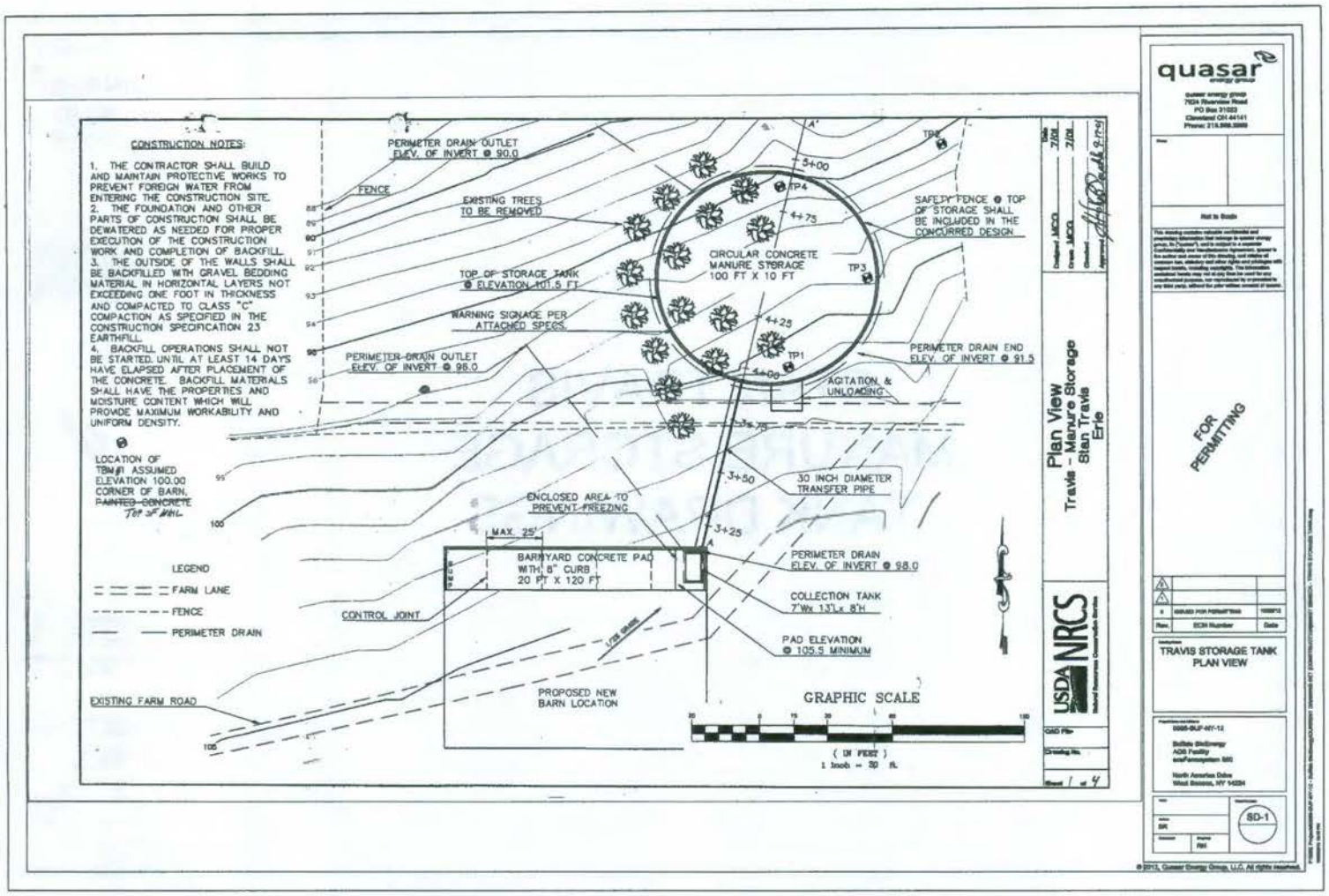
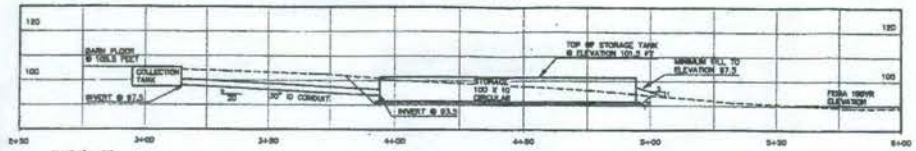
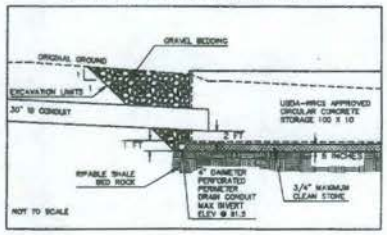
STAN TRAVIS
MANURE STORAGE
TANK DRAWINGS


