

MediLodge of Rochester Hills

Proposed Addition & Renovation



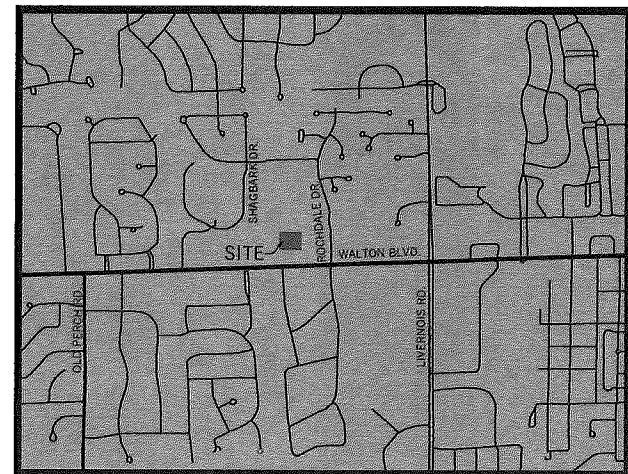
OWNER
 THE MEDILODGE GROUP
 64500 VAN DYKE RD.
 WASHINGTON, MI 48095
 P: (586) 752-5008

PROJECT ADDRESS:
 MEDILODGE OF
 ROCHESTER HILLS
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

412 S. WASHINGTON ST, SUITE 100
 ROYAL OAK, MICHIGAN 48067
 PHONE: (248) 336-2501
 FAX: (248) 336-2107
 EMAIL: INFO@JWDSTUDIO.COM
 WEBSITE: WWW.JWDSTUDIO.COM

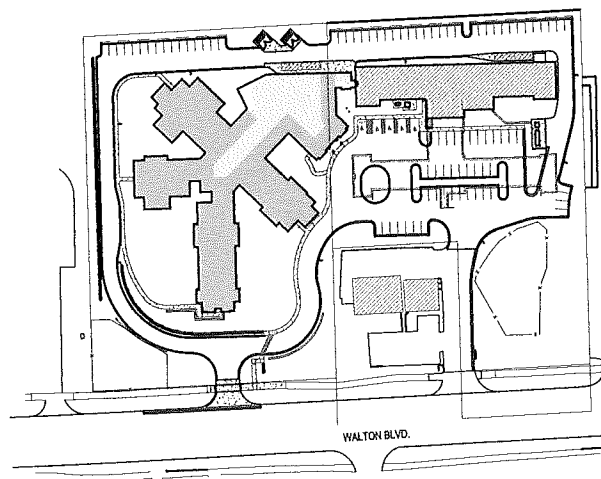
LOCATION MAP

SCALE: NOT TO SCALE



SITE MAP

NOT TO SCALE



LEGAL DESCRIPTION

LEGAL DESCRIPTION AS SUPPLIED:

PARCEL #1

LAND SITUATED IN THE CITY OF ROCHESTER HILLS, COUNTY OF OAKLAND, AND STATE OF MICHIGAN, DESCRIBED AS: PARCEL 1: PART OF THE SOUTHEAST 1/4 OF SECTION 9, TOWNSHIP 3 NORTH, RANGE 11 EAST, ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT ON THE SOUTH SECTION LINE LOCATED NORTH 87 DEGREES 24 MINUTES 10 SECONDS EAST ALONG THE SECTION LINE, 471.00 FEET FROM THE SOUTH 1/4 CORNER OF SECTION 9; THENCE NORTH 00 DEGREE 59 MINUTES 38 SECONDS WEST, 225.00 FEET; THENCE SOUTH 87 DEGREES 24 MINUTES 10 SECONDS WEST, 160.00 FEET; THENCE NORTH 00 DEGREE 59 MINUTES 38 SECONDS WEST, 286.00 FEET; THENCE NORTH 87 DEGREES 24 MINUTES 10 SECONDS EAST, 325.00 FEET; THENCE SOUTH 00 DEGREE 59 MINUTES 38 SECONDS EAST, 511.00 FEET TO THE SOUTH SECTION LINE; THENCE SOUTH 87 DEGREES 24 MINUTES 10 SECONDS WEST ALONG THE SECTION LINE, 165.00 FEET TO THE POINT OF BEGINNING, EXCEPT THAT PART WHICH LIES SOUTH OF A LINE 60 FEET NORTH OF MEASURED AT RIGHT ANGLES AND PARALLEL TO THE SOUTH SECTION LINE DEEDED TO THE BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF OAKLAND.

TOGETHER WITH A PRIVATE EASEMENT FOR PURPOSES OF INGRESS AND EGRESS AND A NON- EXCLUSIVE EASEMENT FOR UTILITIES SUBJECT TO THE TERMS AND CONDITIONS AS SET FORTH IN THE MUTUAL BENEFIT EASEMENT MAINTENANCE AGREEMENT RECORDED OCTOBER 21, 1983 IN LIBER 8501, PAGE 874, OAKLAND COUNTY RECORDS.

1480 WALTON BLVD.
 TAX PARCEL ID NO. 15-09-401-005

PARCEL #2

PART OF THE SOUTHEAST 1/4 OF SECTION 9, TOWN 3 NORTH, RANGE 11 EAST, CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE SOUTH 1/4 CORNER OF SAID SECTION 9; THENCE ALONG THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION, NORTH 00 DEGREES 59 MINUTES 38 SECONDS WEST 511.00 FEET THENCE NORTH 87 DEGREES 24 MINUTES 10 SECONDS EAST 311.00 FEET; THENCE SOUTH 00 DEGREES 59 MINUTES 38 SECONDS EAST 511.00 FEET TO THE SOUTH LINE OF SAID SECTION AS OCCUPIED; THENCE SOUTH 87 DEGREES 24 MINUTES 10 SECONDS WEST 311.00 FEET TO THE POINT OF BEGINNING, EXCEPT THAT PART WHICH LIES SOUTH OF A LINE 60 FEET NORTH OF MEASURED AT RIGHT ANGLES AND PARALLEL TO THE SOUTH SECTION LINE DEEDED TO THE BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF OAKLAND.

1520 WALTON BLVD.
 TAX ID: 15-09-401-003

PROJECT INFORMATION

THE EXISTING FACILITY IS A 126-BED SKILLED NURSING FACILITY, WITH A PORTION OF THE BUILDING HAVING A SECOND FLOOR AND BASEMENT. THE PROJECT INCLUDES ADDING A ONE-STORY ADDITION TO ACCOMMODATE 65 OF THE LICENSED BEDS FROM THE EXISTING BUILDING. A PORTION OF THE EXISTING ONE-STORY BUILDING WILL BE DEMOLISHED AND THE REMAINING 61 LICENSED BEDS WILL BE HOUSED IN THE RENOVATED EXISTING TWO-STORY BUILDING.

THE PROPOSED ADDITION WILL CONSIST OF APPROXIMATELY 38,455 SQ. FT. ADJACENT AND ATTACHED TO THE WESTERN END OF THE EXISTING FACILITY. IT WILL INCLUDE NEW DAY/DINING AREAS, KITCHEN, STATE-OF-THE-ART PHYSICAL AND OCCUPATIONAL THERAPY SPACES, ADMINISTRATION, SUPPORT SPACES, 43 PRIVATE ROOMS AND 11 SEMI-PRIVATE ROOMS PROVIDING A TOTAL OF 65 BEDS.

THE EXISTING BUILDING WILL MAINTAIN 61 BEDS DISTRIBUTED IN 25 PRIVATE ROOMS AND 18 SEMI-PRIVATE ROOMS. THE RENOVATION OF THE EXISTING BUILDING WILL INCLUDE COMMON SPACES, SERVING KITCHENS AND DAY ROOMS.

THE SOUTHERN PORTION OF THE EXISTING BUILDING, CONSISTING OF APPROXIMATELY 15,440 SQ. FT. WILL BE DEMOLISHED. THIS INCLUDES STORAGE, ADMINISTRATION, SUPPORT SPACES, KITCHEN, COMMON SPACES, AND RESIDENT ROOMS. THE ENTIRE EXISTING PHYSICAL PLANT WILL BE INCLUDED IN THE FOOTPRINT OF THE LICENSED SKILLED NURSING FACILITY.

THE PROJECT WILL INCLUDE NEW LANDSCAPING, NEW ENTRY DRIVE AND PARKING AREAS, SITE LIGHTING, DETENTION BASINS, AND DUMPSTER ENCLOSURES. ALL UTILITIES CURRENTLY EXIST ON THE SITE. WATER AND SEWER IS BY MUNICIPAL SYSTEMS.

CONSTRUCTION CODES IN EFFECT

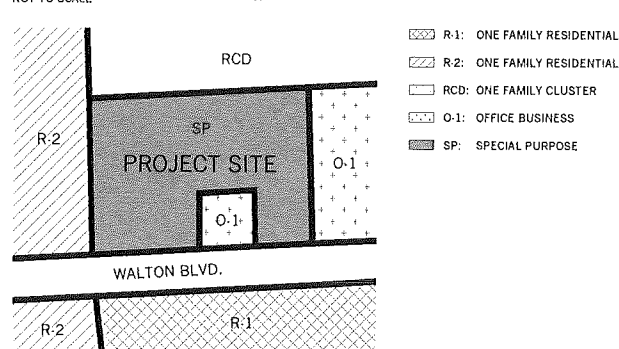
BUILDING:	COMMERCIAL	MBC 2012 (MICHIGAN BUILDING CODE 2012)
PLUMBING:	COMMERCIAL	MPC 2012 (MICHIGAN PLUMBING CODE 2012)
MECHANICAL:	COMMERCIAL	MIMC 2012 (MICHIGAN MECHANICAL CODE 2012)
ELECTRICAL:	COMMERCIAL	NEC 2014 (STATE OF MICHIGAN ELECTRICAL CODE) 2014 NATIONAL ELECTRICAL CODE WITH PART 8 AMENDMENTS
REHAB:		REHAB 2012 (MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS 2012)
FIRE CODE:		IFC 2012 (INTERNATIONAL FIRE CODE 2012) AS REFERENCED IN THE 2012 MICHIGAN BUILDING CODE
FIRE SUPPRESSION:	COMMERCIAL	NFPA 13 (2010)
FIRE ALARM:	COMMERCIAL	NFPA 72 (2010)
ENERGY CODE:	COMMERCIAL	NFPA 17A (2009)
		MBC 2012 (MICHIGAN BUILDING CODE 2012) - CHAPTER 13 & MUEC 2009 (MICHIGAN INFORM ENERGY CODE 2009) - CHAPTER 5 & MICHIGAN UNIFORM ENERGY CODE, PART 10A. RULES (ANSI/ASHRAE 90.1-2007)

DRAWING INDEX

NO.	DESCRIPTION	DATE	BY	CHKD	APP'D
GENERAL					
A00-00	COVER SHEET		X	X	
A00-03	LIST OF DRAWINGS		X	X	
CIVIL					
C00-00	CIVIL COVER SHEET		X	X	
C01-00	BOUNDARY / TOPOGRAPHY / TREE SURVEY		X	X	
C01-01	TREE SURVEY/LEGAL		X	X	
C02-00	DEMOLITION PLAN		X	X	
C03-00	PAVING AND GRADING PLAN		X	X	
C04-00	UTILITY PLAN		X	X	
C05-00	DRAINAGE PLAN		X	X	
C06-00	FIRE DEPARTMENT		X	X	
C07-00	SOIL BORINGS		X	X	
C08-00	DETAILS		X	X	
C09-00	SOIL EROSION / EROSION AREA PLAN		X	X	
LANDSCAPE					
L03-00	TREE MANAGEMENT PLAN		X	X	
L03-01	SITE PLANTING PLAN		X	X	
L03-02	CALCULATIONS AND PLANT LISTS		X	X	
L03-03	KEY NOTES AND DETAILS		X	X	
L03-04	SIGHT DISTANCE PLANS		X	X	
ARCHITECTURAL					
A01-00	OVERALL SITE PLAN		X	X	
A01-01	SITE PLAN DETAILS		X	X	
A03-00	OVERALL FLOOR PLAN		X	X	
A03-01	OVERALL ADDITION FLOOR PLAN		X	X	
A06-00	OVERALL EXTERIOR ELEVATIONS		X	X	
A06-01	OVERALL EXTERIOR ELEVATIONS		X	X	
ELECTRICAL					
PE-1	ELECTRICAL PROGRAM/EMERGENCY SITE PLAN		X	X	

ZONING MAP

NOT TO SCALE



PROJECT # 13025
ISSUED: SITE PLAN REVIEW #3
(NOT TO BE USED AS CONSTRUCTION DRAWINGS)
ISSUED: 09/09/2016

CONSULTANTS

CIVIL ENGINEER
 NOWAK AND FRAUS
 ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342
 (248) 332-7931

LANDSCAPE ARCHITECT
 HAGENBUCH WEIKAL
 LANDSCAPE ARCHITECTURE
 33203 BIDDESTONE LANE
 FARMINGTON HILLS, MI 48334
 (248) 477-3600

ELECTRICAL ENGINEER
 ETS ENGINEERING, INC.
 418.5 S. WASHINGTON AVE.
 ROYAL OAK, MI 48067
 (248) 744-0360

SHEET CONTENTS:

COVER SHEET

DATE:	DESCRIPTION:	DRAWN BY:
09-09-2016	SITE PLAN REVIEW #3	BJ
09-15-2016	SITE PLAN REVIEW #2	BJ
09-23-2016	SITE PLAN REVIEW #1	BJ

THE DRAWING IS UNREVISED AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL VERIFY ALL WORK AND SHALL NOTIFY THE DESIGNER IMMEDIATELY OF ANY DISCREPANCIES IN THE DRAWING BEFORE PROCEEDING. FAILURE TO DO SO SHALL BE AT THE CONTRACTOR'S RISK. ALL RESPONSIBILITY AND LIABILITY IS ASSUMED BY THE CONTRACTOR. USE FOR ANY OTHER PURPOSE IS PROHIBITED.

JWD PROJECT NUMBER: 13025
 SHEET NUMBER: A00.00

CONSULTANTS:

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ETS ENGINEERING, INC.
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SEAL:



CLIENT:
THE MEDILODGE GROUP
 64500 VAN DYKE RD.
 WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF
ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
LIFE SAFETY PLAN

DATE: DESCRIPTION: DRAWN BY:

09.09.2016 - NO CHANGES MADE

09.09.2016 SITE PLAN REVIEW #3 B.J.
 08.15.2016 SITE PLAN REVIEW #2 B.J.
 09.23.2016 SITE PLAN REVIEW #1 B.J.

DATE: DESCRIPTION: DRAWN BY:

DATE: DESCRIPTION: DRAWN BY:

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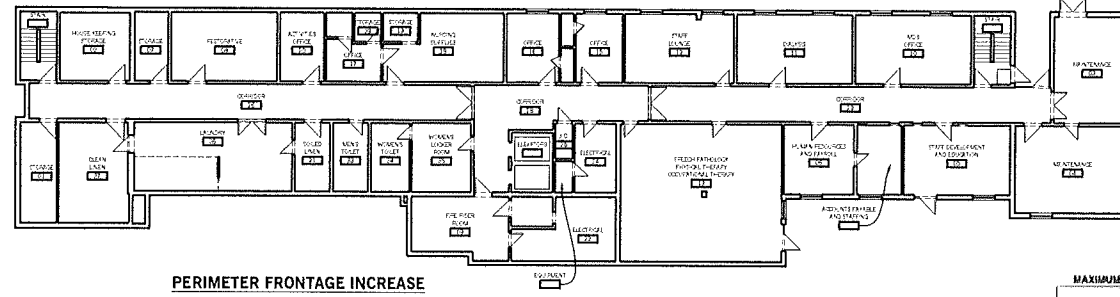
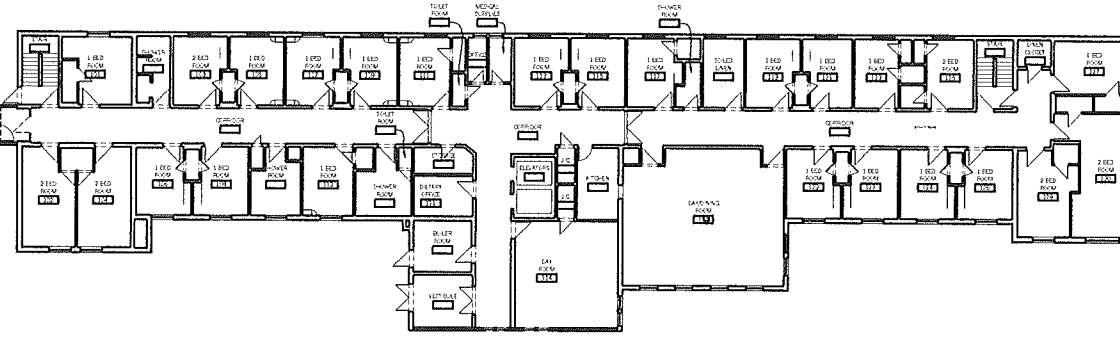
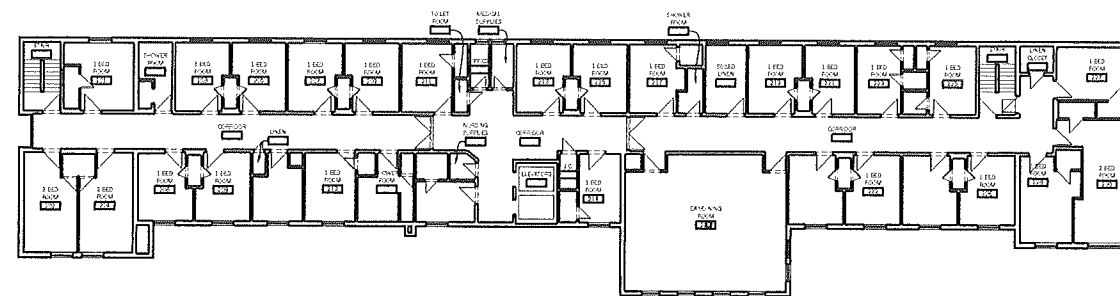
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SHEET NUMBER:

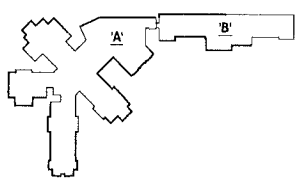
13025

A00.03

#80-186.3



PERIMETER FRONTAGE INCREASE



BUILDING AREA 'A': NEW 1-STORY ADDITION (5A)
BUILDING PERIMETER: 1,809 L.F.
OPEN PERIMETER: 1,159 L.F. (20 FT. OR GREATER)
FRONTAGE INCREASE: 26% (BY EQUATION 5-2)

ALLOWABLE BUILDING SQ. FT.:
 9,500 SQ. FT. (TABLE 503 5A(1)-2)
 28,500 SQ. FT. (300% SPRINKLER INCREASE)
 2,470 SQ. FT. 26% FRONTAGE INCREASE
 40,470 SQ. FT. MAXIMUM ALLOWABLE AREA

38,455 SQ. FT. PROPOSED BUILDING 'A' AREA

BUILDING AREA 'B': EXISTING 2-STORY BUILDING PLUS BASEMENT (2A) AND CONNECTING CORRIDOR
BUILDING PERIMETER: 675 LF
OPEN PERIMETER: 352 LF (20 FT. OF GREATER)
FRONTAGE INCREASE: 18% (BY EQUATION 5-2)

ALLOWABLE BUILDING SQ.FT.:
 15,000 SQ. FT. (TABLE 503 2A(1)-2)
 30,000 SQ. FT. (200% SPRINKLER INCREASE)
 2,700 SQ. FT. (18% FRONTAGE INCREASE)
 47,700 SQ. FT. MAXIMUM ALLOWABLE AREA PER FLOOR

13,025 SQ. FT. PROPOSED (LARGEST SQ. FT. OF THE FLOORS)

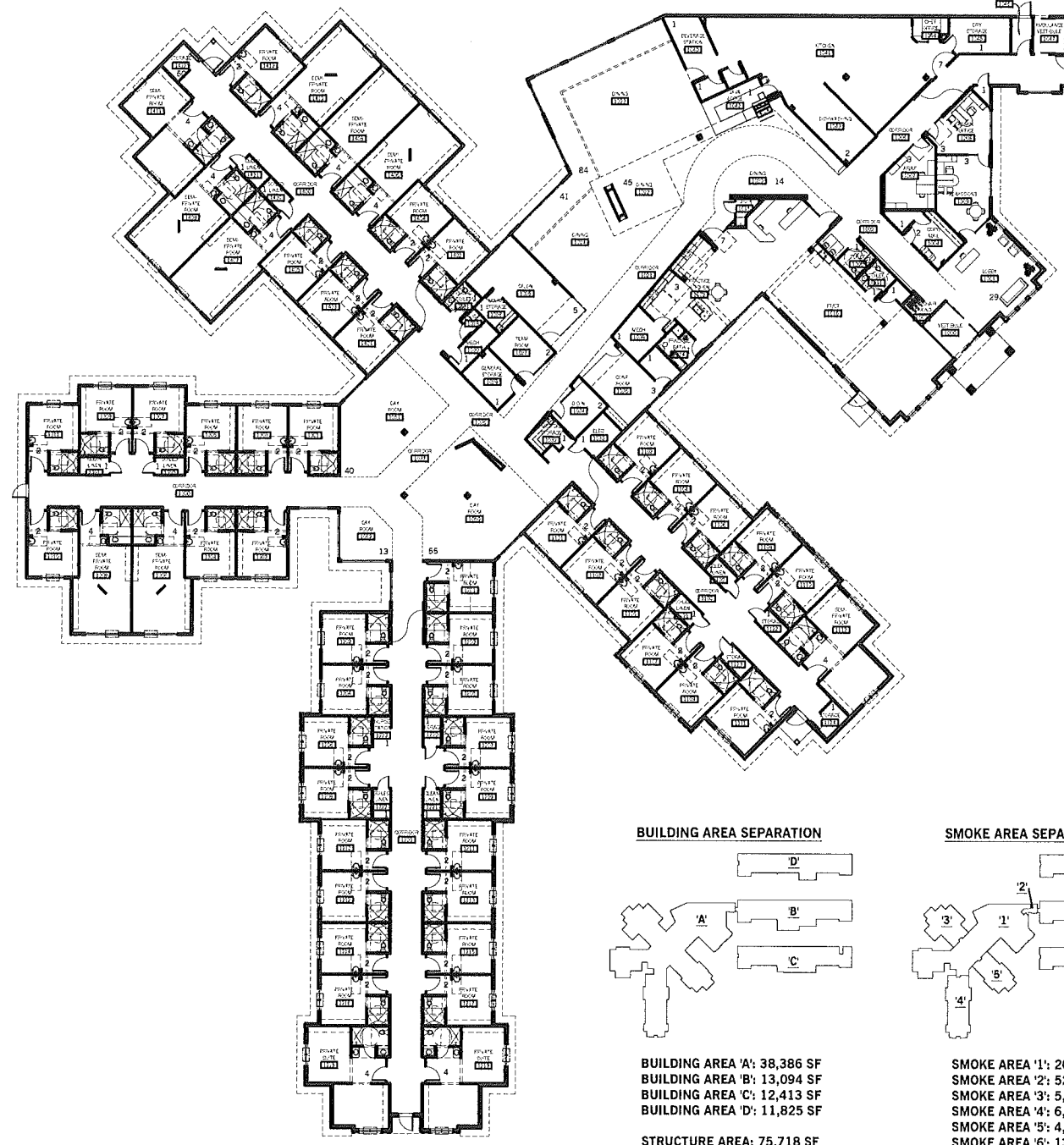
LIFE SAFETY LEGEND:

- FIRE EXIT
- SMOKE BARRIER WALL
- ONE HOUR BEARING WALL (PROTECTION OF OPENINGS, DUCTS AND AIR TRANSFER OPENINGS IN BUILDING ELEMENTS NOT REQUIRED) MBC 602.1
- ONE HOUR FIRE BARRIERS
- TWO HOUR FIRE WALL
- ONE HOUR RATED CEILING (A.C.T. CLG. WITH ONE HOUR RATING ABOVE) MBC TABLE 720.1 (3) ITEM NO. 21.1.1
- MAXIMUM PATH OF TRAVEL (M.P.T.)
- NFEC = NEW FIRE EXTINGUISHER CABINET
- NFE = NEW FIRE EXTINGUISHER (WALL MOUNTED)
- EGRESS OCCUPANT LOAD
- NUMBER OF OCCUPANTS

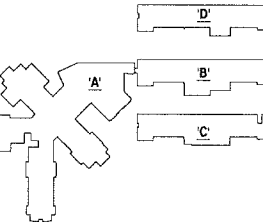
- NOTES:
1. FIRE EXTINGUISHERS TO BE RATED FOR ABC FIRES.
 2. MAXIMUM PATH OF CONVEYANCE ALLOWED FOR A FULLY SPRINKLED BUILDING IS 200'-0".
 3. OCCUPANT LOAD: 823 PEOPLE.
 4. ALL EXTERIOR WALLS TO BE ONE-HOUR RATED (UL DESIGN NO.: U356).
 5. ALL EXTERIOR WALLS WITHIN 10'-0" OF THE IMAGINARY PROPERTY LINES SHALL BE ONE-HOUR RATED (UL DESIGN NO.: U364 UNLESS NOTED OTHERWISE).
 6. ALL SMOKE BARRIERS TO EXTEND THROUGH INTERSTITIAL SPACE TO BOTTOM OF ROOF DECK. PROVIDE ATTIC ACCESS AS REQUIRED.

TABLE 1004.1.1
 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	FLOOR AREA IN SQ. FT. PER OCCUPANT
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	20 gross
Baggage claim	500 gross
Baggage handling	100 gross
Concourse	15 gross
Waiting areas	15 gross
Assembly	
Classroom (desks, tables, etc.)	11 gross
Assembly with fixed seats	See Section 1004.7
Assembly without fixed seats	
Concentrated (chairs only—most fixed)	7 net
Standing space	5 net
Disseminated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross
Canteens—other than fixed seating areas	40 net
Day care	35 net
Dormitories	50 gross
Educational	
Classroom area	20 net
Shops and other recreational rooms	40 net
Locker rooms	15 gross
Exercise rooms	50 gross
H-5 Fabrication and manufacturing areas	200 gross
Industrial areas	100 gross
Institutional areas	
Equipment treatment areas	240 gross
Outpatient areas	100 gross
Skating areas	100 gross
Kitchens, commercial	200 gross
Library	
Reading rooms	50 net
Stack area	100 gross
Locker rooms	50 gross
Mercantile	
Areas on other floors	60 gross
Basement and grade floor areas	30 gross
Storage, stock, shipping areas	300 gross
Parking garages	200 gross
Residential	200 gross
Skating rinks, swimming pools	
Rink and pool	50 gross
Decks	15 gross
Shops and play areas	15 net
Accessory storage areas, mechanical equipment rooms	300 gross
Warehouses	500 gross



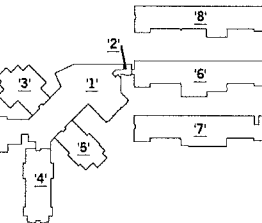
BUILDING AREA SEPARATION



BUILDING AREA 'A': 38,386 SF
BUILDING AREA 'B': 13,094 SF
BUILDING AREA 'C': 12,413 SF
BUILDING AREA 'D': 11,825 SF

STRUCTURE AREA: 75,718 SF

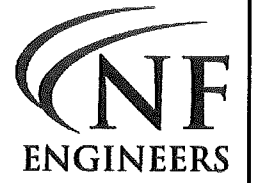
SMOKE AREA SEPARATION



SMOKE AREA '1': 20,497 SF
SMOKE AREA '2': 522 SF
SMOKE AREA '3': 5,791 SF
SMOKE AREA '4': 6,891 SF
SMOKE AREA '5': 4,685 SF
SMOKE AREA '6': 13,094 SF
SMOKE AREA '7': 12,413 SF
SMOKE AREA '8': 11,825 SF

STRUCTURE AREA: 75,718 SF

City of Rochester Hills
Oakland County, Michigan
PRELIMINARY SITE PLAN
MEDILODGE OF ROCHESTER
HILLS



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
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SEAL



PROJECT
Medilodge of
Rochester Hills
Addition and Renovation
1480 Walton Blvd.
Rochester Hills, MI 48039

CLIENT
JW Design
412 S. Washington Street,
Suite 100
Royal Oak, MI 48067

Contact: John Saviski, AIA
Phone: (248) 336-2501

PROJECT LOCATION
Part of the SE 1/4
of Section 9
T.3N., R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Civil Cover Sheet



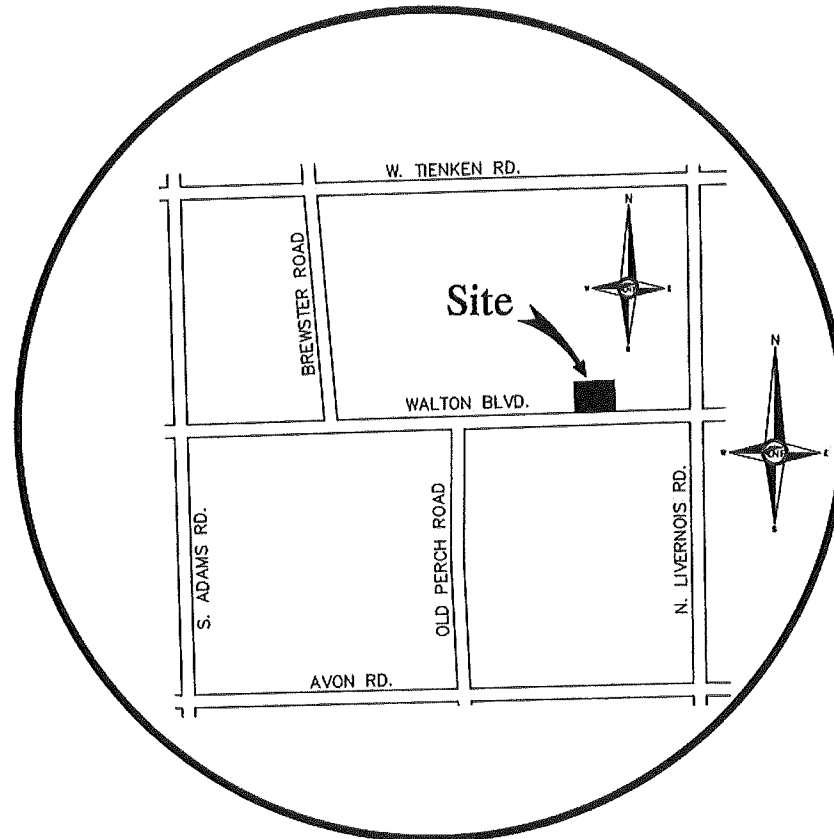
REVISIONS
08/23/2016 Site Plan Review #1
08/15/2016 Site Plan Review #2
08/09/2016 Site Plan Review #2, No Changes

DRAWN BY:
N. Naoum
DESIGNED BY:
M. Peterson
APPROVED BY:
M. Peterson

DATE:
08-02-2016

SCALE: N.T.S.

