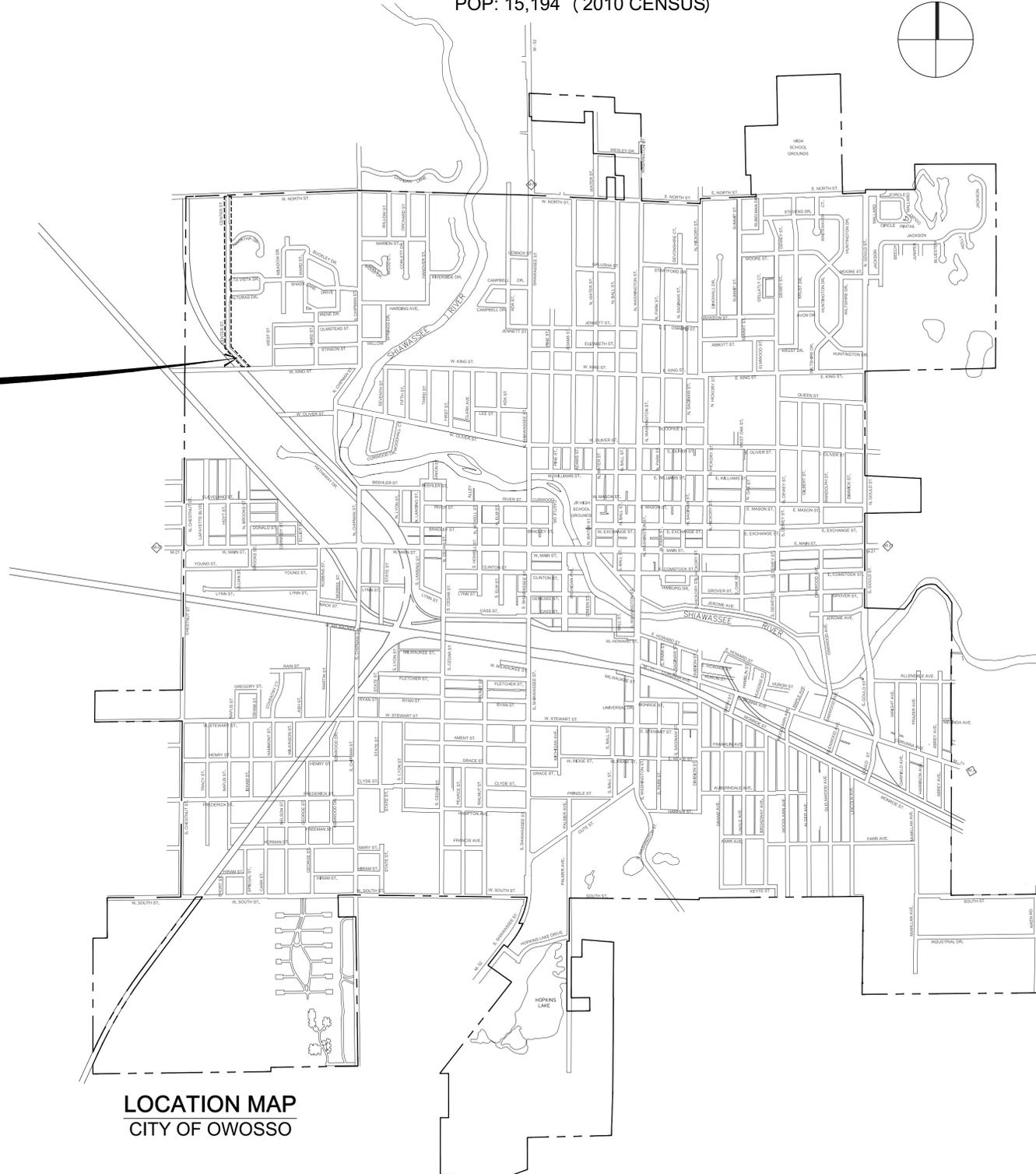


SHEET NO.	DESCRIPTION
CS	COVER SHEET
D1	NOTES AND MISCELLANEOUS ESTIMATES ROAD AND STORM SEWER DETAILS
D2	SESC STANDARD NOTES AND DETAILS
CN1	CENTER ST - TRAFFIC CONTROL PLAN
CN2	CENTER ST - TYPICAL CROSS SECTIONS
CN3 - CN5	CENTER ST - REMOVAL PLAN & SOIL BORINGS
CN6 - CN8	CENTER ST - CONSTRUCTION PLAN

CITY OF OWOSSO

2023 STREET PROGRAM CONTRACT 1

SHIAWASSEE COUNTY
SECTION 14, T7N-R2E, CITY OF OWOSSO
SECTION 19, T7N-R3E, CITY OF OWOSSO
POP: 15,194 (2010 CENSUS)



PROJECT LOCATION - CENTER STREET
B.O.P. STA 0+56.61 TO E.O.P. STA 27+60.61
TOTAL LENGTH = 2704 FT (0.51 MILES)

MDOT ROAD STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE CALLED FOR ON PLANS, THEY ARE TO BE CONSTRUCTED ACCORDING TO THE MDOT STANDARD PLAN GIVEN BELOW OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

DRAINAGE STRUCTURES	R-1-G*
COVER B	R-7-F*
MONUMENT BOXES	R-11-E
COVER K	R-15-F*
COVER Q	R-18-F*
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS	R-28-J*
DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS	R-29-I
CONCRETE CURB AND CONCRETE GUTTER	R-30-G*
BUMPER & PARKING RAIL AND MISC. WOOD POSTS	R-74-D
GRANULAR BLANKET, UNDERDRAINS, AND OUTLET ENDINGS FOR SEWER UNDERDRAINS, AND SEWER BULKHEADS	R-80-E
BEDDING AND FILLING AROUND PIPE CULVERTS	R-82-D
UTILITY TRENCHES	R-83-C*
SOIL EROSION & SEDIMENT CONTROL MEASURES	R-96-E
SEEDING AND TREE PLANTING	R-100-H

*SPECIAL DETAILS INCLUDED IN PROPOSAL OR MODIFIED IN GENERAL PLANS

LOCATION MAP
CITY OF OWOSSO

UTILITY CONTACTS

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE PLANS. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE REASONABILITY TO BE SATISFIED AS TO ITS ACCURACY AND LOCATION OF EXISTING UTILITIES.

CHARTER COMMUNICATIONS
ATT: MARK KELLY
1480 S. VALLEY CENTER DRIVE
BAY CITY, MI 48706

CABLE TV
PHONE: 989-233-9404
mark.kelly@chartercom.com

CITY OF OWOSSO
ATT: CLAYTON WEHNER, P.E.
301 W. MAIN STREET
OWOSSO, MI 48867

ROAD & STORM SEWER
989-725-0550
clayton.wehner@ci.owosso.mi.us

CITY OF OWOSSO
ATT: RYAN SUCHANEK
301 W. MAIN STREET
OWOSSO, MI 48867

SANITARY SEWER & WATER MAIN
989-725-0550
ryan.suchanek@ci.owosso.mi.us

CONSUMERS ENERGY
ATT: TRACY MAHAR
1801 W. MAIN ST
OWOSSO, MI 48867

ELECTRIC
OFFICE: 989-729-3250
CELL: 517-204-9018
tmahar@cmsenergy.com

CONSUMERS ENERGY
ATT: ADAM BERTRAM
530 W. WILLOW STREET
P.O. BOX 30162
LANSING, MI 48909

GAS
OFFICE: 517-374-2375
CELL: 517-614-8570
adam.bertram@cmsenergy.com

DAYSTARR COMMUNICATIONS
ATT: BRENT KLEIN
307 N. BALL STREET
OWOSSO, MI 48867

FIBER
PHONE: 989-720-6000
FAX: 989-720-6000
brent.klein@daystarrfiber.net

FRONTIER COMMUNICATIONS
ATT: MARK V. STEVENS
1943 W. M-21
OWOSSO, MI 48847

FIBER
PHONE: 989-723-0373
mark.stevens@ftr.com

SHIAWASSEE COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
ATT: STEVE ALWORDEN
201 N. SHIAWASSEE STREET
CORUNNA, MI 48817

SOIL EROSION AND SEDIMENTATION CONTROL
PHONE: 989-743-2289
FAX: 989-743-2413
salworden@shiasmawasseechd.net

CALL MISS DIG AT 1-800-482-7171 OR 811 THREE DAYS, EXCLUDING SATURDAY, SUNDAY, AND HOLIDAY, BEFORE STARTING YOUR PROJECT.

CITY OF OWOSSO, MICHIGAN ENGINEERING DIVISION DEPT. OF PUBLIC SERVICE	
BENCH MARK DATA	REVISIONS
ELEV.	NO.
DESCRIPTION	DATE
1	11/14/22
IFB PLANS	BY
1	CW
CHECKED BY	APPROVED BY
ORIGINAL PLAN	
2023 STREET PROGRAM - CONTRACT 1 COVER SHEET	FIELD BOOK PG.
MAY 2023 PROJECT NO.	CS



Know what's below.
Call before you dig.

GENERAL NOTES

UNDERGROUND UTILITIES/MISS DIG

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171 FOR 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. MEMBER 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.

THE EXISTING UTILITIES ON THESE DRAWINGS HAVE BEEN SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION AND SHALL NOTIFY THE ENGINEER AS TO WHERE POSSIBLE CONFLICT EXIST.

EXISTING WATER MAINS AND SEWERS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO PROPERLY IDENTIFIED EXISTING WATER MAINS AND / OR EXISTING SEWERS DURING THE CONSTRUCTION OF THE PROJECT.

ADJUSTING OF MONUMENT BOXES

ALL GOVERNMENT CORNERS ON THIS PROJECT SHALL BE PRESERVED, WHETHER SHOWN OR NOT. IT MAY BE NECESSARY TO PLACE OR ADJUST MONUMENT BOXES AS REQUIRED.