CONSTRUCTION NOTES:
1. THE CONTRACTOR SHALL BUILD AND MAINTAIN PROTECTIVE WORKS TO PREVENT FOREIGN WATER FROM ENTERING THE CONSTRUCTION SITE.
2. THE FOUNDATION AND OTHER PARTS OF CONSTRUCTION SHALL BE DEWATERED AS NEEDED FOR PROPER EXECUTION OF THE CONSTRUCTION WORK AND COMPLETION OF BACKFILL.
3. THE OUTSIDE OF THE WALLS SHALL BE BACKFILLED WITH GRAVEL BEDDING MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING ONE FOOT IN THICKNESS AND COMPACTED TO CLASS "C" COMPACTION AS SPECIFIED IN THE CONSTRUCTION SPECIFICATION 23 EARTHFILL.
4. BACKFILL OPERATIONS SHALL NOT BE STARTED UNTIL AT LEAST 14 DAYS HAVE ELAPSED AFTER PLACEMENT OF THE CONCRETE. BACKFILL MATERIALS SHALL HAVE THE PROPERTIES AND MOISTURE CONTENT WHICH WILL PROVIDE MAXIMUM WORKABILITY AND UNIFORM DENSITY.
LOCATION OF TBM #1 ASSUMED ELEVATION 100.00 CORNER OF BARN, PAINTED CONCRETE Top of Wall
LEGEND
FARM LANE
FENCE
PERIMETER DRAIN
PERIMETER DRAIN OUTLET ELEV. OF INVERT @ 90.0
FENCE
EXISTING TREES TO BE REMOVED
TOP OF STORAGE TANK @ ELEVATION 101.5 FT.
WARNING SIGNAGE PER ATTACHED SPECS.
PERIMETER DRAIN OUTLET ELEV. OF INVERT @ 98.0
CONTROL JOINT
EXISTING FARM ROAD
PROPOSED NEW BARN LOCATION
ENCLOSED AREA TO PREVENT FREEZING
MAX. 25'
BARNYARD CONCRETE PAD WITH 6" CURB 20 FT X 120 FT
CIRCULAR CONCRETE MANURE STORAGE 100 FT X 10 FT
SAFETY FENCE @ TOP OF STORAGE SHALL BE INCLUDED IN THE CONCURRED DESIGN.
AGITATION & UNLOADING
30 INCH DIAMETER TRANSFER PIPE
PERIMETER DRAIN END ELEV. OF INVERT @ 91.5
PERIMETER DRAIN ELEV. OF INVERT @ 98.0
COLLECTION TANK 7'Wx 13'Lx 8'H
PAD ELEVATION @ 105.5 MINIMUM
TP1
TP2
TP3
TP4
3+00
4+75
4+25
4+00
3+75
3+50
3+25
GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.
Plan View
Travis - Manure Storage
Stan Travis
Erie
USDA NRCS
quasar
quasar energy group
7934 Riverview Road
PO Box 31003
Cleveland OH 44141
Phone: 216.999.3999
Not to Scale
FOR PERMITTING
TRAVIS STORAGE TANK PLAN VIEW
SD-1

