



ROCHESTER COLLEGE
health & life sciences center



architects planners interior

view from southwest
january 2008

ROCHESTER COLLEGE

HEALTH AND LIFE SCIENCE CENTER

ROCHESTER HILLS, MICHIGAN
PROJECT NO. 08076.00

December 3, 2008

SITE PLAN RE-SUBMITTAL

LIST OF DRAWINGS

CIVIL

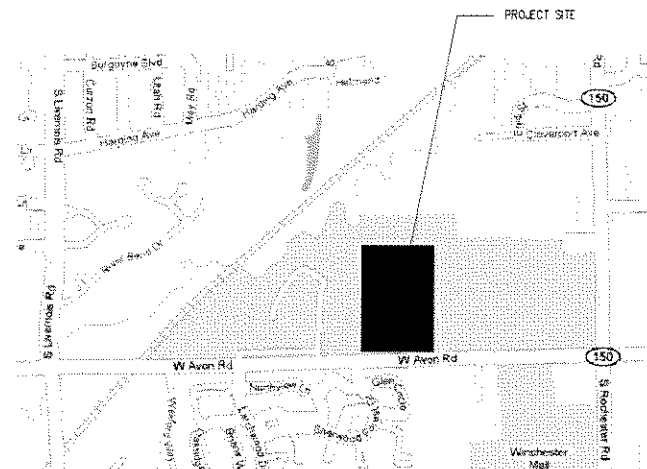
- P-1.1 BOUNDARY SURVEY
- P-1.2 PARTIAL TOPOGRAPHIC SURVEY
- P-1.3 TREE SURVEY
- P-2.1 PRELIMINARY DEMOLITION PLAN
- P-2.2 PRELIMINARY DEMOLITION PLAN
- P-3.0 OVERALL SITE PLAN
- P-3.1 PRELIMINARY SITE PLAN
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- P-4.1 PRELIMINARY GRADING PLAN
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- P-6.1 EXISTING DRAINAGE PLAN & CALCS.
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- P-7.1 PRELIMINARY R.O.W. DEMOLITION PLAN
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- P-7.3 PRELIMINARY R.O.W. GRADING & UTILITY PLAN
- P-7.4 PRELIMINARY WEST CAMPUS BIKE PATH PLAN
- P-8.1 NOTES & DETAILS
- P-8.2 DETAILS
- L-1.1 LANDSCAPE PLAN
- L-1.2 LANDSCAPE PLAN
- L-2.1 LANDSCAPE DETAILS

ARCHITECTURAL

- A2.01 FIRST FLOOR PLAN
- A2.02 SECOND FLOOR PLAN
- A4.01 EXTERIOR ELEVATIONS

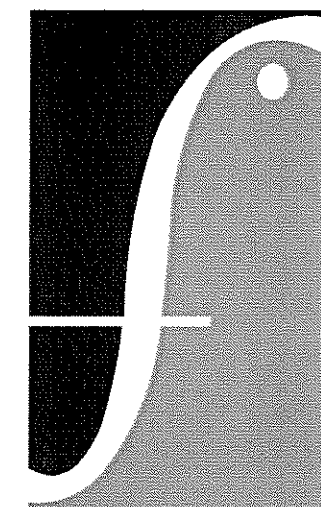
ELECTRICAL

- EO.1 ELECTRICAL STANDARDS & DRAWING INDEX
- EO.2 ELECTRICAL SITE PLAN-DEMOLITION
- EO.3 ELECTRICAL SITE PLAN-NEW WORK
- EO.4 SITE LIGHTING PHOTOMETRIC CALCULATION PLAN
- EO.5 DETAILS & SCHEDULES
- EO.6 DETAILS



SITE ANALYSIS

ZONING	
EXISTING SITE ZONED	PUD
ADJACENT SITE ZONING	
NORTH	PUD
SOUTH	RM-1
EAST	PUD
WEST	PUD
SITE AREA	
GROSS SITE AREA	76.23 ACRES
PROPOSED SITE COVERAGE	2%
BUILDING REGULATIONS	
FIRST FLOOR BUILDING AREA	63,286 S.F.
SECOND FLOOR BUILDING AREA	27,387 S.F.
TOTAL BUILDING AREA	90,673 S.F.
PROPOSED BUILDING HEIGHT	43 FT. A.F.F. 51 FT. A.F.F. • ENTRY WING WALL
PROPOSED BUILDING STORIES	2 STORIES
REQUIRED BUILDING SETBACKS (SP ZONING)	
FRONT	50 FEET
SIDE	50 FEET
REAR	50 FEET
PROPOSED BUILDING SETBACKS	
FRONT	94 FEET
SIDE	1045 FEET (WEST) 405 FEET (EAST)
REAR	915 FEET
PARKING REQUIREMENTS	
EXISTING DORMITORY (352 BEDS • 1 PER 2 BEDS)	176 PARKING SPACES
EXISTING CHAPEL (210 SEATS • 1 PER 3 SEATS - 2 STAFF • 1 PER 2 STAFF)	71 PARKING SPACES
EXISTING THEATER (200 SEATS • 1 PER 3 SEATS - 2 STAFF • 1 PER 2 STAFF)	68 PARKING SPACES
NEW GYMNASIUM (1045 SEATS • 1 PER 3 SEATS)	350 PARKING SPACES
TOTAL PARKING SPACES REQUIRED	665 PARKING SPACES
EXISTING PARKING SPACES PROVIDED	530 PARKING SPACES
EXIST. PARKING LOST DUE TO NEW ATHLETIC CENTER	(115) PARKING SPACES
NEW PARKING PROPOSED	272 PARKING SPACES
TOTAL PARKING AVAILABLE	687 PARKING SPACES
LOADING SPACE REQUIRED (1 SPACE - 1 SPACE FOR EACH 20,000 S.F. OVER 20,001 S.F.)	5 (10'X50') SPACES
LOADING SPACE PROVIDED	3 SPACES (MORE THAN 10'X50')

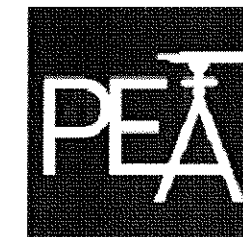


FRENCH
associates

architects planners interiors



CIVIL ENGINEER:



PROFESSIONAL ENGINEERING ASSOCIATES

2430 ROCHESTER CT.
TROY, MI 48083
(248) 689-9090

ELECTRICAL ENGINEER:



PETER BASSO ASSOCIATES, INC.

5145 LIVERNOIS
TROY, MI 48098
(248) 879-5666

City File No. 94-426.8, Section 15

LEGAL DESCRIPTIONS

PARCEL NO. 15-15-378-001 (FROM TAX DESCRIPTION) LAND IN THE CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS: PART OF THE SOUTHWEST 1/4 OF SECTION 15, TOWN 3 NORTH, RANGE 11 EAST, BEGINNING AT SOUTH 1/4 CORNER...

PROPERTY DESCRIPTION FOR PARCEL 15-15-378-003 FROM OUT CLAIN DEED RECORDED IN L. 4606, P. 588

PARCEL A PART OF SOUTHWEST 1/4 OF SECTION 15, TOWN 3 NORTH, RANGE 11 EAST, DESCRIBED AS: BEGINNING AT THE SOUTH 1/4 CORNER OF SECTION 15...

PARCEL B PART OF SOUTHWEST 1/4 OF SECTION 15, TOWN 3 NORTH, RANGE 11 EAST, MORE PARTICULARLY DESCRIBED AS: BEGINNING AT A POINT IN THE SOUTH LINE OF SECTION 15...

PARCEL C PART OF THE SOUTHWEST 1/4 OF SECTION 15, TOWN 3 NORTH, RANGE 11 EAST, DESCRIBED AS FOLLOWS: BEGINNING AT THE 1/8 CORNER WHICH IS MOST 1311.8 FEET OF THE SOUTH 1/4 CORNER...

PARCEL NO. 15-15-481-003 (FROM WARRANTY DEED RECORDED IN L. 4657, PAGE 557 AS BASIS FOR DESCRIPTION) LAND IN THE TOWNSHIP OF AVON (NOW CITY OF ROCHESTER HILLS), COUNTY OF OAKLAND AND STATE OF MICHIGAN TO-WIT: LAND IN THE TOWNSHIP OF AVON...

TRACED PART OF THE WEST 1/2 OF THE SOUTHWEST QUARTER OF SECTION 15, TOWN 3 NORTH, RANGE 11 EAST, MORE PARTICULARLY DESCRIBED AS COMMENCING AT THE SOUTHWEST CORNER THEREOF...

EXCEPT THE EASTERLY 1000 FT THEREOF.

NEW DESCRIPTION FOR THE ROCHESTER COLLEGE PARCEL #15-15-481-004 AFTER CONVEYANCE OF 2.5 ACRES TO THE ROCHESTER CHURCH OF CHRIST

THE EASTERLY 1000 FEET OF PART OF THE WEST 1/2 OF THE SOUTHWEST 1/4, BEGINNING AT THE SOUTHWEST CORNER OF THE WEST 1/2 OF THE SOUTHWEST 1/4...

NEW DESCRIPTION OF OVERALL PARCEL - COMBINATION OF ROCHESTER COLLEGE PARCELS #15-15-378-001, #15-15-481-003 AND #15-15-481-004

BEGINNING AT THE SOUTH 1/4 CORNER OF SAID SECTION 15 AND PROCEEDING THENCE ALONG THE SOUTH LINE OF THE SE 1/4 OF THE SW 1/4 OF SECTION 15 AND CENTERLINE OF AVON ROAD...

MODIFIED HISTORIC DISTRICT PARCEL DESCRIPTION

LAND IN THE CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN, MORE PARTICULARLY DESCRIBED AS: COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 15...

DESCRIPTION OF ROCHESTER COLLEGE PARCEL (REMAINDER) AFTER DEDICATION OF AVON ROAD RIGHT-OF-WAY AND DIVISION OF MODIFIED HISTORIC DISTRICT PARCEL...

COLLEGE PARCELS #15-15-378-001, #15-15-481-003 AND #15-15-481-004 LAND IN PART OF THE SOUTHWEST 1/4 AND PART OF THE SOUTH 1/2 OF SECTION 15...

COMMENCING AT THE SOUTH 1/4 CORNER OF SAID SECTION 15 AND PROCEEDING THENCE ALONG THE SOUTH LINE OF SECTION 15 AND CENTERLINE OF AVON ROAD...

THE DESCRIBED PARCEL CONTAINS 76.23 ACRES OF LAND AS SURVEYED, BEING SUBJECT TO THE RIPEAN RIGHTS OF OTHERS IN THE CLINTON RIVER, AND ALSO SUBJECT TO AND TOGETHER WITH ANY EASEMENTS, RESTRICTIONS, OR RESERVATIONS AFFECTING THIS PARCEL.

DESCRIPTION OF AVON ROAD RIGHT-OF-WAY DEDICATION BEHIND THE SOUTHERLY 60 FEET OF ROCHESTER COLLEGE PARCELS #15-15-378-001, #15-15-481-003 AND #15-15-481-004

BEGINNING AT THE SOUTH 1/4 CORNER OF SAID SECTION 15 AND PROCEEDING THENCE ALONG THE SOUTH LINE OF THE SE 1/4 OF THE SW 1/4 OF SECTION 15 AND CENTERLINE OF AVON ROAD...

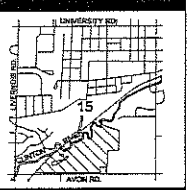
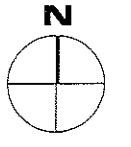
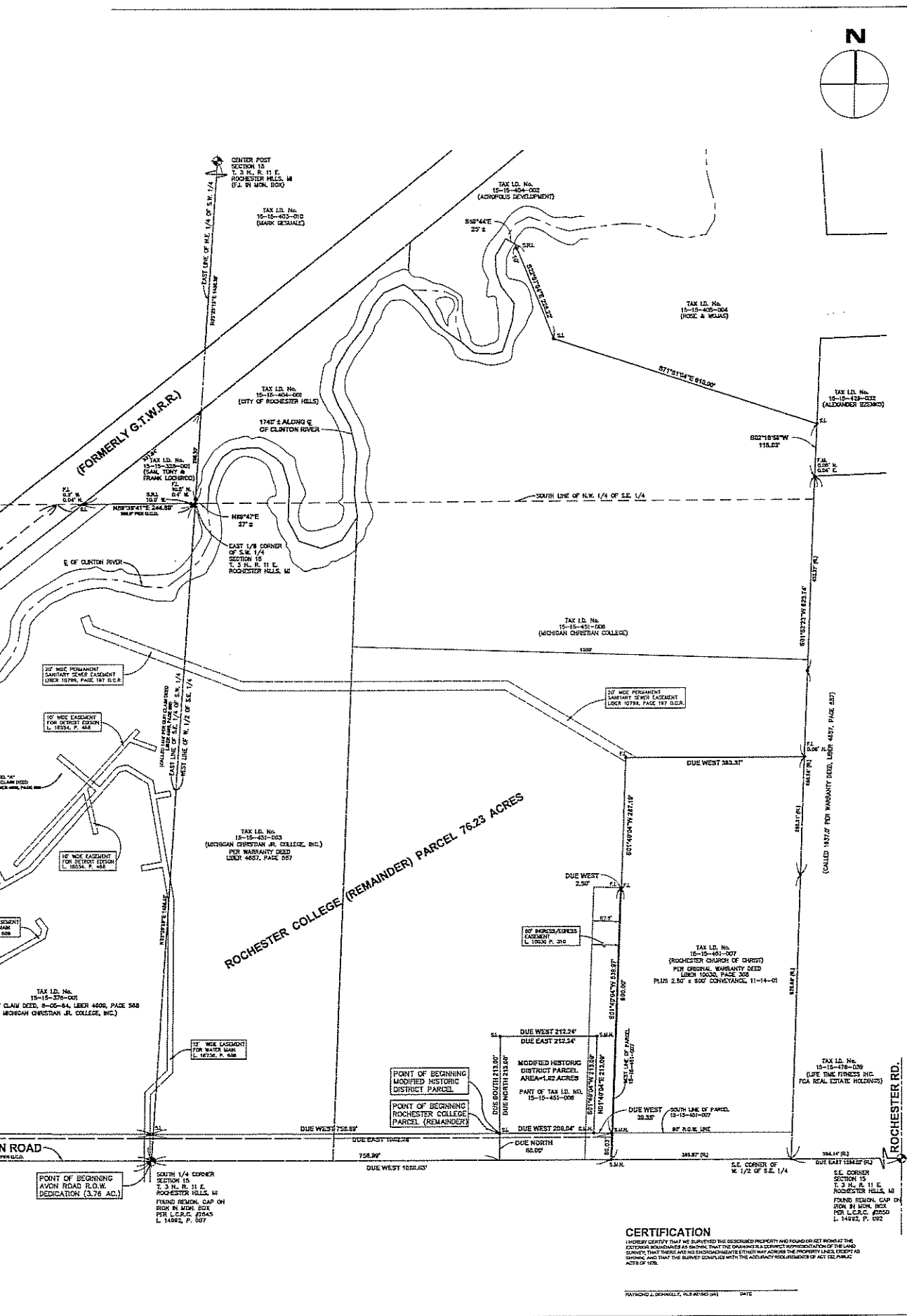
THIS DESCRIBED PARCEL CONTAINS 3.76 ACRES OF LAND AS SURVEYED, BEING SUBJECT TO AND TOGETHER WITH ANY EASEMENTS, RESTRICTIONS, OR RESERVATIONS AFFECTING THIS PARCEL.

LINE OF ORIGINAL CONNECTION TO FORMER CLINTON CHURCH COLLEGE DISTRICT PARCEL...

PARCEL NO. 15-15-378-001 (FROM OUT CLAIN DEED RECORDED IN L. 4606, P. 588)

PARCEL NO. 15-15-481-003 (FROM WARRANTY DEED RECORDED IN L. 4657, PAGE 557 AS BASIS FOR DESCRIPTION)

THIS DESCRIBED PARCEL CONTAINS 76.23 ACRES OF LAND AS SURVEYED, BEING SUBJECT TO THE RIPEAN RIGHTS OF OTHERS IN THE CLINTON RIVER, AND ALSO SUBJECT TO AND TOGETHER WITH ANY EASEMENTS, RESTRICTIONS, OR RESERVATIONS AFFECTING THIS PARCEL.



ABBREVIATIONS table listing symbols for Easement, Right-of-Way, etc.

SYMBOLS table listing symbols for Cable, Electric, Fence, etc.

ISSUE DATE and ISSUED FOR table with entries for 10-22-08, 12-03-08, and 01-16-09.

DRAWN, CHECKED, and APPROVED table with names RLS and DNH.

PEA logo and contact information for Professional Engineering Associates.

FRENCH associates logo and contact information.



Raymond J. Donnelly & Associates, Inc. Land Surveying, Mapping, Site Development Consulting.

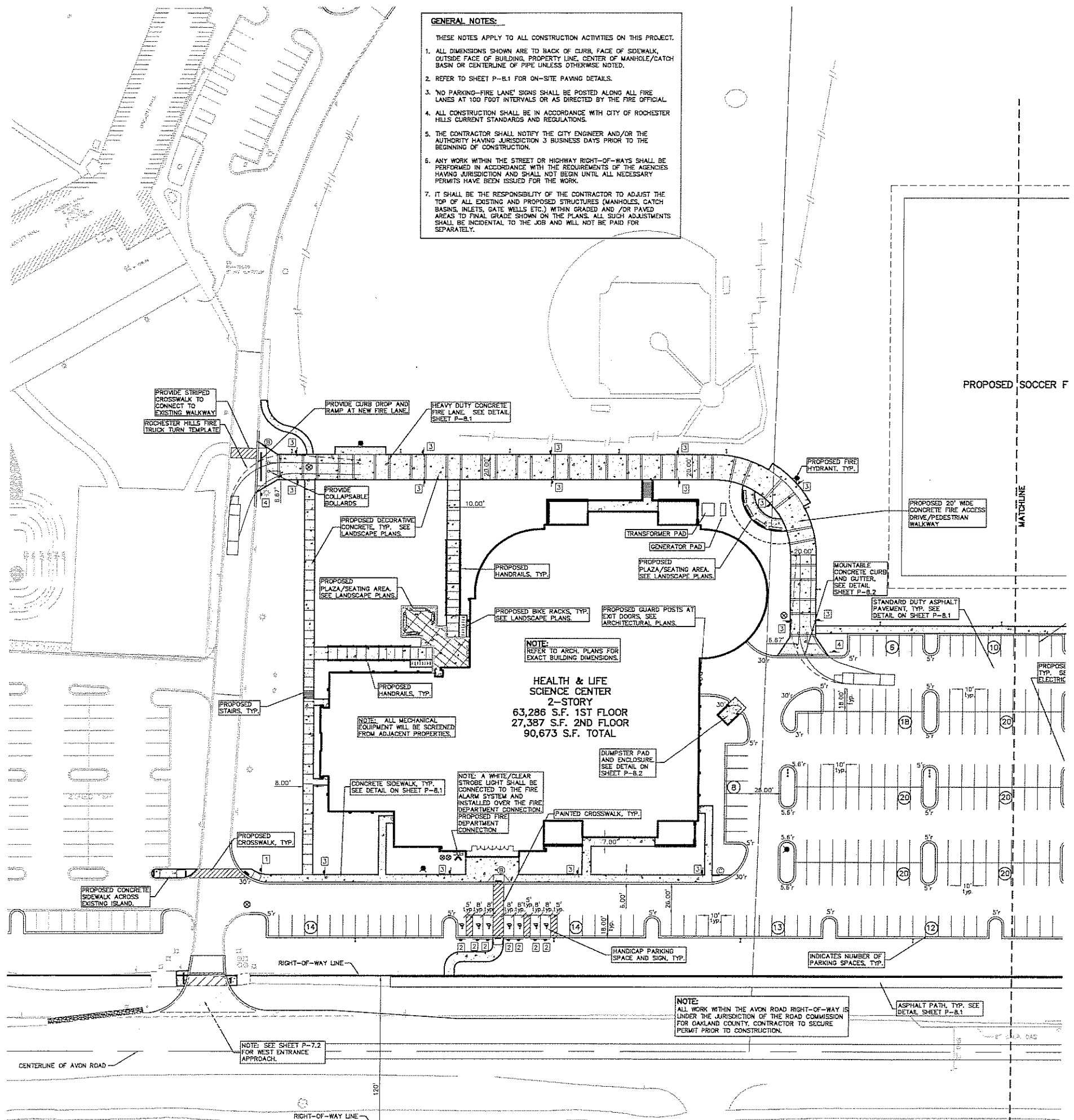
BOUNDARY SURVEY ROCHESTER COLLEGE ROCHESTER HILLS, MI

ROCHESTER COLLEGE 800 WEST AVON RD. ROCHESTER HILLS, MI 48307

Table with columns for PROJECT NUMBER (2008-076), SHEET NUMBER (P-11), and SCALE (1" = 120').

CERTIFICATION I HEREBY CERTIFY THAT WE HAVE SURVEYED THE DESCRIBED PROPERTY AND FOUND IT TO BE THE SAME AS SHOWN ON THE ATTACHED MAP...

RAYMOND J. DONNELLY, INC. SURVEYORS DATE



- GENERAL NOTES:**
 THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
 - REFER TO SHEET P-B.1 FOR ON-SITE PAVING DETAILS.
 - NO PARKING-FIRE LANE SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ROCHESTER HILLS CURRENT STANDARDS AND REGULATIONS.
 - THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
 - ANY WORK WITHIN THE STREET OR HIGHWAY RIGHT-OF-WAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGUN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

- CURB DROP AND RAMP LEGEND:**
- CURB DROP AND RAMP 'TYPE A' (A)
 - CURB DROP AND RAMP 'TYPE B' (B)
 - CURB DROP AND RAMP 'TYPE C' (C)
 - CURB DROP ONLY (D)
 - REFER TO SHEET P-B.1 FOR RAMP DETAILS
- SIGN LEGEND:**
- 'STOP' SIGN (1)
 - 'BARRIER FREE PARKING' SIGN (2)
 - 'NO PARKING-FIRE LANE' SIGN (3)
 - 'NO MOTOR VEHICLES' SIGN (4)
 - REFER TO SHEET P-B.1 FOR SIGN DETAILS

CAUTION!
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. AN ASSURANCE IS GIVEN BY THE CONTRACTOR THAT HE HAS BEEN ADVISED BY THE CONTRACTOR SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.

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GRAPHIC SCALE
 1 inch = 40 ft.

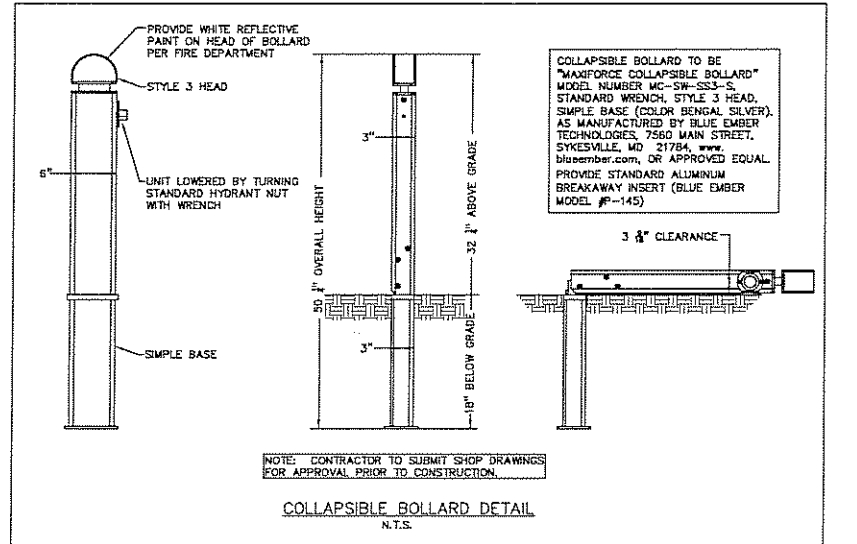
ISSUE DATE ISSUED FOR

12-22-08	SITE PLAN RE-SUBMITTAL
12-03-08	SITE PLAN RE-SUBMITTAL
01-16-09	SITE PLAN RE-SUBMITTAL

DRAWN RLS

CHECKED RLS

APPROVED DNH



PEA

PROFESSIONAL ENGINEERING ASSOCIATES
 2430 Rochester Ct Suite 100
 Troy, MI 48063-1872
 (248) 689-9080

f architects partners services

FRENCH associates
 1600 Parkdale
 Rochester, MI 48307
 T 248.656.1377
 F 248.656.7746
 © FRENCH ASSOCIATES, INC.

