Geographic Information Systems

General Information about the use of GIS at GRU

March 2019

AVL – Automatic Vehicle Location

CU/CUE – Compatible Unit / Estimating – graphical tool used to design electric distribution infrastructure. Think complex virtual Lego assemblies that can be dragged and dropped onto a design that then generates blueprints & material reservations for crews to construct OH/UG power lines.

ERP – Enterprise Resource Planning - is a business process management software that allows an organization to use a system of integrated applications to manage the business and automate many back office functions such as HR, financials, customer information, plant maintenance, sales and marketing — in a single database, application and user interface.

ESRI – Environmental Systems Research Institute – leading vendor for geographic base maps.

GN / UN - Geometric Network / Utility Network. The GN is map-based navigation through electric & gas distribution infrastructure. The UN provides much deeper and broader data on the infrastructure elements. Liken this migration to going from a house with a land line to a house with full wireless coverage and smart devices with all of the data and control provided by moving to this technology.

GIS – Geographic Information System – the Google maps for Energy Delivery – shows pipes & wires & equipment on map.

MIMS – Mobile Information Management System – SSP Innovations brand name for map viewer and graphical design tool built specifically for utility operations and infrastructure.

MM – SAP's Material Management application module.

OMS – Outage Management System – application that System Control uses to record and track outages, restorations and dispatched resources.

OH/UG – Over Head/Under Ground.

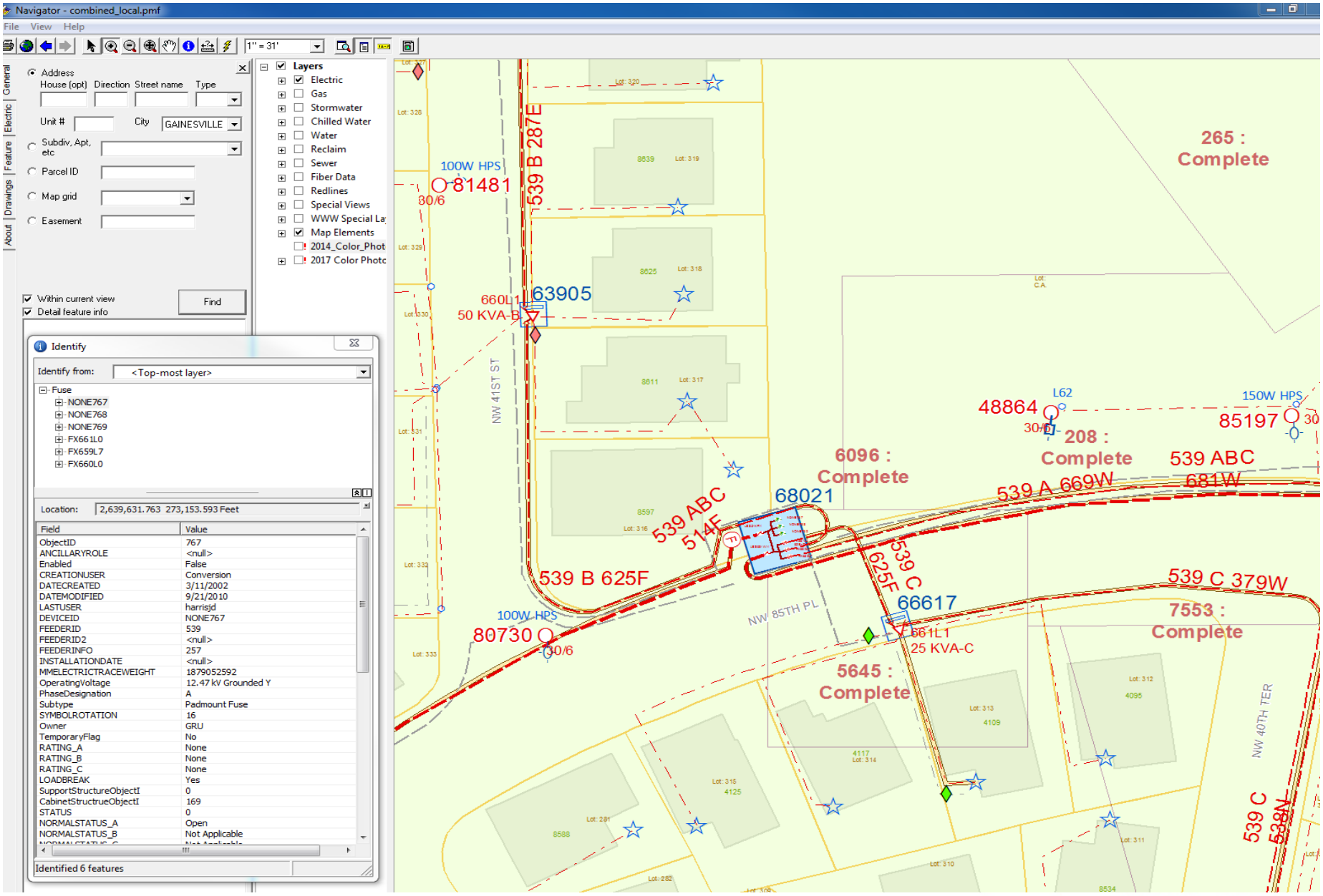
OSI – Open Systems International – vendor for OMS.

PHMSA – Pipeline and Hazardous Material Safety Administration – federal oversight of GRU gas distribution operations.

SAP – Systems, Applications & Products in data processing. The German company that is the largest ERP provider in the world with 19% to 22% of the market share.

SSP Innovations – Company that sells MIMS Mobile.

WMS – Work Management System.



What we do (in GIS)

GRU More than Energy

Searching for and finding a pad-mount switch in GRU's GIS application

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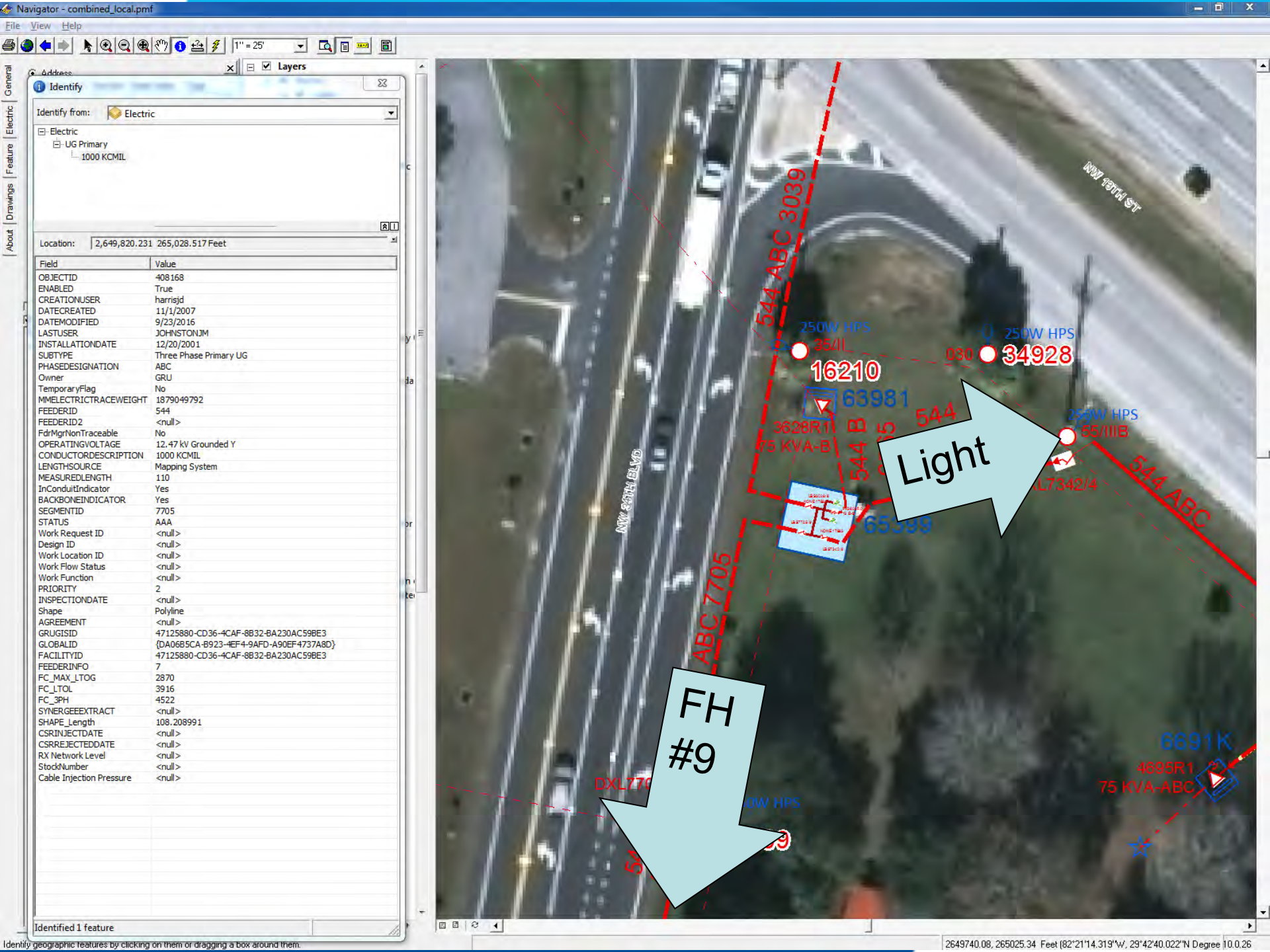
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File View Help
Layers
Identify
Identify from: Electric
Electric
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1000 KCMIL
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DATECREATED 11/1/2007
DATEMODIFIED 9/23/2016
LASTUSER JOHNSTONJM
INSTALLATIONDATE 12/20/2001
SUBTYPE Three Phase Primary UG
PHASEDESIGNATION ABC
Owner GRU
TemporaryFlag No
MMELECTRICTRACEWEIGHT 1879049792
FEEDERID 544
FEEDERID2 <null>
FdrMgrNonTraceable No
OPERATINGVOLTAGE 12.47 kV Grounded Y
CONDUCTORDESCRIPTION 1000 KCMIL
LENGTHSOURCE Mapping System
MEASUREDLENGTH 110
InConduitIndicator Yes
BACKBONEINDICATOR Yes
SEGMENTID 7705
STATUS AAA
Work Request ID <null>
Design ID <null>
Work Location ID <null>
Work Flow Status <null>
Work Function <null>
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FACILITYID 47125880-CD36-4CAF-8B32-BA230AC59BE3
FEEDERINFO 7
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FC_LTOL 3916
FC_3PH 4522
SYNERGEEEXTRACT <null>
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RX Network Level <null>
StockNumber <null>
Cable Injection Pressure <null>
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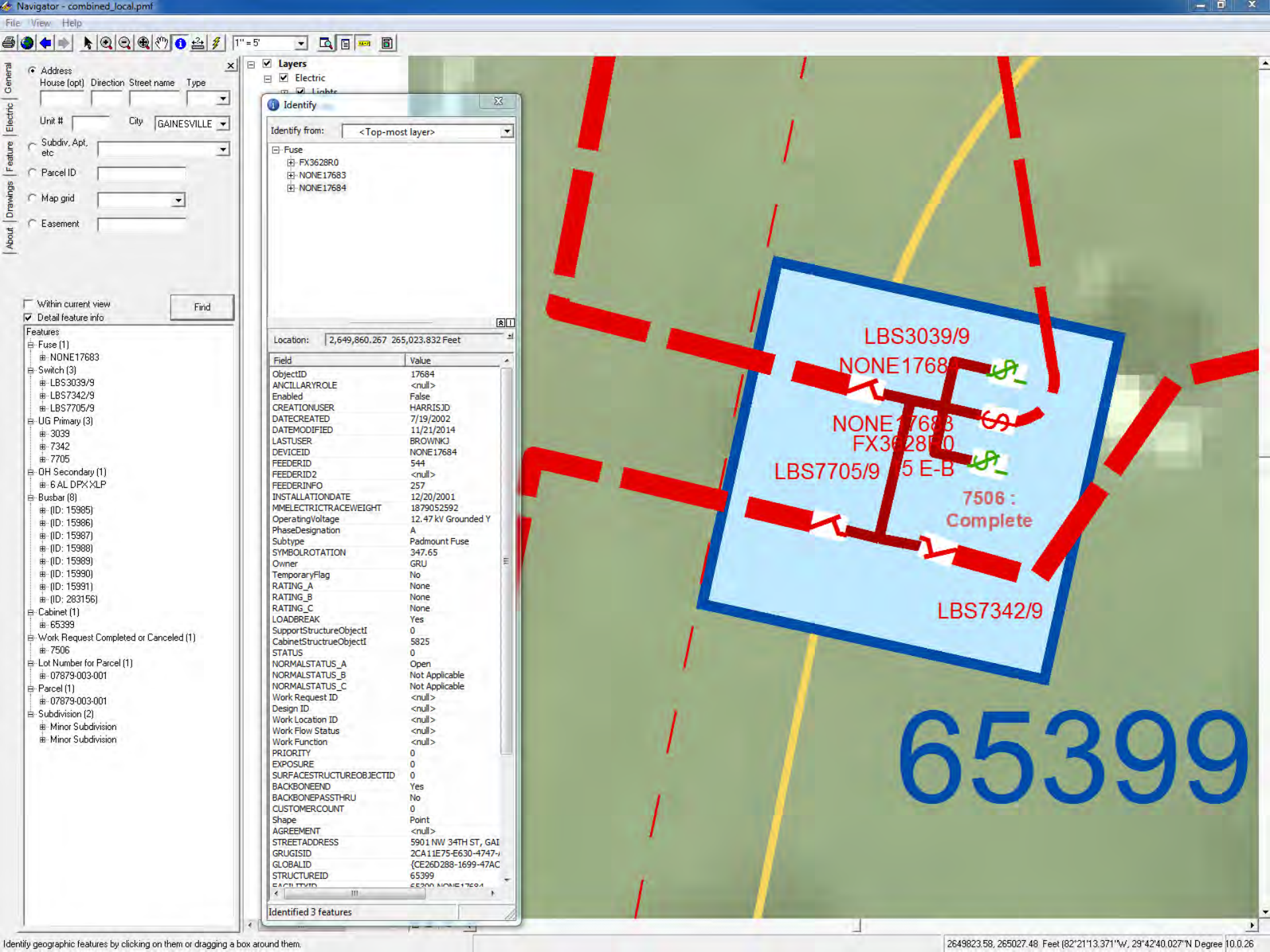
544 ABC 3039
250W HPS
35/IL
16210
63981
250W HPS
030
34928
250W HPS
65/IIIB
Light
544 ABC
65399
NW 24TH BLVD
ABC 7705
FH #9
6691K
4685R1
75 KVA-ABC
NW 19TH ST
Identify geographic features by clicking on them or dragging a box around them.
2649740.08, 265025.34 Feet (82°21'14.319"W, 29°42'40.022"N Degree 10.0.26


