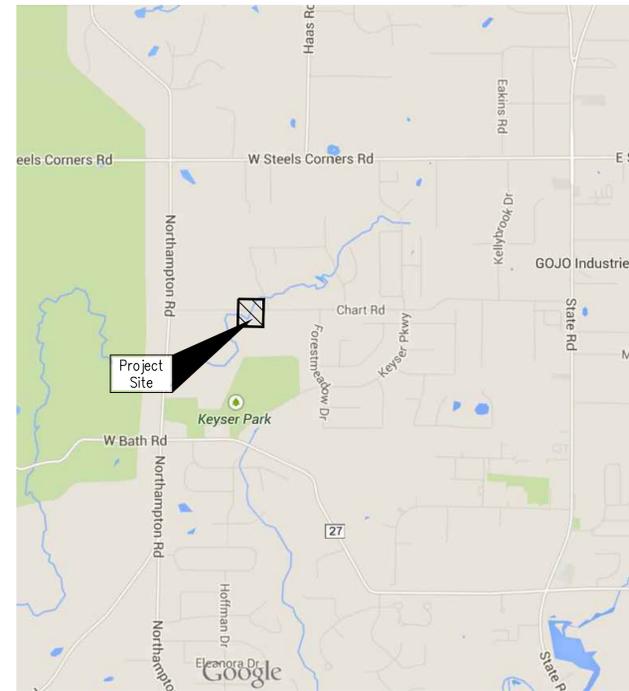


WOODWARD CREEK CULVERT PROJECT CHART ROAD CITY OF CUYAHOGA FALLS COUNTY OF SUMMIT, STATE OF OHIO



VICINITY MAP

NOT TO SCALE



INDEX OF SHEETS:

| | |
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| CULVERT SITE AND GRADING PLAN..... | 2 |
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| | | | |
|------------------|--------------|------------------|--------------------------------|
| DATE: 05-18-2015 | SCALE: | DATE: 10-26-2015 | REVISION: |
| DRAWN: JUF | CHECKED: JUF | No. 1 | ADDED ORDINARY WATER ELEVATION |
| | | No. 2 | |
| | | No. 3 | |
| | | BY: | JUF |

