

CITY OF PORTAGE, FIRE DEPT.

FIRE STATION #1 - OIL AND GRIT SEPARATOR IMPROVEMENTS

WA
WIGHTMAN & ASSOCIATES, INC.
 ENGINEERING
 SURVEYING
 ARCHITECTURE
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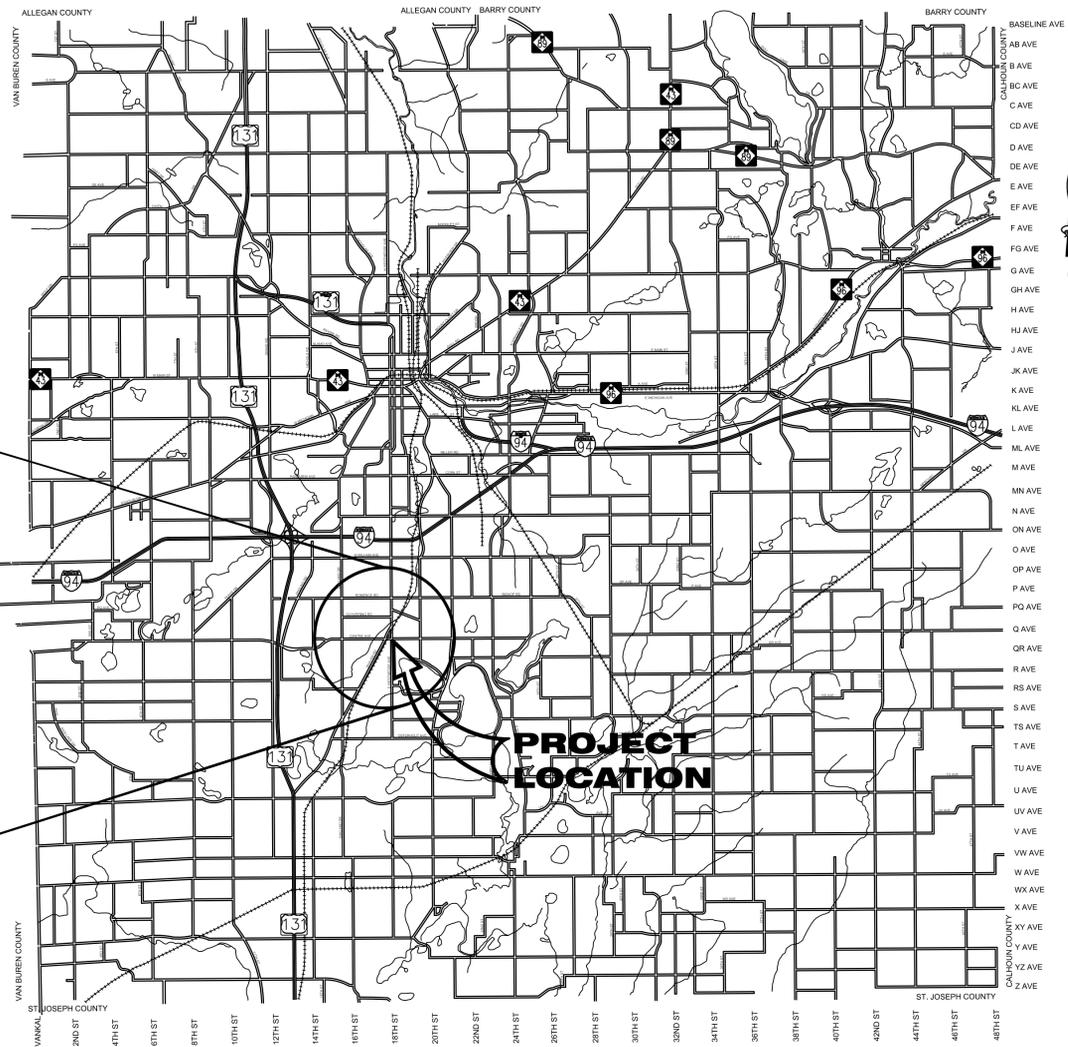
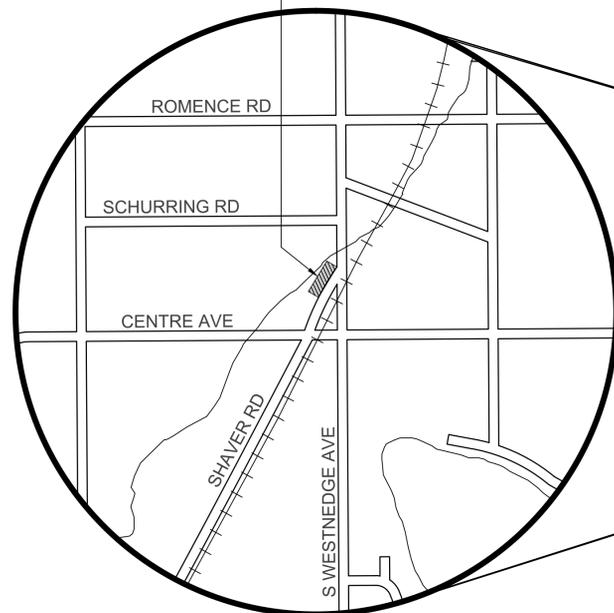
NOTES

