

Amended and Restated Master Sewer Agreement (2017)

An Agreement Among the City of Traverse City, Grand
Traverse County acting through its Board of Public Works,
the Townships of Acme and Peninsula and the Charter
Townships of East Bay, Elmwood and Garfield

AMENDED AND RESTATED **MASTER SEWER AGREEMENT (2017)**

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AMENDED AND RESTATED MASTER SEWER AGREEMENT (2017)

1. Parties

The parties to this Master Sewer Agreement (2017) are the Townships of Acme and Peninsula, the Charter Townships of Garfield and East Bay in Grand Traverse County, and the Charter Township of Elmwood in Leelanau County (all of which are collectively called the Townships") the City of Traverse City (the City), and Grand Traverse County (the County) acting through its Board of Public Works (the B.P.W.).

2. Effective Date

This Agreement shall come into being and be effective on January 1, 2017.

3. Term

The term of this Agreement shall extend from the effective date until June 30, 2041. The parties agree to meet every five years to review the operation of the Agreement and to consider whether amendments are appropriate in light of experience and then-prevailing conditions.

4. Subject Matter

This Agreement defines the allocation of costs of, and establishes certain rights and responsibilities with respect to, the Wastewater Treatment Plant and appurtenances located in the City of Traverse City, herein called the Treatment Plant. This Agreement also defines certain rights and responsibilities of the parties with respect to multi-user facilities such as sewer lines and pumping stations used by more than one party to handle or transport sewage to the Treatment Plant. The County is the owner of the Treatment Plant. Currently, the City is the owner of all the multi-user facilities. The City is the exclusive manager of the Treatment Plant for the benefit of itself and the Townships. The City shall continue to hold and administer necessary permits for operation of the Treatment Plant.

Ownership of the Treatment Plant will revert to the City when all of the currently existing bonds issued by the County to finance the Treatment Plant are retired.

5. Other Agreements

This Agreement amends and restates in its entirety a certain Master Sewer Agreement covering the same subject matter among the same parties effective July 1, 1987 and the Master Sewer Agreement (2001).

6. Capacity Rights

A. Ownership

Each of the following parties owns the proportion of the treatment capacity of the Treatment Plant set forth below:

Party	Capacity Right	Flow ¹ in Gallons Per Day	B.O.D. ² in Lbs Per Day
Townships	45.0 %	3.825	9,091
Traverse City	55.0%	4.675	11,112
Total	100%	8.500	20,203

Note: Actual Loadings (lbs/day) and Flow Capacity (MGD) are subject to change with a change in permit requirements or plant conditions. Owned percentage will not be effected

B. Total Capacity Defined

The Treatment Plant for purposes of this Agreement is defined to have the total capacity to treat an average of 8.5 million gallons per day (MGD) of sewage flow, and 20,203 pounds per day (lbs/day) of BOD (5 day biochemical oxygen demand). The capacity rights and limitations assigned to the Townships and the City under this Agreement apply to flow and BOD, as well as to any other condition, factor, or material which serves to limit the capacity of the Treatment Plant. The stated capacity for sewage flow depends upon, among other things, the strength of the sewage, measured as BOD loading in lbs/day. As BOD loadings increase, the hydraulic capacity is reduced. Exhibit C. Part 3 attached hereto and made a part hereof sets out the relationship between sewer flow, and the BOD loadings of the waste water.

Where capacity is leased by the Townships, the quantity of leased capacity shall be added to the owned capacity of the Townships and deducted from the owned capacity of the City to determine each party's total capacity.

C. Limitation

No party shall exceed the owned and leased capacity allocated to that party pursuant to this Agreement.

¹ The current capacity of the Treatment Plant is 8.5 million gallons per day and 20,203 lbs per day of B.O.D. In the event the total capacity or total B.O.D changes the parties shall retain their proportionate share based upon capacity ownership.

Measurement of capacity use shall be based upon average daily flows and average daily B.O.D loadings during each fiscal year beginning July 1ST. A detailed description of the method of computation of capacity use is found in Exhibit C attached hereto and made a part hereof.

The City or its designee shall provide regular reports on the parties' flows and BOD loadings on a monthly basis or as otherwise agreed to by the parties.

Capacity shall not be deemed exceeded if:

(1) Special Contracts

The excess is attributable to special contracts as provided in paragraph 8 of this Agreement; or

(2) Acts of God

The excess results from an act of God including storms which exceed design parameters, mechanical or structural failure, or an extraordinary occurrence, lasting not more than seven (7) days; or

(3) Events

The excess is attributable to an event attracting large numbers of people which temporarily results in overloading systems which are normally able to meet the demands placed upon them, which event lasts not more than seven (7) days in any year.

