



## Cabarrus County Government

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Cabarrus County Planning and Zoning Commission Meeting

September 11, 2012

7:00 P.M.

Board of Commissioners Meeting Room

Cabarrus County Governmental Center

### Agenda

1. Oath of Office to Newly Appointed and Reappointed Board Members
2. Selection of Chair and Vice-Chair, also appoint a member to be Chair of the Board in the absence of the Chair and Vice-Chair
3. Roll Call
4. Approval May 2012 Minutes
5. New Business –Board Adjustment Function:

**Petition CUSE2012-00001** - Request to amend existing Conditional Use Permit to include Power Generation at the Rocky River WWTP, located at 6400 Breezy Ln, Concord, NC (PIN# 5547-06-4548). Applicant is WSACC.

6. Directors Report



**Cabarrus County Government – Planning and Development Department**

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Planning and Zoning Commission Minutes  
September 11, 2012

Ms. Susie Morris, Planning and Zoning, Manager called the meeting to order at 7:00 p.m. Members present were: Ms. Mary Blakeney, Mr. Andrew Deal, Mr. Gene Divine, Mr. Larry Ensley, Mr. Danny Fesperman, Ms. Shannon Frye, Mr. Ted Kluttz, Ms. Emily Knudson, Mr. James Litaker, Mr. Richard Price, Mr. Jonathan Rett and Mr. Aaron Ritchie. Attending from the Planning and Zoning Division were, Ms. Susie Morris, Planning and Zoning Manager, Ms. Colleen Nelson, Senior Planner, Ms. Shannon Johnson, Planner, Ms. Arlena Roberts, Clerk to the Board and Mr. Richard Koch, County Attorney.

The Oath of Office was administered to reappointed members Mr. Richard Price, Ms. Mary Blakeney and Mr. Ted Kluttz and to newly appointed members Mr. Andrew Deal and Mr. Jonathan Rett.

Ms. Morris introduced the new alternate members of the Planning and Zoning Commission. Mr. Jonathan Rett will be representing the Concord area. He is an Engineer and has a lot of experience in the local area with projects. Mr. Andrew Deal is also an Engineer and a PE, and will be representing the Central area. He is very familiar with the Cabarrus area and works with the city of Charlotte with storm water. They are a very welcome addition to our Commission.

Mr. Danny Fesperman nominated Mr. Larry Ensley as the Chairman of the Planning and Zoning Commission. There being no other nominations, Mr. Ensley was appointed by Acclamation.

Mr. Danny Fesperman nominated Ms. Shannon Frye as the Vice-Chairman of the Planning and Zoning Commission. There being no other nominations, Ms. Frye was appointed by Acclamation.

Mr. Larry Ensley nominated Mr. Danny Fesperman as the Chairman of the Board in the absence of both the Chair and Vice-Chair of the Planning and Zoning Commission. There being no other nominations, Mr. Fesperman was appointed by Acclamation.

### **Roll Call**

### **Approval of May 8, 2012, Planning and Zoning Commission Minutes.**

Ms. Mary Blakeney, **MOTIONED, SECONDED** by Mr. Ted Kluttz to **APPROVE** the May 8, 2012, minutes with correction to page 10, changing the word dumb to dump. The vote was unanimous.

**New Business – Planning Board Function**

**Petition CUSE2012-00001 – Request to amend existing Conditional Use Permit to include Power Generation at the Rocky River WWTP, located at 6400 Breezy Ln, Concord, NC (PIN#5547-06-4548). Applicant is WSACC.**

The Chair swore in Ms. Colleen Nelson, Ms. Angela Roberts, Mr. Thomas Hahn, Ms. Robin Moore, and Ms. Susie Morris.

Ms. Colleen Nelson, Senior Planner addressed the Board stating that the applicant is Angela Roberts with CH2M Hill and the owner is the Water and Sewer Authority of Cabarrus County (WSACC). It is a request is for a public service facility. The location is off Breezy Lane in Concord, NC. PIN#5547-06-4548. The site is approximately 241.46 acres total. The site is the current location of the Rocky River Regional Wastewater Treatment Plant.

She said the original Conditional Use Permit was approved in 1996, and in 2011, it was amended to add equipment for importing biosolids from surrounding utilities along with additions to the existing odor control system.

The applicant is purposing an addition for one steam turbine generator building, approximately 1,300 square feet and modifications of the existing incinerator building. These modifications will allow the facility to safely recover heat from the existing equipment and safely generate power from the recovered heat. The facility currently acts as an imported biosolids handling facility.

She said the application and required documents were sent to outside agencies such as Fire, EMS, City of Concord, NCDOT, Health Department and Cabarrus Soil and Water Conservation District; there were no objections. Storm Water review is not necessary since the project will not disturb more than one acre.

The applicant provided documentation compliant with section 8-3 of the Cabarrus County Zoning Ordinance, Petitioning for a Conditional Use. The Applicant submitted a complete application which includes the findings of facts sheet along with a site plan showing the location of the additions on the property.

The wastewater treatment plant is an existing facility and meets the standards for the Ordinance at the time that it was approved in 1996.

Ms. Nelson said the current standards, such as landscaping and buffering, may have changed since the original conditional use permit was issued and will be addressed as needed.

Should the Board of Adjustment grant approval of the Conditional use Permit, Staff requests the following conditions become part of the approval and case record:

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September 11 2012

1. Site plan review and approval required subsequent to Board of Adjustment approval to ensure compliance with all applicable development requirements and conditions. (Zoning)
2. Granting order, stating restrictions and applicable conditions of approval, shall be recorded with the deed of the property. (Zoning)
3. Applicant shall procure any and all applicable federal, state, and local permits prior to commencement of project. (Zoning)
4. Expansion of project, as well as modifications or changes to approved site plan, must receive Board of Adjustment approval in the form of an amendment to the Conditional Use Permit. (Zoning)

Ms. Angela Roberts, Project Manager, CH2M Hill, 11301 Carmel Commons Blvd. Suite 304, Charlotte NC 28226, addressed the Board. She said also here tonight is Mr. Thomas Hahn, Project Engineer and Resident Inspector working on Phase I of the project.

She said this is the second phase of the WSACC Heat Recovery & Power Generation Facility that was approved in May 2011, by the Cabarrus County Planning and Zoning Commission. She said Phase I consisted of construction of facilities for sludge import to fuel the furnace and produce heat.

This particular project is Phase II and is construction of facilities to use furnace heat to generate electrical power. The proposed use for the second phase of the project will consist of recovering heat from the existing WSACC Rocky River Regional Waste Water Treatment Plant (WWTP) furnace to generate power.

The major components of the second phase of the Heat Recovery Power Generation Facility Project are: Heat Recovery Steam Generator (HRSG), Steam Turbine Generator (STG) and a Steam Turbine Generator Enclosure Building.

She said the Heat Recovery Steam Generator equipment will be installed in the existing furnace building. There is a steam turbine generator which will be installed and a concrete pad will be constructed to support the steam turbine generator. The steam turbine generator will be enclosed in a building approximately 1,300 square feet and 22 feet high.

She said from the existing furnace building, there will be overhead piping to transport the steam to the steam turbine generator. From the steam turbine generator electrical power will be produced. WSACC has a contract with the City of Concord to transfer the electrical power to the existing power grid that is within their property.

Ms. Roberts showed pictures representing typical views of the Heat Recovery Steam Generator equipment that will be installed in the existing furnace building on the

WSACC site and she showed a slide which represents the Steam Turbine Generator that will be enclosed in the building.

She said the existing furnace building has four floors. The Heat Recovery Steam Generator equipment will start on the first floor and continue on the fourth floor. The piping will exit from the HRSG carrying steam, then to the Steam Turbine Generator. The condenser will condense the steam and convert it to water. She said it is a continuous loop. It goes back to the HRSG equipment and produces steam for the steam turbine generator.

She showed an illustration of the Steam Turbine Generator Building that will house the equipment. She said it will be ventilated only, and the electrical room will be air conditioned for the electrical equipment. She showed a typical example of the structure that will be built to enclose the steam turbine generator. WSACC will make a decision on the specific type of building that they want; it will be a modular type building of this design.

The project design is scheduled to be completed in November 2012. The contractor bidding is estimated to be completed January 2013 and the construction is estimated to be completed October 2013.

There being no further discussion, Mr. Aaron Ritchie, **MOTIONED, SECONDED** by Mr. Ted Kluttz to **APPROVE**, Conditional Use Permit - Petition CUSE2012-00001 with the conditions recommended by staff. The vote was unanimous. (See attached Findings of Fact).

### **Director Report**

Ms. Susie Morrison, Planning and Zoning, Manager, addressed the board introducing the new Planning staff member Ms. Shannon Johnson. Ms. Johnson has been employed by Cabarrus County working with the Sustainable Local Economy Project. Her time is split between Planning and Sustainable Local Economy.

We have been given the Youth Council and that is also a part of Ms. Johnson's responsibilities. She will be a familiar face and will be handling cases. Right now we are trying to get everything up to speed. She has a degree from the University of Maryland. Her background is mainly in local economy, local business and helping companies get up and running and hiring employees.

Mr. Koch updated the Board on the Ben Small case. We are in the process of filing a motion for summary judgment. Hopefully, it will be heard the beginning of next month. Presumably, it will bring an end to that case at the court level and if he does not comply with what we believe to be the directive of the court, then we may have to pursue it further.

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Ms. Morris said the first round of the text amendments were successful and approved in July. There were no changes made by the Board of Commissioners. What is a blueway was the only question that was asked. She said that is pretty good if that is the only item that was questioned out of all of the changes that we worked through.

She said the Text Amendment Committee is back up and running. Mr. Ensley, Mr. Fesperman, Mr. Divine, Mr. Litaker and Mr. Rett will be participating on that committee. We also have two folks from the Sustainable Local Economy group that will be joining our group and will be part of our discussions. They are Mr. Chris Pinto; he has a metal fabrication business and Mr. Josh Knipp who is an attorney. There will now be six people on the committee. The process will pretty much be the same. They have agreed to attend some of the Planning and Zoning Commission meetings if they need to hear discussions.

We are getting ready to work on the second round of Text Amendments. She has started some correspondence with our attorney on some things that we may or may not need to have in our Ordinance.

Mr. Koch commented on the decision of the Adequate Public Facilities Ordinance (APFO). The Supreme Court by a 5 to 2 vote affirmed the Court of Appeals decision and declared the APFO invalid; not just part of the APFO but the entire Ordinance.

He said this is probably close to the end of the line, legally, with reference to any challenge to the Ordinance its self. We are going to file a motion for a rehearing.

One of the issues that was raised in the dissent was the severability provision that was contained in the Ordinance; which says, if there is a provision in the ordinance that you find invalid, you do not have to invalidate the whole; you just invalidate that part of it that you find troublesome. The main part of the Ordinance that they found troublesome was the so called "Voluntary Mitigation Payment," the APFO fee. That is what the Majority spent all of its time talking about and did not consider the severability argument at all, which is kind of amazing, because that is a pretty well established area of the law.

He said the Board of Commissioners has authorized him to file a petition for rehearing on that issue and also a much larger issue that is implicit in the Majority opinion. It has to do with the powers of local government, generally and particularly in the zoning area as to how you construe the enumerated powers and the powers that are implied from the enumerated powers.

Statute 153A-4 states that enumerated powers are to be construed broadly to give effect to the provisions of those statutes that enable local government to carry out its powers. The Majority opinion basically writes that Statute out of the Statute books. They have determined in that holding, that unless it is specifically stated in a Statute, you do not have the power to do it.

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He said it is a very troublesome holding, in a larger perspective, not only in just the zoning area, but also across the board with reference to other implied powers that local government, whether it be county or cities, felt that they had. The same set of Statutes is contained under GS-160A, which are the municipal ordinances. It is a larger issue and there is a lot of activity with the NC Association of County Commissioners and the NC League of Municipalities. They are both very concerned about the language in that holding and it is for that reason, and also the severability issue, that we are going to file this petition. If the Supreme Court denies it, that really truly is the end of the road.

Hopefully, we will be able to generate enough support across the state for them to take a hard look at it. There are a couple of retired Supreme Court Justices who have a real problem with that decision. There is a lot going on and it has to be filed by the end of the month, so we are working on it at the moment.

Mr. Koch said the County is not really challenging the money part. It would be good to be able to retain the majority of the Ordinance in the County's tool box in case it is needed in the future. He is talking about the parts that concern phasing of development, and some of the other nonmonetary things that can potentially be done to try to marry development, to have adequate infrastructure and facilities to accommodate it. We do have that as one of the issues that would be addressed in the severability part, and the larger issue about some of the language that seems to restrict the implied or implicit powers of local government, particularly in the zoning area. We are going to take on that issue too. It has some ramifications way beyond the presumed limited holding of this case.

Mr. Koch said there is also the refund lawsuit, which had been stayed by court order, pending the outcome of the validity lawsuits. We are getting cranked back up on that one.

The County's position is that we have Consent Agreements that do not require the money to be repaid and a number of related legal defenses to that. Secondly, there is a very real question about who the money belongs to. The check may have been written by a developer or builder, however, there is a very real belief that it was ultimately paid by the purchaser of the new home. So, that is an issue among the others that we are going to sort through. There is no inclination on the part of the Board of Commissioners to just write a check and give that money back and let it be sorted out elsewhere.

He said that will be going on for a while and we will see where it goes. So, we are not completely finished with the APFO at this point. We do have an ordinance that has been declared by the Supreme Court to be invalid and we are honoring that holding at this point. In other words, anyone applying for a new permit or wants to file a plat can do so irrespective of that ordinance; at least at the present time.

He said a petition to rehear is something that would have a short time period to file. The Supreme Court has a very short time period in which to decide to grant it or not. We

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should know pretty quickly, probably by the end of October, where that is going, if anywhere.

Mr. Fesperman asked if any APFO fees would be imposed.

Mr. Koch said not in this county.

Mr. Fesperman said they are looking at it the same way in Davidson. He asked them what their position was on fees, and they have put it on the back burner. There is also pending APFO's in Davidson, and they have said that the Commission will have to vote to not pursue collection; which they have not done. He said development has started to pick back up and everyone seems to be watching the collectability side of this issue and who is going to end up receiving, if the money is paid back. They seem to think that the ruling did not state anything about the remuneration to a degree. He said it will be interesting to see how this plays out as we move on.

Mr. Koch said Jim Scarborough represents the developers and builders who are seeking refunds in the law suit that we have, and he was quoted in the paper saying that now the price of houses will go down; which seems to imply that the fee is ultimately paid by the purchaser.

He said there are a lot of issues surrounding that, but at least going forward, based on the holding of that case, we cannot enforce it against anybody going forward.

Mr. Fesperman said that seems to be what everyone is doing right now, it is an interesting case.

Mr. Ensley asked if there were any APFO cases in the state that the court has validated.

Mr. Koch said the Cary one was struck down but he thinks that Chatham County has one by special legislation and Orange County. There was also a case from Currituck County, from 10 to 15 years ago where they had a single sentence APFO like we use to have, that basically said facilities need to be adequate. There is an Appellate Court case that upholds that. They just kind of breezed over it in our case.

Mr. Fesperman said Davidson has always said theirs ordinances were different from the regular APFO because the money was used to buy police cars, fire trucks and public parks; it was never used for education.

Mr. Koch thinks the Federal Court took care of that.

Ms. Morris announced that Ms. Emily Knudson will be leaving the area and that there will be an opening for an alternate member to represent the Harrisburg area.

Ms. Morris said if the Board remembers the scenario where we acted as the guinea pigs for the CONNECT Project that the COG is working on. The County has decided to

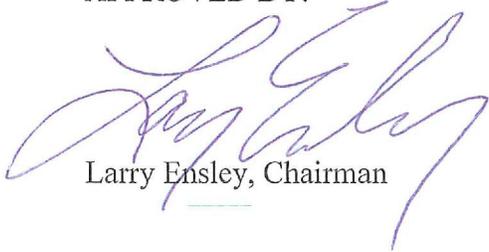
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participate in that project. If you see any advertisements about CONNECT or Connecting Our Future, that is the project. It is probably more at a 40,000 foot scale then it is the caring capacity study that we talked about before; which is more Cabarrus County and the municipalities. She does not know if the committees have been staffed. There is a meeting tomorrow and she may know more after that. She will let the Board know if they are looking for volunteers for the different interest groups.

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September 11 2012

There being no further discussion, Mr. Aaron Ritchie, **MOTIONED, SECONDED** by Ms. Mary Blakeney to **ADJOURN** the meeting. The vote was unanimous. The meeting ended at 7:39 p.m.

APPROVED BY:



Larry Ensley, Chairman

SUBMITTED BY:



Arlena B. Roberts

ATTEST BY:



Susie Morris  
Planning and Zoning Manager

**FINDINGS OF FACT  
CONDITIONAL USE PERMIT APPLICATION  
APPLICANT: WSACC  
ROCKY RIVER REGIONAL  
WASTE WATER TREATMENT PLANT  
CUSE 2012-00001**

**FINDINGS OF FACT**

1. The use as proposed is not detrimental to the public health, safety or general welfare.
  - a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*
  - b) *The proposed use adds no new additional burden to the property that would affect the public adversely.*
  - c) *This is the second phase of a prior approved conditional use permit application (CUSE 2011-00004)*
  
2. The use as proposed is appropriately located with respect to transportation facilities, water supply, fire and police protection, waste disposal, etc.
  - a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*
  - b) *All such facilities, which are not specifically required for this additional use, are located nearby.*
  - c) *This is the second phase of a prior approved conditional use permit application (CUSE 2011-00004)*
  
3. The use as proposed will not violate neighborhood character nor adversely affect surrounding land uses.
  - a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*
  - b) *The proposed use adds no new additional burden to the property that would affect the public adversely.*
  - c) *This is the second phase of a prior approved conditional use permit application (CUSE 2011-00004)*

4. The use as proposed will comply with the general plans for the physical development of the County as embodied in the Zoning Ordinance or in the area development plans that have been adopted.

a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*

b) *The proposed use adds no new additional burden to the property that would affect the public adversely.*

c) *This is the second phase of a prior approved conditional use permit application (CUSE 2011-00004)*

10197  
0232 . .

FILED  
CABARRUS COUNTY NC  
LINDA F. McABEE  
REGISTER OF DEEDS

FILED Oct 10, 2012  
AT 08:50 am  
BOOK 10197  
START PAGE 0232  
END PAGE 0236  
INSTRUMENT # 25975  
EXCISE TAX \$0.00  
SMS

## COVER SHEET

TYPE OF DOCUMENT: CUP

GRANTOR: Water and Sewer Authority of Cabarrus County  
Cabarrus County Planning and Zoning Commission

GRANTEE: Cabarrus County Planning and Zoning Commission  
Water and Sewer Authority of Cabarrus County

PREPARED BY: RICHARD KOCH

MAIL TO & ADDRESS: ROD BOX 74

—file Richard Koch

5/26

CABARRUS COUNTY  
Post Office Box 707  
Concord, North Carolina 28026

Application Number CUSE2012-00001

COUNTY OF CABARRUS  
STATE OF NORTH CAROLINA

ORDER GRANTING A CONDITIONAL USE PERMIT

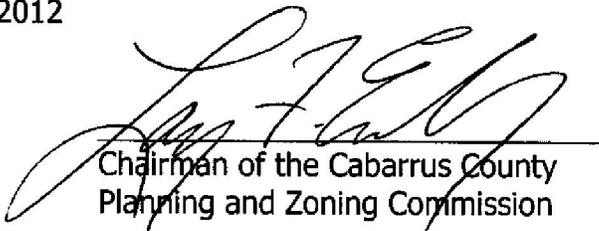
The Board of Adjustment for the County of Cabarrus, having held a public hearing on September 11, 2012, to consider application number CUSE2012-00001, submitted by WSACC, Rocky River Wastewater Treatment Plant a request to amend existing conditional use permit to include Power Generation at Public Service Facility – Rocky River Regional WWTP located at 6400 Breezy Lane, Concord, NC, and having heard all of the evidence and arguments presented at the hearing, makes the following FINDINGS OF FACT and draws the following CONCLUSIONS:

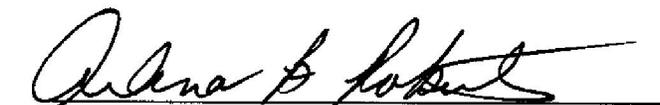
1. The Board makes and adopts the Findings of Fact contained in the attached Exhibit 1 labeled Findings of Fact.
2. It is the Board's CONCLUSION that the proposed use does satisfy the first General Standard listed in Section 8.3 of the Cabarrus County Zoning Ordinance ("Ordinance"); namely, that the use will promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted.
3. It is the Board's CONCLUSION that the proposed use does satisfy the second General Standard listed in the Ordinance; namely, that the use will maintain or enhance the value of contiguous property.

