

UTILITY NOTES

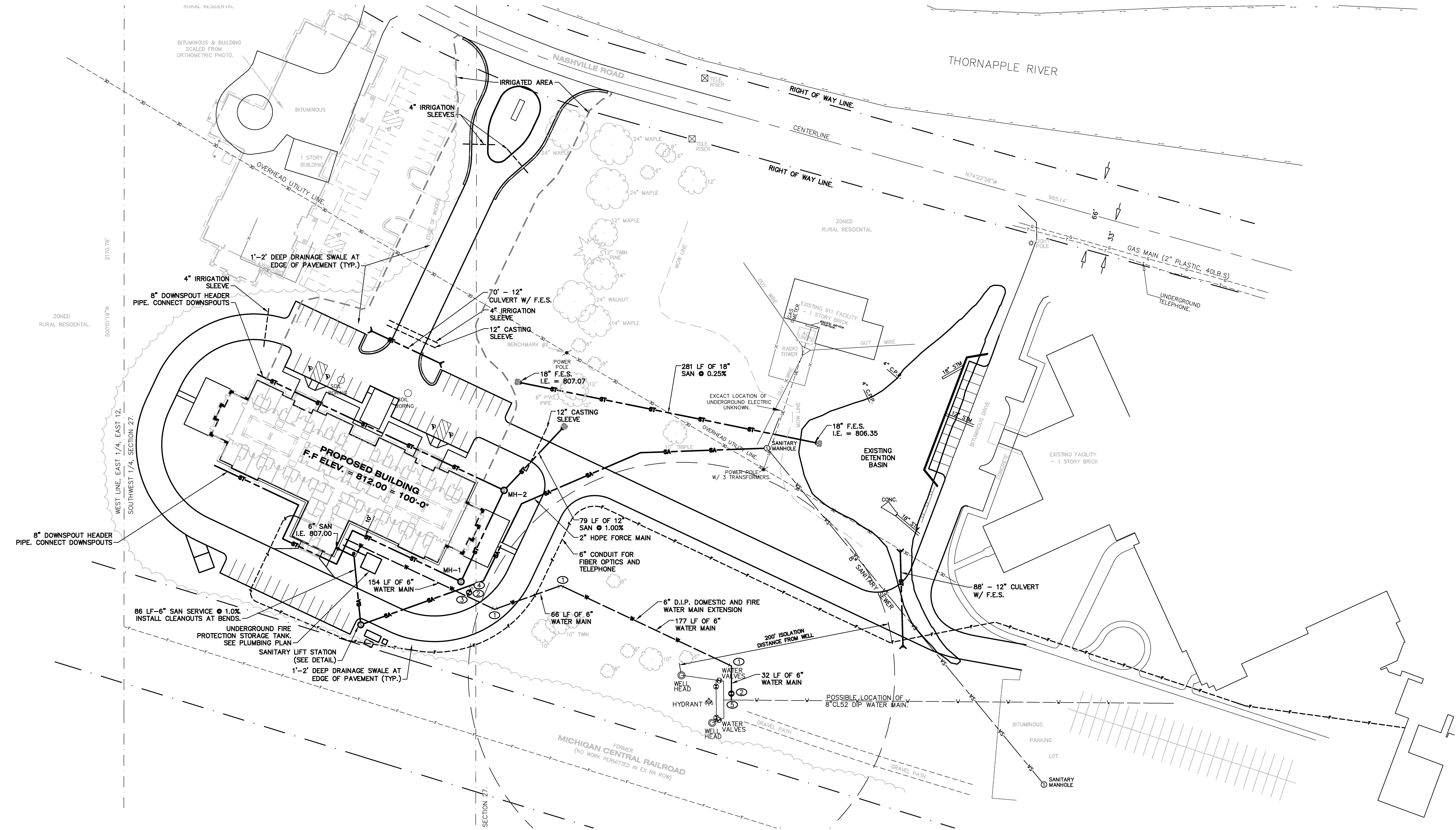
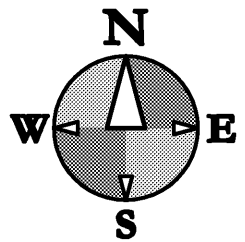
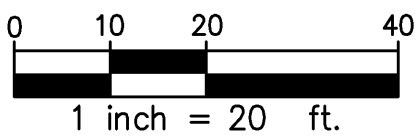
1. PLACE SANITARY CLEANOUT EVERY 100' AND/OR AT BENDS ON ALL 6" SANITARY SEWER LEADS.
2. ALL STRUCTURE CASTINGS TO BE EAST JORDAN IRON WORKS OR APPROVED EQUAL. SEE STRUCTURE TABLE FOR SPECIFIC CASTING AT EACH STRUCTURE.
3. STORM SEWERS SHALL BE CONCRETE C76-III, SOLID WALL ADS N-12 RIGID PIPE MEETING AASHTO M-294, TYPE S, OR APPROVED EQUAL. TESTING SHALL BE PERFORMED PRIOR TO PAVING.
4. THE CONTRACTOR SHALL INSTALL PEDESTRIAN FENCE AROUND ALL EXCAVATIONS TO BE LEFT OPEN OVERNIGHT AS REQUIRED.
5. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR GROUNDWATER AND SOILS INFORMATION. ANY UTILITIES REQUIRING DEWATERING SHALL BE INSTALLED TO THE CITY OF HASTINGS STANDARDS AND INCLUDED IN THE INSTALLATION COSTS. CONTRACTOR IS RESPONSIBLE FOR ALL DEWATERING NECESSARY TO CONSTRUCT UTILITIES IN THE DRY SOIL.
6. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
7. VERIFY NUMBER OF FITTINGS PRIOR TO ORDERING. TOTALS DO NOT INCLUDE VERTICAL DEFLECTIONS THAT MAY BE NEEDED.
8. PROVIDE 18" WATER MAIN SEPARATION WHEN CROSSING OTHER UTILITIES. DEFLECT UNDER OTHER UTILITIES W/O USING FITTINGS WHENEVER POSSIBLE. SEE DEFLECTION DETAIL.
9. SITE CONTRACTOR RESPONSIBLE FOR INSTALLATION OF ALL UTILITIES TO 5' FROM BUILDING WALL.
10. COORDINATE ROUTE AND CONNECTION POINT OF PROPOSED 6" FIBER OPTIC AND TELEPHONE CONDUIT WITH OWNER.

