



**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER RESOURCES DIVISION  
PERMIT**

**ISSUED TO:**

ACR LLC  
Bruce Michael  
2617 Beacon Hill Drive  
Auburn Hills, MI 48326

<b>Permit No.</b>	15-63-0038-P
<b>Issued</b>	June 2, 2015
<b>Extended</b>	
<b>Revised</b>	
<b>Expires</b>	June 2, 2020

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and specifically:

- |  |   |
|--|---|
| <input type="checkbox"/> Part 301, Inland Lakes and Streams                        | <input type="checkbox"/> Part 315, Dam Safety                           |
| <input type="checkbox"/> Part 325, Great Lakes Submerged Lands                     | <input type="checkbox"/> Part 323, Shorelands Protection and Management |
| <input checked="" type="checkbox"/> Part 303, Wetlands Protection                  | <input type="checkbox"/> Part 353, Sand Dunes Protection and Management |
| <input checked="" type="checkbox"/> Part 31, Floodplain/Water Resources Protection |   |

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

**Permitted Activity:** Place 4,575 cubic yards of fill material and 6 cubic yards of riprap within 0.24 acres of wetlands; place 1,718 cubic yards of fill material and 12 cubic yards of riprap within the 100-year floodplain and floodway of Sargent Creek, as delineated in the FEMA map, number 26125C0392F and 26125C0391F, effective date September 29, 2006, for the purposes of constructing condominium units, stormwater detention basins, and installing storm, sanitary, and water main utilities. Excavate approximately 4,032 cubic yards of material from within the 100-year floodplain as compensation for lost storage capacity.

The 100-year floodplain ranges from 807.5 to 818.5 NAVD 88 at this location.

All fill for buildings built in the 100 year flood storage area must be engineered such that it complies with FEMA Technical Bulletin 10-01.

All work shall be completed in accordance with the attached plans and specific terms and conditions of this permit.

See pages 2-4 for special conditions specific to this permit.

**Water Course Affected:** Sargent Creek

**Property Location:** Oakland County, City of Rochester Hills, Section 9

Subdivision, Lot                      Town/Range 3N, 11E    Property Tax No. 15-09-476-035/451-002

**Authority granted by this permit is subject to the following limitations:**

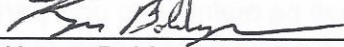
- Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31, Water Resources Protection, of the NREPA.
- This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.

- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Act of 1974 and comply with each of the requirements of that Act.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of the MDEQ.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
- L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31, and wetland).
- M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
- N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the State (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the State and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
- O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
- P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.
- Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the MDEQ. The MDEQ will review the request and if approved, will provide written notification to the new owner.
- R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
- S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
- T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent.
- U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
- V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
- W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the waterbody are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
- X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the MDNR, Fisheries Division.
- Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

- 1) All work shall be completed in accordance with plans prepared by GreenTech Engineering, dated October 23, 2014, being sheets 1-20 entitled Andover Woods Condominiums. Said plans are kept on file at the MDEQ's Water Resources Division (WRD), Southeast Michigan District Office.
- 2) Authority granted by this permit does not waive permit or program requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA). To locate the Soil Erosion Program Administrator for your county visit [www.mi.gov/degstormwater](http://www.mi.gov/degstormwater) and look for Soil Erosion and Sedimentation Control Program under "Related Links".
- 3) A storm water discharge permit may be required under the Federal Clean Water Act for construction activities that disturb one or more acres of land and discharge to surface waters. For sites over five (5) acres, the permit coverage may be obtained by a Part 91, Soil Erosion and Sedimentation Control (SESC) permit, or coverage as an Authorized Public Agency (APA), and filing a "Notice of Coverage" form to the MDEQ's WRD. For sites with disturbance from one acre up to five acres, storm water coverage is automatic once the SESC permit is obtained or if work is being conducted by an APA. These one to five acre sites are not required to apply for coverage, but are required to comply with storm water discharge permit requirements. Information on the storm water discharge permit is available from the Water Resource Division's Storm Water Permit Program at [www.michigan.gov/soilerosion](http://www.michigan.gov/soilerosion) under the "Construction Storm Water Info".
- 4) Prior to the initiation of any permitted construction activities, a sedimentation barrier shall be constructed immediately down gradient of the construction site. Sedimentation barriers shall be specifically designed to handle the sediment type, load, water depth, and flow conditions of each construction site throughout the anticipated time of construction and unstable site conditions. The sedimentation barrier shall be maintained in good working order throughout the duration of the project. Upon project completion, the accumulated materials shall be removed and disposed of at an upland (non-wetland, non-floodplain) site and stabilized with seed and mulch. The sedimentation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.
- 5) All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity, and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.
- 6) All raw earth within 100 feet of a lake, stream, or wetland that is not brought to final stabilization by the end of the active growing season shall be temporarily stabilized with mulch blankets in accordance with the following dates: September 20<sup>th</sup> for the Upper Peninsula, October 1<sup>st</sup> for the Lower Peninsula north of US-10, and October 10<sup>th</sup> for the Lower Peninsula south of US-10.
- 7) All fill/backfill shall consist of clean inert material that will not cause siltation nor contain soluble chemicals, organic matter, pollutants, or contaminants. All fill shall be contained in such a manner so as not to erode into any surface water, floodplain, or wetland. All raw areas associated with the permitted activity shall be stabilized with sod and/or seed and mulch, riprap, or other technically effective methods as necessary to prevent erosion.
- 8) Prior to the start of construction, all adjacent non-work wetland areas shall be protected by properly trenched sedimentation barrier to prevent sediment from entering the wetland. Orange construction fencing shall be installed as needed to prohibit construction personnel and equipment from entering or performing work in these areas. Fence shall be maintained daily throughout the construction process. Upon project completion, the accumulated materials shall be removed and disposed of at an upland site, the sedimentation barrier shall then be removed in its entirety and the area restored to its original configuration and cover.

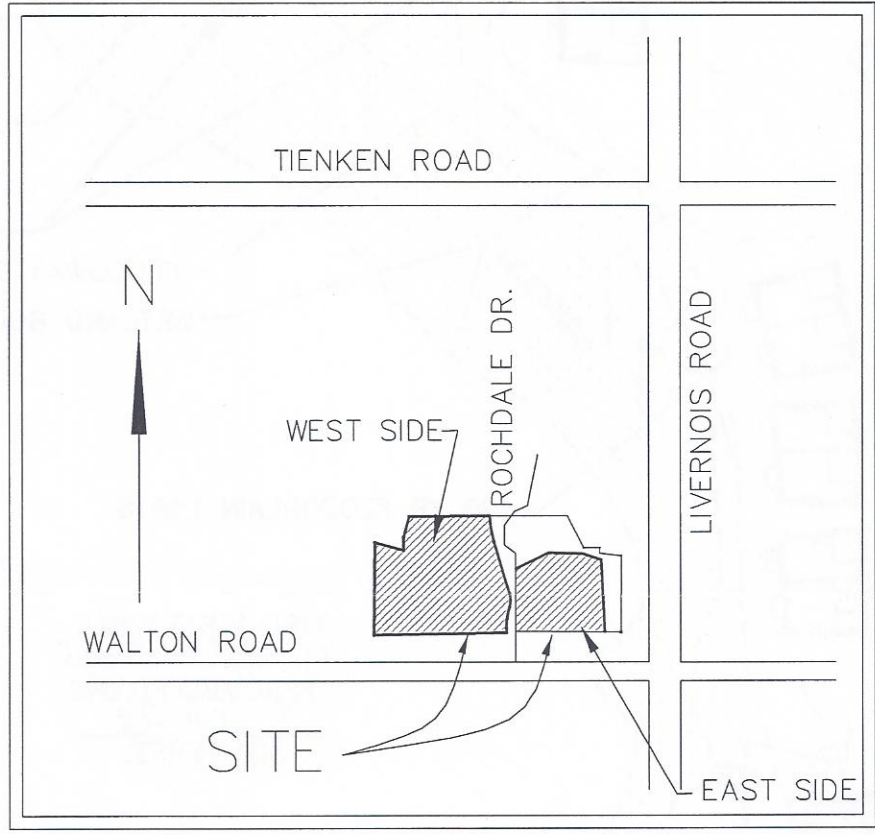
- 9) The compensating cut (excavations) for floodplain fill, as authorized by this permit, shall be completed prior to, or concurrently with, the placement of the fill. The compensating cut and fill areas shall be properly stabilized to prevent soil erosion and off site sedimentation in conformance with Part 91, Soil Erosion and Sedimentation Control, of the NREPA.
- 10) All fill for buildings built in the 100 year flood storage area must be engineered such that it complies with FEMA Technical Bulletin 10-01.
- 11) The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval or authorization, necessary to conduct the activity.
- 12) No fill, excess soil, or other material shall be placed in any wetland or surface water area not specifically authorized by this permit, its plans, and specifications.
- 13) This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.
- 14) The permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.
- 15) This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning at the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.

Should you require further information regarding this permit please contact Karyn Boldys at 586-256-7274; [boldysk@michigan.gov](mailto:boldysk@michigan.gov); or in writing at DEQ, WRD, 27700 Donald Court, Warren, MI 48092-2793.

By:   
Karyn Boldys  
Water Resources Division

cc: City of Rochester Hills Clerk  
Oakland County Drain Commissioner  
Oakland Soil Erosion Officer  
Don Berninger, Brooks Williamson Associates, Inc.

DEQ-WRD-WRU  
 FILE# 15-63-0038 P  
 APPROVED PLANS  
 1 OF 32  
 SEMI DIST.



LOCATION MAP:  
 NO SCALE

FEB 20 2015

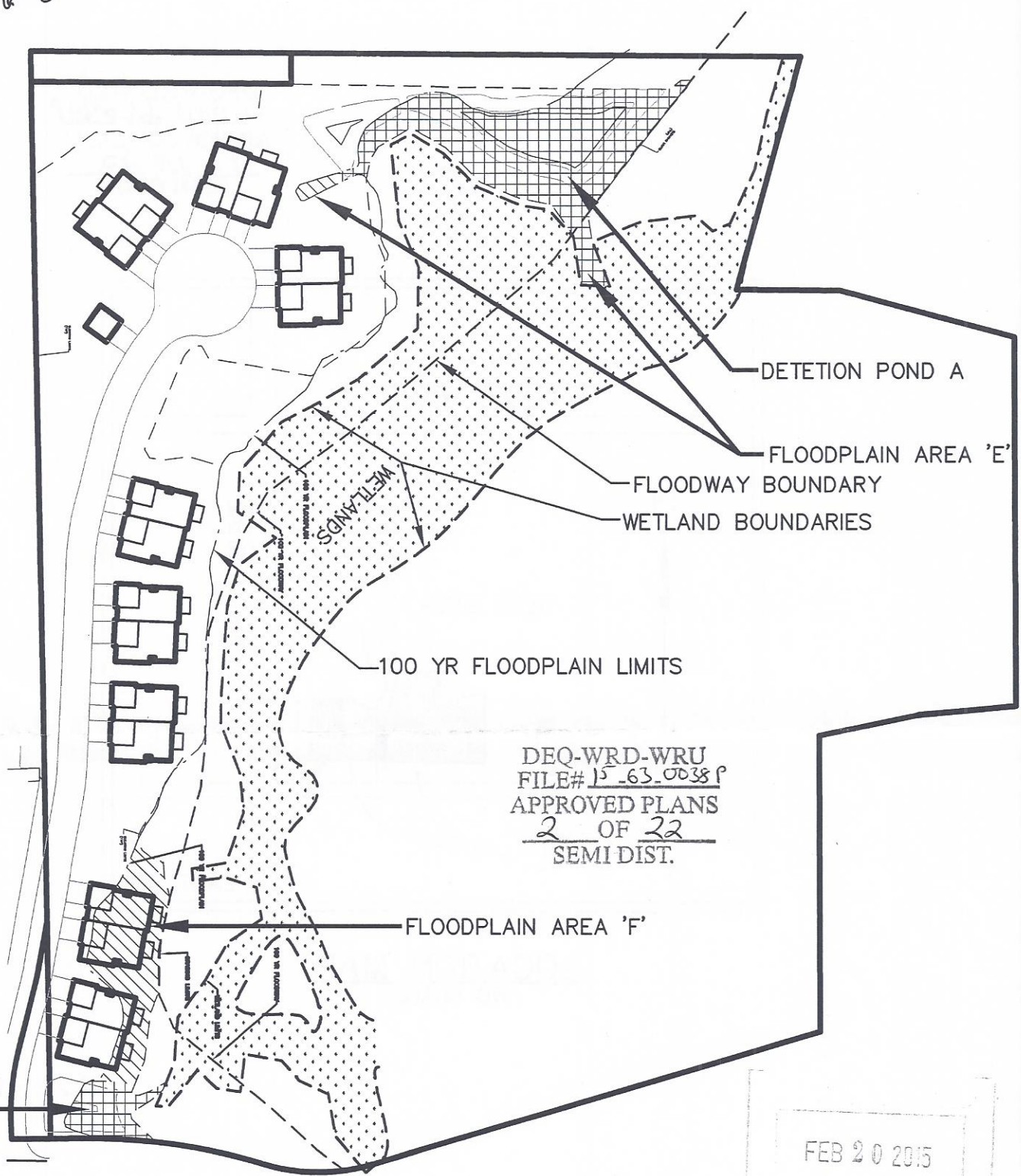


**GREENTECH**  
 ENGINEERING, INC.

CIVIL ENGINEERS & LAND SURVEYORS

51111 W. Pontiac Trail  
 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701

CLIENT: <b>ANDOVER WOODS, LLC.</b>		DATE: 10-23-14	
<b>LOCATION MAP</b>		DRAWN BY: RJF	
		CHECKED BY: DJL	
<b>ANDOVER WOODS CONDOMINIUMS</b> SECTION: 9    TOWNSHIP: 3N    RANGE: 11E CITY OF ROCHESTER HILLS OAKLAND COUNTY MICHIGAN			
		FBK: 1 CHF:	12-120 FT.
		SCALE HOR 1"=0 FT. VER 1"= FT.	