WOODWARD CREEK CULVERT PROJECT
TITLE SHEET

PROJECT NUMBER
20150038

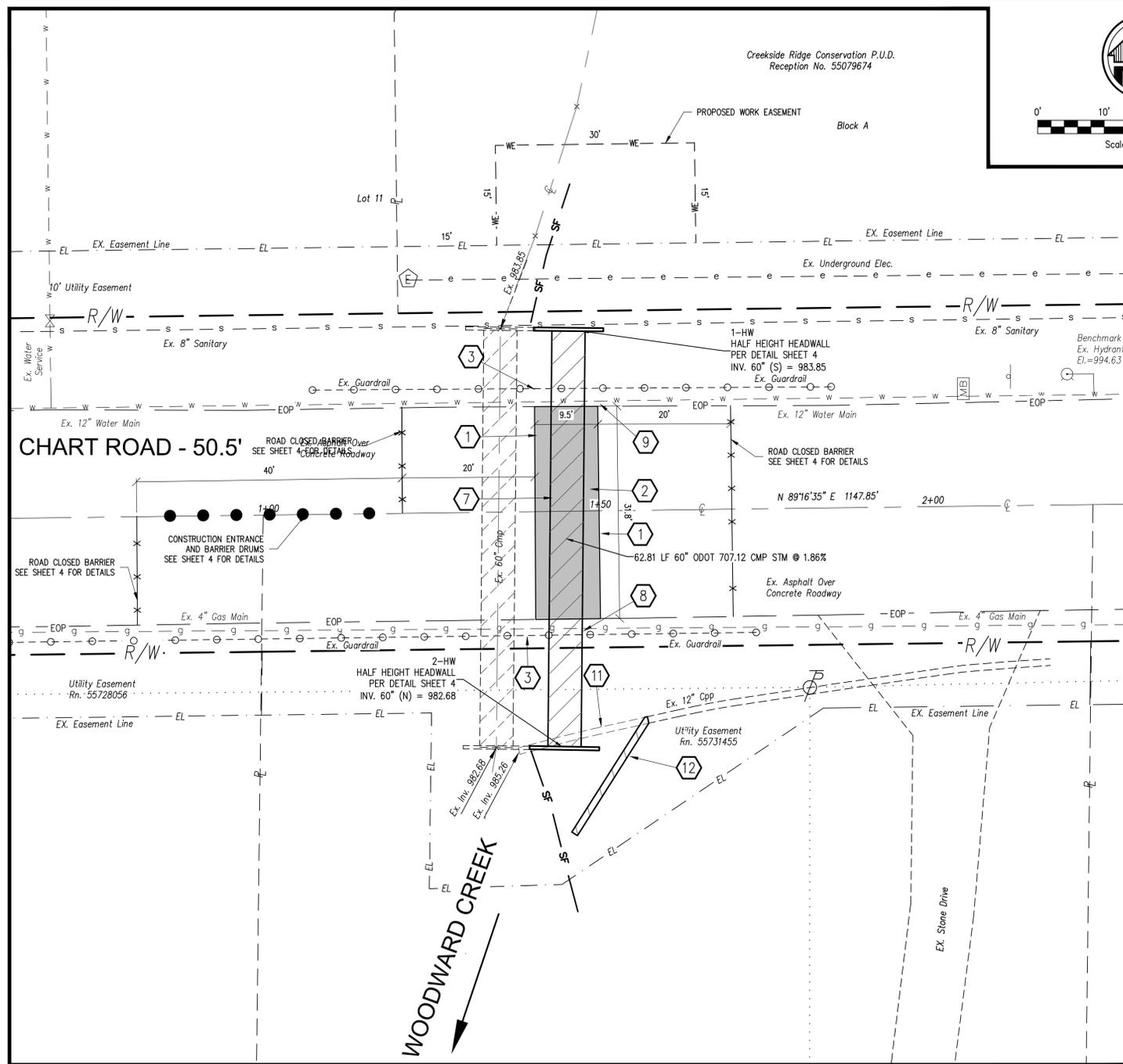
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NORTH OH 44200
(330) 673-2400



