

**PUBLIC UTILITIES**

AT&T  
337 N. ABBOTT, RM. 201  
EAST LANSING, MI 48823  
517.337.3660

TELEPHONE

CONSUMERS ENERGY  
530 W. WILLOW ST.  
P.O. BOX 30162  
LANSING, MI 48909  
517.373.6100

GAS  
ELECTRIC

COMCAST  
1070 TROWBRIDGE ROAD  
EAST LANSING, MI 48823  
517.332.1012

CABLE TV

MERIDIAN TOWNSHIP  
5151 MARSH RD.  
OKEMOS, MI 48864  
517.853.4440

WATER MAINS  
SANITARY SEWER  
PATHWAYS

WOLVERINE PIPE LINE  
8105 VALLEYWOOD LANE  
PORTAGE, MI 49024-5251  
231.323.2491

PETROLEUM PIPELINE

INGHAM COUNTY DRAIN  
COMMISSIONER  
707 BUHL ST.  
MASON, MI 48854  
517.676.8395

DRAINS  
STORM SEWER

INGHAM COUNTY ROAD DEPT  
301 BUSH ST.  
MASON, MI 48854  
517.676.9722

PUBLIC ROADS AND  
RIGHTS OF WAY

MICHIGAN DEPARTMENT OF TRANSPORTATION -  
1700 PORT LANSING RD  
LANSING, MI 48854  
517.335.3754

TRANSPORTATION -  
PUBLIC ROADS AND  
RIGHTS OF WAY

**SOIL EROSION & SEDIMENTATION CONTROL NOTES**

- All soil erosion and sediment control (SESC) work shall conform to the standards and specifications of the Ingham County Drain Commissioner's Office and Meridian Township.
- Daily inspections shall be made by the contractor for effectiveness of SESC measures. Any necessary repairs shall be performed without delay.
- Erosion of any sediment from work on the site shall be contained on-site and not allowed to collect on any off-site areas or in waterways. Waterways include both natural and man-made open ditches, streams, storm drains, lakes, ponds, and wetlands.
- The Contractor shall apply temporary SESC measures when required and as directed on these plans. The Contractor shall remove temporary measures as soon as permanent stabilization of slopes, ditches, and other changes have been established.
- Staging the work shall be done by the Contractor as directed in these plans and as required to ensure progressive stabilization of disturbed earth.
- Soil erosion control practice shall be established in the early stages of construction by the Contractor. Sedimentation control practices shall be applied as a perimeter defense against any transporting of soil off the site.
- The Contractor shall preserve natural vegetation as much as possible.
- Vegetative stabilization of all disturbed areas shall be established within 15 days of completion of the final grading.

**GRAND RIVER AVENUE & PARK LAKE ROAD  
GATE VALVE REPLACEMENT 2025  
CONSTRUCTION PLANS  
for  
MERIDIAN TOWNSHIP  
INGHAM COUNTY, MICHIGAN**



before you  
Call **811** dig.

**STANDARD CONSTRUCTION NOTES**

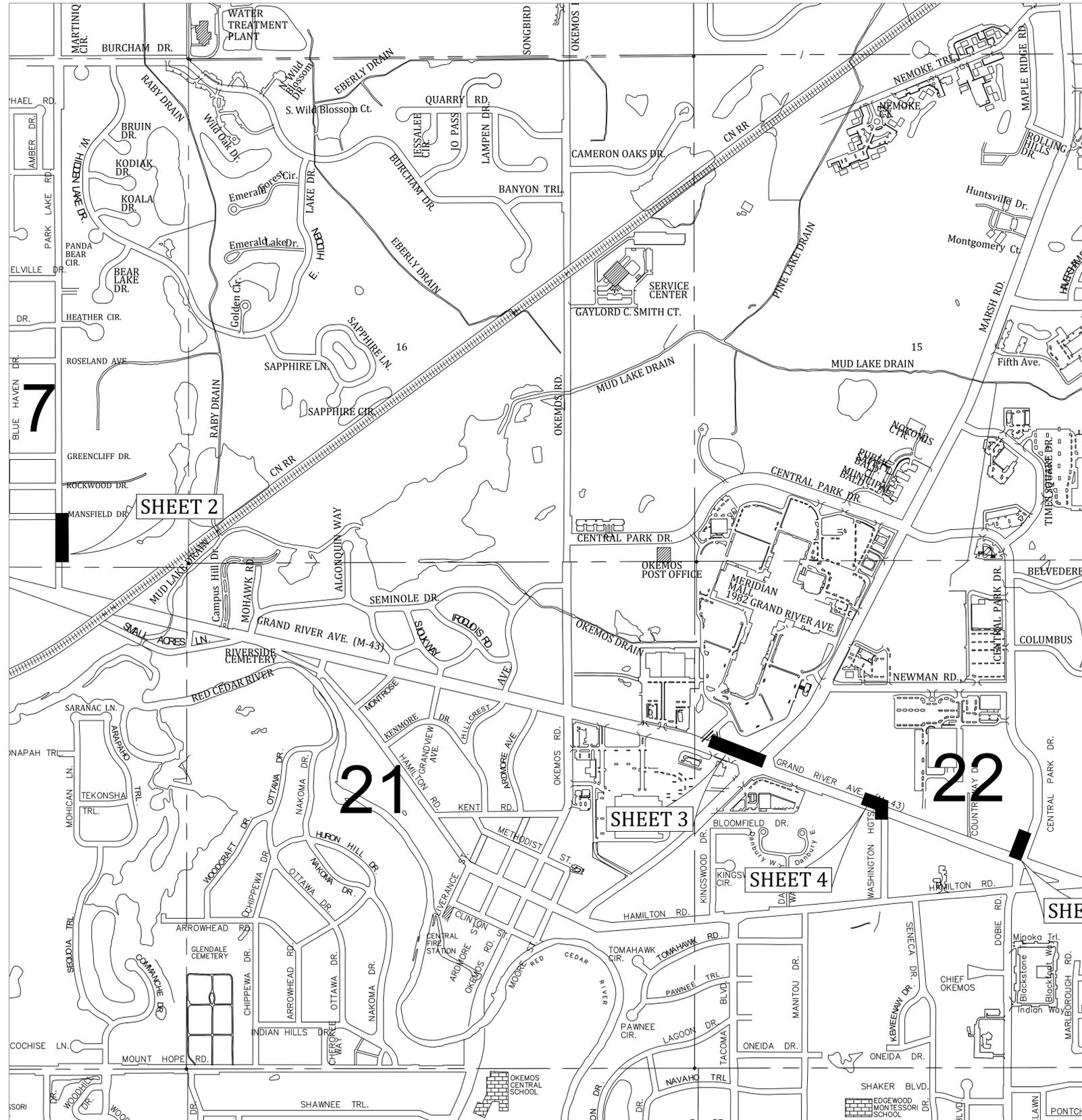
- The Contractor shall notify the Charter Township of Meridian, Department of Public Works, Office of Engineering 517-853-4440 a minimum of 72 hours prior to the start of construction of public utilities or of construction within the public right-of-way.
- All construction shall conform to the current standards and specifications of the Charter Township of Meridian which are included as part of these plans in effect at the time of construction.
- After the completion of construction of public utilities or construction within public right-of-way, the contractor must request a final inspection. Any punchlist items resulting from the final inspection must be resolved prior to final release and acceptance.
- The existing utilities indicated on the plans are in accordance with available information. It shall be the contractor's obligation to verify the exact location of all existing utilities, which might affect this job.
- The contractor shall notify "MISS DIG" 1-800-482-7171 at least 72 hours prior to the start of construction.
- The contractor shall at all times be aware of inconvenience caused to the abutting property owners and the general public. Where the contractor does not remedy undue inconveniences, the Charter Township of Meridian, upon four hours notice, reserves the right to perform the work and deduct the cost therefore from the money due the contractor.
- A Registered Land Surveyor provided by the contractor at the contractor's expense shall replace all property irons and monuments disturbed or destroyed by the contractor's operations.
- Contractor shall provide Owner and Township Engineer a copy of written permission to use private property for storage of equipment and materials or for his construction operations.
- Trench backfill under existing or proposed roadways, driveways, and parking areas, shall be sand or gravel placed in 12" layers (maximum) and consolidated to 95% of maximum density as measured by modified proctor unless otherwise noted.
- Trees and shrubs are to be protected during construction and bored where necessary.
- Existing fences shall be removed and restored to their original condition or better where in conflict with construction.
- Driveways, culverts, ditches, drain tile, tile fields, drainage structures, etc., that are disturbed by the contractor's operations shall be immediately restored.
- All established lawn areas disturbed by the contractor's operations shall be resodded with matching sod. All other areas shall be seeded and mulched. Seeding and mulching shall be done in accordance with the General Specifications.
- All ditch slopes shall have established vegetation and be protected from erosion.
- All utility poles in close proximity to construction shall be supported in a manner satisfactory to the utility owner.
- Onsite parking and sanitary facilities shall be provided for construction workers. The facilities shall be constructed and operated (with minimal impact to the surrounding area) to the satisfaction of the Township.