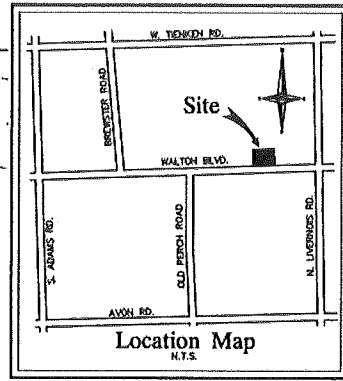
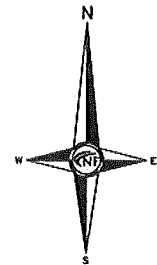
NFE JOB NO. SHEET NO.
1981 **C00.00**
City File #80-186.3



LOCATION MAP
N.T.S.
Section 9, T 3 N , R 11 E

SHEET INDEX	
C00.00	CIVIL COVER SHEET
C01.00	BOUNDARY / TOPOGRAPHIC / TREE SURVEY
C01.01	TREE SURVEY & LEGAL
C02.00	DEMOLITION PLAN
C03.00	PAVING & GRADING PLAN
C04.00	UTILITY PLAN
C05.00	DRAINAGE PLAN
C06.00	FIRE DEPARTMENT
C07.00	SOIL BORINGS
C08.00	DETAILS
C09.00	SOIL EROSION / DRAINAGE AREA PLAN

NOT TO BE USED AS CONSTRUCTION DRAWINGS



CF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
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 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
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STRUCTURE TABLE

1. ROUND CATCH-BASH RM=832.54 NO PIPES VISIBLE TOP OF WATER @ 830.44 TOP OF DIRT @ 829.84	17. SANITARY MANHOLE RM=832.59 12" @ 825.89 TO #14 16" @ 824.79 TO EAST 16" @ 824.79 TO #20
2. SQUARE CATCH BASH RM=834.57 12" CONC. 830.27 TO RETENTION POND S. 6" CONC. 830.57 TO RETENTION POND N.	18. GATE VALVE AND WELL RM=834.10 TOP OF WATER @ 827.80 TOP OF PIPE @ 822.30 BOTTOM OF STRUCTURE @ 821.60
3. GATE VALVE AND WELL RM=835.20 TOP / VERTICAL PIPE @ 834.10 TOP OF WATER @ 831.60 BOTTOM OF MANHOLE 829.60	19. SQUARE CATCH BASH RM=834.23 15" @ 828.53 TO #11
4. SQUARE CATCH BASH RM=833.65 12" @ 831.90 TO RETENTION POND	20. SANITARY MANHOLE RM=833.97 16" @ 825.77 TO WEST 16" @ 825.75 TO #17
5. ROUND CATCH BASH RM=846.42 6" @ 844.07 TO #21	21. SANITARY MANHOLE RM=846.49 6" @ 838.06 TO #2 6" @ 839.04 TO #5
6. SANITARY MANHOLE RM=846.42 6" @ 828.78 TO NORTH 6" @ 828.18 TO #14 6" @ 828.28 TO WEST	22. GATE VALVE AND WELL RM=832.97 TOP OF WATER @ 826.44 TOP OF PIPE @ 821.27 BOTTOM OF STRUCTURE @ 819.47
7. BEDDIE CATCH BASH RM=834.05 12" @ 831.25 TO #11	23. SANITARY MANHOLE RM=830.59 6" @ 828.17 TO #5 6" @ 828.79 TO WEST 12" @ 828.15 TO #17
8. GATE VALVE AND WELL RM=832.97 TOP OF WATER @ 826.44 TOP OF PIPE @ 821.27 BOTTOM OF STRUCTURE @ 819.47	24. SQUARE CATCH BASH RM=830.55 12" @ 827.05 TO NORTH 12" @ 828.16 TO #18
9. BEDDIE CATCH BASH RM=829.30 12" @ 818.10 TO EAST AND WEST 12" NORTH TO RETENTION POND NOT VISIBLE	25. SQUARE CATCH BASH RM=830.72 12" @ 828.22 TO #15
10. GATE VALVE AND WELL RM=835.10 TOP OF PIPE @ 828.30	
11. SQUARE CATCH BASH RM=834.15 12" @ 828.15 TO #7 15" @ 828.15 TO #9	
12. SANITARY MANHOLE RM=839.35 6" @ 832.05 TO NORTH 6" @ 832.55 TO SOUTH	
13. BEDDIE CATCH BASH RM=840.81 OFFITE-MEASURED FOR LOCATION	
14. SANITARY MANHOLE RM=830.59 6" @ 828.17 TO #5 6" @ 828.79 TO WEST 12" @ 828.15 TO #17	
15. SQUARE CATCH BASH RM=830.55 12" @ 827.05 TO NORTH 12" @ 828.16 TO #18	
16. SQUARE CATCH BASH RM=830.72 12" @ 828.22 TO #15	

17. SANITARY MANHOLE RM=832.59 12" @ 825.89 TO #14 16" @ 824.79 TO EAST 16" @ 824.79 TO #20	18. GATE VALVE AND WELL RM=834.10 TOP OF WATER @ 827.80 TOP OF PIPE @ 822.30 BOTTOM OF STRUCTURE @ 821.60
19. SQUARE CATCH BASH RM=834.23 15" @ 828.53 TO #11	20. SANITARY MANHOLE RM=833.97 16" @ 825.77 TO WEST 16" @ 825.75 TO #17
21. SANITARY MANHOLE RM=846.49 6" @ 838.06 TO #2 6" @ 839.04 TO #5	

22. GATE VALVE AND WELL RM=832.97 TOP OF WATER @ 826.44 TOP OF PIPE @ 821.27 BOTTOM OF STRUCTURE @ 819.47	23. SANITARY MANHOLE RM=830.59 6" @ 828.17 TO #5 6" @ 828.79 TO WEST 12" @ 828.15 TO #17
24. SQUARE CATCH BASH RM=830.55 12" @ 827.05 TO NORTH 12" @ 828.16 TO #18	25. SQUARE CATCH BASH RM=830.72 12" @ 828.22 TO #15

TOPOGRAPHIC SURVEY NOTES
 ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.
 UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS OR EXACTNESS OF LOCATION.
 THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

LEGEND

	EXISTING SANITARY SEWER
	EXISTING SAN. CLEAN OUT
	EXISTING WATER MAIN
	EXISTING STORM SEWER
	EX. R.Y. CATCH BASH
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN

SEAL

PROJECT
 Medilodge of
 Rochester Hills
 Addition and Renovation
 1480 Walton Blvd.
 Rochester Hills, MI 48039

CLIENT
 JW Design
 412 S. Washington Street,
 Suite 100
 Royal Oak, MI 48067

Contact: John Saviski, AIA
 Phone: (248) 336-2501

PROJECT LOCATION
 Part of the SE 1/4
 of Section 9
 T.3N., R.11E.
 City of Rochester Hills,
 Oakland County, Michigan

SHEET
 Boundary / Topographic /
 Tree Survey



Know what's below
 Call before you dig.

REVISIONS
 05/23/2016 Site Plan Review #1 No Changes
 06/15/2016 Site Plan Review #2 No Changes
 06/09/2016 Site Plan Review #3 No Changes

DRAWN BY:
 N. Naoum

DESIGNED BY:

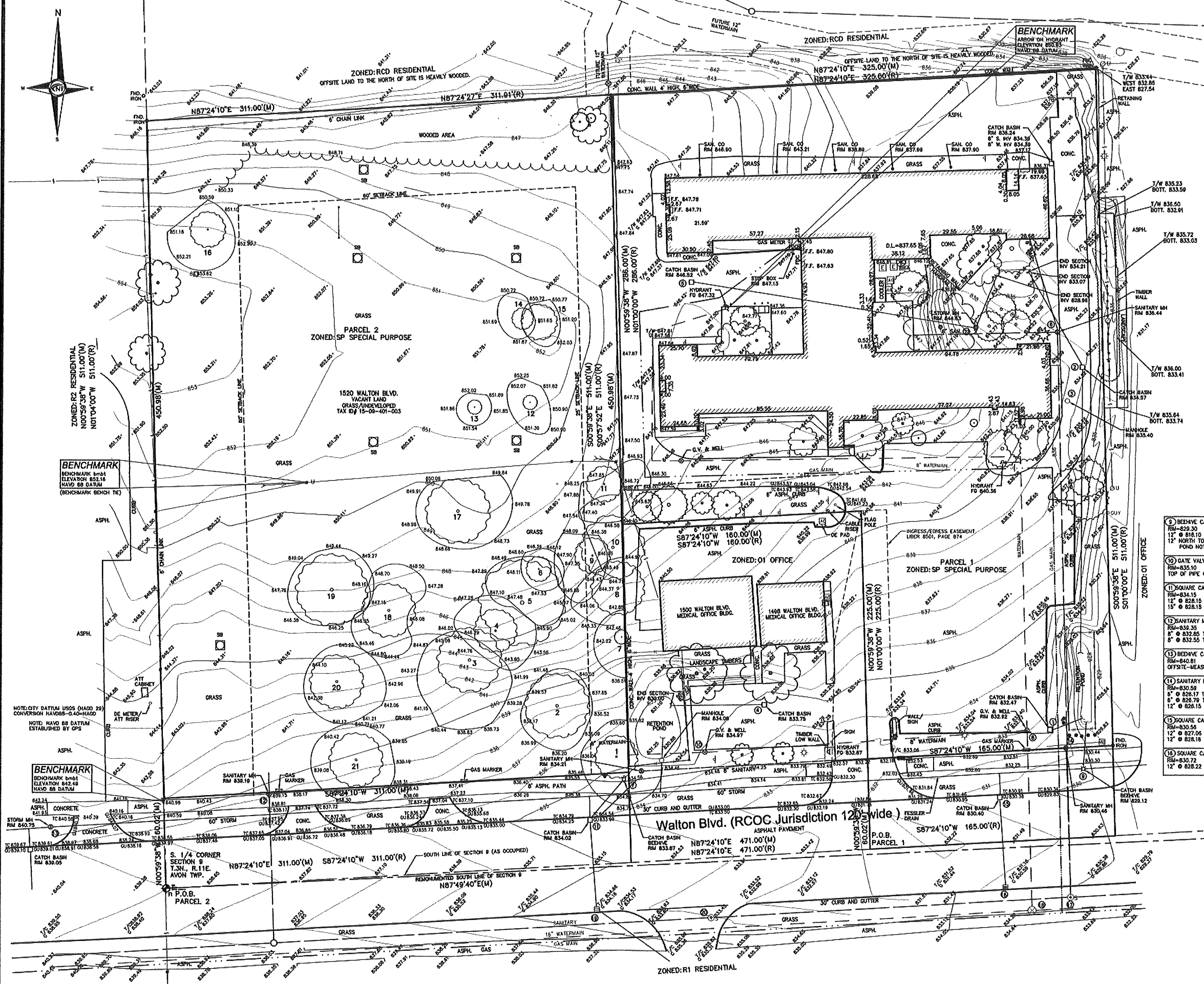
APPROVED BY:
 K. Navaroli

DATE:
 08-02-2016

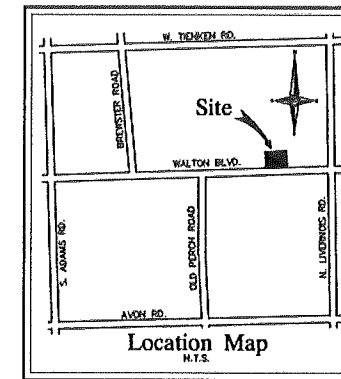
SCALE: 1" = 30'
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NFE JOB NO. 1981 **SHEET NO.** C01.00

City File #80-186.3



NOT TO BE USED AS CONSTRUCTION DRAWINGS



CF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL

TREE LIST

Tree #	Botanical Name	Common Name	Dia.	Type	Other Dia.	Condition	Comments
1	Acer platanoides	Norway Maple	28			Good	
2	Acer platanoides	Norway Maple	34			Good	
3	Acer saccharum	Sugar Maple	28			Good	Unbalanced crown
4	Acer saccharum	Sugar Maple	25			Poor	Extensive trunk decay primary crotch
5	Acer saccharum	Sugar Maple	38			Poor	Extensive trunk decay
6	Picea pungens	Colorado Blue Spruce	12			Fair	Unidentified needle disease
7	Morus alba	White Mulberry	8	Multiple	6, 5, 5, 4	Fair	Growing into concrete wall
8	Acer saccharum	Sugar Maple	28			Good	Some limb deadwood & dieback
9	Acer platanoides	Norway Maple	22			Good	Unbalanced crown
10	Acer saccharinum	Silver Maple	38			Good	
11	Acer saccharum	Sugar Maple	23			Poor	Extensive crown deadwood & dieback
12	Malus spp.	Crabapple spp.	9	Multiple		Poor	Extensive crown deadwood & dieback
13	Malus spp.	Crabapple spp.	8			Poor	Extensive basal trunk decay
14	Acer saccharinum	Silver Maple	12			Good	
15	Juniperus virginiana	Eastern Red-cedar	15			Good	
16	Acer negundo	Boxelder	24	Twin	16	Poor	Extensive trunk decay
17	Acer platanoides	Norway Maple	30			Poor	Scaffold branch failures and decay, declining
18	Acer platanoides	Norway Maple	26			Poor	Large limb deadwood, decay & failures
19	Acer platanoides	Norway Maple	32			Fair	1 large limb failure, beg to decline
20	Acer platanoides	Norway Maple	26			Fair	Weak scaffold branch union, some decay
21	Acer platanoides	Norway Maple	28			Good	

LEGAL DESCRIPTION

PARCEL #1

Land situated in the City of Rochester Hills, County of Oakland, and State of Michigan, described as: Parcel 1: Part of the Southeast 1/4 of Section 9, Township 3 North, Range 11 East, Rochester Hills, Oakland County, Michigan, described as: Beginning at a point on the South Section line located North 87 degrees 24 minutes 10 seconds East along the section line, 471.00 feet from the South 1/4 corner of Section 9; thence North 00 degree 59 minutes 38 seconds West, 225.00 feet; thence South 87 degrees 24 minutes 10 seconds West, 160.00 feet; thence North 00 degree 59 minutes 38 seconds West, 286.00 feet; thence North 87 degrees 24 minutes 10 seconds East, 325.00 feet; thence South 00 degree 59 minutes 38 seconds East, 511.00 feet to the South Section line; thence South 87 degrees 24 minutes 10 seconds West along the section line, 165.00 feet to the Point of Beginning. EXCEPT that part which lies South of a line 60 feet North of measured at right angles and parallel to the South section line deeded to the Board of County Road Commissioners of the County of Oakland.

Together with a private easement for purposes of ingress and egress and a non-exclusive easement for utilities subject to the terms and conditions as set forth in the Mutual Benefit Easement Maintenance Agreement recorded October 21, 1983 in Liber 8501, Page 874, Oakland County Records.

1480 WALTON BLVD.
TAX PARCEL ID NO. 15-09-401-005

PARCEL #2

Part of the Southeast 1/4 of Section 9, Town 3 North, Range 11 East, City of Rochester Hills, Oakland County, Michigan, more particularly described as: Beginning at the South 1/4 corner of said Section 9; thence along the North and South 1/4 line of said Section, North 00 degrees 59 minutes 38 seconds West 511.00 feet thence North 87 degrees 24 minutes 10 seconds East 311.00 feet; thence South 00 degrees 59 minutes 38 seconds East 511.00 feet to the South line of said Section as occupied; thence South 87 degrees 24 minutes 10 seconds West 311.00 feet to the point of beginning. EXCEPTING that part which lies South of a line 60 feet North of measured at right angles and parallel to the South section line deeded to the Board of County Road Commissioners of the County of Oakland.

1520 WALTON BLVD.
TAX ID: 15-09-401-003

PROJECT

Medilodge of
Rochester Hills
Addition and Renovation
1480 Walton Blvd.
Rochester Hills, MI 48039

CLIENT

JW Design
412 S. Washington Street,
Suite 100
Royal Oak, MI 48067

Contact: John Saviski, AIA
Phone: (248) 336-2501

PROJECT LOCATION

Part of the SE 1/4
of Section 9
T.3N., R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET

Tree Survey/ Legal



Know what's below
Call before you dig.

REVISIONS

05/23/2016 Site Plan Review #1 No Changes
06/15/2016 Site Plan Review #2 No Changes
09/09/2016 Site Plan Review #3 No Changes

DRAWN BY:
N. Naoum

DESIGNED BY:
K. Navaroli

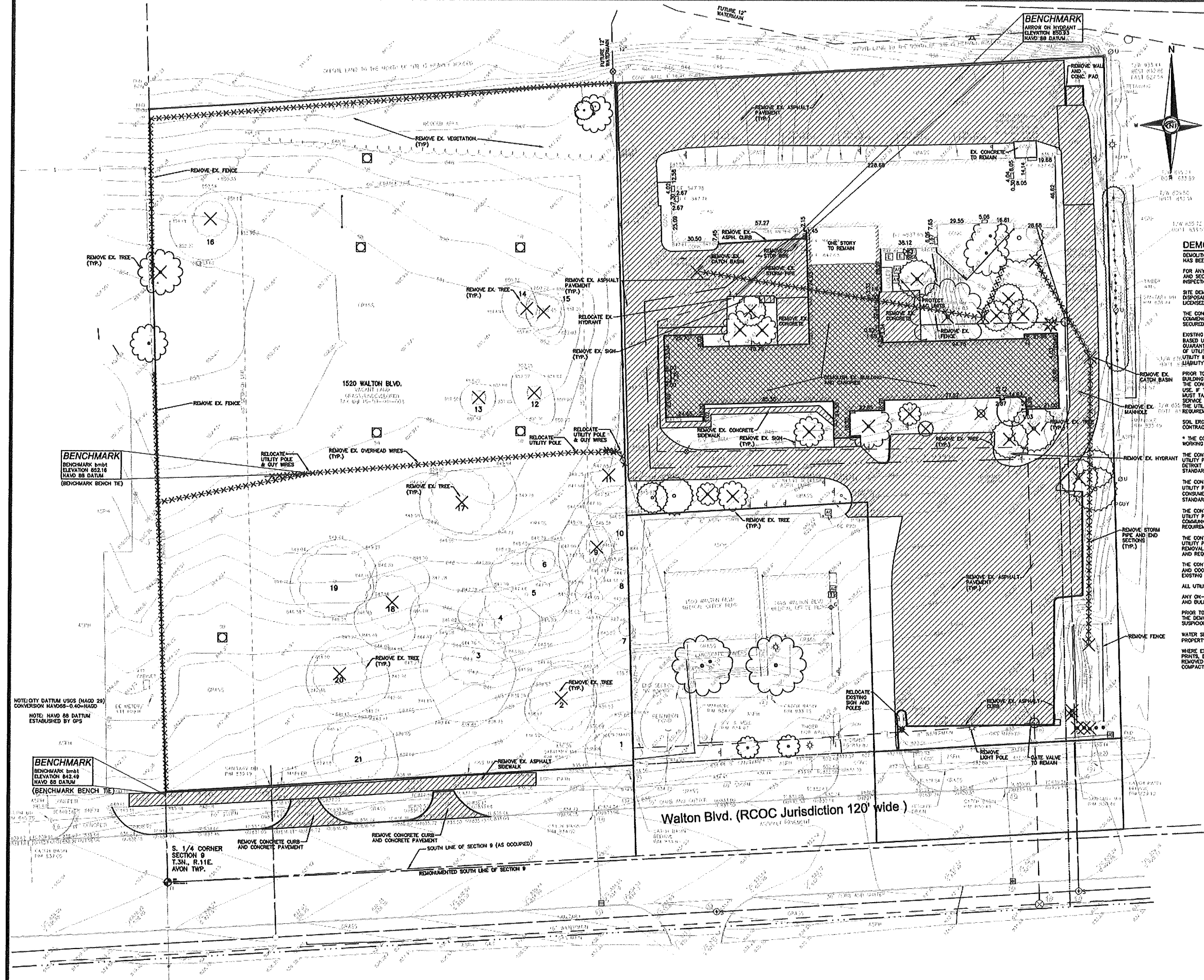
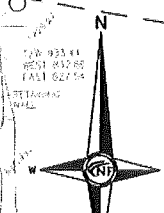
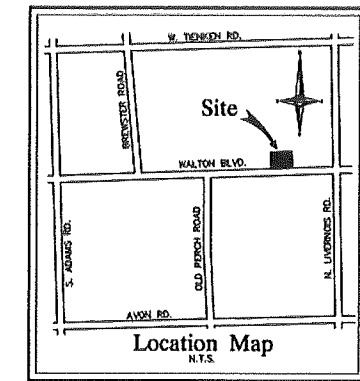
APPROVED BY:

DATE:
08-02-2016

SCALE:

NFE JOB NO. SHEET NO.
1981 C01.01

City File #80-186.3



DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION. FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LICENSES AND MAKE ARRANGEMENTS FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TAPPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE, NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE, THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIO (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE DETROIT Edison COMPANY. REMOVAL OF DETROIT Edison ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF DETROIT Edison.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH CONSUMERS ENERGY/ARCHON. REMOVAL OF CONSUMERS ENERGY/ARCHON GAS SERVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF CONSUMERS ENERGY/ARCHON.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE APPROPRIATE CABLE MEDIA COMPANY. REMOVAL OF CABLE SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF THE CABLE COMPANY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ALL UTILITY METERS SHALL BE REMOVED BY THE APPROPRIATE UTILITY COMPANY.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

PRIOR TO BUILDING DEMOLITION, ALL HAZARDOUS MATERIAL SHALL BE REMOVED BY OTHERS. THE DEMOLITION CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER SHOULD ANY SUSPICIOUS MATERIAL BE FOUND.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

WHERE EXISTING BUILDINGS PLANNED FOR DEMOLITION FALL WITHIN PROPOSED BUILDING FOOT PRINTS, BASEMENT FLOOR SLABS, FOUNDATION WALLS AND FOOTINGS SHALL BE COMPLETELY REMOVED AND BACK FILLED WITH MOIST CLASS II GRANULAR MATERIAL AND BE MACHINE COMPACTED TO A MINIMUM OF 95% OF MATERIALS MAXIMUM DENSITY.

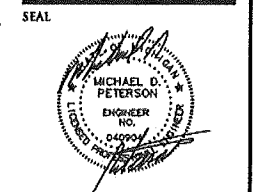
TOPOGRAPHIC SURVEY NOTES

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LEGEND	
	EXISTING SANITARY SEWER
	EXISTING SAN. CLEAN OUT
	EXISTING WATER MAIN
	EXISTING STORM SEWER
	EX. R. Y. CATCH BASIN
	EXISTING BURIED CABLES
	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
	EXISTING UTILITY TO BE REMOVED
	EXISTING UTILITY TO BE ABANDONED
	INDICATES EXISTING TREE TO BE REMOVED
	INDICATES AREAS OF PAVEMENT, BUILDINGS, ETC. TO BE REMOVED



PROJECT
Medlodge of Rochester Hills
Addition and Renovation
1480 Walton Blvd.
Rochester Hills, MI 48039

CLIENT
JW Design
412 S. Washington Street,
Suite 100
Royal Oak, MI 48067

Contact: John Saviski, AIA
Phone: (248) 336-2501

PROJECT LOCATION
Part of the SE 1/4
of Section 9
T.3N., R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Demolition Plan



REVISIONS

05/23/2018	Site Plan Review #1
08/15/2018	Site Plan Review #2 No Changes
09/09/2018	Site Plan Review #3 No Changes

DRAWN BY:
N. Naoum

DESIGNED BY:
M. Peterson

APPROVED BY:
M. Peterson

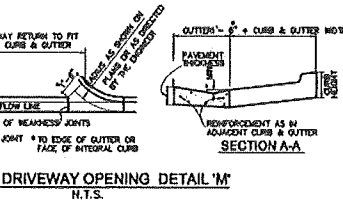
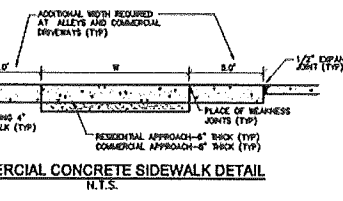
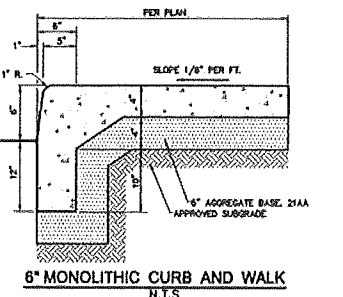
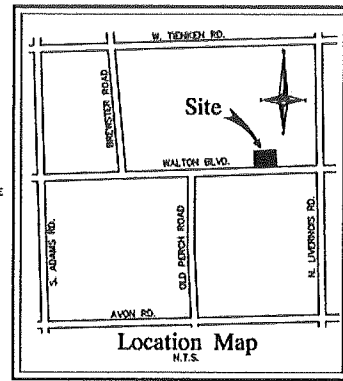
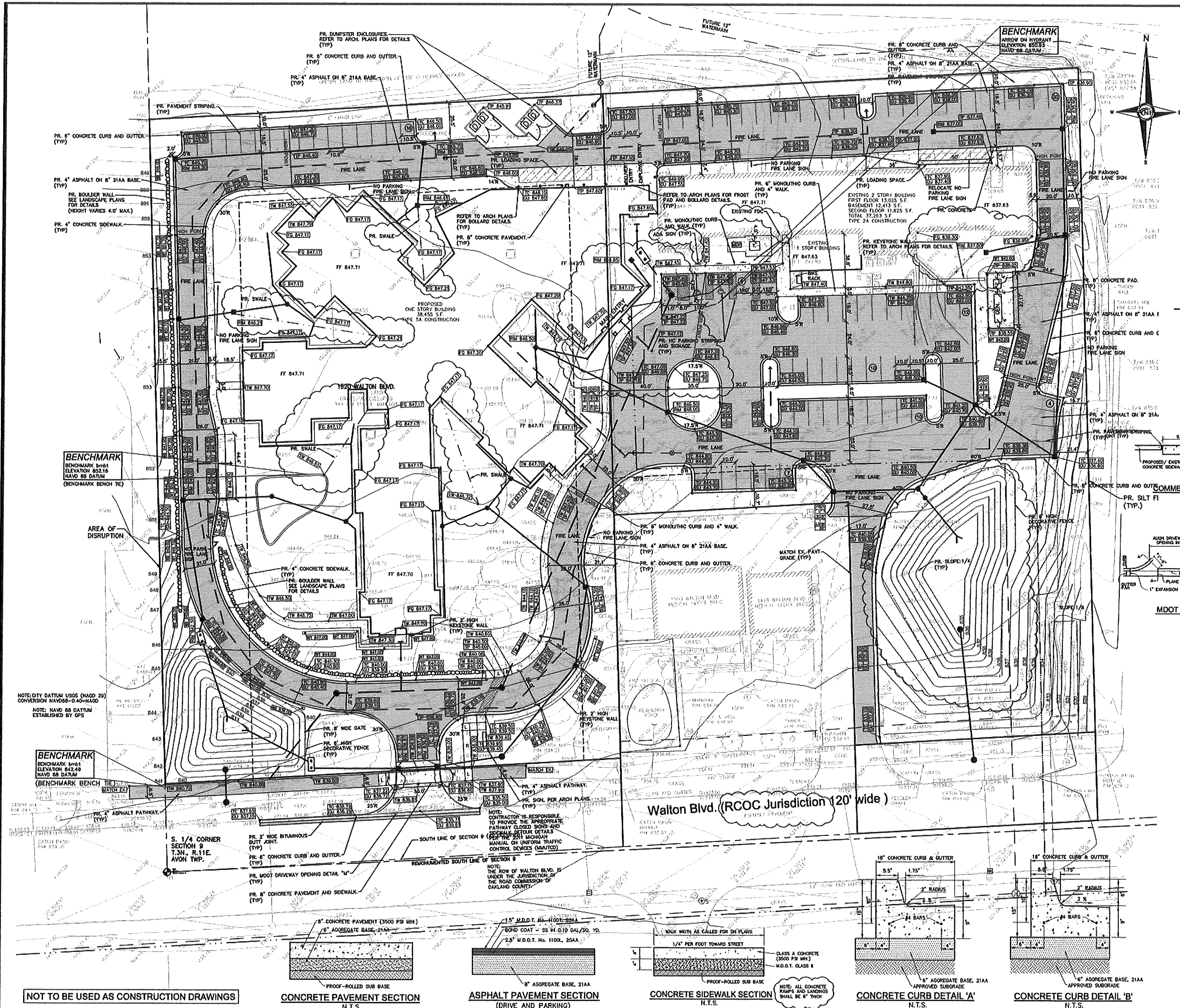
DATE:
08-02-2016

