

4. HEARING OF CASES

- G. VARIANCE REQUEST, JOE GUTOWSKI FOR ND INDUSTRIES, 1893 BARRETT – In order to construct a building addition, a 10 foot variance from the required 20 foot rear yard setback.

**SECTION: 4.15 (C)**



TEMPLE CITY

CROOKS

PREMIER

NORTHWOOD

BARRETT

W MAPLE

1893

1950

1890

1821

1864

1826

1788

1965

1950

1749

1748

1945

1940

1800

1707

1708

1903

1930

1742

1635

1628

1937

1939

1943

1920

1910

1732 1734

1621

1104

1102

1100

1893

1896

1710

1250

1150

1000

950

900

780

778

1650

1340

1300

1350

770



1950

1940

1930  
1920  
1910

1896

770

780

778

BARRETT

1945

1937

1939

1943

1903

1893

1104

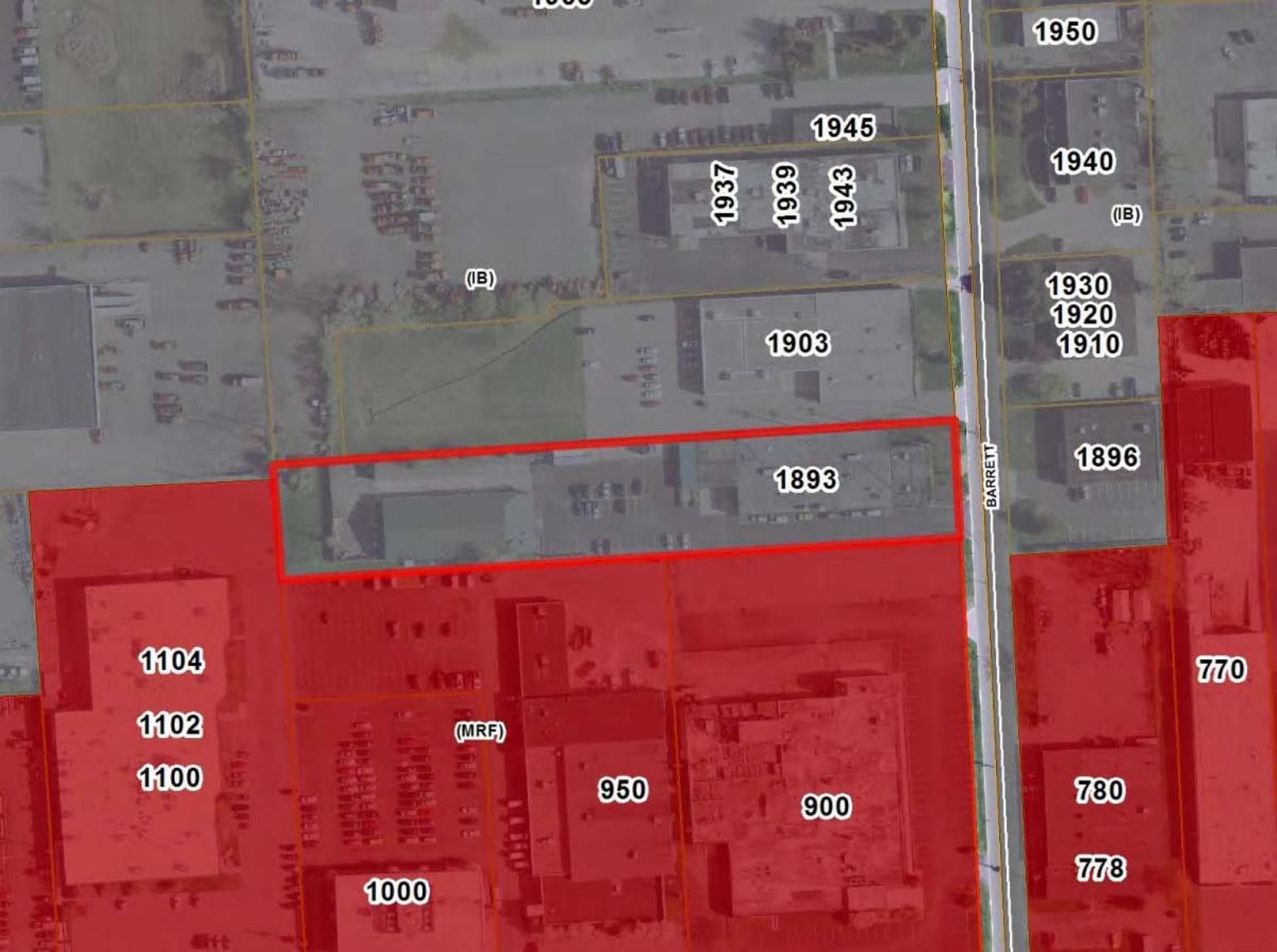
1102

1100

950

900

1000



1500

1945

1937

1939

1943

1940

(IB)

(IB)

1903

1930  
1920  
1910

1893

1896

BARRETT

1104

1102

1100

(MRF)

950

900

770

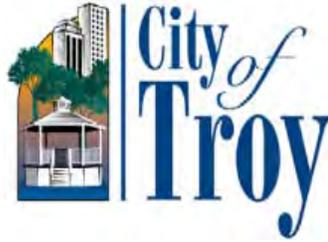
1000

780

778

# ZONING BOARD OF APPEALS APPLICATION

CITY OF TROY PLANNING DEPARTMENT  
500 W. BIG BEAVER ROAD  
TROY, MICHIGAN 48084  
PHONE: 248- 524-3364  
E-MAIL: [evanspm@troymi.gov](mailto:evanspm@troymi.gov)  
<http://www.troymi.gov/CodeEnforcement/#>



FEE \$150.00

THE ZONING BOARD OF APPEALS MEETS THE **THIRD TUESDAY OF EACH MONTH AT 7:30 P.M. AT CITY HALL.** PLEASE FILE A COMPLETE APPLICATION AND FEE, AT LEAST **27 DAYS BEFORE** THE MEETING DATE.

1. ADDRESS OF THE SUBJECT PROPERTY: 1893 Barrett Drive
2. PROPERTY TAX IDENTIFICATION NUMBER(S): 88-20-28-303-024
3. ZONING ORDINANCE SECTIONS RELATED TO THE REQUEST: 4.15(C)
4. REASONS FOR REQUEST: *On a separate sheet, please describe the reasons justifying the requested action. See Submittal Checklist*
5. HAVE THERE BEEN ANY PREVIOUS APPEALS INVOLVING THIS PROPERTY? If yes, provide date(s) and particulars: No
6. APPLICANT:  
NAME Joe Gutowski  
COMPANY ND Industries, Inc.  
ADDRESS 1893 Barrett Drive  
CITY Troy STATE Michigan ZIP 48084  
PHONE 248-765-7648  
E-MAIL jgutowski@ndindustries.com  
AFFILIATION TO THE PROPERTY OWNER: Director of Projects

8. PROPERTY OWNER:

NAME ND Industries, Inc.

COMPANY ND Industries, Inc.

ADDRESS 1000 North Crooks

CITY Clawson

STATE Michigan

ZIP 48017

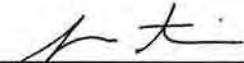
TELEPHONE 248-288-0000

E-MAIL thaase@ndindustries.com

The undersigned hereby declares under penalty of perjury that the contents of this application are true to the best of my (our) knowledge, information and belief.

The applicant accepts all responsibility for all of the measurements and dimensions contained within this application, attachments and/or plans, and the applicant releases the City of Troy and its employees, officers, and consultants from any responsibility or liability with respect thereto.

I, Joseph Gutowski (APPLICANT) HEREBY DEPOSE AND SAY THAT ALL THE ABOVE STATEMENTS CONTAINED IN THE INFORMATION SUBMITTED ARE TRUE AND CORRECT AND GIVE PERMISSION FOR THE BOARD MEMBERS AND CITY STAFF TO ENTER THE PROPERTY TO ASCERTAIN PRESENT CONDITIONS.

APPLICANT SIGNATURE  DATE 9/23/2012

PRINT NAME: Joseph Gutowski - Jim Romzek - Counsel For Applicant

PROPERTY OWNER SIGNATURE  DATE 9/23/2012

PRINT NAME: Tracy Haase - Corporate Officer Authorized To Sign

Failure of the applicant or their authorized representative to appear before the Board, as scheduled, shall be cause for denial or dismissal of the case with no refund of fees. If the person appearing before the Board is not the applicant or property owner, signed permission must be presented to the Board.

The applicant will be notified of the time and date of the hearing by first class mail.

**ATTACHMENT TO ZONING BOARD OF APPEALS APPLICATION**  
**APPLICANT'S RESPONSE TO VARIANCE REVIEW STANDARDS**

**City:** City of Troy  
**Applicant:** ND Industries, Inc.  
**Tax Parcel No.:** 88-20-28-303-024  
**Property:** 1893 Barrett Drive  
**Zoning:** IB Zoning District formerly M-1 Zoning District

**VARIANCE REQUEST**

Variance from Section 4.15(C) of the City of Troy Zoning Ordinance to reduce rear yard setback from 20 feet to 10.36 feet (variance of 9.40 feet) to allow for the construction of a 10 foot x 17 foot fire suppression room that will contain Applicant's fire suppression equipment outside of the constructed chemical storage building.