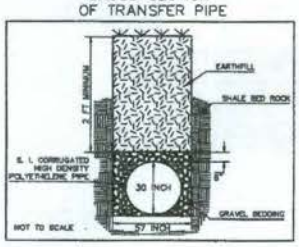
PROFILE VIEW A–A'

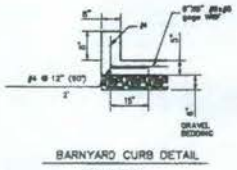


DETAIL OF TRANSFER PIPE OUTLET



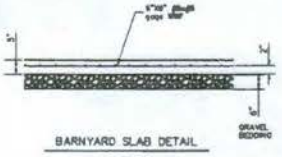
CROSS SECTION OF TRANSFER PIPE





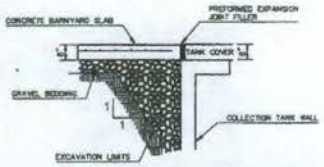
BARNYARD CURB DETAIL

NOT TO SCALE



BARNYARD SLAB DETAIL

NOT TO SCALE



BARNYARD SLAB/COLLECTION BOX DETAIL

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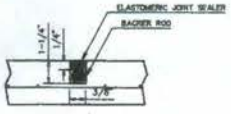

BARNYARD SAW CUT CONTROL JOINT DETAIL

NOT TO SCALE

CONSTRUCTION NOTES:

1. CONTROL JOINT MUST BE CUT WITHIN 6 HOURS OF CONCRETE PLACEMENT
2. ELASTOMERIC JOINT COMPOUND IS ASTM C920 TYPE S OR M GRADE P
3. SAND MAY BE SUBSTITUTED FOR BACKER MATERIAL

Cross-Section View
Travis - Manure Storage
Stan Travis
Erie County

USDA NRCS
Natural Resources Conservation Service

CAD File:

Drawing No.

Sheet 2 of 4

quasar energy group

quasar energy group
7034 Riverview Road
PO Box 31003
Cleveland OH 44141
Phone: 216.986.9999

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Rev.	ECN Number	Date
0	ISSUED FOR PERMITTING	10/09/13