**WATER MAIN NOTES**

- Hydrant elevations and gate well tap elevations shall be set to existing ground elevations unless otherwise directed by the Township Engineer.
- All water mains shall be constructed with 5 feet of cover below finish grade, unless otherwise indicated on the plans.
- Connection to the existing water main shall not be made until after the successful completion of pressure and bacteriological tests. Pressure testing shall be performed in accordance with AWWA C600. Additionally, all corporation stops for proposed house services shall be installed prior to pressure testing. Disinfection and bacteriological testing shall be in accordance with the AWWA C651. Before the mains are chlorinated, they shall be thoroughly flushed. All mains shall be chlorinated for a period of at least twenty-four (24) hours. Chlorine shall be added in sufficient quantity to give a 50-ppm residual of free chlorine after a twenty-four (24) hour period. After completion of the chlorine procedure, the main shall be flushed. Then water samples shall be taken from the main for bacteriological tests. If the tests should result in unsafe conditions, the chlorinating shall be repeated by the Contractor. Two consecutive passing samples at least 24 hours apart must be obtained before the main can be connected to the existing water system.
- All valves shall be counter-clock wise open.
- All fire hydrants shall be EJIW 5BR (54915) Traffic Type with breakaway flange or approved equal.
- Hydrants shall be painted OSHA red.
- Two brass wedges shall be installed at each joint on ductile iron pipe.
- Polyethylene encasement of pipes will be required in all areas. The encasement shall be V-Bio® Enhanced Polyethylene Encasement, in accordance with ANSI/AWWA C105/A21.5, installed per the manufacturer's instructions.
- For existing lines: service taps, shut off valves, and service line extensions to the property shall be made by Township Department of Public Works personnel for connections 2" and smaller.
- Where water mains must dip to pass under a storm sewer or sanitary sewer, the sections which are deeper than normal shall be kept to a minimum length by the use of 45, 22½ or 11½ degree bends properly restrained.
- All manhole covers shall bear the legend "Meridian Water" with tree logo, where available.
- Lead content requirements for all pipes, piping fittings, plumbing fittings, and fixtures that are used for potable water shall comply with NSF/ANSI 372 Standard.
- All mechanical joints and fittings shall be restrained using MEGALUG® style restrainers, or approved equal. All exposed metal components of the restrained-joint system shall be treated with a corrosion resistant coating, including: the collar, breakaway bolts, wedges, and connecting nuts and bolts.

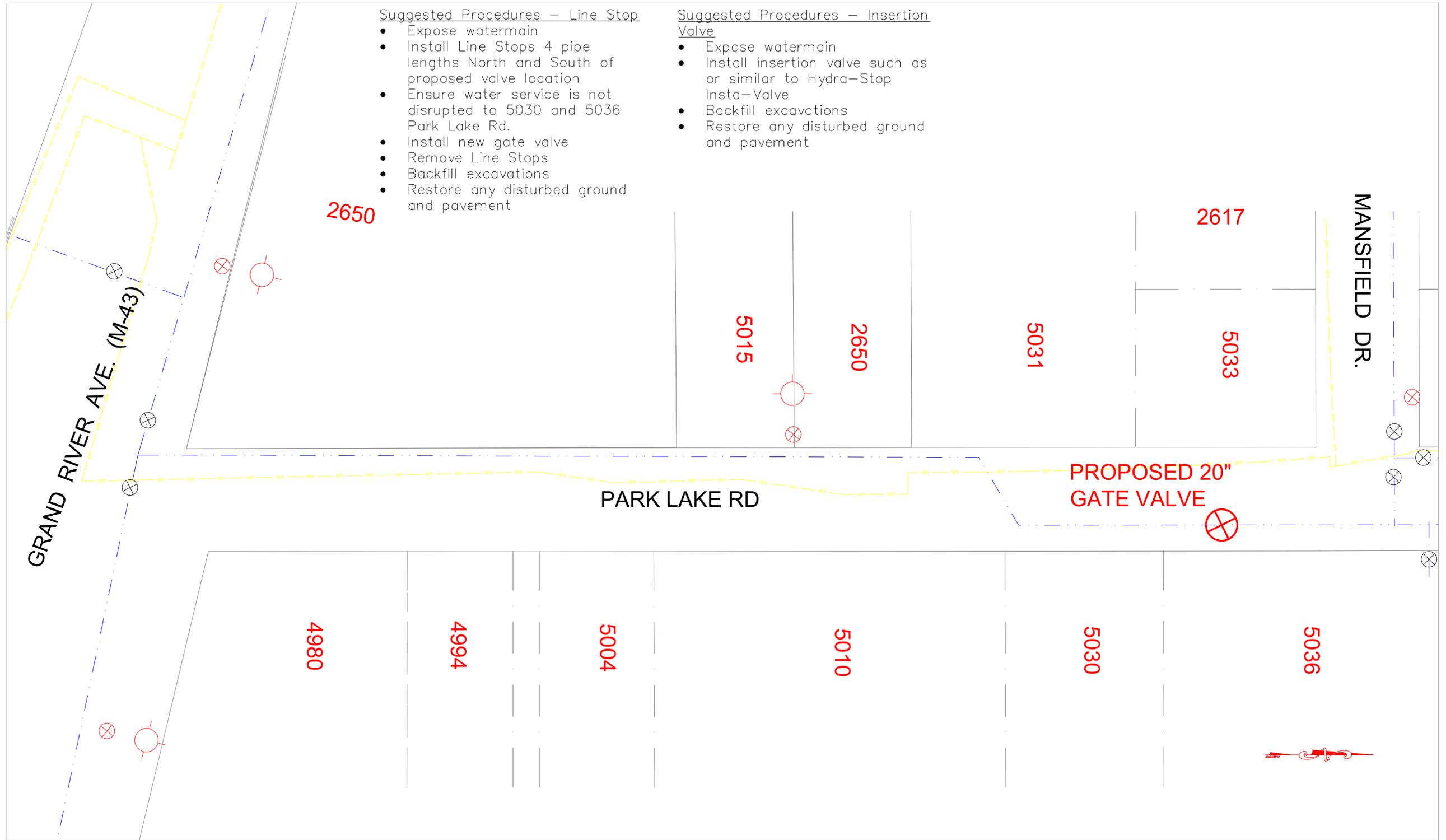
**SHEET INDEX**

SHT #	TITLE
1	COVER SHEET
2	PARK LAKE WTR PLAN
3	GRAND RIVER WTR PLAN (MARSH)
4	GRAND RIVER WTR PLAN (WASHINGTON HGHTS)
5	CENTRAL PARK WTR PLAN
6-9	SESC Plans
10-12	Detail Sheets



**RECOMMENDED CONSTRUCTION SCHEDULING & SEQUENCING**

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
INSTALL SESC MEASURES												
EXCAVATE												
INSTALL LINE STOP												
INSTALL GATE VALVES AND WATER MAIN												
SITE STABILIZATION												



Suggested Procedures – Line Stop

- Expose watermain
- Install Line Stops 4 pipe lengths North and South of proposed valve location
- Ensure water service is not disrupted to 5030 and 5036 Park Lake Rd.
- Install new gate valve
- Remove Line Stops
- Backfill excavations
- Restore any disturbed ground and pavement

Suggested Procedures – Insertion Valve

- Expose watermain
- Install insertion valve such as or similar to Hydra-Stop Insta-Valve
- Backfill excavations
- Restore any disturbed ground and pavement

2650

2617

5015

2650

5031

5033

GRAND RIVER AVE. (M-43)

PARK LAKE RD

PROPOSED 20" GATE VALVE

MANSFIELD DR.

