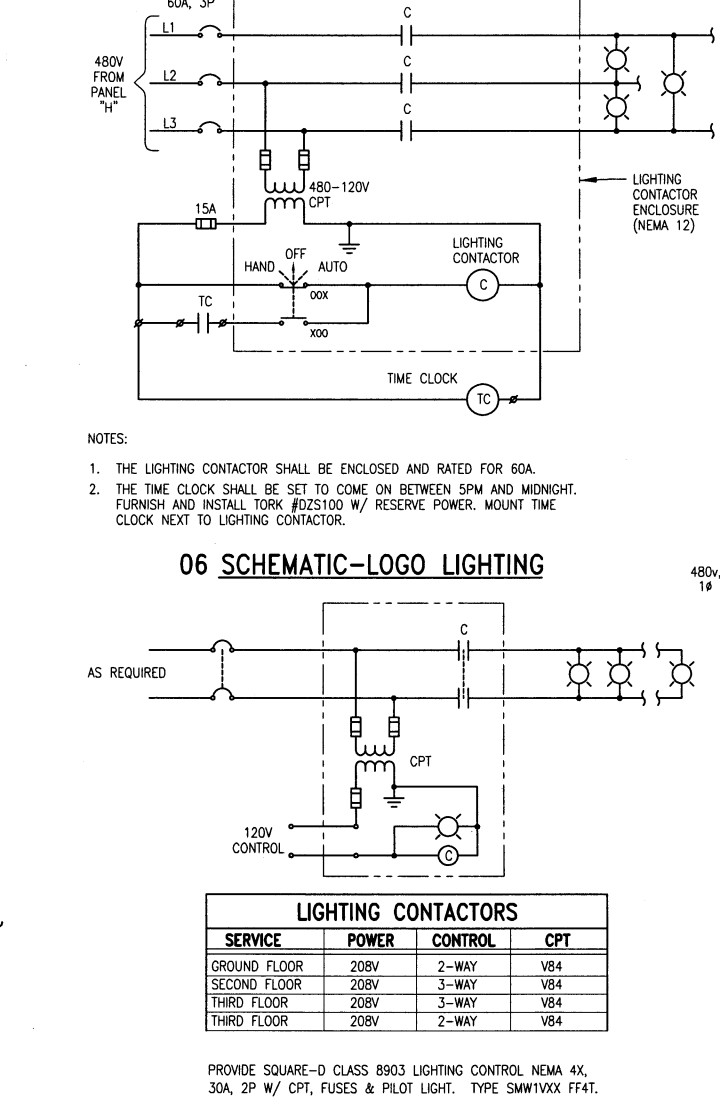
02 CONTROL BLOCK DIAGRAM



03 AC & DC POWER WITH UPS



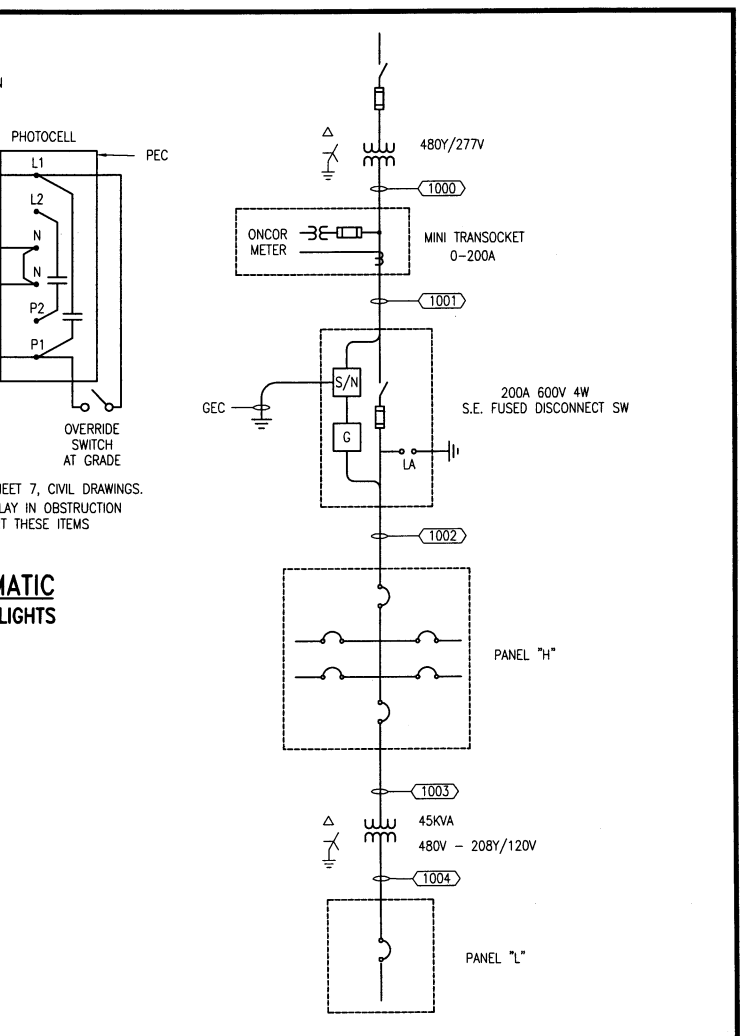
04 CONTROL SCHEMATIC OBSTRUCTION LIGHTS