**BACKGROUND/ HISTORY OF PROJECT**

Applicant has owned and operated its advanced fastening and sealing technologies business on the Property for over 55 years. Approximately 7 years ago, Applicant and the City of Troy Fire Department developed an action plan pursuant to which Applicant agreed to modernize its chemical blending and storage processes. As part of this plan, the City of Troy Fire Department requested that Applicant store its flammable chemicals in a separate building in the interest of the safety of Applicant's employees and the public.

In August of 2011, Applicant submitted its final Site Plan for the construction of a 5,400 square foot addition ("**Chemical Storage Building**") to the existing one story warehouse building located on the Property for the sole purpose of storing Applicant's flammable chemicals in a separate, safe and modernized building equipped with a state of the art foam fire suppression system. (See attached Site Plan, Mechanical and Electrical Plans and Building Permits dated 11-18-2011, and 1-19-2012). The original Site Plan did not detail the fire suppression system in the Chemical Storage Building and the original approved drawings dated November 17, 2011 were stamped "Provide fire suppression as required– submit fire suppression shop drawings– permit required." During subsequent discussions with FM Global and the City of Troy Fire Department it was determined that the fire suppression equipment must be housed in a separate fire suppression room outside of the Chemical Storage Building. As a result, on May 16, 2012, Applicant submitted its fire suppression plans to the City of Troy Fire Department for construction with the fire suppression equipment in the southwest corner of the Property and outside of the Chemical Storage Building. In late July of 2012, the City of Troy Fire Department verbally approved Application's fire suppression plans, however, the City of Troy Fire Department subsequently advised Applicant that it had lost Applicant's submittal package and requested that Applicant resubmit its plans for formal approval. On August 21, 2012, the City of Troy Fire Department and Building Department approved Applicant's fire suppression system plans and issued a building permit for the construction of Applicant's fire suppression system.

**(See attached Fire Suppression Plans approved on 8-22-12 and Letter of Lincoln Fire Protection confirming above facts).**

Subsequent to issuance of the building permit, Applicant's contractors and the City's engineers conducted an on-site visit at which the City's engineers approved the work associated with the construction of the 10 foot x 17 foot foundation/addition ("**Fire Suppression Room**") located within the 20 foot rear yard setback area located in the southwest corner of the Property for purposes of constructing and locating the fire suppression equipment outside of the Chemical Storage Building. In addition, the City's engineers approved Applicant's installation of the water main extension and new fire hydrant which will connect its fire suppression system to the existing water main system located on the adjacent property to the west, being 1100 West Maple ("**West Property**") owned by JBD Troy LLC.

On September 17, 2012, and in reliance upon the City's prior verbal approval and issuance of the permit, Applicant's contractor completed the construction of the footings/foundation to the Fire Suppression Room and the City inspected and approved this work on the same day. **(See attached photograph of foundation to Fire Suppression Room along with City's approval affixed to Chemical Storage Building)**. Notwithstanding the City's prior verbal approval and its subsequent inspection and written approval of Applicant's plans and the construction of the footings/foundation to the Fire Suppression Room on September 17, 2012, the City's Building Department on the same day informed Applicant that the Fire Suppression Room was found to be non-compliant due to (i) it not satisfying the City's 20 foot rear yard setback requirement; and (ii) it being located within the water main easement area to be granted on the Property.

In connection with the construction of the Chemical Storage Building, Applicant, at its own cost, had the storm sewer system located in the northwest corner of the Property reconstructed and connected to the retention/drain system located on the property to the north, being 1903 Barrett ("**North Property**") owned by Electrical Research Corp and leased by RAM Meter Inc. The reconstruction of this retention/drain system was the obligation of the City and had been a health and safety issue for a long time. In addition to resolving this matter for the benefit of the City and owner of the North Property, Applicant has agreed to pay the costs to relocate the fire hydrant located on the West Property to the southwest corner of the Property. As part of this work, the existing fire hydrant and bollards located in the driveway area of the West Property would be removed. As the City is aware, the construction of the fire hydrant and bollards was approved a long time ago in order to allow the tenant of the West Property to operate its chemical business that required the fire hydrant to be constructed within a minimum distance from the chemical tank/cage constructed on the West Property. Special accommodations were made for the operation of that chemical business. The chemical tank has been removed and there is no longer the need for the fire hydrant and bollards, however, the City and owner of the West Property have not removed the same due to the costs of completing such improvements. The City and owner of the West Property want the fire hydrant and bollards removed for safety reasons and to help increase the value of the West Property and surrounding properties.

After exploring various alternative options to seeking the requested variance, Applicant concluded that the only possible option is to move the proposed Fire Suppression Room from the

southwest corner to the green belt area located in the northwest corner of the Property, provided such relocation does not result in the Property becoming non-complaint due to the total green belt area falling below the minimum percentage required under the zoning code. However, after completing its due diligence on this option, Applicant determined that it would be cost prohibitive to move the proposed Fire Suppression Room. In order to move the Fire Suppression Room, this would require Applicant to incur the following costs: (i) money already paid for the prefabricated steel structure of the approved Fire Suppression Room; (ii) removal of the foundation, block and drain approved by a City of Troy inspector; (iii) extension of existing water main and modifications to current water main connection to the Chemical Storage Building; (iv) modifications to internal fire suppression piping in Chemical Storage Building to connect to new water main; and (v) construction of new Fire Suppression Room in the green belt area, including but not limited to, all design, material and labor costs for construction of same. The estimated total costs for such work is \$125,000.00.

As a result of the City's approvals and subsequent actions, Applicant has no alternative but to request a variance to reduce the rear yard setback from 20 feet to 10.36 feet (variance of 9.40 feet) to complete the construction of the Fire Suppression Room. (**See attached Dimensional Plan of Property which reflects the 10.36 rear yard setback distance**). This variance is necessary to relieve the practical difficulty caused by the unique conditions and circumstances relating to the Property and approved use thereon as more particularly set forth below in the responses to the variance review standards.

#### **VARIANCE REVIEW STANDARDS**

a) **Does the property have characteristics, such as narrowness, shallowness, irregular shape, topography, vegetation and other similar characteristics that make compliance with dimensional requirements substantially more difficult than would be the case for the great majority of properties in the same zoning district?**

Yes. As with all variances, the principle review standard is whether the variance is needed to relieve a practical difficulty caused by the unique conditions present on the Property. In this case, the City, after approving Applicant's fire suppression plans and construction of the footings/foundations to the Fire Suppression Room, has asserted that the Fire Suppression Room is non-complaint due to it not satisfying the 20 foot rear yard setback requirement. As a result, special and unique conditions and circumstances have been created with respect to the Property that are not applicable to other buildings and property in the same district. Applicant, unlike other land owners in the district, is charged with the practical difficulty of having to remedy these unique conditions and circumstances by moving the approved Fire Suppression Room from the southwest corner to the northwest corner of the Property at the estimated cost of \$125,000. As referenced above, this alternative is only possible if the Property is able to maintain its minimum green belt after the relocation of the Fire Suppression Room. This practical difficulty may be relieved by approving the requested variance.

From a practical standpoint, Applicant notes that the existing concrete pad and air purifier equipment located adjacent to the proposed Fire Suppression Room is located 10.36 feet from the rear lot line, which is the same distance as the approved constructed footings/foundation of

the Fire Suppression Room. (See attached Dimensional Plan). While this air purifier pad and equipment is not considered an addition or structure for which compliance with the City's dimensional requirements is required, the size, purpose and function of these improvements are materially similar to the fire suppression equipment and Fire Suppression Room which is essential to the use and operation of the Chemical Storage Building. The air purifier pad and equipment has the same encroachment issues as the Fire Suppression Room, which are not material as further outlined below. At minimum, it is disingenuous for the City to have originally approved Applicant's fire suppression plans and to then assert that the Fire Suppression Room is non-complaint due to the rear setback requirement when, from a practical standpoint, the same issues exist and will remain as it relates to the existing air purifier pad and equipment.

Also, after the City agreed that Applicant could connect its fire suppression system to the existing water main located on the West Property, and after the Applicant agreed to move the fire hydrant to the southwest corner of the Property, the City has now asserted that the Fire Suppression Room is non-complaint because it will be located in the water main easement area to be granted on the Property unless the City Engineering Department agrees to reduce the standard dimensions relating to water main easements. Based on its conversations with the City Engineering Department, Applicant understands that the City will approve a water main easement on the Property with reduced dimensions that will result in the Fire Suppression Room being located outside of any water main easement area. Thus, this is not an issue that should preclude the approval of the requested variance.

**b) Are the characteristics which make compliance with dimensional requirements difficult related to the Property for which the variances are sought, not some other location?**

Yes. The existing Chemical Storage Building and proposed Fire Suppression Room are located solely within the Property boundaries and is suitable for use as a chemical storage building with a state of the art foam fire suppression system. The approved footings/foundation to the Fire Suppression Room is setback 10.36 feet from the rear lot line and a variance of 9.64 feet is being requested.

**c) Are the characteristics which make compliance with dimensional requirements difficult of a personal nature?**

No. All such characteristics were caused by the City.

**d) Are the characteristics which make compliance with dimensional requirements difficult created by the current owner or a previous owner?**

No. All such characteristics were caused by the City or special accommodations made to surrounding properties and owners.

e) **Will the proposed variance:**

**(i) be harmful or alter the essential character of the area in which the property is located?**

No. The surrounding properties are all manufacturing and industrial properties which have existed for years. Applicant has been operating its business on the Property for over 55 years and the construction of the Fire Suppression Room is simply the furtherance of its action plan with the City that was developed for purposes of improving the essential character of the area. The Fire Suppression Room will not decrease the visibility of any surrounding property and such improvements will be blocked by the existing 6 foot high wooden fence surrounding the Property. In fact, the improvements will improve the character of the area in that Applicant's business will be operated in a safer manner, the fire hydrant and bollards located on the West Property will be removed and the retention/drain system has been reconstructed and connected to the North Property, all at the cost of Applicant. These improvements have or will eliminate long standing health and safety issues within the area that will only improve the overall character of the area.