4980

4994

5004

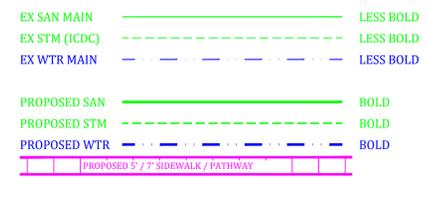
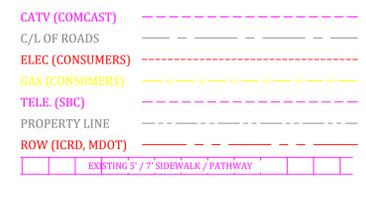
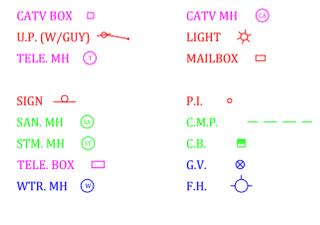
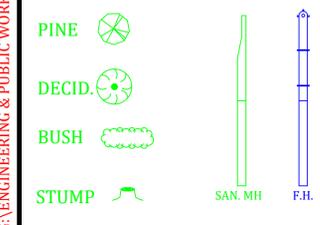
5010

5030

5036



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<b>Meridian Charter Township</b> Ingham County, Michigan <b>Water Main System</b>		REVISIONS:	
		DATE: 05/14/25	BY: TH
<b>PARK LAKE ROAD</b> GRAND RIVER AVE. TO MANSFIELD DR.		COMMENTS:	
		Bid Set	
DRAWN BY: TH		CHECKED BY: YI	
SCALE: 1" = 30' HOR.		PAGE: 2 OF 12	FILE:

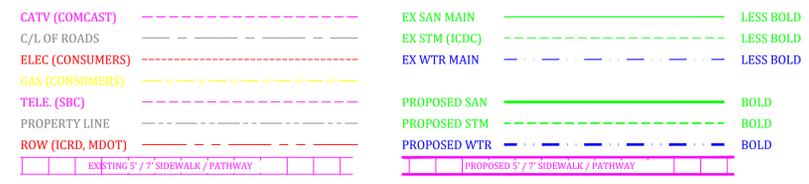
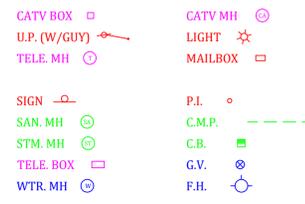
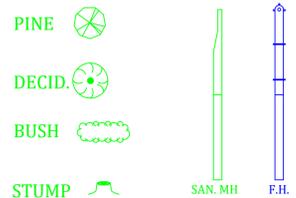
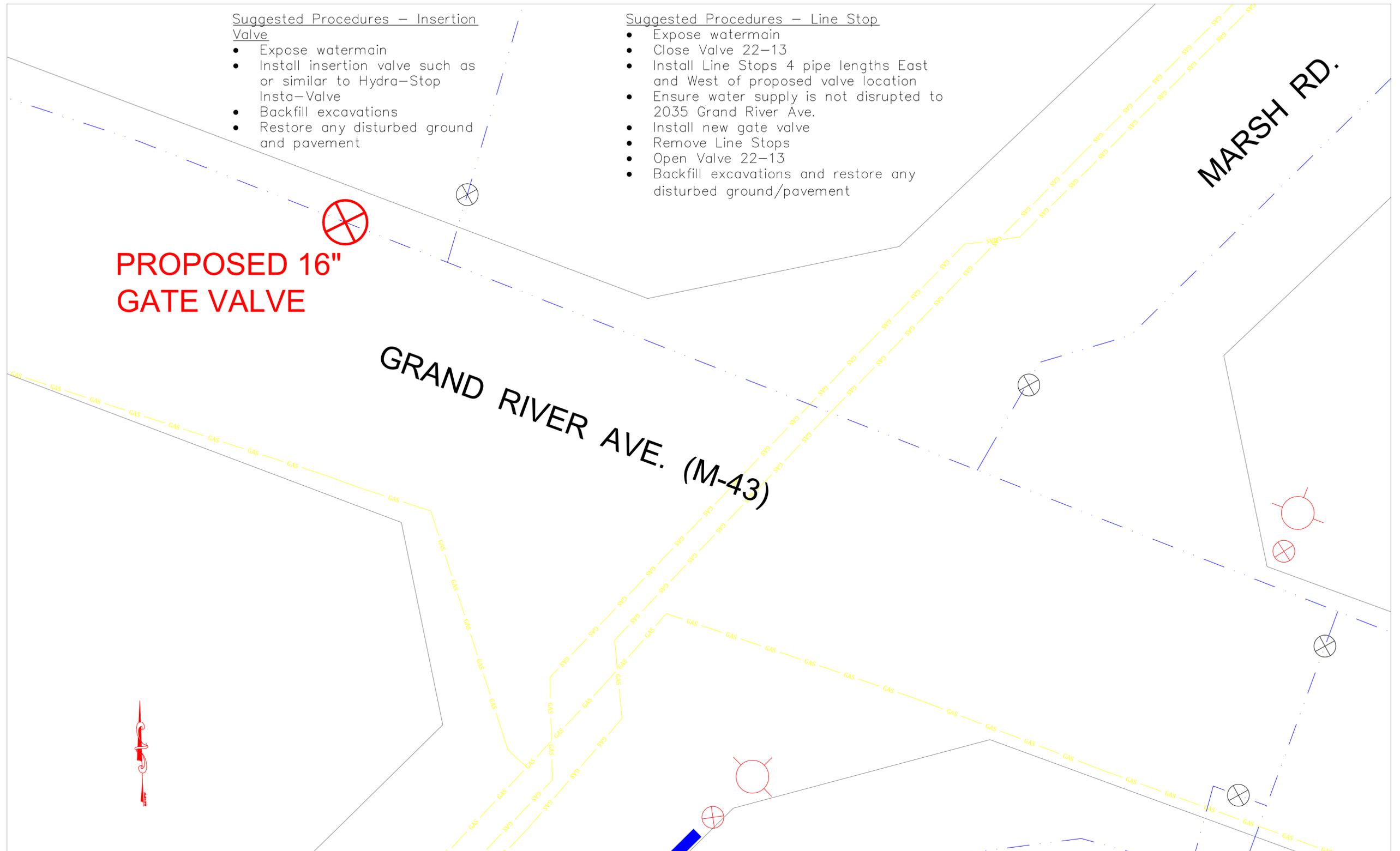
Suggested Procedures – Insertion Valve

- Expose watermain
- Install insertion valve such as or similar to Hydra-Stop Insta-Valve
- Backfill excavations
- Restore any disturbed ground and pavement

Suggested Procedures – Line Stop

- Expose watermain
- Close Valve 22-13
- Install Line Stops 4 pipe lengths East and West of proposed valve location
- Ensure water supply is not disrupted to 2035 Grand River Ave.
- Install new gate valve
- Remove Line Stops
- Open Valve 22-13
- Backfill excavations and restore any disturbed ground/pavement

