

March 2, 2005

TO: The Honorable Mayor and City Council Members
FROM: John Szerlag, City Manager
SUBJECT: Study Item: Charnwood Hills Options Relative to Sanitary Sewer Installation

At the meeting of January 24, 2005 City Council defeated the special assessment standard resolution #4 which would have initiated sanitary sewer installation in Charnwood Hills subdivisions. In the aggregate, roughly 51 percent of the property owners were opposed to this assessment. However, Council requested staff to reexamine this issue and come back with some options. I'll briefly outline these options and delve further into the matter during our table discussion.

Option 1 - Reconfigure Special Assessment Districts

By looking at petitions submitted earlier, it's possible to gerrymander districts in such a fashion as to obtain a clear majority of property owners in favor of a special assessment. A related variable could also be septic failures in a given area as well as installation of new septic fields.

There are two possible methods of achieving a redistricting in the above fashion:

- a) **Property owners can submit new petitions within the confines of the proposed reconfigured area, or**
- b) **Council could spread the roll for these reconfigured areas without obtaining signatures on a petition.**

Please know that a possible outcome resulting from exercising this option is that a septic failure outside the district could occur. If this happens, the City would be obligated to extend a sanitary sewer line a reasonable distance to enable a hook-up. And every other home contiguous to the newly installed line would be required to hook up within 18 months. At that point there would not be any petitions required nor could an appeal be filed as it would become a health/safety function to correct the septic failure. Costs assessed to the property owner under this scenario would be through what's called a benefit fee, which brings us to Option 2.

Option 2 – Benefit Fee Approach

Unlike a special assessment, the benefit fee methodology enables property owners to pay the cost of the sanitary sewer installation over a 40-year timeframe, as opposed to 20 years for a special assessment. Again, where the special assessment is petition driven, the benefit fee approach is mandated without petition. That's the primary reason for allowing more time to have a property owner pay for the sanitary sewer. Thus Council may use a benefit fee approach in tandem with a reconfigured special assessment district. Please know that Council could also use the benefit fee approach in lieu of special assessment districts. So too, the caveat mentioned above whereby there may be forced hook-ups beyond a given district due to septic failures is also applicable here.

Option 3 – Wait for Senate Action on House Bill 4200

The State House of Representatives has already passed the above-referenced bill and it now goes to the Senate. Succinctly, this bill eliminates the requirement for homes to hook up to a sanitary sewer line within 18 months. The salient benefit of eliminating this provision is that residents will be able to utilize their septic fields until such time as a failure occurs. Then, a hook up and subsequent payments to the City would occur upon installation or some other time set by the City. I'm not a future-teller, but my sense is that there'd be an overwhelming support for sanitary sewers in the Charnwood Hills subdivisions, and elsewhere, if the residents had the comfort of knowing they would not have to pay for the sewer line or hook-up costs until such time as their septic field failed.

In terms of asphalt paving, City Management still maintains the position that paving projects should not take place until water and sewer lines are in place because they're housed underneath the street.

As always, please feel free to contact me should you have any questions.

JS/mr\AGENDA ITEMS\2005\03.07.05 – Charnwood Hills Options

c: Lori G. Bluhm, City Attorney
Ivan Johnson, 6100 Windrush (Charnwood Hills Subdivision)
John M. Lamerato, Assistant City Manager/Finance & Administration
Nino Licari, City Assessor
Brian P. Murphy, Assistant City Manager/Services
Steven J. Vandette, City Engineer

February 23, 2005

TO: John Szerlag, City Manager

FROM: Brian Murphy, Assistant City Manager/Services *BM*
Tim Richnak, Public Works Director *TR*
Mark Stimac, Director of Building and Zoning *MS*
Nino Licari, City Assessor *NL*
Steven Vandette, City Engineer *SV*

SUBJECT: **Study Item** – Topics Related to Sanitary Sewer Construction in Charnwood Subdivisions:

House Bill 4200; Updating the Sewer Benefit Fee; Subdivision of Charnwood into Smaller Special Assessment Districts; Septic System Inspection Program

City Staff requests the opportunity to discuss several issues related to construction of sanitary sewers in the Charnwood Subdivisions at a Study meeting on March 7, 2005 immediately following the regular council meeting.

Background:

The Charnwood subdivisions comprise the largest residential area without sanitary sewer and without paved streets. There are 165 properties zoned R1-A without sewer and with streets consisting of a gravel base with two applications of chip seal (double coating of liquid asphalt and stone chips) that was applied in the early 1990s under a special assessment project, initiated by resident petitions.

The streets in Charnwood Hills are long overdue for chip seal treatment. It has been 13 years since the last application, and although many of the roads have held up remarkably well, there are obvious areas exhibiting medium to severe deterioration and areas that DPW has patched over the last several years. Without any action, the deterioration may accelerate and the roads may revert to gravel. Chip seal needs to be redone at least every 8 years. The unresolved sanitary sewer issue has delayed treatment of the roads and if sewers are installed the treatment may ultimately be asphalt paving instead of chip seal. If chip seal is to be done it must be petitioned for by property owners or initiated by City Council.

The sewer project proposed for Charnwood included the installation of sewers on one side of the street, within the greenbelt area between the property line and edge of road. All sewers would have been designed to service all structures, including basements, by gravity. Individual house leads would be installed from the main line sewer to the property line and located with the help of each property owner. The lead location would be determined based on the location of the septic system and

avoidance if possible of any obstacles such as trees, landscaping and driveways. Since the construction of the sewers would require heavy equipment and there would be open cuts for sewers crossing intersections and service leads crossing to the side opposite the sewer, the existing road would be severely impacted. Also, with the roads being chip seal, not asphalt, and long overdue for resealing, the condition of the road after the sewer construction would essentially be gravel. Chip seal itself has no structural strength; it is simply a treatment to seal the roadbed to provide a smooth surface with reduced maintenance cost. The sewer project was proposed along with an asphalt paving SAD project that would provide a permanent road treatment with all future maintenance performed by the city without additional assessment.

Over the last 10 years the city has received special assessment petitions on several occasions for construction of sewers. Whereas previous petition submittals indicated interest by less than 20% of property owners, the recent petitions for paving and sanitary sewer were both slightly over 50%, until slipping to 48% after some signatures were withdrawn. At the public hearing on January 24, 2005 City Council voted not to proceed with either the paving or sanitary sewer projects.

We believe there have been several reasons for the renewed interest by residents. One was House Bill (HB) 5145, now HB 4200, that would allow the city to delay enforcement of the state health code, which requires structures to tie into a sewer within 18 months after the sewer becomes available, provided the septic system has been inspected and deemed in good working order, and also the city's adoption of revisions to Ordinance Chapter 19 that requires septic system inspection every four years.

Should HB 4200 become law, the City of Troy would be able to construct sewers utilizing the Sewer Benefit Fee method and allow property owners with working septic systems to remain on septic. These property owners would not pay the Sewer Benefit Fee until a connection to the sewer is made. Historically, the city has only used this method when there's been a septic failure and a sewer extension constructed to the site of the failure. HB 4200 would allow the city more flexibility to construct sanitary sewers when and where needed or requested by property owners.

Subdivision of Charnwood into Smaller Special Assessment Districts:

During deliberations and subsequent defeat of the proposed sanitary sewer and paving projects in the Charnwood subdivisions, Council requested that staff look at subdividing the area into smaller sewer districts. Smaller districts can be created to bring sanitary sewer into the region, and bypass many (but not all) of the areas that are opposed to the project. These smaller districts could be created by the submission of new petitions from property owners, or by City Council resolution itself, under authority of the City Charter, Chapter 10.

Section 10.1 - General Powers:

The Council shall have power to determine that the whole or any part of the cost of a public improvement shall be defrayed by special assessments upon the property especially benefited. The cost of surveys and plans for a public improvement and all expenses incident to the proceeding for the making of such improvement and the special assessments therefore and for the issuance of bonds in anticipation of such special assessments, shall be deemed to be a part of the cost of the improvement. The cost of any improvement shall also include the cost of acquiring any lands and rights of way necessary therefore. The Council in order to ascertain whether or not a reasonable number of property owners to be assessed desire a public improvement to be made under the provisions of this chapter, may request that a petition therefore be presented to it but in event a petition be so filed it shall be advisory only and shall not be jurisdictional.

As presented at the public hearing of January 24, 2005 the proposed sewer district for all 165 Charnwood properties was initiated by petitions signed by eighty-five (85) of the affected property owners. This equated to 50.91% of the owners being in favor of the project; however, four property owners subsequently rescinded their support, which resulted in an overall percentage of 48.48%. Additionally, since the public hearing we have received two additional requests to withdraw their petition. All requests have been accounted for in the support computations for the four sub-districts identified by the Engineering Department. These districts allow for efficient extensions of existing sewers as well as extensions into adjoining areas that could be serviced in the future. These sub-districts and their estimated assessment cost per parcel are as follows (see attached maps):

Sub Districts	Cost/Parcel	District Size
A) Northwest Charnwood, West of Beach	\$17,784	22 Parcels
B) East Charnwood, East of Beach	\$15,536	70 Parcels
C) Southwest Charnwood, West of Beach	\$19,125	40 Parcels
D) East and Southwest Charnwood	\$15,653	113 Parcels
Single Charnwood District as Petitioned (All costs rounded to nearest dollar)	\$15,720	165 Parcels

City Council may choose to initiate special assessment proceedings for any one of these districts by adopting Standard Resolution No. 1-3 at a regular council meeting; however, should HB 4200 become law, some property owners may not want a 20 year special assessment project, even those that may have previously supported it, since the Sewer Benefit method at 40 years offers a longer payment period.

House Bill 4200 - Permits properties to remain on septic after sewers are constructed, provided septic system is inspected and in good working condition:

Representative Robert Gosselin (primary sponsor) and representative Leon Drolet (Clinton Township) have sponsored HB 4200 that addresses an issue that Troy and other urban cities have long been at odds with when addressing failed septic systems and public health. Property owners with significant investments in their septic systems (there are three new systems in Charnwood constructed since 2002) are currently required by state Public Health Code, PA 268 of 1978, to abandon their septic system within 18 months after a sanitary sewer becomes available, regardless of the condition of their system. Sewer extensions that are needed to abate a failed system nearly

always impact properties with systems that are in good working order. Whereas no septic inspection program previously existed to certify that an existing system was in satisfactory operating condition, all systems regardless of condition were required to be abandoned.

Under the current statute, a municipality that installs a public sanitary sewer collection line to service homes with failed septic areas must mandate that all homes within 200 feet of that line connect to the sanitary sewer regardless of the condition of the property owner's septic system. In the City of Troy alone we have documented cases where property owners have spent thousands of dollars repairing their septic systems and within a short time thereafter a sanitary sewer installed on their street to accommodate a neighbor's failed septic resulted in residents being required to abandon their perfectly functioning septic system and connect to the sanitary sewer within 18 months from the installation of that line.

Troy and other local governments could more efficiently and effectively serve resident homeowners by having the latitude to require connection to sanitary sewer lines only upon septic failures. The reasons are obvious:

- 1) A property owner with a functioning septic system should not be required to abandon that system and hook up to a sanitary sewer line.
- 2) Property owners would be more amenable to petition for a special assessment project to install sanitary sewer lines if they were assured that connection thereto would only be required once their septic system failed.
- 3) Phase II Storm Water permits administered by the MDEQ requires municipalities to address septic system operation and maintenance issues. As a result, Troy will inspect septic systems at least once every four years. This program provides a mechanism to assure that failures are identified in a timely fashion. And if a sanitary sewer line is already in place when a property owner's septic field fails, correction of this health problem can be solved in an effective and permanent fashion.

Now that Troy and other large cities are implementing septic system inspection ordinances as part of the EPA Phase II Storm Water Regulations, Troy's approximately 450 septic systems will be inspected every four years. We believe that HB 4200 will allow Troy to construct sanitary sewers where and when they are needed, while allowing residents to continue using systems that are in good working order and enabling residents to derive full value from the investment in their system.

On February 15th, City Manager John Szerlag and City Engineer Steve Vandette testified before the House Government Affairs Committee on HB 4200 during which the above points were discussed. Also testifying was the Michigan Department of Environmental Quality (MDEQ) who spoke negatively about the bill until the committee resolved to add language specifically requiring septic system inspections. MDEQ indicated that they could support this bill with this addition (see attached Legislative Analysis for details of the bill and testimony during the Committee public hearing).