PAVEMENT MARKINGS AND SIGNS

ALL PERMANENT PAVEMENT MARKINGS, SHAPES, AND DIMENSIONS SHALL CONFORM WITH MDOT PAVEMENT MARKING TYPICALS PAVE - 900 SERIES.

SOIL EROSION MEASURES

APPROPRIATE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTH DISTURBING ACTIVITIES. PLACE LAWN RESTORATION ITEMS AS SOON AS POSSIBLE ON POTENTIAL ERODIBLE SLOPES AS DIRECTED BY THE ENGINEER. CRITICAL DITCH GRADES SHALL BE PROTECTED WITH EITHER SOD OR SEED / MULCH BLANKET AS DIRECTED BY THE ENGINEER.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND MAINTAINED UNTIL THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MEASURES SHALL ONLY BE PAID FOR ONCE.

RUBBISH DISPOSAL

SEE MAINTAINING TRAFFIC SPECIAL PROVISIONS.

MAIL DELIVERY

SEE MAINTAINING TRAFFIC SPECIAL PROVISIONS.

STORM SEWER REMOVAL

REMOVAL OF SEWER WITH DIAMETER LESS THAN 12 INCHES, WITHIN THE EXCAVATION LIMITS OF NEW SEWER, IS INCLUDED IN THE UNIT PRICE FOR NEW SEWER AND WILL NOT BE PAID FOR SEPARATELY.

STORM SEWER STRUCTURES

ALL STORM ORIFICES TO RECEIVE SEWER PIPE SHALL BE FITTED WITH KOR-N-SEAL FLEXIBLE CONNECTOR (S) , OR APPROVED EQUAL CONNECTOR. THE FLEXIBLE CONNECTOR WILL NOT BE PAID FOR SEPARATELY, BUT IS CONSIDERED AS PART OF THE DRAINING STRUCTURE PAY ITEM.

STORM SEWER CONNECTIONS

PROPOSED STORM SEWERS SHALL BE CONNECTED TO EXISTING STORM SEWERS WITH A FERNCO COUPLER, OR APPROVED EQUAL, AS DIRECTED BY THE ENGINEER. CONNECTION SHALL BE ACCOMPLISHED WITH COUPLER OF SIMILAR SIZE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS. PAYMENT FOR ALL MATERIALS AND LABOR NECESSARY TO ACCOMPLISH THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS PART OF OTHER WORK ITEMS.

STREET APPROACHES

STREET APPROACHES SHALL BE PAID FOR AS PART OF THE MAINLINE PAVING PAY ITMES.

STRUCTURE ADJUSTMENTS

ADJUSTMENTS TO STORM AND SANITARY STRUCTURES LOCATED WITHIN THE PAVEMENT OR CURB AND GUTTER SHALL BE PAID FOR AS: Dr Structure Cover, Adj, Case 1.

SIDEWALK RAMPS AND SIDEWALKS

SIDEWALK RAMPS SHALL BE COMPLETED IN ACCORDANCE WITH THE MDOT 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MDOT STANDARD PLAN R-28 SERIES, EXCEPT AS MODIFIED HEREIN. THE PORTION OF RAMP NEAREST THE CURB AND GUTTER SHALL BE 7-INCHES THICK AS IDENTIFIED ON THE SIDEWALK RAMP THICKNESS DETAIL. THE REMAINDER OF THE RAMP SHALL BE 4-INCHES THICK. THE PAY ITEMS FOR Sidewalk Ramp, Conc, __ inch AND Sidewalk, Conc, __ inch SHALL INCLUDE ALL EXCAVATION AND EMBANKMENT NECESSARY TO CONSTRUCT EACH ITEM AND ALL WORK NECESSARY TO SAW AND TRIM EDGES OF EXISTING CONCRETE. EXCAVATION AND EMBANKMENT WILL NOT BE PAID FOR SEPARATELY.

DETECTIBLE WARNING SURFACES SHALL BE BLACK IN COLOR, INSTALLED ONTO FRESH CONCRETE, AND IN ACCORDANCE WITH MDOT STANDARD R-28 SERIES.

SIDEWALKS LOCATED WITHIN RESIDENTIAL DRIVEWAYS SHALL BE 6-INCHES THICK AND WILL BE PAID FOR AS Sidewalk, Conc, 6 inch.

SIDEWALKS LOCATED WITHIN COMMERCIAL DRIVEWAYS SHALL BE 7-INCHES THICK AND WILL BE PAID FOR AS Sidewalk, Conc, 7 inch.

LAWN SPRINKLERS / LANDSCAPING

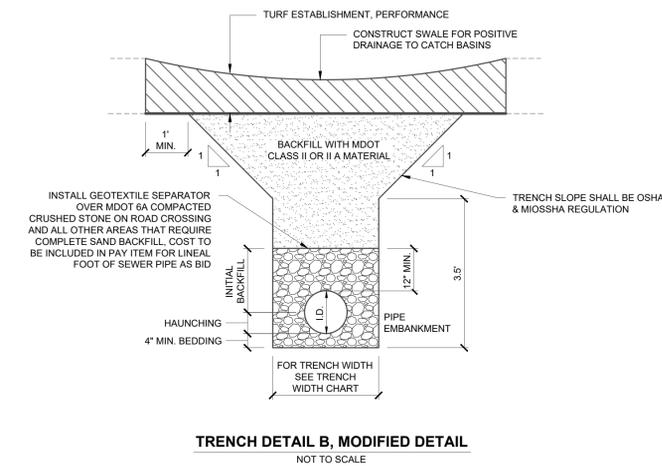
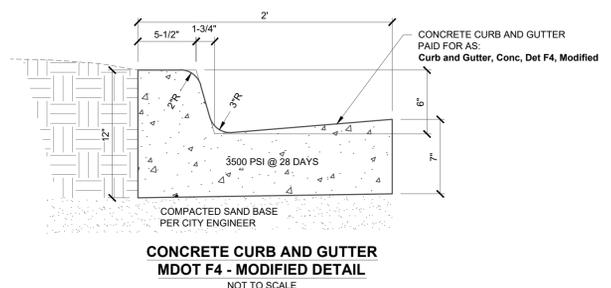
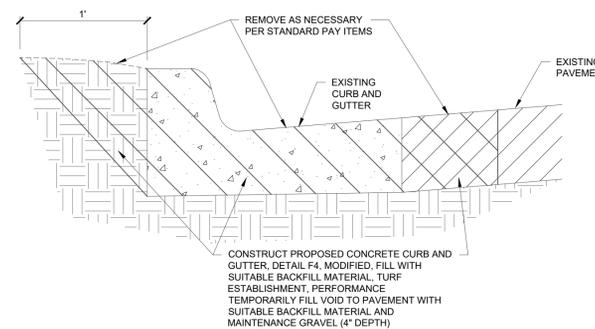
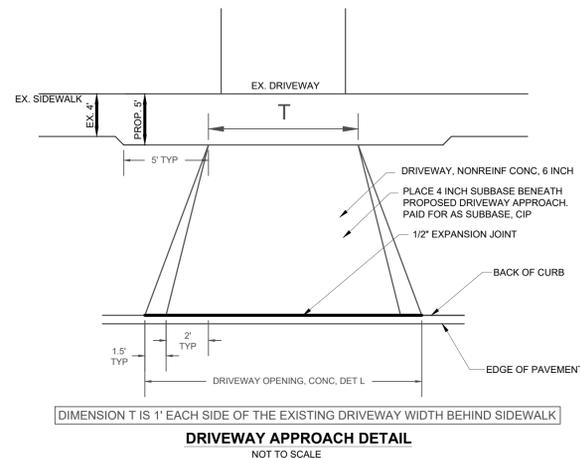
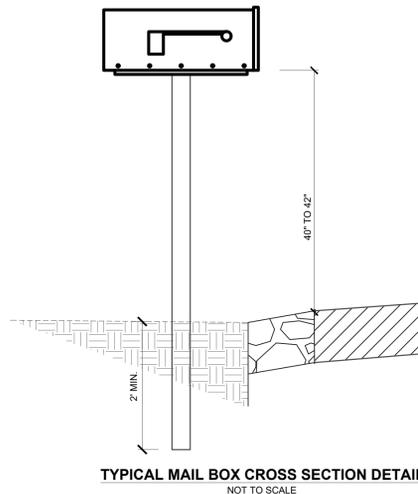
OWNERS OF EXISTING LAWN SPRINKLER SYSTEMS AND / OR LANDSCAPING SHALL BE NOTIFIED (IN WRITING WITH A COPY SENT TO THE ENGINEER) BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF ANY WORK THAT WILL BE DONE THAT WILL AFFECT THOSE SYSTEMS AND / OR LANDSCAPING. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LAWN SPRINKLER SYSTEM PRIOR TO THE CONTRACTOR BEGINNING WORK, AND IF THE CONTRACTOR CUTS THE SYSTEM DURING CONSTRUCTION, THE CONTRACTOR SHALL CAP THE SYSTEM PIPE AND WITNESS THE LOCATION OF THE CAP WITH A WOODEN STAKE FOR THE PROPERTY OWNERS USE. THE CONTRACTOR SHALL PLACE THE SALVAGED SPRINKLER HEADS ON THE BACK OF THE RIGHT OF WAY. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LANDSCAPING PRIOR TO THE CONTRACTOR BEGINNING WORK, THE CONTRACTOR SHALL CAREFULLY SALVAGE THE LANDSCAPING ITEMS AND STOCKPILE THEM ON THE BACK OF THE RIGHT OF WAY OR AT A LOCATION DESIGNATED BY THE ENGINEER FOR THE PROPERTY OWNER. ANY OTHER MODIFICATION TO THE SPRINKLER SYSTEM AND / OR LANDSCAPING IS THE RESPONSIBILITY OF THE OWNER AND IS NOT PART OF THIS CONTRACT. THIS WORK WILL NOT BE PAID FOR SEPARATELY.