Navigator - combined_local.pmf
File View Help
1" = 5'
General
Electric
Feature
Drawings
About
Address
House (opt) Direction Street name Type
Unit # City GAINESVILLE
Subdiv, Apt, etc
Parcel ID
Map grid
Easement
Within current view
Find
Detail feature info
Features
Fuse (1)
NONE17683
Switch (3)
LBS3039/9
LBS7342/9
LBS7705/9
UG Primary (3)
3039
7342
7705
OH Secondary (1)
6 AL DPX XLP
Busbar (8)
(ID: 15985)
(ID: 15986)
(ID: 15987)
(ID: 15988)
(ID: 15989)
(ID: 15990)
(ID: 15991)
(ID: 283156)
Cabinet (1)
65399
Work Request Completed or Canceled (1)
7506
Lot Number for Parcel (1)
07879-003-001
Parcel (1)
07879-003-001
Subdivision (2)
Minor Subdivision
Minor Subdivision
Layers
Electric
Identify
Identify from:
<Top-most layer>
Fuse
FX3628R0
NONE17683
NONE17684
Location:
2,649,860.267 265,023.832 Feet
Field
Value
ObjectID 17684
ANCILLARYROLE <null>
Enabled False
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DATECREATED 7/19/2002
DATEMODIFIED 11/21/2014
LASTUSER BROWNKJ
DEVICEID NONE17684
FEEDERID 544
FEEDERID2 <null>
FEEDERINFO 257
INSTALLATIONDATE 12/20/2001
MMELECTRICTRACEWEIGHT 1879052592
OperatingVoltage 12.47 kV Grounded Y
PhaseDesignation A
Subtype Padmount Fuse
SYMBOLROTATION 347.65
Owner GRU
TemporaryFlag No
RATING_A None
RATING_B None
RATING_C None
LOADBREAK Yes
SupportStructureObjectI 0
CabinetStructrueObjectI 5825
STATUS 0
NORMALSTATUS_A Open
NORMALSTATUS_B Not Applicable
NORMALSTATUS_C Not Applicable
Work Request ID <null>
Design ID <null>
Work Location ID <null>
Work Flow Status <null>
Work Function <null>
PRIORITY 0
EXPOSURE 0
SURFACESTRUCTUREOBJECTID 0
BACKBONEEND Yes
BACKBONEPASSTHRU No
CUSTOMERCOUNT 0
Shape Point
AGREEMENT <null>
STREETADDRESS 5901 NW 34TH ST, GAI
GRUGISID 2CA11E75-E630-4747-
GLOBALID {CE26D288-1699-47AC
STRUCTUREID 65399
Identified 3 features
LBS3039/9
NONE1768
NONE1768
FX3628R0
LBS7705/9
5 E-B
7506 :
Complete
LBS7342/9
65399
Identify geographic features by clicking on them or dragging a box around them.
2649823.58, 265027.48 Feet (82°21'13.371"W, 29°42'40.027"N Degree 10.0.26

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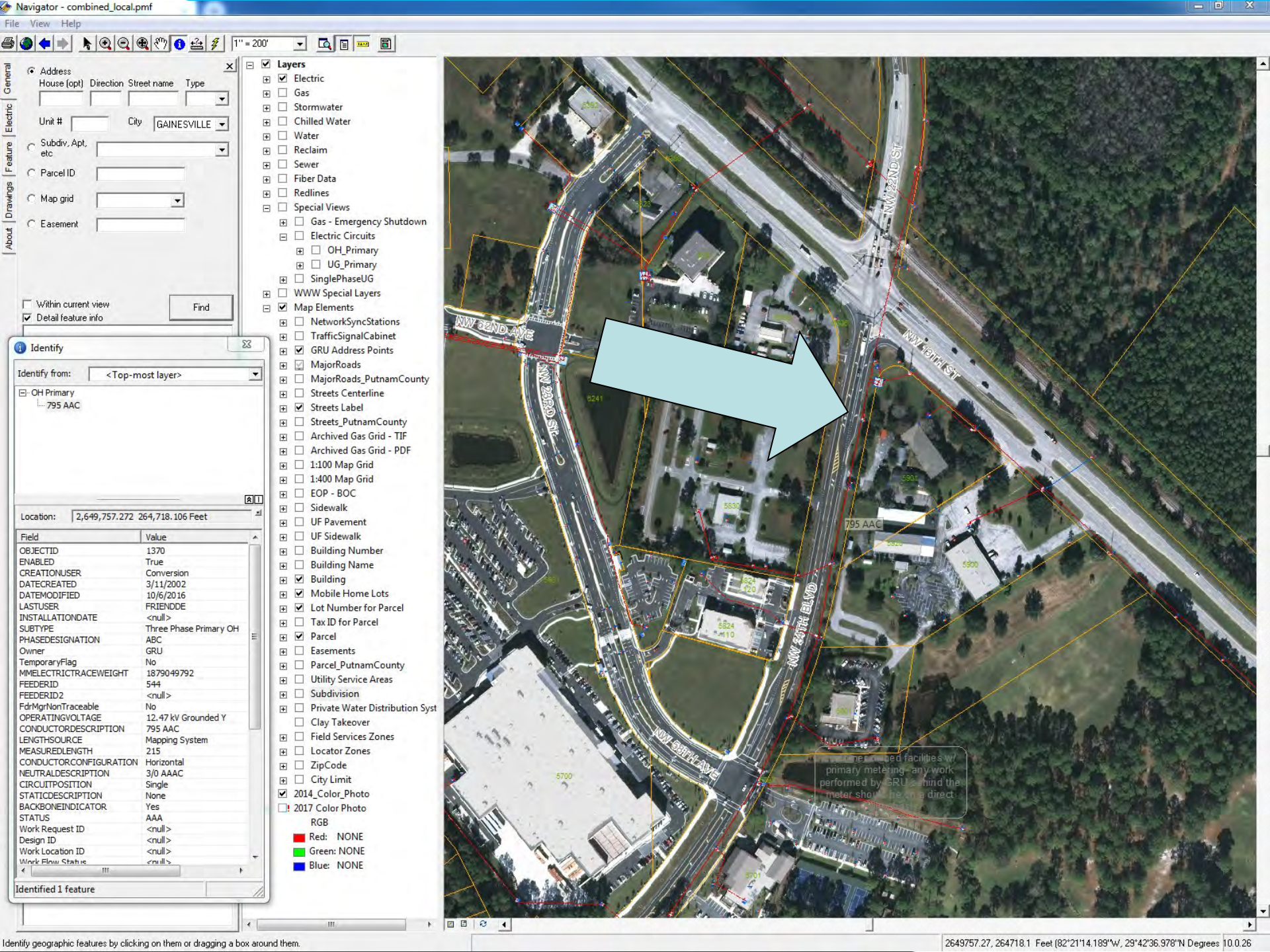
Example of how MIMS Mobile Design application will be used to add a high pressure sodium streetlights using compatible units


Navigator - combined_local.pmf
File View Help
1" = 200'
General
Electric
Feature
Drawings
About
Address
House (opt) Direction Street name Type
Unit # City GAINESVILLE
Subdiv, Apt, etc
Parcel ID
Map grid
Easement
Within current view
Detail feature info
Find
Identify
Identify from: <Top-most layer>
OH Primary
795 AAC
Location: 2,649,757.272 264,718.106 Feet
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OBJECTID 1370
ENABLED True
CREATIONUSER Conversion
DATECREATED 3/11/2002
DATEMODIFIED 10/6/2016
LASTUSER FRIENDDE
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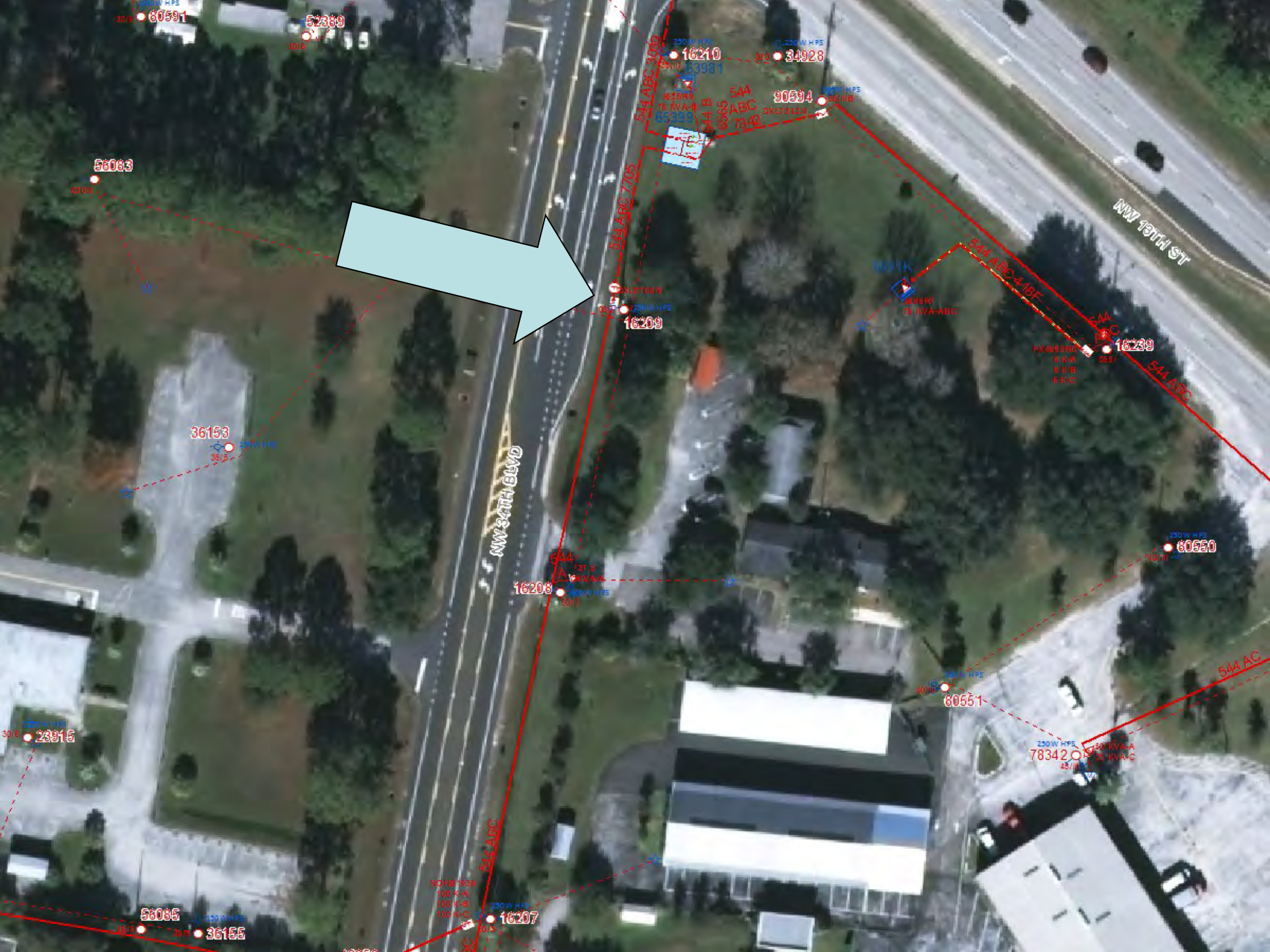
SUBTYPE Three Phase Primary OH
PHASEDESIGNATION ABC
Owner GRU
TemporaryFlag No
MMELECTRICTRACEWEIGHT 1879049792
FEEDERID 544
FEEDERID2 <null>
FdrMgrNonTraceable No
OPERATINGVOLTAGE 12.47 kV Grounded Y
CONDUCTORDESCRIPTION 795 AAC
LENGTHSOURCE Mapping System
MEASUREDLENGTH 215
CONDUCTORCONFIGURATION Horizontal
NEUTRALDESCRIPTION 3/0 AAAC
CIRCUITPOSITION Single
STATICDESCRIPTION None
BACKBONEINDICATOR Yes
STATUS AAA
Work Request ID <null>
Design ID <null>
Work Location ID <null>
Work Flow Status <null>
Identified 1 feature
Layers
Electric
Gas
Stormwater
Chilled Water
Water
Reclaim
Sewer
Fiber Data
Redlines
Special Views
Gas - Emergency Shutdown
Electric Circuits
OH_Primary
UG_Primary
SinglePhaseUG
WWW Special Layers
Map Elements
NetworkSyncStations
TrafficSignalCabinet
GRU Address Points
MajorRoads
MajorRoads_PutnamCounty
Streets Centerline
Streets Label
Streets_PutnamCounty
Archived Gas Grid - TIF
Archived Gas Grid - PDF
1:100 Map Grid
1:400 Map Grid
EOP - BOC
Sidewalk
UF Pavement
UF Sidewalk
Building Number
Building Name
Building
Mobile Home Lots
Lot Number for Parcel
Tax ID for Parcel
Parcel
Easements
Parcel_PutnamCounty
Utility Service Areas
Subdivision
Private Water Distribution Syst
Clay Takeover
Field Services Zones
Locator Zones
ZipCode
City Limit
2014_Color_Photo
2017 Color Photo
RGB
Red: NONE
Green: NONE
Blue: NONE
NW 22ND AVE
NW 83RD ST
NW 22ND ST
NW 76TH ST
NW 75TH BLVD
NW 68TH AVE
795 AAC
primary metering- any work
performed by GRU behind the
Identify geographic features by clicking on them or dragging a box around them.
2649757.27, 264718.1 Feet (82°21'14.189"W, 29°42'36.978"N Degrees 10.0.26