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

THE CONTRACTOR SHALL DIAL MISS DIG @ 811 FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53 OF 1974 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

PROJECT LOCATION
 FIRE STATION #1



KALAMAZOO COUNTY

NOT TO SCALE

INDEX OF PLANS

140692-01	COVER SHEET
140692-02	PLAN & PROFILE
140692-03	GENERAL NOTES AND MISCELLANEOUS DETAILS

UTILITIES

CABLE	CHARTER COMMUNICATIONS 4176 COMMERCIAL AVENUE KALAMAZOO, MI 49001 (269) 217-8152 MARK BURKE
ELECTRIC	CONSUMERS ENERGY 2500 E. CORK STREET KALAMAZOO, MI 49001 (269) 337-2368 KEITH KURDZIEL
GAS	CONSUMERS ENERGY 2500 E. CORK STREET KALAMAZOO, MI 49001 (269) 337-2270 TERRY FIELDS
SANITARY SEWER & WATER	UNITED WATER 7709 S. WESTNEDGE AVENUE PORTAGE, MI 49002 (269) 324-9235 PAUL BURRIS
TELEPHONE	AT&T 2919 MILLCORK STREET KALAMAZOO, MI 49001 (269) 384-4436 TODD SHIBAYAMA
"MISS DIG"	811

CITY OF PORTAGE OFFICIALS

CITY MANAGER	LAURENCE SHAFFER
CITY CLERK	JAMES HUDSON
TRANSPORTATION & UTILITIES	CHRIS BARNES
SR. DEPUTY FIRE CHIEF	JOHN PODGORSKI
ASSISTANT FIRE CHIEF	STACY FRENCH

PROJECT NAME:
**FIRE STATION #1
 OIL AND GRIT
 SEPARATOR
 IMPROVEMENTS**
 PORTAGE, MI

**CITY OF PORTAGE
 FIRE DEPARTMENT**
 PORTAGE, MI

JSL - REVISED - 12/22/14

REVISIONS

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DATE: DECEMBER, 2014

SCALE: N.T.S.

COVER SHEET

140692-01



WIGHTMAN & ASSOCIATES, INC.