On February 23rd the Michigan House passed the amended version (attached) of the bill by 75 to 30, which contained the following new subsection:

[[7)] A CITY THAT GRANTS AN EXTENSION UNDER SUBSECTION 5 OF THIS SECTION SHALL MAKE ITS INSPECTION PLAN AVAILABLE TO THE PUBLIC. THE INSPECTION PLAN MUST DEMONSTRATE THAT THE SEPTIC TANK DISPOSAL SYSTEMS GIVEN EXTENSIONS WILL BE INSPECTED AND OPERATED IN A MANNER THAT WILL PROTECT PUBLIC HEALTH, SAFETY, AND WELFARE.]

HB 4200 was referred to the Senate Committee on Health Policy. It is difficult to predict when it will come out of this Committee or when it may become law. According to Representative Gosselin it could sit in the senate for a year or it could sit for a week.

Septic System Inspection Program:

In January of 2003 City Council adopted revisions to Chapter 19 of the Troy City Code relating to on-site sewage disposal systems (septic systems). Part of those revisions included a new program requiring the periodic inspection of existing on-site sewage disposal systems. This was done, in part, to comply with the requirements of our General Storm Water Permit from the Michigan Department of Environmental Quality.

The program requires that an inspection be done of the existing system at least once every four years. These inspections are to be done by Building Department staff in conjunction with a private contractor that will be servicing the systems on behalf of the property owner. In order to implement the program, two members of the Building department staff have taken training and become certified as residential septic disposal inspectors. These individuals will be coordinating and conducting the inspections on behalf of the City.

The inspection includes a review of any available records on the design and construction of the system to determine size, location, depth, and capacity. It also includes a review of any available maintenance records from the property owner. The field work includes visual and olfactory inspection of the field for signs of failure and an inspection of the operating condition of any pumps, filters and piping that are part of the system. The inspector would also review core samples taken from the field area. It also requires that the tank be pumped and that a visual inspection made of the condition of the tank for signs of damage and leakage.

If the inspection of the system indicates that there is a failure of the system, the owner is required to repair the system to proper working conditions. The repair may include the installation of a new or relocated drain field. This may be a field utilizing natural soils or may be a field that uses material brought to the site from elsewhere (engineered system). Any permits for the repair must be obtained from the Oakland County Health Department. Inspection of the system repair would be obtained from

the County and a copy of the report would be forwarded to the City, as is the current practice.

In order to organize our inspection program we are looking at prioritizing the sites scheduled for inspection based upon their location relative to bodies of water that could be adversely affected by a system failure. A letter will be sent to these property owners identifying the program and asking for their systems to be inspected this year. We will also be sending a letter to all other owners of property with on-site sewage disposal systems to let them know that we will be requiring inspection on their property in the future. We will indicate, however, that we will do the inspections ahead of time if it fits in with their regular maintenance schedule. The program will require that around 80 to 100 systems be inspected each year.

Sewer Benefit Fee:

Whenever a structure connects to an existing public sewer and the property never participated in any special assessment project for the construction of that sewer, a Sewer Benefit Fee is paid in lieu of paying the exact cost of constructing the public sewer. The Sewer Benefit Fee represents the cost of constructing that portion of the sewer system attributable to the proportionate benefit received by the applicant's property. In other words, the Benefit Fee approximates the cost of that portion of the sewer that serves the applicant's property. Property owners participating in a special assessment project do not pay this fee.

It has been the City's practice that when an existing on-site sewage disposal system has a documented failure, and cannot be repaired, it has been the City's policy to extend sanitary sewers to service the property whenever possible. The City has constructed sewers, most recently on Larayne Street in 1999, and used the Sewer Benefit Fee method in lieu of property owners paying a special assessment for the cost of extending the sewer to reach their properties. Much like a Special Assessment, the Benefit Fee is used when a house precedes installation of a sanitary sewer line.

There are three funding methods for the installation of new sanitary sewers: 1) Sewer Benefit Fee, 2) Special Assessment, and 3) Private Agreement.

For a new subdivision the developer must pay for all infrastructure improvements, including sanitary sewer, via Private Agreement. This agreement states that the developer will install all public improvements on behalf of the city and agrees to convey all necessary access easements to the City for maintenance purposes.

Sewer Benefit Fees and Special Assessments are used when a house precedes installation of sanitary sewer lines. An existing house with a septic failure is offered the Benefit Fee method as well as any other houses along the line of a new sewer constructed by the City of Troy. Alternatively, special assessment sewer projects can be initiated by property owners, as in the case of Charnwood subdivisions, or initiated by City Council.

Special assessment costs are based on the estimated actual costs of a given project and in the case of Charnwood spread over a period of 20 years (the maximum permitted by ordinance) at 6% interest on the unpaid balance.

Sewer Benefit Fees are set by resolution of City Council on a per-zoning classification basis for the five (5) residential zones. Payments are made over a 40-year period for existing structures at 6% interest on the unpaid balance. Vacant lots must pay the Sewer Benefit Fee, in total, at the time of building permit issuance.

The Sewer Benefit Fee was last revised in 1989, almost 16 years ago. The current Benefit Fee does not currently reflect the cost of constructing sewers within the various zoning districts. As an example, whereas the estimated cost to construct sewers throughout Charnwood is \$15,720 per parcel the Benefit Fee is only \$4,800. Obviously, the Benefit Fee is outdated and in need of revision.

In the course of estimating the cost of sewers for the entire Charnwood area, which is zoned R-1A, the proposed new Sewer Benefit Fee was determined as well. Engineering recommends that the fee be set at \$15,700 for all lots in this district. Outside of Charnwood there are but a handful of R-1A properties (minimum lot size of 120 ft.) without sewer and all located in the northwest corner of the city.

The next zoning district with a smaller lot size is R1-B with a minimum lot width of 100 feet. Utilizing the Charnwood sewer estimate as a basis for sewer cost in R1-B, a new benefit fee of \$10,900 can be estimated. Using this same system of estimating for all residential zoning districts yields the following fees:

<u>Zone Districts</u>	<u>Min. Lot Size</u>	<u>Existing Fee</u>	<u>Estimated New Fee</u>
R-1E	60	\$2,400	\$6,540
R-1D	75	\$3,000	\$8,175
R-1C	85	\$3,400	\$9,260
R-1B	100	\$4,000	\$10,900
R-1A	120	\$4,800	\$15,700

These sewer benefit fee estimates are preliminary figures. Engineering is currently evaluating these estimates to determine if they reflect the average cost of constructing sewers to structures that currently are on septic within these zoning classifications. The locations of all properties, their zoning classifications, proximity of the property to existing sewers and estimated sewer costs are among the data being used to collaborate these preliminary benefit fees. A formal recommendation will be made at the next regular City Council meeting.

It is very important that revised sewer benefit fees be determined for two reasons: passage of HB 4200 will likely result in all sewers for developed areas being built by either the sewer benefit method or special assessment method, and the establishment of a septic system inspection program will likely result in the need to construct new sewers to service failed septic system sites, regardless of the passage of HB 4200.

Health Department Records on Septic System Inspections last 20 Years:

All septic system records from the Oakland County Health Department are attached as requested at the January 24th Council meeting. Only records dating back to 1990 are available.

The records indicate that there were 9 repair permits and 2 new septic system permits issued within Charnwood east of Beach Road. Two septic system permits for two vacant parcels within this same area were denied due to failure of the soil to pass the perc test.

Within the Charnwood area west of Beach Road, there were 15 repair permits issued and 2 permits for new systems.

There is no evidence of any system failures/problems that could not be repaired in some fashion and the system put back in service. Additionally, neither the city nor the County has identified any system failures or problems at the present time. Given the current conditions, despite many of the systems being 40 years old and up, there is insufficient evidence to suggest that the County would declare a public health hazard and order the City of Troy to install sanitary sewers in this area.

It is unclear when sewers will be needed in this area on a large-scale basis. The lots in Charnwood are quite large and system repair/replacement appears to be a viable option when system problems occur, despite soil conditions that suggest that septic systems would not function well within the Charnwood area.

Soil Conditions in the Charnwood Area:

The Oakland County Soil Survey of 1978 classifies the soil types found in Charnwood east of Beach into three types. The numerical designations are 18B, 18C and 54A from the northwest to the southeast (see attached map). Each soil type's suitability for building site development is described as follows:

18B – This soil is well suited to building site development and is suitable for septic tank absorption fields. Poor filtering capacity is a limitation for septic tank absorption fields. The effluent drains satisfactorily, but there is a hazard of ground water pollution.

18C – This soil is suited to building site development, but slope is a limitation. Land shaping and installing retaining wall help to overcome this slope limitation. This soil is suited to use as septic tank absorption fields, but slope and poor filtering capacity are limitations. Land shaping and installing the absorption field across the slope help to overcome the slope limitation. The effluent drains satisfactorily, but there is a danger of ground water pollution.

54A – This soil is poorly suited to building site development because of wetness, and it is poorly suited to use as septic tank absorption fields because of wetness and poor filtering capacity. If this soil is used as a site for buildings,

the use of surface or subsurface drains to lower the water table and the use of well compacted fill to raise the site help overcome the wetness limitation. If it is used as septic tank absorption fields, special construction, such as filling or mounding the absorption field with suitable soil material, may be needed to raise the site above the water table and increase the filtering capacity.

It is noted from the County's septic permit records that the two septic permits that were denied were located in soil type 54A as well as two (2) permits issued for system repairs. Within 18C there were two (2) permits for new septic systems and within 18B & C there were seven (7) permits issued since 1990 for system repairs. Although both soil types are limited due to poor filtering and potential for ground water contamination, all of Charnwood is serviced by city water. Some properties still have wells, presumably for irrigation.

The numerical designations for the soil types west of Beach Road are 60C, 60B and 18B. (See attached map). Each soil type's suitability for building site development is described as follows:

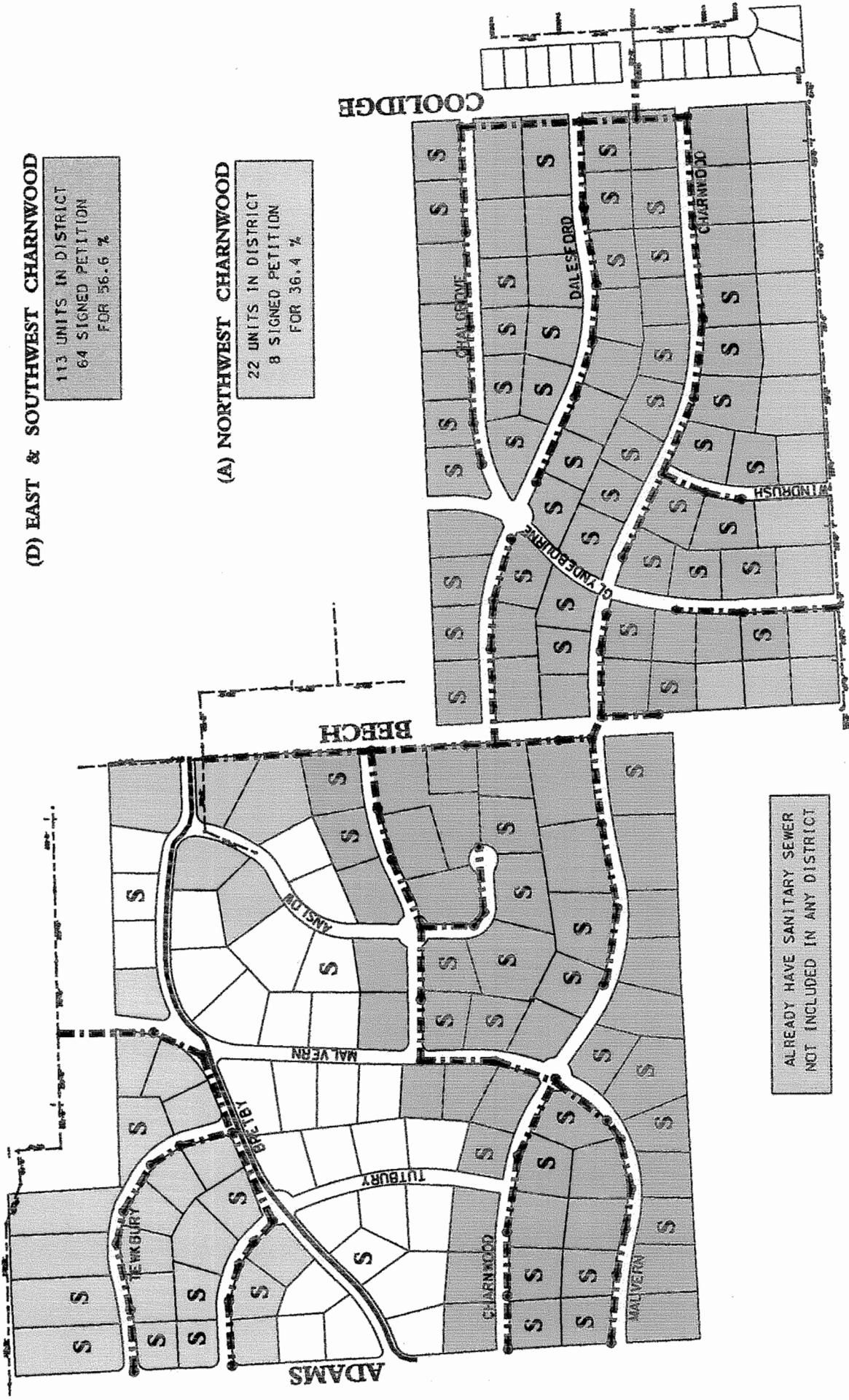
60C – The Marlette soils are suited to building site development, but slope is a limitation. Land shaping helps to overcome this limitation. The Marlette soils are poorly suited to use as septic tank absorption fields because of slope and moderately slow permeability. Sanitary facilities should be connected to public sewers and sewage treatment facilities.