4. It is the Board's Conclusion that the proposed use does satisfy the third General Standard listed in the Ordinance; namely, the use does not adversely affect the adequacy of sewage disposal facilities, solid waste and water, police, fire and rescue, equal protection, schools, transportation systems (in and around the site) and other public facilities.
5. It is the Board's CONCLUSION that the proposed use does satisfy the fourth General Standard listed in the Ordinance; namely, the use is in compliance with the general plans for the physical developments of the County as embodied in the Ordinance or in the Comprehensive Plan, or portion thereof, adopted by the Board of County Commissioners.
6. It is the Board's CONCLUSION that the proposed use does satisfy the specific standards listed in the Ordinance for this use.

Therefore, because the Board concludes that all of the general and specific conditions precedent to the issuance of a CONDITIONAL USE PERMIT have been satisfied, it is ORDERED that the application for the issuance of a CONDITIONAL USE PERMIT be GRANTED, subject to the conditions contained in the staff report, if any, and the Findings of Fact. The applicant shall fully comply with all the applicable, specific requirements in the Ordinance and must develop the property in accordance with the site plan submitted and approved. If any of the conditions shall be held invalid, this permit shall become void and of no effect.

Ordered this 9th day of October, 2012

  
Chairman of the Cabarrus County  
Planning and Zoning Commission

  
Secretary

NOTE: If you are dissatisfied with the decision of this Board, an appeal may be taken to the Superior Court of Cabarrus County within thirty (30) days after the date of this order. See Section 12-25 of the Ordinance.

**Exhibit 1**  
**FINDINGS OF FACT**  
**APPLICATION CUSE2012-00001**

**FINDINGS OF FACT**

1. The use as proposed is not detrimental to the public health, safety or general welfare.

a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*

b) *The proposed use adds no new additional burden to the property that would affect the public adversely.*

2. The use as proposed is appropriately located with respect to transportation facilities, water supply, fire and police protection, waste disposal, etc.

a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*

b) *All such facilities, which are not specifically required for this additional use, are located nearby.*

3. The use as proposed will not violate neighborhood character nor adversely affect surrounding land uses.

a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*

b) *The proposed use adds no new additional burden to the property that would affect the public adversely.*

4. The use as proposed will comply with the general plans for the physical development of the County as embodied in the Zoning Ordinance or in the area development plans that have been adopted.

a) *See Applicant's response to this requirement, which is incorporated by reference as a Finding of Fact.*

b) *The proposed use adds no new additional burden to the property that would affect the public adversely.*

**Exhibit 2**

**CONDITIONS  
APPLICATION CUSE2012-00001**

1. Site plan review and approval required subsequent to Board of Adjustment approval to ensure compliance with all applicable development requirements and conditions.
2. A Granting Order stating restrictions and applicable conditions of approval shall be recorded with the deed to the property.
3. Applicant shall procure any and all applicable federal, state and local permits prior to commencement of project.
4. Expansion of the project, modifications or changes to approved site plan must, receive Board of Adjustment approval in the form of an amendment to the Conditional Use Permit.

PLANNING STAFF REPORT  
CABARRUS COUNTY PLANNING AND ZONING COMMISSION  
09/11/2012

Staff Use Only:  
Approved: \_\_\_\_\_  
Denied: \_\_\_\_\_  
Tabled: \_\_\_\_\_

**Conditional Use Permit: CUSE2012-00001**

Applicant Information: Angela Roberts - Ch2m Hill  
11301 Carmel Commons Blvd., Suite 304  
Charlotte, NC 28226

Owner Information: Water and Sewer Authority  
232 Davidson Highway  
Concord, NC 280260428

PIN#: 5547-06-4548

Area in Acres: 241.46

Purpose of Request: Conditional Use application for WSACC Rocky River Wastewater Treatment Plant heat recovery and power generation facility- The proposed use will allow the site to continue to safely recover heat from the existing equipment, along with safely generating power using the heat recovered. One steam turbine generator building is included along with modifications of the existing incinerator building.

Site Description: The site is approximately 241.46 acres total. The site is currently the location of the Rocky River Regional Wastewater Treatment Plant.

Current Land Uses: Public Service Facility- Rocky River Regional Wastewater Treatment Plant

Adjacent Land Uses: Residential and Agricultural

Permitted Uses: All uses in the LDR zoning district are permitted on the subject property.

Existing Zoning: LDR (Low Density Residential)

Surrounding Zoning: North: LDR (Low Density Residential)  
East: AO (Agriculture Open)  
South: AO (Agriculture Open)  
West: LDR (Low Density Residential) & AO (Agriculture Open)

Signs Posted: 8/17/2012

Newspaper Notification: 08/22/2012

**CASE#: CUSE2012-00001**  
**APPLICANT: WSACC**  
**EXHIBIT: |**

PLANNING STAFF REPORT  
CABARRUS COUNTY PLANNING AND ZONING COMMISSION  
09/11/2012  
Newspaper Notification 2: 08/29/2012

Staff Use Only:  
Approved: \_\_\_\_\_  
Denied: \_\_\_\_\_  
Tabled: \_\_\_\_\_

Notification Letters: 08/23/2012

### Exhibits

1. *Conditional Use Permit Application Form*
2. *Aerial Map*
3. *Zoning Map*
4. *Land Use Map*
5. *Photo of Zoning Sign*
6. *List of Adjacent Property Owners*
7. *Adjacent Property Owner Letter*
8. *Copy of original Conditional Use Permit 0091(C)*
9. *Location Map*
10. *Existing Features Maps*
11. *Development Plan Maps (Building elevations)*
12. *Landscape Plan*
13. *Emergency Action Plan*

### Agency Review Comments

**Utility Review : Approved**

*No Comments- City of Concord has no objection or comment relative to the Conditional Use Permit proposed.*

**EMS Review : Approved**

*No Comments*

**Fire Review : Approved**

*No Comments*

**Schools Review : Approved**

*No Comments*

**NCDOT Review : Approved**

*A traffic impact analysis is not required.*

**Soil-Water Conservation Review : Approved**

*Cabarrus SWCD board and staff have no objections to this request.*

**Stormwater Review - Local : Approved**

*No Comments- The Stormwater Permitting Unit does not require notification since the project will include a total disturbed area of less than one acre.*

**Health Review : Approved**

PLANNING STAFF REPORT  
CABARRUS COUNTY PLANNING AND ZONING COMMISSION  
09/11/2012  
*No Comments*

Staff Use Only:  
Approved: \_\_\_\_\_  
Denied: \_\_\_\_\_  
Tabled: \_\_\_\_\_

**Sheriff Review : Approved**

*No Comments*

**Erosion Review : Approved**

*No Comments- Erosion control plan is not required because the project will include a total disturbed area of less than one acre.*

**Stormwater Review - State : Approved**

*No Comments- The Stormwater Permitting Unit does not require notification since the project will include a total disturbed area of less than one acre.*

**Engineering Review : Approved**

*No Comments*

**History / Other Information**

1. The applicant provided documentation compliant with Section 8-3 of the Cabarrus County Zoning Ordinance, Petitioning for a Conditional Use.
2. The applicant submitted a complete application which includes the "Findings of Fact" sheet along with a site plan showing the location of the additions to the property.
3. This is an existing wastewater treatment plant, and meets the standards of the ordinance at the time it was approved in 1986. Current standards, such as buffering, or landscaping may have changed since the time the original Conditional Use Permit was issued.

**Conditions of Approval**

Should the Board of Adjustment grant approval of the Conditional use Permit, Staff requests the following conditions become part of the approval and case record:

1. Site plan review and approval required subsequent to Board of Adjustment approval to ensure compliance with all applicable development requirements and conditions. (Zoning)
2. Granting order, stating restrictions and applicable conditions of approval shall be recorded with the deed of the property. (Zoning)
3. Applicant shall procure any and all applicable federal, state, and local permits prior to commencement of project. (Zoning)
4. Expansion of project, as well as modifications or changes to approved site plan must, receive Board of Adjustment approval in the form of an amendment to the Conditional Use Permit. (Zoning)

# CONDITIONAL USE PERMIT APPLICATION



Application Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Submitted by: \_\_\_\_\_  
Approved By: \_\_\_\_\_

## Instructions

1. Schedule a pre-application meeting with Staff to discuss the procedures and requirements for a Conditional Use Permit request.
2. Submit a complete application to the Planning Division. All applications must include the following:
  - Cabarrus County Land Records printout of all adjacent property owners. This includes properties located across the right-of-way and all on-site easement holders. The list must include owner name, address, and Parcel Identification Number.
  - A recent survey or legal description of the property.
  - 15 folded copies of the proposed site plan.
  - Any additional documents essential for the application to be considered complete. (Determined at pre-application meeting)
3. Submit cash, check, or money order made payable to Cabarrus County.  
Fees: Conditional Use Permit \$500.00 +\$5.00 per acre  
+3% technology fee based on total application fee

The deadline for submittal is always the same day as the Planning and Zoning Commission Meeting which is the second Tuesday of the month. Applications must be submitted before 5:00 PM that day for consideration on the next available agenda.

*Incomplete applications will be returned to the applicant and will not be processed.*

## **Process Summary:**

1. Hold a pre-application meeting with Staff to discuss your Conditional Use Permit request and the Conditional Use Permit process.
2. Submit a complete application with the appropriate fees to the Cabarrus County Planning Division.

Staff and appropriate agents will review your complete application and site plan and comments will be forwarded to you. You will need to address the comments in writing, revise the site plan accordingly and resubmit a site plan showing that all comments are addressed and errors corrected.

3. Once advised that the site plan is correct and ready to be presented to the Board of Adjustment, you will need to submit 18 folded copies of the plan.
4. When the copies of the plan are received, Staff will begin to prepare a staff report, schedule a public meeting date and notify adjacent property owners of the public meeting/public hearing date. A sign advertising the public hearing will also be placed on the property being considered for the Conditional Use Permit.

**Meeting Information:** Meetings are held the second Tuesday of each month at 7:00 PM in the Cabarrus County Governmental Center located in downtown Concord at 65 Church Street, SE.

**Conditional Use Permit:** Conditional Use Permits are considered by the Board of Adjustment during a quasi-judicial hearing. This means that anyone wishing to speak regarding the application must be sworn in. The vote requirement for the Conditional Use Permit to pass is 80% or greater. Additional conditions may be added as part of the Conditional Use Permit approval process.

**Questions:** Any questions related to the Conditional Use Permit process may be directed to the Planning Division at 704-920-2141, between 8 AM and 5 PM, Monday through Friday.

TO THE BOARD OF ADJUSTMENT:

*I HEREBY PETITION THE BOARD OF ADJUSTMENT TO GRANT THE ZONING ADMINISTRATOR THE AUTHORITY TO ISSUE A CONDITIONAL USE PERMIT FOR THE USE OF THE PROPERTY AS DESCRIBED BELOW.*

Applicant's Name	Property Owner's Name
Angela F. Roberts, P.E.	Water and Sewer Authority of Cabarrus County
Applicant's Address	Property Owner's Address
11301 Carmel Commons Blvd. Suite 304	232 Davidson Highway
Charlotte, NC 28226	Concord, NC 28027
Applicant's Telephone Number	Property Owner's Telephone Number
(704) 544-4040	(704) 788-4164, extension 13

Parcel Information

Existing Use of Property	Public Service Facility
Proposed Use of Property	Public Service Facility
Existing Zoning	Low-Density Residential, Public Service Facility Conditional Use
Property Location	6400 Breezy Lane Concord, NC 28025
Property Acreage	241.46 acres (deeded area)
Parcel Number (PIN)	55470645480000

Land Use of Adjacent Properties

NORTH Residential	SOUTH Agricultural
EAST Agricultural	WEST Agricultural / Residential

### General Requirements

The Zoning Ordinance imposes the following general requirements on the use requested by the applicant. Under each requirement, the applicant should explain, with reference to the attached plans (when applicable) how the proposed use satisfies these requirements.

1. The Board must find that the uses(s) as proposed “are not detrimental to the public health, safety or general welfare.”

The use proposed for this project is consistent with operation of a municipal wastewater treatment plant with residuals handling and power generation capabilities. WSACC has developed and implemented a site-specific Stormwater Pollution Prevention Plan and Emergency Action Plan, attached to this submittal for reference.

2. The Board must find that the use(s) as proposed “are appropriately located with respect to transportation facilities, water supply, fire and police protection, waste disposal, etc.”

The site is located in close proximity to Highways 601, 49, and 24/27. No additional trips per day to the site are expected as a result of this project. No additional facilities for water supply, access to fire and police protection, and waste disposal will be needed as a result of this project.

3. The Board must find that the use(s) as proposed “will not violate neighborhood character nor adversely affect surrounding land uses.”

All heat recovery and power generation activities will occur hundreds of feet inside the plant parcel boundary as shown on the attached drawings. No noise impact from heat recovery and power generation equipment will be experienced at the site's property lines.

4. The Board must find that the use(s) as proposed “will comply with the general plans for the physical development of the County or Town, as embodied in the Zoning Ordinance or in the area development plans that have been adopted.”

The proposed uses will not affect the landscaping or buffer surrounding the site, and will not conflict with the site's use as a municipal wastewater treatment and residuals management facility.

### Specific Requirements

The Zoning Ordinance also imposes SPECIFIC REQUIREMENTS on the use(s) requested by the applicant. The applicant should be prepared to demonstrate that, if the land is used in a manner consistent with the plans, specifications, and other information presented to the Board, the proposed use(s) will comply with specific requirements concerning the following:

Nature of use (type, number of units; and/or area):

The proposed use will allow the site to continue to safely recover heat from the existing equipment, along with safely generating power using the heat recovered. One steam turbine generator building is included, along with modifications inside the existing incinerator building.

Accessory uses (if any):

Not applicable.

Setback provisions: Setback distances from the steam turbine generator building were approximated using GIS software due to the size of the site.

Principle Use

Front: 740 feet      Side yard Single: 1,530 feet      Side yard Total: \_\_\_\_\_      Rear: 1,930 feet

Accessory Use

Front: N/A      Side yard Single: \_\_\_\_\_      Side yard Total: \_\_\_\_\_      Rear: \_\_\_\_\_

Height provisions:      Principle Use: 22 feet      Accessory Use: N/A

Off street parking and loading provisions: (include calculations)

Off-street parking and loading provisions are included with the attached Development Plan Maps and supporting data.

Sign provisions: (include sketch drawing with dimensions)

Not applicable.

Provisions for screening landscaping and buffering: (show on site plan)

Landscape and buffer requirements are addressed in the attached Landscape Plan and supporting data.

Provisions for vehicular circulation and access to streets: (provide NCDOT permit and/or TIA)

Provisions for vehicular circulation at the site are shown in the attached plans. No modifications to public roads or additional trips per day to the site are proposed.

Adequate and safe design for grades, paved curbs and gutters, drainage systems, and treatment or turf to handle storm waters, prevent erosion, subdue dust:

Appropriate grading, sediment and erosion control, and other stormwater conveyance features will be included as part of final design activities.

An adequate amount and safe location of play areas for children and other recreational uses according to the concentration of residential property:

Not applicable.

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Compliance with applicable overlay zones: (see Chapter 4 of Zoning Ordinance)

No conflicts with overlay zones.

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Compliance with the Flood Damage Prevention Ordinance: (see County Code Chapter 38)

As the entire project is located outside of the 100 year flood plain as shown on the attached drawings, the Flood Damage Prevention Ordinance will not apply to this project.

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Other requirements may be requested by the applicant or specified by the Board for protection of the public health, safety, welfare, and convenience:

None requested by applicant.

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#### Predefined Standards

Each individual Conditional Use listed in the Zoning Ordinance may have specific standards imposed. Refer to Chapter 8, the Conditional Use section of the Zoning Ordinance for these requirements. Each standard should be addressed in the site plan submitted along with this application.

#### Certification

I hereby confirm that the information contained herein and herewith is true and correct and that this application shall not be scheduled for official consideration until all of the required contents have been submitted to the Commerce Department.

Signature of Applicant

*Angela F. Roberts*

Date

*8/13/12*

Signature of Owner

*Colin McKeete*

Date

*8/13/12*



### Aerial Map

Water and Sewer Authority of Cabarrus County

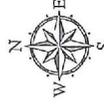
Petition : CUSE2012-00001

Purpose: To amend Conditional Use Permit to include Heat Recovery and Power Generation at Rocky River Regional Wastewater Treatment Plant

Parcel ID# 5547-06-4548

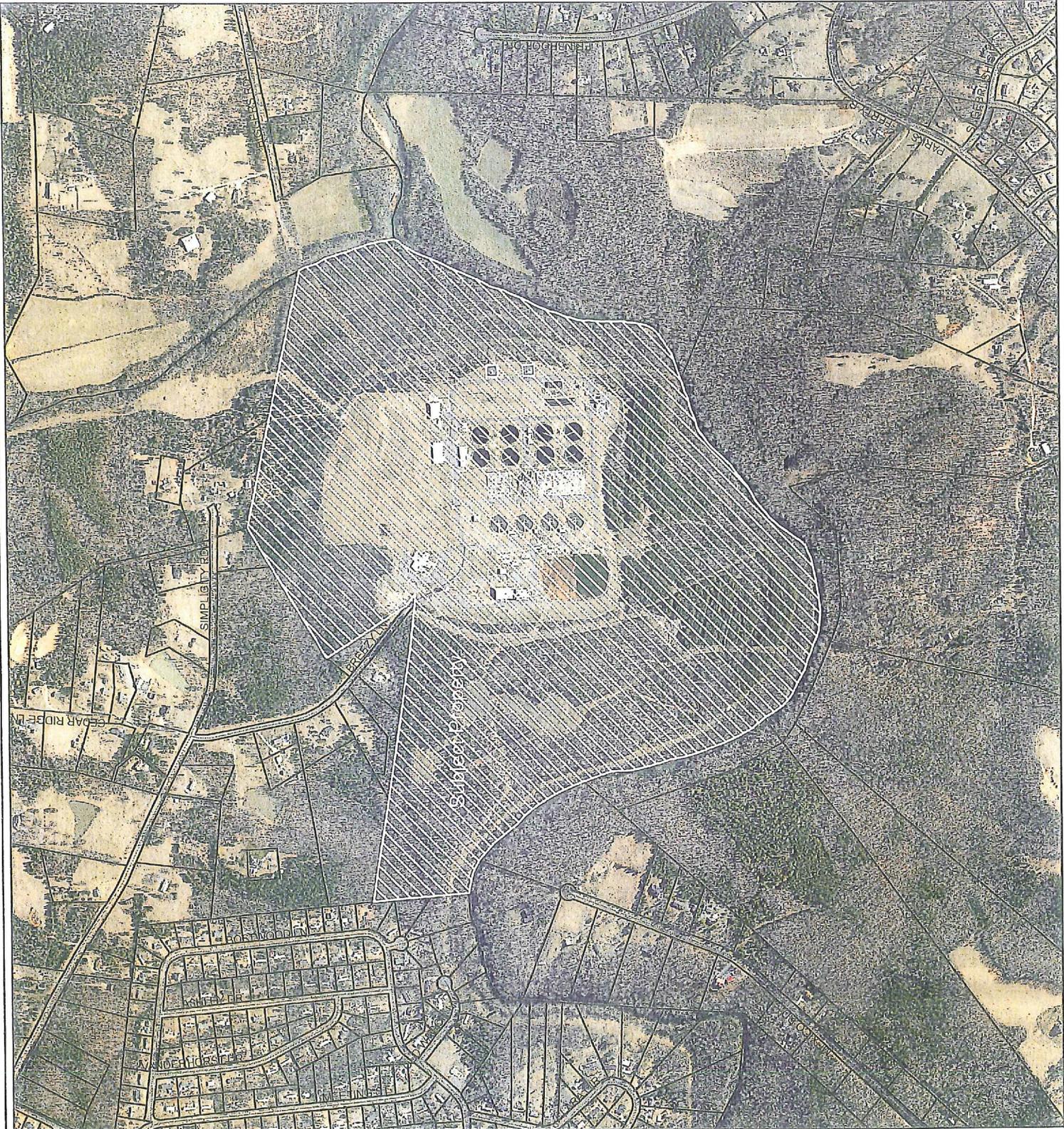
**Legend**

- Streets
- Tax Parcel



Cabarrus County shall not be held liable for any errors in this data. This includes errors of omission, commission, errors concerning the content or the data, and relative and positional accuracy of the data. These data cannot be used to establish a legal easement. Primary sources from which these data were obtained must be consulted for verification of information contained within the data.

