

MEMPHIS AND SHELBY COUNTY OFFICE OF PLANNING AND DEVELOPMENT
STAFF REPORT

#22

[Redacted 3/11/2010]

CASE NUMBER: S.U.P. 10-204cc

L.U.C.B. MEETING: February 11, 2010

LOCATION:

Southeast corner of Riverdale Road and Holmes Road

COUNTY COMMISSION DISTRICT

#4

OWNER:

Houston Levee Trust

APPLICANT:

Tower Ventures

REQUEST:

Cell tower, 160 ft. monopole, "slick stick" design

AREA:

Site: 4,225 sq. ft. leased area on a 76,000 sq. ft (1.6 acre) lot

EXISTING LAND USE & ZONING:

Vacant site in the Planned Commercial (C-P) District

SURROUNDING USES AND ZONING:

- North:** Commercial use regulated by the Villages of Bennington Planned Development, Phase 33 (PD 02-332cc)
- East:** Vacant building, formerly a grocery supermarket and then a school, regulated by the Cypress Southern Commercial Planned Development (PD 98-345)
- South:** Vacant property and gas station, regulated by PD 98-345
- West:** Two semi-wooded parcels --- 1½ and 2½ acres --- in the Agricultural (AG) District, listed as vacant in the records of the Assessor.

OFFICE OF PLANNING AND DEVELOPMENT RECOMMENDATION

Approval, with conditions

[Amended from "Hold, for additional information", as of 2/11/2010]

CONCLUSIONS

- 1. The proposed site is reasonably distant from residential areas. The proposed tower siting is roughly 500 feet west of the nearest single-family residences.**
- 2. The most adverse feature of the proposed location is its prominence with respect to streetscapes of the nearby major roads.**
- 3. To justify the need for service here, staff had requested some information about the lead carrier's service needs and additional siting details, if available.**



Figure 1: Location Map
(Copyrighted material licensed for limited distribution)

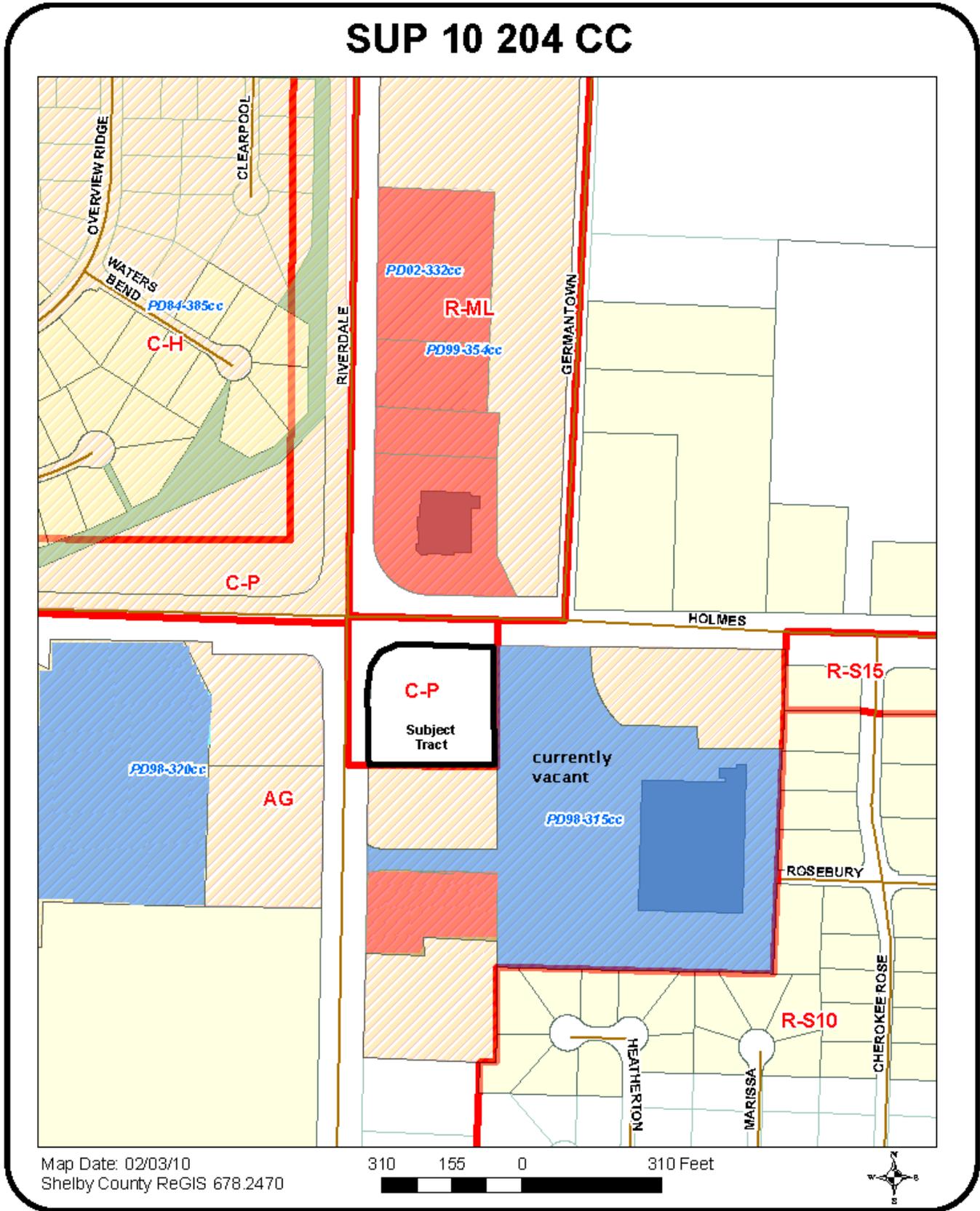
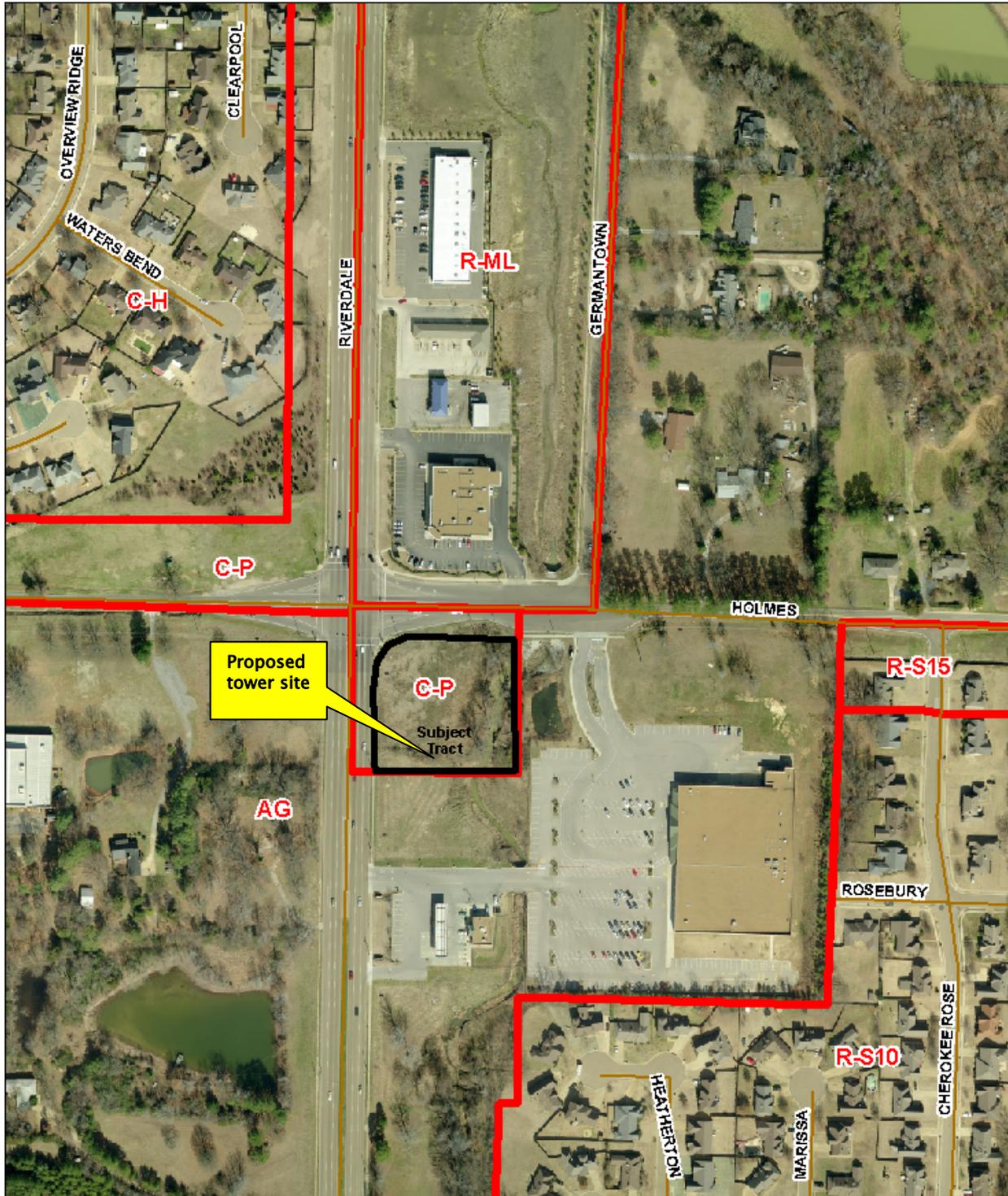