PROPERTY OWNERS

PROPERTY OWNERS' NAMES, WHERE SHOWN, ARE FOR INFORMATION ONLY, AND THEIR ACCURACY IS NOT GUARANTEED.

MAINTAINING TRAFFIC

REFER TO THE CONTRACT SPECIAL PROVISION FOR WORK RESTRICTIONS RELATIVE TO MAINTAINING TRAFFIC.



TRENCH WIDTH CHART		
PIPE SIZE	MINIMUM	MAXIMUM
6", 8" & 10"	24"	30"
12" & 15"	30"	36"
18"	34"	40"
21"	38"	42"
24"	42"	46"
27"	45"	49"
30"	49"	53"
36"	56"	60"
LARGER THAN 36"	I.D. +20"	I.D. +24"

MISCELLANEOUS ESTIMATES

THE FOLLOWING ITEMS OF WORK SHALL BE DONE AS THEY APPLY THROUGHOUT THE PROJECT. THESE ITEMS ARE NOT DETAILED OR INCLUDED ON THE PLAN AND PROFILE SHEETS

- 1 LSUM Mobilization, Max \$42,300
- 50 Ft Curb and Gutter, Rem
- 14 Syd Pavt, Rem
- 100 Syd Subgrade Undercutting, Special
- 3 Cyd Subbase, CIP
- 4 Ea Sanitary Service, Conflict
- 4 Ea Abandoned Gas Main, Conflict
- 10 Tons Hand Patching
- 2 Ton Cement
- 14 Syd Driveway, Nonrein Conc, 6 inch
- 50 Ft Curb and Gutter, Conc, Det F4, Modified
- 8 Ea Gate Box, Adj, Temp, Case 1
- 8 Ea Gate Box, Adj, Case 1
- 5 Ea Sign, Type III, Rem
- 5 Ea Sign, Type III, Erect, Salv
- 80 Ft Post, Steel, 3 Pound

MAINTAINING TRAFFIC QUANTITIES

- 5 Ea Barricade, Type III, High Intensity, Double Sided, Furn & Oper
- 50 Ea Plastic Drum, Fluorescent, Furn & Oper
- 169 Sft Sign, Type B, Temp, Prismatic, Furn & Oper
- 1 LSUM Minor Traffic Devices, Max \$5,000

EXISTING FEATURES LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	TREE (DECIDUOUS)		CABLE BOX		SURVEY CONTROL POINT
	BUSH		TELEPHONE RISER		BENCHMARK
	TREE (CONIFEROUS)		TELEPHONE MANHOLE		SECTION CORNER
	DEAD TREE		TELEPHONE HANDHOLE	BOUNDARY LINE	
	STUMP		ELECTRICAL RISER		PROPERTY LINE
	MANHOLE		ELECTRICAL MANHOLE		WATERMAIN
	SANITARY CLEANOUT		ELECTRICAL HANDHOLE		SANITARY SEWER
	RD. CATCH BASIN		POWER POLE		STORM SEWER
	SQ. CATCH BASIN		LIGHT POLE		CULVERT (21" AND UNDER)
	FIRE HYDRANT		GUY POLE		CULVERT (24" AND UP)
	WATER VALVE		GUY ANCHOR		CABLE T.V.
	CURB STOP & BOX		PED CROSSING SIGNAL		TELEPHONE
	WELL		YARD LIGHT		ELECTRIC
	WATER MANHOLE		SIGN		GAS
	WATER METER		MAILBOX		OVERHEAD LINES
	SOIL BORING		GUARD POST		GUARDRAIL
	MONITORING WELL		FOUND CONC. MONUMENT		FENCE
			FOUND IRON ROD		WOODLINE
			SET IRON ROD		

NOTE: ALL ITEMS LISTED ON THE LEGEND MAY NOT BE PRESENT ON DRAWING.

**CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE**

2023 STREET PROGRAM - CONTRACT 1
NOTES AND MISCELLANEOUS ESTIMATES
ROAD AND STORM SEWER DETAILS

FIELD BOOK
PG.

D1

MAY 2023
PROJECT NO.

NO.	REVISIONS	DATE	BY
1	IFB PLANS	11/14/22	CW

APPROVED BY: _____
CHECKED BY: _____

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET
S-E-S-C KEYING SYSTEM

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
EROSION CONTROLS			
E1	SELECTIVE GRADING AND SHAPING		To reduce steep slopes and erosive velocities.
E2	GRUBBING OMITTED		For use on steep slopes to prevent rilling, gullying, and reduce sheet flow velocity or where clear vision corridors are necessary.
E3	SLOPE ROUGHENING AND SCARIFICATION		Where created grades cause increased erosive velocities. Promotes infiltration and reduces runoff velocity.
E4	TERRACES		On relatively long slopes up to 8% grades with fairly stable soils.
E5	DUST CONTROL		For use on construction sites, unpaved roads, etc. to reduce dust and sedimentation from wind and construction activities.
E6	MULCH		For use in areas subject to erosive surface flows or severe wind or on newly seeded areas.
E7	TEMPORARY SEEDING		Stabilization method utilized on construction sites where earth change has been initiated but not completed within a 2 week period.
E8	PERMANENT SEEDING		Stabilization method utilized on sites where earth change has been completed (final grading attained).
E9	MULCH BLANKETS		On exposed slopes, newly seeded areas, new ditch bottoms, or areas subject to erosion.
E10	SODDING		On areas and slopes where immediate stabilization is required.
E11	VEGETATED CHANNELS		For use in created stormwater channels. Vegetation is used to slow water velocity and reduce erosion within the channel.
E12	RIPRAP		Use along shorelines, waterways, or where concentrated flows occur. Slows velocity, reduces sediment load, and reduces erosion.
E13	GABION WALLS		On newly created or denuded stream banks to reduce velocity until permanent stabilization is achieved or on existing banks to retard erosive velocities.
E14	ENERGY DISSIPATOR		Where the energy transmitted from a concentrated flow of surface runoff is sufficient to erode receiving area or watercourse.
E15	TEMPORARY SLOPE DRAIN		Where surface runoff temporarily accumulates or sheet flows over the top of a slope and must be conveyed down a slope in order to prevent erosion.
E16	SLOPE DRAIN		Where concentrated flow of surface runoff must be permanently conveyed down a slope in order to prevent erosion.

B = BIOENGINEERING

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET
S-E-S-C KEYING SYSTEM

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
E17	CELLULAR CONFINEMENT SYSTEMS		Used on steep slopes and high velocity channels.
E18	PLASTIC SHEETS		Used on exposed slopes, seeded areas, new ditch bottoms, and areas subject to surface runoff and erosion. Used as a liner in temporary channels and to stabilize stockpiles.
E19	TEMPORARY DRAINAGEWAY/ STREAM CROSSING		Use on construction sites where stream/drainage way crossings are required.
E20	TEMPORARY BYPASS CHANNEL		Use within existing stream corridors when existing flow cannot be interrupted, and at culvert and bridge repair sites.
E21	LIVE STAKING		In areas requiring protection of slopes against surface erosion and shallow mass wasting.
EROSION / SEDIMENT CONTROLS			
ES31	CHECK DAM		Used to reduce surface flow velocities within constructed and existing flow corridors.
ES32	STONE FILTER BERM		Use primarily in areas where sheet or rill flow occurs and to accommodate dewatering flow.
ES33	FILTER ROLLS		In areas requiring immediate protection of slopes against surface erosion and gully formation and for perimeter sediment control.
ES34	SAND FENCE		For use in areas susceptible to wind erosion, especially where the ground has not yet been stabilized by other means.
ES35	DEWATERING		Use where construction activities are limited by the presence of water and dry work is required.
ES36	DIVERSION DIKE/BERM		Within existing flow corridors to address or prevent erosion and sedimentation, or on disturbed or unstable slopes subject to erosive surface water velocities.
ES37	DIVERSION DITCH		In conjunction with a diversion dike, or where diversion of upslope runoff is necessary to prevent damage to unstabilized or disturbed construction areas.
ES38	COFFERDAM/SHEET PILING		Constructed along or within water corridor or waterbody to provide dry construction area.
ES39	STREAMBANK BIOSTABILIZATION		For use along banks where stream and riparian zones may have difficulty recovering from the long-term effects of erosion.
ES40	POLYMERS		To minimize soil erosion and reduce sedimentation in water bodies by increasing soil particle size.
ES41	WATTLES		In areas requiring protection of slopes against surface erosion and gully formation.

B = BIOENGINEERING

MICHIGAN DEPARTMENT OF MANAGEMENT AND BUDGET
S-E-S-C KEYING SYSTEM

KEY	BEST MANAGEMENT PRACTICES	SYMBOL	WHERE USED
SEDIMENT CONTROLS			
S51	SILT FENCE		Use adjacent to critical areas, to prevent sediment laden sheet flow from entering these areas.
S52	CATCH BASIN SEDIMENT GUARD		Use in or at stormwater inlets, especially at construction sites.
S53	STABILIZED CONSTRUCTION ACCESS		Used at every point where construction traffic enters or leaves a construction site.
S54	TIRE WASH		For use on construction sites where vehicular traffic requires sediment removed from its tires in highly erosive areas.
S55	SEDIMENT BASIN		At the outlet of disturbed areas and at the location of a permanent detention basin.
S56	SEDIMENT TRAP		In small drainage areas, along construction site perimeters, and above check dams or drain inlets.
S57	VEGETATED BUFFER/FILTER STRIP		Use along shorelines, waterways, or other sensitive areas. Slows velocity, reduces sediment load, and reduces erosion in areas of sheet flow.
S58	INLET PROTECTION FABRIC DROP		Use at stormwater inlets, especially at construction sites.
S59	INLET PROTECTION FABRIC FENCE		Use at stormwater inlets, especially at construction sites.
S60	INLET PROTECTION STONE		Use around urban stormwater inlets.
S61	TURBIDITY CURTAIN		Use during construction adjacent to a water source, to contain sediment within the work area when other BMP's cannot be used.