(4) Dispute

In the event of a dispute whether a condition or occurrence is excepted within this sub-section D. or is a condition of over-capacity requiring the procedures of sub-section E hereof, the determination of the Board of Public Works made in good faith after notice and hearing shall be final.

D. Enforcement

Upon a determination of Traverse City that a party has exceeded its capacity as provided in this Agreement, the parties shall proceed to enforce the limitations as follows:

(1) Notice

Upon receipt of written notice from the City that a party has exceeded its capacity, the offending party, shall immediately stop the issuance of permits for new or

expanded connections³ to the sanitary sewer system if the sanitary waste from the new or expanded connection will flow to the Treatment Plant. This ban will remain in place until the offending party has taken the necessary steps to bring its flows within its capacity. The Board of Public Works with the concurrence of the City of Traverse City shall have the right to grant an exception to the ban in cases of undue hardship where it determines that the exception will not imperil the operation of the Treatment Plant. The exception may contain such conditions, including limits on duration, as the B.P.W. with concurrence of the City deems proper.

(2) Plan

Within sixty (60) days after receipt of notice from the City Manager that the party has exceeded its capacity, unless a longer time is granted by the Board of Public Works for good cause, the offending party shall submit a written plan to bring its capacity use at the Treatment Plant within the limits of this Agreement. The plan shall address (1) replacement or repair of defective or inadequate structures, (2) restriction of its flows to the plant; and (3) acquisition of additional capacity through purchase, lease or construction. The plan shall include the steps to be taken, significant milestones for their accomplishment and the method of financing the steps where applicable. The Board of Public Works with the concurrence of the City of Traverse City may grant exceptions to the ban on new connections if it determines that the plan has been approved, that the party is proceeding in good faith to implement the plan, and that the granting of an exception will not imperil the operation of the Treatment Plant.

a. Action

The Board of Public Works with the concurrence of the City of Traverse City shall approve or deny the plan with such amendments as the offending party and the B.P.W. shall agree upon at the next regularly scheduled board meeting following the receipt of the plan or amended plan.

b. Approval

If the plan is approved, the offending party shall proceed to follow the plan in good faith. If the party fails to follow its approved plan, then the

³ A "new connection" is the physical joining, which did not exist before, of a building sewer to a public sewer main such that sanitary sewage is conducted into the public system. An "expanded connection" is a physical joining which, although a physical joining may have existed before, has increased capacity to conduct sanitary sewage into the public system, or, a connection previously existing which carries an additional quantity of sanitary sewage into the public sewer system by reason of a change in use or increase in use if the change or increase in use requires the issuance of a permit under controlling sewer ordinance or regulation.

monetary provisions described below shall go into effect as of the first day of the calendar month following the date of determination.

c. Denial/Failure of Plan

If the plan is denied or fails, then the monetary provisions described below shall go into effect as of the first day of the calendar month following the date of determination. The ban on new or expanded connections shall be instituted or continued, whichever applies, as of the date of denial/determination of failure.

(i) Additional Costs

When an over-capacity party (1) fails to submit a plan to correct its over-capacity condition, (2) fails to secure approval for its plan, (3) fails to follow an approved plan, or (4) approved plan fails, it shall be subject to the increased costs provided in this sub-section. Beginning with the first calendar month in which the party becomes subject to extra charges, the offending party shall pay additional treatment charges equal to fifteen percent (15%) of its treatment costs for the overage in any month in which its capacity use exceeds the capacity available to it. This additional charge shall be billed and paid as additional treatment charges to offset the additional costs incurred by all parties. The additional treatment charges shall cease when the party remedies the condition which instituted the extra charges. The parties have agreed that they will sustain certain increased costs in cases of over-capacity which are not susceptible of exact measurement but have determined that the 15% factor identified above is a reasonable estimate of such increased costs, and that such factor is intended as liquidated damages and not as a penalty.

(3) Orders

Traverse City as the operator of the Treatment Plant is hereby authorized to enter such orders regulating the use of the Treatment Plant as shall be reasonably necessary to comply with regulations, directives, or orders of the Michigan Department of Environmental Quality or the terms of the permits by which the Treatment Plant operates.

F. Transferability

Capacity rights shall be freely transferable only among the parties as provided in this Agreement.

(1) Purchase and Sale

Any party may sell capacity owned by the selling party to another party purchaser upon such price and conditions as the seller and purchaser may elect.

