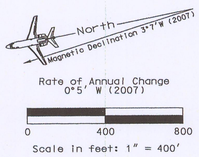
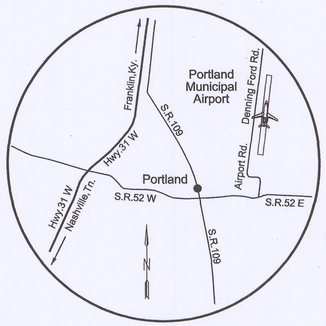
PORTLAND MUNICIPAL AIRPORT
PORTLAND, TENNESSEE
AIRPORT LAYOUT PLAN SET





LOCATION MAP

Not to Scale

MARCH 2008

GARVER PROJECT NO. 06500160

GARVER ENGINEERS

361 MALLORY STATION RD, SUITE 102 FRANKLIN, TENNESSEE 37067

(615) 377-1337 www.garverengineers.com

INDEX OF DRAWINGS

Runway Data

ITEM		Runway 1 - 19 Existing	Runway 1 - 19 Ultimate
Airport Reference Code		B-II	Same
Critical Aircraft		Citation II	Same
Runway Dimensions		5,001' x 100'	Same
Runway Bearing (True)		N 11.10° E	Same
Approach Visibility Minimums		1 Mile	Same
Runway Approach		1-VISUAL/19-NPI	1-NPI/19-NPI
Runway Safety Area (RSA)		150' X 5,601'	Same
Object Free Area (OFA)		500' X 5,601'	Same
Obstacle Free Zone (OFZ)		400' X 5,401'	Same
Runway Approach Surfaces		1-20:1/19-34:1	1-34:1/19-34:1
Runway/Taxiway Lighting		MIRL / MITL	Same
Runway/Taxiway Marking		Non-precision	Same
Effective Runway Gradient (in %)		0.95	Same
Pavement Material (Surface)		Asphalt	Same
Pavement Strength (thousand lbs.)		70(SWL)/85(DWL)	Same
Navigational/Approach Aids		Beacon, PAPI, REILS, AWOS	Same
Instrument Runway		1-VISUAL 19-VOR/DME/GPS	1-GPS 19-VOR/DME/GPS
Threshold Siting Surface		App. 2, Table A2-1, 1-Row 5, 19-Row 5	Same
Runway End Coordinates (NAD 83/NAVD 88)	RW 1	N 36°35'09.91" W 86°28'42.81"	Same
	RW 19	N 36°35'58.43" W 86°28'31.00"	Same
Runway End Elevations	RW 1	817.6'	Same
	RW 19	770.1'	Same
Touch Down Zone (TDZ) Elevations	RW 1	817.6'	Same
	RW 19	803.9'	Same

Airport Data

	Existing	Ultimate
Airport Reference Point (ARP) Coordinates (NAD 83/NAVD 88)	N 36°35'34.17" W 86°28'36.90"	Same
Mean Maximum Temperature Hottest Month	91°F	Same
Airport Elevation	817.6'	Same
Airport Acreage (Approximate)	180.5 ~~144.37~~	217.26

Runway Protection Zone Dimensions

RW End	Existing	Ultimate
1	500' IW X 700' OW X 1,000' L	Same
19	500' IW X 700' OW X 1,000' L	Same