B = BIOENGINEERING

CONSTRUCTION SEQUENCE

1. INSTALLATION OF TEMPORARY EROSION CONTROL MEASURES.
2. TRENCH EXCAVATION, AGGREGATE PLACEMENT, AND PULVERIZING.
3. PERMANENT MEASURES, FINAL GRADING, SEEDING AND MULCHING.

	SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CONSTRUCTION SEQUENCE												
STRIP AND STOCKPILE TOPSOIL												
ROUGH GRADE/ SEDIMENT CONTROL												
TEMP CONTROL MEASURES												
STORM FACILITIES								N/A				
TEMP CONSTRUCTION ROADS								N/A				
FOUNDATION/ BLDG. CONSTRUCTION								N/A				
SITE CONSTRUCTION												
PERM CONTROL MEASURES												
FINISH GRADING												
LANDSCAPING								N/A				

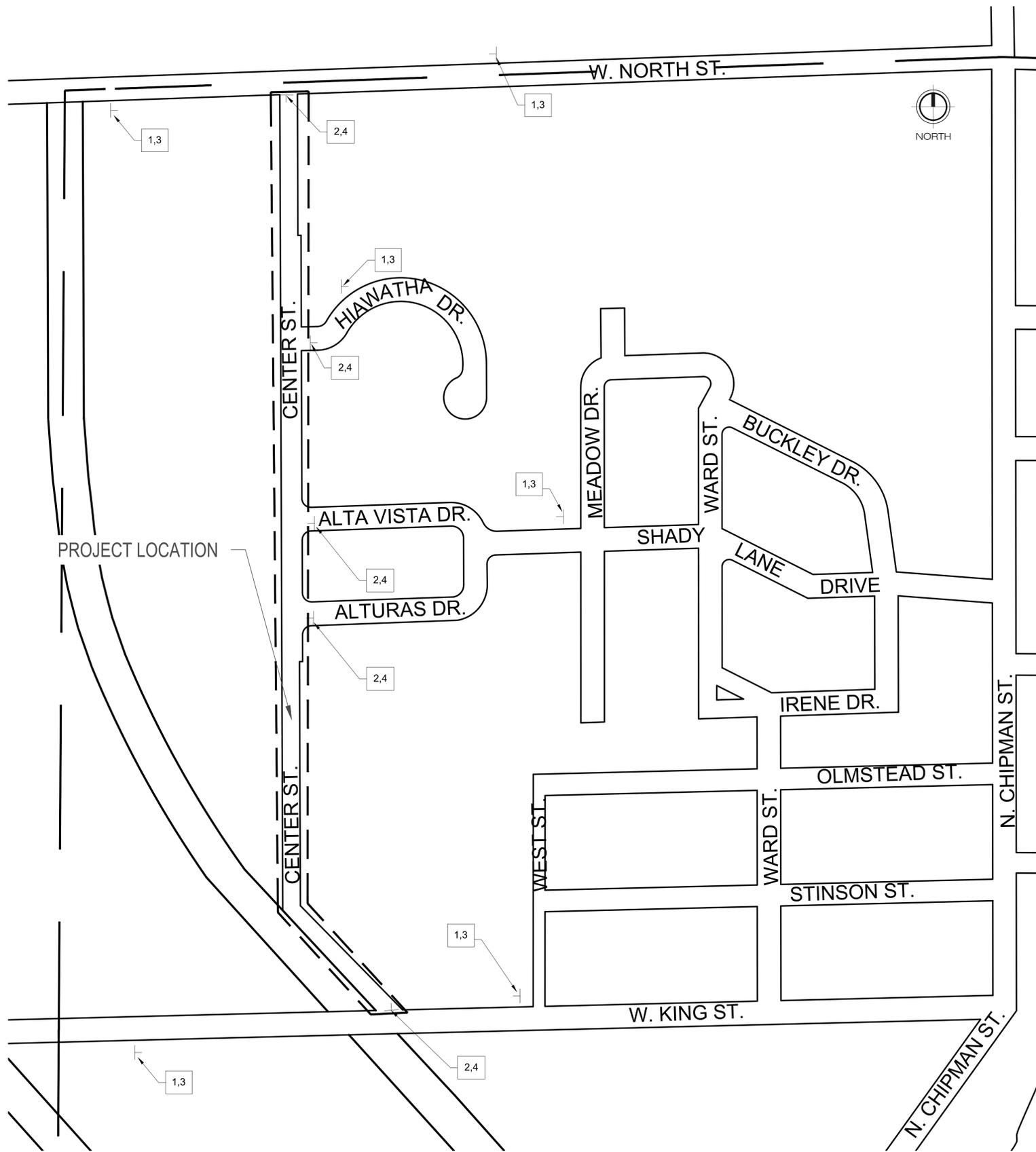
NO.	DATE	BY	REVISIONS
1	11/14/22	CW	IFB PLANS

BENCH MARK DATA	DESCRIPTION
ELEV.	

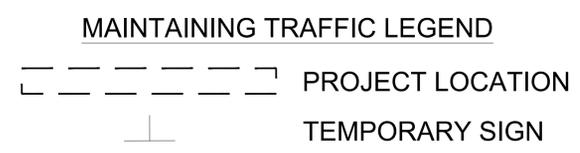
CHECKED BY
ORIGINAL PLAN
APPROVED BY

CENTER STREET CITY OF OWOSSO 2023 STREET PROGRAM - CONTRACT 1

SHEET NO.	DESCRIPTION
CN1	CENTER ST - COVER SHEET & TRAFFIC CONTROL PLAN
CN2	CENTER ST - TYPICAL CROSS SECTIONS
CN3 - CN5	CENTER ST - REMOVAL PLAN
CN6 - CN8	CENTER ST - CONSTRUCTION PLAN



SIGNING REQUIREMENTS					
NO.	SIGN	SIGN DESIGNATION	SIZE	NO. REQ.	TOTAL AREA (SFT)
1		W20-1	48 x 48	6	96
2		R11-3A	60 x 30	5	63
3		M4-8 MOD	30 X 8	6	10
4		TYPE III BARRICADE		5	



CITY OF OWOSSO, MICHIGAN
 ENGINEERING DIVISION
 DEPT. OF PUBLIC SERVICE

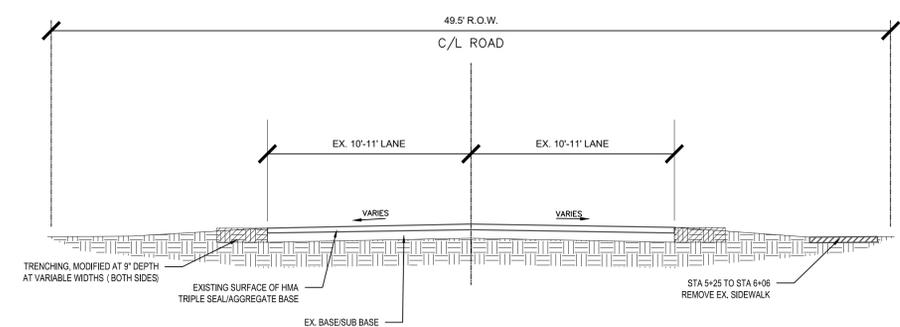
NO.	DATE	BY	REVISIONS	CHECKED BY	APPROVED BY
1	11/14/22	CW			

BENCH MARK DATA	DESCRIPTION	ELEV.

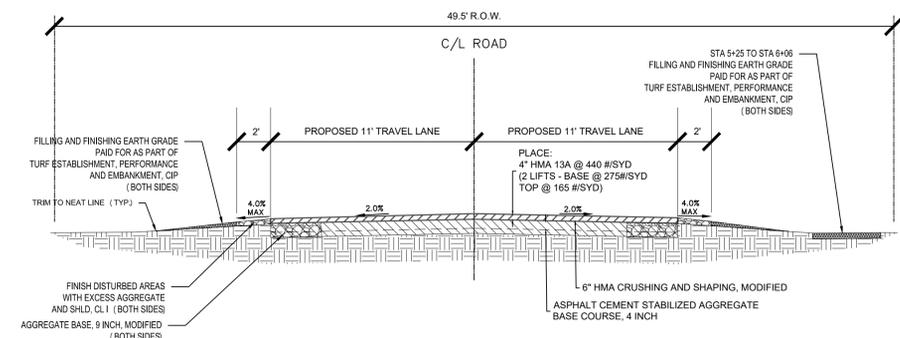
2023 STREET PROGRAM - CONTRACT 1
 CENTER ST
 TRAFFIC CONTROL PLAN

FIELD BOOK
 PG.