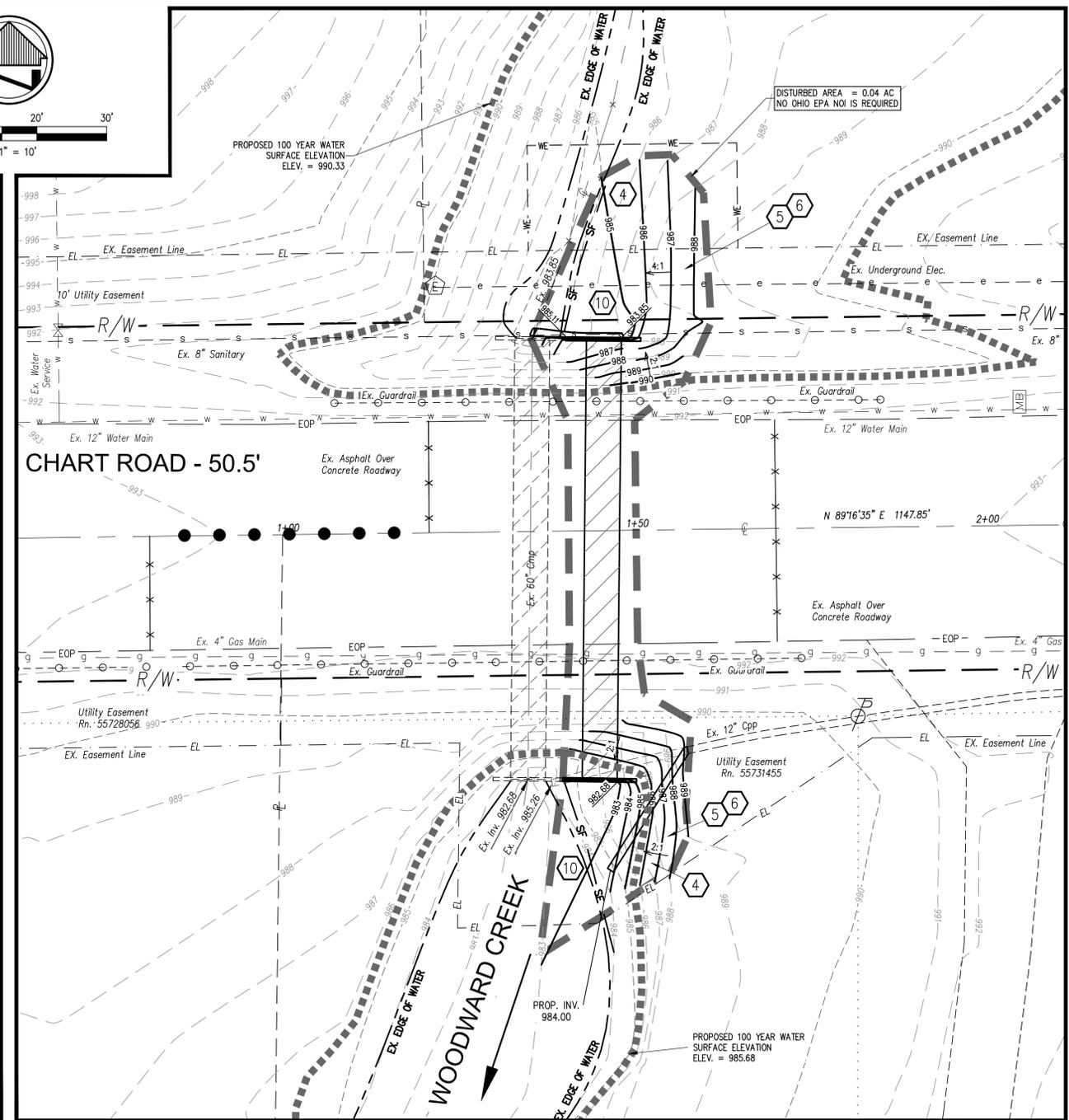
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PROPOSED 60" CULVERT SITE PLAN



PROPOSED 60" CULVERT GRADING PLAN

EXISTING UNDERGROUND UTILITY NOTES

THE EXISTING UNDERGROUND UTILITIES AS SHOWN ARE OBTAINED FROM A COMBINATION OF FIELD LOCATION AND RECORD INFORMATION OBTAINED FROM THE RESPECTIVE UTILITY COMPANIES, WHERE PROVIDED. THESE UTILITIES, THEIR LOCATION AND THEIR ACTIVE OR INACTIVE STATUS, SHOULD BE VERIFIED BY CONTACTING THE OHIO UTILITY PROTECTION SERVICE (O.U.P.S.), PRIOR TO CONSTRUCTION. LOCATION, SIZE, DEPTH, AND STATUS OF USE ARE SHOWN AS ACCURATE AS POSSIBLE WITH THE AVAILABLE DATA.

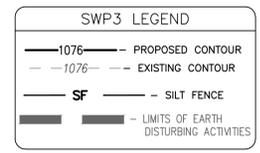
SO-DEEP UTILITY LOCATING WAS CONTRACTED BY THE CITY OF CUYAHOGA FALLS TO VERIFY THE LOCATION AND DEPTH OF THE EXISTING 12" WATER MAIN. PER A REPORT PROVIDED BY SO-DEEP DATED APRIL 27, 2015, SO-DEEP VERIFIED THE HORIZONTAL LOCATION OF THE EXISTING WATERLINE USING QUALITY LEVEL 9 SURFACE RADAR DETECTION EQUIPMENT, BUT COULD NOT VERIFY THE DEPTH OF THE EXISTING WATER MAIN. THE CONTRACTOR SHALL USE CAUTION WHEN EXCAVATING WITHIN THE VICINITY OF THE EXISTING 12" WATER MAIN. REPORT ANY CONFLICTS BETWEEN THE PROPOSED 60" CULVERT LOCATION AND THE EXISTING 12" WATER MAIN TO THE CITY AND DESIGN ENGINEER AS SOON AS POSSIBLE TO DETERMINE HOW TO REMEDY THE CONFLICT.