SCALE: 1" = 30'

NFE JOB NO. SHEET NO.
1981 C02.00

City File #80-186.3

NOT TO BE USED AS CONSTRUCTION DRAWINGS



PAVING LEGEND

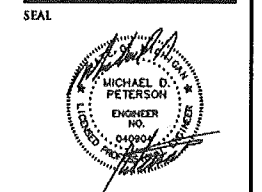
[Symbol]	PROPOSED CONCRETE PAVEMENT
[Symbol]	PROPOSED ASPHALT PAVEMENT

LEGEND

[Symbol]	MANHOLE	EXISTING SANITARY SEWER
[Symbol]	HYDRANT	SAN. CLEAN OUT
[Symbol]	GATE VALVE	EXISTING WATERMAIN
[Symbol]	MANHOLE CATCH BASIN	EXISTING STORM SEWER
[Symbol]	UTILITY POLE	EX. R. Y. CATCH BASIN
[Symbol]	GUY POLE	EXISTING BURIED CABLES
[Symbol]	GUY WIRE	OVERHEAD LINES
[Symbol]	C.O.	EXISTING GAS MAIN
[Symbol]	MANHOLE	PR. SANITARY SEWER
[Symbol]	GATE VALVE	PR. WATER MAIN
[Symbol]	C.B. MANHOLE	PR. STORM SEWER
[Symbol]	INLET	PR. R. Y. CATCH BASIN
[Symbol]	PROPOSED LIGHT POLE	
[Symbol]	PR. TOP OF CURB ELEVATION	
[Symbol]	PR. TOP OF WALK ELEVATION	
[Symbol]	PR. TOP OF PAVT. ELEVATION	
[Symbol]	FINISH GRADE ELEVATION	

CF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 4677 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
 FAX. (248) 332-8257



PROJECT
 Medilodge of
 Rochester Hills
 Addition and Renovation
 1480 Walton Blvd.
 Rochester Hills, MI 48039

CLIENT
 JW Design
 412 S. Washington Street,
 Suite 100
 Royal Oak, MI 48067

Contact: John Saviski, AIA
 Phone: (248) 336-2501

PROJECT LOCATION
 Part of the SE 1/4
 of Section 9
 T.3N., R.11E.
 City of Rochester Hills,
 Oakland County, Michigan

SHEET
 Paving & Grading Plan



REVISIONS

05/25/2016	Site Plan Review #1
08/15/2016	Site Plan Review #2
09/09/2016	Site Plan Review #3

DRAWN BY:
 N. Naoum

DESIGNED BY:
 M. Peterson

APPROVED BY:
 M. Peterson

DATE:
 08-02-2016

SCALE: 1" = 30'

NFE JOB NO. SHEET NO.
 1981 C03.00

City File #80-1863

NOTE: CITY DATUM USGS (NAVD 83)
 CONVERSION NAVD83-040-NAVD

NOTE: NAVD 88 DATUM
 ESTABLISHED BY GPS

BENCHMARK
 BENCHMARK 1901
 ELEVATION 852.49
 NAVD 88 DATUM
 (BENCHMARK BENCH TIE)

BENCHMARK
 BENCHMARK 1901
 ELEVATION 852.49
 NAVD 88 DATUM
 (BENCHMARK BENCH TIE)

BENCHMARK
 BENCHMARK 1901
 ELEVATION 852.49
 NAVD 88 DATUM
 (BENCHMARK BENCH TIE)

BENCHMARK
 BENCHMARK 1901
 ELEVATION 852.49
 NAVD 88 DATUM
 (BENCHMARK BENCH TIE)

NOT TO BE USED AS CONSTRUCTION DRAWINGS

CONCRETE PAVEMENT SECTION
 N.T.S.

ASPHALT PAVEMENT SECTION
 (DRIVE AND PARKING)
 N.T.S.

CONCRETE SIDEWALK SECTION
 N.T.S.

CONCRETE CURB DETAIL 'A'
 N.T.S.

CONCRETE CURB DETAIL 'B'
 N.T.S.

Walton Blvd. (RCOC Jurisdiction 120' wide)

NOTE: CONTRACTOR IS RESPONSIBLE
 TO PROVIDE THE APPROPRIATE
 PATHWAY CLOSED SIGNS AND
 (RESOLVE) DETAIL MICHIGAN
 MANUAL ON UNIFORM TRAFFIC
 CONTROL DEVICES (MUTCD)

NOTE:
 THE ROW OF WALTON BLVD. IS
 UNDER THE JURISDICTION OF
 THE ROAD COMMISSION OF
 OAKLAND COUNTY.

REMOVED SOUTH LINE OF SECTION 9

15" M.D.T. No. 1100L, 20A

2.5" M.D.T. No. 1100L, 20A

CLASS A CONCRETE
 (5000 PSI MIN.)
 M.D.T. CLASS 8

PROOF-ROLLED SUB BASE

6" AGGREGATE BASE, 21AA
 APPROVED SUBGRADE

1.75" RADIUS

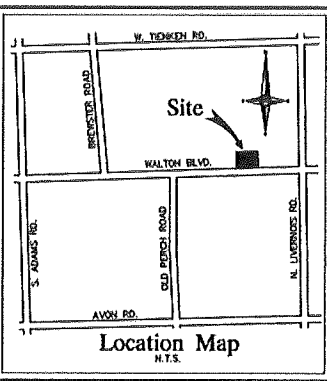
6" AGGREGATE BASE, 21AA
 APPROVED SUBGRADE

6" AGGREGATE BASE, 21AA
 APPROVED SUBGRADE

1.75" RADIUS

6" AGGREGATE BASE, 21AA
 APPROVED SUBGRADE

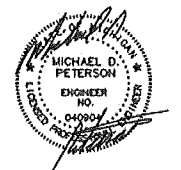
6" AGGREGATE BASE, 21AA
 APPROVED SUBGRADE



CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
4677 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257

SEAL



PROJECT
Medlodge of
Rochester Hills
Addition and Renovation
1480 Walton Blvd.
Rochester Hills, MI 48039

JENI
N Design
2 S. Washington Street,
Suite 100
Royal Oak, MI 48067

Contact: John Saviski, AIA
Phone: (248) 336-2501

PROJECT LOCATION
Part of the SE 1/4
of Section 9
T.3N., R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Utility Plan



REVISIONS
05/23/2016 Site Plan Review #1
09/15/2016 Site Plan Review #2
09/09/2016 Site Plan Review #3

DRAWN BY:
M. Wilson

DESIGNED BY:
M. Peterson

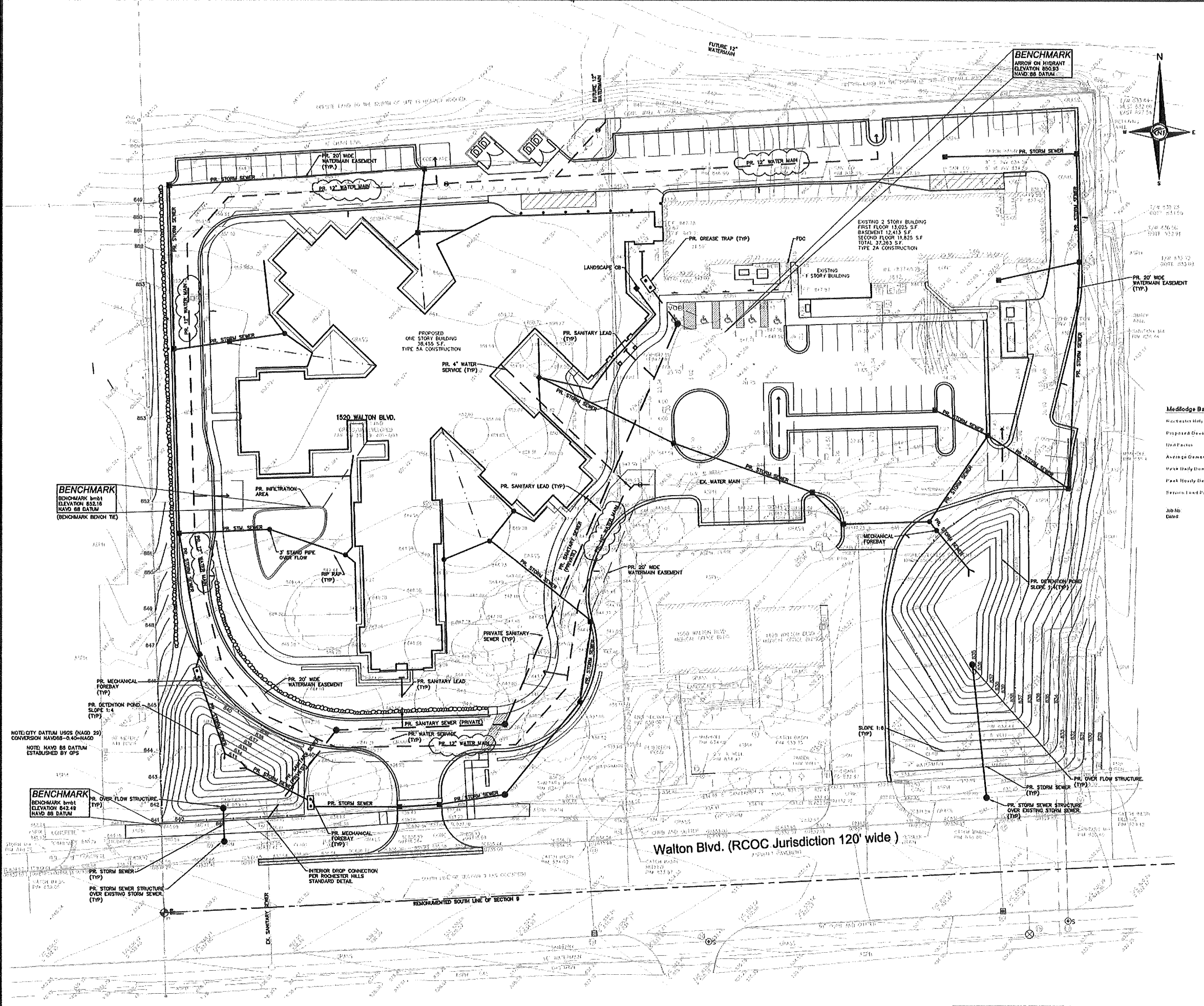
APPROVED BY:
M. Peterson

DATE:
08-02-2016

SCALE: 1" = 40'

NFE JOB NO. SHEET NO.
1981 C04.00

City File #80-186.3



BENCHMARK
BENCHMARK 5761
ELEVATION 832.16
NAVD 88 DATUM
(BENCHMARK BENCH TIE)

BENCHMARK
ARROW ON HYDRANT
ELEVATION 830.83
NAVD 88 DATUM

NOTE: CITY DATUM USGS (NAVD 29)
CONVERSION FACTOR = 0.40-NAD83
NOTE: NAVD 88 DATUM
ESTABLISHED BY OPS

BENCHMARK
BENCHMARK 5762
ELEVATION 842.48
NAVD 88 DATUM

Walton Blvd. (RCOC Jurisdiction 120' wide)

NOT TO BE USED AS CONSTRUCTION DRAWINGS

LEGEND

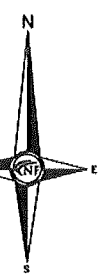
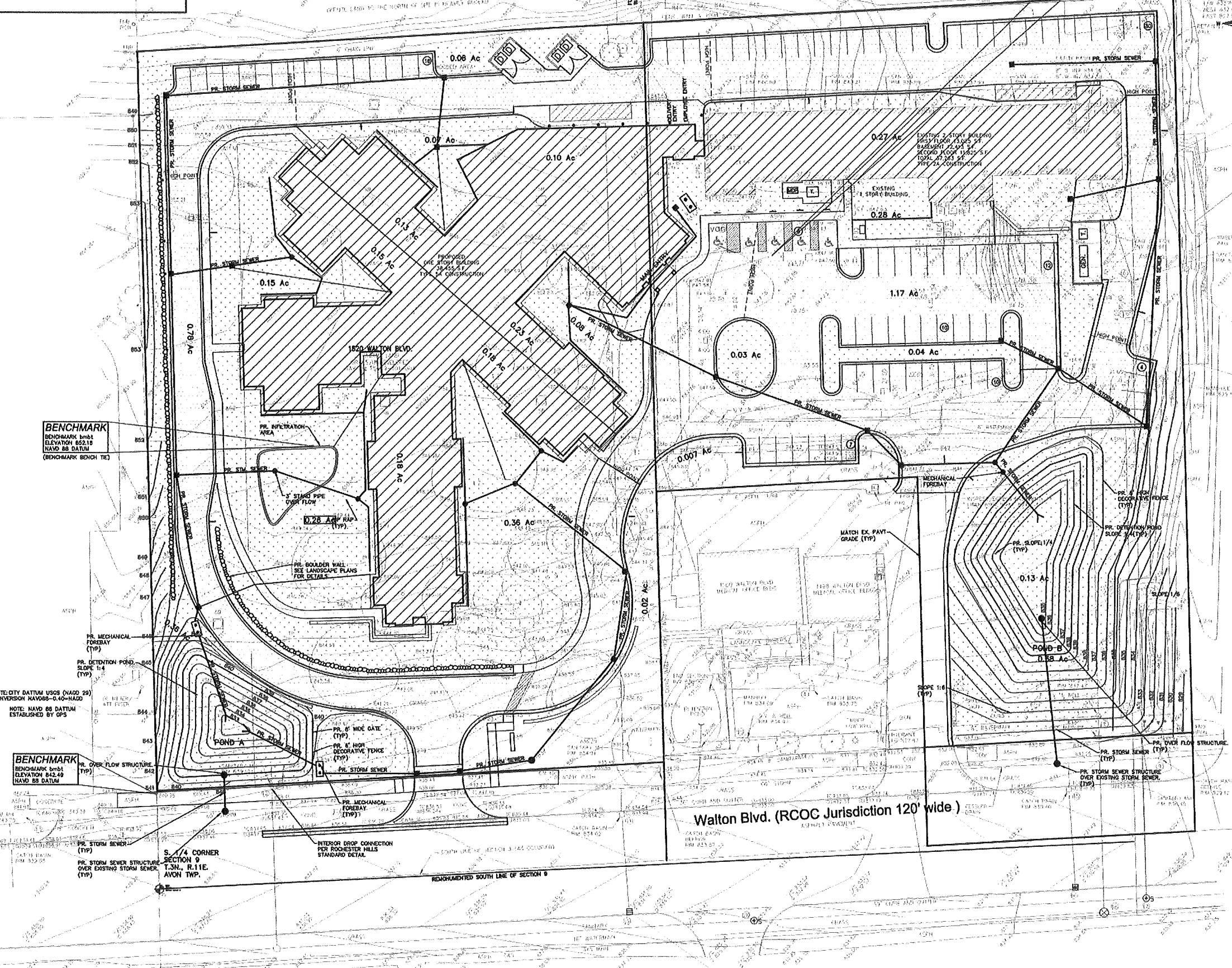
MANHOLE	EXISTING SANITARY SEWER
HYDRANT	SAN. CLEAN OUT
MANHOLE CATCH BASIN	EXISTING WATER MAIN
	EXISTING STORM SEWER
UTILITY POLE	EX. R. Y. CATCH BASIN
GUY POLE	EXISTING BURIED CABLES
GUY WIRE	OVERHEAD LINES
	LIGHT POLE
	SIGN
	EXISTING GAS MAIN
C.O. MANHOLE	PR. SANITARY SEWER
HYDRANT	PR. WATER MAIN
INLET	PR. STORM SEWER
C.B. MANHOLE	PR. R. Y. CATCH BASIN
	SAND BACKFILL (65% DENSITY)
	PROPOSED LIGHT POLE

SURFACE LEGEND

	PROPOSED PAVEMENT
	PROPOSED GREENBELT
	PROPOSED BUILDING

SOIL DATA BY G2 CONSULTING GROUP

Twelve soil borings, B-1 through B-12, were drilled in the footprint of the proposed building and pavements. Approximately 5 to 12 inches of topsoil are present at the boring locations. Very loose to loose silty sand fill underlies the topsoil in borings B-5 and B-12 and extends to an approximate depth of 6 1/2 and 3 1/2 feet, respectively. Native granular soils, consisting of very loose to medium compact gravelly sand, silty sand, clayey sand, and sand, generally underlie the topsoil and fill and extend to the specified depths of 10 and 12 feet. Medium clay is present in boring B-11 extending from an approximate depth of 6 to 13 feet. In addition, layers of stiff to hard sandy clay and silty clay are present at various depths in borings B-1, B-4, and B-6 through B-9. Groundwater seepage was encountered during drilling operations at an approximate depth of 19 feet in borings B-1, B-5, and B-12. Upon completion of drilling at these boring locations, no measurable groundwater was present in the boreholes. No measurable groundwater was encountered during or upon completion of drilling in the remaining boring locations.



Medlodge of Rochester Hills

Preliminary Detention Calculations:
Based on 100 Storm Event:

Proposed Drainage Areas:

West Side - New Building, paved surfaces and greenbelt areas - 2.79			
Building Area -	31,770 SF	0.73 Ac	
Pavement -	33,955 SF	0.78 Ac	
Greenbelt -	55,675 SF	1.28 Ac	
C West Side - Weighted			
C = $1.51(0.95) + 1.28(0.30) =$		2.79	0.65
C Factor Difference - Storage Volume			
Weighted C - 0.30 =		0.35	
Required Storage Volume: 100 Yr. Storm			
$Q_0 = Q_a / (Area \times C)$		$V_s = (16,500 \times T) / (T + 25) \cdot (40 \times Q_0 \times T)$	
CONTRIBUTING ACREAGE: 2.79 ACRES			
Q_a, ALLOWABLE OUTFLOW: 0.56 CFS/ACRE			
C, RUNOFF COEFFICIENT: 0.35 IMPERVIOUSNESS			
Q₀, MAXIMUM ALLOWABLE OUTFLOW: 0.568 CFS/(ACRE*IMPER.)			
T_s, STORAGE TIME (100 YEAR): 109.704 MINUTES			
V_s, STORAGE VOLUME:		10,943.78	CF/(ACRE*IMPER.)
V_t, TOTAL VOLUME:		10,733.06	CUBIC FEET
VOLUME REQUIRED		10,733	CUBIC FEET

Volume Provided:

Pond A	1:4 Slope (Detention Pond)		
839	4,312	3,798	
838	3,283	2,632	
837	2,381	1,995	
836	1,608	1,290	
835	972	732	
834	492	318	
833	143		
Total Vol.		10,954 CF	> 10,733 CF

East Side - Ex. Building, part of New Building, paved surfaces and greenbelt areas

Building Area -	21,960 SF	0.50 Ac
Pavement -	51,110 SF	1.17 Ac
Greenbelt -	33,977 SF	0.78 Ac

***C* West Side - Weighted**

C = $1.68 Ac(0.95) + 0.78(0.30) =$ 2.79

C Factor Difference - Storage Volume

Weighted C - 0.30 = 0.44

Required Storage Volume: 100 Yr. Storm

$Q_0 = Q_a / (Area \times C)$ $V_s = (16,500 \times T) / (T + 25) \cdot (40 \times Q_0 \times T)$

CONTRIBUTING ACREAGE: 2.46 ACRES

Q_a, ALLOWABLE OUTFLOW: 0.49 CFS/ACRE

C, RUNOFF COEFFICIENT: 0.44 IMPERVIOUSNESS

Q₀, MAXIMUM ALLOWABLE OUTFLOW: 0.451 CFS/(ACRE*IMPER.)

T_s, STORAGE TIME (100 YEAR): 126.254 MINUTES

V_s, STORAGE VOLUME: 11,496.35 CF/(ACRE*IMPER.)

V_t, TOTAL VOLUME: 12,535.01 CUBIC FEET

VOLUME REQUIRED 12,535 CUBIC FEET

Volume Provided:

Pond B	1:6 Slope		
838	5,689	5,068	
837	4,471	3,910	
836	3,374	2,873	
835	2,399	1,957	
834	1,547		
Total Vol.		13,808 CF	> 12,535 CF

811

Know what's below
Call before you dig.

REVISIONS

05/23/2016	Site Plan Review #1
09/15/2016	Site Plan Review #2
09/09/2016	Site Plan Review #3

DRAWN BY: M. Wilson
DESIGNED BY: M. Peterson
APPROVED BY: M. Peterson
DATE: 08-02-2016
SCALE: 1" = 30'

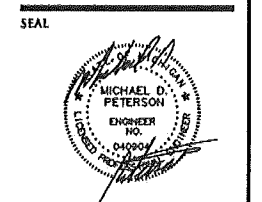
NOTE: PER OWLAND COUNTY WATER RESOURCES COMMISSION THE ORIGINAL DESIGN C-FACTOR OF 0.30, THE DIFFERENCE BETWEEN THE CALCULATED AND THE ORIGINAL WAS USED IN THE DETENTION VOLUME CALCULATION FOR EACH DETENTION POND.

NOT TO BE USED AS CONSTRUCTION DRAWINGS

NFE JOB NO. 1981 SHEET NO. C05-00
 City File #80-186.3

CNF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 4677 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
 FAX. (248) 332-8257



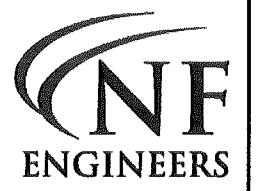
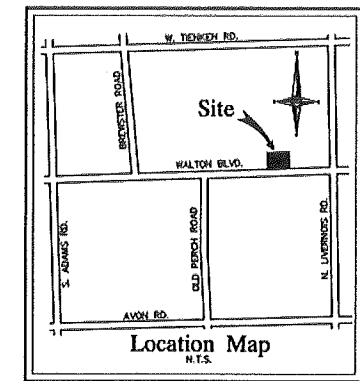
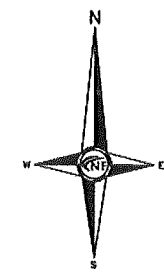
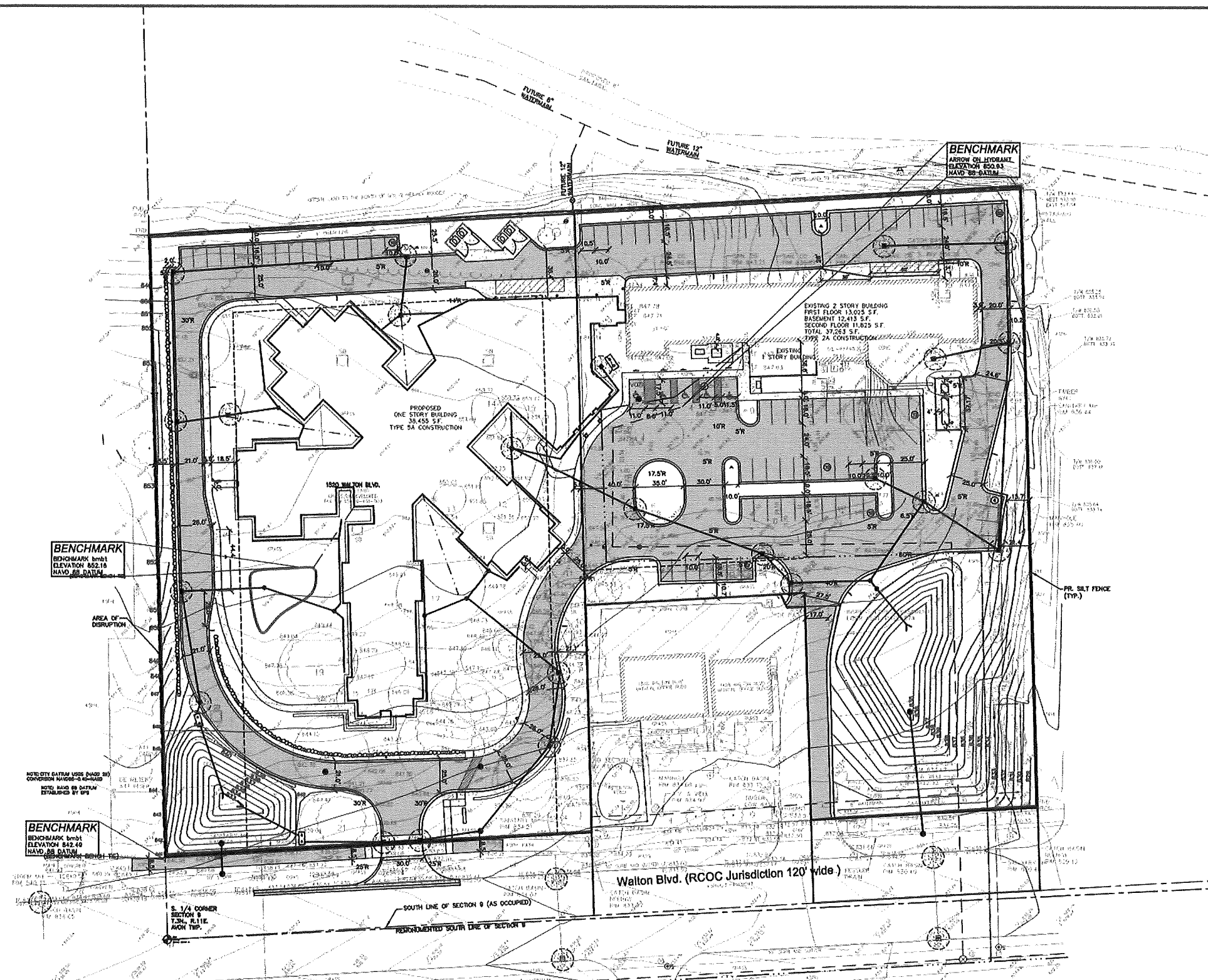
PROJECT
 Medlodge of Rochester Hills
 Addition and Renovation
 1480 Walton Blvd.
 Rochester Hills, MI 48039

CLIENT
 JW Design
 412 S. Washington Street,
 Suite 100
 Royal Oak, MI 48067

Contact: John Saviski, AIA
 Phone: (248) 336-2501

PROJECT LOCATION
 Part of the SE 1/4
 of Section 9
 T.3N., R.11E.
 City of Rochester Hills,
 Oakland County, Michigan

SHEET
 Drainage Plan



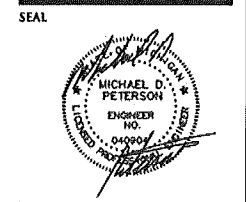
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**CITY OF ROCHESTER HILLS
HYDRANT FLOW TEST**

Date: Feb 16, 2016 Time: 7:30 AM Test Performed By: WILLIAM S. BROWN
 Location: 1480 WALTON BLVD Calculations Performed By: William S. Brown

Number of Hydrants Flowing:	1
Number of Outlets Open:	1
Size of Outlet, D (inches):	3 1/4
Friction Loss Coefficient, C _f :	9
Static Pressure, P _s (psi):	57
Residual Pressure, P _r (psi):	37
Pipe Pressure, P _p (psi):	3.9
Residual Flow, Q _r (GPM):	2034/1686* Q _r = 29.83 Q _d (P _r) ^{0.54} / Outlets
Fire Flow at 20 psi, Q _f (GPM):	2827/2346 Q _f = Q _d [(P _s - 20) / (P _s - P _r)] ^{0.54}
Supply Main Size (pilot hydrant):	8"
Supply Main Size (static hydrant):	8"

* MULTIPLIED BY .83 PER ASTM D71
 Drawing of Flow Test Site (Include location of flow & test hydrant):



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 of Section 9
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 City of Rochester Hills,
 Oakland County, Michigan

SHEET
 Fire Department



REVISIONS
 05/23/2018 Site Plan Review #1
 09/19/2018 Site Plan Review #2
 09/09/2018 Site Plan Review #3

DRAWN BY:
 N. Naoum
DESIGNED BY:
 M. Peterson
APPROVED BY:
 M. Peterson

DATE:
 08-02-2016

SCALE: 1" = 40'

NEE JOB NO. SHEET NO.
 1981 C06.00

City File #80-186.3

12" Water Main Calculations Solving For P2

P1 (P Residual)	37 PSI
P2 (unknown)	7 PSI
V1	3.68 fps
V2	4.53 fps
Z1	844.3 ft
Z2	840.3 ft
L	1170 ft
NL	14.4 ft
Density	62.4
g	32.2 F/S ²
Area	1.23 12"
C	140
d	12"
Q1 (Residual)	2034 gpm
Q2 (Required)	2500 gpm

$$Z_1 + \frac{P_1}{\rho g} + \frac{V_1^2}{2g} - Z_2 + \frac{P_2}{\rho g} + \frac{V_2^2}{2g} + h_f$$

930.9 = 853.6 + P2 x 144 / 62.4 + 14.4
 P2 = 33 p.s.i.
 2500 gpm fire demand @ 33 psi

This is the calculated pressure in a 12" pipe when the required fire demand of 2500 gpm is placed on the lost hydrant in the rear of the building.