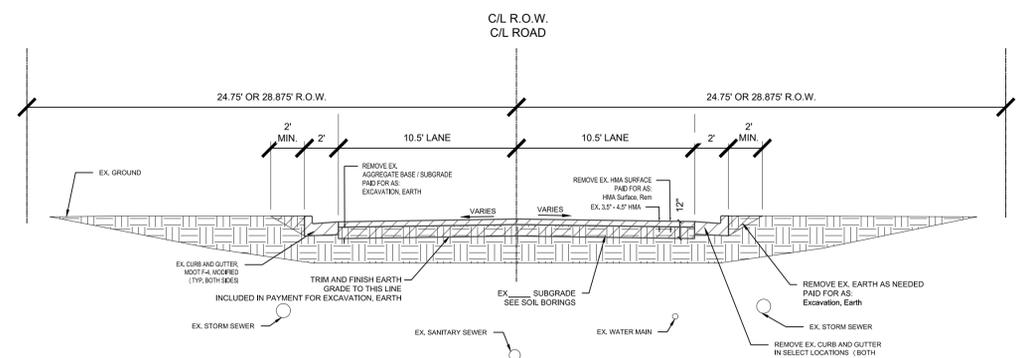
MAY, 2023
PROJECT NO.
CN1



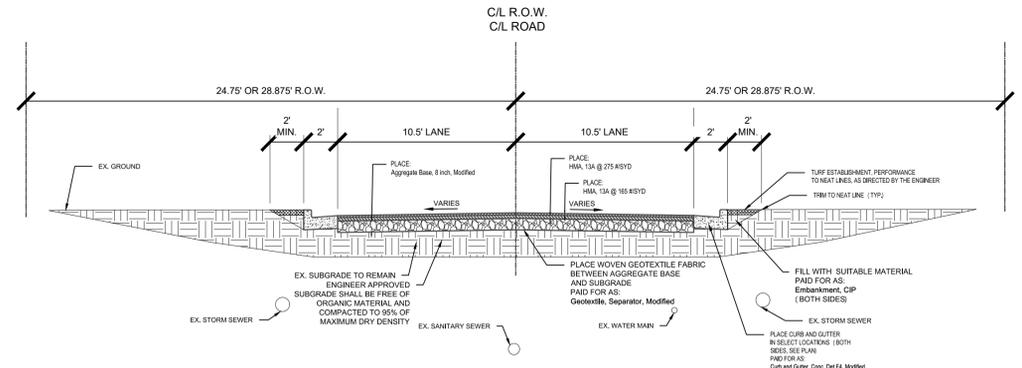
TYPICAL EXISTING CROSS SECTION - CENTER STREET
APPLIES TO STATIONS:
0+56.16 (B.O.P.) TO 14+31.11
SCALE: 1" = 5'



TYPICAL PROPOSED CROSS SECTION - CENTER STREET
APPLIES TO STATIONS:
0+56.16 (B.O.P.) TO 14+31.11
SCALE: 1" = 5'



TYPICAL EXISTING CROSS SECTION - CENTER STREET
APPLIES TO STATIONS:
14+13.11 TO 27+60.61 (E.O.P.)
SCALE: 1" = 5'



TYPICAL PROPOSED CROSS SECTION - CENTER STREET
APPLIES TO STATIONS:
14+31.11 TO 27+60.61 (E.O.P.)
SCALE: 1" = 5'

NOTES:

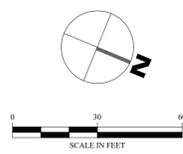
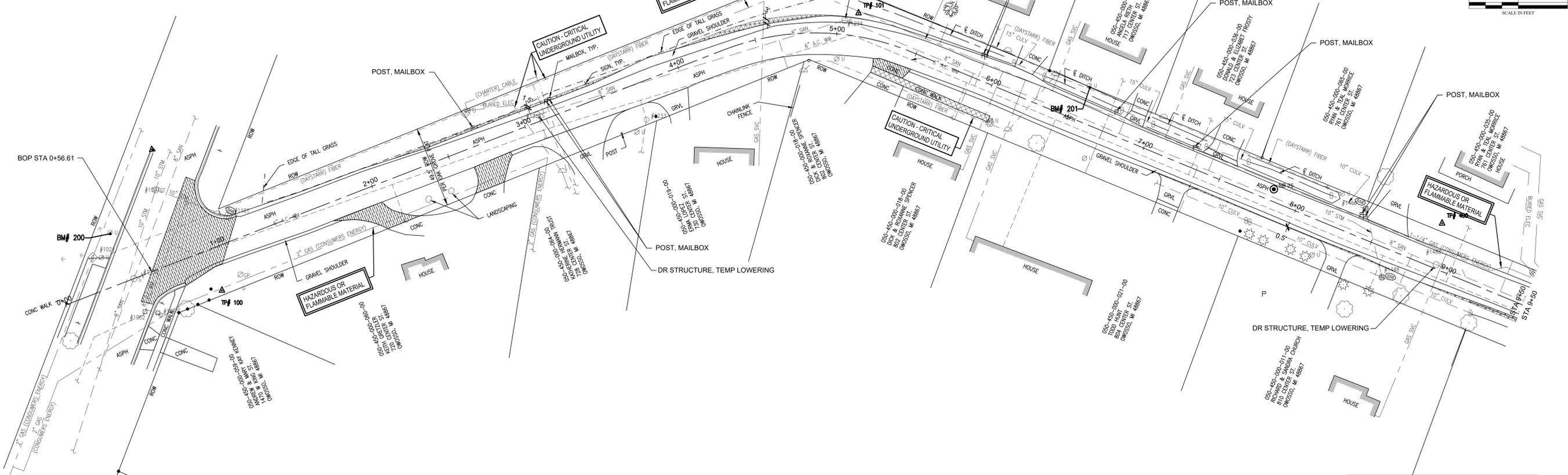
1. WIND ROW SUFFICIENT AMOUNT OF AGGREGATE ALONG ROAD EDGES FOR BLENDING PROPOSED PAVEMENT WITH EX. GROUND. NOT TO BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED AS PART OF MAJOR WORK ITEMS.
2. MATCH PROPOSED ROAD SURFACE WITH ADJACENT PAVEMENT OF OTHER STREETS, PARKING AREAS, ECT. AS DIRECTED BY THE ENGINEER.
3. RESIDENTIAL GRAVEL DRIVEWAYS: CONSTRUCT A 2' ASPHALT WING TO FIT PROPOSED ROAD TO ADJACENT DRIVEWAYS AS DIRECTED BY THE ENGINEER. PLACE ADDITIONAL GRAVEL BEHIND ASPHALT WING AND BLEND INTO EXISTING DRIVEWAY PAID FOR AS APPROACH, CL I, LM.

CENTER STREET - HMA APPLICATION RATE					
ITEM	PAY ITEM	RATE PER SYD	PERFORMANCE GRADE	ESTIMATED THICKNESS	REMARKS
HMA	HMA, 13A	165 LBS.	58-28	1.5"	TOP COURSE - AWI = 220 (MIN)
	HMA, 13A	275 LBS.	58-28	2.5"	LEVELING COURSE
DRIVE APPROACH	HMA, 13A	220 LBS.	58-28	2"	TOP COURSE - AWI = 220 (MIN)
	HMA, 13A	330 LBS.	58-28	3"	LEVELING COURSE HMA, 13A
BOND COAT		0.1 GAL.			SS-1H (FOR INFORMATION ONLY)

NO.	DESCRIPTION	REVISIONS	DATE	BY
1	IFB PLANS		11/14/22	CW

BENCH MARK DATA	DESCRIPTION	ELEV.

JOB BENCHMARK # 200 COTTON SPINDLE IN NORTH FACE OF POWER POLE ON S. SIDE OF WEST KING ST @ CENTER ST ELEV 752.24	TRAVERSE POINT # 100 N 548563.784 E 13169888.360 ELEV 750.11
JOB BENCHMARK # 201 COTTON SPINDLE IN EAST FACE OF POWER POLE IN FRONT OF HOUSE #717 CENTER STREET ELEV 750.44	TRAVERSE POINT # 101 N 548878.438 E 13169584.979 ELEV 750.04
	TRAVERSE POINT # 400 N 540253.916 E 13169567.369 ELEV 748.47



CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

- LEGEND**
- X-X-X-X- Curb and Gutter, Rem
 - X-X-X-X- Sewer, Rem
 - XXX Dr Structure, Rem
 - HMA Surface, Rem
 - Trenching, Modified
 - Pavt, Rem
 - Sidewalk, Rem
 - Excavation Earth
 - STANDARD SOIL EROSION KEY

CENTER STREET
REMOVAL PLAN



Construction Testing Services
3300 E. Bristol Road, Burton, MI 48529
PHONE: (810) 603-0766
FAX: (810) 603-0786

JOB NO. S-18-240 LOG OF SOIL BORING NO. 25
PROJECT: City of Owosso Street Improvements
LOCATION: Owosso, Michigan
DATE: 9/11/18 SURFACE ELEVATION: Existing

QUANTITY	UNIT	WORK ITEM
306	Syd	Pavt, Rem
35	Syd	Sidewalk, Rem
59	Cyd	Excavation, Earth
3	Ea	Erosion Control, Inlet Protection, Fabric Drop
6	Sta	Trenching, Modified
3	Ea	Dr Structure, Temp Lowering
9	Ea	Post, Mailbox

Sample & Type	Depth	Legend	Soil Description	SPT Blows per ft	Moisture %	Natural Wt. P.C.F.	Unc. Comp. Strength	Str %
	1		1.75" Asphalt					
	2		14" Fill Sand - Compact, Moist, Brown w/Gravel	2				
25A	2		Possible Fill Clay - Firm, Moist, Silty, Dark Brown	3				
SS	3		2'5" Possible Topsoil - Firm, Moist, Silty, Clayey, Black	3				
	4			2				
25B	5		Clay - Firm, Moist, Silty, Variegated	3				
SS	4			4				
25C	6			3				
SS	7		6'5" Clay - Stiff, Moist, Silty, Brown w/occ Pebble	4				
	7		7'0" End of Boring	5				
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
	19							
	20							
	21							

TYPE OF SAMPLE
D - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELLEY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
OTHER -

BORING PLUGGED WITH NATURAL SOIL
* The soil descriptions shown on the logs are from visual observations. No classification tests were performed.
Standard Penetration Test - Driving 2" OD Sampler 1' With 140# Hammer Falling 30"; Count Made At 6" Intervals.