DEQ-WRD-WRU  
 FILE# 15-63-0038 P  
 APPROVED PLANS  
2 OF 22  
 SEMI DIST.

FEB 20 2015



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 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701

CLIENT: ANDOVER WOODS, LLC.		DATE: 10-23-14	
SITE PLAN-WEST		DRAWN BY: RJF	
		CHECKED BY: DJL	
ANDOVER WOODS CONDOMINIUMS SECTION: 9 TOWNSHIP: 3N RANGE: 11E CITY OF ROCHESTER HILLS OAKLAND COUNTY MICHIGAN		SCALE: 0 FT. VER 1"= FT.	
		FBK: CHF:	2A 12-120

FLOODPLAIN AREA 'G'

WETLAND FILL AREA E

FLOODPLAIN AREA 'H'

DETENTION POND C

WETLAND FILL AREA D

FLOODPLAIN AREA 'I'

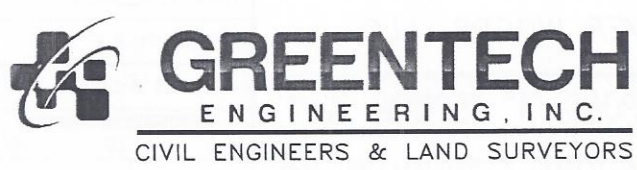
WETLAND BOUNDARY

FLOODWAY BOUNDARY

100 YR FLOODPLAIN LIMITS

DEQ-WRD-WRU  
FILE# 15 63 0038 P  
APPROVED PLANS  
3 OF 22  
SEMI DIST.

FEB 20 2015

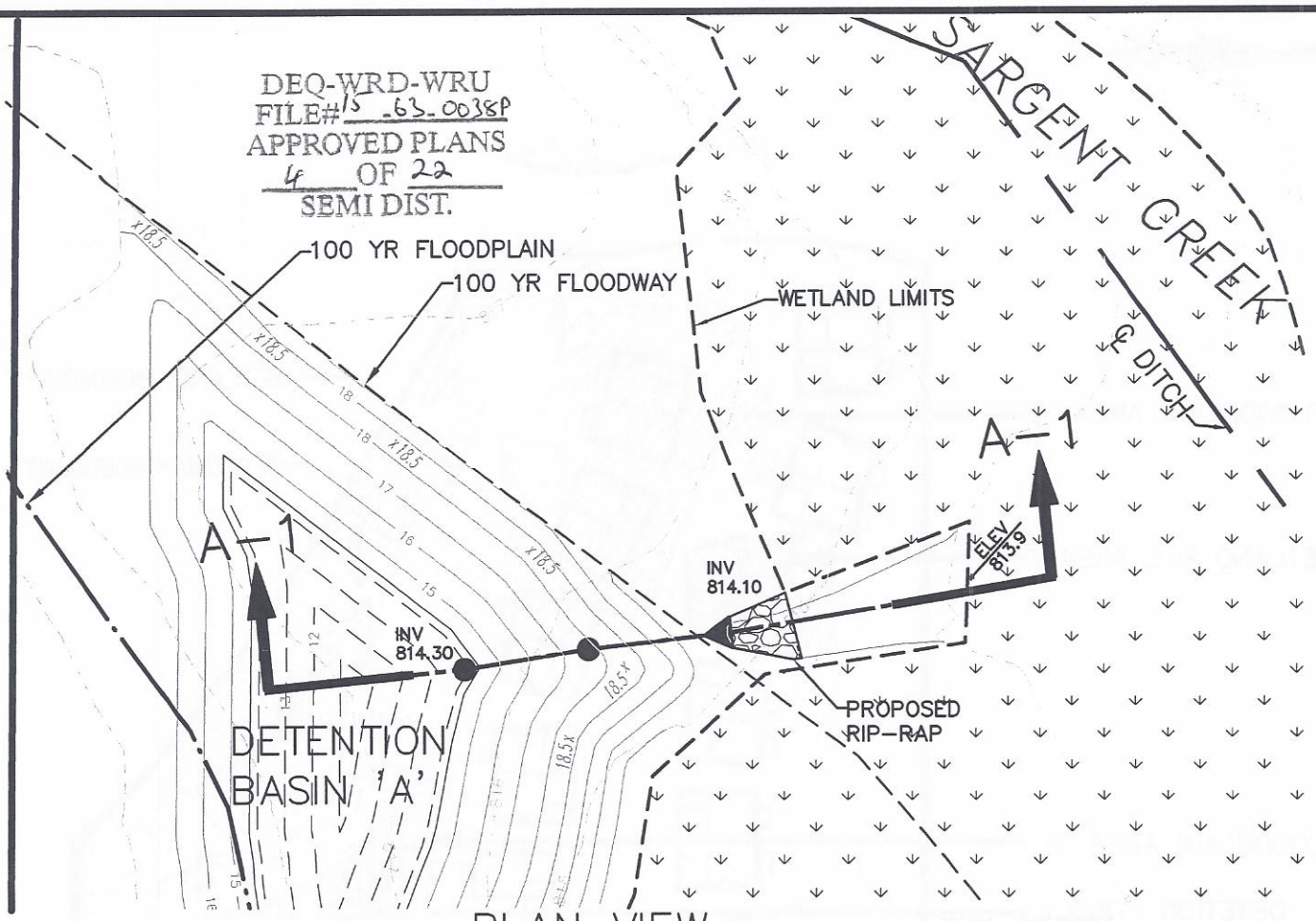


51111 W. Pontiac Trail  
Wixom, MI 48393  
Phone: (248) 668-0700  
Fax: (248) 668-0701

CLIENT:	ANDOVER WOODS, LLC.		DATE:	10-23-14
	<b>SITE PLAN-EAST</b>		DRAWN BY:	RJF
	ANDOVER WOODS CONDOMINIUMS		CHECKED BY:	DJL
	SECTION: 9	TOWNSHIP: 3N	RANGE: 11E	
	CITY OF ROCHESTER HILLS		FBK:	2B
	OAKLAND COUNTY		CHF:	
	MICHIGAN		SCALE:	HOR 1"=0 FT. VER 1"=0 FT.

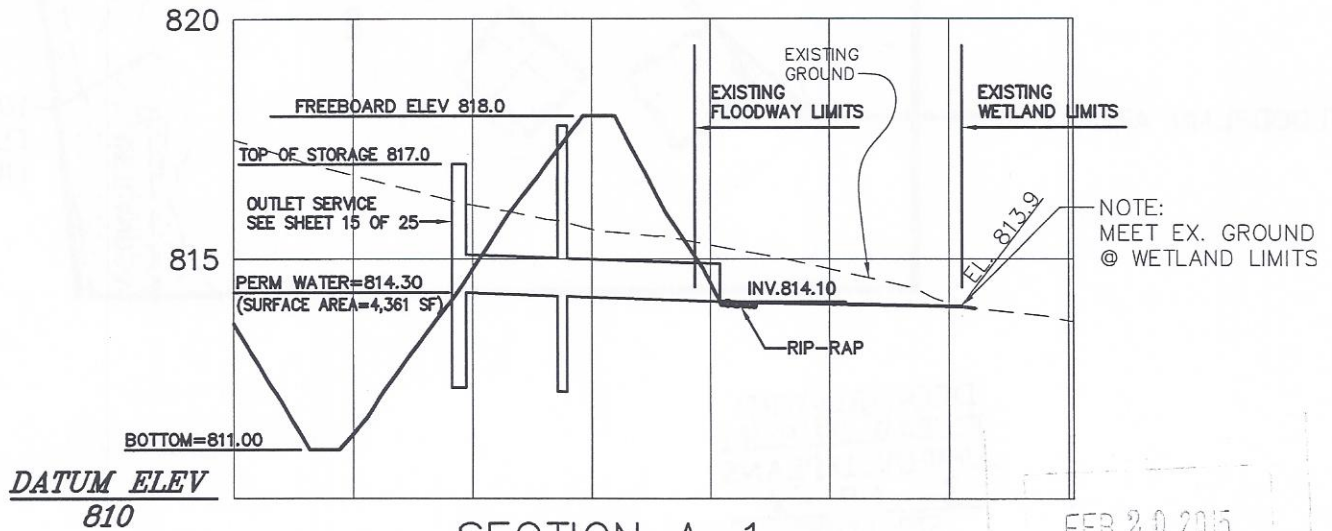
12-120

DEQ-WRD-WRU  
 FILE# 15-63-0038P  
 APPROVED PLANS  
 4 OF 22  
 SEMI DIST.



PLAN VIEW  
 DETENTION BASIN "A"  
 SCALE 1"=40' HORIZ.

SEE OUTLET  
 DETAIL ON SHEET 9



SECTION A-1  
 SCALE 1"=40' HORIZ., 1"=4' VERT.

FEB 20 2015



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CIVIL ENGINEERS & LAND SURVEYORS

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 Wixom, MI 48393  
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 Fax: (248) 668-0701

CLIENT:

ANDOVER WOODS, LLC.

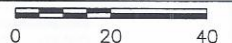
**DETENTION POND 'A' SECTION 'A-1'**

ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL



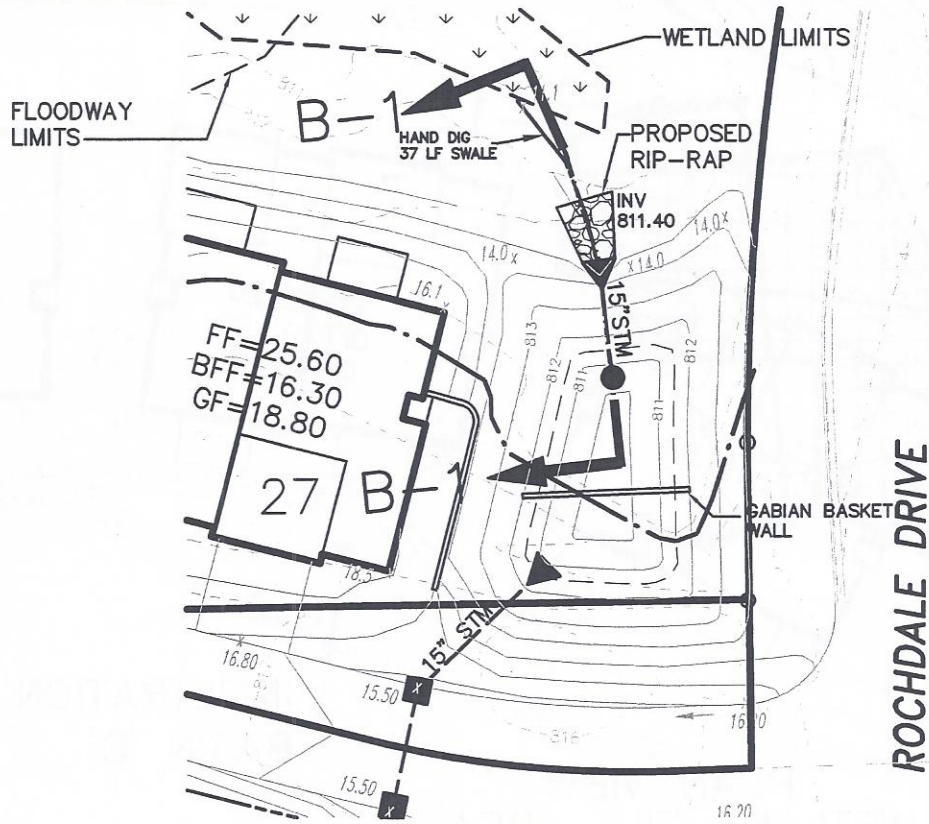
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CHF:

12-120  
 3

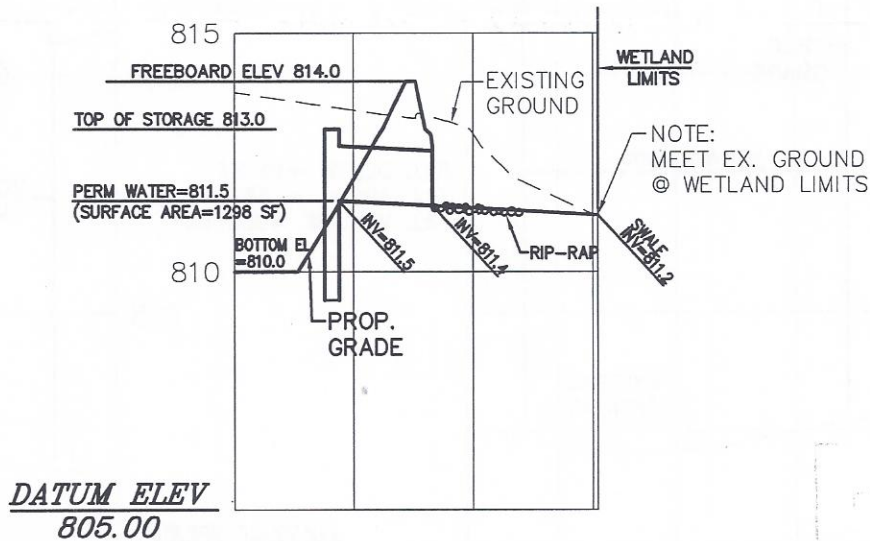
SCALE HOR 1"=40 FT.  
 VER 1"=4 FT.





DEQ-WRD-WRU  
FILE# 15-63-0038P  
APPROVED PLANS  
5 OF 22  
SEMI DIST.

PLAN VIEW  
DETENTION BASIN "B"  
SCALE 1"=40' HORIZ.



SECTION B-1  
SCALE 1"=40' HORIZ.  
1"=4' VERT.

FEB 20 2015



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CIVIL ENGINEERS & LAND SURVEYORS

5111 W. Pontiac Trail  
Wixom, MI 48393  
Phone: (248) 668-0700  
Fax: (248) 668-0701

CLIENT:

ANDOVER WOODS, LLC.