PROJECT
 Rochester College
 Health & Life
 Science Center

**Rochester Hills
 Michigan**

SHEET
 Preliminary
 Site Plan

SCALE: 1" = 40'

PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135

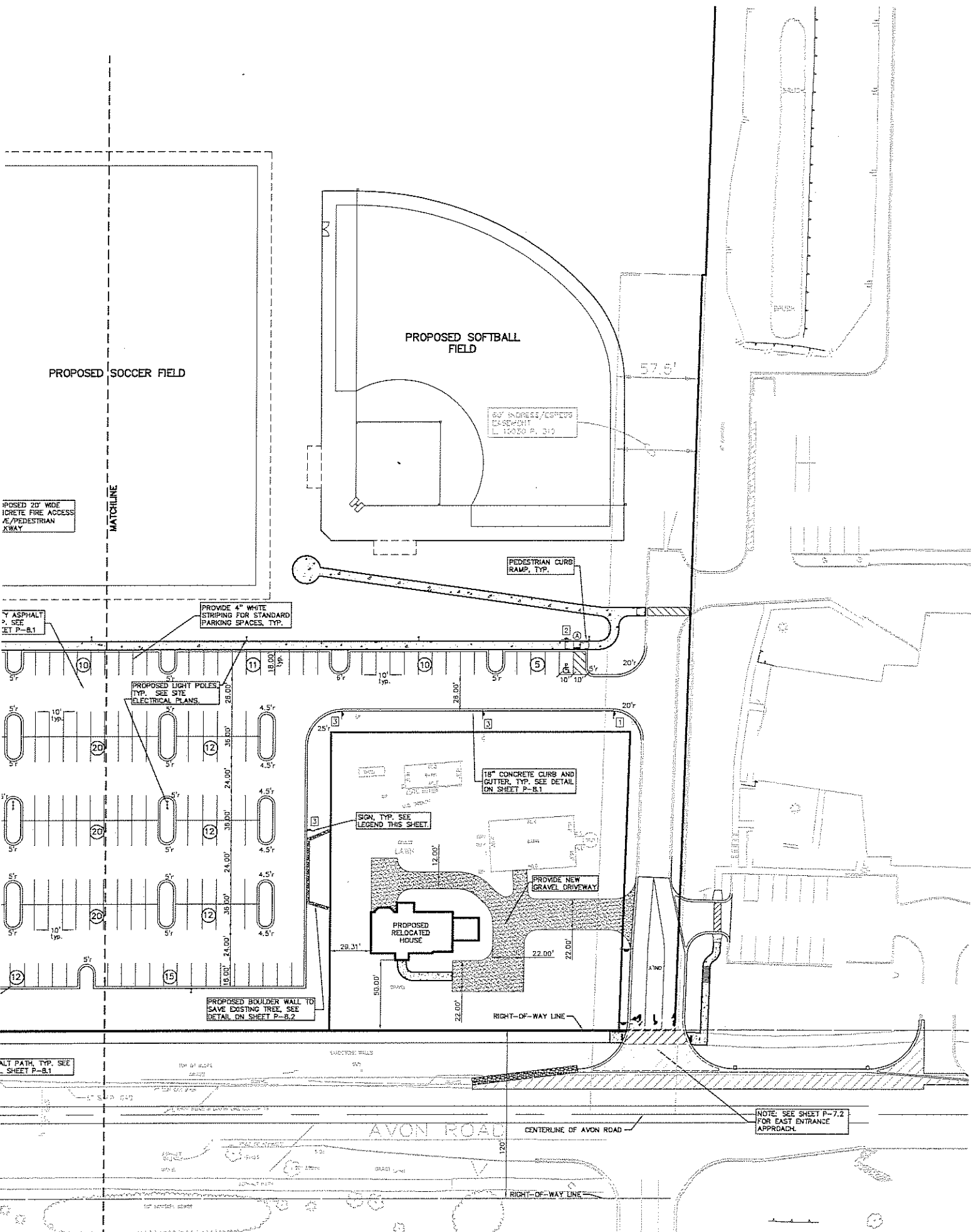
SHEET NUMBER
 P-3.1
PRELIMINARY NOT FOR CONSTRUCTION
CITY FILE # 94-426.B, SECTION #15

LEGEND

ABBREVIATIONS	SYMBOLS
<ul style="list-style-type: none"> FF FOUND FOOTING FIP FOUND IRON PIPE FIP FOUND CONCRETE PIPE SF SET POINT C CALCULATED TA MEASURED R REBORN CLF CHAIN LINK FENCE CB CATCH BASIN GO GROUND OUT DS DOWNSPOUT FF FINISH FLOOR CF CONCRETE FLOOR GD GROUND HYD HYDRANT BLT BLIND HL INVESTIGATION L.P. LIGHT POLE MIS MISCELLANEOUS TEXTS NOT TO SCALE OH OVERHEAD SD SOLI DRIVING T.D. TOP OF DRIVE UC UNDERGROUND UP UTILITY POLE 	<ul style="list-style-type: none"> STRIKE OF CABLE TV OR LINE POLE & SIX WIRE UNDERGROUND CABLE TV TELEPHONE U.G. CABLE, SPRING BOX & MANHOLE ELECTRIC U.G. CABLE & MANHOLE GAS MAIN & VALVE WATERMAIN, IRIG. GATE VALVE, TAPPING SLIT & VALVE SAWNEY SLOPE, CEMENT & MANHOLE STORM SEWER, CEMENT & MANHOLE CANONED SEWER & MANHOLE CATCH BASIN INLET (NO INDOOR LINES) YARD DRAIN (2" DIA. & SMALLER) POST INDICATOR VALVE WATER SERVICE SHAFT, HYDRANT VALVE BOX WALKWAY UNIDENTIFIED STRUCTURE POINT ELEVATION (AT CROSSING) AS REAL ELEVATION CONTOUR LINE FENCE GLASS RAIL STREET LIGHT SMA SAND BACKFILL CONCRETE ASPHALT WETLAND DRIVE SHOULDER

REFERENCE DRAWINGS

FLOODPLAIN: ZONE "X" PER FEMA MAP #200471-0000-B
 SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY:
 RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS
 REF: 2008135DW, TOPBASE-08135.DWG
 REF: 2008135DW, SITE, PAVES, BRIDGE-BOLLS.DWG
 REF: 2008135DW, BASE-EXISTING, PLAN-FRDM-T.MPG



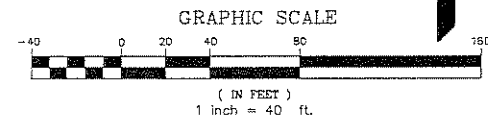
SIGN LEGEND:		CURB DROP AND RAMP LEGEND:	
'STOP' SIGN	(1)	CURB DROP AND RAMP 'TYPE A'	(A)
'BARRIER FREE PARKING' SIGN	(2)	CURB DROP AND RAMP 'TYPE B'	(B)
'NO PARKING-FIRE LANE' SIGN	(3)	CURB DROP AND RAMP 'TYPE C'	(C)
'NO MOTOR VEHICLES'	(4)	CURB DROP ONLY	(D)
REFER TO SHEET P-8.1 FOR SIGN DETAILS		REFER TO SHEET P-8.1 FOR RAMP DETAILS	

GENERAL NOTES:

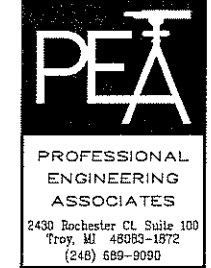
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CAUTION!
 THE LOCATION AND ELEVATIONS OF EXISTING UTILITIES SHOWN ON THIS DRAWING ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.
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ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
12-03-08	SITE PLAN RE-SUBMITTAL
01-15-09	SITE PLAN RE-SUBMITTAL
DRAWN	RLS
CHECKED	RLS
APPROVED	DNH



TOPOGRAPHIC SURVEY DISCLAIMER:
 TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, EXISTING PHYSICAL FEATURES, AND STRUCTURES WAS PROVIDED BY RAYMOND J. DONNELLY & ASSOCIATES, INC.
 AS WELL AS THE FOLLOWING DESIGN PLANS FROM TMP ASSOCIATES, INC. AND SPALDING, D&DECKER ASSOCIATES, INC.:
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 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #2" PLANS
 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #1, PARKING LOT" PLANS
 AS WELL AS PARTIAL AS-BUILT INFORMATION PROVIDED ELECTRONICALLY BY SPALDING, D&DECKER ASSOCIATES, INC.
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LEGEND

ABBREVIATIONS	LEGEND
FI FOUND IRON ROD	ELEC. PHONO OR CABLE TV, EIA, LINE, POLE & RY WIRE
FRP FOUND IRON PIPE	UNDERGROUND CABLE TV
FC FOUND CONCRETE CURB	TELEPHONE U.S. CABLE, SPURRING BOX & MANHOLE
CI CAST IRON PIPE	ELECTRIC U.S. CABLE & MANHOLE
C CALCULATED	C&N MAN & VALVE
M MEXASUPED	WATER MAIN, FIRE WASTE, 1/2" O.D. SLEEVE & VALVE
R REBORED	SAFETY SOWER, CLEANOUT & MANHOLE
CLR CHAIN LINK FENCE	STORM SEWER, CLEANOUT & MANHOLE
CB CASTON BASIN	COMBINED SEWER & MANHOLE
CO CEMENT CUTOFF	CATCH BASIN
DS DOWNSPOUT	INLET (NO INCOMING LINES)
FE FINISHED FLOOR	YARD DRAIN (2" DIA. & SMALLER)
SR CURBED POINT	POST FOUNDATION WALE
GW2 GROUND WATER	WATER SERVICE SHUTOFF, WASTEWATER VALVE BOX
GWD GROUND WOOD	MANHOLE
IS INVERT ELEVATION	UNIDENTIFIED STRUCTURE
LP LIGHT POLE	POINT ELEVATION (AT CROSSING)
MH MANHOLE	AS BUILT ELEVATION
MTS NOT TO SCALE	CENTRAL LINE
OH OVERHEAD	FENCE
SE SIDE SLOPING	QUAD RAIL
TO TOP OF CURB	STREET LIGHT
US UNDERGROUND	S&W BACKFILL
UP UTILITY POLE	CONCRETE
	ASPHALT
	STANDARD HEAVY DUTY
	DEEP
	DUTY
	STRENGTH

REFERENCE DRAWINGS

FLOODPLAIN: ZONE 'C' PER FEMA MAP #250471-002D-B
 SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY:
 RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS
 XREF: 2008135.DWG/CPDRBASE-08135.DWG
 XREF: 2008135.DWG/CPDR PLANS/PDRASE-08135.DWG
 XREF: 2008135.DWG/CPDRBASE-EXISTINGSTPLAN-TRON-TMP.DWG

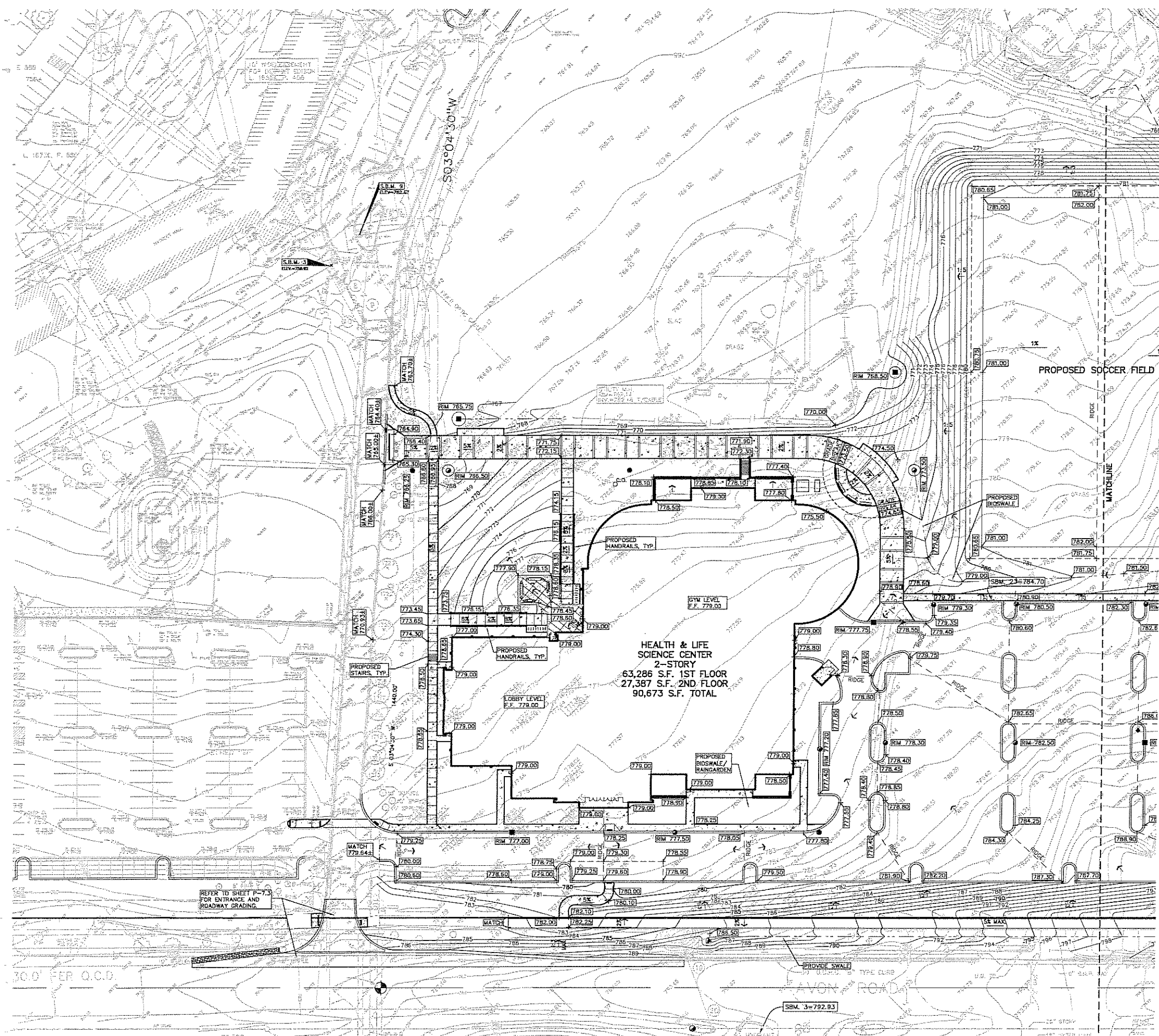


PROJECT
 Rochester College Health & Life Science Center

Rochester Hills Michigan

SHEET
 Preliminary Site Plan

SCALE: 1" = 40'
PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135
SHEET NUMBER
 P-3.2
 PRELIMINARY NOT FOR CONSTRUCTION
 CITY FILE # 94-426.8, SECTION #15



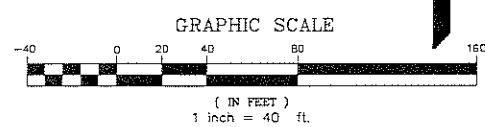
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CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT LOCATION AND ELEVATIONS OF ALL UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING THE EXACT LOCATION AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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2-03-08	SITE PLAN RE-SUBMITTAL
01-16-08	SITE PLAN RE-SUBMITTAL

DRAWN	RLS
CHECKED	RLS
APPROVED	DNH

SYMBOLS: GRADING

174.20 PROPOSED SPOT GRADE ELEVATION
 ALL GRADES INDICATED ARE TOP OF PAVEMENT UNLESS OTHERWISE NOTED.

— 695 — PROPOSED CONTOUR LINE

- GENERAL GRADING AND EARTHWORK NOTES:**
1. ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED. ADD 0.50' TO OBTAIN TOP OF CURB ELEVATION.
 2. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE OAKLAND COUNTY DRAIN COMMISSION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE COUNTY PRIOR TO CONSTRUCTION.
 3. ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT PREPARED BY PROFESSIONAL ENGINEERING ASSOCIATES, DATED JUNE 26, 2008.
 4. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SODED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

LEGEND

ABBREVIATIONS	SYMBOLS
<ul style="list-style-type: none"> SI FOUND IRON ROD FIP ROUND IRON PIPE FM ROUND CONCRETE PIPE SI SET HIGH WOOD C CALCULATED M MEASURED R RECORD CLF CHAIN LINK FENCE CB CATCH BASIN CO CLEAR CUT DS DOWNCUT PF FINISHED FLOOR SP QUINN FOOT G&W GATE VALVE & WELL HYD HYDRAUNT INL INLET IS INVERT ELEVATION LP LIGHT POLE MN MANHOLE STS 12" STEEL OH OVERHEAD SB SOLID BRICK TO TOP OF CURB US UNDERROUND UP UTILITY POLE 	<ul style="list-style-type: none"> ELEC. WIRE OR CABLE TV BK. LINE, POLE & GUY WIRE UNDERGROUND TV TELEPHONE U.S. CABLE, SPLICING BOX & MANHOLE ELECTRIC U.S. CABLE & MANHOLE GAS MAIN & VALVE WATERMAIN, HDG. GATE VALVE, TAPPING SLAVE & VALVE SAWNEY SEWER, CLEANOUT & MANHOLE STORM SEWER, CLEANOUT & MANHOLE COMBINED SEWER & MANHOLE CATCH BASIN INLET (NO HOODING LINES) YARD DRAIN (2" DIA. & SMALLER) POST HOICATOR VALVE WATER SERVICE (6" DIA. & SMALLER) WATER SERVICE (6" DIA. & SMALLER) WATER SERVICE (6" DIA. & SMALLER) UNIDENTIFIED STRUCTURE POINT ELEVATION (AT CROSSING) AS BUILT ELEVATION CONTOUR LINE FENCE QUARD RAIL STREET LIGHT SDM SAND BACKFILL CONCRETE ASPHALT METAL GRAVEL SHOULDER

REFERENCE DRAWINGS

FLOODPLAIN: ZONE "D" PER FIRM MAP #280471-0020-B
 SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY:
 RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS
 XREF: 2008135.DWG/TOPOBASE-08135.DWG
 XREF: 2008135.DWG/SITE PLANS/08135.DWG
 XREF: 2008135.DWG/BASE-EXISTING/08135.DWG

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 F 248.656.7746
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PROJECT
 Rochester College
 Health & Life
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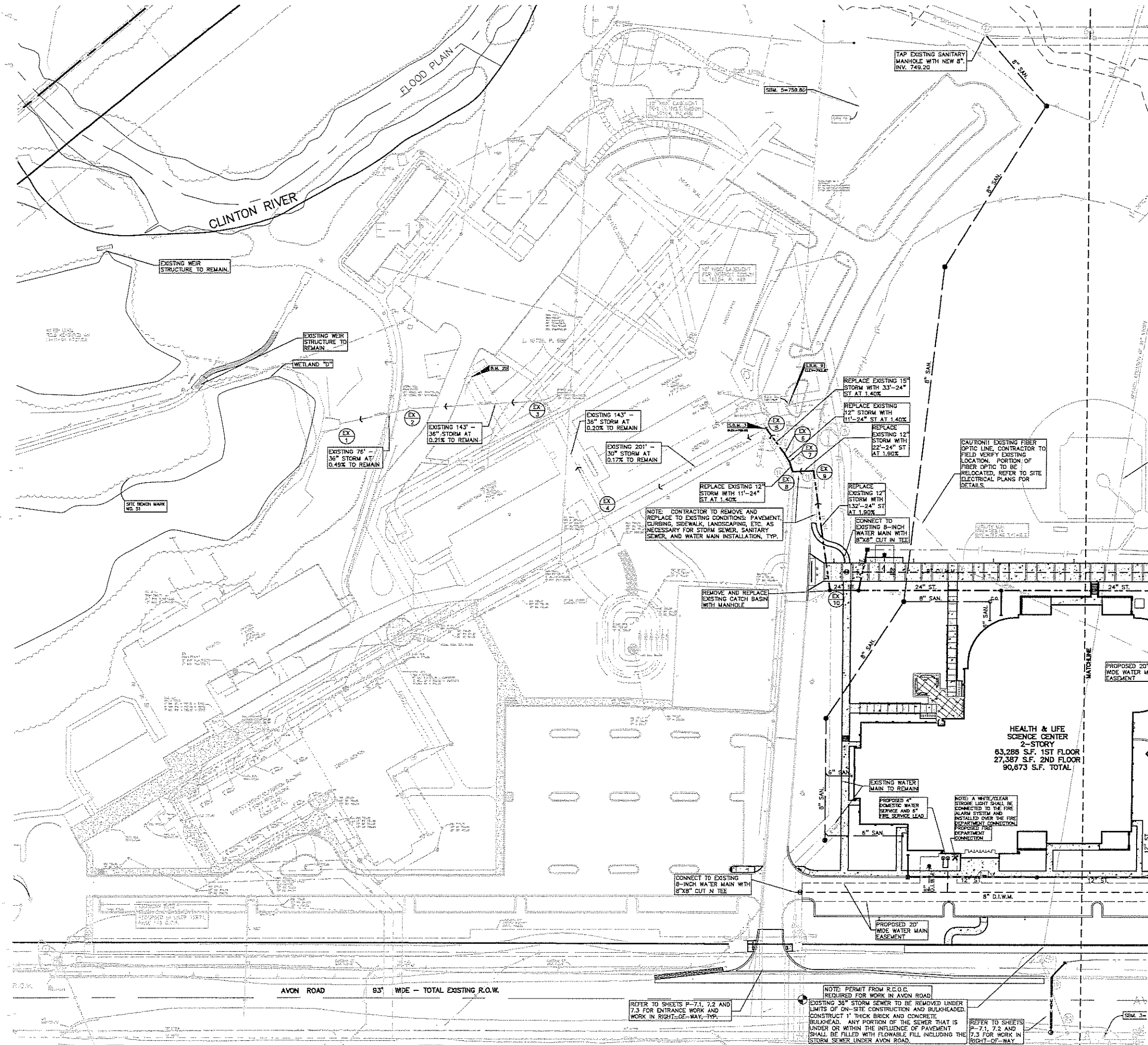
PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135

SHEET
 Preliminary
 Grading Plan

SCALE: 1" = 40'

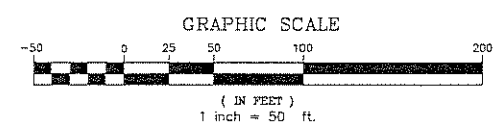
SHEET NUMBER
 P-4.1

PRELIMINARY NOT FOR CONSTRUCTION
CITY FILE # 94-426.8, SECTION #15



CAUTION!
 THE LOCATION AND ELEVATION OF EXISTING UTILITIES SHOWN ON THIS DRAWING ARE THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION PRIOR TO THE START OF CONSTRUCTION.
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GENERAL UTILITY NOTES:

1. ALL UTILITY LINES, STRUCTURES AND TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE CITY OF ROCHESTER HILLS.
2. ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
3. WATER MAIN SERVICE LEADS 2" AND LESS SHALL BE TYPE "K" ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
4. ALL WATER MAIN SHALL BE PROVIDED WITH 6" OF COVER UNLESS OTHERWISE NOTED.
5. ALL SANITARY SEWER 8" OR LARGER SHALL BE PVC TRUSS PIPE (ASTM D2689) AND FITTINGS, WITH GASKET JOINTS UNLESS OTHERWISE NOTED.
6. ALL SANITARY SEWER LEADS SHALL BE PVC SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
7. SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.I.W. #1585 BOX OR EQUAL.
8. ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH PREMIUM JOINTS, UNLESS OTHERWISE NOTED.
9. ALL STORM SEWER LEADS SHALL BE PVC SCHEDULE 40 WITH GLUED JOINTS UNLESS OTHERWISE NOTED.

PUBLIC UTILITY EASEMENTS:
 ALL WATER MAIN SHALL BE LOCATED IN A 20' WIDE EASEMENT

TOPOGRAPHIC SURVEY DISCLAIMER:

TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, EXISTING PHYSICAL FEATURES, AND STRUCTURES WAS PROVIDED BY RAYMOND J. DONNELLY & ASSOCIATES, INC. AS WELL AS THE FOLLOWING DESIGN PLANS FROM TMP ASSOCIATES, INC. AND SPALDING, DEBECKER ASSOCIATES, INC.:
 - "LIBRARY ROADWAY EXTENSION" PLANS
 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #2" PLANS
 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #1, PARKING LOT" PLANS
 AS WELL AS PARTIAL AS-BUILT INFORMATION PROVIDED ELECTRONICALLY BY SPALDING, DEBECKER ASSOCIATES, INC.
 PROFESSIONAL ENGINEERING ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

NOTE: 100 YEAR FLOODPLAIN
 ACCORDING TO THE FIRM MAP COMMUNITY PANEL NUMBER 280471-002D-B, THIS SITE IS NOT LOCATED WITHIN A 100 YEAR FLOODPLAIN.