TRAVIS STORAGE TANK
CROSS SECTIONS

0086-SUF-NY-13

Buffalo Bioenergy
ADS Facility
and Farmsystem 000

North Ansonia Drive
West Seneca, NY 14224

SD-2

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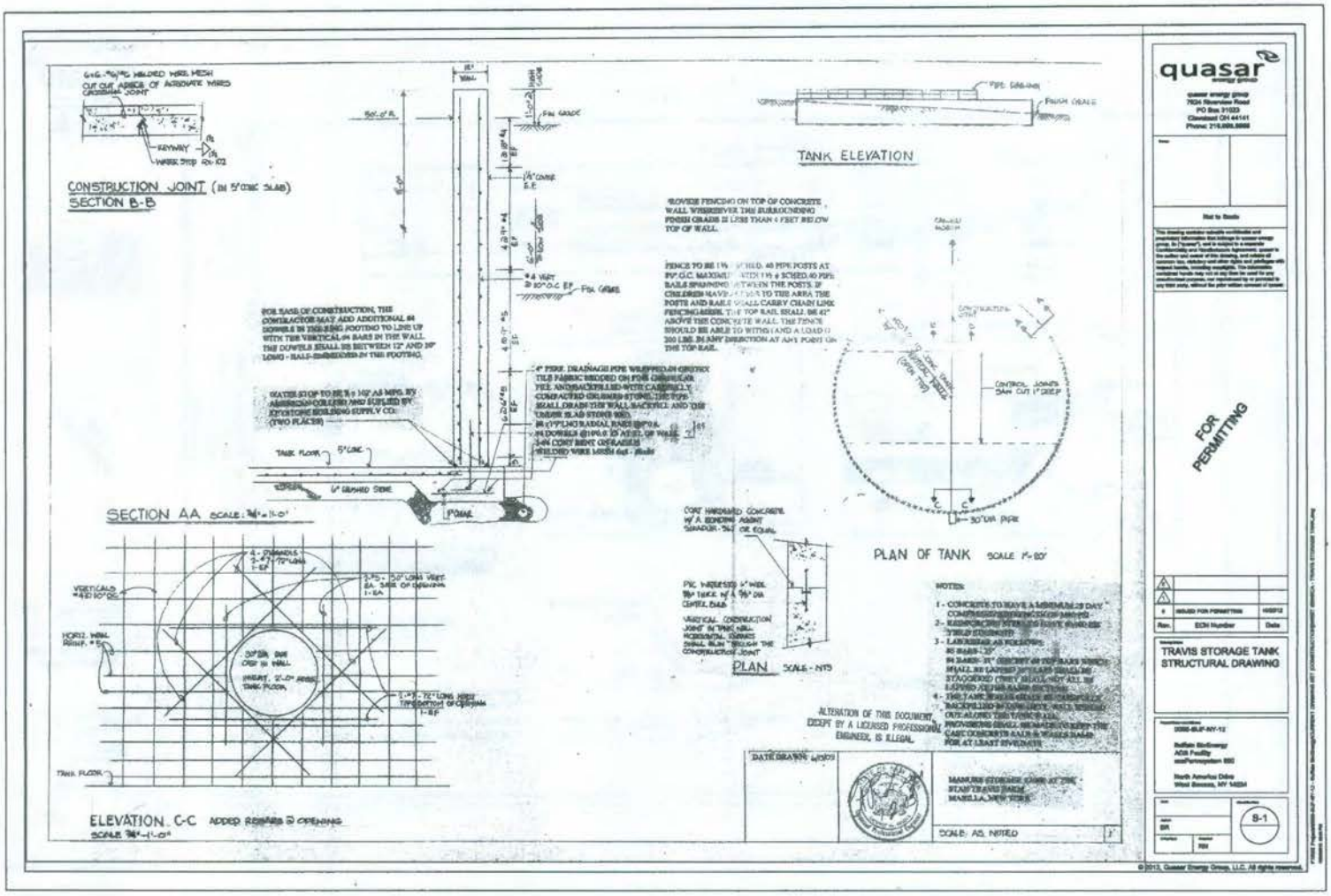
6x6-W2.9/W2.9 WELDED WIRE MESH
CUT CLEAR ANGLE OF ADJACENT WIRES
CONSTRUCTION JOINT (IN 5" CONC SLAB)
SECTION B-B
TANK ELEVATION
FOR BASE OF CONSTRUCTION, THE CONTRACTOR MAY ADD ADDITIONAL #4 DOWELS IN THE RING FOOTING TO LINE UP WITH THE VERTICAL #4 BARS IN THE WALL. THE DOWELS SHALL BE BETWEEN 12" AND 20" LONG - HALF EMBEDDED IN THE FOOTING.
4" PERF. DRAINAGE PIPE WRAPPED IN GEOTEX TILE FABRIC BEDDED ON FOR CIRCULAR PEA AND BACKFILLED WITH CAREFULLY COMPACTED CRUSHED STONE. THIS TYPE SHALL DRAIN THE WALL BACKFILL AND THE UNDER SLAB STONE BED.
SEATBELT TO BE 3/4 x 102" AS MFG. BY ABERDEEN CORDAGE AND SUPPLIED BY KEYSTONE BUILDING SUPPLY CO. (TWO PLACES)
TANK FLOOR
5" CONC
6" CRUSHED STONE
FOOTING
SECTION AA SCALE: 3/4"=1'-0"
PLAN OF TANK SCALE 1"=80'
CONTROL JOINTS SAW CUT 1" DEEP
30" DIA PIPE
CONT HARDENED CONCRETE W/ A FLOATING AGENT SHARDEX-SIKA OR EQUAL
PVC WATERSTOP 9" WIDE 3/8" THICK AT 4 3/8" DIA CENTER DUMB