**PROPOSED 16" GATE VALVE**

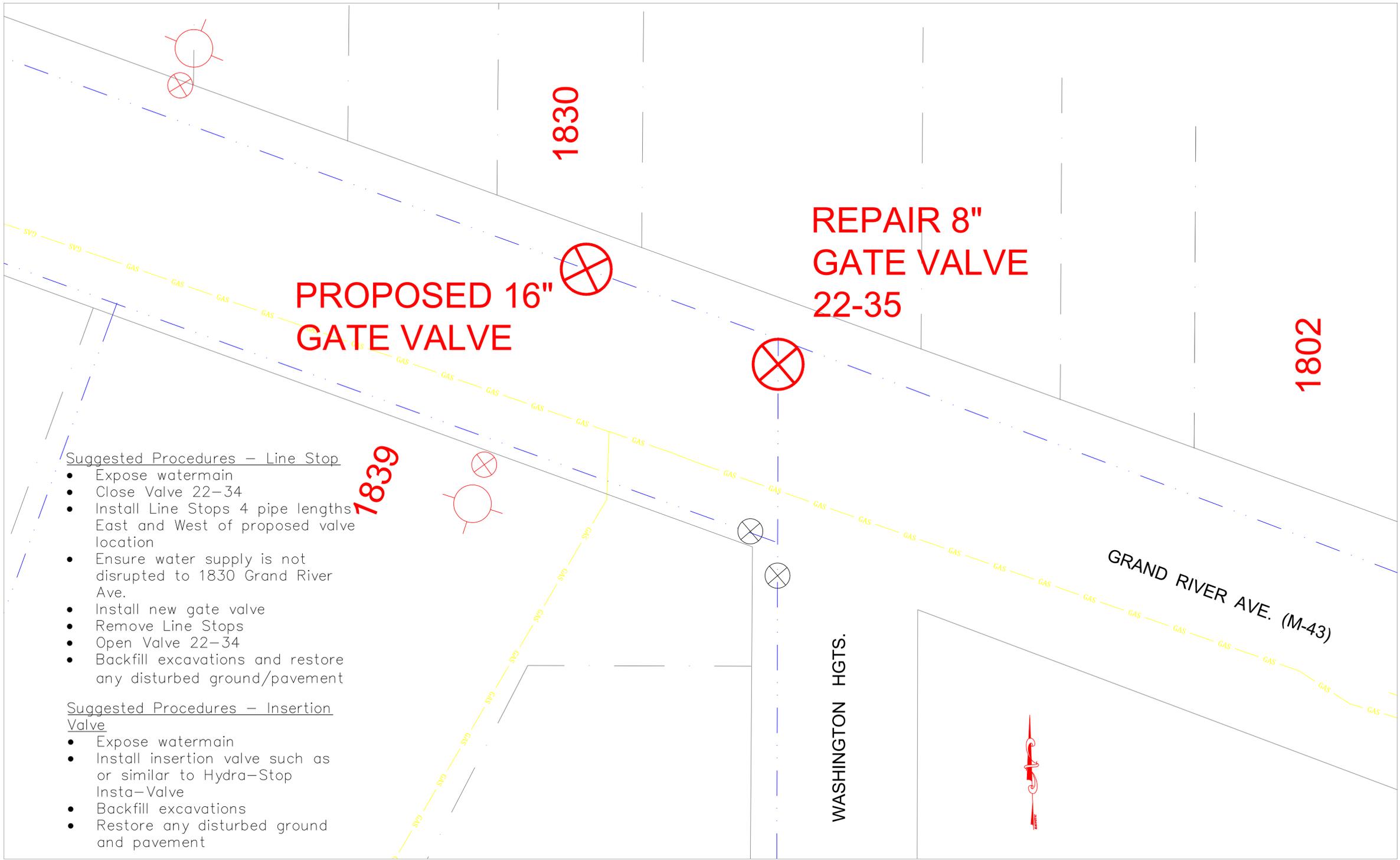


**72 HOURS**  
(3 WORKING DAYS)  
**BEFORE YOU DIG**  
CALL MISS DIG  
1-800-482-7171  
(TOLL FREE)

WOLVERINE PIPE LINE COMPANY 219-844-9510

<b>Meridian Charter Township</b> Ingham County, Michigan Water Main System		REVISIONS:	
		DATE: 05/14/25	BY: TH
<b>GRAND RIVER AVE</b> INTERSECTION OF GRAND RIVER AVE AND MARSH RD		COMMENTS:	
		Bid Set	
DRAWN BY: TH		CHECKED BY: YI	
SCALE: 1" = 20' HOR		PAGE: 3 OF 12	FILE:

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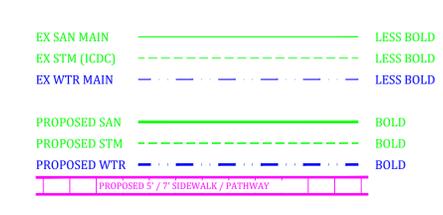
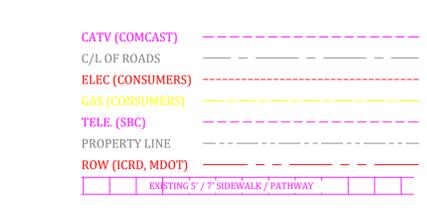
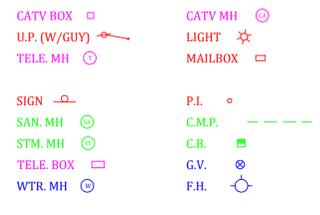
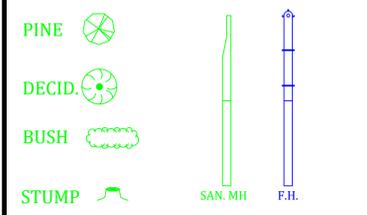
**Suggested Procedures – Line Stop**

- Expose watermain
- Close Valve 22-34
- Install Line Stops 4 pipe lengths East and West of proposed valve location
- Ensure water supply is not disrupted to 1830 Grand River Ave.
- Install new gate valve
- Remove Line Stops
- Open Valve 22-34
- Backfill excavations and restore any disturbed ground/pavement

**Suggested Procedures – Insertion Valve**

- Expose watermain
- Install insertion valve such as or similar to Hydra-Stop Insta-Valve
- Backfill excavations
- Restore any disturbed ground and pavement

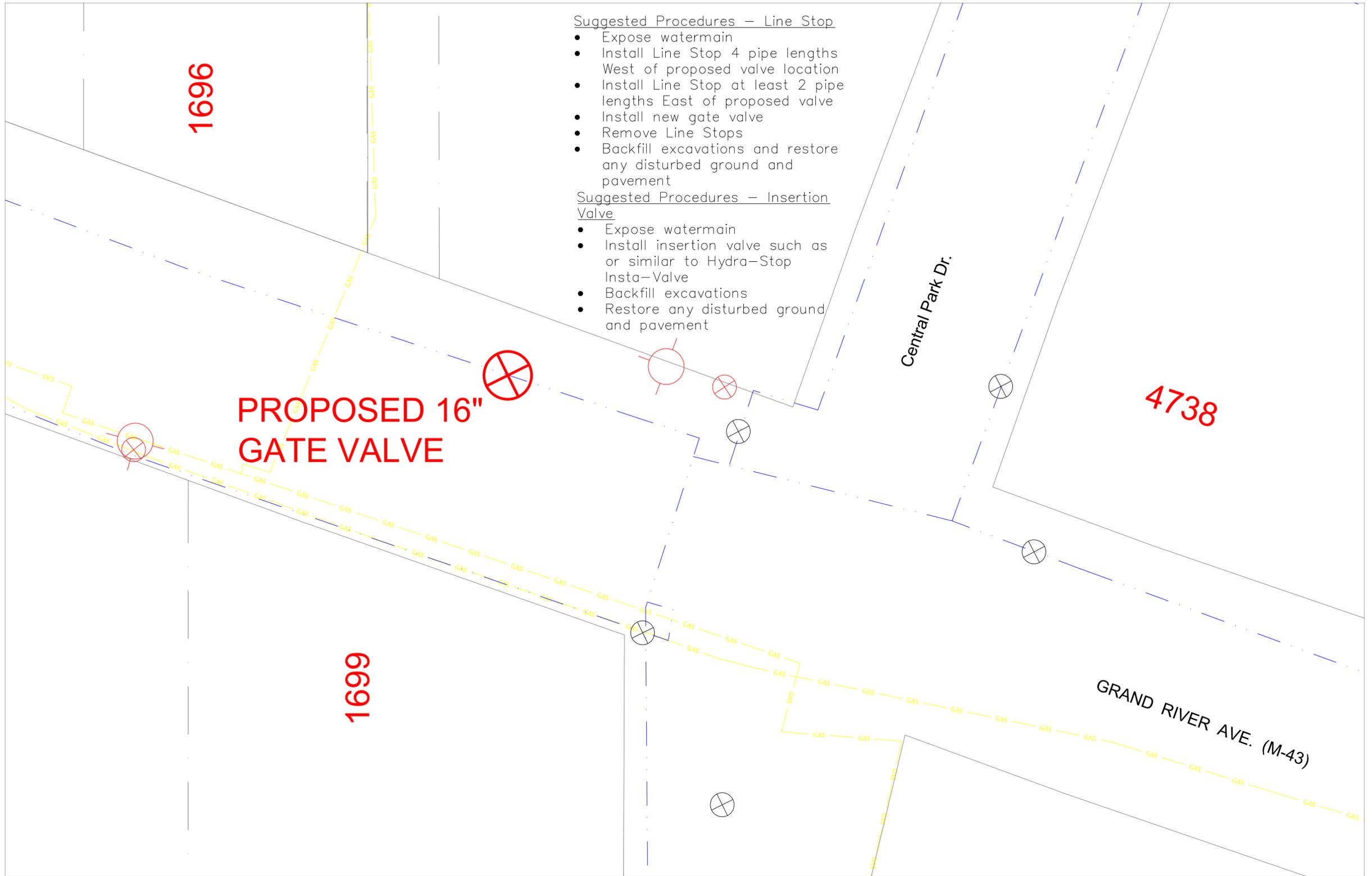
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**72 HOURS**  
 (3 WORKING DAYS)  
**BEFORE YOU DIG**  
**CALL MISS DIG**  
 1-800-482-7171  
 (TOLL FREE)