NOTE: CITY GATEWAY USER (MAD) BY CONVERSION HAYES-3 8/24/08
 NOTE: ROAD BY DATUM ESTABLISHED BY GPS

BENCHMARK
 BENCHMARK 842.49
 ELEVATION 842.49
 HAYES 88 DATUM

S. 1/4 CORNER SECTION 9 T.3N., R.11E. AVON TWP.
 RECOMMENDED SOUTH LINE OF SECTION 9

Walton Blvd. (RCOC Jurisdiction 120' wide)

NOT TO BE USED AS CONSTRUCTION DRAWINGS

- FIRE DEPARTMENT NOTES**
- (1) FIRE LANES SHALL BE DESIGNATED BY THE FIRE CODE OFFICIAL, AND SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS, SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE"
 - (2) CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC 2009 CHAPTER 14
 - (3) OPEN BURNING IS NOT PERMITTED INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR PREPARATION OF MORTAR SHALL BE WITHIN THE CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES.
 - (4) A KNOX KEY SYSTEM SHALL BE INSTALLED, IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT KNOXBOX.COM.
 - (5) PROVIDE A "NO PARKING FIRE DEPARTMENT CONNECTION" SIGN OVER THE FDC.



**CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS**

SEAL

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Contact: John Saviski, AIA
Phone: (248) 336-2501

PROJECT LOCATION
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of Section 9
T.3N., R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
Soil Borings



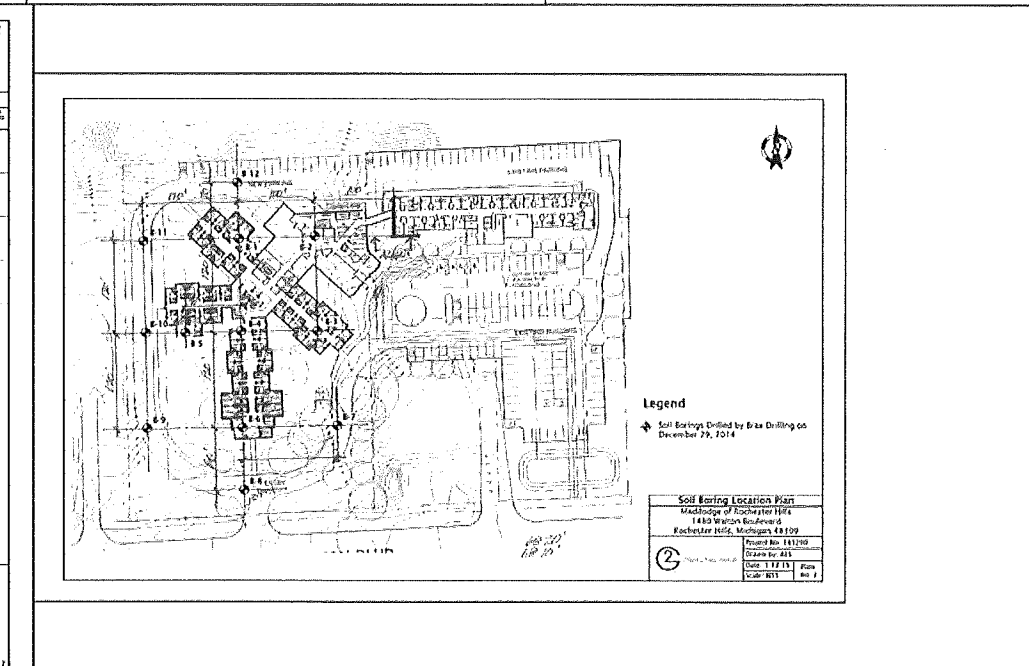
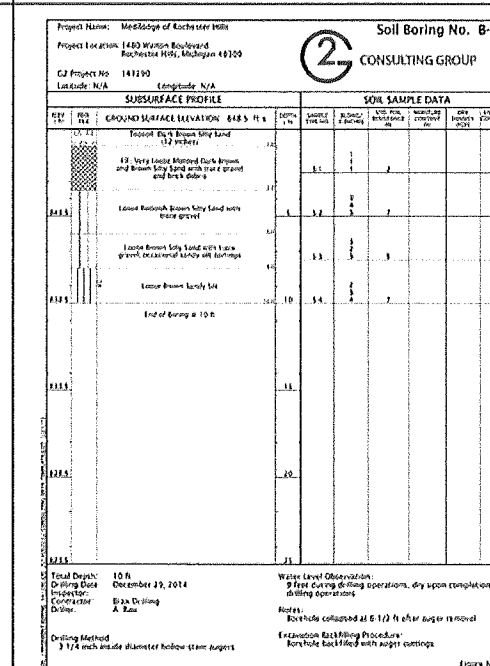
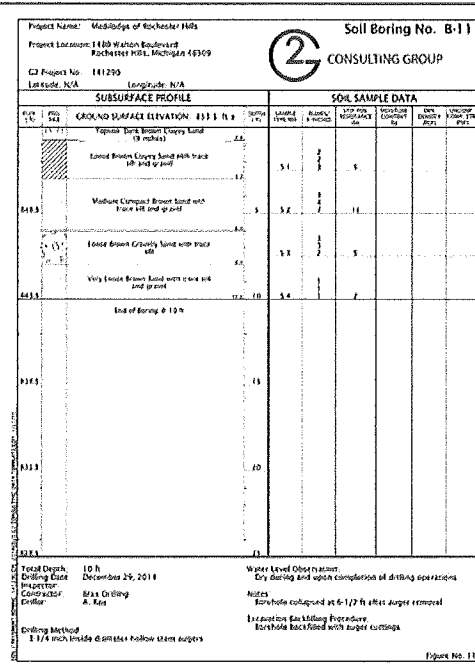
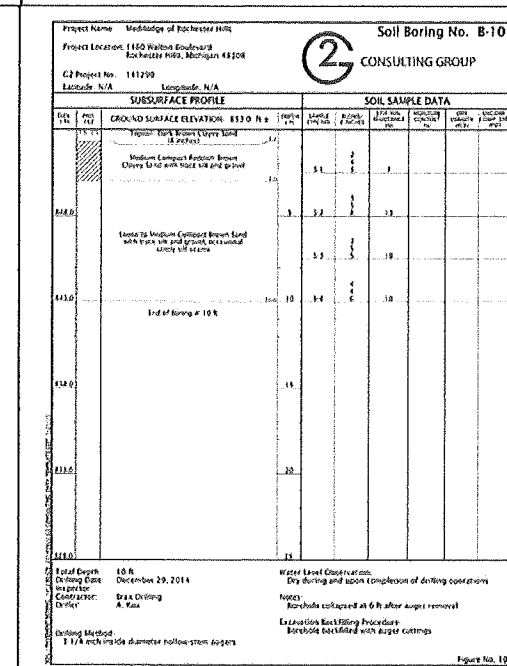
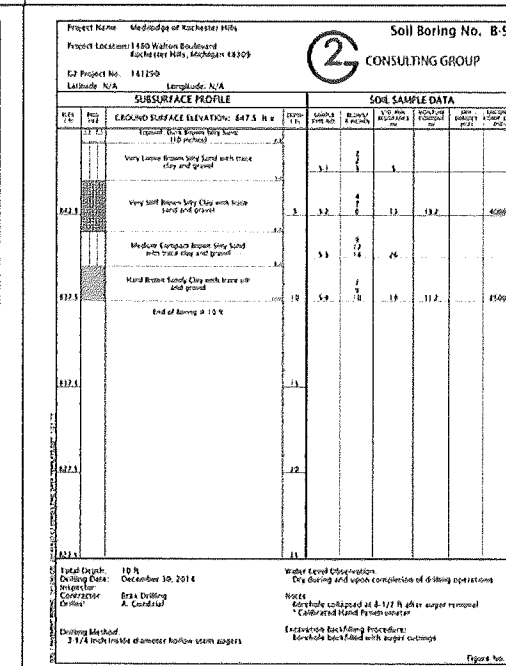
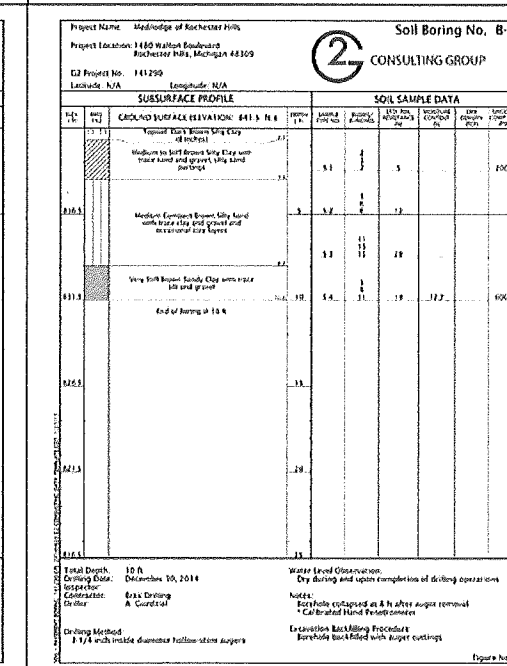
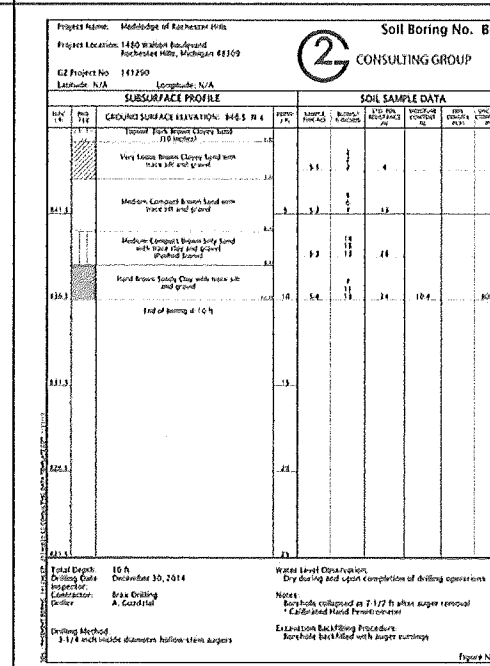
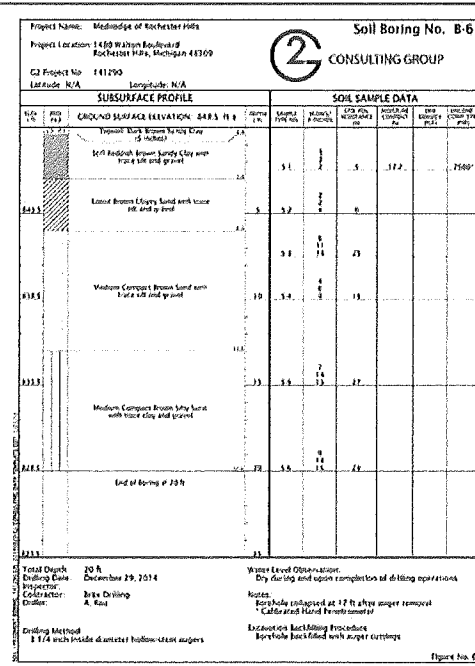
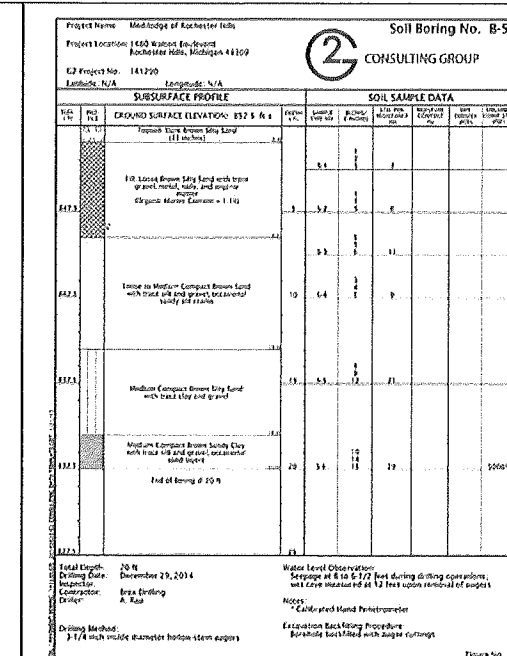
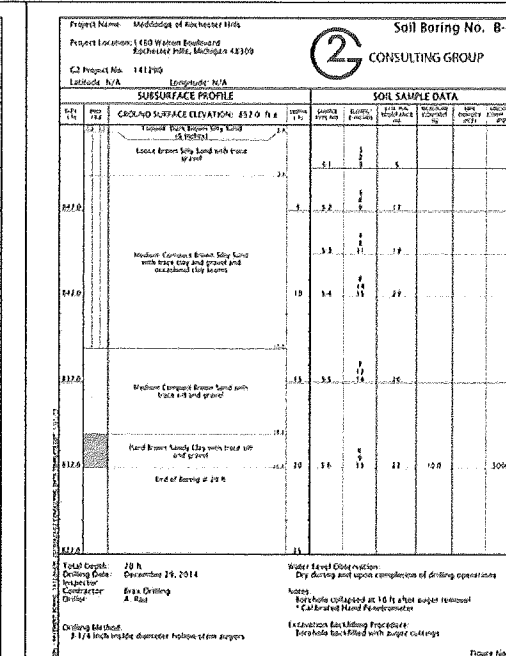
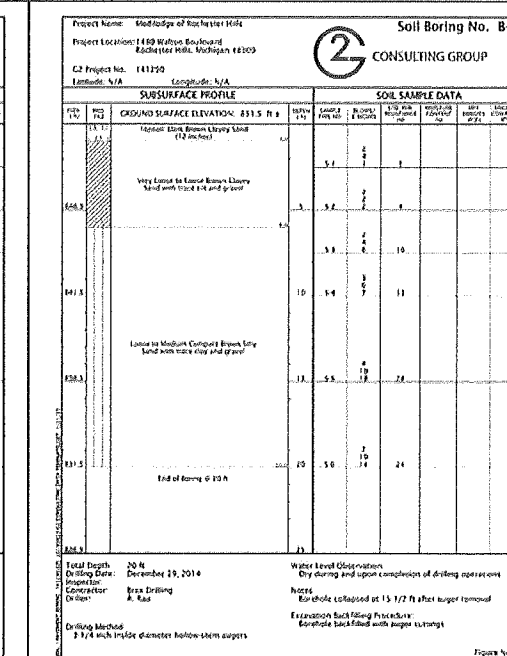
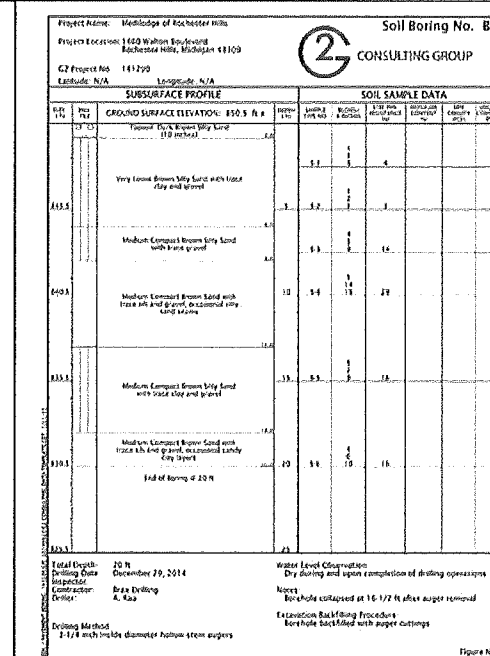
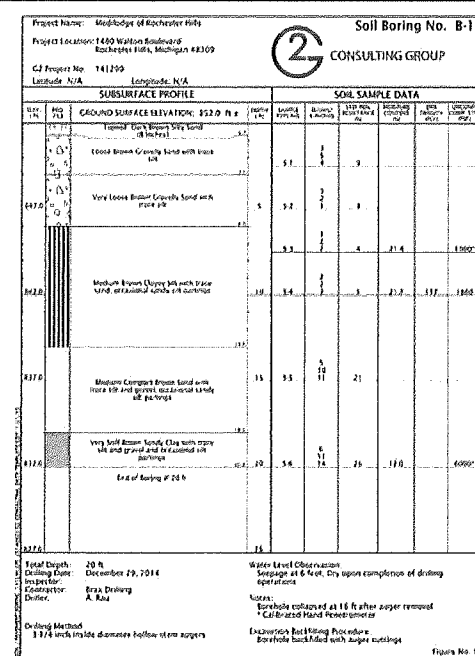
Know what's below
Call before you dig.

REVISIONS
05/23/2016 Site Plan Review #1 No Changes
08/15/2016 Site Plan Review #2 No Changes
09/09/2016 Site Plan Review #3 No Changes

DRAWN BY:
N. Naoum
DESIGNED BY:
M. Peterson
APPROVED BY:
M. Peterson
DATE:
08-02-2016

SCALE: N.T.S.

NFE JOB NO.
1981
SHEET NO.
C07.00
City File #80-186.3



SEAL

PROJECT
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Rochester Hills
Addition and Renovation
1480 Walton Blvd.
Rochester Hills, MI 48039

CLIENT
JW Design
412 S. Washington Street,
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Contact: John Saviski, AIA
Phone: (248) 336-2501

PROJECT LOCATION
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of Section 9
T.3N., R.11E.
City of Rochester Hills,
Oakland County, Michigan

SHEET
DETAILS



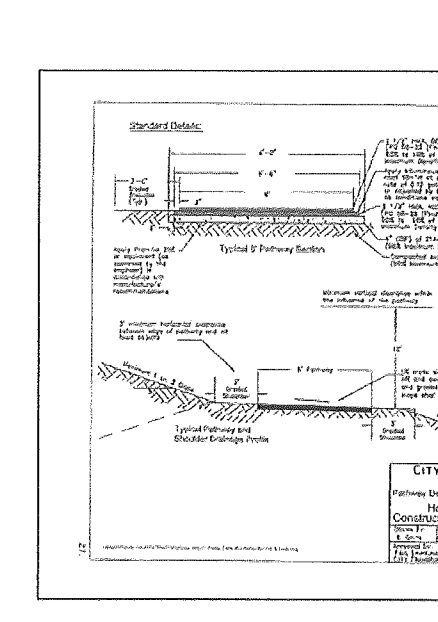
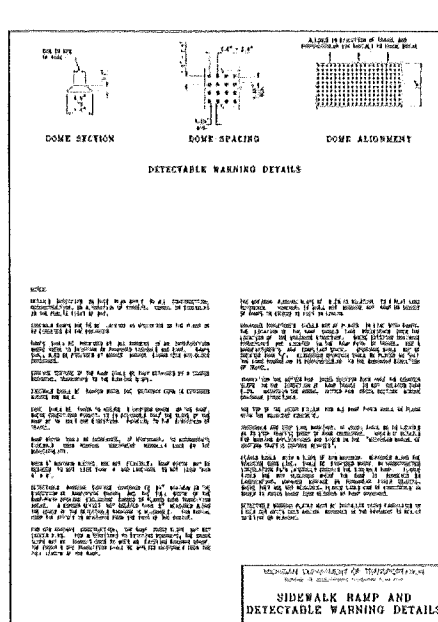
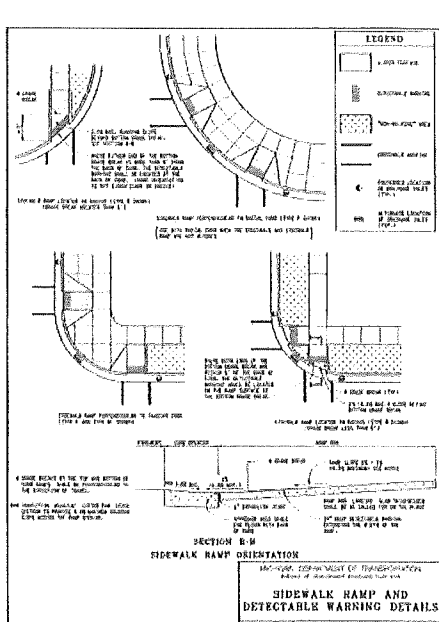
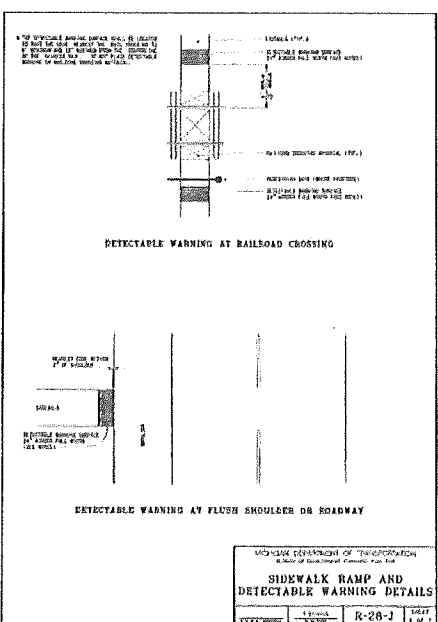
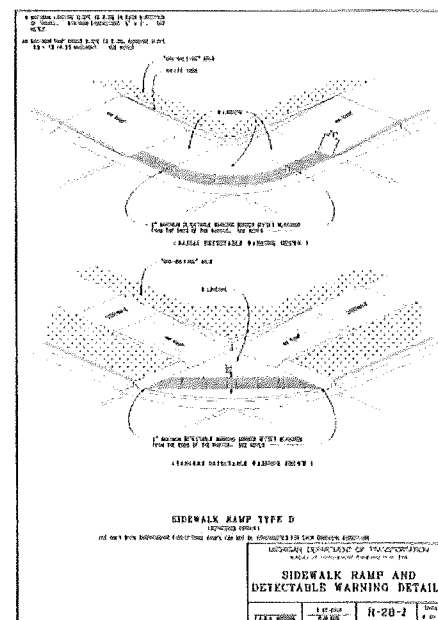
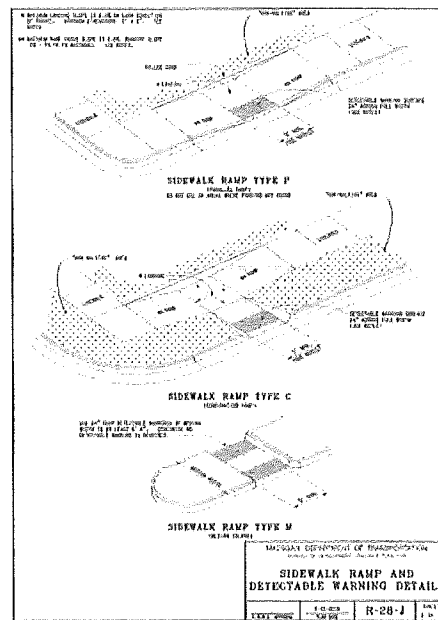
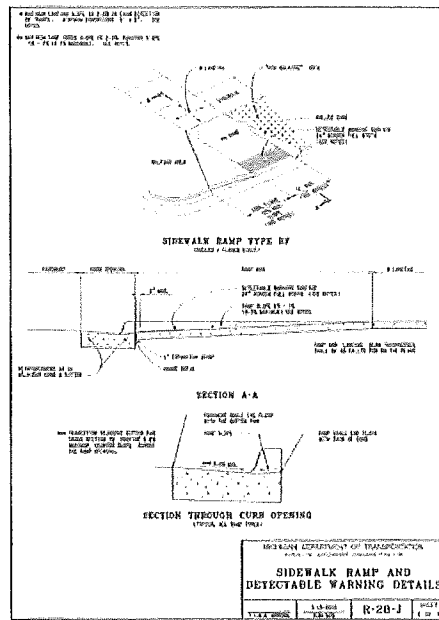
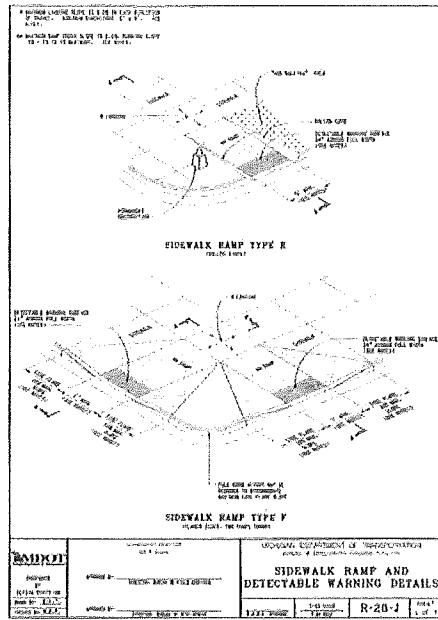
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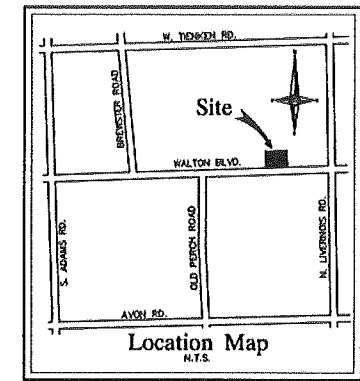
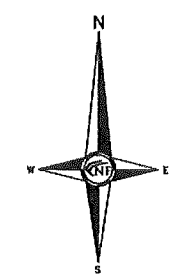
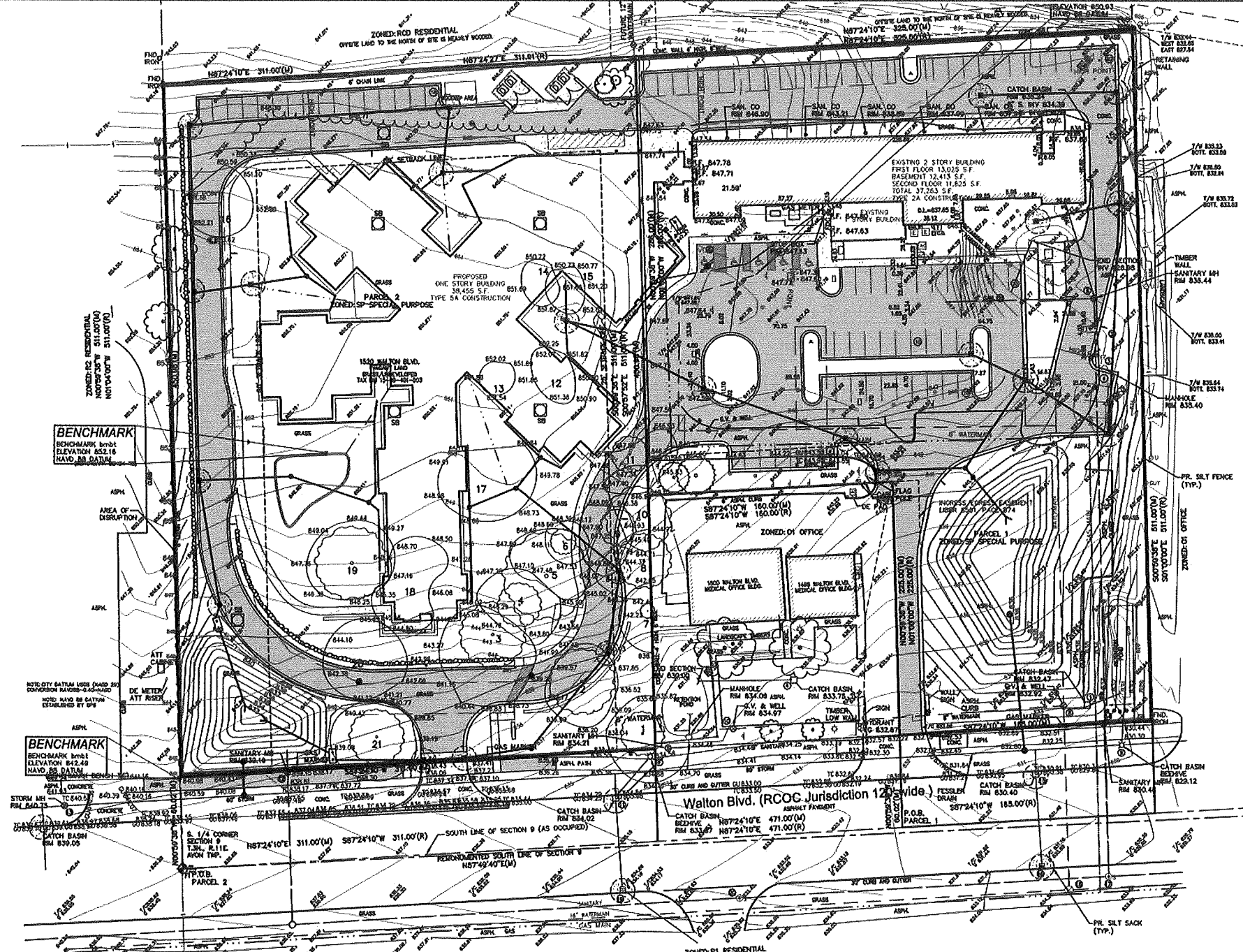
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09/23/2016 Site Plan Review #1
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08/09/2016 Site Plan Review #3 No Changes

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N. Naoum
DESIGNED BY:
M. Peterson
APPROVED BY:
M. Peterson
DATE:
08-02-2016

SCALE: N.T.S.