Runway Object Free Area

RW End	Existing	Ultimate
1	500' X 5,601'	Same
19	500' X 5,601'	Same

Violations to FAR Part 77 Surfaces

No.	Description	Part 77 Sur.	Elevation	Violation	Proposed Disposition
V1	Road	Primary	764.1'	-	Relocate
V2	Road	Primary	740.0'	-	Relocate
V3	Trees	Transitional	787.2'	0.1'	Trim or Remove
V4	Trees	Transitional	789.9'	1.3'	Trim or Remove
V5	Trees	Transitional	782.3'	10.5'	Trim or Remove
V6	Trees	Transitional	793.4'	2.2'	Trim or Remove
V7	Trees	Transitional	797.6'	11.9'	Trim or Remove
V8	Trees	Transitional	817.1'	12.4'	Trim or Remove
V9	Trees	Transitional	850.7'	16.3'	Trim or Remove
V10	Trees	Transitional	843.9'	20.5'	Trim or Remove
V11	Trees	Transitional	813.6'	0.5'	Trim or Remove
V12	Trees	Transitional	852.8'	16.2'	Trim or Remove
V13	Beacon	Transitional	860.1'	11.1'	Relocate
V14	Terrain	Primary	806.8'	1.9'	Remove
V15	Windcone	Transitional	830.7'	17.4'	Relocate
V16	Trees	Transitional	839.5'	7.2'	Trim or Remove
V17	Trees	Transitional	833.3'	5.3'	Trim or Remove
V18	Trees	Transitional	848.4'	19.9'	Trim or Remove
V19	Trees	Transitional	850.8'	1.5'	Trim or Remove
V20	Trees	Transitional	851.3'	25.3'	Trim or Remove
V21	Trees	Primary	836.7'	24.1'	Remove
V22	Road	Primary	825.8'	10.2'	Relocate
V23	Pole	Transitional	843.4'	20.8'	Remove
V24	Trees	Transitional	847.7'	7.6'	Trim or Remove
V25	House	Transitional	835.7'	0.2'	Light
V26	Trees	Transitional	852.9'	5.8'	Trim or Remove
V27	Pole	Transitional	837.4'	4.7'	Remove
V28	Trees	Transitional	846.1'	17.5'	Trim or Remove
V29	Trees	Transitional	826.7'	0.1'	Trim or Remove
V30	Trees	Transitional	824.0'	3.1'	Trim or Remove
V31	Pole	Primary	831.4'	13.8'	Remove
V32	Trees	Transitional	828.9'	2.4'	Trim or Remove
V33	Trees	Transitional	842.9'	24.0'	Trim or Remove
V34	Trees	Transitional	862.3'	15.5'	Trim or Remove
V35	Trees	Approach	868.3'	47.2'	Trim or Remove
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V47	Trees	Approach	875.3'	12.3'	Trim or Remove

Layout Plan Legend

Item	Existing	Ultimate
Airfield Pavement		
Building		
Building Restriction Line	BRL	BRL
Fence Line	X X X	X X X
Airport Property Line	PL	PL
Airport Easement Line	EE	PE
Rotating Beacon		Same
Windcone and Segmented Circle		
Ground Contours	182	Same
Tree Line		Same
Tree		Same
Threshold Lights		
REILS		
VASI/PAPI		
Airport Reference Point (ARP)		
Utility Pole		Same
Part 77 Violation No.	V#	

TRAVERSE WAY

NO.	ROADWAY ELEVATION	APPROACH SURFACE ELEVATION	AMOUNT OF PENETRATION	PROPOSED ACTION
C1	825.0'	817.6'	7.4'	Relocate Road
C2	818.1'	841.2'	-	Relocate Road
C3	813.0'	841.9'	-	Relocate Road
C4	761.0'	770.1'	-	Relocate Road
C5	752.6'	772.2'	-	Relocate Road
C6	755.0'	770.1'	-	Relocate Road
C7	757.0'	776.3'	-	None
C8	735.0'	782.7'	-	None
C9	758.0'	776.3'	-	None

RUNWAY SAFETY AREA DETERMINATION

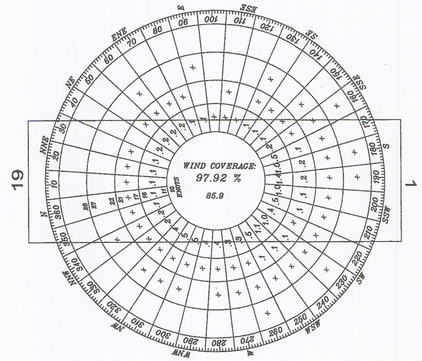
RUNWAY END NUMBER		STANDARD RSA Length Beyond Rwy	STANDARD RSA Width	ACTUAL RSA Length Beyond Rwy	ACTUAL RSA Width	ACTUAL RSA Violations to RSA Along Side of Rwy	RSA DETERMINATION	DATE APPROVED
EXISTING	1	300'	150'	300'	150'	None	NA	NA
ULTIMATE	1	300'	150'	300'	150'	None	NA	NA
EXISTING	19	300'	150'	130'	150'	None	ROAD RELOCATED Required RSA IMPROVEMENT 2015	NA
ULTIMATE	19	300'	150'	300'	150'	None	NA	NA

CONSTRUCTION NOTICE REQUIREMENT

To protect operational safety and future development, all proposed construction on the airport must be coordinated by the airport owner with the Tennessee Department of Transportation, Aeronautics Division/FAA prior to construction. TDOT-AD's review takes approximately 60 days.