LEGEND

ABBREVIATIONS	SYMBOLS
FI FOUND IRON ROD	— CABLE
FIP FOUND IRON PIPE	— ELECTRIC
FC FOUND CONCRETE FOUNDATION	— FIBRE
SI SET IRON ROD	— GAS
C CALCULATED	— GUY WIRE & ANCHOR
W WELDED	— SANITARY SEWER
R RECORD	— STORM SEWER
CLF CHAIN LINK FENCE	— TELEPHONE
CS CATCH BASIN	— TRAVELER CONTROL POINT
CO CLEANOUT	— WATER MAIN
DS DOWNPOUT	— WETLAND
DR DRAINAGE POINT	— WETLAND
GP GUY POINT	— WETLAND
GW GUY WIRE & WELL	— WETLAND
HYC HYDRANT	— WETLAND
RIE RISE	— WETLAND
IE INVERT ELEVATION	— WETLAND
LP LIGHT POLE	— WETLAND
RM MANHOLE	— WETLAND
HTC HOT TAP TO SCALE	— WETLAND
DN DRAINAGE	— WETLAND
SB SIGN BUSHINGS	— WETLAND
TO TOP OF CURB	— WETLAND
US UNDERGROUND	— WETLAND
UP UTILITY POLE	— WETLAND



ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
12-03-08	SITE PLAN RE-SUBMITTAL
01-15-09	SITE PLAN RE-SUBMITTAL

DRAWN: RLS
 CHECKED: RLS
 APPROVED: DNH

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PROJECT
 Rochester College
 Health & Life
 Science Center

Rochester Hills
 Michigan

SHEET
 Preliminary
 Utility Plan

SCALE: 1" = 60'
PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135

SHEET NUMBER
 P-51
 PRELIMINARY NOT FOR CONSTRUCTION
 CITY FILE # 94-426.8, SECTION #15

RUN-OFF COEFFICIENT VALUES:

RUN-OFF COEFFICIENT VALUES USED PER THE CITY OF ROCHESTER HILLS STORMWATER ORDINANCE:

ROOF: C_r = 0.95
 PAVEMENT: C_p = 0.95
 GRASS: C_g = 0.25

EXISTING DRAINAGE AREAS:

AREA CALCULATIONS - DRAINAGE TO LAKE:

DRAINAGE AREA	AREA (AC.)	"C" VALUE	C*A
A	10.84	0.49	5.344
B	1.16	0.95	1.097
C	9.44	0.48	4.525
D	3.76	1.00	3.757
E	1.61	0.85	1.371
F	0.27	0.25	0.067
G	2.13	0.57	1.216
H	0.86	0.65	0.562
TOTAL:	30.05		17.938
WEIGHTED "C" =	0.60		

AREA CALCULATIONS - DRAINAGE TO WETLANDS AND OFF-SITE:

DRAINAGE AREA	AREA (AC.)	"C" VALUE	C*A
J	2.01	0.68	1.358
K	2.78	0.60	1.678
L	0.83	0.59	0.496
M	0.22	0.95	0.208
N	0.12	0.25	0.029
O	0.24	0.25	0.059
P	0.24	0.56	0.132
Q	0.23	0.49	0.111
R	2.08	0.41	0.850
S	5.18	0.79	4.085
T	0.42	0.34	0.144
U	11.19	0.25	2.798
TOTAL:	25.54		11.949
WEIGHTED "C" =	0.47		

WEIR NO. 2
 (0.78 THICK CONCRETE)
 TOP OF CONCRETE EAST=738.38
 TOP OF CONCRETE WEST=738.74
 TOP OF WEIR GATE=739.14
 BOT OF WEIR GATE=737.88

WEIR NO. 1
 (0.86 THICK CONCRETE)
 TOP OF CONCRETE=740.96
 TOP OF WEIR GATE=740.53
 BOT OF WEIR GATE=738.83
 NOTE: 1" WATER PIPE & WIRES ALONG NORTH FACE OF WEIR

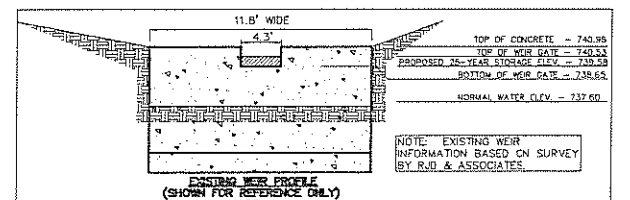
WATER LEVEL MEASURED ON 11-11-04 = 737.0

WATER LEVEL MEASURED ON 11-11-04 = 737.0

NOTE: THERE IS AN EXISTING 48" STORM SEWER ALONG THE SOUTH RIGHT-OF-WAY LINE OF AVON ROAD THAT DRAINS THE MAJORITY OF AVON ROAD.

EXISTING WEIR:
 B = 4.3
 H = 0.43
 Q = (2/3)*B*(SQRT(2*G)*H^(3/2))
 Q = 6.49 CFS

- NOTES:**
- EXISTING DRAINAGE CONDITIONS BASED ON SURVEY INFORMATION PROVIDED BY SJD SURVEYORS, RECORD DRAWINGS, AND SITE VISITS.
 - THE "C" VALUES LISTED ON THE PLAN ARE BASED ON THE CITY OF ROCHESTER HILLS CURRENT STANDARDS, AND THEREFORE, DO NOT MATCH THE "C" VALUES USED DURING PREVIOUS PHASES OF THE CAMPUS.
 - THE DIFFERENCE IN TOTAL DRAINAGE AREA BETWEEN EXISTING AND PROPOSED IS A PORTION OF AVON ROAD THAT CURRENTLY DRAINS TO A 36" PIPE THAT CROSSES THE CAMPUS AND OUTLETS TO THE WETLANDS. THIS PIPE WILL BE DISCONNECTED AS PART OF THIS PROJECT AND WILL BE CONNECTED TO THE STORM SEWER IN AVON ROAD.



EXISTING STORMWATER DETENTION REFERENCE NOTES:

NOTE: PER SPALDING D&DECKER PLANS FOR "MICHIGAN CHRISTIAN COLLEGE" DATED 2-13-06 (CITY FILE NO. 94-426), THE TRIBUTARY AREA OF EXISTING MANHOLE "EX-4" CONTRIBUTED 2.06 CFS TO THE SYSTEM. SUBSEQUENT PLANS BY SPALDING D&DECKER FOR "ROCHESTER COLLEGE LIBRARY - PHASE II", DATED 7-30-01 (CITY FILE NO. 94-426.4) INDICATED THAT DETENTION MUST BE PROVIDED FOR ANY DISCHARGE GREATER THAN 2.06 CFS. IN OTHER WORDS THE ALLOWABLE DISCHARGE AT "EX-4" IS 2.06 CFS.

PER THE "LIBRARY ROADWAY EXTENSION" PLANS BY SPALDING D&DECKER, DATED 7-19-02 (CITY FILE NO. 94-426.5), A 3" RESTRICTOR HAS BEEN INSTALLED AT EXISTING CATCH BASIN "EX-18" ON THE EXISTING 12" NE LINE AND THE FLOW IS SET AT 0.174 CFS.

PER THE "LIBRARY EXPANSION" PLANS BY PROFESSIONAL ENGINEERING ASSOCIATES, DATED 9-9-03 (CITY FILE NO. 94-426.7), A 6" RESTRICTOR HAS BEEN INSTALLED AT EXISTING MANHOLE "EX-4" AND THE FLOW IS RESTRICTED TO 2.06 CFS. DETENTION WAS PROVIDED IN UNDERGROUND PIPES FOR THE LIBRARY EXPANSION.

PER THE LIBRARY PARKING EXPANSION PROJECT BY PROFESSIONAL ENGINEERING ASSOCIATES, DATED 11-2-05, THE DRAINAGE AREA TO EXISTING CATCH BASIN "EX-18" WAS INCREASED TO 0.86 AC. AT A "C" VALUE OF 0.62.

THE ALLOWABLE DISCHARGE AT "EX-18" WAS RESTRICTED BY AN EXISTING 3" RESTRICTOR TO Q = 0.17 CFS, THE VOLUME REQUIRED WAS 3,807.99 C.F.

PER THE "LIBRARY ROADWAY EXTENSION" PLANS BY SPALDING D&DECKER, DATED 7-19-02 (CITY FILE NO. 94-426.5), THE UNDERGROUND DETENTION WAS DESIGNED FOR AN AREA OF 0.87 AC. AT A "C" VALUE OF 0.43 AND THE TOTAL VOLUME WAS PROVIDED BY 195 L.F. OF 48" PIPE AND 59 L.F. OF 12" PIPE, TOTALING 2,496.78 C.F. OF STORAGE.

PER THE LIBRARY PARKING EXPANSION PROJECT BY PROFESSIONAL ENGINEERING ASSOCIATES, DATED 11-2-05, ADDITIONAL 48" UNDERGROUND PIPING WAS ADDED TO PROVIDE AN ADDITIONAL 1318.8 C.F. OF STORAGE.

25 YEAR STORM DETENTION DESIGN (OAKLAND COUNTY DESIGN METHOD)

Contributing Area (A)	38.22
Allowable Discharge (Qa)	6.49 (EXISTING RATE THROUGH WEIR OPENING)
Coefficient of Runoff (C)	0.64

Calculation of Required Discharge/Acre
 $Q_r = ((Q_a)(A)(C))$
 Q_r = 0.31

$T = 25 + ((8062.5)(Q_r))^{0.5}$
 T = 137.52

Storage Volume Required:
 $V_s = (12900)(T)(T+25) - 40Q_r(T)$
 V_s = 9236.47

$V_t = (V_s)(A)(C)$
 V_t = 196.375 C.F.

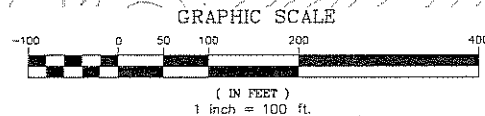
EXISTING DETENTION PROVIDED ON-SITE:
 EXISTING PIPE STORAGE = 3815.58 C.F.
 EXISTING DETENTION BASIN = 5777.08 C.F.

THEREFORE, DETENTION REQUIRED = **186.782 C.F.**

AREA OF LAKE	84,307 S.F.
ELEV. CHANGE	1.98 FT.
NORMAL WATER ELEV.	737.60
25-YEAR STORAGE ELEV.	739.58
EXISTING TOP OF WEIR GATE	740.53

THEREFORE, 25-YEAR STORAGE IS BELOW EXISTING WEIR GATE

SINCE THE WATER LEVEL IN THE EXISTING LAKE HAS BEEN LOW, AND THE ELEVATION OF THE TOP OF THE WEIR GATE IS HIGHER THAN THE PROPOSED 25-YEAR STORAGE ELEVATION, THE EXISTING WEIR SHALL REMAIN AS-IS WITH NO PROPOSED ALTERATIONS.



ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
02-03-09	SITE PLAN RE-SUBMITTAL
01-16-09	SITE PLAN RE-SUBMITTAL

DRAWN: RLS
 CHECKED: RLS
 APPROVED: DNH

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PROJECT
 Rochester College
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Rochester Hills
 Michigan

SHEET

Existing Drainage
 Plan & Calculations

SCALE: 1" = 100'

PROJECT NUMBER

2008-076
 PEA PROJECT NO. 2008-135

SHEET NUMBER

P-6.1
 PRELIMINARY NOT FOR CONSTRUCTION
 CITY FILE # 94-426.8, SECTION #15

REF: 2008135.DWG/TOPBASE-08135.DWG
 REF: 2008135.DWG/SITE PLANS/08135.DWG
 REF: 2008135.DWG/BASE-EXISTING/08135.DWG

RUN-OFF COEFFICIENT VALUES:

RUN-OFF COEFFICIENT VALUES USED PER THE CITY OF ROCHESTER HILLS STORMWATER ORDINANCE:

ROOF:	C _r = 0.85
PAVEMENT:	C _p = 0.95
GRASS:	C _g = 0.25

PROPOSED DRAINAGE AREAS:

AREA CALCULATIONS - DRAINAGE TO LAKE:

DRAINAGE AREA	AREA (AC.)	"C" VALUE	C*A
AA	8.94	0.64	5.712
A	5.07	0.56	2.841
B	1.16	0.95	1.097
C	9.44	0.48	4.525
D	3.76	1.00	3.757
E	1.61	0.85	1.371
F	0.27	0.25	0.067
G	2.13	0.57	1.216
H	0.86	0.65	0.562
TOTAL:	33.22		21.147
WEIGHTED "C"	0.64		

AREA CALCULATIONS - DRAINAGE TO WETLANDS AND OFF-SITE:

DRAINAGE AREA	AREA (AC.)	"C" VALUE	C*A
I	1.66	0.25	0.414
J	2.01	0.68	1.358
K	2.68	0.62	1.656
L	0.58	0.41	0.236
M	0.27	0.95	0.255
N	0.12	0.25	0.029
O	0.21	0.25	0.053
P	0.20	0.68	0.134
Q	0.23	0.49	0.111
R	2.08	0.41	0.850
S	5.18	0.79	4.085
T	0.42	0.34	0.144
U	6.03	0.25	1.509
TOTAL:	21.67		10.835
WEIGHTED "C"	0.50		

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
12-03-08	SITE PLAN RE-SUBMITTAL
01-16-09	SITE PLAN RE-SUBMITTAL

DRAWN	RLS
CHECKED	RLS
APPROVED	DNH

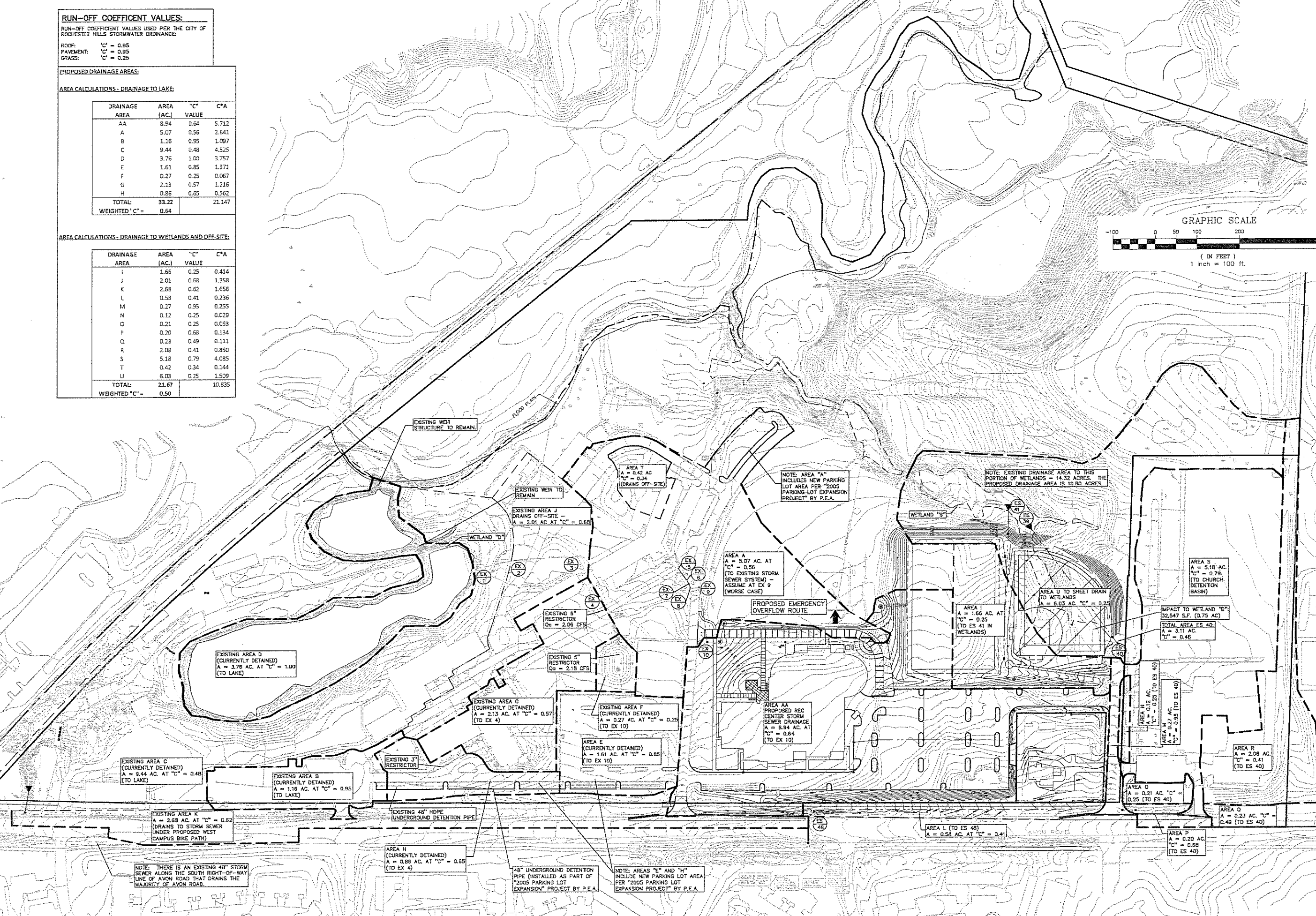
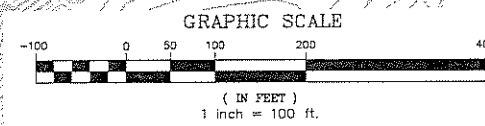
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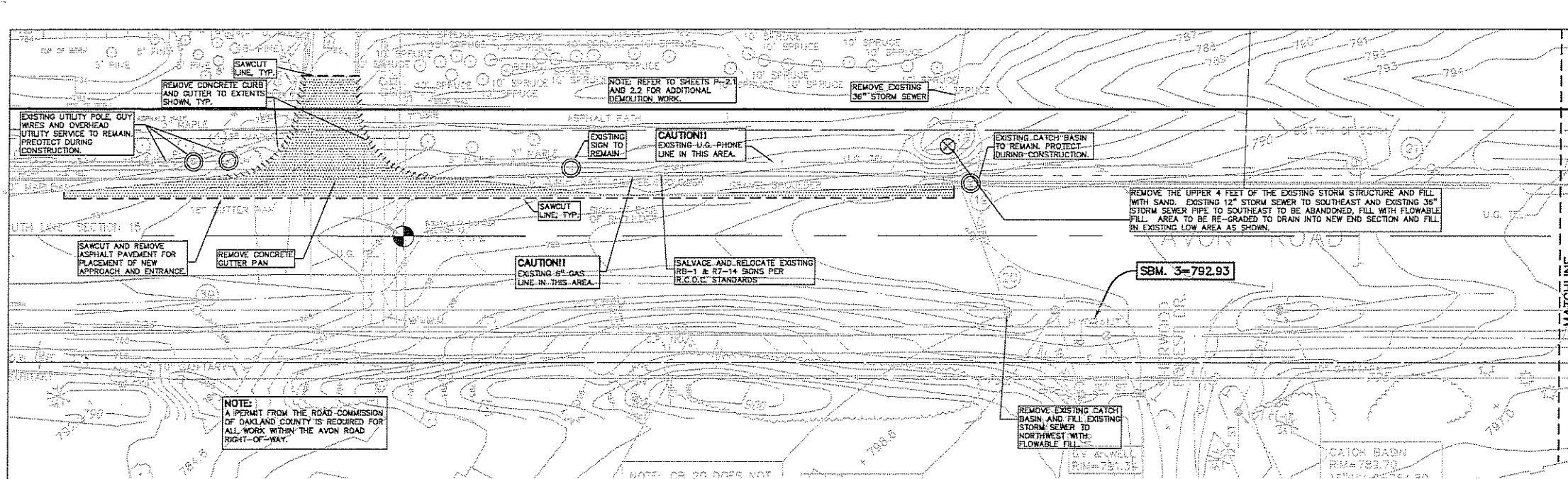
PROJECT
 Rochester College
 Health & Life
 Science Center

SHEET
 Proposed Overall
 Drainage Plan

SCALE: 1" = 100'
 PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135
 SHEET NUMBER



REF: 2008135.DWG/TOPOBASE-08135.DWG
 REF: 2008135.DWG/SITE PLANS/PS456-08135.DWG
 REF: 2008135.DWG/BASE-CRGTNGSITEPLAN-FROM-TWP.DWG



DEMOLITION PLAN - EAST ENTRANCE

CAUTION!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES OR RECORDS OF THESE UTILITIES ARE ONLY APPROXIMATE. NO GUARANTEE IS GIVEN AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING THE EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
THIS DRAWING AND ALL INFORMATION THEREON IS SUBMITTED ON THE CONDITION THAT THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE INFORMATION TO SURE. WITHOUT THE REPLY OF THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE INFORMATION AND DESIGN PERFORMANCE OF THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE INFORMATION AND DESIGN PERFORMANCE OF THE PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE INFORMATION AND DESIGN PERFORMANCE OF THE PROJECT.

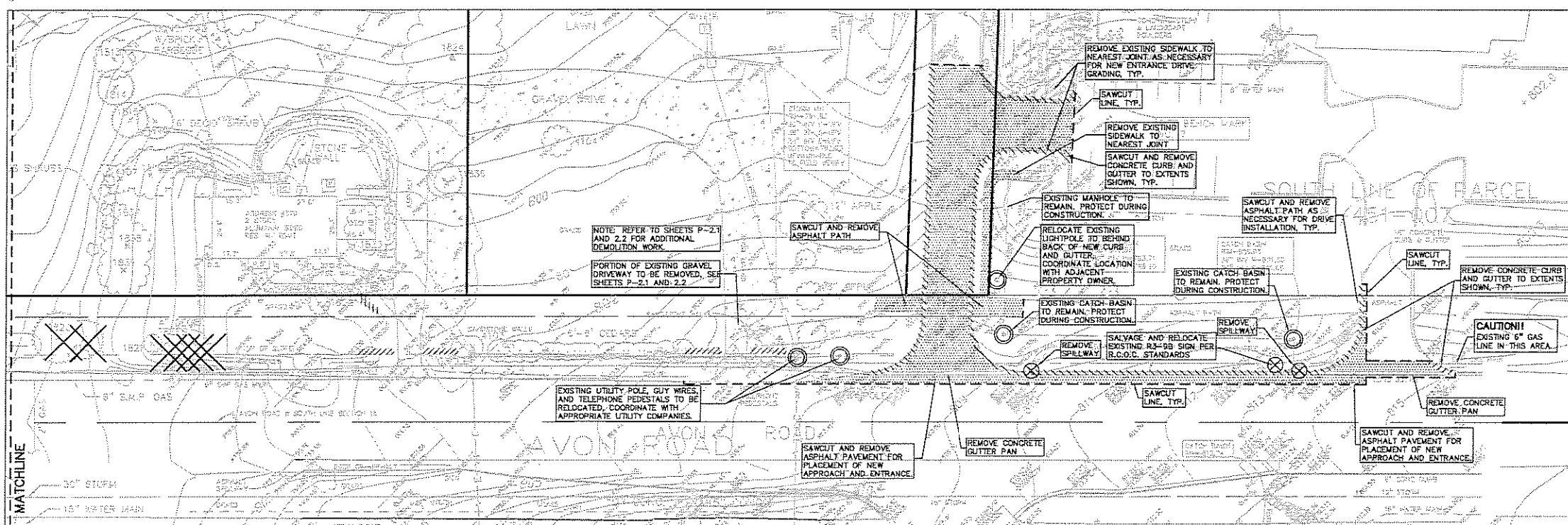
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GRAPHIC SCALE
1 inch = 30 ft.

DEMO LEGEND
AREA OR OBJECT TO BE REMOVED.
SAWCUT LINE

- DEMOLITION NOTES:**
- ALL MATERIAL TO BE REMOVED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
 - ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
 - STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTORS AT THE PRE-CONSTRUCTION MEETING.
 - REFER TO DETAIL SHEET FOR TREE PROTECTION DETAILS.
 - SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS WILL BE COMPLETELY REMOVED ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHOULD VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED.
 - REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, ETC.
 - REMOVE ALL TREES THAT ARE MARKED FOR REMOVAL ON THIS PLAN. REMOVE ALL VEGETATION, STUMPS AND ORGANIC MATTER FROM THE PROPOSED AREAS TO BE GRADED. DISPOSE OF OFF-SITE IN A LEGAL MANNER.
 - PROVIDE TREE PROTECTION FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15' OF CONSTRUCTION ACTIVITIES.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL AND TRAFFIC CONTROL IN ACCORDANCE WITH THE CITY OF ROCHESTER HILLS LOCAL CODES.
 - CONTACT UTILITY COMPANIES TO BE SURE OLD UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION.