**DETENTION POND 'B' SECTION 'B-1'**

ANDOVER WOODS CONDOMINIUMS  
SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
CITY OF ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

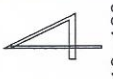
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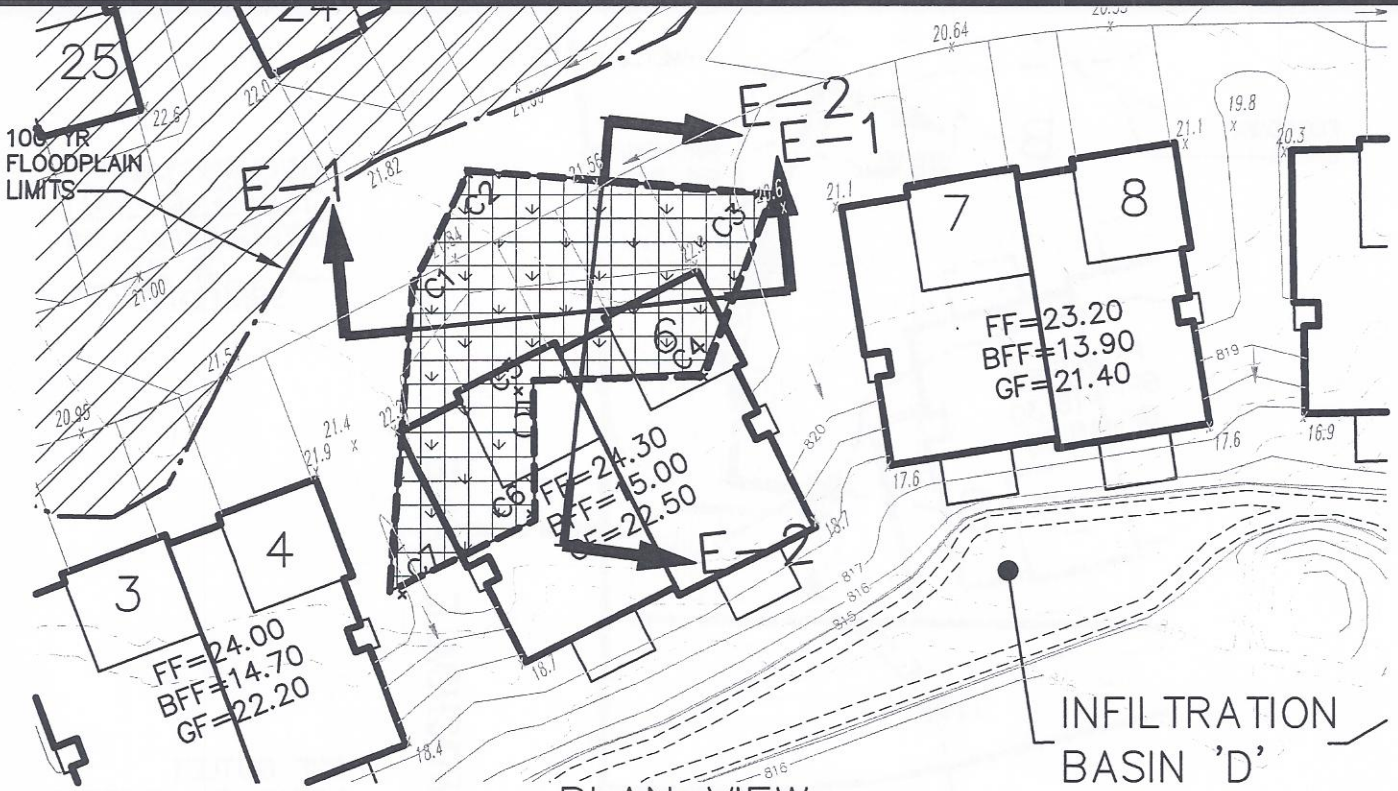


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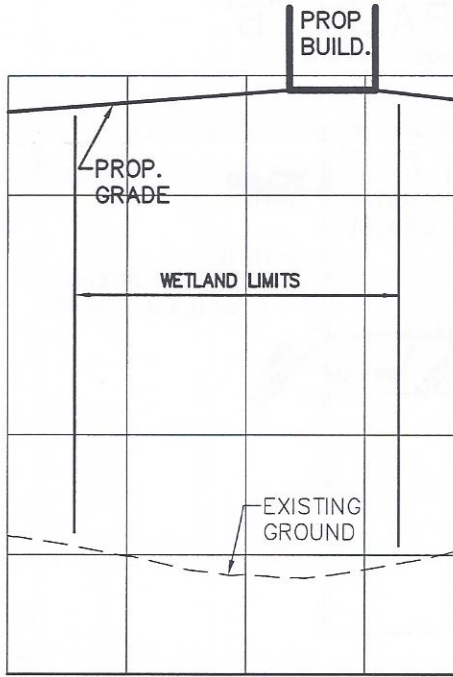
SCALE HOR 1"=40 FT.  
VER 1"=4 FT.





PLAN VIEW  
WETLAND FILL AREA E  
SCALE 1"=40' HORIZ.

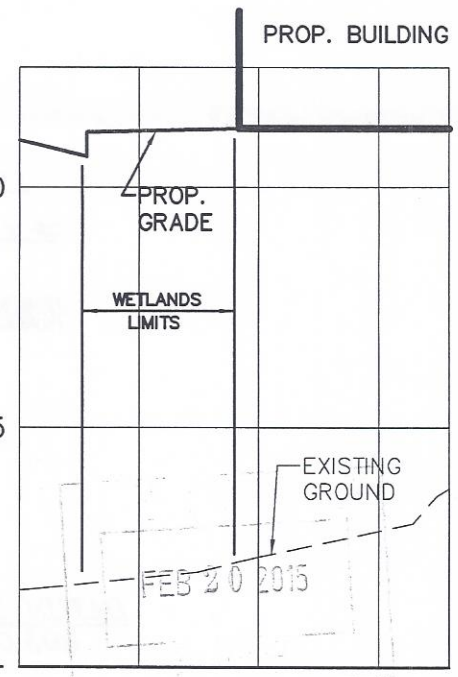
DEQ-WRD-WRU  
FILE# 15\_63\_0038-P  
APPROVED PLANS  
6 OF 23  
SEMI DIS



FILL DEPTH = 10 FT  
FILL AREA = 3586 SF  
FILL VOLUME = 960 CY

DATUM ELEV  
810.00

WETLAND SECTION E-1  
SCALE 1"=40' HORIZ., 1"=4' VERT.



DATUM ELEV  
810.00

WETLAND SECTION E-2  
SCALE 1"=40' HORIZ., 1"=4' VERT.



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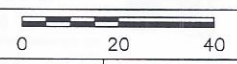
**WETLAND FILL AREA 'E'**

ANDOVER WOODS CONDOMINIUMS  
SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
CITY OF ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL



FBK:

CHF:

12-120  
5

SCALE HOR 1"=40 FT.  
VER 1"= FT.

DEQ-WRD-WRU  
 FILE# 15-63-0038P  
 APPROVED PLANS  
 7 OF 22  
 SEMI DIST.

WETLAND LIMITS

SARGENT CREEK

WETLANDS

100YR FLOODWAY LIMITS

100YR FLOODPLAIN LIMITS

DETENTION  
 BASIN 'C'

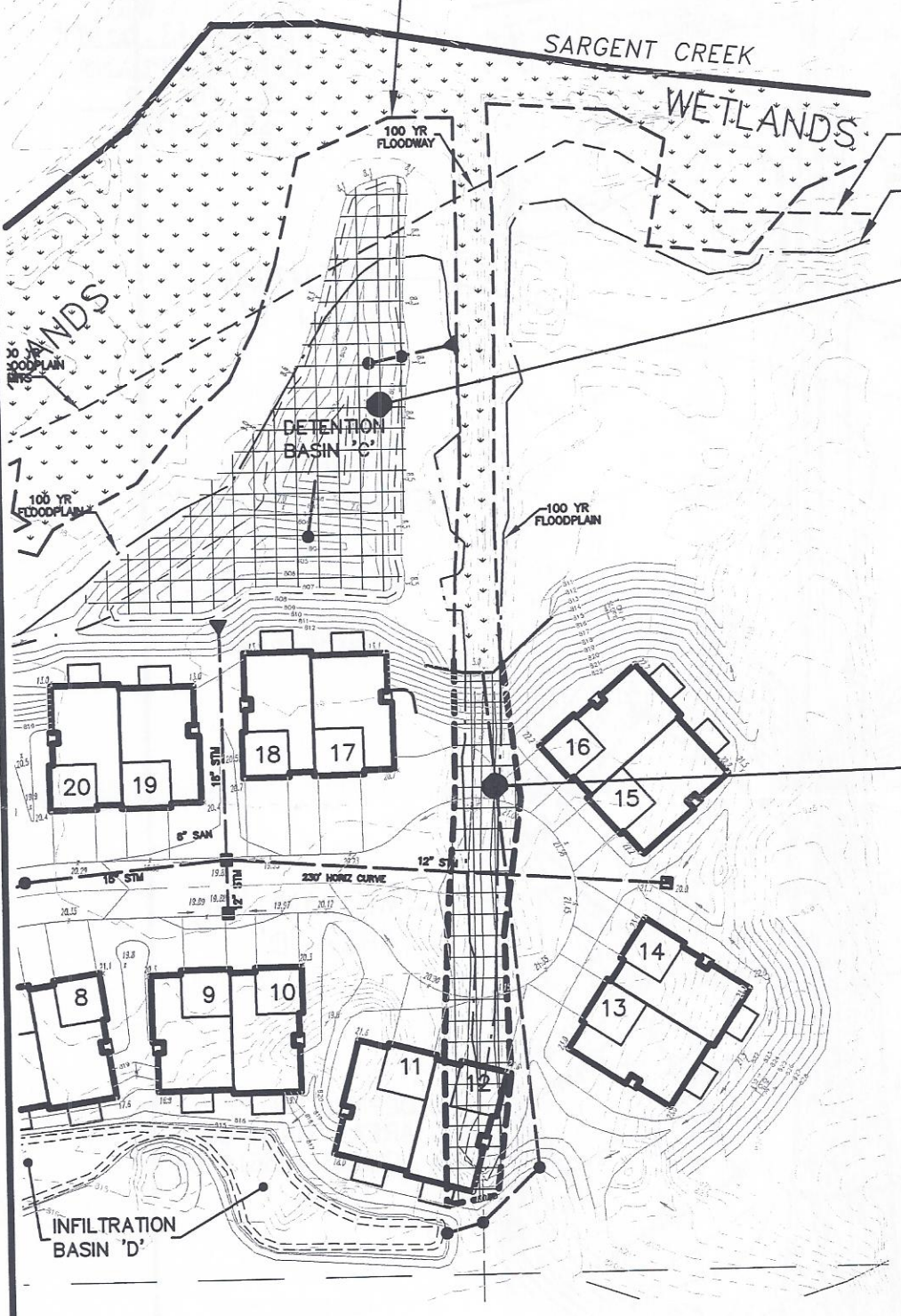
PLAN VIEW  
 DETENTION BASIN 'C'

&  
 WETLAND FILL  
 AREA 'D'  
 SCALE 1"=50' HORIZ.

WETLAND FILL  
 AREA 'D'

FILL DEPTH= 14 FT  
 FILL AREA= 6975 SF  
 FILL VOLUME= 3615 CY

FEB 20 2015



**GREENTECH**  
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CIVIL ENGINEERS & LAND SURVEYORS

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 Wixom, MI 48393  
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 Fax: (248) 668-0701

CLIENT:  
 ANDOVER WOODS, LLC.

WETLAND FILL AREA 'D' & DETENTION BASIN 'C'

ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL



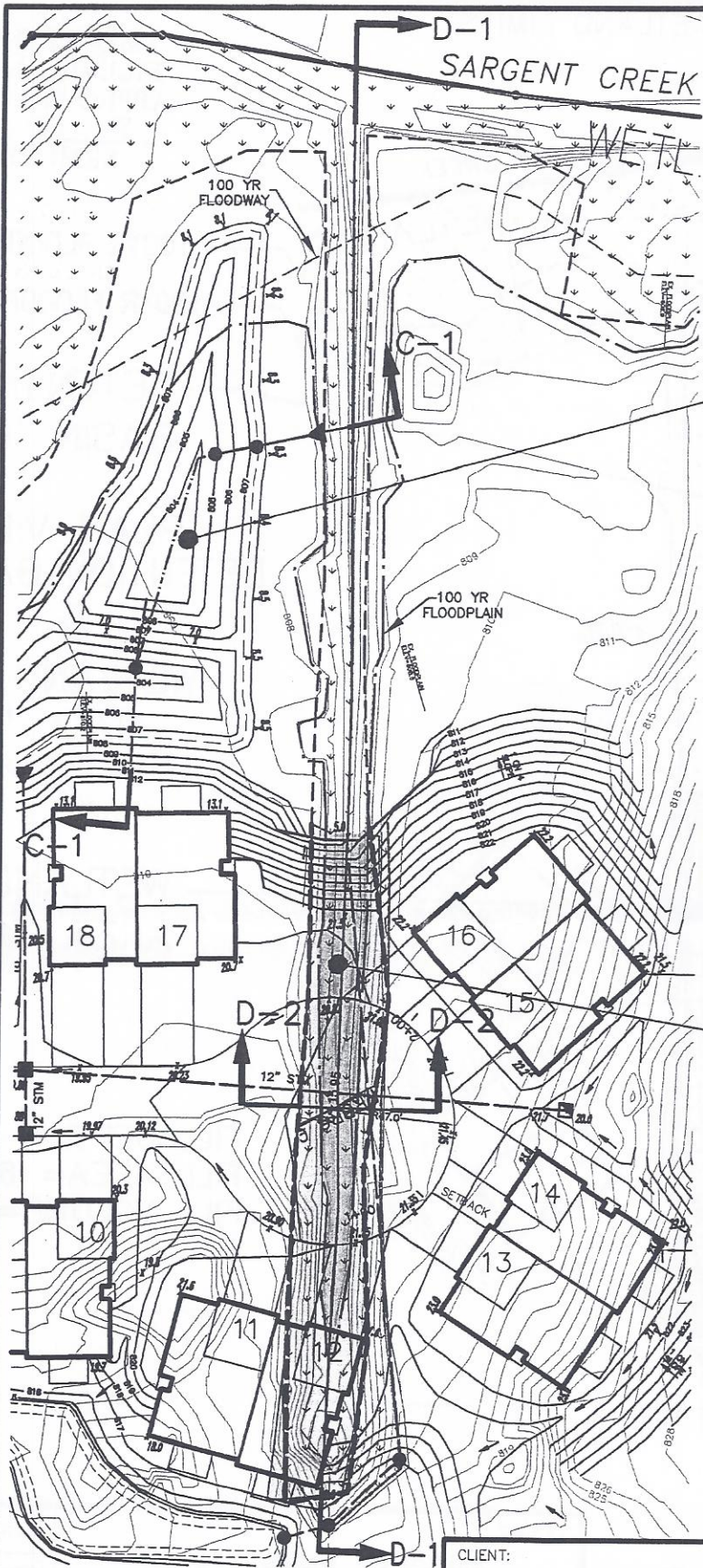
FBK:

CHF:

**6A**  
 12-120

SCALE HOR 1"=80 FT.  
 VER 1"= FT.