Map Prepared by Cabarrus County Planning & Development  
September 2012.





# Zoning Map

Water and Sewer Authority of Cabarrus County

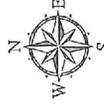
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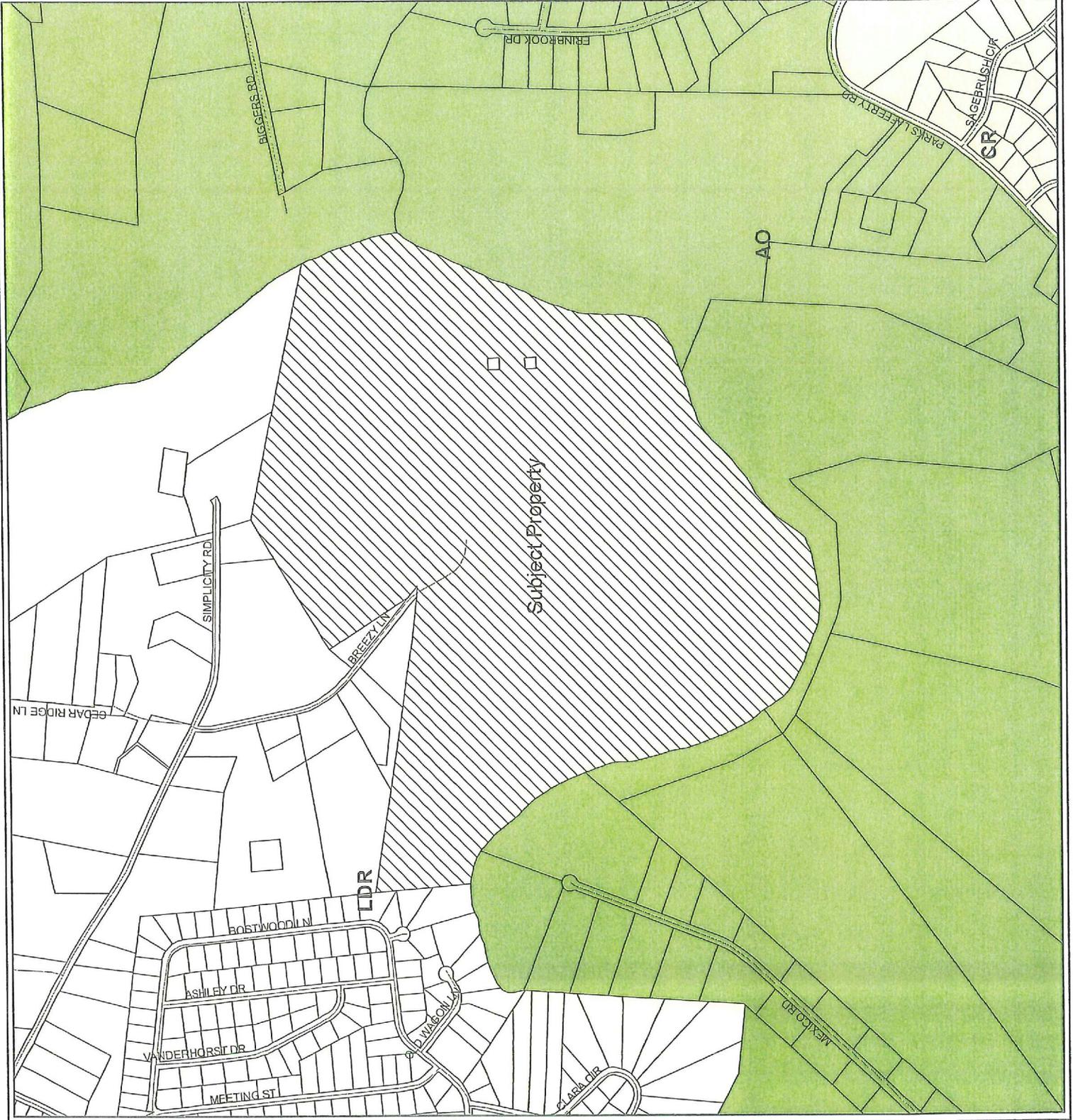
## Legend

- Streets
- Tax Parcel
- County Zoning
- AO- Agricultural Open Space
- CR- Countryside Residential
- LDR- Low Density Residential



Cabarrus County shall not be held liable for any errors in this data. This includes errors of omission, commission, errors concerning the content or the data, and relative and positional accuracy of the data. These data cannot be construed as a legal document. Primary sources which these data were compiled must be consulted for verification of information contained within the data.

Map Prepared by Cabarrus County Planning & Development, September, 2012.





# Land use Map

Water and Sewer Authority of Cabarrus County

Petition : CUUSE2012-00001

Purpose: To amend Conditional Use Permit to include Heat Recovery and Power Generation at Rocky River Regional Wastewater Treatment Plant

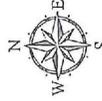
Parcel ID# 5547-06-4548

## Legend

- Streets
- Tax Parcel

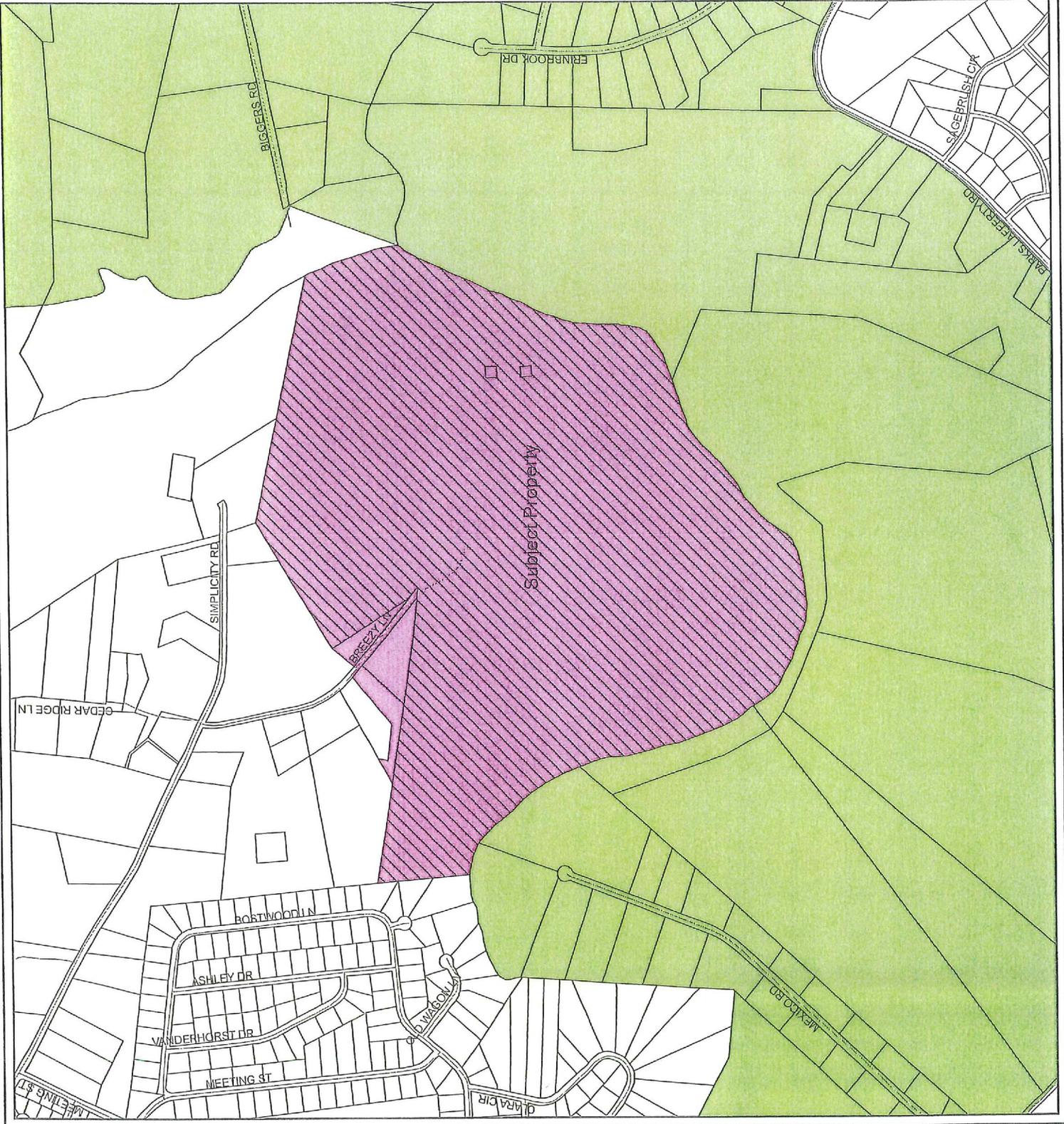
## Land use

- Institutional/Civic
- Low Density Residential
- Rural Residential



Cabarrus County shall not be held liable for any errors in this data. This includes errors of omission, commission, errors concerning the content, accuracy, date, and reliability of the data. The user of this data shall be construed to be a legal document. Primary sources from which these data were compiled must be consulted for verification of information contained within the data.

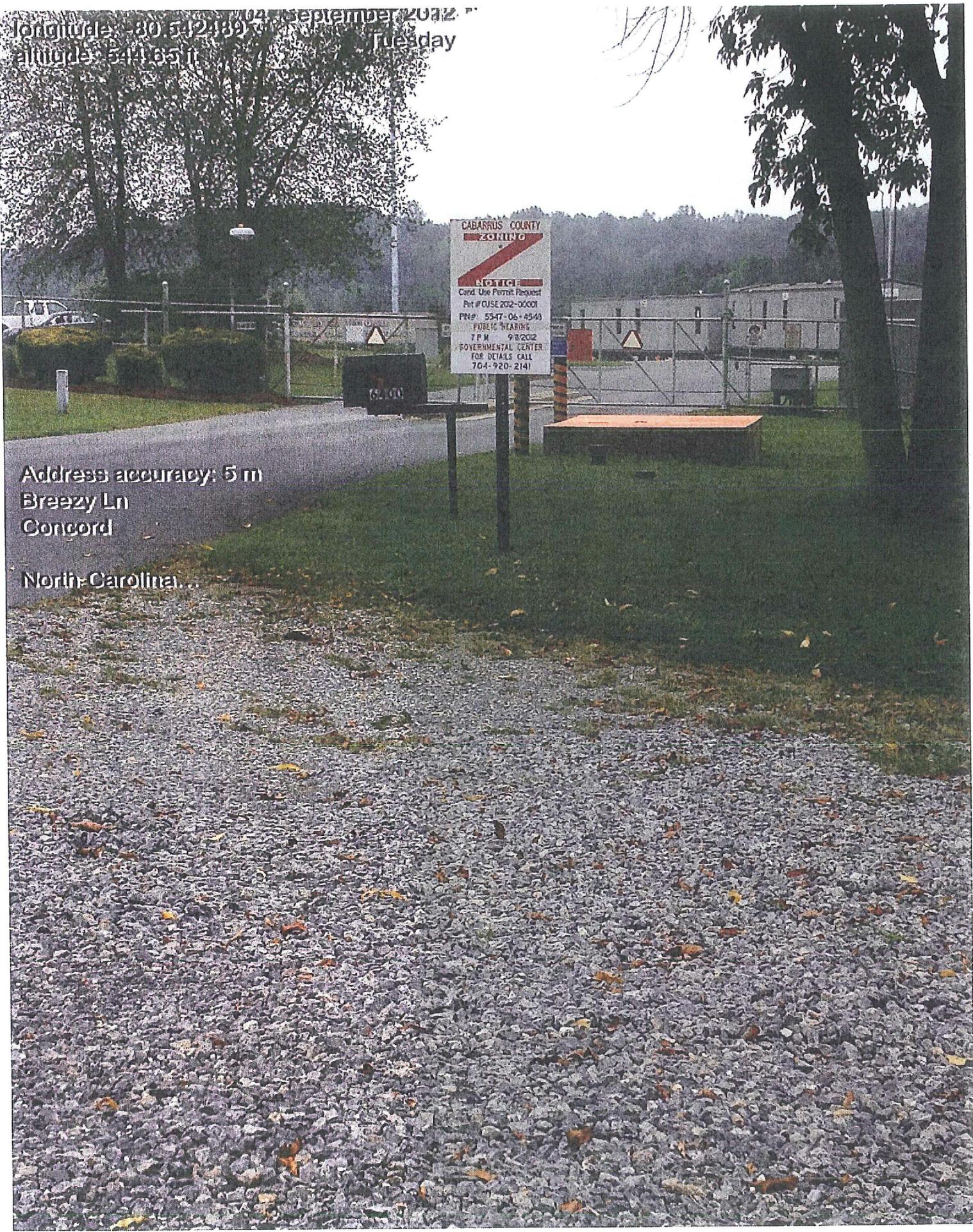
Map Prepared by Cabarrus County Planning & Development, September 2012.



Longitude: -80.542489  
Altitude: 544.65 ft  
02 September 2012  
Tuesday

CABARRUS COUNTY  
NOTICE  
Cond. Use Permit Request  
Per # CUSE 2012-00001  
PIN# 53-47-06-4543  
PUBLIC HEARING  
7 P.M. 9/3/2012  
GOVERNMENTAL CENTER  
FOR DETAILS CALL  
704-920-2141

Address accuracy: 5 m  
Breezy Ln  
Concord  
North Carolina





August 23, 2012

Dear Adjacent Property Owner:

This letter is to inform you that the Water and Sewer Authority of Cabarrus County (WSACC) has petitioned the Cabarrus County Board of Adjustment for a Conditional Use Permit. The applicant is requesting a Conditional Use Permit that would allow them to continue to safely recover heat from the existing equipment, along with safely generating power using the heat recovered at the existing facility at the Rocky River Regional Wastewater Treatment plant. The property is located at 6400 Breezy Lane, Concord. (PIN #: 5547064548).

In accordance with the Cabarrus County Zoning Ordinance, any amendment to a conditional use permit requires the approval of the Board of Adjustment. The proposed change of use is an amendment to a conditional use permit that is already in effect on the property. The applicant has stated that the project will involve installation of heat recovery equipment, steam turbine generator, and associated improvements at the Rocky River Regional Wastewater Treatment Plant. The proposed building to house this equipment will be located within the existing facility, and will be approximately 27'x48'.

A public hearing will take place on Tuesday September 11<sup>th</sup> at 7:00 p.m. at the Cabarrus County Governmental Center located at 65 Church Street SE, Concord, North Carolina. The Conditional Use application is on file in the Cabarrus County Zoning Department. If you have any questions, or would like to view the application, please contact our office at 704-920-2149.

Sincerely,

Colleen Nelson, Senior Planner  
Cabarrus County Planning & Development  
[Canelson@cabarruscounty.us](mailto:Canelson@cabarruscounty.us)  
704-920-2149

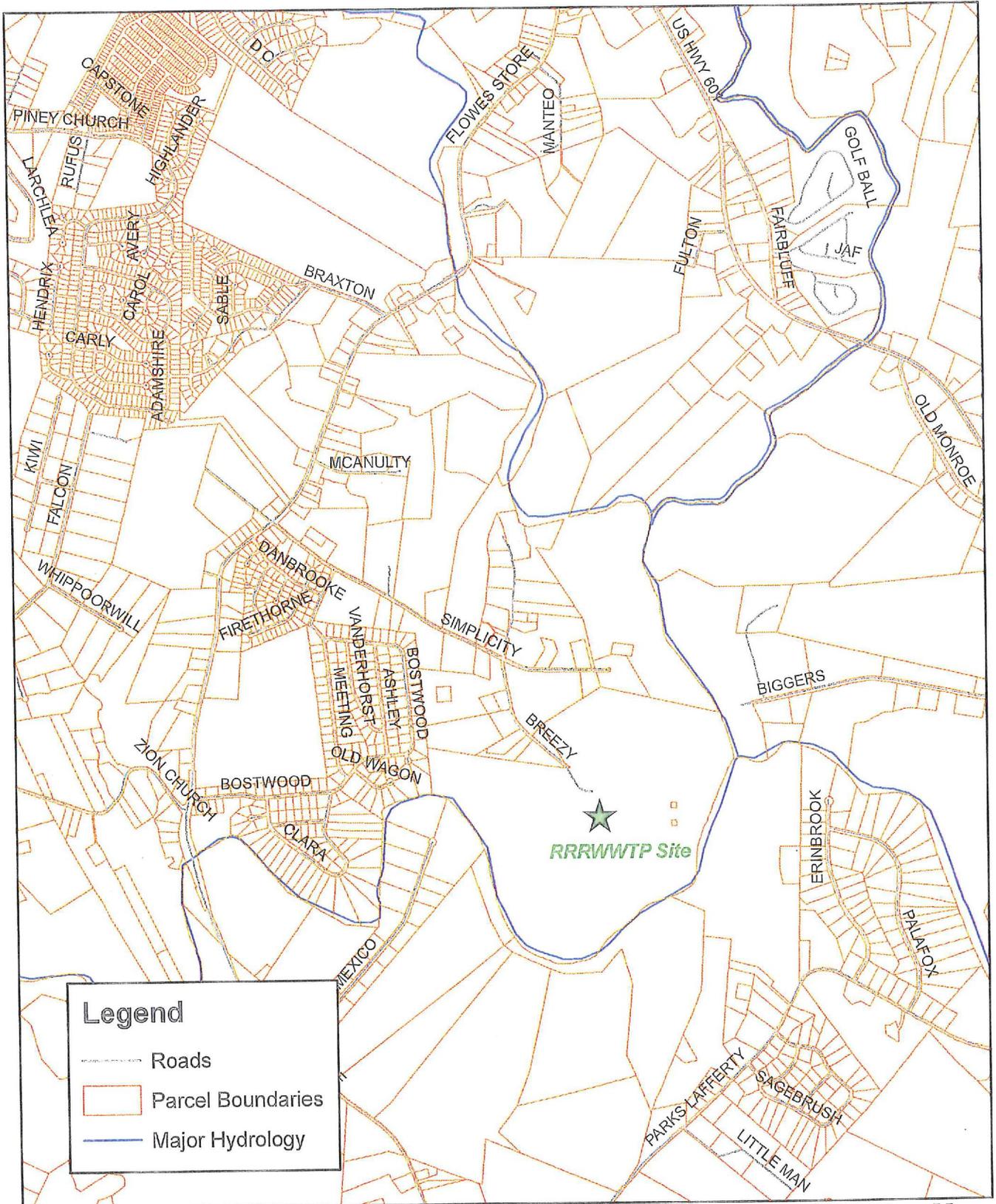
Adjacent Landowners - Names, Addresses, and Parcel Identification Numbers

Owner Name	Address	City	State	Zip Code	Parcel Identification Number
Allen Edward	1218 BOSTWOOD LANE	CONCORD	NC	28025	5537788588
Allred Tadd E & Wife Allred Lori P	2049 SIMPLICITY ROAD	CONCORD	NC	28025	5547092557
Austin David B & Others	PO BOX 3067	CONCORD	NC	28025	5537869013
Blackweider Jean	2070 SIMPLICITY ROAD	CONCORD	NC	28025	5547093281
Bost Homer N Sr & Bost Jean E	2100 SIMPLICITY ROAD	CONCORD	NC	28025	5548008368
Bost Homer N Sr & Bost Jean E	2100 SIMPLICITY ROAD	CONCORD	NC	28025	5548008368
Bost Homer N Sr & Bost Jean E	2100 SIMPLICITY ROAD	CONCORD	NC	28025	5547098229
Botta Dawn Lyn & Michael	1212 BOSTWOOD LANE	CONCORD	NC	28025	5537789406
Breckner Ludmilla C Revocable	2555 BIGGERS ROAD	CONCORD	NC	28025	5547294539
Brooks Anthony Scott & Brooks Patricia L	6600 MEXICO RD	CONCORD	NC	28025	553778393
Cruse Charles E & Wife Wanda C	6222 BREEZY LANE	CONCORD	NC	28025	5537981915
Hill Donald T & Wife Tamera S	6340 BREEZY LANE	CONCORD	NC	28025	5537985189
Kiker Steven J & Kiker Alan T	2271 PARKS LAFFERTY ROAD	CONCORD	NC	28025	5547142481
Lujan Israel LOA	129 WILD DUCK CIRCLE	GREENSBORO	NC	27407	5537789312
M & W Industries D/B/A Bostwood Estates, Inc.	PO BOX 8	LITTLE RIVER	SC	29566	5537789025
Milligan Lynda Campbell	6401 PINCKNEY COURT	CONCORD	NC	28025	5537788127
Newsome Leonard Wayne & Newsome Elaine C Wf	1791 SIMPLICITY ROAD	CONCORD	NC	28025	5537994711
Newsome Leonard Wayne & Newsome Elaine C Wf	1791 SIMPLICITY ROAD	CONCORD	NC	28025	5537997692
Parrish John M & Connie S	6607 MEXICO ROAD	CONCORD	NC	28025	5537874014
Rinehardt Jeffrey P & Rinehardt Katherine Wf	6160 BREEZY LANE	CONCORD	NC	28025	5537884873
Rinehardt Jeffrey P & Rinehardt Katherine Wf	6160 BREEZY LANE	CONCORD	NC	28025	5537892074
Russ Bobby James & Russ Claudia M/Wife	6412 PINCKNEY COURT	CONCORD	NC	28025	5537778898
Shaver Larry Wayne Jr & Shaver Kelly C / Wife	6200 BREEZY LANE	CONCORD	NC	28025	5537889930
Sossoman Kenneth Ray & Daniels Judy Elaine Sossoman	2645 PARKS LAFFERTY ROAD	CONCORD	NC	28025	5547266631