DEMOLITION PLAN - WEST ENTRANCE

TOPOGRAPHIC SURVEY DISCLAIMER
TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, EXISTING PHYSICAL FEATURES, AND STRUCTURES WAS PROVIDED BY RAYMOND J. DONNELLY & ASSOCIATES, INC. AS WELL AS THE FOLLOWING DESIGN PLANS FROM TMP ASSOCIATES, INC. AND SPALDING, DODCKER ASSOCIATES, INC.:
- "LIBRARY ROADWAY EXTENSION" PLANS
- "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #2" PLANS
- "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #1, PARKING LOT" PLANS
AS WELL AS PARTIAL AS-BUILT INFORMATION PROVIDED ELECTRONICALLY BY SPALDING, DODCKER ASSOCIATES, INC.

PROFESSIONAL ENGINEERING ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

LEGEND

ABBREVIATIONS	SYMBOLS
FI FOUND IRON ROD	— CABLE
GR FOUND GRASS	— ELECTRIC
PC FOUND CONCRETE IMPROVEMENT	— GAS
SI SET IRON ROD	— GUY WIRE & ANCHOR
CA CALCULATED	— LIGHTNING ROD
MA MEASURED	— TELEPHONE
R RECORDED	— TRAVELERS/CONTROL POINT
CLP CHAIN LINK FENCE	— WATER MAIN
CB CATCH BASIN	— WATER MAIN
CL CLEAR CUT	— WATER MAIN
CS DOWNSPOUT	— WATER MAIN
PF FINISHED FLOOR	— WATER MAIN
GP GROUND POINT	— WATER MAIN
SURV SURVEY	— WATER MAIN
HYD HYDRANT	— WATER MAIN
UT UTILITY	— WATER MAIN
IE INVERT ELEVATION	— WATER MAIN
LP LIGHT POLE	— WATER MAIN
HM MANHOLE	— WATER MAIN
HTS HOT TO SCALE	— WATER MAIN
O-H OVERHEAD	— WATER MAIN
OS OVERHEAD SIGN	— WATER MAIN
TO TOP OF CURB	— WATER MAIN
UT UNDERGROUND	— WATER MAIN
UP UTILITY POLE	— WATER MAIN
— FENCE	— SAND FILL
— SAND FILL	— SAND FILL
— STREET LIGHT	— SAND FILL
— SIGN	— SAND FILL
— SAND SIGNIFY	— SAND FILL
— CONCRETE	— SAND FILL
— ASPHALT	— SAND FILL
— METAL	— SAND FILL
— DRAIN SHOULDER	— SAND FILL

REFERENCE DRAWINGS

FLOODPLAIN: ZONE 10 PER FIRM MAP #200471-0020-B
SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY:
RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS
REF: 2008135/010/TOP/DBASE-08135.DWG
REF: 2008135/010/CONCRETE PLANS/ROSC-08135.DWG
REF: 2008135/010/DBASE-EXISTING/DEMPLAN-TMP.DWG

ISSUE DATE 10-22-08
ISSUED FOR SITE PLAN RE-SUBMITTAL

12-03-08 SITE PLAN RE-SUBMITTAL

01-16-09 SITE PLAN RE-SUBMITTAL

DRAWN RLS
CHECKED RLS
APPROVED DNH

PEA
PROFESSIONAL ENGINEERING ASSOCIATES
2430 Rochester CL Suite 108
Troy, MI 48063-1872
(248) 689-9090

FRENCH associates
1600 Parkdale
Rochester, MI 48307
T 248.656.1377
F 248.656.7746
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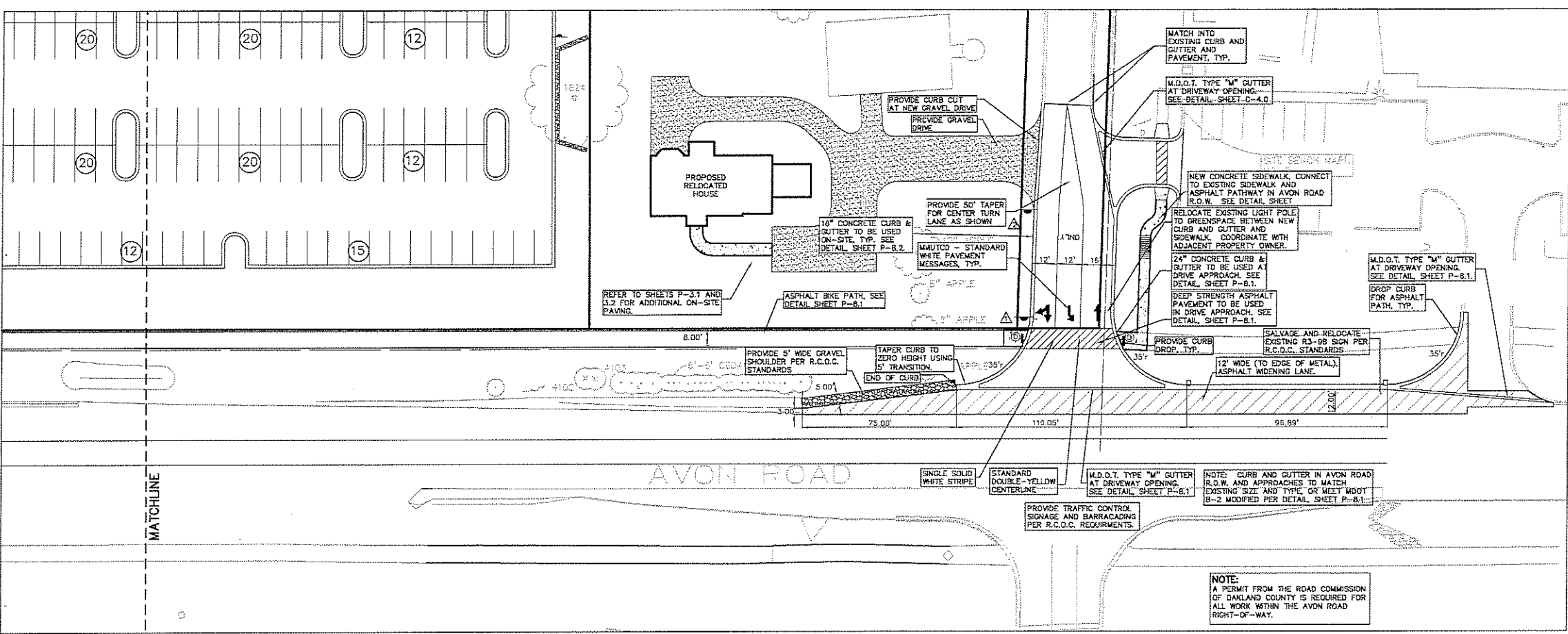
PROJECT
Rochester College Health & Life Science Center

Rochester Hills Michigan

SHEET
Preliminary R.O.W. Demolition Plan

SCALE 1" = 30'
PROJECT NUMBER
2008-076
PEA PROJECT NO. 2008-135
SHEET NUMBER
P-71

PRELIMINARY NOT FOR CONSTRUCTION
CITY FILE # 94-426.8, SECTION #15



SITE PLAN – EAST ENTRANCE

CAUTION!
THE LOCATIONS AND ELEVATIONS OF GUTTERS AND SIDEWALKS ARE SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION.

MISS DIG System, Inc.
1-800-462-7171
www.missdig.org

3 FULL WORKING DAYS BEFORE YOU DIG CALL.

GRAPHIC SCALE
-30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

- ROAD COMMISSION FOR OAKLAND COUNTY NOTES:**
1. MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES.
 2. CALL INSPECTOR OR PERMIT SUPERVISOR BEFORE BEGINNING ANY WORK IN R.O.W.
 3. HAND DIG AROUND ALL UTILITIES.
 4. "PROPER SIGNING" IS REQUIRED BEFORE ANY WORK IN R.O.W. IS STARTED.
 5. NO CURBS TO BE PLACED IN TAPER.
 6. 3' PAVED AND 5' WIDE GRAVEL SHOULDER REQUIRED AT TAPER.
 7. 9" DEEP STRENGTH PAVEMENT REQUIRED IN R.O.W.
 8. 12' LANES REQUIRED.
 9. MATCH EXISTING CURB TYPE IN AVON ROAD OR USE MDOT B-2 MODIFIED.
 10. REPLACE STONE IN GRAVEL DRIVE.

- SIGN LEGEND:**
- ▲ "STOP" SIGN, (R1-1)
 - ▲ CUSTOMIZED LANE-USE CONTROL SIGN, (R3-B MOD.)
- REFER TO SHEET P-8.1 FOR SIGN DETAILS

- CURB DROP AND RAMP LEGEND:**
- CURB DROP AND RAMP "TYPE A" (A)
 - CURB DROP AND RAMP "TYPE B" (B)
 - CURB DROP AND RAMP "TYPE C" (C)
 - CURB DROP ONLY (D)
- REFER TO SHEET P-8.1 FOR RAMP DETAILS

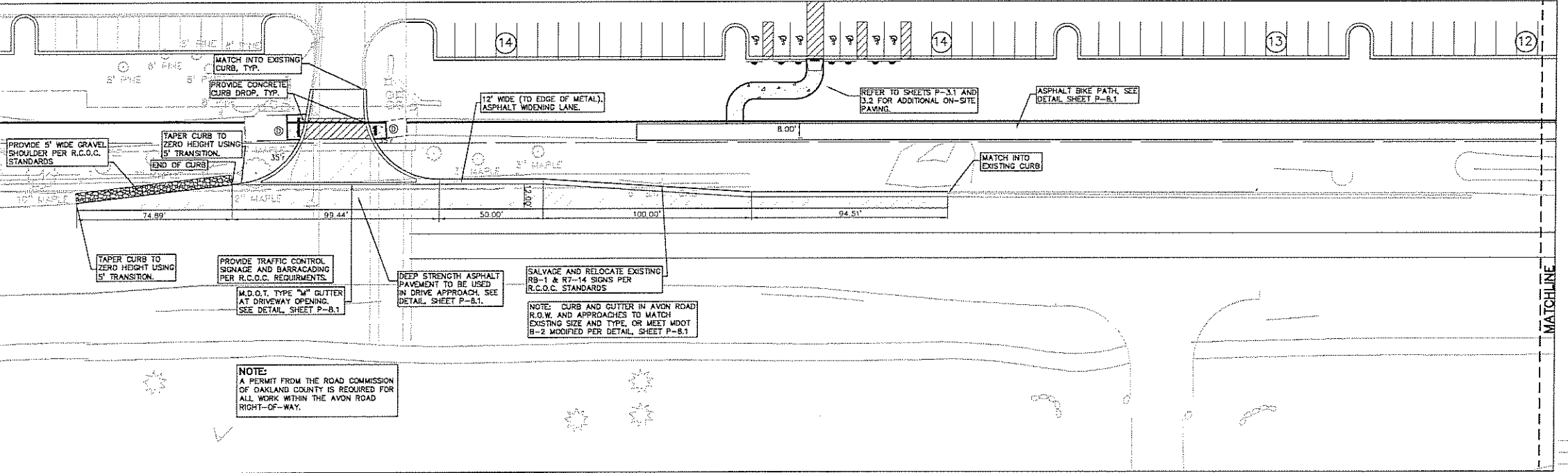
TOPOGRAPHIC SURVEY DISCLAIMER:
TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, EXISTING PHYSICAL FEATURES, AND STRUCTURES WAS PROVIDED BY RAYMOND J. DONNELLY & ASSOCIATES, INC.

AS WELL AS THE FOLLOWING DESIGN PLANS FROM TWP ASSOCIATES, INC. AND SPALDING, DEDICATED ASSOCIATES, INC.:
 - "LIBRARY ROADWAY EXTENSION" PLANS
 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #2" PLANS
 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #1, PARKING LOT" PLANS
 AS WELL AS PARTIAL AS-BUILT INFORMATION PROVIDED ELECTRONICALLY BY SPALDING, DEDICATED ASSOCIATES, INC.

PROFESSIONAL ENGINEERING ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

LEGEND

ABBREVIATIONS FI FOUND IRON ROD FIP FOUND IRON PIPE FPM FOUND POLYMER PIPE FC FOUND CONCRETE FOUNDATION SI SEE SHEET NO. C CALCULATED M MEASURED P PROPOSED CLF CATCH BASIN CS CATCH BASIN CO CLEAN OUT DS DOWNSPROUT FP FLASHING POINT GP GROUND POINT GRW GATE VALVE & WELL HYD HYDRANT IE INVERT ELEVATION LP LIGHT POLE MH MANHOLE STS NOT TO SCALE OH OVERHEAD SB SIGN BOARD TD TOP OF DRIVE UD UNDER DRIVE UP UTILITY POLE SYMBOLS ○ CABLE □ ELECTRIC ■ FENCE --- GAS --- CO-1 WIRE & CABLE --- CATHARTIC SERVICE --- STORM SEWER --- TELEPHONE ○ TRAVELER/TURNING POINT ○ WATER MAIN ○ EXISTING CONTOURS ○ EXISTING ELEVATIONS	EEL PHONE OR CABLE TV OR LINE, POLE & DRY WIRE UNDERGROUND CABLE TV TELEPHONE U.S. CABLE, SPLICING BOX & MANHOLE ELECTRIC U.S. CABLE & MANHOLE GAS MAIN & VALVE WATERMAIN, JND, GATE VALVE, TAPPING SLAVE & VALVE SANITARY SEWER, CLEANOUT & MANHOLE STORM SEWER, CLEANOUT & MANHOLE COMBINED SEWER & MANHOLE CATCH BASIN INLET (NO INCHING LINES) 1/2" DRAIN (IF DIA. IS SMALLER) FOOT WALKER VALVE WATER SERVICE SHUTOFF, HYDRANT VALVE BOX WALKER UNIDENTIFIED STRUCTURE POINT ELEVATION (AT CROSSING) AS BUILT ELEVATION CONTINUM LINE FENCE CHAIR RAIL STREET LIGHT SDW SAND DIRT/FILL CONCRETE ASPHALT METAL GRAVEL SHOULDER REFERENCE DRAWINGS FLOODPLAIN: ZONE "1" PER FEMA MAP #060471-000-0 SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY: RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS REF: 200813510101(TOPOGRA-08135 DMC) REF: 200813510101(SITE PLANNING-08135 DMC) REF: 200813510101(BASE-EXISTING) PLAN-FROM-TWP-DWG
---	--



SITE PLAN – WEST ENTRANCE

ISSUE DATE	ISSUED FOR
0-22-08	SITE PLAN RE-SUBMITTAL
12-03-08	SITE PLAN RE-SUBMITTAL
01-16-09	SITE PLAN RE-SUBMITTAL

DRAWN	RLS
CHECKED	RLS
APPROVED	DNH

PEA
PROFESSIONAL ENGINEERING ASSOCIATES
2430 Rochester Ct. Suite 100
Troy, MI 48063-1872
(248) 689-9090

FRENCH associates
1600 Parkside
Rochester, MI 48307
T 248.656.1377
F 248.656.7746
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PROJECT
Rochester College Health & Life Science Center

Rochester Hills Michigan

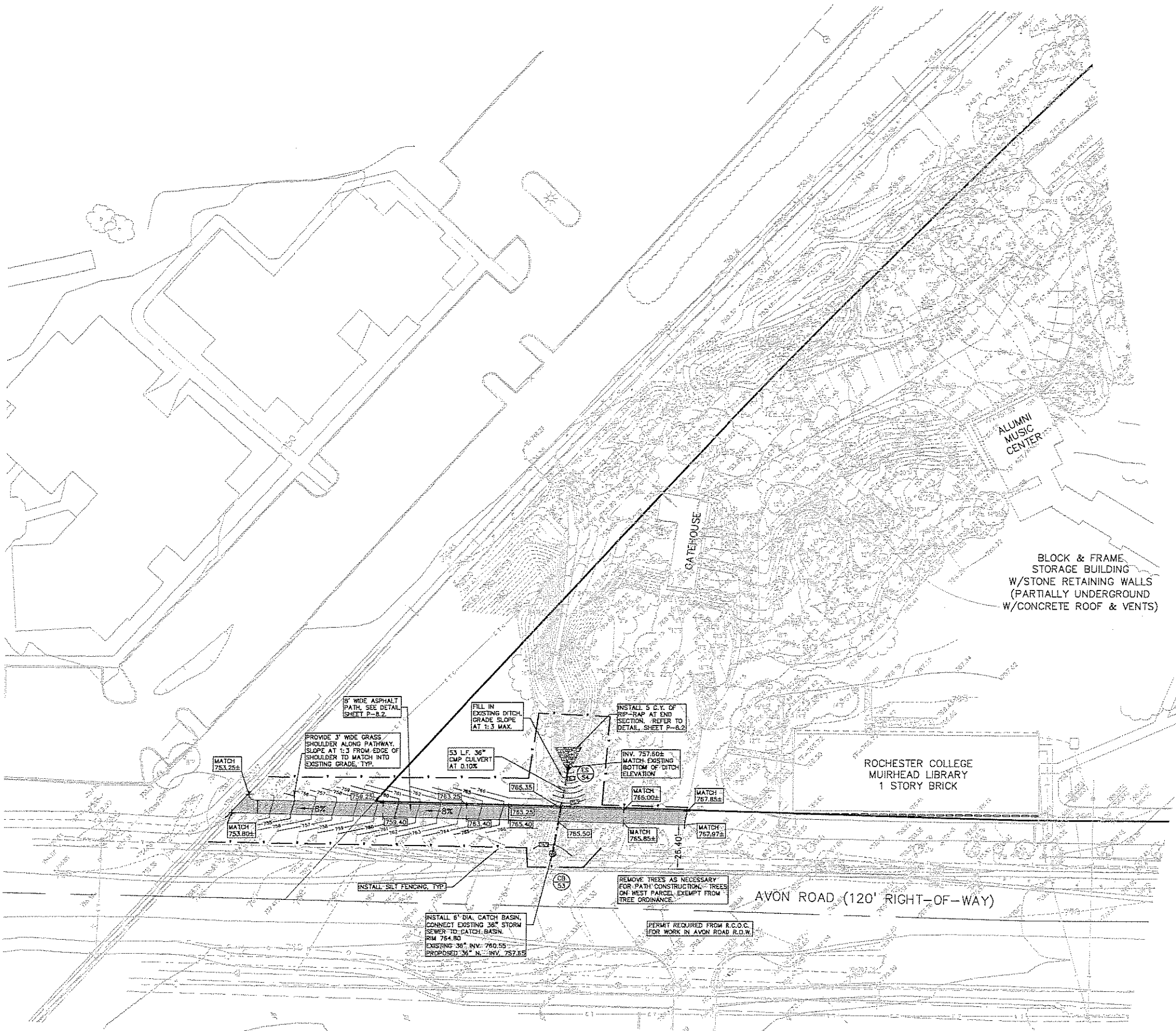
SHEET
Preliminary R.O.W. Site Plan

SCALE: 1" = 30'
PROJECT NUMBER

2008-076
PEA PROJECT NO. 2008-135

SHEET NUMBER

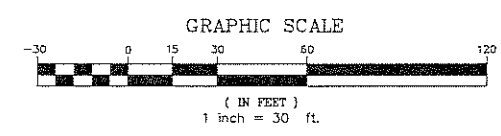
P-7.2
PRELIMINARY NOT FOR CONSTRUCTION
CITY FILE # 94-426.8, SECTION #15



CAUTION!!
 THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND STRUCTURES SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.
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 1-800-492-7171
 www.missdig.org



NOTE: 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 REMOVE, AND POSSIBLY REPLACE ANY SUCH TREES.

BLOCK & FRAME STORAGE BUILDING
 W/STONE RETAINING WALLS (PARTIALLY UNDERGROUND)
 W/CONCRETE ROOF & VENTS

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
02-03-08	SITE PLAN RE-SUBMITTAL
01-16-08	SITE PLAN RE-SUBMITTAL

DRAWN	RLS
CHECKED	RLS
APPROVED	DNH

PEA

PROFESSIONAL ENGINEERING ASSOCIATES
 2430 Rochester Ct. Suite 100
 Troy, MI 48063-1872
 (248) 689-9090

f architects planners interior

FRENCH associates

1600 Parkdale
 Rochester, MI 48307
 T 248.656.1377
 F 248.656.7746
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TOPOGRAPHIC SURVEY DISCLAIMER
 TOPOGRAPHIC AND/OR BOUNDARY SURVEY, INCLUDING PROPERTY LINES, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, EXISTING PHYSICAL FEATURES, AND STRUCTURES WAS PROVIDED BY RAYMOND J. DONNELLY & ASSOCIATES, INC.
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 - "ROCHESTER COLLEGE LIBRARY-BID PACKAGE #1, PARKING LOT" PLANS
 AS WELL AS PARTIAL AS-BUILT INFORMATION PROVIDED ELECTRONICALLY BY SPALDING, DeDECKER ASSOCIATES, INC.
 PROFESSIONAL ENGINEERING ASSOCIATES, INC. WILL NOT BE HELD RESPONSIBLE FOR THE ACCURACY OF THE SURVEY OR FOR DESIGN OMISSIONS RESULTING FROM SURVEY INACCURACIES.

LEGEND

ABBREVIATIONS	SYMBOLS
SI FOUND IRON ROD	CABLE
RIP FOUND IRON PIPE	ELECTRIC
CC FOUND CONCRETE MOUNDMENT	FENCE
SI FOUND IRON ROD	GAS
C CALCULATED	GUY WIRE & ANCHOR
M MISLAPSED	SEWER
R RECORD	STORAGE
QLR GUY WIRE ANCHOR	TELEPHONE
OB CATCH BASIN	TRAPERS (CONCRETE)
CO CLEAN OUT	WATER MAIN
DB DOWNSPOUT	EXISTING UTILITIES
FF FINISHED FLOOR	EXISTING ELEVATIONS
SR GUARD POST	
GYW GUY WIRE	
HYD HYDRANT	
KULEY KULEY	
IS INVERT ELEVATION	
LP LIGHT POLE	
MANHOLE	
NYS NOT TO SCALE	
OH OVERHEAD	
SE SOIL BORING	
TO TOP OF CURB	
UD UNDERGROUND	
UP UTILITY POLE	

REFERENCE DRAWINGS

FLOODPLAIN: ZONE 'C' PER FIRM MAP #200471-0020-B
 SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY:
 RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS
 REF: 2008135(DWG)TOPORASIS-08135.DWG
 REF: 2008135(DWG)SITE PLANS/PAKAGE-08135.DWG
 REF: 2008135(DWG)BASE-EXISTINGSITEPLAN-FRM-DWG

PROJECT
 Rochester College
 Health & Life
 Science Center

Rochester Hills Michigan

SHEET
 Preliminary
 West Campus
 Bike Path Plan

SCALE: 1" = 30'

PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135

SHEET NUMBER
 P-7.4
 PRELIMINARY NOT FOR CONSTRUCTION
 CITY FILE # 94-426.8, SECTION #15



RESERVED PARKING ONLY

12" x 18" GREEN BORDER AND LEGEND WHITE STENCIL, BLUE BACKGROUND, REFLECTORIZED 6"-8" MOUNTING HEIGHT (R7-8)

12" x 18" GREEN BORDER AND LEGEND WHITE STENCIL, BLUE BACKGROUND, REFLECTORIZED 6"-8" MOUNTING HEIGHT (R7-8)

STANDARD "BARRIER FREE" SYMBOL FOR PARKING SPACE

VAN ACCESSIBLE

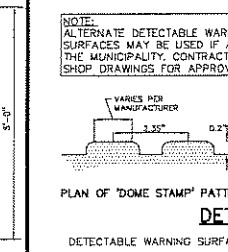
12" x 18" GREEN BORDER AND TEXT REFLECTORIZED MOUNTING HEIGHT (R7-8)



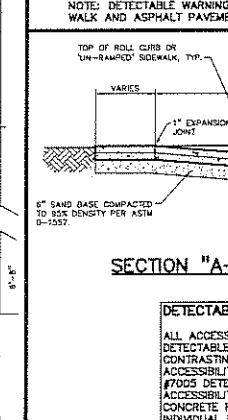
STOP SIGN DETAIL

NO STOPPING STANDING OR PARKING FIRE LANE

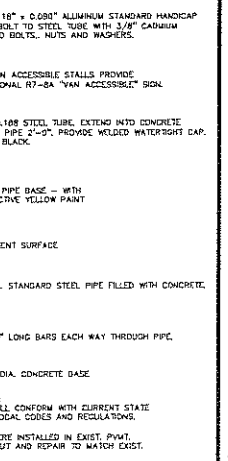
12" x 18" RED ON WHITE REFLECTORIZED 6"-8" MOUNTING HEIGHT (R7-1)



PAINTED DIRECTIONAL ARROWS



SIGN AND POST INSTALLATION IN LANDSCAPED AREAS



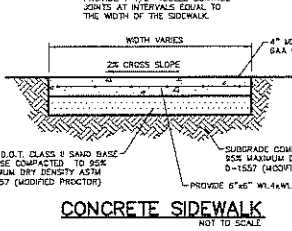
SIGN AND POST INSTALLATION IN PAVED AREAS