ENGINEERING

SURVEYING

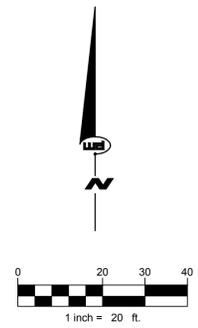
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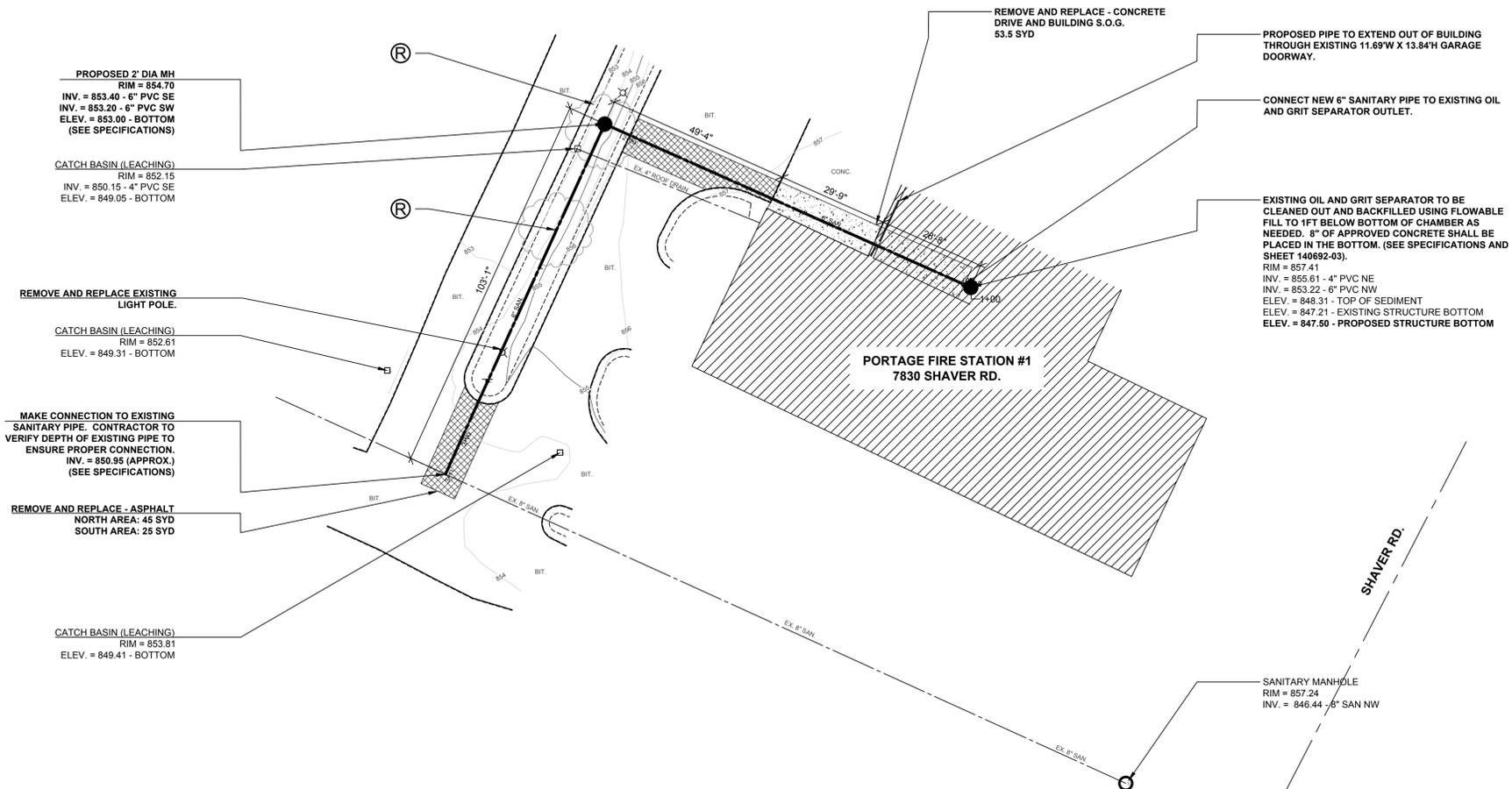
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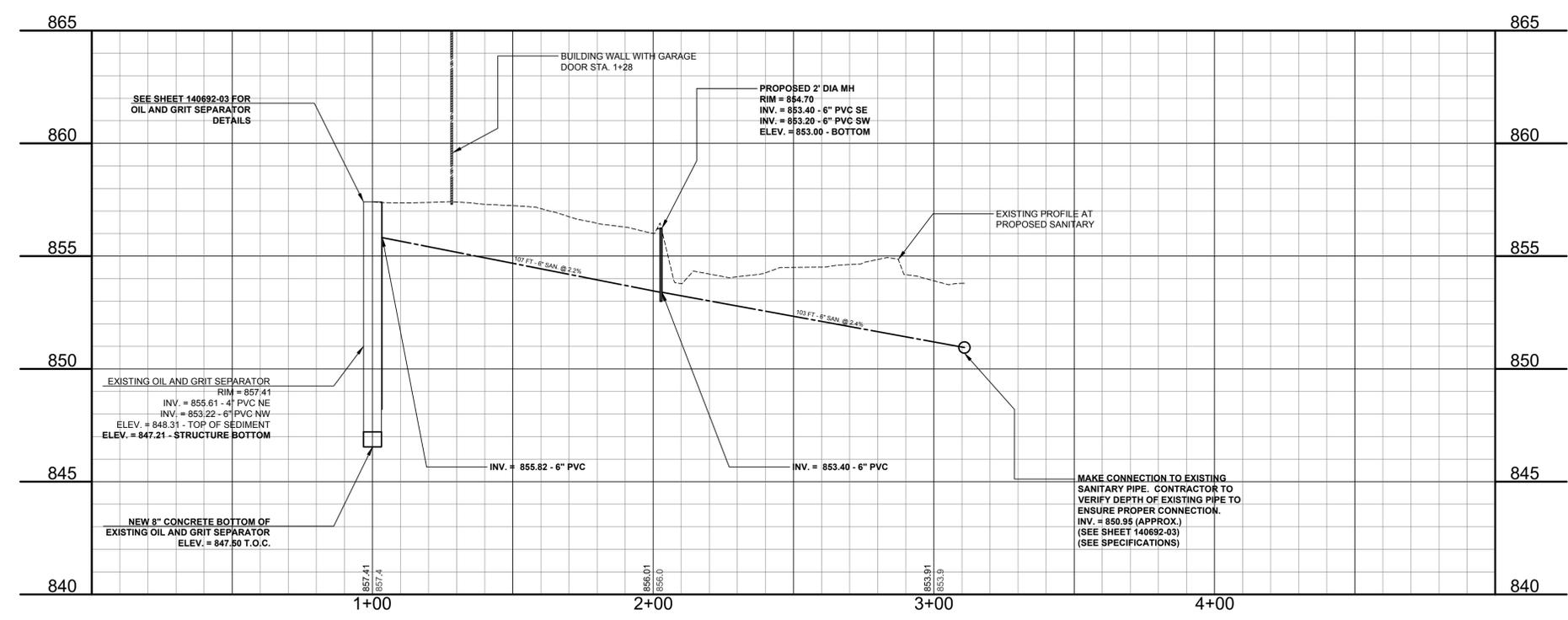