NW 34TH BLVD
NW 191TH ST
16209
16239
16208
16207
16210
34928
90594
80591
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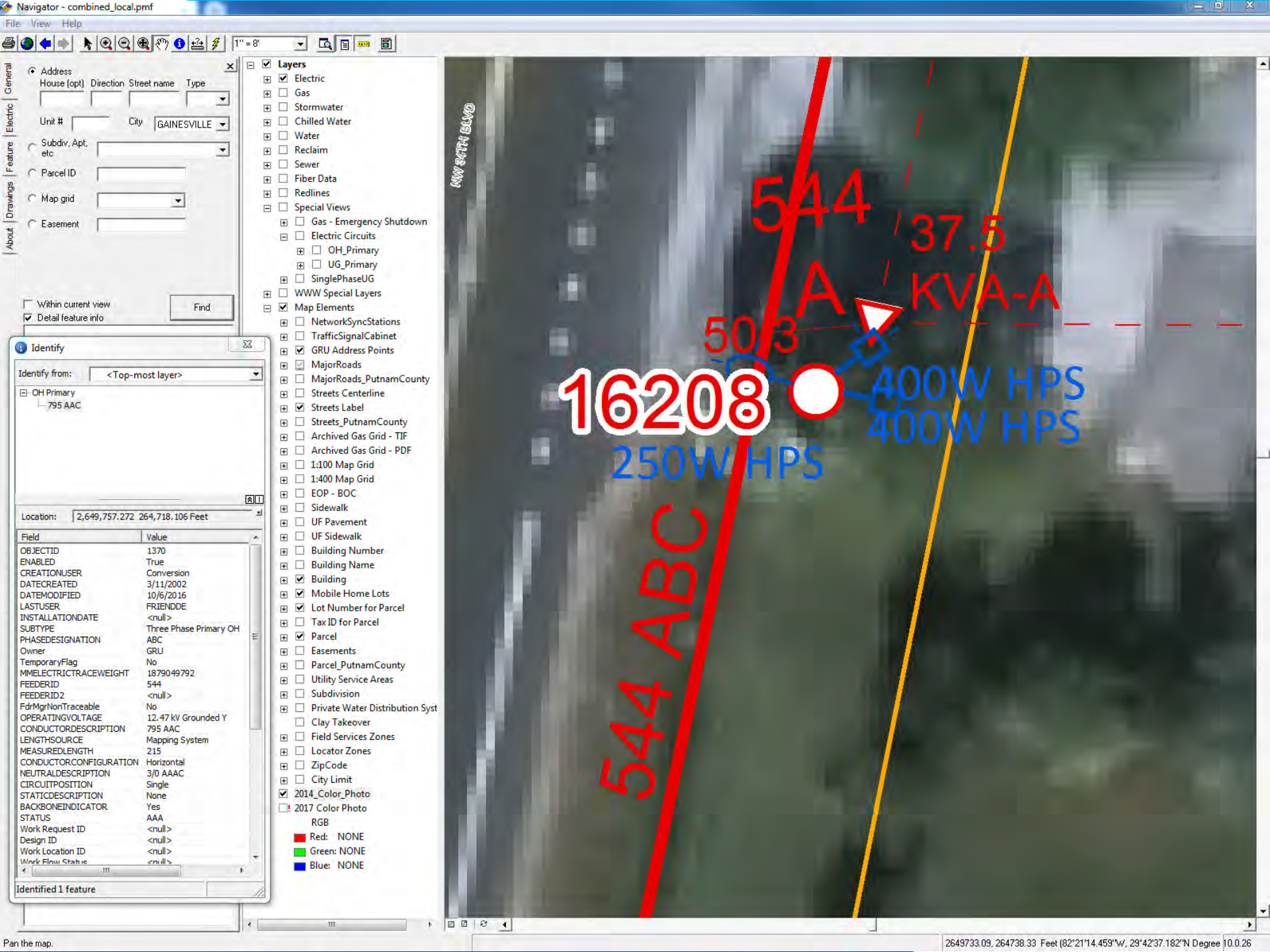
80551
78342
544 ABC 7202
544 ABC 4186
544 AC


Navigator - combined_local.pmf
File View Help
Address
House (opt) Direction Street name Type
Unit # City GAINESVILLE
Subdiv, Apt, etc
Parcel ID
Map grid
Easement
Within current view
Detail feature info
Find
Identify
Identify from: <Top-most layer>
OH Primary
795 AAC
Location: 2,649,757.272 264,718.106 Feet
Field Value
OBJECTID 1370
ENABLED True
CREATIONUSER Conversion
DATECREATED 3/11/2002
DATEMODIFIED 10/6/2016
LASTUSER FRIENDDE
INSTALLATIONDATE <null>
SUBTYPE Three Phase Primary OH
PHASEDESIGNATION ABC
Owner GRU
TemporaryFlag No
MMELECTRICTRACEWEIGHT 1879049792
FEEDERID 544
FEEDERID2 <null>
FdrMgrNonTraceable No
OPERATINGVOLTAGE 12.47 kV Grounded Y
CONDUCTORDESCRIPTION 795 AAC
LENGTHSOURCE Mapping System
MEASUREDLENGTH 215
CONDUCTORCONFIGURATION Horizontal
NEUTRALDESCRIPTION 3/0 AAAC
CIRCUITPOSITION Single
STATICDESCRIPTION None
BACKBONEINDICATOR Yes
STATUS AAA
Work Request ID <null>
Design ID <null>
Work Location ID <null>
Identified 1 feature
Layers
Electric
Gas
Stormwater
Chilled Water
Water
Reclaim
Sewer
Fiber Data
Redlines
Special Views
Gas - Emergency Shutdown
Electric Circuits
OH_Primary
UG_Primary
SinglePhaseUG
WWW Special Layers
Map Elements
NetworkSyncStations
TrafficSignalCabinet
GRU Address Points
MajorRoads
MajorRoads_PutnamCounty
Streets Centerline
Streets Label
Streets_PutnamCounty
Archived Gas Grid - TIF
Archived Gas Grid - PDF
1:100 Map Grid
1:400 Map Grid
EOP - BOC
Sidewalk
UF Pavement
UF Sidewalk
Building Number
Building Name
Building
Mobile Home Lots
Lot Number for Parcel
Tax ID for Parcel
Parcel
Easements
Parcel_PutnamCounty
Utility Service Areas
Subdivision
Private Water Distribution Syst
Clay Takeover
Field Services Zones
Locator Zones
ZipCode
City Limit
2014_Color_Photo
2017 Color Photo
RGB
Red: NONE
Green: NONE
Blue: NONE
NW 34TH BLVD
544
37.5
A
KVA-A
50 3
16208
400W HPS
400W HPS
250W HPS
544 ABC
Pan the map.
2649733.09, 264738.33 Feet (82°21'14.459"W, 29°42'37.182"N Degree 10.0.26

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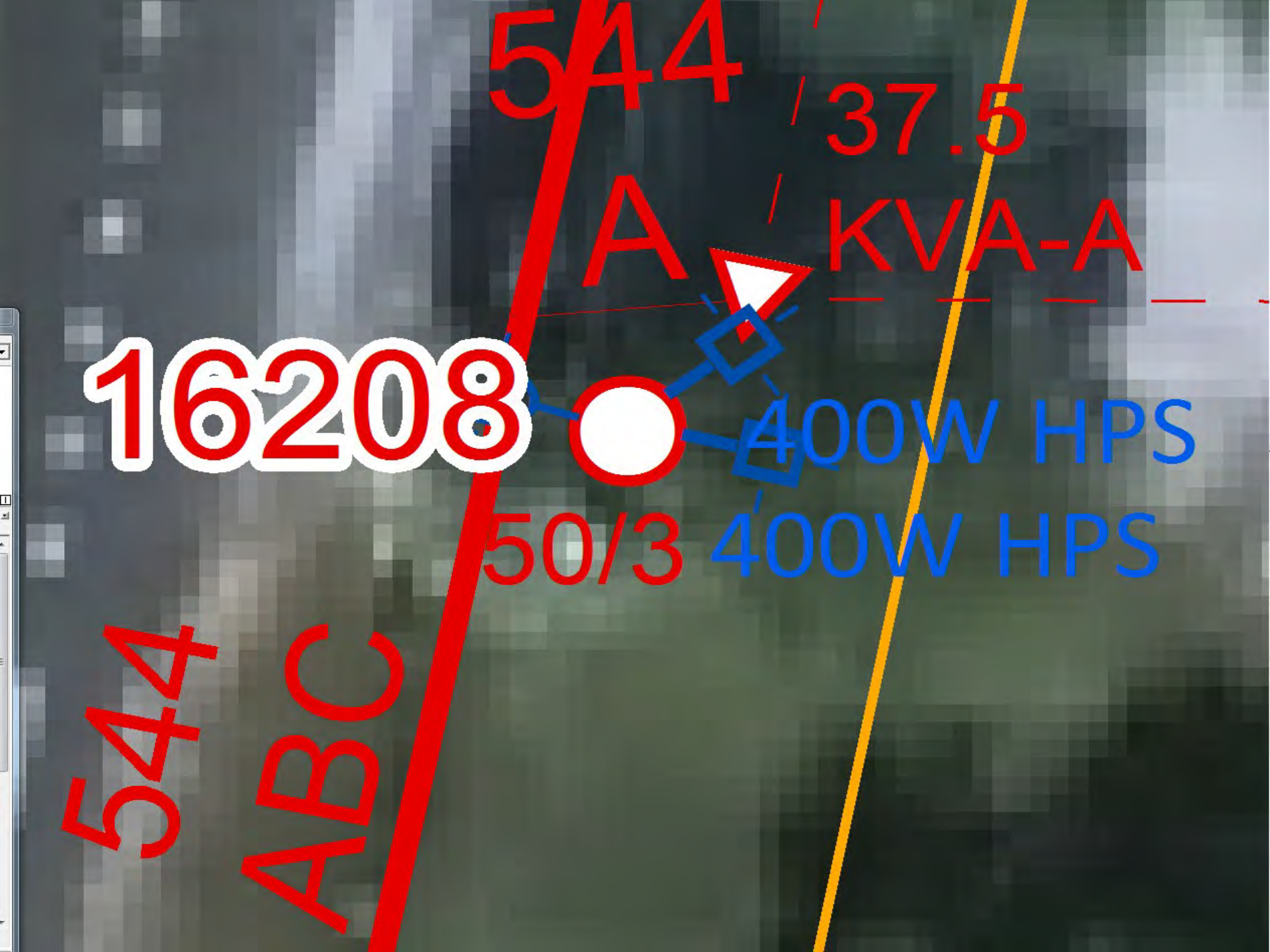
544
37.5
A
KVA-A
16208
400W HPS
50/3
400W HPS
544
ABC

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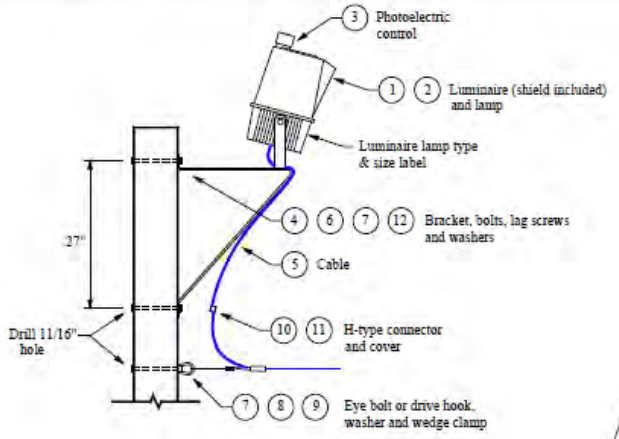
Assembly #	Position #	Part #	Qty	Description
LMF400				
(OH feed concrete pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	10'	Cable, type UF #12/2 with ground
	6	18825-5	2	Bolt, machine 5/8" X 6"
	7	44957-1	3	Washer, square 2-1/4" X 2-1/4"
	8	03712-5	1	Bolt, eye 5/8" X 10"
	9	32120-6	1	REV. Clamp, service wedge
	10	61649-4	3	Conn., H-type #6-3,#14-8
	11	34232-7	2	Conn., cover (black)
		78470-2	1	Luminaire label, HPS 400W.
LMF401				
(OH feed wood pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	10'	Cable, type UF #12/2 with ground
	6	67900-3	2	Bolt, machine 5/8" X 10"
	7	44957-1	3	Washer, square 2-1/4" X 2-1/4"
	8	38002-4	1	Hook, drive (wood pole)
	9	32120-6	1	REV. Clamp, service wedge
	10	61649-4	3	Conn., H-type #6-3,#14-8
	11	34232-7	2	Conn., cover (black)
	12	48411-3	1	Screw, lag 1/2" X 3" (wood pole)
		78470-2	1	Luminaire label, HPS 400W.
LMF402				
(UD feed concrete pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	50'	Cable, typeUF #12/2 with ground
	6	18825-5	2	Bolt, machine 5/8" X 6"
	7	44957-1	2	Washer, square 2-1/4" X 2-1/4"
	~~8~~	~~45250-5~~	~~3~~	~~Connector, screw-on "wire nut" with sealent~~
	9	62242-7	20'	Conduit, PVC 3/4"
	10	74295-3	9	Strap, 3/4" two hole
	11	46528-3	*18	Fastener, cable guard 1/4" x 1-3/4" (masonry)
		78466-6	1	Luminaire label, HPS 400W.
LMF403				
(UD feed wood pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	50'	Cable, type UF #12/2 with ground
	6	67900-3	1	Bolt, machine 5/8" X 10"
	7	44957-1	1	Washer, square 2-1/4" X 2-1/4"
	~~8~~	~~45250-5~~	~~3~~	~~Connector, screw-on "wire nut" with sealent~~
	9	62242-7	20'	Conduit, PVC 3/4"
	10	74295-3	9	Strap, 3/4" two hole
	11	56990-9	18	Fastener, cable guard 1/4" x 2" (wood)
	12	48411-3	1	Screw, lag 1/2" X 3"
		78466-6	1	Luminaire label, HPS 400W.