GROUND WATER OBSERVATIONS
G.W. ENCOUNTERED AT FT. INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. ON COMPLETION FT. INS.
G.W. AFTER HOURS FT. INS.
G.W. VOLUMES None

NO.	DATE	BY
1	11/14/22	CW

NO.	REVISIONS	DESCRIPTION
1	IFB PLANS	

2023 STREET PROGRAM - CONTRACT 1
CENTER ST
REMOVAL PLAN
MAY, 2023
PROJECT NO. CN3



CHECKED BY: ORIGINAL PLAN
APPROVED BY:

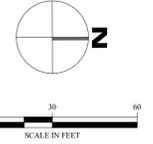
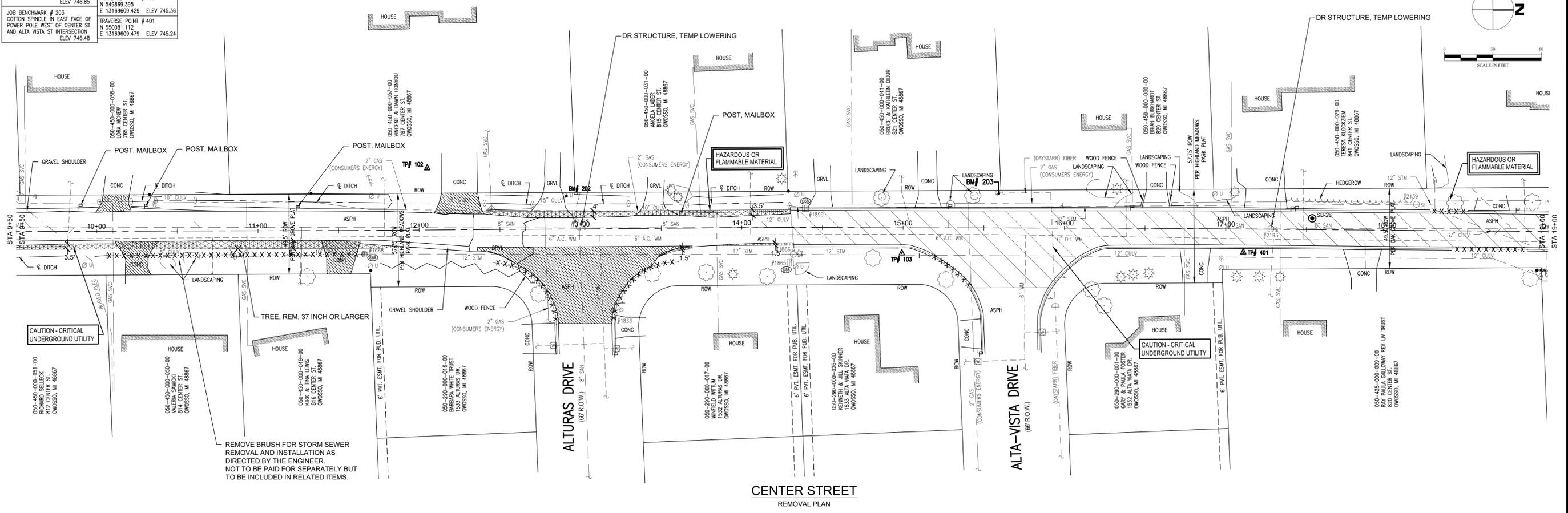
JOB BENCHMARK # 202
COTTON SPINDLE IN EAST FACE OF
LIGHT POLE @ INTERSECTION OF
CENTER ST AND ALTURAS ST
ELEV 746.85

JOB BENCHMARK # 203
COTTON SPINDLE IN EAST FACE OF
POWER POLE WEST OF CENTER ST
AND ALTA VISTA ST INTERSECTION
ELEV 746.48

TRAVERSE POINT # 102
N 549573.343
E 13169556.069 ELEV 746.00

TRAVERSE POINT # 103
N 549869.395
E 13169609.429 ELEV 745.36

TRAVERSE POINT # 401
N 550081.112
E 13169609.479 ELEV 745.24



CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

CAUTION - CRITICAL
UNDERGROUND UTILITY

REMOVE BRUSH FOR STORM SEWER
REMOVAL AND INSTALLATION AS
DIRECTED BY THE ENGINEER.
NOT TO BE PAID FOR SEPARATELY BUT
TO BE INCLUDED IN RELATED ITEMS.

NO.	DATE	BY
1	11/14/22	CW

NO.	REVISIONS
1	IFB PLANS

2023 STREET PROGRAM - CONTRACT 1
CENTER ST
REMOVAL PLAN
MAY, 2023
PROJECT NO.
CN4

LEGEND

- X-X-X-X- Curb and Gutter, Rem
- X-X-X-X- Sewer, Rem
- XXXXX Dr Structure, Rem
- HMA Surface, Rem
- Trenching, Modified
- Pavt, Rem
- Sidewalk, Rem
- Excavation Earth
- STANDARD SOIL EROSION KEY



Construction Testing Services
3300 E. Bristol Road, Burton, MI 48529
PHONE: (810) 603-0766
FAX: (810) 603-0786

JOB NO. S-18-240 LOG OF SOIL BORING NO. 26
PROJECT: City of Owosso Street Improvements
LOCATION: Owosso, Michigan
DATE: 9/11/18 SURFACE ELEVATION: Existing

REMOVAL QUANTITIES - CENTER STREET

QUANTITY	UNIT	WORK ITEM
1	Ea	Tree, Rem, 37 inch or larger
160	Ft	Sewer, Rem, Less than 24 inch
225	Ft	Curb and Gutter, Rem
462	Syd	Pavt, Rem
343	Cyd	Excavation, Earth
3	Ea	Erosion Control, Inlet Protection, Fabric Drop
6	Sta	Trenching, Modified
2	Ea	Dr Structure, Temp Lowering
1309	Syd	HMA Surface, Rem
4	Ea	Post, Mailbox

Sample & Type	Depth	Legend	Soil Description	SPT Blows per Ft	Moisture %	Natural WL P.C.T.	Unc. Comp. Strength	Sh %
	1		3.5" Asphalt					
	2		6.5" Fill Crushed Stone					
26A	2		Fill Sand - Medium Compact, Moist, Clayey, Brown w/Pebble & occ/Black Streaks	2				
SS	3		22" Clay - Firm, Moist, Silty, Variegated w/occ Pebble	3				
	3		3' Clay - Firm, Moist, Silty, Variegated w/occ Pebble	4				
	4							
26B	5		Clay - Stiff, Moist, Silty, Brown w/occ Pebble & tr/Oxidation	3				
SS	6			6				
	6			8				
26C	6		6" Clay - Very Stiff, Moist, Silty, Brown w/Pebble & tr/Oxidation	6				
SS	7		7" Clay - Very Stiff, Moist, Silty, Brown w/Pebble & tr/Oxidation	8				
	7		End of Boring	10				
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
	19							
	20							
	21							

TYPE OF SAMPLE
D - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELBY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
OTHER -

BORING PLUGGED WITH NATURAL SOIL
*The soil descriptions shown on the logs are from visual observations. No classification tests were performed.
Standard Penetration Test - Driving 2" OD Sampler 1' With 140# Hammer Falling 30"; Count Made At 6" Intervals.

GROUND WATER OBSERVATIONS
G.W. ENCOUNTERED AT FT. INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. ON COMPLETION FT. INS.
G.W. AFTER HOURS FT. INS.
G.W. VOLUMES None



2023 STREET PROGRAM - CONTRACT 1
CENTER ST
REMOVAL PLAN
MAY, 2023
PROJECT NO.
CN4

JOB BENCHMARK # 204
COTTON SPINDLE IN EAST FACE OF
POWER POLE WEST OF CENTER ST
BETWEEN HSE #1025 AND #1029
ELEV 742.88

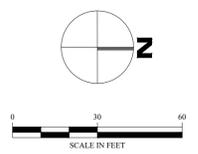
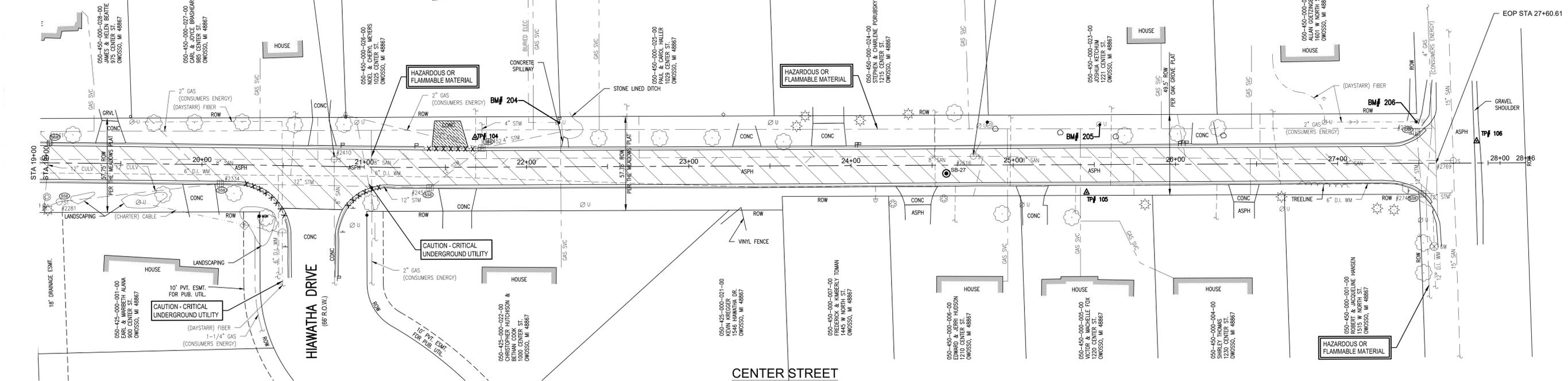
JOB BENCHMARK # 205
COTTON SPINDLE IN EAST FACE OF
POWER POLE WEST OF CENTER ST
IN FRONT OF HSE #1221
ELEV 747.07