Building Data

No.	Structure	Top Elevation
B1	Terminal Bldg.	823.5'
B2	Maint. Hangar/Paint Shop	827.6'
B3	Maintenance Hangar	827.6'
B4	Maintenance Hangar	833.6'
B5	Maintenance Hangar	832.2'
B6	10-Unit T-Hangar	804.4'
P7	Ultimate Terminal Bldg.	~~TBD~~ TBD
P8	Ult. 8-Unit T-Hangars	~~TBD~~ Built
P9	Ult. Corporate Hangars	TBD



ALL WEATHER WIND ROSE

SOURCE: BOWLING GREEN, KY
PERIOD: 1996 - 2005
TOTAL OBSERVATIONS: 76,678
COVERAGE: CONDITIONAL (13 KNOTS)

North
Magnetic Declination 3°7'W (2007)

Rate of Annual Change
0°5' W (2007)

0 300 600 900
Scale in feet: 1" = 300'

State of Tennessee Department of Transportation

CONDITIONALLY APPROVED

STATE BLOCK GRANT PROGRAM

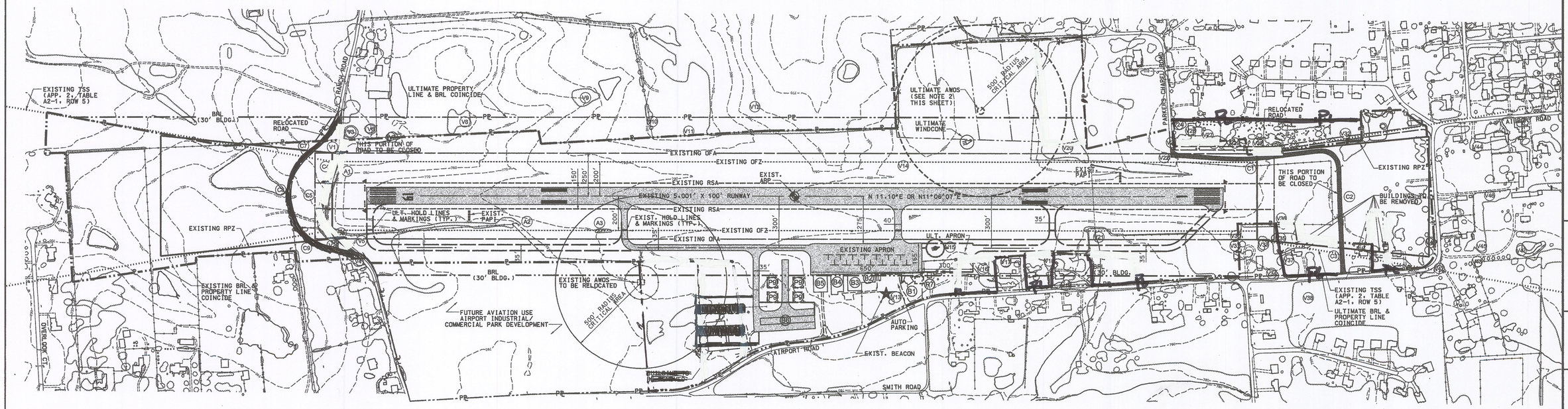
J. Tom Burgess, P.E. — Date 7/24/8

TN DEPT. OF TRANSPORTATION

Subject to Comments in Approval Letter

NOTES:

1. REFER TO THE INNER APPROACH SURFACE DRAWING, SHEET 3, FOR CLOSE IN EXISTING OBSTRUCTIONS.
2. THE EXISTING AWOS IS PROPOSED TO BE RELOCATED TO THE ULTIMATE AWOS AREA ONLY IF HANGAR DEVELOPMENT ENCROACHES ON THE EXISTING AWOS LOCATION.
3. THRESHOLD SITING SURFACE OBJECT PENETRATIONS (TREES LABELED V32, V33, V35, AND V36 AND ROAD LABELED C1) TO BE REMOVED.
4. OBSTACLE FREE ZONE PENETRATIONS (TREES LABELED A1, A2, A3, V5, V20, V21, V36, TERRAIN LABELED V14, AND ROAD LABELED C1) TO BE REMOVED.
5. THE APPROVAL OF THIS AIRPORT LAYOUT PLAN (ALP) REPRESENTS ACCEPTANCE OF THE GENERAL LOCATION OF FUTURE FACILITIES DEPICTED. DURING THE PRELIMINARY DESIGN PHASE, THE AIRPORT OWNER IS REQUIRED TO RESUBMIT FOR APPROVAL THE FINAL LOCATIONS, HEIGHTS AND EXTERIOR FINISH OF STRUCTURES. THE CONCERN IS OBSTRUCTIONS, IMPACT ON ELECTRONIC AIDS OR ADVERSE EFFECTS ON CONTROLLER VIEW OF AIRCRAFT APPROACH AND GROUND MOVEMENT AREAS WHICH COULD ADVERSELY AFFECT THE SAFETY, EFFICIENCY OR UTILITY OF THE AIRPORT.
6. OFZ AND TSS OBJECT PENETRATIONS TO BE REMOVED
7. RUNWAY SAFETY AREA DETERMINATION LOCATED IN CIP NARRATIVE



AIRPORT SPONSOR APPROVAL BLOCK

Approved by :

Chairman, Portland Airport Authority — Date

GARVER ENGINEERS
361 MALLORY STATION ROAD, SUITE 102 • FRANKLIN, TENNESSEE 37067

REV.	DATE	DESCRIPTION
TRD/DWP	3-1-07	Property line upgrade, see P.2 for details
TRD/BC	3-17-2011	T-Hangar 2 - NEW, update total Airport Acreage
LBC	8/2013	Rwy 19 RSA - Road Relocated & Grading

PORTLAND MUNICIPAL AIRPORT

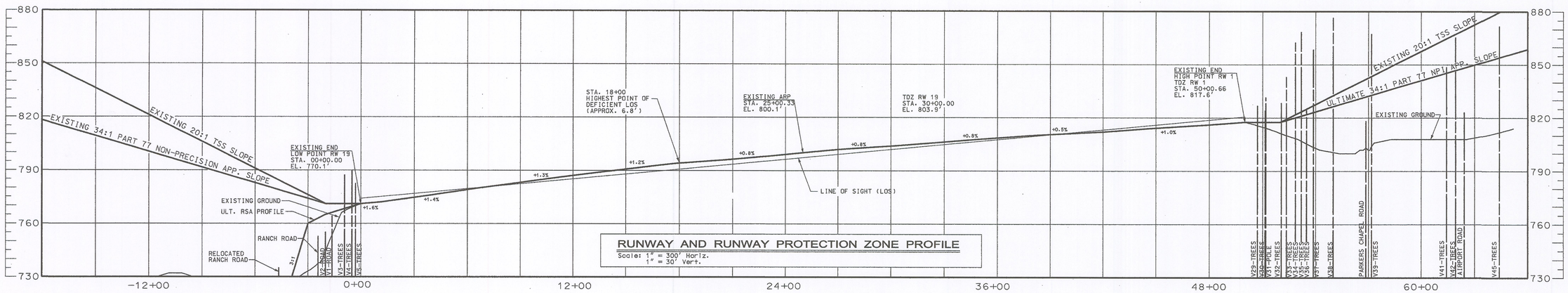
PORTLAND AIRPORT AUTHORITY
PORTLAND, TENNESSEE

AIRPORT LAYOUT DRAWING

Scale: 1" = 300'

Job No. 06500160
Date: March 2008
Designed by: VHL
Drawn by: DLE

Sheet Number
1 OF 8



RUNWAY AND RUNWAY PROTECTION ZONE PROFILE

Scale: 1" = 300' Horiz.
1" = 30' Vert.