(2) Lease

The Townships shall have the option to lease an additional 4% capacity from the City in increments of 2% without additional cost upon exercise at any time prior to the expiration of this Agreement. However, in the event the City utilizes 80% of its capacity any unexercised lease option shall automatically terminate. In the event the Townships have exercised their option to lease capacity under this section and the City reaches 80% of its capacity, the lease(s) shall not terminate and shall remain in force until the term of the lease expires.

(3) No Forced Sale

Notwithstanding the provisions of an earlier Agreement, no party is required to sell capacity to another without its consent.

G. Future Capacity Needs

(1) In the event the Townships collectively or the City reaches 80% of their capacity, they shall initiate a planning process in anticipation of future capacity needs.

(2) In the event the Townships collectively or the City reaches 90% of their capacity, they shall commence implementation of an alternative program designed to provide needed capacity.

(3) In the event total usage of the Treatment Plant reaches 75% of plant capacity, all parties shall initiate a participate in a planning process in anticipation of future capacity needs.

7. Special Contracts

Subject to the provisions of applicable laws, regulations and ordinances, the parties may, from time to time, enter into contracts with industrial or commercial users for the transportation and treatment of extra strength waste. All such contracts shall require the approval of the City of Traverse City as manager of the Treatment Plant, the local unit of government in which the user is located and the Board of Public Works. All sewage received shall be attributed to the capacity of the Treatment Plant as a whole and not to the capacity rights of one or more contracting parties. All revenues from such contracts (except reimbursement for reasonable administrative costs attributable to the special contract and normal strength flow charges) shall be treated as general revenue of the Treatment Plant and used to offset operating costs before allocation of user costs. Such extra strength contracts

shall specify the means and frequency of sampling the waste, the method of computation of charges, the party responsible for conducting the sampling, the mechanism for billing and collection of contract charges, the party responsible for enforcement, and the procedure for imposing unpaid charges as tax liens. The Townships agree to impose tax liens to collect charges if necessary where permitted under law and Township ordinance. Since such extra strength charges are treated as general revenue of the system, none of the parties to this Agreement shall have liability to the others in case of non-collection of such charges. Collection costs, including actual attorney fees, are operating costs which may be charged to the Treatment Plant by the parties incurring them.

8. Past Costs

Upon execution of this Agreement all parties shall pay the disputed amounts identified in Exhibit D.

9. Costs

A. Bonds

With respect to bond payments incurred the parties agree to pay their shares of principal and interest shall be borne in accordance with the owned or leased capacity (combined) of the party regardless of flow. Notwithstanding the terms of this Agreement, each party hereto understands and agrees that the terms of this contract do not supersede the terms of the bond contracts and, in the event of a default by any party or any action by the bondholders to enforce the terms of that contract, all parties retain their original liability thereon.

B. All Other Costs

All other costs with the exception of bond costs described in 10(A) above shall be allocated to the parties on the basis of flow. The parties agree that each party should pay an equal amount to have a gallon of sewage treated at the Treatment Plant. The costs of treatment include capital costs, operating costs such as material, labor, and supplies (whether characterized in previous contracts as "variable" or "fixed") but exclude depreciation. Insurance premiums, retainage for self-insured risks and losses not covered by insurance (or exceeding coverage limits) shall be deemed part of annual plant operating costs.

10. Treatment Costs: Billing

For each month, more or less, the City shall calculate the actual sewage flow into the Treatment Plant by each party and shall, within 20 days of the end of the following month, bill each party for its sewer flows for the preceding month. All costs for the preceding month shall be included in that bill provided that the City may include a budgeted portion of irregular expenses (insurance premiums for example) not incurred within the current month so long as

such expenses were included in the budget, or amended budget, presented to the Townships. Within sixty (60) days of the close of the budget year and completion of The City's audit, the City shall make an adjustment for actual costs of operation and shall bill the Townships therefor, or make refund, as the case may be. All billings shall be due and shall be paid within thirty (30) days of the date of billing.

11. Biochemical Oxygen Demand

The City shall monitor B.O.D. at the point of entry of the Treatment Plant. In addition, the City shall, following consultation with B.P.W. and the Townships, install, maintain, and operate equipment for the sampling and testing of sewer system inflows to monitor the concentration of B.O.D. in the waste of each party. The City shall conduct such sampling and testing procedures as it deems appropriate from time to time and shall periodically report the results of its sampling to the B.P.W., not less often than monthly. Each party shall have the right, upon request, to observe the monitoring process and to have samples tested independently of the tests conducted by the City at its own expense.