WOLVERINE PIPE LINE COMPANY 219-844-9510

<b>Meridian Charter Township</b> Ingham County, Michigan <b>Water Main System</b>		<b>REVISIONS:</b> DATE: 05/14/25 BY: TH COMMENTS: Bid Set	
<b>GRAND RIVER AVE</b> INTERSECTION WITH WASHINGTON HEIGHTS		SCALE: 1" = 20' HOR	PAGE: 4 OF 12
		FILE:	
DRAWN BY: TH		CHECKED BY: YI	



- Suggested Procedures – Line Stop**
- Expose watermain
  - Install Line Stop 4 pipe lengths West of proposed valve location
  - Install Line Stop at least 2 pipe lengths East of proposed valve
  - Remove Line Stops
  - Backfill excavations and restore any disturbed ground and pavement

- Suggested Procedures – Insertion Valve**
- Expose watermain
  - Install insertion valve such as or similar to Hydra-Stop Insta-Valve
  - Backfill excavations
  - Restore any disturbed ground and pavement

**PROPOSED 16" GATE VALVE**

1696

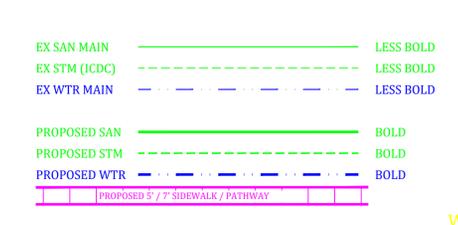
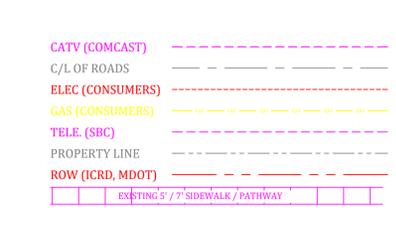
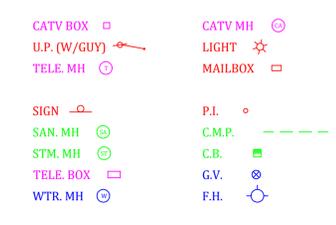
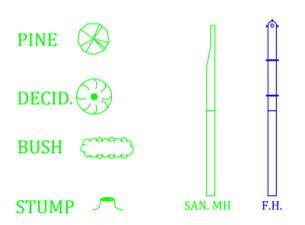
1699

4738

Central Park Dr.

GRAND RIVER AVE. (M-43)

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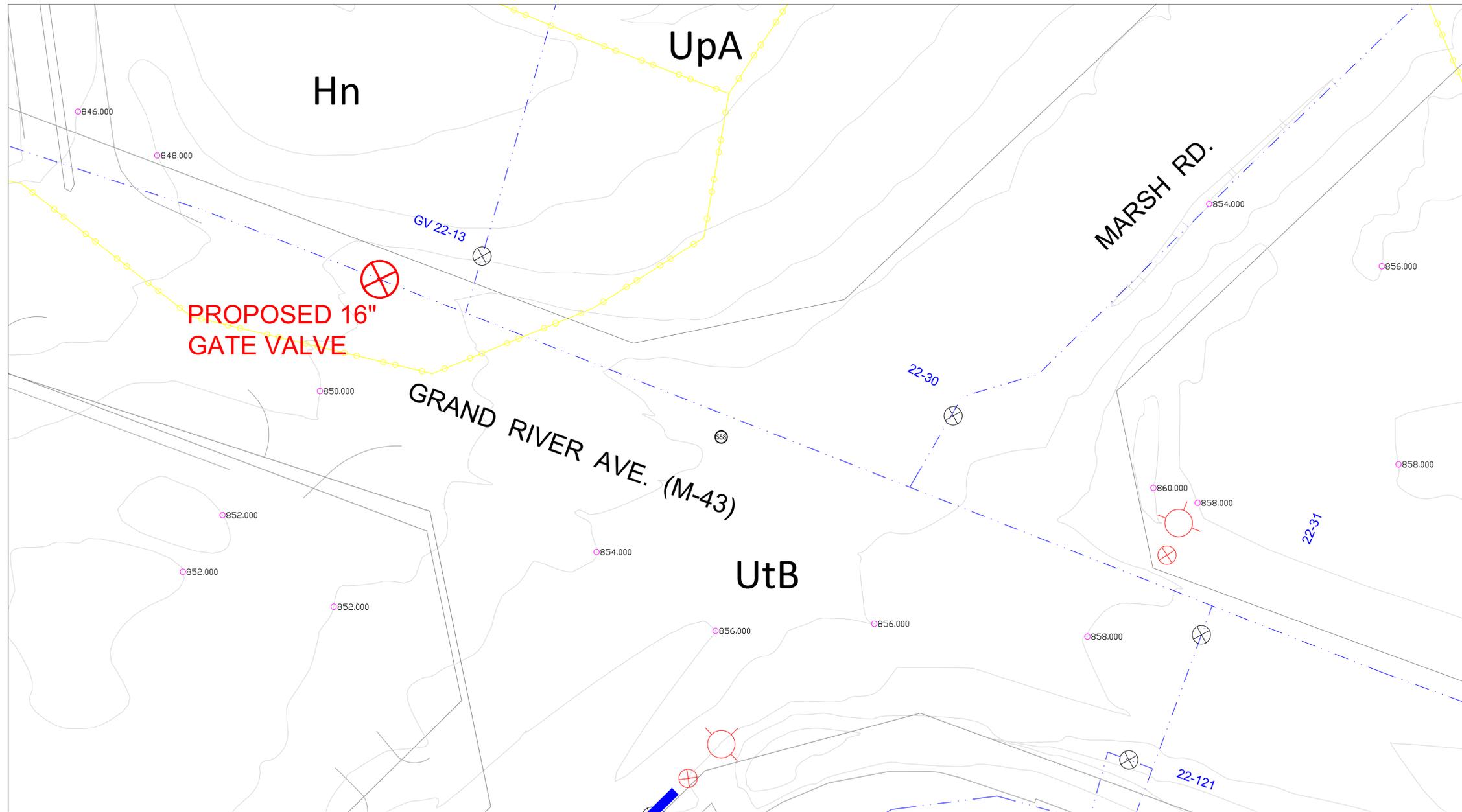


**72 HOURS**  
(3 WORKING DAYS)  
**BEFORE YOU DIG**  
**CALL MISS DIG**  
1-800-482-7171  
(TOLL FREE)

WOLVERINE PIPE LINE COMPANY 219-844-9510

<b>Meridian Charter Township</b> Ingham County, Michigan <b>Water Main System</b>		<b>REVISIONS:</b> DATE: 05/14/25 BY: TH COMMENTS: Bid Set	
<b>GRAND RIVER AVE</b> NW INTERSECTION OF GRAND RIVER AVE & CENTRAL PARK DR		SCALE: 1" = 20' HOR 0 20'	PAGE: 5 OF 12
DRAWN BY: TH	CHECKED BY: YI	FILE:	





CONSTRUCTION SCHEDULE AND SEQUENCING	START DATE	COMPLETE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
PLACE AND MAINTAIN TEMPORARY EROSION CONTROLS														
EXCAVATE														
INSTALL LINE STOP														
INSTALL GATE VALVES AND WATER MAIN														
SITE STABILIZATION														
FINAL INSPECTIONS & TEMPORARY EROSION REMOVAL														

**SOIL TYPES**  
 UIB - URBAN LANDS, MARLETTE COMPLEX, 2 TO 12 PERCENT SLOPES  
 UpA - URBAN LAND-CAPAC-COLWOOD COMPLEX, 0 TO 4 PERCENT  
 Hn - HOUGHTON MUCK



SCALE 1"=30'

LEGEND	
Soil Boundary	
Silt Fencing (Key S51)	
Limits of Disturbance	



## Proposed 16" Gate Valve Along Grand River Ave. at Marsh Rd. SESC Plan

LEGAL DESCRIPTION: ROW along Park Lake Dr. near Mansfield Dr.