NOTE:
*1) The Cable Guard Fasener(Tapcons) are issued by the 50 per box. "WorkMod" will issue one box.

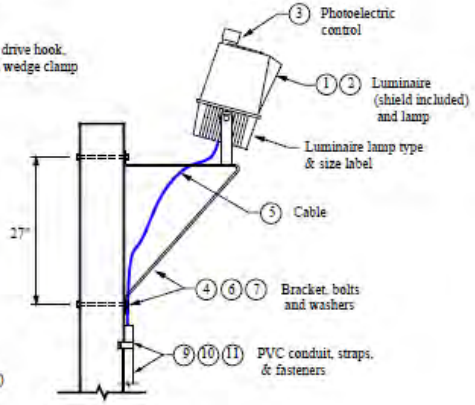
Assembly #	Position #	Part #	Qty	Description
LMF400				
(OH feed concrete pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	10'	Cable, type UF #12/2 with ground
	6	18825-5	2	Bolt, machine 5/8" X 6"
	7	44957-1	3	Washer, square 2-1/4" X 2-1/4"
	8	03712-5	1	Bolt, eye 5/8" X 10"
	9	32120-6	1	REV. Clamp, service wedge
	10	61649-4	3	Conn., H-type #6-3,#14-8
	11	34232-7	2	Conn., cover (black)
		78470-2	1	Luminaire label, HPS 400W.
(OH feed wood pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	10'	Cable, type UF #12/2 with ground
	6	67900-3	2	Bolt, machine 5/8" X 10"
	7	44957-1	3	Washer, square 2-1/4" X 2-1/4"
	8	38002-4	1	Hook, drive (wood pole)
	9	32120-6	1	REV. Clamp, service wedge
	10	61649-4	3	Conn., H-type #6-3,#14-8
	11	34232-7	2	Conn., cover (black)
	12	48411-3	1	Screw, lag 1/2" X 3" (wood pole)
		78470-2	1	Luminaire label, HPS 400W.
LMF402				
(UD feed concrete pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	50'	Cable, typeUF #12/2 with ground
	6	18825-5	2	Bolt, machine 5/8" X 6"
	7	44957-1	2	Washer, square 2-1/4" X 2-1/4"
	~~8~~	~~45250-5~~	~~3~~	~~Connector, screw-on "wire nut" with sealant~~
	9	62242-7	20'	Conduit, PVC 3/4"
	10	74295-3	9	Strap, 3/4" two hole
	11	46528-3	*18	Fastener, cable guard 1/4" x 1-3/4" (masonry)
		78466-6	1	Luminaire label, HPS 400W.
LMF403				
(UD feed wood pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	50'	Cable, type UF #12/2 with ground
	6	67900-3	1	Bolt, machine 5/8" X 10"
	7	44957-1	1	Washer, square 2-1/4" X 2-1/4"
	~~8~~	~~45250-5~~	~~3~~	~~Connector, screw-on "wire nut" with sealant~~
	9	62242-7	20'	Conduit, PVC 3/4"
	10	74295-3	9	Strap, 3/4" two hole
	11	56990-9	18	Fastener, cable guard 1/4" x 2" (wood)
	12	48411-3	1	Screw, lag 1/2" X 3"
		78466-6	1	Luminaire label, HPS 400W.

NOTE:
*1) The Cable Guard Fasener(Tapcons) are issued by the 50 per box. "WorkMod" will issue one box.

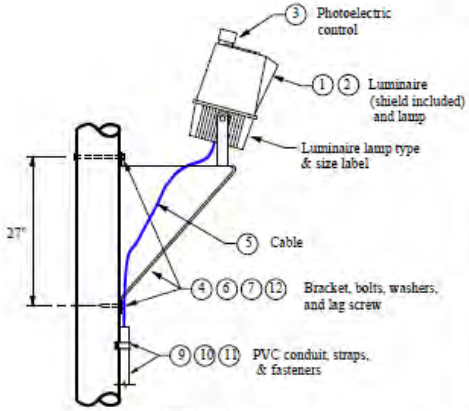
Assembly #	Position #	Part #	Qty	Description
LMF400 (OH feed concrete pole)	1	61575-7	1	Luminaire, 400W HPS floodlight
	2	70768-6	1	Lamp, 400W HPS
	3	06657-5	1	Photoelectric control
	4	29154-4	1	Bracket, floodlight
	5	06818-7	10'	Cable, type UF #12/2 with ground
	6	18825-5	2	Bolt, machine 5/8" X 6"
	7	44957-1	3	Washer, square 2-1/4" X 2-1/4"
	8	03712-5	1	Bolt, eye 5/8" X 10"
	9	32120-6	1 REV.	Clamp, service wedge
	10	61649-4	3	Conn., H-type #6-3,#14-8
	11	34232-7	2	Conn., cover (black)
		78470-2	1	Luminaire label, HPS 400W.



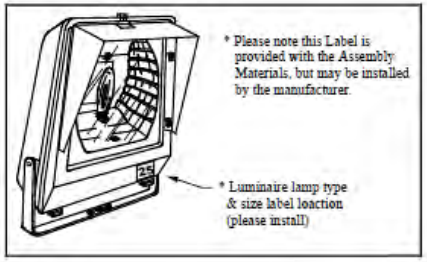
LMF400, 401



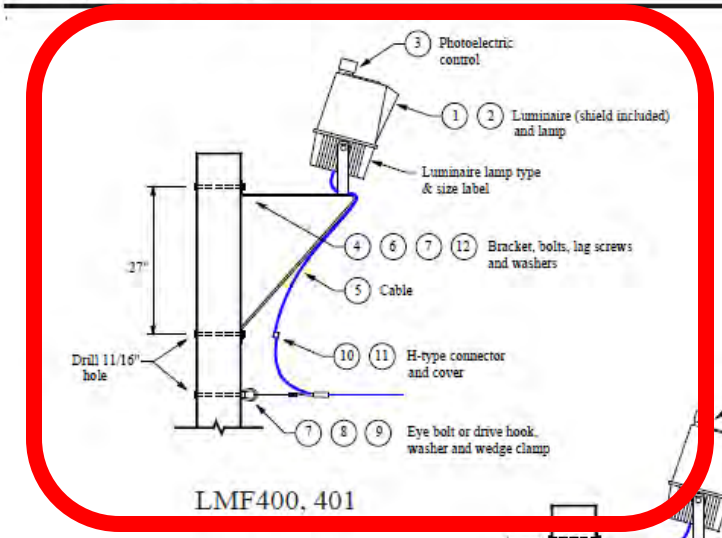
LMF402



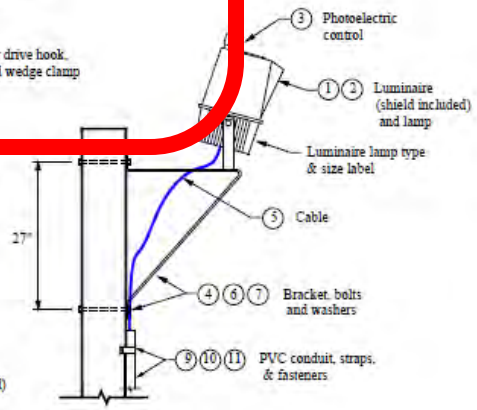
LMF403



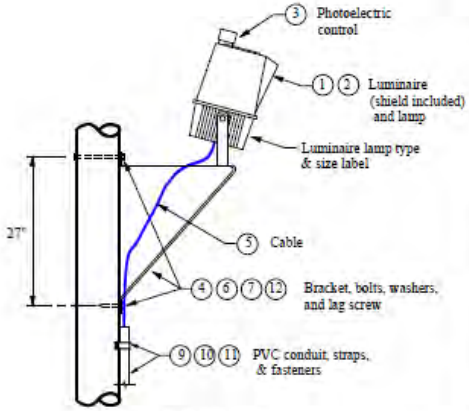
Revision Date:	GRU More than Energy	Gainesville Regional Utilities Energy Delivery Construction Standards Manual	
12-11-01 KLC 9-10-03 KLC 2-4-04 KLC 8-31-07 KLC		**400W High Pressure Sodium Floodlight Luminaire**	Assembly **LMF—**



