



MICHIGAN CITY SANITARY DISTRICT

ENGINEERING DEPARTMENT

ARBER HIMAJ

2021 YEARLY REPORT

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PRIVATE SANITARY SEWER LATERAL AND TAP PERMITS

In 2021, there were one hundred and twenty-three (123) Private Sanitary Lateral Tap Permits issued. This compares to fifty-two (52) issued in 2020. See Table 1, below, for the number of permits issued in each of the last nine (9) years.

Table 1
Number of Private Sanitary Lateral Tap Permits Issued 2013 to 2021

Year	No. of Private Sanitary Lateral Tap Permits issued
2021	123
2020	52
2019	27
2018	44
2017	45
2016	46
2015	43
2014	15
2013	34

These issued permits are saved into a network file. The work at each site was inspected prior to backfilling and photographs were taken and saved in the file for each facility. GPS locations were also obtained and recorded. It is also important to know that the District is requiring a two-way clean-out to be installed at the property line (whenever possible) to aid in the future inspection and cleaning of the private lateral. Additionally, all locations outside of the City of Michigan City were required to have a Sewer Use Agreement signed and recorded before the Private Sanitary Sewer Lateral Permit was issued.

SANITARY SEWER CONSTRUCTION PERMITS

There were four (4) Sanitary Sewer Construction Permits issued in 2021. These permits are issued in accordance with 327 IAC 3 and with the approval granted by IDEM on August 29, 2012, to issue such permits. These permits are also saved into a network file. Inspections of the work associated with the construction of these sanitary sewers is typically conducted by the design engineer with oversight provided by the Sanitary District. The inspection reports, as built drawings, and certifications of completion and acceptance are maintained with the project file. The as-built drawings are also uploaded into the District's sewer system atlas by the GIS Coordinator.

Table 2
Number of Sanitary Sewer Construction Permits issued 2013-2021

Year	No. of Sanitary Sewer Construction Permits
2021	4
2020	1

2019	1
2018	5
2017	8
2016	4
2015	3
2014	4
2013	7

RESTAURANT GREASE TRAP/INTERCEPTOR SIZING ASSESSMENT/INSPECTIONS

In 2021, there were sixteen (16) Grease Trap/Grease Interceptor Inspections conducted. The Food Establishments inspected in 2021 are identified in the list below:

1. 4421 Franklin Street, Michigan City, IN
2. 624 Wabash Street, Michigan City, IN
3. 3717 S. Franklin Street, Michigan City, IN
4. 3705 S. Wabash Street, Michigan City, IN
5. 2030 Tryon Rd, Michigan City, IN 46360
6. 911 Chicago Avenue in Michigan City, IN
7. 718 Franklin Street, Michigan City, IN
8. 3801 Franklin Street, Michigan City, IN
9. 624 Wabash Street, Michigan City, IN
10. 1407 Franklin Street, Michigan City, IN
11. 2030 Tryon Rd, Michigan City, IN
12. 1701 Franklin Street, Michigan City, IN
13. 402 US Highway 20, Michigan City, IN
14. 429 US-20, Michigan City, IN
15. 517 E. Barker Road, Michigan City, IN
16. 2323 Michigan Blvd., Michigan City, IN

ENGINEERING

In 2021, there were many engineering assignments and activities completed in the areas of building Site review, stormwater drainage evaluation, stormwater pollution prevention plans (SWPPP) review and approval, sewer system capacities analyses, sanitary and storm sewer designs reviewed and approved, flow meters and flow measurements reviewed, and WWTF improvements reviewed and evaluated. Additionally, the Development Site meetings held bi-monthly by the Planning Department provided a good opportunity for collaboration with the other City Departments.