**PARCEL NUMBER:** N/A

**PREDOMINANT LAND FEATURES:**  
Urban Setting

**DISTANCE TO NEAREST LAKE / STREAM / DRAIN:**  
Okemos Consolidated Drain 500 feet

**SIZE OF EARTH CHANGE:**  
< 1 Acre

**LANDOWNER INFORMATION:**  
 NAME: Meridian Township  
 ADDRESS: 5151 Marsh Rd, Okemos, MI, 48864  
 PHONE: 517-853-4440  
 EMAIL: DPW@Meridian.mi.us

**PROJECT DESCRIPTION:**  
 Installation of 4 new gate valves and repair of one existing gate valve.

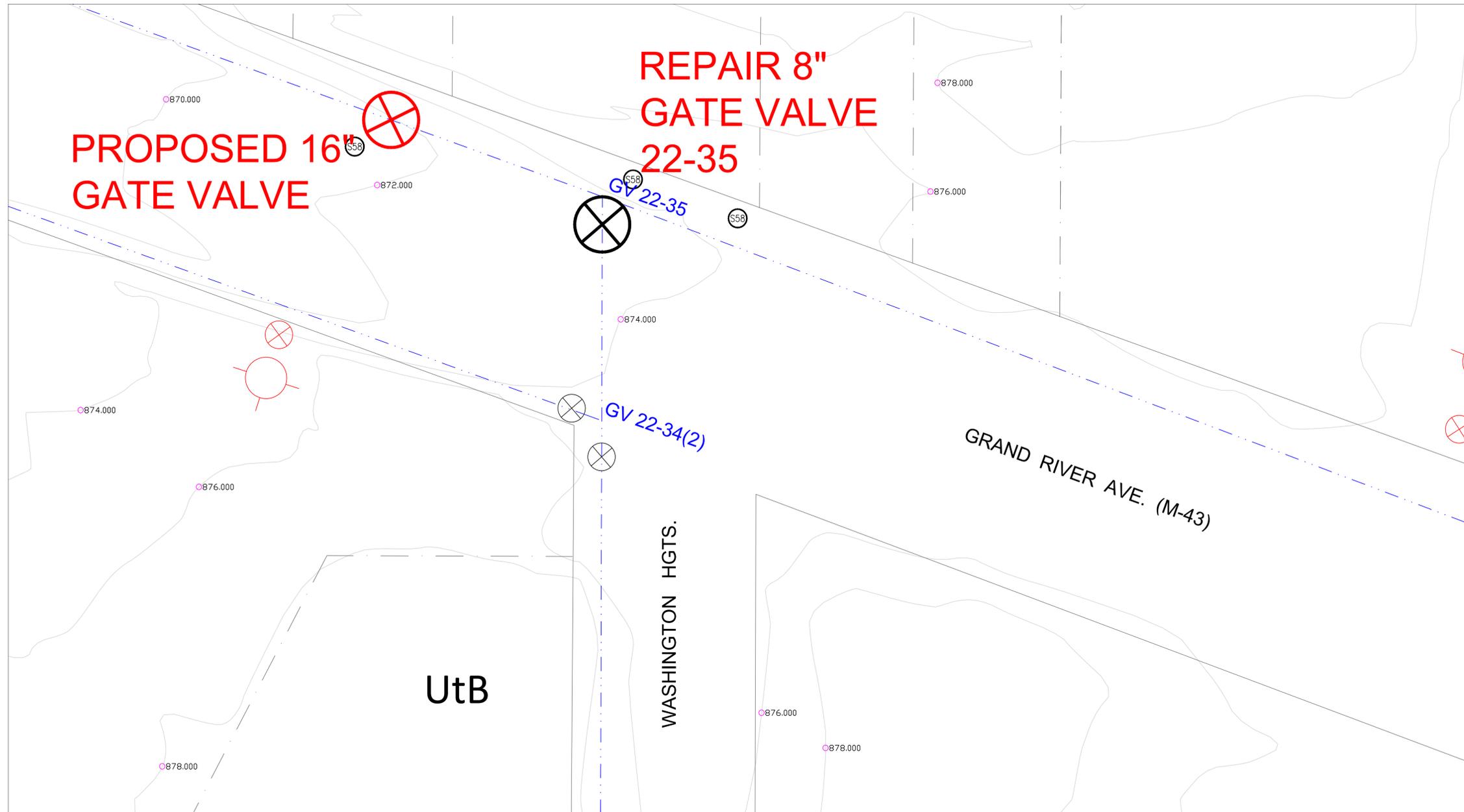
Meridian Charter Township  
 Ingham County, Michigan  
 PUBLIC WORKS DEPARTMENT

**SOIL EROSION AND SEDIMENT CONTROL SITE PLAN**

DRAWN BY: TH      CHECKED BY: YI

REVISIONS:		
DATE	BY:	COMMENTS:
05/14/25	TH	Bid Set

SCALE: 1"=30'      SHEET: 7 of 12      FILE:



CONSTRUCTION SCHEDULE AND SEQUENCING	START DATE	COMPLETE	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
PLACE AND MAINTAIN TEMPORARY EROSION CONTROLS														
EXCAVATE														
INSTALL LINE STOP														
INSTALL GATE VALVES AND WATER MAIN														
SITE STABILIZATION														
FINAL INSPECTIONS & TEMPORARY EROSION REMOVAL														

**SOIL TYPES**  
 UIB - URBAN LANDS, MARLETTE COMPLEX, 2 TO 12 PERCENT SLOPES

SCALE 1"=20'

**LEGEND**

Soil Boundary	—○—○—○—
Silt Fencing (Key S51)	- - - - -
Limits of Disturbance	— — — — —



**Proposed 16" Gate Valve and 8" Gate Valve Repair Along Grand River Ave. at Washington Heights Ave. SESC Plan**

LEGAL DESCRIPTION: ROW along Park Lake Dr. near Mansfield Dr.

**PARCEL NUMBER:** N/A

**PREDOMINANT LAND FEATURES:**  
Urban Setting

**DISTANCE TO NEAREST LAKE / STREAM / DRAIN:**  
Spross Drain 1000 feet

**SIZE OF EARTH CHANGE:**  
< 1 Acre

**LANDOWNER INFORMATION:**  
 NAME: Meridian Township  
 ADDRESS: 5151 Marsh Rd, Okemos, MI, 48864  
 PHONE: 517-853-4440  
 EMAIL: DPW@Meridian.mi.us