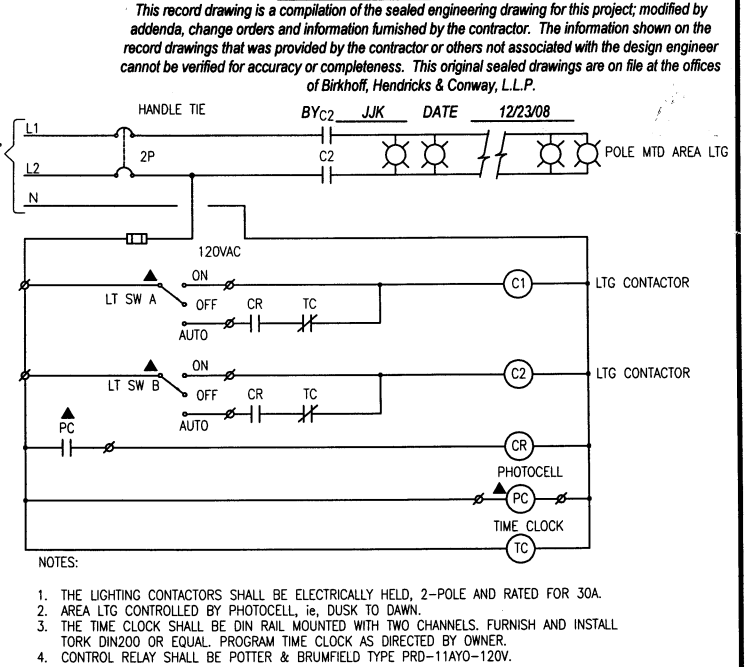
LIGHTING CONTACTORS

SERVICE	POWER	CONTROL	CPT
GROUND FLOOR	208V	2-WAY	V84
SECOND FLOOR	208V	3-WAY	V84
THIRD FLOOR	208V	3-WAY	V84
THIRD FLOOR	208V	2-WAY	V84