NO MOTOR VEHICLES

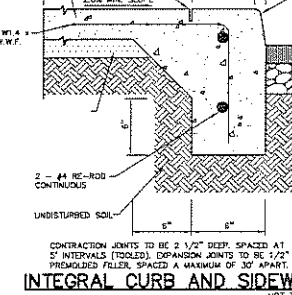
NO MOTOR VEHICLES SIGN DETAIL

NO STOPPING STANDING OR PARKING FIRE LANE

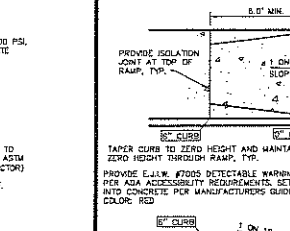
NO PARKING SIGN DETAIL



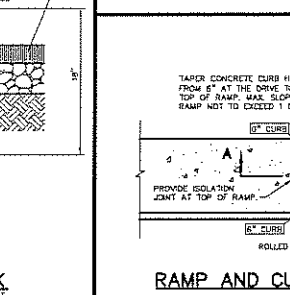
CONCRETE SIDEWALK



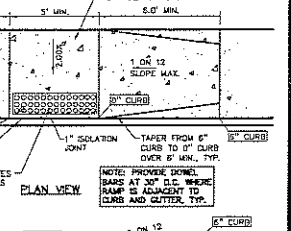
INTEGRAL CURB AND SIDEWALK



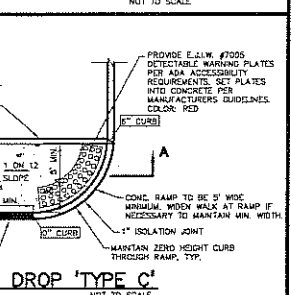
RAMP AND CURB DROP 'TYPE A'



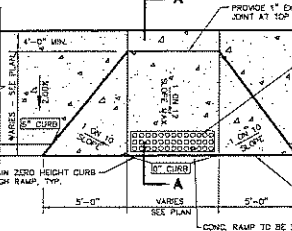
RAMP AND CURB DROP 'TYPE C'



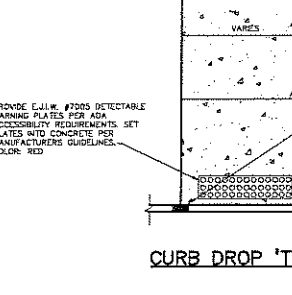
RAMP AND CURB DROP 'TYPE B'



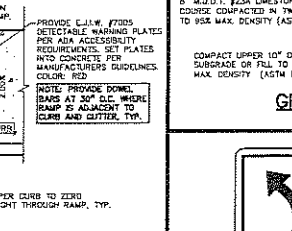
CURB DROP 'TYPE D'



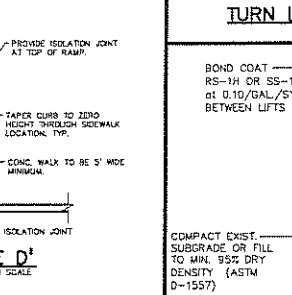
GRAVEL SHOULDER DETAIL



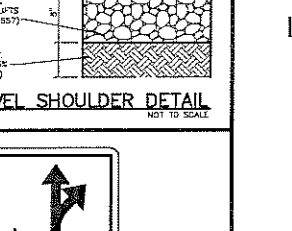
TURN LANE SIGN DETAIL



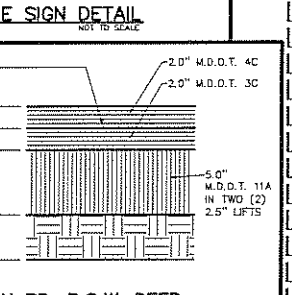
VAN ACCESSIBLE SIGN DETAIL



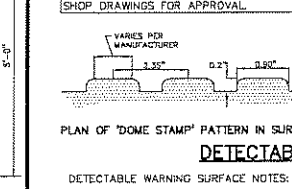
STOP SIGN DETAIL



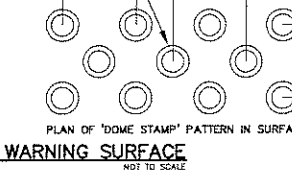
NO MOTOR VEHICLES SIGN DETAIL



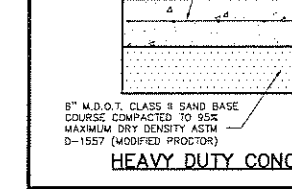
NO STOPPING STANDING OR PARKING FIRE LANE SIGN DETAIL



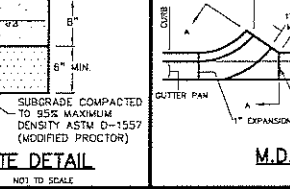
DETECTABLE WARNING SURFACE



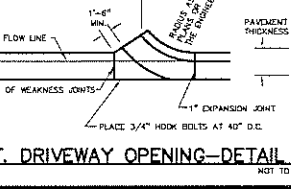
DETECTABLE WARNING SURFACE



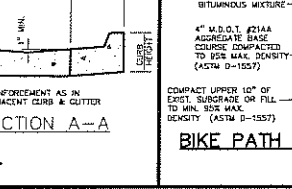
HEAVY DUTY CONCRETE DETAIL



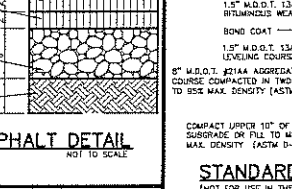
M.D.O.T. DRIVEWAY OPENING-DETAIL 'M'



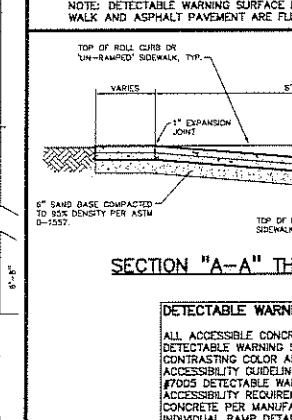
BIKE PATH ASPHALT DETAIL



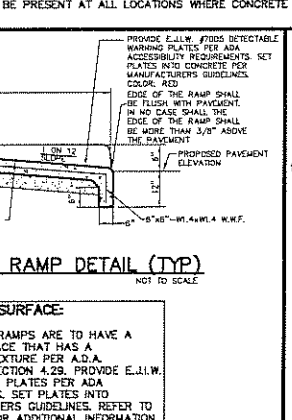
STANDARD DUTY ASPHALT DETAIL



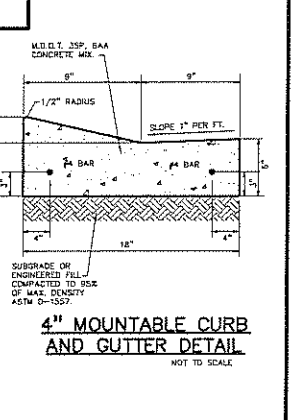
AVON RD. R.O.W. DEEP STRENGTH PAVEMENT SECTION



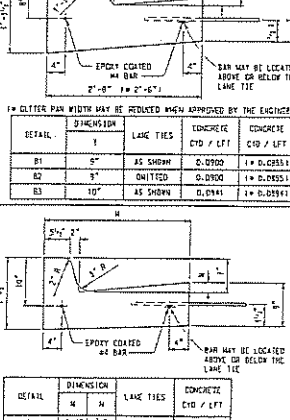
SECTION "A-A" THRU RAMP DETAIL (TYP)



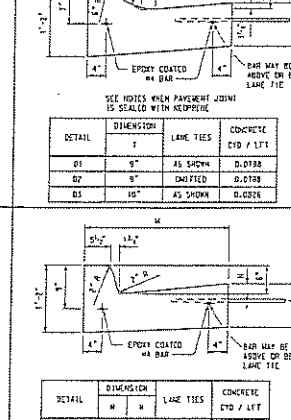
4" MOUNTABLE CURB AND GUTTER DETAIL



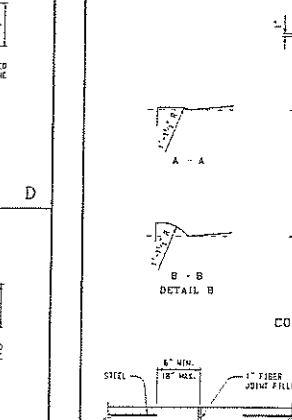
M.D.O.T. DRIVEWAY OPENING-DETAIL 'M'



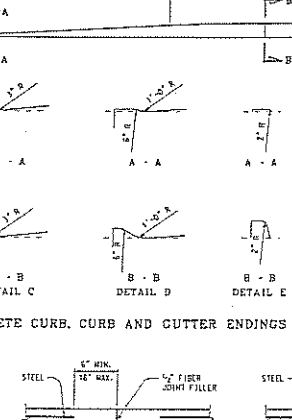
CONCRETE CURB, CURB AND GUTTER ENDINGS



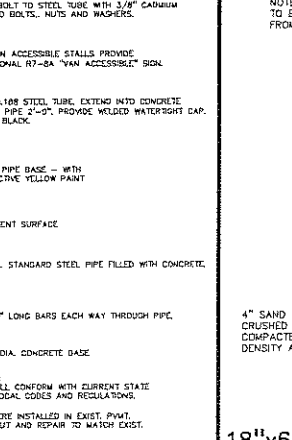
1" FIBER JOINT FILLER



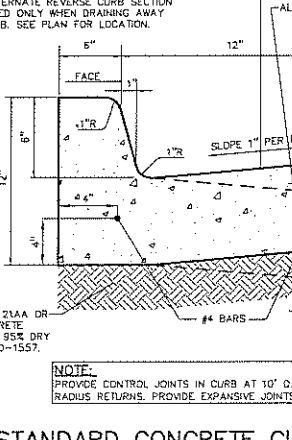
1/2" FIBER JOINT FILLER



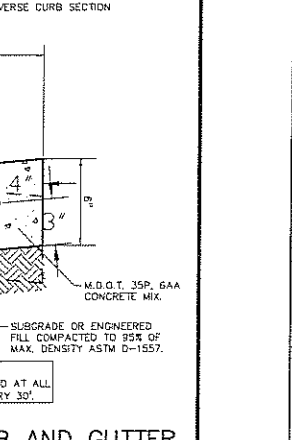
CONTRACTION JOINT



18"x6" STANDARD CONCRETE CURB AND GUTTER



18"x6" STANDARD CONCRETE CURB AND GUTTER



18"x6" STANDARD CONCRETE CURB AND GUTTER

Table with 4 columns: DETAIL, DIMENSION, LAKE TIES, CONCRETE. Rows include details for curb height and lane ties.

Table with 4 columns: DETAIL, DIMENSION, LAKE TIES, CONCRETE. Rows include details for curb height and lane ties.

Table with 4 columns: DETAIL, DIMENSION, LAKE TIES, CONCRETE. Rows include details for curb height and lane ties.

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Table with 4 columns: DETAIL, DIMENSION, LAKE TIES, CONCRETE. Rows include details for curb height and lane ties.

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Table with 2 columns: DRAWN, CHECKED, APPROVED. Rows include names and initials of staff.

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Professional Engineering Associates logo and contact information.

PROJECT: Rochester College Health & Life Science Center

Rochester Hills Michigan

Notes and Details

PROJECT NUMBER: 2008-076

PEA PROJECT NO. 2008-135

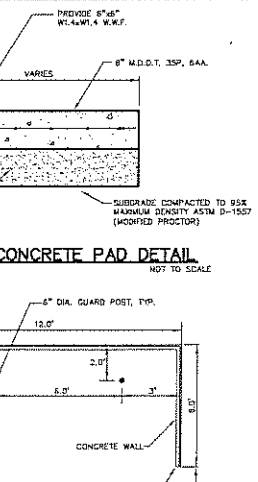
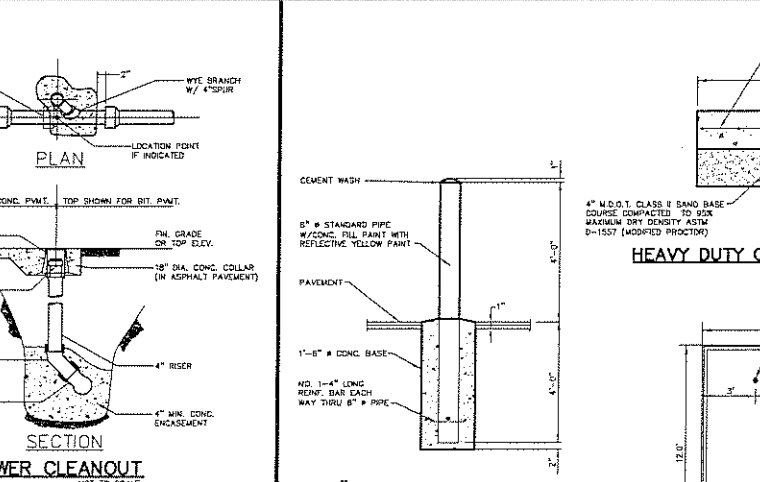
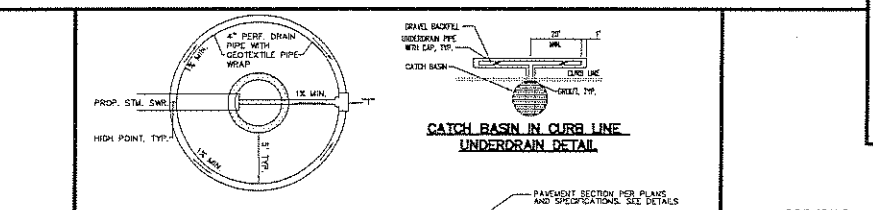
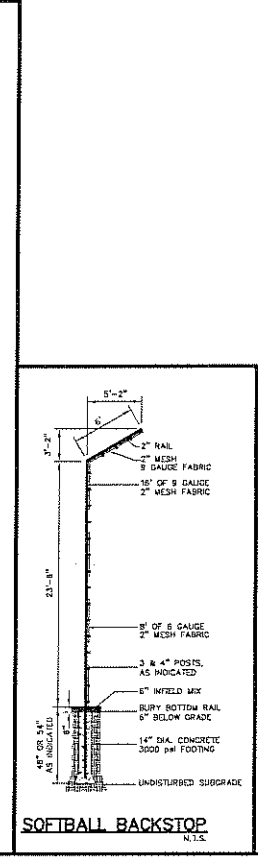
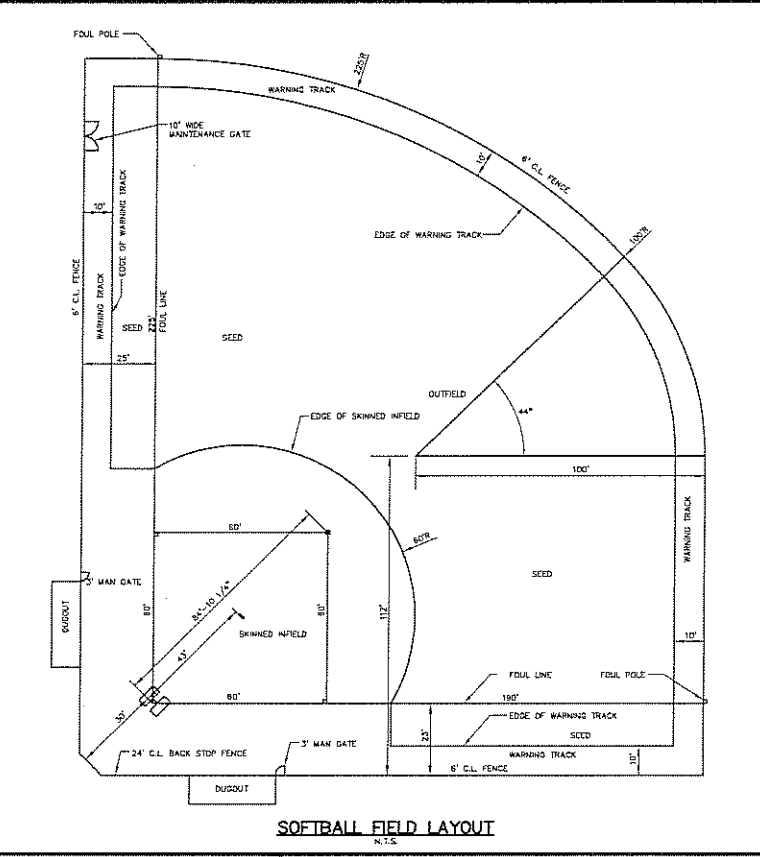
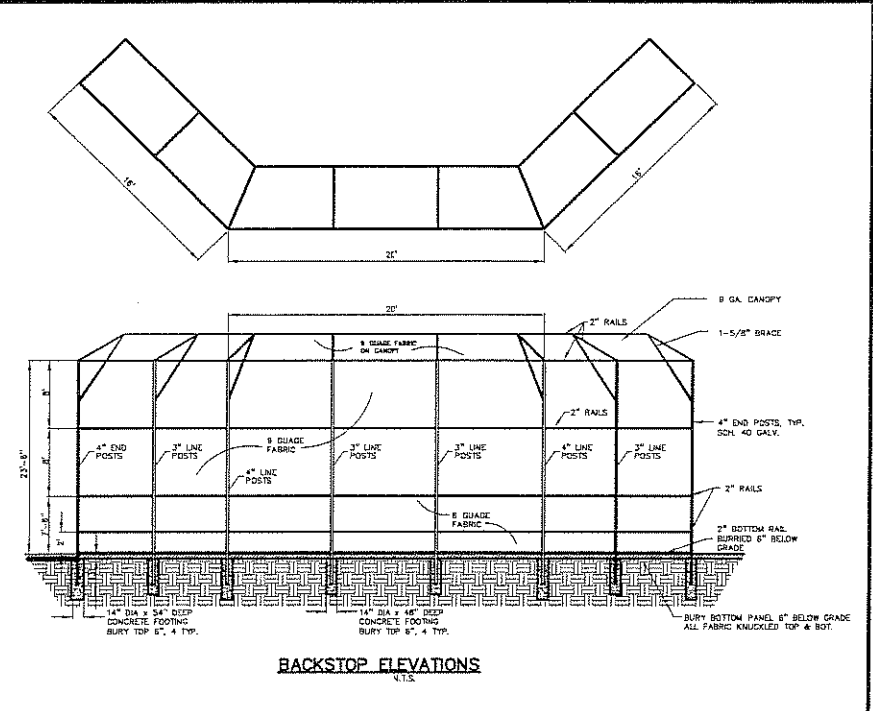
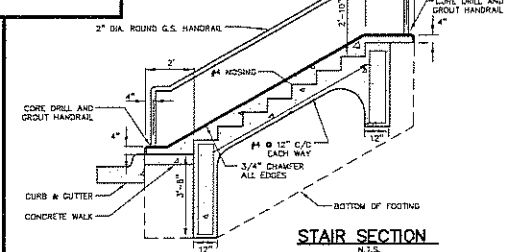
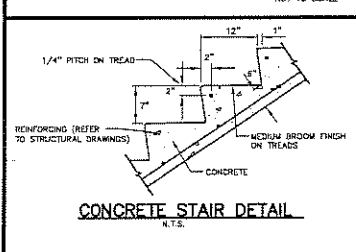
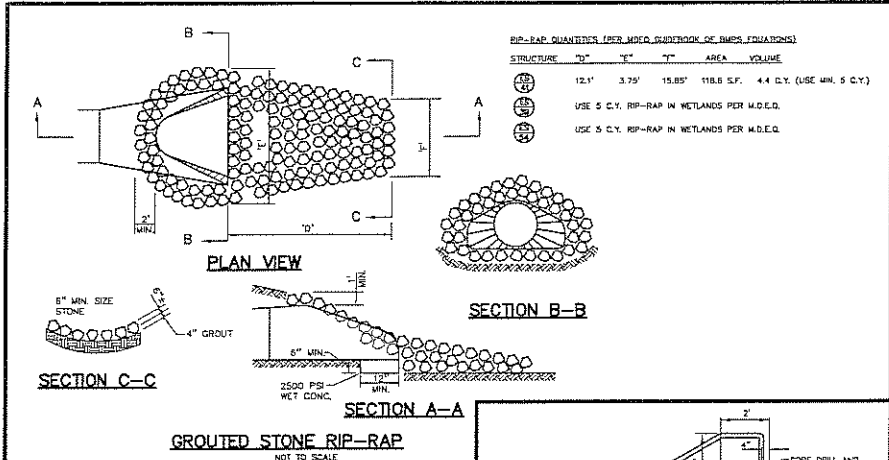
SHEET NUMBER: P-8.1

PRELIMINARY NOT FOR CONSTRUCTION CITY FILE # 94-426.8, SECTION #15

Michigan Department of Transportation logo and project information.

Michigan Department of Transportation logo and project information.

Michigan Department of Transportation logo and project information.



GENERAL NOTES:

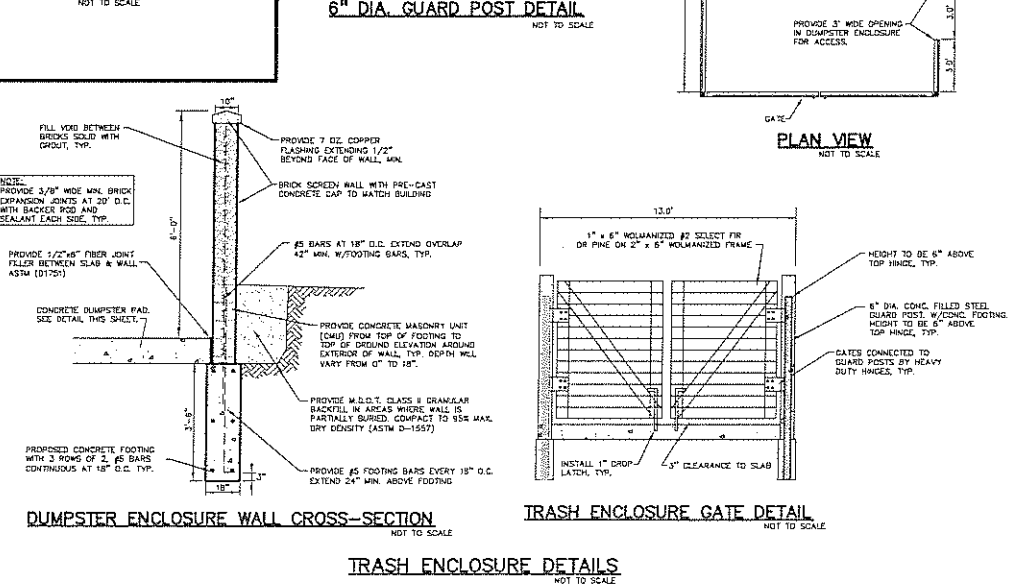
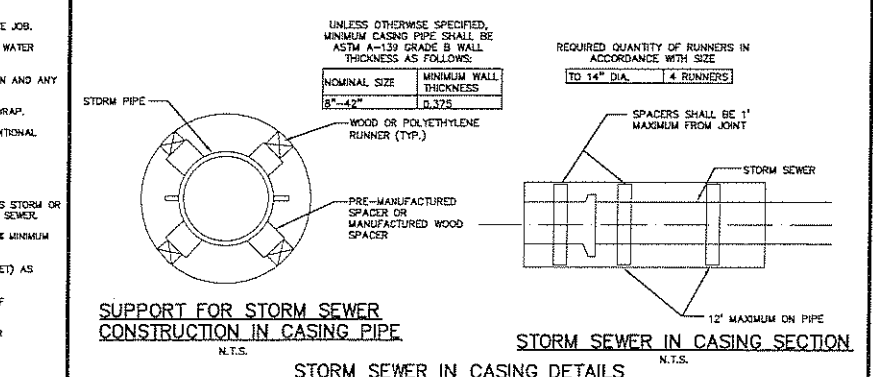
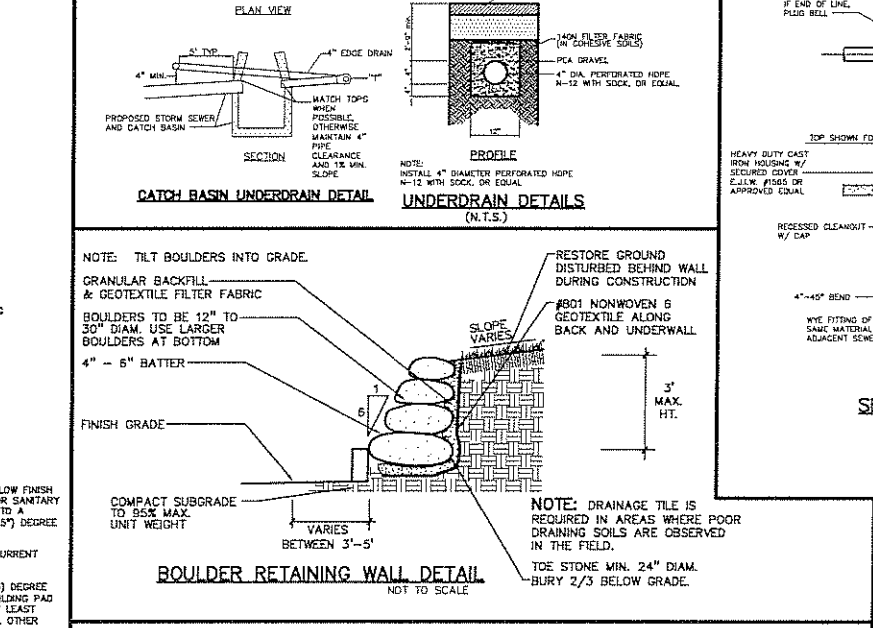
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND R.C.O.C.
- ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL CITY INSPECTION FEES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THE JOB.
- PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG (1-800-482-7171) TO VERIFY THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES AND SHALL NOTIFY OTHER REPRESENTATIVES OF OTHER UTILITIES IN THE VICINITY OF THE WORK.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- MANHOLE, CATCH BASIN, GATE VALVES AND HYDRANT FINISH GRADES MUST BE CLOSELY CHECKED AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS CONSIDERED COMPLETE.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OR OTHER UNWANTED DEBRIS AT THE OWNER'S DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND FLOORS, BURNING OF TRASH, STUMPS OR OTHER DEBRIS SHALL NOT BE PERMITTED.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICAADING, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY CONTAIN TRAFFIC IN ACCORDANCE WITH "MUTUO".
- ALL EXCAVATIONS SHALL BE SLOPED, SHORED OR BRACED IN ACCORDANCE WITH M-OSHA REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATELY CONSTRUCTED AND BRACED SHORING SYSTEM FOR EMPLOYEES WORKING IN AN EXCAVATION THAT MAY EXPOSE EMPLOYEES TO THE DANGER OF MOVING GROUND.
- ALL REFERENCES TO M.D.O.T. SPECIFICATIONS ARE TO BE IN ACCORDANCE WITH THE 1990 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PAVING NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS, R.C.O.C. AND M.D.O.T.
- IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
- SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL SECTIONS OR BELOW SUBGRADE IN CUT SECTIONS, WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
- SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED WITH SAND OR OTHER SIMILAR APPROVED MATERIAL. BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D-1557) UNLESS OTHERWISE SPECIFIED.
- BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS.
- ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.