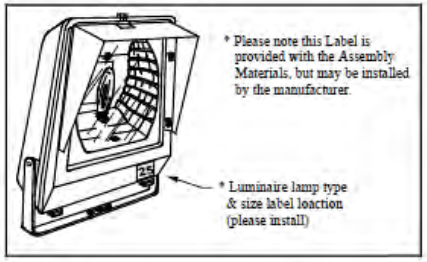
LMF400, 401



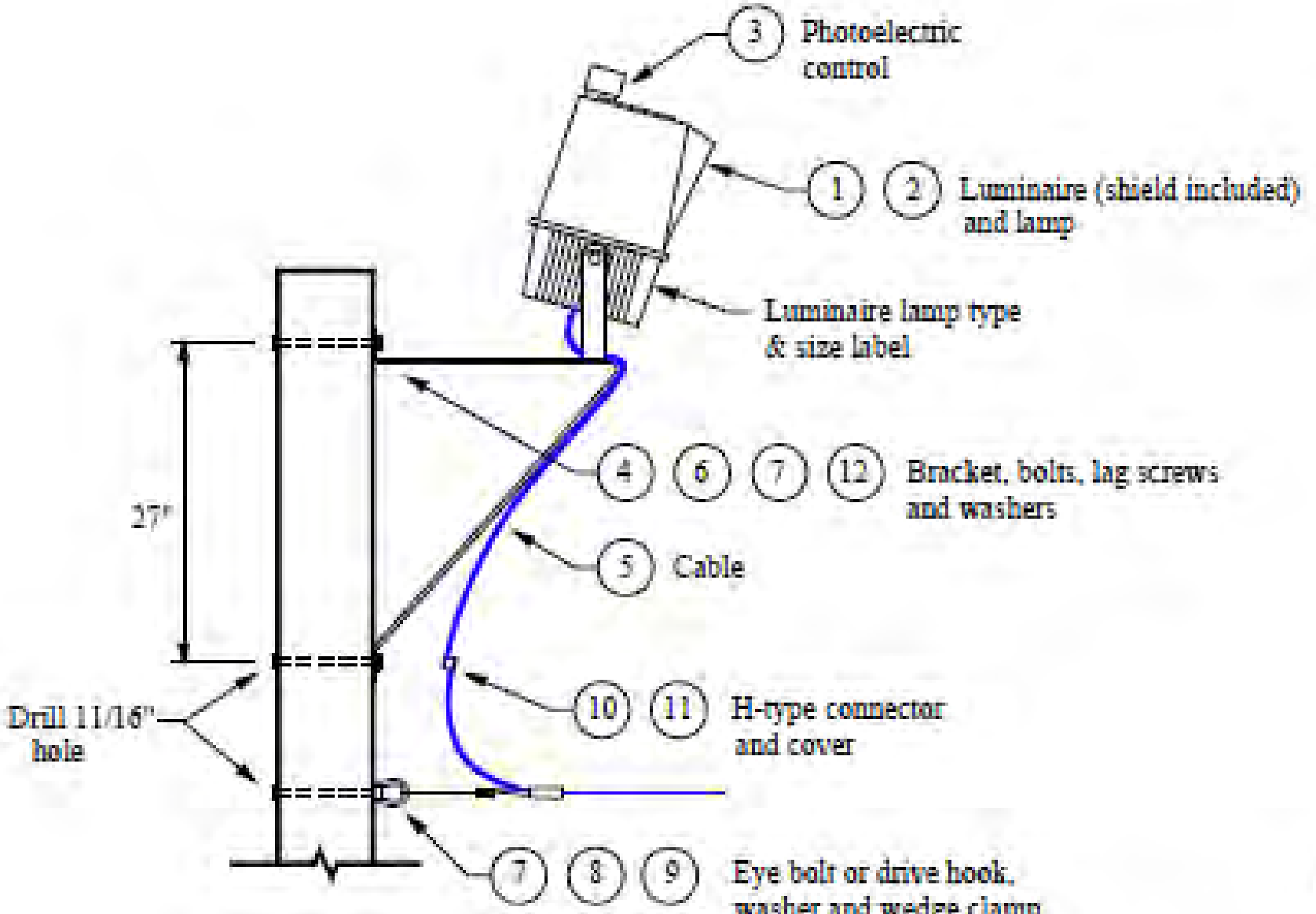
LMF402



LMF403



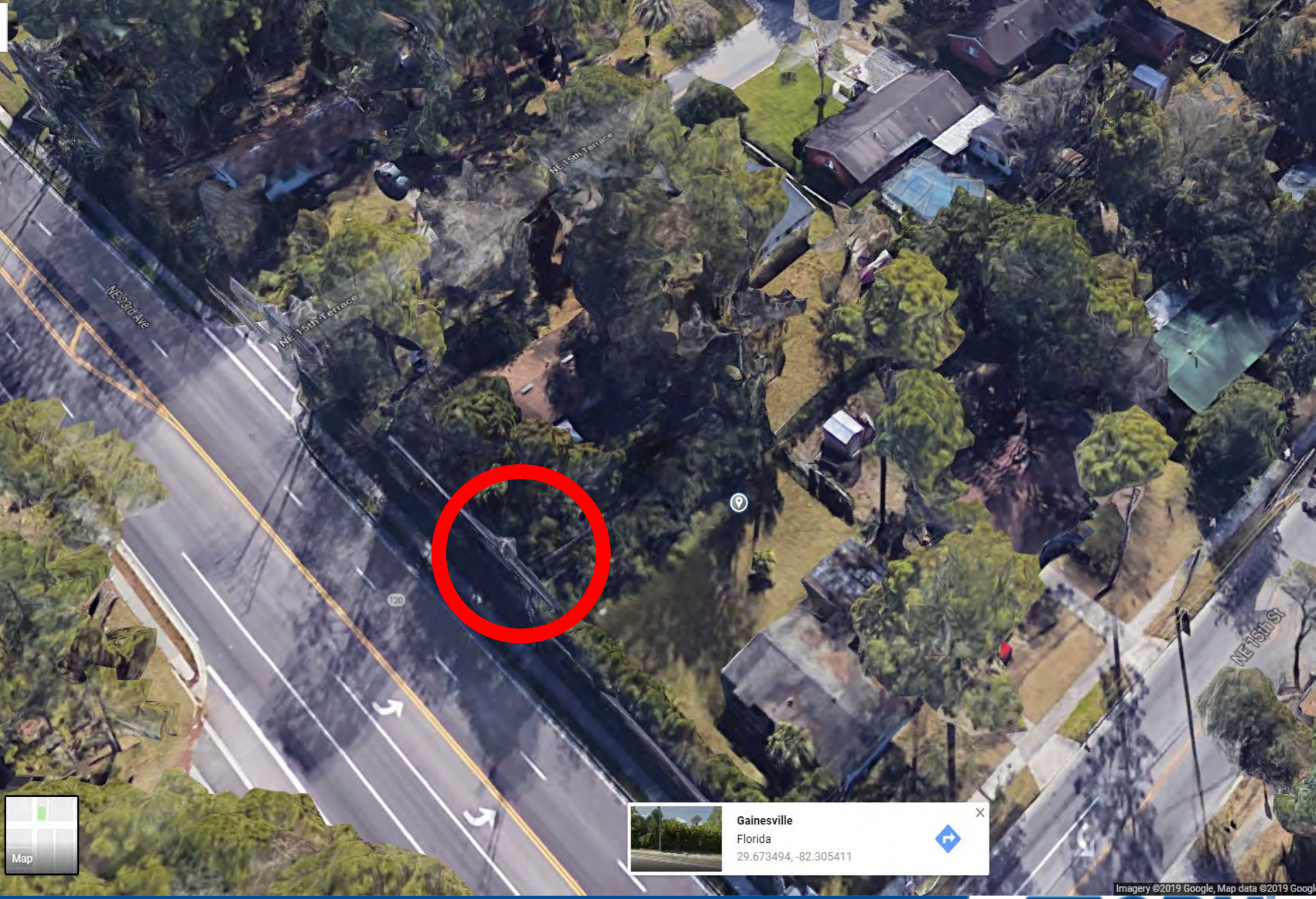
Revision Date:	GRU More than Energy	Gainesville Regional Utilities Energy Delivery Construction Standards Manual	
12-11-01 KLC 9-10-03 KLC 2-4-04 KLC 8-31-07 KLC		**400W High Pressure Sodium Floodlight Luminaire**	Assembly **LMF—**


3 Photoelectric control
1 2 Luminaire (shield included) and lamp
Luminaire lamp type & size label
4 6 7 12 Bracket, bolts, lag screws and washers
27"
5 Cable
Drill 11/16" hole
10 11 H-type connector and cover
7 8 9 Eye bolt or drive hook, washer and wedge clamp

LMF400, 401

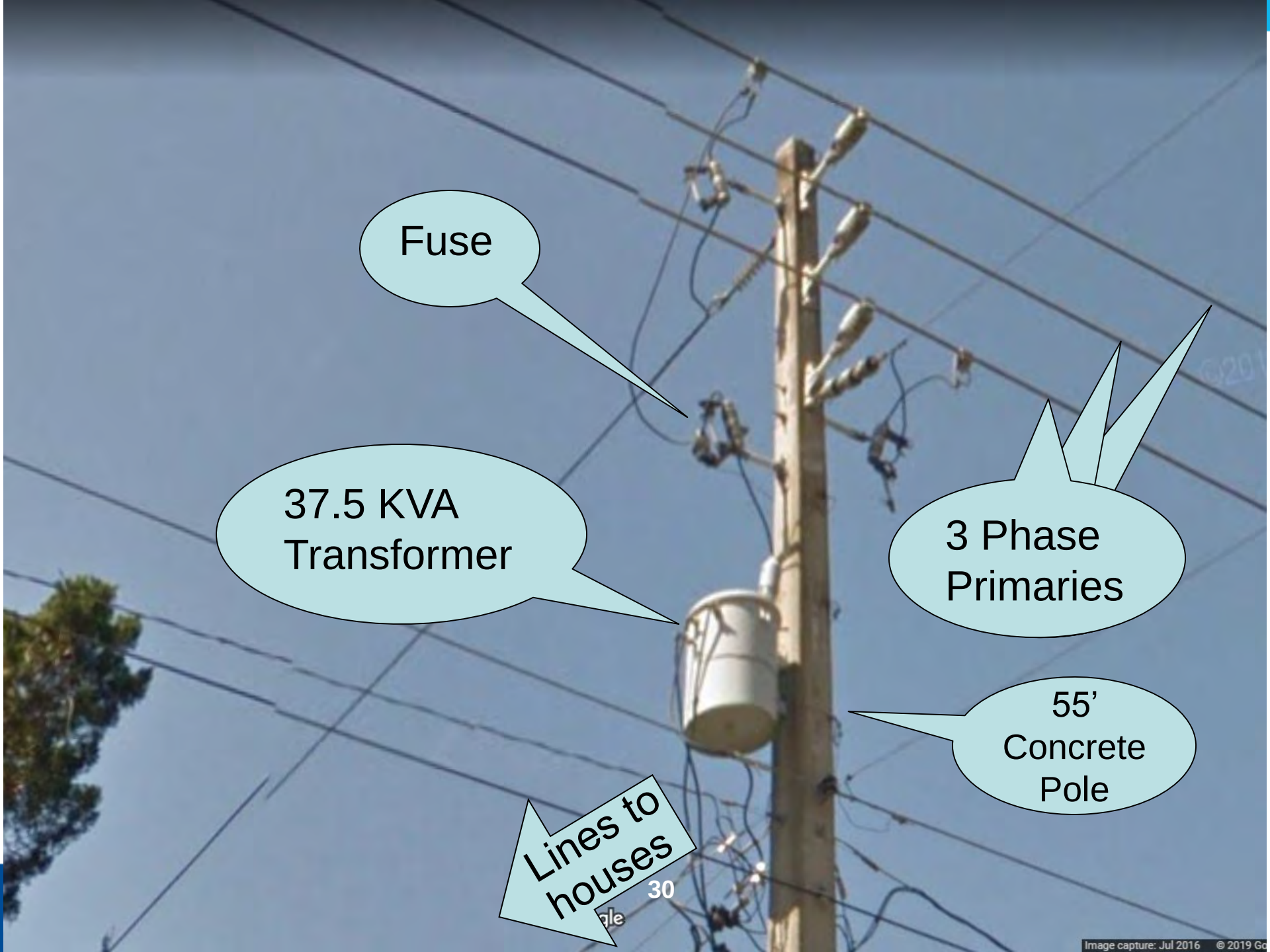
How the GIS application will automatically “roll up” multiple outages to a common device.

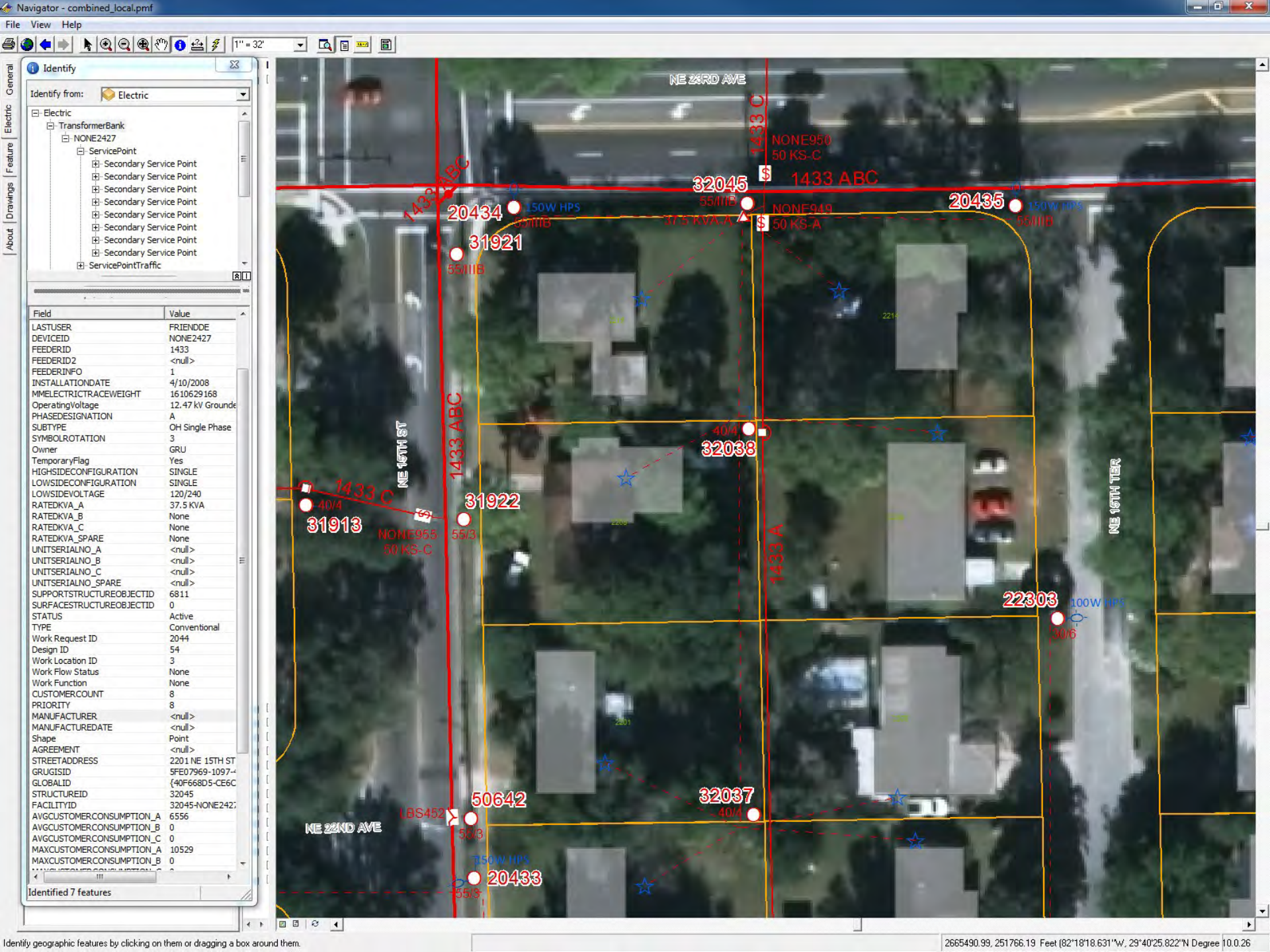

Satchel's Pizza
Carol Estates Baptist Church
NE 16th Terrace
NE 15th Terrace
NE 15th St
NE 17th Terrace
NE 16th Terrace
NE 15th Terrace
PASSAGE Family Church
NE 20 Pl
NE 15th St
Electric
NE 17th Terrace
NE 16th Terrace
NE 15th Terrace
Consolidated Electrical Distribution
NE 15th Terrace
NE 21 Ave
Citgo
SUNRISE FOOD MART # 58
NE 15th Terrace
NE 15th St
NE 21 Ave
NE 22nd Ave
NE 15th St
NE 22nd Ave
Tony's Stringed Instrument Repair
NE 15th St
Smokey Bear Park
NE 15th St
120