Violations to FAR Part 77 Surfaces

No.	Description	Part 77 Sur.	Elevation	Violation	Proposed Disposition
V1	Road	Primary	764.1'	-	Relocate
V2	Road	Primary	740.0'	-	Relocate
V3	Trees	Transitional	787.2'	0.1'	Trim or Remove
V4	Trees	Transitional	789.9'	1.3'	Trim or Remove
V5	Trees	Transitional	782.3'	10.5'	Trim or Remove
V6	Trees	Transitional	793.4'	2.2'	Trim or Remove
V7	Trees	Transitional	797.6'	11.9'	Trim or Remove
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V14	Terrain	Primary	806.8'	1.9'	Remove
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V25	House	Transitional	835.7'	0.2'	Light
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V27	Pole	Transitional	837.4'	4.7'	Remove
V28	Trees	Transitional	846.1'	17.5'	Trim or Remove
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V33	Trees	Transitional	842.9'	24.0'	Trim or Remove
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V35	Trees	Approach	868.3'	47.2'	Trim or Remove
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GARVER ENGINEERS
361 MALLORY STATION ROAD, SUITE 102 • FRANKLIN, TENNESSEE 37067

REV.	DATE	DESCRIPTION

PORTLAND MUNICIPAL AIRPORT

PORTLAND AIRPORT AUTHORITY
PORTLAND, TENNESSEE

RUNWAY PROFILE DRAWING

Scale: 1" = 300'

Job No. 06500160
Date: March 2008
Designed by: VHL
Drawn by: DLE

Sheet Number
2 OF 8

Terminal Area Legend

Item	Existing	Ultimate
Airfield Pavement		
Building		
Building Restriction Line	BRL	BRL
Airport Security Fence	X X X	X X X
Airport Property Line	PL	PL
Airport Easement	EE	PE
Rotating Beacon		Same
Windsock and Segmented Circle		
Ground Contours	182	Same
Tree Line		Same
Tree		Same
Threshold Lights		
REILS		
VASI/PAPI		
Airport Reference Point (ARP)		
Utility Pole		Same
Part 77 Violation No.	V#	

North
Magnetic Declination 3°7' W (2007)
Rate of Annual Change 0°5' W (2007)

0 100 200 300
Scale in feet: 1" = 100'

Building Data

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NOTES:

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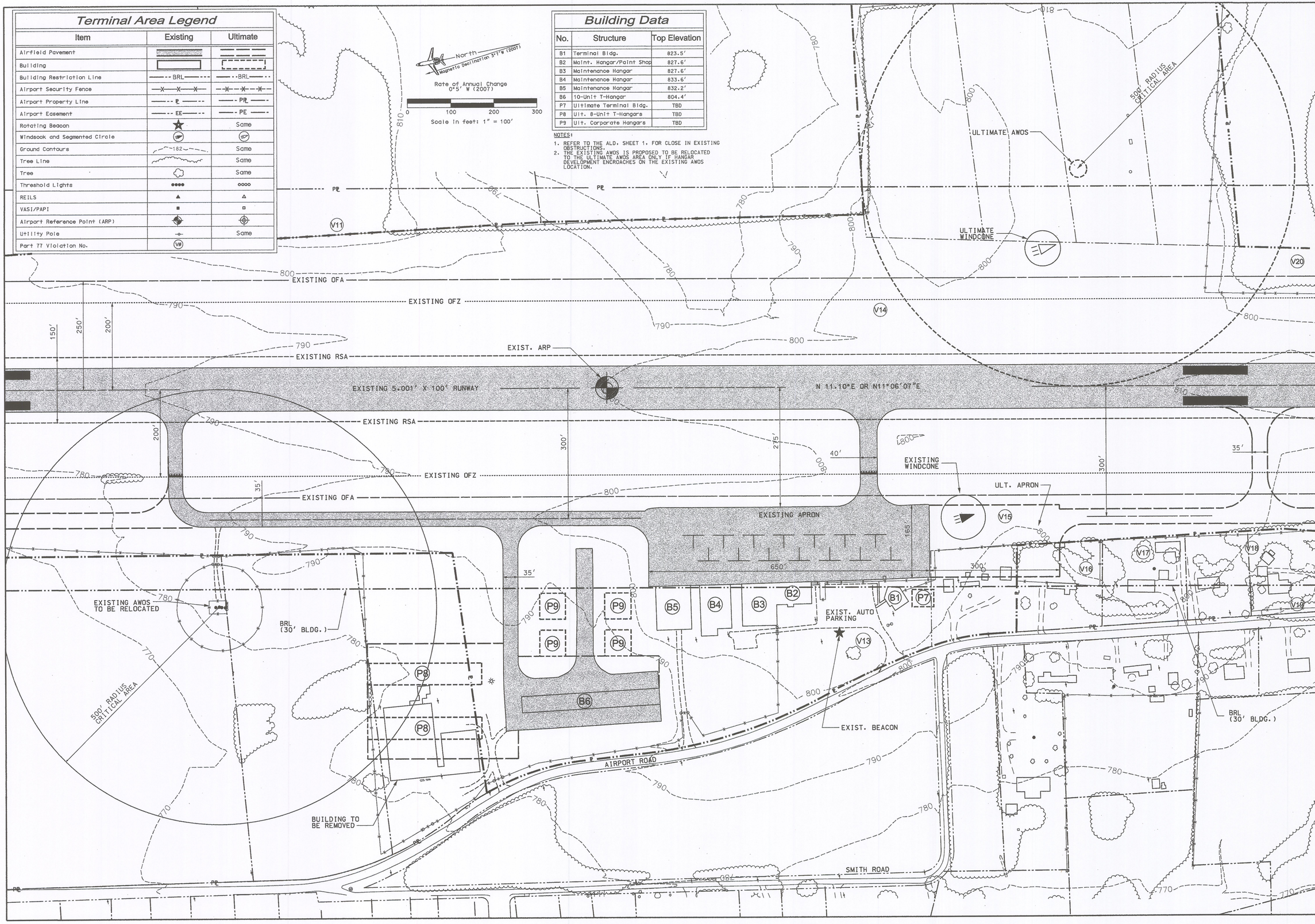