07 SCHEMATIC - LIGHTING CONTACTORS



ONE LINE DIAGRAM



CONTROL SCHEMATIC- OUTDOOR AREA LIGHTING

CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM

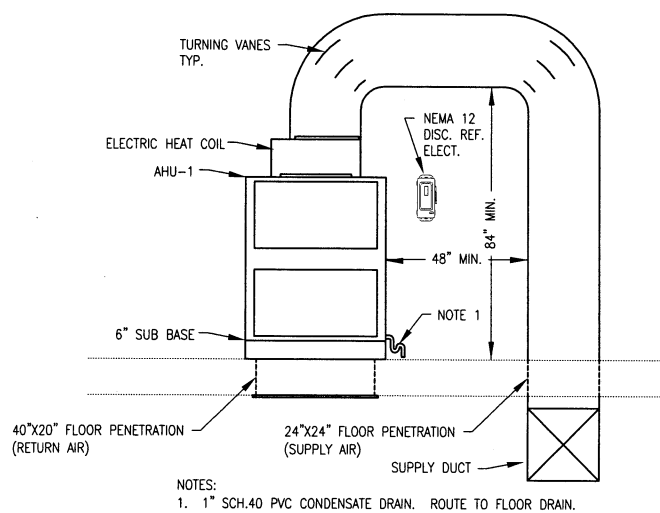
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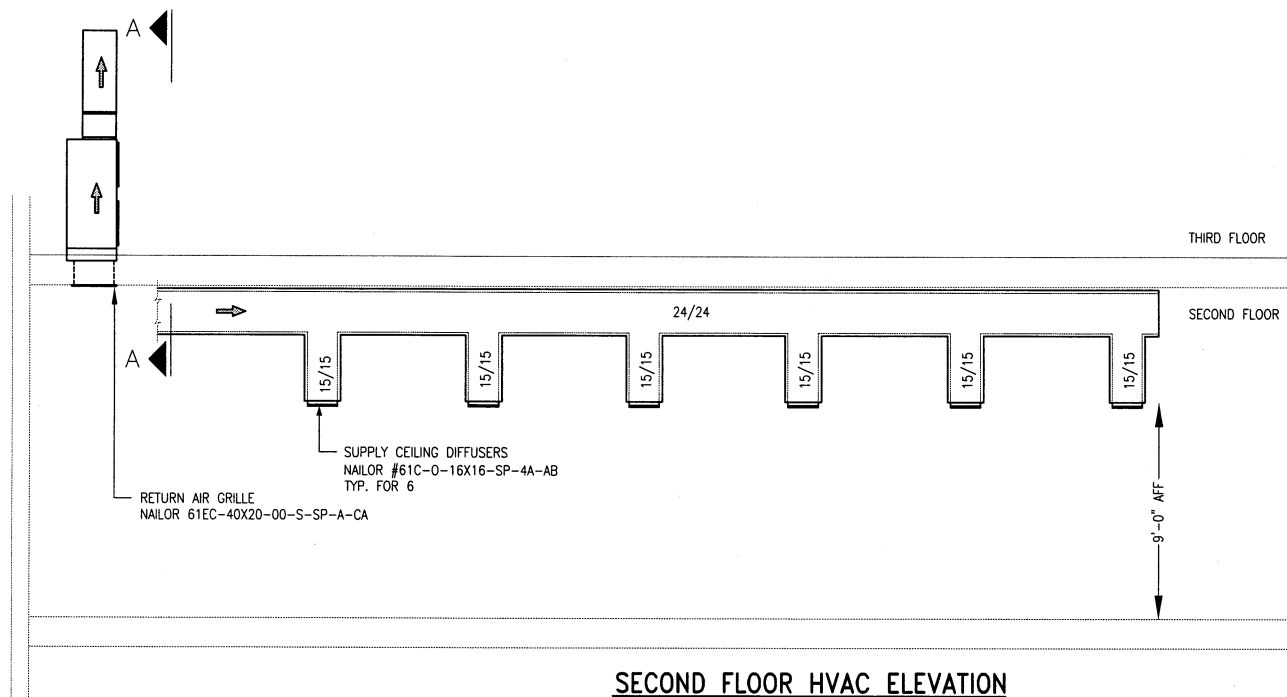
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DATE: 2-19-07

CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
ELECTRICAL CONTROL SCHEMATICS

BHC PROJECT NO. 2005 149
FEBRUARY, 2007
SHEET NO. E6



02 SECTION "A"- "A"
NOT TO SCALE



SECOND FLOOR HVAC ELEVATION

SCALE: 1/8"=1'-0"