NFE JOB NO. SHEET NO.
1981 C08.00
City File #80-186.3





CF ENGINEERS
 CIVIL ENGINEERS
 LAND SURVEYORS
 LAND PLANNERS

NOWAK & FRAUS ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342-5032
 TEL. (248) 332-7931
 FAX. (248) 332-8257

SOIL EROSION CONTROL

CUTTING, FILLING AND GRADING SHALL BE MINIMIZED AND THE NATURAL TOPOGRAPHY OF THE SITE SHALL BE PRESERVED TO THE MAXIMUM POSSIBLE EXTENT. EXCEPT WHERE SPECIFIC FINDINGS DEMONSTRATE THAT MAJOR ALTERATIONS WILL STILL MEET THE PURPOSES AND REQUIREMENTS OF THIS ORDINANCE.

DEVELOPMENT SHALL BE STAGED TO KEEP THE EXPOSED AREAS OF SOIL AS SMALL AS PRACTICABLE.

SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED BETWEEN THE DISTURBED AREA AND ANY WATERCOURSES, INCLUDING RIVERS, STREAMS, CREEKS, LAKES, PONDS AND OTHER WATERCOURSES, WETLANDS OR ROADWAYS ON OR NEAR THE SITE.

SEDIMENT RESULTING FROM ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE THAT WATER LEAVES THE SITE.

TEMPORARY AND PERMANENT SOIL EROSION CONTROL MEASURES DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF WATER AROUND, THROUGH, OR AWAY FROM THE SITE SHALL BE DESIGNED TO LIMIT THE WATER FLOW TO A NON-EROSIVE VELOCITY.

TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE REMOVED AFTER PERMANENT SOIL EROSION CONTROL MEASURES HAVE BEEN IMPLEMENTED. ALL SITES SHALL BE STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES.

IF LAKES, PONDS, CREEKS, STREAMS, OR WETLANDS ARE LOCATED ON OR NEAR THE SITE, EROSION CONTROL MEASURES WHICH DIVERT RUNOFF AND TRAP SEDIMENT MUST BE PROVIDED AT STRATEGIC LOCATIONS. STRAW BALE BARRIERS MAY BE USED AS TEMPORARY SEDIMENT DIVERSION STRUCTURES, BUT WILL NOT BE CONSIDERED SUFFICIENT FOR TRAPPING SEDIMENT. THE USE OF SEDIMENT BASINS, FILTER FABRIC, VEGETATED BUFFER STRIPS, AND ROCK FILTERS IN LIEU OF STRAW BALE BARRIERS SHALL BE STRONGLY ENCOURAGED. OTHER MEASURES MAY BE REQUIRED IF REASONABLY DETERMINED TO BE NECESSARY TO PROTECT A WATERCOURSE OR WETLAND.

WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHEN SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE INSTALLED.

PERMANENT EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 15 (FIFTEEN) CALENDAR DAYS AFTER FINAL GRADING OF THE FINAL EARTH CHANGE HAS BEEN COMPLETED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.

VEGETATED BUFFER STRIPS SHALL BE CREATED OR RETAINED ALONG THE EDGES OF ALL LAKES, PONDS, CREEKS, STREAMS, OTHER WATERCOURSES, OR WETLANDS.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL RECEIVE REGULAR MAINTENANCE TO ASSURE PROPER FUNCTIONING.

ALL GRADING PLANS AND SPECIFICATIONS, INCLUDING EXTENSIONS OF PREVIOUSLY APPROVED PLANS, SHALL INCLUDE PROVISIONS FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE STANDARDS CONTAINED IN THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED BY THE OAKLAND SOIL CONSERVATION DISTRICT.

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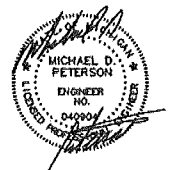
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SEAL



PROJECT
 Medlodge of
 Rochester Hills
 Addition and Renovation
 1480 Walton Blvd.
 Rochester Hills, MI 48039

CLIENT
 JW Design
 412 S. Washington Street,
 Suite 100
 Royal Oak, MI 48067

Contact: John Saviski, AIA
 Phone: (248) 336-2501

PROJECT LOCATION
 Part of the SE 1/4
 of Section 9
 T.3N., R.11E.
 City of Rochester Hills,
 Oakland County, Michigan

SHEET
 Soil Erosion /
 Drainage Area Plan



REVISIONS

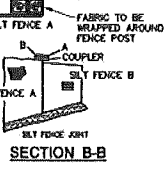
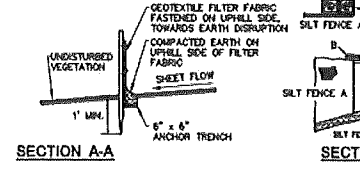
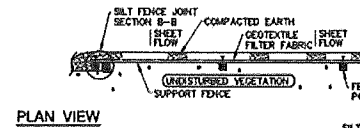
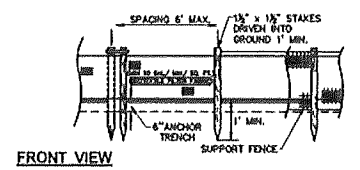
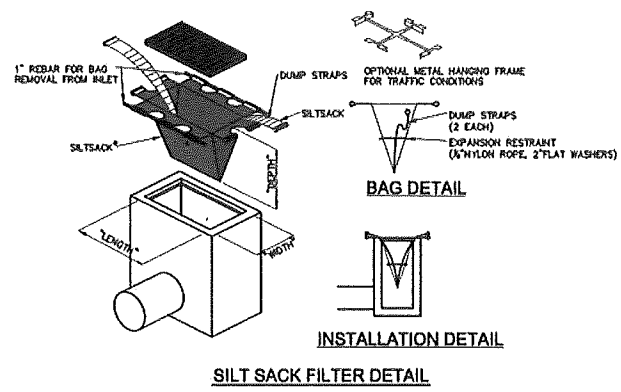
05/13/2018	Site Plan Review #1
08/15/2018	Site Plan Review #2
09/09/2018	Site Plan Review #3

DRAWN BY:
N. Naoum
 DESIGNED BY:
M. Peterson
 APPROVED BY:
M. Peterson
 DATE:
08-02-2018

SCALE: 1" = 30'
 NFE JOB NO. SHEET NO.
1981 C09.00
 City File #80-186.3

CONSTRUCTION SEQUENCE / TIMING SCHEDULE

1. INSTALL PERIMETER FILTER FABRIC FENCING AND STONE FILTER WHERE REQUIRED.	SEPT 2016
2. MASS GRADE SITE.	SEPT 2016
3. COMMENCE UNDERGROUND UTILITY WORK.	SEPT 2016
4. INSTALL INLET FILTERS ON PROPOSED DRAINAGE STRUCTURES.	SEPT 2016
5. FILL IN SEDIMENTATION TRAPS AND PAVE SITE.	AUG 2017
6. COMPLETE ALL BUILDINGS AND LANDSCAPE ACTIVITY.	SEPT 2017
7. SET VAC NEW STORM SEWER SYSTEM AS REQUIRED.	SEPT 2017
8. REMOVE ALL TEMPORARY SOIL EROSION MEASURES.	SEPT 2017



ESTIMATED QUANTITIES

SOIL EROSION

DESCRIPTION	QUANTITY	UNITS
SILT FABRIC FENCING	1,840	L.F.
SILT SACK OR EQUAL	25	EA.

LEGEND

(Symbol: Dashed line)	INDICATES LIMITS OF SILT FABRIC FENCING - MRC SP2
(Symbol: Dashed line)	INDICATES LIMITS OF DRAINAGE DISTRICT AREA
(Symbol: Dashed line)	INDICATES LIMITS OF SOIL DISRUPTION
(Symbol: Circle with cross)	INDICATES SILT SACK OR EQUAL ON EXISTING DRAINAGE STRUCTURE

CONSULTANTS:

CIVIL ENGINEER
NOWAK AND FRAUS ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342
 (248) 332-7931

LANDSCAPE ARCHITECT
HAGENBUCH WEIKLANDSCAPE ARCHITECTURE
 33203 BIDDLESTONE BLVD.
 FARMINGTON HILLS, MI 48334
 (248) 477-3600

ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
 418.5 S. WASHINGTON AVE.
 ROYAL OAK, MI 48067
 (248) 744-0360

SEAL:



KEY PLAN:

CLIENT:
THE MEDILODGE GROUP
 64500 VAN DYKE RD
 WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
TREE MANAGEMENT PLAN

DATE: DESCR: DRAWN BY:

09-09-2016 - NO CHANGE MADE

09-09-2016 SITE PLAN REVIEW #2 RW
 08-19-2016 SITE PLAN REVIEW #2 RW
 03-23-2016 SITE PLAN REVIEW #1 RW

DATE: DESCRIPTION: DRAWN BY:

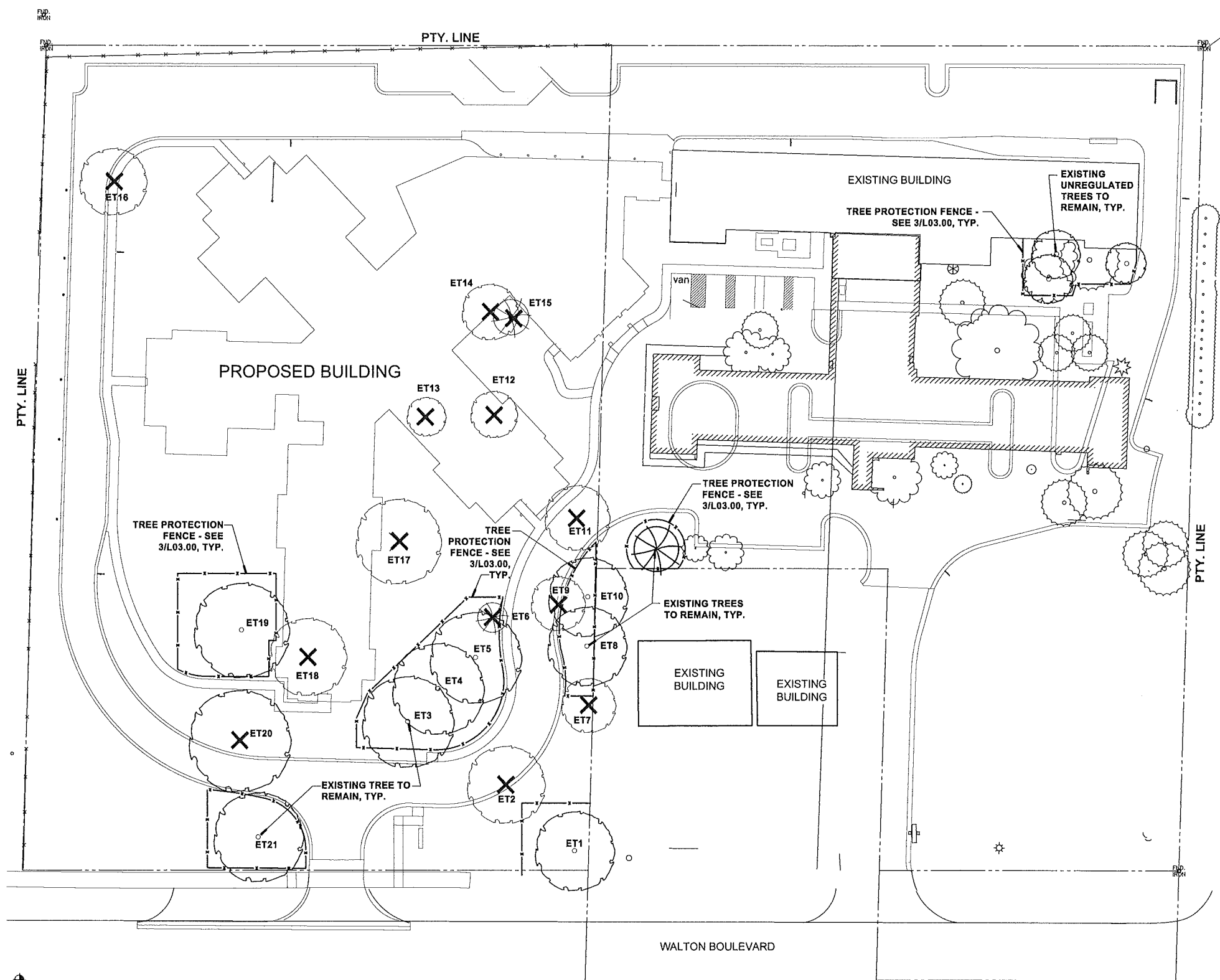
THE DRAWING IS UNLESS OTHERWISE NOTED TO BE USED TO DETERMINE THE DESIGN AND CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF ALL INFORMATION IN THE DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AUTHORITIES.

JWD PROJECT NUMBER:

SHEET NUMBER:

13025 **L03.00**

#80-186-3



SITE TREE DATA:

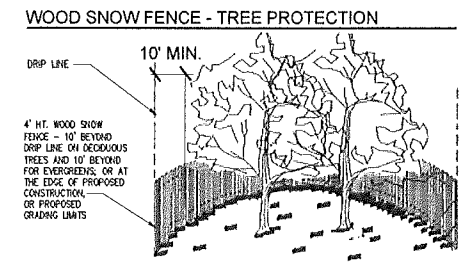
TOTAL REGULATED TREES ON SITE:	21 TREES
TREE STATUS:	
TREES TO REMAIN:	8
TREES TO BE REMOVED:	13
LANDMARK TREE:	0
NON-LANDMARK TREES:	13
TREE REPLACEMENTS: (R)	
TOTAL TREE REPLACEMENTS REQUIRED:	13 TREES
TOTAL TREE REPLACEMENTS PROVIDED:	13 TREES

2 TREE INVENTORY
 NOT TO SCALE

#	10" PINE	EXISTING TREE TO REMAIN
#	14" CEDAR	EXISTING TREE TO REMAIN
#	14" CEDAR	EXISTING TREE TO BE REMOVED
#	20" MAPLE	EXISTING TREE TO BE REMOVED

Tree #	Botanical Name	Common Name	DBH	Zone	Other Site Conditions	Comments
1	A/A					
2	A/A					
3	A/A					
4	A/A					
5	A/A					
6	A/A					
7	A/A					
8	A/A					
9	A/A					
10	A/A					
11	A/A					
12	A/A					
13	A/A					
14	A/A					
15	A/A					
16	A/A					
17	A/A					
18	A/A					
19	A/A					
20	A/A					
21	A/A					

NOTE:
 4' HT. PROTECTIVE WOOD SNOW FENCE - METAL STAKES 8' O.C. MAXIMUM. PLAZE NO CLOSER THAN 10' FROM DROP LINE OF PRESERVED TREE OR AS NOTED ON EXISTING STORE OR MATERIALS WITHIN THE SNOW FENCE AREA. SNOW FENCE TO BE TAKEN DOWN ONLY UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT OR ARCHITECT.



3 TREE PROTECTION DETAIL
 NOT TO SCALE

1 TREE MANAGEMENT PLAN
 SCALE 1" = 30'



CONSULTANTS:

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NOWAK AND FRAUS ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342
 (248) 332-7931

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SEAL:



KEY PLAN:

CLIENT:
THE MEDILODGE GROUP
 64500 VAN DYKE RD
 WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:

SITE PLANTING PLAN

DATE: DESCRIP: DRAWN BY:

02/09/2016 SITE PLAN REVIEW #1 KW
 08/18/2016 SITE PLAN REVIEW #2 KW
 05/23/2016 SITE PLAN REVIEW #1 KW

DATE: DESCRIPTION: DRAWN BY:

THE DRAWING IS A PRELIMINARY DESIGN AND IS NOT TO BE USED TO OBTAIN PERMITS OR FOR CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL INFORMATION AND SHALL NOTIFY THE DESIGNER IMMEDIATELY OF ANY DISCREPANCIES IN THE FIELD PRIOR TO BEING INCURRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.

JWD PROJECT NUMBER: SHEET NUMBER:

13025 **L03.01**

GENERAL PLANTING NOTES:

- (A) ALL TREES TO HAVE CLAY OR LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
- (B) ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
- (C) ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER, TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
- (D) ALL MULTI-STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SPOD TREE OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
- (E) ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
- (F) NO MACHINERY IS TO BE USED WITHIN THE DRILLPIECE OF EXISTING TREES. HAND GRADE ALL LAWN AREAS WITHIN DRILLPIECE OF EXISTING TREES.
- (G) ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
- (H) IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS, WALKS AND PAVED AREAS.
- (I) ALL PLANTING BEDS SHALL RECEIVE 4" SHREDDED BARK MULCH. SEE SPECIFICATIONS.
- (J) SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.

PLANT MIX

- PLANTING BEDS TO RECEIVE 70% LOAM TOPSOIL, 10% COMPOST, 20% SAND; EXCAVATE PLANT BED, DISPOSE OF SPOOLS OFF SITE, INSTALL PLANT MIX. HAND TILL INTO PLACED PLANT MIX:
- (1) 6 CU. FT. BALE CANADIAN PEAT
 - (1) 40 LB BAG COMPOSTED POULTRY MANURE "CHICK MANURE" 5-3-2 WWW.CHICKMANURE.COM (262)495-8220
 - (1) 10 LB BAG SHERMANS 13-13-13 MULTI PURPOSE FERTILIZER
- PER 150 SQ FT BED AREA.
 HAND TILL INTO PROVIDED PLANT MIX TO A DEPTH OF 12" MINIMUM

PLANT BEDS

ALL PLANT BEDS TO BE FULLY EXCAVATED TO DEPTH SHOWN ON DETAILS AND AREAS SHOWN ON PLANS, AND TO RECEIVE CONTRAVOUS PLANT MIX AS SPECIFIED (NOT INDIVIDUAL PLANT HOLES)

TOPSOIL

CONTRACTOR TO TILL OR DISK SUBGRADE TO 4" DEPTH AND INSTALL 4" COMPACTED DEPTH TOPSOIL IN ALL LAWN AREAS - FROM ONSITE STOCKPILE OR PROVIDED TO COMPLETE THE PROJECT

MULCH

MULCH TO BE DOUBLE SHREDDED HARDWOOD BARK MULCH
 NO GROUND WOOD PALETTE MULCH PERMITTED

LANDSCAPE EDGING

ALL LANDSCAPE EDGES ARE SHOVEL CUT

PLANT SPACING

PLANT BED WITH PLANTS SPECIFIED, KEEP PLANTS AWAY FROM BUILDING 12" MATURE SIZE

WATERING

CONTRACTOR RESPONSIBLE FOR MONITORING THE WATERING OF ALL PLANTINGS FOR ONE YEAR FROM THE START OF THE WARRANTY PERIOD.

PLANTINGS THAT PERISH DUE TO LACK OF WATER, OR TOO MUCH WATER, DO NOT QUALIFY AS THE ONE REQUIRED REPLACEMENT PLANT AS STATED IN THE SPECIFICATION, AND SHALL BE REPLACED AT NO COST TO THE OWNER.

CONTRACTOR IS ALSO RESPONSIBLE FOR MONITORING THE WATERING OF ALL NEWLY PLANTED LAWN AREAS FOR ONE YEAR FROM THE START OF THE WARRANTY PERIOD. NEWLY PLANTED LAWN AREAS THAT PERISH DUE TO LACK OF WATER, OR TOO MUCH WATER, DO NOT QUALIFY AS THE REQUIRED REPLACEMENT TO ESTABLISH A HEALTHY FULL DENSE LAWN AS STATED IN THE SPECIFICATION, AND SHALL BE REPLACED AT NO COST TO THE OWNER.

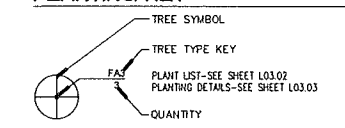
LAWNS:

ALL PROPOSED LAWN AREAS TO BE IRRIGATED SOD.

IRRIGATION:

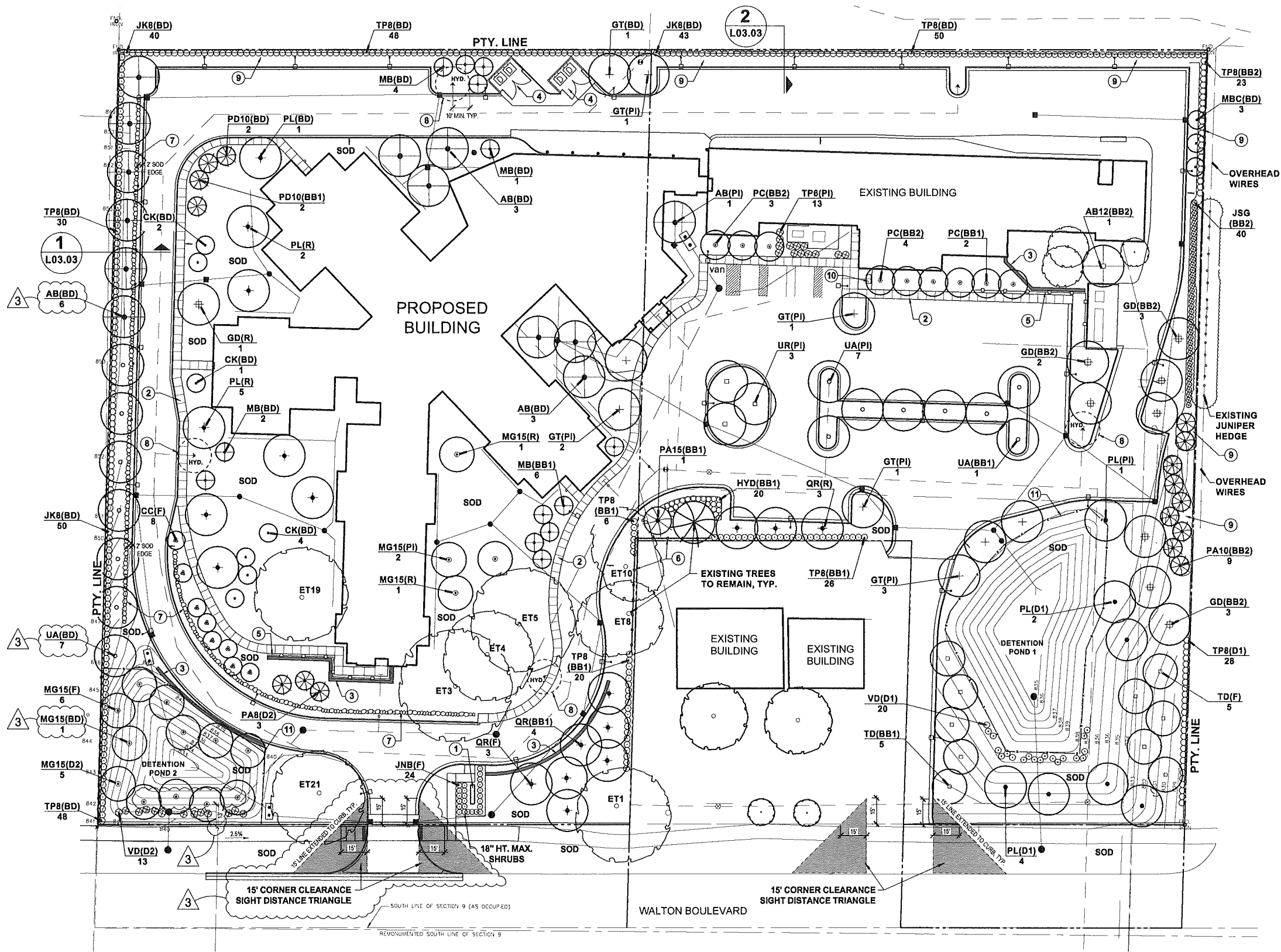
IRRIGATION SYSTEM PLANS WILL BE SUBMITTED WITH FINAL SITE PLAN APPROVAL PLANS.

PLANTING KEY:



NOTE:
 SEE SHEET L03.03 FOR CITY OF ROCHESTER HILLS NOTES AND REQUIREMENTS

NOTE:
 SEE SHEET L03.04 FOR CITY OF ROCHESTER HILLS SITE DISTANCE PATH & ROAD PLANS



1 SITE PLANTING PLAN
 L03.01 SCALE 1" = 30' NORTH

NOTE KEY: 2

- 1 PROJECT SIGN - SEE ARCH. PLANS
- 2 SIDEWALK - SEE CIVIL DETAILS
- 3 LOW RETAINING WALL - SEE 10/03.03
- 4 DUMPSTER AREA - SEE CIVIL PLANS
- 5 42" PROTECTIVE FENCE - SEE 6/03.03
- 6 SCREEN FENCE - SEE 7/03.03
- 7 BOULDER RETAINING WALL - SEE 8/03.03
- 8 10" WIDE HYDRANT CLEAR ZONE
- 9 SHREDDED HARDWOOD MULCH BED
- 10 (S) BIKE, BIKE RACK - SEE SEE 9/03.03
- 11 6" PROTECTIVE FENCE - SEE 6/03.03

LANDSCAPE REQUIREMENTS AND PLANT LIST

REPLACEMENT TREES (R)
 TREES TO BE REMOVED: 13 TREES
 TREE REPLACEMENTS REQUIRED: 13 TREES
 TREE REPLACEMENTS PROVIDED: 13 TREES

GREENBELT BUFFER (BD) (North & West Prop. Ln)
 BUFFER TYPE "D" ~ 1,090 LN. FT.
 DECIDUOUS TREES REQUIRED: 28 TREES
 (2.5 / 100 LN. FT.)
 EXISTING TREES TO REMAIN / EXISTING TREE CREDITS: 22 TREES
 DECIDUOUS TREES PROVIDED: 30 TREES

ORNAMENTAL TREES REQUIRED: 17 TREES
 (1.5 / 100 LN. FT.)
 ORNAMENTAL TREES PROVIDED: 17 TREES

GREEN WALL REQUIRED: 309 EVERGREENS
 GREEN WALL ~ 1,080 LN. FT.
 (42" O.C., 8' HT EVERGREEN)
 GREEN WALL PROVIDED: 309 EVERGREENS

ADDITIONALLY PROVIDED:
 EVERGREEN TREES PROVIDED: 2 TREES

GREENBELT BUFFER (BB1) (Dr. Office)
 BUFFER TYPE "B" ~ 490 LN. FT.
 DECIDUOUS TREES REQUIRED: 10 TREES
 (2 / 100 LN. FT.)
 DECIDUOUS TREES PROVIDED: 10 TREES

ORNAMENTAL TREES REQUIRED: 8 TREES
 (1.5 / 100 LN. FT.)
 ORNAMENTAL TREES PROVIDED: 8 TREES

EVERGREEN TREES REQUIRED: 10 TREES
 (2 / 100 LN. FT.)
 EVERGREEN TREES PROVIDED: 3 TREES

GREENWALL
 (COUNT AS 7 EVERGREEN TREES)
 8' HT. NARROW EVERGREENS PROVIDED: 52 EVERGREENS

SHRUBS REQUIRED: 20 SHRUBS
 (4 / 100 LN. FT.)
 SHRUBS PROVIDED: 20 SHRUBS

GREENBELT BUFFER (BB2) (East Prop. Ln)
 BUFFER TYPE "B" ~ 450 LN. FT.
 DECIDUOUS TREES REQUIRED: 9 TREES
 (2 / 100 LN. FT.)
 DECIDUOUS TREES PROVIDED: 9 TREES

ORNAMENTAL TREES REQUIRED: 7 TREES
 (1.5 / 100 LN. FT.)
 ORNAMENTAL TREES PROVIDED: 7 TREES

EVERGREEN TREES REQUIRED: 9 TREES
 (2 / 100 LN. FT.)
 EVERGREEN TREES PROVIDED: 9 TREES

SHRUBS REQUIRED: 20 SHRUBS
 (4 / 100 LN. FT.)
 SHRUBS PROVIDED: 40 SHRUBS

8' HT. EVERGREENS REQUIRED: 0 SHRUBS
 8' HT. EVERGREENS PROVIDED: 23 SHRUBS

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
1	GD	Kentucky Coffee Tree <i>Gymnocladus dioica</i>	3" Cal.	B&B	\$400	\$400
2	MG15	Dawn Redwood <i>Metasequoia glyptostroboides</i>	16" HL	B&B	\$450	\$900
7	PL	Columbia London Plane Tree <i>Platanus x. acerifolia 'Columbia'</i>	3" Cal.	B&B	\$350	\$2,450
3	QR	Northern Red Oak <i>Quercus rubra</i>	3" Cal.	B&B	\$400	\$1,200

GREENBELT BUFFER (R) PROJECTION OF PROBABLE COST: \$4,950

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
8		Ex. Deciduous Tree to Remain Credit	varies		\$0	\$0
12	AB	Autumn Blaze Maple <i>Acer x. freemanii 'Autumn Blaze'</i>	3" Cal.	B&B	\$325	\$3,900
1	GT	Thornless Honeylocust <i>Gleditsia 'Skyline'</i>	3" Cal.	B&B	\$350	\$350
1	PL	Columbia London Plane Tree <i>Platanus x. acerifolia 'Columbia'</i>	3" Cal.	B&B	\$350	\$350
1	MG15	Dawn Redwood <i>Metasequoia glyptostroboides</i>	16" HL	B&B	\$450	\$450
7	UA	Accolade Elm <i>Ulmus parviflora 'Morton'</i>	3" Cal.	B&B	\$350	\$2,450
7	CK	Cockspur Hawthorn <i>Crataegus crus-galli</i>	6" HL	B&B	\$250	\$1,750
7	MB	Red Baron Crab Apple <i>Malus 'Red Baron'</i>	2" Cal.	B&B	\$250	\$1,750
3	MBC	Columnar Siberian Crabapple <i>Malus baccata 'Columnaris'</i>	2" Cal.	B&B	\$250	\$750
2	PD10	Black Hills Spruce <i>Picea g. 'Densata'</i>	10" HL	B&B	\$450	\$900
133	JK8	Keller Juniper <i>J. 'Kellerii'</i>	8" HL	B&B	\$250	\$33,250
176	TP8	West Coast Arborvitae <i>Thuja plicata</i>	8" HL	B&B	\$250	\$44,000

GREENBELT BUFFER (BD) PROJECTION OF PROBABLE COST: \$89,900

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
4	QR	Northern Red Oak <i>Quercus rubra</i>	3" Cal.	B&B	\$400	\$1,600
5	TD	Bald Cypress <i>Taxodium distichum</i>	3" Cal.	B&B	\$325	\$1,625
1	UA	Accolade Elm <i>Ulmus parviflora 'Morton'</i>	3" Cal.	B&B	\$350	\$350
6	MB	Red Baron Crab Apple <i>Malus 'Red Baron'</i>	2" Cal.	B&B	\$250	\$1,500
2	PC	Chanticleer Pear <i>Pyrus c. 'Chanticleer'</i>	3" Cal.	B&B	\$350	\$700
1	PA16	Norway Spruce <i>Picea Abies</i>	16" HL	B&B	\$700	\$700
2	PD10	Black Hills Spruce <i>Picea g. 'Densata'</i>	10" HL	B&B	\$450	\$900
52	TP8	West Coast Arborvitae <i>Thuja plicata</i>	8" HL	B&B	\$250	\$13,000
20	HYD	LimeLight Hydrangea <i>Hydrangea paniculata 'LimeLight'</i>	30"	B&B	\$58	\$1,160

GREENBELT BUFFER (BB1) PROJECTION OF PROBABLE COST: \$21,556

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
1	AB12	Autumn Blaze Maple - Clump <i>Acer x. freemanii 'Autumn Blaze'</i>	12" HL	B&B	\$325	\$325
8	GD	Kentucky Coffee Tree <i>Gymnocladus dioica</i>	3" Cal.	B&B	\$400	\$3,200
7	PC	Chanticleer Pear <i>Pyrus c. 'Chanticleer'</i>	3" Cal.	B&B	\$350	\$2,450
9	PA10	Norway Spruce <i>Picea Abies</i>	10" HL	B&B	\$450	\$4,050
40	J5G	Sea Green Juniper <i>Juniperus 'Sea Green'</i>	24" Spr.	ConL.	\$50	\$2,000
23	TP8	West Coast Arborvitae <i>Thuja plicata</i>	8" HL	B&B	\$250	\$5,750

GREENBELT BUFFER (BB2) PROJECTION OF PROBABLE COST: \$17,776

PARKING LOT TREES (PI) & (PP)
 INTERIOR (PI)
 64,589 S.F. VEHICLE USE AREA
 64,589 S.F. X .05 = 3,229
 3,229 / 150 = 22 TREES
 SHADE TREES REQUIRED: 22 TREES
 SHADE TREES PROVIDED: 22 TREES

SHRUBS REQUIRED: 0 SHRUBS
 SHRUBS PROVIDED: 13 SHRUBS

PERIMETER (PP) - NOT REQUIRED
 (PARKING LOCATED 117' FROM PUBLIC R.O.W.)