## **Location Map**

Features required to be shown on the Location Map are shown on the attached drawing as indicated below:

- ✓ The site and adjacent lots or tracts of land
- ✓ The intersection of at least two (2) public streets nearest the property and the names of all public ways, opened or unopened, clearly indicated
- ✓ North arrow

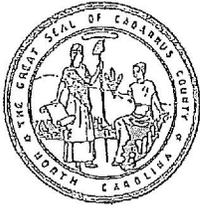


Applicant/Engineer:  
 CH2M HILL  
 11301 Carmel Commons Blvd.  
 Suite 304  
 Charlotte, NC 28226  
 Contact: Angela F. Roberts, PE (704) 544-4040



Owner:  
 Water and Sewer Authority of Cabarrus County  
 Heat Recovery and Power Generation Facility Project  
 232 Davidson Highway  
 Concord, NC 28027  
 Contact: Chad VonCannon, PE (704) 788-4164, ext. 13

Plan Prepared August, 2012



# CABARRUS COUNTY

Post Office Box 707  
CONCORD, NORTH CAROLINA 28025

Application Number 0091(C)

COUNTY OF CABARRUS  
STATE OF NORTH CAROLINA

## APPLICATION FOR A CONDITIONAL USE PERMIT

<u>July</u>	<u>3</u>	<u>1986</u>
Month	Day	Year

TO THE CABARRUS COUNTY BOARD OF ADJUSTMENT:

I, John C. Murdock, III hereby petition the Board of Adjustment to issue a CONDITIONAL USE PERMIT in the name of Rocky River Regional Wastewater Treatment Plant of the City of Concord for use of the property described in the attached form, "Application for Hearing", in a manner set forth on that form, or if not adequately explained there, as more fully described herein: The property in question is proposed to be used for a sludge and sludge ash landfill. (See attached "Fact Sheet and Summary")

Authority to grant the requested permit is contained in the Zoning Ordinance, sections 3.2-4 Schedule of Use Regulations; 9.2 General Standards; 9.7-25 Public Services Facilities

The zoning ordinance imposes the following GENERAL STANDARDS on the use requested by the applicant. Under each requirement, the applicant should explain, with reference to attached plans, where applicable, how the proposed use satisfies these standards:

GENERAL STANDARD (A): The use will promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted.

STATEMENT BY APPLICANT: The proposed use is a public necessity to insure proper operation of the Rocky River Regional Wastewater Treatment Plant and proper handling and disposal of sludge and sludge ash.

STAFF COMMENT: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date July 3, 1986

Cabarrus County  
Zoning Board of Adjustment  
Concord  
North Carolina

Gentlemen:

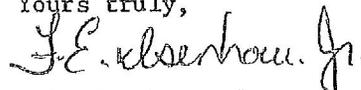
A Zoning Compliance Permit has been (denied) (~~granted~~) to (name) Rocky  
River Wastewater Treatment Plant (address) Breezy Lane, Concord, N.C.  
for the construction of Public Service Facility, Sludge and Sludge Ash Landfill  
located at (address) Breezy Lane (P.I.N.# 5537-27-3211)  
for use as Same

The property is located in a ARR (Agricultural Rural Residential) District, as de-  
signated by the Cabarrus County Zoning Atlas.

The Permit was (denied) (~~granted~~) on (date) July 3, 1986  
for the following reasons: The use is not one by rights but rather by a conditional  
Use permit.

An appeal from the above decision was filed with this office on (date) \_\_\_\_\_  
July 3, 1986 by (name) Rocky River Regional Wastewater Treatment Plant  
(address) Breezy Lane, represented by,  
(name) John C. Murdock, III (address) Same,  
under Section 8 of the Ordinance, and all proceedings in furtherance of the action  
appealed from have been stayed, as required, awaiting a decision of the Board.

Yours truly,



F.E. Isenhour, Jr.  
Zoning Administrator



CABARRUS COUNTY  
Post Office Box 707  
CONCORD, NORTH CAROLINA 28025

DATE: July 14, 1986

Dear Property Owner:

This letter is to inform you of a request by City of Concord  
for a Conditional Use Permit to allow the establishment of a sludge landfill adjacent  
to the Regional Wastewater Treatment Plant.  
at (location) Breezy Lane

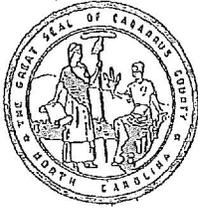
This request will be heard by the Cabarrus County Board of Adjustment at their  
regularly scheduled meeting on July 22, 1986 at 7:00 P.M.  
in Courtroom number 2 of the Cabarrus County Courthouse. At this public hearing  
all comments will be heard concerning this request.

If you have any questions concerning this Conditional Use request you may phone  
782-2169 for additional information.

Yours truly,

F. E. Isenhour, Jr.  
Zoning Administrator

FEIjr:pds



# CABARRUS COUNTY

Post Office Box 707  
CONCORD, NORTH CAROLINA 28025

Application Number 0091(C)

COUNTY OF CABARRUS  
STATE OF NORTH CAROLINA

## ORDER GRANTING/~~DENYING~~ A CONDITIONAL USE PERMIT

The Board of Adjustment for the County of Cabarrus, having held a public hearing on July 22, 1986 to consider application number 0091(C), submitted by City of Concord Rocky River Treatment Plant, a request for a conditional use permit to use the property located at Breezy Lane for the purpose of sludge and sludge ash landfill, and having heard all of the evidence and arguments presented at the hearing, makes the following FINDINGS OF FACT and draws the following CONCLUSIONS:

1. The Board FINDS as a FACT that all of the specific requirements set forth in section 9 of the Ordinance for the proposed use (will/~~will not~~) be satisfied if the property is developed in accordance with the plans submitted to the Board. (Specify which requirements, if any, are not satisfied by the proposed development).

\_\_\_\_\_  
\_\_\_\_\_

2. It is the Board's CONCLUSION that the proposed use (does/~~does not~~) satisfy the first general standard listed in the ordinance, namely, General Standard (A): The use will promote the public health, safety and general welfare, if located where proposed and developed and operated according to the plan as submitted.

\_\_\_\_\_  
\_\_\_\_\_

3. It is the Board's CONCLUSION that the proposed use (does/~~does not~~) satisfy the second general standard listed in the ordinance, namely, General Standard (B): The use will maintain or enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of the contiguous property).

\_\_\_\_\_  
\_\_\_\_\_

4. It is the Board's CONCLUSION that the proposed use (does/~~does not~~) satisfy the third general standard listed in the ordinance, namely, General Standard (C): The use is in compliance with the general plans for the physical developments of the County as embodied in these regulations or in the Comprehensive Plan, or portion thereof, adopted by the Board of County Commissioners. \_\_\_\_\_

5. The Board makes the following additional FINDINGS OF FACT: The Board found and made a condition of if Mr. Gregory Beck's well (Rinehardt property is found to be polluted by reason of the landfill upon determination of the County or State, the City of Concord will provide a water tap free of charge.

Therefore, because the Board concludes that all of the general and specific conditions precedent to the issuance of a CONDITIONAL USE PERMIT (have/~~have not~~) been satisfied, it is ORDERED that the application for the issuance of a CONDITIONAL USE PERMIT be (GRANTED/~~NOT GRANTED~~), subject to the following conditions:

- (1) The applicant shall fully comply with all of the specific requirements stated in the ordinance for the proposed use, as well as any additional conditions stated below.
- (2) If any of the conditions stated below shall be held invalid, then this permit shall become void and of no effect.
- (3) The land and/or structures must be developed in accordance with the site plan submitted and approved.

Ordered this 22nd day of July 19 86.

C. Allen Hargis  
Chairman of the Cabarrus County  
Board of Adjustment

Gregory D. Starr  
Secretary

NOTE: If you are dissatisfied with the decision of this Board, an appeal may be taken to the Superior Court of Cabarrus County within thirty (30) days after the date of this order. See Section 8.10 of the Ordinance.

GENERAL STANDARD (B): The use will maintain or enhance the value of contiguous property (unless the use is a public necessity, in which case the use need not maintain or enhance the value of contiguous property).

STATEMENT BY APPLICANT: Proper operation of the landfill should not effect the value of contiguous property. There is an existing landfill in operation.

STAFF COMMENT: There ~~is~~ should be screening around the property to help protect adjacent property. All things should be done to help insure no ground water

*contamination.*

GENERAL STANDARD (C): The use is in compliance with the general plans for the physical development of the County as embodied in these regulations or in the Comprehensive Plan, or portion thereof, adopted by the Board of County Commissioners.

STATEMENT BY APPLICANT: The present zoning allows for a 2 acre landfill. Since only one trench will be open at a time less than 2 acres will be in use at any one time.

STAFF COMMENT: \_\_\_\_\_

The Zoning Ordinance also imposes the following specific requirements on the use requested by the applicant. The applicant should be prepared to demonstrate that, if the land is used in a manner consistent with the plans, specifications, and other information presented to the Board, the proposed use will comply with each of the following specific requirements:

- (1) Where a building is involved and it is proposed to be located in a residentially zoned district, it shall have an appearance suitable for a residential district, or it shall be screened from adjacent residential land.
- (2) Where buildings are set back from street rights-of-way or from private property lines by a distance of two hundred (200) feet, screening shall not be required.
- (3) All outside storage areas are fenced and screened from adjacent residentially developed areas.
- (4) The site is of adequate size for the sewage disposal system proposed and for the proposed use.

7/3/86  
Date

John C. Musser, III  
Signature of Appellant

161 Breezy Lane, Concord, N.C.  
Address

Office 788-4164

Fact Sheet

Page 2

The sludge ash is the residue that remains after the sludge is incinerated at around 1400 degree F. Ash is removed from the incinerator and pumped to one of two ash holding ponds. When the ponds reach their capacity, the ash will have to be removed and placed in the landfill.

Landfill  
Operations:

The site has been approved by the Division of Environmental Management. Final approval will be given when a complete satisfactory application is filed and a permit issued. The permit will specify how the landfill will be operated the buffer zone maintained, the depth of the trenches, etc. The application and supporting documents are about 85% complete at this time.

The proposed method of operation will be the same as is used in the existing landfill. Trenches will be opened, only as needed, about 200-300' long and 10' deep with 1:1 side slopes. Once the trench is filled to within 2' of the top it will be covered with 2-3 feet of soil. Once covered the trench and adjacent area will be seeded.

The landfill is only a standby for sludge disposal. Every effort is made to incinerate 100% of the sludge generated, but once a year the incinerator must be taken out of service for maintenance and repair. The down time is not expected to be more than one month per year.

CASE NO 0091(C)  
APPELLANT City of Concord  
EXHIBIT A 3 sheets  
DATE 7/22/86

Summary

Background Information

Application for Conditional Use Permit

City of Concord

Rocky River Regional Wastewater Treatment Plant

If the Rocky River Regional Wastewater Treatment Plant is to continue to adequately protect the surface water of Cabarrus County and to provide the essential services of wastewater treatment a suitable landfill site is necessary for the disposal of sludge ash and emergency disposal of sludge.

The normal operation is to incinerate the sludge and landfill the inorganic non-hazardous ash. The incinerator down time is not projected to total more than 30 days a year. Only when the incinerator is out of operation will the non-hazardous sludge be stabilized with lime and landfill.

Background information which has lead to this request is as follows:

- 1) On December 21, 1981 the existing 12 acre landfill site was approved and a Permit issued for sludge and sludge ash.
- 2) In mid 1984 other areas of the Rocky River Regional Wastewater Treatment Plant site where investigated for a suitable landfill site because the ash ponds were about 50% full and the existing landfill site was nearing capacity. No suitable areas were found.
- 3) With permission of the adjacent property owner, the property in question was investigated and evaluated.
- 4) The Division of Environmental Management approved the site as suitable for sludge and sludge ash on March 7, 1986.
- 5) The site was purchased on March 28, 1986 after it was determined to be suitable for the proposed landfill.
- 6) The remaining open area of the existing landfill will accommodate about 77 days of operation (as of June 1, 1986) for sludge disposal.

The purpose of the application for Conditional Use Permit is to allow the Rocky River Regional Wastewater Treatment Plant to prepare and operate a sludge and sludge ash landfill. An application for Permit and the supporting information is being prepared. The landfill can only be operated with the approval and supervision of the North Carolina Division of Environmental Management.

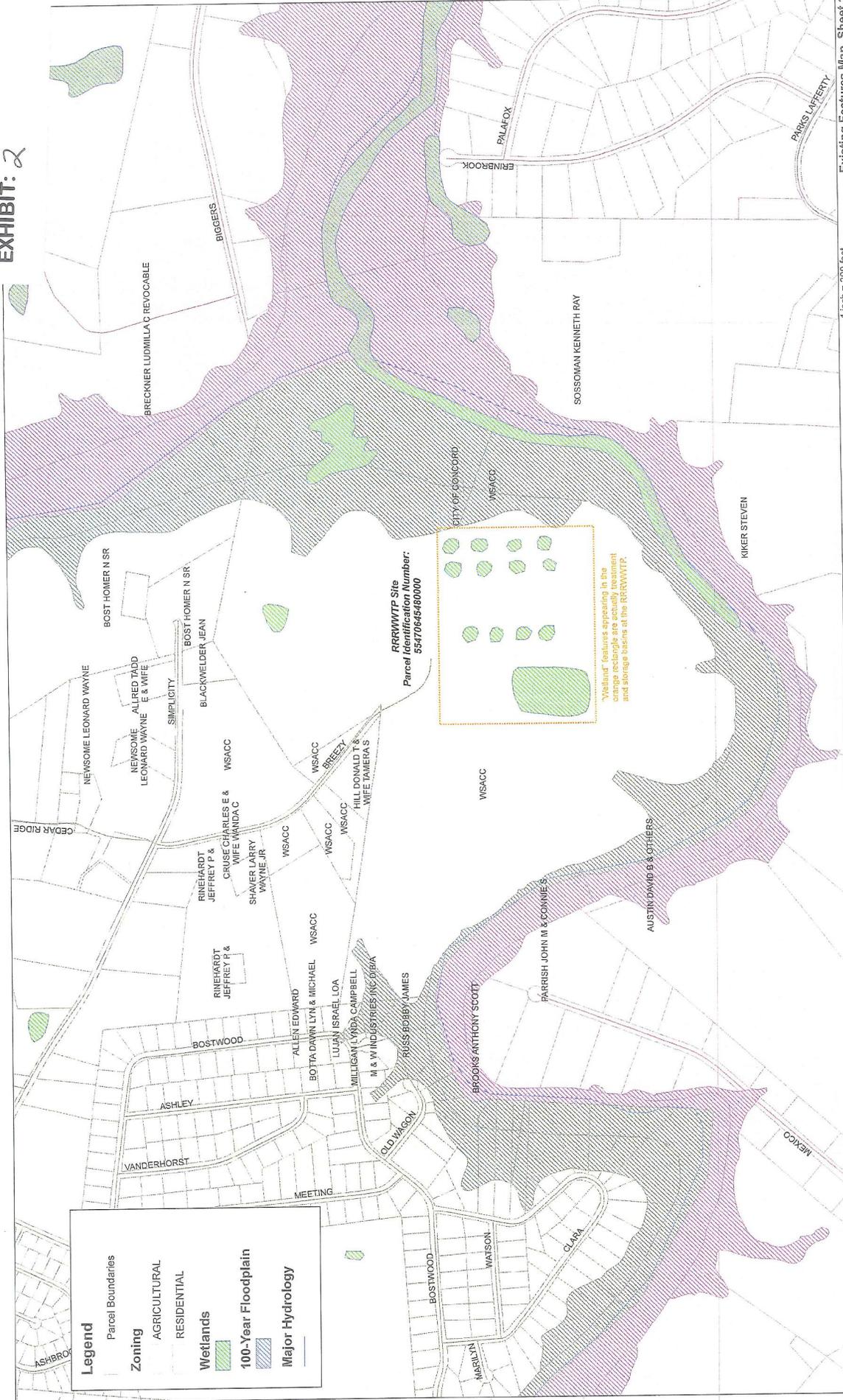
## Existing Features Maps:

Features required to be shown on the Existing Features Maps are shown on the attached drawings as indicated below:

- ✓ Parcel Identification Number for site - **Existing Features Map, Sheet 1**
- ✓ Ownership, use and zone of adjacent lots or tracts of land - **Existing Features Map, Sheet 1**
- ✓ Location of existing public rights-of-way, utility easements, railroads, power lines, culverts, drain pipes, drainage channels, flood channels, water bodies, streams, swamps, parks, cemeteries, bridges, irrigation ditches, waterlines, sewer lines, and/or natural gas lines - **Existing Features Maps, Sheets 1 through 3**
- ✓ All existing structures including walls, fences, and other manmade features of the site - **Existing Features Map, Sheet 2; Sheet C-1** (*presented under "Development Plan Maps"*)
- ✓ Topography shown at not greater than five (5) foot contour intervals - **Existing Features Map, Sheet 2**
- ✓ Proposed finished grade at no greater than five (5) foot contour intervals - **Sheet C-1** (*presented under "Development Plan Maps"*). Proposed finished grade at the steam turbine generator building will be around elevation 565.
- ✓ Delineation of the 100 year flood plain with FEMA map used and date - **Existing Features Map, Sheet 1**
- ✓ Existing driveways, walk-ways, and curb-cuts - **Existing Features Map, Sheet 2**

Graphic scales are included on each Existing Features map. Due to the size of the parcel and limitations of available aerial photography data, the Existing Features Map, Sheets 1 and 3 are presented at scales greater than 1" = 100'.