LEGEND

- SAWCUT AND REMOVE EXISTING HMA PAVEMENT, REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH AGGREGATE BASE, 4 INCH, MODIFIED; 165#/SYD HMA, 13A; AND 165#/SYD HMA, 36A. MATCH EXISTING GRADE AT SAWCUT LINE.
- SAWCUT AND REMOVE EXISTING CONCRETE PAVEMENT, REGRADE EXISTING DRIVEWAY AS REQUIRED AND SURFACE WITH DRIVEWAY, NONREINF, 8 INCH. MATCH EXISTING GRADE AT SAWCUT LINE.



OIL AND GRIT SEPARATOR PLAN
SCALE: 1" = 20'



SEPARATOR PIPE PROFILE
SCALE: 1" = 10' H, 1" V

PROJECT NAME:
STATION #1 OIL AND GRIT SEPARATOR IMPROVEMENTS PROJECT
PORTAGE, MI

CITY OF PORTAGE FIRE DEPARTMENT
PORTAGE, MI

JSL - REVISED - 12/22/14
REVISIONS
DATE: DECEMBER, 2014
SCALE: AS SHOWN

SITE PLAN

PROJECT NOTES

ALL SCALES FOR DRAWINGS AND DETAILS ARE BASED ON 24"x36" PRINTED PLANS. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.

ALL RADII FOR CURB AND GUTTER ARE DIMENSIONED TO THE BACK OF THE CURB.

PAVT. REM. MODIFIED SHALL INCLUDE REMOVING THE FULL DEPTH OF CONCRETE PAVEMENT INCLUDING HMA OVERLAYS, REGARDLESS OF THICKNESS. HMA SURFACE, REM. MODIFIED SHALL INCLUDE REMOVING THE FULL DEPTH OF HMA PAVEMENT REGARDLESS OF THICKNESS. ALL CURB AND GUTTER REMOVAL SHALL BE MEASURED AS CURB AND GUTTER, REM PER FT. ALL REQUIRED SAW CUTTING SHALL BE INCLUDED IN THE RESPECTIVE REMOVAL ITEMS.

HMA MATERIALS FOR THIS PROJECT SHALL BE PERFORMANCE GRADE 64-22.

ALL STRUCTURES REQUIRING ADJUSTMENT TO MEET FINAL GRADE SHALL BE BACK FILLED WITH CONCRETE TO APPROXIMATELY 1 1/2" BELOW FINAL GRADE PRIOR TO THE PLACEMENT OF THE HMA TOP COURSE. AN SQUARE AREA, 4' BY 4', SHALL BE SAWCUT AND REMOVED AROUND DRAINAGE STRUCTURE COVERS, (2' BY 2' AROUND WATER VALVE BOXES). CONCRETE SHALL BE PLACED TO A DEPTH OF 8 INCHES, MINIMUM.