VERTICAL CONSTRUCTION JOINT IN THIS WALL HORIZONTAL SURFACE SHALL RUN THROUGH THE CONSTRUCTION JOINT
PLAN SCALE - NTS
ELEVATION C-C ADDED REBARS @ OPENING
SCALE 3/4"=1'-0"
NOTES:
1 - CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI
2 - REINFORCING STEEL TO HAVE A MIN YIELD STRENGTH OF
3 - LAP SPLICES AS FOLLOWS:
#4 BARS - 24"
#4 BARS - 30" (EXCEPT AT TOP BARS WHICH SHALL BE LAPPED 30" LAPS SHALL BE STAGGERED (THEY SHALL NOT ALL BE LAPPED AT THE SAME SECTION)
4 - THE TANK BASE IS GRADED TO DRAIN TO A BACKFILLED TRENCH. THE TRENCH SHALL DRAIN OUT ALONG THE TANK'S AXIS PROVISIONS SHALL BE MADE TO KEEP THE CAST CONCRETE SALT & WATER TIGHT FOR AT LEAST FIVE DAYS.
ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER, IS ILLEGAL.
DATE DRAWN 4/30/12
SCALE: AS NOTED
quasar energy group
7934 Rawlings Road
PO Box 31022
Cleveland OH 44141
Phone: 216.600.6666
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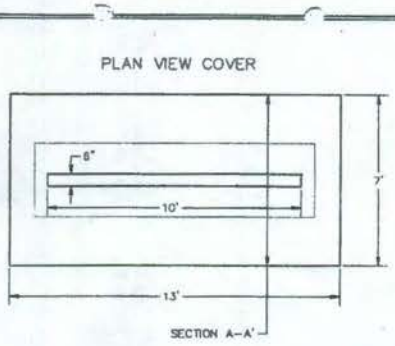
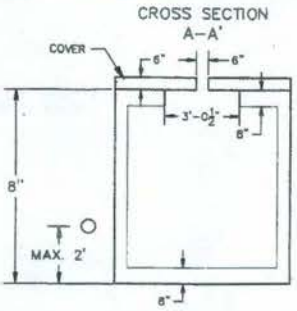
FOR PERMITTING
TRAVIS STORAGE TANK
STRUCTURAL DRAWING
Buffalo BioEnergy
ADS Facility
Pennsylvania
North America Drive
West Seneca, NY 14224
S-1