DEQ-WRD-WRU  
 FILE# 15-63-0038 P  
 APPROVED PLANS  
 8 OF 22  
 SEMI DIST.



DETENTION  
 BASIN 'C'

PLAN VIEW  
 DETENTION BASIN 'C'  
 &  
 WETLAND FILL  
 AREA 'D'  
 SCALE 1"=50' HORIZ.

WETLAND FILL  
 AREA 'D'

FILL DEPTH= 14 FT  
 FILL AREA= 6975 SF  
 FILL VOLUME= 3615 CY

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CLIENT:  
 ANDOVER WOODS, LLC.

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL

WETLAND FILL AREA 'D' & DETENTION BASIN 'C'

ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

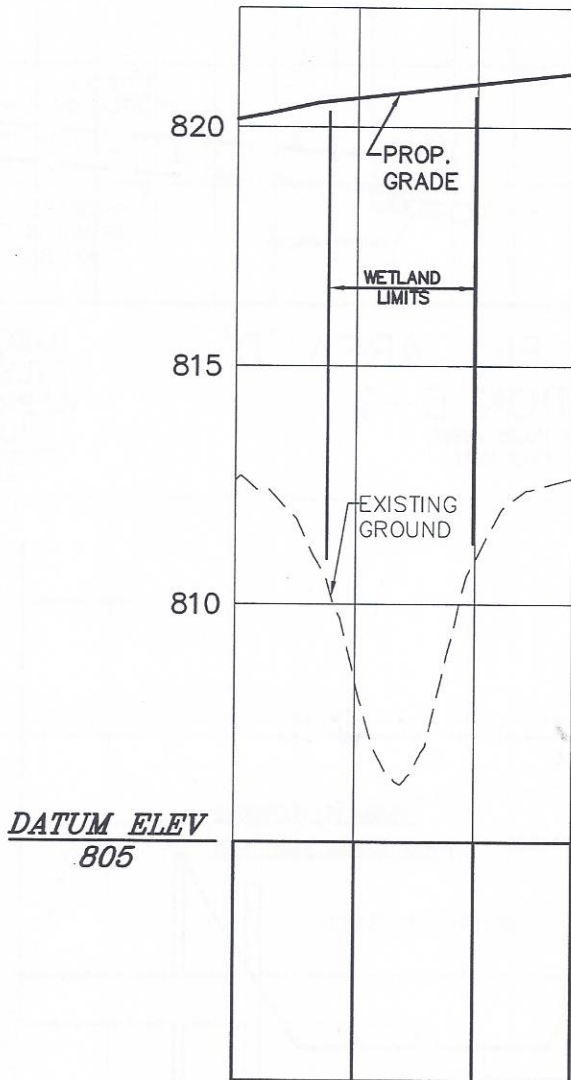
SCALE HOR 1"=50 FT.  
 VER 1"= FT.

FBK:  
 CHF:

**6B**

12-120

DEQ-WRD-WRU  
 FILE# 15-63-0038P  
 APPROVED PLANS  
9 OF 22  
 SEMI DIST.



FILL DEPTH = 14 FT  
 FILL AREA = 6975 SF  
 FILL VOLUME = 3615 CY

WETLAND FILL AREA 'D'  
 SECTION D-2

SCALE 1"=40' HORIZ.  
 1"=4' VERT.

FEB 20 2015



51111 W. Pontiac Trail  
 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701

CLIENT:  
 ANDOVER WOODS, LLC.

**WETLAND FILL AREA 'D', SECTION D-2**

ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL



FBK:

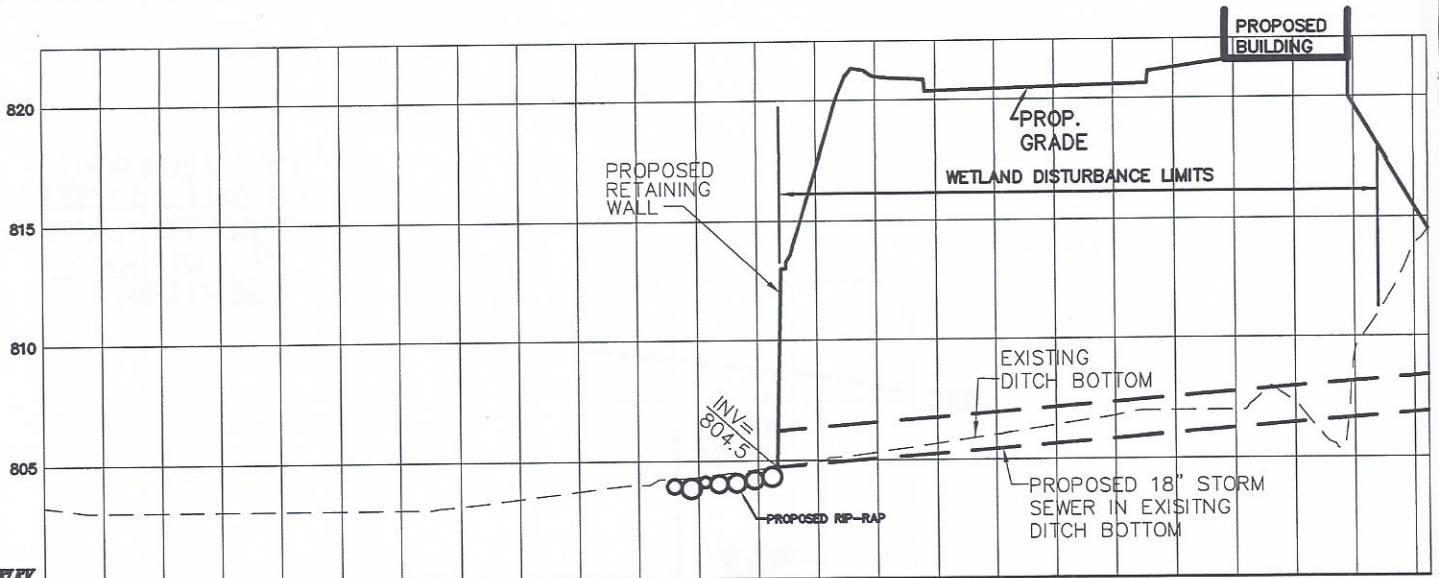
CHF:



SCALE HOR 1"= 40 FT.  
 VER 1"= FT.

12-120

DATUM ELEV  
800

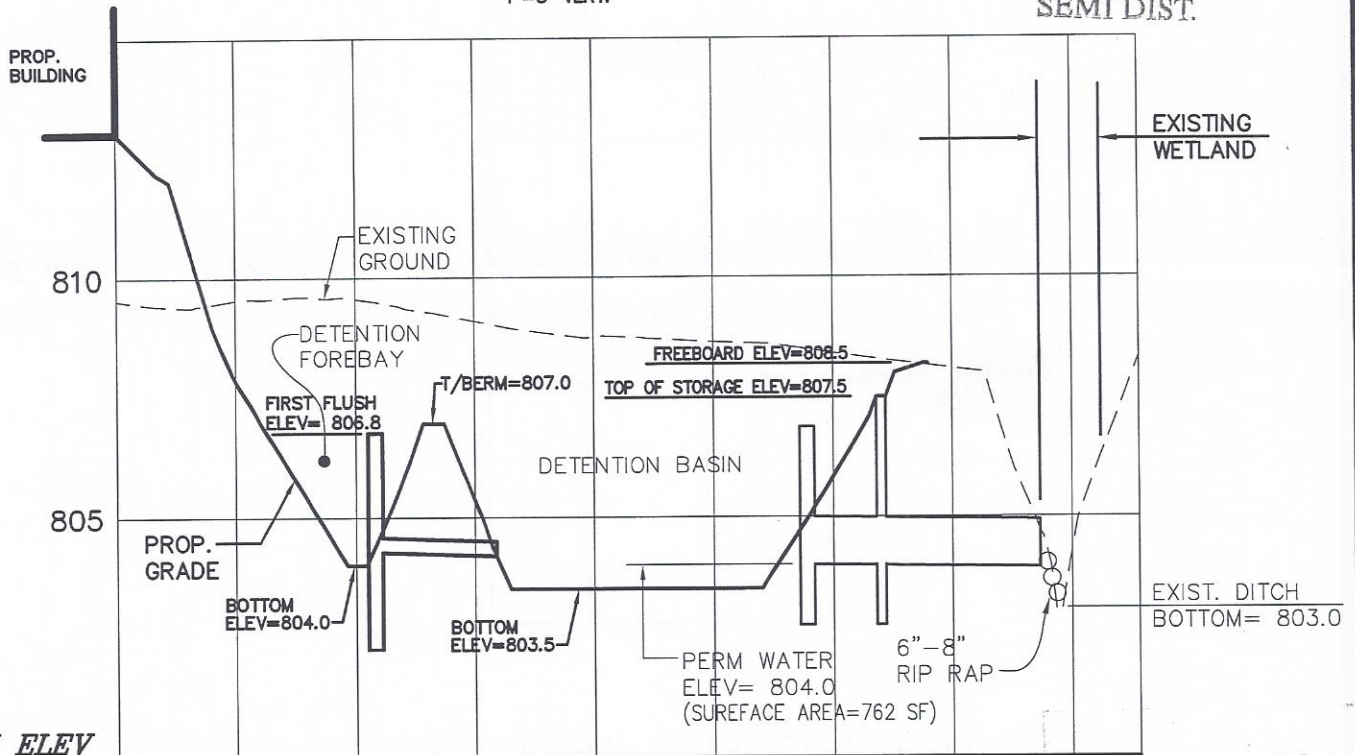


WETLAND FILL AREA 'D'  
SECTION D-1

SCALE 1"=80' HORIZ.  
1"=8' VERT.

DEQ-WRD-WRU  
FILE# 15-63-0038P  
APPROVED PLANS  
10 OF 22  
SEMI DIST.

DATUM ELEV  
800



DETENTION BASIN 'C'  
SECTION C-1

SCALE 1"=40' HORIZ, 1"=4' VERT.

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CIVIL ENGINEERS & LAND SURVEYORS

5111 W. Pontiac Trail  
Wixom, MI 48393  
Phone: (248) 668-0700  
Fax: (248) 668-0701

CLIENT:

ANDOVER WOODS, LLC.

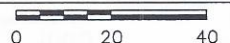
WETLAND FILL AREA 'D', SECTION 'D-1'  
DETENTION POND 'C' SECTION 'C-1'

ANDOVER WOODS CONDOMINIUMS  
SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
CITY OF ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL



FBK:

CHF:

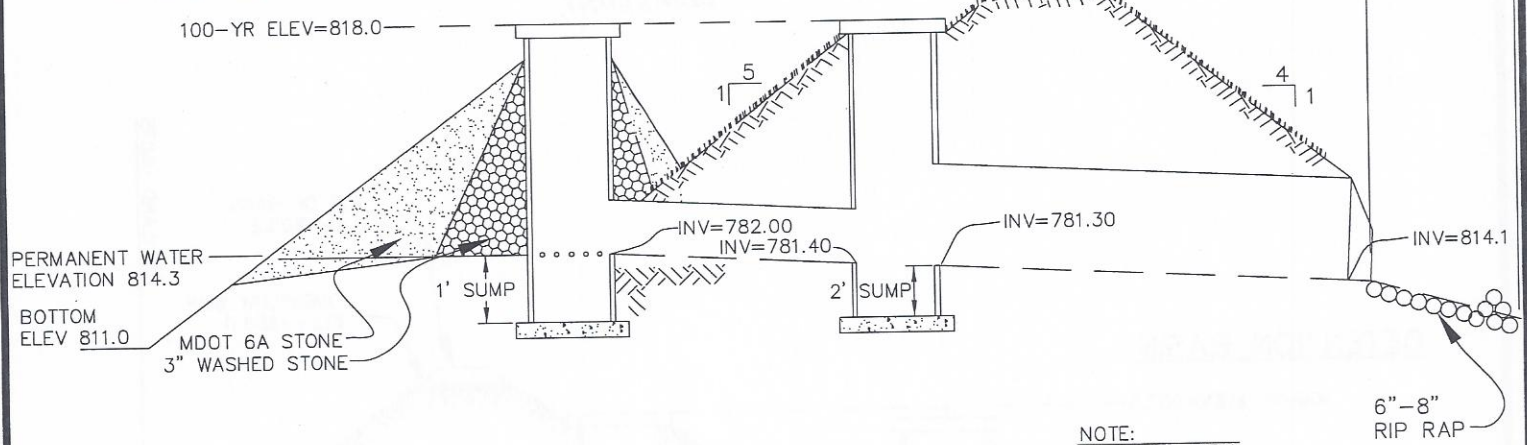


SCALE HOR 1"= 40 FT.  
VER 1"= FT.