Figure 2: Zoning and Land Use in the Vicinity of the Subject Property

SUP 10 204 CC



Map Date: 02/03/10
Shelby County ReGIS 678.2470

310 155 0 310 Feet

Figure 3: Overhead view of vicinity



Figure 4: Subject property with elevation contours
Red "X" shows approximate location of proposed tower

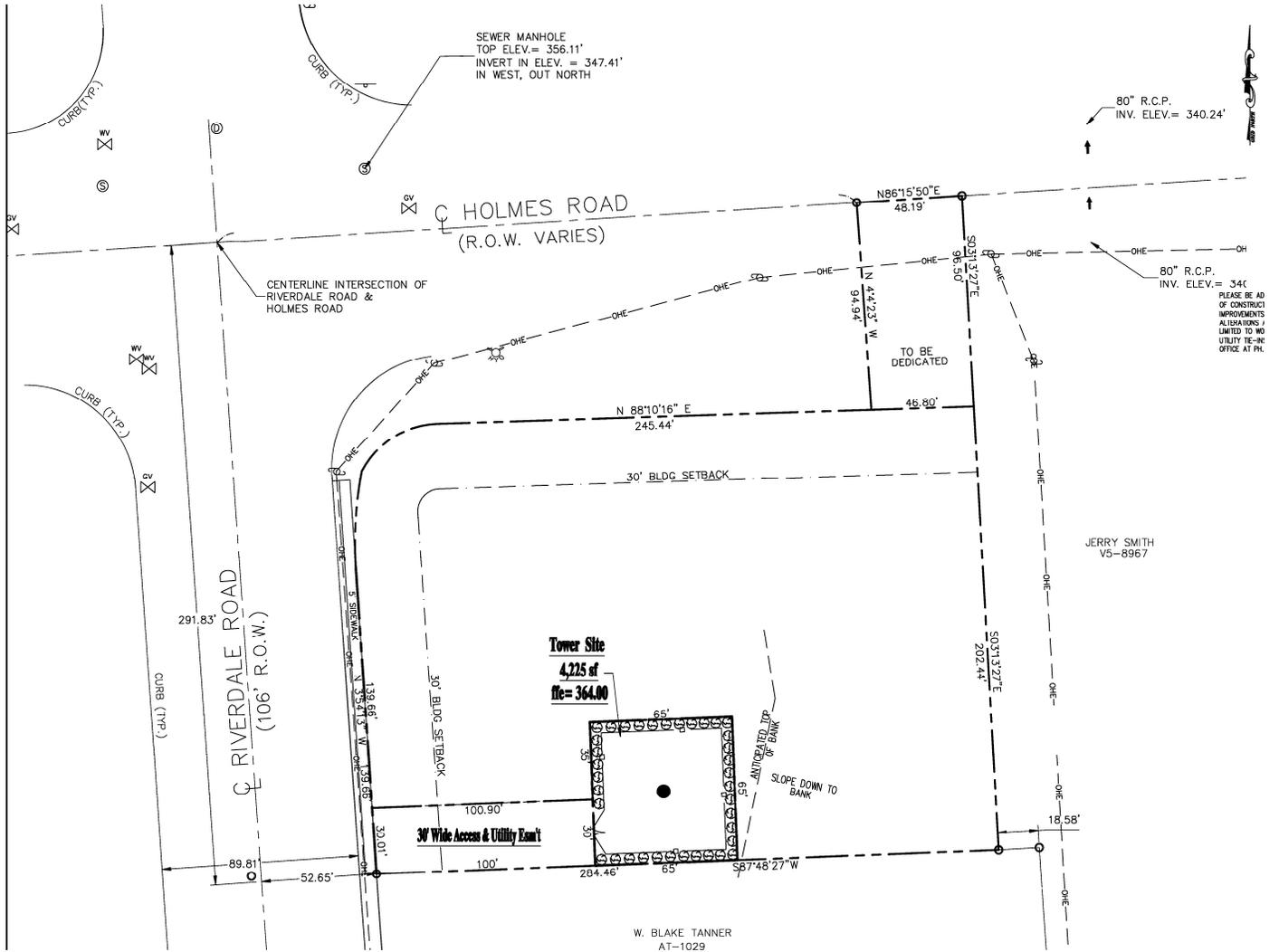
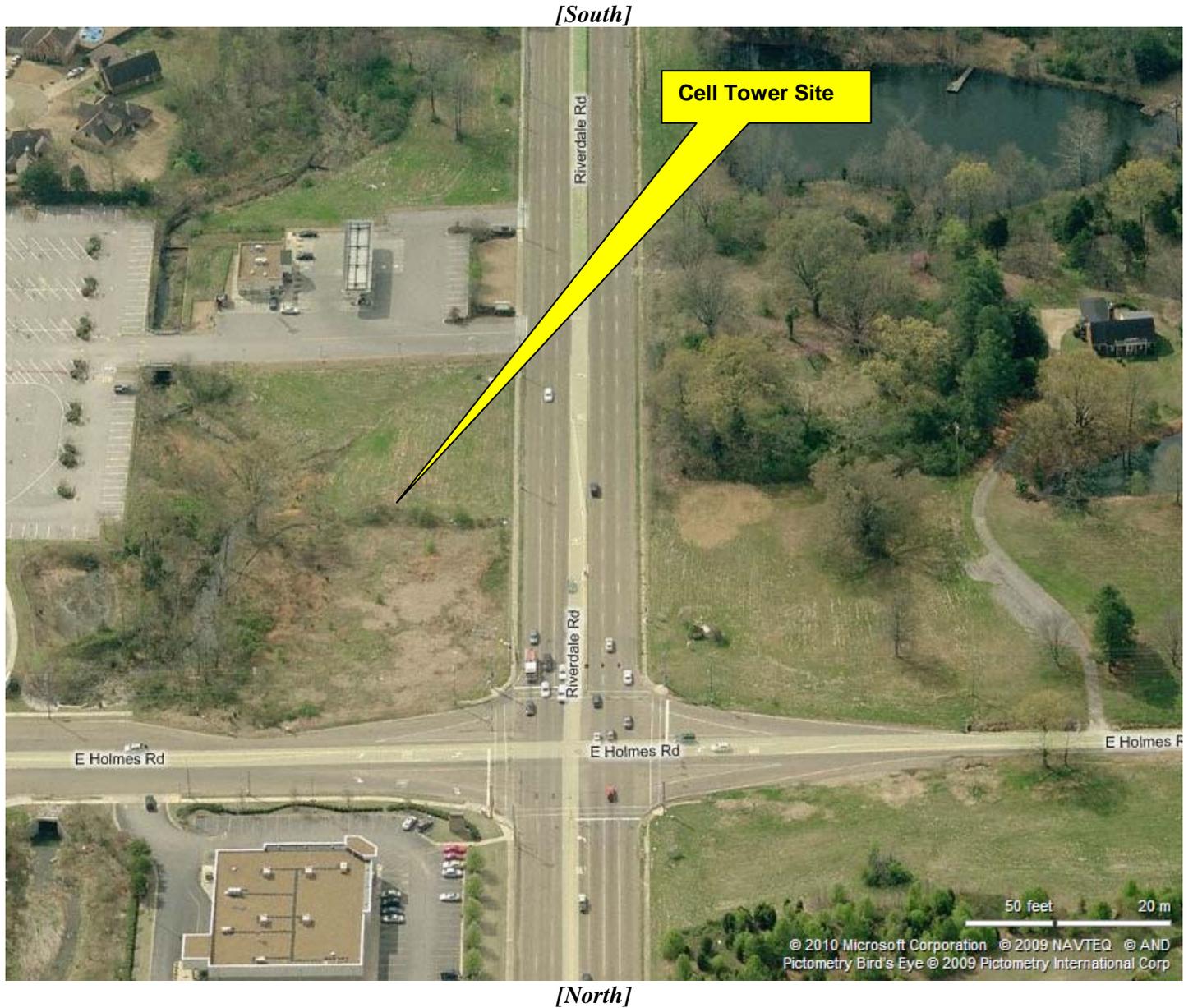


Figure 5: Amended Site Plan
 Drawing by: Prime Development Group, 750 Capital Drive, 38138



**Figure 6: Bird's Eye View of Site
Looking Southward from Riverdale / Holmes Intersection.
(opposite from the direction in Figures 1-5)**



Figure 7: This is a view eastward along the south property line of the parent tract. The large trees are located near a north-south drainage way. The cell tower site would be on the near side of the large trees, and located on the left (north) side of this view. Some of the brushy vegetation at the left side of this picture might have to be removed in order to construct the equipment compound as shown in the site plan.



Figure 8: A view looking northward from the subject property along Riverdale Road.

STAFF ANALYSIS

Site and Location

The subject property consists of a 1.6 acre parent tract at the southeast corner of Holmes Road and Riverdale Road. Originally a nearly rectangular 284' x 294' parcel, its shape has become quite irregular due to right of way dedication along a portion of its Holmes Road frontage. The subject property is currently vacant. The sloping topography is influenced by a substantial north to south drainage way along the east side, and a wet-weather drainage way flowing into the major one diagonally from the northwest.

Proposed Development

This application requests approval for a cell tower site to be located on a leased parcel set back 100 feet from the Riverdale Road right-of-way, along the south property line. The applicant is requesting a 160-foot monopole “slick stick” design, with the antennae mounted against the tower instead of on horizontal platforms. A tower of this height will accommodate at least five collocated commercial mobile communication services.