60B – The Marlette soils are suited to building site development, but wetness is a limitation. Raising the site with well-compacted fill material and installing subsurface drains can help to overcome this limitation. The Marlette soils are poorly suited to use as septic tank absorption fields because of moderately slow permeability. Sanitary facilities should be connected to public sewers and sewage treatment facilities.

According to permit records there have been two (2) new septic systems installed west of Beach Road within the 18B soil type, which is suited to septic systems but provides poor filtration and can potentially pollute ground water. There are three (3) permits in this area as well.

Within 60B and 60C soil type areas west of Beach there have been twelve (12) repair permits issued for septic system repairs. Within this soil type, which is poorly suited to septic tank absorption fields, there are approximately eighty (80) septic systems, five (5) of which are located within 250 feet of a tributary of the Rouge River.

CHARNWOOD SANITARY SEWER SUBDISTRICTS A & D

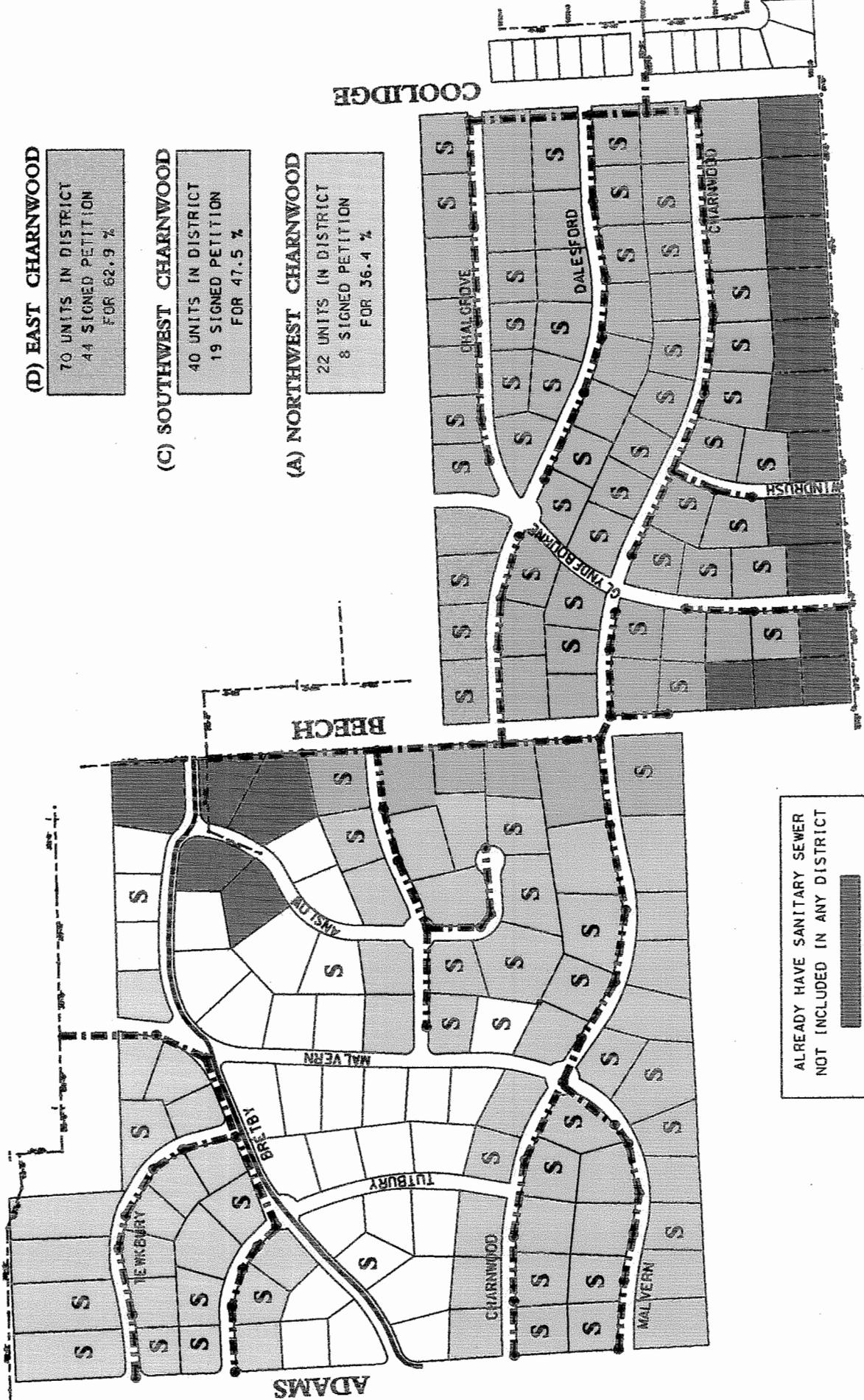


(D) EAST & SOUTHWEST CHARNWOOD
 113 UNITS IN DISTRICT
 64 SIGNED PETITION
 FOR 56.6 %

(A) NORTHWEST CHARNWOOD
 22 UNITS IN DISTRICT
 8 SIGNED PETITION
 FOR 36.4 %

ALREADY HAVE SANITARY SEWER
 NOT INCLUDED IN ANY DISTRICT

CHARNWOOD SANITARY SEWER SUBDISTRICTS A, C & D



(D) EAST CHARNWOOD
 70 UNITS IN DISTRICT
 44 SIGNED PETITION
 FOR 62.9 %

(C) SOUTHWEST CHARNWOOD
 40 UNITS IN DISTRICT
 19 SIGNED PETITION
 FOR 47.5 %

(A) NORTHWEST CHARNWOOD
 22 UNITS IN DISTRICT
 8 SIGNED PETITION
 FOR 36.4 %

ALREADY HAVE SANITARY SEWER
 NOT INCLUDED IN ANY DISTRICT

City of Troy500 W. Big Beaver Road
Troy, Michigan 48084

Preliminary Engineer's Estimate

Charnwood Hills Subs. 1,2 & 3 Sanitary Sewer SAD
Proj. No. 04.403.1

Prepared by: G. Scott Finlay, P.E.

Date: 4-Feb-05

Revised :

Description		Unit	Est. Qty	Unit price	Total
1	Video of Construction Area	LSUM	1.00	4,000.00	\$4,000.00
2	Bonds, Insurance & Initial Set-up	LSUM	1.00	13,950.00	\$13,950.00
3	Remove Trees 8"-18"	EACH	2.00	400.00	\$800.00
4	Remove Trees 18"-36"	EACH	2.00	500.00	\$1,000.00
5	Remove Trees 36"-UP	EACH	2.00	750.00	\$1,500.00
6	10" Sanitary Sewer, T.D. - B	L.F.	1650.00	55.00	\$90,750.00
7	8" Sanitary Sewer, T.D. - B	L.F.	8800.00	47.00	\$413,600.00
8	Boring for Sanitary Sewer	L.F.	100.00	150.00	\$15,000.00
9	Casing	L.F.	100.00	75.00	\$7,500.00
10	6" Sanitary Lead, T.D.- A	L.F.	875.00	18.00	\$15,750.00
11	6" Sanitary Lead, T.D.- B (incl. Road patching)	L.F.	1575.00	30.00	\$47,250.00
12	4' Diameter Sanitary Manhole	EACH	34.00	1,850.00	\$62,900.00
13	Sewer Taps	EACH	2.00	1,000.00	\$2,000.00
14	Mailbox Posts	EACH	20.00	100.00	\$2,000.00
15	12" CMP, 14 gage, Culvert	L.F.	1800.00	18.00	\$32,400.00
16	Std. 12" CMP End Sections	EACH	170.00	75.00	\$12,750.00
17	Conc.Driveway, Nonreinforced 6"	S.Y.	380.00	30.00	\$11,400.00
18	Bituminous Approach	TONS	370.00	75.00	\$27,750.00
19	Class A Sodding w/ 2" Top Soil	S.Y.	25400.00	3.25	\$82,550.00
20	Watering (1000 gallons/unit)	UNITS	160.00	20.00	\$3,200.00
21	Mowing Sodded Areas	Times	4.00	1,000.00	\$4,000.00
22	Traffic Control & Maintenance	LSUM	1.00	7,500.00	\$7,500.00
23	Sanitary Sewer Testing	L.F.	10450.00	1.00	\$10,450.00
Total Construction Costs					\$870,000.00
Construction Costs					\$870,000.00
Admin. & Contingency (25%)					\$217,500.00
Total					\$1,087,500.00

East Charnwood Sanitary Sewer Only

City of Troy500 W. Big Beaver Road
Troy, Michigan 48084

Preliminary Engineer's Estimate

Charnwood Hills Subs. 1,2 & 3 Sanitary Sewer SAD
Proj. No. 04.403.1

Prepared by: G. Scott Finlay, P.E.

Date: 4-Feb-05

Revised

	Description	Unit	Est. Qty	Unit price	Total
1	Video of Construction Area	LSUM	1.00	2,000.00	\$2,000.00
2	Bonds, Insurance & Initial Set-up	LSUM	1.00	8,560.00	\$8,560.00
3	Remove Trees 8"-18"	EACH	2.00	400.00	\$800.00
4	Remove Trees 18"-36"	EACH	2.00	500.00	\$1,000.00
5	Remove Trees 36"-UP	EACH	2.00	750.00	\$1,500.00
6	8" Sanitary Sewer, T.D. - B, Extra Depth	L.F.	3080.00	100.00	\$308,000.00
7	8" Sanitary Sewer, T.D. - B	L.F.	2200.00	47.00	\$103,400.00
8	Boring for Sanitary Sewer	L.F.	50.00	150.00	\$7,500.00
9	Casing	L.F.	50.00	75.00	\$3,750.00
10	6" Sanitary Lead, T.D.- A	L.F.	500.00	18.00	\$9,000.00
11	6" Sanitary Lead, T.D.- B (incl. Road patching)	L.F.	900.00	30.00	\$27,000.00
12	4' Diameter Sanitary Manhole	EACH	20.00	1,850.00	\$37,000.00
13	Sewer Taps	EACH	2.00	1,000.00	\$2,000.00
14	Mailbox Posts	EACH	15.00	100.00	\$1,500.00
15	12" CMP, 14 gage, Culvert	L.F.	1010.00	18.00	\$18,180.00
16	Std. 12" CMP End Sections	EACH	106.00	75.00	\$7,950.00
17	Conc. Driveway, Nonreinforced 6"	S.Y.	220.00	30.00	\$6,600.00
18	Bituminous Approach	TONS	200.00	75.00	\$15,000.00
19	Class A Sodding w/ 2" Top Soil	S.Y.	11660.00	3.00	\$34,980.00
20	Watering (1000 gallons/unit)	UNITS	100.00	20.00	\$2,000.00
21	Mowing Sodded Areas	Times	4.00	1,000.00	\$4,000.00
22	Traffic Control & Maintenance	LSUM	1.00	5,000.00	\$5,000.00
23	Sanitary Sewer Testing	L.F.	5280.00	1.00	\$5,280.00
Total Construction Costs					\$612,000.00
Construction Costs					\$612,000.00
Admin. & Contingency (25%)					\$153,000.00
Total					\$765,000.00

Southwest Charnwood Sanitary Sewer Only

City of Troy500 W. Big Beaver Road
Troy, Michigan 48084

Preliminary Engineer's Estimate

Charnwood Hills Subs. 1,2 & 3 Sanitary Sewer SAD
Proj. No. 04.403.1

Prepared by: G. Scott Finlay, P.E.