CASE#: CU5E2012-00001  
 APPLICANT: WSACC  
 EXHIBIT: 2

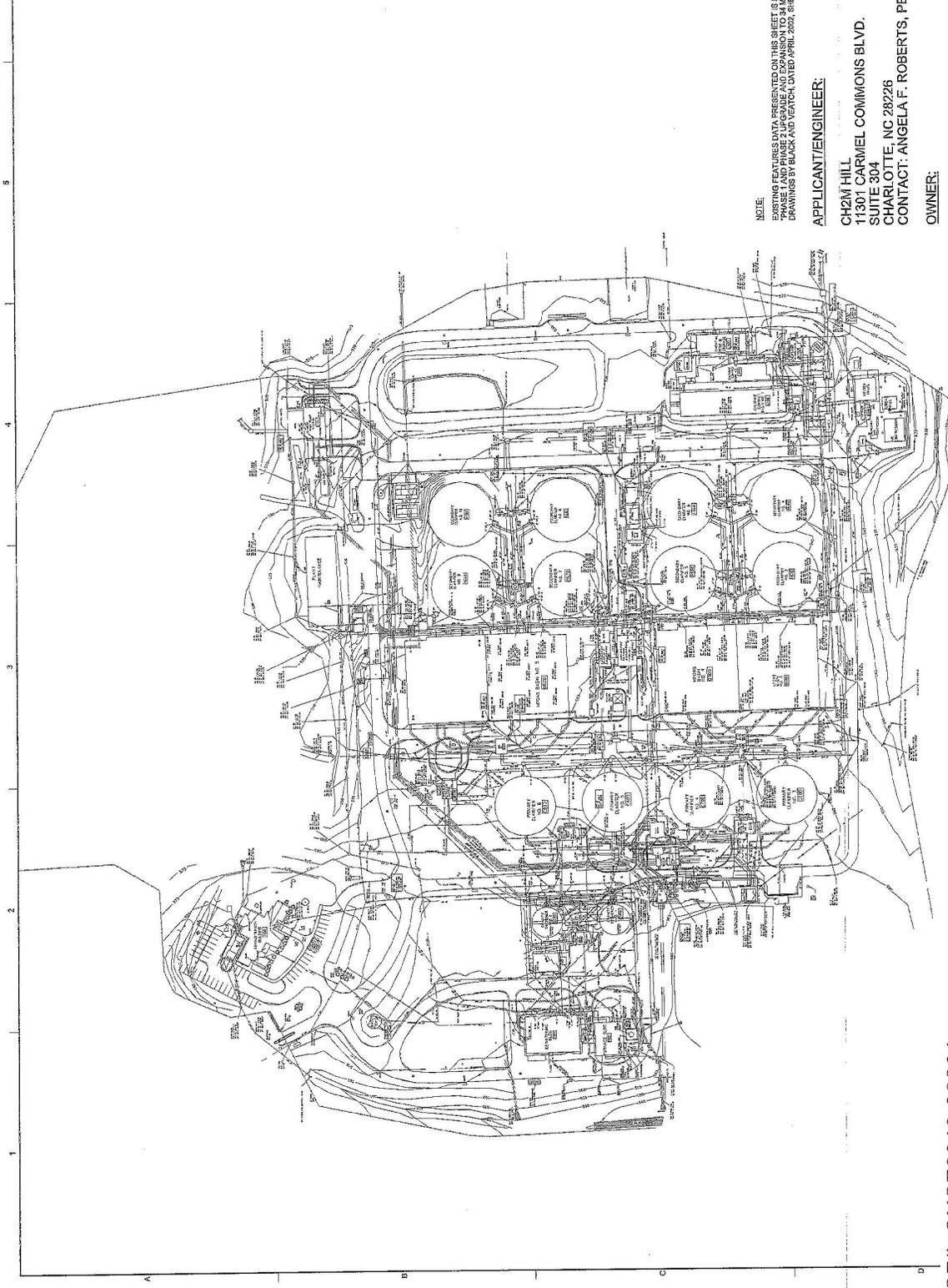
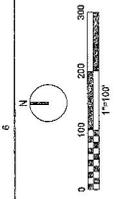


**Existing Features Map, Sheet 1**  
 Plan Prepared August, 2012  
 Owner: City of Concord  
 8000 Breezy Lane  
 Concord, NC 27015  
 Contact: Chad Vaccaroni, PE (704) 798-4184, ext. 13

The 100-yr flood plain elevation of 525.00 is based on the November 5, 2005, Flood Insurance Rate Maps (FIRMS).

Applicant/Engineer:  
 CH2M HILL  
 11571 Co. Road 100, Suite 304  
 Charlotte, NC 28226  
 Contact: Angela H. Watson, PE (704) 544-0200





NOTE:  
 EXISTING FEATURES DATA PRESENTED ON THIS SHEET IS FROM  
 AERIAL PHOTOGRAPHS AND FIELD SURVEY DATA. ALL DIMENSIONS  
 DRAWINGS BY BLACK AND VEATCH DATED APRIL 2024, SHEET 2-2.

APPLICANT/ENGINEER:

CH2M HILL  
 11301 CARMEL COMMONS BLVD.  
 SUITE 304  
 CHARLOTTE, NC 28226  
 CONTACT: ANGELA F. ROBERTS, PE (704) 544-4040

OWNER:

WATER AND SEWER AUTHORITY OF CABARRUS COUNTY  
 HEAT RECOVERY AND POWER GENERATION FACILITY PROJECT  
 232 DAVIDSON HIGHWAY  
 CONCORD, NC 28027  
 CONTACT: CHAD VONCANNON, PE (704) 788-4164 EXT. 13

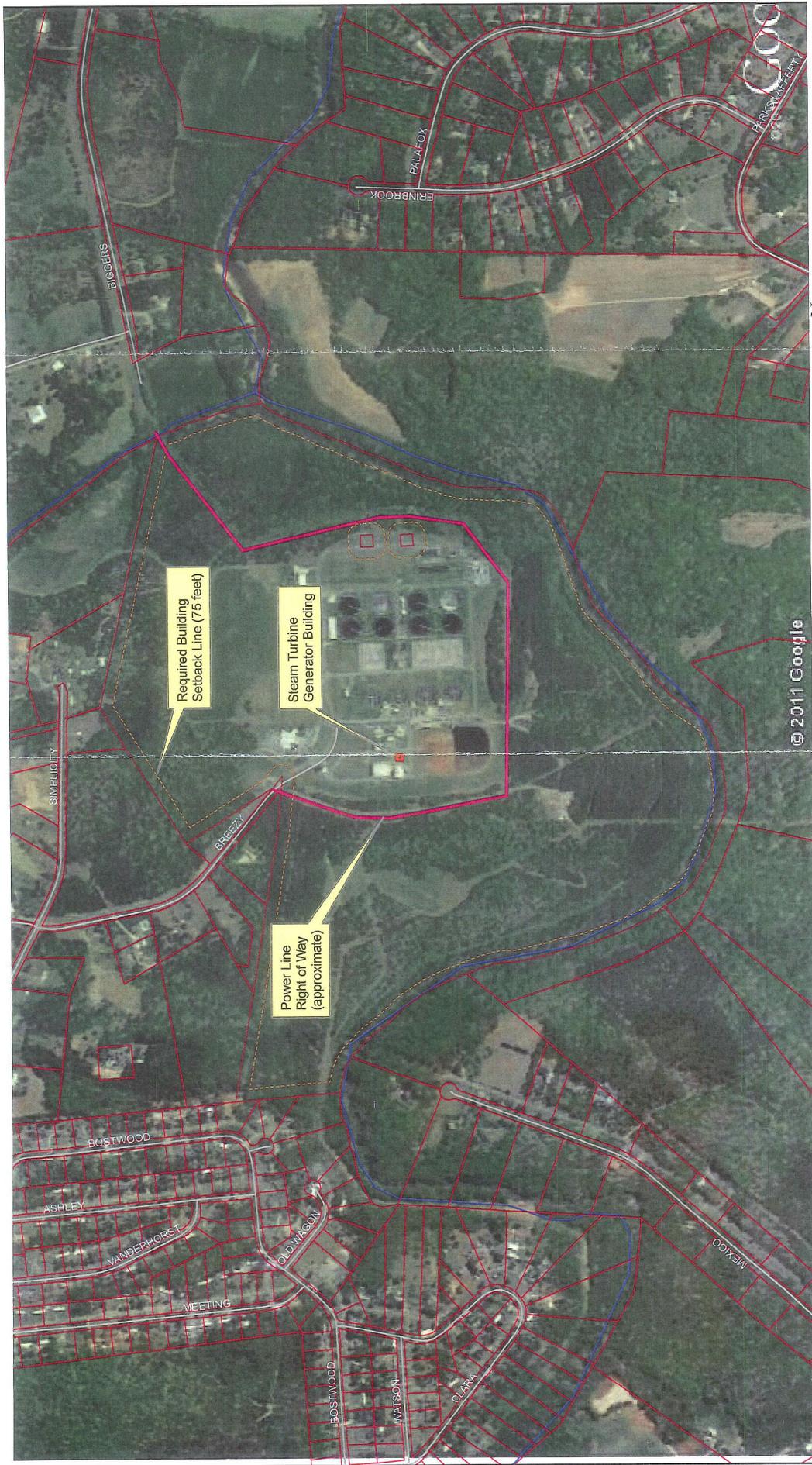
CASE#: CUSE2012-00001  
 APPLICANT: WSACC  
 EXHIBIT: 3

		NC LICENSE NO. E-6889 11901 DANIEL COMMONS BLVD CHARLOTTE, NC 28226	
WATER & SEWER AUTHORITY OF CABARRUS COUNTY HEAT RECOVERY AND POWER GENERATION FACILITY		EXISTING FEATURES MAP, SHEET 2	
DESIGN	NO.	DATE	BY
DR			APVD
REVISION	NO.	DATE	BY
CHK			APVD

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VERIFY SCALE  
 DIMS IN ONE INCH ON  
 DRAWING EQUALS 100 FT  
 DATE: SEPTEMBER 2024  
 PROJ: 2320000  
 DWG: 2320000  
 SHEET

NON-SERVER: GNV FILENAME: existing\_features\_2320000.dgn PLOT DATE: 20240909 PLOT TIME: 11:20:44 AM



**Existing Features Map,  
Sheet 3**



**Legend**

- Parcel Boundaries
- Roads
- Major Hydrology

1 inch = 600 feet  
 Aerial Photography from Google Earth  
 Plan Prepared August 2012

**CH2MHILL**  
**CASE#: CUSE2012-00001**  
**APPLICANT: WSACC**  
**EXHIBIT: 4**

**Applicant/Engineer:**  
 CH2M HILL  
 11301 Carmel Commons Blvd.  
 Suite 304  
 Charlotte, NC 28226  
 Contact: Angela F. Roberts, PE (704) 544-4040

**Owner:**  
 Water and Sewer Authority of Cabarrus County  
 Heat Recovery and Power Generation Facility Project  
 232 Davidson Highway  
 Concord, NC 28027  
 Contact: Chad VotCammon, PE (704) 788-4164, ext. 13

## Development Plan Maps:

Features required to be shown on the Development Plan Maps are shown on the attached drawings as indicated below:

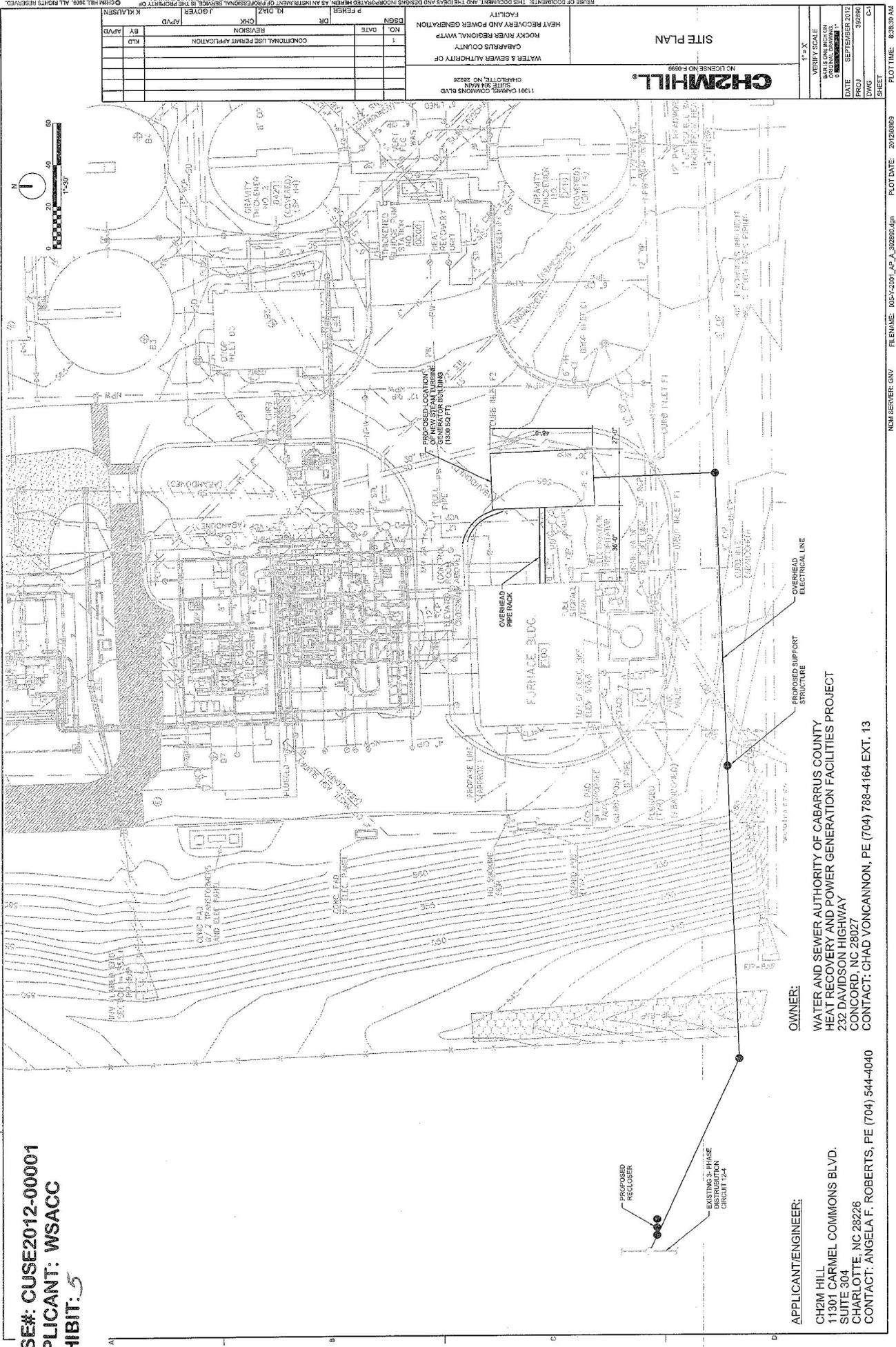
- ✓ Proposed Use(s) – **Sheet C-1**
- ✓ Location of all proposed structures, fences, walls, signs, and exterior lighting of the structures – **Sheet C-1**. Exterior lighting for the steam turbine generator building will be addressed as part of final design activities.
- ✓ Location of required building setback lines – **Existing Features Map, Sheet 3**. 75 feet used per conversation with Colleen Nelson, Cabarrus County Commerce Department, on August 9, 2012.
- ✓ Rendering of building elevations – Photo of steel building same type as proposed for steam turbine generator building is included.
- ✓ Proposed roadway improvements, if any, serving the site should be provided – No road improvements are planned as part of this project.
- ✓ Natural features including landscaping to be left undisturbed – See **Landscape Plan**
- ✓ Proposed drainage and erosion control measures – Appropriate drainage and erosion control measures will be included as part of continuing design activities.
- ✓ Proposed location of utilities – **Sheet C-1**
- ✓ Proposed location of easements, public streets and private drives, including rights-of-way and pavement widths, curb cuts, pedestrian ways and other paths – **Sheet C-1**
- ✓ Location of off-street parking areas and loading areas along with proposed paving material, include parking and loading calculations – Off-street parking areas provided at Administration Building, see **Existing Features Map, Sheet 2**. See below for parking and loading calculations.
- ✓ Area (square feet) of building coverage, area of all impervious vehicular areas (parking areas, loading areas, access ways, etc.), total impervious coverage for all impervious structures (buildings, vehicular areas, sidewalks, etc.) – Building and other impervious areas created as part of this project shown on **Sheet C-1**.
- ✓ Delineation of all areas of special flood hazard and/or wetlands to encroach proposed structures – Not applicable, no special flood hazard or wetlands in vicinity of proposed improvements.
- ✓ Location of Overlay Zones, if applicable – Not applicable
- ✓ Location of solid waste containers including proposed design provisions for screening – No additional solid waste containers beyond those already at the site are included with this project.
- ✓ Number of proposed dwelling units or commercial units by type, size, and proposed ownership – Not applicable

- ✓ Height (both number of floors and linear feet) and floor area of all structures - Sheet C-1. Proposed height for steam turbine generator building is 22 feet.
- ✓ Gross Leasing Floor area (for shopping centers) - Not applicable
- ✓ Sight Triangles - Not applicable. Approach to new Heat Recovery and Power Generation Facility within the plant site includes no visual obstructions.

From Chapter 10 of the *Cabarrus County Zoning Ordinance*, Table 10-6, a minimum of 1 parking space per employee at peak shift is required, along with a minimum of 1 parking space per each company vehicle at peak shift for a "Utility" land use. A maximum of 40 employees of the Water and Sewer Authority of Cabarrus County work at the Rocky River Regional WWTP each day, with those employees divided over three shifts per day. Employee parking is available adjacent to the Administration Building, with a total of 55 parking spaces. Twelve additional spaces by the Administration Building are reserved for WSACC-owned vehicles. One handicapped-accessible space is provided, and is the closest to the building served (Administration Building).

Colors for the steam turbine generator building have not yet been selected, and are specified to be left to the discretion of the Owner and Engineer following receipt of a submittal from the Contractor.

**CASE#: CU2012-00001**  
**APPLICANT: WSACC**  
**EXHIBIT: 5**



**OWNER:**

WATER AND SEWER AUTHORITY OF CABARRUS COUNTY  
 HEAT RECOVERY AND POWER GENERATION FACILITIES PROJECT  
 232 DAVIDSON HIGHWAY  
 CONCORD, NC 28027  
 CONTACT: CHAD VONCANNON, PE (704) 788-4164 EXT. 13

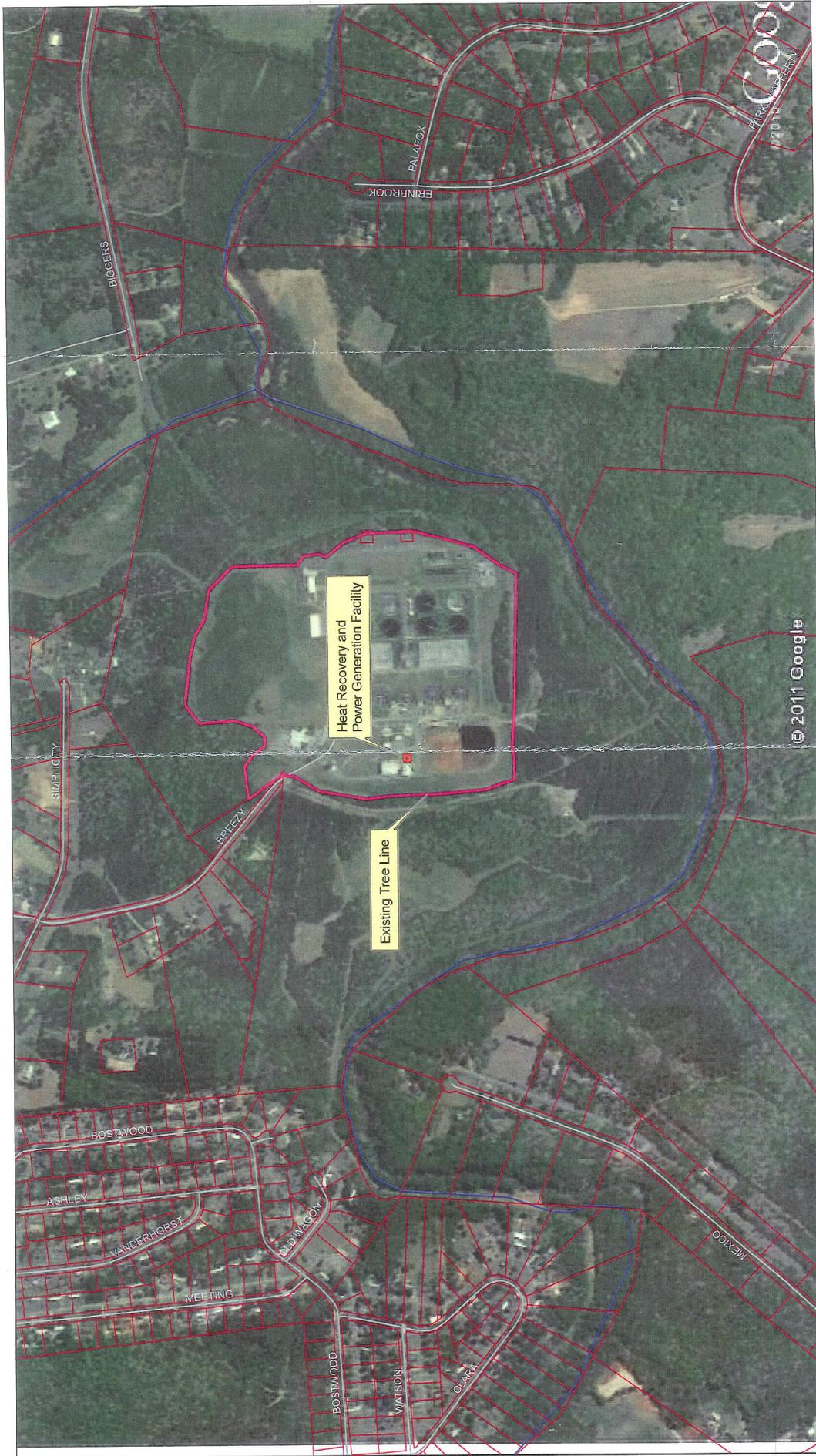
**APPLICANT/ENGINEER:**

CH2M HILL  
 11301 CARMEL COMMONS BLVD.  
 SUITE 304  
 CHARLOTTE, NC 28027  
 CONTACT: ANGELA F. ROBERTS, PE (704) 544-4040

## **Landscape Plan:**

From Chapter 8 of the *Cabarrus County Zoning Ordinance*, Section 8-4, Part 17, "level 2" buffering must be implemented in the event that property with the "Public Service Facility" conditional use abuts residential property. From Chapter 9 of the *Cabarrus County Zoning Ordinance*, Table 4, a "Bufferyard #2" requires a 27' wide buffer for total land disturbance of up to 1 acre. Additionally, six trees and 40 shrubs per 100' are required for a "Bufferyard #2."