Neighborhood Context

Immediately to the east and south of the subject property are four parcels in the Cypress Southern Commercial Planned Development (PD 98-345 cc). The main parcel, to the east, is occupied by a large parking lot and an apparently empty building that once housed a school, and prior to that a grocery supermarket. To the south along Riverdale are three commercial properties covered by the PD 98 345 cc. outline plan. Of those three, only one has been developed, and that was with a gas station originally built in association with the supermarket. Along the east side of Riverdale north of Holmes Road local commercial development continues beyond the Walgreen store on the northeast corner of the intersection.

The subject property is surrounded by single-family residential development, but the nearest of those residential lots (in the Savannah Woods subdivision).is approximately 500 feet from the tower site. The Village of Lake Point, part of the overall Villages of Bennington development plan, is roughly 800 feet to the northwest of the tower site. Another Bennington village ---Oakbrook -- is about 950 feet directly west. And the Meadows of Kindewood subdivision is about 1,000 feet to the south.

Special Use Permit Standards

In the current Memphis / Shelby County zoning ordinance, cell towers may be permitted in the Planned Commercial (C-P) District subject only to an administrative review and possibly approval by the Land Use Control Board as a correspondence item. However if a proposed cell tower site is within 500 feet of a residential zoning district, as in this case, the tower is permissible only subject to site plan approval by the appropriate legislative bodies --- in this case the City of Memphis and the Shelby County Board of Commissioners. Such approval requires a special use permit application.

The zoning ordinance sets forth five general standards of compatibility established for all special use permits^{*}, and in addition, the zoning ordinance does specify certain standards for commercial mobile communication service CMCS towers, which are commonly described as cell towers.[†]

*** General standards of applicability**

1. That the proposed building or use will not have a substantial or undue adverse effect upon adjacent property, the character of the neighborhood, traffic conditions, parking, utility facilities, and other matters affecting the public health, safety and general welfare.
2. That the proposed building or use will be constructed, arranged and operated so as to be compatible with the immediate vicinity and not to interfere with the development and use of adjacent property in accordance with the applicable district regulations.
3. That the proposed building or use will be served adequately by essential public facilities and services such as highways, streets, parking spaces, drainage structures, refuse disposal, fire protection, water and sewers; or that the persons or agencies responsible for the establishment of the proposed use will provide adequately for such services.
4. That the proposed building or use will not result in the destruction, loss or damage of any feature determined by the legislative body to be of significant natural, scenic or historic importance.
5. That the proposed building or use complies with all additional standards imposed on it by the particular provision of this section authorizing such use.

† CMCS facilities subject to the following additional standards:

- (1) Within residential zoning districts, CMCS facilities, support structures and associated attachments shall be encouraged to locate on publicly owned and/or leased properties, public/private utility owned properties, or institutional uses.
- (2) The location, size and design of such facilities shall be such that minimal negative impact results from the facility. Any application for a new CMCS tower shall not be approved nor shall any building permit for a new CMCS tower be issued unless the applicant certifies that the CMS equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or other structure due to one or more of the following reasons:
 - (a) The planned equipment would exceed the structural capacity of existing and approved structures, considering existing and planned use of those structures, and those structures cannot be reinforced to accommodate planned or equivalent equipment at a reasonable cost.
 - (b) The planned equipment would result in technical or physical interference with or from other existing or planned equipment and the interference cannot be prevented at a reasonable cost.
 - (c) There are no appropriate existing or pending structures to accommodate the planned equipment, taking into account, among other factors, the applicant's system requirements.
 - (d) Other reasons that make it impractical to place equipment planned by the applicant on existing and approved structures.
- (3) Applications for CMCS facilities to be located on publicly owned and/or leased properties, including without limitations, public parks, the following criteria shall apply:
 - (a) The CMCS facility will not unduly interfere with the functions or aesthetics of the city park or property.
 - (b) A CMCS facility shall not be located on any public park less than ten acres in size.
 - (c) Minimum distance between any CMCS facility and any playground shall be equal to 1 1/2 times the height of the tower.
 - (d) The use of an existing tower or existing support structure is not technically, structurally, economically and/or financially feasible.
 - (e) The proposed facility has adequate capacity to handle a minimum of three additional users.
 - (f) All towers shall be a "stealth" application or consistent with the natural or built environment or the site. Landscaping and screening may be required in addition to the minimum requirements of this ordinance.
 - (g) Obstruction lighting and/or marking shall not be permitted in public parks or on public school properties. On other public properties, proposed lighting may be approved by the city council and/or county commission as an element of the special use permit site plan and conditions.
 - (h) Any CMCS facility which has ceased operations for a period of 180 continuous days shall be dismantled and removed from the site at the owners expense. Prior to the issuance of a building permit for such CMCS facility, adequate financial security not to exceed \$20,000.00 shall be posted with the building official to assure the dismantling, removing and restoring of the public property/park upon which the CMCS facility will be located.
 - (i) The planned equipment will not interfere with emergency communications including without limitation those of the Memphis Fire and Police Departments, the county fire department and/or the county sheriff's department as