GARVER ENGINEERS
361 MALLORY STATION ROAD, SUITE 102 · FRANKLIN, TENNESSEE 37067

REV.	DATE	DESCRIPTION

PORTLAND MUNICIPAL AIRPORT

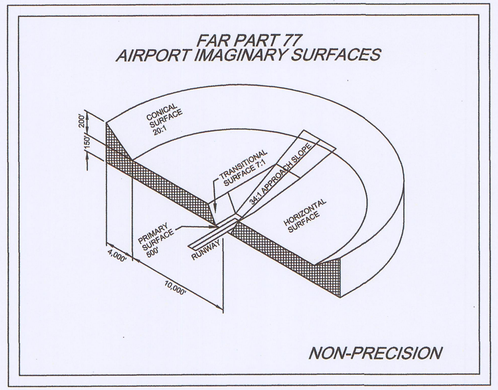
PORTLAND AIRPORT AUTHORITY
PORTLAND, TENNESSEE

TERMINAL AREA DRAWING

Scale: 1" = 100'

Job No. 06500160
Date: March 2008
Designed by: VHL
Drawn by: DLE

Sheet Number
3 OF 8



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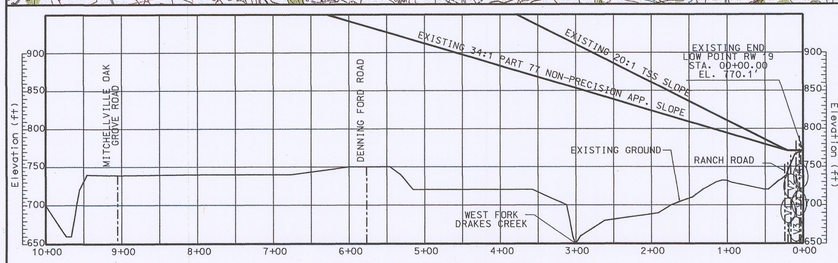
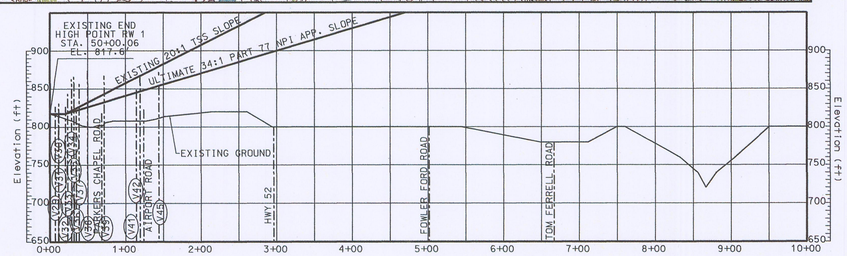
Note: There are no known horizontal or conical Surface Object Penetrations.