JOB BENCHMARK # 206
COTTON SPINDLE IN EAST FACE OF
PP IN SW QUAD OF INTERSECTION
OF CENTER ST AND W NORTH ST
ELEV 741.57

TRAVERSE POINT # 104
N 550336.551
E 13169582.239 ELEV 741.79

TRAVERSE POINT # 105
N 550915.387
E 13169616.479 ELEV 745.94

TRAVERSE POINT # 106
N 551153.839
E 13169585.392 ELEV 741.08



CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

- LEGEND**
- X-X-X-X- Curb and Gutter, Rem
 - X-X-X-X- Sewer, Rem
 - XXX Dr Structure, Rem
 - HMA Surface, Rem
 - Trenching, Modified
 - Pavt, Rem
 - Sidewalk, Rem
 - Excavation Earth
 - STANDARD SOIL EROSION KEY



Construction Testing Services
3300 E. Bristol Road, Burton, MI 48529
PHONE: (810) 603-0766
FAX: (810) 603-0786

JOB NO. S-18-240 LOG OF SOIL BORING NO. 27
PROJECT: City of Owosso Street Improvements
LOCATION: Owosso, Michigan
DATE: 9/11/18 SURFACE ELEVATION: Existing

REMOVAL QUANTITIES - CENTER STREET		
QUANTITY	UNIT	WORK ITEM
99	Ft	Curb and Gutter, Rem
34	Syd	Pavt, Rem
479	Cyd	Excavation, Earth
7	Ea	Erosion Control, Inlet Protection, Fabric Drop
2	Ea	Dr Structure, Temp Lowering
2135	Syd	HMA Surface, Rem

Sample & Type	Depth	Log	Soil Description	SPT Blows/ft	Moisture %	Natural Wt. P.C.F.	Unc. Comp. Strength	Str %
	1		4.5" Asphalt					
			10.5" Fill Sand - Medium Compact, Moist, Brown w/Gravel					
27A SS	2		Possible Fill Sand - Medium Compact, Moist, Brown w/occ Clay & occ/Dark Streaks	3				
	3			2				
	4		3'6" Possible Fill Clay - Firm, Moist, Silty, Sandy, Brown w/occ Pebble	2				
27B SS	5		4'6" Pebble	6				
	6		Clay - Stiff, Moist, Silty, Sandy, Brown w/occ Pebble	7				
27C SS	7			8				
	8		7'0" End of Boring	8				
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
	19							
	20							
	21							

TYPE OF SAMPLE
D - DISTURBED
U.L. - UNDIST. LINER
S.T. - SHELLEY TUBE
S.S. - SPLIT SPOON
R.C. - ROCK CORE
OTHER:

BORING PLUGGED WITH NATURAL SOIL
* The soil descriptions shown on the logs are from visual observations. No classification tests were performed.
Standard Penetration Test - Driving 2" OD Sampler 1' With 140# Hammer Falling 30"; Count Made At 6" Intervals.

GROUND WATER OBSERVATIONS
G.W. ENCOUNTERED AT FT. INS.
G.W. ENCOUNTERED AT FT. INS.
G.W. ON COMPLETION FT. INS.
G.W. AFTER HOURS FT. INS.
G.W. VOLUMES None

NO.	DATE	BY
1	11/14/22	CW

REVISIONS

NO. 1 I/FB PLANS

DATE

BY

ORIGINAL PLAN

CHECKED BY

APPROVED BY

2023 STREET PROGRAM - CONTRACT 1
CENTER ST
REMOVAL PLAN

FIELD BOOK
PG.

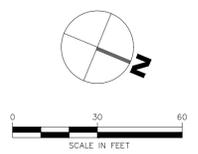
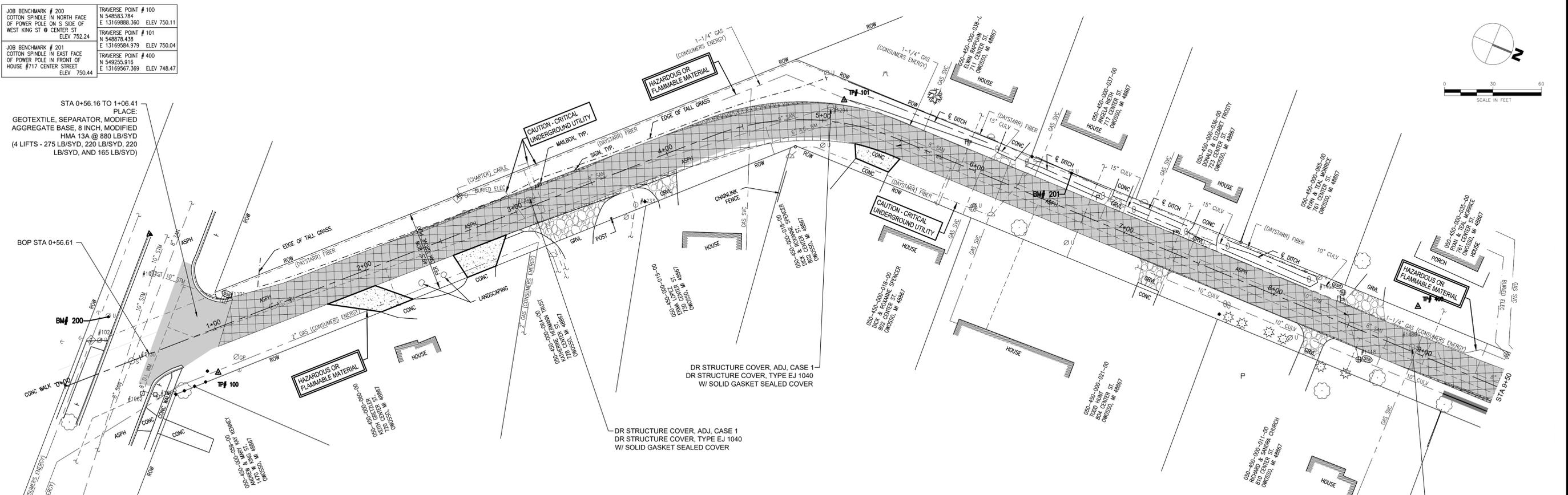
MAY, 2023
PROJECT NO.

CN5



JOB BENCHMARK # 200 COTTON SPINDLE IN NORTH FACE OF POWER POLE ON S. SIDE OF WEST KING ST @ CENTER ST ELEV 752.24	TRAVERSE POINT # 100 N 548563.784 E 13169888.360 ELEV 750.11
JOB BENCHMARK # 201 COTTON SPINDLE IN EAST FACE OF POWER POLE IN FRONT OF HOUSE #717 CENTER STREET ELEV 750.44	TRAVERSE POINT # 101 N 548878.438 E 13169584.979 ELEV 750.04
	TRAVERSE POINT # 400 N 549253.916 E 13169567.369 ELEV 748.47

STA 0+56.16 TO 1+06.41
PLACE:
GEOTEXTILE, SEPARATOR, MODIFIED
AGGREGATE BASE, 8 INCH, MODIFIED
HMA 13A @ 880 LB/SYD
(4 LIFTS - 275 LB/SYD, 220 LB/SYD, 220
LB/SYD, AND 165 LB/SYD)



CONSTRUCTION LEGEND

- Curb and Gutter, Conc, Det F4, Modified
- Sewer, SDR-26, __ inch, Tr Det B, Modified
- HMA
- HMA Base Crushing and Shaping, Modified and Asphalt Cement Stabilized Base Course
- Aggregate Base, 9 inch, Modified
- Driveway, Nonreinf, Conc, 6 inch
- Approach, CI I, LM
- Sidewalk, Conc, __ inch
- Sidewalk, Ramp, Conc, __ inch
- STANDARD SOIL EROSION KEY

CENTER STREET
CONSTRUCTION PLAN

CONSTRUCTION QUANTITIES (THIS SHEET)

QUANTITY	UNIT	WORK ITEM
10	Cyd	Embankment, CIP
14	Cyd	Subbase, CIP
219	Syd	Aggregate Base, 8 inch, Modified
59	Syd	Aggregate Base, 9 inch, Modified
50	Ton	Maintenance Gravel
3374	Gal	Asphalt Cement Binder
2110	Syd	HMA Base Crushing and Shaping, Modified
2110	Syd	Asphalt Cement Stabilized Base Course
23	Cyd	Approach, CI I, LM
88	Ton	Shield, CI I
219	Syd	Geotextile, Separator, Modified
3	Ea	Dr Structure Cover, Adj, Case 1
3	Ea	Dr Structure Cover, Type EJ 1040 w/ Solid Gasket Sealed Cover
606	Ton	HMA, 13A
124	Syd	Driveway, Nonreinf Conc, 6 inch
600	Syd	Turf Establishment, Performance

CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

2023 STREET PROGRAM - CONTRACT 1
CENTER ST
CONSTRUCTION PLAN

MAY, 2023
PROJECT NO. **CN6**

CONSTRUCTION PLAN

NO. 1
DATE 11/14/22
BY CW

REVISIONS

DESCRIPTION

ELEV.

FIELD BOOK
PG.