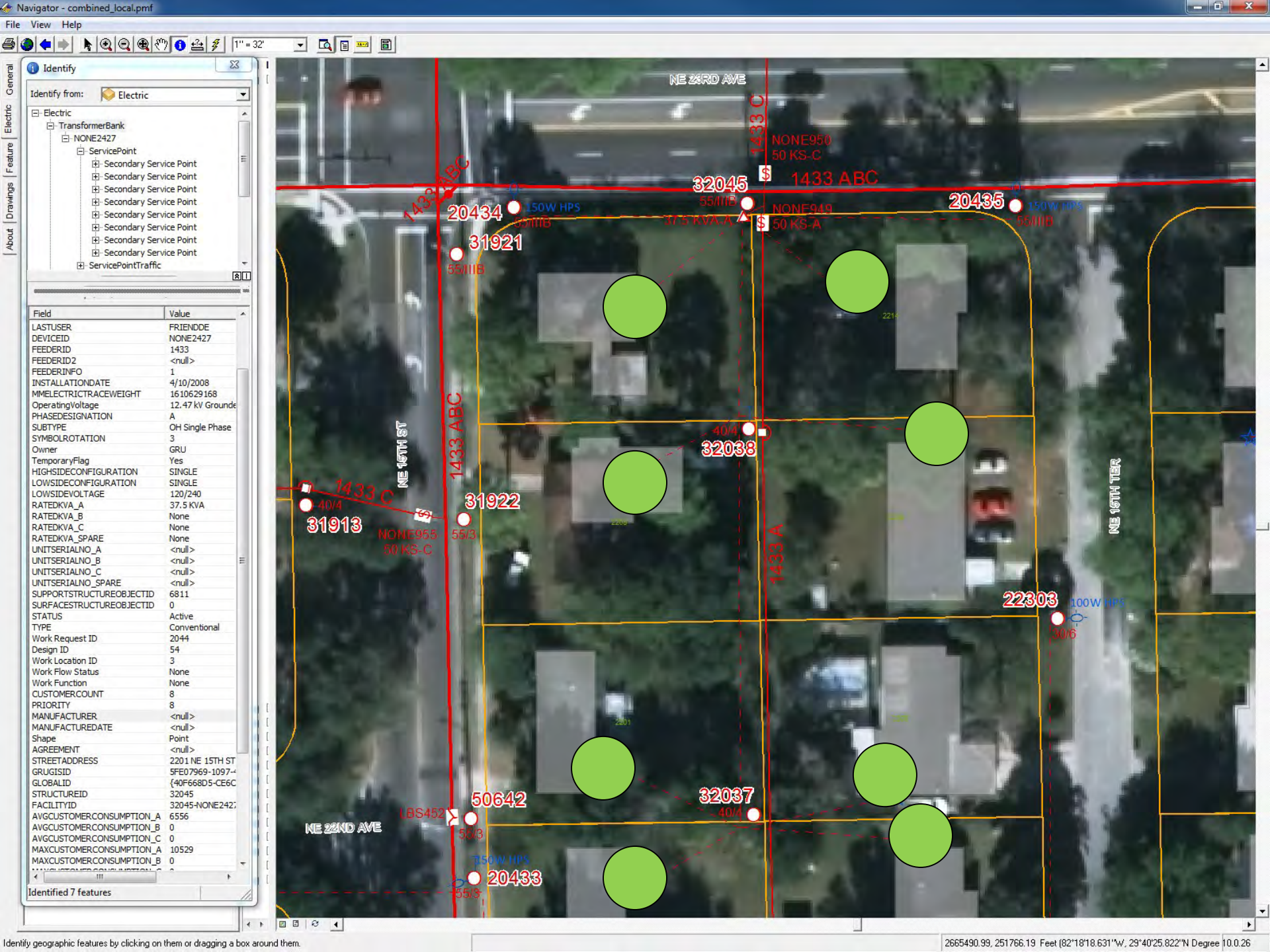


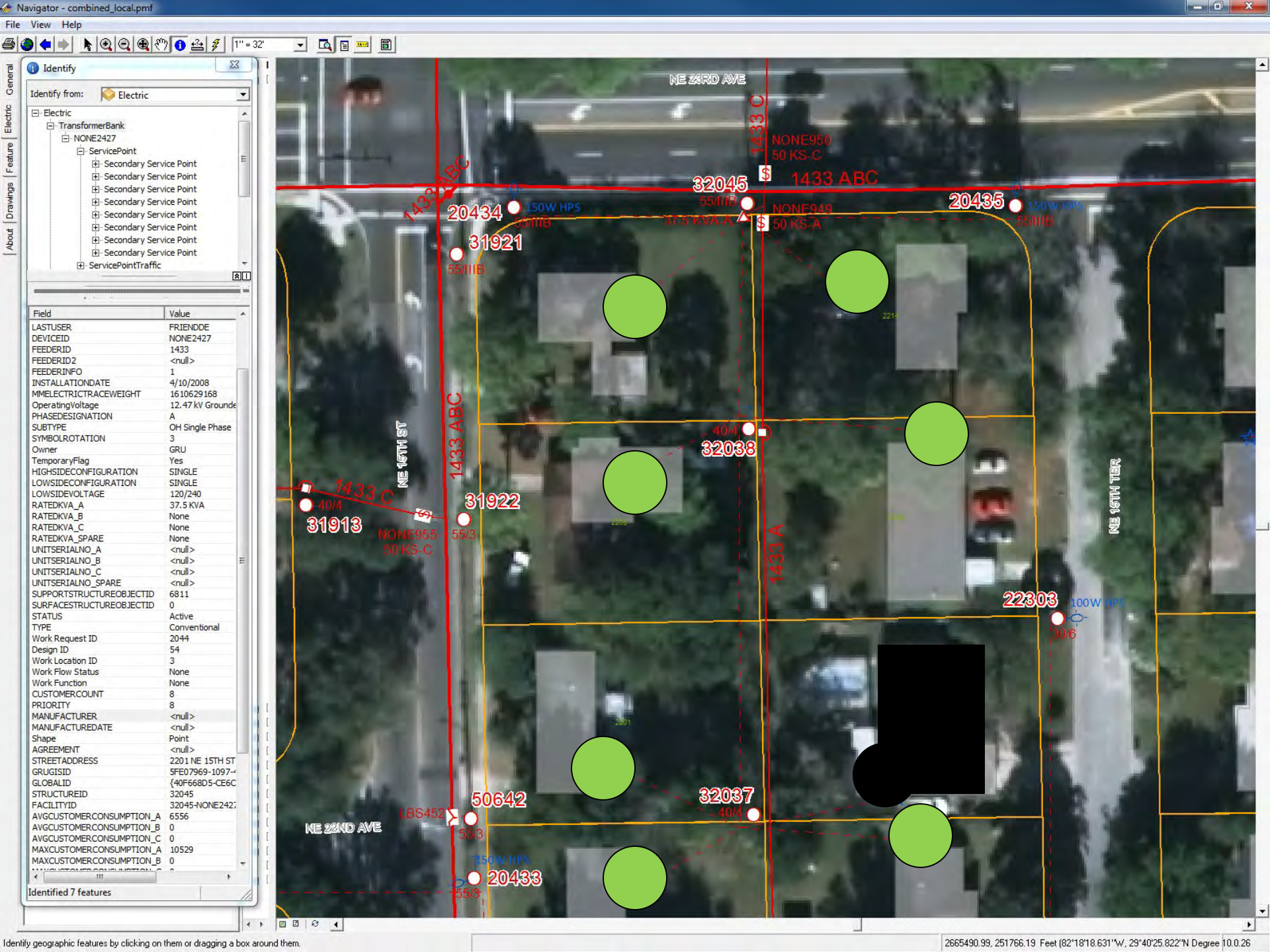
GRU
More than Energy

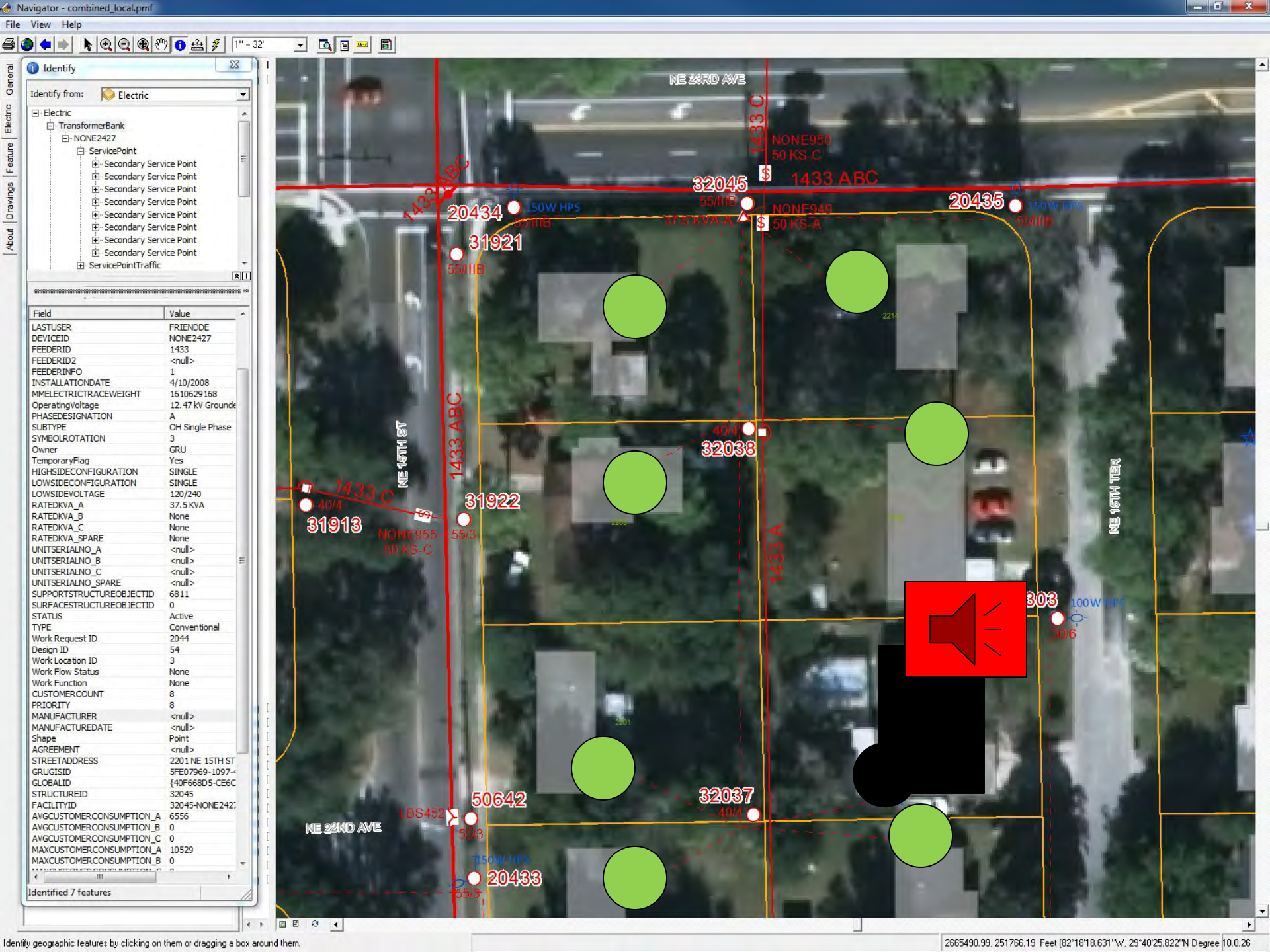
GRU
More than Energy

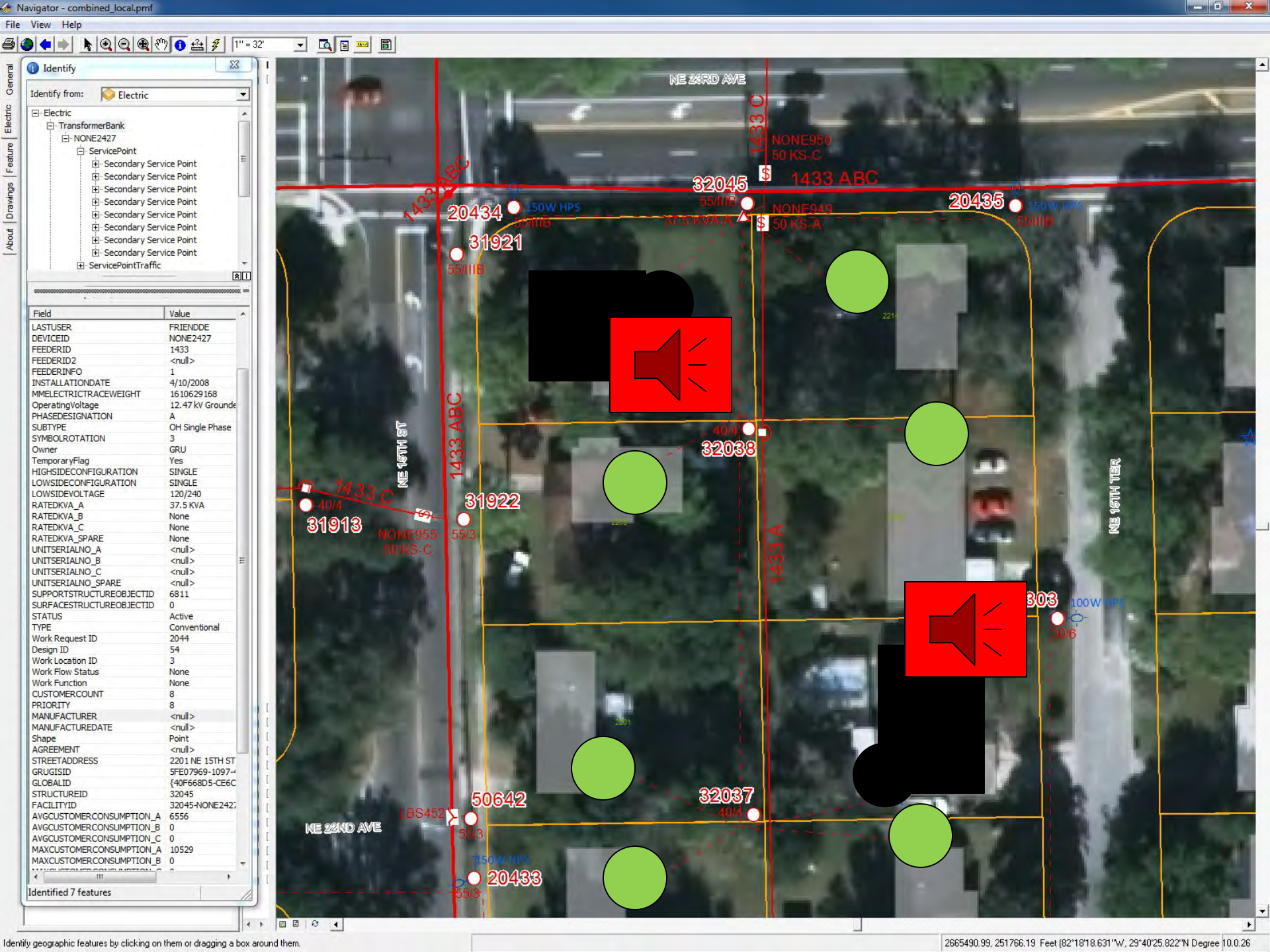

Fuse
37.5 KVA Transformer
3 Phase Primaries
55’ Concrete Pole
Lines to houses
30
Image capture: Jul 2016


Navigator - combined_local.pmf
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
1433 C
NONE950
50 KS-C
1433 ABC
32045
55/IIIB
NONE949
50 KS-A
20435
150W HPS
55/IIIB
20434
150W HPS
55/IIIB
31921
55/IIIB
NE 15TH ST
1433 ABC
40/4
32038
NE 15TH TER
1433 C
40/4
31913
NONE955
50 KS-C
31922
55/3
1433 A
22303
100W HPS
30/6
LBS452
50642
55/3
32037
40/4
NE 22ND AVE
150W HPS
20433
55/3
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26