The attached drawing shows an orange polygon indicating the approximate area of proposed construction for this project. Following construction, the areas surrounding the new facility will be planted with fescue and maintained regularly as currently performed for other grassed areas on the site. The existing treeline surrounding the site is also shown on the attached drawing in pink, and will not be affected by this project, leaving hundreds of feet of undisturbed buffer between the project and surrounding parcels.

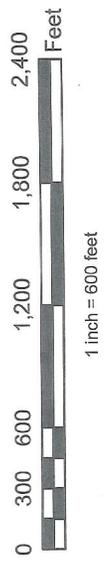


**Landscape Plan**  
 Applicant/Engineer:  
 CH2M HILL  
 11301 Carmel Commons Blvd.  
 Suite 304  
 Charlotte, NC 28226  
 Contact: Angela F. Roberts, PE (704) 544-4040

**Owner:**  
 Water and Sewer Authority of Cabarrus County  
 Heat Recovery and Power Generation Facility Project  
 232 Davidson Highway  
 Concord, NC 28027  
 Contact: Chad VonCannon, PE (704) 788-4164, ext. 13

Aerial Photography from Google Earth  
 Plan Prepared August 2012

Deeded Area = 241.46 acres  
 Level 2 Bufferyard Required (27 feet wide)



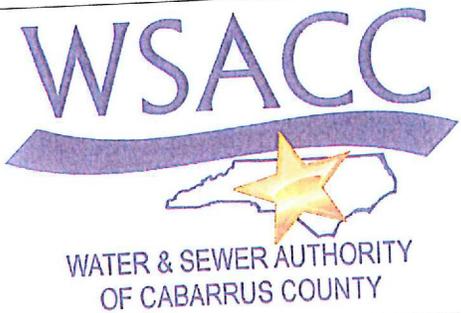
**CH2MHILL**  
 CASE#: CUSE2012-00001  
 APPLICANT: WSACC  
 EXHIBIT: 6

**Metal Building, Same Type as Proposed for Steam Turbine Generator Building**

Approximate Sizing for Metal Building Shown on Sheet C-1



**CASE#: CUSE2012-00001**  
**APPLICANT: WSACC**  
**EXHIBIT: 7**



Policy:

# Emergency Action Plan

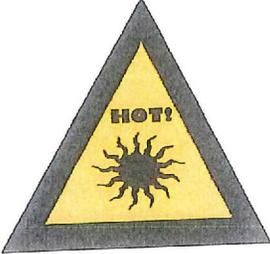
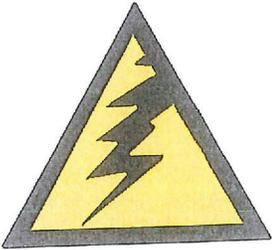
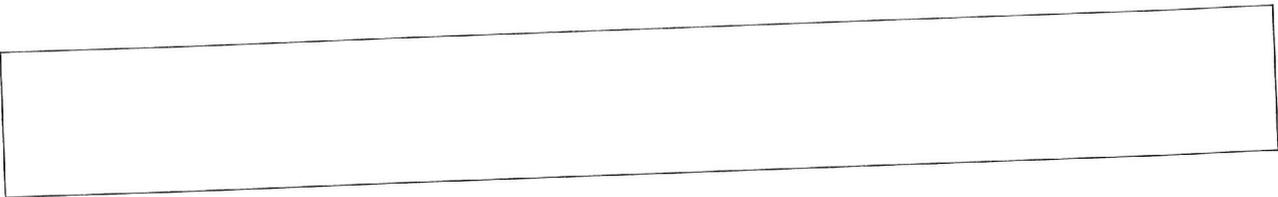
Effective:

Revised: 02/2011

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**CASE#: CUSE2012-00001**  
**APPLICANT: WSACC**  
**EXHIBIT: 6**



THUNDERSTORMS

HEAT WAVE

TERRORISM



FIRES

**DIAL**

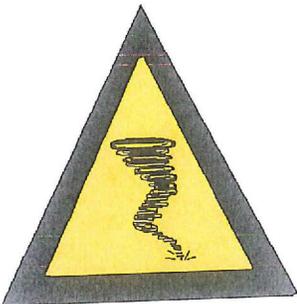


SNOW STORMS

**9-1-1**

*For Any Emergency!!*

CHEMICAL SPILLS



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## NOTICE

This Emergency Action Plan will be placed into effect by designated emergency evacuation personnel upon activation of emergency alarms or notification of any emergency condition.

No unauthorized employee is allowed to attempt a rescue into an area with a hazardous environment. Use of a self-contained breathing apparatus (SCBA) is prohibited unless the Safety Director (Deputy Executive Director/Administration) has approved its use by that specific employee. The employee must receive special training in SCBA use and have medical approval for its use.

# Emergency Numbers

## Emergency Coordinators:

Ray Furr  
Robin Moore

704-436-9433  
704-786-0916

## Emergency Phone Numbers:

Fire  
EMS (Ambulance)  
Police  
Sheriff Dept  
National Response Center  
Northeast Medical Center  
NC Emergency Response Commission  
Duke Power  
F.B.I.  
State Bureau of Investigation  
American Red Cross  
Cabarrus Health Alliance  
Cabarrus County Sheriff Dept  
NC Dept of Environment, Health and Natural  
Resources  
(Public Water & Dam Safety, Water Quality)

9-1-1  
9-1-1  
9-1-1  
9-1-1  
800-424-8802  
704-783-3000  
919-733-3942  
800-653-5307  
704-529-1030  
704-664-3344  
704-782-9022  
704-920-1000  
704-920-3000  
  
704-663-1699

## Management Phone Numbers:

Coleman Keeter, Executive Director  
Ray Furr, Operations Director  
Chad VonCannon, Water Operations Manager  
Tim Mauldin, Wastewater Operations Manager  
Robin Moore, Deputy Executive Dir/Administration  
Van Rowell, Engineering Director  
Everett Stotesbury, Maintenance Manager  
Michael Wilson, Deputy Executive Dir/Finance

704-692-9062  
704-436-9433  
704-436-5320  
704-784-2378  
704-786-0916  
704-932-5896  
704-467-7231  
704-545-8155

## **ACTION PLAN PURPOSE**

The purpose of this plan is to establish procedures for the systematic, safe, and orderly evacuation of affected areas of the Water & Sewer Authority of Cabarrus County (WSACC) by its employees in case of an evacuation event and to establish procedures for the systematic contacting of emergency services for containment of an emergency situation.

### **OBJECTIVES**

- A. The primary objective of this plan is to prevent or minimize personnel injury and property damage at the WSACC facilities.
- B. The secondary objective is to inform and train all employees in the prompt reporting of all emergencies, the proper response to emergency alarms, and the immediate initiation of proper procedures to safeguard life.

# EMERGENCY ACTION PLAN ORGANIZATION

Types of emergencies covered by this plan:

1. Fires
2. Floods
3. Hurricanes
4. Tornados
5. Chemical Spills
6. Terrorist Threats
7. Vandalism
8. Major Accidents
9. Heavy Snow
10. High Heat

To effectively implement the provisions of this Emergency Action Plan, a SAFETY TEAM will be established at each WSACC facility.

## TITLE

Emergency Director  
Safety Committee Members  
Department Heads

At all WSACC facilities, the WSACC Safety Committee will appoint an Emergency Director. This Emergency Director will be responsible for all evacuations and evacuation drills at that facility.

# DUTIES OF SAFETY TEAM

## Emergency Director

The Emergency Director's duties will include, but will not be limited to the following:

1. Determine the extent of the emergency and the action to be taken.
2. Be thoroughly versed with this Emergency Action Plan. Periodically review the plan to insure that it is current and incorporates all administrative, technical, and operational changes.
3. Conduct Emergency Action Plan training and drills for facility staff annually.

## Safety Committee Members

Below is a list of safety committee members:

1. Wastewater Operations Manager
2. Shift Supervisor
3. Lab Representative
4. Administration Representative
5. Maintenance Representative
6. Field Wastewater ORC
7. Pretreatment Representative
8. Mt. Pleasant Water Plant Representative
9. Lake Don T. Howell Representative
10. RRRWWTP Administrative Support Assistant
11. Deputy Executive Director/Administration

When Safety Committee Representatives are not available, trained designated personnel will perform their duties. During off hours of operation the person in charge will conduct the evacuation.

The Safety Committee Members duties will include the following:

1. Set off the evacuation alarm.
2. Notify the proper emergency agency of the emergency.
3. Assist employees in a calm and timely evacuation of the buildings.
4. Account for all visitors and non-WSACC personnel at the facilities.
5. Direct the emergency response personnel to the emergency site.
6. Account for all WSACC personnel at the evacuation point.

These tasks will be assigned to individual personnel at each facility.

## DEPARTMENT HEADS

The department heads will take a head count of all his/her personnel once they reach the evacuation point and report the results to the Safety Committee Member in charge of accounting for personnel. If the department head is not available a trained designated employee will perform their duties.

The employee discovering an emergency will:

**If fire:** Determine if the fire is controllable by using available means or if the assistance of the Fire Department will be required.

Note: **ONLY FIRES IN AN INCIPIENT STATE (SMALL OR SELF-CONTAINED) CAN BE FOUGHT.**

1. If extinguishable, use a fire extinguisher to put out the fire. Use Halon for electrical fires and ABC for all others.
2. If the fire is not extinguishable, or for other serious emergency situations, call 911, or contact the **Administrative Support Assistant** if emergency is at Rocky River, and he/she will alert Emergency Services with the following information by dialing 911:
  - a. Identify yourself
  - b. Type of emergency
  - c. Fire Dept. District
  - d. Location of the facility and location of the emergency on the facility site.  
Facility Address:  
Directions to Facility:
3. **If at any time the employee discovering the emergency feels it is necessary to call the emergency services without the delay of contacting the Administrative Support Assistant he/she may do so. He/she may also sound the evacuation alarm if they feel it is necessary!!!**
4. Notify the Emergency Director (if available) as soon as possible about the emergency.  
Emergency Directors: RRRWWTP – Everett Stotesbury, 704-467-7231  
MCWWTP – Charlie Machado, 704-436-2443  
Lake Howell – Todd Sheeks, 704-855-3344  
Mt. Pleasant WTF – Kenny Black, 910-439-6157  
WSACC Main Office – Mark Lomax, 704-202-6014
5. If the Emergency Director is not available, contact the person-in-charge at the Plant.
6. The Emergency Director will evaluate the emergency situation and take the appropriate action. If necessary Emergency Director will sound the evacuation alarm. Emergency Director will also contact the following personnel:

Executive Director	-	Coleman Keeter	704-786-3788 704-692-9062 (Nextel)
Deputy Executive Director/Administration	-	Robin Moore	704-786-0916 704-309-3396 (Nextel)
Operations Director	-	Ray Furr	704-436-9433 980-521-8136 (Nextel)

**When the alarm sounds all employees will proceed to the prearranged evacuation point.**

Employee driving to the evacuation point should park in assigned areas, never block any roads.

Listed below are the evacuation points and alarms for all the WSACC facilities:

Facility	Evacuation Point	Alarm	Parking
Administrative Offices	Grassy field behind employee parking lot	One continuous buzzer sound	N/A
Lake Don T. Howell	Coddle Creek WTP	None	CCWTP parking lot
Mt. Pleasant Water Plant	Raw Water Lagoon	Continuous, high-pitched alarm	Road leading to lagoon
Muddy Creek WWTP	Corner of Hopewell Church Rd. and Green House (gravel rd.)	N/A	N/A
RRRWWTP	Water Tower	Whooping sound	Lower road next to water tower, south side

The department heads will conduct a head count of their employees and report to the assigned **Safety Committee Representative** in charge of personnel.

The **Safety Committee Representative** or a designee in charge of personnel will bring the **Visitor Log**, for visitors that may need to be accounted for, and the **Sign out sheet**, for employees that may not be on the work site, to the evacuation point.

An assigned **Safety Committee Representative** will meet the Emergency Services at the gate and direct them to the emergency. A representative should be assigned at all facilities in advance.

When Emergency Services arrive, an additional assigned **Safety Committee Representative** will meet with the **emergency officer in-charge** and inform him/her of: any missing personnel, all chemicals stored in the affected area, electrical voltages present, combustible materials such as gas and oil, all compressed gas cylinders in affected area.

The safety team members on site will assist Emergency Services in anyway needed for the duration of the emergency.

All non-essential staff will evacuate to an alternative evacuation point if deemed necessary.

Alternative evacuation points:

- Administrative Offices - BP Service Station at Hwy 73 and Central
- Lake Don T. Howell - Odell Elementary School
- Mt. Pleasant Water Plant - Mt. Pleasant Middle School
- Muddy Creek WWTP - Midland Post Office
- RRRWWTP - Oak Ridge Baptist Church Parking Lot.

Employees are not to return to their workstations until cleared to do so by the **Emergency Director**.

## **EMERGENCY ACTION PLAN - LIST OF EMERGENCY EQUIPMENT**

### **Rocky River Regional Wastewater Treatment Plant maintains:**

1. Fire Extinguishers are located in all buildings at Rocky River. Both ABC dry and Halon extinguishers can be found in structures. Halon extinguishers will be found near Electrical Switch Gear.
2. All primary buildings have telephones connected to a central operator board in the administration building. The phone system will be used to notify employees of an emergency situation.
3. Fire Hydrants are located at strategic locations around the plant; they can be located on the Facility Layout.
4. Emergency Eye Wash Stations, plumbed and portable can be found in the Chemical Feed, Administration, Dewatering, Disinfection Building, Odor Control Building, and the Maintenance Building and Paint Booth.
5. Battery powered emergency lights are used in the Main Pump Station; they are found in the stair-well, and the lower three floors in almost all buildings.
6. Three SCBA's are located in the Shop. One extra air bottle is kept in the same location.
7. A tripod/winch, safety harness, and life line are available to enter confined spaces or areas with limited access, along with gas detection meters.
8. Standard safety issue for new employees include goggles, hearing protection, gloves (leather or rubber), and a rain suit with rubber boots.
9. Gas powered ventilators (Homelite and Hurco) are used for the ventilation of confined spaces. If more appropriate, there are electric powered ventilators that can be used also. Life vests are located in the Ash Pump Station.
10. Automated External Defibrillator – AED.
11. A generator is located at the Plant to provide emergency power.

### **Mt. Pleasant Water Treatment Plant maintains:**

1. Fire extinguishers are located in the main building, sludge basin, and raw water pump station.
2. A fire hydrant is located on Foil Street at the entrance to the Plant.
3. An Emergency Eye Wash Station is located in the main building next to restroom and in the main building chemical storage area. Showers are located in the main building lab, chemical storage area, and the fluoride building.
4. A generator is located at the Plant to provide emergency power.
5. A SCBA is located in the metal storage building.
6. New employee standard safety issue includes goggles, hearing protection, gloves, and rain suit with rubber boots.
7. Life vests are located in the metal storage building.

# **EMERGENCY ACTION PLAN - LIST OF EMERGENCY EQUIPMENT**

(Continued)

## **Muddy Creek Wastewater Treatment Plant maintains:**

1. Two fire extinguishers are located in the main building (one in the hall and one in the lab).
2. The primary building has three telephones (one in office, one in lab and one in electrical control room).
3. A fire hydrant is located outside of main building.
4. An Emergency Eye Wash Station is located at the Influent Pump Station where chemical feed is stored. Showers are located in the main building.
5. An emergency power generator is on site. And is tested weekly and load tested monthly by electricians.
6. Standard safety issue PPE.

## **WSACC's Main Administrative Office maintains:**

1. Fire Extinguishers are located in the primary hallways of the Main building, and near exit doors of the storage shop, which is located at the rear of the WSACC Main Office complex. All fire extinguishers at the site are the ABC dry type.
2. The primary building has telephones in each office and/or at all work stations, which are connected to a central operator board. The phone system will be used to notify employees of an emergency situation. Also, access to outside lines is obtained by dialing "9", followed by the appropriate number.
3. Automated External Defibrillator – AED is located in an AED wall-mounted cabinet, within the Break Room / kitchen area.
4. A fire hydrant is located at, or near, 239 Davidson Highway, which is approximately 300 feet southwest of the Davidson Highway entrance to the WSACC Main Office.
5. The following First-aid items are located in the Break Room / kitchen area: 1) general first-aid / medicine cabinet; 2) portable first-aid (trauma) kit; 3) portable blood-borne pathogen infection control kit; 4) emergency/shock, and, fire blankets; 5) MSDS Safety Sheets (notebook). All items are wall-mounted for access.
6. A "Tornado Safe Room" which is to be used for shelter during severe weather events. The Tornado Safe Room is located in the Central File Room area; the Central File Room is located west of the front entrance / lobby area, in the center of the building.

# PERSONNEL TRAINING

WSACC personnel receive the following training:

New employees receive Safety Orientation, which includes:

- Written Hazard Communication Program
- Material Safety Data Sheets
- Right To Know Law
- Container Labeling
- Safety Signs & Placards in Plant
- Proper use of safety equipment

Also covered are:

- Confined Space Policy
- Lockout/Tagout Policy
- Authority Drug Policy is discussed
- Fire Extinguisher use
- Bloodborne Pathogen Policy
- Forklift Certification

Personnel are informed of the potential hazards and proper use of various hazardous materials, tools, and machines. They receive instruction in safety practices and emergency responses.

All Emergency Directors, Safety Committee Members, and Department Heads are trained in how to respond to an emergency situation, following the plan guidelines.

All employees are offered CPR and First Aid training on a yearly basis.

Training Drills are held annually for:

- The removal of an incapacitated employee from a confined space.
- The evacuation of the Plant due to an emergency.

# ARRANGEMENTS WITH AUTHORITIES FOR EMERGENCY RESPONSES

The Water & Sewer Authority of Cabarrus County has made arrangements with the local authorities to familiarize them with information important in the event of an emergency situation requiring their help.

## SHERIFF, FIRE, CONFINED SPACE RESCUE TEAM

These departments are invited to these facilities as needed to maintain familiarity with the following:

1. Facility access, streets and highways leading into our facility.
2. Building layout.
3. Areas where personnel work and chemicals are stored.
4. Evacuation routes.
5. Types of Hazardous Materials and Wastes on site.
6. Facility Emergency Coordination personnel.
7. Facility response capabilities.

## AMBULANCE

Paramedic service is provided by Cabarrus County Emergency Medical Services. Paramedics will be escorted to the emergency in our facility by one of the safety team members.

## HOSPITALS

The main off site medical response is provided by Northeast Medical Center.

## DISTRIBUTION OF EMERGENCY ACTION PLAN

The following organizations have received copies of RRRWWTP's Emergency Action Plan.

- CMC Northeast Medical Center  
Church Street  
Concord, N.C. 28025  
Phone: 704-783-3000

- Allen Volunteer Fire Department  
43 Flows-Store Road  
Concord, N.C. 28025  
Phone: 911

- Cabarrus County Emergency Services  
65 Church Street, SE  
Concord, NC 28026  
Phone: 911

- Mt. Pleasant Volunteer Fire Department  
Mt. Pleasant 28124  
Phone: 704-436-6314

- City of Concord Fire Department  
Church Street  
Concord, NC 28025  
Phone: 911

## **POST EMERGENCY ANALYSIS REPORT**

A report detailing the emergency and how all employees respond will be prepared for the Operations Director within two weeks of the incident and will include:

1. What happened, why, how and who was involved?
2. Were all guidelines of the Emergency Action Plan followed?
3. What injuries occurred and why?
4. How could the injuries have been avoided?
5. What damage was sustained?
6. Recommendations of changes to the Emergency Action Plan, policies, or procedures.

### **EMERGENCY ACTION PLAN REVISIONS**

The Emergency Action Plan must be reviewed and immediately amended if necessary whenever:

- The plan fails during an Action Plan drill.
- Applicable regulations are revised.
- The plan fails in an emergency.
- The facility changes in its design, construction, operations, maintenance, or other circumstances, in a way that materially increased the potential for fire or changes the response necessary in an emergency.
- The list of Emergency Directors changes.
- The list of Emergency equipment changes



## TORNADOS

### Definitions

Tornado Watch:

Issued when weather conditions are such that tornados are likely to develop.