12-120

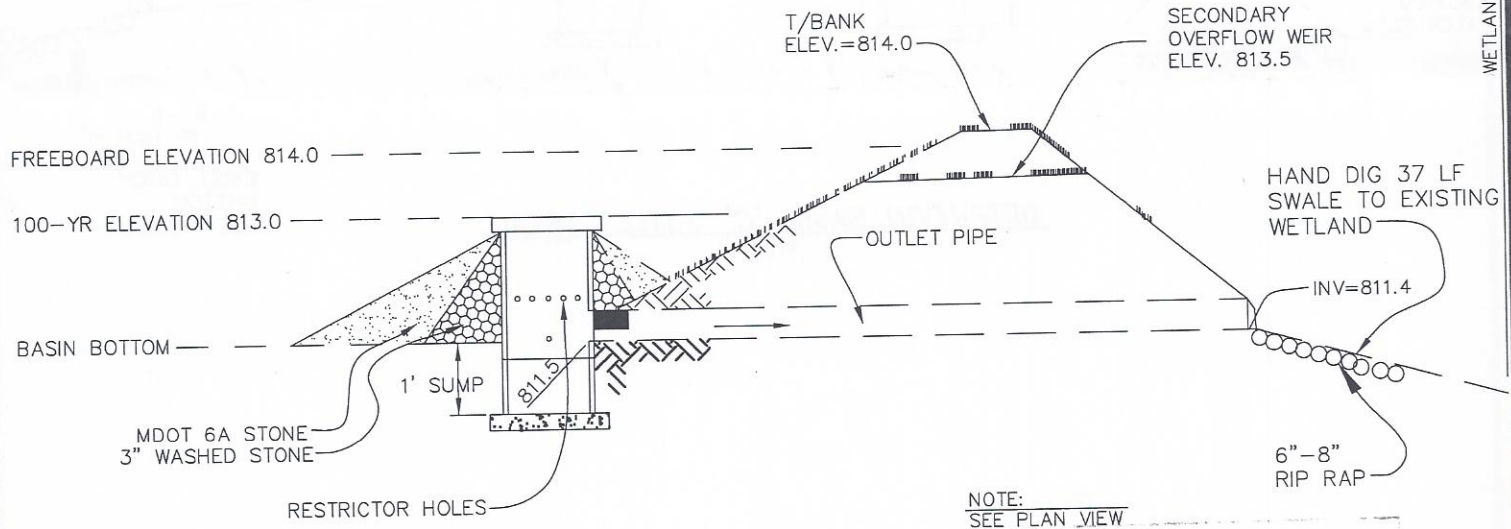
DEQ-WRD-WRU  
 FILE# 15-63-0038 P  
 APPROVED PLANS  
 11 OF 22  
 SEMI DIST.

**DETENTION BASIN**



**DETENTION BASIN 'A' OUTLET DETAIL**  
 NTS

NOTE:  
 SEE PLAN VIEW  
 SHEET 3



**DETENTION BASIN 'B' OUTLET DETAIL**  
 NTS

NOTE:  
 SEE PLAN VIEW  
 SHEET 4

FEB 20 2015



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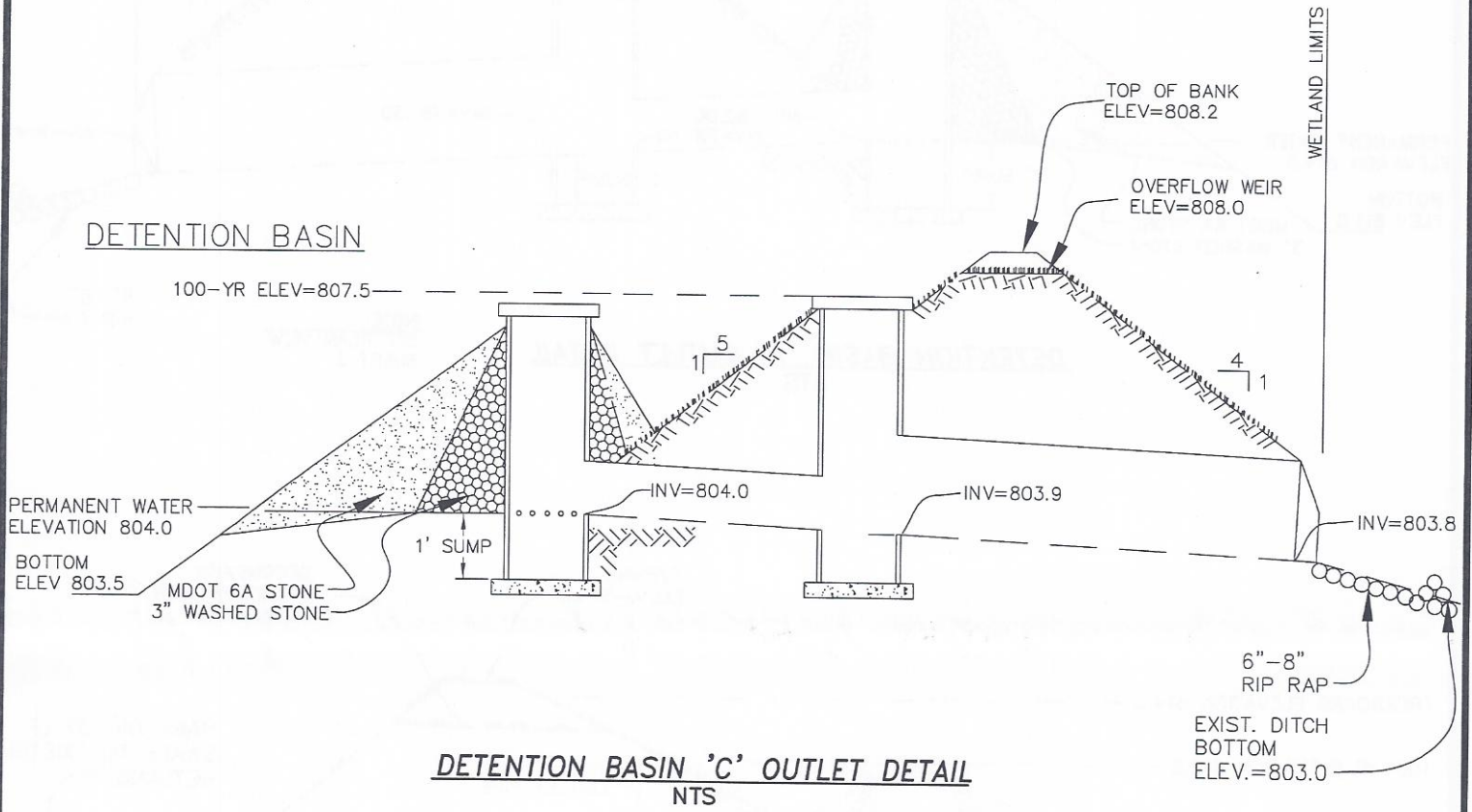
51111 W. Pontiac Trail  
 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701

CLIENT:	ANDOVER WOODS, LLC.	DATE: 10-23-14
<b>DETENTION BASINS 'A' &amp; 'B', OUTLET DETAILS</b>		DRAWN BY: RJF
ANDOVER WOODS CONDOMINIUMS		CHECKED BY: DJL
SECTION: 9 TOWNSHIP: 3N RANGE: 11E		0 20 40
CITY OF ROCHESTER HILLS		FBK:
OAKLAND COUNTY		CHF:
MICHIGAN		SCALE HOR 1" = 40 FT. VER 1" = FT.



12-120

DEQ-WRD-WRU  
 FILE# 15-63 0038P  
 APPROVED PLANS  
 12 OF 22  
 SEMI DIST.



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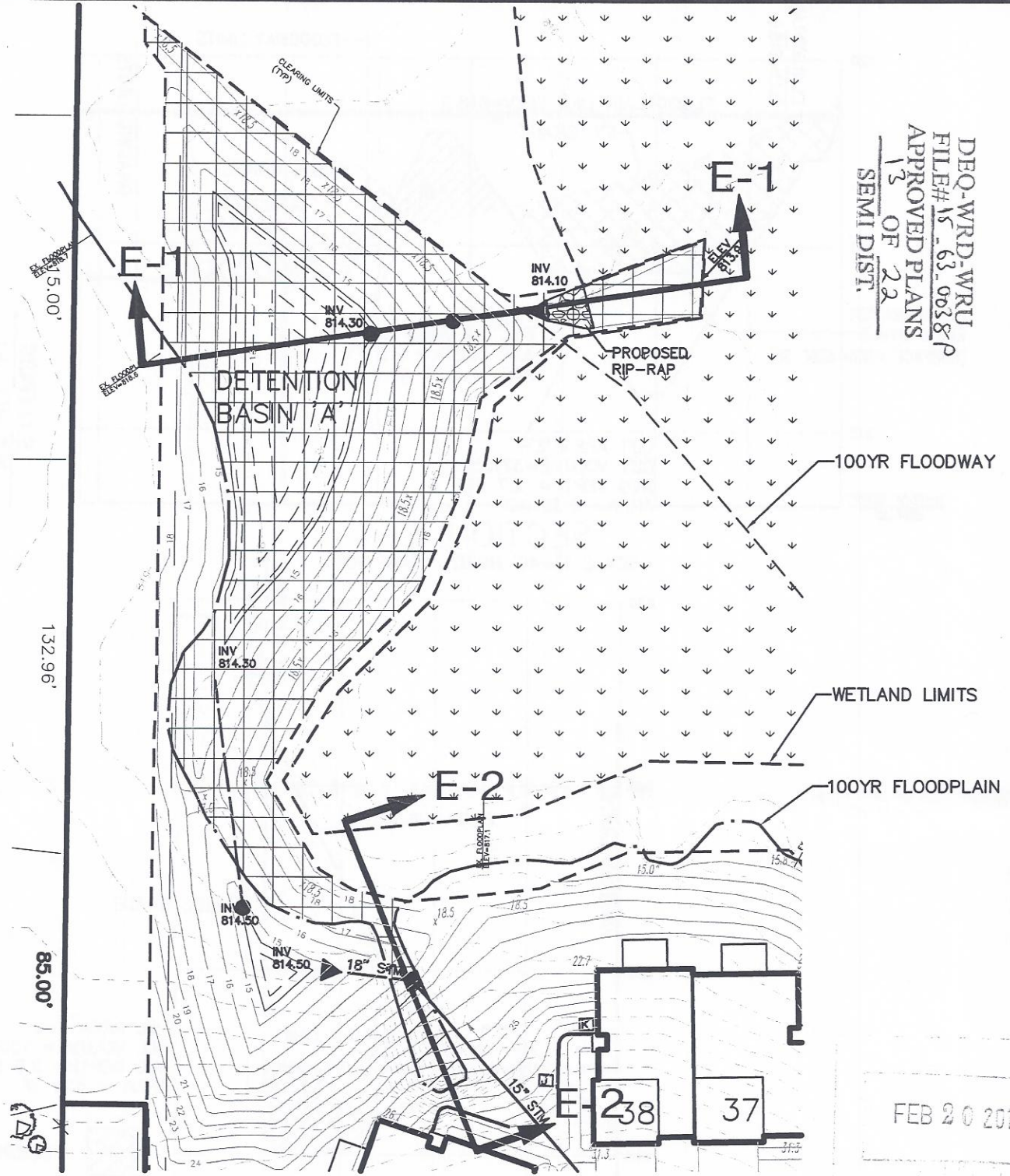
CIVIL ENGINEERS & LAND SURVEYORS

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 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701



CLIENT: ANDOVER WOODS, LLC.		DATE: 10-23-14	
DRAWN BY: RJF		CHECKED BY: DJL	
<b>DETENTION BASIN 'C' OUTLET DETAILS</b> ANDOVER WOODS CONDOMINIUMS SECTION: 9 TOWNSHIP: 3N RANGE: 11E CITY OF ROCHESTER HILLS OAKLAND COUNTY MICHIGAN		0 20 40 FBK: 10 CHF: 12-120 SCALE HOR 1"=40 FT. VER 1"= FT.	



DEQ-WRD-WRU  
 FILE# 15-63-0038P  
 APPROVED PLANS  
 13 OF 22  
 SEMI DIST.




PLAN VIEW  
 FLOODPLAIN AREA 'E'  
 SCALE 1"=50' HORIZ.

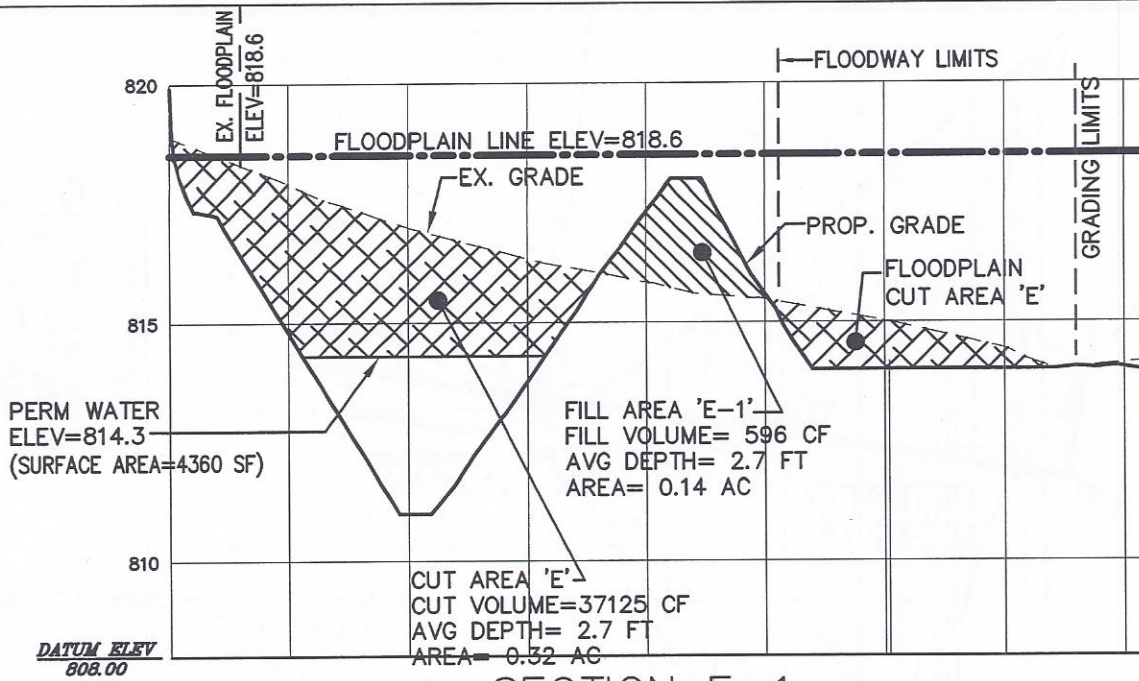
 FLOODPLAIN CUT AREA  
 FLOODPLAIN FILL AREA