Navigator - combined_local.pmf
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
1433 C
NONE950
50 KS-C
1433 ABC
32045
55/IIIB
NONE949
50 KS-A
20435
150W HPS
55/IIIB
20434
150W HPS
55/IIIB
31921
55/IIIB
NE 15TH ST
1433 ABC
1433 C
40/4
31913
NONE955
50 KS-C
69
31922
55/3
40/4
32038
NE 15TH TER
1433 A
22303
100W HPS
30/6
NE 22ND AVE
LBS452
50642
55/3
32037
40/4
150W HPS
20433
55/3
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26


Navigator - combined_local.pmf
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
NONE950
50 KS-C
1433 C
1433 ABC
32045
55/IIIB
NONE949
50 KS-A
20435
150W HPS
20434
31921
NE 15TH ST
1433 ABC
40/4
32038
1433 C
31913
NONE955
50 KS-C
31922
55/3
1433 A
NE 15TH TER
22303
100W HPS
30/6
50642
LBS452
32037
NE 22ND AVE
250W HPS
20433
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26


Navigator - combined_local.pmf
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
NE 22ND AVE
NE 15TH ST
NE 15TH TER
1433 ABC
1433 C
1433 A
NONE950
50 KS-C
NONE949
50 KS-A
NONE955
50 KS-C
32045
55/IIIB
20434
150W HPS
55/IIIB
31921
55/IIIB
20435
150W HPS
55/IIIB
40/4
32038
31922
55/3
31913
40/4
LBS452
50642
55/3
32037
40/4
150W HPS
20433
55/3
303
100W HPS
30/6
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26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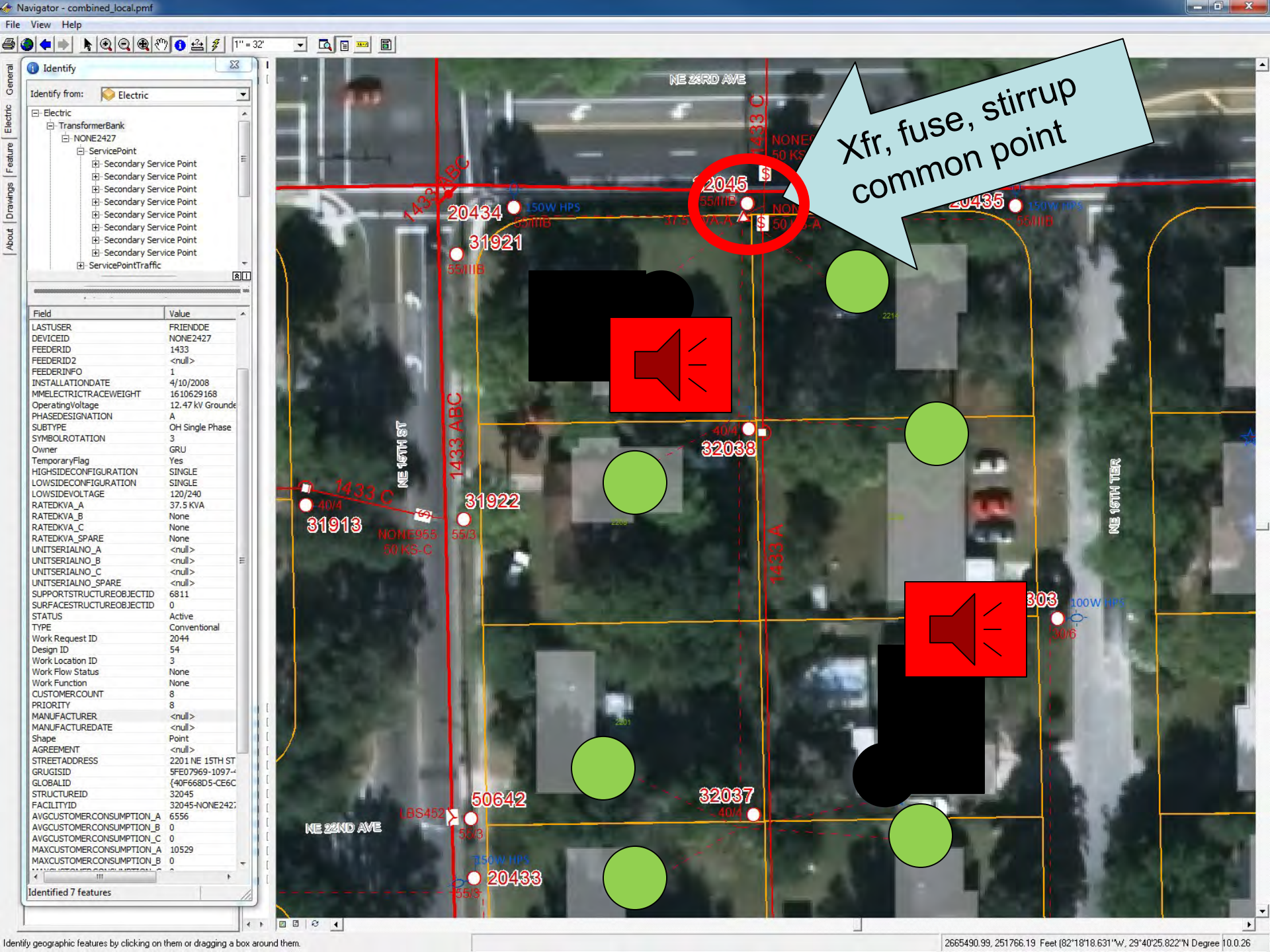
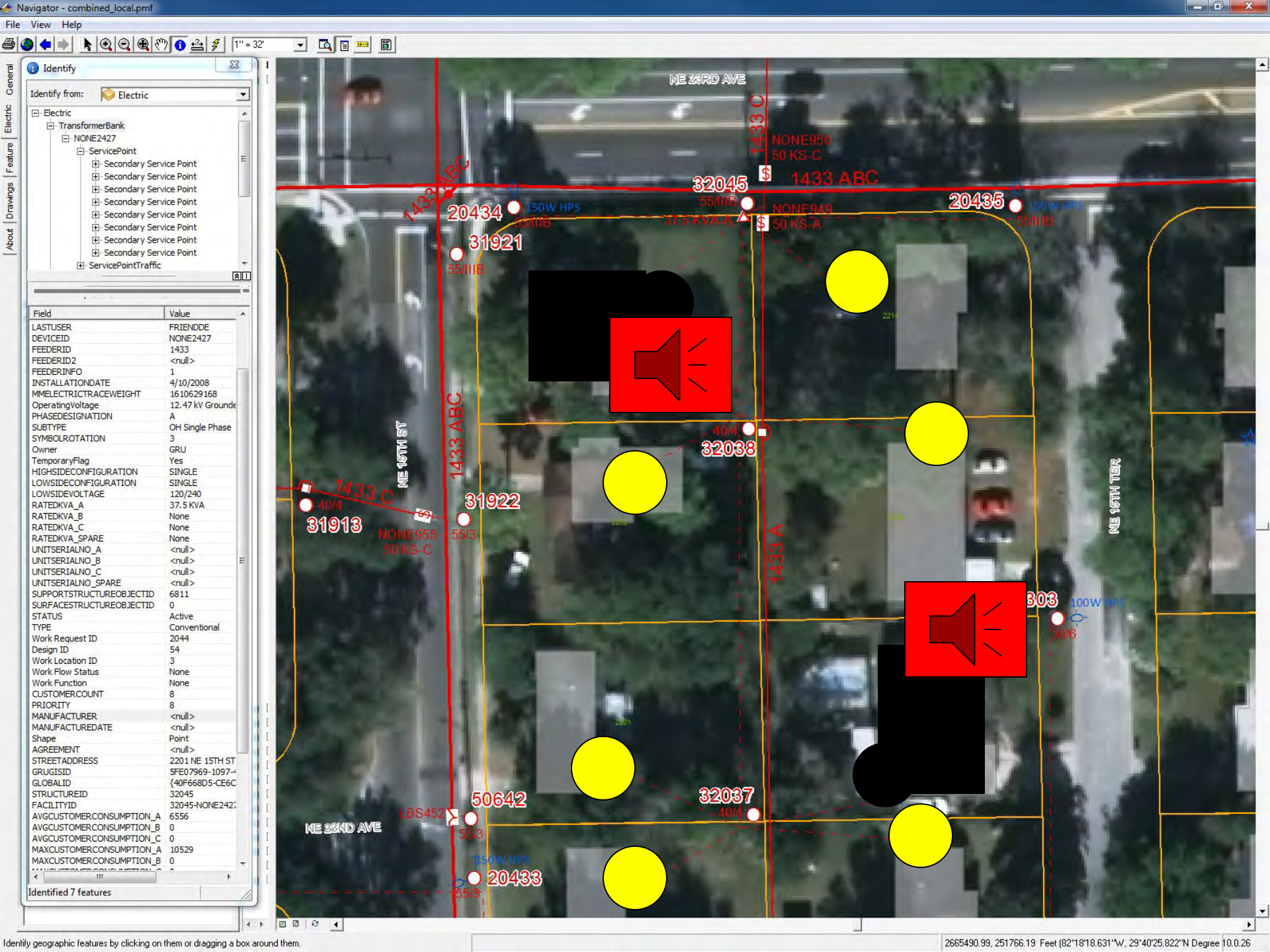
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
1433 C
NONE950
50 KS-C
1433 ABC
32045
55/IIIB
20434
150W HPS
55/IIIB
NONE949
50 KS-A
20435
150W HPS
55/IIIB
31921
55/IIIB
NE 15TH ST
1433 ABC
40/4
32038
NE 15TH TER
1433 C
40/4
31913
NONE955
50 KS-C
31922
55/3
1433 A
303
100W HPS
30/6
LBS452
50642
55/3
32037
40/4
NE 22ND AVE
150W HPS
20433
55/3
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26


Navigator - combined_local.pmf
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
Xfr, fuse, stirrup common point
NE 23RD AVE
NE 22ND AVE
NE 15TH ST
NE 15TH TER
1433 ABC
1433 C
1433 A
20434
150W HPS
31921
55/IIIB
2045
20435
32038
40/4
31922
55/3
31913
NONE955
50 KS-C
50642
LBS452
32037
20433
100W HPS
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26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File View Help
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Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
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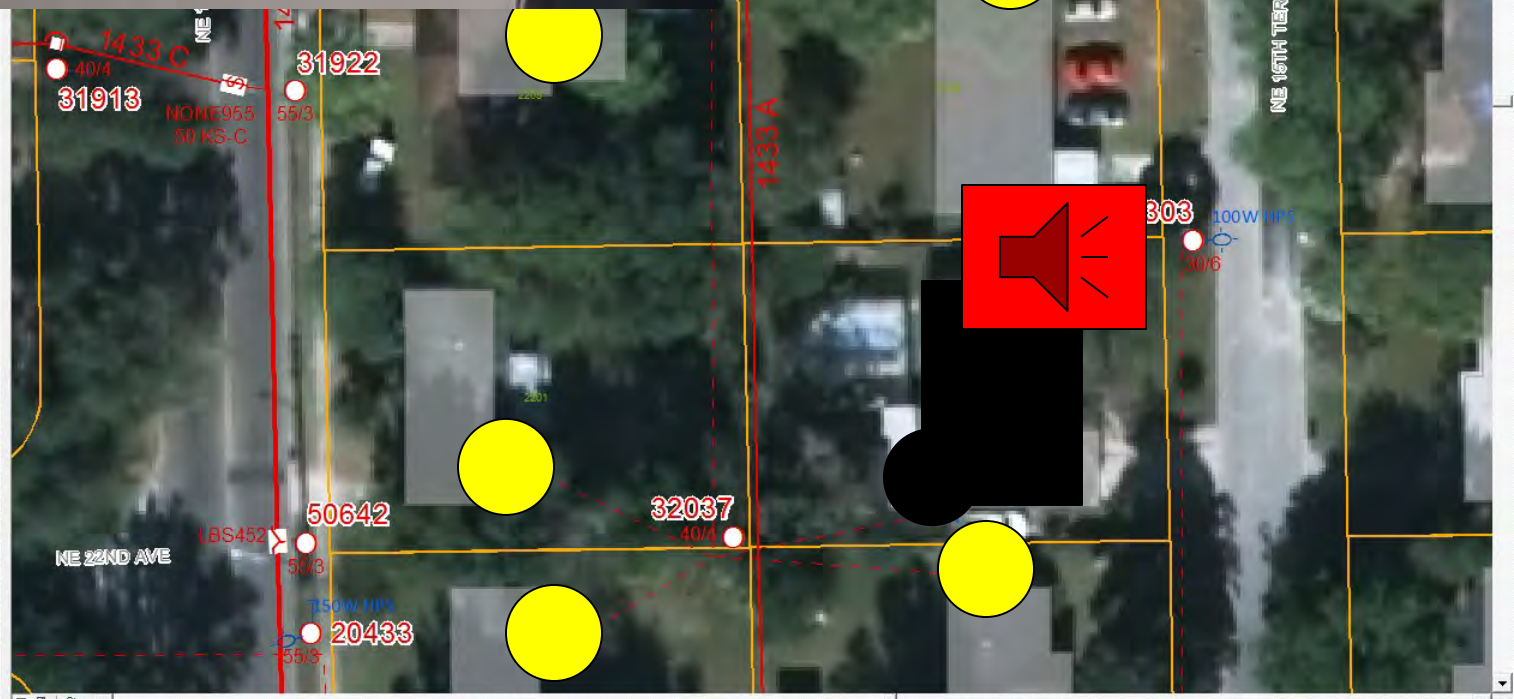
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
NONE950
50 KS-C
1433 C
1433 ABC
32045
20435
20434
150W HPS
NONE949
50 KS-A
31921
NE 15TH ST
1433 ABC
32038
NE 15TH TER
1433 C
31913
NONE955
50 KS-C
31922
1433 A
303
100W HPS
NE 22ND AVE
50642
LBS452
32037
150W HPS
20433
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26

Xfr, fuse, stirrup common point

HIGHSIDECONFIGURATION	SINGLE
LOWSIDECONFIGURATION	SINGLE
LOWSIDEVOLTAGE	120/240
RATEDKVA_A	37.5 KVA
RATEDKVA_B	None
RATEDKVA_C	None
RATEDKVA_SPARE	None
UNITSERIALNO_A	<null>
UNITSERIALNO_B	<null>
UNITSERIALNO_C	<null>
UNITSERIALNO_SPARE	<null>
SUPPORTSTRUCTUREOBJECTID	6811
SURFACESTRUCTUREOBJECTID	0
STATUS	Active
TYPE	Conventional
Work Request ID	2044
Design ID	54
Work Location ID	3
Work Flow Status	None
Work Function	None
CUSTOMERCOUNT	8
PRIORITY	8
MANUFACTURER	<null>
MANUFACTUREDATE	<null>
Shape	Point
AGREEMENT	<null>
STREETADDRESS	2201 NE 15TH ST
GRUGISID	5FE07969-1097-4
GLOBALID	{40F668D5-CE6C
STRUCTUREID	32045
FACILITYID	32045-NONE242
AVGCUSTOMERCONSUMPTION_A	6556
AVGCUSTOMERCONSUMPTION_B	0
AVGCUSTOMERCONSUMPTION_C	0
MAXCUSTOMERCONSUMPTION_A	10529
MAXCUSTOMERCONSUMPTION_B	0

Identified 7 features



Identify geographic features by clicking on them or dragging a box around them.