**(ii) impair an adequate supply of light and air to adjacent property?**

No. See response to e)(i) above. In addition, the requested variance relates specifically to the rear of the Property which faces the parking lots and rear of adjacent properties. The Fire Suppression Room will have no impact on the supply of light or air to adjacent properties.

**(iii) unreasonably increase the congestion in public streets?**

No. The requested variance has no impact on the public streets.

**(iv) increase the danger of fire or endanger the public safety?**

No. The variance will help to significantly decrease the danger of fire or the endangerment of public safety. The Fire Suppression Room is specifically designed to have the fire suppression equipment located outside of the Chemical Storage Building so that in the event of a fire due to Applicant's flammable chemicals stored in the Chemical Storage Building, the fire suppression equipment will not be impacted by the fire and will work to put out any fire in a matter of minutes. This is a state of the art foam fire suppression system that will prevent against the danger of fire and will dramatically improve Applicant's current safety protections.

**(v) unreasonably diminish or impair established property value within the surrounding areas?**

No. See response to e)(i) above.

**(vi) in any other respect impair the public health, safety, comfort, morals or welfare of the inhabitants of the City?**

No. See response to e)(i) above. The City and Applicant engaged in an action plan that would help to improve the public health, safety and welfare of the inhabitants of the City and the construction of the Fire Suppression Room designed to service the existing Chemical Storage Building is a culmination of that action plan.

8601192-1

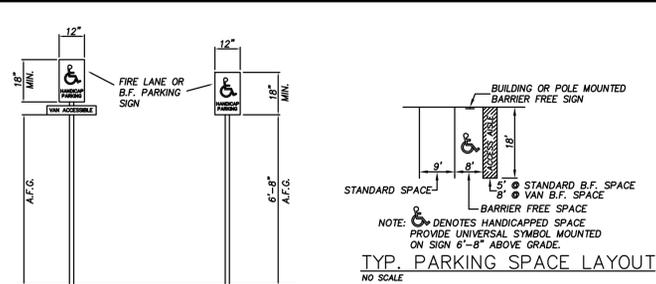
LEGEND	
EXISTING	PROPOSED

**GENERAL NOTES**

- THE CONTRACTOR SHALL NOTIFY "MISS DIG" (800/482-7171) AT LEAST THREE (3) WORKING DAYS (72 HOURS) PRIOR TO THE START OF CONSTRUCTION.
- ALL CONSTRUCTION AND MATERIALS TO CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY.
- HANDICAP PARKING SPACE TO BE IDENTIFIED WITH THE INTERNATIONAL SYMBOL.
- ACCESS TO A STRUCTURE SHALL BE PROVIDED FOR THE PHYSICALLY HANDICAPPED.
- ON-SITE PARKING SHALL BE PROVIDED FOR CONSTRUCTION WORKERS.
- AN AS-BUILT REPRODUCIBLE MYLAR SHALL BE SUBMITTED TO THE CITY OF TROY ENGINEERING DEPARTMENT BEFORE ISSUANCE OF AN OCCUPANCY.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND BONDS FOR CONSTRUCTION BEING DONE WITHIN THE OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION RIGHT OF WAY AND THE CITY OF TROY RIGHT OF WAY UNDER THE JURISDICTION OF THE AFORESAID AGENCIES.
- SOIL BORINGS HAVE NOT BEEN SUPPLIED. CONTRACTOR TO VERIFY SOIL BEARING CAPACITY. INADEQUATE SOIL FINDINGS OF LESS THAN 2,500 PSF MAY REQUIRE REDESIGN OF SITE FEATURES SUCH AS PAVEMENT, UTILITIES, AND FOOTINGS.
- SOIL BORINGS HAVE NOT BEEN SUPPLIED. CONTRACTOR TO VERIFY EXISTING GROUND WATER ELEVATION. IF EXISTING WATER TABLE IS FOUND TO BE WITHIN THE INFLUENCE OF PROPOSED UTILITIES OR DETENTION FACILITIES REDESIGN MAY BE REQUIRED.
- OWNERS SHALL PAY CITY OF TROY AND OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION INSPECTION FEES.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF TROY ENGINEERING DEPARTMENT FORTY EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION OF PUBLIC UTILITIES OR CONSTRUCTION IN THE STREET RIGHT OF WAY.
- THE CONTRACTOR IS TO ARRANGE PRE-CONSTRUCTION MEETING WITH GAS COMPANY, AMERITECH TELEPHONE COMPANY, DETROIT EDISON COMPANY, CITY OF TROY WATER & SEWER DEPARTMENTS AND THE OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION FOR ASSISTANCE TO DETERMINE PROBLEMS OF CONSTRUCTION AND POSSIBLE CONFLICTS WITH EXISTING UTILITIES DURING CONSTRUCTION.
- ENGINEERING HAS BEEN BASED OFF OF SURVEY PROVIDED BY OTHERS. DEVELOPER TO VERIFY ANY AND ALL EXISTING SITE FEATURES.
- PROPOSED BUILDING LEADS TO BE VERIFIED WITH MECHANICAL CONTRACTOR FOR PROPER DESIGN, LOCATION AND DEPTH.
- ALL GRADING TO BE DIRECTED TOWARDS ON-SITE STORM SYSTEM AND AWAY FROM BUILDINGS. GRADING NOT TO BE LESS THAN 0.5% IN LANDSCAPE AREAS OR 1% IN PAVEMENT AREAS.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF TROY WATER AND SEWER DEPARTMENTS AND OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION AND ALL CONCERNED PUBLIC UTILITIES SEVENTY TWO (72) HOURS PRIOR TO THE START OF CONSTRUCTION.
- LOCATION OF ALL EXISTING UTILITIES SHOWN IN AREA OF PROPOSED CONSTRUCTION ARE APPROXIMATE AND ARE NOT GUARANTEED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES IN THE CONSTRUCTION AREA AND WILL BE HELD RESPONSIBLE FOR AND DAMAGE TO SUCH EXISTING UTILITIES FROM HIS OPERATION.
- ROAD, ROAD SHOULDERS, ROAD PAVEMENT, PARKING PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, DITCHES, DRAINAGE PIPE AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, STREET AND PUBLIC INFORMATION SIGNS, ADVERTISEMENT SIGNS, ETC., DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
- ALL WATER MAINS, SANITARY SEWERS (AND LEADS) AND STORM SEWERS UNDER PROPOSED OR EXISTING PAVEMENT OR WITHIN 5 FEET OF PAVEMENT TO BE SAND BACKFILLED AND COMPACTED TO 95% OPTIMUM DENSITY (PROCTOR.) SAND BACKFILLING TO BE INCIDENTAL TO CONTRACT.

**PAVING NOTES**

- ALL MATERIALS AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE OAKLAND COUNTY ROAD COMMISSION AND THE CITY OF TROY.
- ALL GRAVEL SHOULDERS AND ROAD DITCHES SHALL BE PER PLAN AND STABLE PRIOR TO ACCEPTANCE BY THE OAKLAND COUNTY ROAD COMMISSION.
- ALL TOPSOIL SHALL BE REMOVED FROM ROAD R.O.W. PRIOR TO CUTTING OR FILLING.
- ROAD DITCHES AND DRAINAGE SWALES HAVING GRADES OF 2.00% OR GREATER SHALL BE SLOTTED AND PEGGED IN PLACE.
- VEGETATION MUST BE STABLE PRIOR TO RELEASE OF CONSTRUCTION GUARANTEE.
- ADDITIONAL SUB-BASE AND/OR UNDERDRAINS MAY BE REQUIRED IF ROAD SUB-SOIL OR NET CONDITIONS ARE ENCOUNTERED DURING PAVEMENT CONSTRUCTION AS DIRECTED BY THE OAKLAND COUNTY ROAD COMMISSION (SEE RESULTS OF BORINGS).



**SIGN DETAIL**  
NO SCALE

**SITE DATA:**  
SITE AREA = 2.0AC. (87,120 SF.)  
EXISTING ZONING: SITE: IB  
SITE TO NORTH: IB  
SITE TO SOUTH: MR  
SITE TO EAST: IB  
SITE TO WEST: IB

**BUILDING DATA:**  
BUILDING 1:  
MANUFACTURING AREA = 13,042 SF.  
OFFICE AREA = 2,233 SF.  
EX. SHIPPING AREA = 1,700 SF. (TO BE REMOVED)  
PROP. SHIPPING ADDITION = 3,643 SF.  
SUBTOTAL = 18,918 SF.

BUILDING 2:  
LABORATORY AREA = 5,400 SF.  
MACHINE SHOP AREA = 3,780 SF.  
WAREHOUSE AREA = 5,400 SF.  
SUBTOTAL = 14,580 SF.