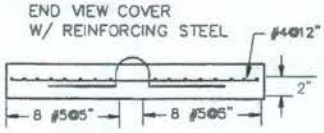


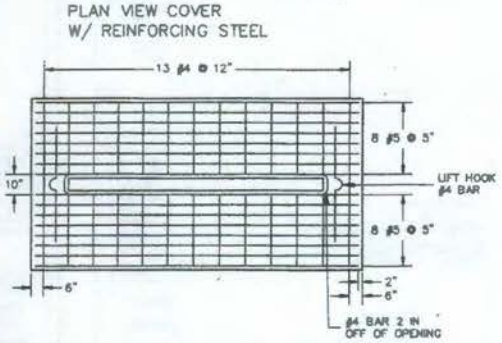


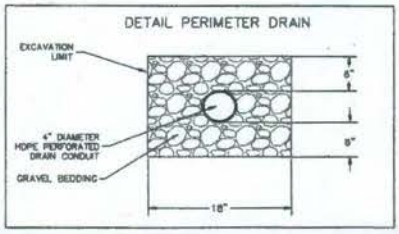
CONSTRUCTION NOTES:

1. ALL BARS HAVE 2 IN. CLEAR SPACING TO CONCRETE EDGES.
2. PRECAST REINFORCED CONCRETE TANK IS REQUIRED WITH MINIMUM STORAGE CAPACITY OF 4,200 GAL.
3. TANK DETAILS ARE FOR KOSTNER RECTANGULAR STRUCTURE (LS-RVPD) OR EQUIVALENT.
4. TANK SHALL BE CAPABLE OF WITHSTANDING A 5,000 LB AXLE LOAD.
5. TANK SHALL BE INSTALLED ACCORDING TO MANUFACTUERES SPECIFICATIONS.