Date: 4-Feb-05

Revised

	Description	Unit	Est. Qty	Unit price	Total
1	Video of Construction Area	LSUM	1.00	5,000.00	\$5,000.00
2	Bonds, Insurance & Initial Set-up	LSUM	1.00	11,785.00	\$11,785.00
3	Remove Trees 8"-18"	EACH	2.00	400.00	\$800.00
4	Remove Trees 18"-36"	EACH	2.00	500.00	\$1,000.00
5	Remove Trees 36"-UP	EACH	2.00	750.00	\$1,500.00
6	10" Sanitary Sewer, T.D. - B	L.F.	1650.00	50.00	\$82,500.00
7	8" Sanitary Sewer, T.D. - B	L.F.	11870.00	45.00	\$534,150.00
8	8" Sanitary Sewer, T.D. - B, Extra Depth	L.F.	2965.00	90.00	\$266,850.00
9	Boring for Sanitary Sewer	L.F.	100.00	150.00	\$15,000.00
10	Casing	L.F.	100.00	75.00	\$7,500.00
11	6" Sanitary Lead, T.D.- A	L.F.	1375.00	18.00	\$24,750.00
12	6" Sanitary Lead, T.D.- B (incl. Road patching)	L.F.	2475.00	30.00	\$74,250.00
13	4' Diameter Sanitary Manhole	EACH	54.00	1,850.00	\$99,900.00
14	Sewer Taps	EACH	2.00	1,000.00	\$2,000.00
15	Mailbox Posts	EACH	35.00	100.00	\$3,500.00
16	12" CMP, 14 gage, Culvert	L.F.	2910.00	18.00	\$52,380.00
17	Std. 12" CMP End Sections	EACH	276.00	75.00	\$20,700.00
18	Conc. Driveway, Nonreinforced 6"	S.Y.	600.00	30.00	\$18,000.00
19	Bituminous Approach	TONS	570.00	75.00	\$42,750.00
20	Class A Sodding w/ 2" Top Soil	S.Y.	37000.00	3.00	\$111,000.00
21	Watering (1000 gallons/unit)	UNITS	260.00	20.00	\$5,200.00
22	Mowing Sodded Areas	Times	4.00	2,000.00	\$8,000.00
23	Traffic Control & Maintenance	LSUM	1.00	10,000.00	\$10,000.00
24	Sanitary Sewer Testing	L.F.	16485.00	1.00	\$16,485.00
Total Construction Costs					\$1,415,000.00
Construction Costs					\$1,415,000.00
Admin. & Contingency (25%)					\$353,750.00
Total					\$1,768,750.00

East & Southwest Charnwood Sanitary Sewer Only

City of Troy500 W. Big Beaver Road
Troy, Michigan 48084

Preliminary Engineer's Estimate

Charnwood Hills Subs. 1,2 & 3 Sanitary Sewer SAD
Proj. No. 04.403.1

Prepared by: G. Scott Finlay, P.E.

Date: 4-Feb-05

Revised

	Description	Unit	Est. Qty	Unit price	Total
1	Video of Construction Area	LSUM	1.00	2,000.00	\$2,000.00
2	Bonds, Insurance & Initial Set-up	LSUM	1.00	4,887.00	\$4,887.00
3	Remove Trees 8"-18"	EACH	2.00	400.00	\$800.00
4	Remove Trees 18"-36"	EACH	2.00	500.00	\$1,000.00
5	Remove Trees 36"-UP	EACH	2.00	750.00	\$1,500.00
6	12" Sanitary Sewer, T.D. - B	L.F.	630.00	60.00	\$37,800.00
7	8" Sanitary Sewer, T.D. - B	L.F.	2915.00	50.00	\$145,750.00
8	Boring for Sanitary Sewer	L.F.	50.00	150.00	\$7,500.00
9	Casing	L.F.	50.00	75.00	\$3,750.00
10	6" Sanitary Lead, T.D.- A	L.F.	275.00	18.00	\$4,950.00
12	6" Sanitary Lead, T.D.- B (incl. Road patching)	L.F.	495.00	30.00	\$14,850.00
13	4' Diameter Sanitary Manhole	EACH	13.00	1,850.00	\$24,050.00
14	Sewer Taps	EACH	1.00	1,000.00	\$1,000.00
15	Mailbox Posts	EACH	6.00	100.00	\$600.00
16	12" CMP, 14 gage, Culvert	L.F.	630.00	18.00	\$11,340.00
17	Std. 12" CMP End Sections	EACH	48.00	75.00	\$3,600.00
18	Conc. Driveway, Nonreinforced 6"	S.Y.	125.00	30.00	\$3,750.00
19	Bituminous Approach	TONS	120.00	75.00	\$9,000.00
20	Class A Sodding w/ 2" Top Soil	S.Y.	7824.00	3.25	\$25,428.00
21	Watering (1000 gallons/unit)	UNITS	70.00	20.00	\$1,400.00
22	Mowing Sodded Areas	Times	4.00	500.00	\$2,000.00
23	Traffic Control & Maintenance	LSUM	1.00	2,500.00	\$2,500.00
24	Sanitary Sewer Testing	L.F.	3545.00	1.00	\$3,545.00
	Total Construction Costs				\$313,000.00
	Construction Costs				\$313,000.00
	Admin. & Contingency (25%)				\$78,250.00
	Total				\$391,250.00

Northwest Charnwood Sanitary Sewer Only

Our hometown newspaper
serving Troy for 35 years

UNDAY

January 27, 2005

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VOLUME 127 NUMBER 98

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TROY TOWN LIFE

House OKs sewer bill on tap-ins

A bill which could help bring sewer lines to the 450 Troy homes still on septic systems was passed by the State House of Representatives.

House Bill 4200, sponsored by Representative Robert Gosselin, R-Troy, was passed out of the Michigan State House of Representatives last week, and will now go to the state Senate for consideration.

"Current law makes connecting to the city sewer system a contentious issue for many citizens, especially those with a septic system in good working order," said Gosselin.

"This bill provides more flexibility to residents by allowing cities the discretion to grant time extensions for tap-ins. Cities deserve to give residents more options."

HB 4200 amends the public health code to allow cities with populations of 80,000 or more to grant extensions of the time limit for connecting to available city sewer lines. This provision allows residents with an existing septic tank disposal system to seek an extension for as long as their septic system remains in satisfactory operating condition and does not threaten public health, safety or welfare.

"Our argument for this bill was that it is good for the environment," Gosselin said. "We restricted it to cities only. Now it goes to the senate. It's going to have to go to a committee. Then to through the senate process. Then it goes to the governor, and she could veto it. It could sit in the senate for a year. Or it could sit for week."

The bill could allow the addition of sewers in Troy's subdivisions that don't yet have them because residents may be more favorable to approving a special assessment if they do not have to start paying for it until they tap into the sewers, according to City Assessor Nino Licari.

Carol Marshall

Legislative Analysis



TIME EXTENSIONS FOR RESIDENTIAL SEWER LINE CONNECTIONS IN CITIES OVER 80,000

Mitchell Bean, Director
Phone: (517) 373-8080
<http://www.house.mi.gov/hfa>

House Bill 4200 (Substitute H-2)
Sponsor: Rep. Robert Gosselin
Committee: Government Operations

First Analysis (2-16-05)

BRIEF SUMMARY: The bill would amend the Public Health Code to extend the time frame for connecting to available city sewer lines in cities with populations of 80,000 or more.

FISCAL IMPACT: The bill would have no apparent fiscal impact on the state or local governmental units.

THE APPARENT PROBLEM:

In some sections of mature cities where homes were built before the existence of municipal sewer systems, homeowners maintain separate on-site septic systems to accommodate each residence's wastewater needs. When a municipal sewer system is expanded to serve more customers, all or a portion of the cost is generally assessed to the property owners who are adjacent to, and would benefit from, the sewer extension and who reside within the special assessment district established by the municipal government. That special assessment paid by the property owners covers the cost of the design, engineering, and construction of the improvements to the sewer system. In addition, upon completion of the sewer system, the nearby property owners pay a one-time connection fee (customarily called a 'tap-in' fee) which typically varies in cost, between \$6,000 and \$10,000 depending on the distance from the home to the sewer line, although the local unit may defer all or a portion of the fee if the property owner is unable to pay the fee.

Under the Public Health Code, property owners must connect to an available municipal sewer system if so required by the local government. In the City of Troy (Oakland County) there are approximately 450 separate on-site septic systems constructed about 40 years ago whose owners maintain them (at their own expense) according to local ordinances. Although these on-site septic systems will eventually fail, many continue to function adequately, and many property owners do not wish to finance the construction and expansion of municipal sewer systems through connection fees and special assessments, since they already pay to maintain their septic fields. This opposition has reportedly stymied the expansion of the municipal sewer system – an expansion said to be needed by some of the residents in the area whose on-site septic systems have already failed, and also to foster commercial development in the region.

The City of Troy would like to give homeowners with septic systems in proper working order the choice of opting out of the connection fee.

THE CONTENT OF THE BILL:

The bill would amend the Public Health Code (MCL 333.12753) to allow for extensions of the time frame for connecting to available city sewer lines in cities with populations of 80,000 or more.

The health code requires structures in which sanitary sewage originates to be connected to an available public sanitary sewer in a city, village, or township and provides deadlines for the connection.

House Bill 4200 would add that, in a city with a population of 80,000 or more, the owner of a residential structure required to be connected to an available sanitary sewer could request an extension of the time limit. Upon request, the city could grant an extension for a period of time it determined appropriate, or for as long as an existing septic tank disposal system was in satisfactory operating condition and did not constitute a threat to the public health, safety, or welfare.

The bill would require the Department of Environmental Quality to adopt guidelines to assist local health departments in determining what septic tank disposal systems are in satisfactory operating condition.

The added provisions would only apply if less than two percent of the residential units within the city are not connected to the public sanitary sewer.

In addition, the code currently provides that local units can require sewer connections within a shorter time period "for reasons of public health." The bill would make that provision apply "for reasons of public health, safety, or welfare."

ARGUMENTS:

For:

Local units of government that provide sewer system services should have the option of allowing their citizens to delay connecting to a sewer extension, if the residents have an adequate, personally maintained septic system. This option will give local officials more flexibility to design and finance sewer construction projects when those projects are thwarted by citizens who resist costly connection fees because they have other sewer services. Moreover, the scope of the bill is greatly limited, by applying only to cities with a population of at least 80,000 and where fewer than two percent of the residential units within the city are not connected to the municipal sewer system.

Response:

Officials from the Department of Environmental Quality testified that it is their opinion that the existing statute already provides local municipalities with flexibility in requiring residents to connect to their municipal sewer systems. The current deadlines apply only where the local unit requires a sewer connection, and a local unit could already design a requirement that allows for exceptions. The Public Health Code provides, in part, that structures shall be connected to an available (that is, within 200 feet) public sanitary

sewer system *if required* by the local municipality, and that the connection shall be made: (1) *before* the municipality requires the connection or (2) within 18 months after the municipal sewer is first constructed or after the structure to be connected to the sewer is built. There does not appear to be a blanket requirement that all sanitary sewer connections be completed within 18 months. [See MCL 333.12753(3)]

Against:

The bill would permit on-site septic systems to continue to operate even after the municipal sewer system is constructed provided that the septic system "is in satisfactory operating condition." This would require regular ongoing inspections conducted by the local government, local health department, or the DEQ. Unfortunately, these inspections typically do not occur with any regularity, as the local government, local health department, or DEQ do not have the capacity to conduct these inspections. There is no provision for funding these inspections. The bill would also require the DEQ to adopt guidelines to assist local health departments in determining which septic systems are operating in a satisfactory manner. This, the DEQ notes, "would be a substantial and time consuming undertaking," for which the bill provides no additional funding.

Response:

There appeared to be an understanding at the committee hearing on the bill that amendments would be forthcoming attempting to address some of the department's concerns.

POSITIONS:

Representatives from the City of Troy testified in support of the bill. (2-15-05)

The Department of Environmental Quality does not support the bill. (2-15-05)

Legislative Analyst: Mark Wolf
Fiscal Analyst: Kirk Lindquist

■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.

SUBSTITUTE FOR
HOUSE BILL NO. 4200

A bill to amend 1978 PA 368, entitled
"Public health code,"
by amending section 12753 (MCL 333.12753).

THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- 1 Sec. 12753: (1) Structures in which sanitary sewage originates
2 lying within the limits of a city, village, or township shall be
3 connected to an available public sanitary sewer in the city,
4 village, or township if required by the city, village, or township.
5 (2) Structures in which sanitary sewage originates lying
6 outside the limits of the city, village, or township in which the
7 available public sanitary sewer lies shall be connected to the
8 available public sanitary sewer after the approval of both the
9 city, village, or township in which the structure and the public

1 sanitary sewer system lies and if required by the city, village, or
2 township in which the sewage originates.