FEB 20 2015

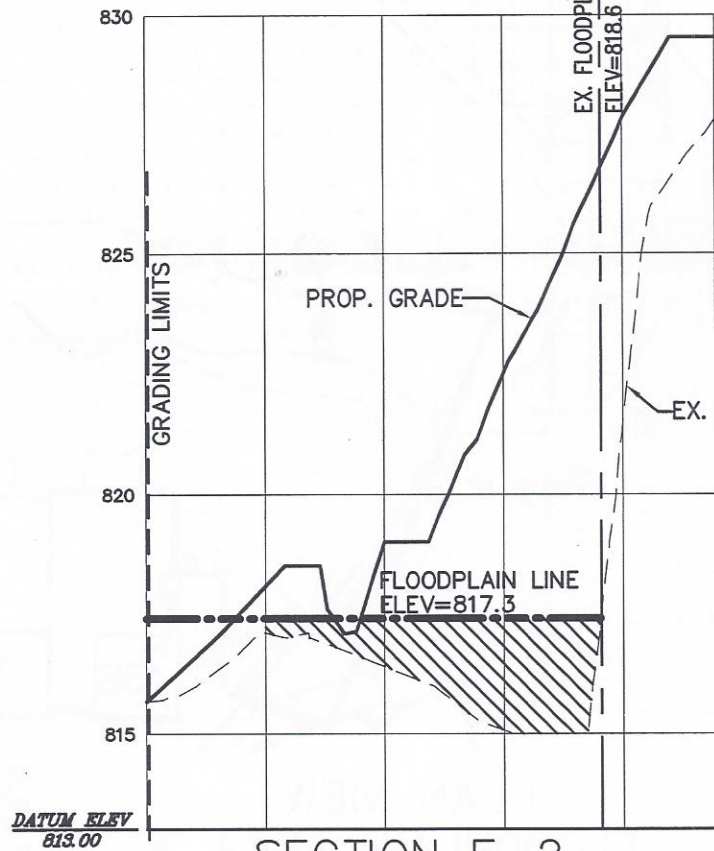
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 Wixom, MI 48393  
 Phone: (248) 668-0700  
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CLIENT: ANDOVER WOODS, LLC.	DATE: 10-23-14
<b>FLOODPLAIN AREA 'E' - PLAN VIEW</b>	DRAWN BY: RJF
	CHECKED BY: DJL
ANDOVER WOODS CONDOMINIUMS SECTION: 9 TOWNSHIP: 3N RANGE: 11E CITY OF ROCHESTER HILLS OAKLAND COUNTY MICHIGAN	
	FBK: 1 1 CHF: 1 1 SCALE HOR 1"=50 FT. VER 1"= FT.



DEO-WRD-WRU  
 FILE# 15-63-0538-P  
 APPROVED PLANS  
 14 OF 22  
 SEMI-DIST.

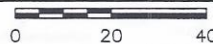


 FLOODPLAIN CUT AREA  
 FLOODPLAIN FILL AREA

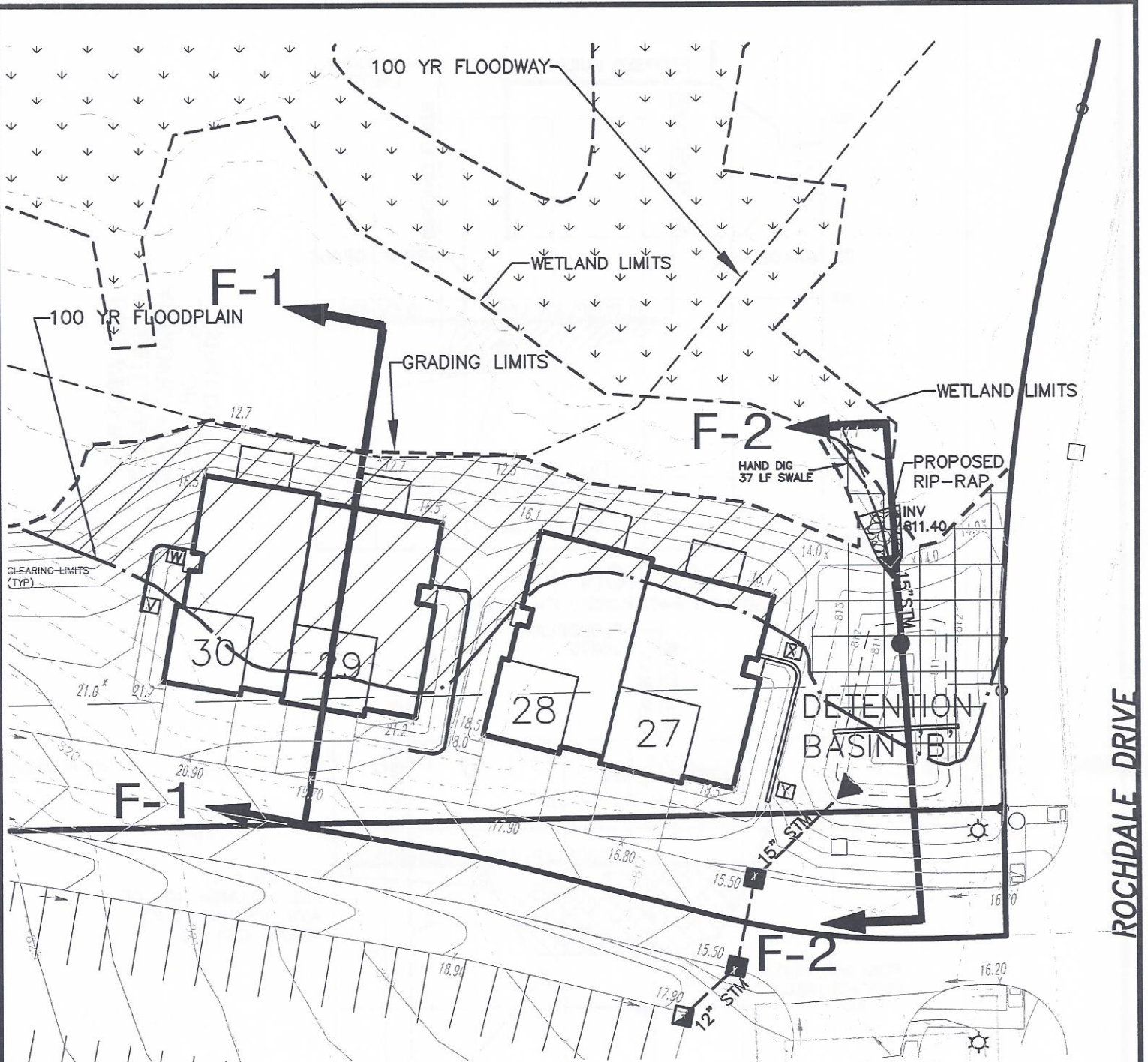
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Wixom, MI 48393  
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Fax: (248) 668-0701

CLIENT: <b>ANDOVER WOODS, LLC.</b>	DATE: 10-23-14
<b>FLOODPLAIN AREA 'E' - SECTIONS</b>	DRAWN BY: RJF
	CHECKED BY: DJL
<b>ANDOVER WOODS CONDOMINIUMS</b> SECTION: 9 TOWNSHIP: 3N RANGE: 11E CITY OF ROCHESTER HILLS OAKLAND COUNTY MICHIGAN	 0 20 40
	FBK: <span style="font-size: 2em; font-weight: bold;">12</span> CHF:
SCALE HOR 1"=40 FT. VER 1"= FT.	

12-120





ROCHDALE DRIVE

PLAN VIEW  
 FLOODPLAIN AREA 'F'  
 SCALE 1"=40' HORIZ.

DEQ-WRD-WRU  
 FILE# 15-63-0038  
 APPROVED PLANS  
 15 OF 22  
 SEMI DIST.

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-  FLOODPLAIN CUT AREA
-  FLOODPLAIN FILL AREA




CIVIL ENGINEERS & LAND SURVEYORS

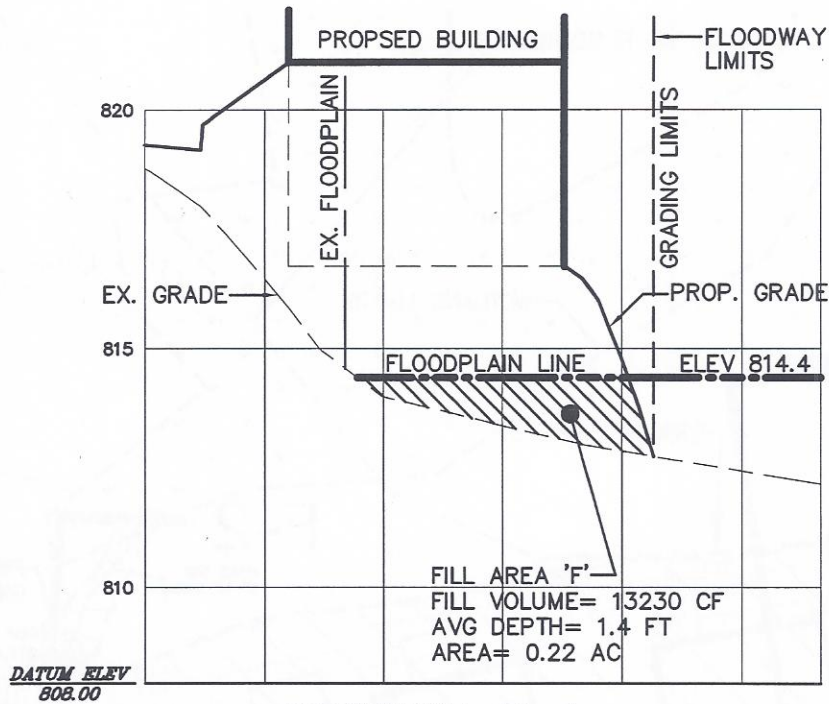
51111 W. Pontiac Trail  
 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701

CLIENT:  
 ANDOVER WOODS, LLC.

**FLOODPLAIN AREA 'F' - PLAN VIEW**

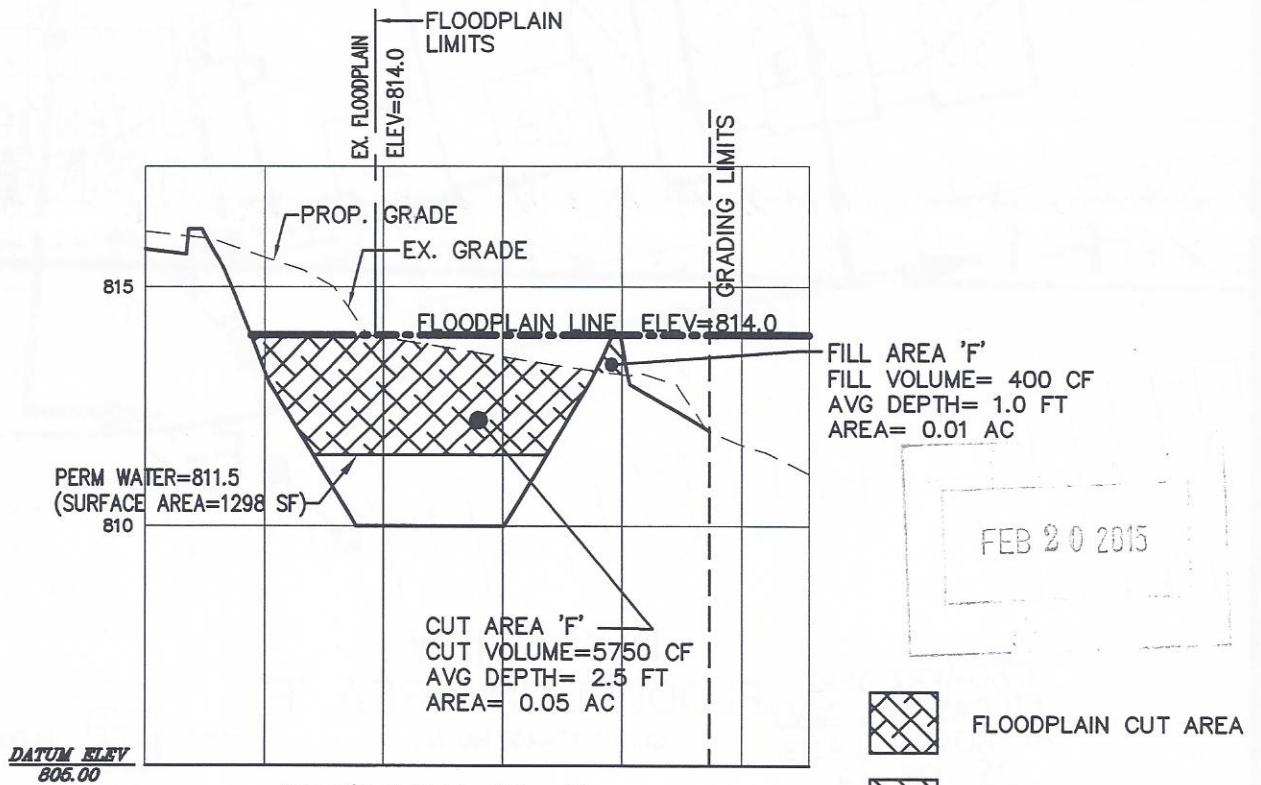
ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9    TOWNSHIP: 3N    RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14
DRAWN BY: RJF
CHECKED BY: DJL

FBK: 13
CHF:
SCALE HOR 1"= 40 FT. VER 1"= 40 FT.



DEQ-WRD-WRU  
 FILE# 15-63.0038P  
 APPROVED PLANS  
 16 OF 22  
 SEMI DIST.

**SECTION F-1**  
 SCALE 1"=40' HORIZ., 1"=4' VERT.



**SECTION F-2**  
 SCALE 1"=40' HORIZ., 1"=4' VERT.



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 Fax: (248) 668-0701

CLIENT:

ANDOVER WOODS, LLC.