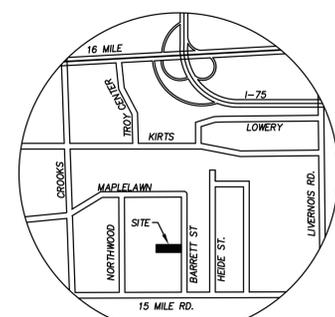
**TOTAL BUILDING AREA = 33,498 SF.**  
LOT COVERAGE = 38.45%  
MAX. ALLOWED LOT COVERAGE = 40%

**BUILDING SETBACKS:**  
FRONT: 30 FT. N/A  
SIDE: 10 FT. 6.21' (MATCHING EXISTING)  
REAR: 20 FT. 20 FT.

**PARKING REQUIRED:**  
INDUSTRIAL = 15P/550 SF. x 28,018 SF. = 515P  
WAREHOUSING = 15P/1500 SF. x 5,400 SF. = 45P  
TOTAL REQUIRED = 555P

**PARKING PROVIDED = 545P. (INCLUDING 2 B.F. SPACES)**

**REQUIRED LANDSCAPE AREA = 20% OF GROSS SITE**  
20% x 87,120 SF. = 17,424 SF.  
**PROVIDED LANDSCAPE AREA = 19,246 SF.**



**LOCATION MAP**  
NO SCALE

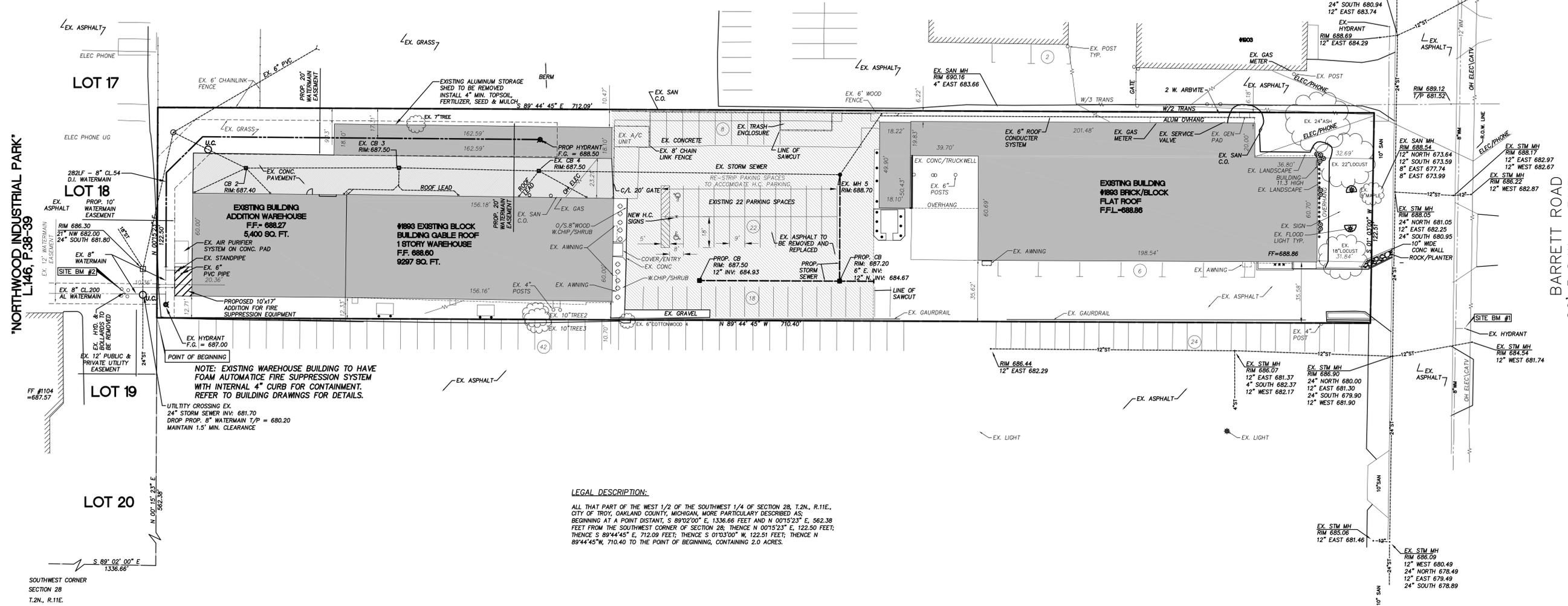


CLIENT  
**INDUSTRIES, INC.**

1893 BARRETT DR.  
TROY, MI 48064  
PH: (248) 655-2522

PROJECT TITLE  
**PROPOSED WAREHOUSE ADDITION**

SHEET TITLE  
**DIMENSIONAL PLAN**



BARRETT ROAD  
60' R.O.W. - PUBLIC ASPHALT PAVEMENT

**LEGAL DESCRIPTION:**  
ALL THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 28, T.2N., R.11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS: BEGINNING AT A POINT DISTANT, S 89°02'00\"/>

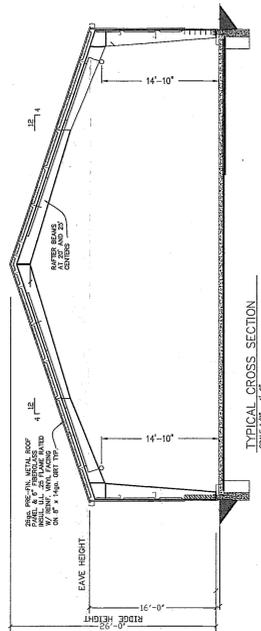
- BENCHMARKS**
- REF. BM ARROW ON HYD. #28-84 - 45± EAST OF BARRETT ELEVATION 687.851 (CITY OF TROY)
  - REF. BM ARROW ON HYD. #28-5 - (AT #95 - KTB) ELEVATION 687.686 (CITY OF TROY)
  - SITE BM #1 ARROW ON HUD. EAST SIDE OF BARRETT DR. OPPOSITE SOUTH ENTRANCE TO #1893 "ND INDUSTRIES" SITE ELEVATION 688.47
  - SITE BM #2 NORTHEAST FLANGE BOLT BETWEEN "MUE" & "LLER" ON HYD 25± WEST OF SOUTHWEST PROPERTY CORNER ELEVATION 688.67

CITY OF TROY  
PROJECT #07.935.3

DATE	ISSUED FOR
4/20/2012	FOR CITY SUBMITTAL
9/14/2012	FOR CITY SUBMITTAL
9-21-12	REVISED WATER MAIN

SHEET NO.  
**CE-1**

PROJECT NO.  
12-533



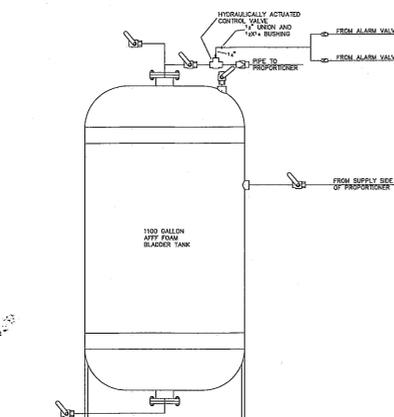
Storm Information:  
 Date of Flow Test Date: 8-31-11  
 Location of flow test date:  
 150 West Main  
 Location of flow test date:  
 City of Troy  
 Storm Data Points: Pump Data Points  
 Pressure (Flow) Pressure (Flow)  
 74.00 0.00  
 62.00 2100.00

Calculation results for Design Area 1 - WAREHOUSE  
 This system as shown on Lincoln Fire Protection company print no. dated  
 for 20 Industries Liquid Warehouse or 1893 Street  
 contract no. is designed to discharge at a rate of 0.3 gpm/ft<sup>2</sup> (L/min/ft<sup>2</sup>) of floor area over  
 a maximum area of 3200.0 ft<sup>2</sup> when supplied with water at a rate of 1500.0 gpm at the base of the riser.  
 Hose stream allowance of is included in the above.  
 Occupancy classification: Storage Number of heads flowing: 65  
 Commodity classification: System Type: Wet  
 Maximum storage height: Maximum velocity: 25.8 ft/s  
 Storage arrangement:  
 Flow from in-Rack sprinklers: 418.2 gpm Pressure Required at Source: 64.4 psi  
 Flow from Overhead sprinklers: 1084.1 gpm Pressure Available at Source: 63 psi  
 Flow from Inside Hoses: 0 gpm Static Pressure at Source: 63.0 psi  
 Flow from Outside Hoses: 0 gpm  
 Other Rack Flow: 0 gpm  
 Total flow in system piping: 1502.3 gpm  
 Additional flow at beyond source: 200.0 gpm  
 Total of all flow: 2002.3 gpm

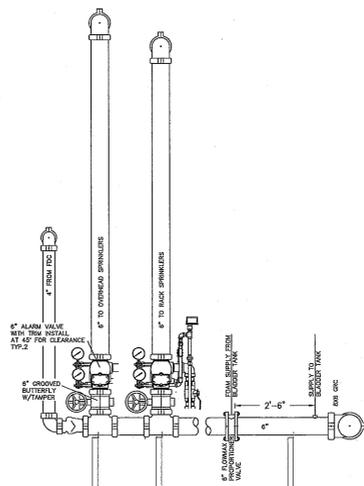
ROOF SPRINKLERS  
**FIRE SPRINKLER PIPING PLAN**

SCALE: 1/8"=1'-0"

SYM.	POS.	MATERIAL	SIZE	WGT.	MANUFACTURER	MODEL #
○	84	UPR	BRASS	285	8.00	3/4" VK200 Viking M
◊	1	SIDE	BRASS	285	5.60	1/2" VK104 Viking M



**BLADDER TANK DIAGRAM**  
 SCALE: 1/2"=1'-0"



**RISER DETAIL**  
 SCALE: 1/2"=1'-0"

CITY OF TROY  
 BUILDING DEPARTMENT  
 PLANS APPROVED 8/22/2011

\* HAZ-MAT PERMIT REQUIRED  
 \* FIRE ALARM CONNECTIONS REQUIRE FIRE ALARM PERMIT

RECEIVED  
 AUG 20 2011  
 CITY OF TROY  
 BUILDING DEPT.