12. Minimum Flows

The parties contemplate that the Townships will construct additional sanitary sewage treatment facilities for treatment of the Townships' waste. The City shall have no liability for such construction and no capacity in the new plants, unless otherwise agreed. Recognizing that the Townships will need to divert flow from the present Treatment Plant in order to provide flow for the startup of the new facilities, and further recognizing that capital cost sharing and efficient operation of the existing Treatment Plant requires continuing flow from the townships, the Townships collectively will maintain average flows of 1,000,000 gallons per day to the existing Treatment Plant notwithstanding diversion of flow to new facilities: The parties agree that if Township plans for new construction require the diversion of greater amounts of flow in order to secure the start-up of a new facility, or, if the 1,000,000 gallons per day guaranteed by the Townships collectively is not sufficient for economical operation of the Treatment Plant, that they will negotiate in good faith to arrive at a plan to secure the efficient operation of all plants in the interests of all users of the sanitary sewer system.

13. Budget

Prior to the commencement of its fiscal year, the City of Traverse City shall submit to the B.P.W. a proposed budget for the operation of the Treatment Plant for the coming year. The B.P.W. shall promptly communicate the proposed budget to the Townships. For a period of thirty (30) days following submission of the proposed budget to the B.P.W. and before adoption of the budget by the City, all parties shall have the right to submit comments thereon to the City and to receive the City's responses thereto. This budget shall incorporate all direct costs of Treatment Plant operation including debt service as reported by the Grand Traverse County Treasurer but excluding items attributable to the City's own operation (such as billing individual customers, maintenance of the sewage collection system and the like) and excluding all

depreciation. Said budget shall include the estimated cost of city employees, (or contractors hired by the City) equipment and material, whose costs are allocated among more than one City department. In addition to these direct and allocated costs, the City shall be entitled to include in the budget an amount equal to five (5%) percent of said Treatment Plant budget to compensate the City for general administration costs not directly attributable to the Treatment Plant. After determination by the City and the B.P.W. that there is a future need to decommission the Treatment Plant, the budget may include decommissioning costs as an operating expense. This budget shall project the predicted per 1,000 gallon cost of sewage treatment for the coming year as well as the cost to each Township based upon the prior year's flows and other factors deemed pertinent by the City.

Where costs are allocated to the Treatment Plant budget for employees, contractors, or equipment which serves more than one City department, the City agrees to make substantial good faith efforts to maintain sufficient records to properly document such costs.

14. Multi-user Facilities

A. Operation and Maintenance.

Facilities such as sewer lines and pumping stations used by the City and one or more (but less than all) Townships are "multi-user facilities". It is understood and agreed that the cost of operation and maintenance of each such multi-user facility shall be borne by the parties making use of the facility in proportion to use. The City and Townships shall maintain such records as may be required to determine such use and the direct costs, not including depreciation, of the operation and maintenance of the multi-user facility. Where exact allocation of costs is not practical, the concerned parties shall estimate in good faith the proportion of use by each party and shall revise such estimates from time to time as conditions warrant. Such costs, separately labeled and identified, shall be billed to the non-owner user not less often than quarterly. Unless the parties otherwise agree, the proportion of use shall be determined on an annual basis to correspond with the city's fiscal year. Where the multi-user facility is owned by a party other than the City, the Township acting through the Board of Public Works shall have the same rights and obligations.

Attached hereto as Exhibit "A" is a list of all existing multi-user facilities together with the current proportion of use made by each party expressed as a percentage. The parties shall update Exhibit A no later than 12/31/2017. Exhibit A shall be updated not less than every three (3) years thereafter.

B. Use

Nothing in the Agreement shall give any party the right to use as a multi-user facility, the property or equipment of another party. Such rights are left to future agreements of the parties.

15. Communications

As the exclusive manager of the Treatment Plant, the City has the obligation to fully inform and advise the Townships as to the operation thereof, and the Townships shall have the right and the duty to comment upon all matters connected with the administration of the Treatment Plant. The parties understand and agree that full and timely communication on matters of common interest will contribute substantially to administration of this Agreement. The City agrees to maintain regular liaison with the B.P.W. to keep all parties informed of Treatment Plant operations.

The Treatment Plant and the books and records thereof shall be open to inspection at reasonable times and places by all of the parties to this Agreement. The City will provide the Townships and the B.P.W. with whatever information they may request for purposes of any rate study they may wish to do.

16. Future Costs Financed Through Debt

If future costs require financing through debt, the parties shall bear the annual debt service thereon in proportion to their combined owned and leased capacity. This Agreement does not extend to expansion of the Treatment Plant to a flow capacity in excess of 8.5 MGD, (20,203 lbs/day B.O.D.) or multi-user facilities beyond their defined capacity, that being left to the future agreement of the parties.