Review of This Proposal

- substantiated through a RF (radio frequency) study. If interference occurs, proper remediation steps shall be taken.
- (4) Any proposed tower shall be structurally designed to accommodate at least three additional CMCS sectorized antennae array if at least 100 feet in height, at least five additional CMCS sectorized antennas if at least 150 feet in height or at least six additional CMCS sectorized antennas if at least 170 feet in height. Colocated CMCS antennas shall be placed on a structure in such a manner as to avoid interference with or impairment of operations of existing antennae or other uses.
 - (5) Nothing in these rules and regulations shall obligate the owner of an existing tower to collocate additional antennas on such tower or be construed to interfere with or limit the rights of parties to set rent or establish other terms and conditions of the shared use of a CMCS tower or facility.
 - (6) The minimum setback requirement for support structures including associated attachments shall correspond to the zoning district in which they are located, except that a minimum buffer equal to the height of the tower shall be maintained between any support structure (excepting sites incorporating stealth design) and any single-family residentially zoned or used property line.
 - (7) Accessory facilities shall be permitted but may not include offices, long-term vehicle storage, other outdoor storage, or broadcast studios, except for emergency purposes or other uses that are not needed to send or receive transmissions.
 - (8) Existing on-site vegetation shall be preserved to the maximum extent practicable and shall be supplemented as required by the office of planning and development as necessary. Where the site abuts residentially developed land, residential zoning districts, the residential portion of an approved planned development, or public land or streets, the site perimeter shall be landscaped with at least one row of deciduous trees, not less than two inches in diameter, measured three feet above the grade, spaced not more than 20 feet apart within 25 feet of the site boundary, as well as at least one row of evergreen trees and shrubs, at least five feet high when planted and spaced not more than five feet apart to form a solid shrub screen and within 40 feet of the site boundary. Alternatives such as walls or fences may be permitted based on security or other reasons.
 - (9) Security fencing shall be required around the base and guy anchors of any towers.
 - (10) Towers shall not be artificially lighted unless:
 - (a) Required by the Federal Aviation Administration or other governmental authority;
 - (b) Circumstances make lighting appropriate for safety or other reasons unique to a specific application that are set forth in that application, but in no case shall any lighting shine into adjacent residential structures.
 - (11) The application for a special use permit approval shall include the following:
 - (a) A site plan drawn showing the property boundaries, tower, guy wire anchors (if any), existing structures, proposed transmission buildings and/or other accessory uses, access, parking, fences, a landscaping plan and existing abutting land uses around the site.
 - (b) A study from a professional engineer which specifies the tower height and design, including a cross-section of the structure, demonstrates the tower's compliance with applicable structural standards, including a certification that the tower will withstand at a minimum sustained winds in accordance with the appropriate building code, and a description of the tower's capacity, including the number and type of antennas which it can accommodate.
 - (c) Written statements that the proposed tower will comply with regulations administered by the Federal Aviation Administration, Federal Communications Commission, and all applicable governmental bodies, or that the tower is exempt from those regulations.
 - (d) A letter of intent committing the tower owner and his or her successors to allow shared use of the tower, if capacity exists, based on existing and planned use, and if a future applicant agrees in writing to pay any reasonable charge of shared use, the potential use is technically compatible and the future applicant is in good standing.
 - (12) The minimum setback requirements of chart 2 shall apply to the equipment, structures, and other buildings which are auxiliary to functions of the CMCS tower except as specified in 9v.(6) of this ordinance. Exceptions to the minimum setback requirements may be permitted. The tower height shall not be used to calculate the minimum setback requirements. The height restrictions of chart 2 do not apply to tower height and the height permitted for each new application shall be set on the basis of its own merits.
 - (13) Any CMCS tower and equipment shall be removed no later than 180 days after ceasing operations subject to the following additional standards.

Based on the above analysis, it appears that the proposed site is reasonably distant from residential areas. The most adverse feature of the proposed location is its prominence with respect to the views from the nearby major roads. The tower itself would be 130 ft from the Riverdale Road right-of-way with a typical layout in the leased parcel / easement or perhaps 20 feet closer than that if the topography should require compensating adjustments. The setback from the Holmes Road would be about 250 feet, based on the parcel boundaries, as mapped by the Assessor, which reflects the current location roadway prior to improvements that would use the additional dedicated area. With the non-existent or relatively thin screening provided by the existing brush and trees, the tower should be very noticeable to passing traffic, particularly for northbound traffic on Riverdale.

The federal Telecommunications Act of 1996 establishes cellular service as a type of utility infrastructure that needs to be accommodated. In order to determine that proposed cell towers are entitled to such consideration, OPD staff may request information about the lead CMCS carrier. In addition, OPD staff often requests information about the availability and feasibility of alternative locations that might play a role in the public discussions of this case, particularly if there were any controversy. In the case of this subject property, this alternative sites exercise indicated that it would be somewhat challenging to find a site in the vicinity that permits a greater setback, while preserving the proposed site's separation from existing residential developments.

[Since the applicant has provided documentation showing a carrier in need of service from the vicinity of the proposed location, OPD staff has concluded that proposed cell tower siting is reasonable under the circumstances.]

RECOMMENDATION: **Approval, with conditions**
[Amended from “Hold, for additional information”, as of 2/11/2010]

SITE PLAN CONDITIONS
CMCS Tower at Riverdale-Holmes
S.U.P. 10-204

[As recommended by] the Land Use Control Board
February 11, 2010

A Special Use Permit is hereby granted to Tower Ventures, LLC to permit the installation of a CMCS tower on the 1.61 acre lot at the southeast corner of Riverdale Road and Holmes Road, (*Instrument Number JV82651. , Shelby County Register's Office*), in accordance with a site plan approved by the Office of Planning and Development with the following conditions:

1. The maximum tower height shall be 160 feet.
2. The tower shall be of monopole design incorporating a “slick stick” appearance, with flush mounted antennae.

3. The tower and related equipment shall be removed within 180 days of ceasing operations.
4. The cell tower shall be constructed within two years of approval by the City Council. The Land Use Control Board may grant a time extension through the applicant filing a correspondence item application with public notice sent to all property owners within 500 feet of the property.
5. The owners of the parent tract shall be responsible for installing and maintaining required additional site landscaping in conformance with the approved conditions for Z 99-129 cc[‡] provided that equivalent alternatives may be substituted with the approval of the Office of Planning and Development.
6. The monopole shall be structurally designed to accommodate at least five (5) more additional antenna arrays. .
7. The access drive to the compound shall be paved with concrete or asphalt.
8. Any curb cut along the Riverdale Road frontage beginning closer than 300 feet from the centerline of Holmes Road will be limited to right in/right access only.
9. The lessor of the tower site shall be responsible for obtaining the any and all permits necessary under state and local regulations in relation to site drainage and siltation control
10. The final site plan shall be recorded at the Shelby County Registers office as an amendment to the general plan for the C-P development identified as Z-99-129 cc.
11. The applicable general plan conditions of Z 99-129 cc shall hereby be included by reference as site plan conditions for this special use permit

[‡] Note: Correction in this case number reference.

GENERAL INFORMATION

Coordinates:	35° 19' 41"N, 89° 42' 15"W
Parcel Number:	D0255 00077
Street Address:	near 5250 Riverdale Road, 38141
Street Frontage:	Primary: Riverdale Rd. Parent tract has 140 feet of frontage on this 7-lane major arterial road with a 106 ft. right-of-way.
Planning District:	Oakhaven
Census Tract:	217.52
Annexation Status:	Memphis Annexation Reserve Area
Zoning Atlas Page:	2550
Zoning History:	1961 – Agricultural “AG” District – 1 st County zoning ordinance 1999 – Rezoned to Planned Commercial (C-P) District in Z 99-129 CC.