LIQUID STORAGE WAREHOUSE

**LFP LINCOLN FIRE PROTECTION**

4453 CABLETON - ROCKWOOD ROAD  
 SOUTH ROCKWOOD, MI 48079  
 PH: (734) 777-8024

JOB:	ND INDUSTRIES 1893 Barret Troy, MI 48084	SHEET	FP1
DRAWN BY:	BH	DATE:	5/15/12
SCALE:	1/8"=1'-0"		



4453 Carleton-Rockwood Road South Rockwood, MI 48179  
Phone: (734) 777-8425 Fax: (734) 789-8740

September 22, 2012

ND Industries  
Attn: Joe Gutowski

Re: ND Industries Storage Warehouse  
1893 Barrett Road  
Troy, Michigan

Lincoln Fire Protection submitted the plans for the above project to the City of Troy originally on May 16, 2012. We started coordination with the fire department at that time. Before the coordination was completed, the plans were somehow misplaced by the City.

We were asked by the City of Troy to re-submit the plans for this project the first week of August, 2012. Lincoln Fire Protection re-submitted and was notified on August 21, 2012 that the permit and plans were complete. The permit was picked up on August 22, 2012.

Respectfully submitted,

Bill Hemphill, President  
[lincolnfireprotection@yahoo.com](mailto:lincolnfireprotection@yahoo.com)



\*PB2011-0691%PB%1383.00\*

# Building Permit No: PB2011-0691

Building Department  
**Inspection: (248) 689-5744**  
Phone: (248) 524-3344

500 W. Big Beaver Road  
Troy, Michigan 48084  
Hours: Mon-Fri 8am - 4:30pm

Fax: (248) 689-3120  
www.ci.troy.mi.us

1893 BARRETT  
88-20-28-303-024      Lot:  
Subdivision:  
Zoning: M-1      Use Group: H-3  
Construction Type:

Location

ND INDUSTRIES INC  
1000 N CROOKS  
CLAWSON      MI      48017  
(248) 655 2590

Owner

Issued: 11/18/2011

ND INDUSTRIES INC  
ND INDUSTRIES INC  
1000 N CROOKS  
CLAWSON      MI      48017  
(248) 655 2590

Applicant

**FOR INSPECTIONS - CALL (248) 689-5744**  
*Inspections called in by 6:00 A.M. will be scheduled the same day.*

**Work Description:** C-FOLDED. ADDITION - FOUNDATION ONLY PERMIT FOR ND INDUSTRIES.

**Special Stipulations:** MEET ALL CODES & INSPECTIONS

Work will meet all codes and inspections.

Permit Item	Work Type	Quantity	Item Total
Initial Plan Review Fee	Plan Rev Min.	1.00	30.00
Value \$10,001 to 1 Million	Building Permit	45,000.00	565.00
Alterations Bond	Bond Alter	1.00	50.00
Plan Review Fee	Plan Review	45,000.00	15.00
Microfilm Fee-Commercial	Microfilm Fee	5.00	5.00
Grade fee Non-Res	Grade Non Res	0.53	70.00
Non Residential Sewer Tap	Sewer Tap	3.24	648.00

**Commercial, Add/Alter**

**Total Due: \$1383.00**

**PAID on: 11/18/2011**  
**Check#: 00291854**  
Payment Validation

This permit is issued subject to the Building Code, Zoning Ordinance and all other Ordinances of the City of Troy, and shall become void once work is not started or is abandoned for a period of one hundred eighty (180) days.  
Separate permits must also be obtained for signs and any plumbing, heating, refrigeration, electric, or sewer work.  
This permit conveys no right to occupy any street or public right-of-way, either temporarily or permanently.



\*PW2011-00096%PW%2268.00\*

# Water Permit No: PW2011-00096

Water Department  
**Inspection: (248) 689-5744**  
Phone: (248) 524-3370

4693 Rochester Road  
Troy, Michigan 48085  
Hours: Mon-Fri 8am - 4:30pm

Fax: (248) 524-3520  
www.ci.troy.mi.us

1893 BARRETT 88-20-28-303-024 Subdivision: Zoning: M-1 Construction Type:	Location Lot: Use Group: H-3	ND INDUSTRIES INC 1000 N CROOKS CLAWSON MI 48017 (248) 655 2590	Owner
---	------------------------------------	--	-------

Issued: 11/18/2011

**FOR INSPECTIONS - CALL (248) 689-5744**  
*Inspections called in by 6:00 A.M. will be scheduled the same day.*

ND INDUSTRIES INC ND INDUSTRIES INC 1000 N CROOKS CLAWSON MI 48017 (248) 655 2590	Applicant
---	-----------

**Sewer District - Acct#: TROY 2-22-0153**  
**Work Description: EXISTING SERVICE, EXISTING METER**

**Service: Meter Size:**

**Special Stipulations: A meter must be installed before the Building Department will issue a Certificate of Occupancy.**

The applicant will be required to pay an additional winter tap fee for any tap made between December 1 and March 15.  
No water service will be permitted under driveways or private sidewalks.

Permit Item	Work Type	Quantity	Item Total
Water Improvement Fund	Improv Fund	3.24	2,268.00

**Water, Industrial Add/Alter**

**Total Due: \$2268.00**

**PAID on: 11/18/2011**  
**Check#: 00291854**  
Payment Validation

**To All Builders:**

After the copper has been installed and inspected by the Building Department, the connection to the water main will be made. It is imperative that you, the builder, be responsible for seeing that the water service is staked, leaving the end of the copper above grade. It is also your responsibility to see that the copper is not covered by building materials.

**If the stake or copper is not visible or accessible, the Water Department will not make the connection to the water main.**

After the Water Department's installation is complete, the builder will be responsible for protecting the curb box and keeping it staked. If the curb box is not accessible, the water meter will not be installed. In the event the curb box is damaged, it will be the builder's responsibility to make all the necessary repairs. The Water Department will not furnish parts, labor or equipment for the repairs. After the repairs have been made, the Water Department must inspect the repairs before backfilling. If the repairs are not inspected, the water service will not be turned on until an inspection can be made.

Signature \_\_\_\_\_ Initial for template \_\_\_\_\_



\*PB2012-0015%PB%1392.25\*

# Building Permit No: PB2012-0015

Building Department  
**Inspection: (248) 689-5744**  
Phone: (248) 524-3344

500 W. Big Beaver Road  
Troy, Michigan 48084  
Hours: Mon-Fri 8am - 4:30pm

Fax: (248) 689-3120  
www.ci.troy.mi.us

1893 BARRETT	Location
88-20-28-303-024	Lot:
Subdivision:	
Zoning: M-1	Use Group: H-3
Construction Type:	

ND INDUSTRIES INC	Owner
1000 N CROOKS	
CLAWSON MI 48017	
(248) 655 2590	

Issued: 01/19/2012

ND INDUSTRIES INC	Applicant
ND INDUSTRIES INC	
1000 N CROOKS	
CLAWSON MI 48017	
(248) 655 2590	

**FOR INSPECTIONS - CALL (248) 689-5744**  
*Inspections called in by 6:00 A.M. will be scheduled the same day.*

**Work Description:** I-ATTACHED

### Special Stipulations:

Work will meet all codes and inspections.

Permit Item	Work Type	Quantity	Item Total
Value \$10,001 to 1 Million	Building Permit	105,000.00	1,165.00
Cert of Occupancy	C of O	1,165.00	58.25
Alterations Bond	Bond Alter	1.00	50.00
Initial Plan Review Fee	Plan Rev Min.	1.00	30.00
Plan Review Fee	Plan Review	105,000.00	75.00
Microfilm Fee-Commercial	Microfilm Fee	14.00	14.00

**Industrial, Add/Alter**

**Total Due: \$1392.25**

**PAID on: 01/19/2012**  
**Check#: 00293269**  
Payment Validation

This permit is issued subject to the Building Code, Zoning Ordinance and all other Ordinances of the City of Troy, and shall become void once work is not started or is abandoned for a period of one hundred eighty (180) days.  
Separate permits must also be obtained for signs and any plumbing, heating, refrigeration, electric, or sewer work.  
This permit conveys no right to occupy any street or public right-of-way, either temporarily or permanently.