4" DIAMETER PERFORATED PERIMETER DRAIN CONDUIT







NOT TO SCALE

COLLECTION TANK
Travis - Manure Storage
Stan Travis
Erie County

USDA NRCS

Sheet 3 of 4

quasar energy group
7934 Riverview Road
PO Box 31653
Cleveland OH 44141
Phone: 216.658.8600

FOR PERMITTING

TRAVIS MANURE STORAGE
COLLECTION TANK
STRUCTURAL DRAWING

S-2

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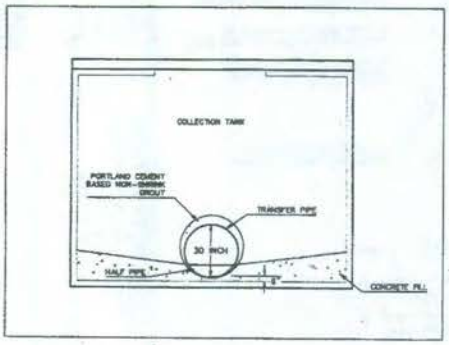
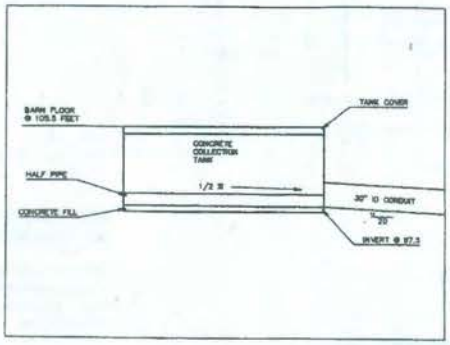
CROSS SECTION
OF TRANSFER PIPE/
COLLECTION TANK



PROFILE COLLECTION
TANK/TRANSFER PIPE



CONSTRUCTION NOTES:

1. COLLECTION TANK SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

2. GROUT MATERIAL SHALL BE A PORTLAND CEMENT BASED NON-SHRINK GROUT OR AS SPECIFIED BY THE MANUFACTURER.

NOT TO SCALE

USDA NRCS
Natural Resources Conservation Service

COLLECTION TANK
Travis - Manure Storage
Stan Travis
Erie County

CAD File:

Drawing No.

Sheet 4 of 4

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TRAVIS MANURE STORAGE
COLLECTION TANK
CROSS SECTIONS

05656-SLF-NY-12

Selkie Electricity
AD8 Facility
xxxPermopticon 666

North Amoritas Drive
West Seaxon, NY 14224

BR

RSI

S-3

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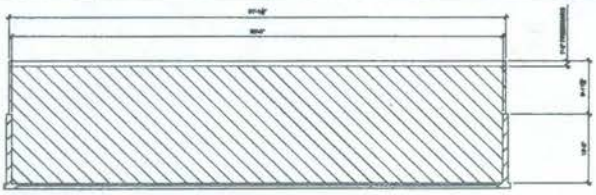
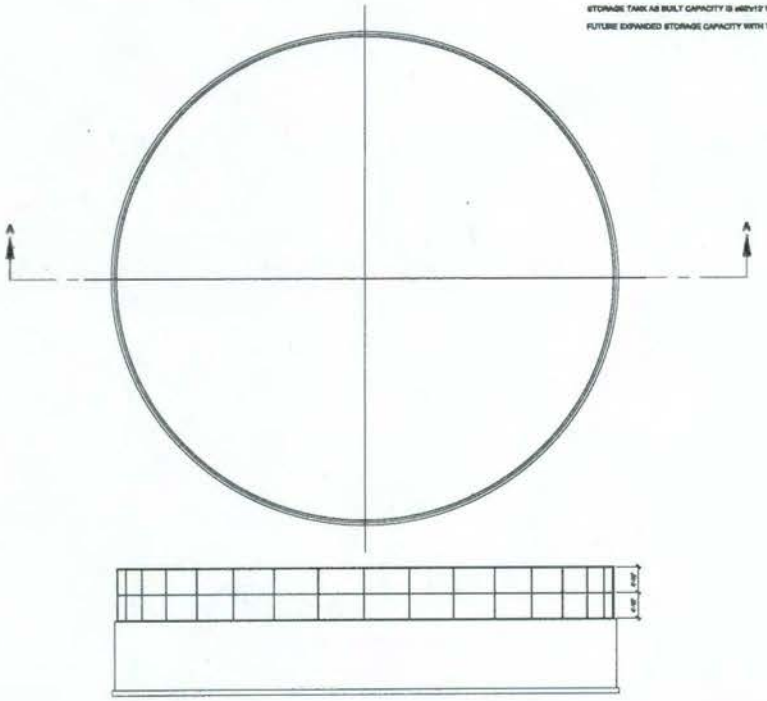