STORMWATER DETENTION POND (D1 & D2)
 D1 - 345 LN. FT. PERIMETER
 DECIDUOUS TREES REQUIRED: 6 TREES
 (1.5 / 100 LN. FT.)
 DECIDUOUS TREES PROVIDED: 6 TREES

EVERGREEN TREES REQ.: 4 TREES
 (1 / 100 LN. FT.)
 EVERGREEN TREES PROVIDED: 0 TREES

GREENWALL
 (COUNT AS 5 EVERGREEN TREES)
 8' HT. NARROW EVERGREENS PROVIDED: 28 EVERGREENS

SHRUBS REQ.: 20 SHRUBS
 (4 / 100 LN. FT.)
 SHRUBS PROVIDED: 20 SHRUBS

D2 - 290 LN. FT. PERIMETER
 DECIDUOUS TREES REQUIRED: 5 TREES
 (1.5 / 100 LN. FT.)
 DECIDUOUS TREES PROVIDED: 5 TREES

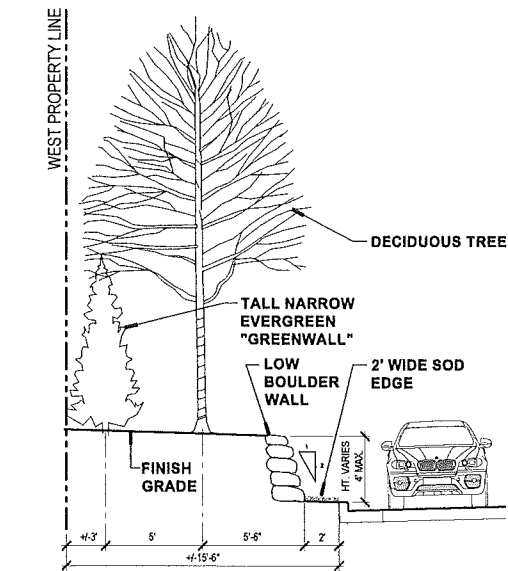
EVERGREEN TREES REQ.: 3 TREES
 (1 / 100 LN. FT.)
 EVERGREEN TREES PROVIDED: 3 TREES

SHRUBS REQ.: 13 SHRUBS
 (4 / 100 LN. FT.)
 SHRUBS PROVIDED: 13 SHRUBS

RIGHT-OF-WAY FRONTAGE (F)
 477 LN. FT.
 DECIDUOUS TREES REQUIRED: 14 TREES
 (1 / 35 LN. FT.)
 DECIDUOUS TREES PROVIDED: 14 TREES

ORNAMENTAL TREES REQUIRED: 8 TREES
 (1 / 60 LN. FT.)
 ORNAMENTAL TREES PROVIDED: 8 TREES

SHRUBS REQUIRED: 0 SHRUBS
 SHRUBS PROVIDED: 24 SHRUBS



1 GREENBELT BUFFER - WEST PROPERTY LINE
 SCALE 1" = 5'

PARKING LOT TREES - INTERIOR (PI)

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
1	AB	Autumn Blaze Maple <i>Acer x. freemanii 'Autumn Blaze'</i>	3" Cal.	B&B	\$325	\$325
8	GT	Thornless Honeylocust <i>Gleditsia 'Skyline'</i>	3" Cal.	B&B	\$350	\$2,800
2	MG15	Dawn Redwood <i>Metasequoia glyptostroboides</i>	16" HL	B&B	\$450	\$900
1	PL	Columbia London Plane Tree <i>Platanus x. acerifolia 'Columbia'</i>	3" Cal.	B&B	\$350	\$350
7	UA	Accolade Elm <i>Ulmus parviflora 'Morton'</i>	3" Cal.	B&B	\$350	\$2,450
3	UR	Regal Elm <i>Ulmus carpiniifolia 'Regal'</i>	3" Cal.	B&B	\$350	\$1,050
13	TP8	West Coast Arborvitae <i>Thuja plicata</i>	6" HL	B&B	\$225	\$2,925

PARKING LOT TREES - INTERIOR (PI) PROJECTION OF PROBABLE COST: \$10,800

STORMWATER DETENTION POND (D1)

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
6	PL	Columbia London Plane Tree <i>Platanus x. acerifolia 'Columbia'</i>	3" Cal.	B&B	\$350	\$2,100
28	TP8	West Coast Arborvitae <i>Thuja plicata</i> (counted as 5 evergreen trees)	8" HL	B&B	\$250	\$7,000
20	VD	Arrowwood Viburnum <i>Viburnum dentatum</i>	30" HL	B&B	\$58	\$1,160

STORMWATER DETENTION (D) PROJECTION OF PROBABLE COST: \$10,260

STORMWATER DETENTION POND (D2)

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
6	MG16	Dawn Redwood <i>Metasequoia glyptostroboides</i>	16" HL	B&B	\$450	\$2,700
3	PA8	Norway Spruce <i>Picea Abies</i>	8" HL	B&B	\$350	\$1,050
13	VD	Arrowwood Viburnum <i>Viburnum dentatum</i>	30" HL	B&B	\$58	\$764

STORMWATER DETENTION (D) PROJECTION OF PROBABLE COST: \$4,054

RIGHT-OF-WAY FRONTAGE (F) (Wallon Blvd. R.O.W.)

QTY	KEY	COMMON/BOTANICAL NAME	SIZE	SPEC.	UNIT COST	COST
6	MG15	Dawn Redwood <i>Metasequoia glyptostroboides</i>	16" HL	B&B	\$450	\$2,700
3	QR	Northern Red Oak <i>Quercus rubra</i>	3" Cal.	B&B	\$400	\$1,200
5	TD	Bald Cypress <i>Taxodium distichum</i>	3" Cal.	B&B	\$325	\$1,625
8	CC	Eastern Redbud <i>Cercis canadensis</i>	8" HL	B&B	\$250	\$2,000
24	JNB	New Blue Tans Juniper <i>Juniperus s. 'New Blue'</i>	24" Spr.	ConL.	\$40	\$960

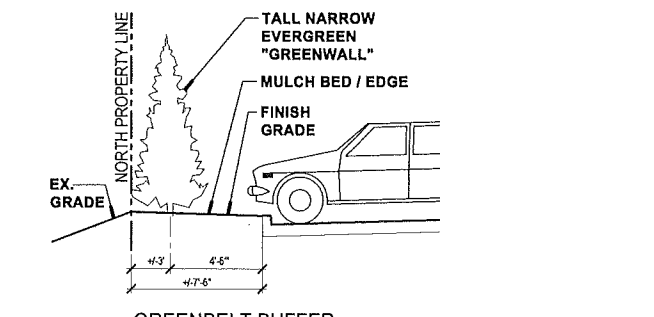
RIGHT-OF-WAY FRONTAGE (F) PROJECTION OF PROBABLE COST: \$8,485

IRRIGATION

QTY	ITEM	UNIT	UNIT COST	COST
9,000	Irrigation	SY	\$3	\$27,000

IRRIGATION PROJECTION OF PROBABLE COST: \$27,000

PROJECTED LANDSCAPE PROBABLE COST: \$193,284



2 GREENBELT BUFFER - NORTH PROPERTY LINE
 SCALE 1" = 5'



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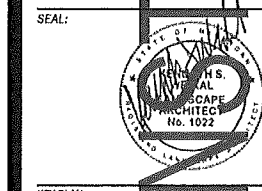
412 S. WASHINGTON ST. SUITE 100
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 PHONE: (248) 336-2501
 FAX: (248) 336-2107
 EMAIL: INFO@JWDSTUDIO.COM

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ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
 418.5 S. WASHINGTON AVE.
 ROYAL OAK, MI 48067
 (248) 744-0360

CONSTRUCTION



KEY PLAN:

CLIENT:
THE MEDILODGE GROUP
 64500 VAN DYKE RD.
 WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
CALCULATIONS & PLANT LISTS

DATE: _____ DESCRIPTION: _____ DRAWN BY: _____

09/09/2016 SITE PLAN REVIEW #3 NW
 08/15/2016 SITE PLAN REVIEW #2 NW
 05/23/2016 SITE PLAN REVIEW #1 NW

DATE: _____ DESCRIPTION: _____ DRAWN BY: _____

JWD PROJECT NUMBER: _____ SHEET NUMBER: _____

13025 **L03.02**

#80-186-3

CONSULTANTS:

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CITY OF ROCHESTER HILLS NOTES:

LANDSCAPE MAINTENANCE

THE OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF SITE LANDSCAPING, AS FOLLOWS:

- LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.
- PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.
- ALL DEAD, DAMAGED, OR DISEASED PLANT MATERIAL SHALL BE REMOVED IMMEDIATELY AND REPLACED WITHIN SIX MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. FOR PURPOSES OF THIS SECTION, THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1 AND FROM OCTOBER 1 UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH 1 AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE. THE CITY MAY NOTIFY PROPERTY OWNERS OF THE NEED TO REPLACE DEAD, DAMAGED, OR DISEASED MATERIAL.
- THE APPROVED LANDSCAPE PLAN SHALL BE CONSIDERED A PERMANENT RECORD AND INTEGRAL PART OF THE SITE PLAN APPROVAL. UNLESS OTHERWISE APPROVED IN ACCORDANCE WITH THE AFOREMENTIONED PROCEDURES, ANY REVISIONS TO OR REMOVAL OF PLANT MATERIALS, OR NON-COMPLIANCE WITH THE MAINTENANCE REQUIREMENTS OF THIS SECTION (138-12.100) WILL PLACE THE PARCEL IN NON-COMFORMITY WITH THE APPROVED LANDSCAPE PLAN AND BE A VIOLATION OF THIS ORDINANCE.
- IF PROTECTED TREES ARE DAMAGED, A FINE SHALL BE ISSUED ON AN INCH-BY-INCH BASIS AT A MONETARY RATE AS DEFINED BY THE FORESTRY DEPARTMENT.

PERFORMANCE BOND NOTE:

PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS MUST INSPECT ALL LANDSCAPE PLANTINGS.

IRRIGATION NOTES:

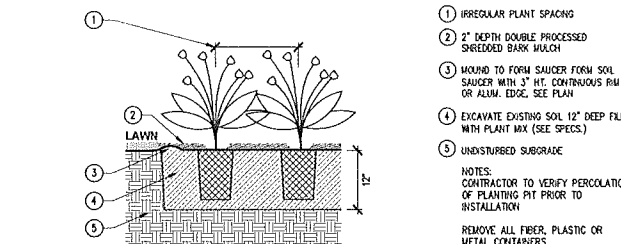
- ALL LANDSCAPE AREAS TO BE IRRIGATED
- IRRIGATION WATERING SHALL ONLY OCCUR BETWEEN THE HOURS OF 12:00 AM AND 5:00 AM

FORESTRY DEPARTMENT STATEMENTS

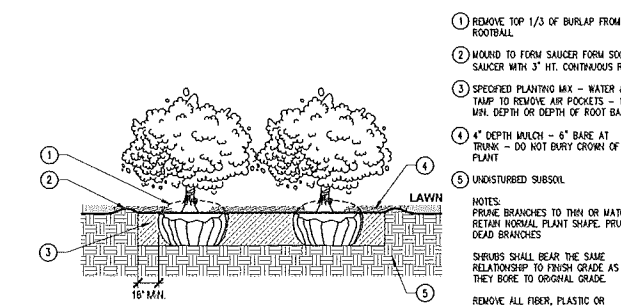
PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB ON THE PUBLIC RIGHT-OF-WAY. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC ROAD. (TREES MUST BE PLANTED AT LEAST 15' AWAY FROM CURB OR ROAD EDGE WHERE THE SPEED LIMIT IS MORE THAN 35 MPH.) SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF THE PUBLIC WALKWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC WALKWAY. NO TREES OR SHRUBS MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET RIGHT-OF-WAY LINES AT A DISTANCE ALONG EACH LINE OF 25' FROM THE POINT OF INTERSECTION. NO TREES OR SHRUBS MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITH A PUBLIC WALKWAY AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM ANY FIRE HYDRANT. SHADE AND EVERGREEN TREES MUST BE PLANTED A MINIMUM 5' FROM AN UNDERGROUND UTILITY, UNLESS THE CITY'S LANDSCAPE ARCHITECT REQUIRES A GREATER DISTANCE.

PRIOR TO THE RELEASE OF THE PERFORMANCE BOND, THE CITY OF ROCHESTER HILLS FORESTRY DIVISION NEEDS TO INSPECT ALL TREES, EXISTING OR PLANTED, TO IDENTIFY ANY THAT POSE A HAZARD TO THE SAFE USE OF THE PUBLIC RIGHT-OF-WAY. FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE, AND POSSIBLY REPLACE, ANY SUCH TREES.

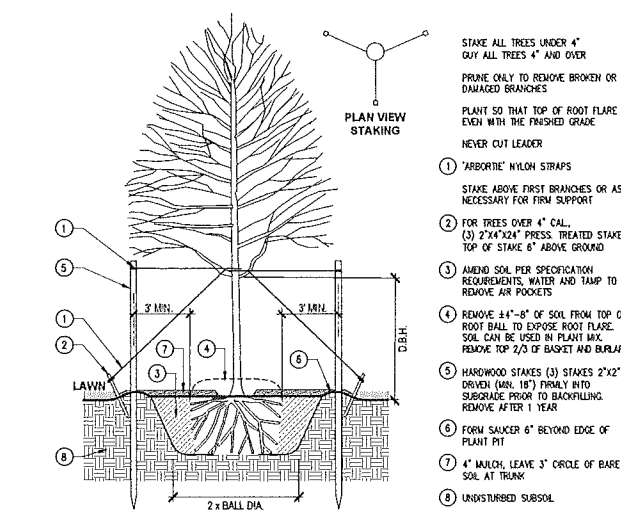
THESE REQUIREMENTS ARE INCORPORATED INTO THE PLAN.



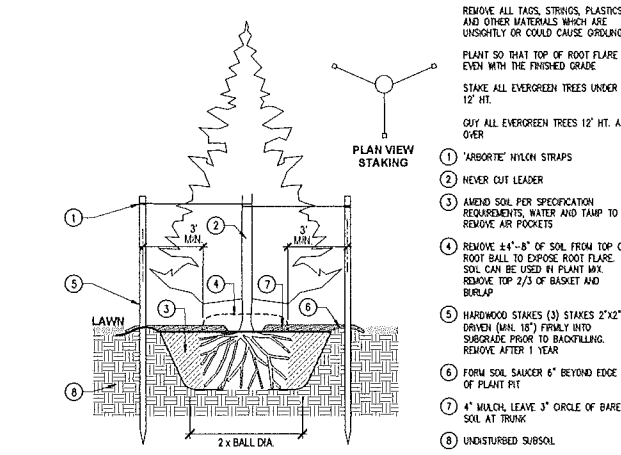
1 PERENNIAL / GROUNDCOVER PLANTING DETAIL
NOT TO SCALE



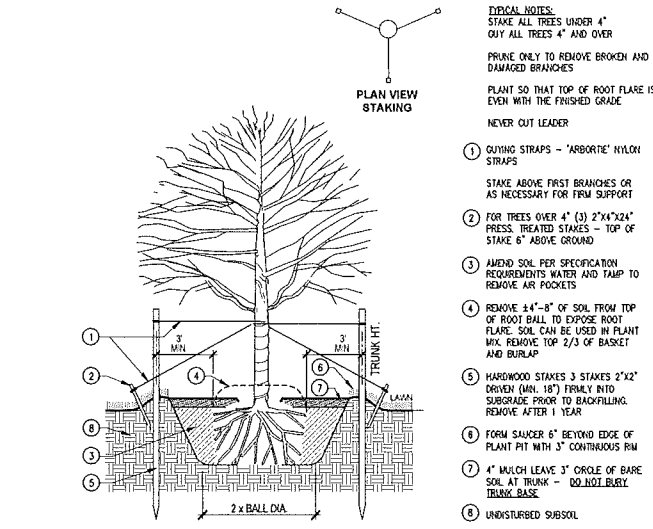
2 SHRUB BED PLANTING DETAIL
NOT TO SCALE



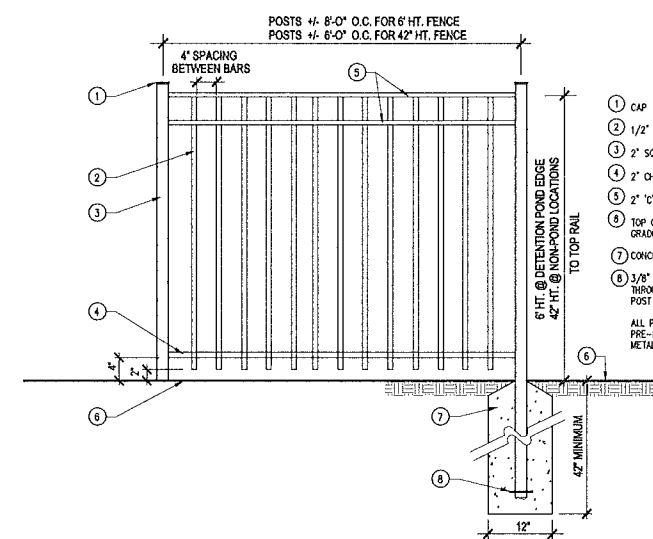
3 DECIDUOUS TREE PLANTING
NOT TO SCALE



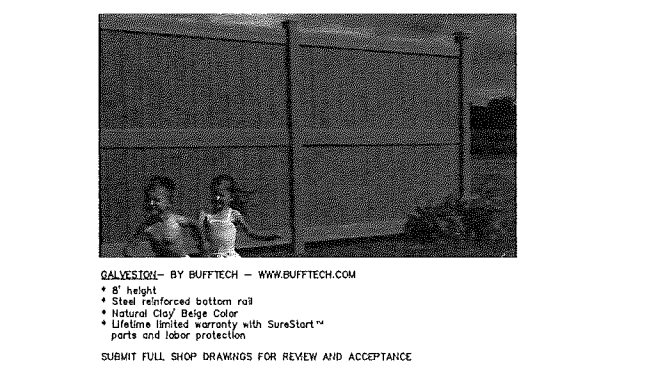
4 EVERGREEN TREE PLANTING
NOT TO SCALE



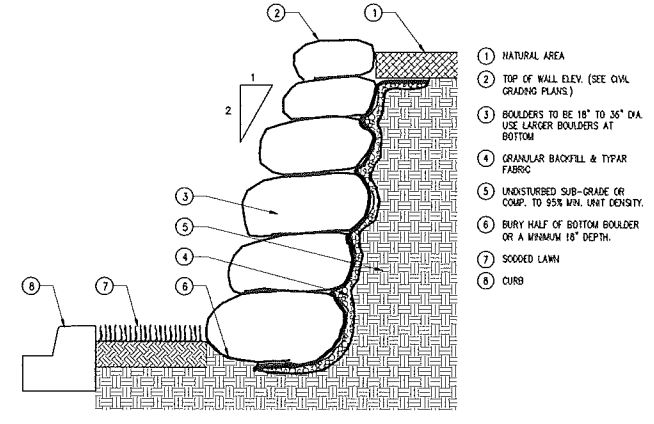
5 ORNAMENTAL TREE PLANTING
NOT TO SCALE



6 PROTECTIVE FENCE DETAIL
NOT TO SCALE



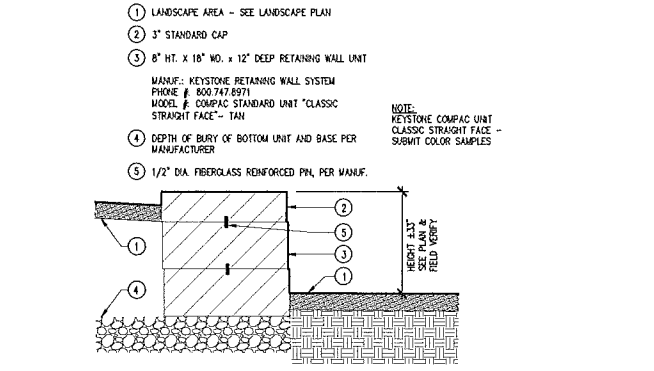
7 ORNAMENTAL PVC FENCE - "GALVESTON" 8' HT. BY BUFFTECH - OR EQUAL
NOT TO SCALE



8 BOULDER WALL AT CURB
NOT TO SCALE

SKU: TBR-06
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9 (5) BIKE - BIKE RACK
NOT TO SCALE



10 PRECAST CONCRETE BLOCK RETAINING WALL
NOT TO SCALE

CLIENT:
THE MEDILODGE GROUP
64500 VAN DYKE RD
WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
ADDITION AND RENOVATION
1480 WALTON BLVD.
ROCHESTER HILLS, MI 48309

CITY NOTES AND DETAILS

DATE:	DESCRIPTION:	DRAWN BY:
09 09 2016	SITE PLAN REVIEW #1	KW
08 15 2016	SITE PLAN REVIEW #2	KW
05 23 2016	SITE PLAN REVIEW #1	KW

JWD PROJECT NUMBER: 13025 SHEET NUMBER: L03.03

CONSULTANTS:

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ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
 418.5 S. WASHINGTON AVE.
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 (248) 744-0360



KEY PLAN:

CLIENT:
THE MEDILODGE GROUP
 64500 VAN DYKE RD.
 WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
SIGHT DISTANCE PLANS

DATE: DESCRIPTION: DRAWN BY:

09 09 2016 - NO CHANGE MADE

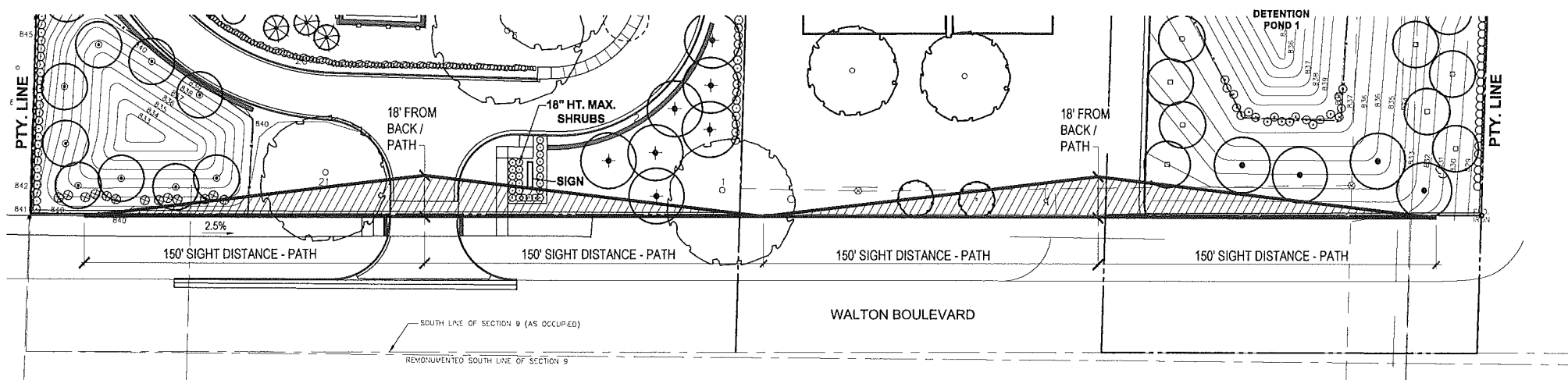
09 09 2016 SITE PLAN REVIEW #1 KJV
 08 15 2016 SITE PLAN REVIEW #2 KJV
 05 23 2016 SITE PLAN REVIEW #1 KJV

DATE: DESCRIPTION: DRAWN BY:

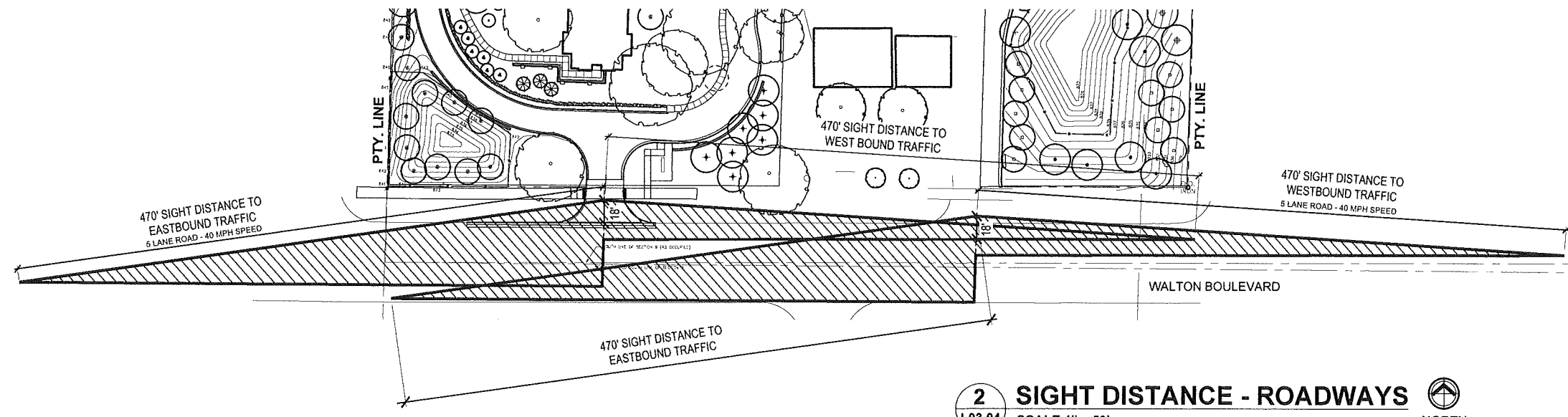
The drawings and specifications are to be used to determine the design intent. The contractor shall verify all work and shall notify the design professional of any discrepancies in the drawings before proceeding. The contractor shall be held responsible for any errors or omissions in the drawings and shall be held responsible for any errors or omissions in the construction. The design professional shall not be held responsible for any errors or omissions in the construction.