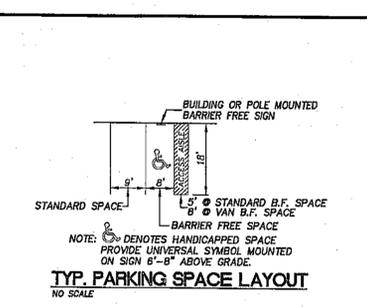
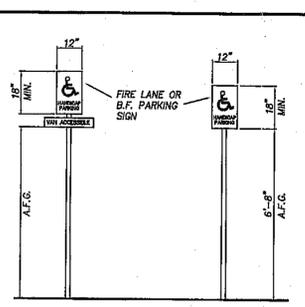
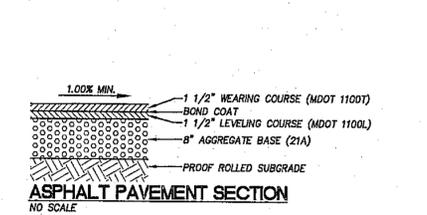
LEGEND	
EXISTING	PROPOSED
ELEVATION 0.000	ELEVATION 100.00
CONTOUR 0.00	CONTOUR 0.00
STORM SEWER	STORM SEWER
SANITARY SEWER	SANITARY SEWER
WATERMAIN	WATERMAIN
GAS	GAS
ELECTRICAL	ELECTRICAL
CATCH BASIN	CATCH BASIN
MANHOLE	MANHOLE
GATE VALVE IN WELL	GATE VALVE IN WELL
HYDRANT	HYDRANT

**GENERAL NOTES**

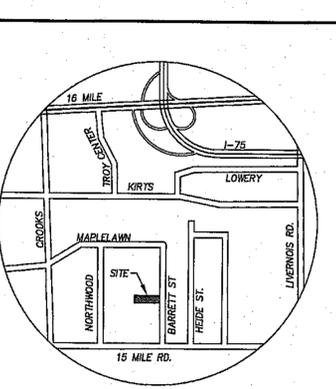
- THE CONTRACTOR SHALL NOTIFY "MISS DIG" (800/482-7171) AT LEAST THREE (3) WORKING DAYS (72 HOURS) PRIOR TO THE START OF CONSTRUCTION.
- ALL CONSTRUCTION AND MATERIALS TO CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF TROY.
- HANDICAP PARKING SPACE TO BE IDENTIFIED WITH THE INTERNATIONAL SYMBOL.
- ACCESS TO A STRUCTURE SHALL BE PROVIDED FOR THE PHYSICALLY HANDICAPPED.
- ON-SITE PARKING SHALL BE PROVIDED FOR CONSTRUCTION WORKERS.
- AN AS-BUILT REPRODUCIBLE MYLAR SHALL BE SUBMITTED TO THE CITY OF TROY ENGINEERING DEPARTMENT BEFORE RESIGNATURE OF AN OCCUPANCY.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND BONDS FOR CONSTRUCTION BEING DONE WITHIN THE OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION RIGHT OF WAY AND THE CITY OF TROY RIGHT OF WAY UNDER THE JURISDICTION OF THE AFORESAID AGENCIES.
- SOIL BORINGS HAVE NOT BEEN SUPPLIED. CONTRACTOR TO VERIFY SOIL BEARING CAPACITY. INADEQUATE SOIL PROFILES OF LESS THAN 2,500 PSF MAY REQUIRE REDESIGN OF SITE FEATURES SUCH AS PAVEMENT, UTILITIES, AND FOOTINGS.
- SOIL BORINGS HAVE NOT BEEN SUPPLIED. CONTRACTOR TO VERIFY EXISTING GROUND WATER ELEVATION. IF EXISTING WATER TABLE IS FOUND TO BE WITHIN THE INFLUENCE OF PROPOSED UTILITIES OR DETENTION FACILITIES REDESIGN MAY BE REQUIRED.
- OWNERS SHALL PAY CITY OF TROY AND OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION INSPECTION FEES.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF TROY ENGINEERING DEPARTMENT FORTY EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION OF PUBLIC UTILITIES OR CONSTRUCTION IN THE STREET RIGHT OF WAY.
- THE CONTRACTOR IS TO ARRANGE PRE-CONSTRUCTION MEETING WITH GAS COMPANY, AMERITECH TELEPHONE COMPANY, DETROIT EDISON COMPANY, CITY OF TROY WATER & SEWER DEPARTMENTS AND THE OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION FOR ASSISTANCE TO DETERMINE PROBLEMS OF CONSTRUCTION AND POSSIBLE CONFLICTS WITH EXISTING UTILITIES DURING CONSTRUCTION.
- ENGINEERING HAS BEEN BASED OFF OF SURVEY PROVIDED BY OTHERS. DEVELOPER TO VERIFY ANY AND ALL EXISTING SITE FEATURES.
- PROPOSED BUILDING LEADS TO BE VERIFIED WITH MECHANICAL CONTRACTOR FOR PROPER DESIGN, LOCATION AND DEPTH.
- ALL GRADING TO BE DIRECTED TOWARDS ON-SITE STORM SYSTEM AND AWAY FROM BUILDINGS. GRADING NOT TO BE LESS THAN 0.5% IN LANDSCAPE AREAS OR 1% IN PAVEMENT AREAS.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF TROY WATER AND SEWER DEPARTMENTS AND OAKLAND COUNTY D.P.W. OR DRAIN COMMISSION AND ALL CONCERNED PUBLIC UTILITIES SEVENTY TWO (72) HOURS PRIOR TO THE START OF CONSTRUCTION.
- LOCATION OF ALL EXISTING UTILITIES SHOWN IN AREA OF PROPOSED CONSTRUCTION ARE APPROXIMATE AND ARE NOT GUARANTEED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES IN THE CONSTRUCTION AREA AND WILL BE HELD RESPONSIBLE FOR AND DAMAGE TO SUCH EXISTING UTILITIES FROM HIS OPERATION.
- ROAD, ROAD SHOULDERS, ROAD PAVEMENT, PARKING PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, DITCHES, DRAINAGE PIPE AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, HARBORS, STREET AND PUBLIC INFORMATION SIGNS, ADVERTISEMENT SIGNS, ETC., DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO CONDITION PRIOR TO CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
- ALL WATER MAINS, SANITARY SEWERS (AND LEADS) AND STORM SEWERS UNDER PROPOSED OR EXISTING PAVEMENT OR WITHIN 5 FEET OF PAVEMENT TO BE SAND BACKFILLED AND COMPACTED TO 95% OPTIMUM DENSITY (PROCTOR). SAND BACKFILLING TO BE INCIDENTAL TO CONTRACT.

**PAVING NOTES**

- ALL MATERIALS AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE OAKLAND COUNTY ROAD COMMISSION AND THE CITY OF TROY.
- ALL GRAVEL SHOULDERS AND ROAD DITCHES SHALL BE PER PLAN AND STABLE PRIOR TO ACCEPTANCE BY THE OAKLAND COUNTY ROAD COMMISSION.
- ALL TOPSOIL SHALL BE REMOVED FROM ROAD R.O.W. PRIOR TO CUTTING OR FILLING.
- ROAD DITCHES AND DRAINAGE SWALES HAVING GRADES OF 2.00% OR GREATER SHALL BE SLOTTED AND REEDED IN PLACE.
- VEGETATION MUST BE STABLE PRIOR TO RELEASE OF CONSTRUCTION GUARANTEE.
- ADDITIONAL SUB-BASE AND/OR UNDERDRAINS MAY BE REQUIRED IF POOR SUB-SOIL OR NET CONDITIONS ARE ENCOUNTERED DURING PAVEMENT CONSTRUCTION AS DIRECTED BY THE OAKLAND COUNTY ROAD COMMISSION (SEE RESULTS OF BORINGS).



**SITE DATA:**  
 SITE AREA = 2.0AC (87,120 SF.)  
 MIN. AREA REQUIRED =  
 EXISTING ZONING:  
 SITE TO NORTH: IR  
 SITE TO SOUTH: MR  
 SITE TO EAST: IR  
 SITE TO WEST: IR  
 BUILDING 1:  
 MANUFACTURING AREA = 13,042 SF.  
 OFFICE AREA = 2,233 SF.  
 SHIPPING AREA = 1,700 SF.  
 SUBTOTAL = 16,975 SF.  
 BUILDING 2:  
 LABORATORY AREA = 5,400 SF.  
 MACHINE SHOP AREA = 3,780 SF.  
 PROP. WAREHOUSE AREA = 5,400 SF.  
 SUBTOTAL = 14,580 SF.  
 TOTAL BUILDING AREA = 31,555 SF.  
 LOT COVERAGE = 36.22%  
 MAX. ALLOWED LOT COVERAGE = 40%  
 BUILDING SETBACKS:  
 FRONT: 30 FT.  
 SIDE: 10 FT.  
 REAR: 10 FT.  
 12.33'  
 20 FT.  
 PARKING REQUIRED:  
 INDUSTRIAL = 1SP/500 SF. x 26,155 SF = 48SP  
 WAREHOUSING = 1SP/1500 SF. x 5,400 SF. = 4SP  
 TOTAL REQUIRED = 52SP  
 PARKING PROVIDED = 46SP. (INCLUDING 2 BF. SPACES)  
 REQUIRED LANDSCAPE AREA = 20% OF GROSS SITE  
 20% x 87,120 SF. = 17,424 SF.  
 PROVIDED LANDSCAPE AREA = 19,246 SF.