CONNECTING NEW PIPE TO EXISTING PIPE OR STRUCTURES AND CONNECTING EXISTING PIPE TO NEW STRUCTURES IS INCLUDED IN THE ITEM FOR THE RESPECTIVE NEW PIPE OR DRAINAGE STRUCTURE.

PROJECT SANITARY SEWER SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST REVISION OF ASTM SPECIFICATION D3034 TYPE PSM POLY (VINYL CHLORIDE) (PVC) SEWER PIPE AND FITTINGS AND HAVE A MINIMUM WALL THICKNESS OF SDR 35.

MAINTAIN 10 FOOT MINIMUM HORIZONTAL SEPARATION BETWEEN THE SANITARY OR STORM SEWER AND WATER MAIN UTILITIES. PROVIDE 18" MINIMUM VERTICAL SEPARATION WHERE THE WATER MAIN CROSSES A SANITARY OR STORM SEWER.

ANY SANITARY SEWER, SANITARY SEWER SERVICE LEADS, WATER MAIN, WATER SERVICES, OR STORM SEWER THAT IS DAMAGED BY THE CONTRACTOR DURING THEIR OPERATIONS SHALL BE REPAIRED TO THE OWNERS SATISFACTION AND AT THE CONTRACTOR'S EXPENSE.

ALL ELECTRICAL WORK SHALL BE PERFORMED BY A STATE OF MICHIGAN LICENSED ELECTRICIAN ACCORDING TO THE NATIONAL ELECTRICAL CODE AS MODIFIED BY THE STATE OF MICHIGAN. FURNISH AND INSTALL ALL MATERIALS AND LABOR TO PROVIDE A COMPLETE WORKING SYSTEM.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS INCLUDING PERMIT COSTS, TAP FEES, METER DEPOSITS, BONDS, INSPECTIONS AND ALL FEES REQUIRED FOR PROPOSED WORK TO OBTAIN OCCUPANCY. THE CONTRACTOR SHALL MAKE ALL PERMANENT UTILITY APPLICATIONS AND SHALL BE RESPONSIBLE FOR ALL APPLICABLE FEES AND UTILITY SERVICE INSTALLATION FEES. THIS INCLUDES BUT IS NOT LIMITED TO PRIMARY AND SECONDARY ELECTRICAL SERVICES, PERTAINING TO SUCH, ON BEHALF OF THE OWNER.

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL PRE-EXISTING ON-SITE IMPROVEMENTS WITHIN LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED. THIS INCLUDES BUT IS NOT LIMITED TO BUILDINGS, FOUNDATIONS, FOOTINGS, CURBS, ASPHALT, TREES, SHRUBS, EXISTING UTILITY LINES, DEBRIS AND ALL OTHER ITEMS AND UTILITIES TO BE ABANDONED.

SOILS EXPOSED IN THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGES IN CONDITION SUCH AS FROM DISTURBANCE, RAIN, AND FREEZING. SURFACE RUN-OFF WATER SHOULD BE DRAINED AWAY FROM THE EXCAVATION AND NOT ALLOWED TO POND. IF POSSIBLE, ALL FOOTING CONCRETE SHOULD BE POURED THE SAME DAY THE EXCAVATION IS MADE. IF THIS IS NOT PRACTICAL, THE FOOTING EXCAVATIONS SHOULD BE ADEQUATELY PROTECTED.

EXTERIOR CONCRETE SHALL (MEET MDOT GRADE P1 OR S2 SPECIFICATIONS) (BE 3500 PSI, LIMESTONE AGGREGATE AND 4 - 6% AIR ENTRAINMENT) WITH A LIGHT BROOM FINISH.

TESTING REQUIREMENTS (ALL CONTRACTORS) SOIL AND AGGREGATE DENSITY TESTING - CONTRACTOR SHALL EMPLOY AN INDEPENDENT TESTING CONSULTANT TO VERIFY THE DENSITY OF ALL FILL EXCAVATION AS SPECIFIED AND ALL SLAB, FOUNDATIONS, AND FOOTING SURFACES AS RECOMMENDED BY ENGINEER. TESTING SHALL TAKE PLACE PRIOR TO INSTALLATION OF THE AGGREGATE BASE AND PRIOR TO THE INSTALLATION OF THE HMA PAVEMENT. COPIES OF ALL COMPACTION TEST RESULTS SHALL BE FORWARDED TO THE ENGINEER.