WATER MAIN FITTING SCHEDULE

FITTING NUMBER	DESCRIPTION	TOTAL THIS SHEET
①	6" 45° BEND	3
②	6" VALVE	2
③	6x6x6 IN TEE	1
④	6" CAP	1
⑤	8"x6" TAPPING SLEEVE	1

STORM SEWER STRUCTURE SCHEDULE

STR. #	RIM EL.	DIAM.	CASTING	PIPES IN:	PIPES OUT
MH-1	811.10	2'	Standard	6" NW: 808.36 6" SW: 807.89	6" NE: 808.36
MH-2	811.50	4'	Standard	6" NW: 808.72 6" SW: 807.89	12" NE: 804.20
OUTLET STR.	807.20	???	Standard		18" E: 806.07



THE COTTAGE at THORNAPPLE MANOR

Hastings, MI

PROJ. NO.: 2011-11-021

9/20/11	SCHEMATIC DESIGN MEETING 1.3
9/21/11	100% SCHEMATIC DESIGN
1/30/12	100% DESIGN DEVELOPMENT
2/08/12	100% CD QA REVIEW
2/21/12	ISSUED FOR BIDS

CONSTRUCTION MANAGER

CM CONTRACTING

CIVIL ENGINEER

HURLEY & STEWART

STRUCTURAL ENGINEER

JDH ENGINEERING

MSEP ENGINEER

E2W ENGINEERING

FOOD SERVICE CONSULTANT

MILLIS & ASSOCIATES



ECKERT WORDELL

ARCHITECTURE • ENGINEERING • INTERIOR DESIGN

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SITE UTILITIES

C203



Know what's below.
Call before you dig.