**FLOODPLAIN AREA 'F' - SECTIONS**

ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL



FBK:

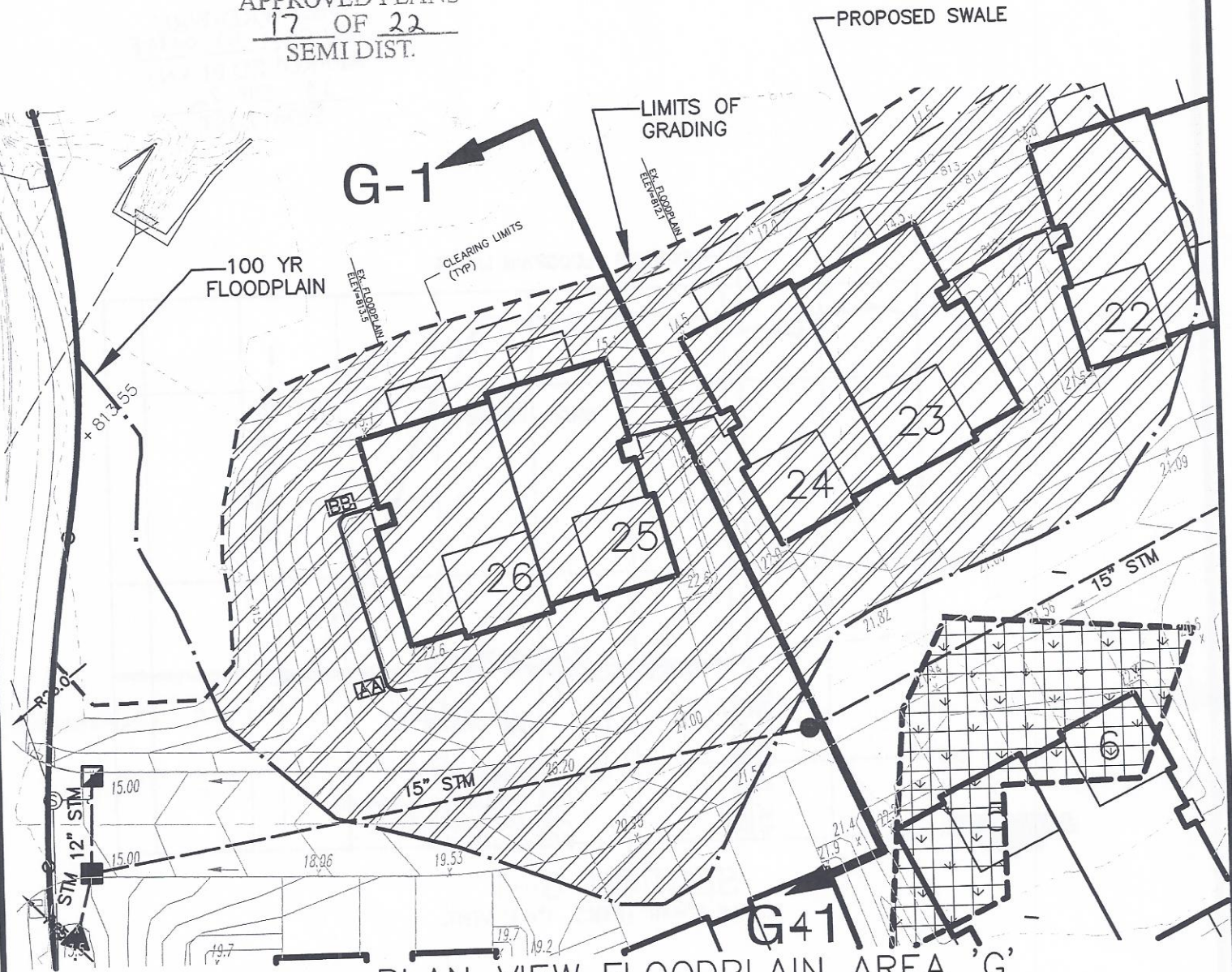
CHF:

14



12-120

SCALE HOR 1"= 40 FT.  
 VER 1"= FT.

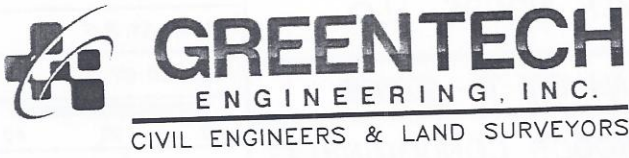
DEQ-WRD-WRU  
 FILE# 15-63-0038P  
 APPROVED PLANS  
 17 OF 22  
 SEMI DIST.



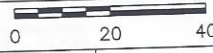
PLAN VIEW FLOODPLAIN AREA 'G'  
 SCALE 1"=40' HORIZ.

-  FLOODPLAIN CUT AREA
-  FLOODPLAIN FILL AREA

FEB 20 2015

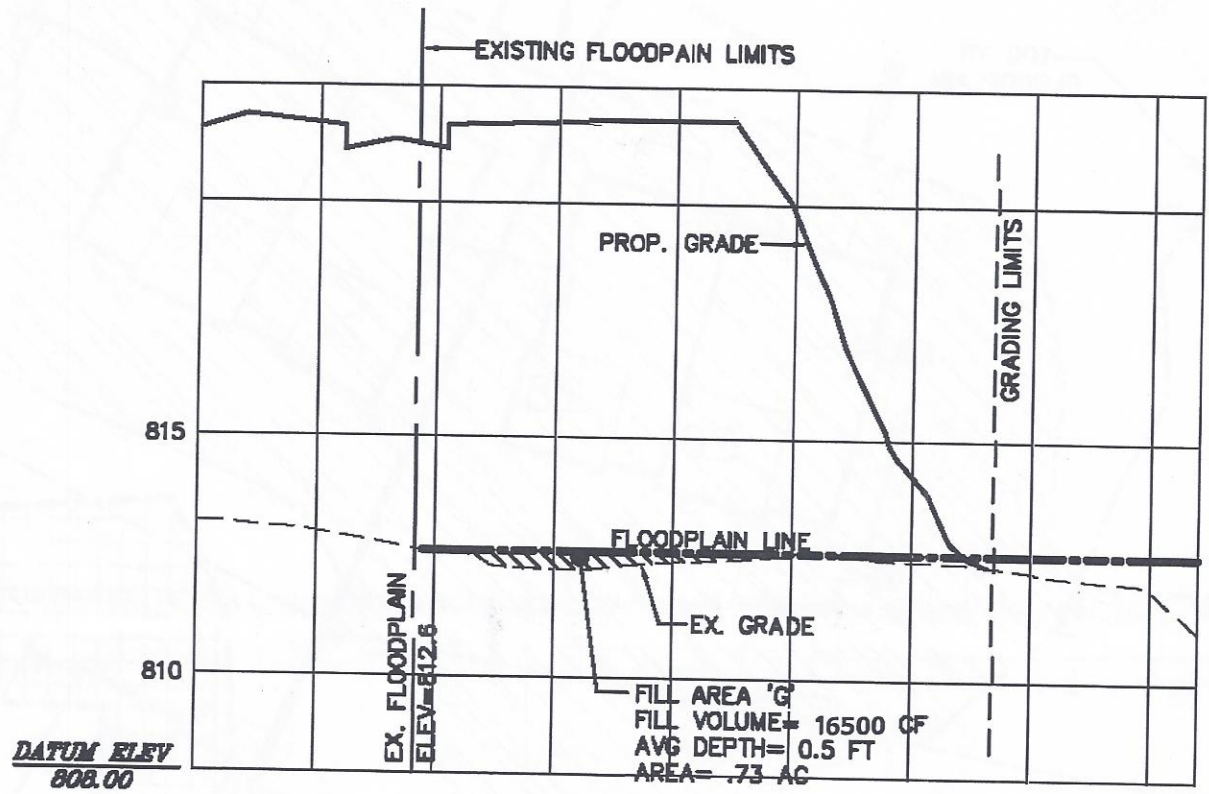


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 Wixom, MI 48393  
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 Fax: (248) 668-0701

CLIENT: ANDOVER WOODS, LLC.	DATE: 10-23-14
FLOODPLAIN AREA 'G' - PLAN VIEW	DRAWN BY: RJF
	CHECKED BY: DJL
ANDOVER WOODS CONDOMINIUMS SECTION: 9 TOWNSHIP: 3N RANGE: 11E CITY OF ROCHESTER HILLS OAKLAND COUNTY MICHIGAN	 0 20 40
	FBK: 15 CHF:
	SCALE HOR 1"=40 FT. VER 1"= FT.

12-120


DEQ-WRD-WRU  
 FILE# 15\_63\_0038P  
 APPROVED PLANS  
 18 OF 22  
 SEMI DIST.



SECTION G-1  
 SCALE 1"=40' HORIZ., 1"=4' VERT.

 FLOODPLAIN FILL AREA

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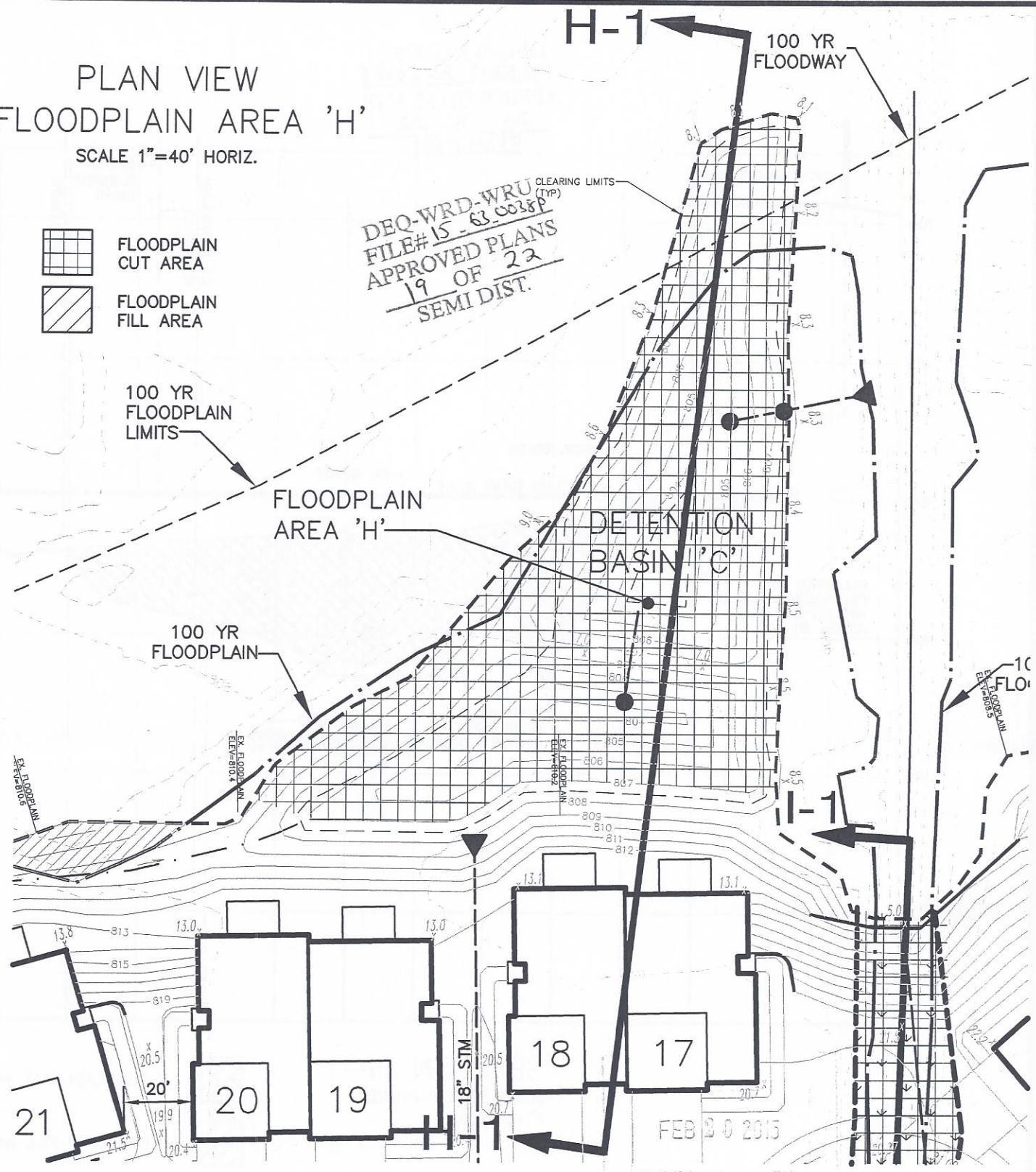
CLIENT: <b>ANDOVER WOODS, LLC.</b>		DATE: 10-23-14
<b>FLOODPLAIN AREA 'G'- SECTION</b>		DRAWN BY: RJF
<b>ANDOVER WOODS CONDOMINIUMS</b>		CHECKED BY: DJL
SECTION: 9	TOWNSHIP: 3N	RANGE: 11E
CITY OF ROCHESTER HILLS		0 20 40
OAKLAND COUNTY		FBK: 16
MICHIGAN		CHF: 12-120
SCALE HOR 1"= 40 FT. VER 1"= 4 FT.		

# PLAN VIEW FLOODPLAIN AREA 'H'

SCALE 1"=40' HORIZ.

-  FLOODPLAIN CUT AREA
-  FLOODPLAIN FILL AREA

DEQ-WRD-WRU CLEARING LIMITS  
FILE# 15-63-0038P  
APPROVED PLANS  
19 OF 22  
SEMI DIST.