LOCAL DETOUR PLAN

AT LEAST TWO WEEKS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL DESIGN AND SUBMIT A LOCAL DETOUR PLAN TO THE CITY OF CUYAHOGA FALLS ENGINEER FOR APPROVAL.

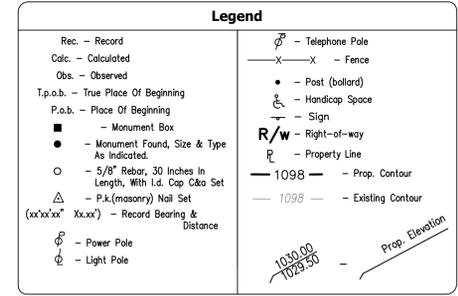
BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS SURVEY IS GRID NORTH OF THE OHIO STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83(2011).

BENCHMARK
THE BENCHMARK FOR THIS SURVEY IS THE ELEVATION OF THE "0" IN THE WORD "OPEN" ON THE TOP CASTING OF THE FIRE HYDRANT AS SHOWN. ELEVATION - 994.63 (NAVD88)



NOTE: HYDRAULIC DESIGN INFORMATION AND PROPOSED WATER SURFACE ELEVATIONS TAKEN FROM "WOODWARD CREEK DRAINAGE STUDY" PREPARED FOR THE CITY OF CUYAHOGA FALLS BY ENVIRONMENTAL DESIGN GROUP AND DATED NOVEMBER 2014.