I. Project Plans and Specifications

The review of the project plans and specifications was completed for the following Projects/Sites:

1. Shady Creek Winery Phase IV– Michigan City, IN
2. Beachwalk Clubhouse and Splash Pad – Michigan City, IN
3. Dunkin Donuts – 1701 Michigan Blvd – Michigan City, IN

STORMWATER DRAINAGE ISSUES

Stormwater Drainage issues were inspected at the following locations in an effort to find cost effective solutions. These sites were added to the District's Stormwater Water Advisory Groups listing of stormwater drainage problem areas/sites:

1. **404 Golfview Rd.:** Stormwater ponds at the NE and SE corners of the intersection of Golfview and Hillcrest. There is an apparent drywell at each corner but they are not functional. Soil on the site is clay-like. The resident is seeking a driveway culvert and swale to convey water to the creek to the south. Steve Stanford on August 24, 2021 ??????.
2. **Route 12 and Custer:** A resident reported that at the intersection of Custer Ave and Rte. 12 (also known as W 4th St.), “Every time there is a significant rainfall the entire intersection is covered with water for 48 hours” and provided photos from shortly after a rain event last week. The ponding begins in the southeast portion of the intersection and emanates outward from there. The curb at this location is practically non-existent. The nearest stormwater inlet is on the western end of the curb line radius for the southwest corner of the intersection. John Gorczyca visited the site after a modest rain event the week of May 3, 2021 and observed the water ponding in the southeast corner as well as the inlet being nearly dry, with a pipe in that inlet flowing northwest beneath Rte. 12, presumably into the 27” storm main that runs beneath the westbound lanes of Rte. 12. Potential solutions include installing an inlet on either side of Custer St. at or near the intersection with Rte. 12, connected to each other with 12” RCP pipe. This pipe would flow from the southeast corner to the southwest corner and then connect to the catch basin to the west of the intersection on Rt 12 so that the water may drain to the 27” main. No cost analysis has been conducted for this solution.
3. **260 Warnke Rd.:** This site was reported to Engineering through the General Manager and Michigan City Engineering. Ponding was photographed and was observed to occur on both the W & E sides of the road, with the deepest points of the puddles occurring in 260 Warnke's Driveway and in the drive immediately across the street. These points were determined by observing the puddles hours after a rain event had ended. Two hours after a rain event the puddle on the East side of the road was 4” deep at the deepest point and had rough dimensions of 45’ x 10’. Simultaneously a puddle still existed on the West side of the road, ~10 ft. from the road's edge into the driveway of 260 Warnke. Dimensions of this puddle were roughly: 2” Deep x 20’ Long x 5’ Wide. Locates were observed, Natural Gas was marked as the only utility potentially in conflict. This was photographed. General Manager proposed the installation of 2x 600 Gallon Drywells in the grass [considerations should be taken for placing the eastern drywell in the driveway itself as this puddle was more severe and its low point is clearly within the drive area]. An alternate solution would be to create two raingardens off the side of the street, one to the south of 260 Warnke's drive and one between the two drives across the street. Cost analysis included the following details: Material for a single 600-gallon drywell is approximately \$1,200; including the

cost of stone its approximately \$2,000. For both drywells and stone, the cost is approximately \$4,000. However, placing one or both drywells in the driveway areas raises the cost significantly. If done in house, this cost could be managed. However, if we do not have the manpower, this will easily double the cost of each drywell.

4. **307 Duneland Beach Dr.**: Light ponding was observed to occur along roadside edges at this site. This location is a new construction, and it appears some of the rutting was created by the equipment and vehicles used for the construction itself. This location was reported by a resident at the May 2021 Blue SWAG meeting. Potential solutions include installing a drywell like those found in the adjacent homes. Alternately, the shoulders could be filled with topsoil and seed to direct runoff and prevent minor puddling. It's expected that the alternate solution would cost approximately \$500 for topsoil and seed, as well as watering and maintenance.
5. **3311 Pottawattomie Trail (Duneland Beach Inn/Farina's Supper Club)**: This site was identified while the Engineering Dept. was observing other sites following a rain event. More than two hours after the rain had stopped, the entire roadway was covered in water at this location. Because there are businesses at this location and the puddle is blocking access to on-site dumpsters, solutions should be identified to address the issue. The puddle was measured to be about 6 to 8 inches deep, 80ft long, and about 60ft wide. Potential solutions include installing a large drywell or similar type of roadway infiltration system. No cost analysis has been conducted for this proposed solution.