3 (3) Except as provided in subsection (4), (5), OR (6), the
4 connection provided for in subsections (1) and (2) shall be
5 completed promptly but not later than 18 months after the date of
6 occurrence of the last of the following events or before the city,
7 village, or township in which the sewage originates requires the
8 connection:

9 (a) Publication of a notice by the governmental entity which
10 operates the public sanitary sewer system of availability of the
11 public sanitary sewer system in a newspaper of general circulation
12 in the city, village, or township in which the structure is
13 located.

14 (b) Modification of a structure ~~so as~~ to become a structure
15 in which sanitary sewage originates.

16 (4) A city, village, or township may enact ordinances, or a
17 county or district board of health ~~and~~ may adopt regulations, to
18 require completion of the connection within a shorter period of
19 time for reasons of public health, SAFETY, OR WELFARE.

20 (5) IN A CITY WITH A POPULATION OF 80,000 OR MORE, AN OWNER OF
21 A RESIDENTIAL STRUCTURE THAT IS REQUIRED TO BE CONNECTED TO AN
22 AVAILABLE PUBLIC SANITARY SEWER UNDER SUBSECTION (1) OR (2) AFTER
23 THE EFFECTIVE DATE OF THE AMENDATORY ACT THAT ADDED THIS SUBSECTION
24 MAY REQUEST AN EXTENSION OF THE TIME SPECIFIED UNDER SUBSECTION (3)
25 OR (4). UPON REQUEST, A CITY MAY GRANT AN EXTENSION TO THAT OWNER
26 FOR THE COMPLETION OF THE CONNECTION FOR A PERIOD OF TIME AS
27 DETERMINED APPROPRIATE BY THAT GOVERNMENTAL UNIT OR FOR AS LONG AS

House Bill No. 4200 (H-2) as amended February 22, 2005

February 23, 2005

1 THE EXISTING SEPTIC TANK DISPOSAL SYSTEM IS IN SATISFACTORY
2 OPERATING CONDITION AND DOES NOT CONSTITUTE A THREAT TO THE PUBLIC
3 HEALTH, SAFETY, OR WELFARE. [

4

5

]

6 (6) SUBSECTION (5) SHALL APPLY ONLY IF FEWER THAN 2% OF THE
7 TOTAL NUMBER OF RESIDENTIAL UNITS ARE NOT CONNECTED TO THE PUBLIC
8 SANITARY SEWER.

[(7) A CITY THAT GRANTS AN EXTENSION UNDER SUBSECTION (5) OF THIS
SECTION SHALL MAKE ITS INSPECTION PLAN AVAILABLE TO THE PUBLIC. THE
INSPECTION PLAN MUST DEMONSTRATE THAT THE SEPTIC TANK DISPOSAL SYSTEMS
GIVEN EXTENSIONS WILL BE INSPECTED AND OPERATED IN A MANNER THAT WILL
PROTECT PUBLIC HEALTH, SAFETY, AND WELFARE.]

Second Reading of Bills**House Bill No. 4227, entitled**

A bill to amend 1966 PA 261, entitled "An act to provide for the apportionment of county boards of commissioners; to prescribe the size of the board; to provide for appeals; to prescribe the manner of election of the members of the county board of commissioners; to provide for compensation of members; to prescribe penalties and provide remedies; and to repeal acts and parts of acts," by amending section 15 (MCL 46.415), as amended by 1980 PA 187.

The bill was read a second time.

Rep. Ward moved that the bill be placed on the order of Third Reading of Bills.

The motion prevailed.

House Bill No. 4012, entitled

A bill to amend 1986 PA 281, entitled "The local development financing act," by amending sections 4 and 16 (MCL 125.2154 and 125.2166), section 4 as amended by 2000 PA 248.

The bill was read a second time.

Rep. Meyer moved that the bill be placed on the order of Third Reading of Bills.

The motion prevailed.

House Bill No. 4013, entitled

A bill to amend 1980 PA 450, entitled "The tax increment finance authority act," by amending sections 3 and 17 (MCL 125.1803 and 125.1817), section 3 as amended by 1983 PA 148.

The bill was read a second time.

Rep. Meyer moved that the bill be placed on the order of Third Reading of Bills.

The motion prevailed.

House Bill No. 4318, entitled

A bill to amend 1975 PA 197, entitled "An act to provide for the establishment of a downtown development authority; to prescribe its powers and duties; to correct and prevent deterioration in business districts; to encourage historic preservation; to authorize the acquisition and disposal of interests in real and personal property; to authorize the creation and implementation of development plans in the districts; to promote the economic growth of the districts; to create a board; to prescribe its powers and duties; to authorize the levy and collection of taxes; to authorize the issuance of bonds and other evidences of indebtedness; to authorize the use of tax increment financing; to reimburse downtown development authorities for certain losses of tax increment revenues; and to prescribe the powers and duties of certain state officials," by amending sections 3 and 18 (MCL 125.1653 and 125.1668), section 3 as amended by 2004 PA 521.

The bill was read a second time.

Rep. Meyer moved that the bill be placed on the order of Third Reading of Bills.

The motion prevailed.

By unanimous consent the House returned to the order of

Third Reading of Bills**House Bill No. 4200, entitled**

A bill to amend 1978 PA 368, entitled "Public health code," by amending section 12753 (MCL 333.12753).

The bill was read a third time.

The question being on the passage of the bill,

Reps. Tobocman and Gosselin moved to amend the bill as follows:

1. Amend page 3, line 3, after "WELFARE." by striking out the balance of the subsection.

The motion was seconded and the amendment was adopted, a majority of the members serving voting therefor.

The question being on the passage of the bill,

The bill was then passed, a majority of the members serving voting therefor, by yeas and nays, as follows:

Roll Call No. 14

Yeas—75

Amos	Gonzales	Marleau	Rocca
Ball	Gosselin	Mayes	Sak
Baxter	Green	McConico	Schuitmaker
Booher	Hansen	McDowell	Shaffer
Casperson	Hildenbrand	Meyer	Sheen
Caswell	Hoogendyk	Moolenaar	Stahl
Caul	Huizenga	Moore	Stakoe
Cheeks	Hummel	Mortimer	Steil
Cushingberry	Hune	Newell	Stewart
DeRoche	Hunter	Nitz	Taub
Drolet	Jones	Nofs	Tobocman
Elsenheimer	Kahn	Palmer	Vagnozzi
Emmons	Kehrl	Palsrok	Van Regenmorter
Espinoza	Kooiman	Pastor	Vander Veen
Farhat	LaJoy	Pavlov	Walker
Farrah	Law, David	Pearce	Ward
Gaffney	Leland	Polidori	Wenke
Garfield	Lemmons, III	Proos	Zelenko
Gleason	Lemmons, Jr.	Robertson	

Nays—30

Accavitti	Byrum	Law, Kathleen	Smith, Alma
Adamini	Clack	Lipsey	Smith, Virgil
Anderson	Clemente	Meisner	Spade
Angerer	Condino	Miller	Waters
Bennett	Donigan	Murphy	Whitmer
Bieda	Gillard	Plakas	Williams
Brown	Hopgood	Sheltrown	Wojno
Byrnes	Kolb		

In The Chair: Kooiman

The House agreed to the title of the bill.

Rep. Ward moved that the bill be given immediate effect.

The motion prevailed, 2/3 of the members serving voting therefor.

Rep. Bieda, having reserved the right to explain his protest against the passage of the bill, made the following statement:
 “Mr. Speaker and members of the House:

I voted no on House Bill 4200 because it fails to provide adequate protections for human health and the environment. I also have concerns because the bill essentially creates a specific narrow exemption to a select community. Because of these concerns, I voted ‘no’ on House Bill 4200. Thank you.”

Rep. Anderson, having reserved the right to explain his protest against the passage of the bill, made the following statement:

“Mr. Speaker and members of the House:

I voted no on House Bill 4200 because it fails to provide adequate protections for human health and the environment. The bill provides mere lip-service to protecting groundwater which is a source of drinking water for 50 percent of Michigan’s citizens and provides an exception for some while other areas have already taken the necessary steps to

comply with connection requirements. It is unlikely that this legislation will withstand a review as the Southeast Michigan area is already under a federal judge's order to eliminate septic systems. There are no specific provisions indicating which agencies would implement it and what enforcement tools and resources would be available."

Rep. Waters, having reserved the right to explain her protest against the passage of the bill, made the following statement:

"Mr. Speaker and members of the House:

I voted no on House bill 4200 because it fails to provide adequate protections for human health and the environment. The bill provides mere lip-service to protecting groundwater which is a source of drinking water for 50 percent of Michigan's citizens. There are no specific provisions indicating which agencies would implement it and what enforcement tools and resources would be available."

Rep. Lipsey, having reserved the right to explain his protest against the passage of the bill, made the following statement:

"Mr. Speaker and members of the House:

I voted no on House Bill 4200 because it fails to provide adequate protections for human health and the environment. The Bill merely provides lip-service to protecting groundwater which is a source of drinking water for 50 percent of Michigan's citizens. There are no specific provisions indicating which agencies would implement this new system and what enforcement tolls and resources would be available."

Rep. Waters moved that Rep. McDowell be excused temporarily from today's session.
The motion prevailed.

House Bill No. 4054, entitled

A bill to amend 1961 PA 236, entitled "Revised judicature act of 1961," by amending section 1312 (MCL 600.1312), as amended by 2004 PA 12.

Was read a third time and passed, a majority of the members serving voting therefor, by yeas and nays, as follows:

Roll Call No. 15

Yeas—104

Accavitti	Espinoza	Leland	Rocca
Adamini	Farhat	Lemmons, III	Sak
Amos	Farrah	Lemmons, Jr.	Schuitmaker
Anderson	Gaffney	Lipsey	Shaffer
Angerer	Garfield	Marleau	Sheen
Ball	Gillard	Mayes	Sheltrown
Baxter	Gleason	McConico	Smith, Alma
Bennett	Gonzales	Meisner	Smith, Virgil
Bieda	Gosselin	Meyer	Spade
Booher	Green	Miller	Stahl
Brown	Hansen	Moolenaar	Stakoe
Byrnes	Hildenbrand	Moore	Steil
Byrum	Hoogendyk	Mortimer	Stewart
Casperson	Hopgood	Murphy	Taub
Caswell	Huizenga	Newell	Tobocman
Caul	Hummel	Nitz	Vagnozzi
Cheeks	Hune	Nofs	Van Regenmorter
Clack	Hunter	Palmer	Vander Veen
Clemente	Jones	Palsrok	Walker
Condino	Kahn	Pastor	Ward
Cushingberry	Kehrl	Pavlov	Waters
DeRoche	Kolb	Pearce	Wenke

CHAPTER 19 - SANITARY SEWER SERVICE

19.01 Definitions. In the interpretation of this chapter the following definitions shall apply unless the content clearly indicates otherwise:

19.01.01 **Available public sanitary sewer** shall be construed to mean a public sanitary sewer system located in a right of way, easement, highway, street or public way which crosses, adjoins or abuts upon the property and passing not more than 200 feet at the nearest point from a structure in which sanitary sewage originates.

(Rev. 01-13-03)

19.01.02 **Biochemical Oxygen Demand or B.O.D.** shall mean the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedure in five (5) days at twenty (20) degrees centigrade, expressed in parts per million by weight.

(Rev. 01-13-03)

19.01.03 **Building Department Inspector** shall mean the employee or employees of the City of Troy's Building Department, who is responsible for the inspection of the privately owned and maintained On-site Sewage Disposal Systems within the City of Troy.

(Rev. 01-13-03)

19.01.04 **Building drain** shall mean that part of the lowest horizontal piping of a building drainage system which receives and conveys the discharge from soil, waste and drainage pipes other than storm drains from within the walls or footings of any building to the building sewer.

(Rev. 01-13-03)

19.01.05 **Building sewer** shall mean the extension from the building drain to the public sewer or other place of disposal.

(Rev. 01-13-03)

19.01.06 **Combination sewer or combined sewer** shall mean a sewer receiving both surface run-off and sewage.

(Rev. 01-13-03)

19.01.07 **DWSD** shall mean the Detroit Water and Sewerage Department.

(Rev. 01-13-03)

19.01.08 **Failure** shall be defined as follows: 1) the backup of sewage into a structure; 2) the discharge of effluent onto the ground surface; 3) the connection of an OSDS to a storm drain; 4) the liquid level in the septic tank is above the outlet invert; 5) the structural failure of a septic tank; 6) the discharge of sewage into any watercourse; 7) the liquid level in the disposal field is

Chapter 19 - Sanitary Sewer Service

above the pipe of such field; or 8) the OSDS which failed to meet operational, effluent or discharge guidelines as set forth by the MDEQ, Oakland County Health Division Services, or the City of Troy.

(Rev. 01-13-03)

19.01.09 **Fixed interval inspection** shall mean the process of inspecting and evaluating the condition and state of the septic tank and septic system to cover a period of four years of operation for the On-site Sewage Disposal System. This process includes observations, information gathering, evaluations, and the report of findings.