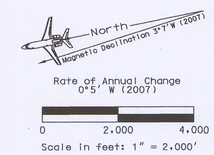
RUNWAY 19 END APPROACH PROFILE

SCALE: HORIZ. 1" = 1,000'
VERT. 1" = 100'



RUNWAY 1 END APPROACH PROFILE

SCALE: HORIZ. 1" = 1,000'
VERT. 1" = 100'



GARVER ENGINEERS
361 MALLORY STATION ROAD, SUITE 102 • FRANKLIN, TENNESSEE 37067

REV.	DATE	DESCRIPTION

PORTLAND MUNICIPAL AIRPORT

PORTLAND AIRPORT AUTHORITY
PORTLAND, TENNESSEE

PART 77
AIRPORT
AIRSPACE
DRAWING

Scale: 1" = 2,000'

Job No. 06500160
Date: March 2008
Designed by: VHL
Drawn by: DLE

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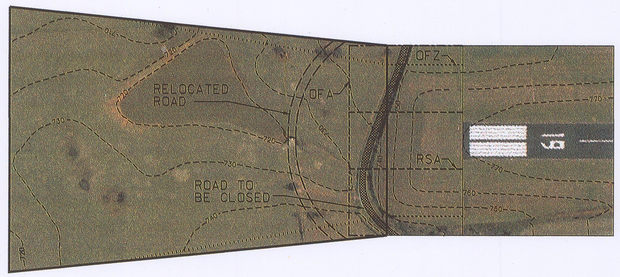
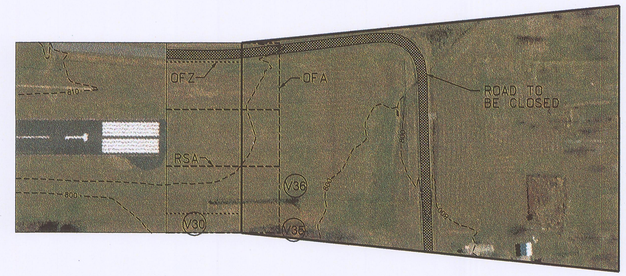
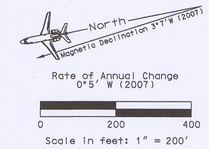
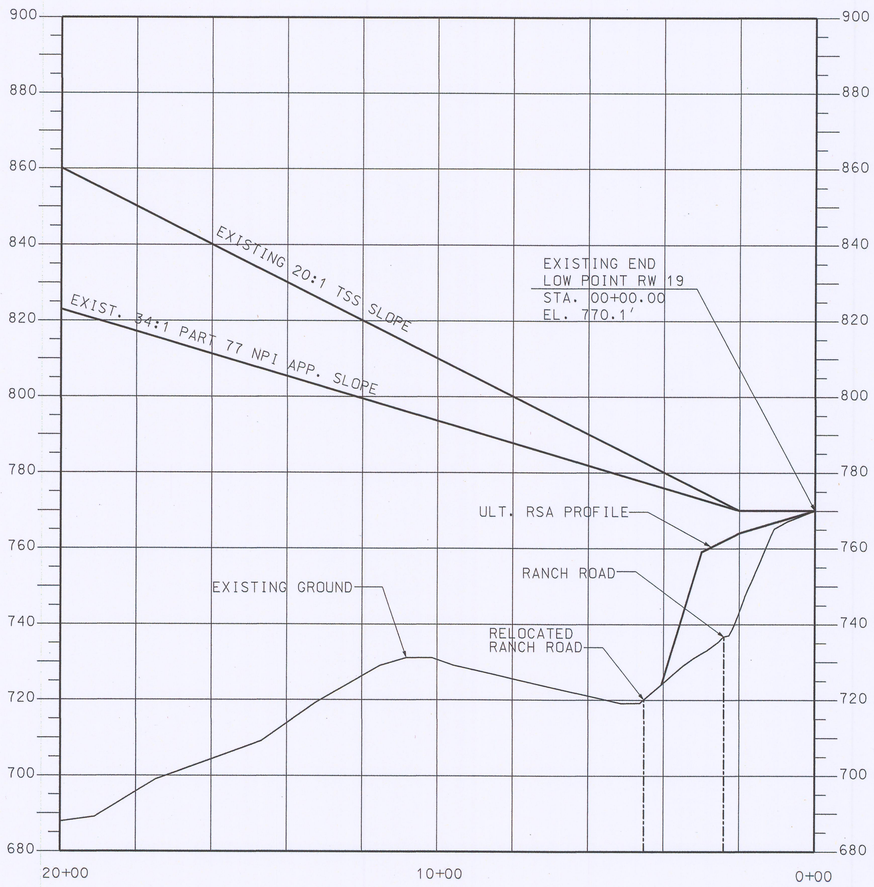
Violations to Part 77 Surfaces