2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26

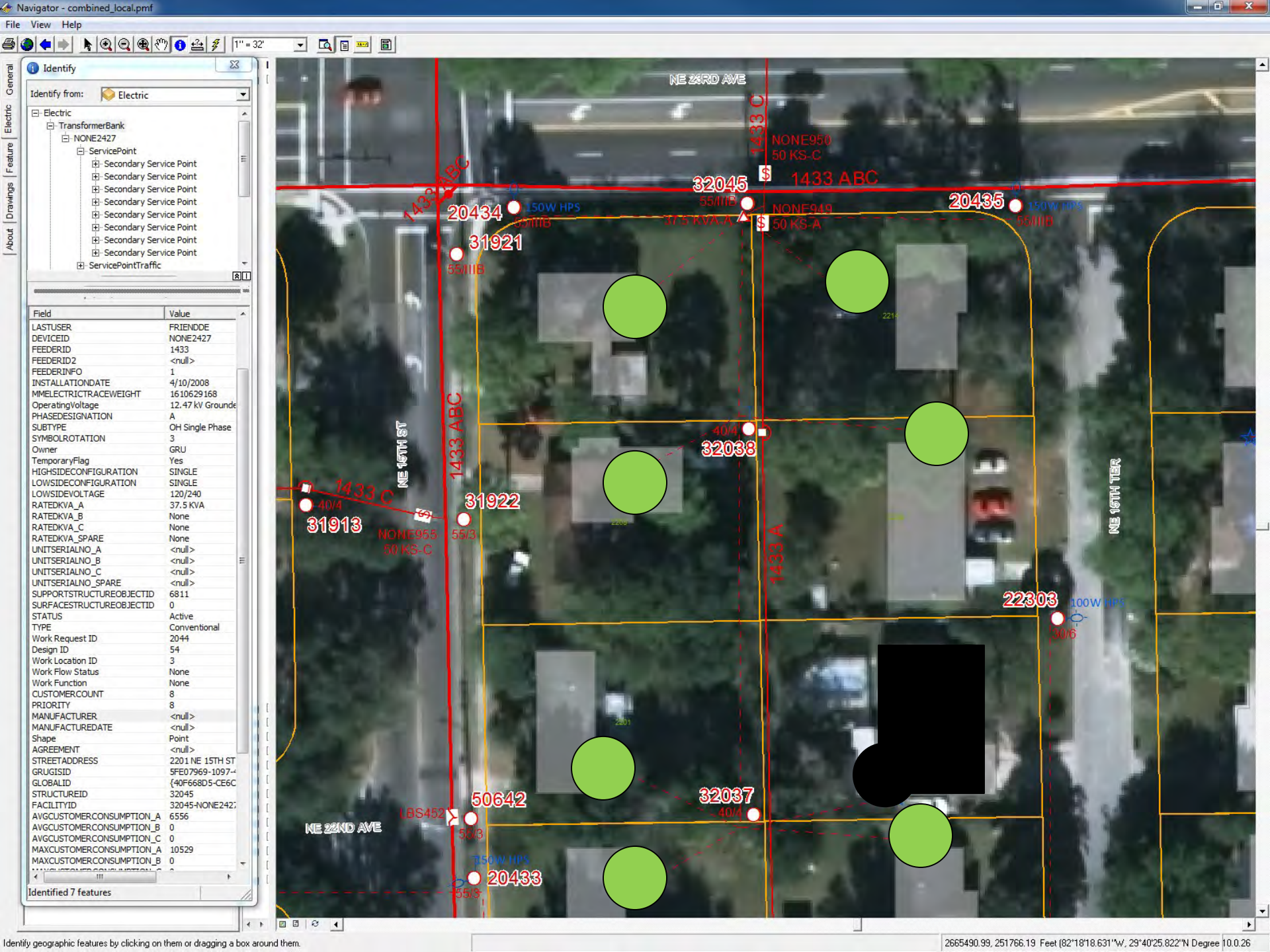
Xfr, fuse, stirrup common point

SUPPORTSTRUCTUREOBJECTID	6811
SURFACESTRUCTUREOBJECTID	0
STATUS	Active
TYPE	Conventional
Work Request ID	2044
Design ID	54
Work Location ID	3
Work Flow Status	None
Work Function	None
CUSTOMERCOUNT	8
PRIORITY	8
MANUFACTURER	<null>
MANUFACTUREDATE	<null>
Shape	Point
AGREEMENT	<null>
STREETADDRESS	2201 NE 15TH ST
GRUGISID	5FE07969-1097-4
GLOBALID	{40F668D5-CE6C
STRUCTUREID	32045
FACILITYID	32045-NONE242
AVGCUSTOMERCONSUMPTION_A	6556
AVGCUSTOMERCONSUMPTION_B	0
AVGCUSTOMERCONSUMPTION_C	0
MAXCUSTOMERCONSUMPTION_A	10529
MAXCUSTOMERCONSUMPTION_B	0

Identified 7 features

Identify geographic features by clicking on them or dragging a box around them.

2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26


Navigator - combined_local.pmf
File View Help
Identify
Identify from: Electric
Electric
TransformerBank
NONE2427
ServicePoint
Secondary Service Point
ServicePointTraffic
Field Value
LASTUSER FRIENDDE
DEVICEID NONE2427
FEEDERID 1433
FEEDERID2 <null>
FEEDERINFO 1
INSTALLATIONDATE 4/10/2008
MMELECTRICTRACEWEIGHT 1610629168
OperatingVoltage 12.47 kV Grounde
PHASEDESIGNATION A
SUBTYPE OH Single Phase
SYMBOLROTATION 3
Owner GRU
TemporaryFlag Yes
HIGHSIDECONFIGURATION SINGLE
LOWSIDECONFIGURATION SINGLE
LOWSIDEVOLTAGE 120/240
RATEDKVA_A 37.5 KVA
RATEDKVA_B None
RATEDKVA_C None
RATEDKVA_SPARE None
UNITSERIALNO_A <null>
UNITSERIALNO_B <null>
UNITSERIALNO_C <null>
UNITSERIALNO_SPARE <null>
SUPPORTSTRUCTUREOBJECTID 6811
SURFACESTRUCTUREOBJECTID 0
STATUS Active
TYPE Conventional
Work Request ID 2044
Design ID 54
Work Location ID 3
Work Flow Status None
Work Function None
CUSTOMERCOUNT 8
PRIORITY 8
MANUFACTURER <null>
MANUFACTUREDATE <null>
Shape Point
AGREEMENT <null>
STREETADDRESS 2201 NE 15TH ST
GRUGISID 5FE07969-1097-
GLOBALID {40F668D5-CE6C
STRUCTUREID 32045
FACILITYID 32045-NONE242
AVGCUSTOMERCONSUMPTION_A 6556
AVGCUSTOMERCONSUMPTION_B 0
AVGCUSTOMERCONSUMPTION_C 0
MAXCUSTOMERCONSUMPTION_A 10529
MAXCUSTOMERCONSUMPTION_B 0
Identified 7 features
NE 23RD AVE
NONE950
50 KS-C
1433 C
1433 ABC
32045
55/IIIB
NONE949
50 KS-A
20435
150W HPS
20434
31921
NE 15TH ST
1433 ABC
40/4
32038
1433 C
31913
NONE955
50 KS-C
31922
55/3
1433 A
NE 15TH TER
22303
100W HPS
30/6
50642
LBS452
32037
NE 22ND AVE
250W HPS
20433
Identify geographic features by clicking on them or dragging a box around them.
2665490.99, 251766.19 Feet (82°18'18.631"W, 29°40'25.822"N Degree 10.0.26

Questions?

GRU
More than Energy

Supplemental Slides

Timeline – How we got here.

1990's:	GRU using ArcView (primarily command line interface) and MapObjects, a custom application
Early 2000's:	ArcGIS & ArcMap released with typical Windows interface ArcReader replaces MapObjects GRU programmer creates Navigator as primary user mapping tool
2004:	Gas converts paper maps to GIS
2008:	Electric stopped paper map books Microsoft stops supporting Visual Basic 6 – Note that GRU has 3 custom apps built on VB6 Responder begins implementation
2010:	Esri stops supporting VB6 in their products – see Note above re: custom apps
2013:	Esri Announces plan to replace Geometric Network Data Model
2014:	Esri Announces retiring ArcGIS version 10.2 in 2019
2015:	TC Technology announces it will replace GO Sync Mapbook with MIMS Mobile GO Sync Mapbook is built on Esri's ArcGIS Engine, to be retired in 2019 MIMS Mobile is built on Esri's ArcGIS Runtime, support continues through 202x
2016:	Executive Team/UAB/CC approves purchase of MIMS Mobile
2017:	TC Technology announces utility design component in MIMS Mobile (no extra cost, covered in ELA) MIMS Mobile used as Storm Damage Assessment application during Hurricane Irma • Success recognized in Esris ArcNews magazine • Several utilities Including Jax Beach Utilities and Lakeland Electric asked how we used MIMS Mobile during Irma
2018:	ESRI Published new Utility Network Data Model in Jan 2018 SSP Innovations acquires TC Technology
2019:	System control is replacing Responder with OSI Electra

FY18 GENERAL PLANT PROJECTIONS

FY	Profit Ctr	WBS	Fnd	Pri #	SOW #	Asset Description	Total Budget	Actuals & Commitments	FY18 Total Projections
2018	1920	CP.000012.02.02	90			1920 / MIMS mobile GIS Software		$ 38,400	$ 38,400
1920 Total								**$ 38,400**	**$ 38,400**

FY19 GENERAL PLANT REQUESTS

FY	Profit Ctr	WBS	Fnd	Pri #	SOW #	Asset Description	Total Budget	Sum Column	
2019	1920	CP.000017.06	90	3	18-9-3	Life Cycle Software	$ 30,000	Annual	
2019	1920	CP.000017.07	90	3	18-9-3	Implement LifeCycle & Intgrt w/MIMS	$ 452,500		
2019	1920	CP.000017.08	90	5	18-9-3	Tracking & Traceability (PHMSA)	$ 112,500		
2019	1920	CP.000017.09	90	6	18-9-3	MIMs Mobile Storm Damage Assessment	$ 262,500	**$ 857,500**	
2019	1920	CP.000017.03	90	1	18-9-4	Implement MIMS Mobile Dispatch	$ 287,500	**$ 287,500**	
2019	1920	CP.000017.02	90	1	18-9-5	SSP Productivity Tools	$ 10,200	Annual	
2019	1920	CP.000017.04	90	2	18-9-5	Implmnt ArcGIS-v10.6 & SSP Sync Gas 1	$ 125,000		
2019	1920	CP.000017.05	90	3	18-9-5	SSP Sync Software	$ 10,000	Annual	
2019	1920	CP.000017.10	90	7	18-9-5	Implmnt ArcGIS-v10.6 & SSP Sync-Elec 1	$ 125,000	**$ 270,200**	
1920 Total							**$ 1,415,200**		

FY20 GENERAL PLANT REQUESTS

FY	Profit Ctr	WBS	Fnd	Pri #	SOW #	Asset Description	Total Budget		
2020	1920	CP.000017.11	90	1		Implmnt ArcGIS-v10.6 & SSP Sync Gas 2	$ 125,000		
2020	1920	CP.000017.12	90	2		Implmnt ArcGIS-v10.6 & SSP Sync-Elec 2	$ 125,000	**$ 250,000**	
2020	1920	CP.000017.13	90	3		MIMs Rplc ArcFM Dsgnr-Elec_SchneiderElec	$ 450,000	**$ 450,000**	
1920 Total							**$ 700,000**		

FY21 GENERAL PLANT PLANNING

FY	Profit Ctr	WBS	Fnd	Pri #	SOW #	Asset Description	Total Budget		
2021	1920	# NEW	90	1		MIMs Rplc ArcFM Dsgnr-Gas_SchneiderElec	$ 300,000	**$ 300,000**	
2021	1920	# NEW	90	1		MIMs & SAP Integration-Gas Work Orders	$ 281,250		
2021	1920	# NEW	90	1		MIMs & SAP Integration-Elec Wrk Orders	$ 281,500	**$ 562,750**	
1920 Total							**$ 862,750**		
						Grand Total	**$ 2,977,950**		
						Total without SAP Integration	$ 2,415,200		