(Rev. 01-13-03)

19.01.10 **Garbage** shall mean solid wastes from the preparation, cooking and dispensing of food, and from the handling, storage, processing and sale of produce.

(Rev. 01-13-03)

19.01.11 **Industrial wastes** shall mean the liquid wastes, solids, or semi-solids from industrial processes as distinct from sanitary sewage.

(Rev. 01-13-03)

19.01.12 **MDEQ** shall mean the Michigan Department of Environmental Quality.

(Rev. 01-13-03)

19.01.13 **Natural outlet** shall mean any outlet into a watercourse, pond, ditch, lake, or other body of water, either surface or ground water.

(Rev. 01-13-03)

19.01.14 **On-site Sewage Disposal System** or **OSDS** shall include all components or devices including, but not limited to all septic tanks, pipes, pumps, vents and absorption systems used to treat and/or dispose of all wastewater from a structure that is not serviced by the City of Troy sewage disposal system.

(Rev. 01-13-03)

19.01.15 **Person** shall mean any individual, firm, company, association, society, corporation or group.

(Rev. 01-13-03)

19.01.16 **pH** shall mean the logarithm of the reciprocal of the weight of hydrogen ions in grams per liter of solution.

(Rev. 01-13-03)

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19.01.17 **Properly shredded garbage** shall mean the wastes from the cooking, preparation and dispensing of food that has been cut or shredded to such a degree that all particles will be carried freely under flow conditions normally prevailing in public sewers, with no particle greater than one-half (1/2) inch in any dimension.

(Rev. 01-13-03)

19.01.18 **Public sanitary sewer system** shall be construed to mean a sanitary sewer or a combined sanitary and storm sewer used or intended for use by the public for collection and transportation of sanitary sewage for treatment or disposal.

19.01.19 **Public sewer** shall mean a sewer in which all owners of abutting property have equal rights, and is controlled by public authority.

(Rev. 01-13-03)

19.01.20 **Sanitary sewer** shall mean a sewer which carries sewage, and to which storm and surface waters are not intentionally admitted.

(Rev. 01-13-03)

19.01.21 **Satisfactory Operation** shall mean that there is minimal likelihood of degradation of groundwater and surface water, or risk to public health caused by improper construction, location or functioning of an OSDS.

(Rev. 01-13-03)

19.01.22 **Sewage** shall mean any combination of water-carried wastes from residences, business and commercial buildings, institutions, and industrial establishments, together with such ground, surface and storm waters as may be present.

(Rev. 01-13-03)

19.01.23 **Sewage disposal system** shall be construed to mean the City of Troy sewage disposal system.

(Rev. 01-13-03)

19.01.24 **Sewage Treatment Plant** shall mean any arrangement of devices and structures used for treating sewage.

(Rev. 01-13-03)

19.01.25 **Sewage works** shall mean all facilities for collecting, pumping, treating and disposing of sewage.

(Rev. 01-13-03)

19.01.26 **Sewer** shall mean any pipe, tile, tubes, or conduit for carrying sewage.

(Rev. 01-13-03)

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19.01.27 **Shall** is mandatory. **May** is permissive.

(Rev. 01-13-03)

19.01.28 **Storm sewer** or **storm drain** shall mean a sewer which carries storm and surface waters and drainage but which excludes sewage and polluted industrial wastes.

(Rev. 01-13-03)

19.01.29 **Structure in which sanitary sewage originates** or **structure** shall be construed to mean a building in which toilet, kitchen, laundry, bathing or other facilities which generate water-carried sanitary sewage, are used or are available for use for household, commercial, industrial or other purposes.

(Rev. 01-13-03)

19.01.30 **Suspended solids** shall mean the solids that either float on the surface of, or are suspended in water, sewage, or other liquids and which are removable by laboratory filtering.

(Rev. 01-13-03)

19.01.31 **System** shall be deemed to refer to the said sewage disposal system.

(Rev. 01-13-03)

19.01.32 **Watercourse** shall mean a channel in which a flow of water occurs, either continuously or intermittently.

(Rev. 01-13-03)

USE OF PUBLIC SEWERS REQUIRED

19.02 Public sanitary sewer systems are essential to the health, safety and welfare of the people of the State and the City of Troy. Septic tank disposal systems are subject to failure due to soil conditions or other reasons. Failure or potential failure of septic tank disposal systems poses a threat to the public health, safety and welfare; presents a potential for ill health, transmission of disease, mortality and potential economic blight and constitutes a threat to the quality of surface and subsurface waters of the State and the City of Troy.

The connection to available public sanitary sewer systems at the earliest, reasonable date is a matter for the protection of the public health, safety and welfare and necessary in the public interest which is declared as a matter of legislative determination.

(Rev. 02-26-73)

19.02.01 **Waste Deposits.** It shall be unlawful for any person to place or deposit or permit to be deposited in an unsanitary manner upon any public or private property within the City of Troy, or in any area under the jurisdiction of the said City of Troy, any human or animal excrement, garbage, or other objectionable waste.

(Rev. 04-01-64)

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19.02.02 Water Pollution. It shall be unlawful to discharge into any natural watercourse or any storm sewer, within the City of Troy or in any area under the jurisdiction of the said City, any sanitary sewage, industrial waste, or other polluted waters, except where suitable treatment has been provided in accordance with the standards established by the MDEQ and the provisions of the Federal Clean Water Act.

(Rev. 01-13-03)

19.02.03 Privies and Septic Tanks. Except as hereinafter provided it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool or other facility intended or based for the disposal of sewage.

(Rev. 04-01-64)

19.02.04 Structures in which sanitary sewage originates located in the City of Troy in the area served by the system for which there is an available public sanitary sewer of the system shall not be used or occupied, after the effective date hereof, unless said structures are connected to the sewage disposal system: Provided, that structures within the City of Troy in which sanitary sewage is originating on the effective date hereof or in which sanitary sewage originates before availability of the system or any part thereof to service said structures shall be connected to said system within eighteen (18) months after publication of a notice by the City of Troy in a newspaper of general circulation in the City of Troy of the availability of the system.

(Rev. 06-07-93)

19.02.05

- A. When the structure in which sanitary sewage originates has not been connected to an available sanitary sewer system before use and occupancy or within the eighteen (18) month period provided in this Chapter, the City of Troy shall require the connection to be made forthwith after notice, which may be by first class mail or posting on the property, to the owner of the property on which the structure is located. The notice shall give the approximate location of the public sanitary sewer of the system, which is available for connection of the structure involved and shall advise the owner of the requirements and of the enforcement provisions of this Chapter.
- B. Any property from which sanitary sewage emanates which is not connected to an available public sewer within 90 days after the date of mailing of the written demand is hereby declared to be a threat to the health, safety, and welfare of the people and a public nuisance and the City may forthwith enter upon or in the property and install, construct and make such connections to abate the nuisance and to serve the property as are necessary or desirable, in the sole discretion of the City. The owner or occupant of any property who fails or refuses to connect the property to an available public sewer upon written demand shall forfeit a sum not exceeding \$100.00 and shall be liable to the City for the costs incurred in making the connection to the sewer, which sum, including contingencies, shall be recoverable, jointly and severally from the owner or occupant, in an action at law or may be assessed against such property and shall be collected and treated in the same manner as taxes.
- C. If the City attempts to enter onto property for the purpose of ascertaining if it is the property from which sanitary sewage emanates, or to install, construct, and make connection of the property to the sewer, and is refused such entry, the City shall make complaint in writing to the Judge stating the facts of the case so far as may be known to the complainant. The Judge may issue a warrant directed to the Police Chief commanding him to take sufficient aid, and being accompanied by the Building Inspector of the City, between the hours of sunrise and sunset, to

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enter upon or in the property to the extent and for the duration required to enforce and carry out the provisions of this act.

(Rev. 06-07-93)

19.02.06 Where any structure in which sanitary sewage originates is not connected to an available public sanitary sewer system within 90 days after the date of mailing or posting of the written notice, the provisions of this Chapter shall be enforceable through the bringing of appropriate action for injunction, mandamus, or otherwise, in any court having jurisdiction. Any violation of this Chapter is deemed to be a nuisance per se.

Properties upon which the structure is more than 200 feet distance from the public sewer will be exempt from the provisions of this section unless deemed to be a serious threat to the health, safety and welfare of the people by the Building Department Inspector. Single family homes existing in areas zoned other than residential may be temporarily exempt from the provisions of this section provided that on-site sewage systems meet the approval of the Building Department Inspector and continue to function in a manner which does not threaten the health, welfare, and safety of the community as determined through periodic inspections by the Building Department Inspector.

(Rev. 01-13-03)

ON-SITE SEWAGE DISPOSAL SYSTEMS

19.03.01 On-site Sewage Disposal Systems. Where a public sanitary sewer or combined sewer is not available under the provisions of this Chapter, the building sewer shall be connected with a private on-site sewage disposal system complying with the regulations and orders of the MDEQ and the Oakland County Health Department, and the provisions of Chapter 79 of this code (Building Regulations).

(Rev. 01-13-03)

19.03.02 Discontinuance of System. At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in this Chapter, a direct connection shall be made to the public sewer in compliance with the provisions of this Chapter, and any septic tank, privy, privy vault, cesspool or similar private sewage disposal facilities shall be abandoned and filled with suitable material.

(Rev. 09-25-78)

19.03.03 Maintenance of System. The owner shall operate and maintain the OSDS facilities in a sanitary manner at all times at no expense to the City. Maintenance of the OSDS shall include:

1. Having a fixed interval inspection and evaluation performed by City staff every four (4) years, which shall consist of:
 - (A.) Pumping of the septic tank at the time of inspection by a state licensed septage hauler
 - (B.) Information gathering on the maintenance, including frequency of pumping of the septic tank
 - (C.) Visual and olfactory observations and inspections of the condition of the septic tank, absorption system, pumps, filters, and other important features of the OSDS
 - (D.) Preparation of a report

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2. Having the septic tank pumped on an as needed basis to ensure a satisfactory operation of the system.
3. Repairs. The cost of all repairs, maintenance and replacements of existing On-site Sewage Disposal Systems shall be borne by the property owner. The owner shall make an application to perform such work to the Building Department Inspector and the Oakland County Health Department.

(Rev. 01-13-03)

19.03.04 Inspections. The City of Troy will notify the property owner when the building sewer and OSDS are required to have an inspection. The Building Department Inspector shall then inspect said OSDS and associated appurtenances to determine if the system is operating satisfactorily or is failing.

(Rev. 01-13-03)

19.03.05 Satisfactory operation will be designated to systems with no evidence of an OSDS failure. Fixed interval inspections will be required every four (4) years thereafter until the structure is connected to the City of Troy's public sanitary sewer system.

(Rev. 01-13-03)

19.03.06 If the OSDS and associated appurtenances do not meet the requirements for a functioning septic system, then the system will be considered a failing system. The owner of the property will be required to have the system repaired. The property owner will be responsible for obtaining all necessary repair permits from the Oakland County Health Department. Once the repairs have been completed, the property owner will be required to have the OSDS inspected again by the Building Department Inspector to ensure that the system is working properly.

(Rev. 01-13-03)

19.03.07 Inspection Fee. All OSDS inspections performed by the City of Troy's Building Department Inspector shall be made only with written authorization and inspection reports issued by the City and with payments of fees as shall be established from time to time by the City Council. The fees and charges shall be related to actual costs incurred directly or indirectly to implement the On-site Sewage Disposal System Inspection Program.

(Rev. 01-13-03)

19.03.08 Additional Requirements. No statement contained in this chapter shall be construed to interfere with the provisions of the State of Michigan Plumbing Code or with any additional requirements that may be imposed by the MDEQ or the Oakland County Health Department with respect to on-site sewage disposal systems.

(Rev. 01-13-03)

BUILDING SEWERS AND CONNECTIONS

19.04.01 Permit Required. No unauthorized person shall uncover, make any connections with or open into, use, alter or disturb any public sewer or any appurtenance thereof without first obtaining a written permit from the Building Inspector of the City.

(Rev. 04-01-64)

19.04.02 Permit Fee. All connections with the sanitary or combined sewers of the City shall be made only on written authorization and permits issued by the City on such forms and on payments of such fees as shall be established from time to time by the City Council.

(Rev. 09-25-78)

19.04.03 Connection Permit. Before either a direct or indirect connection is made into any interceptor sewer system of Oakland County, a connection permit shall be obtained by the owner or contractor from the Oakland County Department of Public Works. This permit shall be obtained prior to any work being done on the connection to the sewer. Such permit shall be obtained in accordance with the rules and regulations of the Oakland County Department of Public Works.