- KEYED NOTES**
- 1 - PROVIDE FULL DEPTH, STRAIGHT AND NEAT SAW CUT. SEE TRENCH RESTORATION DETAIL ON SHEET 4 FOR MINIMUM LIMITS OF SAW CUT LINE IN RELATION TO PROPOSED CULVERT TRENCH. SAW CUTS SHALL BE MADE PERPENDICULAR TO THE CENTER LINE OF CHART ROAD.
 - 2 - REMOVE EXISTING PAVEMENT BETWEEN SAW CUTS PER ODOT ITEM 202. REPLACE PAVEMENT PER TRENCH RESTORATION DETAIL ON SHEET 4.
 - 3 - REMOVE GUARDRAIL FOR REUSE PER ODOT ITEM 202 AS NECESSARY TO INSTALL PROPOSED CULVERT. REINSTALL GUARDRAIL & TERMINALS AND/OR RECONNECT TO EXISTING GUARDRAIL IF REQUIRED PER ODOT ITEM 606.
 - 4 - CLEAR AND GRUB NON-PAVEMENT AREAS WITHIN DISTURBED AREA PER ODOT ITEM 201. STRIP AND STOCK PILE EXISTING TOPSOIL PER ODOT ITEM 651. PERFORM ALL EXCAVATION AND EMBANKMENT WORK PER ODOT ITEM 203.
 - 5 - PLACE 4" OF STOCKPILED TOPSOIL OVER ENTIRE AREA ABOVE NORMAL WATER ELEVATION PER ODOT ITEM 652. FURNISH AND PLACE ADDITIONAL TOPSOIL AS NEEDED PER ODOT ITEM 653.
 - 6 - PLACE ODOT ITEM 659 SEEDING AND MULCH TYPE 1 LAWN MIX OVERALL ALL DISTURBED AREAS WITH A SLOPE OF 3:1 OR LESS. PLACE ODOT ITEM 659 SEEDING MULCHING TYPE 3B LOW GROWING SLOPE MIXTURE FOR ALL SLOPES GREATER THAN 3:1.
 - 7 - INSTALL PROPOSED CORRUGATED METAL CULVERT CONFORMING TO ODOT ITEM 707.12 CORRUGATED STEEL RIB CONDUIT. EXCEPT AS OTHERWISE SHOWN ON THESE PLANS INSTALL CULVERT PER ODOT ITEM 611. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BRACING, SHORING ETC OF EX. UTILITIES & TRENCH SIDES PER ALL STATE & LOCAL REGULATIONS.
 - 8 - VERIFY DEPTH AND LOCATION OF EXISTING GAS LINE, SEE EXISTING UNDERGROUND UTILITY NOTES THIS SHEET. PROVIDE A MINIMUM 12" CLEARANCE BETWEEN EXISTING GAS LINE AND PROPOSED CULVERT. REPORT ANY CONFLICTS TO CITY AND DESIGN ENGINEER AS SOON AS POSSIBLE, OTHERWISE PROPERLY SUPPORT GAS MAIN DURING CONSTRUCTION OF PROPOSED CULVERT. CONTRACTOR TO ASSUME ALL COSTS OF REPAIRS TO EXISTING GAS MAIN DUE TO CONTRACTOR'S NEGLIGENCE.
 - 9 - VERIFY DEPTH AND LOCATION OF EXISTING WATER MAIN, SEE EXISTING UNDERGROUND UTILITY NOTES THIS SHEET. PROVIDE A MINIMUM 18" CLEARANCE BETWEEN EXISTING WATER MAIN AND PROPOSED CULVERT. REPORT ANY CONFLICTS TO CITY AND DESIGN ENGINEER AS SOON AS POSSIBLE, OTHERWISE PROPERLY SUPPORT WATER MAIN DURING CONSTRUCTION OF PROPOSED CULVERT. CONTRACTOR TO ASSUME ALL COSTS OF REPAIRS TO EXISTING WATER MAIN DUE TO CONTRACTOR'S NEGLIGENCE.
 - 10 - EXCAVATE CHANNEL BOTTOM AS NECESSARY PER ODOT ITEM 203. PERFORM EXCAVATION WITHIN STREAM CHANNEL MINIMIZING WATER BORN SEDIMENTS FROM TRAVELING DOWNSTREAM.
 - 11 - REMOVE 20 LF OF EXISTING 12" HDPE STORM PIPE PER ODOT ITEM 202.
 - 12 - INSTALL 20 LF OF 12" HDPE STORM. CONNECT TO EXISTING 12" HDPE USING 45° BEND PER ODOT ITEM 611.



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PROJECT NUMBER: 20150038
PROJECT NAME: WOODWARD CREEK CULVERT PROJECT
SUBJECT: CULVERT SITE AND GRADING PLAN
DATE: 05-28-2015
SCALE: AS SHOWN
DRAWN: JUF
CHECKED: JUF
REVISION: ADDED ORINARY WATER ELEVATION

4215 KANG INDUSTRIAL PKWY
NORTH OH 44290
C330 673-2400

wholwend engineering group

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CULVERT SITE AND GRADING PLAN