STORMWATER POLLUTION PREVENTION PLANS

The District implements the Municipal Separate Stormwater System (MS4) Permit 327 IAC 15-13) for Michigan City. A portion of the requirements of the Permit is to review and approve Stormwater Pollution Prevention Plans (SWPPP) and Notice of Terminations (NOT) for "Rule 5" Construction Associated with Construction Activity (327 IAC 15-5). Additionally, assistance is provided to City of Michigan City Facilities with their SWPPP for the Good Housekeeping Requirements of the MS4 Program. The following was implemented at the sites below:

1. Michigan City Shoreline 138kV Substation Project located south of Woodlawn Avenue and west of Sheridan Avenue. The Project will involve the construction of a new transmission substation, grading for future microwave tower foundation, the removal of an existing 10-inch natural gas main, and the relocation of an existing 12-inch natural gas main within NIPSCO ROW.
2. Reviewed the plans for the Mid-City Supply located at 1501 E 2nd Street. The project consists of remodeling the current facility and adding some parking spaces.
3. Michigan City Storage Development to be located at 7008 West Highway 20 in Michigan City.
4. The Shady Creek Winery Expansion Phase III to be located at 2030 Tryon Road. The project will consist of an addition to the existing building.
5. Old St. Anthony Hospital located at 301 Homer Street.

PETITIONS AND NEW BUSINESS REGISTRATIONS

Reviewed numerous New Business Registrations for compliance assistance, including Stormwater, Pretreatment, and Grease Trap Requirements. Reviewed numerous Petitions for the Board of Zoning Appeals and the City to determine if approval of the Petitions would adversely affect the District's access to exiting sanitary or storm sewer infrastructure or if approval would affect future infrastructure installation

PLANNING DEPARTMENT ASSISTANCE AND DEVELOPMENT REVIEW MEETINGS

Assisted the Planning Department and/or reviewed plans and specifications for the following one hundred and six (106) Projects:

- 1701 Franklin Street
- 4337 Ohio Street
- 114 Louisiana Street
- 5780 Franklin Street
- 22 Bristol Road
- 204 Louisiana Street
- Menards Improvement Project
- 3200 Cleveland Avenue
- 301 Homer Street
- 102 Whisper Dunes
- 10260 and 10290 Grand Beach Road
- 603 Royal Road
- 109 Hamilton Place
- 915 Woodlawn
- 627 Walker Street
- 105 Whisper Dunes
- 510 Springland Ave
- Shady Creek Winery
- 22 Bristol Street
- 710 E. Us Highway 20
- 10270 Grand Beach Road– Michigan City, IN.
- 10280 Grand Beach road– Michigan City, IN.
- 10360 Grand Beach Road– Michigan City, IN.
- 109 Dole– Michigan City, IN.
- 5222 Shoreline Drive– Michigan City, IN.
- 2003 Greenwood– Michigan City, IN.
- 2114 Ohio– Michigan City, IN.
- 706 Colfax– Michigan City, IN.
- 315 S Dickson– Michigan City, IN.
- 216 Belmont – Michigan City, IN.

- 815 E Homer– Michigan City, IN.
- 205 Gardena– Michigan City, IN.
- 620 Pearl Street– Michigan City, IN.
- 4411 E Hwy 12– Michigan City, IN.
- 329 Brinkman Ave– Michigan City, IN.
- 205 E 11th – Michigan City, IN.
- 302 Bolka Ave – Michigan City, IN.
- 526 Cole Court – Michigan City, IN.
- 515 Greenwood – Michigan City, IN.
- 210 E. 11th Street – Michigan City, IN.
- 108 Whisper Dunes – Michigan City, IN.
- 207 Couden – Michigan City, IN.
- 7174 W Hwy 20 – Michigan City, IN.
- 109 Felton – Michigan City, IN.
- 3612 Hampden Road – Michigan City, IN.
- 821 E Homer – Michigan City, IN.
- 1720 W. 10th Street – Michigan City, IN.
- 2002 Buffalo – Michigan City, IN.
- 104 Birch Tree Lane – Michigan City, IN
- 116 Bittersweet – Michigan City, IN
- 213 Washington Blvd – Michigan City, IN
- 318 S Park – Michigan City, IN
- 116 Bittersweet – Michigan City, IN
- 104 Whisper Dunes – Michigan City, IN
- 607 Emily – Michigan City, IN
- Michigan City KIA – Michigan City, IN.
- 6101 Cleveland Ave. – Michigan City, IN.
- 2002 Buffalo Street – Michigan City, IN.
- 318 S. Park Street – Michigan City, IN.
- 913 E. 8th Street – Michigan City, IN.
- 3146 Cleveland Ave. – Michigan City, IN.
- 4120 Franklin Ave. – Michigan City, IN.
- 102 Oakdale Way – Michigan City, IN.
- 1408 Manhattan Street – Michigan City, IN.
- 500 Lake Ave – Michigan City, IN.
- 502 Lake Ave – Michigan City, IN.
- 3500 Wild Rose – Michigan City, IN.
- 1222 W. Garfield Street – Michigan City, IN.
- 940 Liberty Trail – Michigan City, IN
- 302 Bies Street – Michigan City, IN
- 1001 Coolspring Ave – Michigan City, IN
- 512 S. and 514 S. Lake Ave.– Michigan City, IN
- New Establishment located at – 5888 US-35, La Porte, IN 46350
- 115 Blane Street – Michigan City, IN.
- 3141 E. Michigan Blvd– Michigan City, IN.