GENERAL UTILITY NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF ROCHESTER HILLS AND M.D.O.T.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES, WHICH MIGHT AFFECT THIS JOB.
- ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO BOX OR BETTER.
- WHENEVER EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINER BEFORE BREAKING SECTION OUT.
- EXACT GRADES AND DEPTHS OF UTILITIES ARE TO BE CHECKED CLOSELY WITH THE FIELD ENGINEER PRIOR TO INSTALLATION.
- REFER TO CITY OF ROCHESTER HILLS STANDARD DETAIL SHEETS FOR ADDITIONAL INFORMATION.



ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
12-03-08	SITE PLAN RE-SUBMITTAL
07-15-09	SITE PLAN RE-SUBMITTAL
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CHECKED	RLS
APPROVED	DNH

PEA
PROFESSIONAL ENGINEERING ASSOCIATES
2430 Rochester Ct. Suite 100
Troy, MI 48063-1872
(248) 689-9090

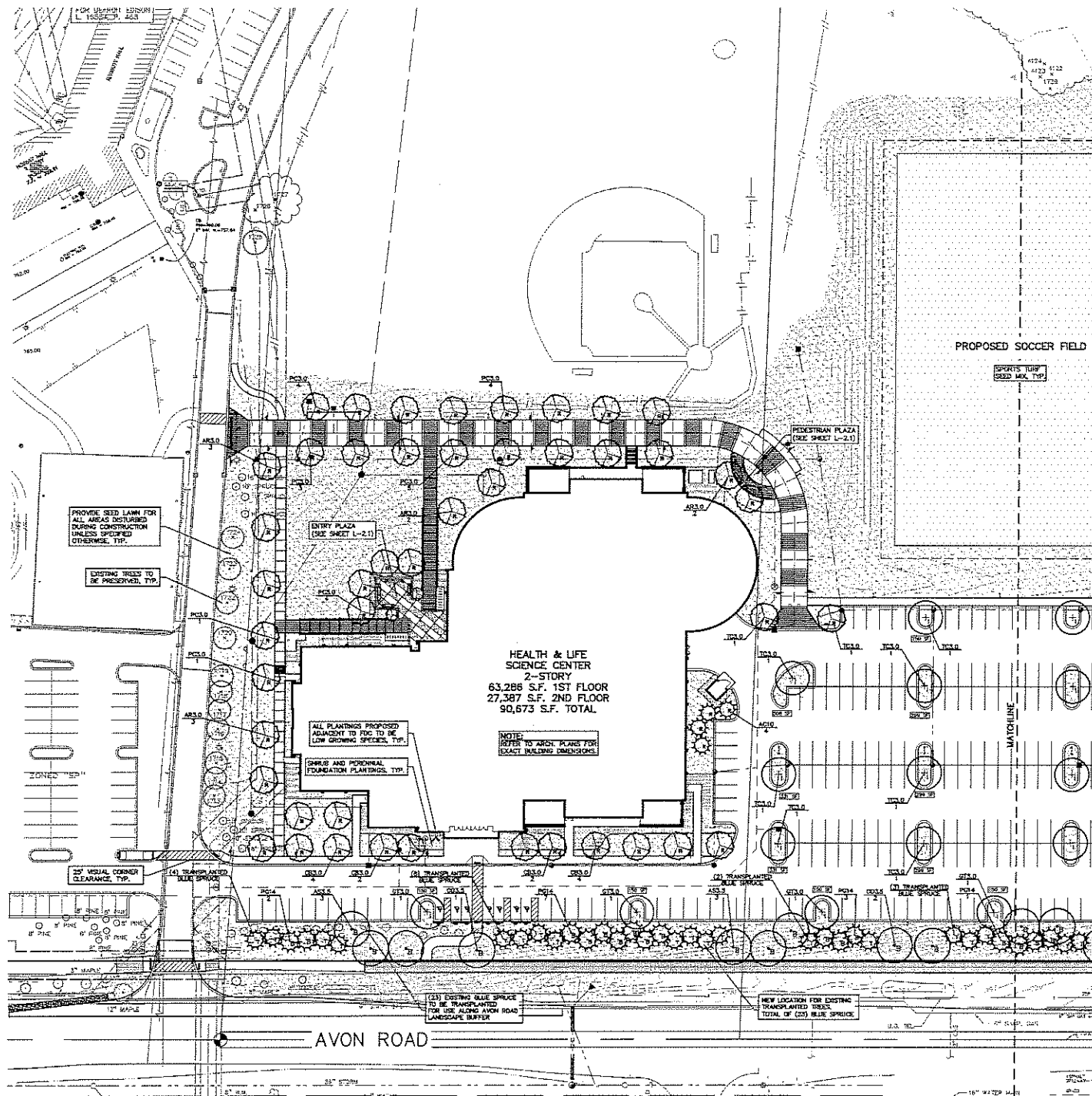
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PROJECT
Rochester College
Health & Life
Science Center

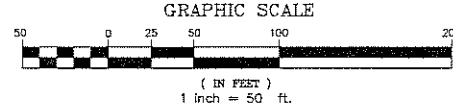
Rochester Hills
Michigan

SHEET
Details

PROJECT NUMBER
2008-076
PEA PROJECT NO. 2008-135



CAUTION!
 THE LOCATION AND DEPTH OF EXISTING UTILITIES AND SERVICES IS SHOWN ON THE DRAWING AND IS APPROXIMATE. UNDEGROUND UTILITIES AND SERVICES SHOULD BE DELETED OR SHOWN AS TO THE CONTRACTOR'S KNOWLEDGE AND BELIEF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICES PRIOR TO THE START OF CONSTRUCTION.



LANDSCAPE REQUIREMENTS SECTION 138-1267: PARKING LOT LANDSCAPING

REQUIRED:
 150 SF OF LANDSCAPED PLANTER ISLAND PER EVERY 10 PARKING SPACES
 272 PARKING SPACES / 10 = 27.2 (ROUND TO 28)
 28 * 150 SF = 4,200 SF PARKING LOT PLANTER ISLAND AREA REQUIRED
 1 DECIDUOUS TREE PER EVERY 300 SF LANDSCAPED ISLAND PLANTER REQ'D
 4,200 SF ISLAND AREA / 300 SF = 14 TREES REQUIRED OR (WHICHEVER IS GREATER)
 1 DECIDUOUS TREE PER EVERY LANDSCAPED ISLAND AREA PROVIDED
 20 LANDSCAPED ISLANDS = 20 TREES REQUIRED

PROPOSED:
 5,013 SF LANDSCAPED ISLAND AREA PROVIDED
 20 TREES PROVIDED

SECTION 138-1216: SCREENING REQUIREMENTS

CURRENT ZONING: SPECIAL PURPOSE (SP)

REQUIRED:
 SP ADJACENT TO RM-1 (AVON ROAD FRONTAGE) = TYPE 'C' BUFFER
 - INTERMITTENT VISUAL OBSTRUCTION; MAX. 20' HT. IN TWO YEARS
 - BUFFER WIDTH: MIN. 10' WIDE
 SP ADJACENT TO SP (EAST SIDE) = NO SCREEN REQUIRED

PROPOSED:
 TYPE 'C' BUFFER ALONG AVON ROAD FRONTAGE
 - 13 DECIDUOUS TREES AND 41 EVERGREEN TREES
 - (18 NEW AND 23 TRANSPLANTED)
 - 30' WIDE

TREE REPLACEMENT CALCULATIONS: ARTICLE III: TREE CONSERVATION

TOTAL NUMBER OF 6" DBH AND LARGER TREES SURVEYED:	159
MINUS EXISTING TREES TO BE PROTECTED (#1713-1727):	-14
MINUS ASH TREES AND DEAD TREES:	-9
TOTAL NUMBER OF REGULATED TREES:	136
MINUS TREES TO BE PRESERVED (OTHER THAN #1713-1727):	-15
TOTAL NUMBER OF REGULATED TREES REMOVED:	121
TOTAL NUMBER OF REPLACEMENT TREES REQUIRED:	121
REPLACEMENT TREES PROVIDED: 61 TOTAL TREES	
49 = 3" CAL. DECIDUOUS AND 12 = 10' HT. EVERGREEN TREES	
= EQUIVALENT OF 122 REPLACEMENT TREES	

(ALL REPLACEMENT TREES HAVE BEEN PROVIDED ON-SITE.)

LEGEND

TYPE 'C' BUFFER	
(B) 3.5" CALIFER DECIDUOUS TREES	
(E) 14' HT. EVERGREEN TREES	
(T) TRANSPLANTED EX. BLUE SPRUCE TREES (23 TREES TOTAL)	
PARKING LOT LANDSCAPING	
(I) 3.0" CALIFER DECIDUOUS TREES	
REPLACEMENT TREES	
(D) 3.0" CALIFER DECIDUOUS TREES	
(E) 10' HT. EVERGREEN TREES	
(L) SOD OR SEED LAWN	
(M) SPORTS TURF SEED MIX	

LANDSCAPE SCHEDULE: BUFFER TREES (FOR THIS SHEET ONLY)

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	SIZE AT INSTALLATION	ROOT	UNIT COST	TOTAL
6	AS3.5	ACER SACCCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	3.5" CAL.	B&B	\$425.00	\$2,550.00
3	CO3.5	CELTIS OCCIDENTALIS	HACKBERRY	3.5" CAL.	B&B	\$425.00	\$1,275.00
13	PG14	PICEA GLAUCA var. 'DENSATA'	BLACK HILLS SPRUCE	14' HT.	B&B	\$500.00	\$6,500.00

LANDSCAPE SCHEDULE: PARKING ISLAND TREES (FOR THIS SHEET ONLY)

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	SIZE AT INSTALLATION	ROOT	UNIT COST	TOTAL
7	TC3.0	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	3.0" CAL.	B&B	\$375.00	\$2,625.00
4	GT3.0	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEYLOCUST	3.0" CAL.	B&B	\$375.00	\$1,500.00

LANDSCAPE SCHEDULE: REPLACEMENT TREES (FOR THIS SHEET ONLY)

QTY	KEY	SCIENTIFIC NAME	COMMON NAME	SIZE AT INSTALLATION	ROOT	UNIT COST	TOTAL
10	AR3.0	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3.0" CAL.	B&B	\$375.00	\$3,750.00
12	CB3.0	CARPINUS BETULIFOLIA 'FASTIGIATA'	PYRAMIDAL HORNBEAM	3.0" CAL.	B&B	\$375.00	\$4,500.00
22	PC3.0	PYRUS CALLERYANA 'CLEVELAND SELECT'	CLEVELAND SELECT PEAR	3.0" CAL.	B&B	\$350.00	\$7,700.00
2	TC3.0	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	3.0" CAL.	B&B	\$375.00	\$750.00
4	AC10	ABIES CONCOLOR	CONCOLOR FIR	10' HT.	B&B	\$375.00	\$1,500.00

MISCELLANEOUS (FOR BOTH L-1.1 & L-1.2)

QTY	UNIT	DESCRIPTION	UNIT COST	TOTAL
30,375	S.Y.	SEED LAWN / SOD LAWN / SPORTS TURF SEED MIX	\$1.50	\$45,562.50
80	C.Y.	4" DEEP SHREDDED HARDWOOD BARK MULCH	\$45.00	\$3,600.00
9,500	S.Y.	IRRIGATION SYSTEM	\$0.85	\$8,075.00
3,365	C.Y.	4" DEEP TOPSOIL	\$15.00	\$50,475.00
			SUBTOTAL:	\$140,362.50

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
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01-16-09	SITE PLAN RE-SUBMITTAL

DRAWN	LAW
CHECKED	JTS
APPROVED	DNH

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 Troy, MI 48083-1872
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f architects planners interiors
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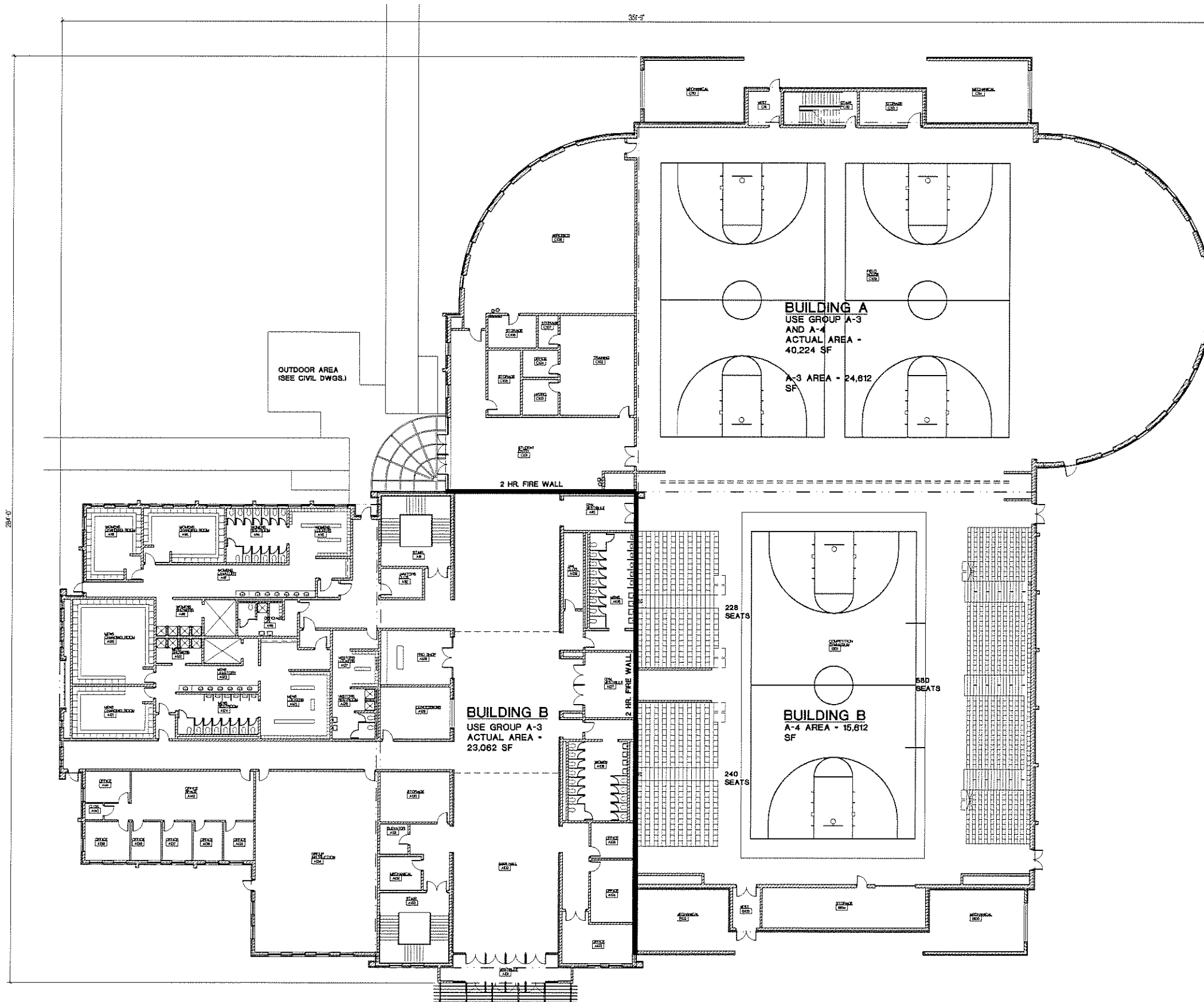
Rochester Hills
 Michigan

SHEET
 Preliminary
 Landscape Plan

PROJECT NUMBER
 2008-076
 PEA PROJECT NO. 2008-135

SHEET NUMBER
 L-11
 PRELIMINARY NOT FOR CONSTRUCTION
 CITY FILE # 94-426.8, SECTION #15

REFERENCE DRAWINGS
 FLOODPLAIN: ZONE 'C' PER FIRM MAP #260471-0229-B
 SURVEY AND EXISTING UTILITIES INFORMATION PROVIDED BY:
 RAYMOND J. DONNELLY & ASSOCIATES, INC. SURVEYORS
 (REV.) 2008135.DWG (TYP) (BASE)-0115.DWG
 (REV.) 2008135.DWG (SITE PLAN) (BASE)-0115.DWG
 (REV.) 2008135.DWG (BASE-EXISTING) (SITE PLAN)-0115.DWG



FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

CODE INFORMATION

1. DESIGN CODE:
2006 MICHIGAN BUILDING CODE

2. DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (106.3.4)
A REPRESENTATIVE OF FRENCH ASSOCIATES WILL BE THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

3. DEFERRED SUBMITTALS (106.3.4.2)
DEFERRED SUBMITTALS WILL INCLUDE THE FOLLOWING:
A) ACCEPTANCE TEST FOR THE FLUSHING OF THE UNDERGROUND WATER MAINS PRIOR TO THE CONNECTION OF THE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 23 OR NFPA 13.
B) HYDROSTATIC TESTING FOR ALL UNDERGROUND AND OVERHEAD PIPING PER NFPA 13 REQUIREMENTS.
C) AUTOMATIC SPRINKLER SYSTEM, INCLUDING MONITORING OF THE AUTOMATIC SPRINKLER SYSTEM BY AN APPROVED SUPERVISORY STATION.
D) CONSTRUCTION DOCUMENTS FOR FIRE ALARM SYSTEMS, INCLUDING DUCT SMOKE DETECTION SYSTEM.
E) FIRE DEPARTMENT CONNECTIONS (APPROVED BY FIRE DEPARTMENT).
F) FIRE PROTECTIVE SIGNALING SYSTEM, INCLUDING SUPERVISION OF THE FIRE PROTECTIVE SIGNALING SYSTEM.

4. USE AND OCCUPANCY CLASSIFICATION (CHAPTER 3)
BUILDING USE GROUP IS ASSEMBLY (A-3 AND A-4) AND BUSINESS (B). E.
BUILDING IS SUB-DIVIDED INTO 2 SEPARATE BUILDINGS BY 2 HOUR RATED FIRE WALLS.
BUILDING CONSTRUCTION TYPE IS 2B.
BUILDING A IS 1 STORY, USE GROUP A-3 AND A-4 WITH A MEZZANINE.
BUILDING B IS 2 STORY, USE GROUP A-3 ON THE 1ST FLOOR, USE GROUP B ON THE 2ND FLOOR.

5. BUILDING HEIGHTS AND AREAS (CHAPTER 5)
BUILDING A-
ALLOWABLE HEIGHT FOR USE GROUP A3 AND A4 AND TYPE OF CONSTRUCTION IIB IS 2 STORIES AND 9,500 SQUARE FEET (TABLE 503). WE ARE TREATING THIS AS A NON-SEPARATED MIXED OCCUPANCY IN ACCORDANCE WITH 503.3.2.
AREA MODIFICATIONS: AUTOMATIC SPRINKLER SYSTEM INCREASE - 300%
FRONTAGE INCREASE - 50%
ALLOWABLE AREA WITH MODIFICATIONS - 42,750 SF.
ACTUAL AREA OF BUILDING A IS 40,224 SF.
BUILDING B-
ALLOWABLE HEIGHT FOR USE GROUP A3 AND TYPE OF CONSTRUCTION 2B IS 2 STORIES AND 9,500 SQUARE FEET (TABLE 503).
ALLOWABLE HEIGHT FOR USE GROUP B AND TYPE OF CONSTRUCTION 2B IS 4 STORIES AND 23,000 SF.
AREA MODIFICATIONS: AUTOMATIC SPRINKLER SYSTEM INCREASE - 200%
FRONTAGE INCREASE - 50%
ALLOWABLE AREA FOR USE GROUP A3 WITH MODIFICATIONS - 33,250 SF.
ALLOWABLE AREA FOR USE GROUP B WITH MODIFICATIONS - 80,500 SF.
ACTUAL AREA OF USE GROUP A3, 1ST FLOOR IS 23,062 SF.
ACTUAL AREA OF USE GROUP B, 2ND FLOOR IS 23,060 SF.
6. PREMISES IDENTIFICATION (501.2)
ADDRESS NUMBERS WILL BE PROVIDED AS REQUIRED.
HEIGHT MODIFICATION FOR AUTOMATIC SPRINKLER SYSTEM (504.2)
1 STORY AND 20' (504.2)
7. TYPE OF CONSTRUCTION (CHAPTER 6)
TYPE IIB (I UNPROTECTED).
A) FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (TABLE 601)
STRUCTURAL FRAME - 0
BEARING WALLS - 0
NON-BEARING WALLS AND PARTITIONS (GREATER THAN 30' SEPARATION DISTANCE) - 0
FLOOR CONSTRUCTION - 0
ROOF CONSTRUCTION - 0
7. FIRE-RESISTANCE-RATED CONSTRUCTION (CHAPTER 7)
A) EXTERIOR WALLS IN ACCORDANCE WITH SECTION 704.2
B) THE TOTAL BUILDING AREA EXCEEDS THE ALLOWABLE AREA. CONSEQUENTLY THE BUILDING IS SUB-DIVIDED INTO SEPARATE BUILDINGS WITH FIRE WALLS IN ACCORDANCE WITH SECTION 705.
C) FIRE BARRIERS AS REQUIRED ARE PROVIDED IN ACCORDANCE WITH SECTION 706.
8. FIRE PROTECTION SYSTEMS (CHAPTER 9)
A) THE BUILDING WILL BE PROTECTED THROUGHOUT BY AN AUTOMATIC SPRINKLER SYSTEM AND FIRE ALARM AND PROTECTION SYSTEM IN ACCORDANCE WITH CHAPTER 9.