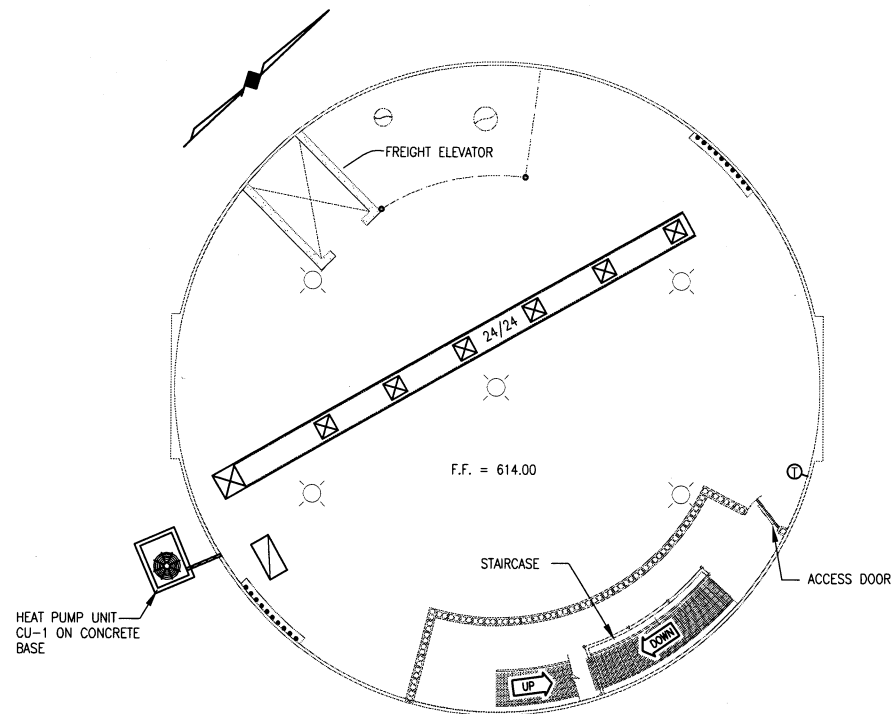
AIR HANDLER UNIT SCHEDULE					
DESIGNATION	S/A CFM	HTG. KW	VOLT/PH	MANUFACTURER/MODEL	ACCESSORIES
AHU-1	3000	25	460/3	TRANE #TWE090A4	
HEAT PUMP SCHEDULE					
DESIGNATION	BTUH	VOLT/PH	SEER EER	MANUFACTURER/MODEL	ACCESSORIES
CU-1	91,000	460/3	13.00	TRANE #4TWA090A400F	NOTE 1

NOTES:

1. PROVIDE EVAPORATOR DEFROST CONTROL KIT, TRANE #AY28X079.
2. PROVIDE ADJUSTABLE OUTSIDE AIR DAMPER, SET AT 10%.
3. ROUTE CONDENSATE DRAIN TO FLOOR DRAIN.
4. PROVIDE VIBRATION ISOLATORS.

03 DETAIL - AIR CONDITIONING UNIT

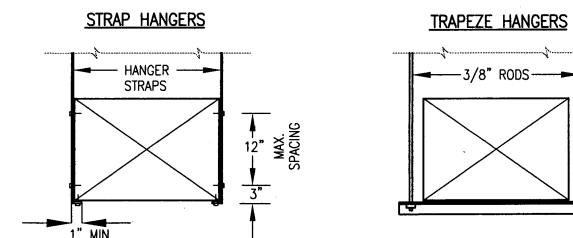
NOT TO SCALE



SECOND FLOOR HVAC PLAN

SCALE: 1/8"=1'-0"

HVAC PLAN SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	DUCT SECTION (SUPPLY)
	DUCT SECTION (EXHAUST OR RETURN)
	TURNING VANES
	VOLUME DAMPER - MANUAL OPERATION
	DUCT (1ST FIGURE, SIDE SHOWN; 2ND FIGURE, SIDE NOT SHOWN) SIZE REPRESENTS AIR STREAM DIMENSION
	DIRECTION OF FLOW
	TRANSITION
	SUPPLY OUTLET, CEILING, SQUARE (TYPE AS SPECIFIED)
	SUPPLY OUTLET, CEILING, ROUND (TYPE AS SPECIFIED)
	THERMOSTAT
	UNIT HEATER (HORIZONTAL)



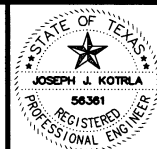
HANGER SIZE FOR RECTANGULAR DUCT				
LONGEST DIM. OF DUCT	ROUND HANGERS	STRAP HANGERS	TRAPEZE SHELF ANGLES	MAXIMUM SPACING
UP THROUGH 18"	8 GA. WIRE	1" x 16 GA.	1" x 1" x 1/8"	10'-0"
19" THRU 30"	8 GA. WIRE	1" x 16 GA.	1" x 1" x 1/8"	10'-0"

05 STRAP AND TRAPEZE HANGERS FOR DUCTS
NOT TO SCALE

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CITY OF ROCKWALL, TEXAS
COUNTRY LANE ELEVATED STORAGE TANK
MECHANICAL
HVAC
PLANS & DETAILS

BHC
PROJECT NO. 2005 149
SHEET NO. M1
FEBRUARY, 2007

CHANGE ORDER NO. X
FIELD CHANGE
ADDENDUM