No.	Desc.	Part 77	Elev.	Violation	Prop. Disposition
V30	Trees	Transitional	824.0′	3.11′	Trim or Remove
V35	Trees	Approach	868.3′	47.2′	Trim or Remove
V36	Trees	Approach	824.1′	2.2′	Trim or Remove



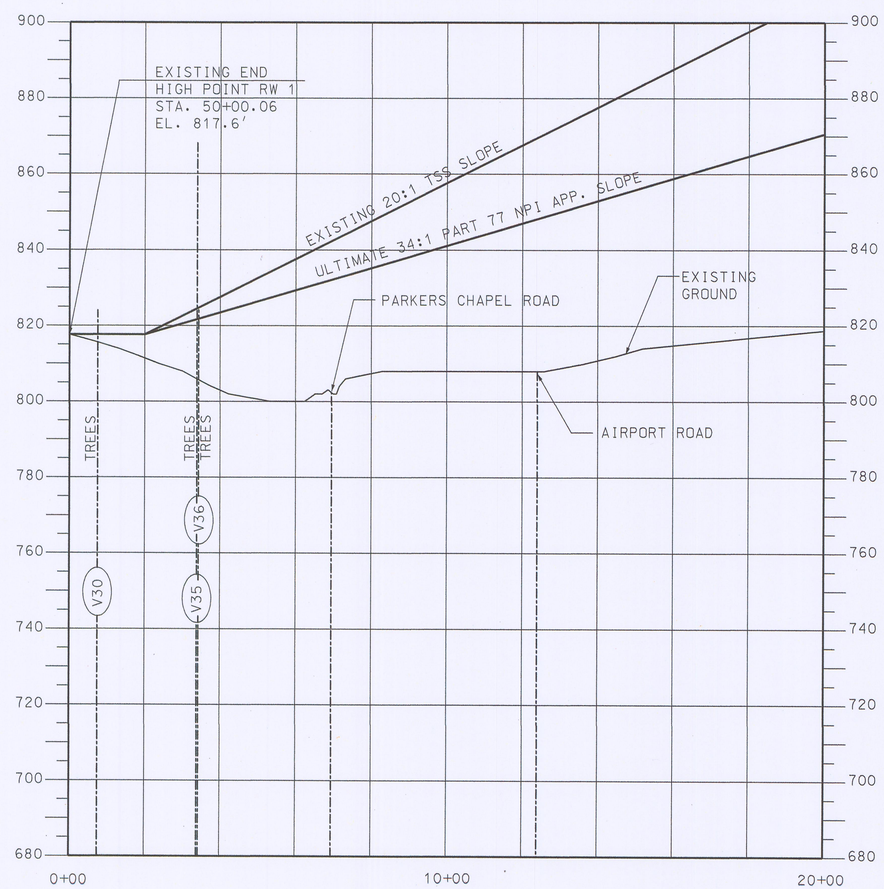






RUNWAY 19 END PROFILE

SCALE: HORIZ.: 1″= 200′; VERT.: 1″= 20′



RUNWAY 1 END PROFILE

SCALE: HORIZ.: 1″= 200′; VERT.: 1″= 20′

GARVER ENGINEERS
361 MALLORY STATION ROAD, SUITE 102 • FRANKLIN, TENNESSEE 37067

REV.	DATE	DESCRIPTION

PORTLAND MUNICIPAL AIRPORT

PORTLAND AIRPORT AUTHORITY
PORTLAND, TENNESSEE

INNER APPROACH SURFACE DRAWING

Scale: 1" = 200'

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