SECTION A-A

STORAGE TANK AS BUILT CAPACITY IS [illegible] WHICH EQUALS [illegible] GALLONS

FUTURE EXPANDED STORAGE CAPACITY WITH TWO ADDITIONAL RDWB OF 84 TANK PANELS IS 1,098,123 GALLONS



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quasar energy group
7555 Riverview Road
PO Box 31663
Cleveland OH 44141
Phone: 216.658.3099

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0	ISSUED FOR PERMITTING	11/22/12

TRAVIS MANURE STORAGE
COLLECTION TANK
ADDITIONAL STORAGE
CAPACITY

0088-SUF-NY-12

Suffolk BioEnergy
ADS Facility
wind*Farmsystem 500

North Junction Drive
West Seneca, NY 14224

Drawn	Checked
SR	RR

S-4

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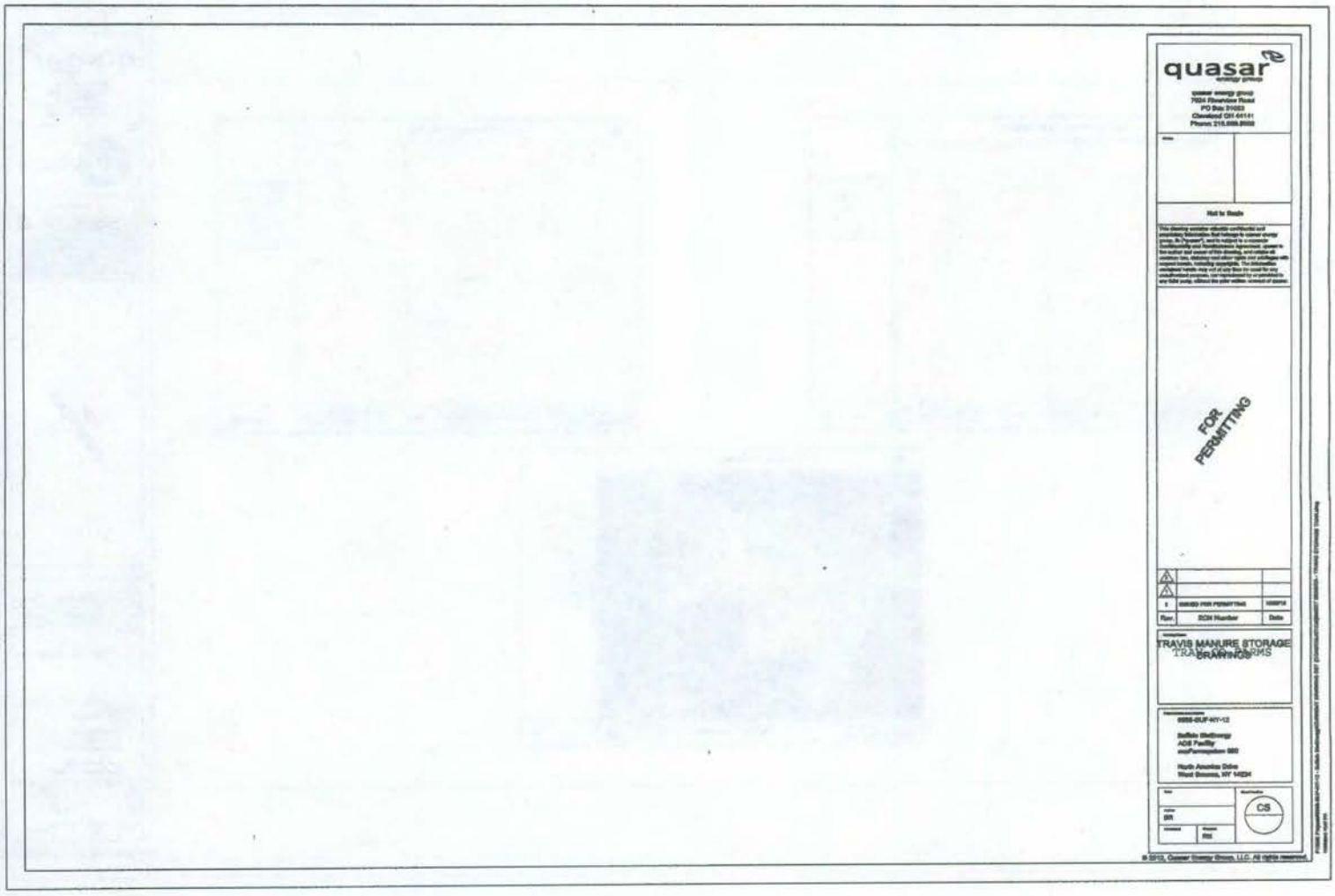
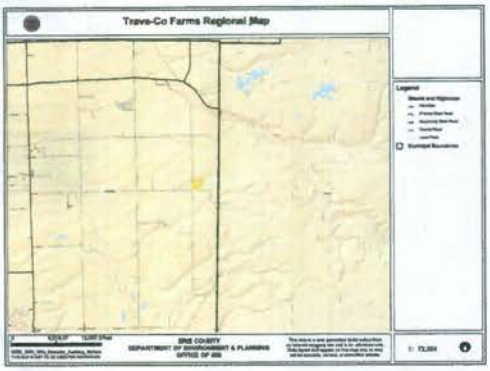
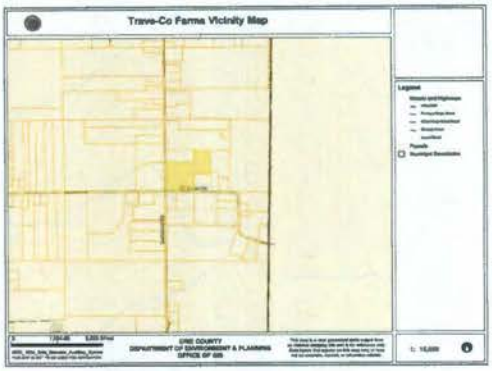

quasar
FOR PERMITTING
TRAVIS MANURE STORAGE
C5





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TRAV-CO FARMS

0068-BUF-NY-12

Buffalo BioEnergy
ADS Facility
Town/Municipality of 060

North Amherst Drive
West Seneca, NY 14224

SR

RM

FS-1

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Trav-Co Farms
Storage Tank Facility
Sustainable BioVolt, LLC

Trav-Co Farms
Storage Tank Facility
Sustainable BioVolt, LLC

quasar energy group
7034 Riverview Road
PO Box 31023
Cleveland OH 44141
Phone: 216.898.0500

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Rev.	ISSUED FOR PERMITTING	10/25/12
Rev.	ECN Number	Date

TRAVIS STORAGE TANK
125CS&R3EC7ONE

0085-SUP-NY-12

Sustainable BioEnergy
ADS Facility
and Farmingdale RBD

Kevin Amedeo Drive
West Seneca, NY 14224

SD-2

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U. S. GEOLOGICAL SURVEY
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NEW YORK
7.5-MINUTE SERIES
TRAV-DO FARMS
STORAGE TANK
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East Aurora, NY
SCALE 1:24 000
CONTOUR INTERVAL 10 FEET
ROAD CLASSIFICATION
COWLESVILLE, NY
2010