**LOCATION MAP**  
NO SCALE

**AR DECKER AND ASSOCIATES, INC.**  
 Civil & Structural Survey  
 Consulting Engineers  
 1878 Star Batt Drive  
 Rochester Hills, MI 48309  
 (248) 243-3940 P  
 (248) 243-3944 F

CLIENT  
**ND INDUSTRIES, INC.**

PROJECT TITLE  
**PROPOSED WAREHOUSE ADDITION**

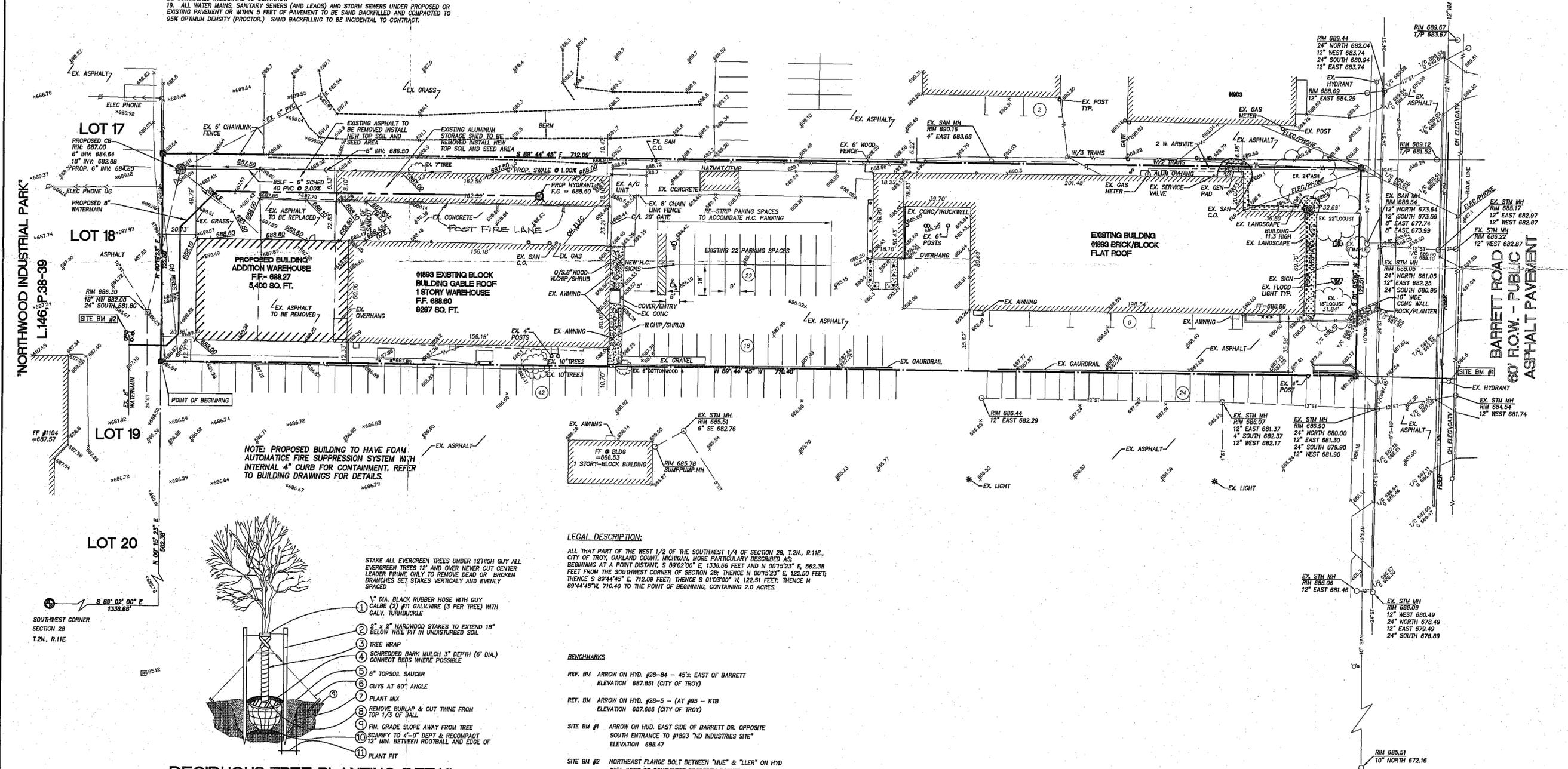
RECEIVED  
OCT 27 2011  
CITY OF TROY  
BUILDING DEPT.

SHEET TITLE  
**SITE PLAN**

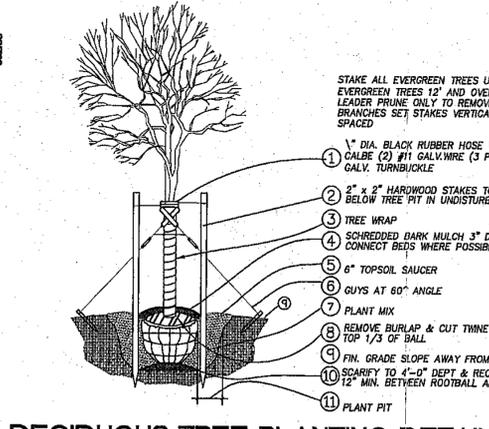
DATE	DESCRIPTION
10-18-2011	ISSUED FOR CITY SUBMITTAL
10-19-2011	AMENDED GRADES
10-27-11	REVISED GRADING



SHEET NO.  
**SP-1**  
PROJECT NO.  
11-0292



NOTE: PROPOSED BUILDING TO HAVE FOAM AUTOMATIC FIRE SUPPRESSION SYSTEM WITH INTERNAL 4" CURB FOR CONTAINMENT. REFER TO BUILDING DRAWINGS FOR DETAILS.



**DECIDUOUS TREE PLANTING DETAIL**  
NO SCALE

**LEGAL DESCRIPTION:**  
 ALL THAT PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 28, T.2N., R.11E., CITY OF TROY, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS: BEGINNING AT A POINT DISTANT, S 89°02'00" E, 1336.66 FEET AND N 0°15'23" E, 582.38 FEET FROM THE SOUTHWEST CORNER OF SECTION 28; THENCE N 0°15'23" E, 122.50 FEET; THENCE S 89°44'45" E, 712.09 FEET; THENCE S 01°03'00" W, 122.51 FEET; THENCE N 89°44'45" W, 710.40 TO THE POINT OF BEGINNING, CONTAINING 2.0 ACRES.

**BENCHMARKS**  
 REF. BM ARROW ON HYD. #28-84 - 45± EAST OF BARRETT ELEVATION 687.851 (CITY OF TROY)  
 REF. BM ARROW ON HYD. #28-5 - (AT #95 - KTB) ELEVATION 687.888 (CITY OF TROY)  
 SITE BM #1 ARROW ON HUD. EAST SIDE OF BARRETT DR. OPPOSITE SOUTH ENTRANCE TO #1893 "ND INDUSTRIES SITE" ELEVATION 688.47  
 SITE BM #2 NORTHEAST FLANGE BOLT BETWEEN "MUE" & "TLER" ON HYD 25± WEST OF SOUTHWEST PROPERTY CORNER ELEVATION 688.67

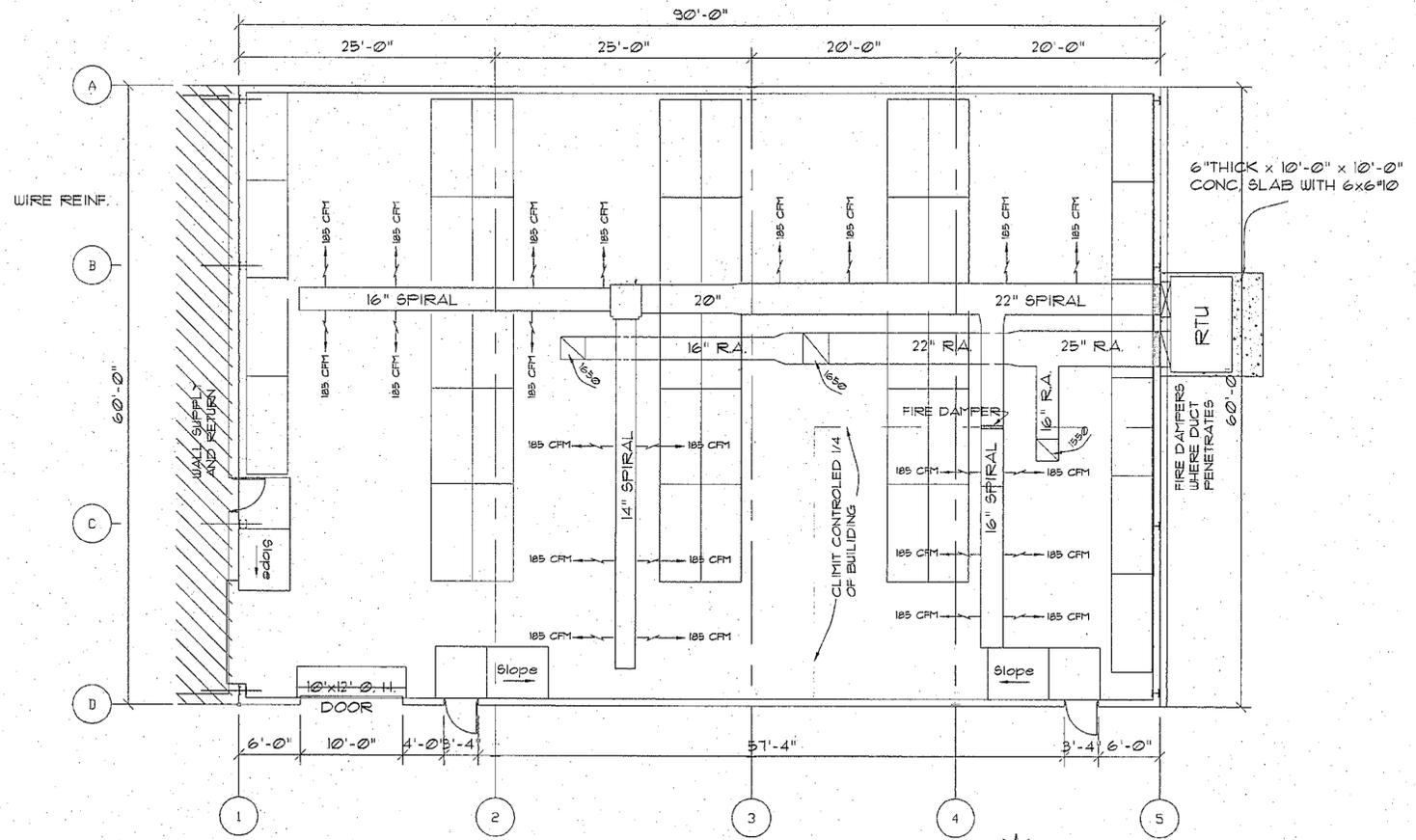
SOUTHWEST CORNER SECTION 28 T.2N., R.11E.