17. Plant Operation

The City of Traverse City agrees to maintain and operate the Treatment Plant in accordance with applicable laws and regulations and in accordance with permits in effect from time to time issued by regulatory authorities.

18. Ordinances

The parties agree that administration of the Township-City wastewater collection and treatment system will be enhanced by uniformity in ordinance provisions as to the use of the sewer system, including particular limitations established to conform to federal and state treatment and pre-treatment standards. All parties agree to make substantial good faith efforts to maintain such uniformity.

19. Facilities

The parties agree to establish, maintain and operate such meters, control devices and sampling facilities as shall be necessary to accomplish the purposes of this Agreement. The Parties shall calibrate the master flow meters annually. The B.P.W. and the City shall jointly read the master flow meters under procedures to be established by them, from time to time. The costs associated with the master flow meters shall be shared between the B.P.W. and the

City as provided in Paragraph 10 above. The City shall pay its share of costs related to the installation, maintenance, replacement or repair of the master meters within thirty (30) days of receiving a written invoice from the B.P.W.

20. Post Expiration

It is understood and agreed that the rights of the parties to utilize their respective capacity rights in the Treatment Plant and multi-user facilities shall extend for the physical life of the Plant and multi-user facilities and shall survive termination of this Agreement. The parties agree to negotiate an equitable Agreement for treatment of the parties' sewage after termination of this Agreement recognizing that the parties have made proportionate capital and operating contributions under this Agreement and prior Agreements.

21. Non-discrimination

The parties agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment because of their actual or perceived race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability, family status, sexual orientation, or gender identity. Breach of this covenant may be regarded as a material breach of this Agreement.

22. Workers Compensation

The parties agree to maintain at all times while work is being performed under this Agreement suitable worker's compensation insurance pursuant to Michigan law.

23. Interpretation

This Agreement shall be governed by the laws of the State of Michigan, both as to interpretation and performance. This Agreement was drafted at the joint direction of the parties.

24. Venue

Any and all suits for any and every breach of this Agreement may be instituted and maintained in any court of competent jurisdiction in the county of Grand Traverse, State of Michigan.

25. Employees

The personnel employed by any party shall not be deemed to be employees of another party and shall not be entitled to any fringe benefits another party affords its employees. Personnel employed by a party shall not hold themselves out as employees of another party.

26. Mediation

If any party to this Agreement has a dispute with another party regarding the meaning operation or enforcement of any of the provisions of this Agreement the disputing parties agree to meet and confer to negotiate a resolution of the dispute. They further agree that if they are unable to resolve the dispute themselves, they will utilize the services of a mutually acceptable neutral mediator to bring them together in at least one mediation session, before formally instituting another dispute resolution mechanism, including litigation.

27. Authority to Execute

The parties agree that the signatories appearing below have the authority and are duly authorized to execute this Agreement on behalf of the respective parties to the Agreement.

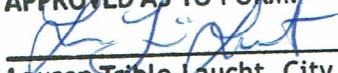
28. Execution in Counterparts

This Agreement may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument.

This Agreement was adopted and approved by the governing bodies of the respective parties on the dates set forth below:

Parties:

APPROVED AS TO FORM:


Lauren Trible-Laucht, City Attorney

APPROVED AS TO SUBSTANCE:


Martin A. Colburn, City Manager

By: 
James C. Carruthers, Mayor
City of Traverse City

By: 
Benjamin C. Marentette, City Clerk

Grand Traverse County Board of
Public Works

By: 
B. Zollinger
Chairman

By: 
Beth Luer
Secretary

Township of Acme

By: 
John B. Zollinger
Supervisor

By: 
Courtney D.
Clerk

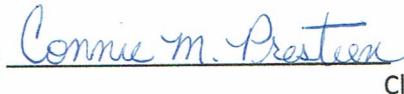
Charter Township of East Bay

By: 
Beth Green
Supervisor

By: 
Amy Welske
Clerk

Charter Township of Elmwood

By: 
Joseph Sca
Supervisor

By: 
Connie M. Preston
Clerk

Charter Township of Garfield

By: 
C. S. Korn
Supervisor

By: 
Lam M. Man
Clerk

Township of Peninsula

By: 
Alvin J. Kallfeld
Supervisor

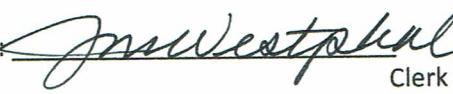
By: 
Jim Westphal
Clerk

Table One
Outstanding Bond Issues

Debt Service Report



Local Unit Name: Grand Traverse County
Local Unit Code: 28-0000
Current Fiscal Year End Date: 12/31/2015