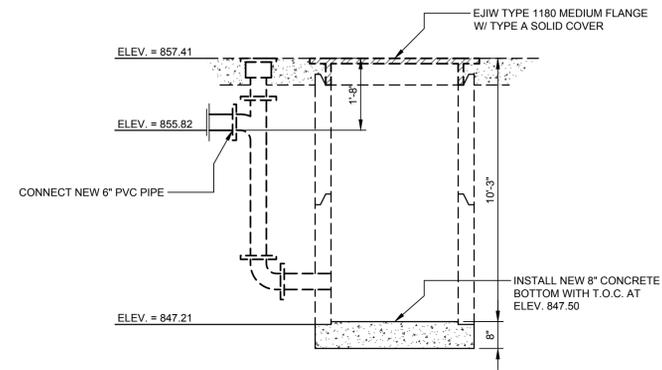
LEGEND

— C —	= EXISTING CABLE
— E —	= EXISTING ELECTRIC LINE
— OHE —	= EXISTING ELECTRIC LINE (OVERHEAD)
— FO —	= EXISTING FIBER OPTIC LINE
— G —	= EXISTING GAS LINE
— T —	= EXISTING TELEPHONE LINE
— F —	= EXISTING FENCE
— FM —	= EXISTING FORCEMAIN
— GS —	= EXISTING GUARDRAIL
— SS —	= EXISTING SANITARY SEWER
— STS —	= EXISTING STORM SEWER
— TL —	= EXISTING TREE LINE
— WM —	= EXISTING WATER MAIN
— DL —	= EXISTING DITCH LINE
— AB —	= TO BE ABANDONED
— EL —	= PROPOSED ELECTRIC LINE
— PF —	= PROPOSED FENCE
— FM —	= PROPOSED FORCEMAIN
— GL —	= PROPOSED GAS LINE
— GR —	= PROPOSED GUARDRAIL
— SS —	= PROPOSED SANITARY SEWER
— STS —	= PROPOSED STORM SEWER
— TL —	= PROPOSED TELEPHONE LINE
— WM —	= PROPOSED WATER MAIN
— CL —	= EXISTING CENTER LINE
— PC —	= PROPOSED CENTER LINE
— ELP —	= EASEMENT LINE/GRADING PERMIT
— GL —	= GRADING LIMITS/LIMITS OF DISTURBANCE
— PL —	= PROPERTY LINE
— ROW —	= RIGHT-OF-WAY LINE
— SL —	= SECTION LINE

⋮	= ANTENNA
□	= CATCH BASIN
□	= CABLE RISER BOX
○	= CLEAN OUT
■	= CURB INLET
⊙	= ELECTRIC MANHOLE
⊕	= FIRE HYDRANT
●	= FOUND IRON PIPE
⊗	= GAS VALVE
⋈	= GUY ANCHOR
⋈	= LIGHT POLE
⊕	= MAILBOX
⊕	= MONITORING WELL
●	= POST
⋈	= SATELLITE DISH
⊙	= SANITARY MANHOLE
⊕	= SECTION CORNER
—	= SIGN
⊕	= PAVEMENT/SOIL BORING
⊕	= PROPOSED HYDRANT
⊕	= PROPOSED GATE VALVE & BOX
⊕	= PROPOSED GATE VALVE & VAULT
⊕	= PROPOSED REDUCER
⊕	= PROPOSED SANITARY MANHOLE
⊕	= PROPOSED STORM MANHOLE
⊕	= STORM MANHOLE
⊕	= TELEPHONE MANHOLE
⊕	= TELEPHONE RISER BOX
●	= TURNING POINT/TRaverse
⋈	= UTILITY POLE
⊕	= VAULT
⊕	= WATER ELEVATION
⊕	= WATER MANHOLE
⊕	= WATER METER
⊕	= WATER VALVE
⊕	= WATER SPIGOT
⊕	= WELL

TREE DESIGNATORS

⊕	= BUSH
⊕	= CONIFEROUS TREE
⊕	= CONIFEROUS TREE TO BE REMOVED
⊕	= DECIDUOUS TREE
⊕	= DECIDUOUS TREE TO BE REMOVED
⊕	= STUMP



OIL & GRIT SEPARATOR DETAIL



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GENERAL NOTES AND MISCELLANEOUS DETAILS

140692-03