DEPARTMENTAL COMMENTS

The following comments were provided by agencies to which this application was referred:

City Engineer:

1. The approved conditions of Z-99-129 cc shall apply with respect to access to streets.
2. Any curb cut along the Riverdale Road frontage beginning closer than 300 feet from the centerline of Holmes Road will be limited to right in/right access only.
3. Drainage improvements, including on-site detention, shall be provided under a Standard Subdivision contract in accordance with Subdivision Regulations and the City of Memphis Drainage Design Manual.
4. The developer should be aware of his obligation under 40 CFR 122.26(b) (14) and TCA 69-3-101 et. seq. to submit a Notice of Intent (NOI) to the Tennessee Division of Water Pollution Control to address the discharge of storm water associated with the clearing and grading activity on this site.
5. Prior to recording, the following note shall be placed on the plat:

No permit for construction shall be granted for lot except for the installation of a

communications tower. Any other use of this property will require re-recording of the plat, the payment of sewer development fees and the installation of the sewer connection to this property.

6. Required landscaping shall not be placed on sewer or drainage easements.

County Engineering Department:

Dedicate ROW and temporary construction easements as required for Holmes Road – Riverdale to Hacks Cross Road project – See attached sheets. [in Exhibit B]

County Fire Department:

1. The following comments do not remove the contractor's responsibility to fully comply with all applicable codes, standards and ordinances. final approval is subject to field verification and applicable field tests.
2. FPC 602.6.1- Communication towers shall be accessible to fire dept. apparatus by way of access roadways with all-weather driving surface of not less than 20 ft. of unobstructed width, with adequate roadway turning radius capable of supporting the imposed loads of fire apparatus and having a minimum vertical clearance of 13 ft. 6 in.
3. FPC 603.3.1- Provide a sufficient number of 40BC rated fire extinguishers in order that all portions of the building are within 50 ft. travel distance of said extinguisher.
4. FPC 603.1.3- No portion of the building shall exceed 500 ft. from a fire hydrant by roadway for the distribution of fire hose.

Memphis Light, Gas and Water:

- **It is the responsibility of the owner/applicant** to identify any utility easements, whether dedicated or prescriptive (electric, gas, water, CATV, telephone, sewer, drainage, etc.), which may encumber the subject property, including underground and overhead facilities. No permanent structures will be allowed within any utility easements.
- **It is the responsibility of the owner/applicant** to pay the cost of any work performed by MLGW to install, remove or relocate any facilities to accommodate the proposed development.
- **It is the responsibility of the owner/applicant** to comply with the **National Electric Safety Code (NESC)** and maintain minimum horizontal/vertical clearances between existing overhead electric facilities and any proposed structures.
- **Landscaping is prohibited** within any MLGW utility easement without prior MLGW approval. It is the responsibility of the owner/applicant to comply with Memphis/Shelby County Zoning Ordinance - Landscape and Screening Regulations.
- **It is the responsibility of the owner/applicant** to contact **TN-1-CALL @ 1.800.351.1111**, before digging, and to determine the location of any underground utilities including electric, gas, water, CATV, telephone, etc

- **It is the responsibility of the owner/applicant** to submit a detailed plan to MLGW Engineering for the purposes of determining the availability and capacity of existing utility services to serve any proposed or future development(s).
- **It is the responsibility of the owner/applicant** to submit a detailed plan to MLGW Engineering for the purposes of determining the availability and capacity of existing utility services to serve any proposed or future development(s). Application for utility service is necessary before plats can be recorded.
 - All residential developers must contact MLGW's Residential Engineer at 901-528-4855 for application of utility services.
 - All commercial developers must contact MLGW's Builder Services at 901-367-3343 to initiate the utility installation process.
- **It is the responsibility of the owner/applicant** to pay the cost of any utility system improvements necessary to serve the proposed development with electric, gas or water utilities.

Respectfully Submitted,
MEMPHIS LIGHT, GAS and WATER DIVISION

City/County Health Department: The Water Quality Branch has no comments

AT&T: ATT Tennessee has no comment regarding this new development.

OPD-Regional Services: No comments received.

City Board of Education: No comments received.

County Real Estate: No comments received.

Construction Code Enforcement: No comments received.

.OPD-Plans Development: No comments received.

Neighborhood Associations / Organizations: No comments received.

**Irene Neighborhood Association
Lake Village Homeowners Association
Southeast Shelby County Coalition
Harvest Knoll Neighborhood Association
Buckingham Farms Neighborhood Association
Pinnacle Point Neighborhood Association**



December 23, 2009

Ms. Mary L. Baker
Deputy Director
Office of Planning and Development
125 North Main Street, Ste. 468
Memphis, TN 38103

RE: Proposed 150' Cell Tower-Holmes & Riverdale CP

Dear Mary:

On behalf of our client, Tower Ventures, we are pleased to submit this application to amend the General Plan conditions to allow the use of a 150 foot tall cell tower within the Holmes & Riverdale CP for review by the Land Use Control Board at their February public hearing. The location of the proposed cell tower will be 100 feet east of the Riverdale right of way. The developers have met informally with neighborhood representatives in advance of this application.

We look forward to presenting this project to the Land Use Control Board and continuing to work with you and your staff.

Sincerely,

Prime Development Group, Inc.

Michael J. Fahy
President

7520 Capital Drive, Suite 200 • Germantown, Tennessee 38138-0804
(901) 753-6840 • (901) 753-7403

Exhibit A1 Letter of Intent



5575 Poplar, suite 812
Memphis, TN 38119

p: 425-216-7600
f: 425-216-7900
www.clear.com

February 25, 2010

Memphis and Shelby County Office of Planning and Development
City Hall
125 North Mid-American Mall
Memphis, Tennessee 38103-2084
Attn: Office of Planning and Department

**SUBJECT: Deed Instrument # D0255 00077, Riverdale & Holmes Site
5250 Riverdale Road, Memphis, TN 38141
Proposed 160-ft Communications Structure(Site: TN-MEM0531)**

To Whom It May Concern:

Clear Wireless LLC ("Clearwire") is a FCC licensed wireless service provider in Memphis, TN we require space for our proprietary Wireless Communications Facilities ("WCF) on Tower Ventures proposed above-mentioned proposed telecommunications structure in the City of Memphis, TN. The site (located near the intersection of Riverdale & Holmes) is required to improve coverage and provide adequate RF signal strength for the Clear Wire network in Memphis and Shelby County, Tennessee as indicated on the enclosed maps indicating proposed Clear Wire service with the addition of this tower.

The Clear Wire Engineering Team has determined that the proposed site TN-MEM0531 will cover the gap between MEM103 and MEM518. Also it will provide coverage to E. Holmes rd, Riverdale rd and surrounding neighborhood.

The Clear Wire Engineering Team has determined that the proposed site TN-MEM0531 will provide coverage to 3600 potential new customers.