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01-16-09	SITE PLAN RE-SUBMITTAL
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APPROVED	xxx

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PROJECT
**Rochester College
Health & Life
Sciences Center**

Rochester Hills
Michigan

SHEET
**First Floor Plan
63,286 Square Feet**

PROJECT NUMBER
2008-076

SHEET NUMBER
A2.01

PRELIMINARY
NOT FOR CONSTRUCTION

ELECTRICAL ABBREVIATION LIST

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMPERES	MAX	MAXIMUM
AF	AMPERES FRAME (BREAKER RATING)	MCB	MAIN CIRCUIT BREAKER
A.F.F.	ABOVE FINISH FLOOR	MCC	MOTOR CONTROL CENTER
AIC	AMPS INTERRUPTING CAPACITY	MDP	MAIN DISTRIBUTION PANEL
AL	AUDIENCE LEFT	MECH	MECHANICAL
AR	AUDIENCE RIGHT	MIN	MINIMUM
AT	AMPERES TRIP (BREAKER SETTING)	MISC.	MISCELLANEOUS
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
AUX	AUXILIARY	MTD	MOUNTED
BKR	BREAKER	MTG	MOUNTING
BPS	BOLTED PRESSURE SWITCH	MTR	MOTOR
C	CONDUIT	N	NEUTRAL
CB	CIRCUIT BREAKER	NC	NORMALLY CLOSED
CKT	CIRCUIT	NEC	NATIONAL ELECTRICAL CODE
CT	CURRENT TRANSFORMER	NF	NON-FUSIBLE
DEM	DEMOLITION	NG	NOT IN CONTRACT
DM	DIMENSION	NL	NIGHT LIGHT
DISC	DISCONNECT	NO	NORMALLY OPEN
DP	DISTRIBUTION PANEL	NTS	NOT TO SCALE
DS	DOWNSTAGE	OC	ON CENTER
DWG	DRAWING	P	POLE
EBU	EMERGENCY BATTERY UNIT	PB	PUSHBUTTON STATION
EC	ELECTRICAL CONTRACTOR	PH	PHASE
ELEC	ELECTRICAL	PT	POTENTIAL TRANSFORMER
EM/EMERG	EMERGENCY	PDP	POWER DISTRIBUTION PANEL
EMT	ELECTRICAL METALLIC TUBING	RECEPT.	RECEPTACLE
EO	ELECTRICALLY OPERATED	RDP	RECEPTACLE DISTRIBUTION PANEL
EW	ELECTRIC WATER COOLER	RP	RECEPTACLE PANEL
EXST	EXISTING	RSC	RIGID STEEL CONDUIT
FA	FIRE ALARM	SCHED	SCHEDULE
FLA	FULL LOAD AMPS	SW	SWITCH
FLR	FLOOR	SWBD	SWITCHBOARD
FOH	FRONT OF HOUSE	SWGR	SWITCHGEAR
FU	FUSE	TB	TERMINAL BOX
G/GRO/EG	GROUND	TELECOM	TELECOMMUNICATIONS
GFC	GROUND FAULT CIRCUIT INTERRUPTER	TP	TAMPER PROOF
HDA	HAND-OFF-AUTO	TIB	TELEPHONE TERMINAL BACKBOARD
HP	HORSEPOWER	TYP	TYPICAL
HV	HIGH VOLTAGE	U.O.N.	UNLESS OTHERWISE NOTED
HZ	HERTZ	US	UPSTAGE
IG	ISOLATED GROUND	V	VOLTS
JB	JUNCTION BOX	W	WIRE
KV	KILOVOLT	WP	WEATHERPROOF
KVA	KILOVOLT - AMPERES	XFR	TRANSFORMER
KW	KILOWATT	XP	EXPLOSION PROOF
KWH	KILOWATT - HOURS	(E)	EXISTING
LA	LIGHTNING ARRESTOR	(R)	RELOCATED
LP	LIGHTING PANEL		
LDP	LIGHTING DISTRIBUTION PANEL		

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
FAE	FIXTURE TYPE	T	TRANSFORMER
[]	LIGHTING FIXTURE		DISTRIBUTION PANEL
[]	DIRECT/INDIRECT LIGHTING FIXTURE	PX	POLE THRU SERVICE FITTING "X" INDICATES TYPE
[]	EMERGENCY FIXTURE	FBX	FLOOR BOX SERVICE FITTING "X" INDICATES TYPE
[]	NIGHT LIGHTING FIXTURE	AFX	ACCESS FLOOR SERVICE FITTING "X" INDICATES TYPE
FX-NL	LIGHTING FIXTURE	RX	CORD REEL "X" INDICATES TYPE
[]	EMERGENCY FIXTURE	RGP	REMOTE GENERATOR ANNUNCIATOR PANEL
[]	WALL MOUNTED LIGHTING FIXTURE "X" INDICATES MOUNTING HEIGHT	ATS	AUTOMATIC TRANSFER SWITCH
[]	LIGHTING FIXTURE	UPS	UN-INTERRUPTIBLE POWER SUPPLY
[]	EMERGENCY FIXTURE	VFC	VARIABLE FREQUENCY/ CONTROLLER
[]	LIGHTING FIXTURE	[]	MOTOR
[]	EMERGENCY FIXTURE	[]	MANUAL CONTROLLER
[]	EMERGENCY FIXTURE	[]	RECESSED OR SURFACE MOUNTED
[]	DIRECTIONAL LIGHTING FIXTURE	[]	MAGNETIC CONTROLLER
[]	WALL SCONCE "X" INDICATES MOUNTING HEIGHT	[]	COMBINATION MAGNETIC CONTROLLER
[]	LIGHTING TRACK	[]	NON-FUSIBLE DISCONNECT SWITCH
[]	TRACK LIGHTING FIXTURE	[]	FUSIBLE DISCONNECT SWITCH
[]	EMERGENCY LIGHTING UNIT	[]	ENCLOSED CIRCUIT BREAKER
[]	POLE MOUNTED LIGHTING FIXTURE	[]	PUSH BUTTON STATION
[]	POLE MOUNTED LIGHTING FIXTURE - POST TOP	[]	JUNCTION BOX
[]	BOLLARD LIGHTING FIXTURE	[]	HARD WIRE POWER CONNECTION
[]	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS (SHADED AREA INDICATES FACE)	[]	AUTOMATIC DOOR CONTROLLER
[]	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS (SHADED AREA INDICATES FACE)	[]	AUTOMATIC DOOR PUSH PAD OPERATOR
[]	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS (SHADED AREA INDICATES FACE)	[]	GROUND ROD
[]	EXIT LIGHTING FIXTURE - WALL MOUNTED	[]	GROUND CONNECTION
S	SINGLE POLE TOGGLE SWITCH	[]	CONDUIT SLEEVE WITH BUSHINGS LENGTH AS REQUIRED "X" INDICATES CONDUIT SIZE
S2	TWO POLE TOGGLE SWITCH	[]	CONDUIT UP
S3	3 WAY TOGGLE SWITCH	[]	CONDUIT DOWN
S4	4 WAY TOGGLE SWITCH	[]	EMPTY BOX FOR FUTURE TELECOMMUNICATION OUTLET
K	KEY OPERATED SWITCH	[]	EMPTY BOX FOR FUTURE TELECOMMUNICATION OUTLET MOUNTED 8" ABOVE COUNTERTOP
K3	3 WAY KEY OPERATED SWITCH	[]	EMPTY BOX FOR FUTURE CEILING MOUNTED TELECOMMUNICATION OUTLET "X" INDICATES TYPE
K4	4 WAY KEY OPERATED SWITCH	[]	TELECOMMUNICATION OUTLET MOUNTED 8" ABOVE COUNTERTOP "X" INDICATES TYPE
D	DIMMER SWITCH	[]	TELECOMMUNICATION CEILING MOUNTED OUTLET "X" INDICATES TYPE
D3	3 WAY DIMMER SWITCH	[]	TELECOMMUNICATION BACKBOARD
SP	PILOT SWITCH	[]	INTERCOM OUTLET
[]	DUAL SWITCHING FOR INNER/OUTER LAMPS OF FLUORESCENT LIGHT FIXTURES	[]	SPEAKER
[]	3-WAY DUAL SWITCHING FOR INNER/OUTER LAMPS OF FLUORESCENT LIGHT FIXTURES	[]	SPEAKER - WALL MOUNTED
[]	4-WAY DUAL SWITCHING FOR INNER/OUTER LAMPS OF FLUORESCENT LIGHT FIXTURES	[]	MICROPHONE
SL	LOW VOLTAGE SWITCH	[]	VOLUME CONTROL
So	OCCUPANCY SENSOR - REFER TO ELECTRICAL STANDARD SCHEDULES	[]	SIGNALING BELL
So2	OCCUPANCY SENSOR - REFER TO ELECTRICAL STANDARD SCHEDULES	[]	SINGLE FACE CLOCK - CEILING MOUNTED
[]	TIME CLOCK	[]	SINGLE FACE CLOCK - WALL MOUNTED
[]	CONTACTOR	[]	DOUBLE FACE CLOCK - CEILING MOUNTED
[]	PHOTOCELL	[]	DOUBLE FACE COMBINATION CLOCK/SPEAKER CEILING MOUNTED
[]	TWIST TIMER	[]	DOUBLE FACE CLOCK - WALL MOUNTED
[]	OCCUPANCY SENSOR - REFER TO ELECTRICAL STANDARD SCHEDULES - "X" INDICATES TYPE	[]	DOUBLE FACE COMBINATION CLOCK/SPEAKER WALL MOUNTED
[]	EMERGENCY LOAD TRANSFER DEVICE	[]	MANUAL FIRE ALARM BOX
[]	SINGLE RECEPTACLE	[]	SMOKE DETECTOR
[]	DUPLEX RECEPTACLE	[]	DUCT SMOKE DETECTOR
[]	QUAD RECEPTACLE	[]	REMOTE TEST STATION (FOR DUCT DETECTOR)
[]	DUPLEX RECEPTACLE MOUNTED 8" ABOVE COUNTER TOP (UNLESS NOTED OTHERWISE) (SIMILAR FOR ISOLATED GROUND, EMERGENCY AND GFI RECEPTABLES)	[]	THERMAL DETECTOR
[]	DUPLEX RECEPTACLE-GROUND FAULT CIRCUIT INTERRUPTER	[]	PROJECTED BEAM DETECTOR
[]	DUPLEX EMERGENCY RECEPTACLE	[]	FIRE ALARM BELL
[]	DUPLEX ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR	[]	FIRE ALARM AUDIBLE NOTIFICATION APPLIANCE
[]	QUAD ISOLATED GROUND RECEPTACLE WITH DEDICATED NEUTRAL CONDUCTOR	[]	FIRE ALARM VISUAL NOTIFICATION APPLIANCE "XX" INDICATES CANDELA RATING
[]	CEILING MOUNTED DUPLEX RECEPTACLE	[]	FIRE ALARM VISUAL/AUDIBLE NOTIFICATION APPLIANCE "XX" INDICATES CANDELA RATING
[]	SPECIAL RECEPTACLE - REFER TO ELECTRICAL STANDARD SCHEDULES	[]	FIRE ALARM VISUAL NOTIFICATION APPLIANCE CEILING MOUNTED "XX" INDICATES CANDELA RATING
[]	MULTI-OUTLET RACEWAY	[]	FIRE ALARM VISUAL/AUDIBLE NOTIFICATION APPLIANCE CEILING MOUNTED "XX" INDICATES CANDELA RATING
[]	BRANCH CIRCUIT PANELBOARD	[]	FIREFIGHTERS PHONE JACK
[]	MOTOR CONTROL CENTER		

ELECTRICAL DRAWING INDEX

SHEET NO.	SHEET TITLE
EO.1	ELECTRICAL STANDARDS AND DRAWING INDEX
EO.2	ELECTRICAL SITE PLAN - DEMOLITION
EO.3	ELECTRICAL SITE PLAN - NEW WORK
EO.4	SITE LIGHTING PHOTOMETRIC CALCULATION PLAN
EO.5	DETAILS AND SCHEDULES
EO.6	DETAILS

KEY PLAN

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL

DRAWN	SC
CHECKED	SC
APPROVED	GJZ

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SHEET
**ELECTRICAL
STANDARDS AND
DRAWING INDEX**
PROJECT NUMBER
2008-0076

SHEET NUMBER
EO.1

STANDARD MOUNTING HEIGHTS

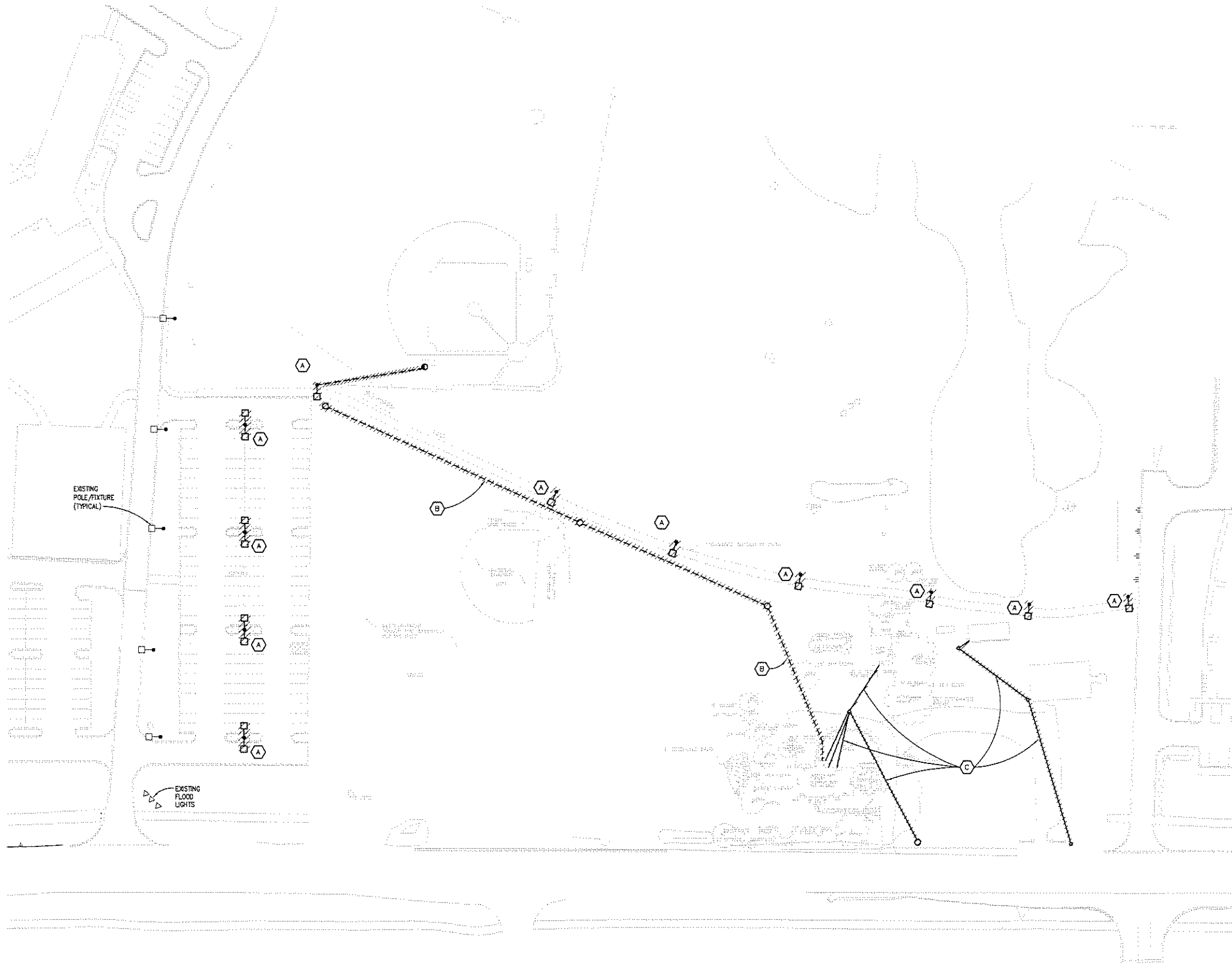
CONVENIENCE AND SPECIAL PURPOSE RECEPTACLE OUTLETS AND TELECOMMUNICATION OUTLETS.	16" A.F.F. TO BOTTOM OF BOX, U.O.N.
LIGHT SWITCHES, MOTOR CONTROL DEVICES AND MANUAL FIRE ALARM BOXES.	48" A.F.F. TO TOP OF BOX, U.O.N.
FIRE ALARM HORNS, SPEAKERS, STROBES AND COMBINATION DEVICES.	96" A.F.F. OR 6" BELOW CEILING, WHICHEVER IS LESS, U.O.N.
GFI RECEPTABLES IN TOILET ROOMS AND JANITOR CLOSETS.	48" A.F.F. TO TOP OF BOX, U.O.N.
BRANCH CIRCUIT PANELBOARDS AND LIGHTING CONTROLLERS.	6'-6" A.F.F. TO TOP OF ENCLOSURE, U.O.N.
CLOCKS AND SPEAKERS	COORDINATE MOUNTING HEIGHTS WITH ARCHITECT

NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

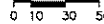
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ELECTRICAL SITE PLAN - DEMOLITION
SCALE: 1" = 50'



KEY PLAN

GENERAL NOTES:

1. THESE NOTES ARE GENERIC GUIDELINES ONLY. ELECTRICAL CONTRACTOR'S PERSONNEL ON SITE SHALL BE THOROUGHLY FAMILIAR WITH THE PUBLISHED SPECIFICATIONS FOR EXACT DESCRIPTIONS OF SCOPE, METHODS, AND MATERIAL.
2. THESE DRAWINGS REPRESENT THE GENERAL EXTENT AND ARRANGEMENT OF SYSTEMS, BUT ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS. COORDINATE WITH OTHER TRADES, AND PROVIDE EACH SYSTEM COMPLETE, INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
3. CONDUCT A SURVEY TO IDENTIFY ALL UNDERGROUND UTILITIES. CALL 811 PRIOR TO EXCAVATION.
4. UTILITIES SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY. COORDINATE EXACT LOCATION OF ALL EXISTING UTILITIES, AND ROUTING OF ALL NEW UNDERGROUND UTILITIES PRIOR TO EXCAVATION. MINIMIZE EXCAVATION BY SHARING TRENCHES WHEN EVER POSSIBLE.
5. Dewater trenches prior to installation of conduits. Provide water tight fittings on all underground conduits.
6. COORDINATE DEMOLITION WORK, AND ELECTRICAL AND TELEPHONE SERVICES TO THE SITE, WITH THE RESPECTIVE LOCAL UTILITY COMPANY REPRESENTATIVES PRIOR TO COMMENCEMENT OF WORK. INCLUDE ALL ASSOCIATED COST/FEE'S BY THE UTILITY COMPANIES IN THE BID PRICE.
7. INSTALL UNDERGROUND CONDUITS 42" BELOW FINISHED GRADE, MINIMUM, UNLESS NOTED OTHERWISE.
8. COORDINATE SERVICE SHUT-DOWNS WITH ALL TRADES INVOLVED ON SITE AND OBTAIN WRITTEN AUTHORIZATION FROM OWNER 72 HOURS PRIOR TO ANY ELECTRICAL AND/OR TELEPHONE SHUT-DOWN.
9. REMOVE ALL DE-ENERGIZED CONDUCTORS FROM SITE AT COMPLETION OF THE PROJECT.
10. OUTDOOR LIGHTING BRANCH CIRCUIT WIRING SHALL BE MINIMUM #8 AWG CONDUCTORS (20'HW), IN MINIMUM 1" DIA. CONDUIT, UNLESS NOTED OTHERWISE.
11. SPARE CONDUITS SHALL INCLUDE PULL STRING AND SHALL BE TERMINATED WITH A CAP.
12. EXCAVATE THE ENTIRE LENGTH OF TRENCH TO PROPERLY SET DUCT ELEVATIONS.

DEMOLITION NOTES:

- (A) REMOVE EXISTING SITE LIGHTING FIXTURES/BASES COMPLETE. REMOVE CIRCUITING BACK TO SOURCE.
- (B) UNDERGROUND FIBER CABLE. COORDINATE REMOVAL WITH THE OWNER.
- (C) OVERHEAD UTILITY CABLES SHALL BE REMOVED. COORDINATE DEMOLITION WITH THE UTILITY COMPANIES.

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
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APPROVED	GJZ

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Health & Life
Science Center

Rochester Hills
Michigan

SHEET
ELECTRICAL SITE
PLAN - DEMOLITION

PROJECT NUMBER
2008-0343-02

SHEET NUMBER
E0.2

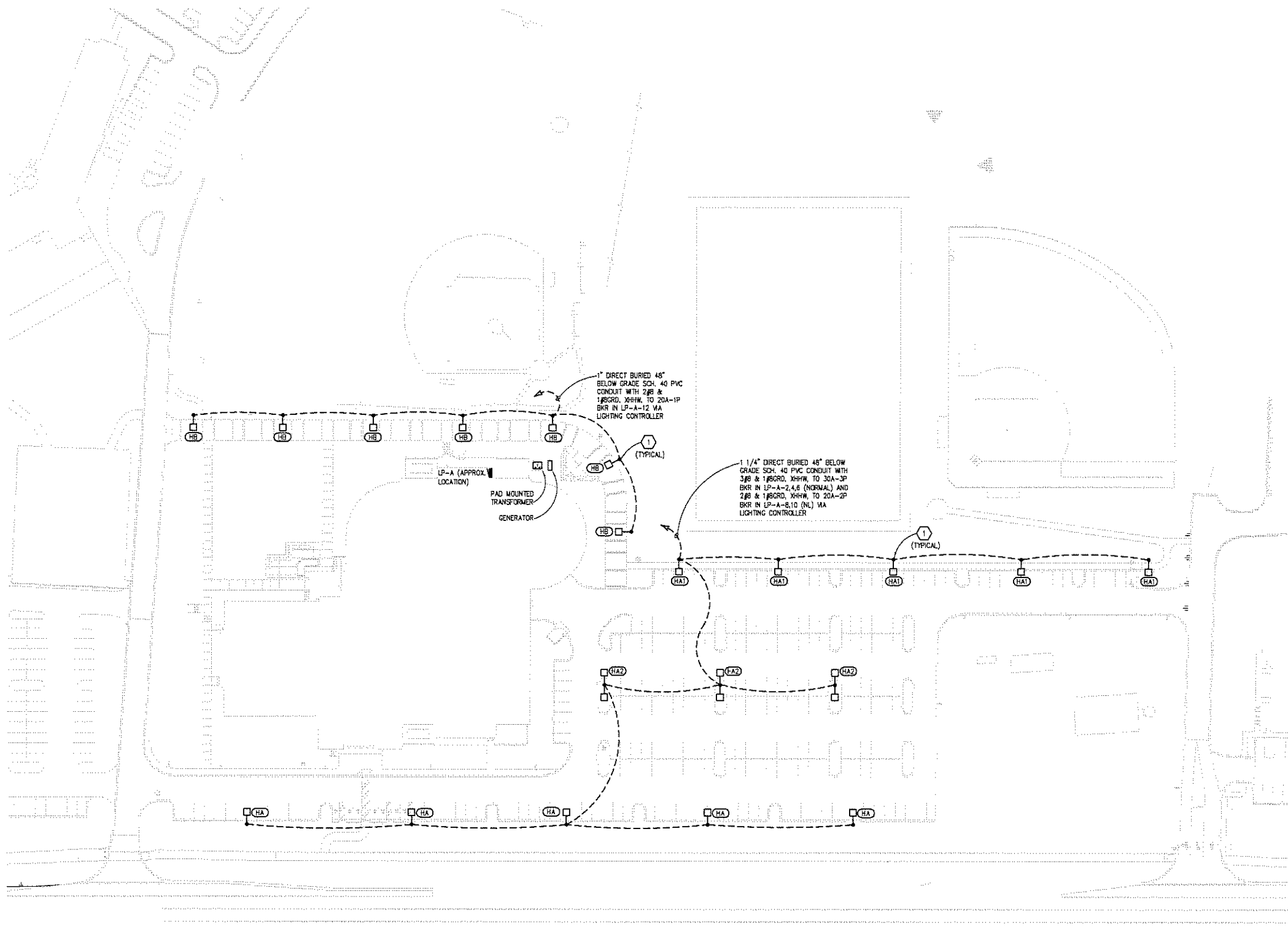


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ELECTRICAL SITE PLAN - NEW WORK
SCALE: 1" = 80'

GENERAL NOTES:

- THESE NOTES ARE GENERIC GUIDELINES ONLY. ELECTRICAL CONTRACTOR'S PERSONNEL ON SITE SHALL BE THOROUGHLY FAMILIAR WITH THE PUBLISHED SPECIFICATIONS FOR EXACT DESCRIPTIONS OF SCOPE, METHODS, AND MATERIAL NOMENCLATURE.
1. ELECTRICAL CONTRACTOR SHALL VERIFY WITH GENERAL CONTRACTOR/CONSTRUCTION MANAGER THAT A SURVEY HAS BEEN CONDUCTED AND ALL UNDERGROUND UTILITIES IDENTIFIED. CONTACT MISS DIG AT 1-800-482-7171.
 2. UTILITIES SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL EXISTING UTILITIES, AND ROUTING OF ALL NEW UNDERGROUND UTILITIES, WITH RESPECTIVE TRADES (GENERAL PLUMBING, CIVIL, ETC.), PRIOR TO DIGGING. MINIMIZE DIGGING BY SHARING TRENCHES WHEN EVER POSSIBLE.
 3. ELECTRICAL CONTRACTOR SHALL DEWATER TRENCHES PRIOR TO INSTALLATION OF CONDUITS. PROVIDE WATER TIGHT FITTINGS ON ALL UNDERGROUND CONDUITS.
 4. ELECTRICAL CONTRACTOR SHALL COORDINATE ANY DEMOLITION, TEMPORARY, AND PERMANENT (ELECTRICAL AND TELEPHONE) SERVICES TO THE SITE, WITH THE RESPECTIVE LOCAL UTILITY COMPANY REPRESENTATIVES, IN FIELD, PRIOR TO COMMENCEMENT OF WORK. ALL ASSOCIATED COSTS/FEE'S BY THE UTILITY COMPANIES SHALL BE INCLUDED IN THE BID PRICE.
 5. UNDERGROUND CONDUITS SHALL BE INSTALLED MINIMUM 42" BELOW FINISHED GRADE, UNLESS NOTED OTHERWISE. REFER TO ELECTRICAL DETAILS.
 6. ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE SHUT-DOWNS WITH ALL TRADES INVOLVED ON SITE, AND OBTAIN WRITTEN AUTHORIZATION FROM OWNER 72 HOURS PRIOR TO ANY ELECTRICAL AND/OR TELEPHONE SHUT-DOWN.
 7. AT COMPLETION OF THE PROJECT, ELECTRICAL CONTRACTOR SHALL REMOVE ALL DE-ENERGIZED CONDUCTORS FROM SITE.
 8. OUTDOOR LIGHTING BRANCH CIRCUIT WIRING SHALL BE MINIMUM #8 AWG CONDUCTORS (XHHW), IN MINIMUM 1" DIA. CONDUIT, UNLESS NOTED OTHERWISE.
 9. OUTDOOR SPARE CONDUITS SHALL INCLUDE PULL STRING AND SHALL BE TERMINATED WITH A CAP ON EACH END. PROVIDE SITE MARKER AT LOCATION.
 10. ELECTRICAL CONTRACTOR SHALL DIG OUT ENTIRE LENGTH OF TRENCH TO PROPERLY SET DUCT ELEVATIONS.
 11. DIRECT BURY CONDUITS IN AREAS WHERE NEW PAVING IS TO OCCUR.
 12. DIRECTIONAL BORE CONDUITS IN AREAS WHERE EXISTING PAVING IS TO REMAIN.
 13. TYPES "HA"/"HA1"/"HA2" POLE MOUNTED LIGHT FIXTURES ARE 480V, 14' 480V, 3# FEEDS TO FIXTURES SHALL BE EVENLY DISTRIBUTED BETWEEN THE PHASES (ab, bc, ca, ab, bc, caAND SO ON). BALANCE LOADS EVENLY.