Debt Name: Wastewater Treatment Plant Upgrade
Issuance Date: 4/1/2011
Issuance Amount: \$21,470,000
Debt Instrument (or Type): Refunding Bonds
Repayment Source(s): Local City/Townships

Years Ending	Principal	Interest	Total
2015	\$ 1,700,000	\$ 592,400	\$ 2,292,400
2016	\$ 1,770,000	\$ 523,000	\$ 2,293,000
2017	\$ 1,830,000	\$ 451,000	\$ 2,281,000
2018	\$ 1,910,000	\$ 376,200	\$ 2,286,200
2019	\$ 2,000,000	\$ 298,000	\$ 2,298,000
2020	\$ 2,075,000	\$ 216,500	\$ 2,291,500
2021	\$ 2,150,000	\$ 132,000	\$ 2,282,000
2022	\$ 2,225,000	\$ 44,500	\$ 2,269,500
Totals	\$ 15,660,000	\$ 2,633,600	\$ 18,293,600

Commentary: Principal & Interest billed to City & Local Townships based on contract dated 3/1/2002.

EXHIBIT A

MULTI-USER FACILITIES

Townships have reserved the following capacities (including peaking periods) in sewer lines and other facilities used by the Townships and owned by the City as follows:

Elmwood Township:	792,000 gallons per day;
Garfield Township:	6,800 gallons per day via Randolph Street Sewer; 157,000 gallons per day via 6 th Street sewer; 376,000 gallons per day via the 14 th Street and Division sewer.
East Bay Township:	None.
Acme Township:	None.

The City agrees to make available such capacity in its lines and facilities to the extent the usable capacity of existing lines permits. The parties estimate that the usable line capacity of the sewer lines being used by the Townships is 70% of the theoretical capacity of the sewer lines. When that flow is reached or when other problems develop with a given sewer line, the parties concerned agree to open good-faith discussion as to the method of increasing capacity or other methods of remedying the problem, including but not limited to repair, reconstruction, replacement, expansion or addition to such lines.

The City agrees that the Townships may make use of capacity in its sewer lines which exceeds that reserved by the Townships (if there is additional capacity not used by the City) without further payment other than by proportion of flow for the operation and maintenance costs as provided in this agreement.

For purposes of determining the initial proportion of use of the multi-user facilities, the parties agree to the following proportions of use, which shall be effective until new determinations are made in accordance with this agreement:

Garfield Township

Location	<u>Proportion of Use by Township</u>
(1) Flow into City at 14 th Street & Division Street	
US 31 from City boundary to 14 th Street & Division Street	13.5%

Location	Proportion of Use by Township
14 th & Division to 14 th & Oak Streets (12" Line)	13.5%
From 14 th & Oak Street manhole At alley between 5 th and 6 th Street On Oak (18" Line)	13.5%
From manhole above to manhole At alley between 5 th and Front Street (24" Line)	6.0%
(2) Flow into City at 6 th Street At City Limits	
From west end of line to Manhole at easement west of Monroe (8" Line)	11.6%
From manhole above to manhole At 7 th & Elmwood (8" Line)	27.0%
From manhole above to Cedar & 6 th Street (12" Line)	7.8%
From point above to Division and alley north of Front Street (15" Line)	7.4%
From point above to Oak and alley North of Front (18" Line)	4.0%
(3) Flow line into City at Randolph and Jefferson Streets	
From manhole at corner of Fulton and Jefferson to manhole At Madison & Randolph (8" Line)	1.0%
From manhole above to Elmwood And Randolph (8" Line)	1.0%
From point above to alley east of Elmwood and Randolph (12" Line)	1.0%

Location	Proportion of Use by Township
From point above to 2 nd & Cedar (15" Line)	0.5%
From point above to manhole East of Maple on 2 nd (21" Line)	0.2%
From manhole above to Intersection of Oak and Alley north of Front Street (24" Line)	0.1%
(4) Flows from (1) through (3) above	
From Oak Street to river Crossing (21" Line)	16.1%
River crossing 2 pipes (12' Lines)	16.1%
From south side of river crossing to pump station at Front & Wellington (21" Line)	26.9%
Pump station at Front and Wellington	2.7%
Force main from pump station to Treatment Plant (16" Line)	2.7%

Elmwood Township

Location	Proportion of Use by Township
From Cedar & 2 nd to Manhole east of Maple on 2 nd (21" Line)	18.0%
From manhole east of Maple Street on 2nd to manhole at Intersection of Oak & alley South of 3rd (24")	10.0%