If you have any technical questions kindly contact me at number below.

Sincerely,

Denis Sequeira
Sr. RF Engineer
Denis.sequeira@clearwire.com
Phone: 972-375-2494

Exhibit A2 Lead Carrier's Letter of Intent

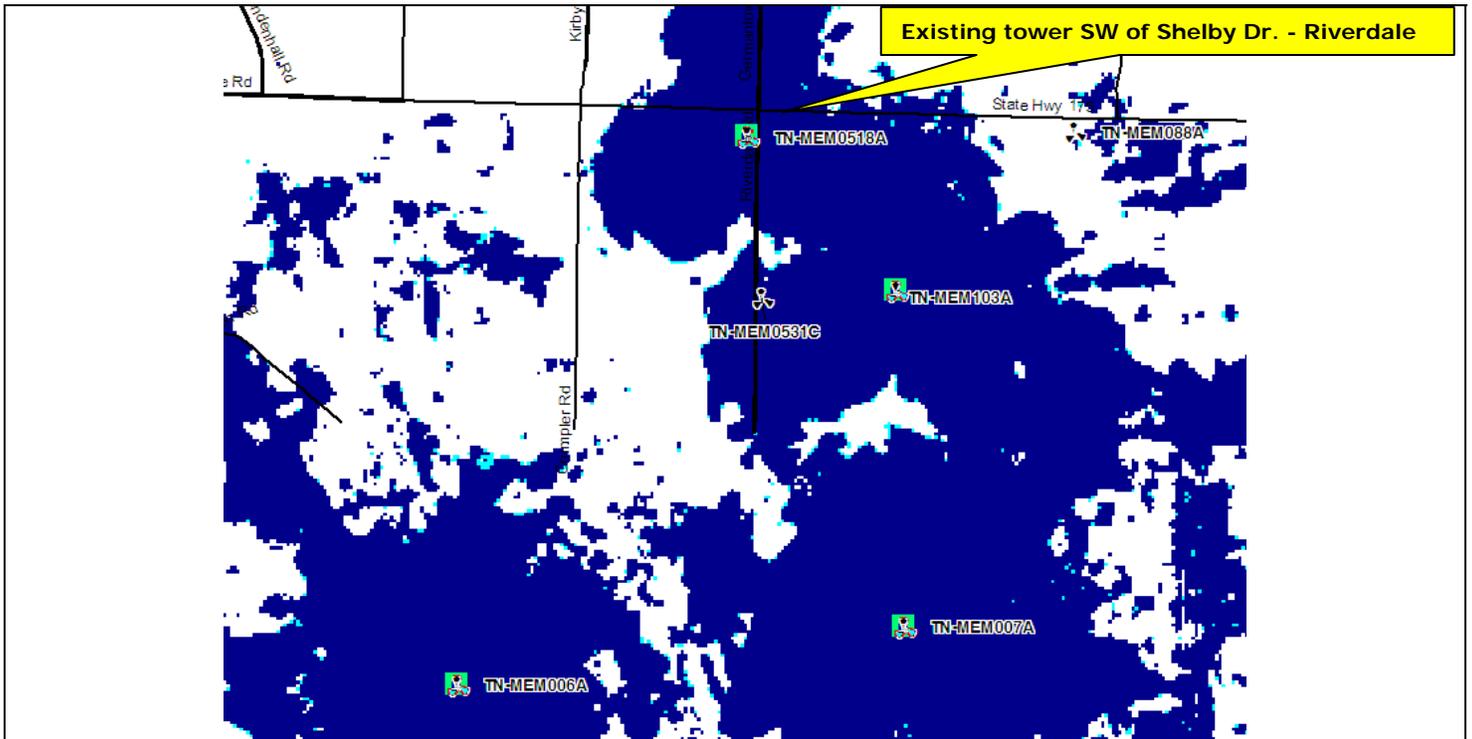


Exhibit A2a Service Available from Neighboring Towers

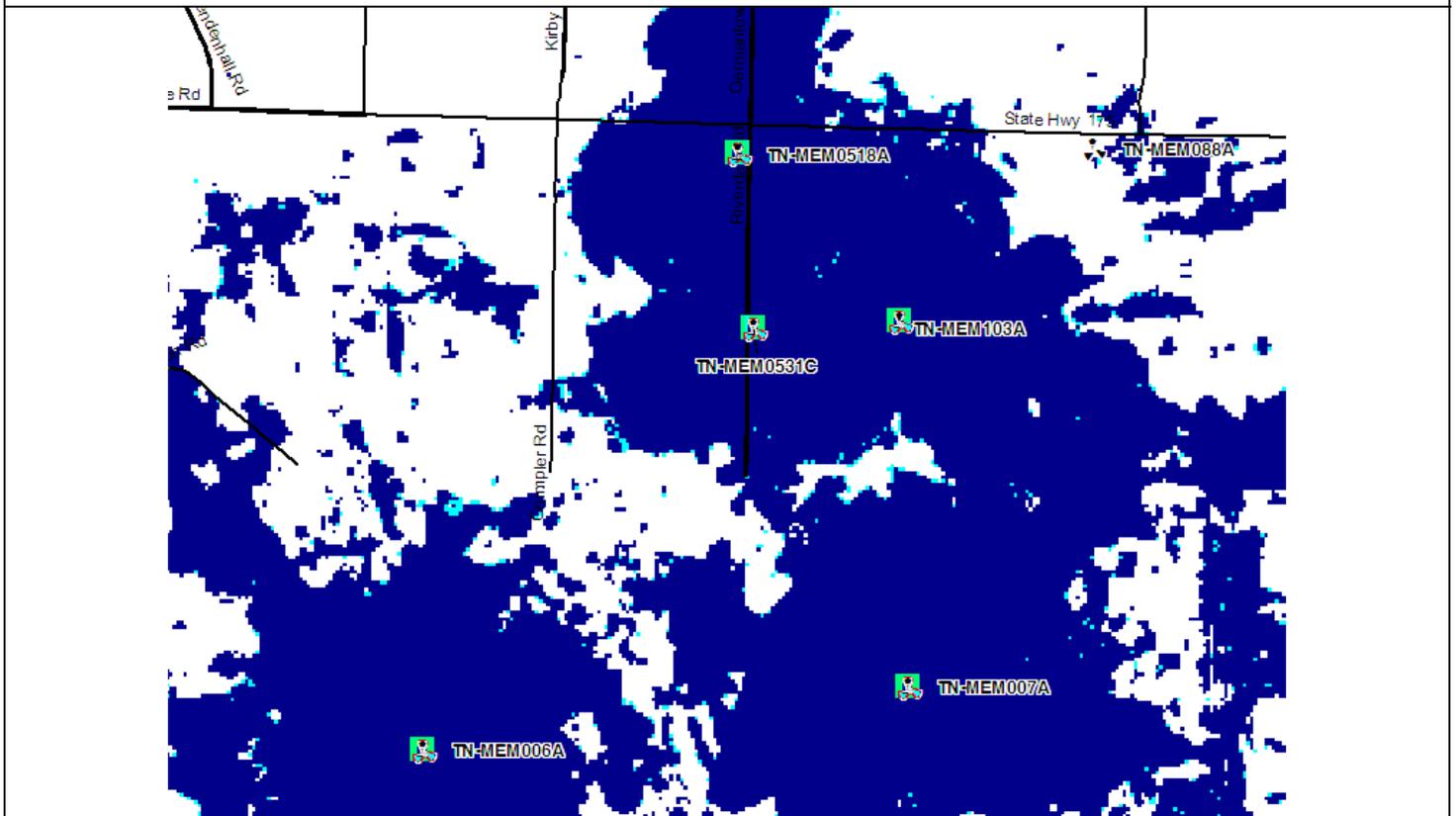


Exhibit A2b Service Available With Proposed Tower (MEM0531C)

ALTERNATIVE SITES FOR ASSESSMENT OF CELL TOWER LOCATION --- SUP 10-204 (RIVERDALE)

Map Ref	Parcel #	Other ID	Principal Issues
X	D0255 00077	Subject property	Prominent location w/r/t major roads; limited or non-existent screening by tree cover (except to the east)
=====			
Map Ref	Parcel #	Other ID	Opportunity
A	D0255 00078	Ila Givens Property (39 acres)	Large tract with opportunities for deeper set back from road and better screening with existing trees