(Rev. 09-08-68)

19.04.04 Installation Costs. All costs and expenses incident to the installation and connection of the building sewer shall be borne by the owner of said property. The owner shall indemnify the City from all loss or damage that may directly or indirectly be occasioned by the installation of the building sewer.

(Rev. 04-01-64)

19.04.05 Plans and Inspection of Plumbing Construction. All applicants for sewer connection permits shall first allow the City Plumbing Inspection to inspect the premises to be connected. The inspector shall determine whether present plumbing facilities are free from all safety hazards. The property owner prior to connection shall make all changes and improvements in the system required by the Plumbing Inspector to the City sewer.

(Rev. 08-30-65)

19.04.05 Inspection. The applicant for a building sewer permit shall notify the Building Inspector when the building sewer is ready for inspection and connection to the public sewer. The Building Inspector shall then inspect the said building and plumbing construction therein and if such construction meets the previous requirements as approved in the construction permit, a sewer connection permit shall be issued, subject to the applicable provisions of other sections of this chapter.

(Rev. 04-01-64)

19.04.06 Repairs. The cost of all repairs, maintenance and replacements of existing building sewers and their connection to public sewers shall be borne by the property owner. Such owner shall make application to perform such work to the Building Inspector.

(Rev. 04-01-64)

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19.04.07 House Connections. House connections from the lateral sewer in street or easement to within five feet from the house shall be in accordance with specifications established by the City of Troy Engineering Department. All joints shall be tight and when tested for infiltration shall not exceed the infiltration requirements of this Chapter.

(Rev. 09-25-78)

19.04.08 Temporary Covering During New Construction. In an open excavated basement, it shall be the duty and responsibility of all owners, tenants, applicants for building permits and/or other agents and employees to cause the sanitary sewer pipe inside the building to be plugged. Also, it shall be the duty of such persons to prevent any removal, breaking, cracking, loosening, hole drilling, or other damage to said plug, when removal, breaking, cracking, loosening, hole drilling, or other damage to such plug results in or causes any storm water, surface water, ground water, sub-surface drainage, dirt or debris to discharge or run into the sanitary sewer system. At such time as the plumbing system of such building or improvement is carried to the first floor, the basement backfilled and the roof placed on the building, and approved by the Building Department for the City, the plug may be removed and the building plumbing system connected thereto.

(Rev. 01-13-03)

PROHIBITED USES

19.05.01 Unpolluted Water. No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters into any sanitary sewer. Yard drains, patio drains, catch basins, downspouts, weep tiles, perimeter drains or any other structures used for the collection and conveyance of storm water shall not be permitted to discharge either directly or indirectly, into any sanitary sewer except as provided in this Chapter. Storm water and all other unpolluted drainage shall be discharged into such sewers as are specifically designated as combined sewers or storm sewers or to a natural outlet approved by the City Engineer and/or the MDEQ. Industrial cooling water or unpolluted process waters may be discharged, upon approval of the Chief Building Inspector into a storm sewer, combined sewer or natural outlet.

(Rev. 01-13-03)

19.05.02 Except as hereinafter provided, no person shall discharge any industrial or commercial type wastes into the Troy sewer system, which is deleterious to the public health and safety of the people of the City of Troy. Any waste will be considered deleterious that may cause damaging effects as stated under General Conditions and/or does not conform to the limitations stated under Specific Conditions.

(Rev. 04-01-64)

- (1) General Conditions:
 - (A) Chemical reaction, either directly or indirectly, with the materials of construction to impair the strength or durability of sewer structures.
 - (B) Mechanical action that will destroy or damage the sewer structures.
 - (C) Restriction of the hydraulic capacity of sewer structures.
 - (D) Restriction of the normal inspection or maintenance of the sewer structures.

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- (E) Placing of unusual demands on the sewage treatment equipment or process.
- (F) Limitation of the effectiveness of the sewage treatment process.
- (G) Danger to public health and safety.
- (H) Obnoxious conditions inimical to the public interest.
- (I) Any conditions not listed above that are prohibited by the DWSD or are prohibited by the MDEQ and/or Federal Clean Water Act.

(Rev. 01-13-03)

(2) Specific Conditions:

- (A) Acidity or alkalinity must be neutralized to a pH of 7.0 as a daily average on a volumetric basis, with a maximum temporary variation of pH 5.0 to 10.0.
- (B) Must not contain more than 10 P.P.M. of the following gases: Hydrogen sulfur dioxide, oxides of nitrogen, or any of the halogens.
- (C) Must not contain any explosive substance.
- (D) Must not contain any flammable substance with a flash point lower than 187 degrees F.
- (E) Must have a temperature within the range of 32 degrees to 150 degrees F.
- (F) Must not contain grease or oil or other substance that will solidify or become viscous at temperatures between 32 degrees and 150 degrees F.
- (G) Must not contain insoluble substance in excess of 10,000 P.P.M. or exceeding a daily average of 500 P.P.M.
- (H) Must not contain total solids (soluble and insoluble substance) in excess of 20,000 P.P.M., or exceeding a daily average of 2,000 P.P.M.
- (I) Must not contain soluble substance in concentrations that would increase the viscosity to greater than 1.1 specific viscosity.
- (J) Must not contain insoluble substance having a specific gravity greater than 2.65.
- (K) Must not contain insoluble substance that will fail to pass a No. 8 standard sieve, or having any dimension greater than 1/2 inch.
- (L) Must not contain gases or vapors, either free or occluded, in concentrations toxic or dangerous to humans or animals.
- (M) Must not have a chlorine demand greater than 15 P.P.M.
- (N) Must not contain more than 100 P.P.M. of an antiseptic substance.
- (O) Must not contain phenols in excess of .005 P.P.M.

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- (P) Must not contain any toxic or irritating substance, which will create conditions hazardous to public health and safety.
- (Q) Must not contain in excess of 100 P.P.M. or exceed a daily average of 25 P.P.M. of any grease or oil or any oily substance.
- (R) Must meet all requirements for discharging into the DWSD public sanitary sewer system.

All of the preceding standards and regulations are to apply at the point where industrial or commercial type wastes are discharged into a public sewer and all chemical and/or mechanical corrective treatment must be accomplished to practical completion before this point is reached.

INTERCEPTORS

19.06.01 Grease, oil and sand interceptors shall be provided when in the opinion of the Building Inspector and/or the MDEQ they are necessary for the proper handling of liquid wastes containing grease in excessive amounts or any inflammable wastes, sand, or other harmful ingredients, except that such interceptors shall not be required for private living quarters or dwelling units. All interceptors shall be of a type and capacity approved by the Building Inspector and/or the MDEQ and shall be located so as to be readily accessible for cleaning and inspection. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be substantially constructed, water-tight, and equipped with easily removable covers which when bolted in place shall be gas-tight and water-tight.

(Rev. 04-01-64)

19.06.02 Interceptor Maintenance. Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times.

(Rev. 04-01-64)

PRELIMINARY TREATMENT FACILITIES

19.07.01 Preliminary Treatment Facilities. The admission into the public sewers of any waters or wastes having (1) a five (5) day BOD greater than 300 parts per million by weight, or (2) containing more than 350 parts per million by weight of suspended solids, or (3) containing any quantity or substance having the characteristics described in Section 19.05.02 or (4) having a daily average flow greater than two (2%) percent of the average daily sewage flow of the City of Troy, shall be subject to the review and approval of the City Council and/or the MDEQ or the DWSD. Where necessary in the opinion of the City Council and/or the MDEQ or the DWSD, the owner shall provide, at his expense, such preliminary treatment as may be necessary to (1) reduce the BOD to 300 parts per million and the suspended solids to 350 parts per million by weight, or (2) reduce objectionable characteristics or constituents to within the maximum limits provided for in Section 19.05.02, or (3) control the quantities and rates of discharge of such waters or wastes. Plans, specifications and any other pertinent information relating to the proposed preliminary treatment facilities shall be submitted for approval of the City Council and/or of the MDEQ or the DWSD and no construction of such facilities shall be commenced until said approvals are obtained in writing.

(Rev.01-13-03)

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19.07.02 Maintenance of Preliminary Facilities. Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained in satisfactory and effective operation, by the owner at his expense.

(Rev. 04-01-64)

19.07.03 Control Manholes. When required by the City Council and/or the MDEQ or the DWSD, the owner of any property served by a building sewer carrying industrial wastes shall install a suitable control manhole in the building sewer to facilitate observation, sampling and measurement of wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the City Council. The manhole shall be installed by the owner at his expense and shall be maintained by him so as to be safe and accessible at all times.

(Rev. 01-13-03)

19.07.04 Measurements and Tests. All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made shall be determined in accordance with "Standard Methods for the Examination of Water and Sewage" and shall be determined at the control manhole or upon suitable samples being taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest down-stream manhole in the public sewer to the point at which the building sewer is connected.

(Rev. 09-25-78)

19.07.08 Agreements. No statement contained in this chapter shall be construed as preventing any special agreement or arrangement between the City and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the said City for treatment, subject to the payment by the industrial concern of the estimated cost of such treatment.

(Rev. 04-01-64)

PROTECTION FROM DAMAGE

19.08 No unauthorized person shall break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment, which is a part of the municipal sewerage system. No person, firm or corporation shall place earth, debris, landscaping or other materials in a manner that will obstruct, obscure or prevent normal access to or operation of any manhole, siphon chamber, pumping station, meter chamber or other sewerage system appurtenance. The Superintendent may order the removal of said materials. The expenses incurred in the removal shall be a debt to the City from the responsible person, firm or corporation, and shall be collected as any other debt to the City.

(Rev. 09-25-78)

SURFACE AND GROUND WATER DISPOSAL

19.09.01 Yard drains, patio drains, catch basins, downspouts, sump pumps or any structures used for the collection and conveyance of storm water shall not be permitted to discharge into any sanitary sewer. Any such structure which conveys storm water either directly or indirectly to any sanitary sewer shall be disconnected or altered so as to remove the possibility of such conveyance.

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- 19.09.02 No weep tile connection to the sanitary sewer system or below grade patio drain made after the original adoption of this Section, February 19, 1968, shall be considered legal and such connections made after that date shall be promptly disconnected.
- 19.09.03 In the case of buildings with weep tiles or below grade patio drains which were permitted to be connected to the sanitary sewer prior to said date, the surface around the building shall be sloped so as to provide positive drainage of all roof and surface areas away from the building. Where weep tiles are connected to the sanitary sewer, downspouts shall be so constructed or altered that they do not discharge into any flower or shrub bed adjacent to a building wall, nor upon the ground within five (5) feet of the building wall. When the building is located less than five (5) feet from the property line or when there are other practical difficulties, the downspouts shall be discharged in a manner approved by the Chief Building Inspector.
- 19.09.04 Downspout piping shall in all cases be permanently affixed to the building wall and shall be anchored at the discharge end.

(Rev. 06-21-99)

- 19.09.05 Requirements for Bulkhead. On all new lateral lines, a watertight bulkhead shall be installed to prohibit water, sand or other material from entering the existing sewer system. Such bulkhead shall be left in place until removal is authorized by the City Engineer.

(Rev. 09-09-68)

- 19.09.06 Ground Water Infiltration. A test for water infiltration into any newly constructed sewer system shall be performed by the owner or contractor in accordance with the procedures established by the City of Troy Engineering Department. When the owner or contractor has determined that the system meets the following requirements for maximum infiltration, he shall arrange for the results of such test to be verified by the Engineering Department.
- 19.09.07 Ground water infiltration at any time shall not exceed 250 U.S. gallons per inch of pipe diameter per mile of sewer per 24 hours for the overall system, nor shall infiltration exceed 500 U.S. gallons per inch of diameter per mile of pipe per 24 hours for any individual run between manholes. It shall be the responsibility of the owner or contractor to whom the permit was issued to make whatever corrections as may be necessary to the system to meet the infiltration requirement prior to using the sanitary sewer.

(Rev. 09-09-68)

ENFORCEMENT - PENALTIES

- 19.10.01 Inspectors. The Building Department Inspector of the City of Troy and other duly authorized officials or employees of the City and agents of the MDEQ, Oakland County Health Department, or the DWSD bearing proper credentials and identification shall be permitted to enter upon all properties for the purpose of inspection, observation, measurement, sampling, and testing, in accordance with the provisions of this chapter at any time during reasonable or usual business hours. Any person guilty of refusing or obstructing such entry shall be guilty of a violation of this code.
- 19.10.02 Notice to Cease Violation. Any person found to be violating any provisions of this chapter except Section 19.04.08, 19.05.02, 19.05.01, 19.08, and 19.10.03 shall be served by the City of Troy with written notice stating the nature of such violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the

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period of the time stated in such notice, take such corrective action as may be necessary.