From manhole above To manhole north of river crossing (21" Line)	24.0%
River crossing 2 pipes (12" Lines)	24.0%
From south side of river Crossing to pump station at Front & Wellington (21" Line)	16.0%
Pump station at Front And Wellington	9.2%
Force main from pump station To Treatment Plant (16" Line)	9.2%

Where customers located within one political subdivision can best be served by another for reasons of economy and efficiency, the parties may agree to exchange customers. In such case, the sewer usage charges to be charged may be the higher of the jurisdiction in which the customer is located or the jurisdiction which provides the service. The party providing the service shall be responsible only for the operation and maintenance and not for capital expenditures. The parties agree that customary lateral benefit, benefit and riser fees may be imposed but no such charge shall be imposed which would discriminate unfairly among similarly situated customers.

At present, the parties have agreed to exchange the following customers:

City Customers to be served by Township

- Bill Marsh Buick (Garfield Road)
- Skate World (Garfield Road)
- Centel Cable (South Airport Road)

Township Customers to be served by the City

- Incochee Hill Subdivision (Garfield Township)
- Cambridge Woods Subdivision (Jefferson Street & Randolph Street, Garfield Township)
- 4 Residences (Jefferson St. West of Cambridge Woods Garfield Township)

City – Peninsula Township Multi-user Facilities
Capacity Estimated to Serve 300 Homes at 200 g.p.d.

Facility	Unit Lgth	Total Cost	Total Cost	Total Capac. G.P.M	Twp Capac. G.P.M.	Twp %	Twp Cost
10 inch Line: City Limits to Milliken Park Pump Station	4062	\$10.50	\$42651	480	90	19%	\$7997.06
Pump Station Milliken Park			\$100000	700	90	13%	\$12857.14
Force main from P. station along Front	2640	\$20.00	\$52800	1900	90	5%	\$2501.05
21 in. Line along Front Street	4640	\$20.00	\$92800	3280	90	3%	\$2546.34
24 in. Line Front To Front Street Pump Station	3920	\$25.00	\$98000	4550	90	2%	\$1938.46
Pump Station at Front and Wellington			\$200000	6280	90	1%	\$2866.24
Force main to Treatment Plant	2700	\$30.00	\$81000	6280	90	1%	\$1160.83
Total Township Cost							\$31867.13

[Percentage of use Needed]

It is further understood and agreed that the multi-user facilities described above do not include facilities to transport sewage from the western side of the Township. At such time as the Township desires to contribute sewage from the western portion of the Township not served by the above described multi-user facilities, the City and the Township shall negotiate in good faith to arrive at an equitable arrangement.

EXHIBIT B
CAPACITY LEASE (Outline)

1. Parties: City, Townships
2. Subject Matter: Lease Option of up to 4% Capacity at the Treatment Plant from the City to the Townships
3. Term: Lease Option available for the term of the Master Sewer Agreement
4. Conditions: (2%) Lease Option can be exercised twice until City Flow reaches 80% of the City's Capacity; non-exercised Option(s) are not available after the 80% threshold

EXHIBIT C

Computation of Capacity Use

Part 1: To determine the flow capacity used by either party throughout the fiscal year, calculate the average daily flow contributed by either party throughout the fiscal year in million gallons per day (MGD). Then determine the party's owned flow capacity by multiplying the plant's average flow capacity of 8.5 MGD by the party's owned capacity as a decimal. A party shall be deemed to have exceeded its capacity if the flow capacity they used is greater than the party's owned flow capacity. The plant's used capacity in a fiscal year will be calculated in the same manner. Calculate the average daily flow for the plant in MGD and compare it to the plant's average daily flow capacity of 8.5MGD.

Formula: Average Daily Flow (MGD) or Flow Capacity Used= Sum of the Monthly Average Flows (MGD) for either Party for a given fiscal Year divided by 12 months

Example: Sum of the Monthly Average Daily Flows for the City in a given fiscal year=25.2MGD

City's Flow Capacity Used=25.2MGD/ 12Months=2.1 MGD

Flow Capacity Used as a Percent= (2.1 MGD/8.5MGD) X 100=24.7%

Flow Capacity Owned=Average Flow Capacity of the Plant X % owned capacity as a decimal

Flow Capacity Owned=8.5 MGD X .55=4.675MGD

The City Owns 4.675MGD (55%) of the plant's flow capacity and in the fiscal year illustrated above used 2.1 MGD (24.7%) of the plant's flow capacity.