Tornado Warning:

A tornado has been sighted or indicated by radar.

### ACTIONS

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#### WATCH (Before)

- The Administrative Support Assistant will monitor the television if tornadoes are in our area, and will notify all employees on duty if shelter needs to be taken.
- Secure outdoor objects that could blow away or cause damage. Take light items inside.
- Secure exterior doors.
- Learn the warning signs of approaching storms: dark, towering or threatening clouds. Distant lightning or thunder.
- Learn the shelter areas in your building

**WARNING** (A tornado has been sighted or indicated on weather radar. If a tornado warning is issued for your area and the skies become threatening, move to your pre-designated place of safety.)

#### Buildings - Safe Areas:

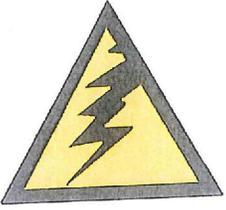
- Go to the interior hallways or basement.
- Small interior rooms with no windows.
- Locker rooms or lavatories.
- Hallways away from doors and windows.
- The RRRWWTP **Tornado Evacuation Point** is Primary Sludge Pump Station #3, or any restroom in the Administration building.
- The MPWTP **Tornado Evacuation Point** is the restroom in the main building.
- The Lake Howell **Tornado Evacuation Point** is the gate vault at the dam.
- The WSACC main office **Tornado Evacuation Point** is IT office or any bathroom.
- The MCWWTP **Tornado Evacuation Point** is the lab closet.
- Avoid areas with long span roofs, (gyms, apparatus bays, rooms with large windows/doors, etc.
- Get under a sturdy piece of furniture such as a workbench or heavy table/desk and hold on to it.
- Get on your knees and crouch low. Place your hands over your head for additional protection.

#### Vehicles

- Never try to outrun a tornado.
- Get out of and away from the vehicle immediately and take shelter in a nearby building, ditch, culvert, or other low spot in the ground.
- Do not forget the danger of flash flooding.

#### Procedures

- Plans and diagrams shall be posted in conspicuous locations. Become familiar with these plans and locations.
- Guests should be moved into these safe areas upon issuance of a warning and advised to stay there until the danger is passed.
- Make sure someone knows how to turn off electricity and gas in the event of damage to the building.
- Assure that someone checks for citizens in or using our facilities and directs them to the proper area.



## SEVERE THUNDERSTORM

Damaging winds 58+ miles per hour or hail 3/4 inch or larger.

### Definitions

Severe Thunderstorm Watch: This means that conditions are present which may result in the development of severe thunderstorms.

Severe Thunderstorm Warning: Issued when a severe thunderstorm has been sighted or indicated by weather radar.

---

### ACTIONS

#### WATCH (Before)

- Secure outdoor objects that could blow away or cause damage. Take light items inside.
- Secure exterior doors.
- Learn the warning signs of approaching storms: dark, towering or threatening clouds, distant lightning or thunder.

#### WARNING (During)

##### Outdoors

- All outdoor activities should stop, unless of an emergency nature. Attempt to get indoors or in a vehicle if at all possible.
- If no structure is available, get to an open space and squat low to the ground as quickly as possible with hands on knees.
- If in the woods, find an area protected by a low clump of trees--never stand underneath a single large tree in the open.
- Avoid all tall structures (i.e., towers, trees, fences, telephone poles, power lines).
- Avoid large bodies of water.
- If you begin to feel the hair stand on end, (indicates lightning is about to strike), drop to your knees and bend forward, putting your hands on your knees. Do not lie flat on the ground.

##### In a Vehicle

- Pull safely onto the shoulder of the road away from trees that could fall on the vehicle.
- Stay in the vehicle and turn on the emergency flashers until the heavy rains subside.
- Avoid flooded roadways.

##### Indoors

- Do not handle any electrical equipment or telephones. Television sets should be turned off. Training classes using electrical equipment will be postponed.
- Avoid bathtubs, showers, water faucets and sinks. Metal pipes can transmit electricity.

**REMEMBER: IF YOU CAN HEAR THE SOUND OF THUNDER,  
YOU CAN BE STRUCK BY LIGHTNING!!!**



## HEAT WAVE

Heat kills by taxing the human body beyond its abilities. The National Weather Service devised the "Heat Index" or apparent temperature to measure how hot it really feels when the relative humidity is added to the hazards of heat waves.

Extreme heat is temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks.

An increased health problem in urban areas is caused by stagnant atmospheric conditions trapping pollutants in the air we breathe.

The national weather service will initiate alert procedures when the Heat Index is expected to exceed 105°F - 110°F, depending on local climates, for at least two consecutive days.

---

### ACTIONS

- Stay indoors as much as possible.
- Drink plenty of water regularly. Anyone who has epilepsy, heart, kidney, liver disease, on fluid-restrictive diets, or has a problem with water retention should consult a doctor before increasing fluid intake.
- Dress in loose-fitting clothing that covers as much skin as possible.
- Protect face and head by wearing a wide brimmed hat.
- Eat well balanced, light meals.
- Slow down. Strenuous activities should be reduced, eliminated, or rescheduled to coolest time of the day.
- Avoid too much sunshine.
- Avoid extreme temperature changes.
- Learn the symptoms of heat disorders and know how to give first aid.

**KNOW THESE HEAT DISORDER SYMPTOMS**

Heat Disorder	Symptoms	First Aid*
Sunburn	Redness and pain. In severe cases swelling of skin, blisters, fever, headaches.	Ointments for mild cases, if blisters appear and do not break. If breaking occurs, apply dry sterile dressing. Serious, extensive cases should be seen by a physician.
Heat Cramps	Painful spasms usually in leg and abdominal muscles. Heavy sweating.	Firm pressure on cramping muscles or gentle massage to relieve spasms. Give sips of water. If nausea occurs, discontinue water.
Heat Exhaustion	Heavy sweating, weakness, skin cold, pale, and clammy. Weak pulse. Normal temperature possible. Fainting, vomiting.	Get the victim to lie down in a cool place. Loosen clothing. Apply cool, wet cloths. Fan or move victim to air-conditioned place. Give sips of water. If nausea occurs, discontinue water. If vomiting occurs, seek immediate medical attention.
Heat Stroke	High body temperature, (106+). Hot, dry skin. Rapid strong pulse. Possible unconsciousness. Victim will likely not sweat.	Severe medical emergency. Call 9-1-1 immediately or get victim to the hospital. Delay can be fatal. Move victim to a cooler environment. A cool bath or sponging to reduce body temperature. Use extreme caution. Remove clothing. Use fans/or air conditioners. DO NOT GIVE FLUIDS.

For more information contact the Emergency Management office to arrange for a first aid course.

**HEAT INDEX FACTORS**

Heat Index	Possible heat disorders for people in high risk groups
130° or Higher	Heatstroke/sunstroke highly likely with continued exposure.
105° - 130°	Sunstroke, heat cramps or heat exhaustion likely, and heat stroke possible with prolonged exposure and/or physical activity.
90° - 105°	Sunstroke, heat cramps and heat exhaustion possible with prolonged exposure and/or physical activity.
80° - 90°	Fatigue possible with prolonged exposure and/or physical activity.

Full sunshine can increase heat index values by up to 15°F. Also, strong winds, particularly with very hot, dry air, can be extremely hazardous.



## FLOODING AND FLASH FLOODS

Flood waters can be extremely dangerous. Six inches of swiftly moving water can knock people off their feet and two feet of moving water can sweep away cars.

Floods are slow or fast rising and generally develop over several days. Flash floods usually result from intense storms dropping large amounts of rain within brief periods of time. They have little or no warning.

Water run-off in urbanized areas is 5 to 6 times that of natural terrain.

### Definitions

Flash Flood Watch: Be alert to signs of flash flooding and be ready to evacuate if necessary.

Flash Flood Warning: Take immediate action.

---

## ACTIONS

### WATCH (Before)

- Know the area where you work and areas prone to flooding. Be familiar with your route to and from work. If your route takes you through areas prone to flooding, have an alternate route planned.
- Report flooding to the communications center.
- If you see someone stranded in flooded areas, call 9-1-1 or advise communications. Leave rescue attempts to properly trained personnel.

### Buildings/Facilities

- WSACC facilities in areas prone to flooding should secure all necessary equipment or move it to safer locations when flooding is predicted.
- Dams should be monitored during flooding conditions to insure that the integrity of the dams are not being compromised. If there is a failure or potential failure of a dam structure occurs, the procedures outlined in the specific EAPs for each dam should be followed.
- If flooding affects your facility, be prepared to evacuate immediately if an order is given.

### WARNING (During)

#### If outdoors

- Avoid areas subject to flooding.
- Do not enter flooded areas. If water is above your ankles, STOP! Turn around, go another way and climb to higher ground.
- Beware of downed power lines and other electrical items in flooded areas.
- Avoid sewers and storm drains.

#### If in a vehicle

- If you come upon a flooded area, turn around and go another way.
- If the vehicle stalls, abandon it immediately and climb to higher ground.

### AFTER a flood

- Remain out of buildings if flood waters are around it. Inspect foundations for cracks and other damage.
- Use caution when entering buildings. Wear sturdy shoes and a flashlight. Leave electrical items alone.
- Watch out for animals, especially poisonous snakes. Use a pole or stick to probe debris.



## HURRICANES

Hurricanes and the severe weather associated with them, affects the coast as well as inland areas. Associated weather affects include winds, heavy rains/flooding, and tornados. Developing storms are defined as follows:

- Tropical depression: maximum sustained winds of 38 mph
- Tropical storm: maximum sustained winds of 30 - 73 mph
- Hurricane: maximum sustained winds of 74 mph or higher

### Definitions

Hurricane Watch: Issued when there is a threat of hurricane conditions within 24 - 36 hours.

Hurricane Warning: Issued when hurricane conditions are expected within forty eight hours.

---

## ACTIONS

Specific actions should follow specific severe storms associated with hurricanes previously address in these guides. Be prepared to assist in areas outside of your normal assignment. In addition the following should be considered:

### WATCH (Before)

- Secure exterior equipment, storage and furniture.
- Remove exterior equipment, storage and furniture out of areas prone to flooding.
- Secure buildings by closing and locking windows.
- Set office refrigerators to coldest setting or remove perishables.
- Check emergency lighting systems, generators, etc....

### WARNING (During)

- Avoid use of elevators.
- Stay inside unless emergency response.
- If power is lost, turn off computers, typewriters, televisions, etc., to reduce power "surge" when electricity is restored.
- Be prepared for extended work periods.
- Be prepared to respond to other severe weather conditions.

### AFTER the Storm

- Avoid loose or dangling power lines. Report these immediately to the communications center.
- Enter damaged buildings only after they have been inspected for safety.
- Open windows and doors to assist in drying flooded buildings.
- Avoid flooded areas and washed out bridges.
- Prepare for extended travel time.
- Use telephones only for emergency calls.



## HAZARDOUS MATERIALS

Various forms of hazardous materials are used throughout WSACC facilities. Become familiar with the materials stored or used in your department and the hazardous communications guidelines. Always handle hazardous materials per the safety directions outlined in specific chemical handling SOPs.

### Definition

Hazardous materials are chemical substances which, if released or misused, can pose a threat to the environment or health.

### ACTIONS

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- Learn to detect the presence of hazardous materials.
- If you witness an accident call 9-1-1 and report the accident as soon as possible.
- Move away from the accident scene and help keep others away.
- Do not walk into or touch any of the spilled substance. Try not to inhale gases, fumes, and smoke.
- Stay away from accident victims until the hazardous material has been identified.
- Stay upwind, uphill, and upstream of the accident.
- Follow the orders of emergency response agencies.

### In-place Sheltering

- Seal the building and lock windows and doors.
- Seal gaps under doorways with wet towels and duct tape.
- Seal gaps around windows and air conditioning units, bathroom and kitchen exhaust fans, with duct tape and plastic sheeting, wax paper or aluminum wrap.
- Close off nonessential rooms.
- Turn off ventilation systems.

### Evacuation

- Follow orders from emergency response officials specifically.
- Assist others who may need help, i.e. infants, elderly, people with disabilities.
- Do not cross barrier tape set up by emergency response officials.
- Do not return to the building until allowed by authorities.
- Follow instructions of authorities regarding food, clothing and other contaminated material.
- Clean-up will be left up to emergency officials.

### Other Actions

- Report any suspected release of hazardous materials by calling 9-1-1.
- Refer to the back of this manual for the telephone number of Poison Control.
- Learn to recognize the signs and symptoms of toxic poisoning.
- Wash hands, arms, or other parts of the body that may have been exposed to the chemical.
- Discard any clothing that may have been contaminated.
- Administer first aid treatment to victims of chemical burns.
- Call 9-1-1 for emergency help
  - Remove clothing and jewelry from around the injury.
  - Pour clean cool water over the burn for 15 - 30 minutes
  - Loosely cover the burn with a sterile or clean dressing. Be sure that the dressing will not stick to the burn.
  - Refer the victim to a medical professional for further assistance.



## FIRE

The fourth largest accidental killer in the United States, behind motor vehicle accidents, falls and drowning, is fire. This is one disaster that you will most likely experience.

### PLAN

- Make sure all employees know what to do in the event of a fire.
- Determine at least two ways out of the building.
- Determine a meeting place for employees to gather once outside of the building to determine if everyone is safe.
- A Safety Committee Representative should bring guests logs with them to assist in accounting for visitors.
- Show locations of fire extinguishers on the building plan.
- Develop a signal for alerting occupants of your building if you do not have an audible alarm system
- Conduct periodic evacuation drills.

### ACTIONS

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- The person discovering the fire will immediately sound the alarm. (DO NOT YELL FIRE. THIS WILL ONLY CAUSE PANIC). If, at any time and at any site, the employee discovering the emergency feels it is necessary to call the emergency services without the delay of contacting the Administrative Support Assistant, he/she may do so.
- The fire alarm for RRRWWTP is **a loud whooping sound.**
- The fire alarm for WSACC Administration Offices is located in the center hallway above the water fountain.
- Make sure someone calls 9-1-1, even if you have an alarm system.
- All staff will immediately evacuate the building and proceed to the meeting area as designated on your evacuation plan. Remember to assist visitors and take a head count once outside.
- DO NOT RE-ENTER THE BUILDING TO CHECK FOR MISSING PERSONNEL. WAIT FOR THE FIRE DEPARTMENT TO ARRIVE.
- Upon arrival of the fire department, **Safety Committee Representative** should report to them about personnel location, and the location of the fire, (if known).
- Do not block access of the fire department.
- Fire extinguishers can be used to fight **small** fires. Do not endanger life.
- If feasible, close doors in each room to delay fire spread.
- If you are trapped in a room, open a window while waiting for rescue.
- DO NOT RE-ENTER THE BUILDING FOR ANY REASON UNTIL INSTRUCTED BY THE FIRE DEPARTMENT.
- In the event of a fire in an adjoining building, follow the foregoing instructions.

Remember you can prevent fires. Practice good fire safety and keep exits clear.



## ACT OF TERRORISM

Acts of terrorism can be in various forms, such as chemicals, physical sabotage to dams, storage tanks, pump stations, water treatment plants as well as bombs. Bombs can be constructed to look like almost anything and can be placed or delivered in any number of ways. The probability of finding a bomb that looks like the stereotypical bomb is almost non-existent. Chemicals and physical sabotage can compromise the integrity of the water and sewer distribution and can be in any form.

### PLAN

- Through proper planning, the wide variety of potentially uncontrollable reactions can be greatly reduced.
- Each facility should determine if additional measures are required.
- Training is essential when dealing with bomb, chemical and sabotage incidents. Make sure key personnel are familiar with their assignments.
- Contact the Concord Police Department or the Cabarrus County Sheriff's Department for guidance regarding a specific plan for your facility.

### ACTIONS

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- In the event of a bomb threat, it is desirable that more than one person listen in on the call.
- Keep the caller on the line as long as possible. Ask him/her to repeat his message. Record and/or document every word spoken by the person, if possible.
- Ask the caller the location of the bomb if they do not give it.
- Inform the caller that the building is occupied and detonation of a bomb will result in death or serious injury to many innocent people.
- Pay attention to background noises, (motors running, children playing, etc.), this may give a clue to location of the caller.
- Listen close to the voice, (male/female), voice quality, (calm/excited), accents, and speech impediments. Immediately after they hang up, report the threat to the person designated by management.
- Report the information immediately to the Police/Sheriff Department, (CALL 9-1-1).
- Remain available, as law enforcement personnel will want to interview you.
- Save all material from written threats. Once recognized as a bomb threat, further unnecessary handling should be avoided. Never ignore written or other threats.
- In the event of other acts of terrorism such as chemical spills, physical sabotage that may damage the water distribution CALL 9-1-1, Chad VonCannon (704-436-5320) Water Treatment Plants effected, (City of Kannapolis, City of Concord, Mt. Pleasant) Call Public Water Supply, Water Quality (704-663-1699)
- In the event of acts of terrorism that compromise the integrity of the dam, please see the Emergency Action Plan for each dam structure.

### DECISION TIME

- The **Emergency Director** will determine whether or not to evacuate the building or conduct a limited search.
  - If a decision is made to evacuate, notification will be made to each area in the building, by direct contact, if time permits.
  - Key personnel should be trained in evacuation procedures. Priority evacuations should be considered, (i.e. evacuate by floor levels. Evacuate the floor levels above and below the danger area.
  - If a suspicious object is discovered, evacuate the building.
  - Do not attempt to cover the object.
  - Everyone should evacuate to at least 300 feet from the building, including floors above and below the area.
  - Check to see that all doors and windows are open to minimize primary damage from blast and secondary damage from fragmentation.
- In the event of other types of acts of terrorism the Emergency Director will contact the Emergency Response Team according to what the need may be.

# BOMB THREAT CHECK LIST

Exact time of call: \_\_\_\_\_

Exact words of caller: \_\_\_\_\_

## QUESTIONS TO ASK

1. When is the bomb going to explode? \_\_\_\_\_
2. Where is the bomb? \_\_\_\_\_
3. What does it look like? \_\_\_\_\_
4. What kind of bomb is it? \_\_\_\_\_
5. What will cause it to explode? \_\_\_\_\_
6. Did you place the bomb? \_\_\_\_\_ Why? \_\_\_\_\_
7. Where are you calling from? \_\_\_\_\_
8. What is your address? \_\_\_\_\_
9. What is your name? \_\_\_\_\_

## CALLER'S VOICE (Circle)

calm	disguised	nasal	angry	broken
stutter	slow	sincere	lisp	rapid
giggling	deep	crying	squeaky	excited
stressed	accent	loud	slurred	normal

If voice is familiar, whom did it sound like? \_\_\_\_\_

Were there any background noises? \_\_\_\_\_

Remarks: \_\_\_\_\_

Person receiving call: \_\_\_\_\_

Telephone number call received at: \_\_\_\_\_

Date: \_\_\_\_\_

**REPORT CALL IMMEDIATELY TO 9-1-1**



## WINTER STORMS

Winter storms can last for several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall and extremely cold temperatures.

### Definitions

Winter Storm Watch:	Indicates that severe winter weather may affect your area.
Winter Storm Warning:	Indicates that severe winter weather will affect your area.
Blizzard Warning:	Expect large amounts of falling or blowing snow and sustained winds of 35 mph.

---

## ACTIONS

### WATCH

- Have a mechanic check your vehicle, (city vehicles should be checked by Fleet Services),
- Make sure the vehicle has at least all weather tires, (be prepared to add chains should conditions warrant,
- Keep a windshield scraper and small broom in your vehicle for ice and snow removal.
- All vehicles should be maintained with a ½ tank of gas.
- Dress warmly, and take a change of clothing if you will be working outside.

### WARNING

- Stay indoors, if possible, and dress warmly.
- If working outside, conduct stretching exercises to warm up your body and take frequent breaks.
- Cover your mouth.
- Avoid overexertion.
- Watch for signs of frostbite and/or hypothermia.
- Keep dry.
- Keep access to City Facilities clear.

### WIND CHILL

This a calculation of how cold it feels outside based on the effects of temperature and wind speed. A strong wind plus a temperature just above freezing can have the same effect as a still air temperature about 35 degrees colder.

### FROSTBITE

A severe reaction to cold exposure that can cause permanent damage to its victim. Symptoms: Loss of feeling, white or pale appearance in fingers, toes, nose, or ears.