**PROJECT DESCRIPTION:**  
 Installation of 4 new gate valves and repair of one existing gate valve.

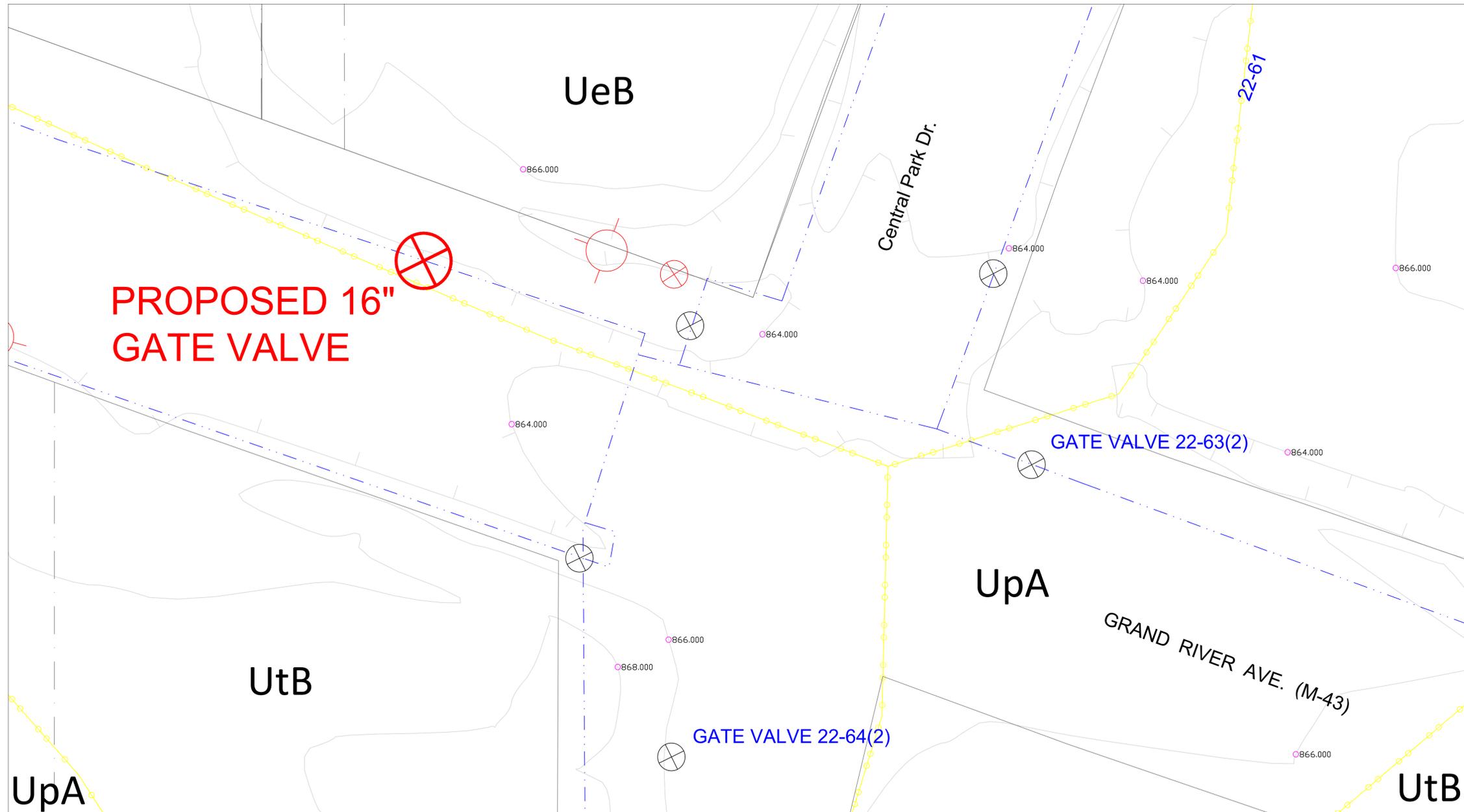
Meridian Charter Township  
 Ingham County, Michigan  
 PUBLIC WORKS DEPARTMENT

**SOIL EROSION AND SEDIMENT CONTROL SITE PLAN**

DRAWN BY: TH      CHECKED BY: YI

REVISIONS:		
DATE	BY:	COMMENTS:
05/14/25	TH	Bid Set

SCALE: 1"=20'      SHEET: 8 of 12      FILE:



CONSTRUCTION SCHEDULE AND SEQUENCING	START DATE	COMPLETE	MONTHS														
			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER			
PLACE AND MAINTAIN TEMPORARY EROSION CONTROLS																	
EXCAVATE																	
INSTALL LINE STOP																	
INSTALL GATE VALVES AND WATER MAIN																	
SITE STABILIZATION																	
FINAL INSPECTIONS & TEMPORARY EROSION REMOVAL																	

**SOIL TYPES**  
 UeB - URBAN LANDS, MARLETTE COMPLEX, 2 TO 12 PERCENT SLOPES  
 UpA - URBAN LAND-CAPAC-COLWOOD COMPLEX, 0 TO 4 PERCENT  
 UeB - URBAN LAND-BOYER-SPINKS COMPLEX, 0 TO 10 PERCENT

SCALE 1"=20'

LEGEND	
Soil Boundary	—○—○—○—
Silt Fencing (Key S51)	- - - - -
Limits of Disturbance	- - - - -



**Proposed 16" Gate Valve Along Grand River Ave. at Central Park Dr. SESC Plan**

LEGAL DESCRIPTION: ROW along Park Lake Dr. near Mansfield Dr.

**PARCEL NUMBER:** N/A  
  
**PREDOMINANT LAND FEATURES:** Urban Setting  
  
**DISTANCE TO NEAREST LAKE / STREAM / DRAIN:** Unruh 800 feet  
  
**SIZE OF EARTH CHANGE:** < 1 Acre

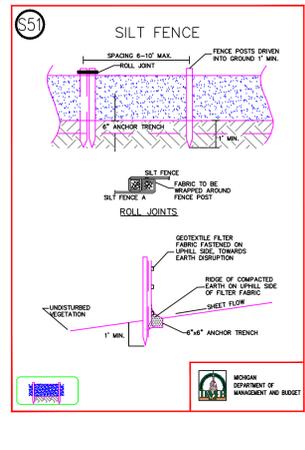
**LANDOWNER INFORMATION:**  
 NAME: Meridian Township  
 ADDRESS: 5151 Marsh Rd, Okemos, MI, 48864  
 PHONE: 517-853-4440  
 EMAIL: DPW@Meridian.mi.us  
  
**PROJECT DESCRIPTION:**  
 Installation of 4 new gate valves and repair of one existing gate valve.

Meridian Charter Township  
 Ingham County, Michigan  
 PUBLIC WORKS DEPARTMENT  
  
**SOIL EROSION AND SEDIMENT CONTROL SITE PLAN**

REVISIONS:		
DATE	BY:	COMMENTS:
05/14/25	TH	Bid Set

SCALE: 1"=20'      SHEET: 9 of 12      FILE:

DRAWN BY: TH      CHECKED BY: YI



### SILT FENCE SPECIFICATIONS

**When**

- A temporary measure for preventing sediment movement.
- Used to prevent sediment suspended in runoff from leaving an earth change area.

**Where**

- Use adjacent to critical areas, wetlands, base of slopes, and watercourses.

**How**

- Install parallel to a contour.
- The silt fence should be made of woven geotextile fabric.
- Silt fence should accommodate no more than 1/2 to 1 acre of drainage per 100' of fence and on slopes less than 1:1.
- Depth of trench along the area where the fence is to be installed should be 6-10" apart and drive into the ground a minimum of 12".
- Backfill the trench with soil and compact the soil on both sides. Create a small ridge on the up-slope.
- Staple the geotextile fabric to the wooden stakes.
- Join sections of silt fence by wrapping ends together (See drawing).
- Inspect frequently and immediately after each storm event. Check several times during prolonged storm events. If necessary, repair immediately.
- If the sediment has reached 1/3 the height of the fence, the soil should be removed and disposed of in a nearby area.
- Silt fence should be removed once vegetation is established and up-slope area has stabilized.

**Maintenance**

- Inspect frequently and immediately after each storm event. Check several times during prolonged storm events. If necessary, repair immediately.
- If the sediment has reached 1/3 the height of the fence, the soil should be removed and disposed of in a nearby area.
- Silt fence should be removed once vegetation is established and up-slope area has stabilized.

**Limitations**

- Silt fence may cause temporary ponding and could fail if too much water flows through the area.
- Do not use in areas with concentrated flows.
- Chance of failure increases if fence is installed incorrectly or if sediment accumulation is not removed.

### SILT FENCE SPECIFICATIONS

**When**

- Silt fence may cause temporary ponding and could fail if too much water flows through the area.
- Do not use in areas with concentrated flows.
- Chance of failure increases if fence is installed incorrectly or if sediment accumulation is not removed.

**Where**

- Use adjacent to critical areas, wetlands, base of slopes, and watercourses.