- 1714 Tennessee Street – Michigan City, IN.
- 100 E. Highway 20 – Michigan City, IN.
- Beachwalk Clubhouse – Michigan City, IN.
- 7676 Meer Road – Michigan City, IN.
- 114 Green Street– Michigan City, IN.
- 508 and 510 Lake Ave. – Michigan City, IN.
- 108 California – Michigan City, IN.
- 812 Essex – Michigan City, IN.
- 100 E. US 20 – Michigan, City, IN
- 17 and 21 Blackberry – Michigan City, IN
- 1701E. Michigan Blvd – Michigan City, IN.
- 1126 Carrol Street – Michigan City, IN.
- 401 Grace– Michigan City, IN.
- 2102 Wabash Street – Michigan City, IN.
- 712 E. 10th Street – Michigan City, IN.
- 6101 Cleveland Ave – Michigan City, IN.
- 305 Golf Lane – Michigan, City, IN
- 1800 Highway 12– Michigan City, IN
- 1701E. Michigan Blvd – Michigan City, IN.
- 1126 Carroll Street – Michigan City, IN.
- 1809 Lakeshore Drive – Michigan City, IN.
- 90 Arndt Street – Michigan City, IN.
- 305 Golf Lane – Michigan, City, IN
- 603 Royal Road– Michigan City, IN
- 301 Coolspring – Michigan City, IN.
- 107 Whisper Dunes – Michigan City, IN.
- 218 Elmwood Drive – Michigan City, IN.
- 330 Beachwalk Lane– Michigan City, IN.
- 209 Warren Street – Michigan City, IN.
- 626 Washington Park Blvd. – Michigan, City, IN
- 220 Arndt St. – Michigan City, IN

OTHER ACTIVITIES

The following other activities were performed:

1. Assisted with the submittal of the Monthly Reports of Operations and Discharge Monitoring Reports via IDEM’s NETDMR System
2. Reviewed MS4 Annual Meeting and IDEM Updates to the MS4 Permit Program

INSPECTIONS OF CONSTRUCTION SITES FOR COMPLIANCE WITH THE STORMWATER ASSOCIATED WITH CONSTRUCTION

In 2021, inspections were conducted at eight (8) sites to check for compliance with stormwater runoff regulations. Six (6) of the sites had been issued Rule 5 Stormwater Associated with Construction Permits because they were one acre or more in size, and two (2) other sites were inspected, that were less than an acre, to make sure that they were not causing or contributing to water quality violations. Overall, compliance at these facilities was satisfactory except for some minor violations. The contractors were able to correct the minor violations in a timely manner.

POLLUTION PREVENTION AND GOOD HOUSEKEEPING INSPECTIONS

327 IAC 15-13-17 - Storm Water Quality Management Plan Municipal Operations Pollution Prevention and Good Housekeeping, requires that all City Departments implement Stormwater Pollution Prevention and Good Housekeeping measures to minimize stormwater Pollution. In 2021 there were three (3) Stormwater Pollution Prevention and Good Housekeeping Inspections conducted at Central Maintenance, Central Services, and Park Department Maintenance Facility. Overall, the findings were satisfactory.

EDUCATION AND TRAINING

In 2021 attended the following education and training opportunities:

- Attended Indiana Municipal Separate Storm Sewer System (MS4) annual conference.
- Attended the Indiana Water Environment Association (IWEA) Conference.