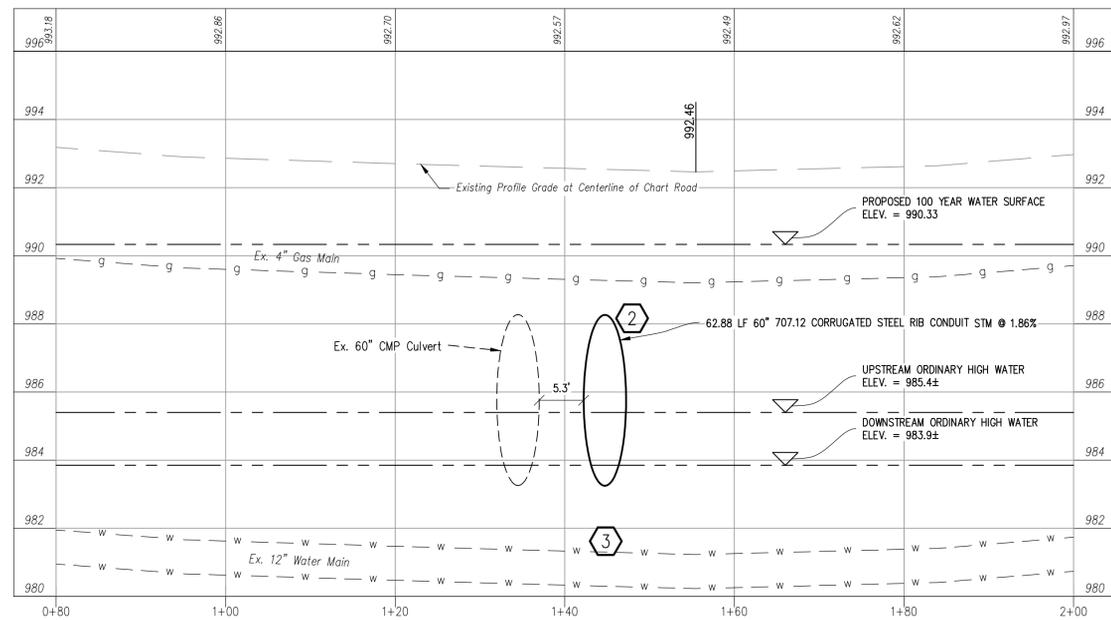
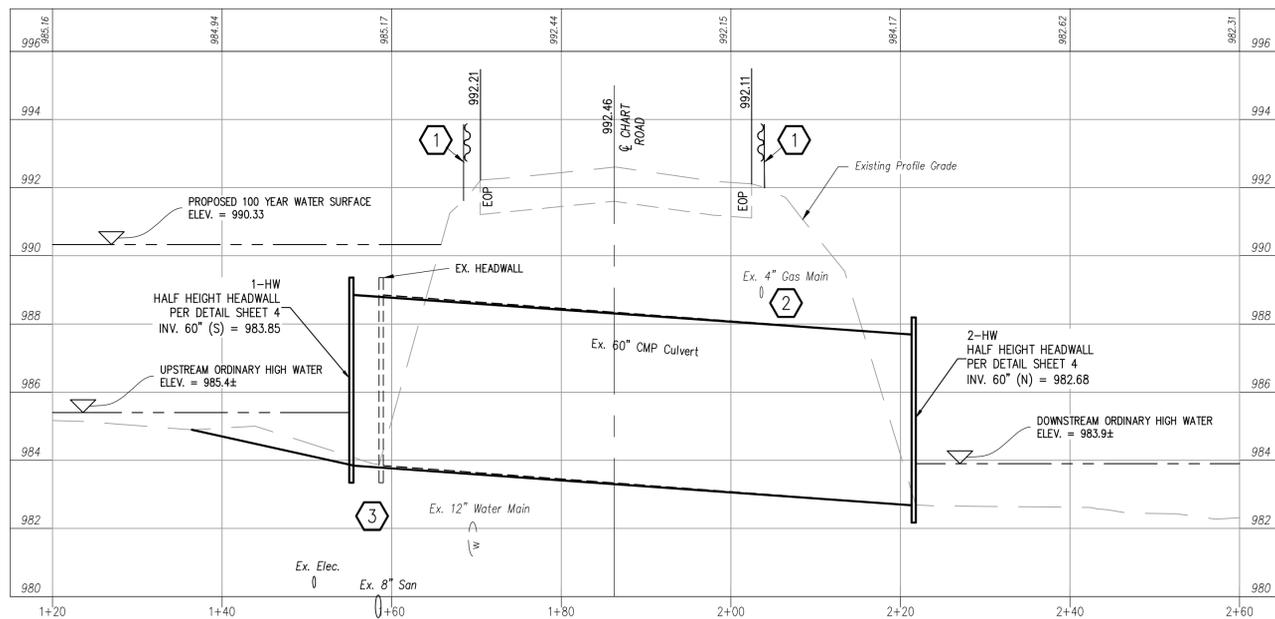