### HYPOTHERMIA

Brought on when the body temperature drops to less than 55°F. Symptoms: uncontrollable shivering, slow speech, memory lapses, frequent stumbling, drowsiness, exhaustion

### FIRST AID

- Seek immediate medical attention
- Begin warming the patient slowly, starting with the trunk of the body, arms and legs should be warmed last.
- Put person in dry clothing and wrap entire body in a blanket.
- **DO NOT GIVE A FROSTBITE OR HYPOTHERMIA VICTIM ANYTHING WITH CAFFEINE OR ALCOHOL IN IT!!**

# HEAT INDEX CHART

To determine the heat index, look at the Heat Index Chart below and use the following steps.

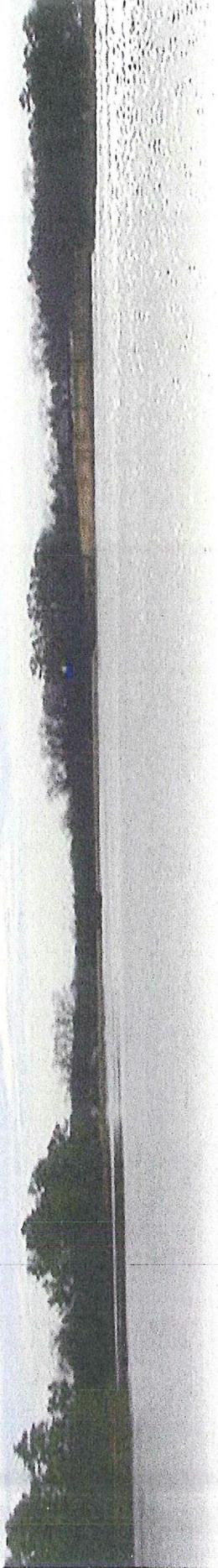
- 1) Find the air temperature, (left side)
- 2) Find the relative humidity, (across the top)
- 3) Find where these two intersect and this is the Heat Index or how hot it really feels

	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	
140	125																					
135	120	128																				
130	117	122	131																			
125	111	116	123	131	141																	
120	<b>107</b>	111	116	123	130	139	148															
115	103	<b>107</b>	111	115	120	127	135	143	151													
110	99	102	<b>105</b>	<b>108</b>	112	117	123	130	137	143	150											
105	95	97	100	102	<b>105</b>	<b>109</b>	113	118	123	129	135	142	149									
100	91	93	95	97	99	101	<b>104</b>	<b>107</b>	110	115	120	126	132	138	144							
95	87	88	90	91	93	94	96	98	<b>101</b>	<b>104</b>	<b>107</b>	110	114	119	124	130	136					
90	83	84	85	86	87	88	90	91	93	95	96	<b>98</b>	<b>100</b>	<b>102</b>	<b>106</b>	<b>109</b>	113	117	122			
85	78	79	80	81	82	83	84	85	86	87	88	89	90	91	93	95	<b>97</b>	<b>99</b>	<b>102</b>	<b>105</b>	<b>108</b>	
80	73	74	75	76	77	77	78	79	79	80	81	81	82	83	85	86	86	87	88	89	91	
75	69	69	70	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	80	
70	64	64	65	65	66	66	67	67	68	68	69	69	70	70	70	70	71	71	71	71	71	72

NUMBERS IN **BOLD** INDICATE TEMPERATURES WHICH MAY CAUSE INCREASINGLY SEVERE HEAT DISORDERS  
WITH CONTINUED EXPOSURE AND/OR PHYSICAL ACTIVITY

WATER & SEWER AUTHORITY OF CABARRUS COUNTY

WSACC



# Heat Recovery & Power Generation Facility Conditional Use Permit Application

September 11, 2012

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CASE#: CUSE2012-00001

APPLICANT: WSACC

EXHIBIT: 9



# Agenda

WSACC

- Overview/Background
- Discuss Phase 2 HRPB Facility Project
- Discuss Schedule
- Questions/Comments

## Overview/Background

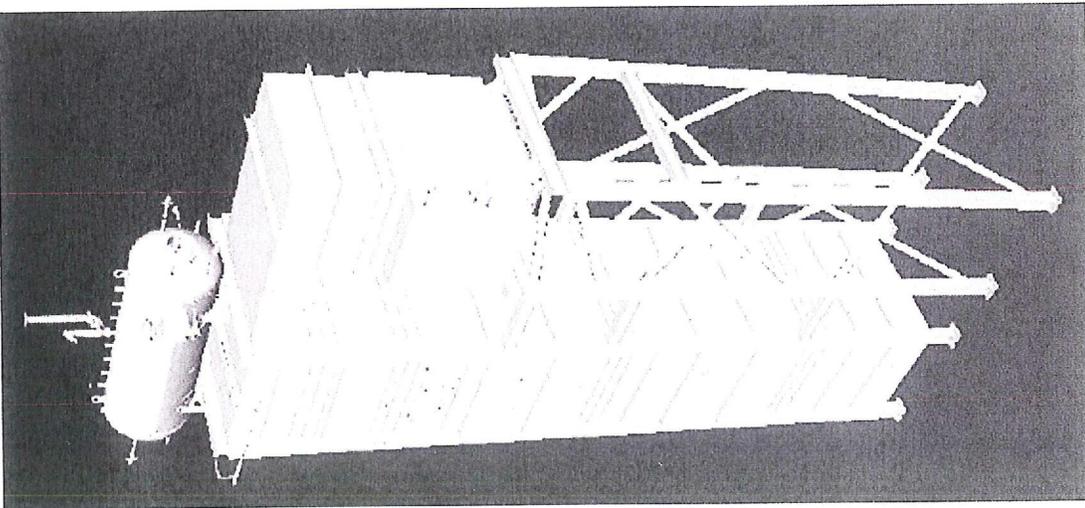
- This project is the second phase of the WSACC Heat Recovery Power Generation Project that was approved May 2011 by the Cabarrus County Planning & Zoning Commission.
- Phase one - construction of facilities for sludge import to fuel the furnace and produce heat.
- Phase two - construction of facilities to use furnace heat to generate electrical power.

## Overview/Background

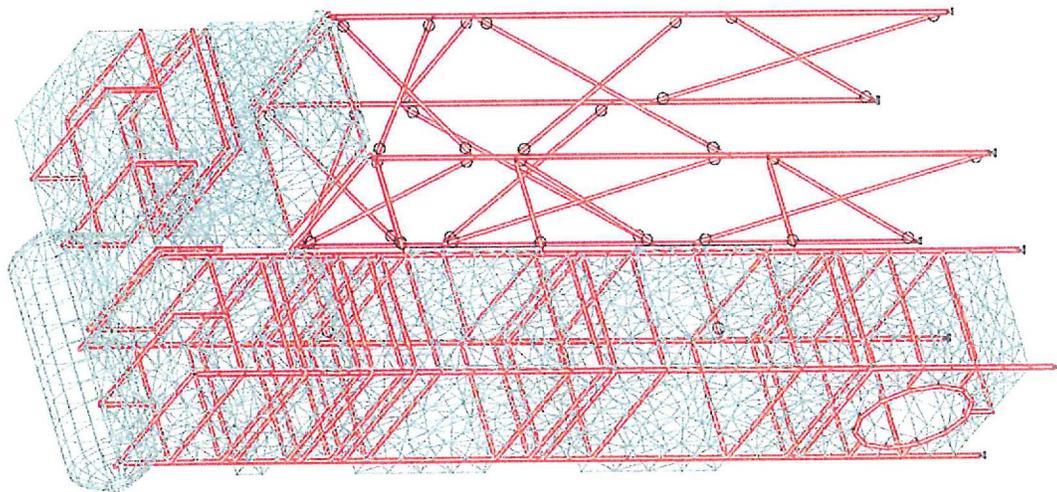
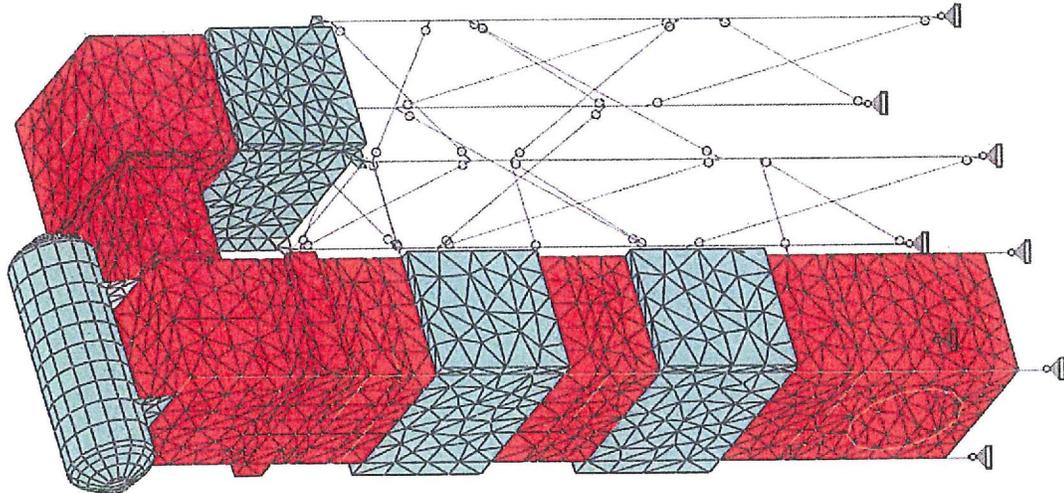
- The proposed use for the second phase of the project will consist of recovering heat from the existing WSACC Rocky River Regional WWTP furnace to generate power.
- The major components of the second phase of the Heat Recovery Power Generation Facility Project are as follows:
  - Heat Recovery Steam Generator (HRSG)
  - Steam Turbine Generator (STG)
  - Steam Turbine Generator Enclosure Building



# WSACC

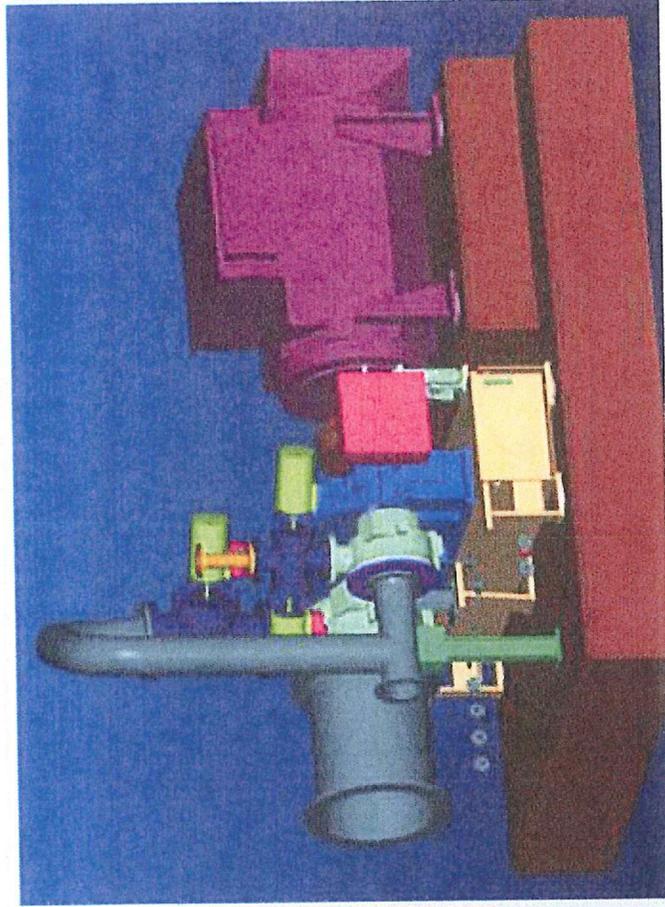
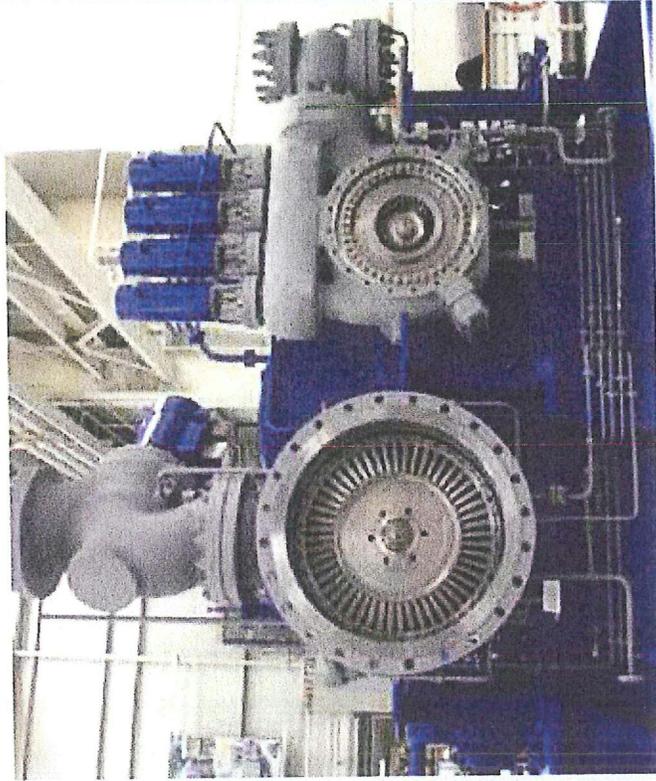


# HRSG



# STG

# WSACC

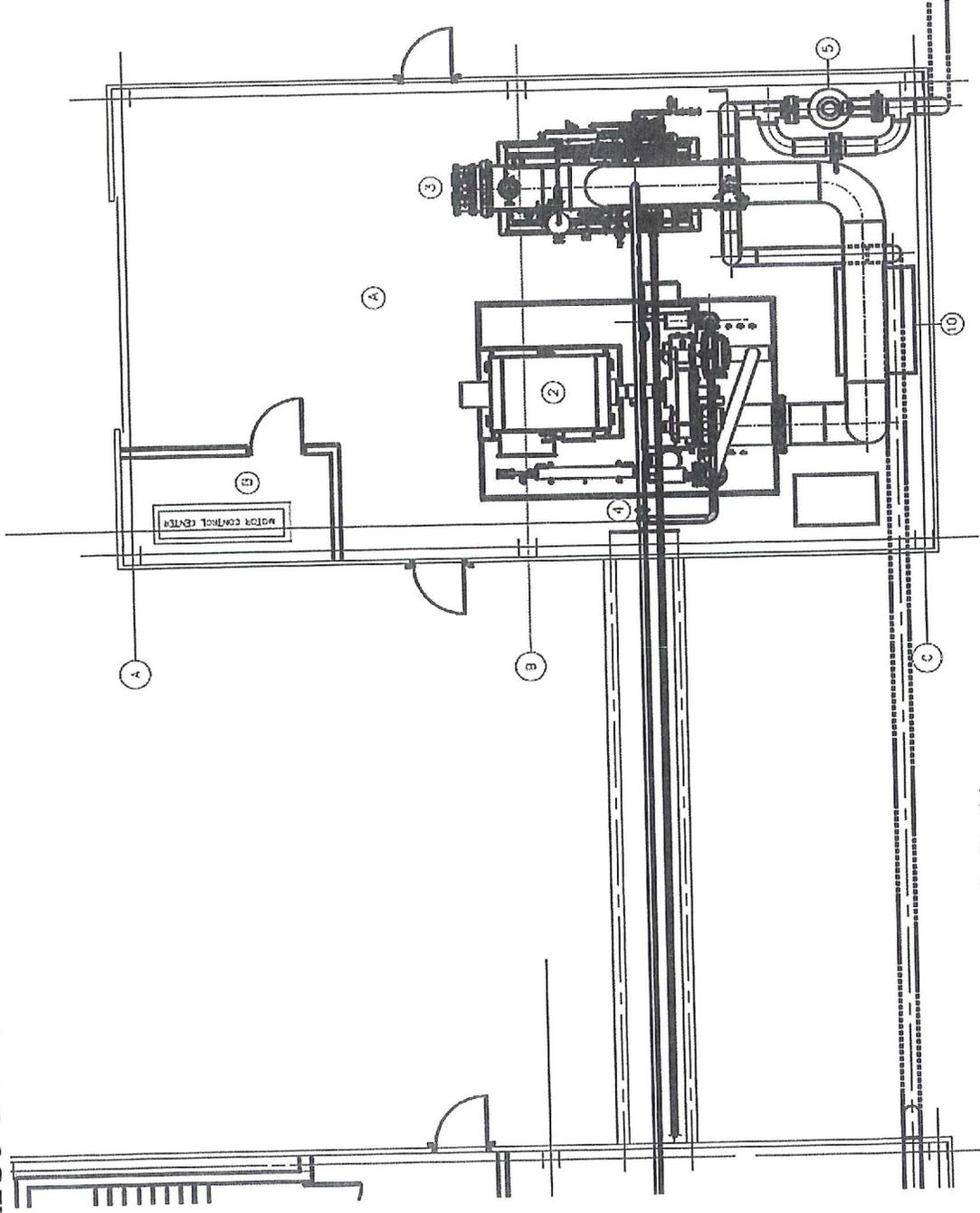


Siemens SST-110 (2 turbine casings, 1 gearbox)



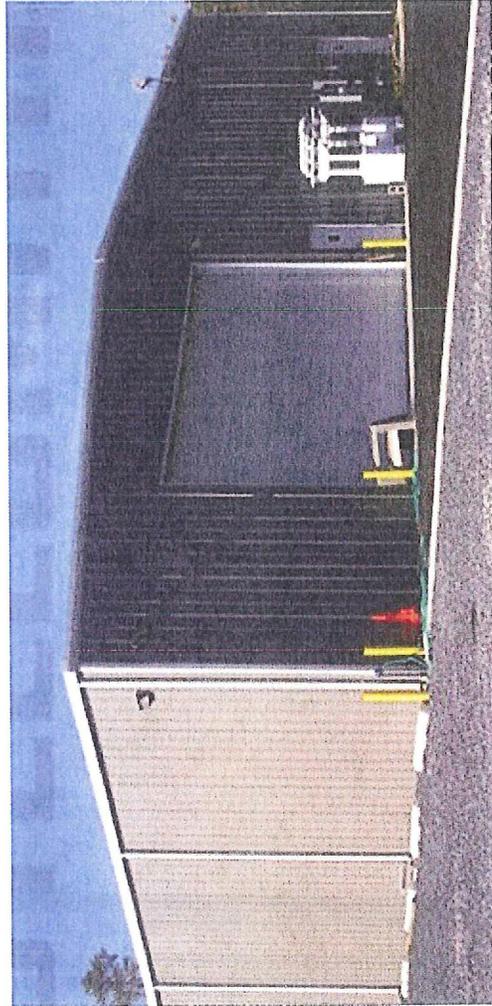
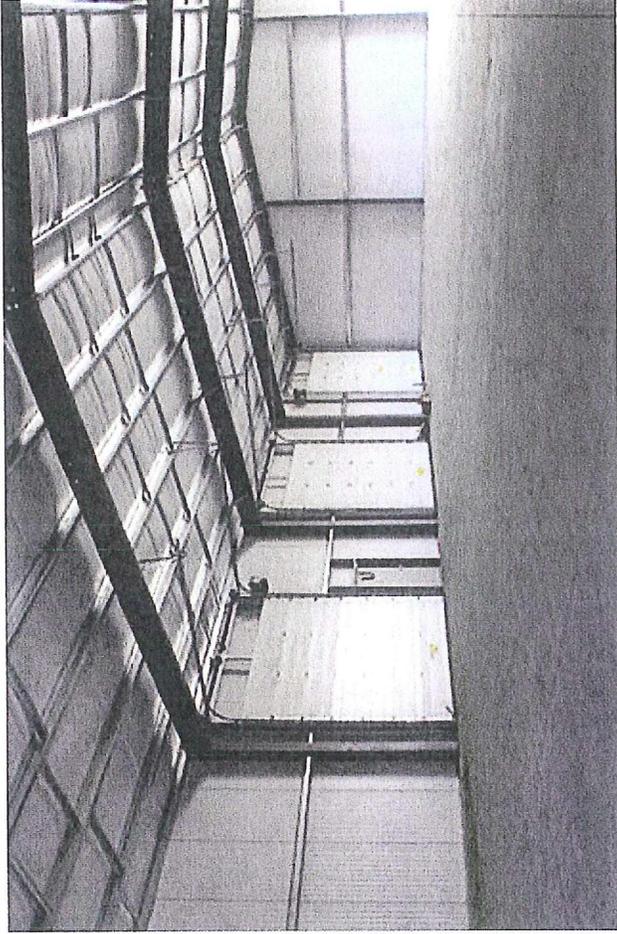
# Plant Layout

First Floor



# WSACC Steam Turbine Generator Building

Illustrative Examples



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## Project Schedule

- Design Complete - November 2012
- Contractor Bidding Complete - January 2013
- Construction Complete - October 2013

WSACC

# Questions / Comments

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