(Rev. 06-19-72)

19.10.03 Continued Violation. Any person who shall continue any violation beyond the time limit provided shall upon conviction thereof, be fined not less than Twenty-Five (\$25.00) nor more than Five Hundred (\$500.00) Dollars, or by imprisonment for not more than ninety (90) days, or by both fine and imprisonment in the discretion of the court. Each day or fraction of a day in which such violation shall continue shall be deemed a separate offense. Any officer, agent, or employee guilty of aiding or abetting such violation, or, being responsible therefore, refuses or neglects to take corrective action, shall be guilty as a principal.

(Rev. 09-25-78)

19.10.04 Civil Liability. Any person violating any of the provisions of this chapter shall be liable to the City of Troy for any expense, loss or damage occasioned to the City of Troy by reason of such violation, and recovery therefore may be had in an appropriate action in any court of competent jurisdiction.

(Rev. 04-01-64)

19.10.05 Abatement in Equity. Any continued violation, after due notice as provided in Section 2.91, shall be deemed a public nuisance, per se, and may be abated by suit in equity by the City of Troy in any court of competent jurisdiction. This remedy shall be in addition to those heretofore provided.

(Rev. 09-09-69)

19.10.06 Severability. If any portion of this Chapter is for any reason held invalid or unenforceable, such portion shall be deemed to be a separate and independent provision from the remainder of this Chapter, and shall have no effect on the validity or enforceability of the remainder of this Chapter.

(Rev. 01-13-03)

Resolution to Revise Sewer Benefit Fees

C-9

Resolution #89-648
 Moved by Johnson
 Supported by Husk

BE IT RESOLVED, that the Sewer Benefit Fees as provided in Chapter 20 of the Code of the City of Troy are hereby revised as recommended in a report from the City Engineer dated June 22, 1989, a copy of which shall be attached to and made a part of the original minutes of this meeting, as follows:

<u>Zone Districts</u>	<u>Min. Lot Size</u>	<u>Existing Fee</u>	<u>Proposed Fee</u>
R-1E	60'	\$1,500	\$2,400
R-1D	75'	1,875	3,000
R-1C	85'	2,125	3,400
R-1B	100'	2,500	4,000
R-1A	120'	3,000	4,800
All Other Zones		\$25/f.f. Minimum \$1,500	\$40/f.f. Minimum \$2,400

BE IT FURTHER RESOLVED, that said revisions shall be effective for installations made on or after January 1, 1990.

Yeas: Doyle, Husk, Johnson, Stine
 Absent: Allemon, Pallotta, Schilling

Resolution to Approve Assessor's Plat #1

C-10

No Action was taken.

Resolution to Approve Concept Plan for Beaver Creek Park

C-11

James Scott explained the various plans and answered questions for Council.

Resolution #89-649
 Moved by Husk
 Supported by Stine

RESOLVED, that Concept Plan No.8 for Beaver Creek Park as presented on this date by the firm of James C. Scott & Associates is hereby approved; and

BE IT FURTHER RESOLVED, that the City Manager is hereby authorized to direct preparation of a final concept plan to be used in preparation of construction plans for further review and consideration of this City Council.

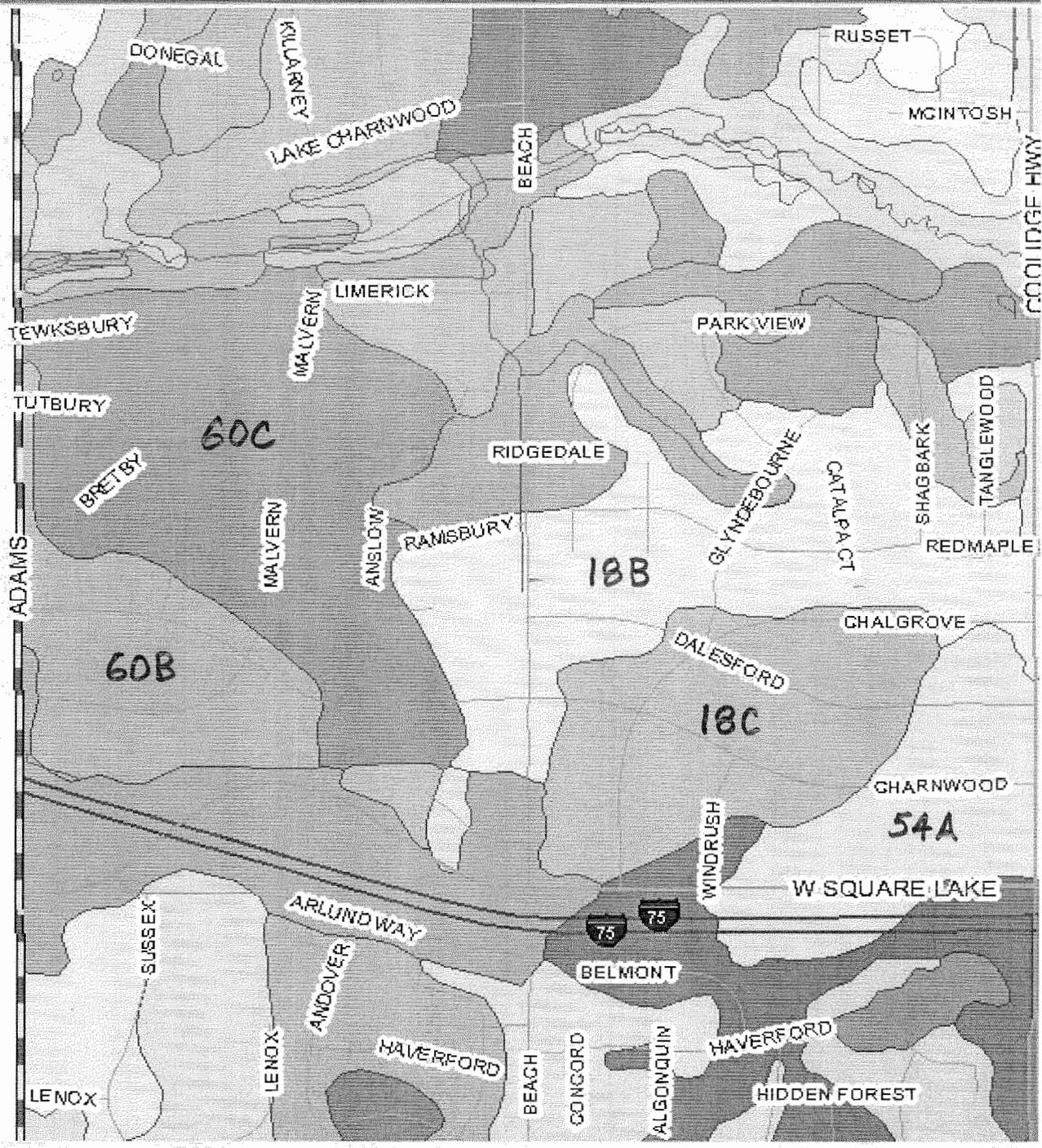
Yeas: Doyle, Husk, Johnson, Stine
 Absent: Allemon, Pallotta, Schilling

9-11-00 Latest Revision.

SOIL TYPES



Geographical Information Systems Online



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



See 2/8/05

TOWNSHIP

TROY

SUBDIVISION

CHARWOOD HILLS #1 & #2

CHAMPS NAME

CHARWOOD HILLS 1 (2)

X

Lot/Sidwell #	# and Street Address	N/ R	Owner and/or Applicant	Date Rec/d	Date Issued	PERMIT #	CHAMPS ID #	Receipt
12	6214 Malvern	R	McCrackin	1-26-90	1/26/90	18808	491238	1868
34								
20-06-302-006	6327 Lathbury Ln	R	Harold AA Sower	3/29/90	Revised 6-2-90			2934
15	6239 Malvern	R	Fawcett Todoroff	6/8/90	6/11/90	19155	506909	4727
14	6227 Malvern	R	Dave Malvern Jedroch Bros	10/18/90	10/29/90	19587	524311	6009
20-06-303-005	2860 Charnwood	R	J. Smith " "	4/5/91	4/16/91	19864	543122	8024
25								
12	6214 Malvern	R	William Luscombe " "	4/30/91	5/23/91	19978	491238	8933
99	2525 Ramsbury	R	Donald Bunkel Patti Bunkel	8/19/91	8/28/91	20219	568332	
20-06-401-003								
178	2440 Dalesford	R	Gil Maester A-1 Sanitation	4/29/92	5/6/92	20781	596061	452
20-06-303-006								
57	2745 Bretby	R	Nicholas Strumpos	7/29/92	9/1/92	21114	614131	6057
98	2505 RAMSBURY	R	H. SHUCK EATON EXCAV.	8/19/92	9/8/92	21123	614670	2073
98	2505 Ramsbury	N	SHUCK BATON EXCAV	8/27/92		VOID		637

TOWNSHIP

TROY

SUBDIVISION

CHARMS NAME

CHARWOOD HILLS 1 (2)

Lot/Sidwell #	# and Street Address	N/ R	Owner and/or Applicant	Date Rec/d	Date Issued	PERMIT #	CHAMPS ID #	Receipt
20-04-324-004 79	6490 Mulberry	R	Steve Cesalov Arlin Supt	5/13/94	5/25/94	22460	688247	6731
20-06-328-001 97A	Beach Rd	N	Craig Robinson John Weigand	8/1/94	8/31/94	22634	695749	8018
20-06-328-009 89	6455 Anslow	N	Domeneciani	1/23/98	Withdrawn		sewer	8088
20-06-326-007 82	6420 Mulvern	R	Richard Michael Gumbert	4/2/98	4/6/98	24271	829538	8851
20-06-152-004 60	2835 Tewksbury	R	Keith Moffat	9/29/98	10/6/98	24538	843690	1198
20-06-152-001 63	2955 Tewksbury	R	Ivey Harrison Assoc	2/7/99	3/12/99	24675	856371	1881
PT. of 49 176 20-06-151-013 58	2710 Bretby	R	Pence Electric Harrison Assoc	7/20/00	8/1/00	25333	909814	8623
95	2761 Bretby	R	Gleason Design Arlin	10/10/00	10/12/00	25440	917535	9316
20-06-328-009	6323 Anslow	N	James Rudnick Kendra Law Assoc	2/6/01	2/14/01	25529	929963	9135

TOWNSHIP
SUBDIVISION
CHAMPS NAME

TROY
CHARWOOD HILLS #3
CHARWOOD HILLS 3

Lot/Sidwell #	# and Street Address	N/ R	Owner and/or Applicant	Date Rec/d	Date Issued	PERMIT #	CHAMPS ID #	Receipt
116	6114 Glyndebourne	R	J. Holmes	1-8-88	1-21-88	16688	407564	1649
145	2420 Charwood	R	A. McGinnis AA Sewer Plumb	9/21/91	4/27/91	20088	561884	9938
20-06-476-004	2205 Dalesford	R	David a. Lawrence Cia Sewer & Plumb	9/14/93	9/14/93	21927	662326	2497
20-06-476-010	2310 Charwood	R	Dick Austin G Lans	5/26/94	6/16/94	22565	691714	697
20-06-476-015	2100 Charwood	R	M. Giannocotti same	7/17/97	7/29/97	24137	807248	7095
20-06-326-007	6420 MALVERN	R	RUEK Michelle BINNY HADAS	2/2/98	(Sec: Charwood Hills # 2)			8851
20-06-427-006	2041 Chalgrave	R	Jane Baker Brendel Sand & Gravel	5/27/98				235
20-06-453-005	2305 Charwood	R	M. Boursseau	10/29/99	11/14/99	25038	883750	5025
20-06-451-002	2469 Dalesford	R	Lois Kebbe R/B Sewer	6/22/01	8/22/01	25753	952420	8720
116	6114 Glyndebourne	R	Tom Stegeman	10/19/01	10/13/01	25806	407564	11675
158	Dalesford	N	Roger Blackwood Morgan cyth	11/19/01	DENIED	17/02		11996

TOWNSHIP Charwood Hills #3
 SUBDIVISION _____
 CHAMPS NAME _____

Lot/Sidwell #	# and Street Address	N/ R	Owner and/or Applicant	Date Rec/d	Date Issued	PERMIT #	CHAMPS ID #	Receipt
120	Charwood	N	Reggie Blumhild Morton Center	1/1/03		DENIED 1/8/02		11995
2 8820 06352011	2555 Charwood	R	Kathy Kessler Brentel	4/15/03	5/29/03	26015	1021523	19772
104	2251 Chalgrave	N	Eugene Park "	2/3/04	5/28/04	26287	1057865	24692
107 2006-427-004	2123 Chalgrave	N	MINA COX Jim Baier	10/21/04	10/27/04	123851	1071480	3270