CHART ROAD PROFILE (CULVERT SECTION)



PROPOSED 60" CULVERT PROFILE

KEYED NOTES

- 1 - REMOVE GUARDRAIL FOR REUSE PER ODOT ITEM 202 AS NECESSARY TO INSTALL PROPOSED CULVERT. REINSTALL GUARDRAIL & TERMINALS AND/OR RECONNECT TO EXISTING GUARDRAIL IF REQUIRED PER ODOT ITEM 606.
- 2 - VERIFY DEPTH AND LOCATION OF EXISTING GAS LINE, SEE EXISTING UNDERGROUND UTILITY NOTES THIS SHEET. PROVIDE A MINIMUM 12" CLEARANCE BETWEEN EXISTING GAS LINE AND PROPOSED CULVERT. REPORT ANY CONFLICTS TO CITY AND DESIGN ENGINEER AS SOON AS POSSIBLE, OTHERWISE PROPERLY SUPPORT GAS MAIN DURING CONSTRUCTION OF PROPOSED CULVERT. CONTRACTOR TO ASSUME ALL COSTS OF REPAIRS TO EXISTING GAS MAIN DUE TO CONTRACTOR'S NEGLIGENCE.
- 3 - VERIFY DEPTH AND LOCATION OF EXISTING WATER MAIN, SEE EXISTING UNDERGROUND UTILITY NOTES THIS SHEET. PROVIDE A MINIMUM 18" CLEARANCE BETWEEN EXISTING WATER MAIN AND PROPOSED CULVERT. REPORT ANY CONFLICTS TO CITY AND DESIGN ENGINEER AS SOON AS POSSIBLE, OTHERWISE PROPERLY SUPPORT WATER MAIN DURING CONSTRUCTION OF PROPOSED CULVERT. CONTRACTOR TO ASSUME ALL COSTS OF REPAIRS TO EXISTING WATER MAIN DUE TO CONTRACTOR'S NEGLIGENCE.

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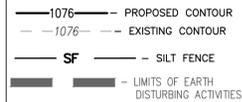
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SWP3 LEGEND



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| Legend | |
|--|-------------------------|
| Rec. - Record | ⊕ - Telephone Pole |
| Calc. - Calculated | -X-X- - Fence |
| Obs. - Observed | • - Post (bollard) |
| T.p.o.b. - True Place Of Beginning | ⊕ - Handicap Space |
| P.o.b. - Place Of Beginning | - - Sign |
| ■ - Monument Box | R/W - Right-of-way |
| ● - Monument Found, Size & Type As Indicated. | ℙ - Property Line |
| ○ - 5/8" Rebar, 30 Inches In Length, With 1/4" Cap Cap Set | 1098 - Prop. Contour |
| ⊕ - P.k.(masonry) Nail Set | 1098 - Existing Contour |
| (xx'xx" Xx.xx') - Record Bearing & Distance | - - Prop. Elevation |
| ⊕ - Power Pole | |
| ⊕ - Light Pole | |

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DATE: 05-18-2015
SCALE: 1"=40'
DRAWN: JLF
CHECKED: JLF

PROJECT NUMBER: 20150038

WOODWARD CREEK CULVERT PROJECT
CULVERT PROFILE AND SECTION

4215 KANG INDUSTRIAL PKWY
NORTH OH 44260
(330) 673-2400

wholwend engineering group

REVISION
ADDED ORDINARY WATER ELEVATION

| | | | |
|------|------------|---|---|
| No. | 1 | 2 | 3 |
| DATE | 10-28-2015 | | |
| BY | JLF | | |