JWD PROJECT NUMBER: SHEET NUMBER:

13025 **L03.04**



1 **SIGHT DISTANCE - PATHWAYS**
 L03.04 SCALE 1" = 30'



2 **SIGHT DISTANCE - ROADWAYS**
 L03.04 SCALE 1" = 50'

SITE AND ZONING REVIEW

BUILDING/SITE SUMMARY

BUILDING/SITE INFORMATION	
ZONED:	SP SPECIAL PURPOSE DISTRICT
USE:	I-2 INSTITUTIONAL GROUP
	WITH ACCESSORY USES A-2, A-3, B, S-1 (MIXED NON-SEPARATED)
CONSTRUCTION TYPE:	EXISTING: 2A ADDITION: 5A

BUILDING INFORMATION	
BUILDING AREA	
EXISTING BUILDING REMAINING (2 STORY + BASEMENT)	PROPOSED ADDITION (1 STORY)
FIRST FLOOR: 13,025 SQ. FT.	FIRST FLOOR: 38,455 SQ. FT.
SECOND FLOOR: 11,825 SQ. FT.	
LOWER FLOOR: 12,413 SQ. FT.	
TOTAL: 37,263 SQ. FT.	
TOTAL PROJECT BUILDING:	75,718 SQ. FT.

BUILDING HEIGHT: (TO MIDPOINT OF SLOPED ROOF)	
(PER SECTION 138-4.423 B)	PROPOSED HEIGHT
ALLOWED HEIGHT	27'-9"
40'-0" (30'-0" WITHIN 100'-0" OF RESIDENTIAL)	

NUMBER OF BEDS:		C.O.N. OF 126 BEDS
	EXISTING	PROPOSED
EXISTING BUILDING:	126 BEDS	61 BEDS
PROPOSED ADDITION:		65 BEDS
TOTAL BEDS:	126 BEDS	126 BEDS
		UNCHANGED

PARKING		
NURSING HOME (PER SECTION 138-4.423 D)		
MAX. PARKING REQUIRED	EXISTING	PROPOSED PARKING
1 SPACE / 2 BEDS	82 SPACES	89 SPACES
126 BEDS = 63 SPACES	4 HANDICAP ACCESSIBLE SPACES	5 HANDICAP ACCESSIBLE SPACES
	86 SPACES (TOTAL)	94 SPACES (TOTAL)

SECTION 138-11.202 MODIFICATION OF PARKING REQUIREMENTS

ZONING ORDINANCE REVIEW

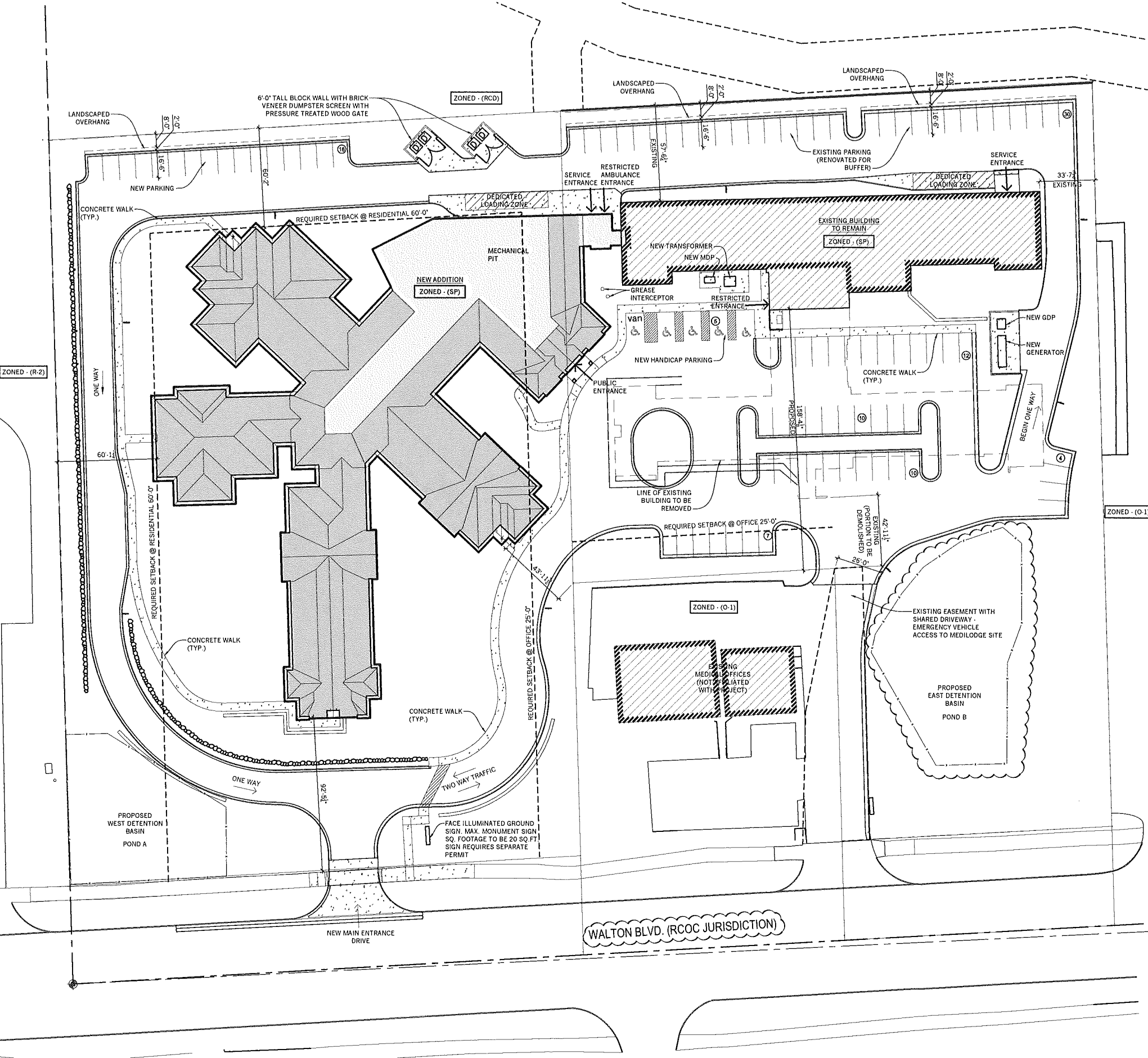
SETBACKS (PER SECTION 138-4.423 A)			
EXISTING BUILDING (EAST PARCEL)	REQUIRED - S.L.U.	EXISTING	PROPOSED
NORTH	60'-0" MINIMUM (ADJACENT RESIDENTIAL ZONING)	57'-6"	EXISTING (UNCHANGED)
EAST	25'-0" MINIMUM (ADJACENT OFFICE ZONING)	33'-7"	EXISTING (UNCHANGED)
WEST	SEE PROPOSED ADDITION		SEE PROPOSED ADDITION
SOUTH	25'-0" MINIMUM (ADJACENT OFFICE ZONING)	42'-11" (PORTION TO BE DEMOLISHED)	158'-4"
PROPOSED BUILDING (WEST PARCEL)			
NORTH	60'-0" MINIMUM (ADJACENT RESIDENTIAL ZONING)		60'-2"
EAST	25'-0" MINIMUM (ADJACENT OFFICE ZONING)		43'-11"
WEST	60'-0" MINIMUM (ADJACENT RESIDENTIAL ZONING)		60'-1"
SOUTH	50'-0" MINIMUM (SP FRONT YARD)		92'-5"

LOT COVERAGE	
EXISTING BUILDING	
EXISTING BUILDING FOOTPRINT ON EAST PARCEL:	26,374 SQ. FT.
PORTION TO BE DEMOLISHED:	13,349 SQ. FT.
EXISTING BUILDING FOOTPRINT TO REMAIN:	13,025 SQ. FT.

PROPOSED ADDITION	
PROPOSED ADDITION FOOTPRINT ON WEST PARCEL:	38,455 SQ. FT.
TOTAL PROJECT BUILDING FOOTPRINT:	51,480 SQ. FT.

SITE ANALYSIS (FROM SURVEY BY TDJ CONSULTING DATED 06/20/2013)	
EAST PARCEL:	120,139 SQ. FT. 2.758 ACRES
WEST PARCEL:	140,430 SQ. FT. 3.22 ACRES
TOTAL PROJECT SITE:	260,569 SQ. FT. 5.978 ACRES

LOT COVERAGE BUILDING FOOTPRINT:	51,480 SQ. FT.	19.8%
LOT COVERAGE PAVED AREA:	85,065 SQ. FT.	32.6%
TOTAL LOT COVERAGE (BUILDING FOOTPRINT + PAVED AREA)	136,545 SQ. FT.	52.4%



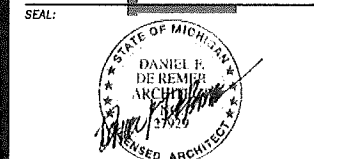
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 ROYAL OAK, MI 48067
 (248) 744-0360



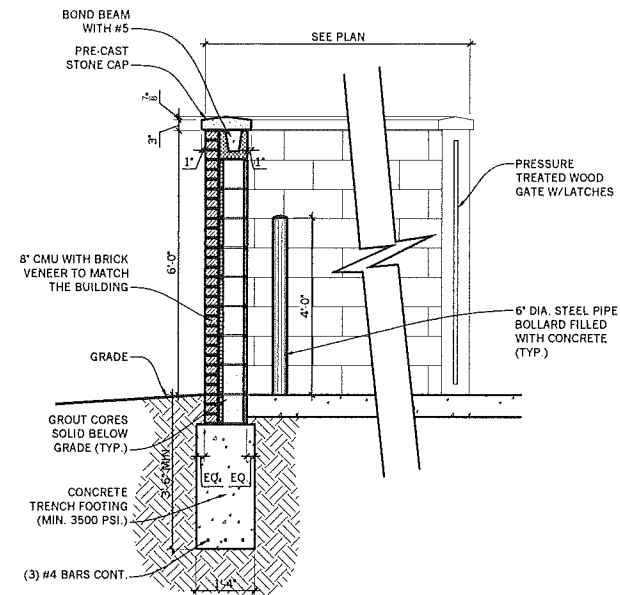
CLIENT:
THE MEDILODGE GROUP
 64500 VAN DYKE RD
 WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
OVERALL SITE PLAN

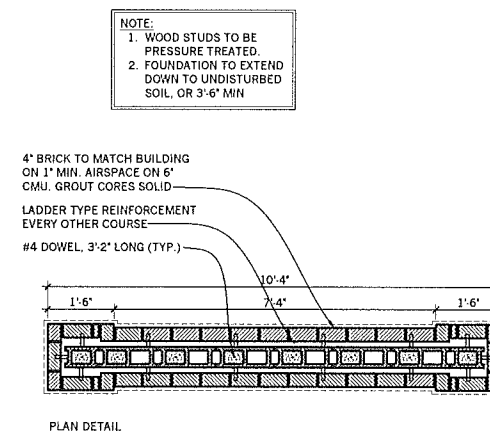
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09/09/2016	SITE PLAN REVIEW #3	BJ
08/15/2016	SITE PLAN REVIEW #2	BJ
05/23/2016	SITE PLAN REVIEW #1	BJ

JWD PROJECT NUMBER: 13025
 SHEET NUMBER: A01.00
 #80-186-3



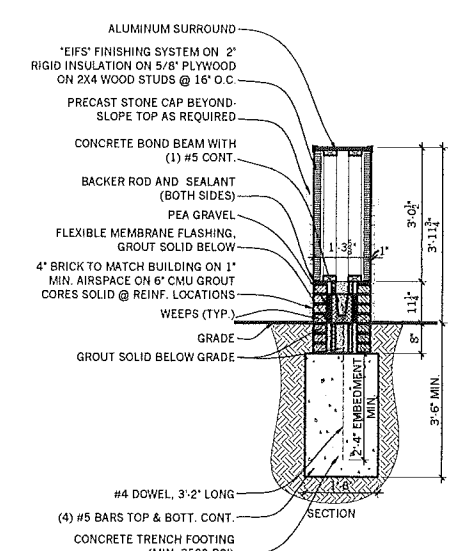
6 DUMPSTER ENCLOSURE SECTION

A01.01 SCALE: 1/2" = 1' - 0"

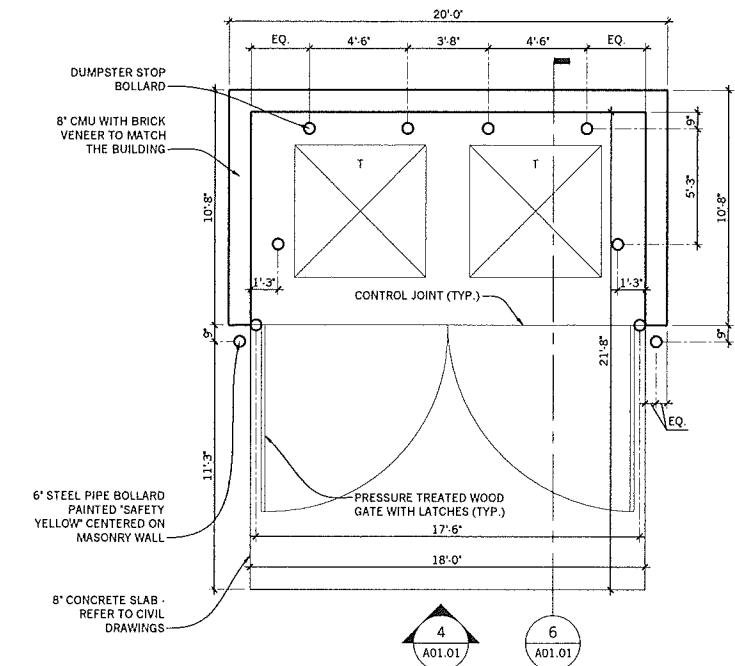


3 MONUMENT SIGN DETAILS

A01.01 SCALE: 1/2" = 1' - 0"

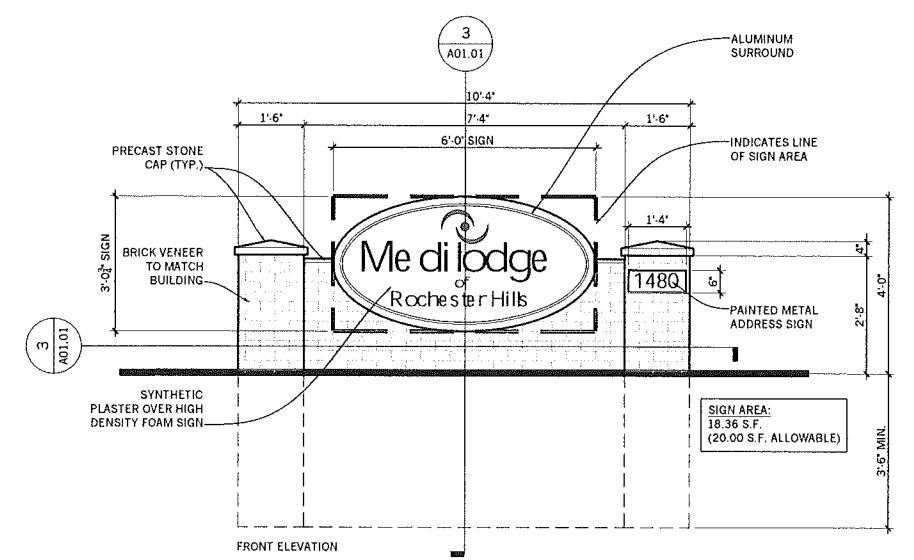


NOTE:
ALL SIGNS MUST MEET SECTION 138-8.603 AND CHAPTER 134 OF THE CITY CODE OF ORDINANCES AND BE APPROVED UNDER A SEPARATE PERMIT ISSUED BY THE BUILDING DEPARTMENT.



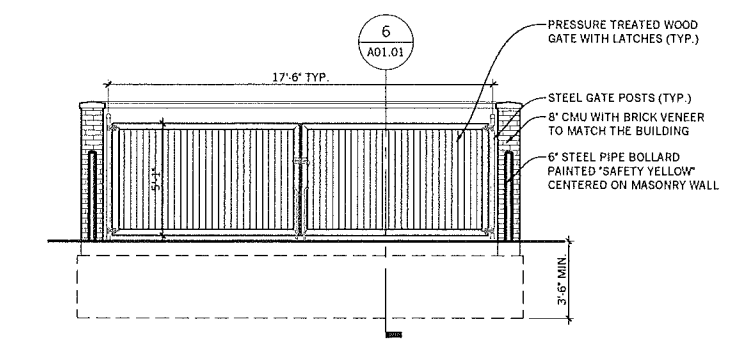
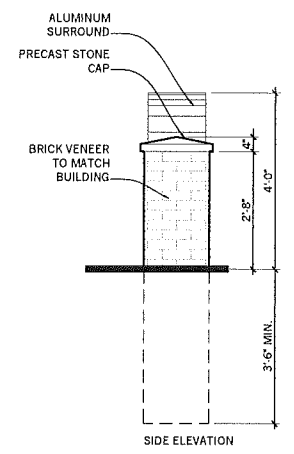
5 DUMPSTER ENCLOSURE PLAN

A01.01 SCALE: 1/4" = 1' - 0"



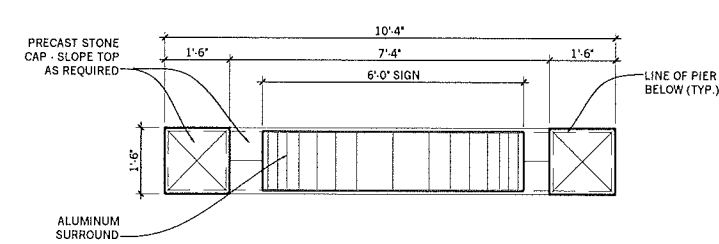
2 MONUMENT SIGN ELEVATIONS

A01.01 SCALE: 1/2" = 1' - 0"



4 DUMPSTER ENCLOSURE ELEVATION

A01.01 SCALE: 1/4" = 1' - 0"



1 MONUMENT SIGN PLAN

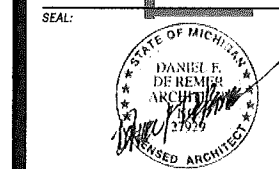
A01.01 SCALE: 1/2" = 1' - 0"



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CONSULTANTS:
CIVIL ENGINEER
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46777 WOODWARD AVE.
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LANDSCAPE ARCHITECT
HAGENBUCH WEIKAL LANDSCAPE ARCHITECTURE
33203 BIDDLESTONE BLVD
FARMINGTON HILLS, MI 48334
(248) 477-3600
ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
418 S. WASHINGTON AVE.
ROYAL OAK, MI 48067
(248) 744-0360

FOR CONSTRUCTION



CLIENT:
THE MEDILODGE GROUP
64500 VAN DYKE RD
WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
ADDITION AND RENOVATION
1480 WALTON BLVD.
ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
SITE PLAN DETAILS

DATE	DESCRIPTION	DRAWN BY
09.09.2016	NO CHANGES MADE	
09.09.2016	SITE PLAN REVIEW #3	BJ
08.15.2016	SITE PLAN REVIEW #2	BJ
05.23.2016	SITE PLAN REVIEW #1	BJ

DATE: DESCRIPTION: DRAWN BY:
THE DRAWING IS UNQUALIFIED AND IS NOT TO BE USED TO DETERMINE THE DESIGN OF THE STRUCTURE OR THE FOUNDATION. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS AND REQUIREMENTS OF THE DOCUMENTS REFERENCED HEREIN. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.

JWD PROJECT NUMBER: SHEET NUMBER:
13025 A01.01

480-186-3

CONSULTANTS:

CIVIL ENGINEER
NOWAK AND FRAUS ENGINEERS
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 (248) 332-7931

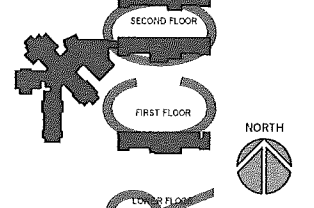
LANDSCAPE ARCHITECT
HAGENBUCH WEIKAL LANDSCAPE ARCHITECTURE
 33203 BIDDLESTONE CIRCLE
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 (248) 477-3600

ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
 418 S. WASHINGTON AVENUE
 ROYAL OAK, MI 48067
 (248) 744-0360

SEAL:



KEY PLAN:



CLIENT:

THE MEDILODGE GROUP
 64500 VAN DYKE RD
 WASHINGTON, MI 48095

PROJECT:

MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:

OVERALL FLOOR PLAN

DATE: DESCRIPTION: DRAWN BY:

09.09.2016 - NO CHANGES MADE

09.09.2016 SITE PLAN REVIEW #3 BJ
 09.15.2016 SITE PLAN REVIEW #2 BJ
 05.23.2016 SITE PLAN REVIEW #1 BJ

DATE: DESCRIPTION: DRAWN BY:

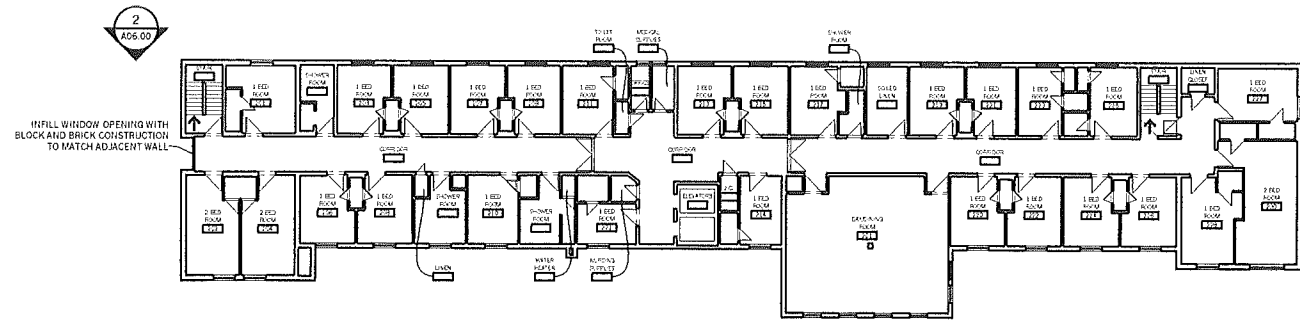
THE DRAWING IS A CONTRACT DOCUMENT AND IS TO BE USED TO OBTAIN PERMITS AND TO CONSTRUCT THE PROJECT. IT IS NOT TO BE USED FOR ANY OTHER PURPOSES. ANY CHANGES TO THE DRAWING MUST BE MADE BY A REGISTERED PROFESSIONAL ENGINEER OR ARCHITECT. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS DRAWING.

JWD PROJECT NUMBER:

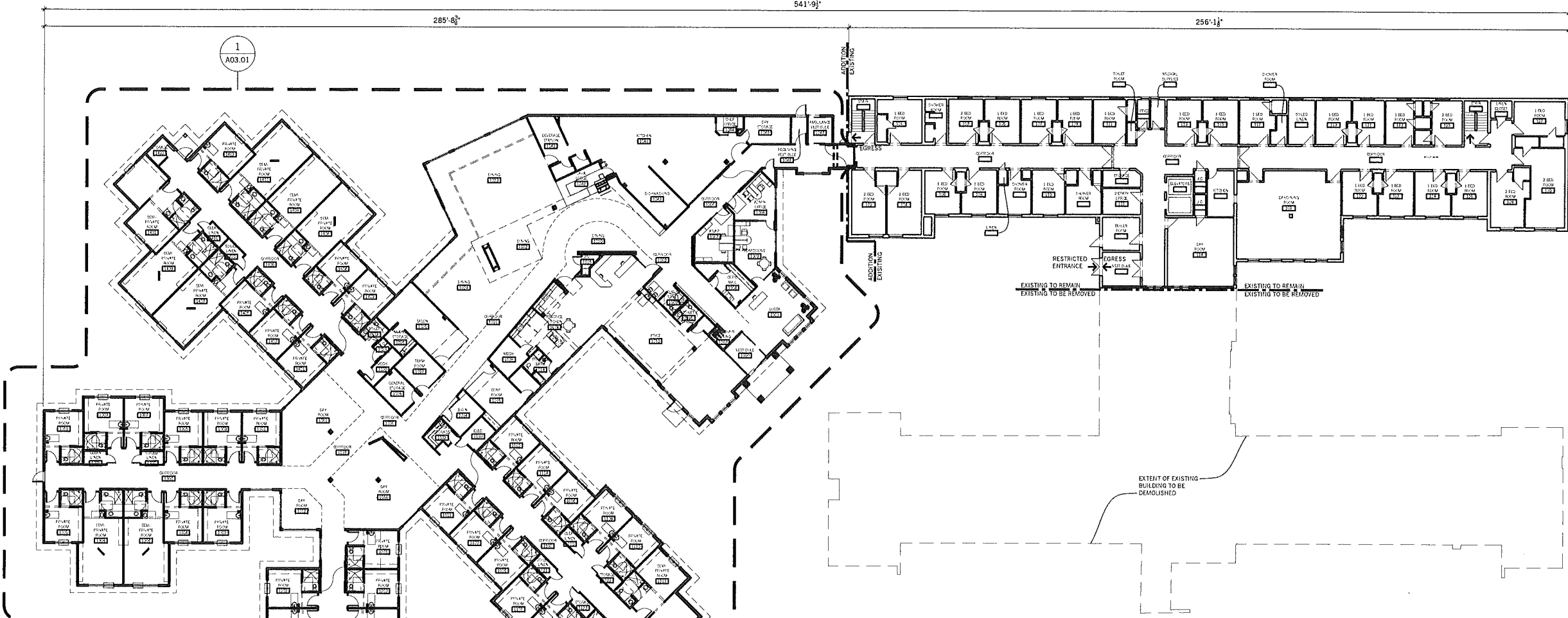
SHEET NUMBER:

13025 A03.00

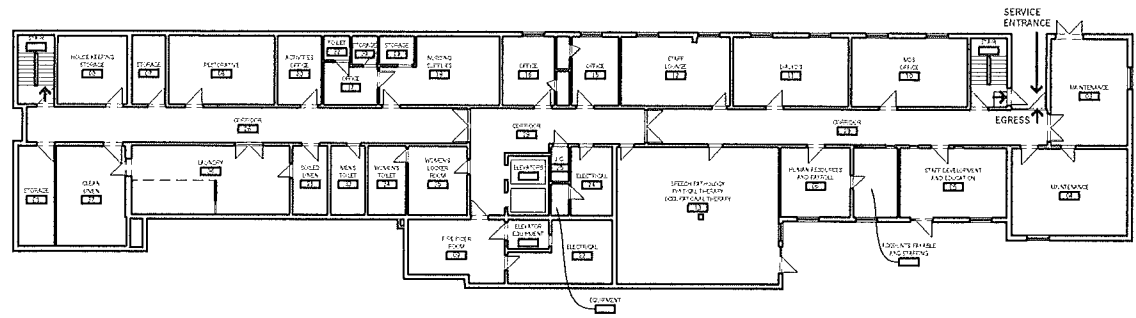
480-186-3



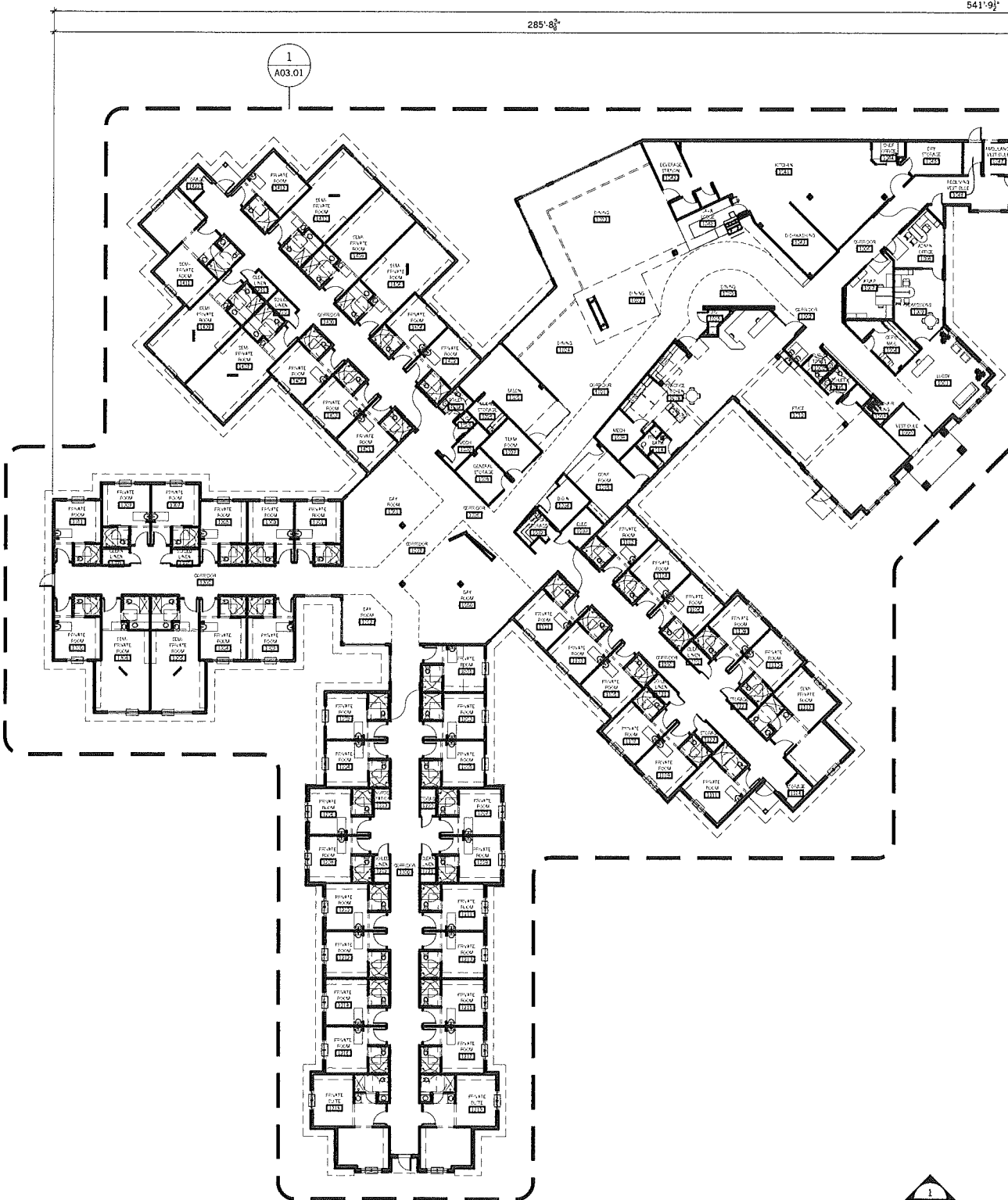
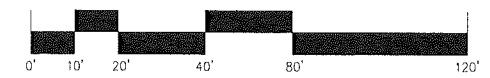
SECOND FLOOR PLAN
 SCALE: 1" = 20' - 0"