CONSTRUCTION NOTES:

1. POLE BASE LOCATIONS SHALL BE 3'-0" FROM CENTER OF THE POLE TO BACK SIDE OF WALK. COORDINATE EXACT LIGHTING POLE LOCATIONS WITH CIVIL AND ARCHITECTURAL TRADES.
2. NIGHT LIGHT (NL) FIXTURE, CIRCUIT TO LP-A-8,12 VIA PHOTO CELL CONTROLLED CONTACTOR.

KEY PLAN

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
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CHECKED	SC
APPROVED	GJZ

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PROJECT
Rochester College
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Rochester Hills
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SHEET
ELECTRICAL SITE
PLAN - NEW WORK

PROJECT NUMBER
20080076

SHEET NUMBER
E0.3

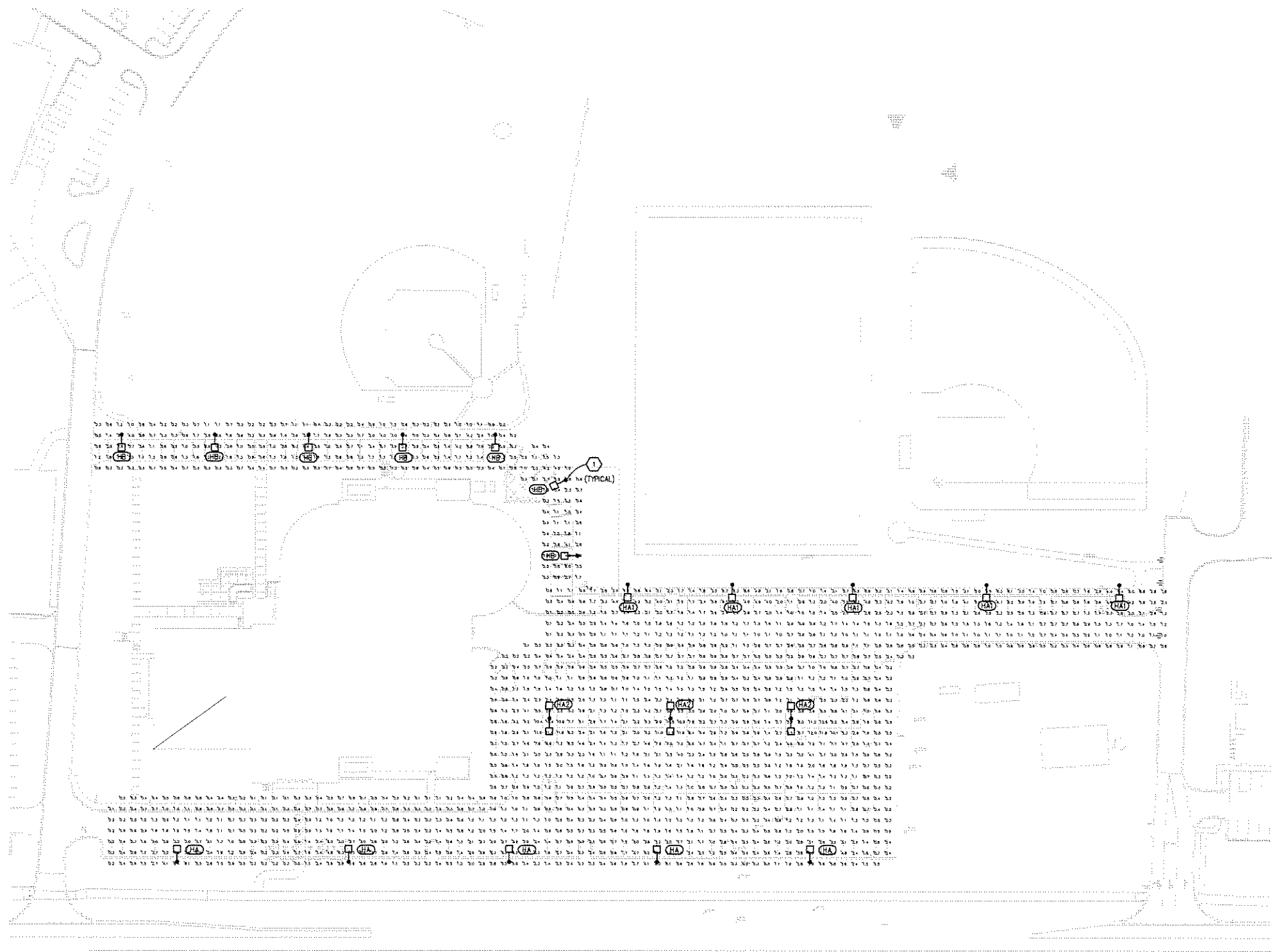


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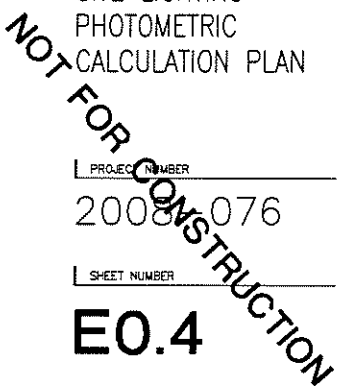
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PROJECT
 Rochester College
 Health & Life
 Science Center

Rochester Hills
 Michigan

SHEET
 SITE LIGHTING
 PHOTOMETRIC
 CALCULATION PLAN

PROJECT NUMBER
 2008076
 SHEET NUMBER
E0.4

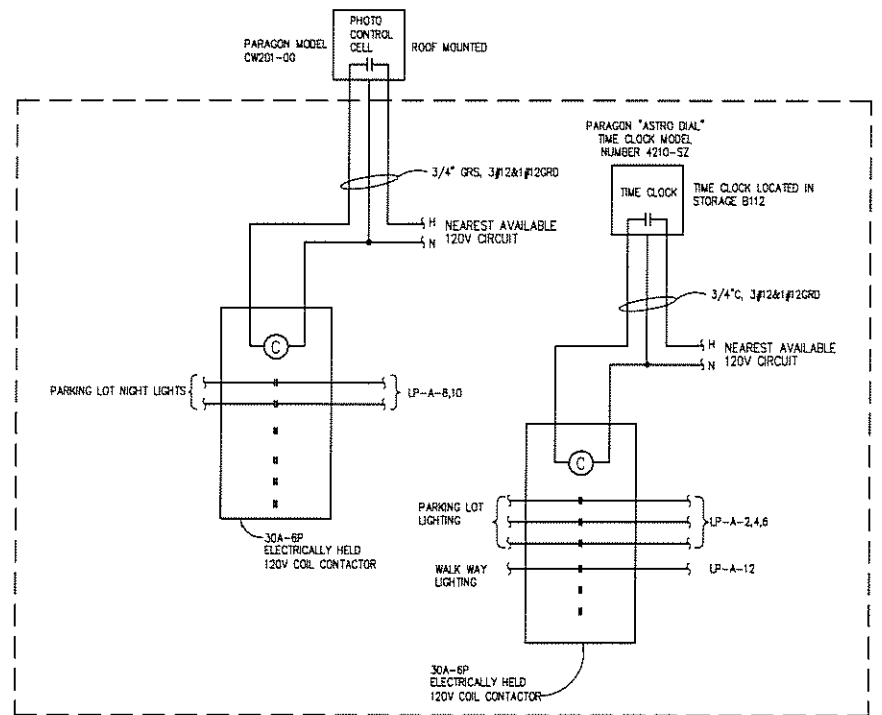


SITE LIGHTING PHOTOMETRIC CALCULATION PLAN
 SCALE: 1" = 50'

STATISTICS						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking Lot	+	1.7 fc	12.0 fc	0.1 fc	120:1	17:1
Walk Way/North	+	1.4 fc	7.9 fc	0.2 fc	39.5:1	7.5:1

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LIGHTING FIXTURE SCHEDULE			
TYPE	DESCRIPTION	MANUFACTURERS	
HA	250 WATT HIGH PRESSURE SODIUM POLE MOUNTED PARKING LOT LIGHT FIXTURE. DIE CAST ALUMINUM HOUSING WIDE FORWARD THROW HORIZONTAL LAMP. WITH FORWARD THROW, TYPE IV DISTRIBUTION, CUT-OFF SHIELDED, SEGMENTED REFLECTOR, FULLY GASKETED, TEMPERED GLASS LENS. BALLAST SHALL BE 480 VOLT FUSED AT POLE HANDHOLE. CWA, HIGH POWER FACTOR CLASS H INSULATED WITH -20 DEG MINIMUM STARTING TEMPERATURE. 17'-6" (4" SQUARE) POLE WITH 2'-6" CONCRETE BASE. POLE SHALL HAVE POWDER COAT FINISH WITH SQUARE BOLT COVER. CONFIGURE AS INDICATED ON PLAN, WITH HOUSE SIDE SHIELD. NOTE: FIXTURE/POLE POWDER COAT PAINT COLOR AS SPECIFIED BY ARCHITECT.	1. LITHONIA KSF 2. MCGRAW-EDISON 3. EMCO 4. BETA	250W HIGH PRESSURE SODIUM
HAI	SAME AS TYPE "HA" EXCEPT WITHOUT HOUSE SIDE SHIELD, WITH 6" LAND SCAPE CONCRETE BASE AND 19'-6" (4" SQUARE) POLE.		
HAI2	SAME AS TYPE "HA" EXCEPT WITH TWO HEADS AND WITHOUT HOUSE SIDE SHIELD.		
HB	100 WATT HIGH PRESSURE SODIUM POLE MOUNTED WALK WAY LIGHT FIXTURE. DIE CAST ALUMINUM HOUSING WIDE FORWARD THROW HORIZONTAL LAMP. WITH FORWARD THROW, TYPE IV DISTRIBUTION, CUT-OFF SHIELDED, SEGMENTED REFLECTOR, FULLY GASKETED TEMPERED GLASS LENS. BALLAST SHALL BE 277 VOLT FUSED AT POLE HANDHOLE. HIGH REACTANCE, HIGH POWER FACTOR CLASS H INSULATED WITH -20 DEG MINIMUM STARTING TEMPERATURE. 11'-6" (4" SQUARE) POLE WITH 6" LAND SCAPE CONCRETE BASE. POLE SHALL HAVE POWDER COAT FINISH WITH SQUARE BOLT COVER. CONFIGURE AS INDICATED ON PLAN. NOTE: FIXTURE/POLE POWDER COAT PAINT COLOR AS SPECIFIED BY ARCHITECT.	1. LITHONIA KSF SERIES 2. MCGRAW-EDISON 3. EMCO 4. BETA	100W HIGH PRESSURE SODIUM



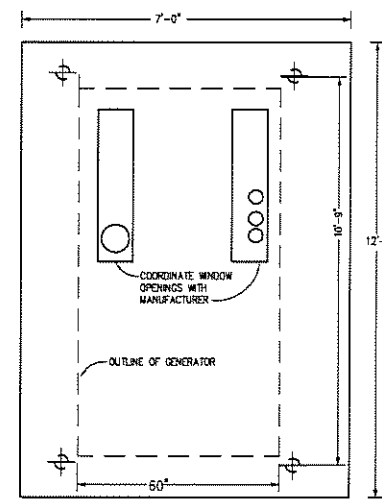
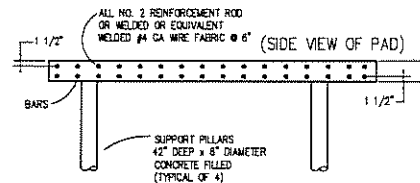
LIGHTING CONTROLLER DETAIL

NO SCALE

NOTES

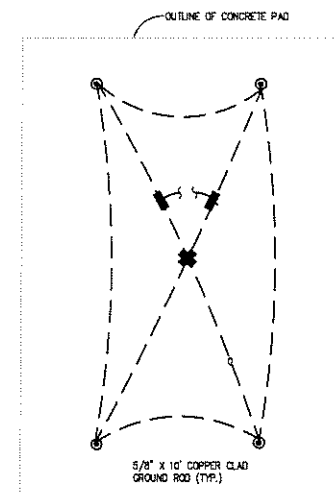
1. SET TIME CLOCKS PER OWNER'S DIRECTION.
2. MODEL NUMBERS LISTED ARE BY PARAGON, OR PROVIDE INTERMATIC EQUAL.

20"x20"x6" SURFACE MOUNTED ENCLOSURE WITH HINGED DOOR AND LATCH HOFFMANN CAT# A-2082ALP (LIGHTING CONTROLLER) LOCATE NEXT TO LP-A



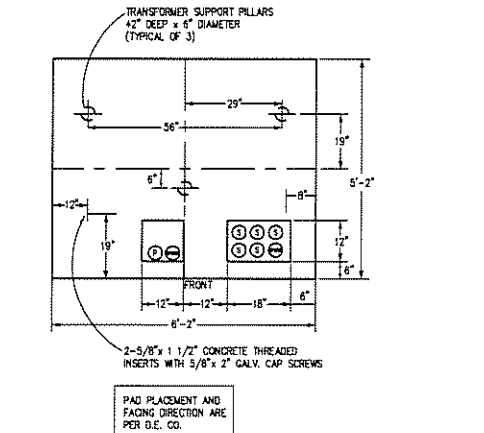
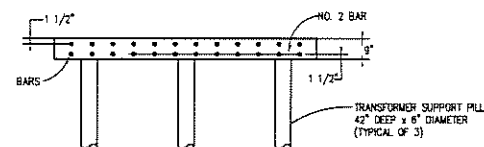
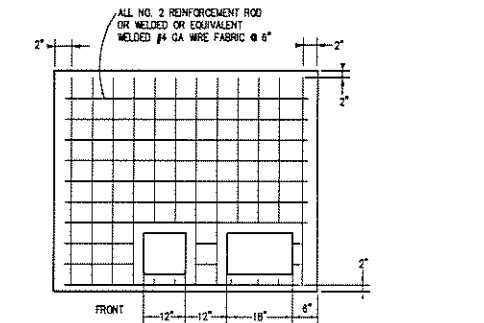
GENERAL NOTES:

1. COORDINATE COMPLETE INSTALLATION AND REQUIREMENTS WITH MANUFACTURERS. ADJUST DIMENSIONS SHOWN AS REQUIRED BY TRANSFORMER MANUFACTURER. (VERIFY SIZES BEFORE POURING PADS)
2. PRIMARY CONDUIT MUST BE POSITIONED AT THE FRONT OF THE PRIMARY WINDOW AS SHOWN
3. NUMBER OF CONDUITS AS SHOWN ON SHEET E5.01.
4. IF CONDUITS ARE NOT PULLED IN ALL SECONDARY SERVICE CONDUITS, THE UNUSED CONDUIT SHOULD BE AT THE FRONT POSITION.
5. PROVIDE 36" RADIUS BEND MINIMUM FOR EACH 4" RIGID CONDUIT SWEEP.
6. CONCENTRATION 6 BAGS OF CEMENT PER YARD.
7. MAINTAIN CONCRETE COVER CLEARANCE BETWEEN REINFORCEMENT RODS AND SURFACES AS SHOWN.
8. ALL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
9. SECURE GENERATOR TO CONCRETE PAD PER MANUFACTURER'S RECOMMENDATIONS. REVISE DETAIL AS REQUIRED.



GENERATOR PAD GROUNDING DETAIL

NO SCALE

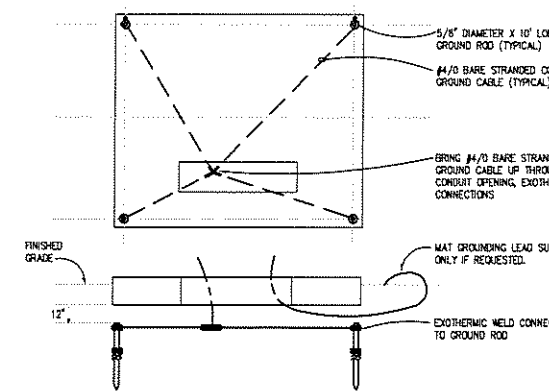


CONCRETE TRANSFORMER PAD DETAIL

NO SCALE

GENERAL NOTES:

1. COORDINATE COMPLETE INSTALLATION AND REQUIREMENTS WITH DETROIT EDISON COMPANY (VERIFY SIZES AND OPENINGS BEFORE POURING PAD)
2. PRIMARY CONDUIT MUST BE POSITIONED AT THE FRONT OF THE PRIMARY WINDOW AS SHOWN
3. NUMBER OF CONDUITS IS TO BE APPROVED BY THE SERVICE PLANNER. CONDUITS SHALL BE INSTALLED 1 1/2" ABOVE THE TOP OF THE PAD.
4. IF CONDUITS ARE NOT PULLED IN ALL SECONDARY SERVICE CONDUITS, THE UNUSED CONDUIT SHOULD BE AT THE FRONT POSITION.
5. SWEEPS SHALL BE 4" RIGID CONDUIT WITH A MINIMUM 36" RADIUS BEND.
6. CONCENTRATION 6 BAGS OF CEMENT PER YARD.
7. MAINTAIN CONCRETE COVER CLEARANCE BETWEEN REINFORCEMENT RODS AND SURFACES AS SHOWN.
8. TRANSFORMER SHALL BE FURNISHED AND SET IN PLACE BY DETROIT EDISON.
9. FINAL TERMINATIONS AT TRANSFORMER BY DETROIT EDISON.



TRANSFORMER PAD GROUNDING DETAIL

NO SCALE

KEY PLAN

ISSUE DATE 10-22-08 ISSUED FOR SITE PLAN RE-SUBMITTAL

DRAWN SC
CHECKED SC
APPROVED CJZ

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PROJECT
Rochester College
Health & Life
Science Center

Rochester Hills
Michigan

SHEET
DETAILS AND
SCHEDULES

PROJECT NUMBER
20080076

SHEET NUMBER

E0.5

NOT FOR CONSTRUCTION

ISSUE DATE	ISSUED FOR
10-22-08	SITE PLAN RE-SUBMITTAL
DRAWN	SC
CHECKED	SC
APPROVED	GJZ



Peter Basso Associates Inc.
CONSULTING ENGINEERS
5145 Livonia, Suite 100
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architect planners interior

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Rochester College
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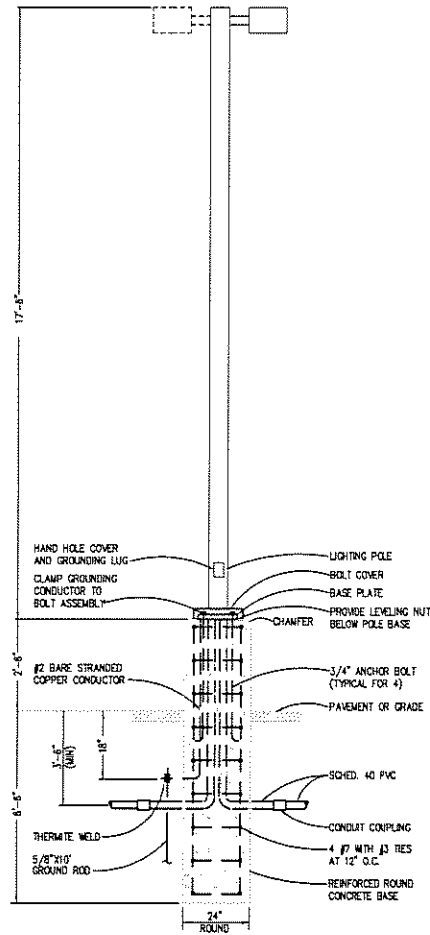
Rochester Hills
Michigan

SHEET
DETAILS

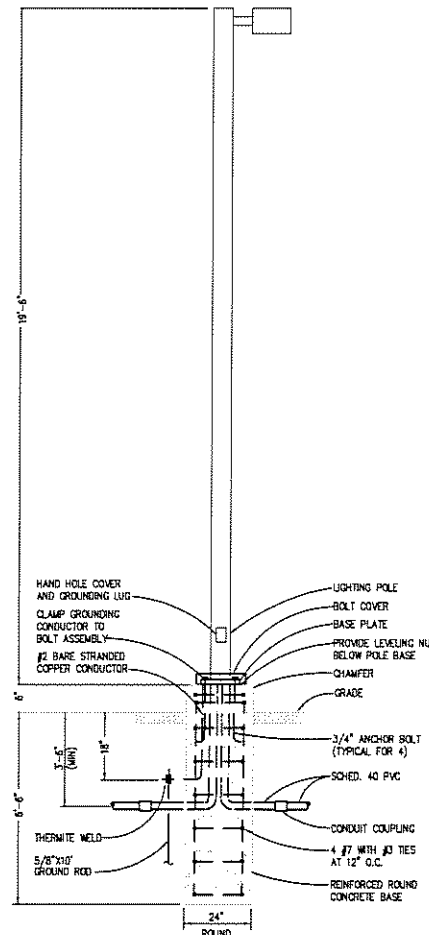
PROJECT NUMBER
2008076

SHEET NUMBER

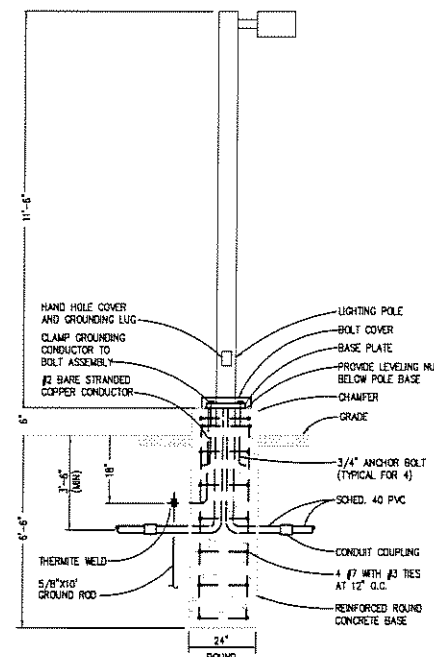
E0.6



FIXTURE TYPE 'HA' AND 'HA2' POLE BASE DETAIL
NO SCALE



FIXTURE TYPE 'HA1' POLE BASE DETAIL
NO SCALE



FIXTURE TYPE 'HB' POLE BASE DETAIL
NO SCALE

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