**How**

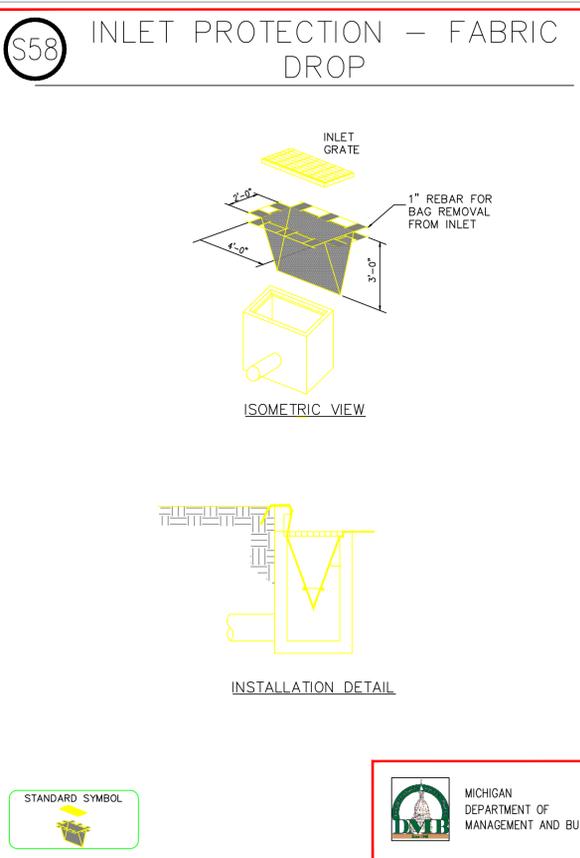
- Install parallel to a contour.
- The silt fence should be made of woven geotextile fabric.
- Silt fence should accommodate no more than 1/2 to 1 acre of drainage per 100' of fence and on slopes less than 1:1.
- Depth of trench along the area where the fence is to be installed should be 6-10" apart and drive into the ground a minimum of 12".
- Backfill the trench with soil and compact the soil on both sides. Create a small ridge on the up-slope.
- Staple the geotextile fabric to the wooden stakes.
- Join sections of silt fence by wrapping ends together (See drawing).
- Inspect frequently and immediately after each storm event. Check several times during prolonged storm events. If necessary, repair immediately.
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### INLET PROTECTION – FABRIC DROP SPECIFICATIONS

**When**

- When sediment laden stormwater requires treatment before entering a stormwater drainage system.

**Why**

- To prevent sediment from entering stormwater systems.

**Where**

- Use in or at stormwater inlets, especially at construction sites or in streets.

**How**

- A filter fabric bag is hung inside the inlet, beneath the grate.
- Replace grate, which will hold bag in place.
- Anchor filter bag with 1" rebar for removal from inlet.
- Flaps of bag that extend beyond the bag can be buried in soil in earth areas.

**Maintenance**

- Drop inlet filters should be inspected routinely and after each major rain event.
- Damaged filter bags should be replaced.
- Clean and/or replace filter bag when 1/2 full.
- Replace clogged fabric immediately.
- If needed, initiate repairs immediately upon inspection.
- Remove entire protective mechanism when upgradient areas are stabilized and streets have been swept.

**Limitations**

- Can only accommodate small flow quantities.
- Requires frequent maintenance.
- Ponding may occur around storm drains if filter is clogged.

### TEMPORARY SEEDING SPECIFICATIONS

**When**

- When an area needs stabilization during a break in construction.
- Stabilizes soil.
- Prevents erosion/sedimentation problems from developing.
- Allows runoff to infiltrate soil.

**Where**

- Used on construction and earth change sites where earth change has been initiated but will not be completed within two normal work weeks.
- A temporary measure when an area needs stabilization during a break in construction.

**How**

- Review construction phasing and soil erosion control plan to identify areas requiring temporary seeding.
- Select annual grass seed for temporary cover areas.
- Seed mixes may vary, should only contain annual, non-aggressive species, and generally include eye, wheat, or oat species. Seed mixes should be obtained from a seed supplier as seed mixes are dependent on soil type, light, moisture, and use application.
- Prepare seedbed by removal of construction/woody debris. Then scarify or rake seedbed.
- Slopes steeper than 1:3 should be roughened.
- Apply seed as soon as possible after seedbed preparation. Mulch immediately after seeding all slopes, unstable soils, heavy clay soils, and all areas adjacent to wetlands, watercourses, or sensitive areas.
- The time to seed is dependent on the climate of the area. Michigan has three climatic zones.
- Protect seeded areas from pedestrian/vehicular traffic.
- Divert concentrated flows away from seeded area until vegetation is established.

### TEMPORARY SEEDING DATES

Seed Type	Zone 1	Zone 2	Zone 3	Amount per 1,000 sq. ft. per acre
Oats, barley	4/1 - 9/15	4/15 - 8/1	5/1 - 8/1	2 lbs. 86 lbs
Annual Rye	8/1 - 10/15	8/1 - 10/10	8/1 - 11/1	3 lbs. 120 lbs
Wheat	9/20 - 10/15	9/10 - 8/10	9/10 - 10/1	3 lbs. 120 lbs
Buckwheat	6/1 - 7/15	6/1 - 7/15	6/1 - 7/15	2 lbs. 75 lbs
Perennial Ryegrass	8/1 - 10/15	8/1 - 8/1	8/1 - 10/15	5 lbs. 20 lbs

Source: Adapted from USDA NRCS Technical Guide #342 (1999)

### PERMANENT SEEDING

**When**

- To finalize stabilization of temporary seeding areas or when an area needs permanent stabilization following completion of construction. Also used when vegetative establishment can correct existing soil erosion or sedimentation problem.
- Within 5 days of final grade.

**Why**

- To stabilize soil and prevent or reduce soil erosion/sedimentation problems from developing.

**Where**

- Used on construction and earth change sites which require permanent vegetative stabilization.

**How**

- Review SESC plan and construction phasing to identify areas in need of permanent vegetative stabilization.
- Select perennial grass and ground cover for permanent SESC mixes vary. However, they should contain native species.
- Seed mixes should be selected through consultation with a certified seed provider and with consideration of soil type, light, moisture, use applications, and native species.
- Tests should be performed to determine the nutrient and pH levels in the soil. The pH may need to be adjusted to between 6.5 and 7.0.
- Prepare a 3-5" deep seedbed, with the top 3-4" consisting of topsoil.
- Slopes steeper than 1:3 should be roughened.
- Apply seed as soon as possible after seedbed preparation. Seed may be broadcast by hand, hydroseeding, or by using mechanical drills.
- Mulch immediately after seeding.
- Dormant seed mixes are for use after the growing season, using seed which lies dormant in the winter and begins growing as soon as site conditions become favorable.

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### PERMANENT SEEDING

Planting Zones	Lower Peninsula (South of T20N)	Lower Peninsula (North of T20N)	Upper Peninsula
Seeding Window	4/15 - 10/10	5/1 - 10/1	5/1 - 9/20
Dormant Seeding Window	11/10 - Freeze	11/01 - Freeze	11/01 - Freeze

Planting Zones	Zone 1	Zone 2	Zone 3
Seeding Window	4/1 - 8/1	5/1 - 9/20	5/1 - 9/10
Dormant Seeding Window	11/1 - Freeze	10/25 - Freeze	10/25 - Freeze

Source: Adapted from USDA NRCS Technical Guide #342 (1999)

\* Dormant seeding is for use in the late fall after the soil temperature remains consistently below 50 F, prior to the ground freezing. This practice is appropriate if construction on a site is completed in the fall but the seed was not planted prior to recommended seeding dates. No seed germination will take place until spring. A cool season annual grass may be added in an attempt to have some fall growth.

\* Mulch must be used with dormant seed.

\* Do not seed when the ground is frozen or snow covered.

\* Do not use a dormant seed mix on grassed waterways.

# 2025 Gate Valve Project SESC Details

Meridian Charter Township  
Ingham County, Michigan  
PUBLIC WORKS DEPARTMENT

SOIL EROSION AND SEDIMENT CONTROL DETAIL SHEETS

REVISIONS:

DATE	BY:	COMMENTS:
05/14/25	TH	Bid Set

SCALE: SHEET 10 of 12 FILE:

DRAWN BY: TH CHECKED BY: YI



