225 S. Washington St.

CITY OF CHARLOTTE, EATON COUNTY, MICHIGAN

SPECIFICATIONS

SANITARY SEWERS

1. All sanitary sewer construction shall comply with the Construction Standards of the City of Charlotte and shall be subject to their inspection and approval.
2. All sanitary sewer pipe shall be PVC SDR 35, ASTM 3034, bell spigot pipe with premium joints conforming to ASTM C425. In addition to a low pressure air test, the contractor shall perform a pipe deflection test on all PVC mains. Out-of-round deflection shall be limited to 5% of the pipe's base inside diameter.
3. All pipe to be laid with the aid of laser equipment.
4. Trench width shall be maintained to a point at least 12" above the top of the pipe to insure bedding conditions
5. All sanitary leads shall be 6" PVC SDR 35, installed at a minimum slope of 1%.

STORM SEWER

1. All storm sewer construction shall comply with the requirements of the City of Charlotte and shall be subject to their inspection and approval.
2. All storm sewer 8" and smaller shall be PVC SDR 35, vitrified clay C-700 ES or concrete C14X. All joints shall be "O" ring water-tight.
3. All storm sewer 10" and larger shall be reinforced concrete, C76-CL III or as designated on the plans, with Mastic joints.
4. All pipe to be laid with the aid of laser equipment.
5. All storm sewer manholes and catch basins shall be in accordance with the City of Charlotte Standards with Neenah R 1784 or approved equal covers.
6. All catch basins shall have a two foot deep sump.

WATER SYSTEM

1. All water system construction shall comply with the Construction Standards of the City of Charlotte and shall be subject to their inspection and approval.
2. All water service leads shall be Type K copper with compression type fittings conforming to City of Charlotte Specifications.
3. All water mains shall have a minimum of 10 feet of horizontal separation from sewers and minimum of 18 inches of vertical separation where water main and sewer lines cross.

STREETS

1. All public street construction and construction within an existing or proposed public R.O.W. shall comply with the requirements of the City of Charlotte and be subject to their inspection and approval.
2. All disturbed areas between the curb and the road right of way shall be covered with 3" of top soil, seeded and mulched unless otherwise noted.
3. All Radii shall be 25' unless noted.

GENERAL

1. Any unstable soil (such as peat, muck, marl, soft blue clay, topsoil, etc.) which is encountered beneath proposed utilities, roadways, parking lots and structures, drives and buildings, shall be removed down to sound subsoil and backfilled with sand and gravel as needed to reached finished grade. Such fill shall be compacted in 6" layers to 95% of max. density. The decision on material for bedding and backfill shall be determined by the Engineer.
2. Information on depth, size, etc., of all other underground utilities shown herein is plan information only, obtained from the utility company involved. Prior to any final designing or construction, it is recommended that all utility companies, agencies, departments, etc., involved be contacted for verification of such locations.
3. The locations, size and elevation of sewers and related structures shown hereon, were obtained through field observation by Geodetic Designs, Inc.
4. For protection of underground utilities, the contractor shall dial 800-482-7171 a minimum of 72 hours prior to excavating in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the contractor of the responsibility of notifying utility owners who may not be a part of the "MISS DIG" alert system.
5. Footing drains and eave troughs shall be connected to the storm sewer
6. All existing roads, driveways and yards disturbed during construction shall be restored by the contractor to its original condition.
7. All sewer pipe shall be bedded with Cl. III granular material, Class III material shall be used in backfilling all sewer trenches to 1' above the sewer pipe.
8. All compaction of trenches within the roadways and parking areas shall be to 95% of max density.
9. Contractor shall be responsible for obtaining all permits required for construction.
10. Contractor shall be responsible for maintaining As-Built drawings of all lot lead locations and drawings shall be available to the Engineer upon request.

EX. SEWER INVENTORIES

STORM MANHOLE #100
RIM ELEV. = 903.34
12" N INV. = 898.90
12" S INV. = 898.90
12" NE INV. = 898.90
12" NW INV. = 898.90
8" E INV. = 898.90