FIRST FLOOR PLAN
 SCALE: 1" = 20' - 0"



LOWER FLOOR PLAN
 SCALE: 1" = 20' - 0"





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CONSULTANTS:

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PONTIAC, MI 48342
(248) 332-7931

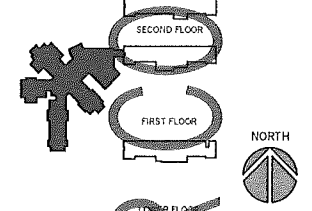
LANDSCAPE ARCHITECT
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33203 BIDDLESTONE DRIVE
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(248) 477-3600

ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
418 S. WASHINGTON AVE.
ROYAL OAK, MI 48067
(248) 744-0360

SEAL:



KEY PLAN:



CLIENT:

THE MEDILODGE GROUP
64500 VAN DYKE RD.
WASHINGTON, MI 48095

PROJECT:

MEDILODGE OF ROCHESTER HILLS
ADDITION AND RENOVATION
1480 WALTON BLVD.
ROCHESTER HILLS, MI 48309

SHEET CONTENTS:

OVERALL ADDITION FLOOR PLAN

DATE: DESCRIPTION: DRAWN BY:

09.09.2016 - NO CHANGES MADE

09.09.2016 SITE PLAN REVIEW #3 BJ
08.15.2016 SITE PLAN REVIEW #2 BJ
05.23.2016 SITE PLAN REVIEW #1 BJ

DATE: DESCRIPTION: DRAWN BY:

JWD PROJECT NUMBER: SHEET NUMBER:

13025 **A03.01**

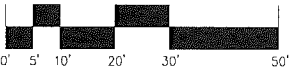


← INDICATES EXIT LOCATIONS



OVERALL FLOOR PLAN

SCALE: 1/16" = 1' - 0"



#80-186-3

PAINT COLOR LEGEND:		MATERIAL LEGEND:	
PT-1:	SHERWIN WILLIAMS SW7038 TONY TAUPE	4" FIBER CEMENT LAP SIDING:	HARDIE PLANK LAP SIDING - "KHAKI BROWN" OR PRIMED SIDING WITH PT-1 FINISH COAT
PT-2:	SHERWIN WILLIAMS SW7029 AGREEABLE GRAY	7" FIBER CEMENT BEADED SIDING:	HARDIE PLANK LAP SIDING BEADED - "COBBLE STONE" OR PRIMED SIDING WITH PT-2 FINISH COAT
PT-3:	SHERWIN WILLIAMS SW6034 ARRESTING AUBURN	ASPHALT SHINGLES:	CERTAINTED LANDMARK TL "COLONIAL SLATE"
PT-4:	SHERWIN WILLIAMS SW7062 ROCK BOTTOM	BRICK:	BRICK TECH ARCHITECTURAL "BTA 19 BURGUNDY FLASHED"
		CAST STONE:	ROYAL STONE "STANDARD BUFF" - DRY PACK
		FIBER CEMENT FASCIA BOARD:	HARDIE TRIM FASCIA BOARD - "IRON GRAY" OR PRIMED SIDING WITH PT-4 FINISH COAT



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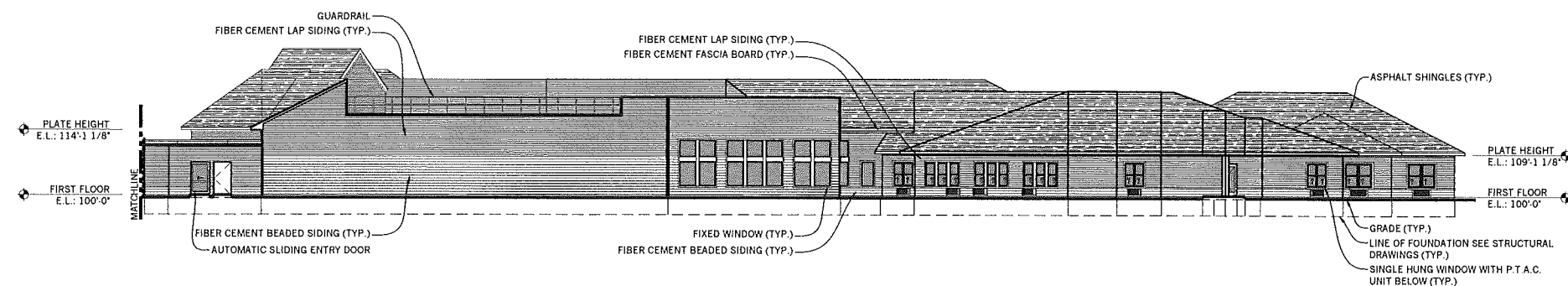
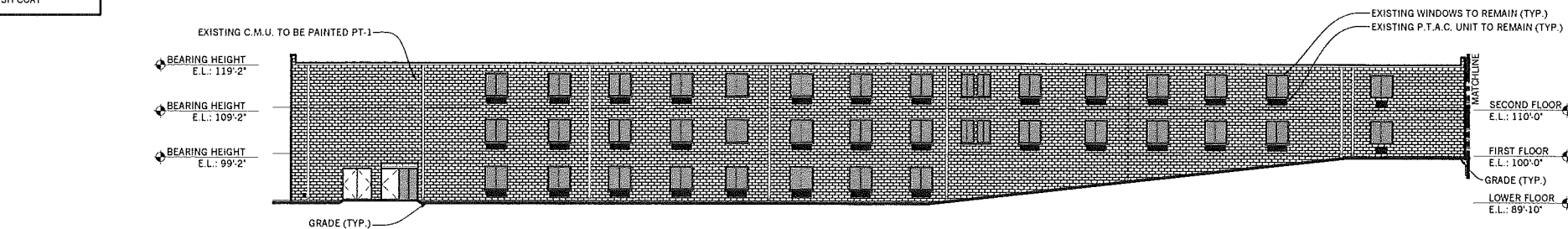
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 PHONE: (248) 336-2501
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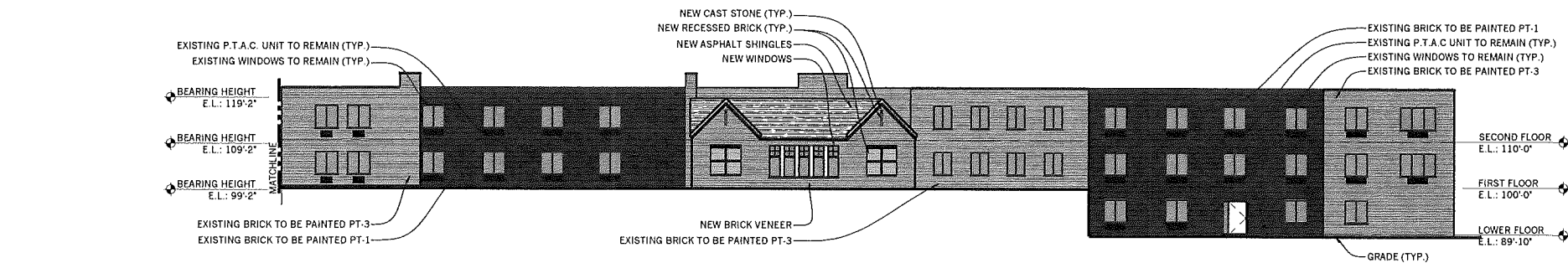
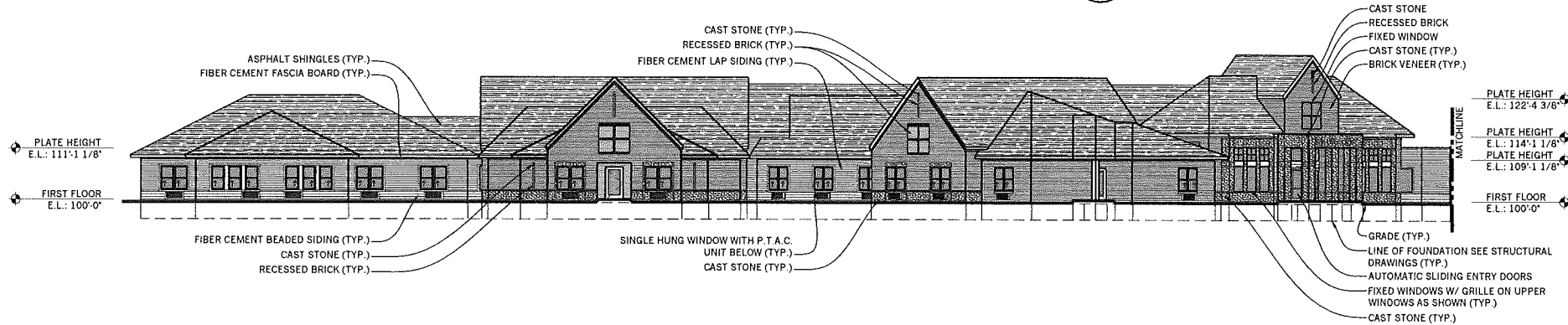
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NOWAK AND FRAUS ENGINEERS
 46777 WOODWARD AVE.
 PONTIAC, MI 48342
 (248) 332-7931

LANDSCAPE ARCHITECT
HAGENBUCH WEIKAL LANDSCAPE ARCHITECTURE
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 418.5 S. WASHINGTON AVE.
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2 NORTH ELEVATION
 A03.00 SCALE: 1/16" = 1" - 0"

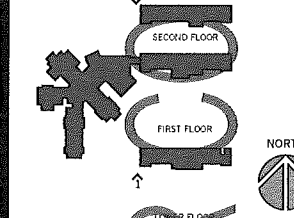


1 SOUTH ELEVATION
 A03.00 SCALE: 1/16" = 1" - 0"

SEAL:



KEY PLAN:



CLIENT:

THE MEDILODGE GROUP
 64500 VAN DYKE RD.
 WASHINGTON, MI 48095

PROJECT:

MEDILODGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:

OVERALL EXTERIOR ELEVATIONS

DATE: DESCRIPTION: DRAWN BY:

09.09.2016 - NO CHANGES MADE

09.09.2016 SITE PLAN REVIEW #3 BJ
 08.15.2016 SITE PLAN REVIEW #2 BJ
 05.23.2016 SITE PLAN REVIEW #1 BJ

DATE: DESCRIPTION: DRAWN BY:

THIS DRAWING IS A CONTRACT DOCUMENT AND SHALL BE USED TO OBTAIN THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL INFORMATION AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

JWD PROJECT NUMBER:

SHEET NUMBER:

13025 **A06.00**

#80-1803

PAINT COLOR LEGEND:		MATERIAL LEGEND:	
PT-1:	SHERWIN WILLIAMS SW7038 TONY TAUPE	4" FIBER CEMENT LAP SIDING:	HARDIE PLANK LAP SIDING - "KHAKI BROWN" OR PRIMED SIDING WITH PT-1 FINISH COAT
PT-2:	SHERWIN WILLIAMS SW7029 AGREEABLE GRAY	7" FIBER CEMENT BEADED SIDING:	HARDIE PLANK LAP SIDING BEADED - "COBBLE STONE" OR PRIMED SIDING WITH PT-2 FINISH COAT
PT-3:	SHERWIN WILLIAMS SW6034 ARRESTING AUBURN	ASPHALT SHINGLES:	CERTAINTEED LANDMARK TL "COLONIAL SLATE"
PT-4:	SHERWIN WILLIAMS SW7062 ROCK BOTTOM	BRICK:	BRICK TECH ARCHITECTURAL "BTA 19 BURGUNDY FLASHED"
		CAST STONE:	ROYAL STONE "STANDARD BUFF" - DRY PACK
		FIBER CEMENT FASCIA BOARD:	HARDIE TRIM FASCIA BOARD - "IRON GRAY" OR PRIMED SIDING WITH PT-4 FINISH COAT



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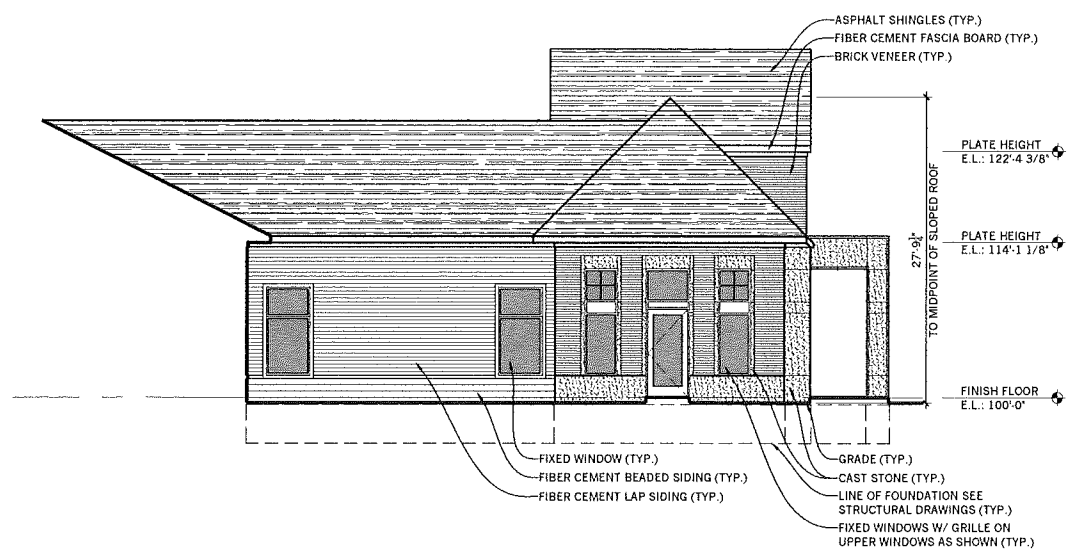
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CONSULTANTS:

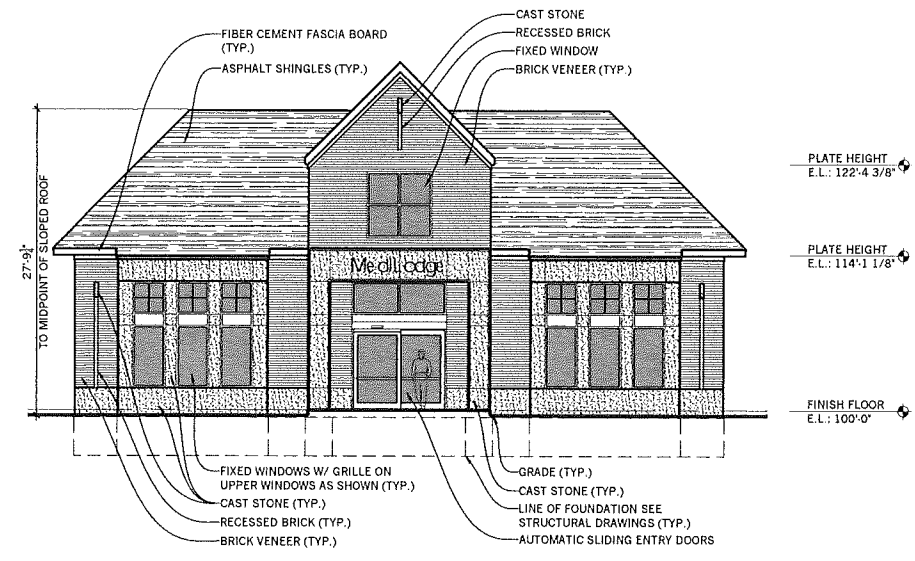
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HAGENBUCH WEIKAL LANDSCAPE ARCHITECTURE
 33203 BIDDLESTONE LANE
 FARMINGTON HILLS, MI 48334
 (248) 477-3600

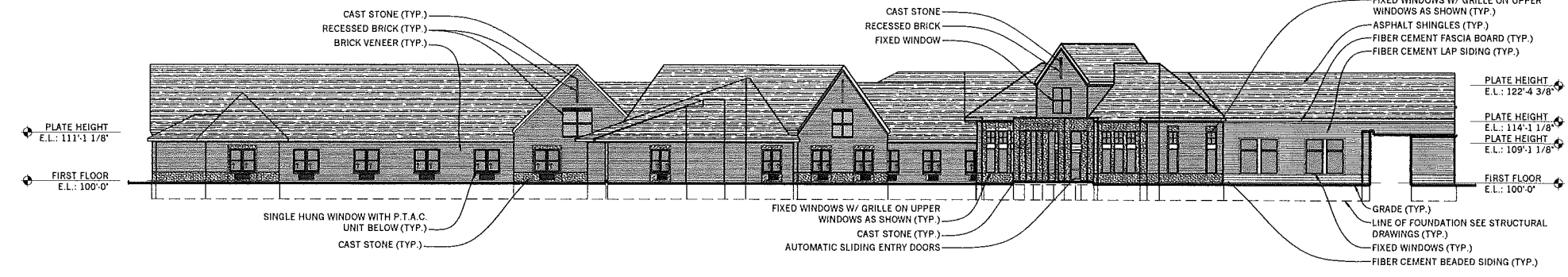
ELECTRICAL ENGINEER
ETS ENGINEERING, INC.
 418 S. WASHINGTON AVE.
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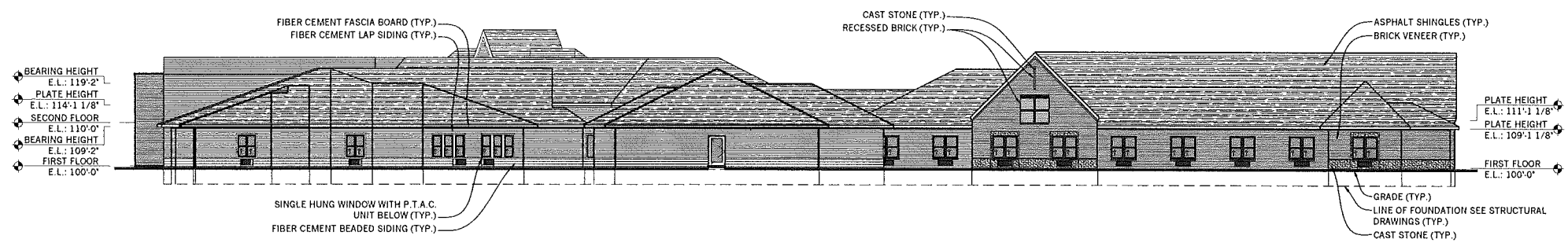
4 PARTIAL ELEVATION
 A03.01 SCALE: 1/8" = 1' - 0"



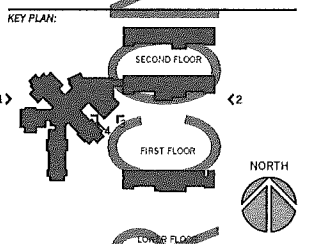
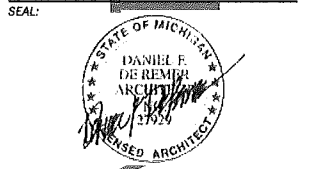
3 PARTIAL ELEVATION
 A03.01 SCALE: 1/8" = 1' - 0"



2 EAST ELEVATION
 A03.00 SCALE: 1/16" = 1' - 0"



1 WEST ELEVATION
 A03.00 SCALE: 1/16" = 1' - 0"



CLIENT:
THE MEDILOGGE GROUP
 64500 VAN DYKE RD.
 WASHINGTON, MI 48095

PROJECT:
MEDILOGGE OF ROCHESTER HILLS
 ADDITION AND RENOVATION
 1480 WALTON BLVD.
 ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
OVERALL EXTERIOR ELEVATIONS

DATE:	DESCRIPTION:	DRAWN BY:
09.09.2016	NO CHANGES MADE	
09.09.2016	SITE PLAN REVIEW #3	BJ
08.15.2016	SITE PLAN REVIEW #2	BJ
05.23.2016	SITE PLAN REVIEW #1	BJ

THE DRAWING CONTRACTOR SHALL BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND SHALL VERIFY THE ACCURACY OF ALL INFORMATION IN THE DRAWINGS BEFORE PROCEEDING. FAILURE TO DO SO SHALL BE AT THE CONTRACTOR'S SOLE RESPONSIBILITY AND LIABILITY. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.

JWD PROJECT NUMBER: 13025 SHEET NUMBER: A06.01

#80-186-3

D-Series Size 1

Specifications:

- Model: D-Series Size 1
- Power: 10W
- Beam Angle: 60°
- Color Temp: 4000K
- Life: 50,000 hrs

Item	Description	Quantity	Unit
1	D-Series Size 1 LED	10	ea

D-Series Size 0

Specifications:

- Model: D-Series Size 0
- Power: 5W
- Beam Angle: 60°
- Color Temp: 4000K
- Life: 50,000 hrs

Item	Description	Quantity	Unit
1	D-Series Size 0 LED	5	ea

WST LED

Specifications:

- Model: WST LED
- Power: 10W
- Beam Angle: 60°
- Color Temp: 4000K
- Life: 50,000 hrs

Item	Description	Quantity	Unit
1	WST LED	10	ea

PHILIPS LIGHTOLIER

Specifications:

- Model: Philips Lightolier
- Power: 10W
- Beam Angle: 60°
- Color Temp: 4000K
- Life: 50,000 hrs

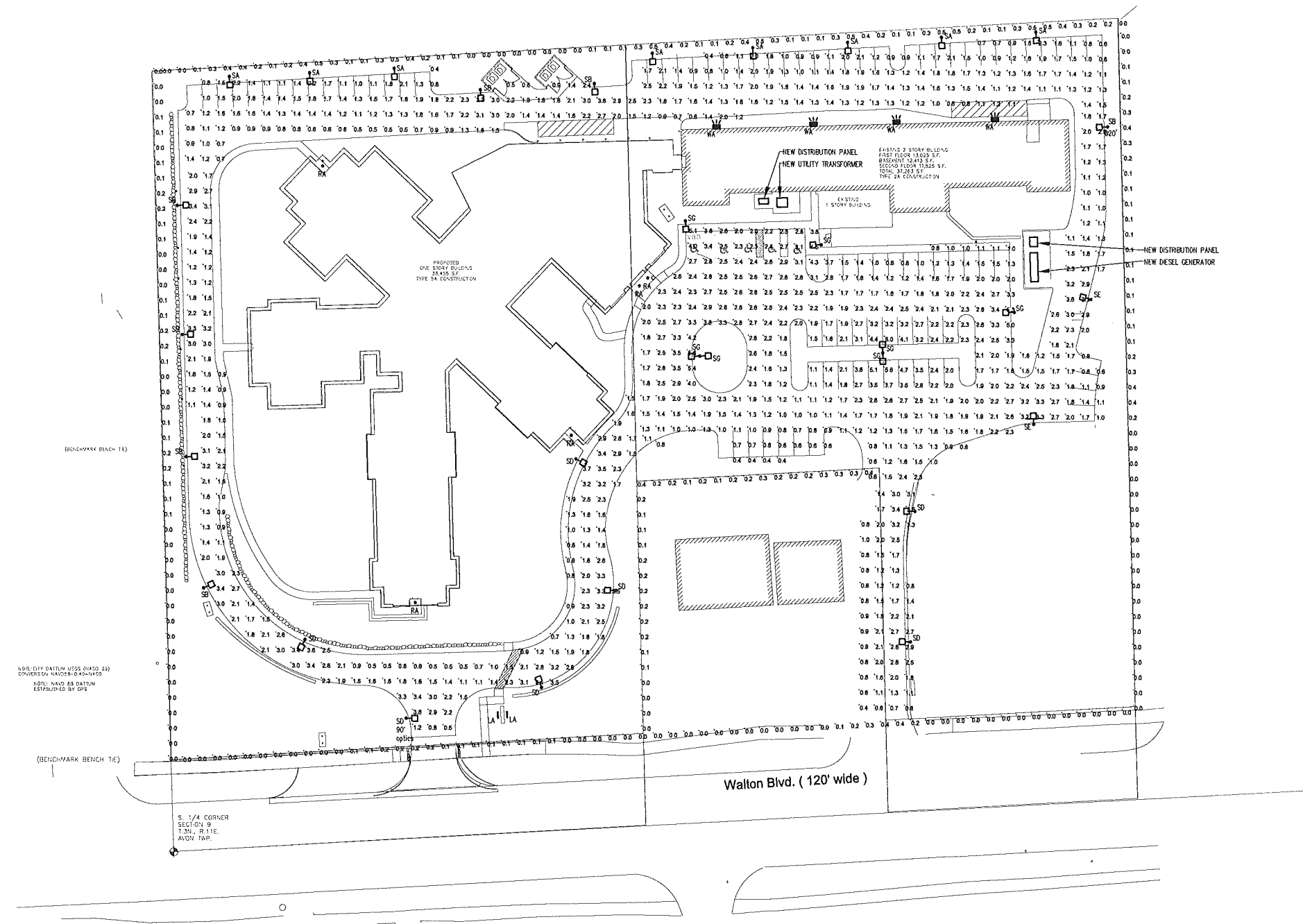
Item	Description	Quantity	Unit
1	Philips Lightolier	10	ea

RHYTHM

Specifications:

- Model: Rhythm
- Power: 10W
- Beam Angle: 60°
- Color Temp: 4000K
- Life: 50,000 hrs

Item	Description	Quantity	Unit
1	Rhythm	10	ea



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
BOUNDARY	+	0.1 fc	0.5 fc	0.0 fc	N/A	N/A
DR OFFICE BOUNDARY	+	0.2 fc	0.4 fc	0.0 fc	N/A	N/A
EAST DRIVE	+	1.9 fc	3.6 fc	1.0 fc	3.6:1	1.9:1
EAST ENTRANCE	+	1.7 fc	3.6 fc	0.4 fc	9.0:1	4.3:1
FRONT PARKING	+	2.1 fc	6.8 fc	0.4 fc	14.5:1	5.3:1
FR WEST DRIVES	+	2.0 fc	3.7 fc	0.5 fc	7.4:1	4.0:1
REAR PARKING	+	1.4 fc	3.6 fc	0.4 fc	9.0:1	3.5:1

Schedule

Label	Manufacturer	Model Number	Description	Lamp	Number	Light Loss Factor	Usage
SA	Generic	SA	SA LED with 20 LEDS	LED	1	0.8	35
SB	Generic	SB	SB LED with 40 LEDS	LED	1	0.8	62
SD	Generic	SD	SD LED with 80 LEDS	LED	1	0.8	62
SE	Generic	SE	SE LED with 160 LEDS	LED	1	0.8	62
SF	Generic	SF	SF LED with 320 LEDS	LED	1	0.8	124
SG	Generic	SG	SG LED with 640 LEDS	LED	1	0.8	124
WA	Generic	WA	WA LED with 1280 LEDS	LED	1	0.8	24
RA	PHILIPS	RA	RA LED with 1280 LEDS	LED	1	0.8	12
LA	HYDRAL	LA	LA LED with 1280 LEDS	LED	1	0.8	12

ELECTRICAL PHOTOMETRIC SITE PLAN
SCALE: 1" = 40' - 0"



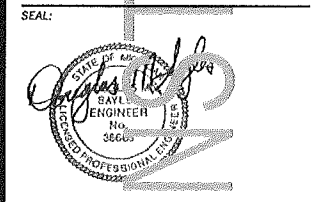
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ELECTRICAL ENGINEER
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418.5 S. WASHINGTON AVE.
ROYAL OAK, MI 48067
(248) 744-0360



CLIENT:
THE MEDILODGE GROUP
64500 VAN DYKE RD.
WASHINGTON, MI 48095

PROJECT:
MEDILODGE OF ROCHESTER HILLS
ADDITION AND RENOVATION
1480 WALTON BLVD.
ROCHESTER HILLS, MI 48309

SHEET CONTENTS:
ELECTRICAL PHOTOMETRIC SITE PLAN

DATE: 09.09.2016 DESCRIPTION: NO CHANGES MADE DRAWN BY: [Signature]

09.09.2016 SITE PLAN REVIEW #3 BJ
08.15.2016 SITE PLAN REVIEW #2 BJ
05.23.2016 SITE PLAN REVIEW #1 BJ

JWD PROJECT NUMBER: 13025 SHEET NUMBER: PE-1 #80-186-3