B	D0255 00201	Wallace Property (14 acres)	Large tract with opportunities for deeper set back from road and better screening with existing trees
C1	D0255 00082	Floyd & Ila Givens Tract (12 acres)	Larger area with opportunities for deeper set backs from roads and screening with existing trees; higher elevation makes tower base more peripheral to streetscape. Steeple / bell tower design appropriate for church site..
C2	057012 00043	New Shelby Missionary Baptist Church	
D	D0255 00448	La Belle Haven Baptist Church	Possible site for steeple or bell tower design. Other stealth design might be OK immediately behind the church building complex where screening would be simpler.

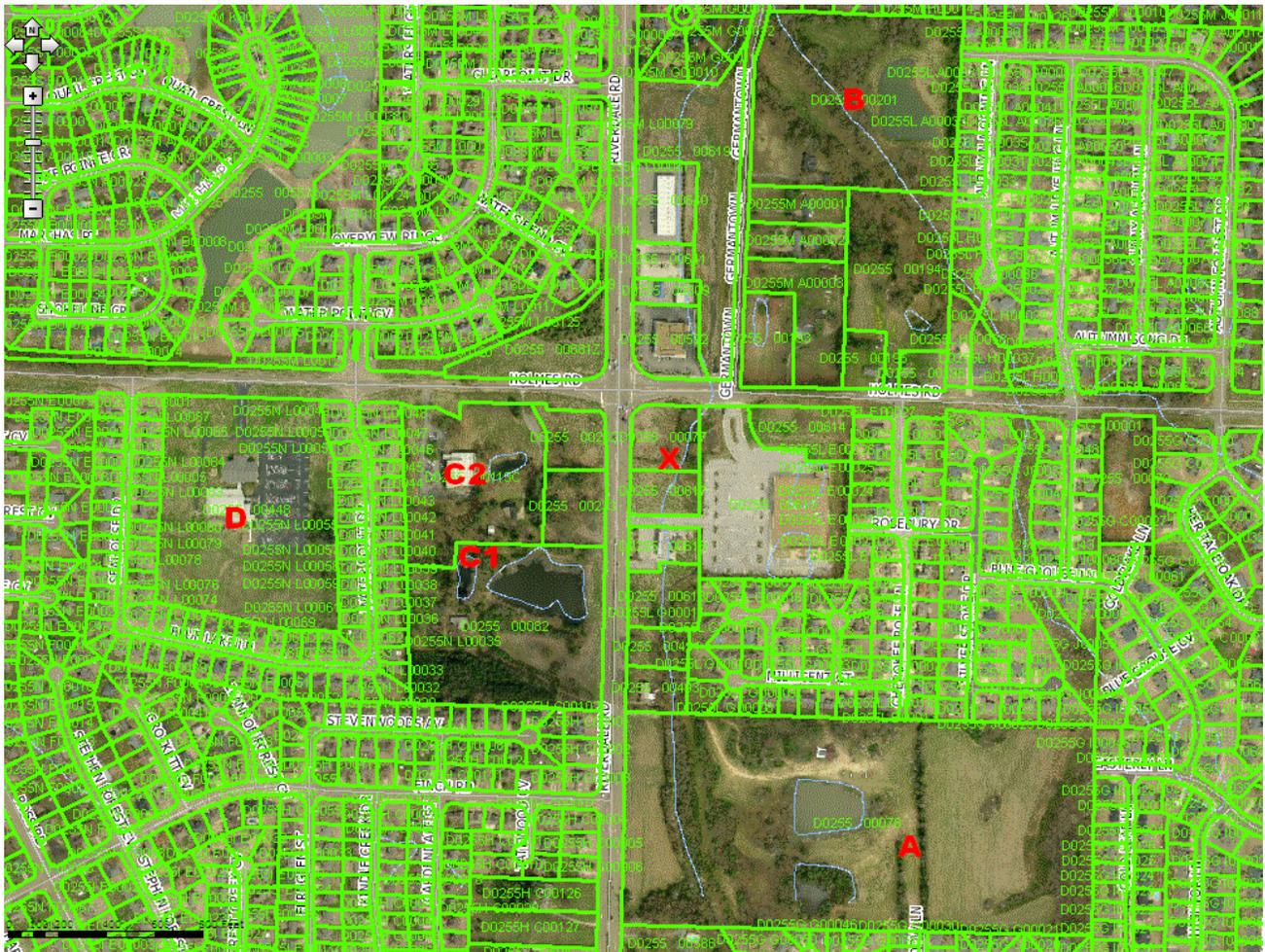


Exhibit B: OPD staff inventory of alternative sites