CATCH BASIN #101
RIM ELEV. = 902.95
12" SW INV. = 898.50

CATCH BASIN #102
RIM ELEV. = 902.20
ADJUST RIM TO 902.85
8" W INV. = 899.10
8" E INV. = 899.10
PROP. 8" N 899.10

CATCH BASIN #103
RIM ELEV. = 902.16
8" W INV. = 899.90
8" E INV. = 899.90

CATCH BASIN #104
RIM ELEV. = 902.08
8" W INV. = 900.40

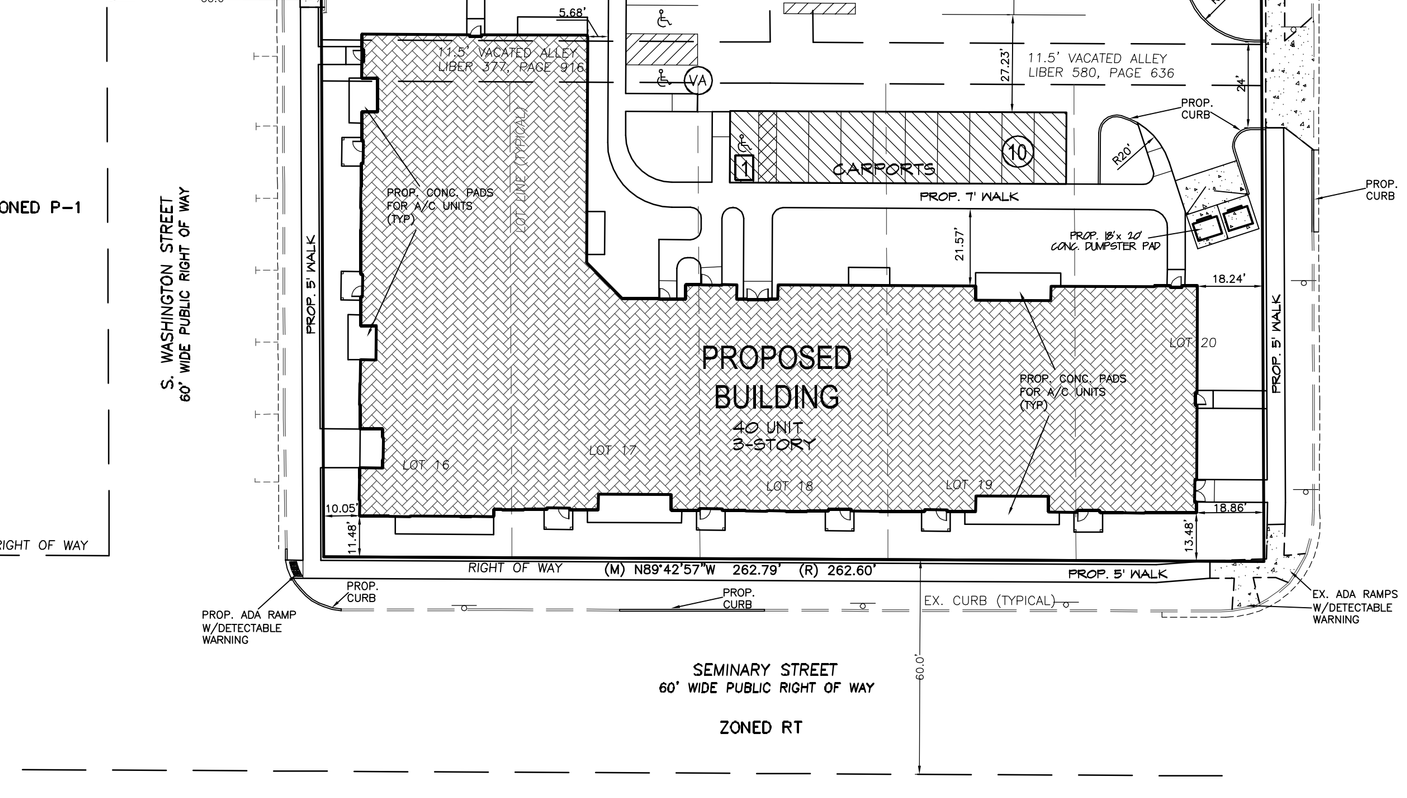
NOTE: KEBS Inc. SHALL NOT BE RESPONSIBLE FOR GEODETIC DESIGNS, INC. SURVEY PLAN

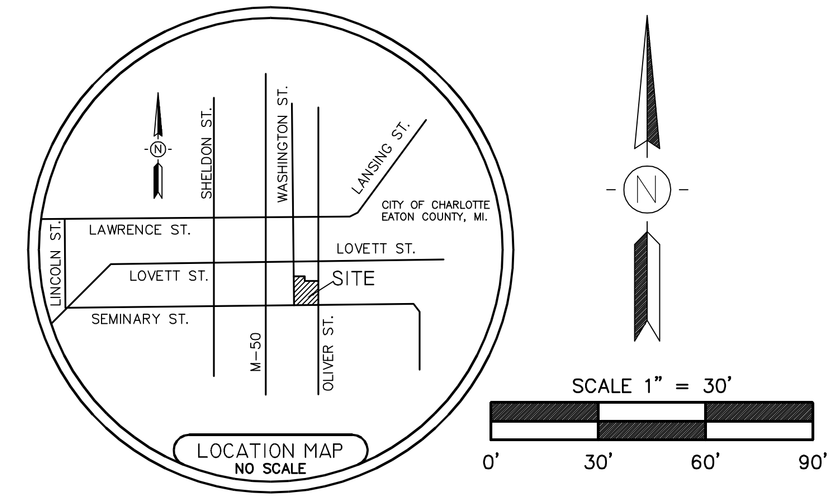
LEGEND

800	PROPOSED GRADES
F-F 800.00	PROPOSED FIRST FLOOR ELEV.
▲T/C 800.00	PROPOSED TOP OF CURB ELEV.
▲T/G 800.00	PROPOSED TOP OF GROUND ELEV.
▲T/P 800.00	PROPOSED TOP OF PAV'T ELEV.
▲T/W 800.00	PROPOSED TOP OF WALK ELEV.
(S)	DENOTES S.E.S.C. KEYING SYSTEM

EX. LEGEND

- = SET 5/8" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = CONCRETE
- 860 = EXISTING SPOT ELEVATION
- 860 = EXISTING CONTOUR ELEVATION
- = SIGN
- = POST





LEGAL DESCRIPTION:
Lots 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, & 20 and vacated alleys adjacent to said Lots, Cummings Subdivision to the original plat, City of Charlotte, Michigan.

CLIENT:
TWG DEVELOPMENT
333 N. PENNSYLVANIA ST.
INDIANAPOLIS, IN. 46202
PH: (317) 407-3095
FAX: (517) 353-3488

ENGINEER/SURVEYOR:
KEBS, Inc.
2116 HASLETT RD.
HASLETT, MI. 48840
PH: (517) 339-1014
FAX: (517) 339-8047

SITE DATA
PROP. USE: SENIOR APARTMENTS
ZONED CBD (CENTRAL BUSINESS DISTRICT)

BUILDING SETBACKS
FRONT – 0 FEET
SIDES – 10 FEET
REAR – 0 FEET

BUILDING/UNIT DATA
1ST FLOOR – 18,425 S.F.
2ND FLOOR – 18,425 S.F.