SCALE: 1" = 30'  
 CAUTION: THE LOCATION AND DEPTH OF UTILITIES SHOWN ARE ONLY APPROXIMATE. NO GUARANTEE IS GIVEN FOR THE LOCATION OR DEPTH OF UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF UTILITIES PRIOR TO THE START OF CONSTRUCTION.  
 BEFORE YOU DIG CALL MISS DIG 1-800-482-7171 (TOLL FREE)

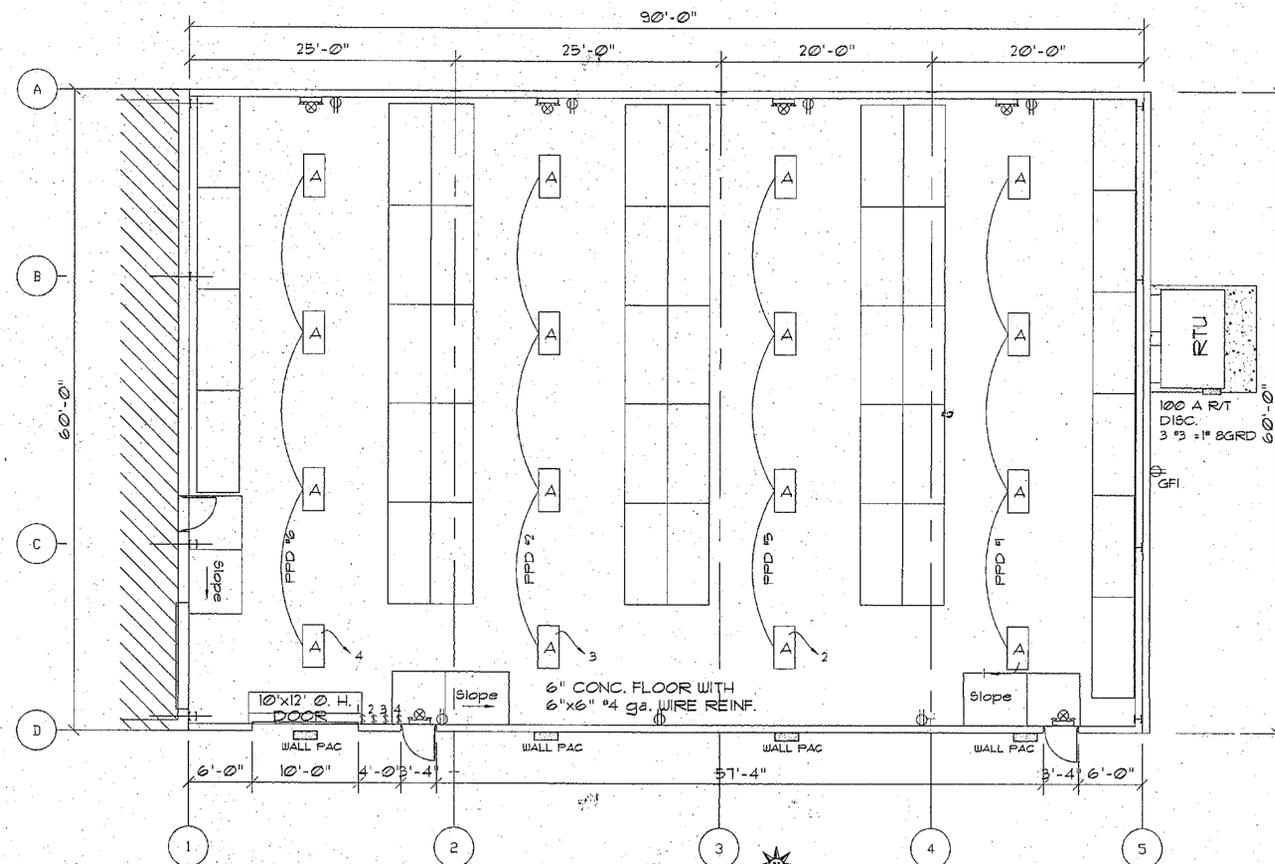
RECEIVED  
NOV 02 2011

RTU	EER	125 TON	HEATING	MCA	MAX
BRIANT	10.8	140,000 BTU	OUT PUT	68.2	FUSE
ELECTRICAL 200/230 - 3P 60		OA 150 CFM			

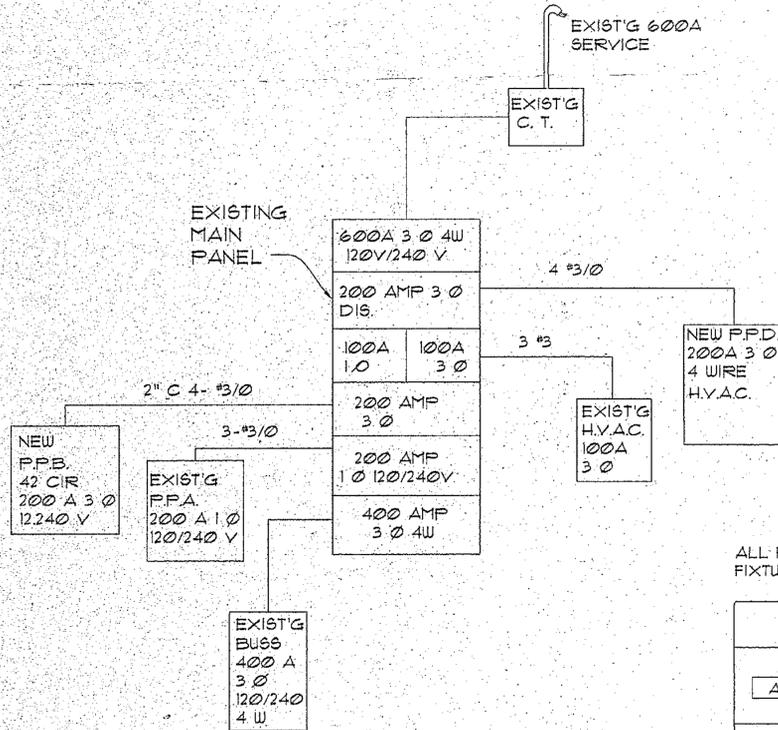
NOTES:  
RTU WILL HAVE ECONOMIZER, ZONED CONTROLS, ZONE DAMPERS, AND BYPASS BAROMETRIC.



MECHANICAL PLAN  
SCALE 1/8" = 1'-0"



ELECTRICAL PLAN  
SCALE 1/8" = 1'-0"



RISER DIAGRAM  
NO SCALE

EXISTING	30.8KW	110KW
NEW	10.4KW	33.25KW
TOTAL	41.2KW	143.25KW
516 AMPS		

ALL FIXTURE ARE TO BE "LITHONIA LIGHTING" FIXTURES OR EQUAL.

A	1BZ654L HIGHBAY T5HO 6 LAMP
EXIT	CAT: ECR M6 LED COMBO EXIT EXIT WITH EMERG. LIGHTING
EXIT SIGN	EXRELM6 LED EXIT SIGN
EMERGENCY LIGHT	CAT: EU2 M6 EMERGENCY LIGHT 2 HEAD
WALL PAK	WALL-PAK TWH503 120V 150 WATT PHOTOCONTROLLED
DUPLEX	125V 20AMP. DUPLEX

MECHANICAL & ELECTRICAL  
INDUSTRIES, INC.  
1893 BARRETT DRIVE  
TROY, MICHIGAN 48064

PRELIMINARY

WORKING DRAWING  
4-18-11

ARCHITECT

FREDERICK H. REISS  
4305 LESSING ST.  
WATERFORD, MI 48329  
NO. 11482

DRAWN BY

CHECKED BY

REVISED

5-15-11 BUILDING ORIENTATION

6-14-11 DOOR LOCATION ADD 30 TO FIRE DOOR

JOB NO.

11-160

SHEET NO.

RECEIVED

NOV 02 2011

CITY OF TROY  
BUILDING DEPT.

P:\ind industries April 18.dwg, 10/26/2011 12:39:11 PM, Ted Taylor





APPROVED



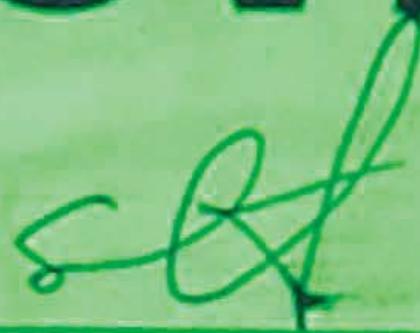
TYPE OF INSPECTION:

TRENCH

**APPROVED**

9/17/12

Date



City of Troy Bldg. Dept.

**From:** [Rick Kessler](#)  
**To:** [jgutowski@ndindustries.com](mailto:jgutowski@ndindustries.com)  
**Subject:** variance  
**Date:** Monday, September 17, 2012 5:52:32 PM

---

Hi Joe,

The addition on the back of the building is going to need a variance from the BZA (Board of Zoning Appeals). A 20' setback from the rear property is required. Applications are available on line. The application has a cover sheet that outlines what has to be done. I am working on water main easement issues; I will keep you posted. Call or email me if you have questions.