CHECKED BY
APPROVED BY

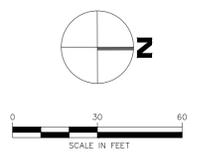
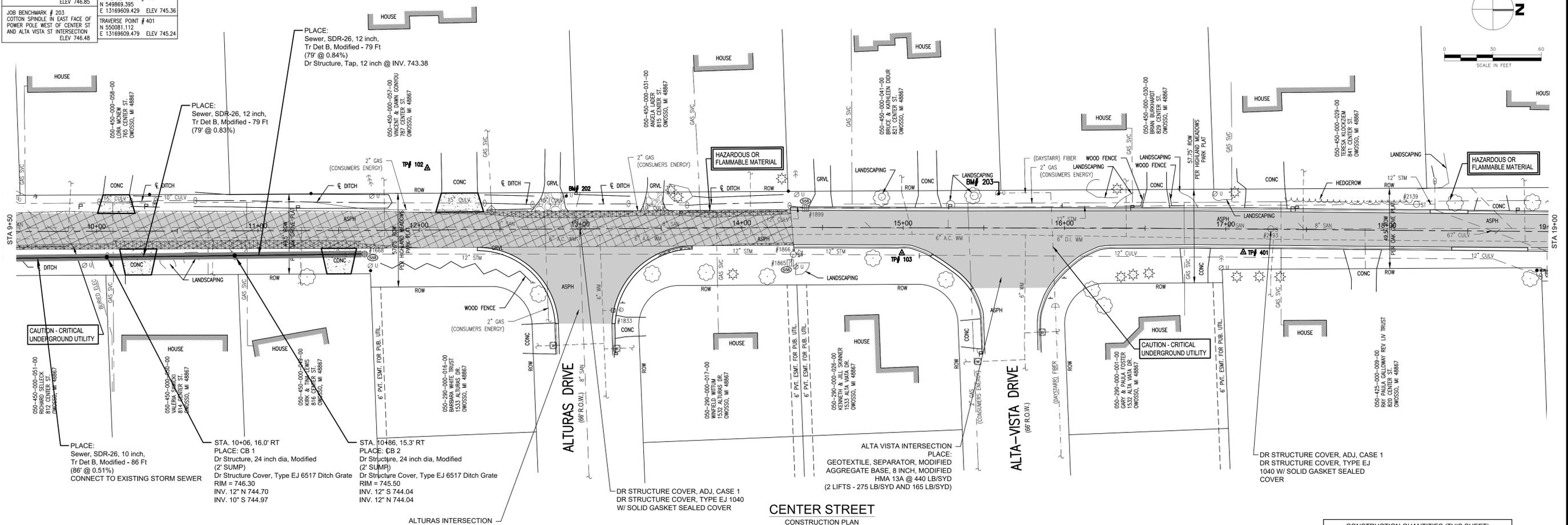
JOB BENCHMARK # 202
COTTON SPINDLE IN EAST FACE OF
LIGHT POLE @ INTERSECTION OF
CENTER ST AND ALTURAS ST
ELEV 746.85

JOB BENCHMARK # 203
COTTON SPINDLE IN EAST FACE OF
POWER POLE WEST OF CENTER ST
AND ALTA VISTA ST INTERSECTION
ELEV 746.48

TRAVERSE POINT # 102
N 549575.343
E 13169556.069 ELEV 746.00

TRAVERSE POINT # 103
N 549869.395
E 13169609.429 ELEV 745.36

TRAVERSE POINT # 401
N 550081.112
E 13169609.479 ELEV 745.24



- CONSTRUCTION LEGEND**
- Curb and Gutter, Conc, Det F4, Modified
 - Sewer, SDR-26, __ inch, Tr Det B, Modified
 - HMA
 - HMA Base Crushing and Shaping, Modified and Asphalt Cement Stabilized Base Course
 - Aggregate Base, 9 inch, Modified
 - Driveway, Nonreinf, Conc, 6 inch
 - Approach, CI I, LM
 - Sidewalk, Conc, __ inch
 - Sidewalk, Ramp, Conc, __ inch
 - STANDARD SOIL EROSION KEY

CONSTRUCTION QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	WORK ITEM
10	Cyd	Embankment, CIP
14	Cyd	Subbase, CIP
1604	Syd	Aggregate Base, 8 inch, Modified
196	Syd	Aggregate Base, 9 inch, Modified
50	Ton	Maintenance Gravel
1927	Gal	Asphalt Cement Binder
1205	Syd	HMA Base Crushing and Shaping, Modified
1205	Syd	Asphalt Cement Stabilized Base Course
6	Cyd	Approach, CI I, LM
48	Ton	Shield, CI I
1604	Syd	Geotextile, Separator, Modified
86	Ft	Sewer, SDR-26, 10 inch, Tr Det B, Modified
158	Ft	Sewer, SDR-26, 12 inch, Tr Det B, Modified
2	Ea	Dr Structure Cover, Adj, Case 1
1	Ea	Dr Structure, Tap, 12 inch
2	Ea	Dr Structure, 24 inch dia, Modified
2	Ea	Dr Structure Cover, Type EJ 1040 w/ Solid Gasket Sealed Cover
2	Ea	Dr Structure Cover, Type EJ 6517 Ditch Grate
673	Ton	HMA, 13A
127	Syd	Driveway, Nonreinf Conc, 6 inch
252	Ft	Curb and Gutter, Conc, Det F4, Modified
350	Syd	Turf Establishment, Performance

**CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE**

NO.	DATE	BY	REVISIONS
1	11/14/22	CW	

APPROVED BY: _____
CHECKED BY: _____

2023 STREET PROGRAM - CONTRACT 1

**CENTER ST
CONSTRUCTION PLAN**

FIELD BOOK
PG. _____

CN7

MAY, 2023
PROJECT NO.

JOB BENCHMARK # 204
COTTON SPINDLE IN EAST FACE OF
POWER POLE WEST OF CENTER ST
BETWEEN HSE #1025 AND #1029
ELEV 742.88

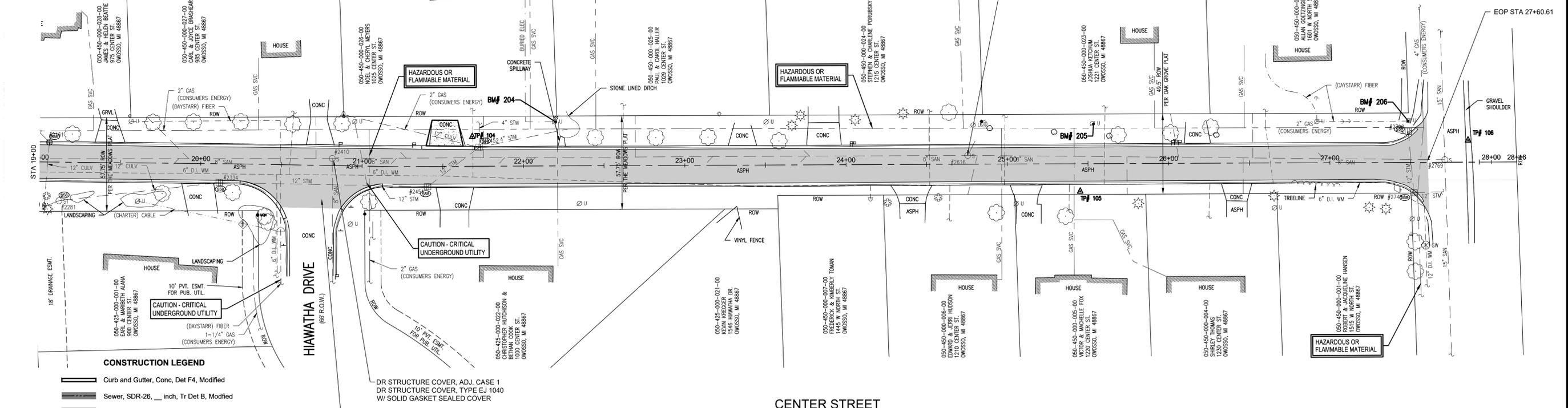
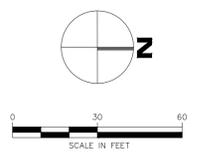
JOB BENCHMARK # 205
COTTON SPINDLE IN EAST FACE OF
POWER POLE WEST OF CENTER ST
IN FRONT OF HSE #1221
ELEV 747.07

JOB BENCHMARK # 206
COTTON SPINDLE IN EAST FACE OF
PP IN SW QUAD OF INTERSECTION
OF CENTER ST AND W NORTH ST
ELEV 741.57

TRAVERSE POINT # 104
N 55036.551
E 13169582.239 ELEV 741.79

TRAVERSE POINT # 105
N 550915.387
E 13169616.479 ELEV 745.94

TRAVERSE POINT # 106
N 551153.839
E 13169585.392 ELEV 741.08



CONSTRUCTION LEGEND

- Curb and Gutter, Conc, Det F4, Modified
- Sewer, SDR-26, ___ inch, Tr Det B, Modified
- HMA
- HMA Base Crushing and Shaping, Modified and Asphalt Cement Stabilized Base Course
- Aggregate Base, 9 inch, Modified
- Driveway, Nonreinf, Conc, 6 inch
- Approach, CI I, LM
- Sidewalk, Conc, ___ inch
- Sidewalk, Ramp, Conc, ___ inch
- STANDARD SOIL EROSION KEY

HIAWATHA INTERSECTION
PLACE:
GEOTEXTILE SEPARATOR, MODIFIED
AGGREGATE BASE, 8 INCH, MODIFIED
HMA 13A @ 440 LB/SYD
(2 LIFTS - 275 LB/SYD AND 165 LB/SYD)

CENTER STREET
CONSTRUCTION PLAN

CONSTRUCTION QUANTITIES (THIS SHEET)		
QUANTITY	UNIT	WORK ITEM
10	Cyd	Embankment, CIP
4	Cyd	Subbase, CIP
2135	Syd	Aggregate Base, 8 inch, Modified
25	Ton	Maintenance Gravel
2135	Syd	Geotextile Separator, Modified
2	Ea	Drainage Structure Cover, Adj, Case 1
2	Ea	Drainage Structure Cover, Type EJ 1040 w/ Solid Gasket Sealed Cover
517	Ton	HMA, 13A
35	Syd	Driveway, Nonreinf Conc, 6 inch
101	Ft	Curb and Gutter, Conc, Det F4, Modified
50	Syd	Turf Establishment, Performance

CITY OF OWOSSO, MICHIGAN
ENGINEERING DIVISION
DEPT. OF PUBLIC SERVICE

NO.	DATE	BY
1	11/14/22	CW

NO.	DESCRIPTION	REVISIONS
1	IFB PLANS	

CHECKED BY: _____ APPROVED BY: _____

2023 STREET PROGRAM - CONTRACT 1
CENTER ST
CONSTRUCTION PLAN

MAY, 2023
PROJECT NO. CN8
FIELD BOOK
PG.