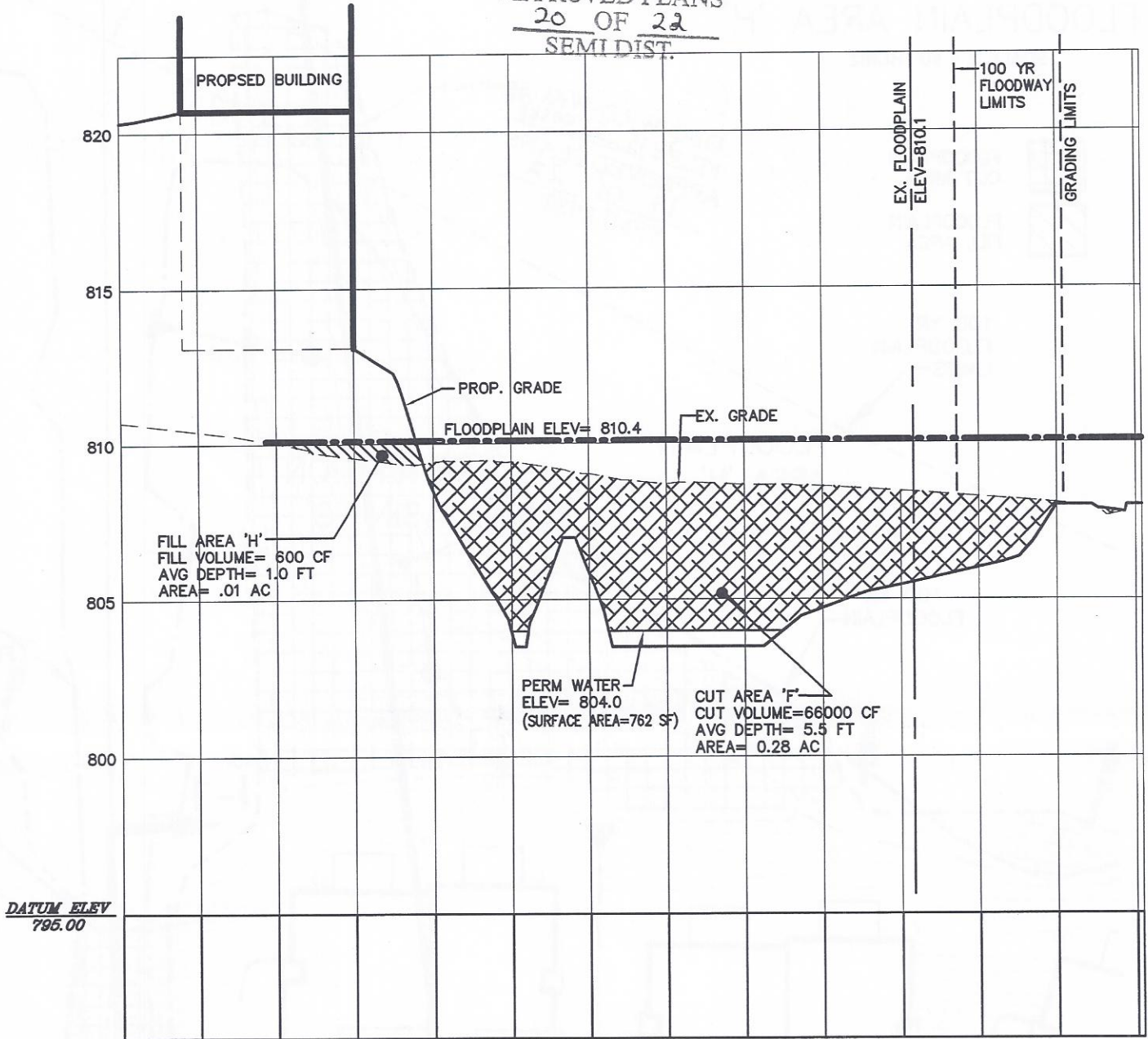
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Wixom, MI 48393  
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Fax: (248) 668-0701

CLIENT:	ANDOVER WOODS, LLC.		DATE: 10-23-14
	<b>FLOODPLAIN AREA 'H'- PLAN VIEW</b>		DRAWN BY: RJF
	ANDOVER WOODS CONDOMINIUMS		CHECKED BY: DJL
	SECTION: 9 TOWNSHIP: 3N RANGE: 11E		0 20 40
	CITY OF ROCHESTER HILLS		FBK: 17
	OAKLAND COUNTY		CHF: 12-120
	MICHIGAN		SCALE HOR 1"=40 FT. VER 1"= FT.

DEQ-WRD-WRU  
 FILE# 15-63-0038P  
 APPROVED PLANS  
 20 OF 22  
 SEMI DIST.



SECTION H-1  
 SCALE 1"=50'-HORIZ.,  
 1"=5' VERT.

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FLOODPLAIN CUT AREA



FLOODPLAIN FILL AREA



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 Fax: (248) 668-0701

CLIENT:

ANDOVER WOODS, LLC.

**FLOODPLAIN AREA 'H'- SECTION**

ANDOVER WOODS CONDOMINIUMS  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14

DRAWN BY: RJF

CHECKED BY: DJL

0 20 40

FBK:

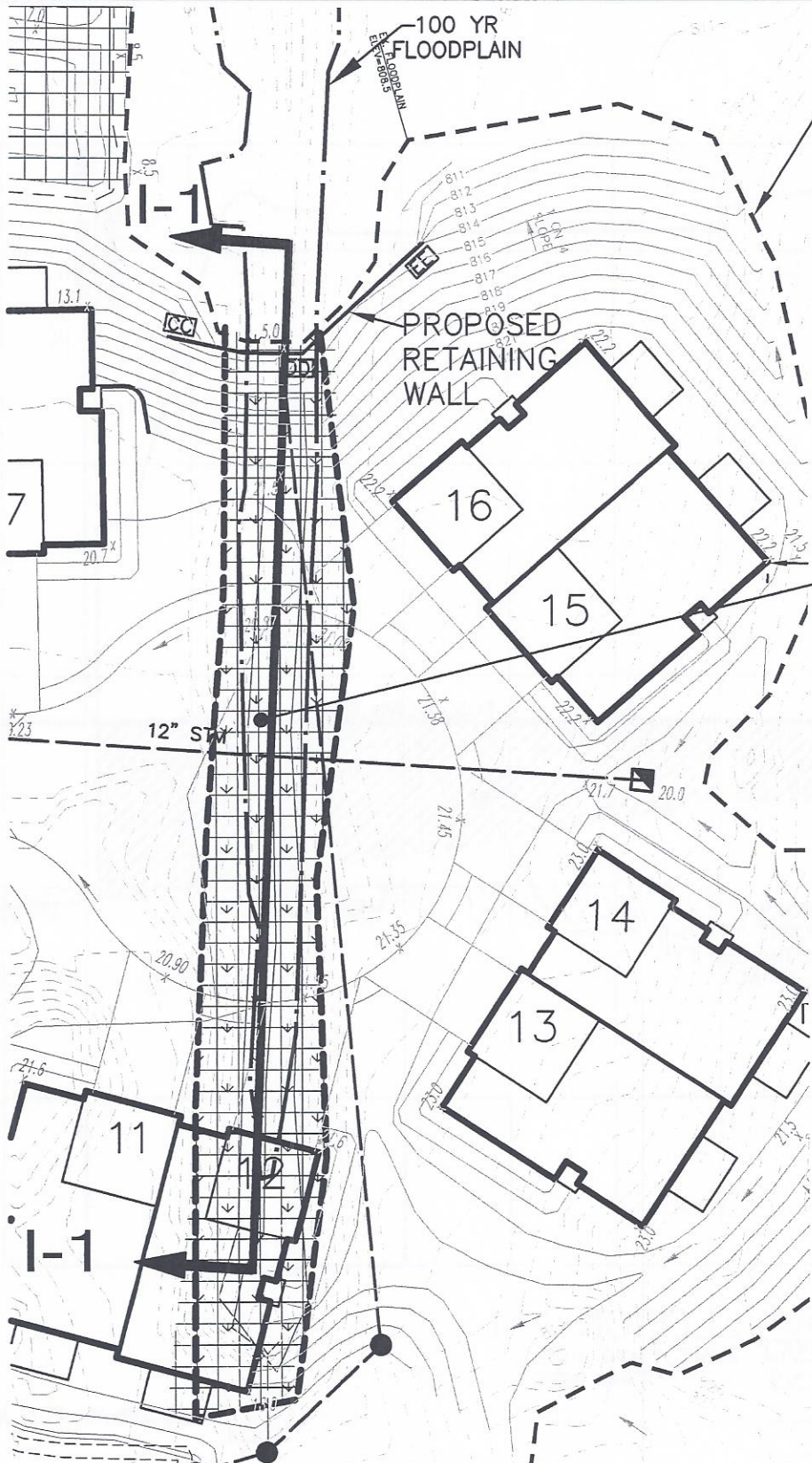
18

CHF:

SCALE HOR 1"= 40 FT.  
 VER 1"= FT.

12-120







PLAN VIEW  
 FLOODPLAIN AREA '1'  
 SCALE 1"=40' HORIZ.

FLOODPLAIN  
 AREA '1'

DEQ-WRD-WRU  
 FILE#15-63-0038P  
 APPROVED PLANS  
21 OF 22  
 SEMI DIST.

FEB 20 2015

 FLOODPLAIN  
 CUT AREA  
 FLOODPLAIN  
 FILL AREA

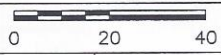
 **GREENTECH**  
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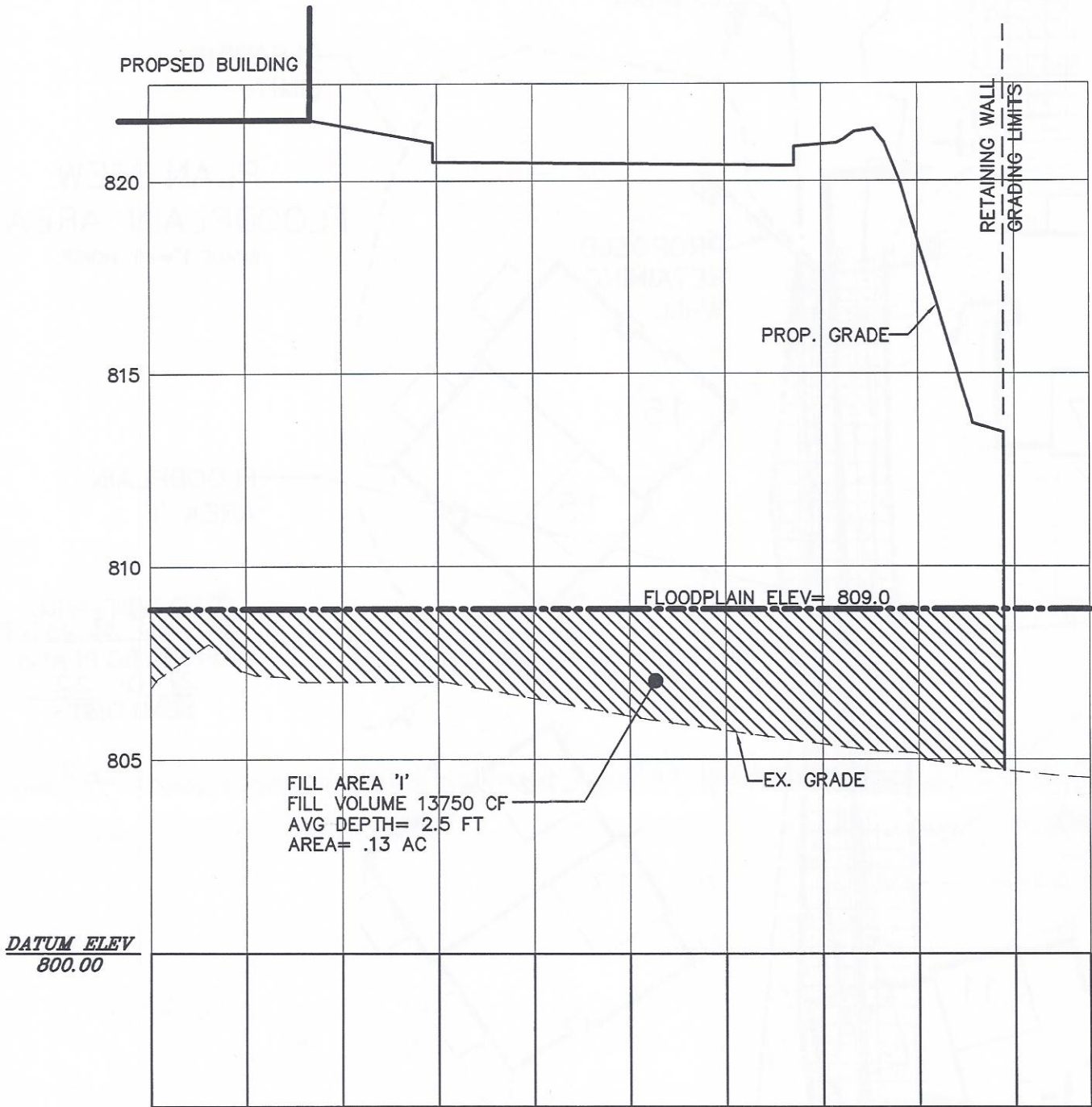
51111 W. Pontiac Trail  
 Wixom, MI 48393  
 Phone: (248) 668-0700  
 Fax: (248) 668-0701

CLIENT:  
 ANDOVER WOODS, LLC.

**FLOODPLAIN AREA '1' - PLAN VIEW**

**ANDOVER WOODS CONDOMINIUMS**  
 SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
 CITY OF ROCHESTER HILLS  
 OAKLAND COUNTY  
 MICHIGAN

DATE: 10-23-14  
 DRAWN BY: RJF  
 CHECKED BY: DJL  
  
 FBK: 19  
 CHF:  
 SCALE HOR 1"=40 FT.  
 VER 1"= FT.  
 12-120



DEQ-WRD-WRU  
FILE# 15-63-0088P  
APPROVED PLANS  
22 OF 22  
SEMI DIST.

SECTION 1-1  
SCALE 1"=40' HORIZ.,  
1"=4' VERT.

FEB 20 2015



FLOODPLAIN FILL AREA



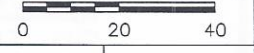
51111 W. Pontiac Trail  
Wixom, MI 48393  
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Fax: (248) 668-0701

CLIENT:  
ANDOVER WOODS, LLC.

DATE: 10-23-14  
DRAWN BY: RJF  
CHECKED BY: DJL

**FLOODPLAIN AREA '1'- SECTION**

ANDOVER WOODS CONDOMINIUMS  
SECTION: 9 TOWNSHIP: 3N RANGE: 11E  
CITY OF ROCHESTER HILLS  
OAKLAND COUNTY  
MICHIGAN



FBK: 20  
CHF: 12-120

SCALE HOR 1"=40 FT.  
VER 1"= FT.