3RD FLOOR – 18,425 S.F.
TOTAL BLDG – 55,275 S.F.

1 BEDROOM = 12 UNITS
2 BEDROOM = 28 UNITS
TOTAL = 40 UNITS

PARKING
REQUIRED:
1.5 SPACES PER UNIT x 40 UNITS = 60
TOTAL REQUIRED = 60 SPACES
TOTAL PROVIDED = 78 SPACES (INCL. 5 B.F.)

UTILITIES
WATER:
CITY PUBLIC WATER MAIN
SANITARY:
CITY PUBLIC SANITARY
STORM:
ON-SITE STORM TO CITY PUBLIC

LIGHTING
EXISTING PARKING LOT LIGHT POLE BASES TO BE RE-USED IN PLACE. ALL LIGHTING SHALL BE SHIELDED AND DIRECTED TOWARDS THE GROUND AWAY FROM PROPERTY LINES.

SIGNS
PROPOSED YARD SIGN CONSTRUCTED ON EXISTING SIGN BASE. NOT TO EXCEED 5' HEIGHT OR 32 S.F. PER SIDE. SIGN PERMIT W/ DETAILS TO BE SUBMITTED FOR APPROVAL SEPARATELY AT TIME OF CONSTRUCTION.

[1] DENOTES NUMBER OF B/F SPACES
(VA) DENOTES VAN ACCESS B/F SPACES
(0) DENOTES PROPOSED NUMBER OF 9' x 20' PARKING SPACES
⟨0⟩ DENOTES PROPOSED NUMBER OF 8' x 20' PARKING SPACES

TAX ID# 200-000-033-170-00 & -190-00
SITE ADDRESS: 225 S. WASHINGTON ST, CHARLOTTE, MI 48813
& 234 S. OLIVER ST, CHARLOTTE, MI 48813

SHEET INDEX

1. COVER SHEET
2. UTILITY PLAN
3. STORM & GRADING PLAN
4. SESC PLAN
5. LANDSCAPE PLAN
6. DEMOLITION PLAN
7. SESC/DETAIL SHEET

REVISIONS	KEBS, INC. KYES ENGINEERING BRYAN LAND SURVEYS		
1-5-18 SUBMITTAL	2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047 Marshall Office Ph. 269-781-9800		
	225 S. Washington St. COVER SHEET		
	SCALE: 1"= 30'	DESIGNER: AJP	APPROVED BY: AJP
	DATE: 10-9-17	PROJECT MGR. AJP	SHEET 1 OF 7
	AUTHORIZED BY: TWG DEVELOPMENT		JOB #: 92660

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