(Note: Monthly Flow Averages are calculated by dividing the total flow for the month by the number of days included in that month)

Part 2: To determine the BOD capacity used by either party throughout the fiscal year, calculate the average daily BOD loading contributed by either party throughout the fiscal year in pounds per day (lbs/day). Then determine the party's owned BOD loading capacity by multiplying the plant's BOD capacity of 20,203 lbs/day by the party's owned capacity as a decimal. A party shall be deemed to have exceeded its capacity if the BOD capacity they used is greater than the party's owned BOD capacity. The plant's used capacity in a fiscal year will be calculated in the same manner. Calculate the average daily BOD loading for the plant in lbs/day and compare it to the plant's BOD capacity of 20,203 lbs/day. Exhibit C, Part 3, below illustrates how either party's flow capacity will be affected when BOD capacity is exceeded.

Formula: Average Daily BOD loadings (lbs/day) or BOD Capacity Used= Sum of the Monthly Average BOD loadings for either Party for a given fiscal Year divided by 12 months

Example: Sum of the Monthly Average BOD loadings for the Townships in a given fiscal year= 60,000lbs/day

Townships' BOD Capacity Used=60,000 lbs/day / 12Months=5,000 lbs/day

BOD Capacity Used as a Percent= (5,000 lbs/day / 20,203 lbs/day) X 100=24.8%

BOD Capacity Owned= BOD Capacity of the Plant X % owned capacity as a decimal

BOD Capacity Owned=20,203 lbs/day X 0.45= 9,090 lbs/day

The Townships own 9,090 lbs/day (45%) of the plant's BOD capacity and in the fiscal year illustrated above used 5,000 lbs/day (24.8%) of the plant's BOD capacity.

(Note: Monthly average BOD loadings are calculated by dividing the total BOD loadings for the month by the number of days included in that month)

Part 3:

WWTP Loadings vs Flow Capacity				
BOD Loadings (lbs./day) Increase Above Capacity	% Decrease in Plant Flow Capacity	Flow Capacity Multiplier	Municipality	Percent Ownership of Plant Capacity
≤ 50	_____	0.08500	Townships	45
100	1	0.0842		
200	2	0.0833	City	55
300	3	0.0825		
400	4	0.0816	Calculating allowable flow at a given BOD Loading	
500	5	0.0808	City owns 55% of current plant capacity	
600	6	0.0799	City exceeds BOD Capacity by 100lbs/day	
700	7	0.0791	Adjusted flow Capacity = Own Plant Capacity * Capacity Multiplier=Allowed Flow (MGD)	
800	8	0.0782	55*0.0842=4.631MGD	
900	9	0.0774		
1000	10	0.0765	Townships own 45% of current plant capacity	
1100	11	0.0757	Townships exceed BOD capacity by 300lbs/day	
1200	12	0.0748	Adjusted flow Capacity = Own Plant Capacity * Capacity Multiplier=Allowed Flow (MGD)	
1300	13	0.0740	45*0.0825=3.712MGD	
1400	14	0.0731	Note: For increases in B.O.D loadings falling between increments of 100 lbs./day the flow capacity multiplier used will be the greater of the two multipliers when less than or equal to 50 lbs/day, and when equal to or greater than 60lbs/day the lesser multiplier will be used. For example: If loading is 150lbs/day above capacity, the multiplier used would be 0.0842. If the loading is 160lbs/day above capacity, the multiplier used would be 0.0833.	
1500	15	0.0723		
1600	16	0.0714		
1700	17	0.0706		
1800	18	0.0697		
1900	19	0.0689		
2000	20	0.0680		

EXHIBIT D

Master Sewer Agreement - Disputed Costs

#	Date	Invoice	Paid	Disputed
89507	11/23/2015	\$451,896.28	\$395,625.25	(\$56,271.03)
89637	12/28/2015	\$231,614.13	\$205,108.27	(\$26,505.86)
89864	1/25/2016	\$723,647.05	\$629,496.35	(\$94,150.70)
90433	6/3/2016	\$63,276.11	\$57,598.66	(\$5,677.45)
90620	6/30/2016	\$176,684.75	\$164,130.14	(\$12,554.61)

Subtotal	(\$195,159.65)
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Acme	10.70%	(\$20,882.08)
East Bay	20.60%	(\$40,202.89)
Elmwood	7.70%	(\$15,027.29)
Garfield	55.30%	(\$107,923.29)
STF	0.90%	(\$1,756.44)
Blair	0.90%	(\$1,756.44)
Peninsula	3.90%	(\$7,611.23)
	100.00%	(\$195,159.65)